City of West Linn
Planning & Development · 22500 Salamo Rd #1000 · West Linn, Oregon 97068
Telephone 503.656.4211 · Fax 503.656.4106 · westlinnoregon.gov

DEVELOPMENT REVIEW APPLICATION

For Office Use Only		
STAFF CONTACT	PROJECT NO(S). CUP-16-01/DR-16-02/VAR-16-02/VAR-16-03/WAP-16-06	
NON-REFUNDABLE FEE(S)	REFUNDABLE DEPOSIT(S)	TOTAL

Type of Review (Please check all that apply):

- ☐ Annexation (ANX)
- ☐ Appeal and Review (AP) *
- ☒ Conditional Use (CUP)
- ☒ Design Review (DR)
- ☐ Easement Vacation
- ☐ Extraterritorial Ext. of Utilities
- ☐ Final Plat or Plan (FP)
- ☐ Flood Management Area
- ☐ Hillside Protection & Erosion Control
- ☐ Historic Review
- ☐ Legislative Plan or Change
- ☐ Lot Line Adjustment (LLA) */**
- ☐ Minor Partition (MIP) (Preliminary Plat or Plan)
- ☐ Non-Conforming Lots, Uses & Structures
- ☐ Planned Unit Development (PUD)
- ☐ Pre-Application Conference (PA) */**
- ☐ Street Vacation
- ☐ Subdivision (SUB)
- ☐ Temporary Uses *
- ☐ Time Extension *
- ☒ Variance (VAR)
- ☐ Water Resource Area Protection/Single Lot (WAP)
- ☒ Water Resource Area Protection/Wetland (WAP)
- ☐ Willamette & Tualatin River Greenway (WRG)
- ☐ Zone Change

Home Occupation, Pre-Application, Sidewalk Use, Sign Review Permit, and Temporary Sign Permit applications require different or additional application forms, available on the City website or at City Hall.

Site Location/Address:	Assessor's Map No.: 21E35D
2400-2450 Willamette Falls Drive	Tax Lot(s): 2000, 3400, 3500, & 5300
	Total Land Area: 1.58 acres

Brief Description of Proposal: FOUR-STORY SELF-STORAGE BUILDING

Applicant Name: (please print)	NORTHWEST SELF STORAGE WEST LINN	Phone: 503-804-5545
Address:	14855 SE 82ND DRIVE	Email: capitalman@onlinenw.com
City State Zip:	CLACKAMAS, OR 97015	
Owner Name (required): (please print)	VK NORTHWEST, INC. C/O VIPUL PATEL	Phone:
Address:	12700 SE MCLOUGHLIN BLVD.	Email: mpinvestments@gmail.com
City State Zip:	MILWAUKIE, OR 97222	
Consultant Name: (please print)	LEE LEIGHTON	Phone: 503-224-9560
Address:	C/O MACKENZIE, 1515 SE WATER AVE., STE 100	Email: lleighton@mcknze.com
City State Zip:	PORTLAND, OR 97214	

1. All application fees are non-refundable (excluding deposit). Any overruns to deposit will result in additional billing.
2. The owner/applicant or their representative should be present at all public hearings.
3. A denial or approval may be reversed on appeal. No permit will be in effect until the appeal period has expired.
4. *Three (3) complete hard-copy sets (single sided) of application materials must be submitted with this application.*
   One (1) complete set of digital application materials must also be submitted on CD in PDF format.
   If large sets of plans are required in application please submit only two sets.

* No CD required / ** Only one hard-copy set needed

The undersigned property owner(s) hereby authorizes the filing of this application, and authorizes on site review by authorized staff. I hereby agree to comply with all code requirements applicable to my application. Acceptance of this application does not infer a complete submittal. All amendments to the Community Development Code and to other regulations adopted after the application is approved shall be enforced where applicable. Approved applications and subsequent development is not vested under the provisions in place at the time of the initial application.

Bernie Howard — Applicant's signature — 3/16/16 Date

(503) 757-6969 — Owner's signature *(required)* — 3/15/16 Date

Development Review Application (Rev. 2011.07)

RECEIVED
APR 11 2016
PLANNING & BUILDING
CITY OF WEST LINN
INT. _____ TIME _____

MACKENZIE.

DESIGN DRIVEN | CLIENT FOCUSED

CONDITIONAL USE, DESIGN REVIEW, WATER RESOURCES AREA PERMIT, SPECIAL WAIVER, & VARIANCE

To
City of West Linn

For
NW Self Storage

Submitted
April 11, 2016

Project Number
2150120.01

MACKENZIE
Since 1960

RiverEast Center | 1515 SE Water Ave, Suite 100, Portland, OR 97214
PO Box 14310, Portland, OR 97293 | T 503.224.9560 | www.mcknze.com

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H. Plans

ONE COPY PROVIDED SEPARATELY FROM BOUND SUBMITTAL

1. Original Application Form
2. Check
3. Materials Board
4. 11"x17" set of plans
5. Neighborhood meeting documentation
6. Electronic copy of application materials

I. PROJECT SUMMARY

Applicant:	Northwest Self Storage West Linn 14855 SE 82nd Drive Clackamas, OR 97015 (503) 804-5545 capitalman@onlinenw.com
Property Owner:	VK Northwest, Inc. c/o Vipul Patel 12700 SE McLoughlin Boulevard Milwaukie, OR 97222 mpinvestments@gmail.com
Site Address:	2400-2450 Willamette Falls Drive West Linn, OR 97068
Assessor Site Acreage:	1.58
Tax Map/Lots:	Clackamas County Assessor Map 21E35D, Tax Lots 2000 & 5300 and Map 21E35DD, Tax Lots 3400 & 3500
Zoning:	General Commercial (GC)
Comprehensive Plan:	Commercial
Adjacent Zoning:	I-205 to the north, R10 residential (single-family residential detached) to the south, and GC to the east and west
Existing Structures:	None
Request:	Conditional Use Permit, Design Review, Water Resource Area Permit, Variance for driveway spacing, and Special Waiver for building height for a proposed self-storage facility
Project Contact:	Lee Leighton, AICP Mackenzie 1515 SE Water Avenue, Suite 100 Portland, OR 97214 503-224-9560 lleighton@mcknze.com

II. INTRODUCTION

Description of Request

This application package includes narrative, plans, and additional documentation in support of a proposed self-storage facility on Willamette Falls Drive near the intersection of 6th Street. The applications necessary for approval of the proposal include a Conditional Use Permit, Design Review, Water Resource Area Permit, a Variance for driveway spacing, and a Special Waiver for building height. The following statements address the development standards of the City of West Linn that relate to this application.

Existing Site & Surrounding Land Use

The site consists of four vacant parcels at 2400-2450 Willamette Falls Drive—tax lots 2000 and 5300 of Clackamas County Assessor's Map 21E35D, and tax lots 3400 and 3500 of Clackamas County Assessor's Map 21E35DD. See Figure 1. The site is located in the Willamette Neighborhood Association. The site is bounded to the north by the on-ramp to I-205; to the east and west by multi-tenant office buildings; and to the south by Willamette Falls Drive and beyond that by single-family detached residences. The site is located in the GC General Commercial zone. The Community Development Code (CDC) classifies self-storage facilities as conditional uses in the GC zone.

Figure 1. Site Aerial Photo

A portion of the site used to be the historic alignment of Willamette Falls Drive, prior to the construction of the I-205 freeway. The street alignment was subsequently vacated by the City and reverted to private ownership.

The site is traversed by a stream (Bernert Creek) flowing generally from the west to the east, with a piped portion toward the west end of the site (under what used to be Willamette Falls Drive). The City has classified this stream as a Water Resource Area (WRA) subject to additional development regulations. The applicant's natural resources consultant has delineated the boundaries of the wetlands associated with the stream. The Oregon Department of State Lands (DSL) has concurred with the locations identified in the wetland delineation (see Appendix D in Exhibit C). The applicant's arborist has determined that the site has one tree classified by the City as "significant," a large Oregon white oak in the northeast corner (additionally, there is a significant madrone located nearby but off-site). The site has approximately 40 trees overall (see Exhibit B).

Description of Proposed Development

The proposed development consists of a 106,487-square-foot, four-story self-storage building containing parking and loading areas internal to the building. The site will be secured with electronically-operated gates to safeguard the building and its contents. The traffic circulation pattern is intended to generally flow from west to east, with customers entering the west driveway, driving through the building itself, and exiting the east driveway. The west driveway will accommodate two-way traffic to account for visitors that do not proceed beyond the security gates, while the east driveway will be exit-only. During the project's design development phase, the applicant approached the property owner to the east (the "2500 Building") to explore the possibility of sharing their existing driveway, but the abutting property owner was unwilling to enter into a shared access agreement. Consequently, the east driveway as proposed would serve only the self-storage facility.

The design intent is to reduce impacts on the WRA by locating the building near the north end of the site away from the stream. The west driveway will utilize a bottomless arch culvert at the location of the existing stream culvert in the vacated Willamette Falls Drive alignment to avoid creating another piped stream segment in that area. Finally, the building will be four stories tall, rather than shorter and wider, to minimize the development area's footprint and impact on the riparian corridor area.

The building exterior will consist of split face block, painted fiber cement siding (some horizontal lap siding and some vertical board and batten style), and a standing seam metal roof. Building colors have been selected to complement the surroundings while expressing the brand identity colors of the applicant's business, Northwest Self Storage (see the materials board).

Based on City standards, it does not appear that dedication of additional right-of-way is required along the subject property's Willamette Falls Drive frontage. The applicant will construct street improvements as necessary to conform to City street standards, including some utility relocation as may be required; however, in order to minimize impacts on Bernert Creek and wetlands within or adjacent to the right-of-way, the applicant proposes to meander the sidewalk at some locations. No off-site improvements to water, sanitary sewer, or storm sewer are necessary to serve the development.

Several land use approvals are necessary for the proposed building. Design Review is required for new commercial/industrial buildings, and a Conditional Use Permit is required for self-storage facilities in the GC zone. A Water Resource Area permit is necessary due to construction within proximity of the stream, and a Variance is required due to the proximity of the east driveway to that of the adjoining driveway to the east. Finally, a Special Waiver is requested for building height to accommodate a narrow, tall building that minimizes WRA impacts compared to a wider, shorter building.

III. NARRATIVE & COMPLIANCE

Development applications are required to meet development standards set forth in the West Linn Community Development Code (CDC). The following addresses the specified approval criteria and development guidelines and standards which apply to this application. In the sections below, applicable approval standards are shown in *italics,* while responses are shown in normal font.

Chapter 19: General Commercial, GC

19.060 Conditional Uses

The following are conditional uses which may be allowed in this zone subject to the provisions of Chapter 60 CDC, Conditional Uses:

11. Wholesale storage and distribution:
a. Mini-warehouse.
b. Light.

Response: The proposed use, a self-storage building, is defined as a mini-warehouse in the Community Development Code. In the General Commercial zone, mini-warehouses are considered conditional uses. The applicant is requesting a Conditional Use Permit for the proposed facility. This standard is met.

19.070 Dimensional Requirements, Uses Permitted Outright and Uses Permitted Under Prescribed Conditions

A. Except as may be otherwise provided by the provisions of this code, the following are the requirements for uses within this zone:

Response: Conditional uses do not fall in the category of uses permitted outright (19.030) or uses permitted under prescribed conditions (19.050). Consequently, they are not subject to the provisions of this section. This standard does not apply.

19.080 Dimensional Requirements, Conditional Uses

Except as may otherwise be established by this code, the appropriate lot or parcel size for a conditional use shall be determined by the approval authority at the time of consideration of the application based upon the criteria set forth in CDC 60.070(A) and (B).

Response: Conditional uses are not subject to the specific dimensional requirements identified in Section 19.070 for parcel dimensions, setbacks, lot coverage, or building height. The response to Section 60.070 below demonstrates that the proposed building design and location is appropriate for the site context. This standard is met.

19.090 Other Applicable Development Standards

A. The following standards apply to all development including permitted uses:

1. Chapter 34 CDC, Accessory Structures, Accessory Dwelling Units, and Accessory Uses.
2. Chapter 35 CDC, Temporary Structures and Uses.
3. Chapter 38 CDC, Additional Yard Area Required; Exceptions to Yard Requirements; Storage in Yards; Projections into Yards.
4. Chapter 40 CDC, Building Height Limitations, Exceptions.
5. Chapter 42 CDC, Clear Vision Areas.
6. Chapter 44 CDC, Fences.
7. Chapter 46 CDC, Off-Street Parking, Loading and Reservoir Areas.
8. Chapter 48 CDC, Access, Egress and Circulation.
9. Chapter 52 CDC, Signs.
10. Chapter 54 CDC, Landscaping.

Response: This application is subject to the development standards located in other chapters of the Community Development Code. Compliance with the applicable standards is demonstrated below in this narrative/findings statement, and in the attached plans and reports. This standard is met.

B. The provisions of Chapter 55 CDC, Design Review, apply to all uses except detached single-family dwellings and approved conditional use applications pursuant to CDC 60.030(C).

Response: The applicant is requesting Design Review for the proposed facility. Compliance with the Design Review standards is demonstrated in the narrative and in the attached plans and reports. This standard is met.

Chapter 32: Water Resource Area Protection

32.030 Prohibited Uses

Alteration, development, or use of real property designated as, and within, a WRA is strictly prohibited except as specifically allowed or exempted in this chapter.

TABLE 32-1: SUMMARY OF WHERE DEVELOPMENT AND ACTIVITIES MAY OCCUR IN AREAS SUBJECT TO THIS CHAPTER

Type of Development or Activity	In Water Resource	Water Resource Area
New house, principal structure(s)	No	No, except by hardship, CDC 32.100. Geotechnical study may reduce WRA width per Table 32-2 (footnote 4).
Additions to existing house, principal structure(s) and replacement in kind (replacement in kind does not count against the 500 sq. ft. limit so long as it remains within the existing footprint)	No	Yes, so long as it gets no closer to the WRA than building footprint that existed January 1, 2006. Max. 500 sq. ft. of addition(s) to side or 500 sq. ft. to side of building footprint furthest from WRA. No limit on vertical additions within existing footprint. (CDC 32.040(C)). Geotechnical study may reduce the WRA width per Table 32-2 (footnote 4).
New cantilevered decks (over 30 inches), balconies, roof overhangs and pop outs towards the WRA from existing house or principal structure(s)	No	Yes, but only 5 ft. into the WRA. Foundation or supports of structure cannot extend vertically to grade in the WRA. Geotechnical study may reduce the WRA width per Table 32-2 (footnote 4).
Decks within 30 inches of grade, at grade patios	No	Yes, but only to within 50 ft. of the water resource or 10 ft. behind the top of slope (ravine), whichever is greater.1 Geotechnical study may reduce the WRA width per Table 32-2 (footnote 4).
New accessory structure under 120 sq. ft. and 10 ft. tall	No	Yes, but only if it is a minimum of 50 ft. from the water resource or 10 ft. behind the top of slope (ravine), whichever is greater.1
Repair and maintenance to existing accessory structures	No	Yes, but no increase in footprint or height.

Stormwater treatment and detention (e.g., rain gardens, storm outfall/energy dissipaters)	No	Yes, private and public facilities including outfall and energy dissipaters are permitted if no reasonable alternatives exist.
Driveways/streets/bridges and parking lots	No, unless a WRA crossing is the only available route. No parking lots.	No, unless a WRA crossing is the only available route, or it is part of a hardship application. Parking lots only allowed in hardship cases the maximum distance from water resource.
New fence(s)	No markers or posts in a water resource.	Yes, but only to within 50 ft. of the water resource or behind the top of slope (ravine), whichever is greater.1 In remainder of a WRA, only City approved property markers or posts every 25 ft. to delineate property.
Demolition of structure and/or removal of impervious surfaces in the WRA	Yes, restoration and re-vegetation required.	Yes, restoration and re-vegetation required.
Exterior lighting	No	No, except on existing buildings, additions or hardship cases, but light must be directed away from the WRA and less than 12 ft. high.
Public passive recreation facilities	No, except for bridges and utility crossings.	Yes, but only soft or permeable surface trails, bridges and elevated paths, interpretive facilities and signage. Hard surface ADA trails are allowed in WRA above top of slope associated with well-defined ravine WRAs.
Public active recreation facilities	No, except for bridges and utility crossings.	Yes, but natural surface playing fields and playground areas only in WRA above top of slope associated with well-defined ravine WRAs.
Grading, fill (see also TDAs)	No, except for bridges and utility crossings.	Yes, after a WRA permit is obtained. Restoration and re-vegetation required.
Temporarily disturbed areas (TDAs) (e.g., buried utilities)	No, except as allowed by WRA permit.	Yes, restoration and re-vegetation required.
Removal of existing vegetation or planting new vegetation	No, except invasive plants and hazard trees per CDC 32.040(A)(2) or per CDC 32.100.	Yes, if it is replaced by native vegetation. Exemption CDC 32.040(A)(3) applies.
Realigning water resources	Yes, after "alternate review" process	Not applicable

Response: The proposed building is a "principal structure" and approval is requested pursuant to the Hardship provisions of CDC 32.100, as allowed in the first row of Table 32-1. The project also includes "stormwater treatment and detention" facilities located within the Riparian Corridor area of the subject property, which are allowed "if no reasonable alternatives exist." In the case of the subject property, reasonable development cannot be achieved without an encroachment into the designated WRA, a 100-foot Riparian Corridor along Bernert Creek, so all areas between the proposed building and its access/circulation are within the WRA and no reasonable alternatives exist. Similarly, because the only

available route for access to the subject property is Willamette Falls Drive and the developable area is on the opposite side of Bernert Creek from the roadway, it is necessary for the driveways to cross the WRA; approval for the site plan and circulation are included in the Hardship application. The project will also involve grading and fill to implement the proposed site grading, which is allowed with WRA permit approval, and planting of new vegetation to implement the proposed WRA buffer enhancement planting plan/site landscaping plan, which will rely substantially on native plantings, consistent with the requirements in Table 32-1. The proposed development does not include any proposal to realign the Bernert Creek water resource or any delineated wetland boundary.

32.040 Exemptions

The following development, activities or uses are exempt from a WRA permit but must conform to any applicable requirements of this section.

D. New construction activities allowed in the WRA.

1. Structures shall be located out of the WRA, except that eaves, balconies, decks, "pop outs," and similar additions, may cantilever over the outer boundary of the WRA a maximum of five feet. No vertical supports may extend down to grade within the WRA.

Response: This provision is not applicable because the applicant is requesting approval pursuant to the Alternative Review Process provisions of Section 32.080 and the Hardship provisions of Section 32.110 rather than this Section.

F. Exempt areas.

2. Existing enclosed or piped sections of streams, including any development at right angles to the enclosed or piped sections.

Response: The on-site topographic survey indicates that an existing culvert remains in place where the former alignment of Willamette Falls Drive crossed Bernert Creek. The applicant proposes to use a bottomless arch culvert to support the proposed driveway crossing of the Creek at the same location. For purposes of interpreting WRA provisions, the existing culvert crossing may be subject to this exemption.

32.060 Approval Criteria (Standard Process)

Response: The subsections of Section 32.060 are referenced by Subsection 32.080.D and are therefore addressed below under that heading.

32.070 Alternate Review Process

This section establishes a review and approval process that applicants can use when there is reason to believe that the width of the WRA prescribed under the standard process (CDC 32.060(D)) is larger than necessary to protect the functions of the water resource at a particular site. It allows a qualified professional to determine what water resources and associated functions (see Table 32-4 below) exist at a site and the WRA width that is needed to maintain those functions. (Ord. 1623 § 1, 2014)

Response: The applicant has retained Martin Schott and Associates to perform wetland delineation and habitat assessment at the subject property, to advise the project design team, and to prepare a WRA impact mitigation and replanting plan specifically for the proposed development (see Exhibit C). The plan incorporates the project arborist's recommendations for tree removal and conservation. The submitted report and planting plans satisfy the requirements of this Section.

32.080 Approval Criteria (Alternate Review Process)

Applications reviewed under the alternate review process shall meet the following approval criteria:

A. The proposed WRA shall be, at minimum, qualitatively equal, in terms of maintaining the level of functions allowed by the WRA standards of CDC 32.060(D).

Response: Riparian corridor is mapped along the water resource through the entire site. The standards of CDC 32.060(D) require a minimum WRA width 100 feet from the OHW for Riparian Corridors. As discussed in Exhibit C, the constraints of the site do not allow development while maintaining this minimum width. The proposed WRA will be an average of 40+ feet and a minimum of 29 feet from the resource to the edge of proposed development. The entire retained Riparian Corridor will be enhanced with native species and improved from degraded to good condition as described below. The proposed WRA will be, at minimum, qualitatively equal in terms of providing the level of functions as required. This standard is met.

B. If a WRA is already significantly degraded (e.g., native forest and ground cover have been removed or the site dominated by invasive plants, debris, or development), the approval authority may allow a reduced WRA in exchange for mitigation, if:

1. The proposed reduction in WRA width, coupled with the proposed mitigation, would result in better performance of functions than the standard WRA without such mitigation. The approval authority shall make this determination based on the applicant's proposed mitigation plan and a comparative analysis of ecological functions under existing and enhanced conditions (see Table 32-4).

TABLE 32-4 ECOLOGICAL FUNCTIONS OF WRA

Ecological Function	Landscape Features Potentially Providing the Function
Stream flow moderation and/or water storage	A wetland or other water body with a hydrologic connection to a stream or flood area, the presence of fallen trees and density of vegetation in the WRA that slows the flow of stormwater and increases its ability to retain sediment and infiltrate stormwater, and the porosity of the WRA's surface to enable it to infiltrate stormwater.
Sediment or pollution control	Vegetation within 100 feet of a WRA on gentle slopes and up to 200 feet of a WRA if the slope is greater than 25%. The presence of fallen trees and other material that slows the flow of water and increase the ability to retain sediment, absorb pollutants and infiltrate stormwater; the composition and density of vegetation; slope; and soils.
Bank stabilization	Root masses, existing large rocks or anchored large wood along the stream bank.
Large wood recruitment for a fish bearing section of stream	Forest canopy within 50 to 150 feet of a fish bearing stream.
Organic material sources	Forest canopy or woody vegetation within 100 feet of a water resource; or within a flood area.
Shade (water temperature moderation) and microclimate	Forest canopy or woody vegetation within 100 feet of the water resource. Roughly 300 feet of continuous canopy for microclimate.
Stream flow that sustains in-stream and adjacent habitats	Seasonal or perennial flow.
Other terrestrial habitat	Forest canopy natural vegetation contiguous to and within 100 to 300 feet of the water resource.

Response: The existing WRA is degraded as described in Exhibit C. Native forest and groundcover have been removed and existing vegetation is dominated by non-native and invasive species, primarily reed canary grass and Himalayan blackberry. The proposed reduction in WRA width, along with proposed mitigation, enhancement of the entire WRA remaining, will provide higher functions as shown in the comparative analysis and mitigation plan. This standard is met.

2. *The mitigation project shall include all of the following components as applicable. It may also include other forms of enhancement (mitigation) deemed appropriate by the approval authority.*
   a. *Removal of invasive vegetation.*
   b. *Planting native, non-invasive plants (at minimum, consistent with CDC 32.100) that provide improved filtration of sediment, excess nutrients, and pollutants. The amount of enhancement (mitigation) shall meet or exceed the standards of CDC 32.090(C).*
   c. *Providing permanent improvements to the site hydrology that would improve water resource functions.*
   d. *Substantial improvements to the aquatic and/or terrestrial habitat of the WRA.*

Response: Proposed mitigation will consist of a combination of invasive removal and replanting with native vegetation as detailed in the mitigation plan in Exhibit C. These activities will improve onsite filtration of sediment, excess nutrients, and pollutants, improving water quality and erosion control functions by providing additional vegetation appropriate for the WRA. Additionally, the proposed mitigation enhancement will increase native species cover and diversity improving wildlife habitat functions by providing greater cover, nesting or burrowing sites, and food availability and type. This standard is met.

C. Identify and discuss site design and methods of development as they relate to WRA functions.

Response: The approach to maintaining WRA ecological functions is to site the building as far from the water resource as possible; to minimize the width of stream crossings and utilize the existing crossing at the west driveway; to utilize permeable paving to minimize impervious surfaces within and near the WRA; to utilize a four-story building rather than a shorter and wider structure; and to mitigate the degraded habitat with native mitigation plantings as proposed within this report. This standard is met.

D. Address the approval criteria of CDC 32.060, with the exception of CDC 32.060(D).

32.060 Approval Criteria (Standard Process)

No application for development on property containing a WRA shall be approved unless the approval authority finds that the proposed development is consistent with the following approval criteria, or can satisfy the criteria by conditions of approval:

A. WRA protection/minimizing impacts.
   1. *Development shall be conducted in a manner that will avoid or, if avoidance is not possible, minimize adverse impact on WRAs.*
   2. *Mitigation and re-vegetation of disturbed WRAs shall be completed per CDC 32.090 and 32.100 respectively.*

Response: Proposed development will minimize adverse impact on the WRA to the extent possible given the limitations of this site. These provisions are not applicable because the applicant requests approval pursuant to the Alternative Review Process provisions of Section 32.080 and the Hardship provisions of Section 32.110 rather than this Section. Mitigation is provided per the standards of CDC 32.090.

B. Stormwater and stormwater facilities.

1. Proposed developments shall be designed to maintain the existing WRAs and utilize them as the primary method of stormwater conveyance through the project site unless:

a. The surface water management plan calls for alternate configurations (culverts, piping, etc.); or

b. Under CDC 32.070, the applicant demonstrates that the relocation of the water resource will not adversely impact the function of the WRA including, but not limited to, circumstances where the WRA is poorly defined or not clearly channelized. Re-vegetation, enhancement and/or mitigation of the re-aligned water resource shall be required as applicable.

2. Public and private stormwater detention, stormwater treatment facilities and stormwater outfall or energy dissipaters (e.g., rip rap) may encroach into the WRA if:

a. Accepted engineering practice requires it;

b. Encroachment on significant trees shall be avoided when possible, and any tree loss shall be consistent with the City's Tree Technical Manual and mitigated per CDC 32.090;

c. There shall be no direct outfall into the water resource, and any resulting outfall shall not have an erosive effect on the WRA or diminish the stability of slopes; and

d. There are no reasonable alternatives available.

A geotechnical report may be required to make the determination regarding slope stability.

3. Roadside stormwater conveyance swales and ditches may be extended within rights-of-way located in a WRA. When possible, they shall be located along the side of the road furthest from the water resource. If the conveyance facility must be located along the side of the road closest to the water resource, it shall be located as close to the road/sidewalk as possible and include habitat friendly design features (treatment train, rain gardens, etc.).

4. Stormwater detention and/or treatment facilities in the WRA shall be designed without permanent perimeter fencing and shall be landscaped with native vegetation.

5. Access to public stormwater detention and/or treatment facilities shall be provided for maintenance purposes. Maintenance driveways shall be constructed to minimum width and use water permeable paving materials. Significant trees, including roots, shall not be disturbed to the degree possible. The encroachment and any tree loss shall be mitigated per CDC 32.090. There shall also be no adverse impacts upon the hydrologic conditions of the site.

Response: The project will utilize the WRA for stormwater conveyance and includes stormwater treatment and detention facilities located within the Riparian Corridor area of the subject property. This is allowed if "there are no reasonable alternatives available." In the case of the subject property, approximately 77% of the site is covered by designated WRA, and reasonable development cannot be achieved without an encroachment into the WRA. All areas between the proposed building and its access/circulation are within the WRA and no reasonable alternatives exist. The proposed facilities will be constructed in a manner consistent with the above requirements. No outfall will be located directly into the water resource as the outfalls will be located upslope of Bernert Creek with appropriate energy dissipation utilized to ensure the proposed facilities will not result in an erosive effect on the WRA. The roadside culvert under the driveway east of the site is proposed to be extended westerly within the right-of-way

to accommodate the new on-site east driveway. Stormwater facilities are not proposed to have permanent perimeter fencing and will be landscaped with native vegetation. No public stormwater facilities are proposed on-site. No significant trees will be affected by the development. This standard is met.

C. Dedications and easements. The City shall request dedications of the WRA to the City when acquisition of the WRA by dedication or easement would serve a public purpose. When such a dedication or easement is mutually agreed upon, the applicant shall provide the documentation for the dedication or easement. Nothing in this section shall prohibit the City from condemning property if:

1. The property is necessary to serve an important public purpose; and

2. Alternative means of obtaining the property are unsuccessful.

Response: As the site is not adjacent to other public property, there is no identified public interest that would be served by dedicating the WRA to the City or encumbering the WRA by easements. This standard does not apply.

D. WRA width. Except for the exemptions in CDC 32.040, applications that are using the alternate review process of CDC 32.070, or as authorized by the approval authority consistent with the provisions of this chapter, all development is prohibited in the WRA as established in Table 32-2 below:

Response: Subsection D is not applicable because the applicant requests approval pursuant to the alternate review process of CDC 32.070. Tables and Figures contained in that Subsection have been omitted for brevity.

E. Roads, driveways and utilities.

1. New roads, driveways, or utilities shall avoid WRAs unless the applicant demonstrates that no other practical alternative exists. In that case, road design and construction techniques shall minimize impacts and disturbance to the WRA by the following methods:

a. New roads and utilities crossing riparian habitat areas or streams shall be aligned as close to perpendicular to the channel as possible.

b. Roads and driveways traversing WRAs shall be of the minimum width possible to comply with applicable road standards and protect public safety. The footprint of grading and site clearing to accommodate the road shall be minimized.

c. Road and utility crossings shall avoid, where possible:

1) Salmonid spawning or rearing areas;

2) Stands of mature conifer trees in riparian areas;

3) Highly erodible soils;

4) Landslide prone areas;

5) Damage to, and fragmentation of, habitat; and

6) Wetlands identified on the WRA Map.

Response: The only available route for access to the subject property is from Willamette Falls Drive, and the developable area is on the opposite side of Bernert Creek from the roadway. It is not possible to avoid crossing the WRA. Crossings have been designed to minimize impacts to the WRA and stream to the greatest extent possible. The western crossing is aligned with the existing culvert for the vacated Willamette Falls Drive ROW. The eastern crossing will extend an existing culvert in order to minimize additional impacts within the resource. Both crossings will be as close to perpendicular as possible given the geometry of the site and the alignment of Willamette Falls Drive. No salmonid

spawning or rearing areas are known to be present onsite. No stands of mature conifer trees are present. Highly erodible soils and landslide prone areas are not present onsite.

In this case, the minimum road width at the east has been negotiated with Tualatin Valley Fire & Rescue (TVFR) to satisfy emergency access needs. At the west, the 24-foot width is the City's minimum requirement for 2-way circulation. At the east, although the City's minimum requirement for a one-way driveway might be lower, in order to allow one fire truck to stage and another to pass by it, a 20-foot width is proposed. The one-way circulation enables covered access to elevator bays and forward movements for vehicles. The site layout avoids the need for a large hammerhead turnaround or a 26-foot-wide paved drive aisle along the length of the building because TVFR can fight a fire by heading into the two driveways and backing out again. This approach was negotiated with TVFR as a response to the site's constraints.

Road and utility crossings will avoid damage to and fragmentation of habitat and wetlands to the extent possible. The western crossing has been located to take advantage of the location of an existing culvert which previously fragmented the onsite habitat. Wetlands in this area are minimal. The eastern crossing will be an extension of the existing culvert at the eastern property boundary and will not result in wetland impacts or habitat fragmentation. This standard is met.

2. *Crossing of fish bearing streams and riparian corridors shall use bridges or arch-bottomless culverts or the equivalent that provides comparable fish protection, to allow passage of wildlife and fish and to retain the natural stream bed.*

Response: The western crossing will use a bottomless arch culvert over the re-channelized location of an existing culvert. The existing culvert remains in place where the former alignment of Willamette Falls Drive crossed Bernert Creek. The applicant proposes to use a bottomless arch culvert to support the proposed driveway crossing of the Creek at the same location. For purposes of interpreting WRA provisions, the existing culvert crossing may be subject to an exemption per 32.040(F). The eastern crossing will consist of an extension of an existing culvert. No fish are listed as present within Bernert Creek according to StreamNet and fish passage is not anticipated to be a concern. This standard is met.

3. *New utilities spanning fish bearing stream sections, riparian corridors, and wetlands shall be located on existing roads/bridges, elevated walkways, conduit, or other existing structures or installed underground via tunneling or boring at a depth that avoids tree roots and does not alter the hydrology sustaining the water resource, unless the applicant demonstrates that it is not physically possible or it is cost prohibitive. Bore pits associated with the crossings shall be restored upon project completion. Dry, intermittent streams may be crossed with open cuts during a time period approved by the City and any agency with jurisdiction.*

Response: New utilities spanning the WRA will be located along the proposed stream crossing corridors for the driveways. This standard is met.

4. *No fill or excavation is allowed within the ordinary high water mark of a water resource, unless all necessary permits are obtained from the City, U.S. Army Corps of Engineers and Oregon Department of State Lands (DSL).*

Response: No significant fill or excavation is proposed within the OHW or wetland. The western crossing will be via a bottomless arch culvert located outside the jurisdictional

water boundaries. The eastern crossing will be an extension of an existing culvert with the minimum amount of fill necessary to stabilize the pipe. Since the removal/fill is anticipated to be less than 50cy, it should not require state or federal permits; if the final design results in a greater amount of fill, then permits will be obtained from state and federal agencies as needed. This standard is met.

5. *Crossings of fish bearing streams shall be aligned, whenever possible, to serve multiple properties and be designed to accommodate conduit for utility lines. The applicant shall, to the extent legally permissible, work with the City to provide for a street layout and crossing location that will minimize the need for additional stream crossings in the future to serve surrounding properties.*

Response: The onsite waterway is not listed as a fish bearing stream according to ODFW's Stream Net website. During the project's design development phase, the applicant approached the property owner to the east (the "2500 Building") to explore the possibility of sharing their existing driveway, but the abutting property owner was unwilling to enter into a shared access agreement. Consequently, the east driveway as proposed will serve only the self-storage facility. The applicant would not object to a condition requiring this property to allow its eastern driveway to be realigned to form a shared driveway configuration (i.e., with a "Y" north of the Willamette Falls Drive right-of-way) as part of a future redevelopment of the "2500 Building" site, provided that the required permitting and construction would be the responsibility of the redeveloper of that property. This standard is met.

F. *Passive recreation. Low impact or passive outdoor recreation facilities for public use including, but not limited to, multi-use paths and trails, not exempted per CDC 32.040(B)(2), viewing platforms, historical or natural interpretive markers, and benches in the WRA, are subject to the following standards:*

1. *Trails shall be constructed using non-hazardous, water permeable materials with a maximum width of four feet or the recommended width under the applicable American Association of State Highway and Transportation Officials (AASHTO) standards for the expected type and use, whichever is greater.*
2. *Paved trails are limited to the area within 20 feet of the outer boundary of the WRA, and such trails must comply with the stormwater provisions of this chapter.*
3. *All trails in the WRA shall be set back from the water resource at least 30 feet except at stream crossing points or at points where the topography forces the trail closer to the water resource.*
4. *Trails shall be designed to minimize disturbance to existing vegetation, work with natural contours, avoid the fall line on slopes where possible, avoid areas with evidence of slope failure and ensure that trail runoff does not create channels in the WRA.*
5. *Foot bridge crossings shall be kept to a minimum. When the stream bank adjacent to the foot bridge is accessible (e.g., due to limited vegetation or topography), where possible, fences or railings shall be installed from the foot bridge and extend 15 feet beyond the terminus of the foot bridge to discourage trail users and pets from accessing the stream bank, disturbing wildlife and habitat areas, and causing vegetation loss, stream bank erosion and stream turbidity. Bridges shall not be made of continuous impervious materials or be treated with toxic substances that could leach into the WRA.*
6. *Interpretive facilities (including viewpoints) shall be at least 10 feet from the top of the water resource's bank full flow/OHW or delineated wetland edge and*

constructed with a fence between users and the resource. Interpretive signs may be installed on footbridges.

Response: This subsection is not applicable because no passive recreation facilities are proposed.

G. Daylighting Piped Streams.

1. *As part of any application, covered or piped stream sections shown on the WRA Map are encouraged to be "daylighted" or opened. Once it is daylighted, the WRA will be limited to 15 feet on either side of the stream. Within that WRA, water quality measures are required which may include a stormwater treatment system (e.g., vegetated bioswales), continuous vegetative ground cover (e.g., native grasses) at least 15 feet in width that provides year round efficacy, or a combination thereof.*
2. *The re-opened stream does not have to align with the original piped route but may take a different route on the subject property so long as it makes the appropriate upstream and downstream connections and meet the standards of subsections (G)(3) and (4) of this section.*
3. *A re-aligned stream must not create WRAs on adjacent properties not owned by the applicant unless the applicant provides a notarized letter signed by the adjacent property owner(s) stating that the encroachment of the WRA is permitted.*
4. *The evaluation of proposed alignment and design of the reopened stream shall consider the following factors:*
    a. *The ability of the reopened stream to safely carry storm drainage through the area without causing significant erosion.*
    b. *Continuity with natural contours on adjacent properties, slope on site and drainage patterns.*
    c. *Continuity of adjacent vegetation and habitat values.*
    d. *The ability of the existing and proposed vegetation to filter sediment and pollutants and enhance water quality.*
    e. *Provision of water temperature conducive to fish habitat.*
5. *Any upstream or downstream WRAs or riparian corridors shall not apply to, or overlap, the daylighted stream channel.*
6. *When a stream is daylighted the applicant shall prepare and record a legal document describing the reduced WRA required by subsections (G)(1) and (5) of this section. The document will be signed by a representative of the City and recorded at the applicant's expense to better ensure long term recognition of the reduced WRA and reduced restrictions for the daylighted stream section.*

Response: This subsection is not applicable because no daylighting of a piped stream is proposed.

H. The following habitat friendly development practices shall be incorporated into the design of any improvements or projects in the WRA to the degree possible:

1. *Restore disturbed soils to original or higher level of porosity to regain infiltration and stormwater storage capacity.*
2. *Apply a treatment train or series of stormwater treatment measures to provide multiple opportunities for stormwater treatment and reduce the possibility of system failure.*
3. *Incorporate stormwater management in road rights-of-way.*

4. *Landscape with rain gardens to provide on-lot detention, filtering of rainwater, and groundwater recharge.*
5. *Use multi-functional open drainage systems in lieu of conventional curb-and-gutter systems.*
6. *Use green roofs for runoff reduction, energy savings, improved air quality, and enhanced aesthetics.*
7. *Retain rooftop runoff in a rain barrel for later on-lot use in lawn and garden watering.*
8. *Disconnect downspouts from roofs and direct the flow to vegetated infiltration/filtration areas such as rain gardens.*
9. *Use pervious paving materials for driveways, parking lots, sidewalks, patios, and walkways.*
10. *Reduce sidewalk width to a minimum four feet. Grade the sidewalk so it drains to the front yard of a residential lot or retention area instead of towards the street.*
11. *Use shared driveways.*
12. *Reduce width of residential streets and driveways, especially at WRA crossings.*
13. *Reduce street length, primarily in residential areas, by encouraging clustering.*
14. *Reduce cul-de-sac radii and use pervious and/or vegetated islands in center to minimize impervious surfaces.*
15. *Use previously developed areas (PDAs) when given an option of developing PDA versus non-PDA land.*
16. *Minimize the building, hardscape and disturbance footprint.*
17. *Consider multi-story construction over a bigger footprint.*

Response: The building and site uses a number of these approaches to minimize impacts on the WRA, including stormwater planters and vegetated storm facilities, pervious paving, driveways no wider than required by fire code, placement of parking within the structure itself, and a multi-story building to minimize the building footprint. This standard is met.

32.090 Mitigation Plan

A. *A mitigation plan shall only be required if development is proposed within a WRA (including development of a PDA). (Exempted activities of CDC 32.040 do not require mitigation unless specifically stated. Temporarily disturbed areas, including TDAs associated with exempted activities, do not require mitigation, just grade and soil restoration and re-vegetation.) The mitigation plan shall satisfy all applicable provisions of CDC 32.100, Re-Vegetation Plan Requirements.*

Response: Development is proposed within a WRA. The mitigation plan will satisfy applicable provisions of this section and section 32.100 as outlined in Exhibit C. This standard is met.

B. *Mitigation shall take place in the following locations, according to the following priorities (subsections (B)(1) through (4) of this section):*
   1. *On-site mitigation by restoring, creating or enhancing WRAs.*
   2. *Off-site mitigation in the same sub-watershed will be allowed, but only if the applicant has demonstrated that:*
      a. *It is not practicable to complete mitigation on-site, for example, there is not enough area on-site; and*
      b. *The mitigation will provide equal or superior ecological function and value.*
   3. *Off-site mitigation outside the sub-watershed will be allowed, but only if the applicant has demonstrated that:*

a. *It is not practicable to complete mitigation on-site, for example, there is not enough area on-site; and*
b. *The mitigation will provide equal or superior ecological function and value.*

4. *Purchasing mitigation credits though DSL or other acceptable mitigation bank.*

Response: Mitigation is proposed to occur on site. This standard is met.

C. *Amount of mitigation.*

1. *The amount of mitigation shall be based on the square footage of the permanent disturbance area by the application. For every one square foot of non-PDA disturbed area, on-site mitigation shall require one square foot of WRA to be created, enhanced or restored.*
2. *For every one square foot of PDA that is disturbed, on-site mitigation shall require one half a square foot of WRA vegetation to be created, enhanced or restored.*
3. *For any off-site mitigation, including the use of DSL mitigation credits, the requirement shall be for every one square foot of WRA that is disturbed, two square feet of WRA shall be created, enhanced or restored. The DSL mitigation credits program or mitigation bank shall require a legitimate bid on the cost of on-site mitigation multiplied by two to arrive at the appropriate dollar amount.*

Response: The proposed impact within the WRA is 15,214 SF. Proposed mitigation consists of enhancement of the entire remaining Riparian Area, which has an area of 16,454 SF. The on-site mitigation more than meets the required 1:1 ratio. This standard is met.

D. *The Planning Director may limit or define the scope of the mitigation plan and submittal requirements commensurate with the scale of the disturbance relative to the resource and pursuant to the authority of Chapter 99 CDC. The Planning Director may determine that a consultant is required to complete all or a part of the mitigation plan requirements.*

Response: This subsection provides guidance to staff and requires no substantive response from the applicant.

E. *A mitigation plan shall contain the following information:*

1. *A list of all responsible parties including, but not limited to, the owner, applicant, contractor, or other persons responsible for work on the development site.*
2. *A map showing where the specific adverse impacts will occur and where the mitigation activities will occur.*
3. *A re-vegetation plan for the area(s) to be mitigated that meets the standards of CDC 32.100.*
4. *An implementation schedule, including timeline for construction, mitigation, mitigation maintenance, monitoring, and reporting. All in-stream work in fish bearing streams shall be done in accordance with the Oregon Department of Fish and Wildlife.*
5. *Assurances shall be established to rectify any mitigation actions that are not successful within the first three years. This may include bonding or other surety.*

Response: The mitigation plan by Schott and Associates has been prepared in accordance with these information requirements (see Appendix C in Exhibit C). Contact information is included in the full plan set (Exhibit H). Mitigation will occur concurrently with construction during the construction period after all approvals are met. As per City of West Linn WRA protection requirements, 80% success is required for replanted areas. The mitigation site will be monitored and maintained for three years. If, after each year monitoring period, 80% survival has not been met, dead plants will be replaced up to the 80% success required. Mitigation monitoring reports will be provided to document these activities. The onsite waterway is not fish bearing and the in-stream work window is not applicable. The applicant can provide any necessary assurance as necessary based on coordination with City staff. The applicant

proposes that any bonding or surety be deferred based on the results of the ongoing monitoring, maintenance, and reporting requirements. This requirement is met.

32.100 Re-Vegetation Plan Requirements

A. In order to achieve the goal of re-establishing forested canopy, native shrub and ground cover and to meet the mitigation requirements of CDC 32.090 and vegetative enhancement of CDC 32.080, tree and vegetation plantings are required according to the following standards:

1. All trees, shrubs and ground cover to be planted must be native plants selected from the Portland Plant List.

2. Plant size. Replacement trees must be at least one-half inch in caliper, measured at six inches above the ground level for field grown trees or above the soil line for container grown trees (the one-half inch minimum size may be an average caliper measure, recognizing that trees are not uniformly round), unless they are oak or madrone which may be one gallon size. Shrubs must be in at least a one-gallon container or the equivalent in ball and burlap and must be at least 12 inches in height.

3. Plant coverage.

a. Native trees and shrubs are required to be planted at a rate of five trees and 25 shrubs per every 500 square feet of disturbance area (calculated by dividing the number of square feet of disturbance area by 500, and then multiplying that result times five trees and 25 shrubs, and rounding all fractions to the nearest whole number of trees and shrubs; for example, if there will be 330 square feet of disturbance area, then 330 divided by 500 equals 0.66, and 0.66 times five equals 3.3, so three trees must be planted, and 0.66 times 25 equals 16.5, so 17 shrubs must be planted). Bare ground must be planted or seeded with native grasses or herbs. Non-native sterile wheat grass may also be planted or seeded, in equal or lesser proportion to the native grasses or herbs.

b. Trees shall be planted between eight and 12 feet on center and shrubs shall be planted between four and five feet on center, or clustered in single species groups of no more than four plants, with each cluster planted between eight and 10 feet on center. When planting near existing trees, the dripline of the existing tree shall be the starting point for plant spacing measurements.

4. Plant diversity. Shrubs must consist of at least two different species. If 10 trees or more are planted, then no more than 50 percent of the trees may be of the same genus.

5. Invasive vegetation. Invasive non-native or noxious vegetation must be removed within the mitigation area prior to planting.

6. Tree and shrub survival. A minimum survival rate of 80 percent of the trees and shrubs planted is expected by the third anniversary of the date that the mitigation planting is completed.

7. Monitoring and reporting. Monitoring of the mitigation site is the ongoing responsibility of the property owner. Plants that die must be replaced in kind.

8. To enhance survival of tree replacement and plantings, the following practices are required:

a. Mulching. Mulch new plantings a minimum of three inches in depth and 18 inches in diameter to retain moisture and discourage weed growth.

b. Irrigation. Water new plantings one inch per week between June 15th to October 15th, for the three years following planting.

c. Weed control. Remove, or control, non-native or noxious vegetation throughout maintenance period.

d. *Planting season. Plant bare root trees between December 1st and February 28th, and potted plants between October 15th and April 30th.*

e. *Wildlife protection. Use plant sleeves or fencing to protect trees and shrubs against wildlife browsing and resulting damage to plants.*

Response: The proposed plantings in Exhibit C will be native plants selected from the Portland Plant List and planted at the specified size. Plant coverage and diversity has been proposed in accordance with the standards outlined above (see Table 3 and the planting plan in Exhibit C). Exhibit C notes that 95% of the riparian corridor is populated with invasive species; these invasives will be removed and replaced with native plantings. The mitigation site will be monitored and maintained for three years. If, after each year monitoring period, 80% survival has not been met, dead plants will be replaced up to the 80% success required. Mitigation monitoring reports shall be provided to document these activities. Best practices such as those identified above will be utilized to maximize opportunities for plant survival. This standard is met.

B. *When weather or other conditions prohibit planting according to schedule, the applicant shall ensure that disturbed areas are correctly protected with erosion control measures and shall provide the City with funds in the amount of 125 percent of a bid from a recognized landscaper or nursery which will cover the cost of the plant materials, installation and any follow up maintenance. Once the planting conditions are favorable the applicant shall proceed with the plantings and receive the funds back from the City upon completion, or the City will complete the plantings using those funds.*

Response: The applicant will install plantings as part of the overall development project. If the time of year is not appropriate for planting, then the applicant will provide surety in accordance with the provisions outlined above and perform the planting once conditions are favorable. This standard is met.

32.110 Hardship Provisions

The purpose of this section is to ensure that compliance with this chapter does not deprive an owner of reasonable use of land. To avoid such instances, the requirements of this chapter may be reduced. The decision-making authority may impose such conditions as are deemed necessary to limit any adverse impacts that may result from granting relief. The burden shall be on the applicant to demonstrate that the standards of this chapter, including Table 32-2, Required Width of WRA, will deny the applicant "reasonable use" of his/her property.

A. *The right to obtain a hardship allowance is based on the existence of a lot of record recorded with the County Assessor's Office on, or before, January 1, 2006. The lot of record may have been, subsequent to that date, modified from its original platted configuration but must meet the minimum lot size and dimensional standards of the base zone.*

Response: The subject property consists of four contiguous parcels that were acquired by the State of Oregon in order to construct Interstate 205 and associated ramps and facilities, and to realign Willamette Falls Drive. The former Willamette Falls Drive right-of-way was subsequently vacated and the subject parcels sold as surplus property. Exhibit F contains Clackamas County Property Account Summaries for the four parcels, which show that they have been in the same configuration since prior to the Year 2000. This provision is satisfied.

B. *For lots described in subsection A of this section that are located completely or partially inside the WRA, development is permitted, consistent with this section. The maximum disturbed area (MDA) of the WRA shall be determined on a per lot basis. The MDA shall be the greater of:*

1. *Five thousand square feet of the WRA; or*
2. *Thirty percent of the total area of the WRA.*

Response: The applicant's submitted plans include calculations demonstrating that site improvements for the proposed building and paved surfaces do not exceed thirty percent (30%) of the Water Resource Area (Riparian Zone). Of the subject property's total area of 68,663 square feet, 52,966 square feet (77.1%) are in the Riparian Zone. The corresponding 30% disturbed area limit is 15,890 square feet, and the calculations provided on Sheet A1.0 demonstrate that the actual impact area is 15,214 square feet. Therefore, the proposed plans comply with the MDA limit.

C. The MDA shall be located as follows:

1. *In areas where the development will result in the least square footage encroachment into the WRA.*
2. *The applicant shall demonstrate, through site and building design, that the proposed development is the maximum practical distance from the water resource based on the functional needs of the proposed use.*
3. *The minimum distance from a water resource shall be 15 feet.*
4. *Access driveways shall be the minimum permitted width; select an alignment that is least impactful upon the WRA; and shall share use of the driveway, where possible.*

Response: The subject property is constrained not only by Bernert Creek in the southern part of the property and the associated 100-foot riparian corridor, but also by the presence of a significant Oregon white oak tree in the northeast corner of the property. The tree itself is outside the riparian corridor boundary, but protecting its root zone precludes shifting the building or access driveways all the way into the northeast corner of the site, away from the riparian corridor (WRA). Therefore, with respect to subparagraphs 1 and 2, the applicant's design team has optimized the site design to locate the proposed building at the maximum practical distance from the water resource that is consistent with conserving the significant tree in the northeast corner of the site. The building is located more than 15 feet from Bernert Creek and wetland boundaries, consistent with subparagraph 3. The access driveways are based on consultation with Tualatin Valley Fire & Rescue (TVFR) to determine the minimum acceptable widths, and the stream crossings are aligned to use an existing culvert location at the west, and minimize the lengthening of the existing driveway culvert of the "2500 Building" driveway immediately to the east of the subject site. Additionally, to limit the stream/WRA impact to the extent practicable, the applicant proposes to construct a five-foot-wide pedestrian path between the office and the sidewalk, in lieu of an eight-foot-wide path that would typically be required in the GC Zone.

It is notable that the proposed building design, with customer vehicle staging and storage unit/elevator access internalized within the building itself, avoids the need to provide an emergency access route 26-feet-wide outside the building and a hammerhead turnaround, which would have encroached into the riparian zone.

Also of note, the applicant initially attempted to negotiate an agreement with the owner of the "2500 Building" to the east that would allow the proposed development to share that site's existing driveway; however, the parties were unable to reach satisfactory terms. This applicant would not object to a condition requiring this property to allow its eastern driveway to be realigned to form a shared driveway configuration (i.e., with a "Y" north of the Willamette Falls Drive right-of-way) as part of a future redevelopment of the "2500 Building" site, provided that the required permitting and construction would be the responsibility of the redeveloper of that property.

D. The MDA shall include:

1. *The footprints of all structures, including accessory structures, decks and paved water impermeable surfaces including sidewalks, driveways, parking pads, paths, patios and parking lots, etc. Only 75 percent of water permeable surfaces at grade shall be included in the MDA.*

2. *All graded, disturbed or modified areas that are not subsequently restored to their original grade and replanted with native ground cover per an approved plan.*

Response: Drawing sheet A1.0 shows the proposed site plan, including the building and paved areas, in relation to the riparian corridor (WRA) boundary, stream, and wetlands. The drawing sheet also provides a data table and calculations for the amount of building area and paving situated within the riparian zone, with the 75 percent adjustment allowed by subparagraph 1 for the use of pervious pavement. The calculation shows that the MDA ("Actual Impact" in the Site Data table) contains 15,214 square feet, which is less than the 15,890 square foot maximum limit corresponding to 30% of the 52,966 square feet in the riparian zone area.

E. The MDA shall not include:

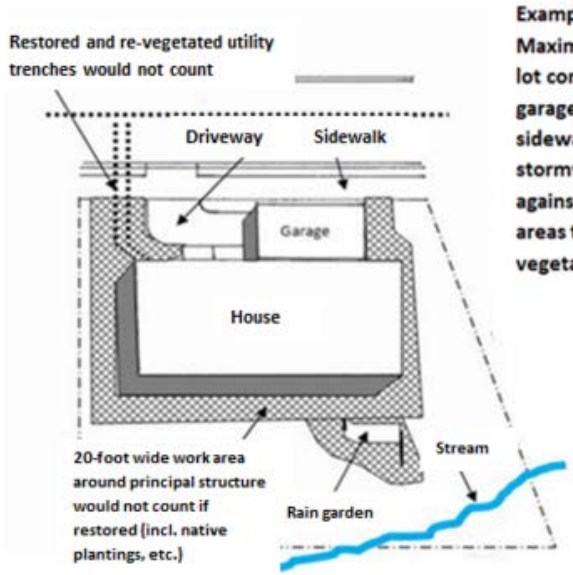
1. *Temporarily disturbed areas (TDAs) adjacent to an approved structure or development area for the purpose of grading, material storage, construction activity, trenched or buried utilities and other temporary activities so long as these areas are subsequently restored to the original grades and soil permeability, and re-vegetated with native plants per CDC 32.100, such that they are at least equal in functional value to the area prior to the initiation of the permitted activity;*
2. *Bay windows and similar cantilevered elements (including decks, etc.) of the principal or secondary structure so long as they do not extend more than five feet towards the WRA from the vertical plane of the house, and have no vertical supports from grade;*
3. *PDAs that are not built upon as part of the development proposal will not count in the MDA (e.g., use of an existing access driveway). (Conversely, PDAs that are built upon as part of the development proposal will count in the MDA.);*
4. *The installation of public streets and public utilities that are specifically required to meet either the transportation system plan or a utility master plan so long as all trenched public utilities are subsequently restored to the original grades and soil permeability, and revegetated with native plants per CDC 32.100, such that they are at least equal in functional value to the area prior to the initiation of the permitted activity. All areas displaced by streets shall be mitigated for.*

TABLE 32-5 MDA CALCULATION SUMMARY

Type of Development	Square footage included in MDA calculation?
All structures	YES
Non-water permeable paved surfaces including driveways, parking lots, patios, and paths	YES
Approved water permeable paved surfaces including driveways, parking lots, patios, and paths	YES but at 75% of total water permeable surface square footage
TDAs/graded areas that are restored and re-vegetated with native vegetation	NO
TDAs/all utility trenches and buried utilities restored or re-vegetated with native vegetation	NO
PDAs that are built upon or developed as part of the application	YES
PDAs that are not built upon or developed as part of the application	NO
Stormwater detention or treatment pond	YES
Rain garden or bioswale with the native plantings as part of re-vegetation plan	NO
Stormwater outfall, energy dissipaters (at, or above, grade)	YES

Non-native landscaping	YES
Sharing an existing driveway	NO
Development of lands that are not within the WRA	NO

Figure 32–7



Example of the applicability of the Maximum Disturbed Area (MDA) on a lot completely within a WRA. The garage, house, water impermeable sidewalks, driveways, patios, and stormwater outfall would all count against the MDA. Also any disturbed areas that are not restored and re-vegetated with native plantings.

Response: The calculations provided on Sheet A1.0 of the drawings are consistent with these definitions, figures, and calculation instructions.

F. Development allowed under subsection A of this section may use the following provisions:

1. Setbacks required by the underlying zoning district may be reduced up to 50 percent where necessary to avoid construction within the WRA, as long as the development would otherwise meet the standards of this chapter. However, front loading garages shall be set back a minimum of 18 feet, while side loading garages shall be set back a minimum of three feet.

2. Landscaping and parking requirements may be reduced for hardship properties but only if all or part of the WRA is dedicated pursuant to CDC 32.060(C) or if a restrictive deed covenant is established. These reductions shall be permitted outright and, to the extent that the practices are inconsistent with other provisions or standards of the West Linn CDC, this section is given precedence so that no variance is required. The allowable reductions include:

a. Elimination of landscaping for the parking lot interior.

b. Elimination of the overall landscape requirement (e.g., 20 percent for commercial uses).

c. Elimination of landscaping between parking lots and perimeter non-residential properties.

d. Landscaping between parking lots and the adjacent right-of-way may be reduced to eight feet. This eight-foot-wide landscaped strip may be used for vegetated stormwater detention or treatment.

e. A 25 percent reduction in total required parking is permitted to minimize or avoid intrusion into the WRA.

f. Adjacent improved street frontage with curb and sidewalk may be counted towards the parking requirement at a rate of one parking space per 20 lineal feet of street

frontage adjacent to the property, subject to City Engineer approval based on the street width and classification.

g. The current compact and full sized parking mix may be modified to allow up to 100 percent compact spaces and no full sized spaces. However, any required ADA compliant spaces shall be provided.

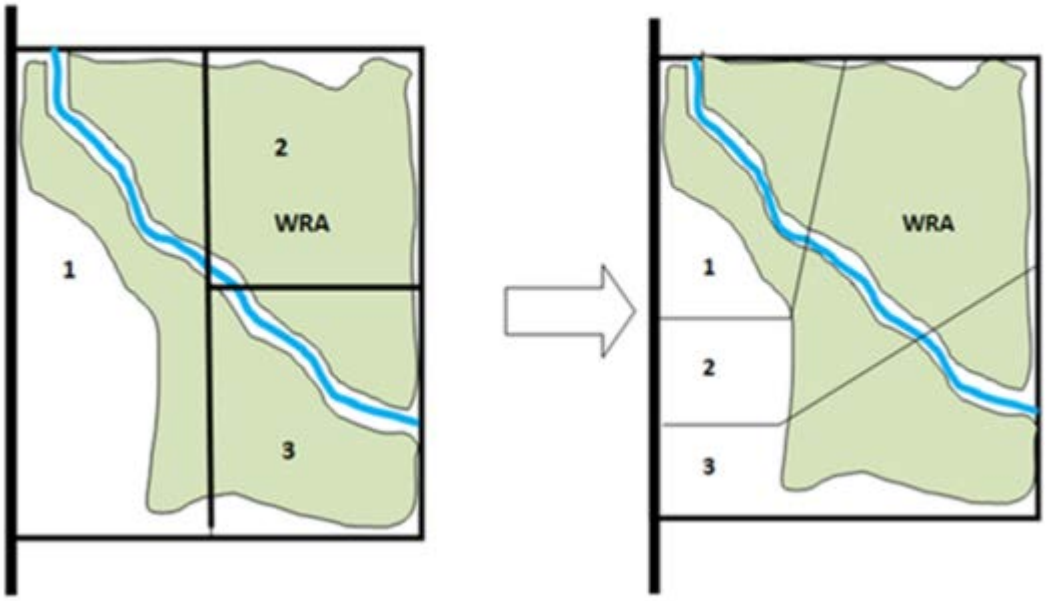
Response: The GC zone does not specify setback requirements for conditional uses (including self-storage facilities), so it is not necessary to request a setback width reduction under subparagraph 1. The proposed building will be located five feet from the north property line and 20 feet or more from all other property lines. The proposed plans demonstrate that over 50 percent of the site will be landscaped. The provisions of subparagraph 2 are not applicable because this application does not include requests to reduce setbacks, minimum required landscaping, or parking pursuant to these provisions.

G. Where a property owner owns multiple platted lots of record where each lot could be built upon under the hardship provisions, the property owner may either use the MDA for each lot on an individual lot by lot basis or may transfer 100 percent of the cumulative MDA of all the lots to those lots that are further away from, or less impactful upon, the WRA. Lot line adjustments may also be used to facilitate the density transfer. See Figure 32-8.

Response: This provision is not specifically applicable because the four parcels comprising the subject property are not platted lots, but instead consist of remnant parts of tracts and vacated right-of-way from the former alignment of Willamette Falls Drive. Notwithstanding the status of the parcels, however, this proposal to consolidate the four parcels comprising the subject property for integrated development as a single site is consistent with the intent of this provision. All area calculations have been provided on an aggregate basis. As explained above in this narrative, the design approach locates the building as far from Bernert Creek and the wetlands as possible, to the extent doing so can be consistent with conservation of the significant Oregon white oak in the northeast corner of the property. This approach is specifically designed to limit WRA impacts consistent with this requirement.

Figure 32–8

Transferring MDA from constrained lots 2 and 3 to the west edge of lot 1 which is out of the WRA. In this case, the transfer is accomplished by a lot line adjustment.



H. Mitigation and re-vegetation of disturbed WRAs shall be completed per CDC 32.090 and 32.100 respectively.

Response: The applicant has submitted a mitigation plan, including a planting plan for re-vegetation of the disturbed WRA, prepared by Martin Schott and Associates. Compliance with this requirement in the construction process can be assured through a condition of approval.

I. Any further modification of the standards of this chapter or the underlying zone shall require approval of a variance pursuant to Chapter 75 CDC.

Response: The applicant's proposed site plan and mitigation plan demonstrate compliance with the Alternate Review Process and Approval Criteria provisions of Sections 32.070 and 32.080, respectively; with the Hardship provisions of Section 32.110; and with related Sections incorporated by reference. No further modification of the WRA standards or the underlying zone is necessary for approval of the proposed development plan. This provision is therefore not applicable.

Chapter 38 Additional Yard Area Required; Exceptions to Yard Requirements; Storage in Yards; Projections into Yards

38.020 No Yard Required; Structure not on Property Line

In zones where a side yard or a rear yard setback is not required, a structure which is not to be built on the property line shall be set back from the property line by at least three feet.

Response: The GC zone does not specify require specific setbacks for conditional uses (including self-storage facilities), so this section applies. The proposed building will be located five feet from the north property line and 20 feet or more from all other property lines. This standard is met.

38.060 Projections into Required Yards

B. Cornices, eaves, belt courses, sills, canopies, or similar architectural features may extend or project into a required yard not more than 36 inches provided the width of such side yard is not reduced to less than three feet. Projections into the side yard may not include living space such as bay windows or overhanging breakfast nooks, etc.

Response: Any projections of this nature will comply with applicable building code and CDC separation requirements outlined herein. At this time, no yards are anticipated to be less than three feet. This standard is met.

Chapter 41 Building Height, Structures On Steep Lots, Exceptions

41.005 Determining Height of Building

A. For all zoning districts, building height shall be the vertical distance above a reference datum measured to the highest point of a flat roof or to the deck line of a mansard roof or to the highest gable, ridgeline or peak of a pitched or hipped roof, not including projections above roofs such as cupolas, towers, etc. The reference datum shall be selected by either of the following, whichever yields a greater height of building.

1. For relatively flat sites where there is less than a 10-foot difference in grade between the front and rear of the building, the height of the building shall be measured from grade five feet out from the exterior wall at the front of the building; or

2. For steeper lots where there is more than a 10-foot difference in grade between the front and rear of the building, the height of the building is measured from grade at a point five feet out from the exterior wall on the lowest side (front or rear) of the building. One then measures vertically to the peak or ridgeline of the roof to determine the height.

3. Buildings on cross slopes or side slopes are measured at either the front or rear of the building using methods described in subsections (A)(1) and (2) of this definition only.

Even if the cross slope creates a tall elevation on the side, the method of determining height is not modified. Also see CDC 41.020, Height Exceptions.

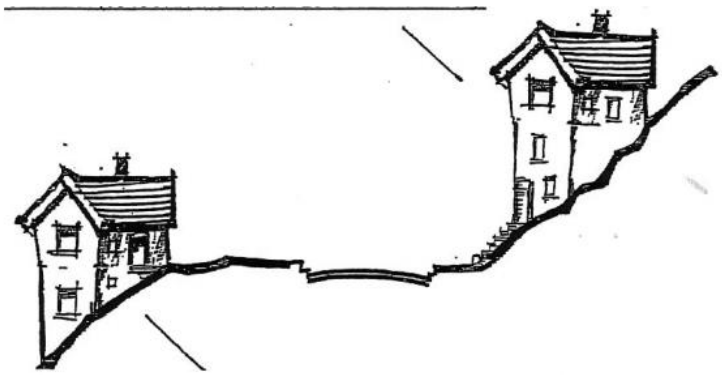
Response: As illustrated on the site plans, the site transitions from a high point at approximately elevation 157 feet at the northeast corner to a low point at approximately elevation 127 feet at the stream level by the east driveway. Within the vicinity of the building, the grade difference exceeds 10 feet; therefore, the height is measured utilizing the reference datum of 141.0 feet, which corresponds to the lowest ground elevation at a point five feet from the front of the building. Based on the ridge height of 193.2 feet, the maximum height of the building is thus 52.2 feet.

41.020 Height Exceptions

B. If the highest grade of a building site which fronts on the upslope side of the street is greater than 10 feet above the lowest grade, as measured along the planes of the proposed structure, the total building height shall not exceed 45 feet. In the R-15, R-20, and R-40 zones the 45-foot height may be increased to 50 feet.

Height of buildings on uphill slopes where there is more than a 10-foot difference between the rear and front elevation is measured from a point five feet downhill from the front of the building to the peak or dominant ridgeline and shall not exceed 45 feet (50 feet in the R-15, R-20 and R-40 zones).

Figure 2. Height exceptions



Height of buildings on downhill slopes where there is more than a 10-foot difference between the rear and front elevation is measured from a point five feet downhill from the rear of the building to the peak or dominant ridgeline and shall not exceed 45 feet (50 feet in the R-15, R-20 and R-40 zones). Front house height cannot be more than 24 feet above average street grade.

Response: The proposed building is located on the upslope side of the street, so the provisions of this subsection apply. As noted in the response to Section 41.005, based on the site topography and the elevation of the roof ridge, the overall building height is 52.2 feet. As the height exceeds the specified standard of 45 feet, this application includes a request for a Special Waiver pursuant to Chapter 75. The proposed building height can be allowed with approval of the Special Waiver request.

Chapter 42 Clear Vision Areas

42.020 Clear Vision Areas Required, Uses Prohibited

A. A clear vision area shall be maintained on the corners of all property adjacent to an intersection as provided by CDC 42.040 and 42.050.

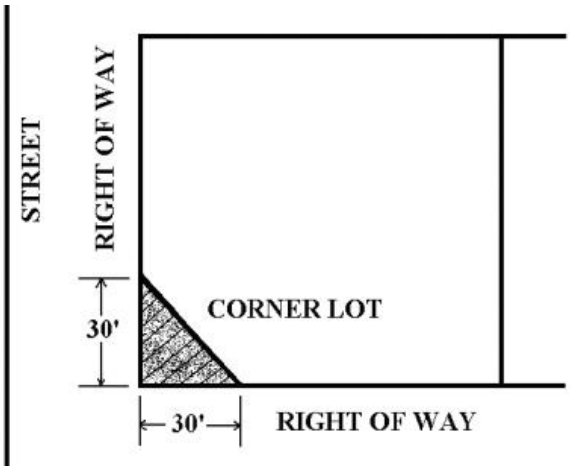
B. A clear vision area shall contain no planting, fence, wall, structure or temporary or permanent obstruction (except for an occasional utility pole or tree) exceeding three feet in height, measured from the top of the curb, or, where no curb exists, from the street centerline grade, except that trees exceeding this height may be located in this area, provided all branches below eight feet are removed.

Response: The applicable clear vision areas are depicted on the site plans at the intersections of the driveways with Willamette Falls Drive, and no obstructions are proposed within these areas that would obstruct sightlines. This standard is met.

42.040 Computation; Street and Accessway 24 Feet or More in Width

The clear vision area for all street intersections and street and accessway intersections (accessways having 24 feet or more in width) shall be that triangular area formed by the right-of-way or property lines along such lots and a straight line joining the right-of-way or property line at points which are 30 feet distant from the intersection of the right-of-way line and measured along such lines.

Clear vision area for corner lots and driveways 24 feet or more in width:

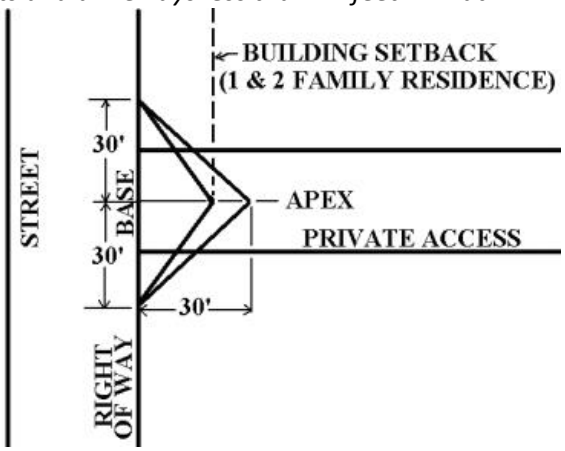


Response: The western driveway, which is 24 feet wide, utilizes the clear vision area depicted above. This standard is met.

42.050 Computation; Accessway less than 24 Feet in Width

The clear vision area for street and accessway intersections (accessways having less than 24 feet in width) shall be that triangular area whose base extends 30 feet along the street right-of-way line in both directions from the centerline of the accessway at the front setback line of a single-family and two-family residence, and 30 feet back from the property line on all other types of uses.

Clear vision area for corner lots and driveways less than 24 feet in width:



Response: The eastern driveway, which is less than 24 feet wide and is used only for one-way circulation, utilizes the clear vision area depicted above. This standard is met.

Chapter 46 Off-Street Parking, Loading and Reservoir Areas

46.080 Computation of Required Parking Spaces and Loading Area

B. To calculate building square footage as a basis for determining how many parking spaces are needed, the area measured shall be gross floor area under the roof measured from the faces of the structure, including all habitable floors and excluding only space devoted to covered off-street parking or loading.

C. Where employees are specified, the employees counted are the persons who work on the premises including proprietors, executives, professional people, production, sales, and distribution employees, during the largest shift.

Response: The parking standard for the proposed use requires utilization of building space and employee counts. Computation of required parking will implement the methods outlined above. This standard is met.

46.090 Minimum Parking Space Requirements

E. Industrial.

2.	*Storage or wholesale use including personal storage facilities.*	*One space per employee plus one space/700 sq. ft. of patron serving area.*

Response: The facility anticipates having typically 1 on-site employee per shift, or occasionally 2 for limited periods of time, thus requiring up to 2 parking spaces. The patron serving area consists of the office and adjoining restrooms, which have a combined area of approximately 400 square feet, thus requiring 1 parking space. The combined requirement for parking is therefore 3 spaces. As illustrated on the Level 1 floor plan, the facility will provide a total of 3 parking spaces internal to the building for customer and employee use. This standard is met.

F. Maximum parking. Parking spaces (except for single-family and two-family residential uses) shall not exceed the minimum required number of spaces by more than 10 percent.

Response: As noted in the response to subsection E, the facility is required to have 3 parking spaces and has provided 3 parking spaces. The maximum allowable number of spaces has not been exceeded. This standard is met.

46.130 Off-Street Loading Spaces

Buildings or structures to be built or substantially altered, which receive and distribute material or merchandise by truck, shall provide and maintain off-street loading and maneuvering space. The dimensional standard for loading spaces is a minimum of 14 feet wide by 20 feet long or proportionate to accommodate the size of delivery trucks that typically serve the proposed use as follows:

GROSS FLOOR AREA		
Land Use	**At Which First Berth is Required**	**At Which Second Berth is Required**
Manufacturing	5,000 sq. ft.	40,000 sq. ft.
Warehouse	5,000	40,000
Storage	10,000	100,000

Response: The storage facility has a total building area of 106,487 square feet including the internal parking and loading spaces and vehicle circulation area, or 96,709 square feet when excluding the vehicle areas in the grade-level breezeway. The table above thus requires one loading berth as the building size is between 10,000 and 100,000 square feet and the use is storage. As illustrated on the Level 1 floor plan, the facility will provide 2 truck loading spaces, each with dimensions of 14 feet by 40 feet. This standard is met.

46.150 Design and Standards

The following standards apply to the design and improvement of areas used for vehicle parking, storage, loading, and circulation:

A. Design standards

1. "One standard parking space" means a minimum for a parking stall of eight feet in width and 16 feet in length. These stalls shall be identified as "compact." To accommodate larger

cars, 50 percent of the required parking spaces shall have a minimum dimension of nine feet in width and 18 feet in length (nine feet by 18 feet). When multi-family parking stalls back onto a main driveway, the stalls shall be nine feet by 20 feet. Parking for development in water resource areas may have 100 percent compact spaces.

Response: The internal parking spaces are proposed to have dimensions of 10 feet by 18 feet, which exceeds the minimum of 9 feet by 18 feet. This standard is met.

2. *Disabled parking and maneuvering spaces shall be consistent with current federal dimensional standards and subsection B of this section and placed nearest to accessible building entryways and ramps.*

Response: Disabled parking is provided in accordance with applicable standards of the Americans with Disabilities Act (ADA) and the Oregon Structural Specialty Code. This standard is met.

3. *Repealed by Ord. 1622.*
4. *Service drives shall be designed and constructed to facilitate the flow of traffic, provide maximum safety of traffic access and egress, and maximum safety of pedestrians and vehicular traffic on the site.*
5. *Each parking and/or loading space shall have clear access, whereby the relocation of other vehicles to utilize the parking space is not required.*
6. *Except for single- and two-family residences, any area intended to be used to meet the off-street parking requirements as contained in this chapter shall have all parking spaces clearly marked using a permanent paint. All interior drives and access aisles shall be clearly marked and signed to show direction of flow and maintain vehicular and pedestrian safety. Permeable parking surface spaces may have an alternative delineation for parking spaces.*
7. *Except for residential parking, and parking for public parks and trailheads, at least 50 percent of all areas used for the parking and/or storage and/or maneuvering of any vehicle, boat and/or trailer shall be improved with asphalt or concrete surfaces according to the same standards required for the construction and acceptance of City streets. The remainder of the areas used for parking may use a permeable paving surface designed to reduce surface runoff. Parking for public parks or trailheads may use a permeable paving surface designed to reduce surface runoff for all parking areas. Where a parking lot contains both paved and unpaved areas, the paved areas shall be located closest to the use which they serve.*
9. *Access drives from the street to off-street parking or loading areas shall be designed and constructed to facilitate the flow of traffic and provide maximum safety for pedestrian and vehicular traffic on the site. The number of access drives shall be limited to the minimum that will allow the property to accommodate and service the anticipated traffic. Access drives shall be clearly and permanently marked and defined through use of rails, fences, walls, or other barriers or markers on frontage not occupied by service drives.*

Response: The building has been designed to provide service vehicle access through the core of the building (in a grade-level breezeway) and to maintain vehicle and pedestrian safety by limiting pedestrian activity to areas near the office, providing loading spaces near the elevators, and leaving a safety buffer near individual storage units on Level 1. The parking spaces and loading spaces have been designed to allow for vehicles to enter and exit without necessitating movement by other vehicles. The parking spaces and drive aisles will be marked with paint and all parking will utilize a concrete surface within the breezeway. The two proposed access drives are intended to create a one-way circulation pattern from west to east for users accessing storage units, while also allowing for vehicles to turn around and exit the west driveway if they do not progress through the western security gate (e.g., customers visiting the office without

accessing storage, or after-hours visitors without security access). The access drives will utilize curbs to define the drive path and the west driveway will have an adjacent raised sidewalk for pedestrian safety. This standard is met.

10. *Access drives shall have a minimum vision clearance as provided in Chapter 42 CDC, Clear Vision Areas.*

Response: Vision clearance is maintained as described in the response to Chapter 42. This standard is met.

11. *Parking spaces along the boundaries of a parking lot or adjacent to interior landscaped areas or sidewalks shall be provided with a wheel stop at least four inches high located two feet back from the front of the parking stall. Such parking spaces may be provided without wheel stops if the sidewalks or landscaped areas adjacent the parking stalls are two feet wider than the minimum width.*

Response: The parking spaces are all interior to the building (within the breezeway) rather than adjacent to landscaped areas or sidewalks. This standard does not apply.

12. *Off-street parking and loading areas shall be drained in accordance with plans and specifications approved by the City Engineer. Storm drainage at commercial sites may also have to be collected to treat oils and other residue.*

Response: Pervious pavement is proposed for the access aisles to enable stormwater to infiltrate directly. By contrast, drainage from vehicles within the building perimeter will be collected via drains, treated via an oil-water separator, and discharged to the sanitary sewer system. This standard is met.

13. *Artificial lighting on all off-street parking facilities shall be designed to deflect all light downward away from surrounding residences and so as not to create a hazard to the public use of any road or street.*

Response: As the parking area is within the building, there are no concerns regarding lighting spillover onto neighboring properties. This standard does not apply.

14. *Directional arrows and traffic control devices which are placed on parking lots shall be identified.*

Response: Directional arrows will be provided in the vehicle circulation areas as required. This standard is met.

16. *Visitor or guest parking must be identified by painted "GUEST" or "VISITOR."*

Response: There are no specific visitor or guest parking spaces so painted labels are unnecessary. This standard does not apply.

17. *The parking area shall have less than a five percent grade. No drainage across adjacent sidewalks or walkways is allowed.*

Response: The parking area will be nearly level as it is internal to the building. This standard is met.

18. *Commercial, office, industrial, and public parking lots may not occupy more than 50 percent of the main lot frontage of a development site. The remaining frontage shall comprise buildings or landscaping. If over 50 percent of the lineal frontage comprises parking lot, the landscape strip between the right-of-way and parking lot shall be increased to 15 feet wide and shall include terrain variations (e.g., one-foot-high berm) plus landscaping. The defensible space of the parking lot should not be compromised.*

Response: There is no parking lot frontage along Willamette Falls Drive as the parking area is located within the building. This standard does not apply.

19. *Areas of the parking lot improved with asphalt or concrete surfaces shall be designed into areas of 12 or less spaces through the use of defined landscaped area. Groups of 12 or less spaces are defined as:*
    a. *Twelve spaces in a row, provided there are no abutting parking spaces, as in the case when the spaces are abutting the perimeter of the lot; or*
    b. *Twelve spaces in a group with six spaces abutting together; or*
    c. *Two groups of 12 spaces abutting each other, but separated by a 15-foot-wide landscape area including a six-foot-wide walkway.*
    d. *Parking areas improved with a permeable parking surface may be designed using the configurations shown in subsections (A)(19)(a), (b) and (c) of this section except that groups of up to 18 spaces are allowed.*
    e. *The requirements of this chapter relating to total parking lot landscaping, landscaping buffers, perimeter landscaping, and landscaping the parking lot islands and interior may be waived or reduced pursuant to CDC 32.110(F) in a WRA application without a variance being required.*

Response: No landscaping is required for the parking area as it is inside the building footprint rather than outdoors. This standard does not apply.

20. *Pedestrian walkways shall be provided in parking areas having 20 or more spaces. Walkways or sidewalks shall be constructed between major buildings/activity areas (an example in multi-family housing: between recreation center, swimming pool, manager's office, park or open space areas, parking lots, etc.) within a development, between adjacent developments and the new development, as feasible, and between major buildings/activity areas within the development and adjacent streets and all adjacent transit stops. Internal parking lot circulation and design should maintain ease of access for pedestrians from streets and transit stops. Walkways shall be constructed using a material that visually contrasts with the parking lot and driveway surface. Walkways shall be further identifiable to pedestrians and motorists by grade separation, walls, curbs, surface texture (surface texture shall not interfere with safe use of wheelchairs, baby carriages, shopping carts, etc.), and/or landscaping. Walkways shall be six feet wide. The arrangement and layout of the paths shall depend on functional requirements.*

Response: The parking area has only 3 spaces so no pedestrian walkways are required. This standard does not apply.

21. *The parking and circulation patterns are easily comprehended and defined. The patterns shall be clear to minimize traffic hazards and congestion and to facilitate emergency vehicles.*

Response: The one-way driving pattern will be marked with arrows to provide for efficient and understandable circulation. This standard is met.

22. *The parking spaces shall be close to the related use.*

Response: The required parking spaces are located near the office for easy access by employees and customers. This standard is met.

23. *Permeable parking spaces shall be designed and built to City standards.*

Response: No permeable parking spaces are proposed as the parking spaces are within the building. The permeable paving utilized in the access drives will be designed per City design requirements. This standard does not apply.

B. Accessible parking standards for persons with disabilities. If any parking is provided for the public or visitors, or both, the needs of the people with disabilities shall be based upon the following standards or current applicable federal standards, whichever are more stringent:

1. Minimum number of accessible parking space requirements (see following table):

MINIMUM REQUIRED NUMBER OF TOTAL PARKING SPACES	TOTAL NUMBER OF ACCESSIBLE SPACES	NUMBER OF VAN-ACCESSIBLE SPACES REQUIRED, OF TOTAL	SPACES SIGNED "WHEELCHAIR USE ONLY"
1 – 25	1	1	-

2. Location of parking spaces. Parking spaces for the individual with a disability that serve a particular building shall be located on the shortest possible accessible circulation route to an accessible entrance to a building. In separate parking structures or lots that do not serve a particular building, parking spaces for the persons with disabilities shall be located on the shortest possible circulation route to an accessible pedestrian entrance of the parking facility.

3. Accessible parking space and aisle shall meet ADA vertical and horizontal slope standards.

4. Where any differences exist between this section and current federal standards, those standards shall prevail over this code section.

5. One in every eight accessible spaces, but not less than one, shall be served by an access aisle 96 inches wide.

6. Van-accessible parking spaces shall have an additional sign marked "Van Accessible" mounted below the accessible parking sign. A van-accessible parking space reserved for wheelchair users shall have a sign that includes the words "Wheelchair Use Only." Van-accessible parking shall have an adjacent eight-foot-wide aisle. All other accessible stalls shall have a six-foot-wide aisle. Two vehicles may share the same aisle if it is between them. The vertical clearance of the van space shall be 96 inches.

Response: One van-accessible parking space will be provided within the breezeway at the first floor level of the building near the office. Signage and slopes will conform to applicable standards of the Americans with Disabilities Act and the Oregon Structural Specialty Code. This standard is met.

C. Landscaping in parking areas. Reference Chapter 54 CDC, Landscaping.

Response: All the parking will be indoors on Level 1 so no landscaping is required for the parking area. This standard does not apply.

D. Bicycle facilities and parking.

1. Provisions shall be made for pedestrian and bicycle ways if such facilities are shown on an adopted plan.

2. Bicycle parking facilities shall either be lockable enclosures in which the bicycle is stored, or secure stationary racks which accommodate bicyclist's locks securing the frame and both wheels. The bicycle parking shall be no more than 50 feet from the entrance to the building, well-lit, observable, and properly signed.

3. Bicycle parking must be provided in the following amounts:

LAND USE CATEGORY	MINIMUM REQUIRED BICYCLE PARKING SPACES	MINIMUM COVERED AMOUNT
Warehouse	2, or 0.1 spaces per 1,000 gross sq. ft.	50%

Response: As noted in the response to Section 46.090, the patron serving area consists of the office and adjoining restrooms with a combined area of approximately 400 square feet, thus requiring 0.1 bicycle parking space, rounded up to the minimum of 2 spaces. The applicant proposed providing 2 bicycle parking spaces located near the main entrance. This standard is met.

F. (See Figures 1 and 2 below.)

Figure 1. MINIMUM STANDARDS FOR PARKING LOT LAYOUT

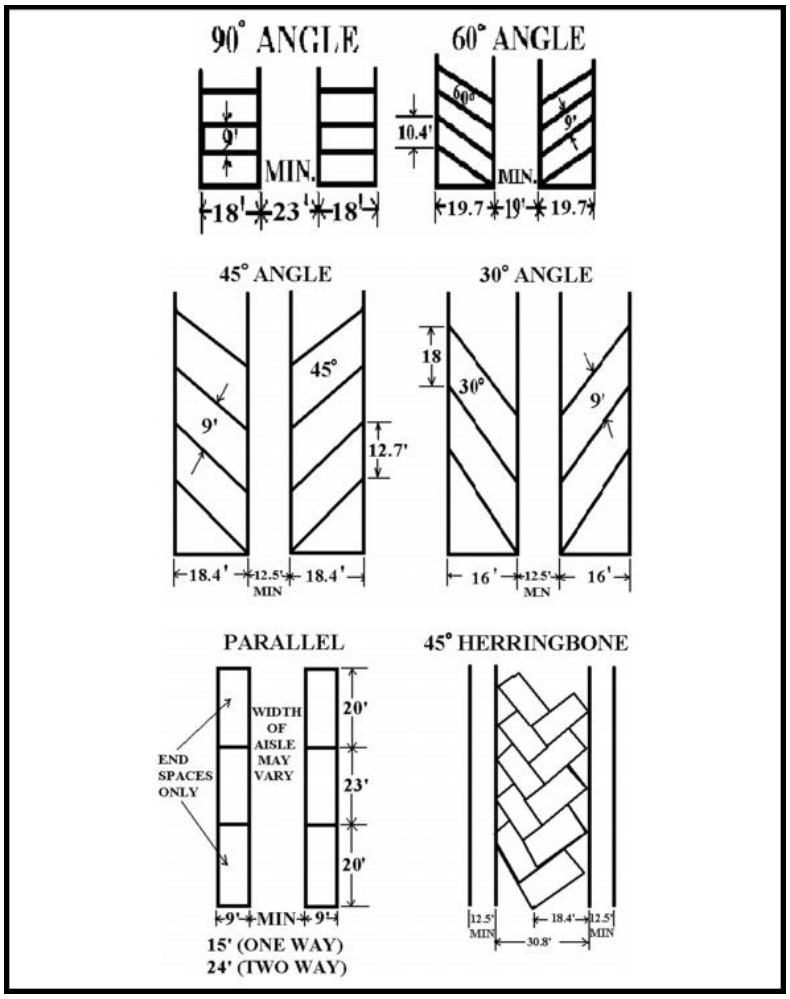
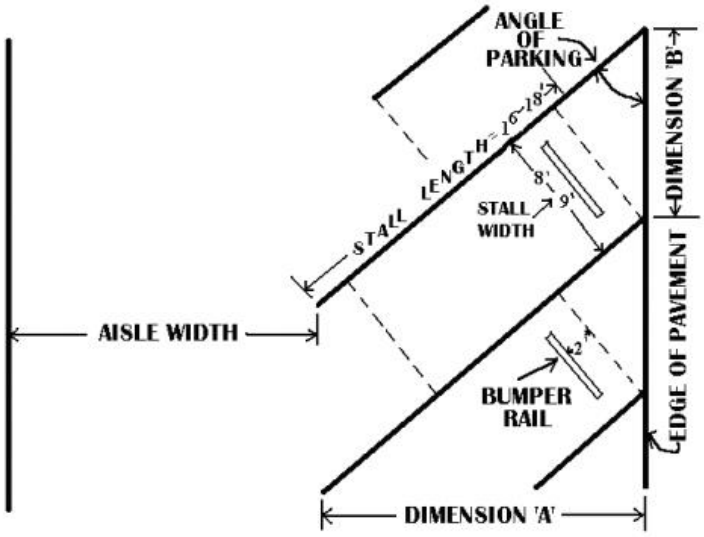


Figure 2. MINIMUM DISTANCE FOR PARKING STALLS



ANGLE OF PARKING	DIRECTION OF PARKING	AISLE WIDTH		DIMENSION 'A'		DIMENSION 'B'	
		STALL WIDTH		STALL WIDTH		STALL WIDTH	
		9.0'	8.0'	9.0'	8.0'	9.0'	8.0'
30°	DRIVE-IN	12.5'	12.5'	16.8'	13.8'	18.0'	16.0'
45°	DRIVE-IN	12.5'	12.5'	19.1'	17.0'	12.7'	11.3'
60°	DRIVE-IN	19.0'	18.0'	20.1'	17.8'	10.4'	9.2'
60°	BACK-IN	17.0'	17.0'	20.1'	17.8'	10.4'	9.2'
90°	DRIVE-IN	23.0'	23.0'	18.0'	16.0'	9.0'	8.0'
90°	BACK-IN	22.0'	22.0'	18.0'	16.0'	9.0'	8.0'

Response: As illustrated on the Level 1 floor plan, the applicant has proposed three 90° parking spaces near the office, with an aisle width at this location of approximately 25 feet. The parking spaces will have minimum dimensions of 10 feet by 18 feet. This standard is met.

Chapter 48 Access, Egress and Circulation

48.020 Applicability and General Provisions

A. The provisions of this chapter do not apply where the provisions of the Transportation System Plan or land division chapter are applicable and set forth differing standards.

Response: As discussed in the Transportation Impact Letter (Exhibit E), the proposed access points have been evaluated against the standards of Chapter 48 and those of the Transportation System Plans (e.g., the access spacing standards of TSP Table 8-3). This standard is met.

B. All lots shall have access from a public street or from a platted private street approved under the land division chapter.

Response: Direct access is provided from the lot to Willamette Falls Drive. This standard is met.

C. No building or other permit shall be issued until scaled plans are presented to the City and approved by the City as provided by this chapter, and show how the access, egress, and circulation requirements are to be fulfilled. Access to State or County roads may require review, approval, and permits from the appropriate authority.

Response: This application includes scaled plans illustrating the proposed entry and exit points and vehicle circulation through the building and site. This standard is met.

E. Owners of two or more uses, structures, lots, parcels, or units of land may agree to utilize jointly the same access and egress when the combined access and egress of both uses, structures, or parcels of land satisfies the requirements as designated in this code; provided, that satisfactory legal evidence is presented to the City Attorney in the form of deeds, easements, leases, or contracts to establish joint use. Copies of said instrument shall be placed on permanent file with the City Recorder.

Response: The applicant contacted the owner of the neighboring property to the east to explore the possibility of utilizing its existing driveway as a shared access to Willamette Falls Drive, but the parties were not able to arrive at terms for a shared access agreement. This standard does not apply.

48.025 Access Control

B. Access control standards.

1. Traffic impact analysis requirements. The City or other agency with access jurisdiction may require a traffic study prepared by a qualified professional to determine access, circulation and other transportation requirements. (See also CDC 55.125, Traffic Impact Analysis.)

2. The City or other agency with access permit jurisdiction may require the closing or consolidation of existing curb cuts or other vehicle access points, recording of reciprocal access easements (i.e., for shared driveways), development of a frontage street, installation of traffic control devices, and/or other mitigation as a condition of granting an access permit, to ensure the safe and efficient operation of the street and highway system. Access to and from off-street parking areas shall not permit backing onto a public street.

3. Access options. When vehicle access is required for development (i.e., for off-street parking, delivery, service, drive-through facilities, etc.), access shall be provided by one of the following methods (planned access shall be consistent with adopted public works standards and TSP). These methods are "options" to the developer/subdivider.

a) Option 1. Access is from an existing or proposed alley or mid-block lane. If a property has access to an alley or lane, direct access to a public street is not permitted.

b) Option 2. Access is from a private street or driveway connected to an adjoining property that has direct access to a public street (i.e., "shared driveway"). A public access easement covering the driveway shall be recorded in this case to assure access to the closest public street for all users of the private street/drive.

c) Option 3. Access is from a public street adjacent to the development lot or parcel. If practicable, the owner/developer may be required to close or consolidate an existing access point as a condition of approving a new access. Street accesses shall comply with the access spacing standards in subsection (B)(6) of this section.

6. Access spacing.

a. *The access spacing standards found in Chapter 8 of the adopted Transportation System Plan (TSP) shall be applicable to all newly established public street intersections and non-traversable medians.*

b. *Private drives and other access ways are subject to the requirements of CDC 48.060.*

7. *Number of access points. For single-family (detached and attached), two-family, and duplex housing types, one street access point is permitted per lot or parcel, when alley access cannot otherwise be provided; except that two access points may be permitted corner lots (i.e., no more than one access per street), subject to the access spacing standards in subsection (B)(6) of this section. The number of street access points for multiple family, commercial, industrial, and public/institutional developments shall be minimized to protect the function, safety and operation of the street(s) and sidewalk(s) for all users. Shared access may be required, in conformance with subsection (B)(8) of this section, in order to maintain the required access spacing, and minimize the number of access points.*

8. *Shared driveways. The number of driveway and private street intersections with public streets shall be minimized by the use of shared driveways with adjoining lots where feasible. The City shall require shared driveways as a condition of land division or site design review, as applicable, for traffic safety and access management purposes in accordance with the following standards:*

   a. *Shared driveways and frontage streets may be required to consolidate access onto a collector or arterial street. When shared driveways or frontage streets are required, they shall be stubbed to adjacent developable parcels to indicate future extension. "Stub" means that a driveway or street temporarily ends at the property line, but may be extended in the future as the adjacent lot or parcel develops. "Developable" means that a lot or parcel is either vacant or it is likely to receive additional development (i.e., due to infill or redevelopment potential).*

   b. *Access easements (i.e., for the benefit of affected properties) shall be recorded for all shared driveways, including pathways, at the time of final plat approval or as a condition of site development approval.*

   c. *Exception. Shared driveways are not required when existing development patterns or physical constraints (e.g., topography, lot or parcel configuration, and similar conditions) prevent extending the street/driveway in the future.*

Response: A transportation impact letter is attached as Exhibit E to evaluate the effect of the proposed development on the transportation system and provide evidence in support of the requested variance to the driveway spacing standards. The letter demonstrates that the storage facility will have a negligible impact on the operations of Willamette Falls Drive and that the proposed driveway locations are appropriate given the trip generation, sight lines, and location of other nearby driveways. The letter also outlines opportunities for future driveway shared driveways. No backing movements onto the public street will be necessary to access the site's parking spaces as all parking is interior to the building. The applicant contacted the owner of the neighboring property to the east to explore the possibility of utilizing a shared access to Willamette Falls Drive, but the parties were not able to reach agreement on terms for a shared access agreement.

The number of access points off Willamette Falls Drive has been limited to two, consistent with Section 5.0070 of the Public Works Design Standards, which allows for multiple driveways on commercial developments with more than 250 feet of frontage. As outlined in Exhibit E, the proposed driveways provide the required 150-foot separation from each other, and in relation to the driveway to the west, but do not meet the spacing requirement relative to the driveway to the east (the "2500 Building" site). Given the minimal transportation impacts anticipated from the facility, the applicant is requesting a Variance to the driveway spacing standards to allow the proposed configuration (see the response to

Chapter 75). It is not anticipated that the number or location of driveways would negatively impact the safety or operation of the roadway. Furthermore, pedestrian safety will be improved by the construction of a public sidewalk along Willamette Falls Drive. With the approval of the requested Variance, this standard is met.

48.040 Minimum Vehicle Requirements for Non-Residential Uses

Access, egress, and circulation system for all non-residential uses shall not be less than the following:

A. Service drives for non-residential uses shall be fully improved with hard surface pavement:
- *1. With a minimum of 24-foot width when accommodating two-way traffic; or*
- *2. With a minimum of 15-foot width when accommodating one-way traffic. Horizontal clearance shall be two and one-half feet wide on either side of the driveway.*
- *3. Meet the requirements of CDC 48.030(E)(3) through (6).*
- *4. Pickup window driveways may be 12 feet wide unless the Fire Chief determines additional width is required.*

Response: The west driveway has a width of 24 feet to allow for two-way traffic. The east driveway has a width of 20 feet to allow for one-way (exiting) traffic and to accommodate emergency vehicles. The facility provides 15'-6" vertical clearance through the building and provides a vehicle turnaround to the west of the building. The driveway configuration and access movements are subject to final review and approval by Tualatin Valley Fire and Rescue (TVFR), but based on the design team's consultation with TVFR, the western turnaround does not need to be dimensioned to accommodate their equipment. This standard is met.

B. All non-residential uses shall be served by one or more service drives as determined necessary to provide convenient and safe access to the property and designed according to CDC 48.030(A). In no case shall the design of the service drive or drives require or facilitate the backward movement or other maneuvering of a vehicle within a street, other than an alley.

Response: The west driveway will allow for two-way traffic and the east driveway will allow for one-way (exiting) traffic, with the intent to provide a one-way traffic pattern from west to east that accommodates the range of vehicle sizes that will utilize the facility. No backing movements would be required on the public street. This standard is met.

C. All on-site maneuvering and/or access drives shall be maintained pursuant to CDC 46.130.

Response: The vehicle access drives will be constructed and maintained per the requirements of Chapter 46 and other applicable development standards. This standard is met.

D. Gated accessways to non-residential uses are prohibited unless required for public safety or security.

Response: As a storage facility, there will be gates installed for the security of customers' possessions inside the storage units. This exception to the general rule of prohibitions on gates is allowed for security reasons. This standard is met.

48.050 One-Way Vehicular Access Points

Where a proposed parking facility plan indicates only one-way traffic flow on the site, it shall be accommodated by a specific driveway serving the facility, and the entrance drive shall be situated closest to oncoming traffic, and the exit drive shall be situated farthest from oncoming traffic.

Response: The proposed site plan implements a hybrid circulation pattern, with a two-way primary access point at the west, closest to the primary route most visitors will use (typically coming from 10th Street, where the Interstate 205 ramps are located), and a secondary, exit-only driveway at the east end

of the property. Site visitors not accessing storage units (including employees) can enter as well as leave by way of the primary (western) driveway. However, visitors accessing storage units will proceed through the security gate within the breezeway (within the building footprint) and beyond that point will proceed to exit using a one-way traffic pattern, passing through the building and leaving the site by way of the eastern driveway. Given the site's location, the majority of trips are anticipated to approach the facility from the west and depart headed back to the west again. The proposed configuration is consistent with this policy to route the majority of approaching trips into the first driveway on their route. This standard is met.

48.060 Width and Location of Curb Cuts and Access Separation Requirements

A. Minimum curb cut width shall be 16 feet.

Response: The width of the west driveway is 24 feet and the width of the east driveway is 20 feet. This standard is met.

B. Maximum curb cut width shall be 36 feet, except along Highway 43 in which case the maximum curb cut shall be 40 feet. For emergency service providers, including fire stations, the maximum shall be 50 feet.

Response: Both the proposed driveway widths are less than 36 feet (specifically, 24 feet and 20 feet). This standard is met.

C. No curb cuts shall be allowed any closer to an intersecting street right-of-way line than the following:

1. On an arterial when intersected by another arterial, 150 feet.
2. On an arterial when intersected by a collector, 100 feet.
3. On an arterial when intersected by a local street, 100 feet.
4. On a collector when intersecting an arterial street, 100 feet.
5. On a collector when intersected by another collector or local street, 35 feet.
6. On a local street when intersecting any other street, 35 feet.

Response: Willamette Falls Drive is classified as an arterial. The north side of the road has no street intersections in the vicinity of the site, so the proposed driveway locations are well in excess of the required separation outlined above. However, the driveway of the adjacent "2500 Building" to the east aligns well (if not precisely) with the 6th Street intersection on the south side of Willamette Falls Drive. As noted above, the applicant made a substantial effort to reach agreement with that neighboring owner to allow shared access using that driveway, but the effort was ultimately not successful. As a result, this application includes a request for a variance to allow the easterly (exit-only) driveway with spacing below the minimum standard requirement. This standard is satisfied, subject to approval of the Variance request.

D. There shall be a minimum distance between any two adjacent curb cuts on the same side of a public street, except for one-way entrances and exits, as follows:

1. On an arterial street, 150 feet.

Response: Driveway spacing and movements are discussed in detail in the applicant's Transportation Impact Letter (see Exhibit E). The eastern (exit-only) driveway is approximately 20 feet from the neighboring driveway (measured edge-to-edge), and is therefore the subject of the requested Variance to allow reduced driveway spacing.

E. A rolled curb may be installed in lieu of curb cuts and access separation requirements.

Response: Rolled curb is not proposed at this location. This standard does not apply.

F. Curb cuts shall be kept to the minimum, particularly on Highway 43. Consolidation of driveways is preferred. The standard on Highway 43 is one curb cut per business if consolidation of driveways is not possible.

Response: Only two curb cuts are proposed for the facility. The applicant approached the property owner to the east to explore the possibility of sharing a driveway for the two developments, but the parties were not able to reach agreement on terms for a shared access agreement. Consequently, the east driveway is proposed to serve only exiting trips from the self-storage facility. The transportation impact letter (Exhibit E) discusses the possibility of a future driveway consolidation. This standard is met.

G. Adequate line of sight pursuant to engineering standards should be afforded at each driveway or accessway.

Response: The transportation impact letter (Exhibit E) demonstrates that adequate sight distance is provided at both proposed driveways. This standard is met.

48.080 Bicycle and Pedestrian Circulation

C. Bicycle and pedestrian ways at commercial or industrial sites shall be provided according to the provisions of Chapter 55 CDC, Design Review.

Response: These provisions are addressed in the response to Chapter 55. This standard is met.

Chapter 52 Signs

52.101 Procedures and Approval Process

B. A sign subject to City approval is a sign for which approval will be granted by the Planning Director provided all conditions are satisfied; and

1. The Planning Director shall make the decision in the manner provided by CDC 99.060.

2. The decision may be appealed to the City Council as prescribed by CDC 99.240(A).

Response: While preliminary signage concepts are illustrated in the drawings, the applicant has not yet finalized the design. Separate permit applications will be submitted prior to the installation of any signage, subject to the review of the Planning Director. This standard is met.

Chapter 54 Landscaping

54.020 Approval Criteria

A. Every development proposal requires inventorying existing site conditions which include trees and landscaping. In designing the new project, every reasonable attempt should be made to preserve and protect existing trees and to incorporate them into the new landscape plan. Similarly, significant landscaping (e.g., bushes, shrubs) should be integrated. The rationale is that saving a 30-foot-tall mature tree helps maintain the continuity of the site, they are qualitatively superior to two or three two-inch caliper street trees, they provide immediate micro-climate benefits (e.g., shade), they soften views of the street, and they can increase the attractiveness, marketability, and value of the development.

Response: An inventory of existing trees is included in the arborist's report (Exhibit B). Trees are preserved to the extent possible to preserve mature canopy. The landscaping design prepared by the applicant's natural resource consultant integrates existing native species into the overall planting plan. This standard is met.

B. To encourage tree preservation, the parking requirement may be reduced by one space for every significant tree that is preserved in the parking lot area for a maximum reduction of 10 percent of the required parking. The City Parks Supervisor or Arborist shall determine the significance of the tree and/or landscaping to determine eligibility for these reductions.

Response: No reduction in parking has been requested by the applicant. This standard does not apply.

C. Developers must also comply with the municipal code chapter on tree protection.

Response: The arborist report addresses West Linn regulations regarding protection of existing trees. The applicant's arborist has determined that the site has one tree classified by the City as "significant," a large Oregon white oak in the northeast corner, and the site design incorporates efforts to preserve and protect this tree. This standard is met.

D. Heritage trees. Heritage trees are trees which, because of their age, type, notability, or historical association, are of special importance. Heritage trees are trees designated by the City Council following review of a nomination. A heritage tree may not be removed without a public hearing at least 30 days prior to the proposed date of removal. Development proposals involving land with heritage tree(s) shall be required to protect and save the tree(s). Further discussion of heritage trees is found in the municipal code.

Response: The site has approximately 40 trees overall, none of which has been designated as Heritage Trees. This standard does not apply.

E. Landscaping – By type, location and amount.

2. Non-residential uses. A minimum of 20 percent of the gross site area shall be landscaped. Parking lot landscaping may be counted in the percentage.

Response: As illustrated on the plans, over 50 percent of the site will be landscaped. This standard is met.

3. All uses (residential uses (non-single-family) and non-residential uses):

a. The landscaping shall be located in defined landscaped areas which are uniformly distributed throughout the parking or loading area. There shall be one shade tree planted for every eight parking spaces. These trees shall be evenly distributed throughout the parking lot to provide shade. Parking lots with over 20 spaces shall have a minimum 10 percent of the interior of the parking lot devoted to landscaping. Pedestrian walkways in the landscaped areas are not to be counted in the percentage. The perimeter landscaping, explained in subsection (E)(3)(d) of this section, shall not be included in the 10 percent figure. Parking lots with 10 to 20 spaces shall have a minimum five percent of the interior of the parking lot devoted to landscaping. The perimeter landscaping, as explained above, shall not be included in the five percent. Parking lots with fewer than 10 spaces shall have the standard perimeter landscaping and at least two shade trees. Non-residential parking areas paved with a permeable parking surface may reduce the required minimum interior landscaping by one-third for the area with the permeable parking surface only.

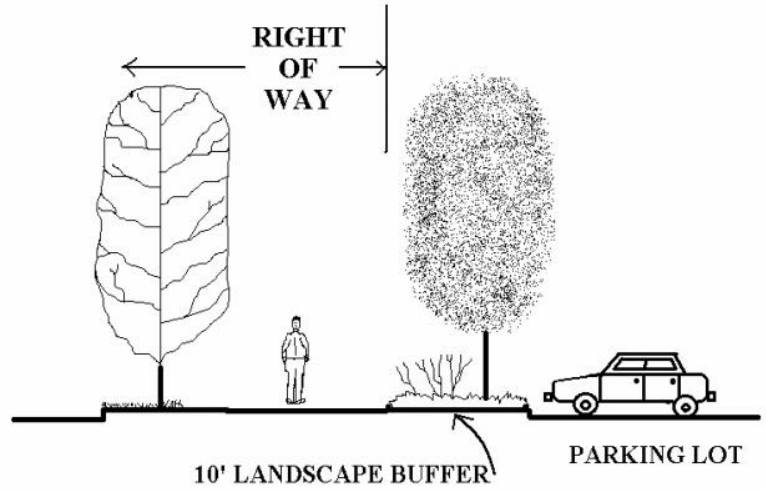
b. The landscaped areas shall not have a width of less than five feet.

Response: All parking will occur within the building envelope (within the breezeway) so there is no outdoor parking area that would necessitate interior or perimeter landscaping. These standards do not apply.

c. The soils, site, proposed soil amendments, and proposed irrigation system shall be appropriate for the healthy and long-term maintenance of the proposed plant species.

Response: The proposed planting plan has been prepared by a biologist to utilize species appropriate for the site context near the wetlands and stream. This standard is met.

d. A parking, loading, or service area which abuts a street shall be set back from the right-of-way line by perimeter landscaping in the form of a landscaped strip at least 10 feet in width. When a parking, loading, or service area or driveway is contiguous to an adjoining lot or parcel, there shall be an intervening five-foot-wide landscape strip. The landscaped area shall contain:



1) Street trees spaced as appropriate to the species, not to exceed 50 feet apart on the average;

2) Shrubs, not to reach a height greater than three feet, six inches, spaced no more than five feet apart on the average; or

3) Vegetative ground cover such as grass, wildflowers, or other landscape material to cover 100 percent of the exposed ground within two growing seasons. No bark mulch shall be allowed except under the canopy of low level shrubs.

Response: All parking will occur within the building envelope so there is no outdoor parking area that would necessitate interior or perimeter landscaping. Similarly, there is no outdoor loading area that would necessitate landscape buffers. This standard does not apply.

e. If over 50 percent of the lineal frontage of the main street or arterial adjacent to the development site comprises parking lot, the landscape strip between the right-of-way and parking lot shall be increased to 15 feet in width and shall include terrain variations (e.g., one-foot-high berm) plus landscaping. This extra requirement only applies to one street frontage.

Response: All parking will occur within the building envelope so there is no outdoor parking area that would necessitate interior or perimeter landscaping. This standard does not apply.

f. A parking, loading, or service area which abuts a property line shall be separated from the property line by a landscaped area at least five feet in width and which shall act as a screen and noise buffer, and the adequacy of the screen and buffer shall be determined by the criteria set forth in CDC 55.100(C) and (D), except where shared parking is approved under CDC 46.050.

Response: All parking will occur within the building envelope so there is no outdoor parking area that would necessitate interior or perimeter landscaping. Similarly, there is no outdoor loading area that would necessitate landscape buffers. This standard does not apply.

g. All areas in a parking lot not used for parking, maneuvering, or circulation shall be landscaped.

h. The landscaping in parking areas shall not obstruct lines of sight for safe traffic operation.

Response: All parking will occur within the building envelope so there is no outdoor parking area that would necessitate interior or perimeter landscaping. These standards do not apply.

i. Outdoor storage areas, service areas (loading docks, refuse deposits, and delivery areas), and above-ground utility facilities shall be buffered and screened to obscure their view from adjoining properties and to reduce noise levels to acceptable levels at the property line. The adequacy of the buffer and screening shall be determined by the criteria set forth in CDC 55.100(C)(1).

Response: There are no outdoor loading or storage areas that necessitate landscape buffers. This standard does not apply.

j. Crime prevention shall be considered and plant materials shall not be located in a manner which prohibits surveillance of public and semi-public areas (shared or common areas).

Response: There are no outdoor common areas. This standard does not apply.

k. Irrigation facilities shall be located so that landscaped areas can be properly maintained and so that the facilities do not interfere with vehicular or pedestrian circulation.

Response: If required, irrigation facilities will not conflict with other use areas on the site. This standard is met.

l. For commercial, office, multi-family, and other sites, the developer shall select trees that possess the following characteristics:

1) Provide generous "spreading" canopy for shade.
2) Roots do not break up adjacent paving.
3) Tree canopy spread starts at least six feet up from grade in, or adjacent to, parking lots, roads, or sidewalks unless the tree is columnar in nature.
4) No sticky leaves or sap-dripping trees (no honey-dew excretion).
5) No seed pods or fruit-bearing trees (flowering trees are acceptable).
6) Disease-resistant.
7) Compatible with planter size.
8) Drought-tolerant unless irrigation is provided.
9) Attractive foliage or form all seasons.

Response: At this site, to mitigate degraded existing conditions as well as the impacts of development, virtually all of the on-site areas available for plantings will be devoted to re-vegetation designed to re-establish good quality conditions for the riparian zone adjacent to Bernert Creek. Because the top priority is to plant tree species best suited to that goal, the applicant proposes to plant trees as specified in the tree planting/re-vegetation planting plan prepared by Martin Schott and Associates in collaboration with consulting arborist Morgan Holen (see Exhibits C and B, respectively).

m. Plant materials (shrubs, ground cover, etc.) shall be selected for their appropriateness to the site, drought tolerance, year-round greenery and coverage, staggered flowering periods, and avoidance of nuisance plants (Scotch broom, etc.).

Response: The proposed planting plan has been prepared by a biologist to utilize species appropriate for the site context near the wetlands and stream. These standards do not apply or are met.

G. Landscaping requirements in water resource areas (WRAs). Pursuant to CDC 32.110(E)(3) the requirements of this chapter relating to total site landscaping, landscaping buffers, landscaping around parking lots, and landscaping the parking lot interior may be waived or reduced in a WRA application without a variance being required.

Response: As noted above, the site meets the requirements for overall landscaping percentage. The landscaping requirements associated with parking lots do not apply as all parking is located interior to the building. This standard is met.

54.030 Planting Strips for Modified and New Streets

All proposed changes in width in a public street right-of-way or any proposed street improvement shall, where feasible, include allowances for planting strips. Plans and specifications for planting such areas shall be integrated into the general plan of street improvements. This chapter requires any multi-family, commercial, or public facility which causes change in public right-of-way or street improvement to comply with the street tree planting plan and standards.

Response: The proposed street improvements utilize a planting strip except in two locations where the stream is too close to the road to accommodate the planting strip and required grading without impacting or realigning the creek. The planting strips are anticipated to be used as vegetated stormwater facilities. Street trees will be planted in accordance with City specifications. This standard is met.

Chapter 55 Design Review

55.100 Approval Standards – Class II Design Review

The approval authority shall make findings with respect to the following criteria when approving, approving with conditions, or denying a Class II design review application.

A. The provisions of the following chapters shall be met:

1. Chapter 34 CDC, Accessory Structures, Accessory Dwelling Units, and Accessory Uses.
2. Chapter 38 CDC, Additional Yard Area Required; Exceptions to Yard Requirements; Storage in Yards; Projections into Yards.
3. Chapter 40 CDC, Building Height Limitations, Exceptions.
4. Chapter 42 CDC, Clear Vision Areas.

5. *Chapter 44 CDC, Fences.*
6. *Chapter 46 CDC, Off-Street Parking, Loading and Reservoir Areas.*
7. *Chapter 48 CDC, Access, Egress and Circulation.*
8. *Chapter 52 CDC, Signs.*
9. *Chapter 54 CDC, Landscaping.*

Response: This narrative provides responses to the applicable provisions of the chapters noted above. This standard is met.

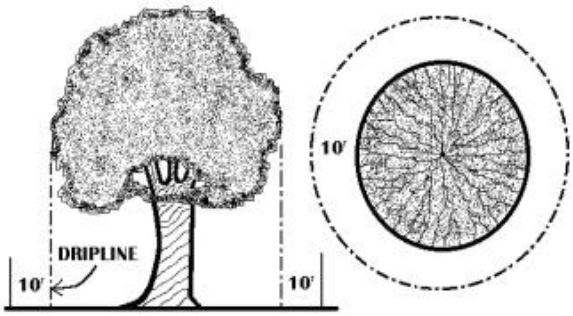
B. Relationship to the natural and physical environment.

1. The buildings and other site elements shall be designed and located so that all heritage trees, as defined in the municipal code, shall be saved. Diseased heritage trees, as determined by the City Arborist, may be removed at his/her direction.

Response: There are no heritage trees on site. This standard does not apply.

2. All heritage trees, as defined in the municipal code, all trees and clusters of trees ("cluster" is defined as three or more trees with overlapping driplines; however, native oaks need not have an overlapping dripline) that are considered significant by the City Arborist, either individually or in consultation with certified arborists or similarly qualified professionals, based on accepted arboricultural standards including consideration of their size, type, location, health, long term survivability, and/or numbers, shall be protected pursuant to the criteria of subsections (B)(2)(a) through (f) of this section. In cases where there is a difference of opinion on the significance of a tree or tree cluster, the City Arborist's findings shall prevail. It is important to acknowledge that all trees are not significant and, further, that this code section will not necessarily protect all trees deemed significant.

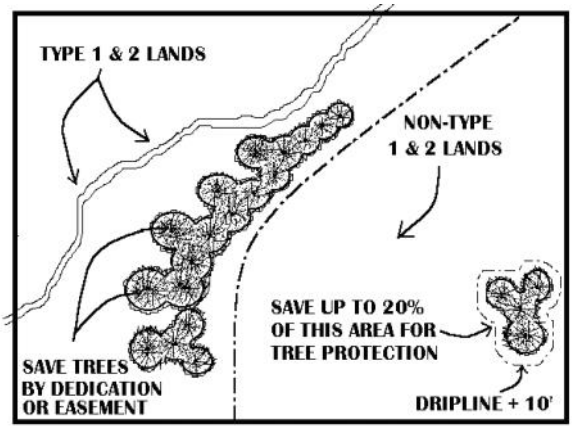
a. Non-residential and residential projects on Type I and II lands shall protect all heritage trees and all significant trees and tree clusters by either the dedication of these areas or establishing tree conservation easements. Development of Type I and II lands shall require the careful layout of streets, driveways, building pads, lots, and utilities to avoid heritage trees and significant trees and tree clusters, and other natural resources pursuant to this code. The method for delineating the protected trees or tree clusters ("dripline + 10 feet") is explained in subsection (B)(2)(b) of this section. Exemptions of subsections (B)(2)(c), (e), and (f) of this section shall apply.



PROTECTED AREA = DRIPLINE + 10 FEET

b. Non-residential and residential projects on non-Type I and II lands shall set aside up to 20 percent of the area to protect trees and tree clusters that are determined to be significant, plus any heritage trees. Therefore, in the event that the City Arborist determines that a significant tree cluster exists at a development site, then up to 20 percent of the non-Type I and II lands shall be devoted to the protection of those trees, either by dedication or easement. The exact percentage is determined by

establishing the driplines of the trees or tree clusters that are to be protected. In order to protect the roots which typically extend further, an additional 10-foot measurement beyond the dripline shall be added. The square footage of the area inside this "dripline plus 10 feet" measurement shall be the basis for calculating the percentage (see figure below). The City Arborist will identify which tree(s) are to be protected. Development of non-Type I and II lands shall also require the careful layout of streets, driveways, building pads, lots, and utilities to avoid significant trees, tree clusters, heritage trees, and other natural resources pursuant to this code. Exemptions of subsections (B)(2)(c), (e), and (f) of this section shall apply. Please note that in the event that more than 20 percent of the non-Type I and II lands comprise significant trees or tree clusters, the developer shall not be required to save the excess trees, but is encouraged to do so.



METHOD OF PERCENTAGE CALCULATION

E.G., DRIPLINE + 10 FT. AREA = 2,500 SQ. FT. OR 18% OF TOTAL NON-TYPE I AND II LAND DENSITY CALCULATIONS FOR THIS PARCEL WILL BE BASED ON REMAINING NET SQ. FOOTAGE OF SITE (EXCLUDING THE 2,500 SQ. FT.)

c. *Where stubouts of streets occur on abutting properties, and the extension of those streets will mean the loss of significant trees, tree clusters, or heritage trees, it is understood that tree loss may be inevitable. In these cases, the objective shall be to minimize tree loss. These provisions shall also apply in those cases where access, per construction code standards, to a lot or parcel is blocked by a row or screen of significant trees or tree clusters.*

d. *For both non-residential and residential development, the layout shall achieve at least 70 percent of maximum density for the developable net area. The developable net area excludes all Type I and II lands and up to 20 percent of the remainder of the site for the purpose of protection of stands or clusters of trees as defined in subsection (B)(2) of this section.*

e. *For arterial and collector street projects, including Oregon Department of Transportation street improvements, the roads and graded areas shall avoid tree clusters where possible. Significant trees, tree clusters, and heritage tree loss may occur, however, but shall be minimized.*

f. *If the protection of significant tree(s) or tree clusters is to occur in an area of grading that is necessary for the development of street grades, per City construction codes, which will result in an adjustment in the grade of over or under two feet, which will*

then threaten the health of the tree(s), the applicant will submit evidence to the Planning Director that all reasonable alternative grading plans have been considered and cannot work. The applicant will then submit a mitigation plan to the City Arborist to compensate for the removal of the tree(s) on an "inch by inch" basis (e.g., a 48-inch Douglas fir could be replaced by 12 trees, each four-inch). The mix of tree sizes and types shall be approved by the City Arborist.

Response: The applicant's arborist has determined that the site has one significant tree, a large Oregon white oak in the northeast corner; additionally, there is a significant madrone located nearby but off-site. Based on the site topography, the property would be classified as a non-Type I and II land. The proposed development uses the vast majority of the net developable area by utilizing the 30% allowable Maximum Developable Area in the Water Resource Area plus nearly the entirety of the non-riparian portion of the site, so the layout uses at least 70% of the maximum density. The significant trees are protected by placement of the building and drive aisles in compliance with the project arborist's specific recommendations for root zone protection, as indicated on the site plan. There are no stubouts of streets on abutting properties. The proposed street improvements along Willamette Falls Drive (an arterial) incorporate a meandering sidewalk to minimize impacts on the roots of nearby trees; at locations where that is not possible, the trees are proposed for removal. No changes are proposed to the street grades. This standard is met.

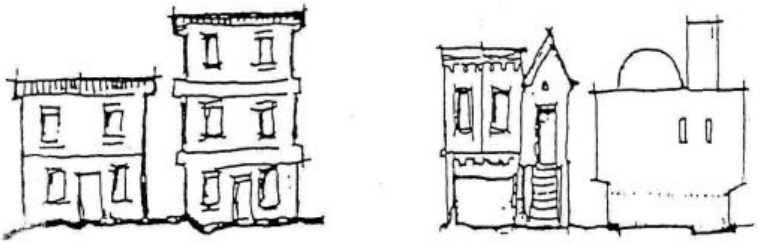
3. *The topography and natural drainage shall be preserved to the greatest degree possible.*
4. *The structures shall not be located in areas subject to slumping and sliding. The Comprehensive Plan Background Report's Hazard Map, or updated material as available and as deemed acceptable by the Planning Director, shall be the basis for preliminary determination.*

Response: The proposed grading plan preserves much of the existing topography and the proposed building and site layout have been designed to protect the water resource area. Stormwater will be managed by collecting and treating runoff from roof drains prior to discharge to the stream running through the site. Permeable pavement driveway surfaces are proposed to allow infiltration from those surfaces. The applicant has retained a geotechnical engineer to evaluate slope stability and will implement site-specific recommendations to refine the design and implement appropriate construction techniques to maintain slopes. This standard is met.

5. *There shall be adequate distance between on-site buildings and on-site and off-site buildings on adjoining properties to provide for adequate light and air circulation and for fire protection.*

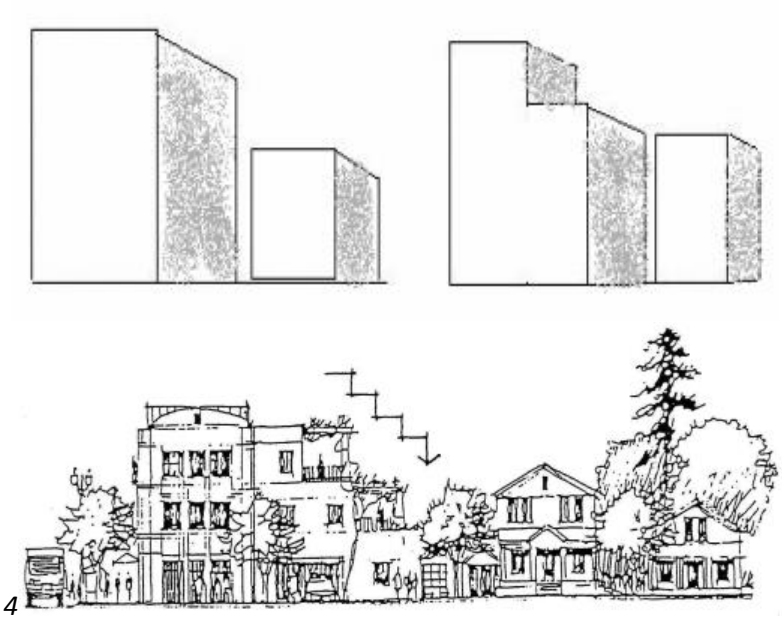
Response: The building has been placed near the north end of the site, close to the I-205 on-ramp. The building will be located over 100 feet from the nearest neighboring structure. This standard is met.

6. *Architecture.*
    a. *The proposed structure(s) scale shall be compatible with the existing structure(s) on site and on adjoining sites. Contextual design is required. Contextual design means respecting and incorporating prominent architectural styles, building lines, roof forms, rhythm of windows, building scale and massing of surrounding buildings in the proposed structure. The materials and colors shall be complementary to the surrounding buildings.*



Response: The abutting commercial buildings west and east of the site are one- and two-story structures with gabled and hipped roofs, whereas the proposed structure is four stories with a parapet around the roof. The applicant proposes to utilize contrasting architecture per subsection C below. This standard does not apply.

b. While there has been discussion in Chapter 24 CDC about transition, it is appropriate that new buildings should architecturally transition in terms of bulk and mass to work with, or fit, adjacent existing buildings. This transition can be accomplished by selecting designs that "step down" or "step up" from small to big structures and vice versa (see figure below). Transitions may also take the form of carrying building patterns and lines (e.g., parapets, windows, etc.) from the existing building to the new one.



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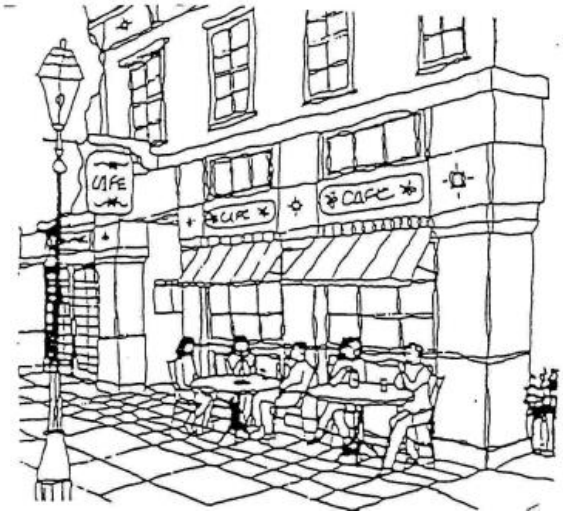
Response: Chapter 24 regulates planned unit developments (PUDs). This application does not include a PUD. This standard does not apply.

c. Contrasting architecture shall only be permitted when the design is manifestly superior to adjacent architecture in terms of creativity, design, and workmanship, and/or it is adequately separated from other buildings by distance, screening, grade variations, or is part of a development site that is large enough to set its own style of architecture.

Response: The applicant proposes to utilize a contrasting architectural style due to the large site size (1.58 acres) which provides for significant distance from abutting buildings and vegetation between properties. The site is large enough to set its own style. The quality of building materials and architectural details is superior to those of many other self-storage facilities: this building design will utilize high-quality materials including split-

faced block, fiber cement siding (some horizontal lap siding and some vertical board & batten style), and a standing seam metal roof. Building colors will be selected to complement the surroundings. Notably, the site's landscaping is designed to re-establish a dense stand of trees to enhance the riparian corridor adjacent to Bernert Creek, with the corresponding benefit of visually screening the building as viewed from Willamette Falls Drive. This standard is met.

d. *Human scale is a term that seeks to accommodate the users of the building and the notion that buildings should be designed around the human scale (i.e., their size and the average range of their perception). Human scale shall be accommodated in all designs by, for example, multi-light windows that are broken up into numerous panes, intimately scaled entryways, and visual breaks (exaggerated eaves, indentations, ledges, parapets, awnings, engaged columns, etc.) in the facades of buildings, both vertically and horizontally.*
The human scale is enhanced by bringing the building and its main entrance up to the edge of the sidewalk. It creates a more dramatic and interesting streetscape and improves the "height and width" ratio referenced in this section.

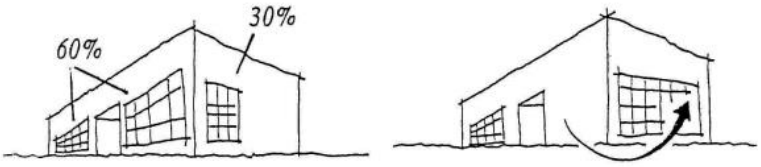


Human scale is captured in this example

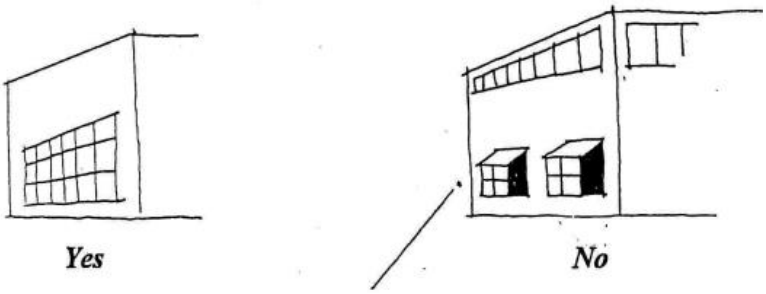
Response: The building is not built to the sidewalk due to the presence of the stream and water resource area close to Willamette Falls Drive. However, human scale is provided in this building by utilizing a parapet, multiple building materials and surfaces, and considerable glazing implemented through multi-light windows. This standard is met.

e. *The main front elevation of commercial and office buildings shall provide at least 60 percent windows or transparency at the pedestrian level to create more interesting streetscape and window shopping opportunities. One side elevation shall provide at least 30 percent transparency. Any additional side or rear elevation, which is visible from a collector road or greater classification, shall also have at least 30 percent transparency. Transparency on other elevations is optional. The transparency is measured in lineal fashion. For example, a 100-foot-long building elevation shall have at least 60 feet (60 percent of 100 feet) in length of windows. The window height shall be, at minimum, three feet tall. The exception to transparency would be cases where demonstrated functional constraints or topography restrict that elevation from being used. When this exemption is applied to the main front*

elevation, the square footage of transparency that would ordinarily be required by the above formula shall be installed on the remaining elevations at pedestrian level in addition to any transparency required by a side elevation, and vice versa. The rear of the building is not required to include transparency. The transparency must be flush with the building elevation.



60 percent of lineal street facing or main elevation is windows. 30 percent of one side elevation is windows. You may transfer windows from the side to front, or vice versa.



(Windows not at eye level and/or not flush with building.)

Response: The standard above applies to commercial and office buildings. Mini-warehouse use is referred to in the Code as a form of industrial use, to which this standard would not logically apply. Additionally, the building's distance from the street (to maximize the riparian corridor along Bernert Creek) and dense tree plantings within that riparian corridor are designed to downplay the building's visibility and soften its appearance along Willamette Falls Drive. Adding windows at the ground floor level would be at cross-purposes with that strategy for achieving visual compatibility at this specific location. This standard does not apply.

f. Variations in depth and roof line are encouraged for all elevations.
To vary the otherwise blank wall of most rear elevations, continuous flat elevations of over 100 feet in length should be avoided by indents or variations in the wall. The use of decorative brick, masonry, or stone insets and/or designs is encouraged. Another way to vary or soften this elevation is through terrain variations such as an undulating grass area with trees to provide vertical relief.

Response: Parapets with varying roof lines are utilized on the ends of the buildings. This standard is met.

g. Consideration of the micro-climate (e.g., sensitivity to wind, sun angles, shade, etc.) shall be made for building users, pedestrians, and transit users, including features like awnings.

Response: Canopies are provided at the main entrance. This standard is met.

h. The vision statement identified a strong commitment to developing safe and attractive pedestrian environments with broad sidewalks, canopied with trees and awnings.

trees, awnings, and building orientation enhance micro-climate

Response: This section does not specify an approval criterion. The subject property is not located in an area the City has designated as having high pedestrian-oriented use potential. This standard does not apply.

i. Sidewalk cafes, kiosks, vendors, and street furniture are encouraged. However, at least a four-foot-wide pedestrian accessway must be maintained per Chapter 53 CDC, Sidewalk Use.

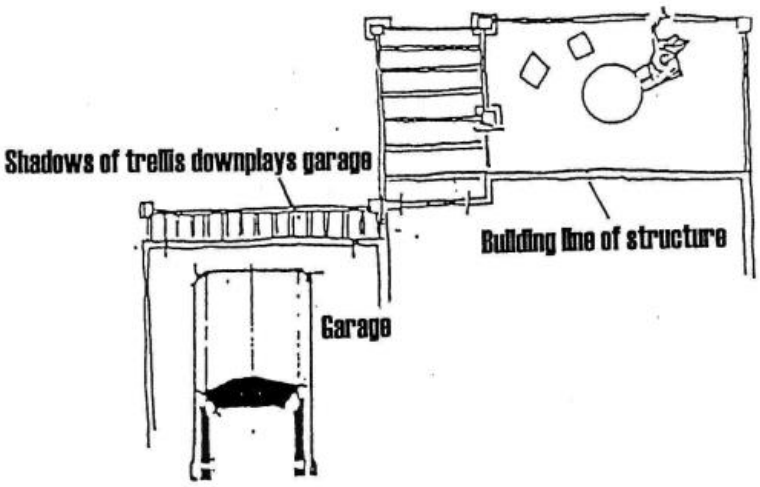
Response: This project does not propose these features. This standard does not apply.

7. Transportation Planning Rule (TPR) compliance. The automobile shall be shifted from a dominant role, relative to other modes of transportation, by the following means:

a. Commercial and office development shall be oriented to the street. At least one public entrance shall be located facing an arterial street; or, if the project does not front on an arterial, facing a collector street; or, if the project does not front on a collector, facing the local street with highest traffic levels. Parking lots shall be placed behind or to the side of commercial and office development. When a large and/or multi-building development is occurring on a large undeveloped tract (three plus acres), it is acceptable to focus internally; however, at least 20 percent of the main adjacent right-of-way shall have buildings contiguous to it unless waived per subsection (B)(7)(c) of this section. These buildings shall be oriented to the adjacent street and include pedestrian-oriented transparencies on those elevations.

For individual buildings on smaller individual lots, at least 30 lineal feet or 50 percent of the building must be adjacent to the right-of-way unless waived per subsection (B)(7)(c) of this section. The elevations oriented to the right-of-way must incorporate pedestrian-oriented transparency.

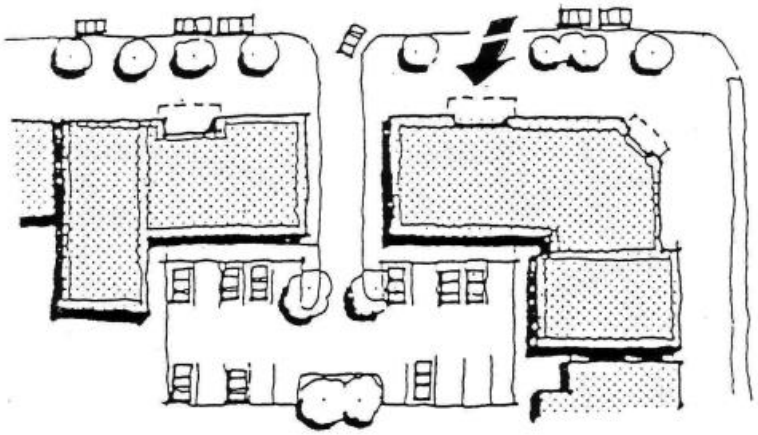
b. Multi-family projects shall be required to keep the parking at the side or rear of the buildings or behind the building line of the structure as it would appear from the right-of-way inside the multi-family project. For any garage which is located behind the building line of the structure, but still facing the front of the structure, architectural features such as patios, patio walls, trellis, porch roofs, overhangs, pergolas, etc., shall be used to downplay the visual impact of the garage, and to emphasize the rest of the house and front entry.



The parking may be positioned inside small courtyard areas around which the units are built. These courtyard spaces encourage socialization, defensible space, and can provide a central location for landscaping, particularly trees, which can provide an effective canopy and softening effect on the courtyard in only a few years. Vehicular access and driveways through these courtyard areas is permitted.

c. *Commercial, office, and multi-family projects shall be built as close to the adjacent main right-of-way as practical to facilitate safe pedestrian and transit access. Reduced frontages by buildings on public rights-of-way may be allowed due to extreme topographic (e.g., slope, creek, wetlands, etc.) conditions or compelling functional limitations, not just inconveniences or design challenges.*

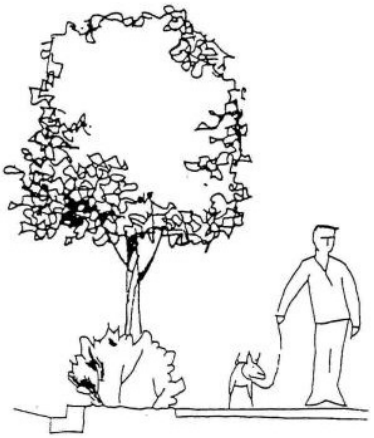
entrance from right-of-way



Response: The standards above apply strictly to commercial and office buildings and multi-family developments. The Code refers to mini-storage warehouses as a form of industrial use. These standards do not apply to the proposed development.

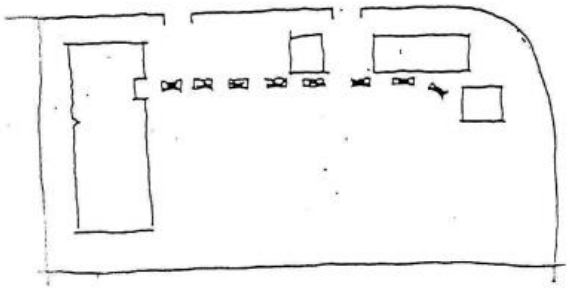
d. *Accessways, parking lots, and internal driveways shall accommodate pedestrian circulation and access by specially textured, colored, or clearly defined footpaths at least six feet wide. Paths shall be eight feet wide when abutting parking areas or travel lanes. Paths shall be separated from parking or travel lanes by either landscaping, planters, curbs, bollards, or raised surfaces. Sidewalks in front of storefronts on the arterials and main store entrances on the arterials identified in CDC 85.200(A)(3) shall be 12 feet wide to accommodate pedestrians, sidewalk sales, sidewalk cafes, etc. Sidewalks in front of storefronts and main store entrances in*

commercial/OBC zone development on local streets and collectors shall be eight feet wide.



landscaping

e. Paths shall provide direct routes that pedestrians will use between buildings, adjacent rights-of-way, and adjacent commercial developments. They shall be clearly identified. They shall be laid out to attract use and to discourage people from cutting through parking lots and impacting environmentally sensitive areas.



direct pedestrian route required (- -)

Response: As illustrated in the plans, a walkway is proposed from the right-of-way to the office portion of the building. However, the proposed building and site layout have been designed to protect the water resource area and minimize impacts to both resources and surface area. As such, the walkway is proposed at only five feet in width, with a railing on the east side to safely separate pedestrians and the resource area and bottomless arched culvert over the stream. The path will be raised from the driveway surface.

The building does not contain storefronts on arterials or main streets.

These standards are met to the maximum extent feasible given the site's constraints, natural features, and the goal of limiting impacts on WRA features.

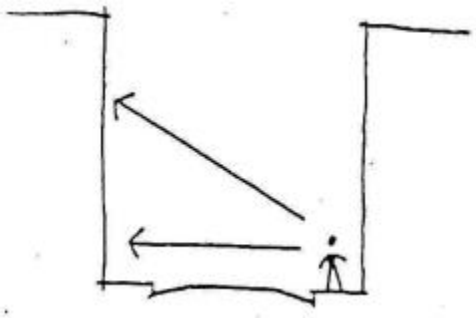
f. At least one entrance to the building shall be on the main street, or as close as possible to the main street. The entrance shall be designed to identify itself as a main point of ingress/egress.

Response: The proposed building and site layout have been designed to protect the water resource area and minimize impacts to both resources and surface area. As illustrated in the plans, the main entrance will be as close to the street as possible, located at the southwest corner. This standard is met.

g. Where transit service exists, or is expected to exist, there shall be a main entrance within a safe and reasonable distance of the transit stop. A pathway shall be provided to facilitate a direct connection.

Response: TriMet Bus Route 154 (Willamette/Clackamas Heights) provides service on Willamette Falls Drive, with bus stops on both sides of the street just east of the 6th Street intersection. Because of the nature of the proposed use, the number of transit-based trips to and from the site is expected to be extremely low, since most customers visit with large vehicles and/or trailers in order to access storage units to pick up or drop off items. Employees or other visitors using transit will be able to use the proposed sidewalk along the site frontage and the walkway within the site to walk between the bus stops and the office. A pedestrian walkway has been provided adjacent to the western driveway to provide convenient access from the bus stop to the main entrance. This standard is met.

h. Projects shall bring at least part of the project adjacent to or near the main street right-of-way in order to enhance the height-to-width ratio along that particular street. (The "height-to-width ratio" is an architectural term that emphasizes height or vertical dimension of buildings adjacent to streets. The higher and closer the building is, and the narrower the width of the street, the more attractive and intimate the streetscape becomes.) For every one foot in street width, the adjacent building ideally should be one to two feet higher. This ratio is considered ideal in framing and defining the streetscape.



1:1 height to width ratio is ideal
(example only)

Response: The proposed building and site layout have been designed to protect the water resource area and minimize impacts to both resources and surface area. As illustrated in the plans, the main entrance will be as close to the street as possible, located at the southwest corner. The height-to-width ratio of Willamette Falls Drive will be improved by the location of the approximately 52-foot tall building. Significantly, as a visual backdrop, the berm supporting the northbound I-205 on-ramp is located right behind the subject property (as viewed from points to the south) and is as high as the proposed building. This standard is met.

i. These architectural standards shall apply to public facilities such as reservoirs, water towers, treatment plants, fire stations, pump stations, power transmission facilities, etc. It is recognized that many of these facilities, due to their functional requirements, cannot readily be configured to meet these architectural standards. However, attempts shall be made to make the design sympathetic to surrounding properties by landscaping, setbacks, buffers, and all reasonable architectural means.

j. Parking spaces at trailheads shall be located so as to preserve the view of, and access to, the trailhead entrance from the roadway. The entrance apron to the

trailhead shall be marked: "No Parking," and include design features to foster trail recognition.

Response: No public facilities or trailheads are part of the proposal. These standards do not apply.

C. Compatibility between adjoining uses, buffering, and screening.

1. In addition to the compatibility requirements contained in Chapter 24 CDC, buffering shall be provided between different types of land uses; for example, buffering between single-family homes and apartment blocks. However, no buffering is required between single-family homes and duplexes or single-family attached units. The following factors shall be considered in determining the adequacy of the type and extent of the buffer:

a. The purpose of the buffer, for example to decrease noise levels, absorb air pollution, filter dust, or to provide a visual barrier.

b. The size of the buffer required to achieve the purpose in terms of width and height.

c. The direction(s) from which buffering is needed.

d. The required density of the buffering.

e. Whether the viewer is stationary or mobile.

Response: The site abuts a commercial development to the northeast and southwest. The proposed mini-warehouse self-storage facility use will be compatible with the scale, design, vehicular types, and hours of operation of the adjacent uses. However, a 10-foot-deep landscaped strip will be provided on the northeastern lot line, and the vehicular area on the southwest side will be separated from the southwest lot line by at least 27 feet of landscaped area. Considerable landscaping will also be present between the building and the single-family residences across Willamette Falls Drive. This standard is met.

2. On-site screening from view from adjoining properties of such things as service areas, storage areas, and parking lots shall be provided and the following factors will be considered in determining the adequacy of the type and extent of the screening:

a. What needs to be screened?

b. The direction from which it is needed.

c. How dense the screen needs to be.

d. Whether the viewer is stationary or mobile.

e. Whether the screening needs to be year-round.

Response: Service and storage areas and parking spaces will be contained within the building. These standards do not apply.

3. Rooftop air cooling and heating systems and other mechanical equipment shall be screened from view from adjoining properties.

Response: No rooftop mechanical equipment is proposed. This standard does not apply.

D. Privacy and noise.

1. Structures which include residential dwelling units shall provide private outdoor areas for each ground floor unit which is screened from view from adjoining units.

2. Residential dwelling units shall be placed on the site in areas having minimal noise exposure to the extent possible. Natural-appearing sound barriers shall be used to lessen noise impacts where noise levels exceed the noise standards contained in West Linn Municipal Code Section 5.487.

3. Structures or on-site activity areas which generate noise, lights, or glare shall be buffered from adjoining residential uses in accordance with the standards in subsection C of this section where applicable.

4. *Businesses or activities that can reasonably be expected to generate noise in excess of the noise standards contained in West Linn Municipal Code Section 5.487 shall undertake and submit appropriate noise studies and mitigate as necessary to comply with the code. (See CDC 55.110(B)(11) and 55.120(M).)*

If the decision-making authority reasonably believes a proposed use may generate noise exceeding the standards specified in the municipal code, then the authority may require the applicant to supply professional noise studies from time to time during the user's first year of operation to monitor compliance with City standards and permit requirements.

Response: No residential units are included in this proposal. There are no abutting residential uses. The proposed self-storage building will not generate noise in excess of the standards of Section 5.487. This standard is met.

G. Demarcation of public, semi-public, and private spaces. The structures and site improvements shall be designed so that public areas such as streets or public gathering places, semi-public areas, and private outdoor areas are clearly defined in order to establish persons having a right to be in the space, to provide for crime prevention, and to establish maintenance responsibility. These areas may be defined by:

1. *A deck, patio, fence, low wall, hedge, or draping vine;*
2. *A trellis or arbor;*
3. *A change in level;*
4. *A change in the texture of the path material;*
5. *Sign; or*
6. *Landscaping.*

Use of gates to demarcate the boundary between a public street and a private access driveway is prohibited.

Response: The proposal does not include public gathering places, semi-public areas, or private outdoor decks or amenity areas. However, the on-site walkway from the right-of-way will be clearly identifiable with raised, contrasting paving and a handrail. This standard is met as applicable.

H. Public transit.

1. *Provisions for public transit may be required where the site abuts an existing or planned public transit route. The required facilities shall be based on the following:*
   a. *The location of other transit facilities in the area.*
   b. *The size and type of the proposed development.*
   c. *The rough proportionality between the impacts from the development and the required facility.*
2. *The required facilities shall be limited to such facilities as the following:*
   a. *A waiting shelter with a bench surrounded by a three-sided covered structure, with transparency to allow easy surveillance of approaching buses.*
   b. *A turnout area for loading and unloading designed per regional transit agency standards.*
   c. *Hard-surface paths connecting the development to the waiting and boarding areas.*
   d. *Regional transit agency standards shall, however, prevail if they supersede these standards.*
3. *The transit stop shall be located as close as possible to the main entrance to the shopping center, public or office building, or multi-family project. The entrance shall not be more than 200 feet from the transit stop with a clearly identified pedestrian link.*
4. *All commercial business centers (over three acres) and multi-family projects (over 40 units) may be required to provide for the relocation of transit stops to the front of the site if the existing stop is within 200 to 400 yards of the site and the exaction is roughly proportional*

to the impact of the development. The commercial or multi-family project may be required to provide new facilities in those cases where the nearest stop is over 400 yards away. The transit stop shall be built per subsection (H)(2) of this section.

5. *If a commercial business center or multi-family project is adjacent to an existing or planned public transit stop, the parking requirement may be reduced by the multiplier of 0.9, or 10 percent. If a commercial center is within 200 feet of a multi-family project, with over 80 units and pedestrian access, the parking requirement may be reduced by 10 percent or by a 0.90 multiplier.*
6. *Standards of CDC 85.200(D), Transit Facilities, shall also apply.*

Response: TriMet Bus Route 154 (Willamette/Clackamas Heights) provides service on Willamette Falls Drive, with bus stops on both sides of the street just east of the 6th Street intersection. Because of the nature of the proposed use, the number of transit-based trips to and from the site is expected to be extremely low, since most customers visit with large vehicles and/or trailers in order to access storage units to pick up or drop off items. Employees or other visitors using transit will be able to use the proposed sidewalk along the site frontage and the walkway within the site to walk between the bus stops and the office. No parking reduction has been requested due to the proximity to transit. This standard is met.

I. Public facilities. An application may only be approved if adequate public facilities will be available to provide service to the property prior to occupancy.

1. *Streets. Sufficient right-of-way and slope easement shall be dedicated to accommodate all abutting streets to be improved to the City's Improvement Standards and Specifications. The City Engineer shall determine the appropriate level of street and traffic control improvements to be required, including any off-site street and traffic control improvements, based upon the transportation analysis submitted. The City Engineer's determination of developer obligation, the extent of road improvement and City's share, if any, of improvements and the timing of improvements shall be made based upon the City's systems development charge ordinance and capital improvement program, and the rough proportionality between the impact of the development and the street improvements.*

   In determining the appropriate sizing of the street in commercial, office, multi-family, and public settings, the street should be the minimum necessary to accommodate anticipated traffic load and needs and should provide substantial accommodations for pedestrians and bicyclists. Road and driveway alignment should consider and mitigate impacts on adjacent properties and in neighborhoods in terms of increased traffic loads, noise, vibrations, and glare.

   The realignment or redesign of roads shall consider how the proposal meets accepted engineering standards, enhances public safety, and favorably relates to adjacent lands and land uses. Consideration should also be given to selecting an alignment or design that minimizes or avoids hazard areas and loss of significant natural features (drainageways, wetlands, heavily forested areas, etc.) unless site mitigation can clearly produce a superior landscape in terms of shape, grades, and reforestation, and is fully consistent with applicable code restrictions regarding resource areas.

   Streets shall be installed per Chapter 85 CDC standards. The City Engineer has the authority to require that street widths match adjacent street widths. Sidewalks shall be installed per CDC 85.200(A)(3) for commercial and office projects, and CDC 85.200(A)(16) and 92.010(H) for residential projects, and applicable provisions of this chapter. Where streets bisect or traverse water resource areas (WRAs) the street width shall be reduced to the minimum standard of 20 feet (two 10-foot travel lanes) plus four-foot-wide curb flush sidewalks or alternate configurations which are appropriate to site conditions, minimize

WRA disturbance or are consistent with an adopted transportation system plan. The street design shall also be consistent with habitat friendly provisions of CDC 32.060(H).

Based upon the City Manager's or Manager's designee's determination, the applicant shall construct or cause to be constructed, or contribute a proportionate share of the costs, for all necessary off-site improvements identified by the transportation analysis commissioned to address CDC 55.125 that are required to mitigate impacts from the proposed development. Proportionate share of the costs shall be determined by the City Manager or Manager's designee, who shall assume that the proposed development provides improvements in rough proportion to identified impacts of the development.

Response: Adequate streets exist to serve the proposed development. As discussed in the Transportation Impact Letter (Exhibit E), the proposed access points have been evaluated against the standards of Chapter 48 and those of the Transportation System Plans (e.g., the access spacing standards of TSP Table 8-3). This standard is met.

2. *Repealed by Ord. 1635.*
3. *Municipal water. A registered civil engineer shall prepare a plan for the provision of water which demonstrates to the City Engineer's satisfaction the availability of sufficient volume, capacity, and pressure to serve the proposed development's domestic, commercial, and industrial fire flows. All plans will then be reviewed by the City Engineer.*

Response: Adequate water service exists to serve the proposed development, as shown in the attached utility plan. This standard is met.

4. *Sanitary sewers. A registered civil engineer shall prepare a sewerage collection system plan which demonstrates sufficient on-site capacity to serve the proposed development. The City Engineer shall determine whether the existing City system has sufficient capacity to serve the development.*

Response: Adequate sanitary sewer service exists to serve the proposed development, as shown in the attached utility plan. This standard is met.

5. *Solid waste and recycling storage areas. Appropriately sized and located solid waste and recycling storage areas shall be provided. Metro standards shall be used.*

Response: Minimal waste will be generated by the proposed mini-warehouse building; only the employees of the small office will generate waste. As shown in the attached floor plan, a trash storage area is proposed immediately east of the accessible parking stall. This standard is met.

J. *Crime prevention and safety/defensible space.*
1. *Windows shall be located so that areas vulnerable to crime can be surveyed by the occupants.*
2. *Interior laundry and service areas shall be located in a way that they can be observed by others.*
3. *Mailboxes, recycling, and solid waste facilities shall be located in lighted areas having vehicular or pedestrian traffic.*
4. *The exterior lighting levels shall be selected and the angles shall be oriented towards areas vulnerable to crime.*
5. *Light fixtures shall be provided in areas having heavy pedestrian or vehicular traffic and in potentially dangerous areas such as parking lots, stairs, ramps, and abrupt grade changes.*
6. *Fixtures shall be placed at a height so that light patterns overlap at a height of seven feet which is sufficient to illuminate a person. All commercial, industrial, residential, and public facility projects undergoing design review shall use low or high pressure sodium bulbs and be able to demonstrate effective shielding so that the light is directed downwards rather*

than omni-directional. Omni-directional lights of an ornamental nature may be used in general commercial districts only.

7. *Lines of sight shall be reasonably established so that the development site is visible to police and residents.*
8. *Security fences for utilities (e.g., power transformers, pump stations, pipeline control equipment, etc.) or wireless communication facilities may be up to eight feet tall in order to protect public safety. No variances are required regardless of location.*

Response: As shown in the attached site plans and perspective, windows will be located on all sides of the building, with ground floor windows on the office portion at the southwest corner. The parking area will be adequately lit to discourage crime, and the applicant typically installs video equipment for enhanced on-site security. Lighting is intended to adequately illuminate the site without causing unnecessary spillover onto the street or neighboring property. Additional detail on lighting will be provided during the building permit stage once specific light fixtures have been selected. This standard is met.

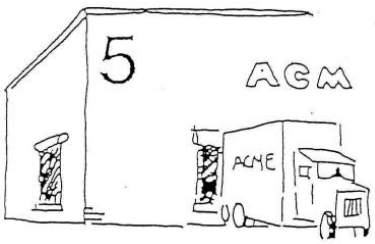
K. Provisions for persons with disabilities.

1. *The needs of a person with a disability shall be provided for. Accessible routes shall be provided between all buildings and accessible site facilities. The accessible route shall be the most practical direct route between accessible building entries, accessible site facilities, and the accessible entry to the site. An accessible route shall connect to the public right-of-way and to at least one on-site or adjacent transit stop (if the area is served by transit). All facilities shall conform to, or exceed, the Americans with Disabilities Act (ADA) standards, including those included in the Uniform Building Code.*

Response: The accessibility requirements of the building code will be met with the building permit submittal. As shown in the attached plans, accessible parking will be provided and the walkway from the right-of-way to the street will be accessible. This standard is met.

L. Signs.

1. *Based on considerations of crime prevention and the needs of emergency vehicles, a system of signs for identifying the location of each residential unit, store, or industry shall be established.*



buildings shall be numbered for emergency identification

2. *The signs, graphics, and letter styles shall be designed to be compatible with surrounding development, to contribute to a sense of project identity, or, when appropriate, to reflect a sense of the history of the area and the architectural style.*
3. *The sign graphics and letter styles shall announce, inform, and designate particular areas or uses as simply and clearly as possible.*
4. *The signs shall not obscure vehicle driver's sight distance.*
5. *Signs indicating future use shall be installed on land dedicated for public facilities (e.g., parks, water reservoir, fire halls, etc.).*
6. *Signs and appropriate traffic control devices and markings shall be installed or painted in the driveway and parking lot areas to identify bicycle and pedestrian routes.*

Response: Signage for the name of the facility is indicated in the attached perspective drawing; as shown, this signage will represent the Northwest Self Storage brand to add to the project's identity and will be compatible with the architectural style of the proposed development. Additional signage required for addressing will also meet the above standards. This standard is met.

M. Utilities. The developer shall make necessary arrangements with utility companies or other persons or corporations affected for the installation of underground lines and facilities. Electrical lines and other wires, including but not limited to communication, street lighting, and cable television, shall be placed underground, as practical. The design standards of Tables 1 and 2 above, and of subsection 5.487 of the West Linn Municipal Code relative to existing high ambient noise levels shall apply to this section.

Response: Services to the proposed building will be installed underground, consistent with these requirements. There is an existing overhead wire on the site southwest of the proposed development. The pole/drop and overhead wires will not be affected by the proposed new construction. It is not practical to underground this line. This standard does not apply.

N. Wireless communication facilities (WCFs). (This section only applicable to WCFs.) WCFs as defined in Chapter 57 CDC may be required to go through Class I or Class II design review. The approval criteria for Class I design review is that the visual impact of the WCF shall be minimal to the extent allowed by Chapter 57 CDC. Stealth designs shall be sufficiently camouflaged so that they are not easily seen by passersby in the public right-of-way or from any adjoining residential unit. WCFs that are classified as Class II design review must respond to all of the approval criteria of this chapter.

Response: No WCFs exist or are proposed. This standard does not apply.

O. Refuse and recycling standards.

1. All commercial, industrial and multi-family developments over five units requiring Class II design review shall comply with the standards set forth in these provisions. Modifications to these provisions may be permitted if the Planning Commission determines that the changes are consistent with the purpose of these provisions and the City receives written evidence from the local franchised solid waste and recycling firm that they are in agreement with the proposed modifications.

Response: The proposed development is for a mini-warehouse, an industrial use. These standards apply and are addressed below.

2. Compactors, containers, and drop boxes shall be located on a level Portland cement concrete pad, a minimum of four inches thick, at ground elevation or other location compatible with the local franchise collection firm's equipment at the time of construction. The pad shall be designed to discharge surface water runoff to avoid ponding.

Response: No compactors are proposed. This standard does not apply.

3. Recycling and solid waste service areas.

a. Recycling receptacles shall be designed and located to serve the collection requirements for the specific type of material.

b. The recycling area shall be located in close proximity to the garbage container areas and be accessible to the local franchised collection firm's equipment.

c. Recycling receptacles or shelters located outside a structure shall have lids and be covered by a roof constructed of water and insect-resistive material. The maintenance of enclosures, receptacles and shelters is the responsibility of the property owner.

d. *The location of the recycling area and method of storage shall be approved by the local fire marshal.*

e. *Recycling and solid waste service areas shall be at ground level and/or otherwise accessible to the franchised solid waste and recycling collection firm.*

f. *Recycling and solid waste service areas shall be used only for purposes of storing solid waste and recyclable materials and shall not be a general storage area to store personal belongings of tenants, lessees, property management or owners of the development or premises.*

g. *Recyclable material service areas shall be maintained in a clean and safe condition.*

Response: As shown in the attached floor plan, recycling and solid waste will be stored in the trash storage area proposed immediately east of the accessible parking stall. This area will be maintained. This standard is met.

4. *Special wastes or recyclable materials.*

a. *Environmentally hazardous wastes defined in ORS 466.005 shall be located, prepared, stored, maintained, collected, transported, and disposed in a manner acceptable to the Oregon Department of Environmental Quality.*

b. *Containers used to store cooking oils, grease or animal renderings for recycling or disposal shall not be located in the principal recyclable materials or solid waste storage areas. These materials shall be stored in a separate storage area designed for such purpose.*

Response: Minimal waste will be generated by the proposed mini-warehouse building; only the employees of the office will generate waste. No hazardous wastes will be produced by the self-storage building. This standard does not apply.

5. *Screening and buffering.*

a. *Enclosures shall include a curbed landscape area at least three feet in width on the sides and rear. Landscaping shall include, at a minimum, a continuous hedge maintained at a height of 36 inches.*

b. *Placement of enclosures adjacent to residentially zoned property and along street frontages is strongly discouraged. They shall be located so as to conceal them from public view to the maximum extent possible.*

c. *All dumpsters and other trash containers shall be completely screened on all four sides with an enclosure that is comprised of a durable material such as masonry with a finish that is architecturally compatible with the project. Chain link fencing, with or without slats, will not be allowed.*

Response: Trash will be stored indoors; no exterior enclosures are proposed. This standard does not apply.

6. *Litter receptacles.*

a. *Location. Litter receptacles may not encroach upon the minimum required walkway widths.*

b. *Litter receptacles may not be located within public rights-of-way except as permitted through an agreement with the City in a manner acceptable to the City Attorney or his/her designee.*

c. *Number. The number and location of proposed litter receptacles shall be based on the type and size of the proposed uses. However, at a minimum, for non-residential uses, at least one external litter receptacle shall be provided for every 25 parking spaces for first 100 spaces, plus one receptacle for every additional 100 spaces.*

Response: No outdoor litter receptacles are proposed. This standard does not apply.

55.170 Exceptions to Underlying Zone, Yard, Parking, Sign Provisions, and Landscaping Provisions

A. The Planning Director may grant an exception to the dimensional building setback or yard requirements in the applicable zone based on findings that the approval will satisfy the following criteria:

1. A minor exception that is not greater than 20 percent of the required setback.
2. A more efficient use of the site.
3. The preservation of natural features that have been incorporated into the overall design of the project.
4. No adverse affect to adjoining properties in terms of light, air circulation, noise levels, privacy, and fire hazard.
5. Safe vehicular and pedestrian access to the site and safe on-site vehicular and pedestrian circulation.

Response: No exceptions with respect to these dimensional standards are required because the dimensional requirements for Conditional Uses are determined through the Conditional Use review and approval process.

D. The Planning Director may grant an exception to the landscaping requirements in the applicable zone based on findings that the following criteria will be met:

1. A minor exception that is not greater than 10 percent of the required landscaped area.
2. A more efficient use of the site.
3. The preservation of natural features that have been incorporated into the overall design of the project.
4. No adverse effect to adjoining property.

Response: These provisions are not applicable because more than 50 percent of site area is devoted to landscaping, primarily in the form of enhancement plantings in the riparian corridor adjacent to Bernert Creek.

Chapter 60 Conditional Uses

60.070 Approval Standards and Conditions

A. The Planning Commission shall approve, approve with conditions, or deny an application for a conditional use, except for a manufactured home subdivision in which case the approval standards and conditions shall be those specified in CDC 36.030, or to enlarge or alter a conditional use based on findings of fact with respect to each of the following criteria:

1. The site size and dimensions provide:
a. Adequate area for the needs of the proposed use; and
b. Adequate area for aesthetic design treatment to mitigate any possible adverse effect from the use on surrounding properties and uses.
2. The characteristics of the site are suitable for the proposed use considering size, shape, location, topography, and natural features.
3. The granting of the proposal will provide for a facility that is consistent with the overall needs of the community.
4. Adequate public facilities will be available to provide service to the property at the time of occupancy.
5. The applicable requirements of the zone are met, except as modified by this chapter.
6. The supplementary requirements set forth in Chapters 52 to 55 CDC, if applicable, are met.
7. The use will comply with the applicable policies of the Comprehensive Plan.

Response: The site has an overall area of 1.58 acres and is of sufficient area and dimensions to accommodate buildings on a greater percentage of the site than is proposed (the proposed site plan will landscape upwards of 50% of the site area). Placement of the building toward the rear of the site minimizes visual impacts on the residential properties across Willamette Falls Drive and affords abundant opportunity for trees to provide a vegetated buffer. The City has zoned the site for commercial development but the property is challenging for development due to its irregular shape, varying topography, stream and wetlands, and Water Resource Area designation with a 100-foot-wide riparian corridor alongside Bernert Creek.

The proposed building and site layout is appropriate for the site because it clusters development impacts to areas as far removed from the water resources as possible and re-vegetates the remainder of the property to enhance riparian corridor conditions. Granting the Conditional Use Permit for this proposal will allow development of an underutilized property with a storage facility that addresses an unmet need in the community (as there are no other storage facilities in the City).

The public infrastructure requirements are minimal for a storage facility as there are limited plumbing needs and traffic is minimal (see Exhibit E); the nearby water and sewer infrastructure is adequate without upgrades and the applicant will perform street improvements along the site frontage. Stormwater will be collected and treated on site prior to discharge to the stream; runoff will be reduced through the use of pervious pavement in the driveways. The responses to Chapters 19, 52, 54, and 55 demonstrate compliance with the standards of the zone and with the supplemental provisions of the Community Development Code. The proposed use complies with the applicable policies of the Comprehensive Plan by virtue of the consistency between the Plan and the Development Code and the fact that this use is allowed in the zone via the Conditional Use Permit review process. This standard is met.

B. An approved conditional use or enlargement or alteration of an existing conditional use shall be subject to the development review provisions set forth in Chapter 55 CDC.

Response: The applicant is seeking Design Review approval in conjunction with the request for a Conditional Use Permit. This standard is met.

C. The Planning Commission may impose conditions on its approval of a conditional use which it finds are necessary to assure the use is compatible with other uses in the vicinity. These conditions may include, but are not limited to, the following:

1. *Limiting the hours, days, place, and manner of operation.*
2. *Requiring design features which minimize environmental impacts such as noise, vibration, air pollution, glare, odor, and dust.*
3. *Requiring additional setback areas, lot area, or lot depth, or width.*
4. *Limiting the building height, size or lot coverage, or location on the site.*
5. *Designating the size, number, location and design of vehicle access points.*
6. *Requiring street right-of-way to be dedicated and the street to be improved including all steps necessary to address future street improvements identified in the adopted Transportation System Plan.*
7. *Requiring participation in making the intersection improvement or improvements identified in the Transportation System Plan when a traffic analysis (compiled as an element of a conditional use application for the property) indicates the application should contribute toward.*
8. *Requiring landscaping, screening, drainage, and surfacing of parking and loading areas.*
9. *Limiting the number, size, location, height, and lighting of signs.*
10. *Limiting or setting standards for the location and intensity of outdoor lighting.*

11. *Requiring berming, screening, or landscaping and the establishment of standards for their installation and maintenance.*
12. *Requiring and designating the size, height, location, and materials for fences.*
13. *Requiring the protection and preservation of existing trees, soils, vegetation, watercourses, habitat areas, and drainage areas.*

Response: The applicant acknowledges the Planning Commission's authority to impose conditions of approval on the project, to the extent evidence demonstrates that such conditions are warranted to address reasonably anticipated impacts. This standard is met.

D. Aggregate extraction uses shall also be subject to the provisions of ORS 541.605.

Response: This project does not propose aggregate extraction. This standard does not apply.

E. The Historic Review Board shall review an application for a conditional use, or to enlarge a conditional use on a property designated as a historic resource, based on findings of fact that the use will:

1. *Preserve or improve a historic resource which would probably not be preserved or improved otherwise; and*
2. *Utilize existing structures rather than new structures.*

Response: This project is not located on the site of a designated historic resource. This standard does not apply.

Chapter 75 Variances and Special Waivers

75.020 Classification of Variances

B. Class II Variance. Class II variances may be utilized when strict application of code requirements would be inconsistent with the general purpose of the CDC and would create a burden upon a property owner with no corresponding public benefit. A Class II variance will involve a significant change from the code requirements and may create adverse impacts on adjacent property or occupants. It includes any variance that is not classified as a Class I variance or special waiver.

1. *Class II Variance Approval Criteria. The approval authority may impose appropriate conditions to ensure compliance with the criteria. The appropriate approval authority shall approve a variance request if all the following criteria are met and corresponding findings of fact prepared.*
    a. *The variance is the minimum variance necessary to make reasonable use of the property. To make this determination, the following factors may be considered, together with any other relevant facts or circumstances:*
        1) *Whether the development is similar in size, intensity and type to developments on other properties in the City that have the same zoning designation.*
        2) *Physical characteristics of the property such as lot size or shape, topography, or the existence of natural resources.*
        3) *The potential for economic development of the subject property.*
    b. *The variance will not result in violation(s) of any other code standard, and the variance will meet the purposes of the regulation being modified.*
    c. *The need for the variance was not created by the applicant and/or owner requesting the variance.*
    d. *If more than one variance is requested, the cumulative effect of the variances results in a project that is consistent with the overall purpose of the zone.*

Response: The applicant is requesting a Class II Variance to authorize a driveway location that does not conform to the City's access spacing standards outlined in Chapter 48 and the West Linn TSP.

Specifically, the applicant attempted to negotiate an agreement to connect to and share access by way of the existing driveway to the east of the site, belonging to the "2500 Building," but was unable to reach acceptable terms with that owner. As a result, the proposed secondary, exit-only driveway is proposed with a separation of only some 20 feet, edge-to-edge, from that existing access, which is less than the Code standard requiring a minimum 150-foot spacing between driveways on an Arterial street. (CDC 48.060.D.1)

To minimize habitat and water quality impacts, the west (primary) driveway utilizes an existing stream crossing in the alignment of vacated Willamette Falls Drive, and it meets the minimum 150-foot spacing requirement in relation to both the eastern on-site driveway and the neighboring driveway to the west.

A transportation impact letter is attached as Exhibit E to evaluate the effect of the proposed development on the transportation system and provide evidence in support of the requested variance to the driveway spacing standards. The letter demonstrates that the storage facility will have a negligible impact on the operations of Willamette Falls Drive and that the proposed driveway locations are appropriate given the trip generation, sight lines, and location of other nearby driveways. Therefore, the variance would be consistent with the general purpose of access management to promote safety and maintain an efficient transportation network.

The presence of natural resources on site is beyond the control of the applicant, so the need for the variance was not created by the applicant or owner. Only one variance has been requested with this application. This standard is met.

C. Special Waivers. Special waivers are only applicable in mixed use and non-residential zoning districts. Special waivers may be granted by the approval authority when it can be shown that the proposed site design provides a superior means of furthering the intent and purpose of the regulation to be waived. A special waiver involves a waiver of a standard to permit a specific proposed development. It does not require demonstration of a hardship. It is a request to modify specific requirements in order to provide a superior site design that would not otherwise be possible under the standard requirements of the code.

1. The Planning Commission may approve a special waiver due to the unique nature of the proposed development if it finds that there is sufficient evidence to demonstrate that the proposed development:

a. Demonstrates that the proposed development can comply with the regulation to be waived, but the waiver provides an alternative means of furthering the purpose of the regulation to be waived;

b. Will not be materially detrimental to the public welfare or injurious to other property in the area when compared with the impacts of development otherwise permitted;

c. Provides adequate area for aesthetic design treatment to mitigate potential visual impacts from the use on surrounding properties and uses; and

d. The characteristics of the site are suitable for the proposed use considering size, shape, location, topography, and natural features.

Response: The applicant is requesting a Special Waiver to allow a building height of 52.2 feet, which exceeds the 45-foot standard specified in Section 41.020 by just over 7 feet – an increase of 16%. The overall design reflects a balancing act between protecting the water resource and ensuring that the building size is sufficient to generate revenues sufficient to offset the project's substantial construction and operating costs. The proposed design utilizes a narrow, tall building that minimizes water resource area impacts while achieving the necessary amount of interior square footage. (By contrast, a wider, shorter building that could comply with the 45-foot maximum height would have resulted in a larger footprint that would require removal of additional vegetation in the vicinity of an important natural

resource, and its smaller overall leasable area could make the project economically unviable.) The project will not be detrimental to the public welfare because the intent of the tall building form with a compact footprint is to protect the natural resource valued by the public.

Given the building's distance from the street and the fact that the berm for the northbound I-205 on-ramp (located right behind it) is just as high, the 16% increase in height over the 45-foot standard will not be noticeable to the casual observer and will not impose any burdens on neighboring properties. The applicant has provided section drawings to illustrate the relative heights of features surrounding the proposed building (see Sheets A2.1, A4.1, and A4.2 of the plan set). As illustrated in the perspective drawings, the design utilizes a varied building façade with split-face block, fiber-cement siding, and glazing to create a structure that is visually interesting. The building's muted colors have been selected to complement the natural surroundings, and dense tree plantings in the landscape area between the building and Bernert Creek will serve to soften its appearance and screen it from view from the south.

The City has zoned the site for commercial development, but the property is challenging for development due to its irregular shape, its sloping topography, and the applicable stream, wetlands, and WRA protection requirements. The proposed building and site layout is appropriate for the site because it clusters development impacts to areas as far removed from the water resources as possible and leaves the majority of the property undeveloped. This standard is met.

75.060 Site Plans and Map

3. In the case of a request for a variance to the building height provisions:

a. An elevation drawing of the structure and the proposed variances; and

b. A drawing(s) to scale showing the impact on adjoining properties; for example, will the height variance, if granted, block a viewpoint from an adjoining property of a significant land feature.

Response: The applicant is requesting a Special Waiver to exceed the building height provisions. Section drawings have been included to depict the building in the context of neighboring properties. The building's 16% increase in height over the 45-foot standard will not be noticeable to the casual observer and will not significantly impact any neighboring properties as compared to what could be allowed without the waiver (see the elevation and section drawings). This standard is met.

IV. CONCLUSION

Based on the information presented and discussed in this narrative and the attached supporting plans and documentation, this application meets applicable standards necessary for land use approval. The proposed development complies with applicable standards of the West Linn Community Development Code and furthers the City's objectives of promoting development while protecting sensitive natural resources. The applicant respectfully requests approval by the City.

MACKENZIE.

DESIGN DRIVEN | CLIENT FOCUSED

April 11, 2016

City of West Linn
Attention: Peter Spir, Associate Planner
22500 Salamo Road
West Linn, OR 97068

Re: **Northwest Self Storage West Linn**
Neighborhood Meeting Documentation
Project Number 2150120.01

Dear Peter:

Enclosed please find the requisite materials to document compliance with the provisions of West Linn Community Development Code 99.038 regarding neighborhood contact for the proposed Northwest Self Storage project at 2400-2450 Willamette Falls Drive. The neighborhood meeting was held at the Willamette Neighborhood Association on October 14, 2015.

If you have any questions please let me know.

Sincerely,

Brian Varricchione

Brian Varricchione, PE
Land Use Planning

Enclosure(s):
1. Certified letter to the neighborhood association requesting a neighborhood meeting
2. Return receipts from letters to the neighborhood association
3. Letter to officers of the neighborhood association and to property owners within 500 feet of site regarding neighborhood meeting
4. Affidavit of mailing notice
5. Maps of notice radius to identify properties within 500 feet
6. Mailing list for letter regarding neighborhood meeting
7. Photograph of posted notice
8. Affidavit of posting notice
9. Minutes from October 14, 2015 Willamette Neighborhood Association meeting (downloaded from City web site)
10. Audiotape of the meeting

MACKENZIE.

DESIGN DRIVEN | CLIENT FOCUSED

By Certified Mail with Return Receipt Requested

September 2, 2015

Willamette Neighborhood Association
Attention: Gail Holmes, President
801 Wendy Court
West Linn, OR 97068

Willamette Neighborhood Association
Attention: Julia Simpson, Vice President
1671 Killarney Drive
West Linn, OR 97068

Re: **Northwest Self Storage West Linn**
Neighborhood Association Meeting Request Confirmation
Project Number 2150120.01

Dear Ms. Holmes and Ms. Simpson:

Mackenzie is helping Northwest Self Storage prepare a land use application to develop a self-storage facility in West Linn. The proposed site is on the north side of Willamette Falls Drive between 6th and 7th Streets, adjacent to I-205 (see attached aerial photo image). Prior to submitting the application, the project team would like to discuss the proposal with the Willamette Neighborhood Association and neighbors in the surrounding area through a brief presentation, including time for questions and answers, at your monthly meeting on Wednesday, October 14, 2015.

I spoke by phone with Gail Homes on Monday, August 31, 2015, for preliminary confirmation that time was available on that date's meeting agenda. Please confirm by reply to my email address, lleighton@mcknze.com, so we can proceed to mail invitations to surrounding property owners promptly. If the Neighborhood Association is not able to schedule the presentation and discussion at a regular meeting within 60 days, we will schedule a separate public meeting. In either case, we will invite Neighborhood Association officers and neighbors in the area surrounding the subject site to attend, as required by City Code standards.

Thank you for the opportunity to present the proposal to the Willamette Neighborhood Association. Please call me at 503-224-9560, or mobile 503-515-5890, with any questions you may have.

Sincerely,

Lee Leighton, AICP
Planner III

Enclosure(s): Site Aerial Photo

c: Tom Jones - Northwest Self Storage

H:\Projects\215012000\6_Final\LTR-Willamette Neighborhood Association-Meeting Request-150902.docx

http://www.portlandmaps.com/detail.cfm?

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2500 WILLAMETTE FALLS DR - WEST LINN

Explorer | Property | **Maps** | Projects | Crime | Census | Environmental | Transportation

Summary | Benchmarks | Businesses | Elevation | Fire | Hazard | **Photo** | Property | Tax Map | UGB | USB | Walkability | Zoning | Zip Code | Public Art

Aerial Photo

2013 / '12 / '11 / '10 / '09 / '08 / '07 / '06 / '05 / '04 / '03 / '02 / '01 6" / 2' / **4'** / 10' / 20' Streets: **On** Lots: **On** Dot: **On**

City of Portland, Corporate GIS 7/28/2015

Address | Mapping | Advanced | Google Earth | Help | About

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Willamette Neighborhood Assn.

Attn: Julia Simpson
1671 Kilarney Dr.
West Linn, OR 97068

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X Julia Simpson ☐ Agent ☐ Addressee

B. Received by (Printed Name) Julia Simpson C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☑ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7008 2810 0001 7293 3360

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Willamette Neighborhood Assn.
Gail Holmes - President
401 Wendy Court
West Linn, OR.
97068

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X Gail P. Holmes ☐ Agent ☐ Addressee

B. Received by (Printed Name) Gail P. Holmes C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☑ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7008 2810 0001 7293 3377

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

MACKENZIE.

DESIGN DRIVEN | CLIENT FOCUSED

September 17, 2015

Re: **Northwest Self Storage West Linn**
Neighborhood Association Meeting Invitation
Project Number 2150120.01

Dear Neighbor:

Mackenzie is helping Northwest Self Storage prepare a land use application to develop a self-storage facility in West Linn. The proposed site is on the north side of Willamette Falls Drive between 6th and 7th Streets, adjacent to I-205. Prior to submitting the application, the project team would like to discuss the proposal with the Willamette Neighborhood Association and neighbors in the surrounding area through a brief presentation, including time for questions and answers. We invite you to attend this monthly Willamette Neighborhood Association (WNA) meeting, when we will be on the agenda:

Date/Time: **Wednesday, October 14, 2015, 7:00 PM**
Location: **Community Room, West Linn Police Department, 1800 8th Avenue, West Linn, OR 97068**

This presentation is likely to be only one of multiple items on the agenda for this meeting, so you are encouraged to contact the WNA beforehand with any questions that you may have for the applicant, at willamettena@westlinnoregon.gov.

Please note that this will be an informal presentation featuring preliminary plans for the proposed development, and the plans may be modified before the land use application is submitted to the City of West Linn. Once submitted, you may also receive an official notice of the application from the City of West Linn inviting you to participate in the land use review process.

We appreciate the opportunity to discuss the proposed development, and we look forward to seeing you at the WNA meeting on October 14. If you are unable to attend the meeting but have any questions, please contact me at LLeighton@mcknze.com, or by phone at 503-224-9560 or mobile 503-515-5890.

Sincerely,

Lee Leighton, AICP
Planner III

AFFIDAVIT OF MAILING NOTICE

I, Lee Leighton, the applicant's representative for the Northwest Self Storage Project at 2400-2450 Willamette Falls Drive, hereby certify that on the 17th day of September, 2015, notice of a neighborhood meeting was mailed to neighborhood association officers and affected property owners within 500 feet of the site in accordance with the requirements of the West Linn Community Development Code 99.038.

Signature of Applicant or Representative — Date: 03/31/16

STATE OF OREGON)
)SS
COUNTY OF MULTNOMAH)

On this the 31st day of March, 2016, before me, the undersigned, a notary public in and for the said county and state, personally appeared the within-named, Lee Leighton who is known to me to be the identical individual described herein and who executed the same freely and voluntarily.

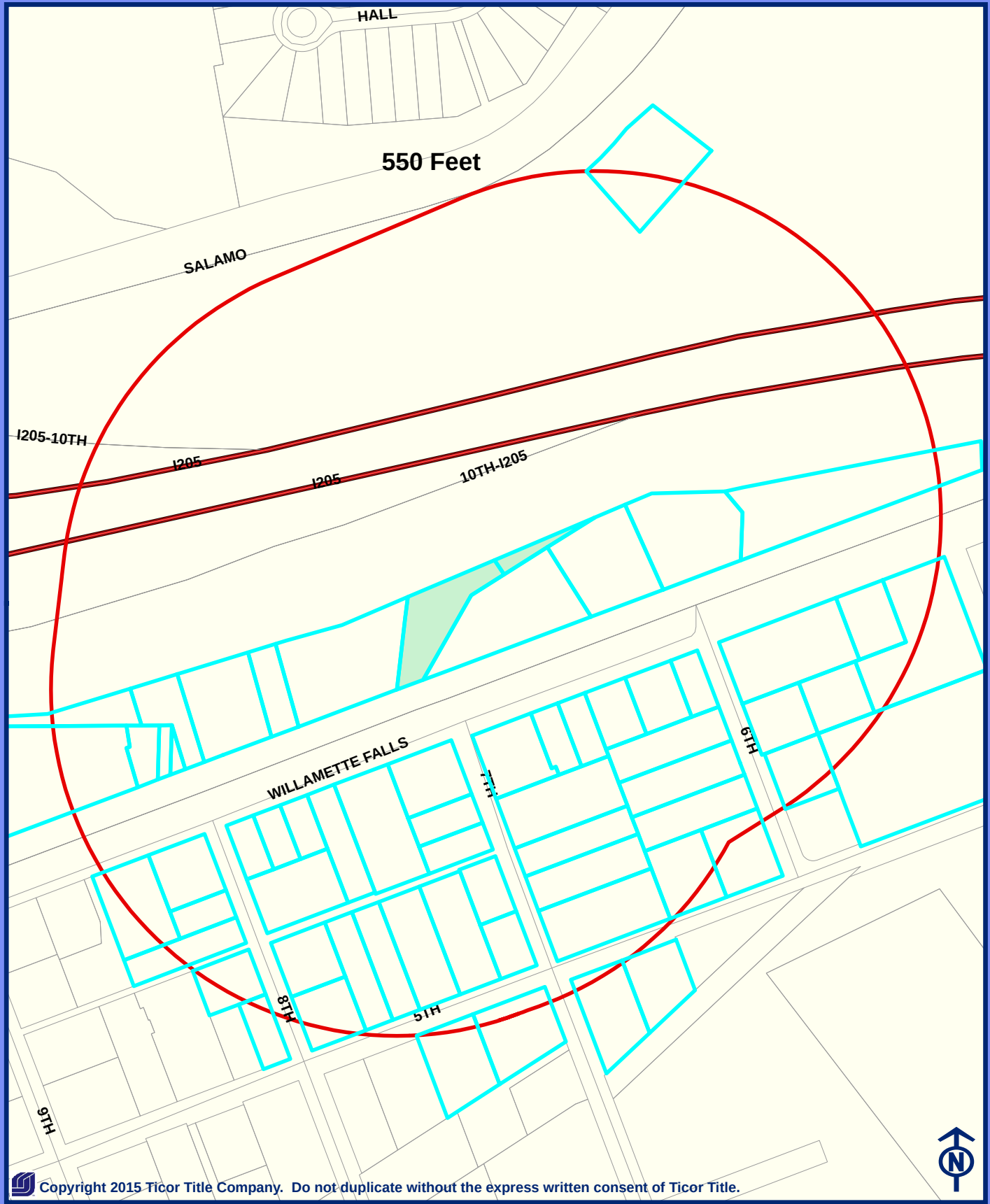
Seal:

OFFICIAL SEAL
REBECCA LYNN BRANDT
NOTARY PUBLIC-OREGON
COMMISSION NO. 469805
MY COMMISSION EXPIRES JULY 08, 2016

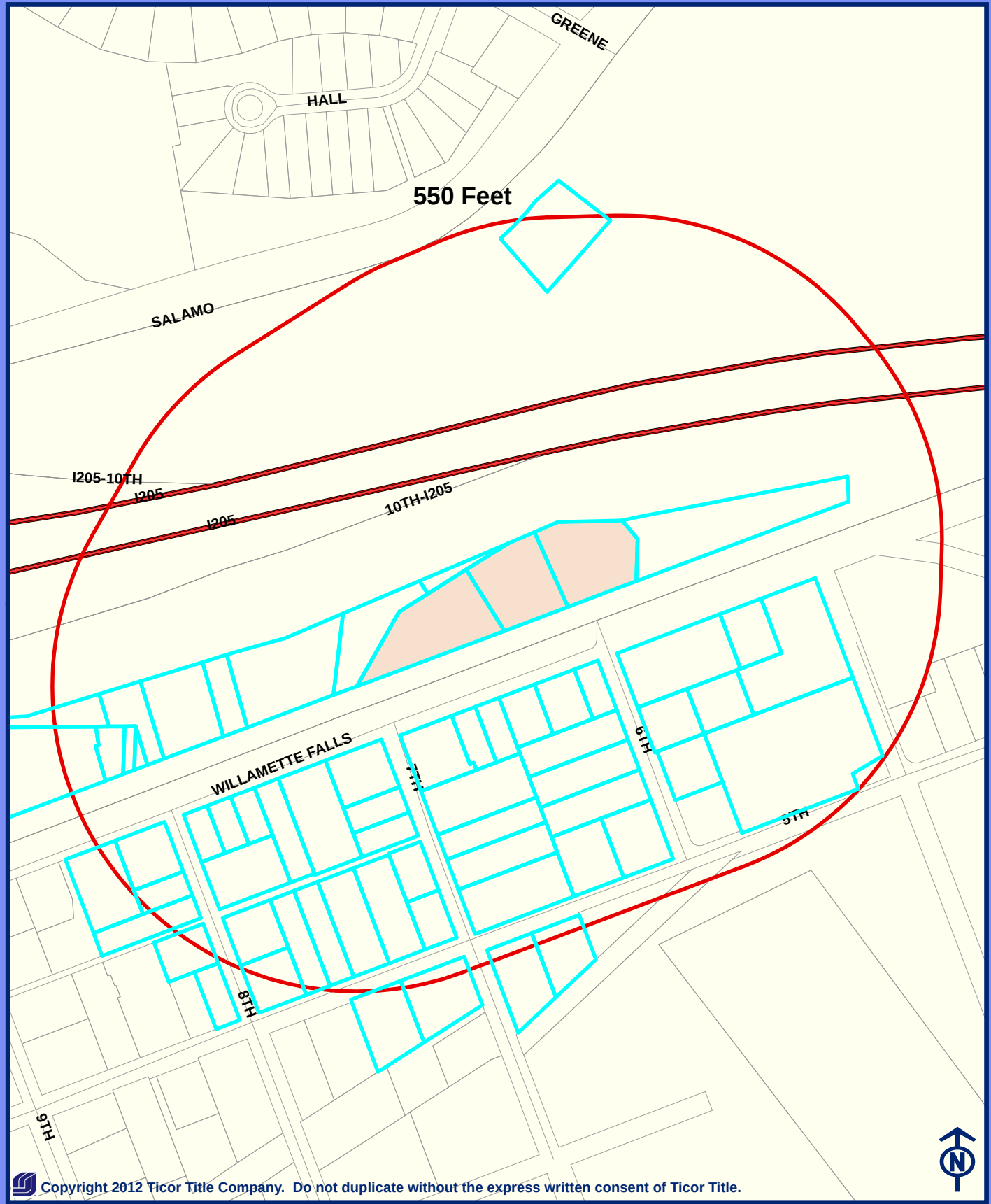
IN TESTIMONY WHEREOF, I have hereunto set my hand and seal the day and year last above written.

Rebecca L. Brandt
Notary Public

Radius Search
21E35D 2000 & 5300



Radius Search
21E35DD 3400-3600




PUBLIC MEETING
On A
Preliminary Development Proposal
Affecting
N. side of Willamette Falls Dr. between
6th & 7th Streets
PROPOSED
Northwest Self Storage facility
A meeting to discuss the preliminary
development proposal is scheduled for
Willamette Nbhd. Assn. October meeting
Wednesday, October 14, 2015, 7:00 PM
Community Rm., West Linn Police, 1800 8th Ave
ALL INTERESTED PERSONS MAY ATTEND
FOR MORE INFORMATION
CONTACT:
Lee Leighton at Mackenzie
503-224-9560

AFFIDAVIT OF POSTING NOTICE

I, Suzannah Stanley, the representative for the Northwest Self Storage Project at 2400-2450 Willamette Falls Drive, hereby certify that on the 17th day of September, 2015, a sign for the neighborhood meeting was posted on the subject property in accordance with the requirements of the West Linn Community Development Code 99.038.

Signature of Representative

3/31/16
Date

STATE OF OREGON)
)SS
COUNTY OF MULTNOMAH)

On this the 31 day of March, 2016, before me, the undersigned, a notary public in and for the said county and state, personally appeared the within-named, Suzannah Stanley who is known to me to be the identical individual described herein and who executed the same freely and voluntarily.

Seal:

OFFICIAL SEAL
REBECCA LYNN BRANDT
NOTARY PUBLIC-OREGON
COMMISSION NO. 469805
MY COMMISSION EXPIRES JULY 08, 2016

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal the day and year last above written.

Rebecca L. Brandt
Notary Public

Draft Minutes of Willamette Neighborhood Association meeting 10/14/2015

Called to order by Julia Simpson – VP

Those in attendance = Kathie Halicki, Julia Simpson, Eric Miller, Connie Richardson, Debbie Meyers, Jody Carson, Tom Jones, Lynda McDowell, Andy Rocchia, Elizabeth Rocchia, Ken Vanduloff, Matt Altenhofen, Shannon Knight, Midge Pierce, Michael Selvaggio, Danny Belding, Christine Lewis.

The minutes from Aug. 12/2015 and Sept. 9, 2015 were ratified. Elizabeth Rocchia made the motion and Debbie Meyers seconded for both motions. Both motions had 16 yeas making a unanimous decision.

Treasure's report: Elizabeth Rocchia informed us that we have $4299.35, the same as last month.

Northwest Self Storage Presentation:

Number on informational sheet sent out dated 9/17/2015 is MacKenzie/Northwest Storage number not West Linn Planning number. (2150120.01).

Tom Jones = Northwest Self Storage. As of today, brush clearing on the site has not been finished for the surveyor to begin. It is currently being done. The arborist has visited and will visit the site for the White Oak and other trees. City arborist also to visit. The wetland consultant has also been out and will return. There is a 30' fall from back to front. ODOT=setback from right of freeway. TVFR mandated a 26' driveway. Driveway will go to back of building and will share driveway of business next door. The driveway is in the Greenway overlay, so there will need to be improvements made there too. There will be landscaping along Willamette Falls Dr., very tall fast growing trees to mitigate the impact of the building. Riparian Line=can only encroach 30% into Riparian way (this is a hardship). Site to be built and building designed one way if they keep the large White Oak and other significant trees vs. removal of said trees and planting others. If White Oak is removed then the driveway will go all the way around the back and will have a simpler building. Presently city mandates that a sidewalk is to have planted strip along WFD then the sidewalk. Site is already fully served. Compare their new builds in Beaverton on Canyon Road and in Wilsonville across from Fred Meyer. They have 80 facilities. The picture he showed is not like what is to be built. They are asking for a 4 story (43' in all) building with the loading area away from WFD. The building will be climate controlled, everything indoors. Colors=taupe and green. Can be used for warehouse space. There would be 500 units, very little parking (7-8 parking stalls). Hours to be 7am-10pm, office hours 9am-6pm. Managers office not to be a dwelling. High security= must enter code and multiple cameras. 16 trips per day. Heaviest use days= probably Sat., evenings, end of month. A question was asked by Andy Rocchia about how far above the creek the foundation would be=answer, don't know. They will not disturb the drainage for the creek. The issue of flooding was brought up by several WNA members=NWSS not aware of recent flooding. Basement floor would be above the 100 year flood plain. Shannon Knight felt that the building was too modern for our historic district. Perhaps a change needs to happen there. Tom said that they did a historic looking building in Wilsonville. Construction traffic=10-12 vehicles perhaps as little as 5-6. Road already taxed. Traffic Engineers to figure out traffic. NWSS was informed by those in attendance of WFD becoming 205a, many times per week. Needs for NWSS= conditional use permit review, water resource review, impact and hardship review, design review, waiver of height allowance, improvement of greenway overlay. Timetable= Dec. submittal to WL Planning, Spring-summer 2016 construction. Jobs created 3.

Main Street:

Trick or Treat (Sat. 2-5pm) Shannon Knight asked for $150., to go towards Halloween. Shannon made the motion and Jody seconded. It passed unanimously. Also mentioned was an adult costume contest for Halloween. Alice in Willamette Land. So far J. Willeys , Saloon (karaoke), La Fiesta, Lil Cooperstown have all sign up to have costume contests.

Change out every other banner for the holiday season. May ask for money from WNA. Jody made a motion for $200. For banners on WFD. Debbie 2nd and it passed unanimously.

End of Oct. the Main Street Manager will start.

Elizabeth Rocchia informed us that 2 signs (announcing the Willamette Neighborhood) were paid for by the city. Parks and Rec will install them. The discussion was/is where to put them and could we perhaps use 2 more. This is to be discussed next month.

Jody Carson informed us that the National Historic District signs are in but ODOT wants $30,000. To install. The city has $18,000 for 2 signs. Jody drove around and found that ¾ of the other historic signs are attached to other signs. Will go back and discuss this with ODOT.

Annual postcard= tabled until Jan. since Lori Hall has resigned, we will wait for her replacement to get situated in job.

Oct. 15th Bland Circle pre-app meeting

Oct. 21st Planning Commission meeting to discuss amendments to Transportation Codes.

Oct. 26 City Council meeting, appeal of Con Am denial by Planning Commission

A suggestion was made by Andy Rocchia that perhaps there should be some "old varieties of Rhododendrons planted under the firs that have been limbed up along WFD. That way the houses above 8th Ave. wouldn't have to look at buildings. Perhaps the raised planters should use native planted in "Old Town".

New Pavement= dirt on historic stairway. The stairs went from the trolley line to the street (upper WFD to lower WFD, 2 cement 1 stone). Danny Belding said he will approach city hall about WNA requesting that it be cleaned up. Safety hazard and doing damage. It was discussed that perhaps we should get a sign explaining the history of the stairs.

Eric Miller UAB= this was a good year for selling water. If we have another good year next year we won't need a 5-18% (depending on whom you are speaking to) rate increase. UAB will wait until Aug. of 2016 to make decision. UAB is looking to clarify legally the language of the increase. 5% of base in 1999 or 5% of entire budget.

Meeting adjourned 8:35pm

Submitted by Kathie Halicki, secretary

REPORT OF GEOTECHNICAL ENGINEERING

Northwest Self Storage
West Linn, Oregon

Geotech Solutions Inc.

March 24, 2016

GSI Project: nwselfstorage-15-3-gi

Geotech Solutions Inc.

March 24, 2016 *nwselfstorage-15-3-gi*

NW Self Storage
Tom Jones; capitalman@onlinenw.com

REPORT OF GEOTECHNICAL ENGINEERING SERVICES
Willamette Falls Drive Self Storage, West Linn

As authorized, herein we present our report of geotechnical engineering services for the proposed new storage development to be located on Willamette Falls Drive in West Linn, Oregon. The 5-story building is to be located near the north property boundary, with a drive through access and paved access drives to the north and south. We have assumed building loads will be less than 10 kips per foot for walls, 350 kips for columns, and 500 psf for floors, and that grading will be limited to shored and retained cuts less than 17 feet high. The purpose of our services was to explore subsurface conditions and provide a geotechnical engineering report for use in design by others. Our specific scope included the following:

- Provide principal level geotechnical project management including management of field and subcontracted services, report writing, analyses, and invoicing.
- Review geologic maps and vicinity geotechnical information as indicators of subsurface conditions.
- Complete a site reconnaissance to observe surface features relevant to geotechnical issues, such as topography, vegetation, presence and condition of springs, exposed soils, and evidence of previous grading.
- Complete public one call and private utility locates.
- Observe excavation of up to 4 test pits to depths of up to 17 feet or refusal with an owner provided excavator and operator.
- Classify and sample the materials encountered and maintain a detailed log of the explorations.
- Determine the moisture content of selected samples obtained from the explorations, and complete soil classification testing as necessary.
- Provide recommendations for earthwork including seasonal material usage, suitability of on-site fill for reuse, stabilization of fills, use of granular working pads, cut and fill slopes, and the need for subsurface drainage.
- Provide recommendations for temporary and permanent slope inclinations.
- Provide recommendations for cantilever soldier pile walls, including lateral soil loads, drainage, and installation criteria.
- Complete qualitative stability analyses for one cross section from the immediate slope above to the creek through the northern building area, including the shored condition. Provide qualitative measures to improve stability if needed.
- Provide recommendations for support of shallow foundations, including an allowable bearing pressure and related settlement estimates, sliding coefficients, lateral earth pressures, a seismic coefficient, embedment depths, perimeter drainage, and foundation subgrade preparation.
- Provide recommendations for pavement subgrade preparation as well as the need for stabilization and/or geosynthetics, as well as base rock and asphalt concrete materials, thicknesses, and installation criteria based traffic information provided by others.
- Provide a written report summarizing the results of our geotechnical evaluation.

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SITE OBSERVATIONS AND CONDITIONS

Surface Conditions

The site is located northwest of the intersection of Willamette Falls Drive and 6th Street between Willamette Falls Drive and the Interstate 205 on-ramp in West Linn, Oregon. The general site features in an aerial photo from 2015 are shown on the attached ***Site Plan***. The site consists of a roughly 2 acre parcel that generally slopes moderately down to the south towards a small creek, and gently down to the west. Elevations change by roughly 27 feet from the northeast corner down to the creek bed, and roughly 16 feet along the north proposed building line. Site topography, features, and review of LIDAR mapping indicates a former roadbed running southwest to northeast across and up the site that likely predated Interstate 205. Fills are evident at the surface across much of the site. Site vegetation consists of long grass and weeds with occasional small trees in a northern swale abutting the property line and trees and brush near the creek. The Interstate 205 on-ramp to the north may be built from structural fill or cut into native soils, and is vegetated with grass and weeds.

Subsurface Conditions

General – The site was explored on March 15th by advancing four test pits to depths of up to 17 feet below the existing ground surface (bgs). Approximate exploration locations are shown on the attached ***Site Plan.***

We reviewed the Geologic Map of the Canby and Oregon City Quadrangles (DOGAMI, Bulletin 99) as part of our evaluation, as well as landslide susceptibility from DOGAMI O-13-08. The site is located in an area of mapped Lacustrine sediments including the Willamette Silt formation (Qws), which abuts Columbia River Basalt (Tcr) to the west. An large historical landslide from the initial Interstate 205 cuts is present off-site to the northeast, and no slides are mapped on site.

In general, we encountered subsurface conditions at the site consisting of 1 to 6 feet of variable fill overlying native silt. Old asphalt concrete pavement was observed in the former roadbed, primarily under softer fill. The fill ranged from loose gravels and cobbles to reddish-brown clayey silt with debris, as well as concrete and asphalt rubble. Under the fill the native brown silt was generally stiff with trace clay and slight cementation in some areas, with dark brown and gray mottling. The silt had a low to moderate plasticity with some apparent cohesion, and exhibited minor caving, and extended to the depths explored. It is possible that weathered or intact basalt is present below the base of the test pits.

Groundwater seepage was observed from perched conditions above or near the native silt interface. Several feet into the silt no seepage was observed, but is possible during the wet season.

CONCLUSIONS AND RECOMMENDATIONS

General

Based on the results of our explorations and analyses, the site can be developed as proposed following the recommendations herein. Primary geotechnical considerations at this site are high shoring walls subject to seepage and high pressures due to slopes above them, extensive fills, and very low infiltration rates. The soils expected to be near site subgrade elevations generally consist of silt which is easily disturbed when wet. If construction is planned for wet conditions, measures must be taken to minimize disturbance.

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The following sections discuss these and other geotechnical considerations in greater detail and provide recommendations for design and construction.

Earthwork

Site Preparation – Prior to earthwork construction, the site must be prepared by removing any existing structures, foundation elements, pavements, utilities, and all fill. Any excavation resulting from the aforementioned preparation must be brought back to grade with structural fill. Existing undocumented fill is likely to be removed from site cuts in building areas, and can only be used in the driest of late summer conditions if properly moisture conditioned as structural fill. This may not be practical on this site as large areas for soil drying and processing would be needed.

Any existing undocumented fill must be removed from all pavement, building, and fill to expose undisturbed native subgrade. Excavation below ground water seepage elevations will require dewatering and stabilization of the excavation base. The need for temporary shoring is expected for trenches and excavations.

Stabilization and Soft Areas - We must be contacted to evaluate the exposed subgrade after the above site preparation. This evaluation can be done by proof rolling in dry conditions or probing during wet or inaccessible conditions. Soft areas or areas of unsuitable fill or debris will require overexcavation and backfilling with well graded, angular crushed rock compacted as structural fill. Excavations below groundwater seepage elevations will likely require stabilization using crushed rock with a maximum particle size of 6 inches and less than 5 percent passing the U.S. Standard No. 200 Sieve (when tested in accordance with ASTM C 117). A geosynthetic may also be required. We recommend that a geosynthetic used for separation consist of a woven geosynthetic with an AOS of #70 to # 100 sieve, and a minimum puncture resistance of 120 pounds (such as a Propex Geotex 601 or equivalent). Areas that remain soft may also require a geogrid over the fabric, such as a Hanes EGrid 2020 or equivalent.

Working Blankets and Haul Roads – The fine-grained soils at the site are easily disturbed when wet and will not provide adequate support for construction activities and equipment. If not carefully executed, demolition, site preparation, and excavation activities can create extensive soft areas and significant repair costs can result. Earthwork must be planned and executed carefully to reduce subgrade disturbance and construction equipment must not operate directly on the subgrade.

Rock working blankets and haul roads placed over a separation geosynthetic (such as a Propex Geotex 601 or equivalent) in a thickened advancing pad can be used to protect subgrades. We recommend that sound, angular, pit run or crushed basalt with no more than 6 percent passing a #200 sieve be used to construct haul roads and working blankets. Working blankets must be at least 12 inches thick, and haul roads at least 18 inches thick. These can be reduced to 10 inches and 14 inches if the preceding geogrid is used. Some repair of working blankets and haul roads must be expected.

The preceding rock thicknesses are the minimum recommended. Subgrade protection is the responsibility of the contractor and thicker sections may be required based on subgrade and weather conditions during construction and type and frequency of construction equipment.

Structural Fill – The on-site native soil can be only be used for structural fill if properly moisture conditioned. This will not be feasible during wet conditions. Even during dry summer conditions the

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on-site soils will require drying by scarification and frequent mixing in thin lifts over broad areas and may be impractical. If attempted, once moisture contents are within 3 percent of optimum, the material must be compacted to at least 92 percent relative to ASTM D1557 (modified proctor) using a tamping foot type compactor. Fill must be placed in lifts no greater than 10 inches in uncompacted thickness. In addition to meeting density specifications, fill will also need to pass a proof roll using a loaded dump truck, water truck, or similar size equipment.

Existing undocumented fill containing demolished pavements and excavated crushed rock fill rock that is free of organic and other deleterious materials and crushed to no greater than 3 inches in any dimension may be suitable for use as structural fill under the same preceding moisture conditioning difficulties. Such material must also be well graded and placed and compacted in a manner to prevent voids and provide a dense, incompressible material. This material must be placed and compacted as recommended above. In addition to meeting density specifications, fill will also need to pass a proof roll using a loaded dump truck.

In wet conditions, fill must be imported granular soil with less than 6 percent fines, such as clean crushed or pit run rock. This material must be placed in lifts not exceeding 12 inches in uncompacted thickness and be compacted to 95 percent relative to ASTM D1557.

Trenches – Utility trenches may encounter ground water seepage and caving must be expected where seepage is present. Flowing conditions can occur if sandy fills are encountered at seepage levels. Shoring of utility trenches will be required for depths greater than 4 feet and where groundwater seepage is present. We recommend that the type and design of the shoring system be the responsibility of the contractor, who is in the best position to choose a system that fits the overall plan of operation.

Depending on the excavation depth and amount of groundwater seepage, dewatering may be necessary for construction of underground utilities. Flow rates for dewatering are likely to vary depending on location, soil type, and the season during which the excavation occurs. The dewatering systems, if necessary, must be capable of adapting to variable flows.

Pipe bedding must be installed in accordance with the pipe manufacturers' recommendations. If groundwater is present in the base of the utility trench excavation, we recommend overexcavating the trench by 12 to 18 inches and placing trench stabilization material in the base. Trench stabilization material must consist of well-graded, crushed rock or crushed gravel with a maximum particle size of 4 inches and be free of deleterious materials. The percent passing the U.S. Standard No. 200 Sieve must be less than 5 percent by weight when tested in accordance with ASTM C 117.

Trench backfill above the pipe zone must consist of well graded, angular crushed rock or sand fill with no more than 7 percent passing a #200 sieve. Trench backfill must be compacted to 92 percent relative to ASTM D-1557, and construction of hard surfaces, such as sidewalks or pavement, must not occur within one week of backfilling.

Excavation Considerations

General - Excavations will likely terminate in silt that is sensitive to disturbance and easily damaged by construction equipment. We recommend that excavation subgrades be protected from disturbance as described in the ***Stabilization and Soft Areas*** section of this report. It is possible that weathered or

intact Columbia River basalt is present at depths below our test pits, and that rock excavation may be needed.

Slope Stability Evaluation

The site's native soils are suitably stable at slopes of 2H:1V and flatter. Stability analyses were completed for static and dynamic conditions using the proposed built profile provided through critical cross sections of the north building area. The range of our evaluation profile was from the on-ramp slope down to Willamette Falls Drive, and included variations on slip surfaces, water levels, soil strengths, and construction phases. Based on our analyses, slopes that are inclined, retained, and drained as described herein have suitable stability.

Temporary Open Cut Slopes – From preliminary plans provided dated January 27, 2016 we anticipate that proposed development plans will require roughly up to 17-foot deep excavations (in the northeast corner) to reach subgrade elevations. Excavations deeper than 10 feet, or that do not allow for the temporary slope inclinations herein on property, must be shored. Temporary open excavations in stiff native silt soils up to 10 feet high must be sloped no steeper than 1H:1V provided groundwater seepage is not present and with the understanding that some sloughing may occur. These slopes are only applicable in the dry season which is typically from July through September. In the wet season slope heights must not exceed 8 feet and inclinations of 1.5H:1V. The slopes must be flattened, stabilized, or retained if sloughing occurs. Drainage must be routed away from slope faces and no surcharges or construction equipment are allowed within 10 feet of the slope crest. Excavations may be completed using open cut methods only in the absence of adjacent structures, pavements, and sidewalks within 10 feet of slope crests. All sloped temporary cuts must be protected from rainfall and erosion during the wet season which typically runs from late September to June, and typical approaches include weighted sheeting or pinned coir matting.

If no room for these slopes is available from building plans and setbacks, shoring will be required, and also where temporary excavations are adjacent to settlement-sensitive elements such as existing buildings, pavements, sidewalks to remain, and utilities. Recommendations for design of temporary shoring are provided in following sections.

Excavation Dewatering - Excavations that extend below groundwater seepage elevations are expected to encounter moderate to low flow groundwater seepage and possibly flowing conditions in some layers with no cohesion and/or some sand content is present. Larger diameter wells or sumps operating inside the excavation will likely be required to remove seepage into the excavation during construction. The type and design of the dewatering shoring system must be the responsibility of the contractor, who is in the best position to choose a system that fits the overall plan of operation but we request that we review the proposed system prior to construction. The dewatering system must be expandable and capable of adjusting to variable flows.

Conventional Tied-Back Soldier Pile Shoring

The need for tie backs must be determined by the structural engineer's shoring design, and property lines may limit tieback use and location. Conventional tied-back soldier pile and lagging is anticipated where wall heights exceed 15 feet, and cantilever shoring may be feasible for lower heights. Other wall types proposed by a contractor may also be suitable, but we must be consulted to evaluate application of the design parameters presented herein, as they would likely change. Site explorations were done to

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proposed cut depths provided in the January 27 preliminary plan, and it is possible that different materials, such as weathered or intact basalt, may be present, including at soldier pile drill depths.

If soldier pile and lagging shoring is used, the height of cuts to install lagging should not exceed 4 feet for no more than two pile spans horizontally at a time, and should be closely monitored to evaluate sloughing. If sloughing occurs, or if seepage is present, additional measures such as decreased cut widths and heights, may be necessary to reduce undermining, loss of support, instability, and impacts on adjacent property. In addition to surveying, we recommend monitoring deflections of piles with inclinometer readings on inclinometer casing (or permanent inclinometer installations) embedded in at least two of the soldier piles where shoring exceeds 15 feet, with daily observations and documentation by the contractor of visual plumbness, ground cracking, and associated deformation indicators. In any case if deformation features are noted excavations must cease, buttressing or other methods may be required, and we must be contacted immediately.

Design - Shoring must be designed by a licensed structural engineer experienced in shoring design. Tied-back soldier pile shoring can be designed in accordance with the attached ***Tied Back Wall Shoring Pressures*** figure and cantilevered soldier pile shoring can be designed in accordance with the attached ***Cantilevered Shoring Pressures*** figure. Where surcharges are not within the no load zone at the surface, the rectangular pressure is not needed.

Soldier pile embedment (D) below excavation depths must be determined by the structural engineer. Soldier piles must be backfilled with structural concrete (3,000 psi minimum) below the base of the excavation and 'lean-mix' concrete (at least 500 psi compressive strength) above the excavation base. All concrete must be placed from the bottom of the excavation using a tremie pipe, and any sloughed materials must first be removed to provide a full pile diameter. Slough removal volume and grout volumes must be closely monitored with sloughing limited to prevent loss of support for adjacent structures or ground.

Tiebacks must be sleeved in the no-load zone. Tiebacks should be designed for a 15 degree downward inclination. A preliminary design adhesion of 1,000 psf can be used for the surface area of simple grouted tie-backs in medium stiff or better silt. The adhesions are a rough estimate, and are subject to change based on the results of verification testing during construction. We recommend at least 2 verification tests at each level of tiebacks, each to 150% of design load with 25% increments and deflection measurements to the nearest 0.01". These must be done prior to production anchors, but may be included as production anchors if no failure is observed in load testing. The 100% load in verification tests should be held for at least 10 minutes as a creep/deflection test. In addition, all tiebacks must be proof tested to 100% of design load, and locked off at roughly 10% of the design load.

Tieback lengths and sizes may need to be adjusted in the field based on tested capacities and observed drilling character.

Lagging can be designed using a no load span equal to one pile diameter from each end of the lagging. Any void between lagging and soil must be filled using gravel. CDF (Controlled Density Fill) should not be used unless internal erosion protected weep-holes/drains are drilled through the cured CDF and lagging to contact drainage elements on a grid of 4 foot centers to provide suitable drainage. CDF must

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be placed in lifts not exceeding 3 vertical feet and each lift must be placed only after the previous lift has sufficiently cured (otherwise excessive fluid pressures could induce unsuitable shoring deformations).

Drainage Considerations - The recommended pressure distributions for shoring design assume the shoring walls are fully drained. The facing of soldier pile and timber lagging walls is sufficiently permeable and does not require additional drainage elements during construction unless CDF is used. If CDF is used, internal erosion protected weep-holes/drains are drilled through the cured CDF and lagging to contact drainage elements on a grid of 4 foot centers to provide suitable drainage. Permanent drainage between embedded retaining walls and the shoring must also be designed and installed unless permanent walls are waterproofed and designed for hydrostatic pressures.

Performance Expectations and Monitoring – Cantilevered solider pile and lagging walls typically deflect between 1 to 2 percent of the exposed wall height at the top of the wall. Deflections behind the walls typically dissipate to very small deformations between a distance equal to 2 to 4 (exposed) wall heights behind the wall. Preventing voids, infiltration from runoff, surcharges, and other detrimental influences on wall loads and support is critical to avoiding larger deformations which could be damaging to site improvements and adjacent structures. If these deformations are unsuitable to existing features above the wall and less deflection is required, increased design pressures and/or different shoring methods will be required.

We recommend monitoring wall deflection by regularly surveying the top of the wall during excavation and construction. Survey points should be surveyed for both horizontal and vertical position to the nearest 0.001 feet once for every tieback level but not less than weekly, as well as weekly upon completion of excavation. Survey data should be provided to us to evaluate the performance of the shoring system and survey data collection frequency. In addition, we recommend monitoring deflections of piles with inclinometer readings on inclinometer casing (or permanent inclinometer installations) embedded in at least two of the soldier piles where shoring exceeds 20 feet.

Soil Nailed Shoring

Soil nailed shoring is also typically a contractor designed item, and may not be viable if nails would extend off-property or be retaining existing fill. The site's existing uncontrolled fills are unlikely to hold a face. In addition, some non-plastic, low cohesion zones in the native silt or where seepage is present may not hold a vertical face for application of shotcrete at conventional panel heights of 4-6 feet. I soil nailing is planned, we should be consulted further, and the contractor is solely responsible for evaluating the ability of the soil to hold a face.

Drainage - The site silts are expected to show seepage from perched groundwater at shallow depths near the native soil contact, and possibly at depth within the silt. Therefore, in order to maintain design wall pressures and provide suitable drainage we recommend that drain board strips (Amerdrain 500 or equivalent) at least one foot wide covering between 15 and 25% of the wall face area be used. These strips can be intersected by weep holes or routed to a toe drain pipe that is at the back of the base of the wall. If weep holes are used they should be placed on a grid bisecting the tieback locations but at a maximum of 10 feet on center. Weep holes should consisted of drilled and inserted, or pre-sleeved, drains consisting of 2- inch diameter rigid pvc or other non-corroding pipe that has slotted machined screening at the third points of the circumference or is perforated and wrapped with a non-woven

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Propex Geotex 601 or equivalent. Surface collection of the drainage must be routed to a suitable erosion protected discharge.

Permanent Retaining Structures

General – All embedded walls must be fully drained. Embedded building walls must be designed per the following. Our retaining wall design recommendations are based on the following assumptions: (1) the walls are not in contact with temporary shoring; (2) the walls consist of conventional, cantilevered retaining walls or embedded building walls; (3) the walls are less than 17 feet in exposed height; (4) the walls are fully drained and backfill consists of clean granular materials; and (5) the backfill is level or at the stated inclinations herein and no surcharges such as stockpiled soil, equipment, or footings are located within 15 feet of the wall without the lateral loading considerations herein. Reevaluation of our recommendations will be required if the retaining wall design criteria for the project vary from these assumptions. Footings for retaining walls must be designed as recommended in the ***Shallow Foundations*** section of this report.

Lateral Earth Pressures - For fully drained cantilever walls not restrained from rotation, with 2H:1V or flatter backfill, and no surcharges, the static triangular lateral pressure of a 50 pcf equivalent fluid can be used for design or the following seismic pressure, whichever is greater. Increased lateral pressures due to surcharges can be calculated as previously recommended for shoring. If needed, seismic design for roughly one inch of deflection (Based on NCHRP 6-11 methods), can be evaluated for a seismically induced rectangular wall pressure of 38H (compare this rectangular pressure to the static triangular pressure to evaluate which control design).

Backfill - Backfill must be placed and compacted as recommended for structural fill, with the exception of backfill placed immediately adjacent to walls, which must be compacted to a lesser standard to reduce the potential for generation of excessive pressure on the walls. Backfill located within a horizontal distance of 3 feet from the retaining walls must be compacted to approximately 90 percent of the maximum dry density, as determined by American Society for Testing and Materials (ASTM) D 1557 and must be compacted in lifts less than 6 inches thick using hand-operated tamping equipment (such as "jumping jack" or vibratory plate compactors). If flat work (slabs, sidewalk, or pavement) will be placed adjacent to the wall, we recommend that the upper 2 feet of fill be compacted to 95 percent of the maximum dry density, as determined by ASTM D 1557. Settlements of up to 1 percent of the wall height commonly occur immediately adjacent to the wall as the wall rotates and develops active lateral earth pressures. We recommend that construction of flat work adjacent to retaining walls be postponed at least two weeks after construction, unless survey data indicates that settlement is complete prior to that time.

Wall Drains - Retaining wall drains must consist of a two-foot wide zone of drain rock encompassing a 4-inch diameter perforated pipe, all enclosed with a non-woven filter fabric. The drain rock must have no more than 2 % passing a #200 sieve and must extend to within one foot of the ground surface. The geosynthetic must have an AOS of a #70 sieve, a minimum permittivity of 1.0 sec^{-1}, and a minimum puncture resistance of 80 pounds (such as Propex Geotex 601 or equivalent). One foot of low permeability soil (such as the on-site silt) must be placed over the preceding fabric at the top of the drain to isolate the drain from surface runoff. Alternatively, a composite drain board could be used at the back of the wall in lieu of the drain rock, such as an Amerdrain 500 or 520 or equivalent. This could also be applied as permanent drainage against a shoring wall used as a back-form.

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Shallow Foundations

Based on the preceding anticipated structural loads, the proposed structure can be supported on shallow spread foundations bearing on native medium stiff or better undisturbed silt soils or on crushed rock structural fill pads on these soils. The need for rock pads and their thicknesses must be in accordance with the following table, and pads must extend at least half the pad thickness beyond the footing edges. In areas cut more than 7 feet below preconstruction grades, no rock pads are needed for loads less than 500 kips for columns.

Foundation Load	**Crushed Rock Pad Thickness (feet)**
Columns (kips)	
<250	0
250-350	1.5
Continuous Footings (kips/ft)	
<8	0
Footings in areas cut more than 7 feet below preconstruction grades	
Columns (kips)	
<350 kips	0

Footings should be embedded at least 24 inches below the lowest adjacent, exterior grade. Footings for these loads, cut depths, and rock pads can be designed for an allowable net bearing pressure of 3,000 psf when founded as recommended. The preceding bearing pressure can be increased to 5,000 psf for temporary wind and seismic loads. Continuous footings should be no less than 18 inches wide, and pad footings should be no less than 24 inches wide. Resistance to lateral loads can be obtained by a passive equivalent fluid pressure of 350 pcf against suitable footings, ignoring the top 12 inches of embedment, and by a footing base friction coefficient of 0.35 on silt and 0.45 on the rock pads. Properly founded footings are expected to settle less than a total of 1 inch, with less than ½ inch differentially.

All footing subgrades should be protected by at least 2 inches of crushed rock where seepage is present and in the west season.

Seismic Design

In accordance with the International Building Code (IBC) as adapted by State of Oregon Structural Specialty Code (SOSSC) and based on our explorations and experience in the site vicinity, as well as on site deeper explorations by others, the subject project can be evaluated using the parameters associated with Site Class D. Seismic hazards at the site are low.

Liquefaction - Liquefaction occurs in loose, saturated, granular soils. Strong shaking, such as that experienced during earthquakes, causes the densification and the subsequent settlement of these soils. As site soils are unsaturated, and non-plastic soils are generally medium stiff or better, structurally damaging liquefaction is not expected. Liquefaction or softening of discrete non-plastic layers in perched ground water is possible, but is also not expected to be structurally damaging.

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Floor Slabs On-grade

Floor slab on-grade loads up to 500 psf are expected to induce less than one inch of settlement. A minimum of six inches of clean, angular crushed rock with no more than 9 percent passing a #200 sieve is recommended for underslab rock, underlain by a separation geosynthetic such as a Propex Geotex 601 or equivalent. Prior to slab rock placement the subgrade will need to be evaluated by us by probing or observing a proof rolling using a fully loaded truck. Underslab rock should be compacted to 92 percent compaction relative to ASTM D-1557, and should be proof rolled as well. In addition, any areas contaminated with fines must be removed and replaced with clean rock. If the base rock is saturated or trapping water, the water must be removed prior to slab construction.

Some flooring manufacturers require specific slab moisture levels and/or vapor barriers to validate the warranties on their products. A properly installed and protected vapor flow retardant can reduce slab moistures. If moisture sensitive floor coverings or operations are planned, we recommend a vapor barrier be used. Typically a reinforced product or thicker product (such as a 15 mil STEGO wrap) can be used. Experienced contractors using special concrete mix design and placement have been successful placing concrete directly over the vapor barrier which overlies the rock. This avoids the issue of water trapped in the rock between the slab and vapor barrier, which otherwise requires removal. In either case, slab moisture should be tested/monitored until it meets floor covering manufacturer's recommendations.

Drainage

General - Perimeter foundation drains are required around all exterior foundations. The surface around building perimeters must be sloped to drain away from buildings. As stated previously, our retaining wall recommendations are based on drained conditions. All retaining walls must include drains constructed as described in the following section.

Permanent embedded structures and floor slabs that extend beneath the groundwater table, or are more than 4 feet below existing pre-construction grades, must be sealed and designed for hydrostatic pressure and uplift forces (where relevant) with water levels up to 4 feet below preconstruction grades. As an alternative (with walls still needing to be sealed), a permanent subsurface drainage system may be employed to adequately drain the basement walls and floor slab. Specific recommendations for under slab drainage are included herein, and wall drainage is described ***Wall Drains*** section.

Foundation Drains - Foundation drains must consist of a two-foot wide zone of drain rock encompassing a 4-inch diameter perforated pipe, all enclosed with a non-woven filter fabric. The drain rock must have no more than 2 percent passing a #200 sieve and must extend to within one foot of the ground surface. The geosynthetic should be a Propex Geotex 601 or equivalent. One foot of low permeability soil (such as the on-site silt) must be placed over the fabric at the top of the drain to isolate the drain from surface runoff.

Underslab Drains - For underslab floor elevations more than 4 feet below existing, pre-construction grades, underslab drains must be installed on 20 foot centers. Underslab drains should include a 2" rigid perforated pipe in one foot square cross section of angular drain rock (or crushed rock or crushed recycled concrete with less than 4% fines), wrapped by a Propex Geotex 601 non-woven fabric (or equivalent).

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Infiltration

We completed one falling head stand pipe infiltration test in TP-3 at a depth of 4 feet in the native silt. Results indicate very low infiltration (<0.2 cubic inches per square inch per hour [$in^3/in^2/hr$]). This is typical of these materials. With a reduction factor of 2 in this unit the recommended infiltration rate for shallow system design is 0.1 $in^3/in^2/hr$, applied to the sides of the system and to the base also if protected by upstream sedimentation systems. This may preclude use of infiltration systems. If infiltration systems are used, they must be located downslope from the building.

As actual subsurface conditions and infiltration can vary widely, flexibility for additional dry wells or adaptation of infiltration systems must be included in the design and construction, with contingencies built into the budgets and schedules. Infiltration systems need to be maintained free of debris and silt in order to function properly. We must be contacted during shallow infiltration system construction to confirm that exposed conditions are consistent with those observed during our infiltration testing. The size of the systems must be done by the civil engineer according to design storm water volumes, rates, and detention needs.

Pavement

Asphalt Concrete – At the time of this report we did not have specific information regarding the type and frequency of expected traffic. We therefore developed asphalt concrete pavement thicknesses for areas exposed to passenger vehicles only and areas exposed to up to 5 trucks per day based on a 20-year design life and a truck factor of 0.6. We assumed that the average truck will consist of a panel-type delivery truck or 3-axle truck. Traffic volumes can be revised if specific data is available.

Our pavement analyses is based on AASHTO methods and subgrade of structural fill or undisturbed medium stiff or better native silt having a resilient modulus of 6,000 psi and prepared as recommended herein. A separation geosynthetic is recommended below all pavements, such as a Propex Geotex 601 or equivalent. We have also assumed that roadway construction will be completed during an extended period of dry weather. The results of our analyses based on these parameters are provided in the following table.

Traffic	ESAL's	AC (inches)	CR (inches)
Passenger Vehicle Only	-	2.5	6
Up to 5 Trucks Per Day	24,300	3	8

The thicknesses listed in the above table are the minimum acceptable for construction during an extended period of dry weather. Increased rock thicknesses will be required for construction during wet conditions. Crushed rock must conform to ODOT base rock standards and have less than 6 percent passing the #200 sieve. Asphalt concrete must be compacted to a minimum of 91 percent of a Rice Density.

Subgrade Preparation - The pavement subgrade must be prepared in accordance with the ***Earthwork*** *and* ***Site Preparation*** recommendations presented in this report. All pavement subgrades must pass a proof roll prior to paving. Soft areas must be repaired per the preceding ***Stabilization*** section.

1112 7th Street, Oregon City, OR 97045 *ph 503.657.3487 fax 503.722.9946*

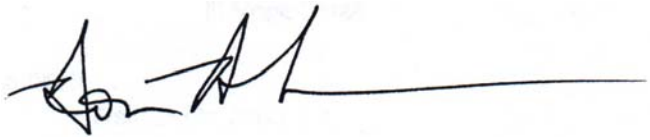
LIMITATIONS AND OBSERVATION DURING CONSTRUCTION

We have prepared this report for use by Northwest Self Storage and the design and construction teams for this project only. The information herein could be used for bidding or estimating purposes but must not be construed as a warranty of subsurface conditions. We have made observations only at the aforementioned locations and only to the stated depths. These observations do not reflect soil types, strata thicknesses, water levels or seepage that may exist between observations. We must be consulted to observe all foundation bearing surfaces, installation of structural fill, and subsurface drainage. We must be consulted to review final design and specifications in order to see that our recommendations are suitably followed. If any changes are made to the anticipated locations, loads, configurations, or construction timing, our recommendations may not be applicable, and we must be consulted. The preceding recommendations must be considered preliminary, as actual soil conditions may vary. In order for our recommendations to be final, we must be retained to observe actual subsurface conditions encountered. Our observations will allow us to interpret actual conditions and adapt our recommendations if needed.

Within the limitations of scope, schedule and budget, our services have been executed in accordance with the generally accepted practices in this area at the time this report was prepared. No warranty, expressed or implied, is given.

We appreciate the opportunity to work with you on this project and look forward to our continued involvement. If you have any questions, please contact us.

Sincerely,



Don Rondema, MS, PE, GE
Principal

Attachments –
Site Plan, Soil Classification, Test Pit Logs, Moisture Contents, Tied Back Wall Shoring Pressures, Cantilever Shoring Pressures

1112 7th Street, Oregon City, OR 97045 *ph 503.657.3487 fax 503.722.9946*

BASE FROM GOOGLE EARTH 2015 AERIAL

Geotech Solutions Inc.

SITE PLAN

nwselfstorage-15-3-gi

Test Pit #	Depth (ft)	Soil Description

Explorations completed on March 15, 2016 with a Link Belt 130x Excavator

Test pit #	Depth (ft)	

TP-1

Location: Northeast corner of site 15 feet from fence.
Surface conditions: Long grass.

0 – 2	Loose to medium dense, brown, angular GRAVEL and COBBLE FILL with some boulders and silt; moist.
2 – 6	Stiff, reddish brown, SILT FILL with some clay and gravel and occasional roots and debris above 4 ft in depth (4" steel pipe); moist.
6 – 8	Very stiff, brown to reddish-brown, gravelly SILT FILL with trace clay; moist to wet.
8 – 17	Stiff, mottled dark brown and gray, light brown SILT with trace clay (slightly cemented); moist.

Slow seepage 6 - 8 feet.
Minor caving 4 -17 feet.

TP-2

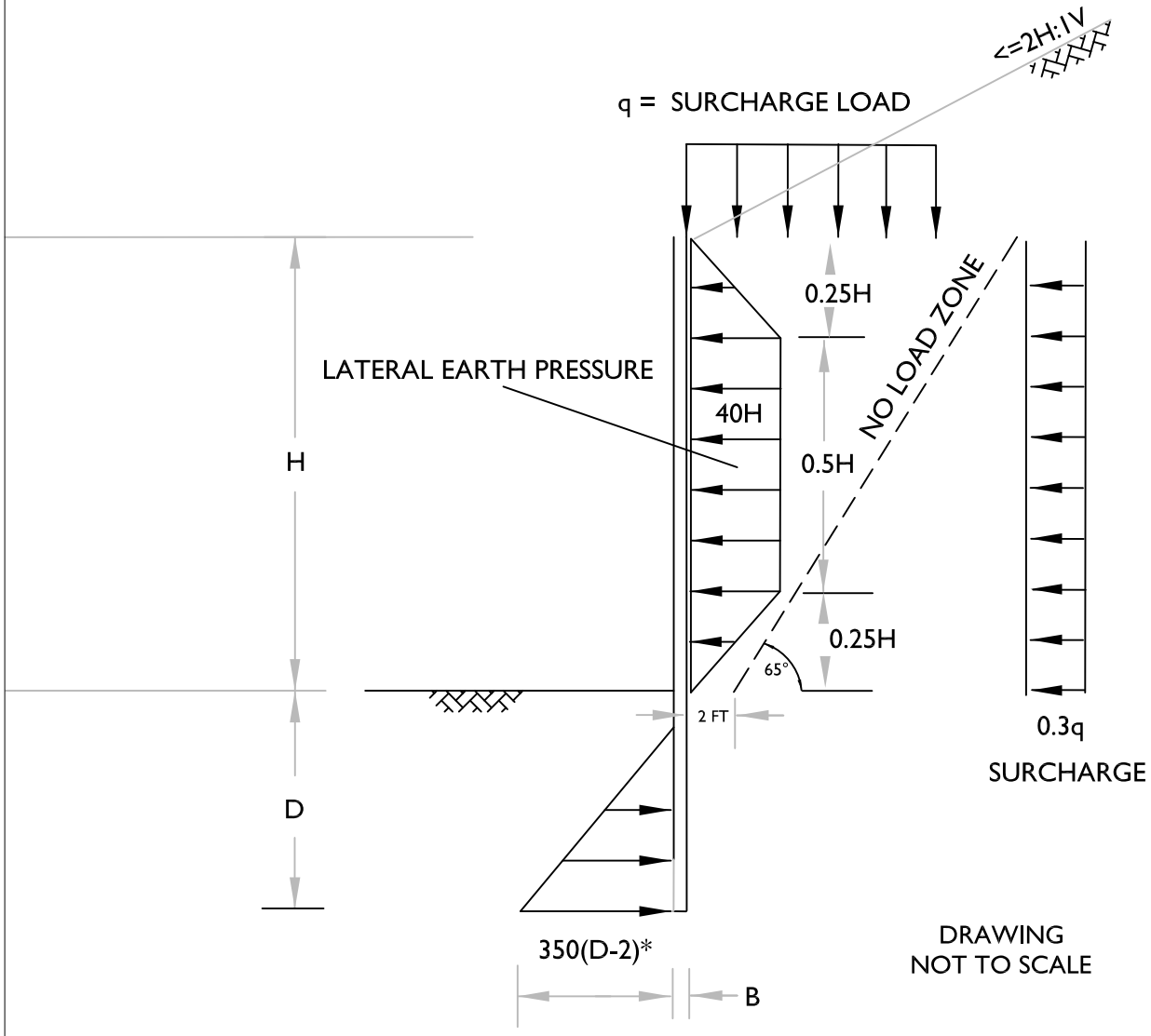
Location: North central portion of site 20 feet from fence.
Surface conditions: Long grass near brush.

0 – 1	Very soft, brown, rooty organic SILT FILL with some lumber debris; moist.
1 – 1.4	Intact ASPHALT CONCRETE PAVEMENT.
1.4 – 2	Dense, brown, silty angular GRAVEL FILL; moist.
2 – 5	Soft, reddish-brown SILT FILL with some clay and occasional angular gravel; moist to wet.
5 – 15	Stiff, mottled dark brown and gray, brown SILT with trace clay (slightly cemented); moist to wet. 6 ft – becomes light brown 7 ft – becomes moist.

Moderate seepage 1 - 6 feet.
Moderate caving 0 - 6 feet. Minor caving 6 -15 feet.

Test Pit #	Depth (ft)	Soil Description
TP-3		**Location:** Central portion of site near crest of creek slope. **Surface conditions:** Long grass.
	0 – 1	Very soft, brown, rooty organic SILT FILL; moist.
	1 – 4	Loose, silty, concrete and asphalt DEBRIS FILL; moist.
	4 – 6	Stiff, mottled dark brown and gray, brown SILT with trace clay; moist to wet.
		4 ft – double ring standpipe falling head infiltration test.
		No seepage. Moderate caving 0 - 4 feet.
TP-4		**Location:** Northwest portion of site. **Surface conditions:** weeds and gravel.
	0 – 3	Medium dense, brown, silty, well graded angular GRAVEL and COBBLE FILL; moist. Rooty 0-0.3 ft.
	3 – 5	Soft, reddish-brown SILT FILL with some clay; moist.
	5 – 12	Stiff, mottled dark brown and gray, brown SILT with trace clay (slightly cemented); moist to wet. 5-6 ft – trace to some roots to ½" diameter
		Slow seepage 5 - 6 feet. Minor caving 0 - 5 feet.

Exploration	Depth, ft	Moisture Content
TP-1	2.0	24%
TP-1	8.0	37%
TP-1	12.0	36%
TP-2	15.0	32%
TP-2	8.0	34%
TP-4	4.0	35%
TP-4	7.0	34%



*Passive pressure acts over 2B for individual drilled soldier piles, 1.5B for driven piles, where B is equal to the pile width in feet.

NOTES:

1. Surcharge effects from construction equipment, foundations, etc. must be added to the above design pressures. The actual amount of this surcharge will depend on the contractors approach to the work.

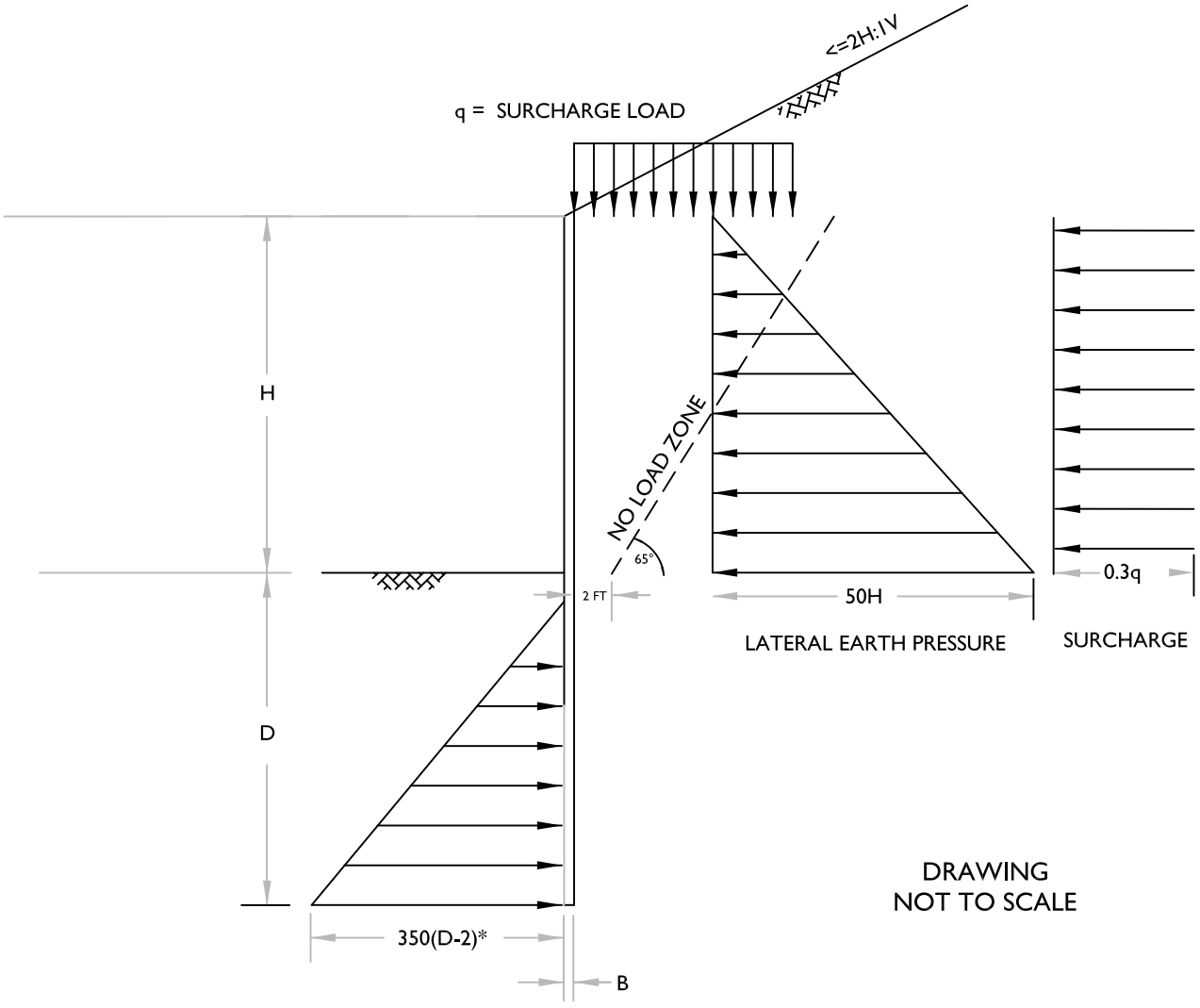
2. This figure must only be used in conjunction with the complete geotechnical report.

Geotech Solutions Inc.

TIED BACK WALL SHORING PRESSURES

nwselfstorage-15-3-gi

LATERAL EARTH PRESSURE - CANTILEVERED SHORING



*Passive pressure acts over 2B for individual drilled soldier piles, 1.5B for driven piles, where B is equal to the pile width in feet.

NOTES:

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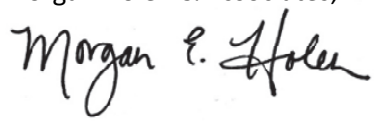
March 20, 2016

Planning and Building
City of West Linn
22500 Salamo Road #1000
West Linn, Oregon 97068

Re: Arborist Report and Tree Preservation Plan for Northwest Self Storage
West Linn, Oregon
Project No. MHA15053 NW Self Storage

Please find enclosed the Arborist Report and Tree Preservation Plan for the Northwest Self Storage project located at 2500 Willamette Falls Drive in West Linn, Oregon. Please contact us if you have questions or need any additional information.

Respectfully,
Morgan Holen & Associates, LLC



Morgan E. Holen, Owner
ISA Board Certified Master Arborist, PN-6145B
ISA Tree Risk Assessment Qualified
Forest Biologist

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Arborist Report and Tree Preservation Plan

Northwest Self Storage
West Linn, Oregon

March 20, 2016

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Table of Contents

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Northwest Self Storage – West Linn, Oregon
Arborist Report and Tree Preservation Plan
March 20, 2016

MHA15053

Purpose

This Arborist Report and Tree Preservation Plan for the Northwest Self Storage project in West Linn, Oregon, is provided pursuant to City of West Linn Community Development Code Chapter 55, Municipal Code Sections 8.500 and 8.600, and the West Linn Tree Technical Manual. This report describes the existing trees located on the project site, as well as recommendations for tree removal, retention and protection. This report is based on observations made by International Society of Arboriculture (ISA) Board Certified Master Arborist (PN-6145B) and Qualified Tree Risk Assessor Morgan Holen during a site visit conducted on November 13, 2015, subsequent coordination over the telephone with the City Arborist Mike Perkins on November 17, 2016, and site plan coordination with Mackenzie.

Scope of Work and Limitations

Morgan Holen & Associates, LLC, was contracted by Northwest Self Storage to collect tree inventory data for individual trees measuring six inches and larger in diameter and to develop an arborist report and tree preservation plan for the project. The site is planned for commercial development, including a new building, parking area, driveways, and street improvements. Site plans were provided by Mackenzie illustrating the location of existing trees and potential construction impacts.

Visual Tree Assessment (VTA) was performed on individual trees located across the site. VTA is the standard process whereby the inspector visually assesses the tree from a distance and up close, looking for defect symptoms and evaluating overall condition and vitality of individual trees. Trees were evaluated in terms of general condition and potential construction impacts. Following the inventory fieldwork, we coordinated with the City Arborist to discuss potentially significant trees and with Mackenzie to discuss tree protection recommendations.

The client may choose to accept or disregard the recommendations contained herein, or seek additional advice. Neither this author nor Morgan Holen & Associates, LLC, have assumed any responsibility for liability associated with the trees on or adjacent to this site.

General Description

The Northwest Self Storage project site is located at 2500 Willamette Falls Drive in West Linn, Oregon. The site is undeveloped and sloping to the south with a wetland near the southern boundary adjacent to Willamette Falls Drive. Existing trees are scattered across the site, primarily near property boundaries and within and adjacent to the wetland. The location of individual trees is shown on site plan drawings and tree numbers correspond with the enclosed tree data.

Tree Inventory

In all, 40 existing trees were inventoried, including 11 different species and three trees located completely off-site to the east. Table 1 provides a summary of the number of inventoried trees by species and location. The enclosed tree data provides a complete description of the individual trees.

Table 1. Number of Trees by Species – Northwest Self Storage.

Common Name	Species Name	On-Site	Off-Site	Total	Percent
bigleaf maple	*Acer macrophyllum*	2		**2**	5.0%
black cottonwood	*Populus trichocarpa*	1		**1**	2.5%
Douglas-fir	*Pseudotsuga menziesii*		2	**2**	5.0%
English hawthorn	*Crataegus monogyna*	1		**1**	2.5%
lodgepole pine	*Pinus contorta*	1		**1**	2.5%
madrone	*Arbutus menziesii*		1	**1**	2.5%
Oregon ash	*Fraxinus latifolia*	28		**28**	70.0%
Oregon white oak	*Quercus garryana*	1		**1**	2.5%
red alder	*Alnus rubra*	1		**1**	2.5%
Scouler's willow	*Salix scouleriana*	1		**1**	2.5%
willow	*Salix* spp.	1		**1**	2.5%
Total		**37**	**3**	**40**	**100%**
Percent		92.5%	7.5%		

Oregon ash (*Fraxinus latifolia*) is most common, accounting for 28 of the 40 trees inventoried. Twenty-four of these trees are smaller than 10-inches in diameter, three are 16-inches in diameter and one is 20-inches in diameter. The ash trees are located within and adjacent to the wetland and are variable in condition, including seven trees in good condition, 20 trees in fair condition with moderate structure and minor defects, and one tree in poor condition that is hazardous to the adjacent overhead utility lines on the west side of the site (this is the 20-inch diameter ash).

The largest and most prominent tree, and the only potentially significant on-site tree, is a 34-inch diameter Oregon white oak (*Quercus garryana*) in excellent condition with no major defects. This tree is located near the northeast corner of the project site.

The other 11 inventoried trees include a mix of species, including:

- Two 6-inch diameter bigleaf maples (*Acer macrophyllum*) in fair condition with some lower trunk decay;
- One 7-inch diameter black cottonwood (*Populus trichocarpa*) in poor condition with very poor structure and basal decay;
- Two Douglas-firs (*Pseudotsuga menziesii*) in good condition measuring 11- and 12-inches each in diameter located off-site to the east;
- One 24-inch diameter invasive English hawthorn (*Crataegus monogyna*) in poor condition with very poor structure and a trunk hollow with advanced decay;
- One 14-inch diameter lodgepole pine (*Pinus contorta*) in poor condition with a thin crown;
- One multi-stemmed madrone (*Arbutus menziesii*) in good condition with a one-sided crown that leans to the north. This tree is also potentially significant, but it is located off-site just northeast of the potentially significant Oregon white oak;
- One 10-inch diameter red alder (*Alnus rubra*) in good condition, but with moderate structure;
- One multi-stemmed Scouler's willow (*Salix scouleriana*) in fair condition with poor structure; and,
- One other willow (*Salix* spp.) with two 9-inch diameter codominant stems in fair condition, but also with poor structure.

Significant trees will be determined by the City Arborist. Based on our evaluation of the size, type, location, health, and long term survivability of the individual trees, two (5%) trees were identified as potentially being significant, including the Oregon white oak located on the project site and the madrone located off-site northeast of the oak.

Tree Preservation Plan

We coordinated with the project team to discuss trees suitable for preservation in terms of potential construction impacts. Table 2 provides a summary of the number of non-significant and potentially significant trees by treatment recommendation.

Table 2. Number of On Site Trees by Treatment Recommendation and Significance.

Treatment	Non-Significant	Potentially Significant	Total
Remove	19	0	**19** (48%)
Retain	17	1	**18** (45%)
Protect Off-Site	2	1	**3** (7%)
Total	**38** (95%)	**2** (5%)	**40** (100%)

Of the 40 on site trees, 19 non-significant trees are recommended for removal, including seven trees within the proposed building and parking lot footprint (#10793, #10794, #10797, #10957, #10958, #10963 and #11067), five trees likely to be impacted by proposed driveway grading and construction (#11064-11066, #11068 and #11069), four trees likely to be impacted by proposed sidewalk grading and construction (#10644, #10646, #10690 and #10691), two trees likely to be impacted by the proposed rock wall grading and construction (#10719 and #10933), and one hazardous tree located west of proposed construction impacts (#11025).

The remaining 21 trees are planned for retention, including the potentially significant Oregon white oak and all three off-site trees. Trees to be retained should be protected with tree protection fencing established at the dripline plus 10-feet.

However, the proposed development, including driveway grading and building excavation will encroach within the tree protection area southwest of tree #10061, the potentially significant Oregon white oak. The contractor should coordinate with the project arborist prior to adjusting the location of protection fencing for work to occur in this area. Work that is necessary beneath the dripline plus 10-feet of this tree should be supervised and documented by the project arborist in coordination with the City's arborist. Additional recommendations may be provided once the site is staked and prepared for construction. Standard tree protection specifications are provided in the next section and should be translated onto construction drawings.

Tree Protection Standards

Trees to be protected will need special consideration to assure their protection during construction. Any work that is necessary within the standard tree protection zone should be performed under the guidance of a qualified arborist. It is the Client's responsibility to implement this plan and to monitor the construction process. Tree protection measures include:

Before Construction

1. **Tree Protection Zone.** The project arborist shall designate the Tree Protection Zone (TPZ) for each tree to be protected. Where feasible, the size of the TPZ shall be established at the dripline of the tree plus 10-feet. Alternatively, the TPZ shall be established at the dripline of protected trees. Where infrastructure (driveways, buildings, and utilities) must be installed closer to the tree(s), the TPZ may be established within the dripline area if the project arborist, in coordination with the City Arborist, determines that the tree(s) will not be unduly damaged. The location of TPZs shall be shown on construction drawings.
2. **Protection Fencing.** Protection fencing shall serve as the tree protection zone and shall be erected before demolition, grubbing, grading, or construction begins. All trees to be retained shall be protected by six-foot-high chain link fences installed at the edge of the TPZ. Protection fencing shall be secured to two-inch diameter galvanized iron posts, driven to a depth of a least two feet, placed no further than 10-feet apart. If fencing is located on pavement, posts may be supported by an appropriate grade level concrete base. Protection fencing shall remain in place until final inspection of the project permit, or in consultation with the project arborist.
3. **Signage.** An 8.5x11 –inch sign stating, "WARNING: Tree Protection Zone," shall be displayed on each protection fence at all times.
4. **Designation of Cut Trees.** Trees to be removed shall be clearly marked with construction flagging, tree-marking paint, or other methods approved in advanced by the project arborist. Trees shall be carefully removed so as to avoid either above or below ground damage to those trees to be preserved. Roots of stumps that are adjacent to retained trees shall be carefully severed prior to stump extraction.
5. **Preconstruction Conference.** The project arborist shall be on site to discuss methods of tree removal and tree protection prior to any construction.
6. **Verification of Tree Protection Measures.** Prior to commencement of construction, the project arborist shall verify in writing to the City Arborist that tree protection fencing has been satisfactorily installed.

During Construction

7. **Tree Protection Zone Maintenance.** The protection fencing shall not be moved, removed, or entered by equipment except under direction of the project arborist, in coordination with the City Arborist.
8. **Storage of Material or Equipment.** The contractor shall not store materials or equipment within the TPZ.
9. **Excavation within the TPZ.** Excavation with the TPZ shall be avoided if alternatives are available. If excavation within the TPZ is unavoidable, the project arborist shall evaluate the proposed excavation to determine methods to minimize impacts to trees. This can include tunneling, hand digging or other approaches. All construction within the TPZ shall be under the on-site technical supervision of the project arborist, in coordination with the City Arborist.
10. **Tree Protection Zone.** The project arborist shall monitor construction activities and progress, and provide written reports to the developer and the City at regular intervals. Tree protection inspections shall occur monthly or more frequently if needed.

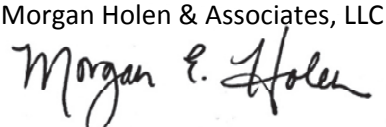
11. **Quality Assurance.** The project arborist shall supervise proper execution of this plan during construction activities that could encroach on retained trees. Tree protection site inspection monitoring reports shall be provided to the Client and City on a regular basis throughout construction.

Post Construction

12. **Final Report.** After the project has been completed, the project arborist shall provide a final report to the developer and the City. The final report shall include concerns about any trees negatively impacted during construction, and describe the measures needed to maintain and protect the remaining trees for a minimum of two years after project completion.

Please contact us if you have questions or need any additional information. Thank you for choosing Morgan Holen & Associates, LLC, to provide consulting arborist services for the Northwest Self Storage project.

Thank you,
Morgan Holen & Associates, LLC



Morgan E. Holen, Owner
ISA Board Certified Master Arborist, PN-6145B
ISA Tree Risk Assessment Qualified
Forest Biologist

Enclosures: MHA15053 Northwest Self Storage – Tree Data 11-13-15

No.	Common Name	Species Name	DBH*	C-Rad^	Cond#	Comments	Sig?	Treatment
10060	madrone	*Arbutus menziesii*	2x10,12	15	G	off-site, one-sided crown with lean to the N	Yes	protect
10061	Oregon white oak	*Quercus garryana*	34	28	E	no major defects	Yes	retain
10063	Douglas-fir	*Pseudotsuga menziesii*	12	10	G	off-site	No	protect
10064	Douglas-fir	*Pseudotsuga menziesii*	11	10	G	off-site	No	protect
10623	Oregon ash	*Fraxinus latifolia*	8	10	F	adjacent to stream	No	retain
10634	Oregon ash	*Fraxinus latifolia*	6	8	G	adjacent to stream	No	retain
10635	Oregon ash	*Fraxinus latifolia*	7	10	G	adjacent to stream	No	retain
10636	Oregon ash	*Fraxinus latifolia*	8	12	G	adjacent to stream	No	retain
10642	Oregon ash	*Fraxinus latifolia*	8	14	F	adjacent to stream	No	retain
10643	Oregon ash	*Fraxinus latifolia*	9	14	F	adjacent to stream	No	retain
10644	Oregon ash	*Fraxinus latifolia*	3x6	14	F	poor structure, growing on old decaying stump	No	remove
10646	Oregon ash	*Fraxinus latifolia*	2x6,8	14	F	likely to be impacted by sidewalk construction	No	remove
10647	Oregon ash	*Fraxinus latifolia*	7	14	F	adjacent to stream	No	retain
10668	Oregon ash	*Fraxinus latifolia*	8	12	F	adjacent to stream	No	retain
10669	Oregon ash	*Fraxinus latifolia*	6	10	F	adjacent to stream	No	retain
10670	Oregon ash	*Fraxinus latifolia*	7	12	F	adjacent to stream	No	retain
10675	Oregon ash	*Fraxinus latifolia*	6	10	F	adjacent to stream	No	retain
10678	Oregon ash	*Fraxinus latifolia*	6	10	F	adjacent to stream	No	retain
10679	Oregon ash	*Fraxinus latifolia*	6	10	F	adjacent to stream	No	retain
10680	Oregon ash	*Fraxinus latifolia*	7	12	F	adjacent to stream	No	retain
10681	Oregon ash	*Fraxinus latifolia*	6	10	F	adjacent to stream	No	retain

No.	Common Name	Species Name	DBH*	C-Rad^	Cond#	Comments	Sig?	Treatment
10690	Oregon ash	*Fraxinus latifolia*	7	15	G	likely to be impacted by fill behind new sidewalk	No	remove
10691	Oregon ash	*Fraxinus latifolia*	6	15	G	likely to be impacted by fill behind new sidewalk	No	remove
10697	Oregon ash	*Fraxinus latifolia*	6	10	F	adjacent to stream	No	retain
10703	Oregon ash	*Fraxinus latifolia*	6	10	F	adjacent to stream	No	retain
10719	willow	*Salix* spp.	2x9	16	F	adjacent to stream, poor structure	No	remove
10793	black cottonwood	*Populus trichocarpa*	7	6	P	very poor structure, basal decay	No	remove
10794	Scouler's willow	*Salix scouleriana*	6,8,11	12	F	poor structure	No	remove
10795	omit					codominant stem of tree 10794		omit
10796	omit					codominant stem of tree 10794		omit
10797	red alder	*Alnus rubra*	10	15	G	moderate structure	No	remove
10933	Oregon ash	*Fraxinus latifolia*	9	12	F	poor structure	No	remove
10957	bigleaf maple	*Acer macrophyllum*	6	10	F	some lower trunk decay	No	remove
10958	bigleaf maple	*Acer macrophyllum*	6	10	F	some lower trunk decay	No	remove
10963	English hawthorn	*Crataegus monogyna*	24	16	P	invasive species, very poor structure, hollow with advanced trunk decay	No	remove
11025	Oregon ash	*Fraxinus latifolia*	20	14	P	dead and broken branches, poor structure, hazardous to utility lines	No	remove
11064	Oregon ash	*Fraxinus latifolia*	16	20	F	moderate structure, complete visual assessment inhibited by invasive vegetation	No	remove
11065	Oregon ash	*Fraxinus latifolia*	16	20	F	moderate structure, complete visual assessment inhibited by invasive vegetation	No	remove
11066	Oregon ash	*Fraxinus latifolia*	16	20	F	moderate structure, complete visual assessment inhibited by invasive vegetation	No	remove

No.	Common Name	Species Name	DBH*	C-Rad^	Cond#	Comments	Sig?	Treatment
11067	lodgepole pine	*Pinus contorta*	14	12	P	thin crown	No	remove
11068	Oregon ash	*Fraxinus latifolia*	9	12	G	likely to be impacted by driveway grading	No	remove
11069	Oregon ash	*Fraxinus latifolia*	9	12	G	likely to be impacted by driveway grading	No	remove

***DBH** is tree diameter measured at breast height, 4.5-feet above the ground level (inches); codominant trunks splitting below DBH are measured individually and separated by a comma, except for codominant stems of equal size are noted as quantity x size.

^C-Rad is the average crown radius measured in feet.

#Cond is an arborist assigned rating to generally describe the condition of individual trees as follows- **D**ead; **P**oor; **F**air; or **G**ood condition.

Sig? asks whether or not individual trees are considered potentially significant, either Yes (likely significant) or No (not considered significant).

NATURAL RESOURCE ASSESSMENT
Within
Water Resource Area

FOR

Northwest Self Storage West Linn

Prepared for:
Northwest Self Storage West Linn
14855 SE 82nd Ave.
Clackamas, OR 97015

Prepared by:
Schott and Associates

April 2016
Project #: 2394

INTRODUCTION

Site Location

The approximate 1.58 acre subject property is located north of Willamette Falls Drive in West Linn, Clackamas County, Oregon (T2S, R1E, Sec. 35D, TL 2000 and 5300 & Sec. 35DD, TL 3400 and 3500).

Site Description

The rectangular shaped subject property is situated between Willamette Falls Drive to the south-southeast and the Interstate 205 right-away to the north-northwest. Commercial buildings are located to the northeast and southwest. The old road grade of the vacated Willamette Falls Drive enters the property at the southwest corner of the property and runs north-northeast leaving the property toward the center of the site's northern boundary. The vacated road was covered with Himalayan blackberry and barely visible at the time of the site visit. To the south, south of Willamette Falls Drive is residential development.

Bernert Creek flows from west to east across the property near the southern property boundary. The drainage way exits the property through a 48" culvert that extends offsite to the northeast. The site is mainly south sloping at the northern property line on the eastern 4/5ths of the property. Toward the southern property line there is a flat depressional area and then topography slopes up off property to the south. The western approximate 1/5th of the property slopes north, south and west, creating a depression extending off property to the west. Just east of the western 1/5th of the property, slopes converge north and south with a narrow flat area in between due to the removal of soil just to above an existing culvert, connecting the depressional area to the west with the flat depressional area to the east. There is a 24" culvert located in the southwest portion of the subject property, where the vacated Willamette Falls Drive crosses the property to the north. Sometime in 2009, soil was removed to just above the culvert in a trench fashion that remains open. This created fringe wetland on each side of the culvert, now connecting the east and west wetlands. The drainage way flows through the culvert, but also flows over the top during high flow events.

Throughout the depressional areas, reed canary grass (*Phalaris arundinacea*) was dominant. The side slopes were dominated by Himalayan blackberry (*Rubus armeniacus*). Holly (*Ilex sp*), bracken fern (*Pteridium aquilinum*), sword fern (*Polystichum munitum*), common horsetail (*Equisetum arvense*), tall fescue (*Schedonorus arundinaceus*), teasel (*Dipsacus sylvestris*) and reed canary grass were also present. The eastern 1/3rd of the property also consisted of Oregon ash (*Fraxinus latifolia*), willow (*Salix*), English hawthorn (*Crataegus monogyna*) and bigleaf maple (*Acer macrophyllum*).

Project Objectives

The applicant proposes construction of a self storage facility with associated access drive, parking and utilities. As shown on the WRA Map (Appendix A), nearly the entirety of the subject property is located within identified Water Resource Area, specifically within the Goal 5 Significant Riparian Corridor. It is not feasible to develop the site without impacting the WRA. This report will outline the extent of the onsite WRA features and address the approval criteria in CDC Chapter 32.080 Alternate Review Process and 32.110 Hardship Provisions.

The development is proposed to have two driveways onto Willamette Falls Drive. The western entry will cross Bernert Creek at the location of the existing culvert. The crossing

will be with a bottomless arch culvert. The eastern crossing will be an extension of an existing culvert and no significant impacts to the Water Resource are proposed.

METHODS

The site was visited in December 2014 and again in October 2015 for the purposes of completing a Wetland delineation and natural resource assessment. As per CDC 32.020 the undisturbed waterway, wetlands and riparian corridor boundaries were identified and documented in this report and an attached delineation report and DSL concurrence letter.

WRA CONDITIONS

Waterway

Bernert Creek flows from west to east across the property near the southern property boundary. The drainage way exits the property through a 48" culvert that extends offsite to the northeast. There is a 24" culvert located in the southwest portion of the subject property, where the vacated Willamette Falls Drive crosses the property to the north. Sometime in 2009, soil was removed to just above the culvert in a trench fashion that remains open. This created fringe wetland on each side of the culvert, now connecting the east and west wetlands. The drainage way flows through the culvert, but also flows over the top during high flow events.

Wetland

Based on soil, vegetation and hydrology data taken in the field three PEM wetlands, totaling 8,861sf were delineated. A creek flowed through the wetland area. Three wetlands connected with the creek. Wetland 1 with an area of 553sf and Wetland 3 with an area of 1,384sf are located on the south side of the creek. Wetland 2 (6,924sf) is located on the north side of the creek. Vegetation in the wetlands was dominated by reed canary grass as well as some tall fescue and Oregon ash in the eastern portion. Soils met the Redox Dark Surface (F6) hydric soil indicator. Saturation at 12" from the top to surface saturation was observed in all but sample plot A where secondary indicators were present and other criteria met. The wetland extended offsite to the west. The wetland was clearly identified by the change in topography between the flat bottom flood plain and the sloping banks.

The Local Wetland Inventory (LWI) for the City of West Linn mapped a drainage way flowing through two wetlands separated by a culvert on the subject property (BE-01 and BE-02). The LWI wetlands and drainage way closely correspond with the location of the onsite wetlands and drainage and the dividing culvert corresponds with the location of the vacated alignment of Willamette Falls Drive. The LWI appears to have been based on the 2006 delineation. The new delineation closely matches the 2006 delineation.

Riparian Zone

The remaining WRA consists of Significant Riparian zone north and south of the creek. As per Table 32-2 the required width of the Riparian Corridor extends 100 feet from the ordinary high water (OHW) line. As per CDC Section 32.050(F)(8) plant communities

within the undisturbed WRA were identified and characterized. This area was dominated by Himalayan blackberry with some swordfern and bracken fern, teasel and horsetail and was generally in degraded condition. One significant tree was identified by the arborist in the northeast corner of the site.

The majority of the WRA for the wetlands and waterway were composed of non-native reed canary grass and Himalayan blackberry. Tree canopy was minimal and consisted of a few scattered Oregon ash. The condition of the WRA was degraded.

Table 1. Riparian Zone vegetation

Scientific Name	**Common Name**	**Layer**	**% Cover**
Phalaris arundinacea	Reed canary grass	Grass	50
Pteridium aquilinum	Bracken fern	Forb	5
Rubus armeniacus	Himalayan blackberry	Shrub	45
Fraxinus latifolia	Oregon ash	Tree	5
% cover by natives			10
% tree canopy			5
% invasive/noxious			95
Condition			Degraded

DEVELOPMENT PLAN DESCRIPTION

The proposed development consists of a 106,487-square-foot, four-story self-storage building including internal parking and loading areas. The access to the site is from Willamette Falls Drive with two way traffic access at the west end of the site. The traffic circulation pattern is intended to generally flow from west to east, with customers entering the west driveway, driving through the building itself, and exiting the east driveway. The east driveway will be exit-only.

The proposed design is intended to reduce impacts on the WRA by locating the building near the north end of the site as far away from the stream as possible. The west driveway will utilize the existing stream culvert in the vacated Willamette Falls Drive alignment to avoid creating another piped stream segment in that area. Finally, the building will be four stories tall, rather than shorter and wider, to minimize the development area's footprint and impact on the riparian corridor area.

32.080 APPROVAL CRITERIA (ALTERNATE REVIEW PROCESS)

As per CDC 32.070 and 32.110 approximately 77% of the site is covered by designated WRA. The site cannot be developed without impacts to the Resource and shall be considered with regard to these sections.

Applications reviewed under the alternate review process shall meet the following approval criteria:

A. The proposed WRA shall be, at minimum, qualitatively equal, in terms of maintaining the level of functions allowed by the WRA standards of CDC 32.060(D).

Riparian corridor is mapped along the water resource through the entire site. The standards of 32.060(D) require a minimum WRA width 100 feet from the OHW for Riparian Corridors. As discussed below the constraints of the site do not allow development while maintaining this minimum width. The proposed WRA shall be an average of 40+ feet and a minimum of 29 feet from the resource to the edge of proposed development. The entire retained Riparian Corridor shall be enhanced with native species and improved from degraded to good condition as described below. The proposed WRA shall be, at minimum, qualitatively equal in terms of providing the level of functions as required.

B. If a WRA is already significantly degraded (e.g., native forest and ground cover have been removed or the site dominated by invasive plants, debris, or development), the approval authority may allow a reduced WRA in exchange for mitigation, if:

1. The proposed reduction in WRA width, coupled with the proposed mitigation, would result in better performance of functions than the standard WRA without such mitigation. The approval authority shall make this determination based on the applicant's proposed mitigation plan and a comparative analysis of ecological functions under existing and enhanced conditions (see Table 32-4).

The existing WRA is degraded as described in this report. Native forest and groundcover have been removed and existing vegetation is dominated by non-native and invasive species, primarily reed canary grass and Himalayan blackberry. The proposed reduction in WRA width, along with proposed mitigation, enhancement of the entire WRA remaining, shall provide higher functions as shown in the comparative analysis and mitigation plan.

Table 2. Ecological Functions Comparison per Table 32-4		
Ecological Functions	**WRA existing conditions**	**WRA enhanced conditions**
Stream flow moderation and/or water storage	Wetland Storage functions moderate, creek water flows into wetland as well as sheet flow across portions of the WRA.	Storage functions will be higher with vegetation density increase in WRA to further slow flow for better storage capacity.
Sediment or pollution control	Vegetation is within 100' of all wetland /waterways. The majority of vegetation is non-native grasses and Himalayan blackberry with few scattered trees.	Increased vegetation and tree canopy within the entire remaining onsite WRA will increase functions by slowing water flow, creating more tree canopy and increasing the capacity to filter nutrients and retain sediments.
Bank stabilization	Few trees along bank. Predominantly reed canary grass.	Increased native vegetation will help bank stabilization although bank is minimal.
Large wood recruitment for a fish bearing section of stream	Stream is likely not fish bearing. There are scattered trees for LWD recruitment.	Additional trees will eventually increase tree canopy and increase functions.
Organic material sources	Few scattered trees. Forest habitat not present within adjacent Riparian Zone	Additional trees/shrubs will increase organic material sources throughout the Riparian Zone.
Shade (water temperature moderation) and microclimate	Stream is not likely fish bearing. Currently minimal shade, with a few scattered trees on the eastern side of the site.	Additional tree~~s~~ planting through the Riparian zone will significantly increase this function, improving downstream temperatures as well.
Stream flow that sustains in-stream and adjacent habitats	Perennial flow.	Perennial flow will be maintained. No hydrologic impacts anticipated.
Other terrestrial habitat	Habitat within 100 feet of the resource is predominantly non-native and invasive with few scattered native trees.	Removal of invasives and planting of diverse native species shall increase type and diversity of cover and food sources, significantly improving terrestrial habitat.

2. *The mitigation project shall include all of the following components as applicable. It may also include other forms of enhancement (mitigation) deemed appropriate by the approval authority.*
    a. *Removal of invasive vegetation.*
    b. *Planting native, non-invasive plants (at minimum, consistent with CDC 32.100) that provide improved filtration of sediment, excess nutrients, and pollutants. The amount of enhancement (mitigation) shall meet or exceed the standards of CDC 32.090(C).*
    c. *Providing permanent improvements to the site hydrology that would improve water resource functions.*
    d. *Substantial improvements to the aquatic and/or terrestrial habitat of the WRA.*

Proposed mitigation shall consist of a combination of invasive removal and replanting with native vegetation as detailed in the mitigation plan below. These activities will improve onsite filtration of sediment, excess nutrients and pollutants, improving water quality and erosion control functions by providing additional vegetation appropriate for the WRA. Additionally, the proposed mitigation enhancement will increase native species cover and diversity improving wildlife habitat functions by providing greater cover, nesting or burrowing sites and food availability and type.

C. *Identify and discuss site design and methods of development as they relate to WRA functions.*

The approach to maintaining WRA ecological functions is to site the building as far from the water resource as possible; to minimize the width of stream crossings and utilize the existing crossing at the west driveway; to utilize permeable paving to minimize impervious surfaces within and near the WRA; to utilize a four-story building rather than a shorter and wider structure; and to mitigate the degraded habitat with native mitigation plantings as proposed within this report.

D. *Address the approval criteria of CDC 32.060, with the exception of CDC 32.060(D).*
32.060 APPROVAL CRITERIA (STANDARD PROCESS)

No application for development on property containing a WRA shall be approved unless the approval authority finds that the proposed development is consistent with the following approval criteria, or can satisfy the criteria by conditions of approval:

A. *WRA protection/minimizing impacts.*
    1. *Development shall be conducted in a manner that will avoid or, if avoidance is not possible, minimize adverse impact on WRAs.*
    2. *Mitigation and re-vegetation of disturbed WRAs shall be completed per CDC 32.090 and 32.100 respectively.*

Proposed development shall minimize adverse impact on the WRA to the extent possible given the limitations of this site. To this end, the applicant requests approval pursuant to the Alternative Review Process provisions of Section 32.080 and the Hardship provisions of Section 32.110 rather than this Section. Mitigation is provided per the standards of CDC 32.090.

B. *Storm water and storm water facilities.*

1. *Proposed developments shall be designed to maintain the existing WRAs and utilize them as the primary method of storm water conveyance through the project site unless:*
    a. *The surface water management plan calls for alternate configurations (culverts, piping, etc.); or*
    b. *Under CDC 32.070, the applicant demonstrates that the relocation of the water resource will not adversely impact the function of the WRA including, but not limited to, circumstances where the WRA is poorly defined or not clearly channelized. Re-vegetation, enhancement and/or mitigation of the re-aligned water resource shall be required as applicable.*
2. *Public and private storm water detention, storm water treatment facilities and storm water outfall or energy dissipaters (e.g., rip rap) may encroach into the WRA if:*
    a. *Accepted engineering practice requires it;*
    b. *Encroachment on significant trees shall be avoided when possible, and any tree loss shall be consistent with the City's Tree Technical Manual and mitigated per CDC 32.090;*
    c. *There shall be no direct outfall into the water resource, and any resulting outfall shall not have an erosive effect on the WRA or diminish the stability of slopes; and*
    d. *There are no reasonable alternatives available.*

    A geotechnical report may be required to make the determination regarding slope stability.
3. *Roadside storm water conveyance swales and ditches may be extended within rights-of-way located in a WRA. When possible, they shall be located along the side of the road furthest from the water resource. If the conveyance facility must be located along the side of the road closest to the water resource, it shall be located as close to the road/sidewalk as possible and include habitat friendly design features (treatment train, rain gardens, etc.).*
4. *Storm water detention and/or treatment facilities in the WRA shall be designed without permanent perimeter fencing and shall be landscaped with native vegetation.*
5. *Access to public storm water detention and/or treatment facilities shall be provided for maintenance purposes. Maintenance driveways shall be constructed to minimum width and use water permeable paving materials. Significant trees, including roots, shall not be disturbed to the degree possible. The encroachment and any tree loss shall be mitigated per CDC 32.090. There shall also be no adverse impacts upon the hydrologic conditions of the site.*

The project will utilize the WRA for stormwater conveyance and includes storm water treatment and detention facilities located within the Riparian Corridor area of the subject property. This is allowed if "there are no reasonable alternatives available." In the case of the subject property, approximately 77% of the site is covered by designated WRA, and reasonable development cannot be achieved without an encroachment into the WRA. All areas between the proposed building and its access/circulation are within the WRA and no reasonable alternatives exist. The proposed facilities shall be constructed in a manner consistent with the above

requirements. No outfall shall be located directly into the water resource as the outfalls will be located upslope of Bernert Creek with appropriate energy dissipation utilized to ensure the proposed facilities shall not result in an erosive effect on the WRA. The roadside culvert under the driveway east of the site is proposed to be extended westerly within the right-of-way to accommodate the new on-site east driveway. Stormwater facilities are not proposed to have permanent perimeter fencing and shall be landscaped with native vegetation. No public stormwater facilities are proposed on-site. No significant trees will be affected by the development.

C. Dedications and easements. The City shall request dedications of the WRA to the City when acquisition of the WRA by dedication or easement would serve a public purpose. When such a dedication or easement is mutually agreed upon, the applicant shall provide the documentation for the dedication or easement. Nothing in this section shall prohibit the City from condemning property if:

1. The property is necessary to serve an important public purpose; and

2. Alternative means of obtaining the property are unsuccessful.

As the site is not adjacent to other public property, there is no identified public interest that would be served by dedicating the WRA to the City or encumbering the WRA by easements.

E. Roads, driveways and utilities.

1. New roads, driveways, or utilities shall avoid WRAs unless the applicant demonstrates that no other practical alternative exists. In that case, road design and construction techniques shall minimize impacts and disturbance to the WRA by the following methods:

a. New roads and utilities crossing riparian habitat areas or streams shall be aligned as close to perpendicular to the channel as possible.

b. Roads and driveways traversing WRAs shall be of the minimum width possible to comply with applicable road standards and protect public safety. The footprint of grading and site clearing to accommodate the road shall be minimized.

c. Road and utility crossings shall avoid, where possible:

1) Salmonid spawning or rearing areas;

2) Stands of mature conifer trees in riparian areas;

3) Highly erodible soils;

4) Landslide prone areas;

5) Damage to, and fragmentation of, habitat; and

6) Wetlands identified on the WRA Map.

The only available route for access to the subject property is from Willamette Falls Drive and the developable area is on the opposite side of Bernert Creek from the roadway. It is not possible to avoid to crossing the WRA. Crossings have been designed to minimize impacts to the WRA and stream to the greatest extent possible. The western crossing is aligned with the existing culvert for the vacated Willamette Falls Drive ROW. The eastern crossing will extend an existing culvert in order to minimize additional impacts within the resource. Both crossings shall be as close to perpendicular as possible given the geometry of the site and the

alignment of Willamette Falls Drive. No salmonid spawning or rearing areas are known to be present onsite. No stands of mature conifer trees are present. Highly erodible soils and landslide prone areas are not present onsite.

In this case, the minimum road width at the east has been negotiated with Tualatin Valley Fire & Rescue (TVFR) to satisfy emergency access needs. At the west, the 24-foot width is the City's minimum requirement for 2-way circulation. At the east, although the City's minimum requirement for a one-way driveway might be lower, in order to allow one fire truck to stage and another to pass by it, a 20-foot width is proposed. The one-way circulation enables covered access to elevator bays, it enables forward movements for vehicles and avoids the need for a large hammerhead turnaround or a 26-foot wide paved drive aisle all the way along the length of the building, because TVFR can mobilize to fight a fire by heading into the two driveways and backing out again – a configuration our design architect was able to negotiate as a response to the site's constraints.

Road and utility crossings will avoid damage to and fragmentation of habitat and wetlands to the extent possible. The western crossing has been located to take advantage of the location of an existing culvert which previously fragmented the onsite habitat. Wetlands in this area are minimal. The eastern crossing will be an extension of the existing culvert at the eastern property boundary and will not result in wetland impacts or habitat fragmentation.

2. *Crossing of fish bearing streams and riparian corridors shall use bridges or arch-bottomless culverts or the equivalent that provides comparable fish protection, to allow passage of wildlife and fish and to retain the natural stream bed.*

The western crossing shall use a bottomless arch culvert over the re-channelized location of an existing culvert. The existing culvert remains in place where the former alignment of Willamette Falls Drive crossed Bernert Creek. The applicant proposes to use a bottomless arch culvert to support the proposed driveway crossing of the Creek at the same location. For purposes of interpreting WRA provisions, the existing culvert crossing may be subject to an exemption per 32.040(F).

The eastern crossing shall consist of an extension of an existing culvert. No fish are listed as present within Bernert Creek according to StreamNet and fish passage is not anticipated to be a concern.

3. *New utilities spanning fish bearing stream sections, riparian corridors, and wetlands shall be located on existing roads/bridges, elevated walkways, conduit, or other existing structures or installed underground via tunneling or boring at a depth that avoids tree roots and does not alter the hydrology sustaining the water resource, unless the applicant demonstrates that it is not physically possible or it is cost prohibitive. Bore pits associated with the crossings shall be restored upon project completion. Dry, intermittent streams may be crossed with open cuts during a time period approved by the City and any agency with jurisdiction.*

New utilities spanning the WRA shall be located along the proposed stream crossing corridors for the driveways.

4. *No fill or excavation is allowed within the ordinary high water mark of a water resource, unless all necessary permits are obtained from the City, U.S. Army Corps of Engineers and Oregon Department of State Lands (DSL).*

No significant fill or excavation is proposed within the OHW or wetland. The western crossing shall be via a bottomless arch culvert located outside the jurisdictional water boundaries. The eastern crossing shall be an extension of an existing culvert with the minimum amount of fill necessary to stabilize the pipe. Since the removal/fill is anticipated to be less than 50cy it should not require state or federal permits; if the final design results in a greater amount of fill then permits will be obtained from state and federal agencies as needed.

5. *Crossings of fish bearing streams shall be aligned, whenever possible, to serve multiple properties and be designed to accommodate conduit for utility lines. The applicant shall, to the extent legally permissible, work with the City to provide for a street layout and crossing location that will minimize the need for additional stream crossings in the future to serve surrounding properties.*

The onsite waterway is not listed as a fish bearing stream according to ODFW's Stream Net website. During the project's design development phase, the applicant approached the property owner to the east (the "2500 Building") to explore the possibility of sharing their existing driveway, but the abutting property owner was unwilling to enter into a shared access agreement. Consequently, the east driveway as proposed will serve only the self-storage facility. The applicant would not object to a condition requiring this property to allow its eastern driveway to be realigned to form a shared driveway configuration (i.e., with a 'Y' north of the Willamette Falls Drive right-of-way) as part of a future redevelopment of the "2500 Building" site, provided that the required permitting and construction would be the responsibility of the redeveloper of that property.

32.110 HARDSHIP PROVISIONS

As per Chapter 32/Table 32-2 Required Width of WRA; the required width on each side of the Riparian Corridor is 100 feet from the OHW. The onsite water resource is located on the south side of the subject property adjacent to the only access road. Approximately 77% of the property is designated WRA and based on its location, crossing the resource is necessary to reach the developable land area. It would not be feasible to develop the property without impacting the WRA.

A. The right to obtain a hardship allowance is based on the existence of a lot of record… on or before January 1, 2006.

The subject property consists of four contiguous parcels that were acquired by the State of Oregon in order to construct Interstate 205 and associated ramps and facilities, and to realign Willamette Falls Drive. The former Willamette Falls Drive right-of-way was subsequently vacated and the subject parcels sold as surplus property. Clackamas County Property Account Summaries for the four parcels show that they have been in the same configuration since prior to the Year 2000. This provision is satisfied.

B. For lots described in subsection A of this section that area located completely or partially inside the WRA, development is permitted, consistent with this section. The maximum disturbed area (MDA) of the WRA shall be the greater of:

1. Five thousand square feet of the WRA; or

2. Thirty percent of the total area of the WRA.

The onsite Riparian Zone Area is 52,966sf. The proposed project shall impact 15,214sf of the Riparian Zone Area. This is just under the allowed 30 percent (15, 890sf).

C. The MDA shall be located as follows:

1. In areas where the development will result in the least square footage encroachment into the WRA.

The subject property is constrained by the presence of Bernert Creek and its associated Riparian Zone along the southern edge of the property and more or less parallel with Willamette Falls Drive. An additional constraint is the presence of a Significant Oregon white oak in the northeast corner of the property. The tree is outside the Riparian Zone but protecting its root zone precludes shifting the building or access driveways all the way into the northeast corner of the site, away from the riparian corridor (WRA). Therefore, the applicant's design team has optimized the site design to locate the proposed building at the maximum practical distance from the water resource that is consistent with conserving the significant tree in the northeast corner of the site. It is not possible to develop the site without impacting the WRA. The proposed disturbance area is located at the back of the subject property, minimizing encroachment into the WRA. Additionally, the applicant is requesting a variance to make the building four stories tall, rather than shorter and wider, to minimize the development area's footprint and overall impact on the riparian corridor area.

2. The applicant shall demonstrate, through site and building design, that the proposed development is the maximum practical distance from the water resource based on the functional needs of the proposed use.

As described above, the water resource is located on the south side of the property adjacent to the only access to the site, Willamette Falls Drive. The development location is pushed back to the opposite edge of the property and, based on the required size and configuration of the proposed usage, is the maximum practical distance from the water resource. The functional needs of the proposed use involve a secure storage building with access and circulation for visitors' vehicles, including light duty trucks and vehicles pulling trailers. The proposed building design, with customer vehicle staging and storage unit/elevator access internalized within the building itself, avoids the need to provide an emergency access route 26 feet wide outside the building and a hammerhead turnaround, which would have encroached into the riparian zone.

Additionally, to limit the stream/WRA impact to the extent practicable, the applicant proposes to construct a five-foot wide pedestrian path between the office and the sidewalk, in lieu of an eight-foot wide path that would typically be required in the GC Zone.

3. The minimum distance from a water resource shall be 15 feet.

The building is located more than 15 feet from Bernert Creek and wetland boundaries. The project requires crossing Bernert Creek. The western crossing shall be via a bottomless arch culvert and shall not impact the water resource. The eastern crossing shall be an extension of an existing culvert and will result in minimal impacts.

4. Access driveways shall be the minimum permitted width; select an alignment that is least impactful upon the WRA; and shall share use of the driveway where possible.

The access driveways are based on consultation with Tualatin Valley Fire & Rescue (TVFR) to determine the minimum acceptable widths, and the stream crossings are aligned to use an existing culvert location at the west, and minimize the lengthening of the existing driveway culvert of the "2500 Building" driveway immediately to the east of the subject site. The applicant initially attempted to negotiate an agreement with the owner of the "2500 Building" to the east that would allow the proposed development to share that site's existing driveway; however, the parties were unable to reach satisfactory terms. The applicant would not object to a condition requiring this property to allow its eastern driveway to be realigned to form a shared driveway configuration (i.e., with a 'Y' north of the Willamette Falls Drive right-of-way) as part of a future redevelopment of the "2500 Building" site, provided that the required permitting and construction would be the responsibility of the redeveloper of that property.

D. The MDA shall include:

1. *The footprints of all structures, including accessory structures, decks and paved water impermeable surfaces including sidewalks, driveways, parking pads, paths, patios and parking lots, etc. Only 75 percent of water permeable surfaces at grade shall be included in the MDA.*
2. *All graded, disturbed or modified areas that are not subsequently restored to their original grade and replanted with native ground cover per an approved plan.*

E. The MDA shall not include:

1. *Temporarily disturbed areas (TDAs) adjacent to an approved structure or development area for the purpose of grading, material storage, construction activity, trenched or buried utilities and other temporary activities so long as these areas are subsequently restored to the original grades and soil permeability, and re-vegetated with native plants per CDC 32.100, such that they are at least equal in functional value to the area prior to the initiation of the permitted activity;*
2. *Bay windows and similar cantilevered elements (including decks, etc.) of the principal or secondary structure so long as they do not extend more than five feet towards the WRA from the vertical plane of the house, and have no vertical supports from grade;*

3. *PDAs that are not built upon as part of the development proposal will not count in the MDA (e.g., use of an existing access driveway). (Conversely, PDAs that are built upon as part of the development proposal will count in the MDA.);*
4. *The installation of public streets and public utilities that are specifically required to meet either the transportation system plan or a utility master plan so long as all trenched public utilities are subsequently restored to the original grades and soil permeability, and revegetated with native plants per CDC 32.100, such that they are at least equal in functional value to the area prior to the initiation of the permitted activity. All areas displaced by streets shall be mitigated for.*

TABLE 32-5 MDA CALCULATION SUMMARY

Type of Development	**Square footage included in MDA calculation?**
All structures	YES
Non-water permeable paved surfaces including driveways, parking lots, patios, and paths	YES
Approved water permeable paved surfaces including driveways, parking lots, patios, and paths	YES but at 75% of total water permeable surface square footage
TDAs/graded areas that are restored and re-vegetated with native vegetation	NO
TDAs/all utility trenches and buried utilities restored or re-vegetated with native vegetation	NO
PDAs that are built upon or developed as part of the application	YES
PDAs that are not built upon or developed as part of the application	NO
Storm water detention or treatment pond	YES
Rain garden or bioswale with the native plantings as part of re-vegetation plan	NO
Storm water outfall, energy dissipaters (at, or above, grade)	YES
Non-native landscaping	YES
Sharing an existing driveway	NO
Development of lands that are not within the WRA	NO

The MDA has been defined as outlined in sections D-E.

F. Development allowed under subsection A of this section may use the following provisions:

1. *Setbacks required by the underlying zoning district may be reduced up to 50 percent where necessary to avoid construction within the WRA, as long as the development would otherwise meet the standards of this chapter. However, front loading garages shall be set back a minimum of 18 feet, while side loading garages shall be set back a minimum of three feet.*

2. *Landscaping and parking requirements may be reduced for hardship properties but only if all or part of the WRA is dedicated pursuant to CDC 32.060(C) or if a restrictive deed covenant is established. These reductions shall be permitted outright and, to the extent that the practices are inconsistent with other provisions or standards of the West Linn CDC, this section is given precedence so that no variance is required. The allowable reductions include:*
    a. *Elimination of landscaping for the parking lot interior.*
    b. *Elimination of the overall landscape requirement (e.g., 20 percent for commercial uses).*
    c. *Elimination of landscaping between parking lots and perimeter non-residential properties.*
    d. *Landscaping between parking lots and the adjacent right-of-way may be reduced to eight feet. This eight-foot-wide landscaped strip may be used for vegetated storm water detention or treatment.*
    e. *A 25 percent reduction in total required parking is permitted to minimize or avoid intrusion into the WRA.*
    f. *Adjacent improved street frontage with curb and sidewalk may be counted towards the parking requirement at a rate of one parking space per 20 lineal feet of street frontage adjacent to the property, subject to City Engineer approval based on the street width and classification.*
    g. *The current compact and full sized parking mix may be modified to allow up to 100 percent compact spaces and no full sized spaces. However, any required ADA compliant spaces shall be provided.*

The GC zone does not specify setback requirements for conditional uses (including self-storage facilities), so it is not necessary to request a setback width reduction under subparagraph 1. The proposed building will be located five feet from the north property line and 20 feet or more from all other property lines. The proposed plans demonstrate that over 50 percent of the site will be landscaped. The provisions of subparagraph 2 are not applicable because this application does not include requests to reduce setbacks, minimum required landscaping, or parking pursuant to these provisions.

H. Mitigation and re-vegetation of disturbed WRAs shall be completed according to 32.090 and 32.100 respectively.

See Mitigation Plan below.

I. Any further modification of the standards of this chapter or the underlying zone shall require approval of a variance pursuant to Chapter 75 CDC.

The applicant's proposed site plan and mitigation plan demonstrate compliance with the Alternate Review Process and Approval Criteria provisions of Sections 32.070 and 32.080, respectively; with the Hardship provisions of Section 32.110; and with related Sections incorporated by reference. No further modification of the WRA standards or the underlying zone is necessary for approval of the proposed development plan. This provision is not applicable.

32.090 MITIGATION PLAN

A. A mitigation plan shall only be required if development is proposed within a WRA… Temporarily disturbed areas… do not require mitigation, just grade and soil restoration and re-vegetation. The mitigation plan shall satisfy all applicable provisions of CDC 32.100 Re-Vegetation Plan Requirements.

Development is proposed within a WRA. The mitigation plan shall satisfy applicable provisions of this section and section 32.100 as outlined below.

B. Mitigation shall take place in the following locations, according to the following priorities of this section.

1. Onsite mitigation by restoring, creating, or enhancing WRAs.

Proposed mitigation shall take place onsite.

C. Amount of mitigation

1. The amount of mitigation shall be based on the square footage of the permanent disturbance area by the application. For every one square foot of non-PDA disturbed area, onsite mitigation shall require one square foot of WRA to be created, enhanced or restored.

Proposed impact within the WRA is 15,214sf. Proposed mitigation shall consist of enhancement of the entire remaining Riparian Area. This area is 16,454sf and more than meets the required 1:1 ratio.

E. A mitigation plan shall contain the following information

1. A list of all responsible parties including, but not limited to the owner, applicant, contractor, or other persons responsible for work on the development site.

Applicant:
Northwest Self Storage West Linn
14855 SE 82nd Drive
Clackamas, OR 97015
(503) 804-5545
capitalman@onlinenw.com

Property Owner:
VK Northwest, Inc.
c/o Vipul Patel
12700 SE McLoughlin Blvd.
Milwaukie, OR 97222
mpinvestments@gmail.com

Project Contact:
Lee Leighton, AICP
Mackenzie
1515 SE Water Ave., Suite 100
Portland, OR 97214
503-224-9560
lleighton@mcknze.com

2. A map showing where the specific adverse impacts will occur and where the mitigation activities will occur.

Appendix C.

3. A re-vegetation plan for the area(s) to be mitigation that meets the standards of CDC 32.100.

See the response to CDC 32.100, below.

4. An implementation schedule including timeline for construction, mitigation, mitigation maintenance, monitoring and reporting. All in-stream work in fish bearing streams shall be done in accordance with the Oregon Department of Fish and Wildlife.

Mitigation shall occur concurrently with construction during the construction period after all approvals are met. As per City of West Linn WRA protection requirements, 80% success is required for replanted areas. The mitigation site will be monitored and maintained for three years. If, after each year monitoring period, 80% survival has not been met, dead plants will be replaced up to the 80% success required. Mitigation monitoring reports shall be provided to document these activities. The onsite waterway is not fish bearing and the in-stream work window is not applicable.

5. Assurances shall be established to rectify any mitigation actions that are not successful within the first three years. This may include bonding or other surety.

The applicant can provide any necessary assurance as necessary based on coordination with City staff. We would propose that any bonding or surety be deferred based on the results of the ongoing monitoring, maintenance, and reporting requirements.

32.100 RE-VEGETATION PLAN REQUIREMENTS

A. In order to achieve the goal of re-establishing forested canopy, native shrub and groundcover and to meet the mitigation requirements of CDC 32.090, tree and vegetation plantings are required according to the following standards.

1. All trees, shrubs and groundcover to be planted must be native plants selected from the Portland Plant List.

As noted in the planting plan, all proposed plant species will be native plants selected from the Portland Plant List.

2. Plant size. Replacement trees must be at least one half inch in caliper, measured at six inches above the ground level for field grown trees or above the soil line for container grown trees, unless they are oak or madrone which may be one gallon size. Shrubs must be in at least a one-gallon container or the equivalent in ball and burlap and must be at least 12 inches in height.

As noted in the planting plan, plant size will meet the above requirements.

3. Plant coverage.

a. Native trees and shrubs are required to be planted at a rate of five trees and 25 shrubs per every 500 square feet of disturbance area… Bare ground must be planted or seeded with native grasses or herbs. Non-native sterile wheat grass may also be planted or seeded, in equal or lesser proportion to the native grasses or herbs.

b. Trees shall be planted between eight and 12 feet on center and shrubs shall be planted between four and five feet on center, or clustered in single species groups of no more than four plants, with each cluster planted between eight and 10 feet on center. When planting near existing trees, the dripline of the existing tree shall be the starting point for plant spacing measurements.

As noted in the planting plan, plant coverage shall meet the above requirements. See Table 3 for planting plan.

4. Plant diversity. Shrubs must consist of at least two different species. If 10 trees or more are planted, then no more than 50 percent of the trees may be of the same genus.

Plant diversity requirements shall be met as shown in Table 3 and Mitigation Plan description.

MITIGATION AND ENHANCEMENT PLAN DESCRIPTION

The proposed mitigation area consists of enhancement of the entire remaining 16,454sf of WRA within the subject property. This area was determined based on the large area of onsite resource, limiting the possible development area outside the resource. As described under the alternatives the proposed mitigation area shall provide higher functions than what would be provided by the existing resource, even though reduced in size.

The goal of the mitigation is protecting the ecological benefit and water quality benefit to the higher quality sensitive areas while maximizing developable area. Mitigation shall consist of removal of reed canary grass, Himalayan blackberry and other non-native species throughout the remaining WRA. An approved herbicide shall be used prior to grubbing out root material. Follow up spot applications will be provided as necessary.

The remaining onsite WRA will be planted with native trees, shrubs and groundcover consistent with CDC 32.100, meeting or exceeding the standards of CDC 32.090(C) to provide a diverse native forested/scrub-shrub community adjacent to the onsite water resource. Tree and shrub species will provide shade, large woody debris, habitat and food sources. In addition it will increase filtration and replace non-native vegetation with a greater diversity of native species. Species will be selected from the Portland Plant list and will include species such as Douglas fir, red alder, big leaf maple, Oregon grape, snowberry, and sword fern (Table 3 and 4).

TABLE 3. FORESTED WRA ENHANCEMENT PLANTING PLAN (11,629SF)

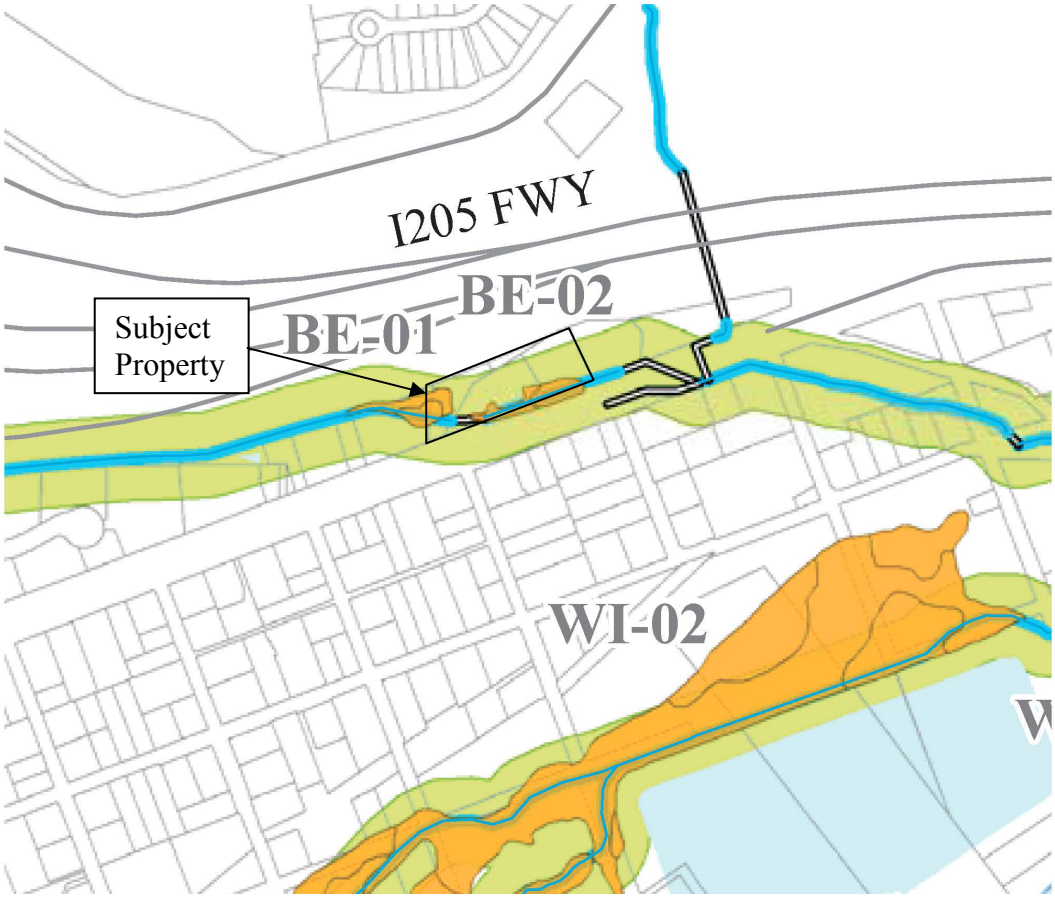
	Plant Type	Water Require-ments	Light Require-ments	Min. Size	Min. Height	Spacing	Qty
Douglas fir (*Pseudotsuga menziesii*)	Tree	Dry	Sun	2 gal/ 1/2" caliper	3'	Single	44
Big leaf maple (*Acer macrophyllum*)	Tree	Dry	Sun	2 gal/ 1/2" caliper	3'	Single	40
Red alder (*Alnus rubra*)	Tree	Moist	Sun	2 gal/ 1/2" caliper	3'	Single	45
Oregon ash* (*Fraxinus latifolia*)	Tree	Moist	Part	2 gal/ 1/2" caliper	3'	Single	30
Red flowering currant (*Ribes sanguineum*)	Shrub	Dry	Sun	1 gal.	1.5'	Cluster	100
Tall Oregon grape (*Mahonia aquifolium*)	Shrub	Dry	Sun	1 gal.	12"	Single	150
Snowberry (*Symphoricarpos albus*)	Shrub	Dry	Part	1 gal.	1.5'	Cluster	150
Serviceberry (*Amelanchier alnifolia*)	Shrub	Dry	Part	1 gal.	1.5'	Single	77
Sword fern (*Polystichum munitum*)	Forb	Moist	Shade	2 gal.	n/a	Cluster	100
Native California brome (*Bromus carinatus*)	Grass	Dry	Part	Seed	n/a	10lbs. pls	
Blue Wildrye (*Elymus glaucus*)	Grass	Dry	Part	Seed	n/a	10lbs. pls	

*To be planted at toe of slope adjacent to wetlands only.

TABLE 4. SCRUB-SHRUB WRA ENHANCEMENT PLANTING PLAN (4,825SF)

	Plant Type	Water Require-ments	Light Require-ments	Min. Size	Min. Height	Spacing	Qty
Red flowering currant (*Ribes sanguineum*)	Shrub	Dry	Sun	1 gal.	1.5’	Cluster	60
Tall Oregon grape (*Mahonia aquifolium*)	Shrub	Dry	Sun	1 gal.	12”	Single	60
Snowberry (*Symphoricarpos albus*)	Shrub	Dry	Part	1 gal.	1.5’	Cluster	60
Sword fern (*Polystichum munitum*)	Forb	Moist	Shade	2 gal.	n/a	Cluster	35
Native California brome (*Bromus carinatus*)	Grass	Dry	Part	Seed	n/a	10lbs. pls	
Blue Wildrye (*Elymus glaucus*)	Grass	Dry	Part	Seed	n/a	10lbs. pls	

Appendix A. WRA Map



Goal 5 Significant Riparian Corridors*

- Significant Riparian Corridors
- Streams
- Ephemeral Stream
- Piped Segments
- Upper Stream Reach of Fish Inventory 2003/2004 Survey

Goal 5 Wetland Inventory**

- Locally Significant Wetlands, DSL 2005
- Other Wetlands, DSL 2005
- TA-05 Specific Wetland Identifier
- Rivers & Ponds
- West Linn City Limits
- Taxlot Base Map***

0 0.25 0.5 1 Miles

Map Created: 6/6/2014

LOC: G:\PROJECTS\GIS\GOAL5_2006\SIGRIPARIAN\SIGRIPARIAN_WETLANDS_201406V6_FINAL.MXD | KAHA

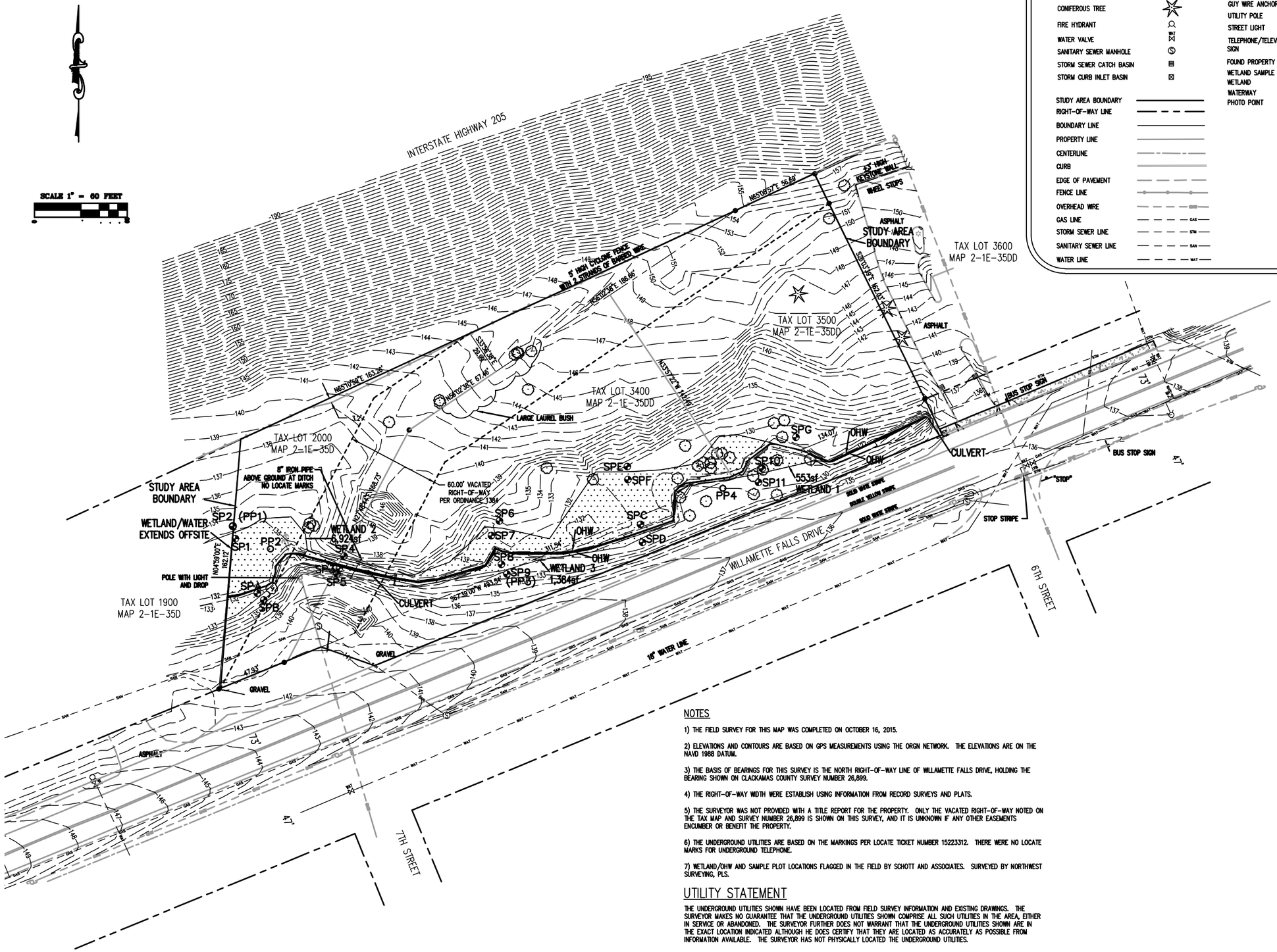
VERSION 5 TO VERSION 6: REMOVED "PROPOSED" FROM MAP TITLE

City of West Linn GIS GEOGRAPHIC INFORMATION SYSTEMS

Appendix B. Existing Conditions Map

NOTES

SCALE 1" = 60 FEET



LEGEND

- DECIDUOUS TREE
- CONIFEROUS TREE
- FIRE HYDRANT
- WATER VALVE
- SANITARY SEWER MANHOLE
- STORM SEWER CATCH BASIN
- STORM CURB INLET BASIN
- GAS VALVE
- GUY WIRE ANCHOR
- UTILITY POLE
- STREET LIGHT
- TELEPHONE/TELEVISION RISER
- SIGN
- FOUND PROPERTY CORNER MONUMENT
- WETLAND SAMPLE PIT
- WETLAND
- WATERWAY
- PHOTO POINT
- STUDY AREA BOUNDARY
- RIGHT-OF-WAY LINE
- BOUNDARY LINE
- PROPERTY LINE
- CENTERLINE
- CURB
- EDGE OF PAVEMENT
- FENCE LINE
- OVERHEAD WIRE
- GAS LINE
- STORM SEWER LINE
- SANITARY SEWER LINE
- WATER LINE

NOTES

1) THE FIELD SURVEY FOR THIS MAP WAS COMPLETED ON OCTOBER 16, 2015.

2) ELEVATIONS AND CONTOURS ARE BASED ON GPS MEASUREMENTS USING THE ORGN NETWORK. THE ELEVATIONS ARE ON THE NAVD 1988 DATUM.

3) THE BASIS OF BEARINGS FOR THIS SURVEY IS THE NORTH RIGHT-OF-WAY LINE OF WILLAMETTE FALLS DRIVE, HOLDING THE BEARING SHOWN ON CLACKAMAS COUNTY SURVEY NUMBER 26,899.

4) THE RIGHT-OF-WAY WIDTH WERE ESTABLISH USING INFORMATION FROM RECORD SURVEYS AND PLATS.

5) THE SURVEYOR WAS NOT PROVIDED WITH A TITLE REPORT FOR THE PROPERTY. ONLY THE VACATED RIGHT-OF-WAY NOTED ON THE TAX MAP AND SURVEY NUMBER 26,899 IS SHOWN ON THIS SURVEY, AND IT IS UNKNOWN IF ANY OTHER EASEMENTS ENCUMBER OR BENEFIT THE PROPERTY.

6) THE UNDERGROUND UTILITIES ARE BASED ON THE MARKINGS PER LOCATE TICKET NUMBER 15223312. THERE WERE NO LOCATE MARKS FOR UNDERGROUND TELEPHONE.

7) WETLAND/OHW AND SAMPLE PLOT LOCATIONS FLAGGED IN THE FIELD BY SCHOTT AND ASSOCIATES. SURVEYED BY NORTHWEST SURVEYING, PLS.

UTILITY STATEMENT

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

NORTHWEST SURVEYING, INC.
1815 NW 169th PLACE, SUITE 2090
BEAVERTON, OR 97006
PH:(503) 848-2127 FAX:(503) 848-2179
EMAIL: nwsurveying@nwsrvy.com

LOCATED IN THE SE 1/4, SECTION 35, TOWNSHIP 2 SOUTH, RANGE 1 EAST, W.M., CITY OF WEST LINN, CLACKAMAS COUNTY, OREGON

TOPOGRAPHIC SURVEY

WEST LINN, OREGON

DRAWING NO.:	1392 TOPO
SCALE:	AS NOTED
DRAWING GENERATED BY LD2004	
DRAWN BY:	TWW
CHECKED BY:	CHS

PREPARED FOR:
NORTHWEST SELF STORAGE
14855 SE 82ND DRIVE
CLACKAMAS, OR 97015

REVISIONS:
INITIAL RELEASE OCT. 28, 2015

REGISTERED PROFESSIONAL LAND SURVEYOR

OREGON
JANUARY 15, 2008
CLINTON H. STUBBS JR.
55469LS
RENEWAL DATE: 06/30/16

JOB NUMBER
1392

SHEET
1 OF 1

Appendix C. Site Development and Mitigation Planting Plan

APPENDIX C.
WILLAMETTE FALLS SITE DEVELOPMENT AND MITIGATION PLANTING PLAN

S&A#2394

WQ POND
Plant per Portland
Stormwater
Management Manual

WQ PLANTER
Plant per Portland
Stormwater
Management Manual

WQ POND
Plant per Portland
Stormwater
Management Manual

5' HIGH CYCLONE FENCE WITH 2 STRANDS OF BARBED WIRE

N65°10'59"E 163.26'

N56°02'38"E 186.66'

S33°56'38"E 29.99'

N56°02'38"E 67.46'

N33°57'22"W 15.00'

S26°03'39"E 162.03'

N04°59'00"E 162.12'

S29°00'00"W 495.54'

60.00' VACATED RIGHT-OF-WAY PER ORDINANCE 1384

311.54'

134.07'

47.93'

68.73'

LARGE LAUREL BUSH

8" IRON PIPE ABOVE GROUND AT DITCH NO LOCATE MARKS

CULVERT

CULVERT

18" WATER LINE

OHW

OHW

OHW

EXIT ONLY

ASPHALT

ASPHALT

STUDY AREA BOUNDARY

TAX LOT MAP 2-1E

TAX LOT 3500 MAP 2-1E-35DD

TAX LOT 3400 MAP 2-1E-35DD

TAX LOT 2000 MAP 2-1E-35D

AREA 1 936SF

AREA 2 629SF

AREA 3 3,058SF

AREA 4 1,304SF

AREA 5 9,817SF

AREA 6 463SF

AREA 243SF

WETLAND 1

WETLAND 2 6,924sf

WETLAND 3 1,384sf

553sf

SP1 SP2 (PP1) PP2 SP3 SP4 SP5 SPA SPB SP6 SP7 SP8 SP9 (PP3) SPC SPD SPE SPF PP4 SP10 SP11 SPG

SOLID WHITE STRIPE
DOUBLE YELLOW STRIPE
SOLID WHITE STRIPE

WILLAMETTE FALLS DRIVE

GRAVEL

GRAVEL

REPRESENTATIVE PLANTING PLANS

AREA 1,2,5,7

AREA 3,4,6

LEGEND

ALRU	Red Alder
ACMA	Big Leaf Maple
FRLA	Oregon Ash
	Douglas Fir
Ribes	Red Flowering currant (cluster)
SYAL	Snowberry (cluster)
(P)	Swordfern
(M)	Oregon grape
(S)	Serviceberry

Appendix D. Delineation report and concurrence letter

Oregon
Kate Brown, Governor

Department of State Lands
775 Summer Street NE, Suite 100
Salem, OR 97301-1279
(503) 986-5200
FAX (503) 378-4844
www.oregon.gov/dsl

January 19, 2016

West Linn Self-Storage
Attn: Kevin Howard
14885 SE 82nd Ave
Clackamas, OR 97015

Re: WD #2015-0523 Wetland Delineation Report for a Proposed Self-Storage Unit, Clackamas County;
T 2S R 1E S 35D TL 2000 and 5300; S 35DD TL 3400, 3500 and a Portion of the Right of Way for Willamette Falls Drive;
City of West Linn Local Wetlands Inventory, Bernert Creek

Dear Mr. Howard:

The Department of State Lands has reviewed the wetland delineation report prepared by Schott and Associates for the site referenced above. Based upon the information presented in the report, and additional information submitted upon request, we concur with the wetland and waterway boundaries as mapped in Figure 6 of the report. Within the study area, three wetlands (totaling approximately 0.2 acres) and a segment of Bernert Creek were identified.

The wetlands and creek are subject to the permit requirements of the state Removal-Fill Law. Under current regulations, a state permit is required for cumulative fill or annual excavation of 50 cubic yards or more in wetlands or below the ordinary high water line (OHWL) of a waterway (or the 2 year recurrence interval flood elevation if OHWL cannot be determined). In addition, a culverted portion of the creek that had been located under the vacated, former right-of-way for Willamette Falls Drive, was excavated and exposed sometime between 2008 and 2009 expanding the regulated area of the creek.

This concurrence is for purposes of the state Removal-Fill Law only. Federal or local permit requirements may apply as well. The Army Corps of Engineers will review the report and make a determination of jurisdiction for purposes of the Clean Water Act at the time that a permit application is submitted. We recommend that you attach a copy of this concurrence letter to both copies of any subsequent joint permit application to speed application review.

Please be advised that state law establishes a preference for avoidance of wetland impacts. Because measures to avoid and minimize wetland impacts may include reconfiguring parcel layout and size or development design, we recommend that you

work with Department staff on appropriate site design before completing the city or county land use approval process.

This concurrence is based on information provided to the agency. The jurisdictional determination is valid for five years from the date of this letter unless new information necessitates a revision. Circumstances under which the Department may change a determination are found in OAR 141-090-0045 (available on our web site or upon request). In addition, laws enacted by the legislature and/or rules adopted by the Department may result in a change in jurisdiction; individuals and applicants are subject to the regulations that are in effect at the time of the removal-fill activity or complete permit application. The applicant, landowner, or agent may submit a request for reconsideration of this determination in writing within six months of the date of this letter.

Thank you for having the site evaluated. Please phone me at 503-986-5232 if you have any questions.

Sincerely,

Peter Ryan, PWS
Jurisdiction Coordinator

Approved by

Kathy Verble, CPSS
Aquatic Resource Specialist

Enclosures

ec: Cari Cramer, Schott and Associates
City of West Linn Planning Department (Map enclosed for updating LWI)
Dominic Yballe, Corps of Engineers
Anita Huffman, DSL

WD2015-0523

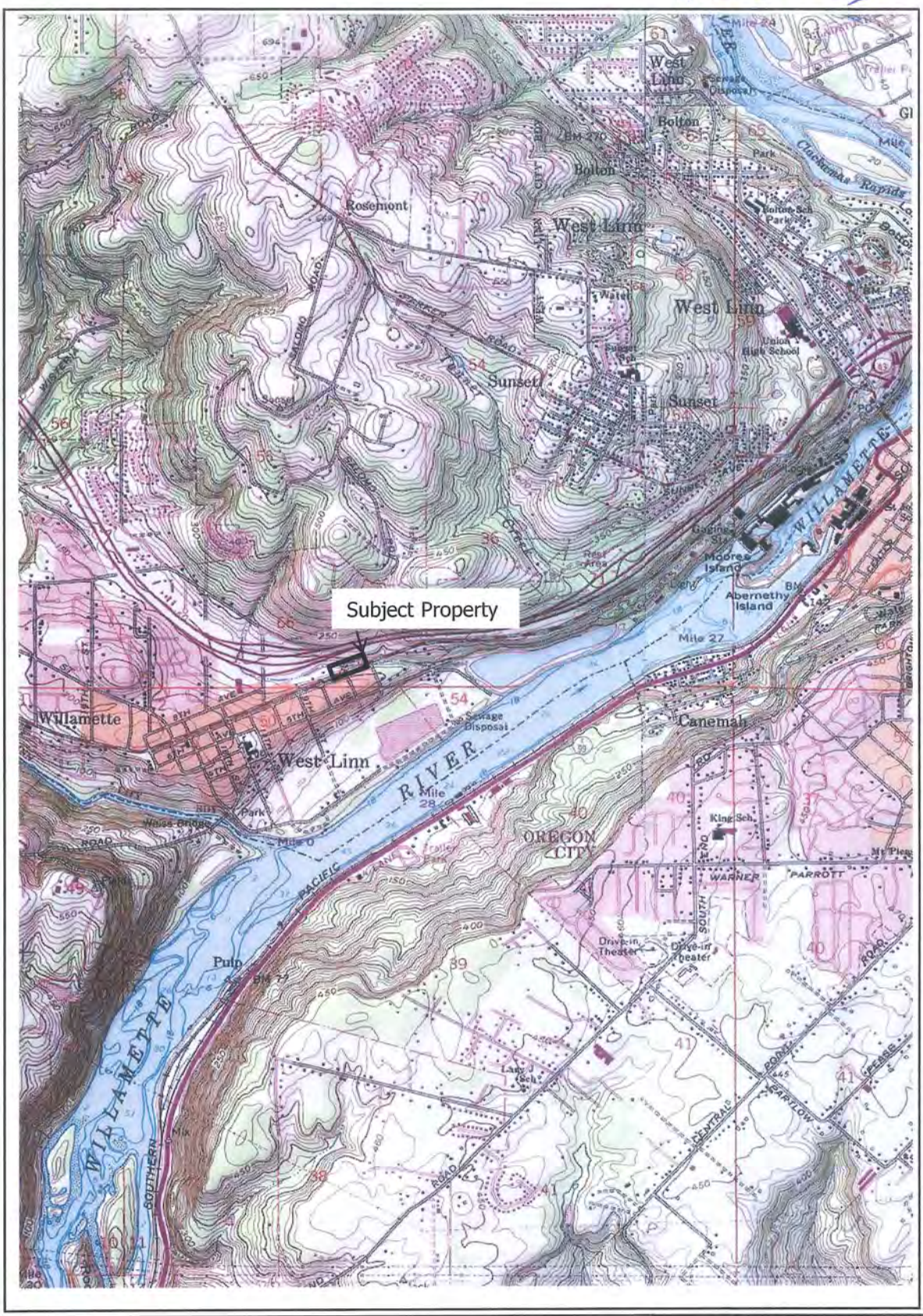


Figure 1: Location Map
S&A 2394
Willamette Falls Drive

Schott & Associates
P.O. Box 589
Aurora, OR. 97002
503.678.6007

This map was prepared for assessment purpose only.

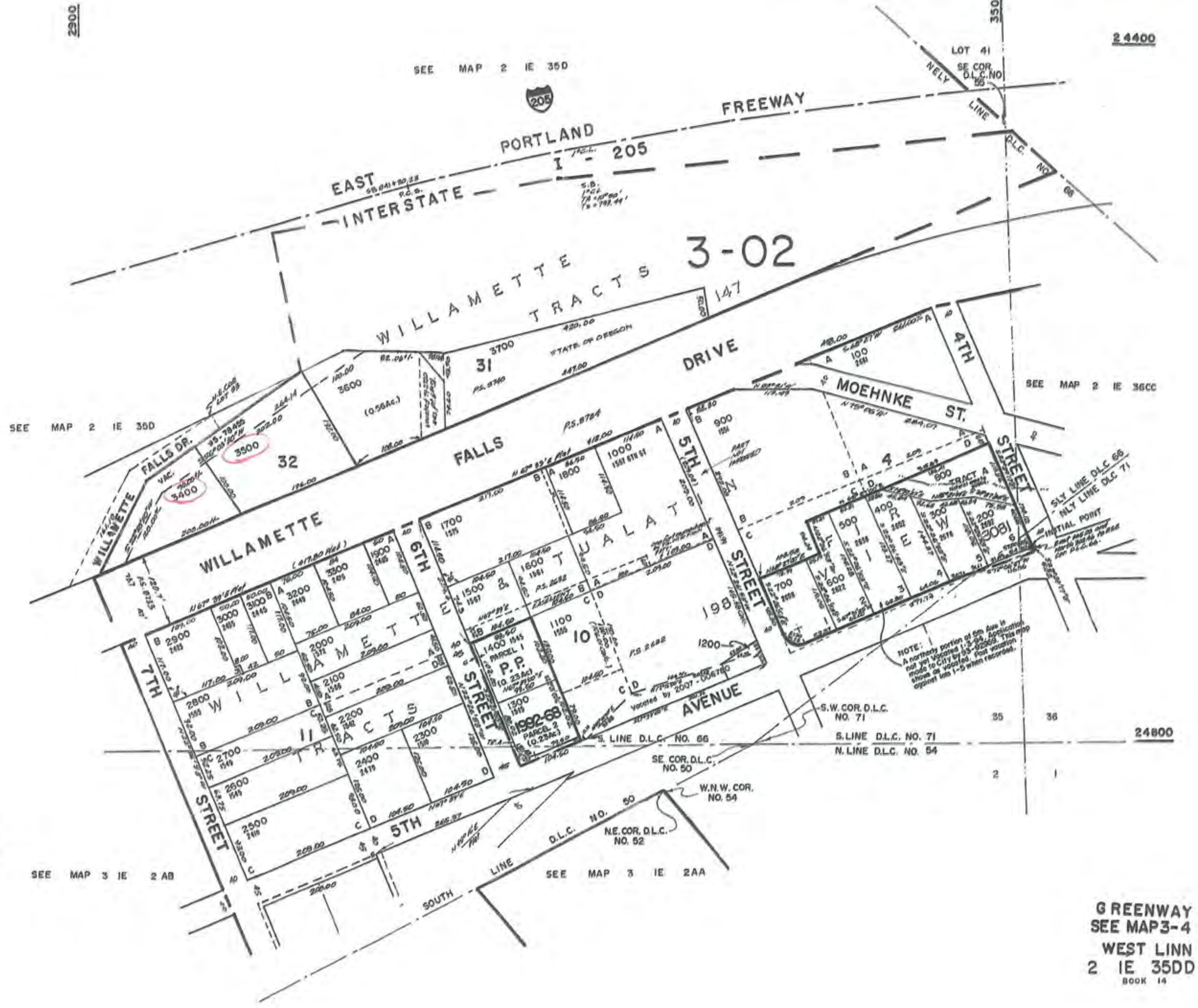
S.E.1/4 S.E.1/4 SEC.35 T.2S. R.1E. W.M.
CLACKAMAS COUNTY

1" = 100'

D.L.C.
M.K. PERRIN NO. 50 & 66
ROBERT MOORE NO. 71 & 54
WM. BLAND NO. 55

2 IE 35DD
WEST LINN

WD2015-0523



GREENWAY
SEE MAP3-4
WEST LINN
2 IE 35DD
BOOK 14

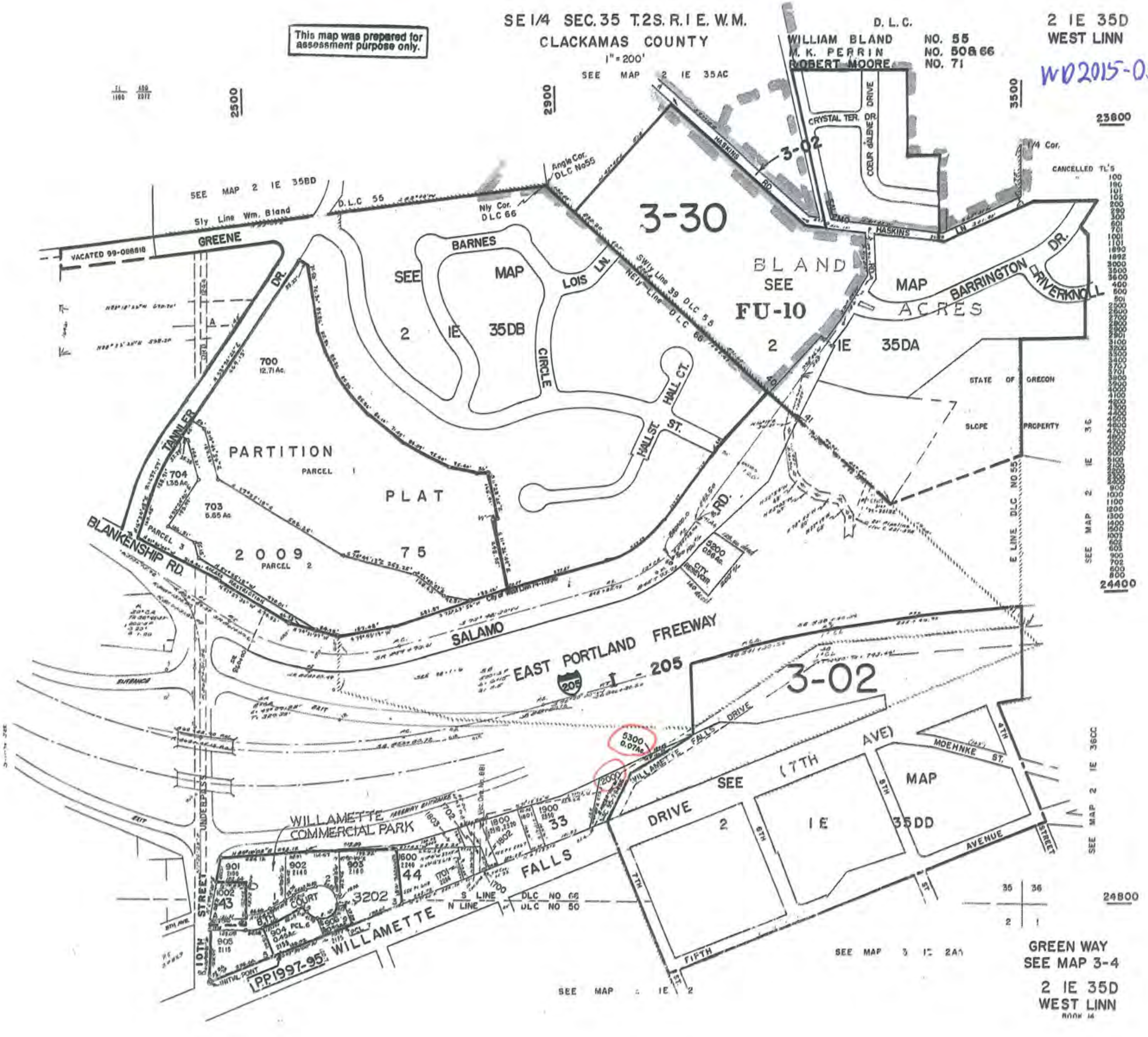

This map was prepared for assessment purpose only.
SE 1/4 SEC. 35 T.2S. R.1 E. W.M.
CLACKAMAS COUNTY
1" = 200'
SEE MAP 2 1E 35AC
D.L.C.
WILLIAM BLAND NO. 55
M. K. PERRIN NO. 50 & 66
ROBERT MOORE NO. 71
2 1E 35D
WEST LINN
WD2015-0523
23800
24400
24800
3-30
3-02
BLAND
SEE
FU-10
MAP
ACRES
2 1E 35DA
SEE MAP 2 1E 35DB
SEE MAP 2 1E 35BD
PARTITION PLAT 2009 75
700
12.71 Ac.
704
1.36 Ac.
703
5.65 Ac.
PARCEL 1
PARCEL 2
PARCEL 3
GREENE
VACATED 99-088818
TANNLER DR.
BLANKENSHIP RD.
SALAMO RD.
BARNES CIRCLE
LOIS LN.
HALL CT.
HALL ST.
HASKINS RD.
CRYSTAL TER. DR.
COEUR D'ALENE DRIVE
BARRINGTON DR.
RIVERKNOLL
STATE OF OREGON SLOPE PROPERTY
E LINE DLC NO 55
CANCELLED TL'S
EAST PORTLAND FREEWAY
I - 205
5300
0.07 Ac.
2000
WILLAMETTE FALLS DRIVE
WILLAMETTE COMMERCIAL PARK
(7TH AVE)
MOEHNKE ST.
SEE MAP 2 1E 35DD
SEE MAP 2 1E 36CC
10TH STREET
UNDERPASS
FIFTH
AVENUE
PP1997-95
1900
1800
1600
33
44
43
3202
901
902
903
904
905
1002
COURT
S LINE
N LINE
DLC NO 66
DLC NO 50
SEE MAP 3 1E 2A
SEE MAP 2 1E 2
GREEN WAY
SEE MAP 3-4
2 1E 35D
WEST LINN

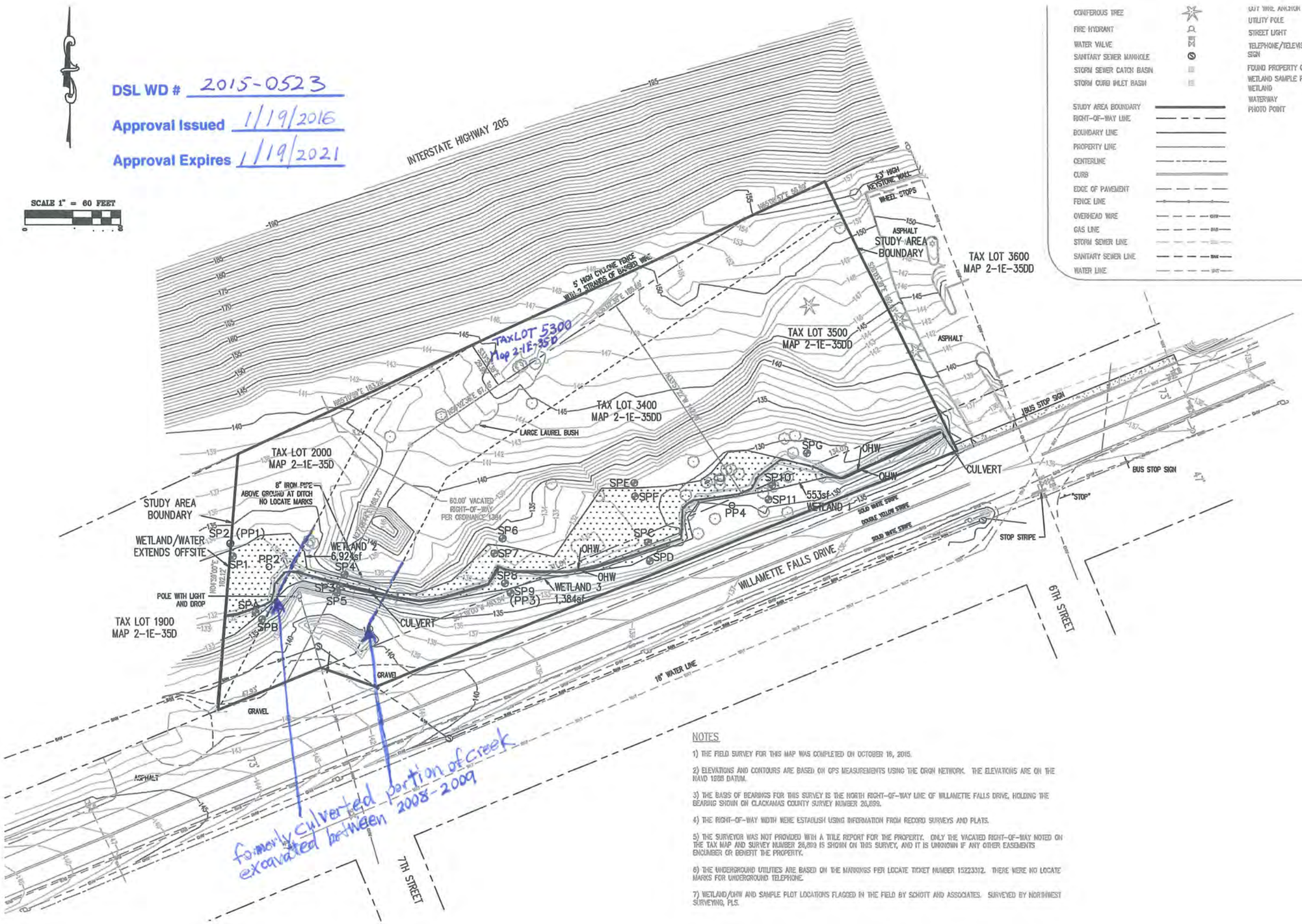
FIGURE 6. WETLAND MAP

DSL WD # 2015-0523

Approval Issued 1/19/2016

Approval Expires 1/19/2021

SCALE 1" = 60 FEET



CONIFEROUS TREE
FIRE HYDRANT
WATER VALVE
SANITARY SEWER MANHOLE
STORM SEWER CATCH BASIN
STORM CURB INLET BASIN
CAT TAIL ANALYSIS
UTILITY POLE
STREET LIGHT
TELEPHONE/TELEVISION RISER
SIGN
FOUND PROPERTY CORNER MONUMENT
WETLAND SAMPLE PIT
WETLAND
WATERWAY
PHOTO POINT

STUDY AREA BOUNDARY
RIGHT-OF-WAY LINE
BOUNDARY LINE
PROPERTY LINE
CENTERLINE
CURB
EDGE OF PAVEMENT
FENCE LINE
OVERHEAD WIRE
GAS LINE
STORM SEWER LINE
SANITARY SEWER LINE
WATER LINE

NOTES

1) THE FIELD SURVEY FOR THIS MAP WAS COMPLETED ON OCTOBER 16, 2015.

2) ELEVATIONS AND CONTOURS ARE BASED ON GPS MEASUREMENTS USING THE ORGN NETWORK. THE ELEVATIONS ARE ON THE NAVD 1988 DATUM.

3) THE BASIS OF BEARINGS FOR THIS SURVEY IS THE NORTH RIGHT-OF-WAY LINE OF WILLAMETTE FALLS DRIVE, HOLDING THE BEARING SHOWN ON CLACKAMAS COUNTY SURVEY NUMBER 26,893.

4) THE RIGHT-OF-WAY WIDTH WERE ESTABLISH USING INFORMATION FROM RECORD SURVEYS AND PLATS.

5) THE SURVEYOR WAS NOT PROVIDED WITH A TITLE REPORT FOR THE PROPERTY. ONLY THE VACATED RIGHT-OF-WAY NOTED ON THE TAX MAP AND SURVEY NUMBER 26,893 IS SHOWN ON THIS SURVEY, AND IT IS UNKNOWN IF ANY OTHER EASEMENTS ENCUMBER OR BENEFIT THE PROPERTY.

6) THE UNDERGROUND UTILITIES ARE BASED ON THE MARKINGS PER LOCATE TICKET NUMBER 15223312. THERE WERE NO LOCATE MARKS FOR UNDERGROUND TELEPHONE.

7) WETLAND/OHW AND SAMPLE PLOT LOCATIONS FLAGGED IN THE FIELD BY SCHOTT AND ASSOCIATES. SURVEYED BY NORTHWEST SURVEYING, PLS.

NORTHWEST SURVEYING
1815 NW 169th PLACE
BEAVERTON, OR
PH:(503) 848-2127 FAX
EMAIL: nwsurveying

LOCATED IN THE SE 1/4, SECTION 35, TOWNSHIP 2 SOUTH, RANGE 1 EAST, W.M., CITY OF WEST LINN, CLACKAMAS COUNTY, OREGON

DRAWING NO.: 1392 TOPO
SCALE: AS NOTED
DRAWING GENERATED BY: LD2004
DRAWN BY: TWW
CHECKED BY: CHS

PREPARED FOR:
NORTHWEST SELF STORAGE
14855 SE 82ND DRIVE
CLACKAMAS, OR 97015

REVISIONS:
INITIAL RELEASE OCT. 28, 2015

REGISTERED PROFESSIONAL LAND SURVEYOR

OREGON
JANUARY 14, 2003
CLINTON H. STUBBS JR.
55489LS
RENEWAL DATED 06/30/16

MACKENZIE.

DESIGN DRIVEN | CLIENT FOCUSED

PRELIMINARY STORMWATER REPORT

To
City of West Linn Department of Engineering

For
Willamette Falls Self Storage

Prepared
4/11/2016

Project Number
2150120.00

MACKENZIE
Since 1960

RiverEast Center | 1515 SE Water Ave, Suite 100, Portland, OR 97214
PO Box 14310, Portland, OR 97293 | T 503.224.9560 | www.mcknze.com

TABLE OF CONTENTS

ATTACHMENTS

1. STORM PLAN
2. PAC OUTPUT
3. HYDRAFLOW REPORT

I. SITE AND SYSTEM DESCRIPTION

The proposed development is a self-storage facility on an existing 1.58-AC property. Two access driveways, two water quality facilities, and two detention facilities will be created in addition to the building. The proposed development is located at 2400 and 2450 Willamette Falls Drive in West Linn, Oregon.

The City of West Linn Follows the City of Portland Stormwater Management Manual (SWMM) for water quality requirements. Since the project has more than 10,000-SF of new impervious area, the presumptive approached was used in designing the water quality basins.

The City of West Linn requires stormwater detention facilities to provide enough storage to reduce peak flows up to the 25-year storm event with safe overflow conveyance of up to the 100-year storm event. Post development discharge rates for the 2, 5, 10 and 25-year storm events are not to exceed that of the pre-developed rates. West Linn also requires that stormwater is treated to reduce the discharge of pollutants.

Water quality and detention requirements are met by collecting and conveying stormwater from new impervious areas through one of two water quality basins at the northwest and southeast sides of the site. Treated water is then detained in detention pipes and released at pre-developed rates to Bernert Creek. Hydraflow Hydrographs Extension was used for detention calculations and the results have been included with this report.

All new onsite roadways will be constructed from pervious pavement. Runoff from new roadways will be treated and infiltrated through the pavement section.

II. FACILITY DESIGN

Water Quality

Stormwater roof runoff is treated onsite through a system of water quality basins located in on the northwest and southeast corners of the site. Basin 1 collects 12,12575-sf of the north roof runoff. Basin 2 collects 12,100-sf of the south roof runoff.

Water Quality basins have been sized using the PAC provided by the City of Portland. The PAC was used to confirm that water quality requirements were being met. The basins have 18-in of growing medium, 9-in of storage, and 3-in of freeboard.

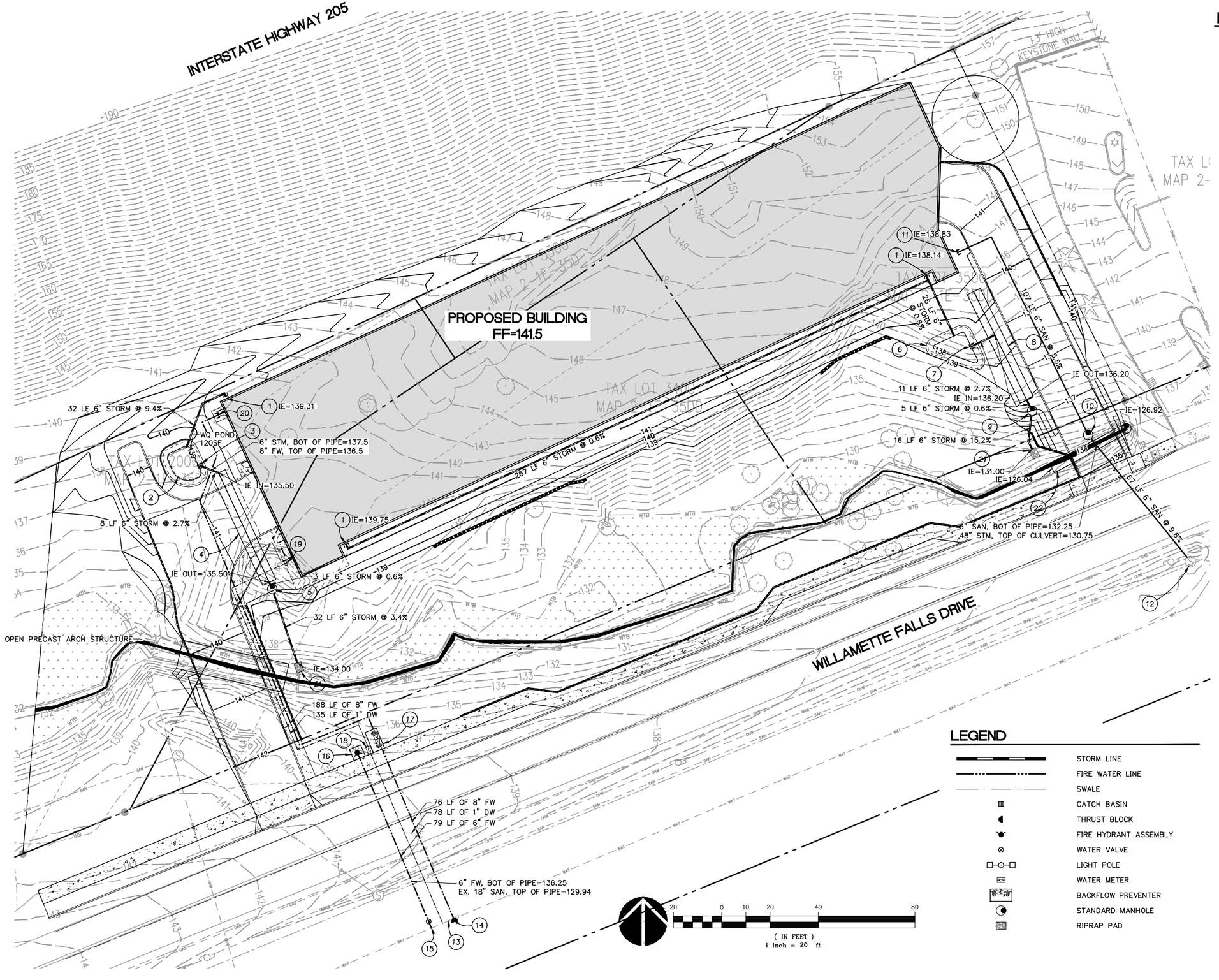
Runoff from roadways (6,863-sf) will be treated via the pervious pavement section.

Detention

Hydraflow was used to size the detention pipes. Water is released from the detention pipes via orifices in a flow control structure such that post-development flow rates do not exceed predeveloped conditions. Runoff is ultimately discharged to Bernert Creek.

ODOT Drainage

The existing site has an Oregon Department of Transportation (ODOT) drainage path flowing through the proposed building footprint. The proposed development does not contribute additional runoff to the ODOT drainage path. A proposed channel will be provided to direct the existing runoff away from the building footprint. The existing channel has an average slope of 4.9%. The proposed channel will have an average slope of 4.4% and will be designed in accordance with the ODOT Hydraulics Manual.



KEYNOTES:

1. CONNECT 6" STORM PIPE TO ROOF DRAIN DOWNSPOUT
2. 120 SF VEGETATED WATER QUALITY FACILITY (BASIN 1), SEE DETAIL XX
   IE IN = 138.88 (6")
   TOP OF SOIL ELEV=138.88
3. CONSTRUCT DITCH INLET, SEE DETAIL XX
   RIM=139.12
   IE OUT=137.62 (6")
4. (2) 36" DETENTION PIPES, 100LF TOTAL, SEE DETAIL XX, IE=135.50
5. CONSTRUCT FLOW CONTROL MANHOLE, SEE DETAIL XX
   RIM=143.5
   IE IN=135.30 (6")
   IE OUT=135.10 (6")
6. 118 SF VEGETATED WATER QUALITY FACILITY (BASIN 2), SEE DETAIL XX
   IE IN = 138.00 (6")
   TOP OF SOIL ELEV=138.00
7. CONSTRUCT DITCH INLET, SEE DETAIL XX
   RIM=138.00
   IE OUT=136.5 (6")
8. (2) 36" DETENTION PIPES, 100LF TOTAL, SEE DETAIL XX, IE=133.70
9. CONSTRUCT FLOW CONTROL MANHOLE, SEE DETAIL XX
   RIM=137.00
   IE IN=133.67 (6")
   IE OUT=133.47 (6")
10. CONSTRUCT SANITARY MANHOLE, SEE DETAIL XX
    RIM=136.25
    IE IN=132.93 (6")
    IE OUT=132.73 (6")
11. SANITARY CONNECTION TO PLUMBING
12. CONNECT TO EXISTING SANITARY MANHOLE
    RIM=135.01
    IE IN=126.20 (6"), EXISTING
    IE IN=126.3 (6")
    IE OUT=126.10 (6"), EXISTING
13. 1" DOMESTIC WATER SERVICE WITH 1" METER, BY CITY OF WEST LINN
14. INSTALL 8" FIRE TAP TO 18" EXISTING MAIN
15. INSTALL 6" FIRE TAP TO 18" EXISTING MAIN
16. INSTALL STANDARD FIRE HYDRANT ASSEMBLY, SEE DETAIL X
17. INSTALL 5106-LA VAULT AND 8" DDCV.
18. INSTALL 1" WATER FROM METER TO PLUMBING CONNECTION.
19. DOMESTIC WATER CONNECTION TO PLUMBING
20. FIRE WATER CONNECTION TO PLUMBING
21. RIPRAP PAD
22. INSTALL 48"x30' CULVERT

LEGEND

- STORM LINE
- FIRE WATER LINE
- SWALE
- CATCH BASIN
- THRUST BLOCK
- FIRE HYDRANT ASSEMBLY
- WATER VALVE
- LIGHT POLE
- WATER METER
- BACKFLOW PREVENTER
- STANDARD MANHOLE
- RIPRAP PAD

CONDITIONAL USE PERMIT SUBMITTAL - 4/11/16

M.
Architecture ▪ Interiors
Planning ▪ Engineering

Portland, OR
503.224.9560
Vancouver, WA
360.695.7879
Seattle, WA
206.749.9993
www.mcknze.com

MACKENZIE.
DESIGN DRIVEN | CLIENT FOCUSED

Client
VK NORTHWEST, INC.
12700 SE MCLOUGHLIN BLVD.
MILWAUKIE, OR 97222

Project
NORTHWEST SELF STORAGE 2400 AND 2450 WILLAMETTE FALLS DRIVE

REVISIONS:

REVISION DELTA	REVISION DELTA CLOSING DATE

SHEET TITLE:
UTILITY PLAN

DRAWN BY: BLF

CHECKED BY: MWB

SHEET:
C4.0

JOB NO. 2150120.00

Presumptive Approach Calculator ver. 1.2

Catchment Data

Catchment ID:	**BASIN 1**
Project Name:	**2150120.00 Northwest Self-Storage**
Date:	**02/01/10**
Project Address:	**2400 WILLAMETTE FALLS DRIVE**
Permit Number:	**0**
	0
Run Time	3/24/2016 5:55:53 PM
Designer:	**BLF**
Company:	**Mackenzie**

Drainage Catchment Information

Catchment ID	BASIN 1	
	Catchment Area	
Impervious Area	12,575	SF
Impervious Area	0.29	ac
Impervious Area Curve Number, CN_{imp}	98	
Time of Concentration, Tc, minutes	5	min.

Site Soils & Infiltration Testing Data

Infiltration Testing Procedure:	Open Pit Falling Head	
Native Soil Field Tested Infiltration Rate (I_{test}):	0.06	in/hr
Bottom of Facility Meets Required Separation From High Groundwater Per BES SWMM Section 1.4:	Yes	

Correction Factor Component

CF_{test} (ranges from 1 to 3)	2	

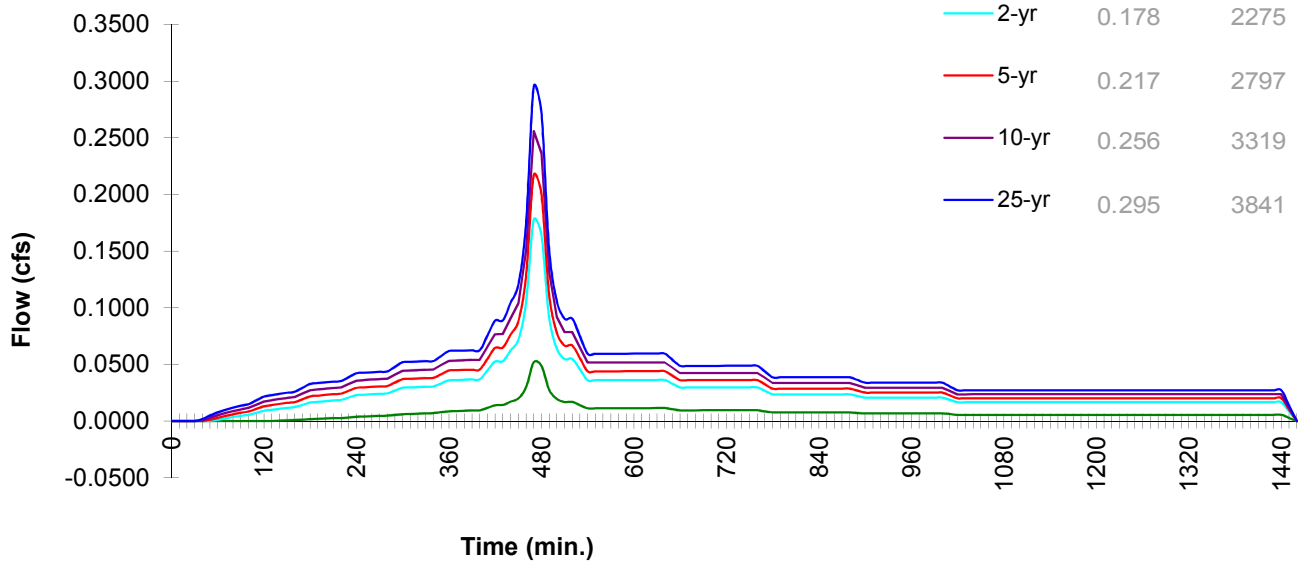
Design Infiltration Rates

I_{dsgn} for Native (I_{test} / CF_{test}):	0.03	in/hr	**Design infiltration rate < 0.5 in/hr**
I_{dsgn} for Imported Growing Medium:	2.00	in/hr	

Execute SBUH

SBUH Results

	Peak Rate (cfs)	Volume (cf)
PR	0.052	657
2-yr	0.178	2275
5-yr	0.217	2797
10-yr	0.256	3319
25-yr	0.295	3841



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Presumptive Approach Calculator ver. 1.2

Catchment ID: BASIN 1

Run Time 3/24/2016 5:55:53 PM

Project Name: 2150120.00 Northwest Self-Storage **Catchment ID:** BASIN 1 **Date:** 2/1/2010

imported file 120-NORTH POND.xls - 3/24/2016 5:55:55 PM

Instructions:

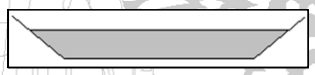
1. Identify which Stormwater Hierarchy Category the facility.
2. Select Facility Type.
3. Identify facility shape of surface facility to more accurately estimate surface volume, except for Swales and sloped planters that use the PAC Sloped Facility Worksheet to enter data.
4. Select type of facility configuration.
5. Complete data entry for all highlighted cells.

Catchment facility will meet Hierarchy Category: 3

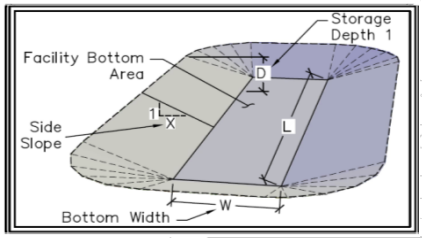
Goal Summary:

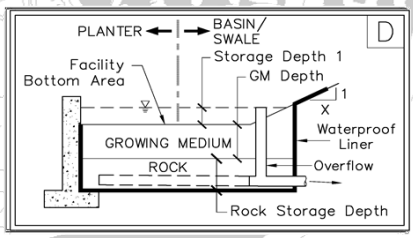
Hierarchy Category	SWMM Requirement	RESULTS box below needs to display…	
		Pollution Reduction as a	10-yr (aka disposal) as a
3	Off-site flow to drainageway, river, or storm-only pipe system.	PASS	N/A

Facility Type = Basin



Facility Shape: Rectangle/Square **Facility Configuration:** D





Calculation Guide
Max. Rock Stor. Bottom Area
232 SF

DATA FOR ABOVE GRADE STORAGE COMPONENT

Facility Bottom Area =	120	sf
Bottom Width =	10.0	ft
Facility Side Slope =	3	to 1
Storage Depth 1 =	9	in
Growing Medium Depth =	18	in
Freeboard Depth =	3	in

BELOW GRADE STORAGE

Rock Stor…

Surface Capacity at Depth 1 =	132	cf
Infiltration Area at 75% Depth1 =	204	SF
GM Design Infiltration Rate =	2.00	in/hr
Infiltration Capacity =	0.009	cfs

Rock Storage Capacity =		cf
Native Design Infiltration Rate =		in/hr
Infiltration Capacity =		cfs

RESULTS

Pollution Reduction: **PASS** | Overflow Volume: 0 CF | **92%** Surf. Cap. Used | Run PAC

Output File

	2-yr	5-yr	10-yr	25-yr
Peak cfs	0.178	0.217	0.256	0.295

Current data has been exported:

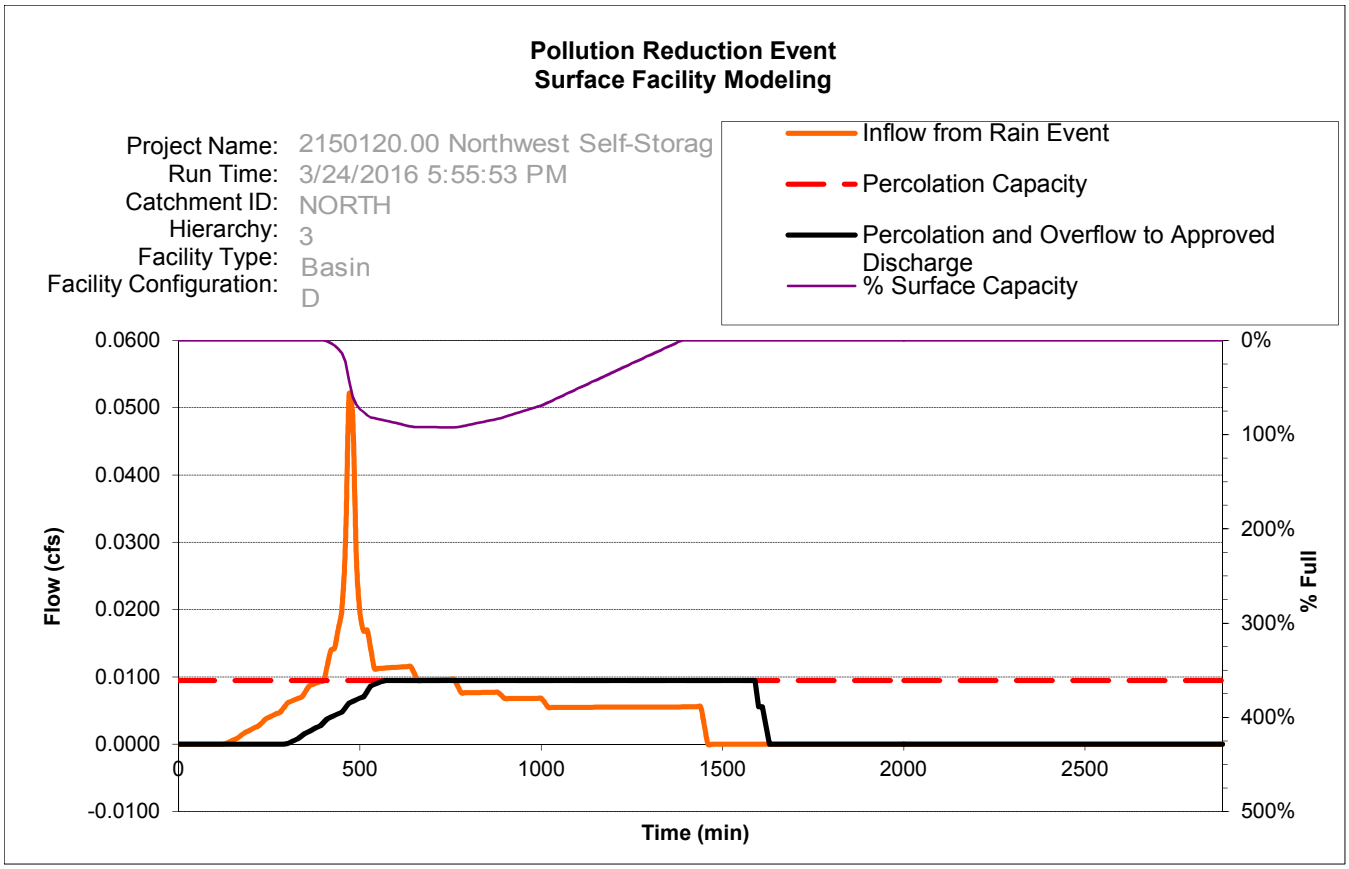
120-NORTH POND (BASIN 1).xls
3/24/2016 6:21:42 PM

FACILITY FACTS

Total Facility Area Including Freeboard =	288 SF
Sizing Ratio (Total Facility Area / Catchment Area) =	0.023

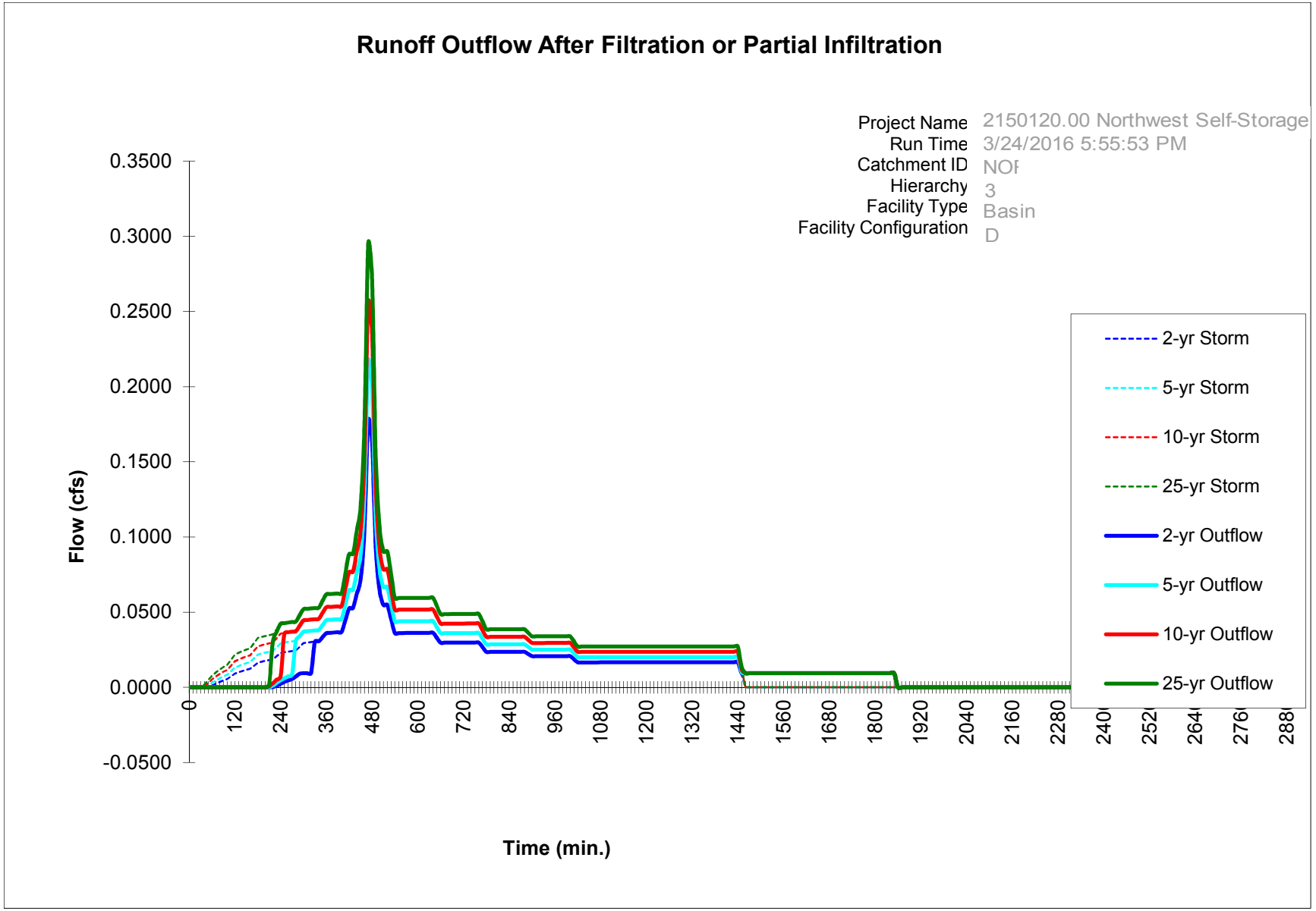
BES - Presumptive Approach Calculator - Ver 1.2

PR Con-D



BES - Presumptive Approach Calculator - Ver 1.2

Output Chart



Presumptive Approach Calculator ver. 1.2

Catchment Data

Catchment ID:	**BASIN 2**
Project Name:	**2150120.00 Northwest Self-Storage**
Date:	**02/01/10**
Project Address:	**2400 WILLAMETTE FALLS DRIVE**
Permit Number:	**0**
	0
Run Time	3/24/2016 6:27:15 PM
Designer:	**BLF**
Company:	**Mackenzie**

Drainage Catchment Information

Catchment ID	BASIN 2	
	Catchment Area	
Impervious Area	12,100	SF
Impervious Area	0.28	ac
Impervious Area Curve Number, CN_{imp}	98	
Time of Concentration, Tc, minutes	5	min.

Site Soils & Infiltration Testing Data

Infiltration Testing Procedure:	Open Pit Falling Head	
Native Soil Field Tested Infiltration Rate (I_{test}):	0.06	in/hr
Bottom of Facility Meets Required Separation From High Groundwater Per BES SWMM Section 1.4:	Yes	

Correction Factor Component

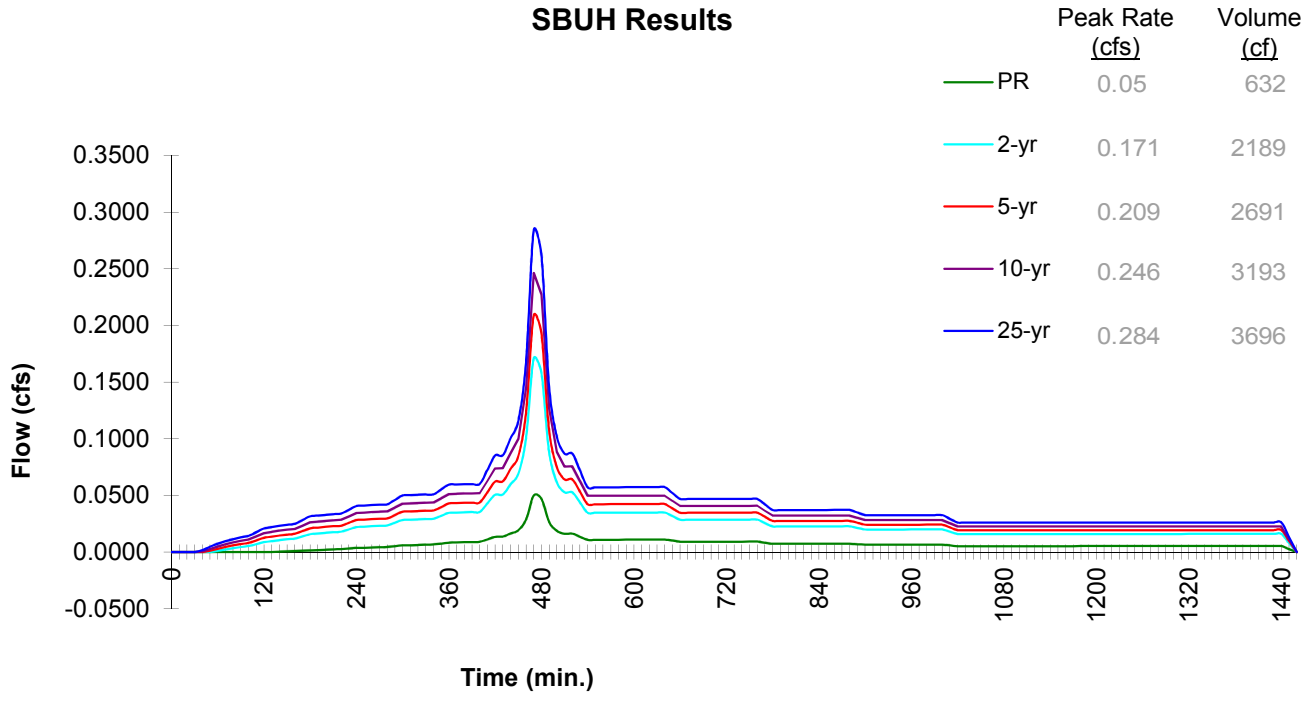
CF_{test} (ranges from 1 to 3)	2	

Design Infiltration Rates

I_{dsgn} for Native (I_{test} / CF_{test}):	0.03	in/hr	**Design infiltration rate < 0.5 in/hr**
I_{dsgn} for Imported Growing Medium:	2.00	in/hr	

Execute SBUH

SBUH Results



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Presumptive Approach Calculator ver. 1.2

Catchment ID: BASIN 2

Run Time 3/24/2016 6:27:15 PM

Project Name: 2150120.00 Northwest Self-Storage **Catchment ID:** BASIN 2 **Date:** 2/1/2010

imported file 120-SOUTH POND.xls - 3/24/2016 6:27:16 PM

Instructions:

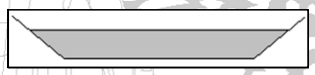
1. Identify which Stormwater Hierarchy Category the facility.
2. Select Facility Type.
3. Identify facility shape of surface facility to more accurately estimate surface volume, except for Swales and sloped planters that use the PAC Sloped Facility Worksheet to enter data.
4. Select type of facility configuration.
5. Complete data entry for all highlighted cells.

Catchment facility will meet Hierarchy Category: 3

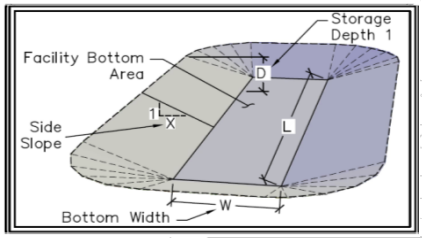
Goal Summary:

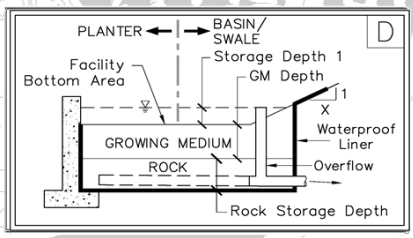
Hierarchy Category	SWMM Requirement	RESULTS box below needs to display…	
		Pollution Reduction as a	10-yr (aka disposal) as a
3	Off-site flow to drainageway, river, or storm-only pipe system.	PASS	N/A

Facility Type = Basin



Facility Shape: Rectangle/Square **Facility Configuration:** D





Calculation Guide
Max. Rock Stor. Bottom Area
225 SF

DATA FOR ABOVE GRADE STORAGE COMPONENT

Facility Bottom Area =	115	sf
Bottom Width =	10.0	ft
Facility Side Slope =	3	to 1
Storage Depth 1 =	9	in
Growing Medium Depth =	18	in
Freeboard Depth =	3	in

BELOW GRADE STORAGE

Rock Stor…

Surface Capacity at Depth 1 =	128	cf
Infiltration Area at 75% Depth1 =	197	SF
GM Design Infiltration Rate =	2.00	in/hr
Infiltration Capacity =	0.009	cfs

Rock Storage Capacity =		cf
Native Design Infiltration Rate =		in/hr
Infiltration Capacity =		cfs

RESULTS

Pollution Reduction: **PASS** | Overflow Volume: 0 CF | **92%** Surf. Cap. Used | Run PAC

Output File

	2-yr	5-yr	10-yr	25-yr
Peak cfs	0.171	0.209	0.246	0.284

Current data has been exported:

120-SOUTH POND (BASIN 2).xls
3/24/2016 6:27:39 PM

FACILITY FACTS

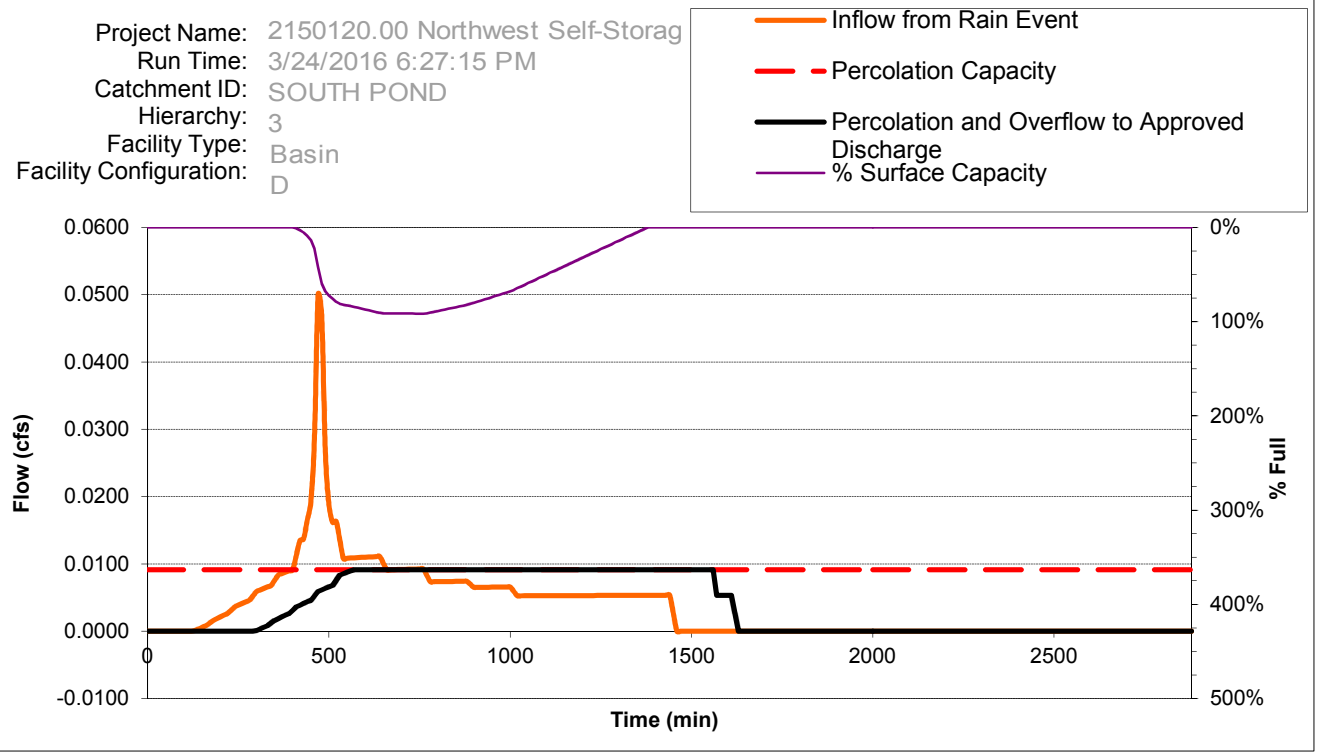
Total Facility Area Including Freeboard =	280 SF
Sizing Ratio (Total Facility Area / Catchment Area) =	0.023

BES - Presumptive Approach Calculator - Ver 1.2

PR Con-D

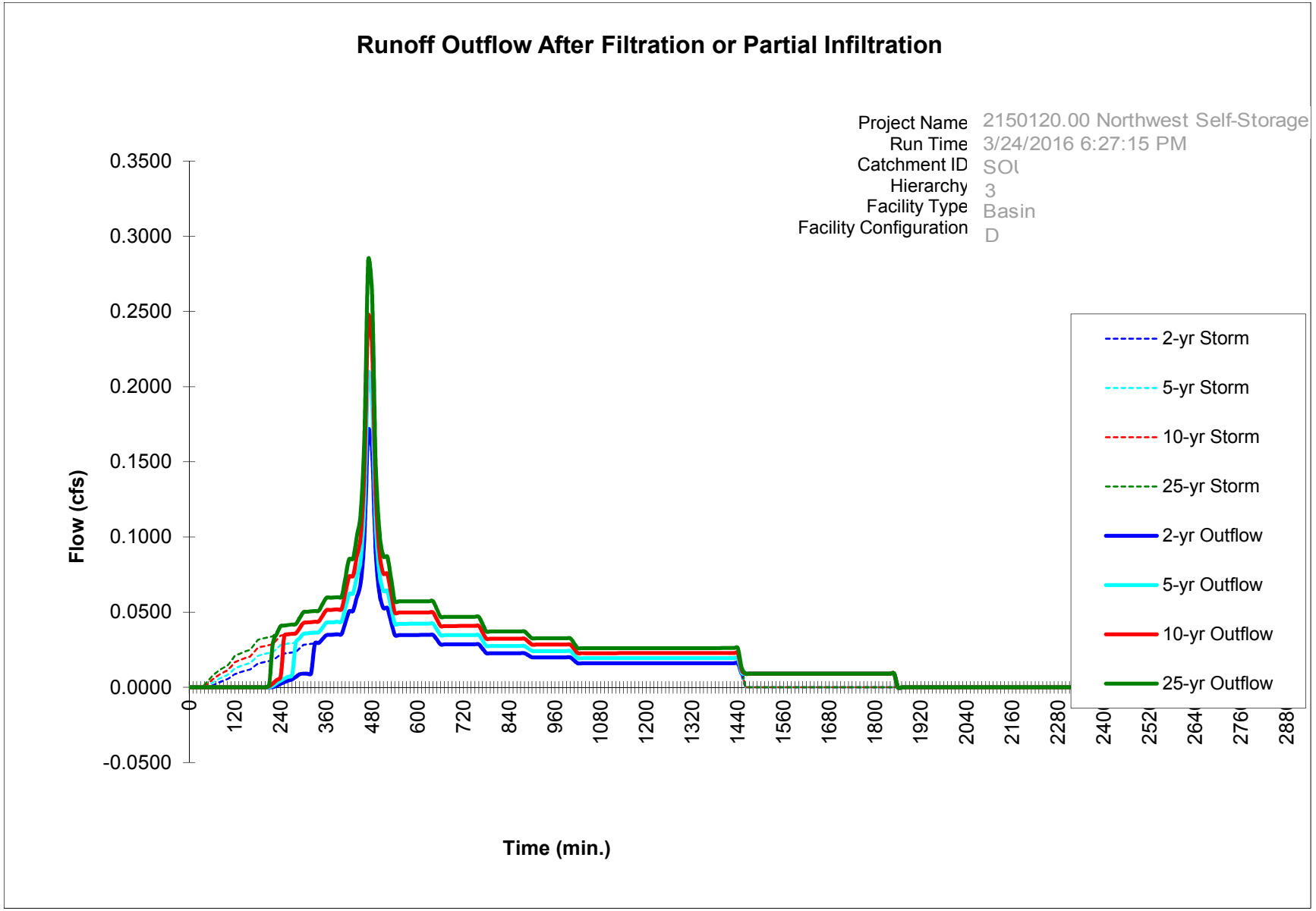
Pollution Reduction Event
Surface Facility Modeling

Project Name: 2150120.00 Northwest Self-Storag
Run Time: 3/24/2016 6:27:15 PM
Catchment ID: SOUTH POND
Hierarchy: 3
Facility Type: Basin
Facility Configuration: D



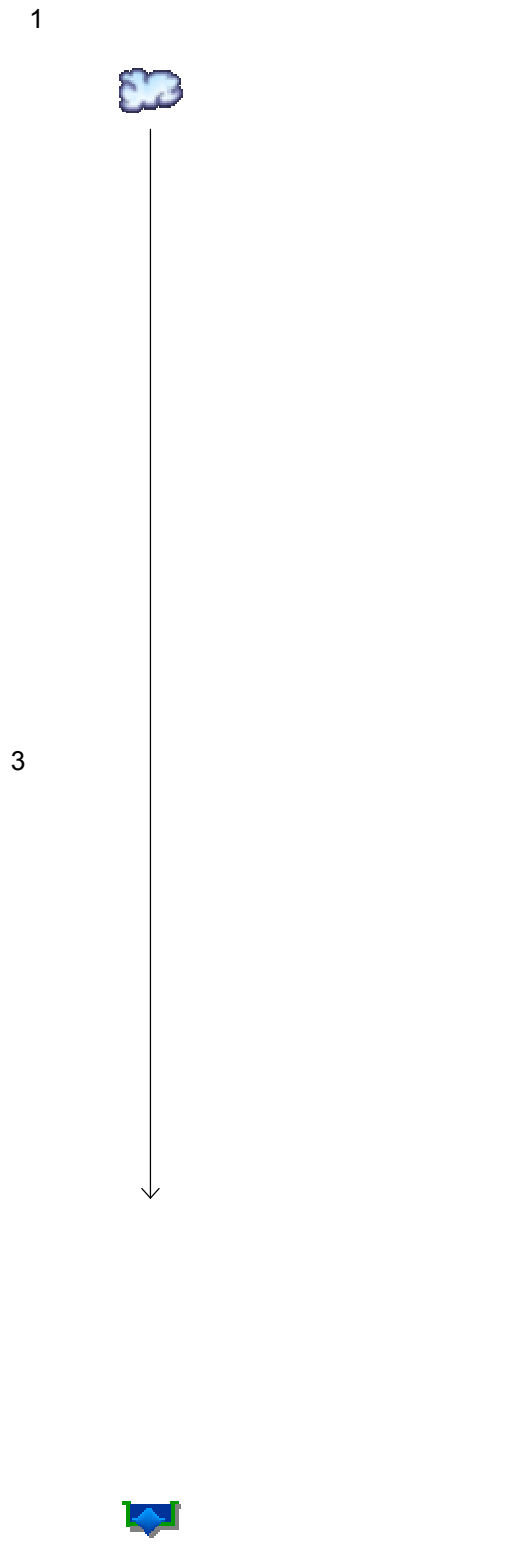
BES - Presumptive Approach Calculator - Ver 1.2

Output Chart



Watershed Model Schematic

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2014 by Autodesk, Inc. v10.3



Legend

Hyd.	Origin	Description
1	SCS Runoff	NORTH ROOF
2	SCS Runoff	EXISTING NORTH
3	Reservoir	NORTH POND RELEASE

Hydrograph Return Period Recap

Hyd. No.	Hydrograph type (origin)	Inflow hyd(s)	Peak Outflow (cfs)								Hydrograph Description
			1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr	
1	SCS Runoff	------	-------	0.145	-------	0.192	0.226	0.259	-------	0.292	NORTH ROOF
2	SCS Runoff	------	-------	0.057	-------	0.098	0.130	0.164	-------	0.198	EXISTING NORTH
3	Reservoir	1	-------	0.057	-------	0.098	0.117	0.134	-------	0.150	NORTH POND RELEASE

Hydrograph Summary Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2014 by Autodesk, Inc. v10.3

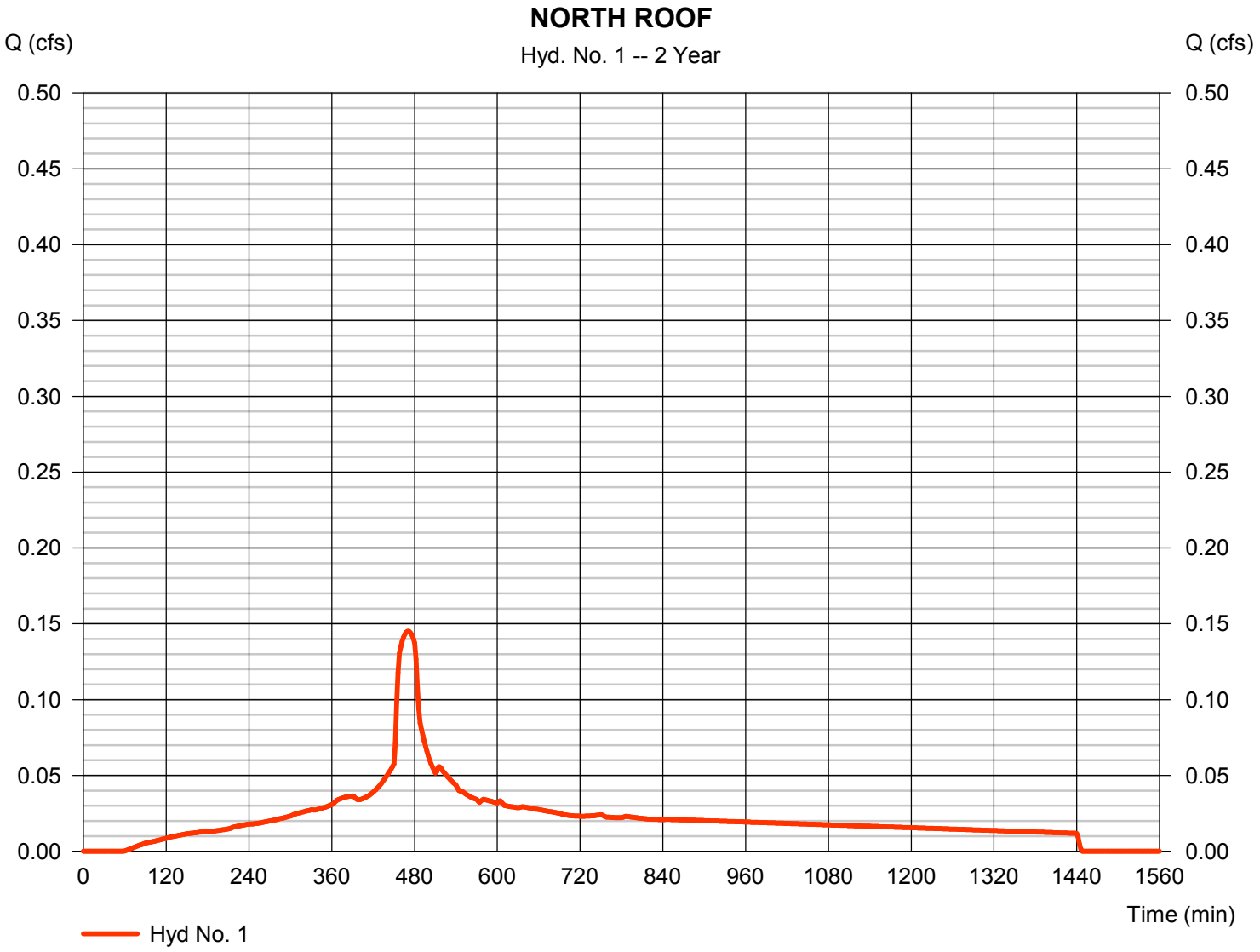
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	0.145	2	470	2,036	------	------	------	NORTH ROOF
2	SCS Runoff	0.057	2	486	1,027	------	------	------	EXISTING NORTH
3	Reservoir	0.057	2	504	2,033	1	101.24	277	NORTH POND RELEASE

Hydrograph Report

Hyd. No. 1

NORTH ROOF

Hydrograph type	= SCS Runoff	Peak discharge	= 0.145 cfs
Storm frequency	= 2 yrs	Time to peak	= 470 min
Time interval	= 2 min	Hyd. volume	= 2,036 cuft
Drainage area	= 0.289 ac	Curve number	= 98
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 2.30 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Summary Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2014 by Autodesk, Inc. v10.3

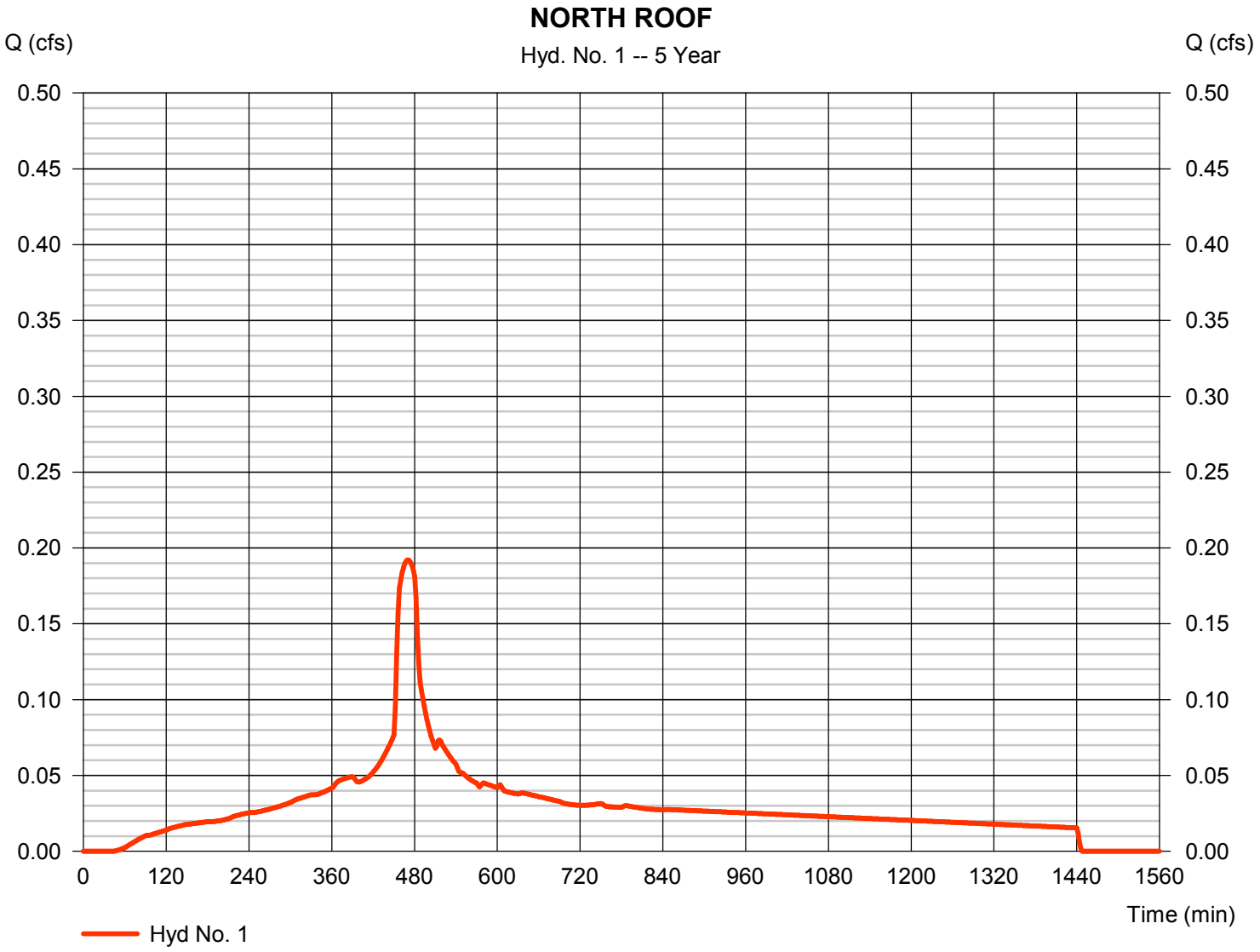
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	0.192	2	470	2,720	------	------	------	NORTH ROOF
2	SCS Runoff	0.098	2	486	1,617	------	------	------	EXISTING NORTH
3	Reservoir	0.098	2	494	2,717	1	101.57	375	NORTH POND RELEASE

Hydrograph Report

Hyd. No. 1

NORTH ROOF

Hydrograph type	= SCS Runoff	Peak discharge	= 0.192 cfs
Storm frequency	= 5 yrs	Time to peak	= 470 min
Time interval	= 2 min	Hyd. volume	= 2,720 cuft
Drainage area	= 0.289 ac	Curve number	= 98
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.00 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Summary Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2014 by Autodesk, Inc. v10.3

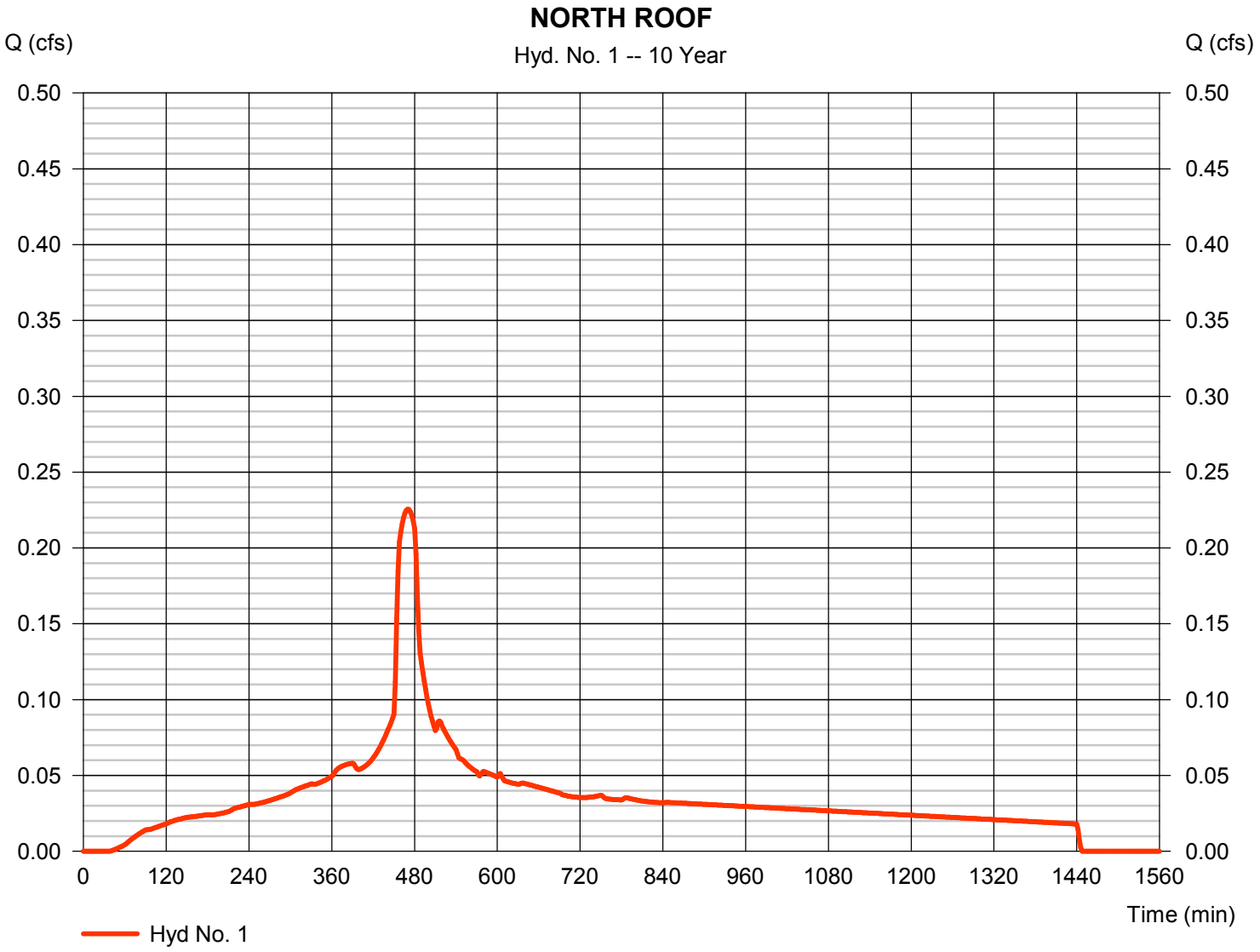
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	0.226	2	470	3,209	------	------	------	NORTH ROOF
2	SCS Runoff	0.130	2	484	2,066	------	------	------	EXISTING NORTH
3	Reservoir	0.117	2	492	3,206	1	101.83	452	NORTH POND RELEASE

Hydrograph Report

Hyd. No. 1

NORTH ROOF

Hydrograph type	= SCS Runoff	Peak discharge	= 0.226 cfs
Storm frequency	= 10 yrs	Time to peak	= 470 min
Time interval	= 2 min	Hyd. volume	= 3,209 cuft
Drainage area	= 0.289 ac	Curve number	= 98
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Summary Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2014 by Autodesk, Inc. v10.3

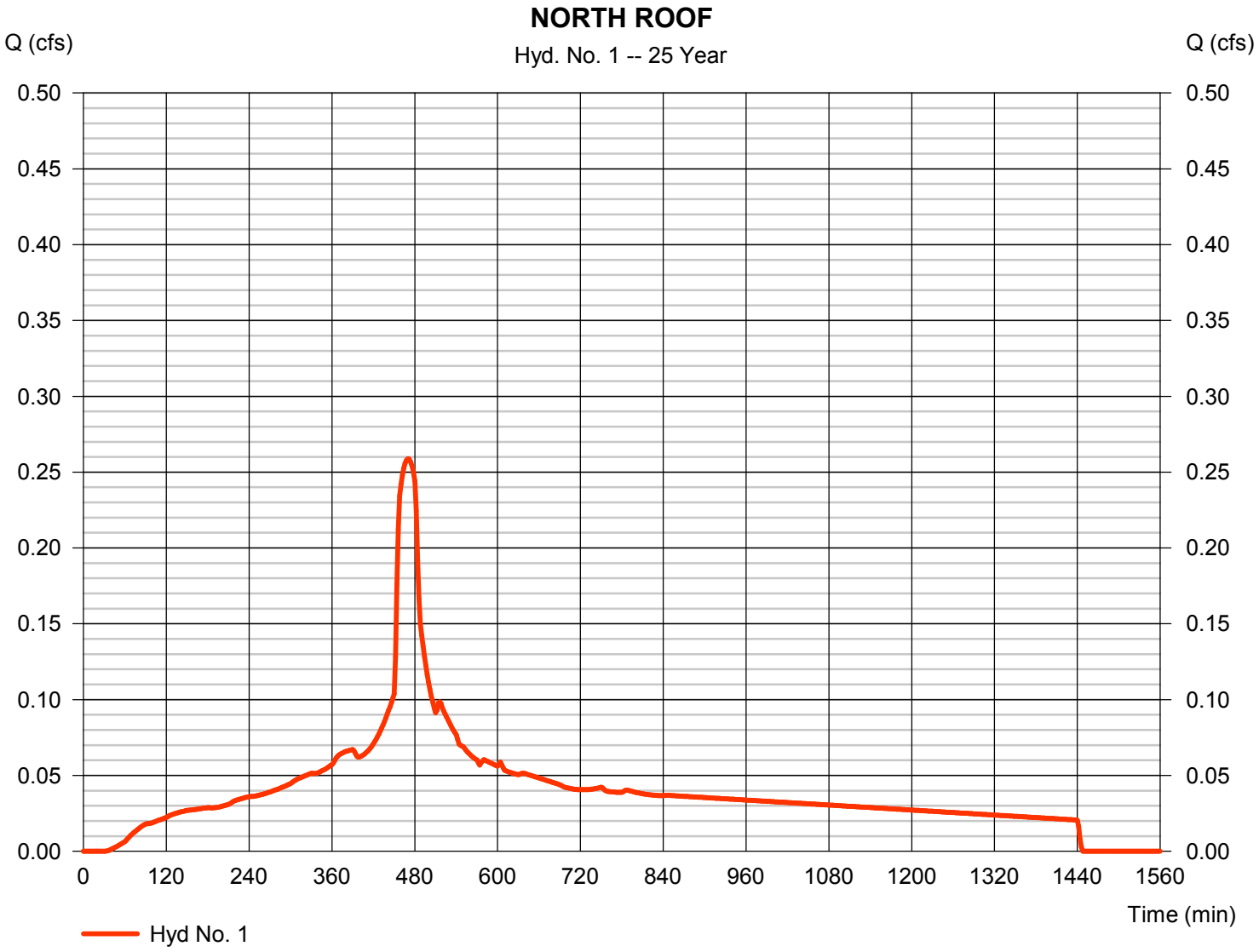
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	0.259	2	470	3,699	------	------	------	NORTH ROOF
2	SCS Runoff	0.164	2	484	2,529	------	------	------	EXISTING NORTH
3	Reservoir	0.134	2	492	3,696	1	102.12	535	NORTH POND RELEASE

Hydrograph Report

Hyd. No. 1

NORTH ROOF

Hydrograph type	= SCS Runoff	Peak discharge	= 0.259 cfs
Storm frequency	= 25 yrs	Time to peak	= 470 min
Time interval	= 2 min	Hyd. volume	= 3,699 cuft
Drainage area	= 0.289 ac	Curve number	= 98
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 4.00 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Summary Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2014 by Autodesk, Inc. v10.3

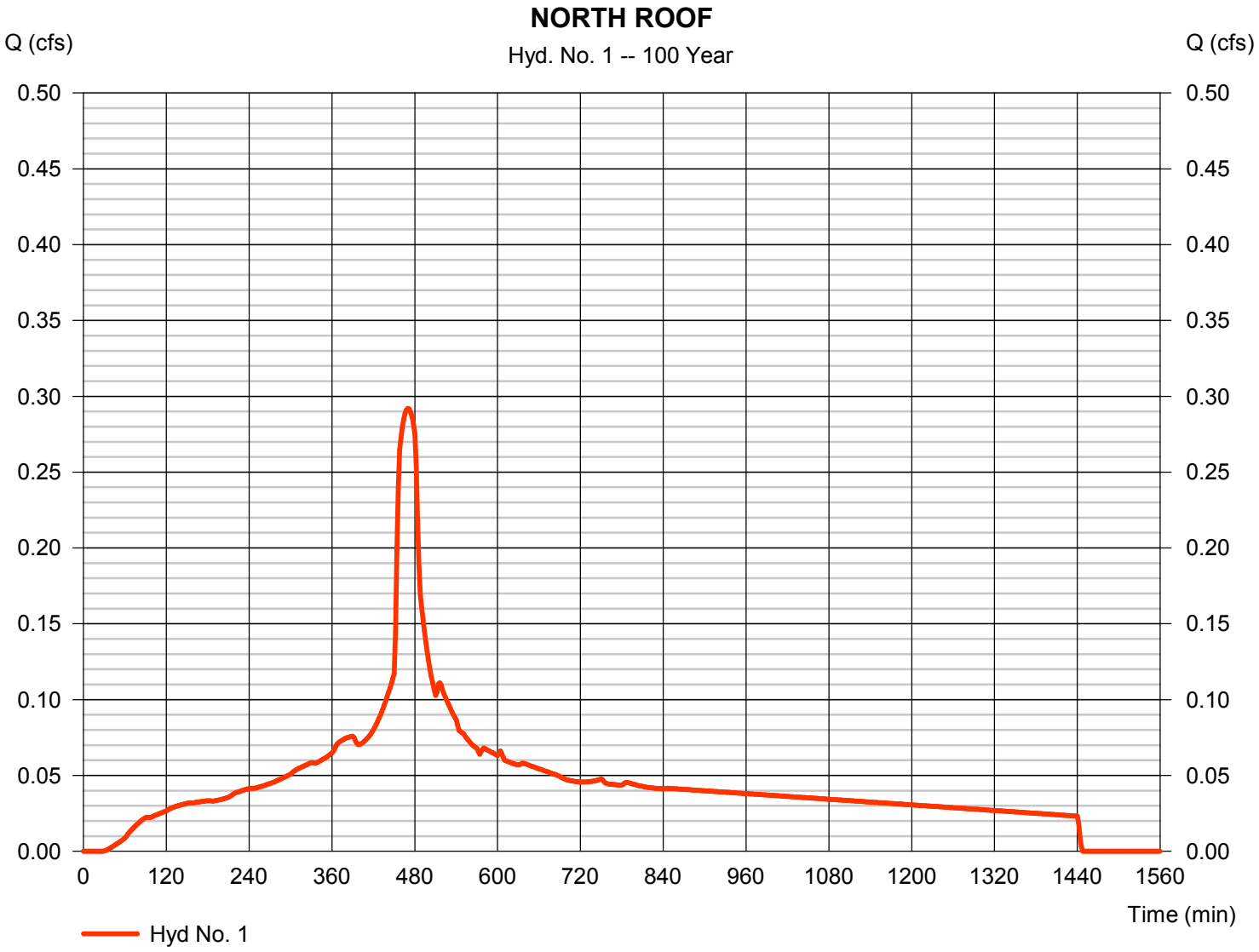
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	0.292	2	470	4,189	------	------	------	NORTH ROOF
2	SCS Runoff	0.198	2	484	3,004	------	------	------	EXISTING NORTH
3	Reservoir	0.150	2	492	4,187	1	102.45	617	NORTH POND RELEASE

Hydrograph Report

Hyd. No. 1

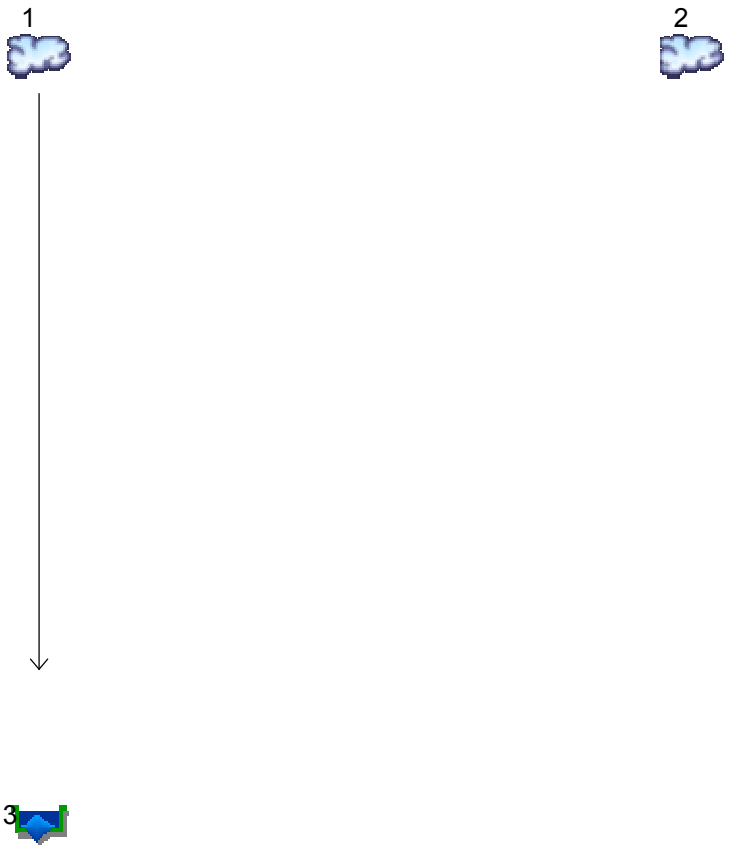
NORTH ROOF

Hydrograph type	= SCS Runoff	Peak discharge	= 0.292 cfs
Storm frequency	= 100 yrs	Time to peak	= 470 min
Time interval	= 2 min	Hyd. volume	= 4,189 cuft
Drainage area	= 0.289 ac	Curve number	= 98
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 4.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= 484



Watershed Model Schematic

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2014 by Autodesk, Inc. v10.3



Legend

Hyd.	Origin	Description
1	SCS Runoff	SOUTH ROOF
2	SCS Runoff	EXISTING SOUTH
3	Reservoir	SOUTH POND RELEASE

Hydrograph Return Period Recap

Hyd. No.	Hydrograph type (origin)	Inflow hyd(s)	Peak Outflow (cfs)								Hydrograph Description
			1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr	
1	SCS Runoff	------	-------	0.140	-------	0.185	0.217	0.249	-------	0.281	SOUTH ROOF
2	SCS Runoff	------	-------	0.055	-------	0.095	0.125	0.157	-------	0.190	EXISTING SOUTH
3	Reservoir	1	-------	0.055	-------	0.095	0.114	0.130	-------	0.146	SOUTH POND RELEASE

Hydrograph Summary Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2014 by Autodesk, Inc. v10.3

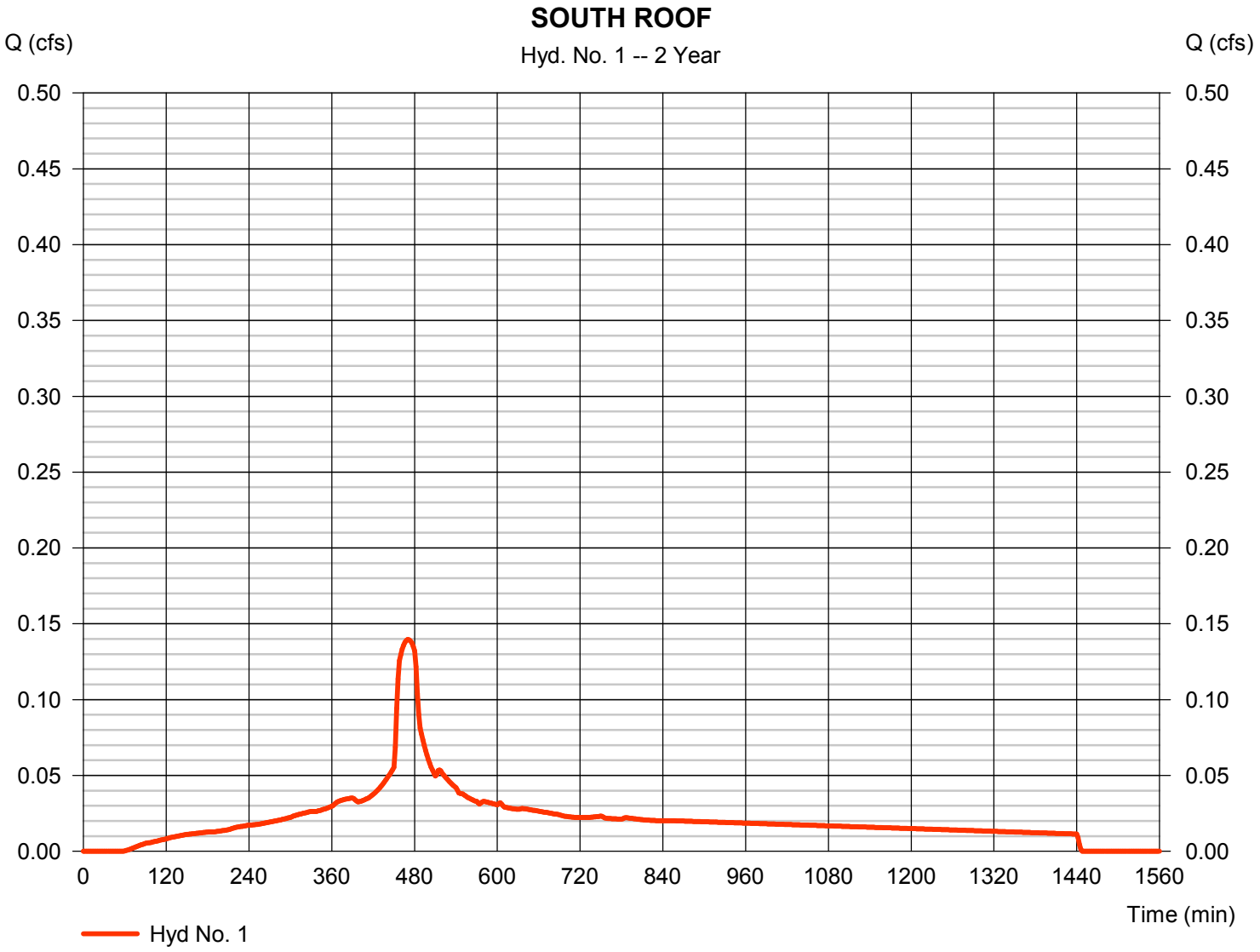
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	0.140	2	470	1,959	------	------	------	SOUTH ROOF
2	SCS Runoff	0.055	2	486	989	------	------	------	EXISTING SOUTH
3	Reservoir	0.055	2	504	1,956	1	101.21	268	SOUTH POND RELEASE

Hydrograph Report

Hyd. No. 1

SOUTH ROOF

Hydrograph type	= SCS Runoff	Peak discharge	= 0.140 cfs
Storm frequency	= 2 yrs	Time to peak	= 470 min
Time interval	= 2 min	Hyd. volume	= 1,959 cuft
Drainage area	= 0.278 ac	Curve number	= 98
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 2.30 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Summary Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2014 by Autodesk, Inc. v10.3

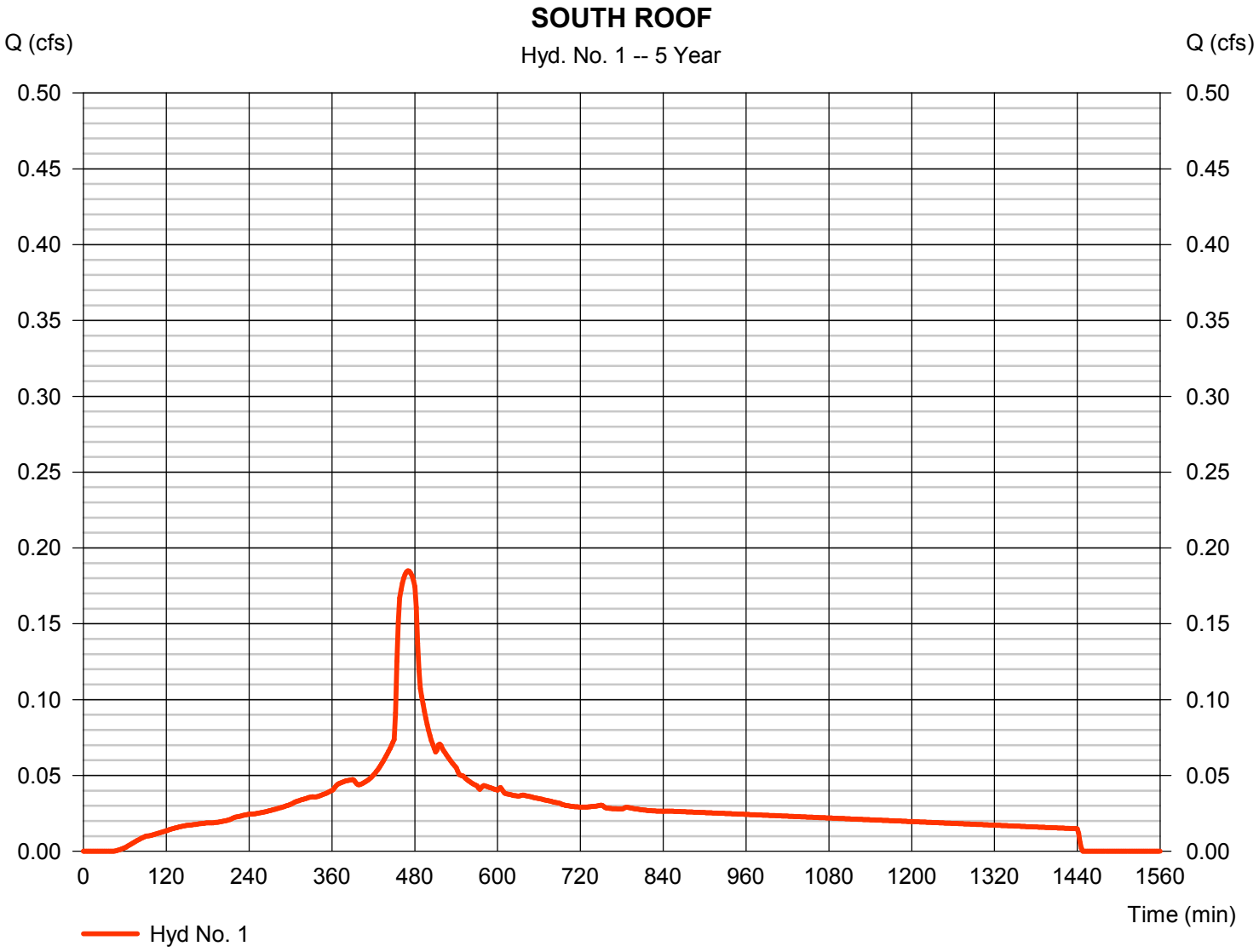
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	0.185	2	470	2,617	------	------	------	SOUTH ROOF
2	SCS Runoff	0.095	2	486	1,556	------	------	------	EXISTING SOUTH
3	Reservoir	0.095	2	492	2,614	1	101.53	361	SOUTH POND RELEASE

Hydrograph Report

Hyd. No. 1

SOUTH ROOF

Hydrograph type	= SCS Runoff	Peak discharge	= 0.185 cfs
Storm frequency	= 5 yrs	Time to peak	= 470 min
Time interval	= 2 min	Hyd. volume	= 2,617 cuft
Drainage area	= 0.278 ac	Curve number	= 98
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.00 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Summary Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2014 by Autodesk, Inc. v10.3

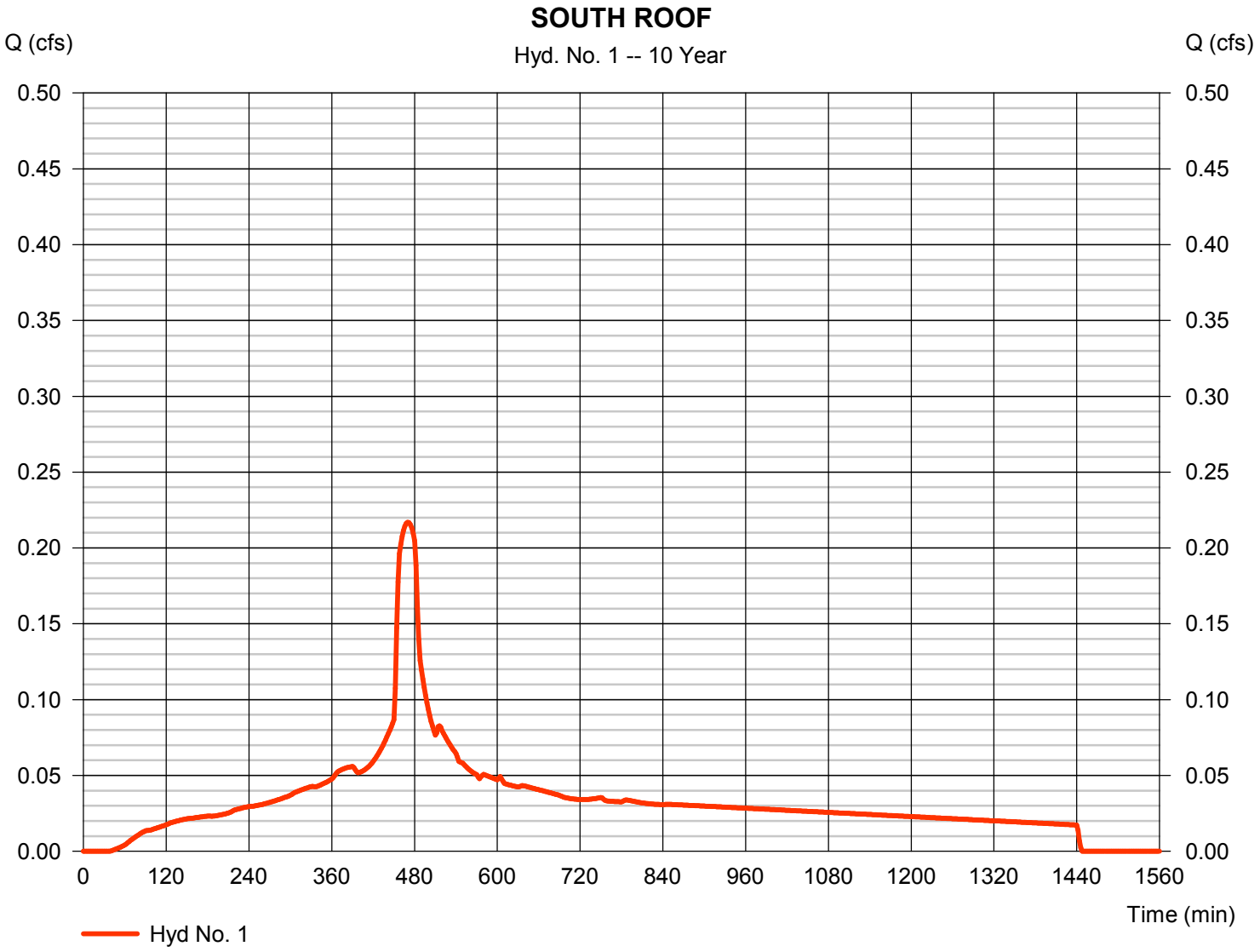
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	0.217	2	470	3,088	------	------	------	SOUTH ROOF
2	SCS Runoff	0.125	2	484	1,988	------	------	------	EXISTING SOUTH
3	Reservoir	0.114	2	492	3,085	1	101.77	434	SOUTH POND RELEASE

Hydrograph Report

Hyd. No. 1

SOUTH ROOF

Hydrograph type	= SCS Runoff	Peak discharge	= 0.217 cfs
Storm frequency	= 10 yrs	Time to peak	= 470 min
Time interval	= 2 min	Hyd. volume	= 3,088 cuft
Drainage area	= 0.278 ac	Curve number	= 98
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Summary Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2014 by Autodesk, Inc. v10.3

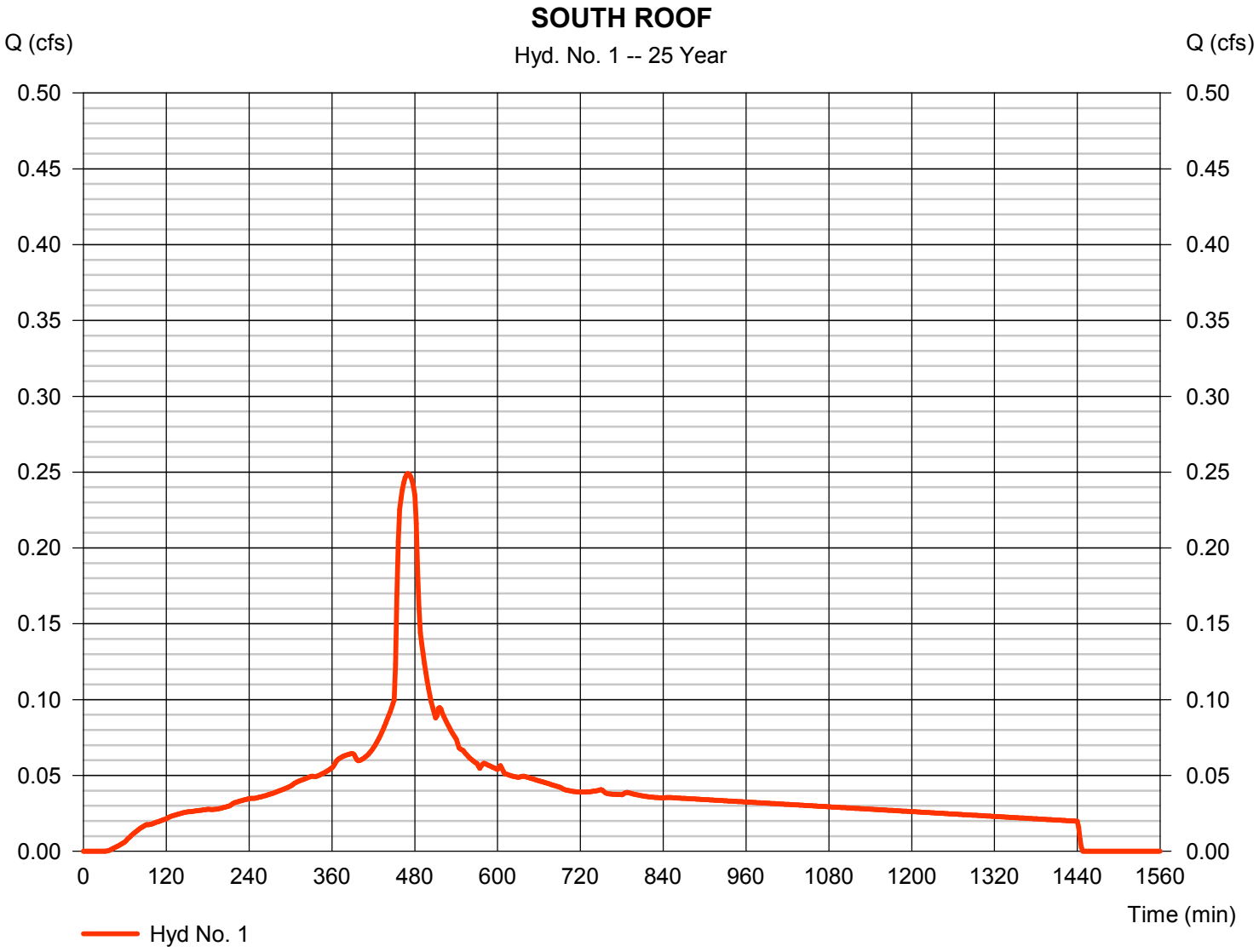
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	0.249	2	470	3,559	------	------	------	SOUTH ROOF
2	SCS Runoff	0.157	2	484	2,434	------	------	------	EXISTING SOUTH
3	Reservoir	0.130	2	492	3,557	1	102.04	513	SOUTH POND RELEASE

Hydrograph Report

Hyd. No. 1

SOUTH ROOF

Hydrograph type	= SCS Runoff	Peak discharge	= 0.249 cfs
Storm frequency	= 25 yrs	Time to peak	= 470 min
Time interval	= 2 min	Hyd. volume	= 3,559 cuft
Drainage area	= 0.278 ac	Curve number	= 98
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 4.00 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Summary Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2014 by Autodesk, Inc. v10.3

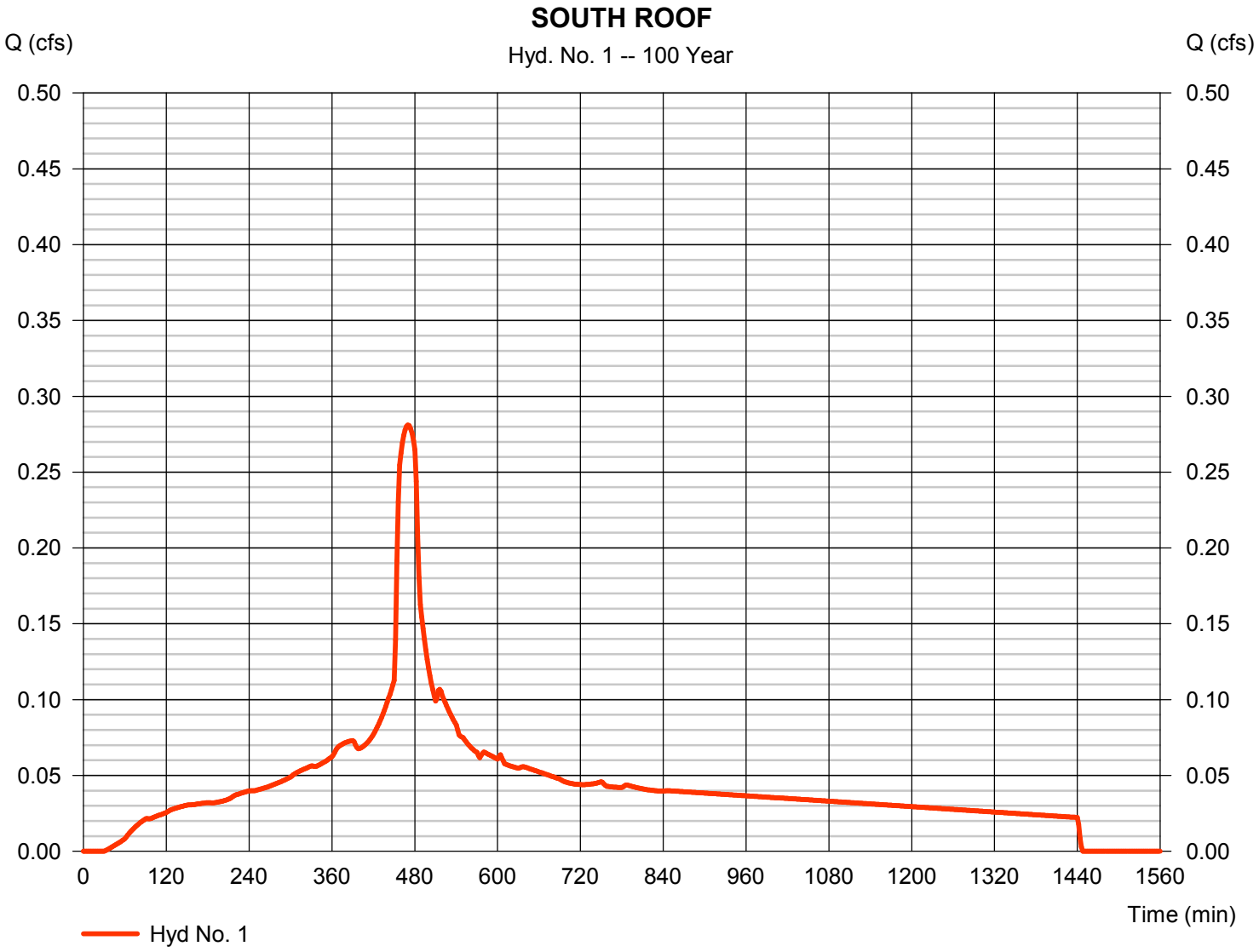
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	0.281	2	470	4,031	------	------	------	SOUTH ROOF
2	SCS Runoff	0.190	2	484	2,891	------	------	------	EXISTING SOUTH
3	Reservoir	0.146	2	492	4,028	1	102.34	591	SOUTH POND RELEASE

Hydrograph Report

Hyd. No. 1

SOUTH ROOF

Hydrograph type	= SCS Runoff	Peak discharge	= 0.281 cfs
Storm frequency	= 100 yrs	Time to peak	= 470 min
Time interval	= 2 min	Hyd. volume	= 4,031 cuft
Drainage area	= 0.278 ac	Curve number	= 98
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 4.50 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= 484



MACKENZIE.

DESIGN DRIVEN | CLIENT FOCUSED

April 4, 2016

City of West Linn
Attention: Khoi Le
22500 Salamo Road
West Linn, OR 97068

Re: **Northwest Self Storage West Linn**
Traffic Impact Letter
Project Number 2150120.01

Dear Mr. Le:

Mackenzie has prepared this letter to address the Traffic Impact Analysis (TIA) requirements for the proposed self-storage facility in West Linn, Oregon, and specifically to request a variance from access spacing standards for one of two proposed driveways. The facility will be located on Willamette Falls Drive (a City arterial) between 7th Street and 6th Street.

EXISTING CONDITIONS

The project site is zoned General Commercial (GC) and consists of four tax lots: 2000 and 5300 on Map 2-1E-35D and 3400 and 3500 on Map 2-1E-35DD. The 1.58-acre site, spanning postal addresses 2400-2450 Willamette Falls Drive, currently is undeveloped. Trees and brush currently cover the site; vegetation is especially dense along Bernert Creek, which flows generally easterly across the southern portion of the site. The embankment supporting Interstate 205 and its northbound on-ramp from 10th Street are adjacent to the north. Adjoining parcels to the east and west are developed with multi-tenant commercial buildings. The parcel to the east (2500 Willamette Falls Drive) has a driveway access onto Willamette Falls Drive that is aligned with 6th Street to the south, and the parcel to the west (2350 Willamette Falls Drive) has a driveway access approximately 65 feet from the storage facility site's southwest corner (measured from property corner to driveway centerline) and approximately 170 feet from the subject site's proposed west driveway.

SITE DEVELOPMENT

The proposed multistory facility will contain approximately 96,710 square feet of building area, primarily in storage units, but including a small area for an on-site management office and restrooms. An unheated vehicle drive aisle (breezeway) is proposed through the first floor to provide access to the storage units and elevators; the breezeway is excluded from the foregoing building floor area value. The building will be sited near the north property line to preserve the front area nearer Willamette Falls Drive as open space. For reference, the proposed site plan is attached as Exhibit A.

Access

Two accesses are proposed along Willamette Falls Drive, which has a posted speed limit of 45 mph. The two proposed accesses will be approximately 370 feet apart from each other (measured between centerlines) and will connect via an on-site drive aisle/breezeway that passes through the building. Together, the two accesses support different types of activity at the site. A graphic depicting the proposed access layout is attached at Exhibit B.

The 24-foot-wide primary access at the west is designed to accommodate entering and exiting vehicles at a point approximately 105 feet east of the southwest property corner (as measured to the driveway centerline) and approximately 170 feet east of the private driveway serving the adjacent parcel. This proposed west driveway will accommodate all entering vehicles plus exiting trips by employees of the facility and visitors who are not accessing storage units: they can park in spaces in the west end of the building, and, when their visit is complete, they can depart again by way of the west driveway.

The proposed 20-foot-wide access at the east is designed to accommodate only exiting vehicles that have proceeded all the way through the building's central breezeway, typically to drop off or pick up items in storage units. There will be no entering movements at this driveway. This access is located at a point approximately 15 feet west of the southeast property corner (as measured to the driveway centerline) and approximately 45 feet west of the 6th Street intersection and an aligned private driveway on the north side of Willamette Falls Drive.

According to AASHTO's *A Policy on Geometric Design of Highways and Streets*, 6th Edition (2011), the recommended intersection sight distance on a 50-mph design speed roadway is 555 feet for a left turn from stop and 480 feet for a right-turn from stop. Willamette Falls Drive has few bends and a minimal slope in the vicinity of the project. The 555-foot intersection sight distance is met at the two proposed driveways.

Trip Generation

The proposed facility will contain approximately 96,710 square feet of floor area and will include four stories of storage space, a small office space for management of the facility, restrooms, and a mezzanine level. Trip generation estimates for the proposed storage facility were prepared based on the client's similar 71,552 square foot storage facility in Beaverton (9065 SW Canyon Road, 97225). Security records from that facility suggest the site generates 4 to 6 peak hour trips by storage customers with about half entering and half exiting the facility. For reference, a summary of the Beaverton facility data is attached as Exhibit C.

Factoring up the Beaverton trip values based on the proportionate building areas, the West Linn facility may generate approximately 5 to 8 peak hour trips by storage customers, including 3 to 4 exiting trips. These are the trips that may be anticipated to leave the proposed east driveway during a peak hour, i.e., during one hour between 7:00 and 9:00 AM or during one hour between 4:00 and 6:00 PM.

By contrast, the industry standard reference, the Institute of Transportation Engineers' *Trip Generation Manual*, 9th Edition (2012), suggests a 96,710 SF "Mini Warehouse" (LUC 151) could generate 14 AM peak hour trips and 25 PM peak hour trips. Note these are total trips, including trips made by customers, employees, and visitors, and ITE provides no distinction among the user types making the trips. Therefore, since employees and visitors at the proposed facility will exit via the west driveway, the data from a local, contemporary, and comparable storage facility is expected to provide a more accurate estimate of trip generation at the east driveway.

Traffic Impact

Recent turning movement counts were obtained for the 10th Street/Willamette Falls Drive intersection to determine the project's impact. Counts conducted in April 2015 reported 687 vehicles traveling on Willamette Falls Drive during the AM peak hour (469 westbound, 218 eastbound), and 891 vehicles traveling the roadway during the PM peak hour (290 westbound, 601 eastbound). These traffic volumes are assumed to be fairly representative of traffic volumes passing the subject site on Willamette Falls Drive since there are only four private driveways and only one local street intersection between 10th Street and 6th Street. Based on these existing traffic volumes it is anticipated the project will increase roadway volumes by approximately 1% during either peak hour. Copies of the count reports are attached as Exhibit D.

DRIVEWAY VARIANCE

The requested variance is to permit a driveway access on Willamette Falls Drive near the east property line even though the access will be located at less than the applicable minimum spacing standard (150 feet) from an existing driveway on the adjacent property.

Code Requirement

Under the West Linn Community Development Code (CDC) Chapter 48.025(B)(6)(b), access spacing standards for "private drives and other access ways are subject to the requirements of CDC 48.060." On arterial streets, the minimum distance is 150 feet "between any two adjacent curb cuts on the same side of a public street, except for one-way entrances and exits" [CDC Chapter 48.060(D)(1)].

Site Proposal

The proposed driveways will be spaced approximately 370 feet apart from each other. The nearest driveway to the west is located approximately 170 feet from the site entrance, and the nearest driveway to the east is located approximately 45 feet from the site's exit-only driveway. With the proposed site layout, the driveways will meet the 150-foot spacing standard between each other and to the west, but the east exit-only driveway will not meet the 150-foot spacing standard to the adjacent existing driveway east of the site. However, this exit-only access is deemed necessary for efficient operations to and from the site, as described and reasoned below.

Justification for Variance

First, the low trip volumes generated by the self-storage facility will pose a low risk for driveway conflicts. The PM peak hour trip generation at the eastern driveway is estimated at 3-4 exiting trips, which is equivalent to 1 trip every 15 to 20 minutes. Most of the exiting vehicles are expected to turn right from the driveway as the trip distribution to the east on Willamette Falls Drive (i.e., the exiting left turn movement) is anticipated to be relatively low given the few destinations reachable in less time via Willamette Falls Drive than via Interstate 205. Because of the relative driveway locations, right turns from the proposed east driveway will not conflict with turn movements at the driveway to the east.

Second, code-conforming fire access requires the second driveway for fire protection coverage around the east side of the proposed building. Importantly, the Applicant initially attempted to create a site plan with a single driveway location, but the need to provide fire access to both ends of the building would have required a 26-foot-wide drive aisle

and a hammerhead turnaround, which would have resulted in an even larger impact on the site's protected Water Resource Area (WRA) than the proposed plan with two accesses in a one-way loop configuration.

Furthermore, the proposed east driveway is warranted based on the City's *Public Works Design Standards 2010*, which state, "Commercial developments with frontage greater than 250 ft. may request an additional driveway if needed" (Section 5.0070 Driveways and Approaches). At this site, the eastern driveway is particularly merited based on the site's existing conditions, as described further below with references to the CDC.

Lastly, the CDC requires "a minimum distance between any two adjacent curb cuts on the same side of a public street, except for one-way entrances and exits" [Chapter 48.060(D)(1)]. Because the east access on Willamette Falls Drive is proposed to be an exit-only driveway, the minimum distance may not apply.

Traffic Impact Criteria & Responses

CDC Chapter 85.170(B)(2)(e)(1) identifies *"When a Traffic Impact Analysis is required, approval of the development proposal requires satisfaction of the following criteria."* Criterion (C) requires *"The proposed site design and traffic and circulation design and facilities, for all transportation modes, including any mitigation measures, are designed to:"*

(1) Have the least negative impact on all applicable transportation facilities
Response: Minimal or negligible adverse safety impacts are anticipated with the development. With only two conflicting movements (left out and right out), the east driveway will have fewer potential conflict points than a standard full-movement driveway. Furthermore, very few vehicles are anticipated to make either of these exiting movements: only 3 to 4 exiting trips are expected during a peak hour, and the trip distribution to the east on Willamette Falls Drive (i.e., the exiting left turn movement) is anticipated to be relatively low given the few destinations reachable in less time via Willamette Falls Drive than via Interstate 205. Ultimately, a very low number of left turns exiting onto Willamette Falls Drive are anticipated, and, consequently, minimal safety impacts are anticipated. Finally, the AASHTO intersection sight distance guidelines are met in both directions at the proposed east driveway**.**

(2) Accommodate and encourage non-motor vehicular modes of transportation to the extent practicable
Response: The nature of the proposed self-storage use generally depends upon the use of a vehicle to transport the items being stored, as non-motor vehicular modes are frequently impractical for such action. Nonetheless, employee trips may be made by non-motor vehicular modes, and these will be accommodated by the provision of on-site bicycle parking, a paved walkway between the building entry and the public roadway, and full public frontage improvements, including a bicycle lane and a paved sidewalk.

(3) Make the most efficient use of land and public facilities as practicable
Response: The site is notably constrained by a stream (Bernert Creek) flowing from west to east through the southern part of the property; by the presence of delineated wetlands; by the presence of a large Oregon white oak tree in the northeast corner of the property, which the applicant proposes to conserve as a significant tree; and by significant existing slopes, both on-site and on the surrounding properties. Collectively, these effectively limit development potential to the rear (north) half of the property, where the vacated Willamette Falls Drive right-of-way lies above the resource areas and is more shallowly sloped than the front (south) half of the property. Additionally, since the building is sited opposite Bernert Creek from Willamette Falls Drive, stream crossings are necessary for access: these will be accomplished for the west driveway by re-use of an existing culvert location, and for the east driveway by extension of an existing culvert. In these ways the proposed building, accesses, and site plan are configured to maximize the use of

the developable area, to minimize impacts to the stream and resource areas, and to preserve as much of the resource area as possible in open space. Notably, a four-story building is proposed in order to achieve capacity sufficient to make the use economically feasible while reducing the required land area (footprint) to achieve it.

The public improvements within the Willamette Falls Drive right-of-way also are designed to minimize impacts to the stream and resource areas. A retaining wall will support the back of the public sidewalk along most of the frontage between the proposed driveways, and the typically detached sidewalk will transition to a curb-tight alignment where Bernert Creek crosses into the right-of-way.

(4) Provide the most direct, safe and convenient routes practicable between on-site destinations, and between on-site and off-site destinations

Response: The proposed driveways and paved walkway will access Willamette Falls Drive at perpendicular angles to provide the most direct, safe, and convenient connections possible. The breezeway through the building will provide all necessary circulation connections between on-site destinations.

(5) Otherwise comply with applicable requirements of the City of West Linn Community Development Code

Response: Other CDC requirements are addressed in the narrative/findings statement provided in the applicant's submittal.

Variance Criteria & Responses

CDC Chapter 75.020(B)(1) identifies the applicable variance approval criteria: *"The approval authority may impose appropriate conditions to ensure compliance with the criteria. The appropriate approval authority shall approve a variance request if all the following criteria are met and corresponding findings of fact prepared."*

a. The variance is the minimum variance necessary to make reasonable use of the property. To make this determination, the following factors may be considered, together with any other relevant facts or circumstances:

1) Whether the development is similar in size, intensity and type to developments on other properties in the City that have the same zoning designation.

Response: It is appropriate to consider this approval criterion in the context of the variance request itself, which is limited to allowing one driveway to be located within 150 feet of an existing driveway on an adjacent property. No multi-story self-storage facilities are known to exist within the City limits, so direct comparisons with other examples of a similar use are not possible. Another factor limiting a general comparison to other commercial or industrial developments within the City is the presence of the 100-foot Riparian Corridor Water Resource Area (WRA) designation that covers 78.6% of the site's area (52,966 SF WRA/68,663 SF Total Area). The proposed project concentrates the active use (mini storage) in a multi-story building in order to reduce the development impact on the protected WRA, but other than that adaptation to respond to site constraints, it is comparable in size and intensity to similarly-zoned properties within West Linn. The two-driveway site plan's loop circulation pattern does not require an on-site hammerhead turnaround for fire equipment, which significantly reduces the amount of site area that must be devoted to paved access and circulation. The proposed variance satisfies this factor.

2) Physical characteristics of the property such as lot size or shape, topography, or the existence of natural resources.

Response: The site is notably constrained by a stream (Bernert Creek) flowing from west to east through the southern part of the property; by the presence of delineated wetlands; by the presence of a large Oregon white

oak tree in the northeast corner of the property, which the applicant proposes to conserve as a significant tree; by the Riparian Corridor WRA noted in the paragraph above; and by significant existing slopes, both on-site and on the surrounding properties. Approximately 79% of the site is encumbered by a riparian zone, only 30% of which may be impacted (with approval through the Hardship provisions in the Code, as requested by the applicant); as a result, only 46% of the total site area may be developed. The least constrained portion of the site is a shallow strip of land near the rear property line on the opposite side of Bernert Creek from the only public roadway available for access. The proposed variance satisfies this factor.

3) The potential for economic development of the subject property.

Response: As noted above, the site's physical constraints severely limit the development potential of the property to merely 46% of its total area. The most developable portion of the property—where the vacated Willamette Falls Drive right-of-way lies above the resource areas and is more shallowly sloped than much of the site—lies opposite Bernert Creek from Willamette Falls Drive, meaning stream crossings are required for access. Additionally, the applicant has proposed to retain the existing Oregon white oak tree in the northeast corner of the property. To address all these constraints, the proposed multi-story building will represent a floor-area-ratio (FAR) of well over 1.00. This FAR, which is higher than either the FAR for a typical single-story storage facility or than is presently found among nearby commercial properties, reflects both the low number of parking spaces necessary to serve a mini-storage facility and the effort to concentrate development within a relatively small footprint within the site. In light of all these existing limitations and of the strategically configured building and site plan, the proposed exit-only east driveway will enable vehicle circulation for the limited development footprint to function adequately, enabling an economically feasible use of the constrained property. The proposed variance satisfies this factor.

b. The variance will not result in violation(s) of any other code standard, and the variance will meet the purposes of the regulation being modified.

Response: The purposes of an access spacing standard typically are to promote safe and efficient travel on the subject roadway. The proposed site plan will achieve those goals by providing frontage improvements along Willamette Falls Drive; by providing for adequate intersection sight distance at both of the proposed driveways; and by directing a small number of exiting turning movements at the proposed east driveway. The applicant has identified no other code standards that would be violated by the requested variance to the access spacing standard. The proposed variance satisfies this criterion.

c. The need for the variance was not created by the applicant and/or owner requesting the variance.

Response: As detailed below, the need for the variance for the east access might have been eliminated if a connection could have been made to the nearby existing driveway, but this decision was under the adjoining property owner's control, and the applicant was not able to obtain the needed access and construction rights. Similarly, the applicant does not have rights to share access by way of the neighbor's existing driveway to the west. Given these limitations, the two-driveway looped access plan (with one-way circulation through the storage access area/breezeway) is the optimal method of providing access to the site, including sufficient fire protection coverage around the entire building perimeter. The site's development constraints are a function of the many protective regulations that apply to the property (e.g., for significant trees, streams, wetlands, and riparian corridor areas) and the previous developments that have occurred to both the east and west on the north side of Willamette Falls Drive. The proposed variance satisfies this criterion.

d. If more than one variance is requested, the cumulative effect of the variances results in a project that is consistent with the overall purpose of the zone.

Response: The applicant understands that this request to allow one driveway at substandard access spacing with respect to the neighboring driveway will be considered a single variance request. The applicant is also submitting a variance request with respect to the height of the building because it will exceed the maximum 45-foot standard at some locations on the sloping site. The two variance requests address different site-related factors by proposing minimal allowances that will allow development of the site in a manner consistent with the overall purpose of the zone (pursuant to Conditional Use Permit approval, which the applicant has also requested). The proposed access spacing variance satisfies this criterion.

In summary, the variance to allow spacing of less than 150 feet for one proposed site driveway merits approval for the following reasons:

- Existing constraints severely limit the site's economic development potential.
- The proposed building and site plan respect the site constraints, limit development impacts, and offer an economically viable development on a much smaller footprint than would typically be proposed.
- The proposed use limits traffic impacts to be minimal or negligible.
- Alternative shared access is unavailable.
- Fire protection codes require a second access.

FUTURE SHARED DRIVEWAY POTENTIAL

Given the arterial access driveway spacing standards and existing development patterns, the subject site might typically be expected to share access with one of the adjacent properties. The adjoining parcel to the east is developed with a multi-tenant commercial building and exclusive access, but it does not have the same degree of physical constraints seen on the subject site. As further rationale for the proposed development, this evaluation of the potential for shared accesses in the future is provided. A graphic presenting the following discussion in map form is attached as Exhibit E.

Together, the combined frontage length of the properties evaluated here is 642 feet: the subject site has approximately 494 feet of frontage and the adjoining site to the east (2500 Willamette Falls Drive, the 2500 Building) has approximately 148 feet. The City's minimum arterial access spacing standard of 150 feet could allow up to four accesses along the two sites' combined frontage. One driveway currently exists on the adjoining site, and two are proposed on the subject site.

Near the east portion of the subject site's frontage, the lone existing public street intersection within the combined 642 feet of frontage, at 6th Street and Willamette Falls Drive, provides a logical place for one access, and the 2500 site already has developed a driveway there.[1] Early in this project's design development phase, the applicant approached the adjacent property owner to request a connection to the existing driveway, but that owner declined. The alignment of the driveway with 6th Street makes this the preferred location for a shared access in the future; however, accomplishing that would require creation of a right of access for the benefit of the subject property. In that case, it would be feasible to realign the on-site circulation to form a "Y" immediately north of the 2500 Building's driveway and

[1] 7th Street also intersects the frontage road segment of Willamette Falls Drive within the 642 feet of combined frontage. However, due to a grade separation between the frontage road and the mainline, it is not likely that 7th Street will be extended to intersect the Willamette Falls Drive mainline. Consequently, there is no need to consider a future driveway aligned with 7th Street.

subject property's east driveway, so that exiting trips from the subject property would be directed to the existing 2500 Building site's driveway.

CONCLUSION

Based on the anticipated low number of peak hour trips, the proposed driveway configurations for the self-storage facility, and the available sight distance along Willamette Falls Drive, the location of the site driveways are not believed to result in an imminent traffic hazard.

Furthermore, the compact development footprint necessitated by the existing site constraints and the resultant requirement for fire protection coverage dictate the need for the east driveway, which will operate as exit-only. For these reasons, it is requested that the proposed east driveway be granted a variance to allow its spacing in relation to the existing adjacent driveway, which does not meet the City's minimum standards for new development.

Finally, it appears both possible and reasonable to create a program for future compliance with the arterial access spacing standard along Willamette Falls Drive as redevelopment occurs, through a combination of driveway modifications and creation of access agreements between the owner of the subject site and the adjoining property owner to the east.

If you have any questions regarding this letter, please do not hesitate to contact us.

Sincerely,

Jennifer E. Danziger, PE
Transportation Engineer

David Holt, PE (WA)
Transportation Engineer

Enclosures:
Exhibit A: Site Plan
Exhibit B: Access Spacing Exhibit
Exhibit C: Beaverton Storage Facility Trip Generation Summary
Exhibit D: Traffic Counts
Exhibit E: Shared Driveway Exhibit

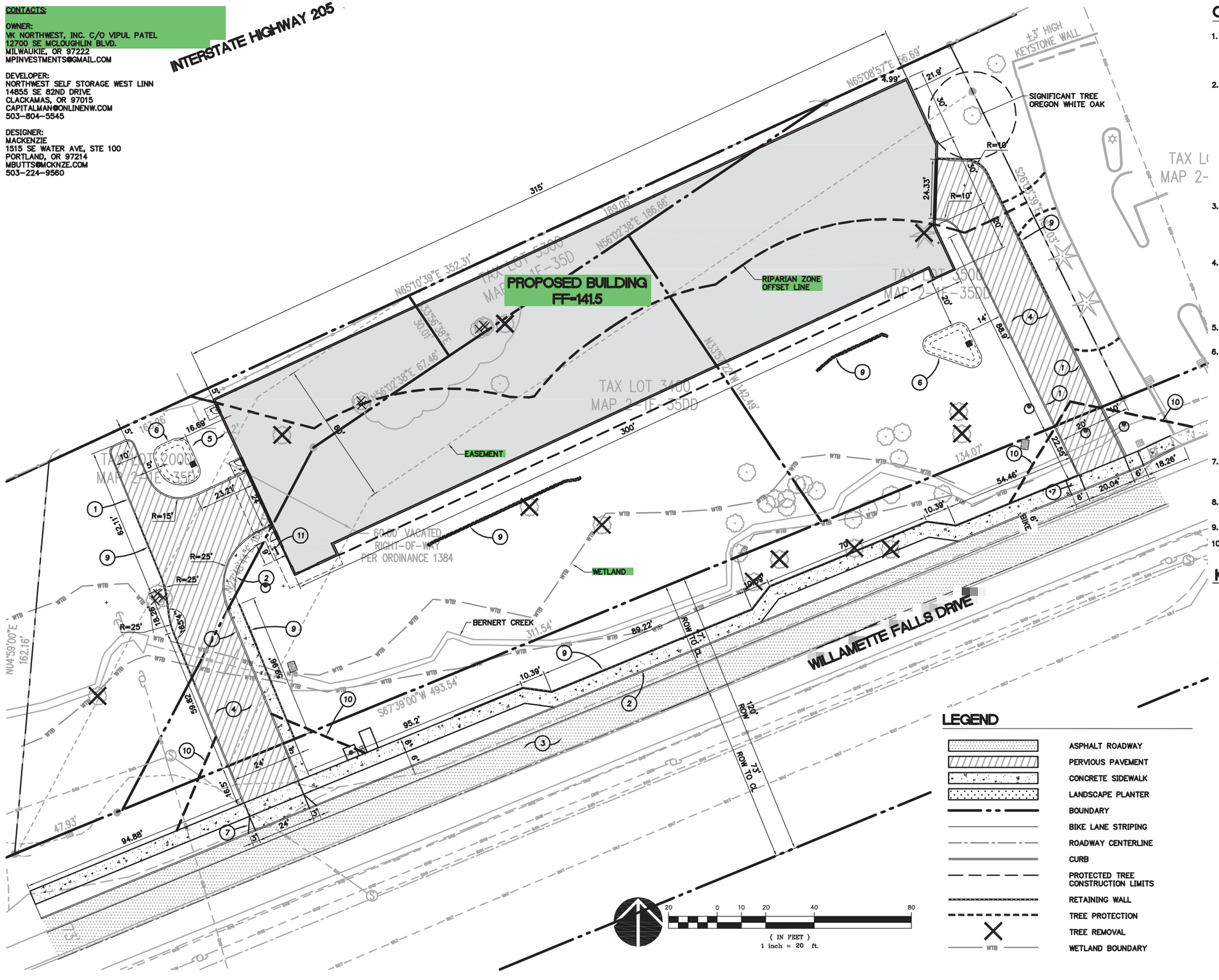
c: Tom Jones, Kevin Howard – Northwest Self Storage West Linn LLC
Dennis Woods, Lee Leighton, Janet Jones, Brian Varricchione – Mackenzie

CONTACTS:

OWNER:
VK NORTHWEST, INC. C/O VIPUL PATEL
12700 SE MCLOUGHLIN BLVD.
MILWAUKIE, OR 97222
MPINVESTMENTS@GMAIL.COM

DEVELOPER:
NORTHWEST SELF STORAGE WEST LINN
14855 SE 82ND DRIVE
CLACKAMAS, OR 97015
CAPITALMAN@ONLINENW.COM
503-804-5545

DESIGNER:
MACKENZIE
1515 SE WATER AVE, STE 100
PORTLAND, OR 97214
MBUTTS@MCKNZE.COM
503-224-9560



GENERAL NOTES

1. ALL WORK SHALL CONFORM TO THE STANDARD SPECIFICATIONS AND THE REQUIREMENTS OF THE CITY OF WEST LINN AND THE CURRENT AMERICAN PUBLIC WORKS ASSOCIATION STANDARDS FOR PUBLIC WORKS CONSTRUCTION.
2. THE WORKING DRAWINGS ARE GENERALLY DIAGRAMMATIC. THEY DO NOT SHOW EVERY OFFSET, BEND OR ELBOW REQUIRED FOR INSTALLATION IN THE SPACE PROVIDED. THEY DO NOT SHOW EVERY DIMENSION, COMPONENT PIECE, SECTION, JOINT OR FITTING REQUIRED TO COMPLETE THE PROJECT. ALL LOCATIONS FOR WORK SHALL BE CHECKED AND COORDINATED WITH EXISTING CONDITIONS IN THE FIELD BEFORE BEGINNING CONSTRUCTION. EXISTING UNDERGROUND UTILITIES LAYING WITHIN THE LIMITS OF EXCAVATION SHALL BE VERIFIED AS TO CONDITION, SIZE AND LOCATION BY UNCOVERING, PROVIDING SUCH IS PERMITTED BY LOCAL PUBLIC AUTHORITIES WITH JURISDICTION, BEFORE BEGINNING CONSTRUCTION. CONTRACTOR TO NOTIFY ENGINEER IF THERE ARE ANY DISCREPANCIES.
3. EFFECTIVE EROSION PREVENTION AND SEDIMENT CONTROL IS REQUIRED. EROSION CONTROL DEVICES MUST BE INSTALLED AND MAINTAINED TO MEET CITY OF WEST LINN REQUIREMENTS. THE GOVERNING JURISDICTION MAY, AT ANY TIME, ORDER CORRECTIVE ACTION AND STOPPAGE OF WORK TO ACCOMPLISH EFFECTIVE EROSION CONTROL.
4. EFFECTIVE DRAINAGE CONTROL IS REQUIRED. DRAINAGE SHALL BE CONTROLLED WITHIN THE WORK SITE AND SHALL BE ROUTED SO THAT ADJACENT PRIVATE PROPERTY, PUBLIC PROPERTY, AND THE RECEIVING SYSTEM ARE NOT ADVERSELY IMPACTED. THE GOVERNING JURISDICTION MAY, AT ANY TIME, ORDER CORRECTIVE ACTION AND STOPPAGE OF WORK TO ACCOMPLISH EFFECTIVE DRAINAGE CONTROL.
5. CONTRACTOR SHALL ADJUST ALL STRUCTURES IMPACTED BY CONSTRUCTION IMPROVEMENTS TO NEW FINISH GRADES.
6. EXCAVATION: EXCAVATE FOR SLABS, PAVING, AND OTHER IMPROVEMENTS TO SIZES AND LEVELS SHOWN OR REQUIRED. ALLOW FOR FORM CLEARANCE AND FOR PROPER COMPACTION OF REQUIRED BACKFILLING MATERIAL. EXCAVATOR(S) MUST COMPLY WITH O.R.S. 757.541 THROUGH 757.571; EXCAVATOR(S) SHALL NOTIFY ALL UTILITY COMPANIES FOR LINE LOCATIONS SEVENTY-TWO (72) HOURS (MINIMUM) PRIOR TO START OF WORK. DAMAGE TO UTILITIES SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE. (ONE CALL LOCATE UTILITY NOTIFICATION CENTER – PORTLAND METRO AREA 246-6699, OREGON 696-4848, ALL OTHER AREAS 1-800-332-2344).
7. WHERE CONNECTING TO AN EXISTING PIPE, AND PRIOR TO ORDERING MATERIALS, THE CONTRACTOR SHALL EXPOSE THE END OF THE EXISTING PIPE VERIFY THE LOCATION, SIZE, AND ELEVATION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
8. REQUEST BY THE CONTRACTOR FOR CHANGES TO THE PLANS MUST BE APPROVED BY THE ENGINEER.
9. CURB RADII 3' UNLESS OTHERWISE INDICATED.
10. WASTE DISPOSAL AND RECYCLING IN BUILDING

KEYNOTES:

1. CONCRETE VERTICAL CURB, SEE DETAIL XX
2. STANDARD CONCRETE SIDEWALK, SEE DETAIL XX
3. ASPHALT PAVEMENT, SEE DETAIL XX
4. PERVIOUS PAVEMENT, SEE DETAIL XX
5. LANDSCAPE AREA, SEE LANDSCAPE PLANS
6. WATER QUALITY POND, SEE UTILITY PLAN
7. CONSTRUCT CONCRETE DRIVEWAY, SEE DETAIL XX
8. CONSTRUCT 6' CHAINLINK FENCE
9. CONSTRUCT RETAINING WALL, SEE DETAIL XX
10. VISION CLEARANCE TRIANGLE
11. INSTALL BIKE RACK, SEE DETAIL XX

LEGEND

- ASPHALT ROADWAY
- PERVIOUS PAVEMENT
- CONCRETE SIDEWALK
- LANDSCAPE PLANTER
- BOUNDARY
- BIKE LANE STRIPING
- ROADWAY CENTERLINE
- CURB
- PROTECTED TREE CONSTRUCTION LIMITS
- RETAINING WALL
- TREE PROTECTION
- TREE REMOVAL
- WETLAND BOUNDARY

20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

SITE COVERAGE SUMMARY:

PREVIOUSLY DISTURBED AREA	0 SF
TEMPORARILY DISTURBED AREA	XX,XXX SF
PERMANENTLY DISTURBED AREA	42,433 SF
LANDSCAPED AREA	XX,XXX SF
TREE CANOPY AREA	10,954 SF.
WRA DISTURBED AREA	XX,XXX SF

DESIGN REVIEW: APRIL 1, 2016

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Planning ▪ Engineering

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DESIGN DRIVEN | CLIENT FOCUSED

Client
NORTHWEST SELF STORAGE

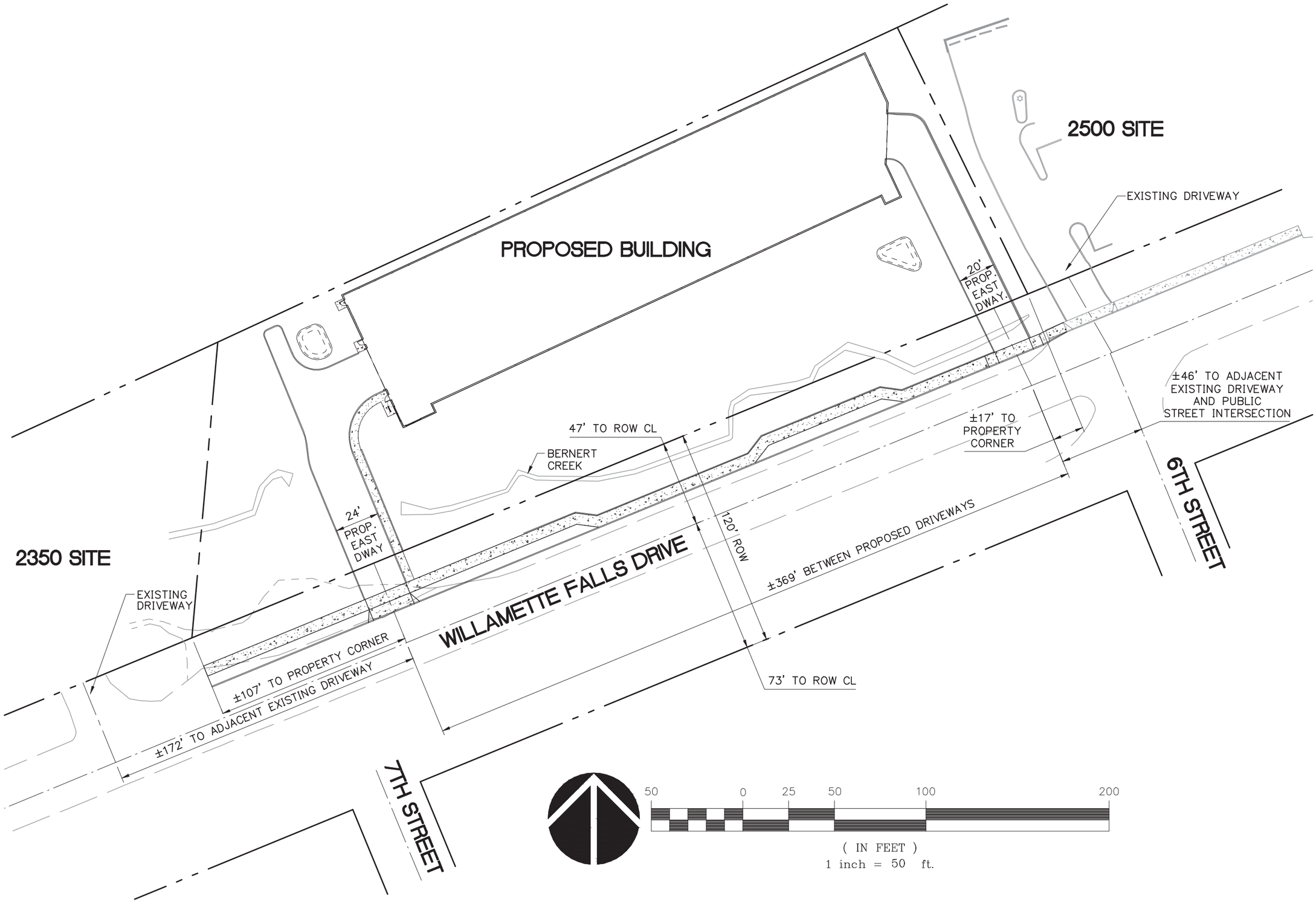
Project
NORTHWEST SELF STORAGE
2400 AND 2450 WILLAMETTE FALLS DRIVE

REVISIONS:

REVISION DELTA	REVISIONS THIS SHEET	REVISION DELTA CLOSING DATE

SHEET TITLE:
SITE PLAN

DRAWN BY: BLF
CHECKED BY: MWB
SHEET: A
JOB NO. 2150120.00



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CLIENT:
NORTHWEST SELF STORAGE

PROJECT:
NORTHWEST SELF STORAGE
2400-2500 WILLAMETTE FALLS DRIVE
WEST LINN, OR

SHEET TITLE:
ACCESS SPACING EXHIBIT

DATE:
04.04.2016
DRAWN BY:
DAH
CHECKED BY:
DAH

EXHIBIT:
B

JOB NO:
2150120.00

PRELIMINARY ONLY

Peak	Description	Date	Time	Customer No.	Notes
	User Cleared By ReArm	2/18/2016	11:47:05 PM	1	
	User Cleared By ReArm	2/18/2016	11:10:58 PM	2	
	User Logged Off By Host	2/18/2016	10:47:31 PM		
	User Cleared By ReArm	2/18/2016	10:20:31 PM	3	
	Granted Entry	2/18/2016	9:33:34 PM	4	
	Granted Entry	2/18/2016	9:26:45 PM	5	
	User Cleared By ReArm	2/18/2016	9:15:40 PM	6	
	User Cleared By ReArm	2/18/2016	9:01:22 PM	7	
	Granted Entry	2/18/2016	8:49:59 PM	4	
	Denied Unknown User	2/18/2016	8:49:53 PM		
	User Cleared By ReArm	2/18/2016	8:42:50 PM	8	
	Granted Elevator	2/18/2016	7:55:05 PM	9	
	Granted Elevator	2/18/2016	7:46:38 PM	9	
	Granted Elevator	2/18/2016	7:38:34 PM	9	
	Granted Entry	2/18/2016	7:35:34 PM	9	
	Granted Elevator	2/18/2016	7:17:25 PM	10	
	Granted Elevator	2/18/2016	7:14:56 PM	9	
	Granted Elevator	2/18/2016	7:12:13 PM	10	
	Granted Elevator	2/18/2016	6:47:17 PM	9	
	Denied Unknown User	2/18/2016	6:47:10 PM		
	Granted Elevator	2/18/2016	6:46:50 PM	9	
	Granted Elevator	2/18/2016	6:15:56 PM	9	
	Granted Elevator	2/18/2016	6:13:23 PM	9	
	Granted Elevator	2/18/2016	6:02:50 PM	9	
	Granted Elevator	2/18/2016	6:01:19 PM	9	
PM	Granted Elevator	2/18/2016	5:44:20 PM	9	Customer No. 9: appears to have been on-site throughout the 4-6 period
PM	Granted Elevator	2/18/2016	5:22:38 PM	9	Customer No. 4: arrived during the 4-6 period, and presumably also departed
PM	Granted Entry	2/18/2016	5:05:49 PM	4	Customer No. 5: arrived during the 4-6 period, and presumably also departed
PM	Denied Unknown User	2/18/2016	5:05:43 PM		All other users appear to have departed before 4:00 PM or to have arrived after 6:00 PM.
PM	Granted Elevator	2/18/2016	5:01:01 PM	9	TOTAL: 2 entering trips + 2 exiting trips (in 2 hours)
PM	Granted Elevator	2/18/2016	4:55:51 PM	4	*Based on the timestamps, we could assume these 4 trips all occurred within a single hour.*
PM	Granted Entry	2/18/2016	4:50:09 PM	5	
PM	User Cleared By ReArm	2/18/2016	4:43:06 PM	4	
PM	Granted Elevator	2/18/2016	4:38:47 PM	9	
PM	Granted Elevator	2/18/2016	4:38:05 PM	9	
	Granted Elevator	2/18/2016	3:59:46 PM	9	
	Granted Entry	2/18/2016	3:55:39 PM	9	
	Granted Entry	2/18/2016	3:55:39 PM	9	
	Granted Elevator	2/18/2016	2:56:48 PM	11	
	Granted Elevator	2/18/2016	2:29:52 PM	11	
	Granted Elevator	2/18/2016	2:26:22 PM	12	
	Granted Elevator	2/18/2016	1:53:05 PM	5	
	Granted Elevator	2/18/2016	1:14:32 PM	13	
	User Logged Off By Host	2/18/2016	12:53:40 PM		
	Granted Elevator	2/18/2016	12:50:33 PM	14	
	Granted Elevator	2/18/2016	12:49:27 PM	13	
	Denied Unknown User	2/18/2016	12:49:00 PM		
	Granted Elevator	2/18/2016	12:46:24 PM	14	
	Granted Elevator	2/18/2016	12:38:57 PM	15	

C

Peak	Description	Date	Time	Customer No.	Notes
	Granted Elevator	2/18/2016	12:23:47 PM	15	
	Granted Elevator	2/18/2016	12:11:01 PM	15	
	Granted Entry	2/18/2016	12:06:33 PM	16	
	Granted Elevator	2/18/2016	12:03:48 PM	16	
	Granted Entry	2/18/2016	11:58:51 AM	15	
	Granted Elevator	2/18/2016	11:54:04 AM	15	
	Granted Elevator	2/18/2016	11:47:04 AM	1	
	Granted Elevator	2/18/2016	11:40:33 AM	1	
	Granted Entry	2/18/2016	11:10:57 AM	2	
	Granted Entry	2/18/2016	10:48:14 AM	17	
	Granted Elevator	2/18/2016	10:45:22 AM	5	
	Granted Elevator	2/18/2016	10:44:21 AM	5	
	Granted Elevator	2/18/2016	10:41:59 AM	2	
	Granted Elevator	2/18/2016	10:41:31 AM	17	
	Granted Elevator	2/18/2016	10:40:00 AM	17	
	Granted Elevator	2/18/2016	10:35:20 AM	17	
	Granted Entry	2/18/2016	10:31:00 AM	5	
	Granted Elevator	2/18/2016	10:26:51 AM	17	
	Granted Elevator	2/18/2016	10:20:30 AM	3	
	Granted Elevator	2/18/2016	10:18:59 AM	17	
	Granted Elevator	2/18/2016	10:04:41 AM	17	
	Granted Elevator	2/18/2016	9:58:44 AM	17	
	Granted Elevator	2/18/2016	9:52:06 AM	17	
	Granted Elevator	2/18/2016	9:34:56 AM	17	
	Granted Elevator	2/18/2016	9:33:13 AM	17	
	Granted Elevator	2/18/2016	9:17:39 AM	17	
	Granted Elevator	2/18/2016	9:15:39 AM	6	
	Granted Elevator	2/18/2016	9:05:42 AM	17	
	Granted Elevator	2/18/2016	9:01:21 AM	7	
AM	Granted Entry	2/18/2016	8:57:16 AM	11	Customer No. 11: arrived during the 7-9 period, and presumably also departed
AM	Granted Elevator	2/18/2016	8:56:00 AM	17	Customer No. 17: arrived during the 7-9 period and remained on-site
AM	Granted Elevator	2/18/2016	8:53:35 AM	11	Customer No. 18: arrived during the 7-9 period, and presumably also departed
AM	Granted Elevator	2/18/2016	8:52:15 AM	11	Customer No. 8: arrived during the 7-9 period, and presumably also departed
AM	Granted Elevator	2/18/2016	8:45:50 AM	17	All other users appear to have departed before 7:00 AM or to have arrived after 9:00 AM.
AM	User Cleared By ReArm	2/18/2016	8:42:56 AM	18	TOTAL: 4 entering trips + 3 exiting trips (in 2 hours)
AM	Granted Elevator	2/18/2016	8:42:49 AM	8	*Based on the timestamps, we could assume these 7 trips all occurred within a single hour.*
AM	Granted Elevator	2/18/2016	8:20:24 AM	17	
	User Cleared By ReArm	2/18/2016	6:09:23 AM	19	
	User Cleared By ReArm	2/18/2016	5:51:56 AM	5	
	Granted Elevator	2/18/2016	4:43:05 AM	4	
	User Cleared By ReArm	2/18/2016	4:06:02 AM	11	
	User Cleared By ReArm	2/18/2016	3:44:45 AM	20	
	User Cleared By ReArm	2/18/2016	3:18:29 AM	14	
	User Cleared By ReArm	2/18/2016	2:02:07 AM	15	
	User Cleared By ReArm	2/18/2016	1:56:04 AM	Temporary Code	
	User Cleared By ReArm	2/18/2016	1:30:32 AM	21	
	User Cleared By ReArm	2/18/2016	1:13:34 AM	22	
	User Cleared By ReArm	2/18/2016	12:27:49 AM	23	
	Granted Elevator	2/18/2016	12:14:56 AM	4	

C

Peak	Description	Date	Time	Customer No.	Notes
	User Cleared By ReArm	2/18/2016	12:13:26 AM	24	
	User Cleared By ReArm	2/17/2016	10:49:09 PM	25	
	User Cleared By ReArm	2/17/2016	9:57:10 PM	3	
	Granted Elevator	2/17/2016	8:42:55 PM	18	
	Granted Elevator	2/17/2016	8:38:49 PM	18	
	User Cleared By ReArm	2/17/2016	8:35:30 PM	8	
	User Cleared By ReArm	2/17/2016	7:06:32 PM	4	
	User Cleared By ReArm	2/17/2016	6:34:52 PM	26	
	Granted Elevator	2/17/2016	6:09:22 PM	19	
PM	Granted Entry	2/17/2016	5:51:55 PM	5	Customer No. 5: arrived during the 4-6 period, and presumably also departed
PM	Granted Entry	2/17/2016	5:43:26 PM	5	Customer No. 11: arrived during the 7-9 period, and presumably also departed
PM	Granted Elevator	2/17/2016	4:06:01 PM	11	TOTAL: 2 entering trips + 2 exiting trips (in 2 hours)
	Granted Elevator	2/17/2016	3:44:44 PM	20	*Based on the timestamps, we could assume only 2 trips (1 entering + 1 exiting) occurred within a single hour.*
	Granted Elevator	2/17/2016	3:18:28 PM	14	
	Granted Elevator	2/17/2016	3:10:02 PM	14	
	Granted Elevator	2/17/2016	3:08:54 PM	20	
	Granted Elevator	2/17/2016	2:40:35 PM	20	
	Granted Entry	2/17/2016	2:39:24 PM	20	
	Granted Elevator	2/17/2016	2:02:06 PM	15	
	Granted Entry	2/17/2016	1:56:03 PM	Temporary Code	
	Granted Entry	2/17/2016	1:54:02 PM	Temporary Code	
	Granted Elevator	2/17/2016	1:43:45 PM	Temporary Code	
	Granted Elevator	2/17/2016	1:40:41 PM	Temporary Code	
	Granted Elevator	2/17/2016	1:30:31 PM	21	
	Granted Elevator	2/17/2016	1:27:25 PM	11	
	Granted Elevator	2/17/2016	1:13:33 PM	22	
	Granted Elevator	2/17/2016	1:12:42 PM	Temporary Code	
	Granted Elevator	2/17/2016	1:08:35 PM	Temporary Code	
	Granted Elevator	2/17/2016	12:59:48 PM	Temporary Code	
	Granted Elevator	2/17/2016	12:57:14 PM	Temporary Code	
	Granted Elevator	2/17/2016	12:48:02 PM	Temporary Code	
	Granted Elevator	2/17/2016	12:42:40 PM	Temporary Code	
	Granted Elevator	2/17/2016	12:42:28 PM	Temporary Code	
	Granted Elevator	2/17/2016	12:42:14 PM	Temporary Code	
	Granted Elevator	2/17/2016	12:35:46 PM	22	
	Granted Elevator	2/17/2016	12:27:48 PM	23	
	Granted Elevator	2/17/2016	12:13:25 PM	24	
	Granted Elevator	2/17/2016	11:31:21 AM	19	
	Denied Unknown User	2/17/2016	11:31:13 AM		
	Granted Elevator	2/17/2016	11:29:33 AM	19	
	Granted Elevator	2/17/2016	11:29:33 AM	19	
	Granted Elevator	2/17/2016	11:27:34 AM	24	
	User Cleared By ReArm	2/17/2016	11:05:02 AM	27	
	Granted Entry	2/17/2016	10:49:08 AM	25	
	Granted Entry	2/17/2016	9:57:09 AM	3	
	Granted Elevator	2/17/2016	9:54:00 AM	3	
AM	Granted Elevator	2/17/2016	8:35:29 AM	8	Customer No. 8: arrived during the 7-9 period, and presumably also departed
AM	Granted Elevator	2/17/2016	7:58:50 AM	27	Customer No. 27: arrived during the 7-9 period, and presumably also departed
AM	Granted Entry	2/17/2016	7:06:31 AM	4	Customer No. 4: presumably departed during the 7-9 period

C

Peak	Description	Date	Time	Customer No.	Notes
AM	Granted Elevator	2/17/2016	7:01:36 AM	4	TOTAL: 2 entering trips + 3 exiting trips (in 2 hours)
	User Cleared By ReArm	2/17/2016	6:58:27 AM	4	*Based on the timestamps, we could assume only 4 trips (2 entering + 2 exiting) occurred within a single hour.*
	User Cleared By ReArm	2/17/2016	6:38:19 AM	5	
	Granted Entry	2/17/2016	6:34:51 AM	26	
	User Cleared By ReArm	2/17/2016	5:17:13 AM	28	
	User Cleared By ReArm	2/17/2016	4:49:31 AM	Temporary Code	
	User Cleared By ReArm	2/17/2016	4:14:17 AM	29	
	User Cleared By ReArm	2/17/2016	3:28:11 AM	11	
	User Cleared By ReArm	2/17/2016	2:37:45 AM	30	
	User Cleared By ReArm	2/17/2016	1:35:18 AM	31	
	User Cleared By ReArm	2/17/2016	1:31:58 AM	32	
	User Cleared By ReArm	2/17/2016	12:15:06 AM	33	
	User Cleared By ReArm	2/16/2016	10:17:20 PM	3	
	User Cleared By ReArm	2/16/2016	9:12:22 PM	34	
	User Cleared By ReArm	2/16/2016	8:59:05 PM	35	
	User Cleared By ReArm	2/16/2016	7:13:52 PM	8	
	Granted Elevator	2/16/2016	6:58:26 PM	4	
	Granted Entry	2/16/2016	6:38:18 PM	5	
	Granted Entry	2/16/2016	6:38:06 PM	5	
	Granted Elevator	2/16/2016	6:03:11 PM	5	
PM	Granted Elevator	2/16/2016	5:32:45 PM	5	Customer No. 5: arrived during the 4-6 period
PM	Granted Elevator	2/16/2016	5:19:08 PM	5	Customer No. 28: arrived during the 4-6 period, and presumably also departed
PM	Granted Elevator	2/16/2016	5:17:12 PM	28	Temporary Code: presumably departed during the 4-6 period
PM	Granted Entry	2/16/2016	4:49:30 PM	Temporary Code	Customer No. 29: presumably departed during the 4-6 period
PM	Granted Entry	2/16/2016	4:48:20 PM	Temporary Code	TOTAL: 2 entering trips + 3 exiting trips (in 2 hours)
PM	Granted Elevator	2/16/2016	4:37:15 PM	Temporary Code	*Based on the timestamps, we could assume these 5 trips all occurred within a single hour.*
PM	Granted Elevator	2/16/2016	4:36:44 PM	Temporary Code	
PM	Granted Elevator	2/16/2016	4:30:24 PM	Temporary Code	
PM	Granted Elevator	2/16/2016	4:27:56 PM	Temporary Code	
PM	Granted Elevator	2/16/2016	4:20:30 PM	Temporary Code	
PM	Granted Elevator	2/16/2016	4:16:15 PM	Temporary Code	
PM	Granted Elevator	2/16/2016	4:15:59 PM	Temporary Code	
PM	Granted Entry	2/16/2016	4:14:16 PM	29	
PM	Granted Entry	2/16/2016	4:12:39 PM	Temporary Code	
PM	Granted Elevator	2/16/2016	4:09:11 PM	Temporary Code	
PM	Granted Elevator	2/16/2016	4:01:46 PM	Temporary Code	
	Granted Elevator	2/16/2016	3:57:54 PM	Temporary Code	
	Granted Elevator	2/16/2016	3:55:20 PM	Temporary Code	
	Granted Elevator	2/16/2016	3:54:18 PM	Temporary Code	
	Granted Entry	2/16/2016	3:52:36 PM	Temporary Code	
	Granted Elevator	2/16/2016	3:47:27 PM	29	
	Granted Elevator	2/16/2016	3:46:24 PM	29	
	Granted Elevator	2/16/2016	3:44:02 PM	Temporary Code	
	Denied Unknown User	2/16/2016	3:43:52 PM		
	Granted Entry	2/16/2016	3:43:22 PM	29	
	Granted Elevator	2/16/2016	3:41:58 PM	Temporary Code	
	Granted Elevator	2/16/2016	3:28:09 PM	11	
	Granted Elevator	2/16/2016	2:37:44 PM	30	
	Granted Elevator	2/16/2016	2:35:24 PM	30	

C

Peak	Description	Date	Time	Customer No.	Notes
	Granted Entry	2/16/2016	1:35:17 PM	31	
	Granted Elevator	2/16/2016	1:31:56 PM	32	
	Granted Elevator	2/16/2016	12:22:59 PM	31	
	Granted Elevator	2/16/2016	12:15:04 PM	33	
	User Cleared By ReArm	2/16/2016	11:44:01 AM	27	
	Granted Elevator	2/16/2016	10:17:19 AM	3	
	Granted Entry	2/16/2016	9:25:12 AM	27	
	Granted Elevator	2/16/2016	9:12:21 AM	34	
AM	Granted Entry	2/16/2016	8:59:04 AM	35	Customer No. 35: arrived during the 7-9 period
AM	User Cleared By ReArm	2/16/2016	8:43:28 AM	5	Customer No. 5: arrived during the 7-9 period, and presumably also departed
AM	Granted Elevator	2/16/2016	8:29:05 AM	27	Customer No. 27: arrived during the 7-9 period, and presumably also departed
AM	Granted Elevator	2/16/2016	8:16:30 AM	11	Customer No. 11: arrived during the 7-9 period, and presumably also departed
AM	Granted Entry	2/16/2016	7:13:51 AM	8	Customer No. 8: presumably departed during the 7-9 period
AM	Denied Unknown User	2/16/2016	7:13:44 AM		Customer No. 4: presumably departed during the 7-9 period
AM	Denied Unknown User	2/16/2016	7:13:37 AM		TOTAL: 4 entering trips + 5 exiting trips (in 2 hours)
AM	Granted Entry	2/16/2016	7:06:53 AM	4	*Based on the timestamps, we could assume only 7 trips (4 entering + 3 exiting) occurred within a single hour.*
AM	Denied Unknown User	2/16/2016	7:06:47 AM		
AM	Granted Elevator	2/16/2016	7:00:29 AM	4	
	Granted Elevator	2/16/2016	6:59:55 AM	8	
	Denied Unknown User	2/16/2016	6:59:42 AM		
	User Cleared By ReArm	2/16/2016	6:12:20 AM	4	
	User Cleared By ReArm	2/16/2016	5:00:19 AM	36	
	User Cleared By ReArm	2/16/2016	4:56:31 AM	37	
	User Cleared By ReArm	2/16/2016	2:51:44 AM	38	
	User Cleared By ReArm	2/16/2016	2:30:24 AM	39	
	User Cleared By ReArm	2/16/2016	2:25:00 AM	13	
	User Cleared By ReArm	2/16/2016	1:54:57 AM	40	
	User Cleared By ReArm	2/16/2016	1:24:53 AM	7	
	User Cleared By ReArm	2/16/2016	1:14:18 AM	18	
	User Cleared By ReArm	2/16/2016	12:52:06 AM	41	
	User Cleared By ReArm	2/16/2016	12:25:25 AM	42	
	User Cleared By ReArm	2/16/2016	12:22:08 AM	31	
	User Cleared By ReArm	2/16/2016	12:14:20 AM	43	
	User Cleared By ReArm	2/16/2016	12:09:08 AM	44	

AM Trip Generation Summary

	Enter	Exit
Tue 2/16	4	3
Wed 2/17	2	2
Thu 2/18	4	3
AVG	**3**	**3**

PM Trip Generation Summary

	Enter	Exit
Tue 2/16	2	3
Wed 2/17	1	1
Thu 2/18	2	2
AVG	**2**	**2**

C

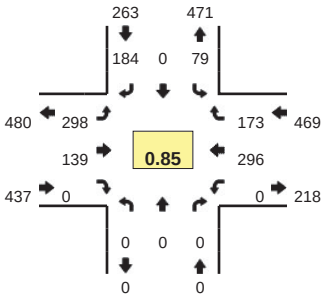
Type of peak hour being reported: Intersection Peak

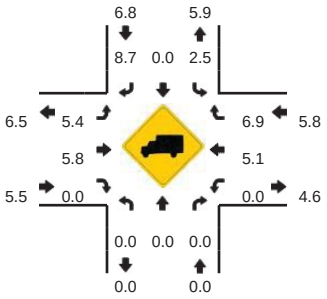
Method for determining peak hour: Total Entering Volume

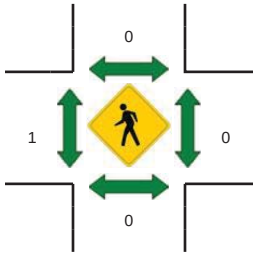
LOCATION: 10th St -- Willamette Falls Dr
CITY/STATE: West Linn, OR

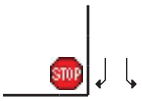
QC JOB #: 13358501
DATE: Tue, Apr 14 2015

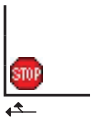
Peak-Hour: 7:05 AM -- 8:05 AM
Peak 15-Min: 7:35 AM -- 7:50 AM

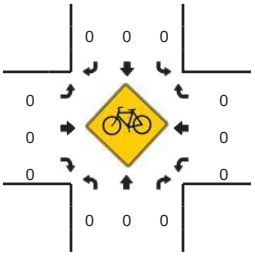


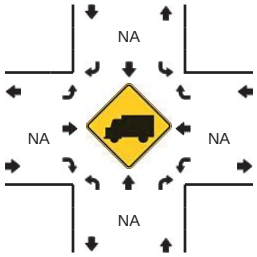


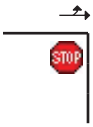


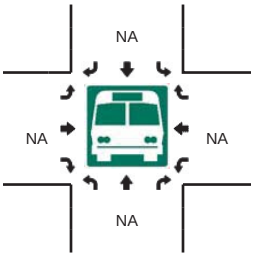












5-Min Count Period Beginning At	10th St (Northbound)				10th St (Southbound)				Willamette Falls Dr (Eastbound)				Willamette Falls Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	0	0	0	0	5	0	11	5	0	0	0	18	10	0	49	
7:05 AM	0	0	0	0	7	0	7	0	25	7	0	0	0	22	14	0	82	
7:10 AM	0	0	0	0	9	0	12	0	20	7	0	0	0	27	12	0	87	
7:15 AM	0	0	0	0	2	0	8	0	15	9	0	0	0	30	17	0	81	
7:20 AM	0	0	0	0	6	0	19	0	22	14	0	0	0	23	18	0	102	
7:25 AM	0	0	0	0	8	0	9	0	18	9	0	0	0	29	14	0	87	
7:30 AM	0	0	0	0	9	0	16	0	25	12	0	0	0	24	14	0	100	
7:35 AM	0	0	0	0	5	0	25	0	32	9	0	0	0	27	16	0	114	
7:40 AM	0	0	0	0	9	0	21	0	31	16	0	0	0	29	8	0	114	
7:45 AM	0	0	0	0	5	0	21	0	40	16	0	0	0	20	12	0	114	
7:50 AM	0	0	0	0	1	0	18	0	35	15	0	0	0	22	16	0	107	
7:55 AM	0	0	0	0	9	0	12	0	20	10	0	0	0	20	20	0	91	1128
8:00 AM	0	0	0	0	9	0	16	0	15	15	0	0	0	23	12	0	90	1169
8:05 AM	0	0	0	0	11	0	12	0	12	16	0	0	0	13	9	0	73	1160
8:10 AM	0	0	0	0	12	0	13	0	15	12	0	0	0	22	14	0	88	1161
8:15 AM	0	0	0	0	8	0	10	0	15	12	0	0	0	32	10	0	87	1167
8:20 AM	0	0	0	0	10	0	11	0	24	14	0	0	0	20	17	0	96	1161
8:25 AM	0	0	0	0	3	0	18	0	11	6	0	0	0	32	17	0	87	1161
8:30 AM	0	0	0	0	3	0	6	0	16	8	0	0	0	23	15	0	71	1132
8:35 AM	0	0	0	0	8	0	10	0	12	7	0	0	0	29	13	0	79	1097
8:40 AM	0	0	0	0	4	0	14	0	14	6	0	0	0	17	9	0	64	1047
8:45 AM	0	0	0	0	4	0	15	0	17	10	0	0	0	16	7	0	69	1002
8:50 AM	0	0	0	0	3	0	13	0	19	6	0	0	0	14	10	0	65	960
8:55 AM	0	0	0	0	3	0	16	0	6	4	0	0	0	15	12	0	56	925

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	76	0	268	0	412	164	0	0	0	304	144	0	1368
Heavy Trucks	0	0	0		0	0	28		32	16	0		0	12	4		92
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/21/2015 9:29 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

D

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

LOCATION: 10th St -- Willamette Falls Dr

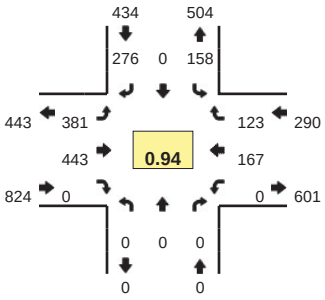
CITY/STATE: West Linn, OR

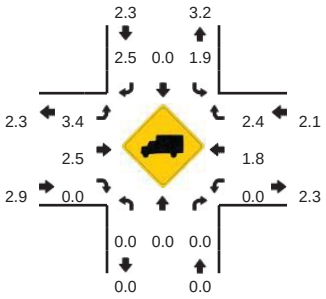
QC JOB #: 13358502

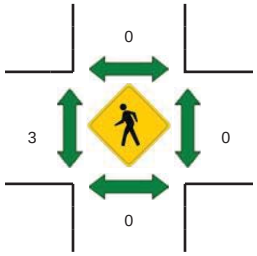
DATE: Tue, Apr 14 2015

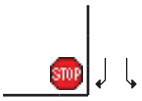
Peak-Hour: 4:20 PM -- 5:20 PM

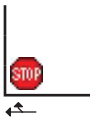
Peak 15-Min: 5:00 PM -- 5:15 PM

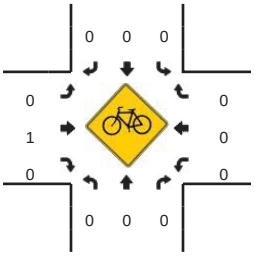


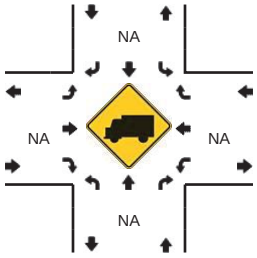


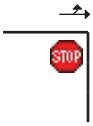


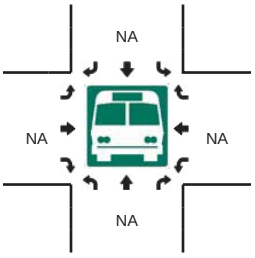












5-Min Count Period Beginning At	10th St (Northbound)				10th St (Southbound)				Willamette Falls Dr (Eastbound)				Willamette Falls Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	0	0	8	0	16	0	28	37	0	0	0	5	5	0	99	
4:05 PM	0	0	0	0	11	0	8	0	24	40	0	0	0	18	12	0	113	
4:10 PM	0	0	0	0	14	0	13	0	23	35	0	0	0	10	7	0	102	
4:15 PM	0	0	0	0	20	0	7	0	28	37	0	0	0	12	17	0	121	
4:20 PM	0	0	0	0	11	0	17	0	32	40	0	0	0	15	12	0	127	
4:25 PM	0	0	0	0	15	0	19	0	21	43	0	0	0	13	11	0	122	
4:30 PM	0	0	0	0	7	0	18	0	28	42	0	0	0	7	12	0	114	
4:35 PM	0	0	0	0	14	0	16	0	33	34	0	0	0	10	12	0	119	
4:40 PM	0	0	0	0	17	0	25	0	30	42	0	0	0	15	10	0	139	
4:45 PM	0	0	0	0	13	0	21	0	31	36	0	0	0	20	9	0	130	
4:50 PM	0	0	0	0	5	0	24	0	39	34	0	0	0	16	10	0	128	
4:55 PM	0	0	0	0	13	0	32	0	34	33	0	0	0	10	11	0	133	1447
5:00 PM	0	0	0	0	11	0	37	0	34	38	0	0	0	14	12	0	146	1494
5:05 PM	0	0	0	0	14	0	24	0	29	39	0	0	0	18	3	0	127	1508
5:10 PM	0	0	0	0	22	0	25	0	34	34	0	0	0	11	14	0	140	1546
5:15 PM	0	0	0	0	16	0	18	0	36	28	0	0	0	18	7	0	123	1548
5:20 PM	0	0	0	0	12	0	18	0	26	37	0	0	0	10	15	0	118	1539
5:25 PM	0	0	0	0	10	0	22	0	24	20	0	0	0	25	12	0	113	1530
5:30 PM	0	0	0	0	15	0	22	0	26	35	0	0	0	23	11	0	132	1548
5:35 PM	0	0	0	0	11	0	27	0	39	14	0	0	0	13	9	0	113	1542
5:40 PM	0	0	0	0	13	0	13	0	28	34	0	0	0	13	9	0	110	1513
5:45 PM	0	0	0	0	9	0	16	0	21	28	0	0	0	11	6	0	91	1474
5:50 PM	0	0	0	0	12	0	16	0	33	28	0	0	0	11	6	0	106	1452
5:55 PM	0	0	0	0	12	0	24	0	24	36	0	0	0	12	11	0	119	1438

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	188	0	344	0	388	444	0	0	0	172	116	0	1652
Heavy Trucks	0	0	0		4	0	4		8	12	0		0	4	0		32
Pedestrians		0				0				4				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

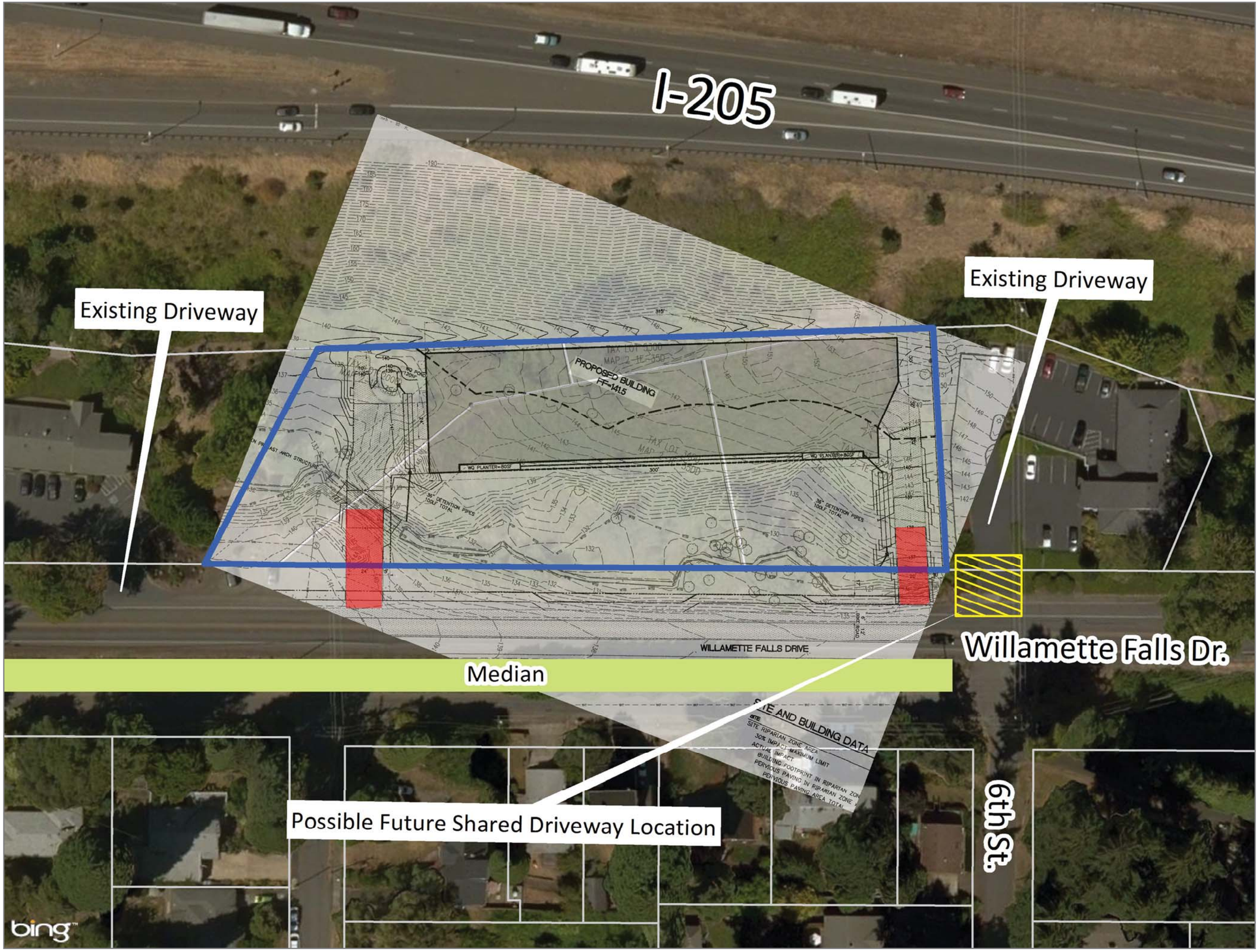
Comments:

Report generated on 4/21/2015 9:29 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

D

Exhibit E - Shared Driveway Exhibit
NW Self Storage
West Linn, Oregon



LEGEND

- Tax Lots
- Subject Site
- Proposed Driveway
- Possible Shared Driveway

0 30 60 120 Feet

1 inch = 60 feet

N

SOURCE DATA:
Metro RLIS Lite Base Data, Aug 2014

GEOGRAPHIC PROJECTION:
NAD 83 HARN, Oregon North Lambert Conformal Conic

Date: 4/6/2016
File: West Linn Base

Map Created By: WCW
Project No: 2150120.00

MACKENZIE.
P 503.224.9560 • F 503.228.1285 • W MCKNZE.COM
RiverEast Center, 1515 SE Water Avenue, #100, Portland, OR 97214
Portland, Oregon • Vancouver, Washington • Seattle, Washington

Clackamas County
Department of Assessment and Taxation
150 Beavercreek Rd
Oregon City, Oregon 97045
503-655-8671

Property Account Summary

Parcel Number	00409329	Situs Address	NO SITUS , ADDRESS, OR

General Information	
Alternate Property #	21E35D 02000
Property Description	147 WILLAMETTE TRS PT LT 33 &VAC ST
Property Category	Land &/or Buildings
Status	Active, Locally Assessed
Tax Code Area	003-002
Remarks	

Tax Rate	
Description	Rate
Taxable Fire District Value	1.8911
Taxable Value	16.5897

Property Characteristics	
Neighborhood	15831: West Linn/Willamette old town 100, 101
Land Class Category	100: Residential land, vacant
Change property ratio	1XX

Related Properties
No Values Found

Parties			
Role	Percent	Name	Address
Taxpayer	100	PATEL JAYANTI	2724 SE 82ND AVE, PORTLAND, OR 97266
Owner	100	VK NORTHWEST INC	12700 SE MCLOUGHLIN BLVD, MILWAUKIE, OR 97222

Property Values					
Description	2014	2013	2012	2011	2010
AVR Total	872	847	822	798	775
Exempt					
TVR Total	872	847	822	798	775
Real Mkt Land	81,067	75,024	75,024	75,528	78,547
Real Mkt Bldg	0	0	0	0	0
Real Mkt Total	81,067	75,024	75,024	75,528	78,547
M5 Mkt Land	81,067	75,024	75,024	75,528	78,547
M5 Mkt Bldg	0	0	0	0	0
M5 SAV	0	0	0	0	0
SAVL (MAV Use Portion)					
MAV (Market Portion)	872	847	822	798	775
Mkt Exception	0	0	0	0	0
AV Exception	0	0	0	0	0

Active Exemptions

No Exemptions Found

Events

Effective Date	Entry Date-Time	Type	Remarks
05/08/2007	2007-05-17 10:57:00.000	Recording Processed	Property Transfer Filing No.: 160132, Bargain & Sale, Recording No.: 2007-039604 05/08/2007 by ROMANSIE
04/30/2007	2007-05-07 14:38:00.000	Taxpayer Changed	Property Transfer Filing No.: 159469 04/30/2007 by CINDYSIM
04/30/2007	2007-05-07 14:38:00.000	Recording Processed	Property Transfer Filing No.: 159469, Warranty Deed, Recording No.: 2007-037265 04/30/2007 by CINDYSIM
04/05/2004	2004-04-05 10:05:00.000	Annexation Completed For Property	Annex to TVFR, Ord 03-13 for 2004-Revise TCA Membership by JENMAYO
05/14/2001	2001-05-17 15:05:00.000	Recording Processed	Property Transfer Filing No.: 32346, Quit Claim Deed, Recording No.: 2001-034951 05/14/2001 by LAURIEB
05/14/2001	2001-05-17 15:05:00.000	Taxpayer Changed	Property Transfer Filing No.: 32346 05/14/2001 by LAURIEB
08/16/1999	1999-09-10 08:51:00.000	Recording Processed	Property Transfer Filing No.: 1601, Warranty Deed, Recording No.: 1999-080932
08/16/1999	1999-09-10 08:51:00.000	Taxpayer Changed	Property Transfer Filing No.: 1601
07/01/1999	1999-07-01 12:00:00.000	Ownership at Conversion	Warranty Deed: 96-78650, 10/1/96, $ 195000

Taxes

Tax Year	Category	TCA/District	Charged	Minimum	Balance Due	Due Date
1993	Property Tax Principal	003-002	56.26	0.00	0.00	11/15/1993
1994	Property Tax Principal	003-002	54.64	0.00	0.00	11/15/1994
1995	Property Tax Principal	003-002	7.81	0.00	0.00	11/15/1995
1996	Property Tax Principal	003-002	511.97	0.00	0.00	11/15/1996
1997	Property Tax Principal	003-002	8.57	0.00	0.00	11/15/1997
1998	Property Tax Principal	003-002	9.47	0.00	0.00	11/15/1998
1999	Property Tax Principal	003-002	8.80	0.00	0.00	11/15/1999
2000	Property Tax Principal	003-002	10.38	0.00	0.00	11/15/2000
2001	Property Tax Principal	003-002	10.47	0.00	0.00	11/15/2001
2002	Property Tax Principal	003-002	10.87	0.00	0.00	11/15/2002
2003	Property Tax Principal	003-002	11.15	0.00	0.00	11/15/2003
2004	Property Tax Principal	003-002	11.81	0.00	0.00	11/15/2004
2005	Property Tax Principal	003-002	12.21	0.00	0.00	11/15/2005
2006	Property Tax Principal	003-002	12.71	0.00	0.00	11/15/2006
2007	Property Tax Principal	003-002	12.80	0.00	0.00	11/15/2007
2008	Property Tax Principal	003-002	13.05	0.00	0.00	11/15/2008
2009	Property Tax Principal	003-002	13.92	0.00	0.00	11/15/2009
2010	Property Tax Principal	003-002	14.43	0.00	0.00	11/15/2010
2011	Property Tax Principal	003-002	14.76	0.00	0.00	11/15/2011
2012	Property Tax Principal	003-002	15.38	0.00	0.00	11/15/2012
2013	Property Tax Principal	003-002	15.73	0.00	0.00	11/15/2013
2014	Property Tax Principal	003-002	16.12	0.00	0.00	11/15/2014
TOTAL Due as of 2015/03/02					0.00	

Receipts

Date	Receipt	Amount Applied	Amount Due	Tendered	Change
2014/11/18	3787856	16.12	16.12	15.64	0.00
2013/11/15	3584923	15.73	15.73	15.26	0.00
2012/11/20	3419243	15.38	15.38	14.92	0.00
2011/11/16	3194974	14.76	14.76	14.32	0.00
2010/11/04	2897927	14.43	14.43	14.00	0.00
2009/11/17	2792000	13.92	13.92	13.50	0.00
2008/11/20	2602873	13.05	13.05	12.66	0.00

2007/11/13	2329272	12.80	12.80	12.42	0.00
2006/11/07	2117981	12.71	12.71	12.33	0.00
2005/11/04	1929399	12.21	12.21	11.84	0.00
2004/11/04	1745523	11.81	11.81	11.46	0.00
2003/11/18	1645058	11.15	11.15	10.82	0.00
2002/11/15	1436148	10.87	10.87	10.54	0.00
2001/11/20	1287397	10.47	10.47	10.16	0.00
2000/11/15	1066333	10.38	10.38	10.07	0.00
1999/11/22	942023	8.80	8.80	8.54	0.00
1998/11/15	268518	9.47	9.47	9.19	0.00
1997/11/15	268517	8.57	8.57	8.31	0.00
1996/11/15	268516	511.97	511.97	496.61	0.00
1995/11/15	268515	7.81	7.81	7.58	0.00
1994/11/15	268514	54.64	54.64	53.00	0.00
1993/11/15	268513	56.26	56.26	54.57	0.00

Sales History

Transfer Date	Recording Number	Sale Amount	Deed Type	Grantee	Grantor
04/30/2007	2007-037265	100,000	M	PATEL JAYANTI	WEST LINN LAW CENTER LLC
04/27/2007	2007-039604	0	S	VK NORTHWEST INC	PATEL JAYANTI
08/16/1999	1999-080932	282,500	M	BLUNCK LAWRENCE P & KAREN J	POLK ARNOLD S
08/01/1999	1999-080932	282,500			
10/01/1996	1996-078650	195,000			
03/01/1991	1991-011056	80,000			

Property Details

Living Area Sq Ft	Manf Struct Size	Year Built	Improvement Grade	Stories	Bedrooms	Full Baths	Half Baths

Clackamas County
Department of Assessment and Taxation
150 Beavercreek Rd
Oregon City, Oregon 97045
503-655-8671

Property Account Summary

Parcel Number	01814978	Situs Address	NO SITUS , ADDRESS, OR

General Information	
Alternate Property #	21E35D 05300
Property Description	147 WILLAMETTE TRS VAC ST
Property Category	Land &/or Buildings
Status	Active, Locally Assessed
Tax Code Area	003-002
Remarks	

Tax Rate	
Description	Rate
Taxable Fire District Value	1.8911
Taxable Value	16.5897

Property Characteristics	
Neighborhood	15851: Willamette newer 100, 101
Land Class Category	100: Residential land, vacant
Change property ratio	1XX

Related Properties
No Values Found

Parties			
Role	Percent	Name	Address
Taxpayer	100	PATEL JAYANTI	2724 SE 82ND AVE, PORTLAND, OR 97266
Owner	100	VK NORTHWEST INC	12700 SE MCLOUGHLIN BLVD, MILWAUKIE, OR 97222

Property Values					
Description	2014	2013	2012	2011	2010
AVR Total	2,730	2,650	2,573	2,498	2,425
Exempt					
TVR Total	2,730	2,650	2,573	2,498	2,425
Real Mkt Land	3,636	3,366	3,366	3,587	3,734
Real Mkt Bldg	0	0	0	0	0
Real Mkt Total	3,636	3,366	3,366	3,587	3,734
M5 Mkt Land	3,636	3,366	3,366	3,587	3,734
M5 Mkt Bldg	0	0	0	0	0
M5 SAV	0	0	0	0	0
SAVL (MAV Use Portion)					
MAV (Market Portion)	2,730	2,650	2,573	2,498	2,425
Mkt Exception	0	0	0	0	0
AV Exception	0	0	0	0	0

Active Exemptions

No Exemptions Found

Events

Effective Date	Entry Date-Time	Type	Remarks
05/08/2007	2007-05-17 10:25:00.000	Recording Processed	Property Transfer Filing No.: 160129, Bargain & Sale, Recording No.: 2007-039604 05/08/2007 by ROMANSIE
04/30/2007	2007-05-07 14:38:00.000	Taxpayer Changed	Property Transfer Filing No.: 159469 04/30/2007 by CINDYSIM
04/30/2007	2007-05-07 14:38:00.000	Recording Processed	Property Transfer Filing No.: 159469, Warranty Deed, Recording No.: 2007-037265 04/30/2007 by CINDYSIM
04/05/2004	2004-04-05 10:05:00.000	Annexation Completed For Property	Annex to TVFR, Ord 03-13 for 2004-Revise TCA Membership by JENMAYO
05/14/2001	2001-05-17 15:05:00.000	Recording Processed	Property Transfer Filing No.: 32346, Quit Claim Deed, Recording No.: 2001-034951 05/14/2001 by LAURIEB
05/14/2001	2001-05-17 15:05:00.000	Taxpayer Changed	Property Transfer Filing No.: 32346 05/14/2001 by LAURIEB
08/16/1999	1999-09-10 08:51:00.000	Recording Processed	Property Transfer Filing No.: 1601, Warranty Deed, Recording No.: 1999-080932
08/16/1999	1999-09-10 08:51:00.000	Taxpayer Changed	Property Transfer Filing No.: 1601
07/01/1999	1999-07-01 12:00:00.000	Ownership at Conversion	Bargain and Sale: 98-34964, 10/1/97, $ 9008

Taxes

Tax Year	Category	TCA/District	Charged	Minimum	Balance Due	Due Date
1998	Property Tax Interest	003-002	0.39	0.00	0.00	11/15/1998
1998	Property Tax Principal	003-002	29.28	0.00	0.00	11/15/1998
1999	Property Tax Principal	003-002	27.49	0.00	0.00	11/15/1999
2000	Property Tax Principal	003-002	31.94	0.00	0.00	11/15/2000
2001	Property Tax Principal	003-002	31.47	0.00	0.00	11/15/2001
2002	Property Tax Principal	003-002	32.99	0.00	0.00	11/15/2002
2003	Property Tax Principal	003-002	33.92	0.00	0.00	11/15/2003
2004	Property Tax Principal	003-002	36.41	0.00	0.00	11/15/2004
2005	Property Tax Principal	003-002	38.20	0.00	0.00	11/15/2005
2006	Property Tax Principal	003-002	39.79	0.00	0.00	11/15/2006
2007	Property Tax Principal	003-002	40.03	0.00	0.00	11/15/2007
2008	Property Tax Principal	003-002	40.85	0.00	0.00	11/15/2008
2009	Property Tax Principal	003-002	43.60	0.00	0.00	11/15/2009
2010	Property Tax Principal	003-002	45.16	0.00	0.00	11/15/2010
2011	Property Tax Principal	003-002	45.97	0.00	0.00	11/15/2011
2012	Property Tax Principal	003-002	46.26	0.00	0.00	11/15/2012
2013	Property Tax Principal	003-002	46.75	0.00	0.00	11/15/2013
2014	Property Tax Principal	003-002	48.72	0.00	0.00	11/15/2014
TOTAL Due as of 2015/03/02					0.00	

Receipts

Date	Receipt	Amount Applied	Amount Due	Tendered	Change
2014/11/18	3787855	48.72	48.72	47.26	0.00
2013/11/15	3584922	46.75	46.75	45.35	0.00
2012/11/20	3419242	46.26	46.26	44.87	0.00
2011/11/16	3194973	45.97	45.97	44.59	0.00
2010/11/04	2897928	45.16	45.16	43.81	0.00
2009/11/17	2787613	43.60	43.60	42.29	0.00
2008/11/20	2602874	40.85	40.85	39.62	0.00
2007/11/13	2329273	40.03	40.03	38.83	0.00
2006/11/07	2117980	39.79	39.79	38.60	0.00
2005/11/04	1929183	38.20	38.20	37.05	0.00
2004/11/04	1745524	36.41	36.41	35.32	0.00

2003/11/18	1645110	33.92	33.92	32.90	0.00
2002/11/18	1453861	32.99	32.99	32.00	0.00
2001/11/20	1287396	31.47	31.47	30.53	0.00
2000/11/15	1066332	31.94	31.94	30.98	0.00
1999/11/22	938911	27.49	27.49	26.67	0.00
1998/11/15	268519	29.67	29.67	29.67	0.00

Sales History

Transfer Date	Recording Number	Sale Amount	Deed Type	Grantee	Grantor
04/30/2007	2007-037265	100,000	X	PATEL JAYANTI	WEST LINN LAW CENTER LLC
04/27/2007	2007-039604	0	S	VK NORTHWEST INC	PATEL JAYANTI
08/16/1999	1999-080932	282,500	X	BLUNCK LAWRENCE P & KAREN J	POLK ARNOLD S
08/01/1999	1999-080932	282,500			
10/01/1997	1998-034964	9,008			

Property Details

Living Area Sq Ft	Manf Struct Size	Year Built	Improvement Grade	Stories	Bedrooms	Full Baths	Half Baths

Clackamas County
Department of Assessment and Taxation
150 Beavercreek Rd
Oregon City, Oregon 97045
503-655-8671

Property Account Summary

Parcel Number	00409338	Situs Address	2400 WILLAMETTE FALLS DR , WEST LINN, OR 97068

General Information	
Alternate Property #	21E35DD03400
Property Description	147 WILL TRS PT LT 32 &VAC ST
Property Category	Land &/or Buildings
Status	Active, Locally Assessed
Tax Code Area	003-002
Remarks	

Tax Rate	
Description	Rate
Taxable Fire District Value	1.8911
Taxable Value	16.5897

Property Characteristics	
Neighborhood	15831: West Linn/Willamette old town 100, 101
Land Class Category	100: Residential land, vacant
Change property ratio	1XX

Related Properties
No Values Found

Parties			
Role	Percent	Name	Address
Taxpayer	100	PATEL VIPUL	2724 SE 82ND AVE, PORTLAND, OR 97266
Owner	100	VK NORTHWEST INC	12700 SE MCLOUGHLIN BLVD, MILWAUKIE, OR 97222

Property Values					
Description	2014	2013	2012	2011	2010
AVR Total	18,399	17,863	17,343	16,838	16,348
Exempt					
TVR Total	18,399	17,863	17,343	16,838	16,348
Real Mkt Land	20,172	18,668	18,668	18,794	19,545
Real Mkt Bldg	0	0	0	0	0
Real Mkt Total	20,172	18,668	18,668	18,794	19,545
M5 Mkt Land	20,172	18,668	18,668	18,794	19,545
M5 Mkt Bldg	0	0	0	0	0
M5 SAV	0	0	0	0	0
SAVL (MAV Use Portion)					
MAV (Market Portion)	18,399	17,863	17,343	16,838	16,348
Mkt Exception	0	0	0	0	0
AV Exception	0	0	0	0	0

Active Exemptions

No Exemptions Found

Events

Effective Date	Entry Date-Time	Type	Remarks
01/29/2015	2015-01-29 14:34:00.000	The situs address has changed	by HEIDIHAR
04/02/2007	2007-04-12 16:36:00.000	Recording Processed	Property Transfer Filing No.: 158322, Bargain & Sale, Recording No.: 2007-027887 04/02/2007 by CINDYSIM
04/02/2007	2007-04-12 09:31:00.000	Taxpayer Changed	Property Transfer Filing No.: 158298 04/02/2007 by CINDYSIM
04/02/2007	2007-04-12 09:31:00.000	Recording Processed	Property Transfer Filing No.: 158298, Bargain & Sale, Recording No.: 2007-027888 04/02/2007 by CINDYSIM
10/15/2004	2004-10-23 14:54:00.000	Taxpayer Changed	Property Transfer Filing No.: 106248 10/15/2004 by CINDYSIM
10/15/2004	2004-10-23 14:54:00.000	Recording Processed	Property Transfer Filing No.: 106248, Warranty Deed, Recording No.: 2004-095708 10/15/2004 by CINDYSIM
04/05/2004	2004-04-05 10:05:00.000	Annexation Completed For Property	Annex to TVFR, Ord 03-13 for 2004-Revise TCA Membership by JENMAYO
07/01/1999	1999-07-01 12:00:00.000	Ownership at Conversion	Conversion deed: 78-41385, , $ 0

Taxes

Tax Year	Category	TCA/District	Charged	Minimum	Balance Due	Due Date
1993	Property Tax Interest	003-002	308.54	0.00	0.00	11/15/1993
1993	Property Tax Principal	003-002	593.35	0.00	0.00	11/15/1993
1994	Property Tax Interest	003-002	282.11	0.00	0.00	11/15/1994
1994	Property Tax Principal	003-002	577.11	0.00	0.00	11/15/1994
1995	Property Tax Interest	003-002	62.05	0.00	0.00	11/15/1995
1995	Property Tax Principal	003-002	179.02	0.00	0.00	11/15/1995
1996	Property Tax Interest	003-002	24.12	0.00	0.00	11/15/1996
1996	Property Tax Principal	003-002	129.20	0.00	0.00	11/15/1996
1997	Property Tax Interest	003-002	5.35	0.00	0.00	11/15/1997
1997	Property Tax Principal	003-002	171.97	0.00	0.00	11/15/1997
1998	Property Tax Interest	003-002	4.21	0.00	0.00	11/15/1998
1998	Property Tax Principal	003-002	189.51	0.00	0.00	11/15/1998
1999	Property Tax Interest	003-002	9.62	0.00	0.00	06/05/2000
1999	Property Tax Principal	003-002	180.46	0.00	0.00	11/15/1999
2000	Property Tax Interest	003-002	13.19	0.00	0.00	06/20/2001
2000	Property Tax Principal	003-002	197.82	0.00	0.00	11/15/2000
2001	Property Tax Interest	003-002	7.68	0.00	0.00	05/14/2002
2001	Property Tax Principal	003-002	192.07	0.00	0.00	11/15/2001
2002	Property Tax Principal	003-002	201.31	0.00	0.00	11/15/2002
2003	Property Tax Principal	003-002	206.81	0.00	0.00	11/15/2003
2004	Property Tax Principal	003-002	222.15	0.00	0.00	11/15/2004
2005	Property Tax Principal	003-002	236.65	0.00	0.00	11/15/2005
2006	Property Tax Principal	003-002	259.78	0.00	0.00	11/15/2006
2007	Property Tax Principal	003-002	269.98	0.00	0.00	11/15/2007
2008	Property Tax Principal	003-002	275.49	0.00	0.00	11/15/2008
2009	Property Tax Principal	003-002	290.63	0.00	0.00	11/15/2009
2010	Property Tax Principal	003-002	283.20	0.00	0.00	11/15/2010
2011	Property Tax Principal	003-002	282.95	0.00	0.00	11/15/2011
2012	Property Tax Principal	003-002	291.66	0.00	0.00	11/15/2012
2013	Property Tax Principal	003-002	295.01	0.00	0.00	11/15/2013
2014	Property Tax Principal	003-002	306.72	0.00	0.00	11/15/2014
TOTAL Due as of 2015/03/02					0.00	

Receipts

Date	Receipt	Amount Applied	Amount Due	Tendered	Change

2014/11/18	3787854	306.72	306.72	297.52	0.00
2013/11/15	3584921	295.01	295.01	286.16	0.00
2012/11/20	3419241	291.66	291.66	282.91	0.00
2011/11/16	3194972	282.95	282.95	274.46	0.00
2010/11/04	2897929	283.20	283.20	274.70	0.00
2009/11/17	2787615	290.63	290.63	281.91	0.00
2008/11/20	2602871	275.49	275.49	267.23	0.00
2007/11/08	2319463	269.98	269.98	261.88	0.00
2006/10/27	2100294	259.78	259.78	251.99	0.00
2005/11/23	2033738	236.65	236.65	229.55	0.00
2004/10/19	1726580	222.15	222.15	215.49	0.00
2003/11/17	1635681	206.81	206.81	200.61	0.00
2002/11/13	1395521	201.31	3,159.87	3,065.07	0.00
2002/05/14	1342721	199.75	461.22	461.22	0.00
2001/06/20	1171006	211.01	487.13	487.13	0.00
2000/06/05	989506	190.08	438.75	438.76	0.00
1998/11/15	269266	193.72	193.72	193.72	0.00
1997/11/15	269265	177.32	177.32	177.32	0.00
1996/11/15	269264	153.32	153.32	153.32	0.00
1995/11/15	269263	241.07	241.07	241.07	0.00
1994/11/15	269262	859.22	859.22	859.22	0.00
1993/11/15	269261	901.89	901.89	901.89	0.00

Sales History

Transfer Date	Recording Number	Sale Amount	Deed Type	Grantee	Grantor
03/28/2007	2007-027888	300,000	S	VK NORTHWEST INC	PATEL KATEN
03/28/2007	2007-027887	150,000	S	VK NORTHWEST INC	VK NORTHWEST INC
10/15/2004	2004-095708	300,000	X	PATEL KATEN	MEANS C RAY & MARGARET C

Property Details

Living Area Sq Ft	Manf Struct Size	Year Built	Improvement Grade	Stories	Bedrooms	Full Baths	Half Baths

Clackamas County
Department of Assessment and Taxation
150 Beavercreek Rd
Oregon City, Oregon 97045
503-655-8671

Property Account Summary

Parcel Number	00409347	Situs Address	2450 WILLAMETTE FALLS DR , WEST LINN, OR 97068

General Information	
Alternate Property #	21E35DD03500
Property Description	147 WILL TRS PT LT 32 &VAC ST
Property Category	Land &/or Buildings
Status	Active, Locally Assessed
Tax Code Area	003-002
Remarks	

Tax Rate	
Description	Rate
Taxable Fire District Value	1.8911
Taxable Value	16.5897

Property Characteristics	
Neighborhood	15831: West Linn/Willamette old town 100, 101
Land Class Category	100: Residential land, vacant
Change property ratio	1XX

Related Properties
No Values Found

Parties			
Role	Percent	Name	Address
Taxpayer	100	PATEL VIPUL	2724 SE 82ND AVE, PORTLAND, OR 97266
Owner	100	VK NORTHWEST INC	12700 SE MCLOUGHLIN BLVD, MILWAUKIE, OR 97222

Property Values					
Description	2014	2013	2012	2011	2010
AVR Total	24,086	23,384	22,703	22,042	21,400
Exempt					
TVR Total	24,086	23,384	22,703	22,042	21,400
Real Mkt Land	26,407	24,439	24,439	24,603	25,585
Real Mkt Bldg	0	0	0	0	0
Real Mkt Total	26,407	24,439	24,439	24,603	25,585
M5 Mkt Land	26,407	24,439	24,439	24,603	25,585
M5 Mkt Bldg	0	0	0	0	0
M5 SAV	0	0	0	0	0
SAVL (MAV Use Portion)					
MAV (Market Portion)	24,086	23,384	22,703	22,042	21,400
Mkt Exception	0	0	0	0	0
AV Exception	0	0	0	0	0

Active Exemptions

No Exemptions Found

Events

Effective Date	Entry Date-Time	Type	Remarks
01/29/2015	2015-01-29 14:35:00.000	The situs address has changed	by HEIDIHAR
04/12/2007	2007-04-12 09:30:00.000	Taxpayer Changed	Party/Property Relationship by CINDYSIM
04/02/2007	2007-04-06 09:03:00.000	Taxpayer Changed	Property Transfer Filing No.: 157938 04/02/2007 by BARBARAHEN
04/02/2007	2007-04-06 09:03:00.000	Recording Processed	Property Transfer Filing No.: 157938, Bargain & Sale, Recording No.: 2007-027888 04/02/2007 by BARBARAHEN
04/02/2007	2007-04-05 14:25:00.000	Taxpayer Changed	Property Transfer Filing No.: 157909 04/02/2007 by BARBARAHEN
04/02/2007	2007-04-05 14:25:00.000	Recording Processed	Property Transfer Filing No.: 157909, Bargain & Sale, Recording No.: 2007-027887 04/02/2007 by BARBARAHEN
10/15/2004	2004-10-23 14:54:00.000	Taxpayer Changed	Property Transfer Filing No.: 106248 10/15/2004 by CINDYSIM
10/15/2004	2004-10-23 14:54:00.000	Recording Processed	Property Transfer Filing No.: 106248, Warranty Deed, Recording No.: 2004-095708 10/15/2004 by CINDYSIM
04/05/2004	2004-04-05 10:05:00.000	Annexation Completed For Property	Annex to TVFR, Ord 03-13 for 2004-Revise TCA Membership by JENMAYO
07/01/1999	1999-07-01 12:00:00.000	Ownership at Conversion	Conversion deed: 76-24397, , $ 0

Taxes

Tax Year	Category	TCA/District	Charged	Minimum	Balance Due	Due Date
1993	Property Tax Interest	003-002	411.59	0.00	0.00	11/15/1993
1993	Property Tax Principal	003-002	791.52	0.00	0.00	11/15/1993
1994	Property Tax Interest	003-002	379.95	0.00	0.00	11/15/1994
1994	Property Tax Principal	003-002	769.96	0.00	0.00	11/15/1994
1995	Property Tax Interest	003-002	80.42	0.00	0.00	11/15/1995
1995	Property Tax Principal	003-002	232.01	0.00	0.00	11/15/1995
1996	Property Tax Interest	003-002	31.54	0.00	0.00	11/15/1996
1996	Property Tax Principal	003-002	168.97	0.00	0.00	11/15/1996
1997	Property Tax Interest	003-002	7.00	0.00	0.00	11/15/1997
1997	Property Tax Principal	003-002	224.98	0.00	0.00	11/15/1997
1998	Property Tax Interest	003-002	5.51	0.00	0.00	11/15/1998
1998	Property Tax Principal	003-002	247.88	0.00	0.00	11/15/1998
1999	Property Tax Interest	003-002	12.59	0.00	0.00	06/05/2000
1999	Property Tax Principal	003-002	236.08	0.00	0.00	11/15/1999
2000	Property Tax Interest	003-002	17.25	0.00	0.00	06/20/2001
2000	Property Tax Principal	003-002	258.87	0.00	0.00	11/15/2000
2001	Property Tax Interest	003-002	10.05	0.00	0.00	05/14/2002
2001	Property Tax Principal	003-002	251.42	0.00	0.00	11/15/2001
2002	Property Tax Principal	003-002	263.50	0.00	0.00	11/15/2002
2003	Property Tax Principal	003-002	270.75	0.00	0.00	11/15/2003
2004	Property Tax Principal	003-002	290.82	0.00	0.00	11/15/2004
2005	Property Tax Principal	003-002	309.80	0.00	0.00	11/15/2005
2006	Property Tax Principal	003-002	340.06	0.00	0.00	11/15/2006
2007	Property Tax Principal	003-002	353.41	0.00	0.00	11/15/2007
2008	Property Tax Principal	003-002	360.63	0.00	0.00	11/15/2008
2009	Property Tax Principal	003-002	380.47	0.00	0.00	11/15/2009
2010	Property Tax Principal	003-002	370.72	0.00	0.00	11/15/2010
2011	Property Tax Principal	003-002	370.44	0.00	0.00	11/15/2011
2012	Property Tax Principal	003-002	381.81	0.00	0.00	11/15/2012
2013	Property Tax Principal	003-002	386.19	0.00	0.00	11/15/2013
2014	Property Tax Principal	003-002	401.54	0.00	0.00	11/15/2014
TOTAL Due as of 2015/03/02					0.00	

Receipts

Date	Receipt	Amount Applied	Amount Due	Tendered	Change
2014/11/18	3787853	401.54	401.54	389.49	0.00
2013/11/15	3584920	386.19	386.19	374.60	0.00
2012/11/20	3419240	381.81	381.81	370.36	0.00
2011/11/16	3194975	370.44	370.44	359.33	0.00
2010/11/04	2897930	370.72	370.72	359.60	0.00
2009/11/17	2792025	380.47	380.47	369.06	0.00
2008/11/20	2602872	360.63	360.63	349.81	0.00
2007/11/08	2312400	353.41	353.41	342.81	0.00
2006/10/27	2100293	340.06	340.06	329.86	0.00
2005/11/23	2033737	309.80	309.80	300.51	0.00
2004/10/19	1726579	290.82	290.82	282.10	0.00
2003/11/17	1635679	270.75	270.75	262.63	0.00
2002/11/13	1395521	263.50	3,159.87	3,065.07	0.00
2002/05/14	1342721	261.47	461.22	461.22	0.00
2001/06/20	1171006	276.12	487.13	487.13	0.00
2000/06/05	989506	248.67	438.75	438.76	0.00
1998/11/15	269272	253.39	253.39	253.39	0.00
1997/11/15	269271	231.98	231.98	231.98	0.00
1996/11/15	269270	200.51	200.51	200.51	0.00
1995/11/15	269269	312.43	312.43	312.43	0.00
1994/11/15	269268	1,149.91	1,149.91	1,149.91	0.00
1993/11/15	269267	1,203.11	1,203.11	1,203.11	0.00

Sales History

Transfer Date	Recording Number	Sale Amount	Deed Type	Grantee	Grantor
03/28/2007	2007-027888	300,000	S	VK NORTHWEST INC	PATEL KATEN
03/28/2007	2007-027887	150,000	S	PATEL KATEN	PATEL KATEN
10/15/2004	2004-095708	300,000	M	PATEL KATEN	MEANS C RAY & MARGARET C

Property Details

Living Area Sq Ft	Manf Struct Size	Year Built	Improvement Grade	Stories	Bedrooms	Full Baths	Half Baths

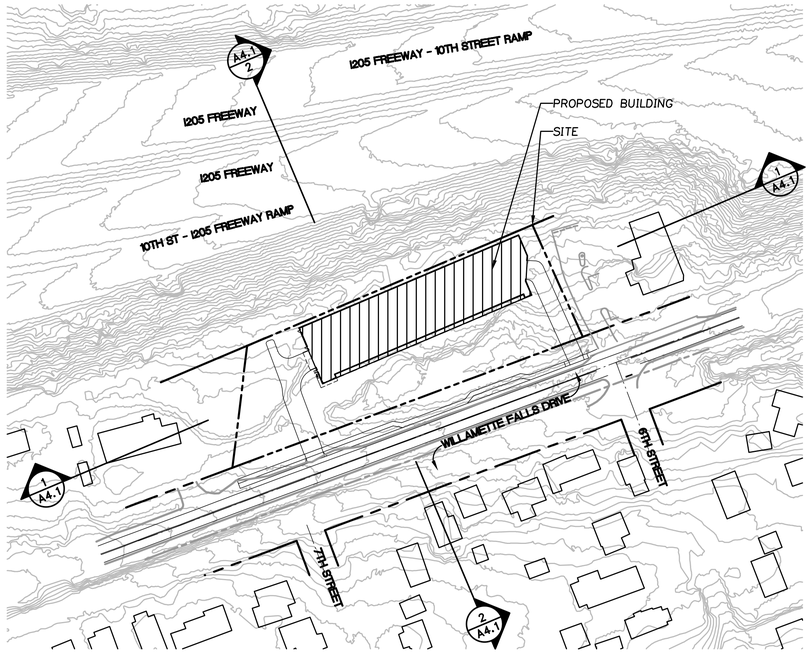
SW Perspective

April 11, 2016

NW Self Storage
2150120.00

WEST LINN SELF STORAGE

2400–2450 WILLAMETTE FALLS DRIVE
WEST LINN, OR



VICINITY MAP
1" = 100'–0"

ABBREVATIONS

AB	ANCHOR BOLT
AC	ASPHALTIC CONCRETE
ADJ	ADJACENT
AFF	ABOVE FINISH FLOOR
ALT	ALTERNATE
ALUM	ALUMINUM
ANOD	ANODIZED
APPROX	APPROXIMATE
ARCH	ARCHITECT(URAL)
B/	BOTTOM OF
BD	BOARD
BTWN	BETWEEN
BLDG	BUILDING
BLK	BLOCK
BLKG	BLOCKING
BM	BENCH MARK
BOTT	BOTTOM
BRG ℄	BEARING PLATE
CB	CATCH BASIN
CI	CAST IRON
CJ	CONTROL JOINT
℄	CENTER LINE
CLG	CEILING
CLR	CLEAR
CMP	CORRUGATED METAL PIPE
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUOUS
CORR	CORRUGATED(ION)
CSP	CONCRETE SEWER PIPE
CNTR	CENTER
DBL	DOUBLE
DF	DRINKING FOUNTAIN
DIA	DIAMETER
DIM	DIMENSION
DL	DEAD LOAD
DN	DOWN
DR	DOOR
DS	DOWNSPOUT
DWG	DRAWING
EIFS	EXTERIOR INSULATION FINISH SYSTEM
ELEV	ELEVATION
ELECT	ELECTRICAL
EQ	EQUAL
EXIST	EXISTING
EXP JT	EXPANSION JOINT
EXT	EXTERIOR
FACE/STUD	FACE OF STUD
FD	FLOOR DRAIN
FDC	FIRE DEPARTMENT CONNECTION
FIN FLR	FINISH FLOOR
FIN GR	FINISH GRADE
FLR	FLOOR
FOC	FACE OF CONCRETE
FND	FOUNDATION
FOIC	FURNISH BY OWNER INSTALL BY CONTRACTOR
FOS	FACE OF STUD
FOW	FACE OF WALL
FT	FEET/FOOT
FTG	FOOTING
GA	GAUGE
GALV	GALVANIZED
GEN	GENERAL
GR	GRADE
GYP BD	GYPSUM BOARD
HB	HOSE BIBB
HC	HOLLOW CORE
HDR	HEADER
HDW	HARDWARE
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HTG	HEATING
HVAC	HEATING, VENTILATION AND AIR CONDITIONING
ID	INSIDE DIMENSION
IE	INVERT ELEVATION
INSUL	INSULATION
INT	INTERIOR
JST	JOIST
JNT	JOINT
LL	LIVE LOAD
MATL	MATERIAL
MAX	MAXIMUM
MECH	MECHANICAL
MFD	MANUFACTURED
MFG	MANUFACTURING
MGR	MANUFACTURER
MH	MAN HOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MK	MARK
MO	MASONRY OPENING
NIC	NOT IN CONTRACT
NO./#	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
O/A	OVERALL
OC	ON CENTER
OD	OUTSIDE DIAMETER
OHD	OVER HEAD DOOR
OPNG	OPENING
OPP	OPPOSITE
O/S	OUTSIDE
℄	PLATE
PLAM	PLASTIC LAMINATE
PLYWD	PLYWOOD
PVC	POLY VINYL CHLORIDE
PVMT	PAVEMENT
PT	PRESSURE TREATED
R	RADIUS
RAD	RADIAL
RD	ROOF DRAIN
REF	REFERENCE
REINF	REINFORCING
REQD	REQUIRED
REV	REVISION
RM	ROOM
RO	ROUGH OPENING
ROW	RIGHT OF WAY
SHTG	SHEATHING
SIM	SIMILAR
SPEC	SPECIFICATION
SQ	SQUARE
SS	STAINLESS STEEL
STA PT	STATION POINT
STD	STANDARD
SUSP	SUSPENDED
T/	TOP OF
THK	THICK(NESS)
T/RF	TOP OF ROOF (FRAMING)
TS	TUBE STEEL
TU	TILT–UP
TYP	TYPICAL
UL	UNDER WRITERS LABORATORIES
U/S	UNDERSIDE
VERT	VERTICAL
VEST	VESTIBULE
W/	WITH
WC	WATER CLOSET
WD	WOOD
W/O	WITH OUT
WP	WATER PROOF
WR	WATER RESISTANT
WWM	WELDED WIRE MESH
WH	WATER HEATER

TEAM MEMBERS

OWNERS

VK NORTHWEST, INC. C/O VIPUL PATEL

12700 SE McLoughlin Boulevard
Milwaukie, Oregon 97222

Contact: mpinvestments@gmail.com

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WEST LINN

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Fax: (503) 228–1285
Contact: Matt Butts (Civil Engineering)
Contact: Lee Leighton (Planning)

SYMBOL LEGEND

BUILDING SECTION KEY MARKS — X / NUM — SECTION# / SHEET#

SECTION KEY MARKS — X / NUM — SECTION# / SHEET#

DETAIL REFERENCE MARKS — X / NUM — DETAIL# / SHEET#

KEYNOTE BUBBLE MARK — X — KEYNOTE#

ROOM/SPACE IDENTIFICATION — OFFICE / 101 — ROOM NAME / ROOM #

DOOR SYMBOL NUMBER — XX

DRAWING CRITERIA

ALL DRAWINGS ARE IDENTIFIED BY TWO DIGITS AS FOLLOWS:

A. CATEGORY LETTER REFERRING TO THE DISCIPLINE OR MAJOR DIVISION.
- T. TITLE SHEET
- C. CIVIL – SITE DEVELOPMENT
- L. LANDSCAPE
- A. ARCHITECTURAL
- S. STRUCTURAL
- P. PLUMBING
- M. MECHANICAL
- E. ELECTRICAL

B. SUB–CATEGORY NUMBER REFERRING TO TYPE OF DRAWING OR GROUPING.
1. GENERAL
2. PLANS
3. EXTERIOR ELEVATIONS/BUILDING SECTIONS
4. WALL SECTIONS
5. INTERIOR ELEVATIONS
6. REFLECTED CEILING PLANS
7. STAIR SECTIONS, PLANS, AND DETAILS
8. DETAILS
9. SCHEDULES

INDEX OF DRAWINGS

CONDITIONAL USE PERMIT SUBMITTAL - 4/11/16

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Project
NORTHWEST
SELF STORAGE
2400 AND 2450
WILLAMETTE FALLS
DRIVE

REVISIONS:

REVISION DELTA	REVISIONS THIS SHEET	REVISION DELTA CLOSING DATE

SHEET TITLE:
TITLE SHEET

DRAWN BY: TCB

CHECKED BY: DRW

SHEET:
T1.0

JOB NO. 2150120.00

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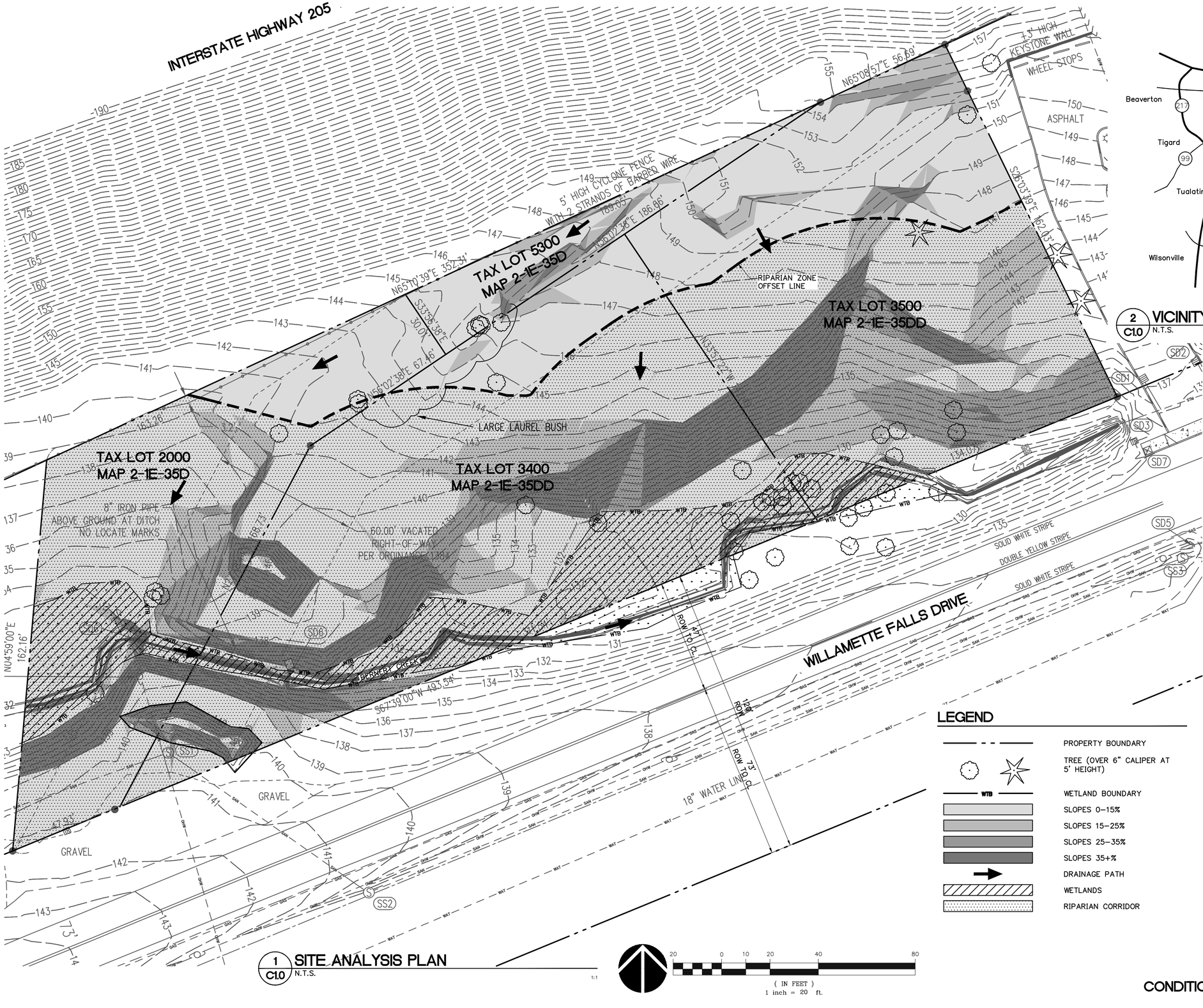
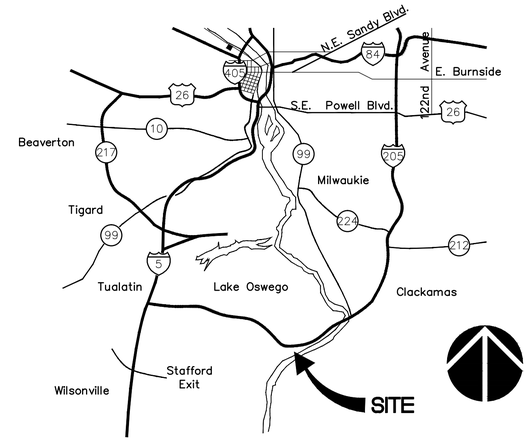


1 C1.0 SITE ANALYSIS PLAN
N.T.S.

1:1

20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.



2 C1.0 VICINITY MAP
N.T.S.

1:1

LEGEND

- PROPERTY BOUNDARY
- TREE (OVER 6" CALIPER AT 5' HEIGHT)
- WTB — WETLAND BOUNDARY
- SLOPES 0–15%
- SLOPES 15–25%
- SLOPES 25–35%
- SLOPES 35+%
- DRAINAGE PATH
- WETLANDS
- RIPARIAN CORRIDOR

NOTE:
THIS SITE DOES NOT CONTAIN TYPE I OR TYPE II LANDS AS DEFINED IN CDC 02.030 BECAUSE THE SLOPES EXCEEDING 25% CONSTITUTE LESS THAN HALF THE SITE AREA

EXISTING SITE ANALYSIS:

EXISTING SITE AREA			68,663 SF	(1.58 AC)
SLOPES:	0–15	PERCENT	45,648 SF	(66.5%)
	15–25	PERCENT	8,435 SF	(12.3%)
	25–35	PERCENT	4,947 SF	(7.2%)
	35+	PERCENT	9,633 SF	(14.0%)

CONDITIONAL USE PERMIT SUBMITTAL - 4/11/16

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Project
NORTHWEST SELF STORAGE
2400 AND 2450 WILLAMETTE FALLS DRIVE

REVISIONS:

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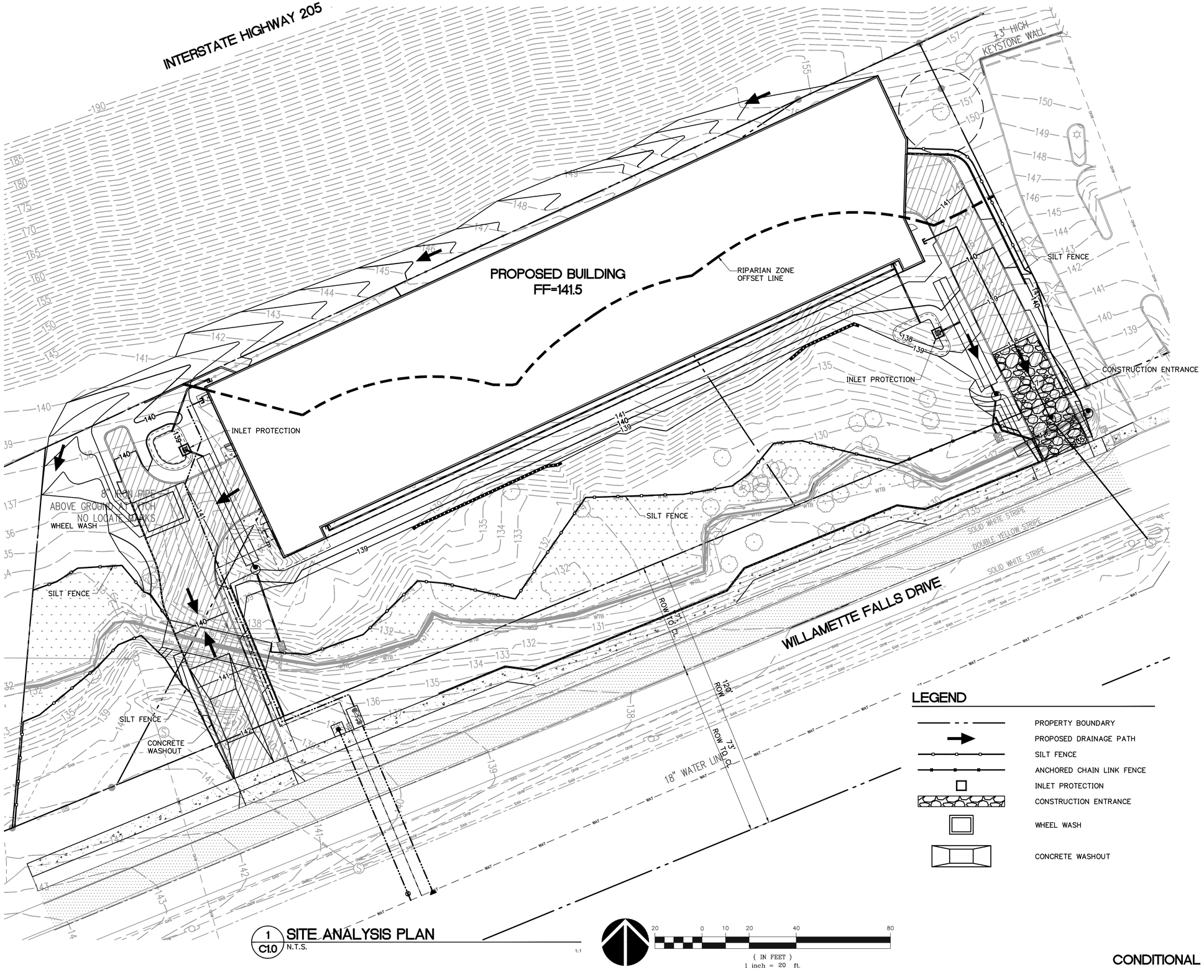
SHEET TITLE:
SITE ANALYSIS PLAN

DRAWN BY: BLF

CHECKED BY: MWB

SHEET:
C1.0

JOB NO. 2150120.00



LEGEND

- PROPERTY BOUNDARY
- PROPOSED DRAINAGE PATH
- SILT FENCE
- ANCHORED CHAIN LINK FENCE
- INLET PROTECTION
- CONSTRUCTION ENTRANCE
- WHEEL WASH
- CONCRETE WASHOUT

1 C1.0 SITE ANALYSIS PLAN
N.T.S.

1:1

20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

CONDITIONAL USE PERMIT SUBMITTAL - 4/11/16

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SHEET TITLE:
CONSTRUCTION MANAGEMENT PLAN

DRAWN BY: BLF

CHECKED BY: MWB

SHEET:
C1.2

JOB NO. 2150120.00

CONTACTS:

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DESIGNER:
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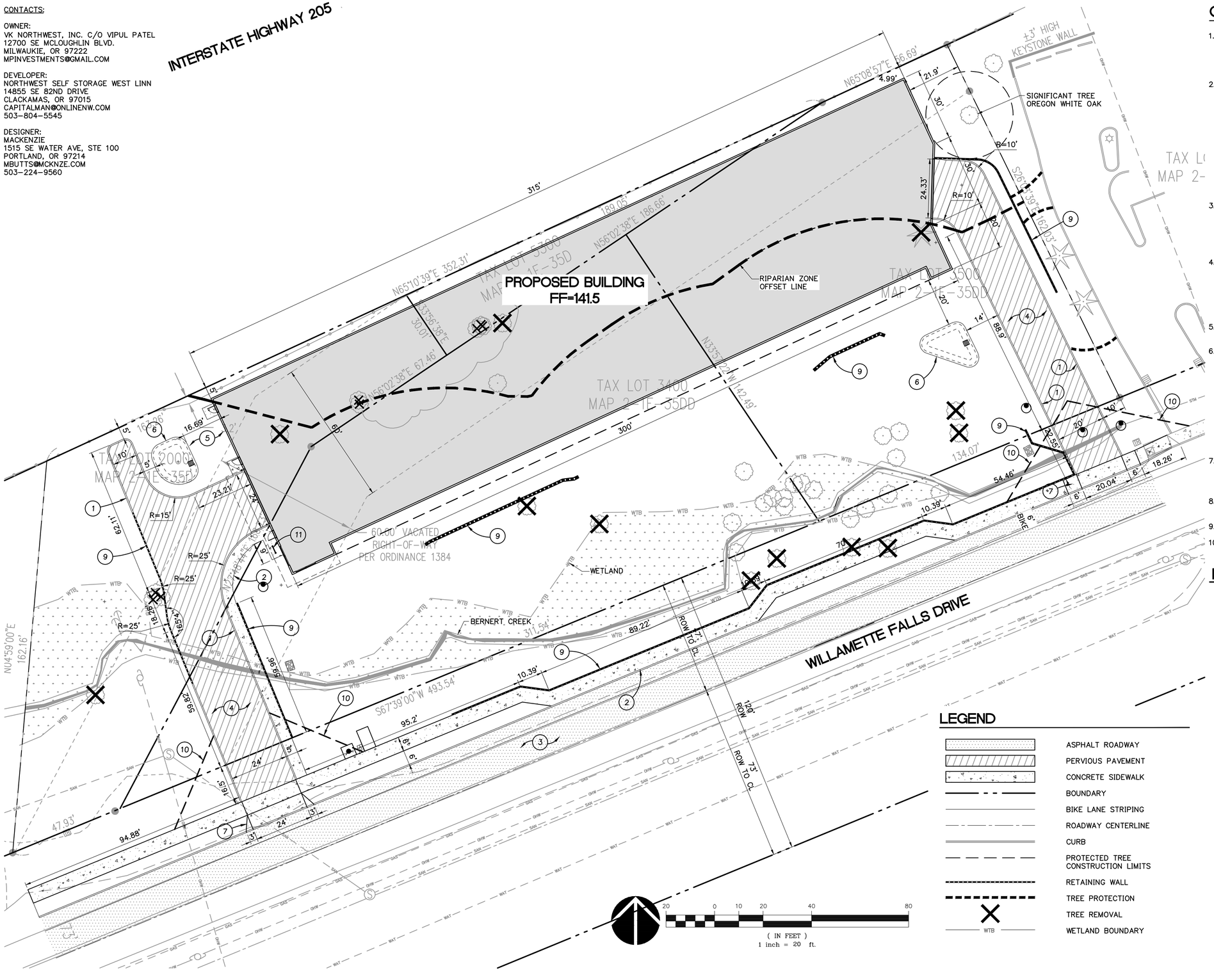

LEGEND

- ASPHALT ROADWAY
- PERVIOUS PAVEMENT
- CONCRETE SIDEWALK
- BOUNDARY
- BIKE LANE STRIPING
- ROADWAY CENTERLINE
- CURB
- PROTECTED TREE CONSTRUCTION LIMITS
- RETAINING WALL
- TREE PROTECTION
- TREE REMOVAL
- WETLAND BOUNDARY

GENERAL NOTES

1. ALL WORK SHALL CONFORM TO THE STANDARD SPECIFICATIONS AND THE REQUIREMENTS OF THE CITY OF WEST LINN AND THE CURRENT AMERICAN PUBLIC WORKS ASSOCIATION STANDARDS FOR PUBLIC WORKS CONSTRUCTION.
2. THE WORKING DRAWINGS ARE GENERALLY DIAGRAMMATIC. THEY DO NOT SHOW EVERY OFFSET, BEND OR ELBOW REQUIRED FOR INSTALLATION IN THE SPACE PROVIDED. THEY DO NOT SHOW EVERY DIMENSION, COMPONENT PIECE, SECTION, JOINT OR FITTING REQUIRED TO COMPLETE THE PROJECT. ALL LOCATIONS FOR WORK SHALL BE CHECKED AND COORDINATED WITH EXISTING CONDITIONS IN THE FIELD BEFORE BEGINNING CONSTRUCTION. EXISTING UNDERGROUND UTILITIES LAYING WITHIN THE LIMITS OF EXCAVATION SHALL BE VERIFIED AS TO CONDITION, SIZE AND LOCATION BY UNCOVERING, PROVIDING SUCH IS PERMITTED BY LOCAL PUBLIC AUTHORITIES WITH JURISDICTION, BEFORE BEGINNING CONSTRUCTION. CONTRACTOR TO NOTIFY ENGINEER IF THERE ARE ANY DISCREPANCIES.
3. EFFECTIVE EROSION PREVENTION AND SEDIMENT CONTROL IS REQUIRED. EROSION CONTROL DEVICES MUST BE INSTALLED AND MAINTAINED TO MEET CITY OF WEST LINN REQUIREMENTS. THE GOVERNING JURISDICTION MAY, AT ANY TIME, ORDER CORRECTIVE ACTION AND STOPPAGE OF WORK TO ACCOMPLISH EFFECTIVE EROSION CONTROL.
4. EFFECTIVE DRAINAGE CONTROL IS REQUIRED. DRAINAGE SHALL BE CONTROLLED WITHIN THE WORK SITE AND SHALL BE ROUTED SO THAT ADJACENT PRIVATE PROPERTY, PUBLIC PROPERTY, AND THE RECEIVING SYSTEM ARE NOT ADVERSELY IMPACTED. THE GOVERNING JURISDICTION MAY, AT ANY TIME, ORDER CORRECTIVE ACTION AND STOPPAGE OF WORK TO ACCOMPLISH EFFECTIVE DRAINAGE CONTROL.
5. CONTRACTOR SHALL ADJUST ALL STRUCTURES IMPACTED BY CONSTRUCTION IMPROVEMENTS TO NEW FINISH GRADES.
6. EXCAVATION: EXCAVATE FOR SLABS, PAVING, AND OTHER IMPROVEMENTS TO SIZES AND LEVELS SHOWN OR REQUIRED. ALLOW FOR FORM CLEARANCE AND FOR PROPER COMPACTION OF REQUIRED BACKFILLING MATERIAL. EXCAVATOR(S) MUST COMPLY WITH O.R.S. 757.541 THROUGH 757.571; EXCAVATOR(S) SHALL NOTIFY ALL UTILITY COMPANIES FOR LINE LOCATIONS SEVENTY-TWO (72) HOURS (MINIMUM) PRIOR TO START OF WORK. DAMAGE TO UTILITIES SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE. (ONE CALL LOCATE UTILITY NOTIFICATION CENTER – PORTLAND METRO AREA 246-6699, OREGON 696-4848, ALL OTHER AREAS 1-800-332-2344).
7. WHERE CONNECTING TO AN EXISTING PIPE, AND PRIOR TO ORDERING MATERIALS, THE CONTRACTOR SHALL EXPOSE THE END OF THE EXISTING PIPE VERIFY THE LOCATION, SIZE, AND ELEVATION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
8. REQUEST BY THE CONTRACTOR FOR CHANGES TO THE PLANS MUST BE APPROVED BY THE ENGINEER.
9. CURB RADII 3' UNLESS OTHERWISE INDICATED.
10. WASTE DISPOSAL AND RECYCLING IN BUILDING

KEYNOTES: (#)

1. CONCRETE VERTICAL CURB, SEE DETAIL XX
2. STANDARD CONCRETE SIDEWALK, SEE DETAIL XX
3. ASPHALT PAVEMENT, SEE DETAIL XX
4. PERVIOUS PAVEMENT, SEE DETAIL XX
5. LANDSCAPE AREA, SEE LANDSCAPE PLANS
6. WATER QUALITY POND, SEE UTILITY PLAN
7. CONSTRUCT CONCRETE DRIVEWAY, SEE DETAIL XX
8. CONSTRUCT 6' CHAINLINK FENCE
9. CONSTRUCT RETAINING WALL, SEE DETAIL XX
10. VISION CLEARANCE TRIANGLE
11. INSTALL BIKE RACK, SEE DETAIL XX

SITE COVERAGE SUMMARY:

PREVIOUSLY DISTURBED AREA	0 SF
TEMPORARILY DISTURBED AREA	29,412 SF
PERMANENTLY DISTURBED AREA	30,726 SF
LANDSCAPED AREA	29,412 SF
TREE CANOPY AREA	10,954 SF
MAXIMUM DISTURBED AREA ALLOWED	15,890 SF
MAXIMUM DISTURBED AREA	15,214 SF

CONDITIONAL USE PERMIT SUBMITTAL - 4/11/16

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2400 AND 2450 WILLAMETTE FALLS DRIVE

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SHEET TITLE:
SITE PLAN

DRAWN BY: BLF
CHECKED BY: MWB
SHEET:
C2.0
JOB NO. 2150120.00

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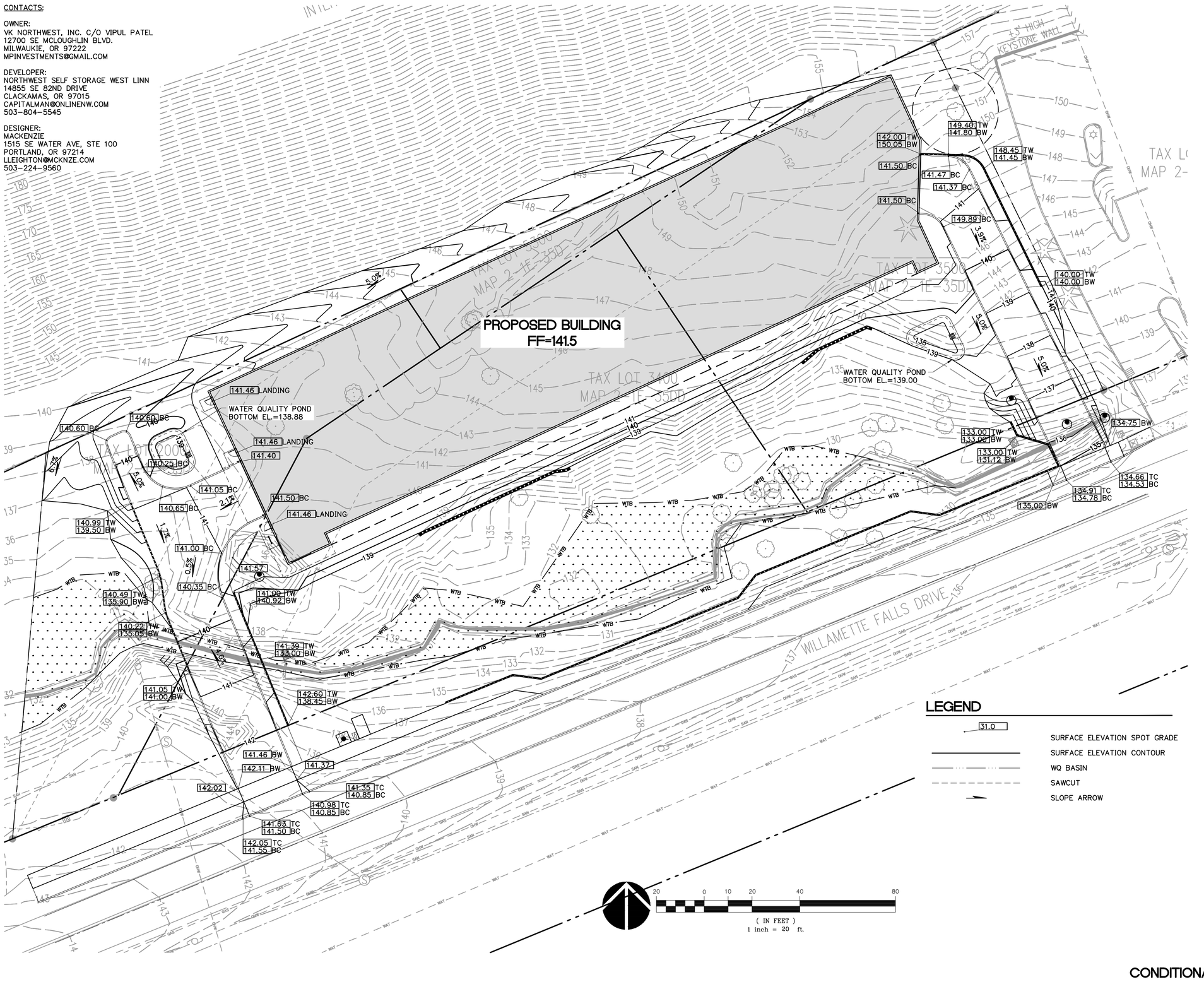
LLEIGHTON@MCKNZE.COM
503-224-9560



LEGEND

- 31.0 — SURFACE ELEVATION SPOT GRADE
- SURFACE ELEVATION CONTOUR
- WQ BASIN
- SAWCUT
- SLOPE ARROW

20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

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MILWAUKIE, OR 97222

Project
NORTHWEST
SELF STORAGE
2400 AND 2450
WILLAMETTE FALLS
DRIVE

REVISIONS:

REVISION DELTA	REVISION DELTA CLOSING DATE

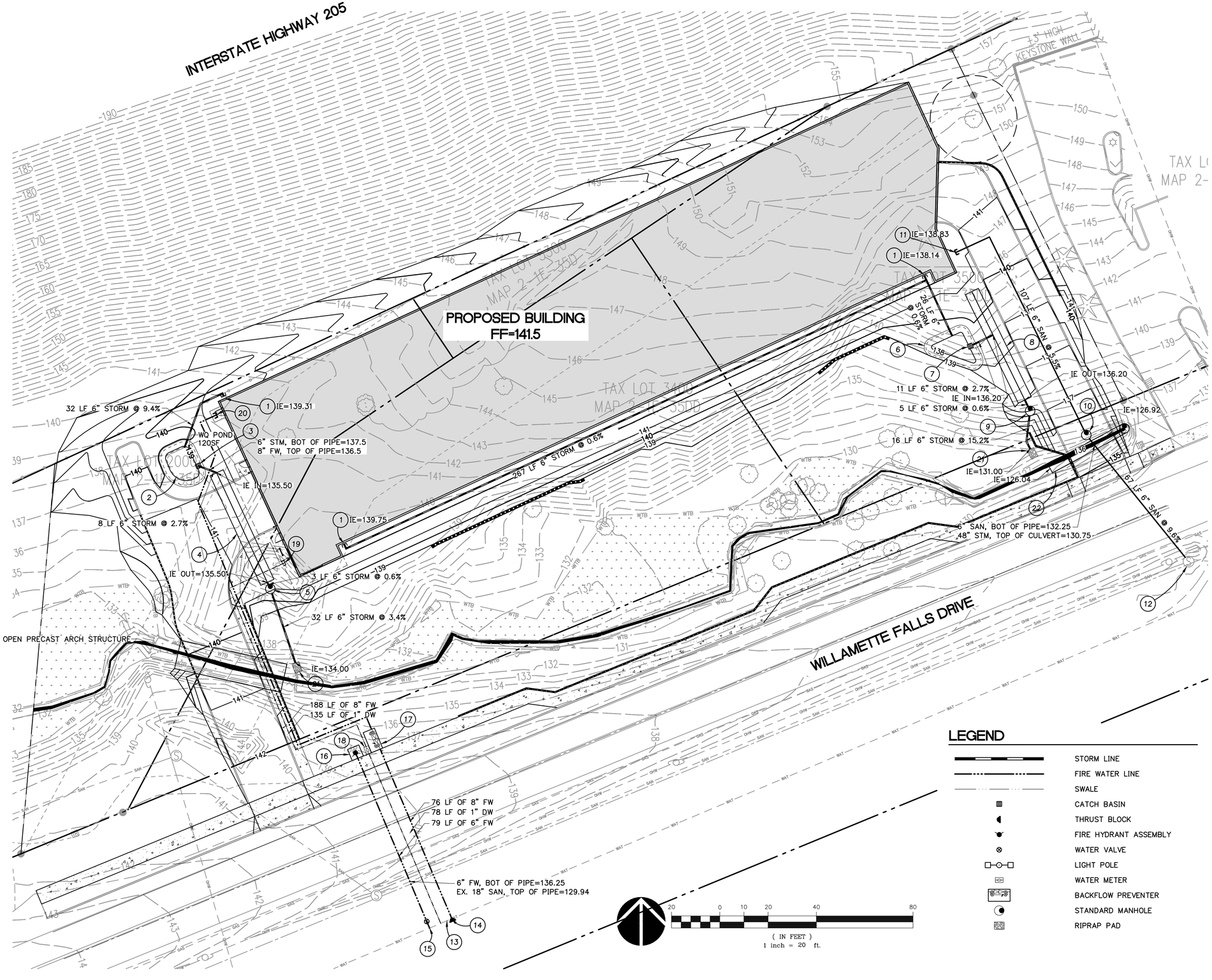
SHEET TITLE:
GRADING PLAN

DRAWN BY: BLF

CHECKED BY: MWB

SHEET:
C3.0

JOB NO. 2150120.00



KEYNOTES:

1. CONNECT 6" STORM PIPE TO ROOF DRAIN DOWNSPOUT
2. 120 SF VEGETATED WATER QUALITY FACILITY (BASIN 1), SEE DETAIL XX
   IE IN = 138.88 (6")
   TOP OF SOIL ELEV=138.88
3. CONSTRUCT DITCH INLET, SEE DETAIL XX
   RIM=139.12
   IE OUT=137.62 (6")
4. (2) 36" DETENTION PIPES, 100LF TOTAL, SEE DETAIL XX, IE=135.50
5. CONSTRUCT FLOW CONTROL MANHOLE, SEE DETAIL XX
   RIM=143.5
   IE IN=135.30 (6")
   IE OUT=135.10 (6")
6. 118 SF VEGETATED WATER QUALITY FACILITY (BASIN 2), SEE DETAIL XX
   IE IN = 138.00 (6")
   TOP OF SOIL ELEV=138.00
7. CONSTRUCT DITCH INLET, SEE DETAIL XX
   RIM=138.00
   IE OUT=136.5 (6")
8. (2) 36" DETENTION PIPES, 100LF TOTAL, SEE DETAIL XX, IE=133.70
9. CONSTRUCT FLOW CONTROL MANHOLE, SEE DETAIL XX
   RIM=137.00
   IE IN=133.67 (6")
   IE OUT=133.47 (6")
10. CONSTRUCT SANITARY MANHOLE, SEE DETAIL XX
    RIM=136.25
    IE IN=132.93 (6")
    IE OUT=132.73 (6")
11. SANITARY CONNECTION TO PLUMBING
12. CONNECT TO EXISTING SANITARY MANHOLE
    RIM=135.01
    IE IN=126.20 (6"), EXISTING
    IE IN=126.3 (6")
    IE OUT=126.10 (6"), EXISTING
13. 1" DOMESTIC WATER SERVICE WITH 1" METER, BY CITY OF WEST LINN
14. INSTALL 8" FIRE TAP TO 18" EXISTING MAIN
15. INSTALL 6" FIRE TAP TO 18" EXISTING MAIN
16. INSTALL STANDARD FIRE HYDRANT ASSEMBLY, SEE DETAIL X
17. INSTALL 5106-LA VAULT AND 8" DDCV.
18. INSTALL 1" WATER FROM METER TO PLUMBING CONNECTION.
19. DOMESTIC WATER CONNECTION TO PLUMBING
20. FIRE WATER CONNECTION TO PLUMBING
21. RIPRAP PAD
22. INSTALL 48"x30' CULVERT

LEGEND

- STORM LINE
- FIRE WATER LINE
- SWALE
- CATCH BASIN
- THRUST BLOCK
- FIRE HYDRANT ASSEMBLY
- WATER VALVE
- LIGHT POLE
- WATER METER
- BACKFLOW PREVENTER
- STANDARD MANHOLE
- RIPRAP PAD

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SHEET TITLE:
UTILITY PLAN

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CHECKED BY: MWB
SHEET:
C4.0
JOB NO. 2150120.00

APPENDIX C.
WILLAMETTE FALLS SITE DEVELOPMENT AND MITIGATION PLANTING PLAN

S&A#2394

WQ POND
Plant per Portland
Stormwater
Management Manual

WQ PLANTER
Plant per Portland
Stormwater
Management Manual

WQ POND
Plant per Portland
Stormwater
Management Manual

5' HIGH CYCLONE FENCE
WITH 2 STRANDS OF BARBED WIRE

N56°02'38"E 186.86'

S33°56'38"E 29.99'

N65°10'59"E 163.26'

N56°02'38"E 67.46'

N33°57'22"W 142.45'

S26°03'39"E 162.03'

N04°59'00"E 162.12'

S85°01'00"W 493.54'

311.54'

68.73'

47.93'

3.2'

134.07'

LARGE LAUREL BUSH

8" IRON PIPE
ABOVE GROUND AT DITCH
NO LOCATE MARKS

60.00' VACATED
RIGHT-OF-WAY
PER ORDINANCE 1384

TAX LOT 2000
MAP 2-1E-35D

TAX LOT 3400
MAP 2-1E-35DD

TAX LOT 3500
MAP 2-1E-35DD

TAX LOT
MAP 2-1E

ASPHALT
STUDY AREA
BOUNDARY

ASPHALT

EXIT
ONLY

AREA 1
936SF

AREA 2
629SF

AREA 3
3,058SF

AREA 4
1,304SF

AREA 5
9,817SF

AREA 6
463SF

AREA 7
247SF

WETLAND 1

WETLAND 2
6,924sf

WETLAND 3
1,384sf

553sf

SP1
SP2 (PP1)
SP3
SP4
SP5
SP6
SP7
SP8
SP9 (PP3)
SP10
SP11
SPA
SPB
SPC
SPD
SPE
SPF
SPG
PP2
PP4

OHW

CULVERT

GRAVEL

18" WATER LINE

SOLID WHITE STRIPE

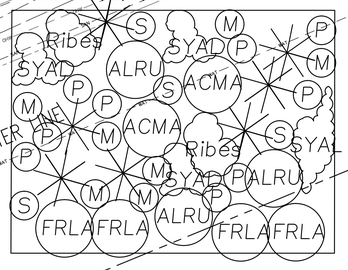
DOUBLE YELLOW STRIPE

SOLID WHITE STRIPE

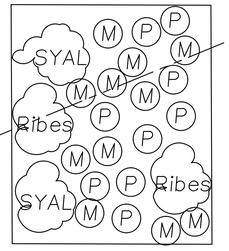
WILLAMETTE FALLS DRIVE

REPRESENTATIVE PLANTING PLANS

AREA 1,2,5,7

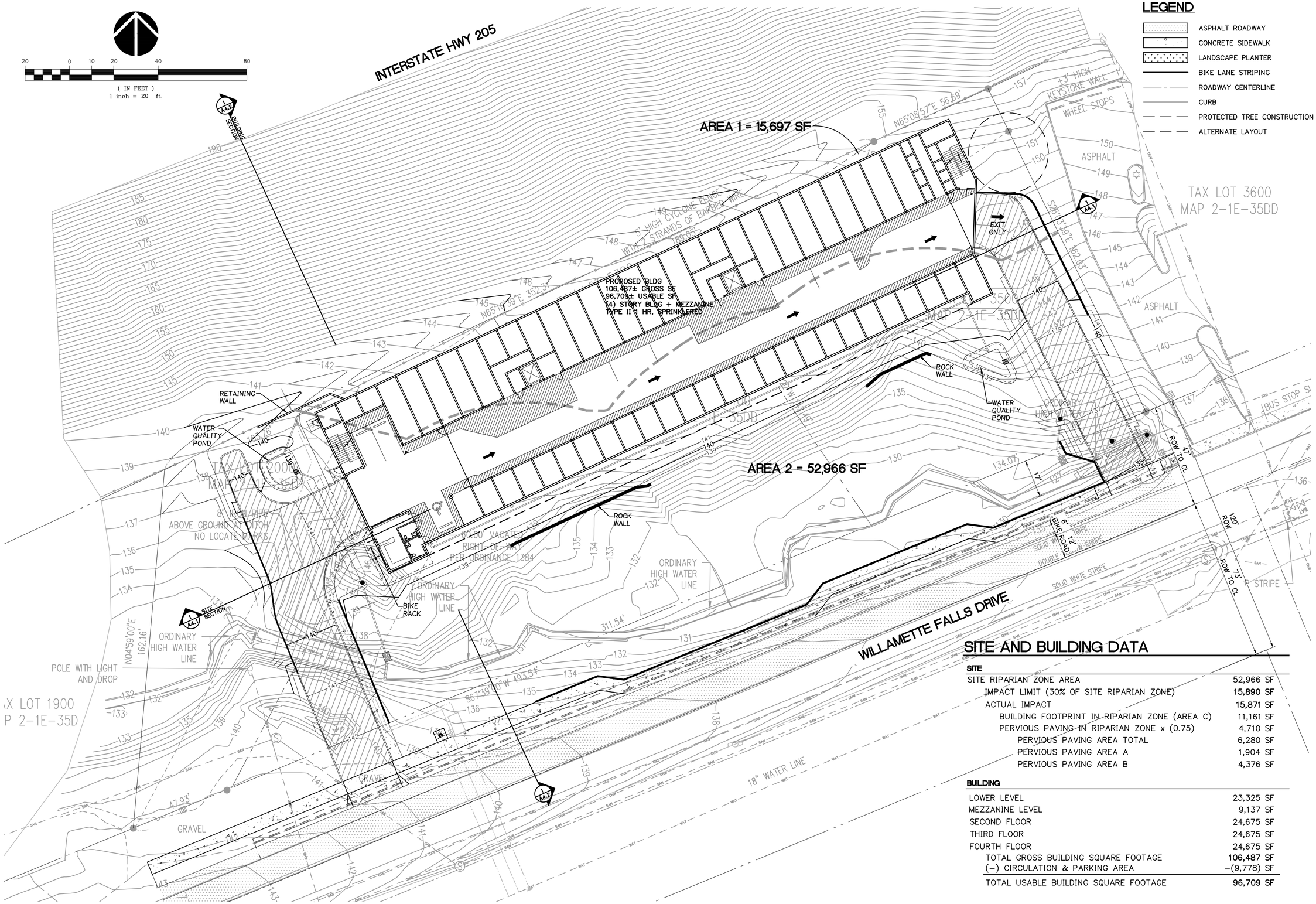


AREA 3,4,6



LEGEND

ALRU	Red Alder
ACMA	Big Leaf Maple
FRLA	Oregon Ash
	Douglas Fir
Ribes	Red Flowering currant (cluster)
SYAL	Snowberry (cluster)
P	Swordfern
M	Oregon grape
S	Serviceberry



LEGEND

- ASPHALT ROADWAY
- CONCRETE SIDEWALK
- LANDSCAPE PLANTER
- BIKE LANE STRIPING
- ROADWAY CENTERLINE
- CURB
- PROTECTED TREE CONSTRUCTION LIMITS
- ALTERNATE LAYOUT

SITE AND BUILDING DATA

SITE	
SITE RIPARIAN ZONE AREA	52,966 SF
IMPACT LIMIT (30% OF SITE RIPARIAN ZONE)	**15,890 SF**
ACTUAL IMPACT	**15,871 SF**
BUILDING FOOTPRINT IN RIPARIAN ZONE (AREA C)	11,161 SF
PERVIOUS PAVING IN RIPARIAN ZONE x (0.75)	4,710 SF
PERVIOUS PAVING AREA TOTAL	6,280 SF
PERVIOUS PAVING AREA A	1,904 SF
PERVIOUS PAVING AREA B	4,376 SF
BUILDING	
LOWER LEVEL	23,325 SF
MEZZANINE LEVEL	9,137 SF
SECOND FLOOR	24,675 SF
THIRD FLOOR	24,675 SF
FOURTH FLOOR	24,675 SF
TOTAL GROSS BUILDING SQUARE FOOTAGE	**106,487 SF**
(–) CIRCULATION & PARKING AREA	–(9,778) SF
TOTAL USABLE BUILDING SQUARE FOOTAGE	**96,709 SF**

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SHEET TITLE:
SITE LAYOUT

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SHEET:
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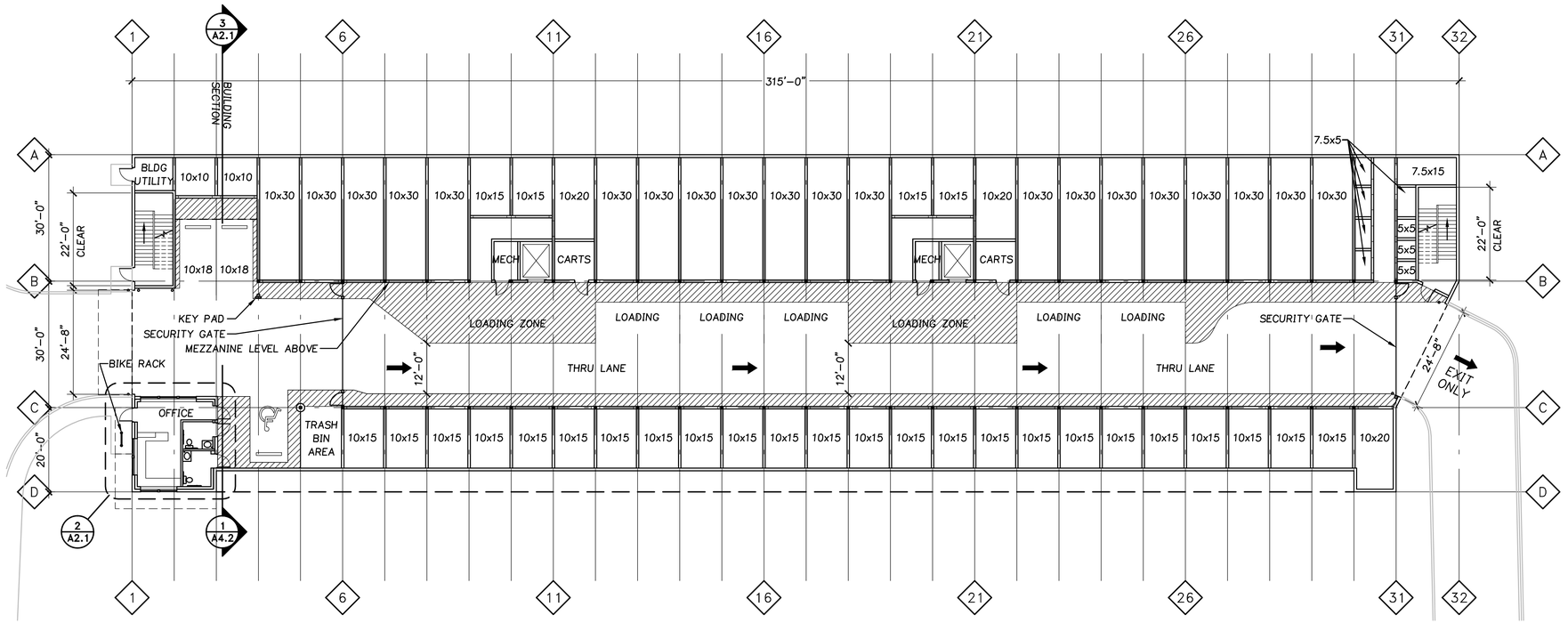
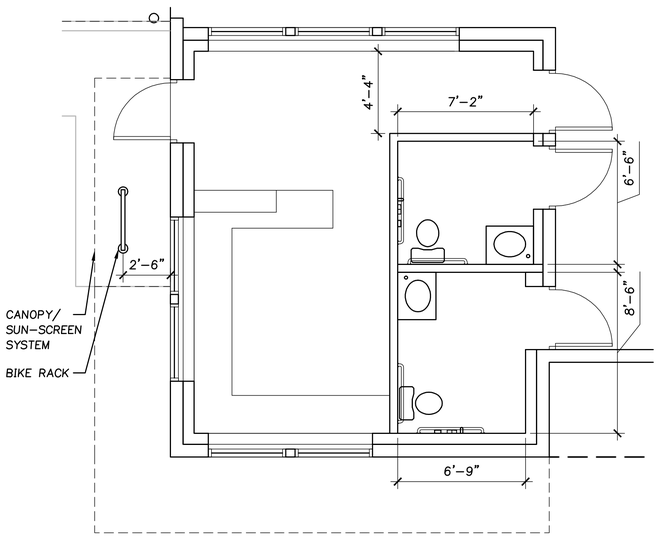
JOB NO. 2150120.00



1 A2.1 LEVEL 1 FLOOR PLAN

1/16"=1'-0"



2 A2.1 ENLARGED OFFICE PLAN

1/4"=1'-0"

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SHEET TITLE:
LEVEL 1
FLOOR PLAN

DRAWN BY: TCB

CHECKED BY: DRW

SHEET:
A2.1

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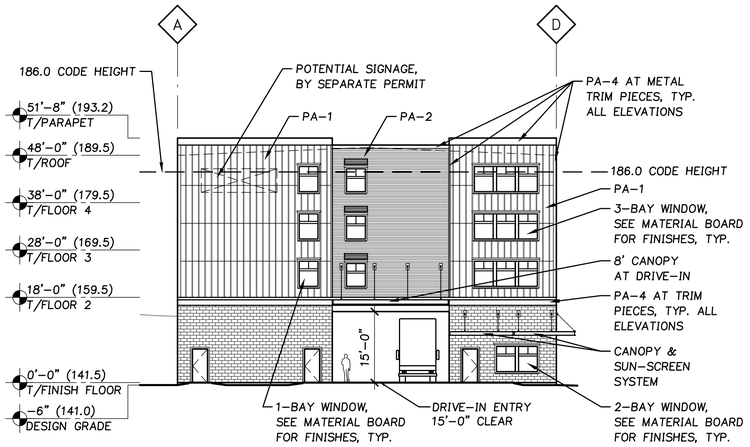
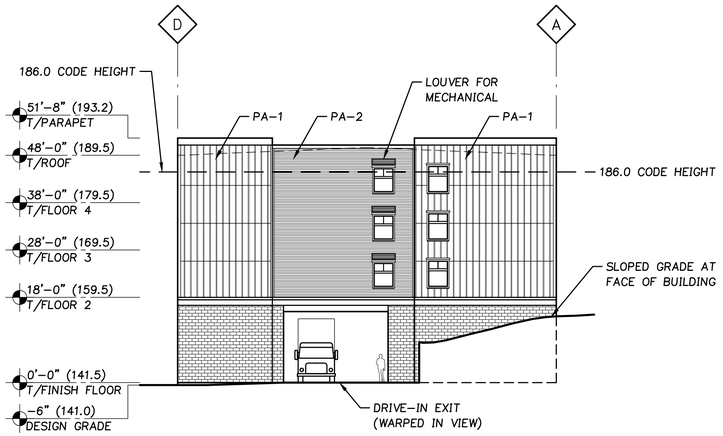


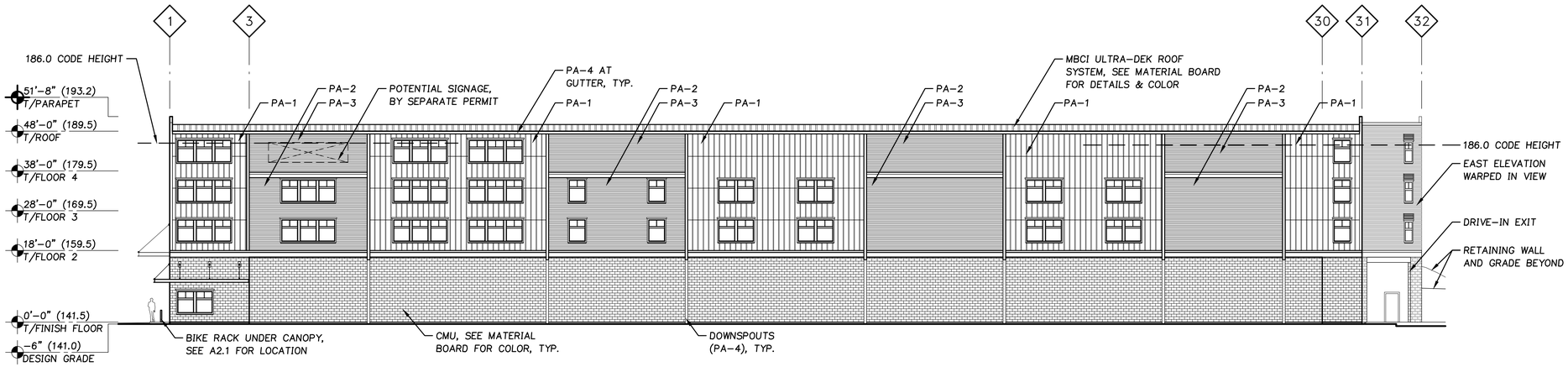
WEST ELEVATION

1/16"=1'-0"



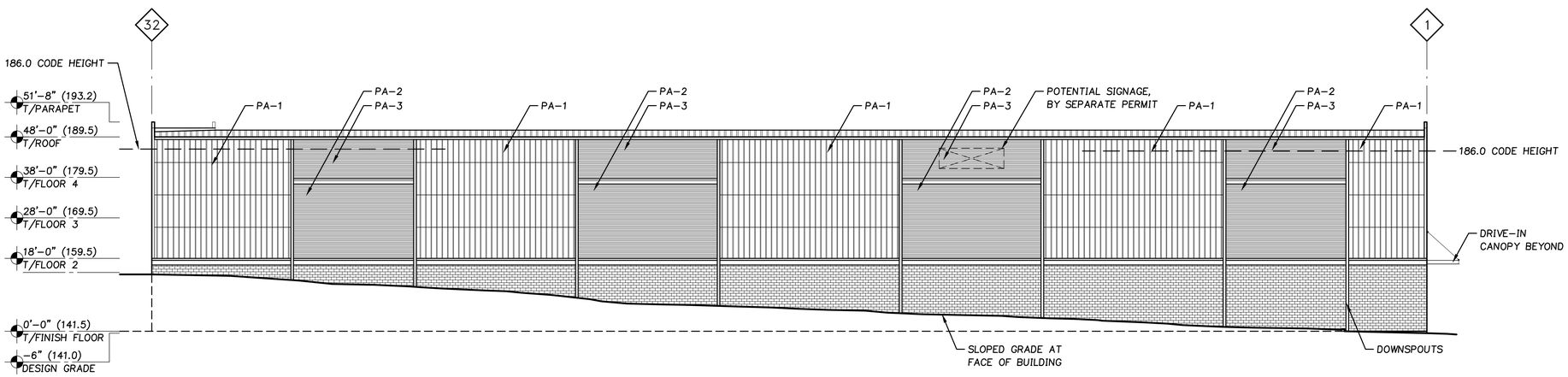
EAST ELEVATION

1/16"=1'-0"



SOUTH ELEVATION

1/16"=1'-0"



NORTH ELEVATION

1/16"=1'-0"

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ELEVATIONS

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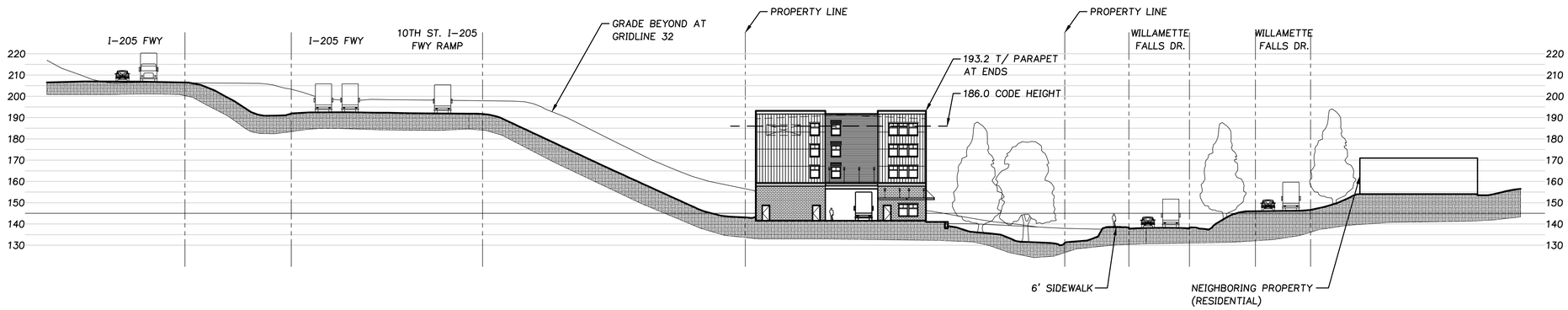
1 A4.1 SITE SECTION: EAST-WEST

1"=30'-0"



2 A4.1 SITE SECTION: NORTH-SOUTH

1"=30'-0"

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SHEET TITLE:
SITE SECTIONS

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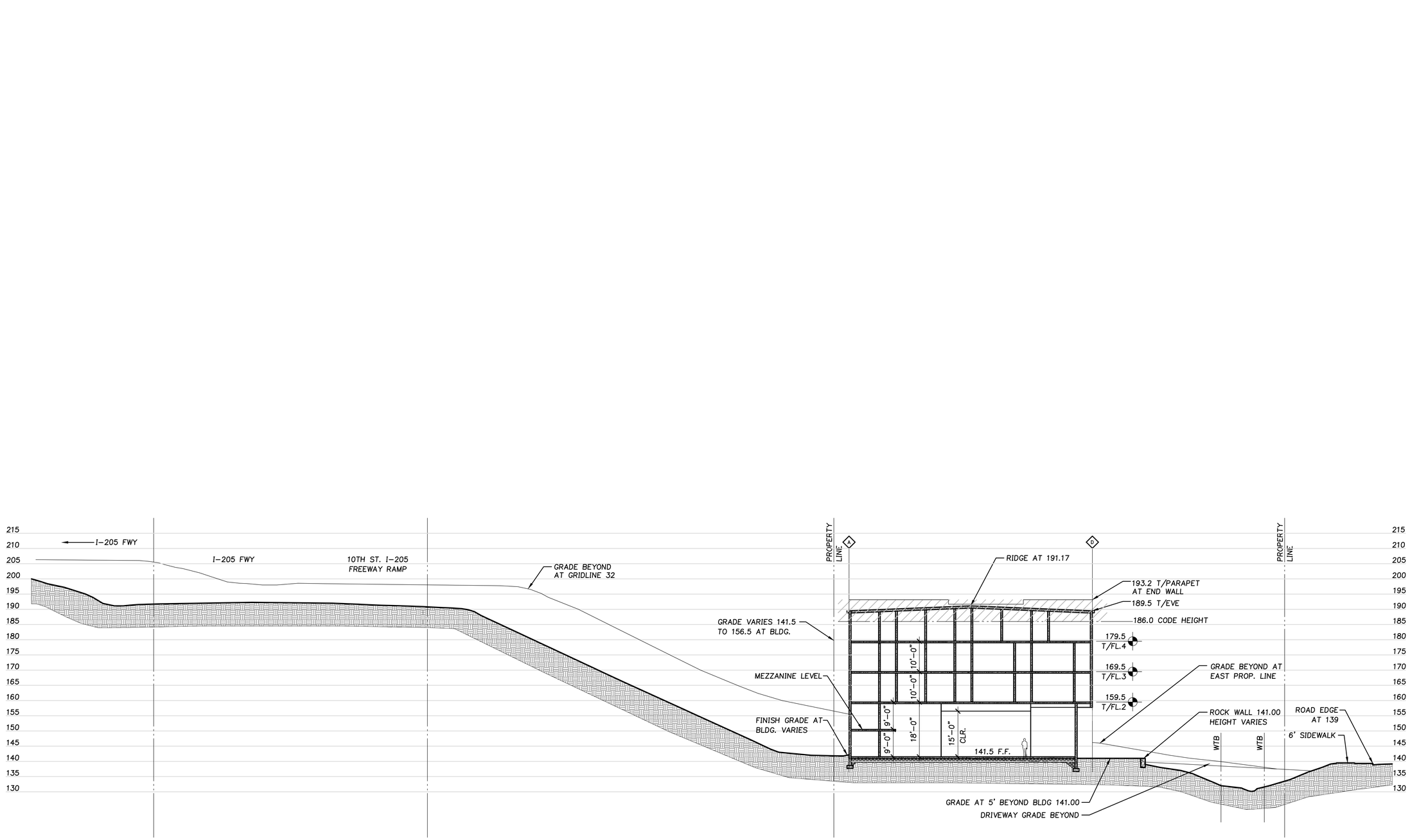

1 / A4.2 SITE SECTION: NORTH-SOUTH
1/16"=1'-0"

REVISIONS:

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SHEET TITLE:
BUILDING
SECTION

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