

Sentinel Storage Annex II Site Plan Modification Application

Date: February 2022

Submitted to: City of Sherwood
Planning Department
22560 SW Pine Street
Sherwood, OR 97140

Applicant: Langer Storage 2, LLC
15585 SW Tualatin-Sherwood Road
Sherwood, OR 97140

AKS Job Number: 4668-01



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Table of Contents

I.	Executive Summary	2
II.	Background Information	2
IV.	Applicable Review Criteria	3
	SHERWOOD ZONING AND COMMUNITY DEVELOPMENT CODE	3
	Title 16 – Zoning and Community Development Code	3
	Division II. – LAND USE AND DEVELOPMENT	3
	Chapter 16.31 - INDUSTRIAL LAND USE DISTRICTS.....	3
	Division III. - ADMINISTRATIVE PROCEDURES	5
	Chapter 16.70 - GENERAL PROVISIONS.....	5
	Chapter 16.72 - PROCEDURES FOR PROCESSING DEVELOPMENT PERMITS.....	8
	Division V. - COMMUNITY DESIGN	10
	Chapter 16.90 - SITE PLANNING*	10
	Chapter 16.92 - LANDSCAPING	16
	Chapter 16.94 - OFF-STREET PARKING AND LOADING.....	16
	Chapter 16.96 - ON-SITE CIRCULATION.....	16
	Chapter 16.98 - ON-SITE STORAGE	17
	Division VI. - PUBLIC INFRASTRUCTURE	17
	Chapter 16.106 - TRANSPORTATION FACILITIES.....	17
	Chapter 16.108 - IMPROVEMENT PLAN REVIEW	18
	Chapter 16.110 - SANITARY SEWERS	18
	Chapter 16.114 - STORM WATER*	19
	Chapter 16.116 - FIRE PROTECTION*	20
IV.	Conclusion	22

Exhibits

- Exhibit A:** Preliminary Plans
 - Exhibit B:** City of Sherwood Land Use Application Forms & Checklists
 - Exhibit C:** Preliminary Title Report
 - Exhibit D:** Preliminary Architectural Materials
 - Exhibit E:** CWS Service Provider Letter
 - Exhibit F:** Neighborhood Meeting Documentation
 - Exhibit G:** Public Notice Information
 - Exhibit H:** Amended and Restated Development Agreement (2010)
 - Exhibit I:** Pre-Application Conference Documentation
 - Exhibit J:** Washington County Assessor’s Map
 - Exhibit K:** Preliminary Stormwater Report
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Submitted to:	City of Sherwood Planning Department 22560 SW Pine Street Sherwood, OR 97140
Applicant/ Property Owner:	Langer Storage 2, LLC 15585 SW Tualatin-Sherwood Road Sherwood, OR 97140
Applicant's Consultant:	AKS Engineering & Forestry, LLC 12965 SW Herman Road, Suite 100 Tualatin, OR 97062
	Contact: Chris Goodell, AICP, LEED ^{AP} Email: chrisg@aks-eng.com Phone: (503) 563-6151
Site Location:	21900 SW Langer Farms Parkway
Washington County Assessor's Map:	2S129DC, Tax Lot 900
Site Size:	±6.14 acres
City Zoning:	Light Industrial (LI) Planned Unit Development (PUD)



I. Executive Summary

The Applicant is seeking approval of a site plan modification regarding the existing Sentinel Self-Storage Annex II facility. The original site improvements were reviewed and approved through City of Sherwood File Nos. MLP 16-02 and SP 16-06. The ±6.14-acre property (Tax Lot 900 of Washington County Assessor’s Map 2S129DC) is located northeast of the intersection of SW Langer Farms Parkway and SW Oregon Street, addressed as 21900 SW Langer Farms Parkway. The site is zoned Light Industrial Planned Unit Development (LI-PUD) and currently contains four storage buildings, a recreational vehicle (RV) storage canopy, site landscaping, paved circulation, trash service, lighting, and other improvements. The facility is accessed by a gated entrance and a private driveway on the east side of SW Langer Farms Parkway; both access points are planned to remain unchanged. The scope of the site plan modification application is limited to the removal and replacement of the existing ±14,850 square-foot RV storage canopy with an enclosed three-story self-storage building (with a footprint of ±25,000 square feet). As discussed in further detail in the application materials, this project meets the threshold for a Major Modification to an Approved Site Plan.

This written narrative, together with the preliminary plans and other documentation included in the application materials, establishes that the application complies with all applicable approval criteria of the Sherwood Zoning and Community Development Code (SZCDC). This documentation provides the basis for the City to recommend approval of the application.

II. Background Information

Background

The subject site (Tax Lot 900 of Washington County Assessor’s Map 2S 1 29DC) has been involved in previous land use actions over the years. The PUD (Planned Unit Development) designation was assigned as part of the Langer Family PUD application (PUD 95-01), hereafter referred to as the “PUD,” that was approved by the City of Sherwood on April 26, 1995. The subject property is included as Phase 8 of the PUD. The City approved an application (PUD 07-01) covering the land uses that are permitted within the PUD in January 2008. The 2008 City decision is memorialized in a development agreement – the Amended and Restated Development Agreement dated 2010 (included as Exhibit H). Thereafter, the ‘Langer Farms’ subdivision plat recorded in March 2013 (Document No. 2013025409). In June 2017, Partition Plat 2017-019 (a replat of Lot 4 of ‘Langer Farms’) was recorded, resulting in 2 parcels. The property is currently configured as Parcel 1 of recorded Partition Plat No. 2017-019 (Document No. 2017050998).

Development Agreement

ORS 92.040(2) states that after September 9, 1995, when a local government approves a subdivision application inside an urban growth boundary, only those local government laws implemented under an acknowledged plan and in effect at the time of the subdivision application apply to subsequent construction on the property, unless the Applicant elects otherwise. This vesting remains in place for 10 years after approval of the subdivision, pursuant to ORS 92.040(3).

At the pre-application conference, staff discussed the operating self-storage facility is no longer a permitted use in the LI zone under current development code; however, the use was permitted on the site in 2012 when the subject property was created by the Langer Farms subdivision plat. Self-storage is therefore a permitted use on the site until August 28, 2022 (i.e. 10 years), pursuant to ORS 92.040. For further information, please see the pre-application conference documentation included as Exhibit I.

Application Description

A Major Modification to the Approved Site Plan (City of Sherwood File No. SP 16-06) is required to review the enclosed self-storage structure, planned to replace the existing RV canopy. This Major Modification (Site Plan Review) application involves review of ±74,000 square feet of enclosed space, and provides specific details for building, architecture, and site circulation. Improvement of the subject site in accordance with the Langer Farms PUD, 2010 Development Agreement (Exhibit H), and Sherwood Zoning and Community Development Code (SZCDC) will facilitate the continued successful use of the property.

Setting

The site is located north of SW Oregon Street and south of SW Century Drive, on the east side of SW Langer Farms Parkway. As stated above, the property is zoned Light Industrial Planned Unit Development (LI-PUD) and surrounded by similar land uses, including:

Area	Jurisdiction	Zoning	Land Uses
North	City of Sherwood	Light Industrial Planned Unit Development (LI-PUD)	Industrial/commercial retail (i.e. Langer’s Entertainment Center, etc.)
South	City of Sherwood	Light Industrial (LI)	Industrial (i.e. Bilet Wood Pallets)
East	City of Sherwood	Light Industrial Planned Unit Development (LI-PUD)	Industrial (i.e. Self-Storage Facility)
West	City of Sherwood	Institutional Public (IP)	Institutional (i.e. Church.)

IV. Applicable Review Criteria

SHERWOOD ZONING AND COMMUNITY DEVELOPMENT CODE

Title 16 – Zoning and Community Development Code

Division II. – LAND USE AND DEVELOPMENT

Chapter 16.31 - INDUSTRIAL LAND USE DISTRICTS

16.31.010 - Purpose

- B. Light Industrial (LI) - The LI zoning district provides for the manufacturing, processing, assembling, packaging and treatment of products which have been previously prepared from raw materials. Industrial establishments shall not have objectionable external features and shall feature well- landscaped sites and attractive architectural design, as determined by the Commission.

Response: The site is within the LI zoning district. Therefore, this section is applicable.

16.31.020 - Uses

- A. The table below identifies the land uses that are permitted outright (P), permitted conditionally (C) and not permitted (N) in the industrial zoning districts. The specific land use categories are described and defined in Chapter 16.88.
- B. Uses listed in other sections of this Code, but not within this specific table are prohibited.

- C. Any use not otherwise listed that can be shown to be consistent or associated with the uses permitted outright or conditionally in the industrial zones or contribute to the achievement of the objectives of the industrial zones may be permitted outright or conditionally, utilizing the provisions of Chapter 16.88.
- D. Additional limitations for specific uses are identified in the footnotes of this table.

Uses	LI
INDUSTRIAL	
Mini-warehousing or self-storage	N

Response: The site is currently improved as the Sentinel Self-Storage Annex II self-storage facility. As discussed in the background information above, the land uses that are permitted on site are memorialized in the Amended and Restated Development Agreement dated 2010 (included as Exhibit H). Further, the Pre-Application Conference Documentation (Exhibit I), states “mini-warehousing or self-storage is a permitted use on the site until August 28, 2022, pursuant to ORS 92.040.” As such, self-storage is a permitted use on site and the criteria above are met.

16.31.030 - Development Standards

A. Generally

No lot area, setback, yard, landscaped area, open space, off-street parking or loading area, or other site dimension or requirement, existing on, or after, the effective date of this Code shall be reduced below the minimum required by this Code. Nor shall the conveyance of any portion of a lot, for other than a public use or right-of-way, leave a lot or structure on the remainder of said lot with less than minimum Code dimensions, area, setbacks or other requirements, except as permitted by Chapter 16.84 (Variances and Adjustments).

B. Development Standards

Except as otherwise provided, required minimum lot areas and dimensions and setbacks shall be:

Development Standards by Zone	LI
Lot area – industrial uses:	10,000 SF
Lot area – commercial uses (subject to Section 16.31.050)	10,000 SF
Lot width at front property line:	100 feet
Lot width at building line:	100 feet
Front yard setback ¹¹	20 feet
Side yard setback ¹⁰	None
Rear yard setback ¹¹	None
Corner lot street side ¹¹	20 feet
Height ¹¹	50 feet

¹⁰ When a yard is abutting a residential zone or public park, there shall be a minimum setback of forty (40) feet provided for properties zoned Employment Industrial and Light Industrial zones, and a minimum setback of fifty (50) feet provided for properties zoned General Industrial.

¹¹ Structures located within one hundred (100) feet of a residential zone shall be limited to the height requirements of that residential zone.

Response: This application does not involve changes to lot dimensions. The existing property is ±6.14 acres in size, with a lot width greater than 100 feet, and the existing buildings are set back greater than 20 feet along the front lot lines of SW Langer Farms Parkway. The project

site is located approximately 75 feet (within 100 feet) southeast of the High Density Residential (HDR) zone. Therefore, according to footnote 11 (above) height limitations of the HDR zone are applicable. Pursuant to Section 12.12.030, the maximum building height in the HDR zone is 40 feet or 3 stories.

As shown on the Preliminary Plans (Exhibit A), the planned building is located internal to the facility, behind existing buildings situated along the perimeter of the site. As illustrated, the building is set back approximately 28-56 feet on each side from existing buildings. The Preliminary Architectural Materials (Exhibit D) show the height of the planned building is ±35 feet, less than both the LI district maximum of 50 feet and the HDR district of 40 feet. Therefore, the standards above are met.

Division III. - ADMINISTRATIVE PROCEDURES

Chapter 16.70 - GENERAL PROVISIONS

16.70.010 - Pre-Application Conference

Pre-application conferences are encouraged and shall be scheduled to provide applicants with the informational and procedural requirements of this Code; to exchange information regarding applicable policies, goals and standards of the Comprehensive Plan; to provide technical and design assistance; and to identify opportunities and constraints for a proposed land use action. An applicant may apply at one time for all permits or zone changes needed for a development project as determined in the pre-application conference.

Response: A pre-application conference for this project was held on October 28, 2021. The documentation is included as Exhibit I. The criterion is met.

16.70.020 - Neighborhood Meeting

- A. The purpose of the neighborhood meeting is to solicit input and exchange information about the proposed development.
- B. Applicants of Type III, IV and V applications are required to hold a meeting, at a public location for adjacent property owners and recognized neighborhood organizations that are within 1,000 feet of the subject application, prior to submitting their application to the City. Affidavits of mailing, sign-in sheets and a summary of the meeting notes must be included with the application when submitted. Applicants for Type II land use action are encouraged, but not required to hold a neighborhood meeting.

Response: This application involves a Type IV Major Modification. A Neighborhood Meeting was held on January 6, 2022. Notice was provided to owners of property within 1,000 feet of the subject property. No members of the public showed up to participate in the meeting. Please see Exhibit F for further documentation demonstrating consistency with the provisions of this section. Therefore, the criteria are met.

16.70.030 - Application Requirements

- A. Form

Any request for a land use action shall be made on forms prescribed and provided by the City and shall be prepared and submitted in compliance with this Code. A land use application shall be reviewed against the standards and criteria effective at the time of application

submittal. Original signatures from all owners or their legal representative must be on the application form.

B. Copies

To assist in determining the compliance of proposed land use actions with the Comprehensive Plan and provisions of this Code, applicants shall submit one (1) complete electronic copy of the full application packet, one reduced (8½ × 11) copy of the full application packet and the required number of hard copies as outlined on the applicable forms prescribed and provided by the City.

C. Content

1. In addition to the required application form, all applications for Type II-V land use approval must include the following:

a. Appropriate fee(s) for the requested land use action required based on the City of Sherwood Fee Schedule.

Response: The appropriate fees are included with the application.

b. Documentation of neighborhood meeting per 16.70.020.

Response: Neighborhood Meeting Documentation is included within Exhibit F.

c. Tax Map showing property within at least 300 feet with scale (1" = 100' or 1" = 200') north point, date and legend.

Response: The Washington County Assessor's Map is included within Exhibit J.

d. Two (2) sets of mailing labels for property owners of record within 1,000 feet of the subject site, including a map of the area showing the properties to receive notice and a list of the property owners, addresses and tax lots. Ownership records shall be based on the most current available information from the Tax Assessor's office.

Response: Public Notice Information is included within Exhibit G,

e. Vicinity Map showing a minimum radius of 500 feet around the property and the closest intersection of two Principal Arterial, Arterial, Collector or Neighborhood roads.

Response: The Preliminary Plans (Exhibit A) contain a vicinity map.

f. A narrative explaining the proposal in detail and a response to the Required Findings for Land Use Review for the land use approval(s) being sought.

Response: This written document satisfies the criterion above.

g. Two (2) copies of a current preliminary title report.

Response: A Preliminary Title Report is included within Exhibit C.

h. Existing conditions plan drawn to scale showing: property lines and dimensions, existing structures and other improvements such as streets and

utilities, existing vegetation, any floodplains or wetlands and any easements on the property.

Response: Please see the Existing Conditions Plan within the Preliminary Plans (Exhibit A) showing the applicable information above. The property does not contain floodplains or wetlands.

- i. Proposed development plans sufficient for the Hearing Authority to determine compliance with the applicable standards. Checklists shall be provided by the City detailing information typically needed to adequately review specific land use actions.

Response: The City of Sherwood land use application forms and checklists are within Exhibit B. The Preliminary Plans (Exhibit A) and the Preliminary Architectural Materials (Exhibit D) contain sufficient information for the Hearing Authority to determine compliance with the applicable standards.

- j. A traffic study, if required by other sections of this Code.

Response: As determined at the Pre-Application Conference (documentation within Exhibit I), a traffic study was not required for this project because the planned self-storage use will not generate more than 400 average daily trips. For further information, please see the response to Section 16.90.020.D.5. The submittal requirement is not applicable.

- k. Other special studies or reports that may be identified by the City Manager or his or her designee to address unique issues identified in the pre-application meeting or during project review including but not limited to:
 - 1) Wetland assessment and delineation;
 - 2) Geotechnical report;
 - 3) Traffic study;
 - 4) Verification of compliance with other agency standards such as CWS, DSL, Army Corps of Engineers, ODOT, PGE, BPA, Washington County.

Response: There were no special study requirements identified at the pre-application conference. Please see the Service Provider Letter from Clean Water Services within Exhibit E, demonstrating a site assessment is not necessary.

- l. Plan sets must have:
 - 1) The proposed name of the development. If a proposed project name is the same as or similar to other existing projects in the City of Sherwood, the applicant may be required to modify the project name.
 - 2) The name, address and phone of the owner, developer, applicant and plan producer.
 - 3) North arrow,

-
- 4) Legend,
 - 5) Date plans were prepared and date of any revisions
 - 6) Scale clearly shown. Other than architectural elevations, all plans must be drawn to an engineer scale.
 - 7) All dimensions clearly shown.

Response: The Preliminary Plans (Exhibit A) contain the required information, as applicable. The submittal requirements are met.

2. Exemptions can be made when items in 16.70.030.C.1 are not necessary in order to make a land use decision, such as for text amendments to the development code. Additional written documentation may be necessary to adequately demonstrate compliance with the criteria.

Response: This application does not include or require exemptions. The criterion is not applicable.

Chapter 16.72 - PROCEDURES FOR PROCESSING DEVELOPMENT PERMITS

16.72.010 – Generally

A. Classifications

Except for Final Development Plans for Planned Unit Developments, which are reviewed per Section 16.40.030, all quasi-judicial development permit applications and legislative land use actions shall be classified as one of the following:

4. Type IV

The following quasi-judicial actions shall be subject to a Type IV review process:

...

- c. Site Plans — Greater than 40,000 square feet of floor area, parking or seating capacity.

...

Response: This application involves a Major Modification (Site Plan Review) for a new building containing ±74,000 square feet of floor area. Therefore, a Type IV review process is required.

B. Hearing and Appeal Authority

1. Each Type V legislative land use action shall be reviewed at a public hearing by the Planning Commission with a recommendation made to the City Council. The City Council shall conduct a public hearing and make the City's final decision.
2. Each quasi-judicial development permit application shall potentially be subject to two (2) levels of review, with the first review by a Hearing Authority and the second review, if an appeal is filed, by an Appeal Authority. The decision of the Hearing Authority shall be the City's final decision, unless an appeal is properly filed within fourteen (14) days after the date on which the Hearing Authority took final action. In the

event of an appeal, the decision of the Appeal Authority shall be the City's final decision.

3. The quasi-judicial Hearing and Appeal Authorities shall be as follows:

...

d. The Type IV Hearing Authority is the Planning Commission and the Appeal Authority is the City Council.

1) The Planning Commission shall hold a public hearing following public notice in accordance with Sections 16.72.020 through 16.72.080.

2) Any person who testified before the Planning Commission at the public hearing or submitted written comments prior to the close of the record may appeal the Planning Commission's decision.

Response: The information above regarding Hearing and Appeal Authorities is understood.

C. Approval Criteria

1. The approval criteria for each development permit application shall be the approval standards and requirements for such applications as contained in this Code. Each decision made by a Hearing Authority or Appeal Authority shall list the approval criteria and indicate whether the criteria are met. It is the applicant's burden to demonstrate to the Hearing Authority and Appeal Authority how each of the approval criteria are met. An application may be approved with conditions of approval imposed by the Hearing Authority or Appeal Authority. On appeal, the Appeal Authority may affirm, reverse, amend, refer, or remand the decision of the Hearing Authority.
2. In addition to Section 1 above, all Type IV quasi-judicial applications shall also demonstrate compliance with the Conditional use criteria of Section 16.82.020.

Response: The applicable approval criteria have been addressed within this narrative. Please see the responses to Section 16.82.020. These criteria are met.

16.72.020 - Public Notice and Hearing

A. Newspaper Notice

Notices of all public hearings for Type III, IV and V land use actions required by this Code shall be published in a newspaper of general circulation available within the City two (2) calendar weeks prior to the initial scheduled hearing before the Hearing Authority and shall be published one additional time in the Sherwood Archer, Sherwood Gazette or similarly local publication, no less than 5 days prior to the initial scheduled hearing before the hearing authority.

B. Posted Notice

...

C. Mailed Notice

...

16.72.030 - Content of Notice

Public notices shall include the following information:

...

Response: Public notification is performed by the City of Sherwood. The standards above are understood and do not require action by the Applicant.

Division V. - COMMUNITY DESIGN

Chapter 16.90 - SITE PLANNING*

...

16.90.020 - Site Plan Review

A. Site Plan Review Required

Site Plan review is required prior to any substantial change to a site or use that does not meet the criteria of a minor or major modification, issuance of building permits for a new building or structure, or for the substantial alteration of an existing structure or use.

For the purposes of Section 16.90.020, the terms "substantial change" and "substantial alteration" mean any development activity as defined by this Code that generally requires a building permit and may exhibit one or more of the following characteristics:

...

Response: This application involves review of a Major Modification for the existing Sentinel Self-Storage Annex II facility. This project includes removal and replacement of an RV storage canopy with a ±74,000-square-foot enclosed self-storage building. Therefore, this application meets the criteria for a Major Modification and pursuant to 16.90.020, the following standards are addressed.

D. Required Findings

No site plan approval will be granted unless each of the following is found:

1. The proposed development meets applicable zoning district standards and design standards in Division II, and all provisions of Divisions V, VI, VIII and IX.
2. The proposed development can be adequately served by services conforming to the Community Development Plan, including but not limited to water, sanitary facilities, storm water, solid waste, parks and open space, public safety, electric power, and communications.

Response: As shown on the Preliminary Plans (Exhibit A), the existing Sentinel Self-Storage Annex II facility is currently served with the applicable elements listed above. This project includes removal and replacement of an RV storage canopy with an enclosed self-storage building. According to Section 16.90.030.A.1.a.(3), the scope of the site plan modification review is limited to the modified element(s) and the associated impacts on landscaping, circulation, etc. This site plan modification does not impact staff findings or prior conditions of

approval related to the provision of water, sanitary sewer, stormwater, or franchise utilities. Therefore, the criteria above are met, as applicable.

3. Covenants, agreements, and other specific documents are adequate, in the City's determination, to assure an acceptable method of ownership, management, and maintenance of structures, landscaping, and other on-site features.

Response: This property is associated with the Amended and Restated Development Agreement (2010), included as Exhibit H. Additional agreements and/or specific documents can be prepared and provided, if required by the City. The criterion is met.

4. The proposed development preserves significant natural features to the maximum extent feasible, including but not limited to natural drainage ways, wetlands, trees, vegetation (including but not limited to environmentally sensitive lands), scenic views, and topographical features, and conforms to the applicable provisions of Division VIII of this Code and Chapter 5 of the Community Development Code.

Response: This application for site plan modification will not impact significant natural features. As shown on the Preliminary Plans (Exhibit A), the extent of the modification involves removal and replacement of an existing RV storage canopy with an enclosed building. The subject portion of the property contains existing improvements that have been reviewed for compliance with the SZCDC. Further, the CWS Service Provider Letter (Exhibit E) demonstrates natural resources are not impacted by this project. As such, the criterion above is met as applicable.

5. For developments that are likely to generate more than 400 average daily trips (ADTs), or at the discretion of the City Engineer, the applicant must provide adequate information, such as a traffic impact analysis (TIA) or traffic counts, to demonstrate the level of impact to the surrounding transportation system. The developer is required to mitigate for impacts attributable to the project, pursuant to TIA requirements in Section 16.106.080 and rough proportionality requirements in Section 16.106.090. The determination of impact or effect and the scope of the impact study must be coordinated with the provider of the affected transportation facility.

Response: The ±575-unit self-storage building is planned to replace the existing ±32-unit RV canopy and associated current use. The trip generation documented in the original transportation impact analysis (TIA) was calculated based on unit count. Therefore, after subtracting the existing ±32 RV units, it is estimated that the new ±575-unit self-storage use will generate approximately 11 average peak hour trips or 98 average daily trips. Therefore, this project is anticipated to generate less than 400 average daily trips and a TIA is not required or included.

6. The proposed commercial, multi-family, institutional or mixed-use development is oriented to the pedestrian and bicycle, and to existing and planned transit facilities. Urban design standards include the following:

...

Response: This project does not involve commercial, multi-family, institutional, or mixed-use land use. This property is designated within the LI zoning district and therefore the industrial design standards, below, take precedence.

7. Industrial developments provide employment opportunities for citizens of Sherwood and the region as a whole. The proposed industrial development is designed to enhance areas visible from arterial and collector streets by reducing the "bulk" appearance of large buildings. Industrial design standards include the following:

a. Portions of the proposed industrial development within 200 feet of an arterial or collector street and visible to the arterial or collector (i.e. not behind another building) must meet any four of the following six design criteria:

Response: The subject site is located along SW Langer Farms Parkway, functionally classified as a collector street in the Washington County Transportation System Plan (TSP). The site is improved with the existing Sentinel Self-Storage Annex II facility, including buildings that front SW Langer Farms Parkway, situated along the perimeter of the site. This site plan modification application involves removal of an RV storage canopy (i.e. currently located behind the existing perimeter buildings) and replacement with an enclosed three-story self-storage building. The building is anticipated to be ±35 feet in height, and although the bulk of the new building will not be visible from the collector street frontage (i.e. located behind existing buildings), portions of the upper stories will likely be visible from the right-of-way when approached from the north and south. Therefore, responses in the remainder of this section demonstrate compliance with more than four of the design criteria of this section.

...

2) A minimum of two (2) building materials used to break up vertical facade street facing frontages (no T-111 or aluminum siding).

Response: As illustrated on the material key within the Preliminary Architectural Materials (Exhibit D), multiple building materials (concrete masonry, ribbed metal siding, galvanized metal roofing, etc.) are used to incorporate complex massing in the new building's design. The new building is designed to complement the existing self-storage structures and surrounding facility improvements. The building materials incorporate an assortment of colors including terracotta, slate gray, cedar red, and dark bronze. The prohibited materials listed above are not included in the building façade design. The criterion is met.

3) Maximum thirty-five (35) foot setback for all parts of the building from the property line separating the site from all arterial or collector streets (required visual corridor falls within this maximum setback area).

Response: As shown on the Preliminary Plans (Exhibit A), the existing buildings along SW Langer Farms Parkway (collector street) are located within the maximum 35-foot setback area. This application involves a Major Modification to replace an existing RV storage canopy with an enclosed building, located behind the perimeter buildings. As such, the Preliminary Site Plan complies with the intent of the provision above.

- 4) Parking is located to the side or rear of the building when viewed from the arterial or collector.
- 5) Loading areas are located to the side or rear of the building when viewed from the arterial or collector. If a loading area is visible from an arterial or collector, it must be screened with vegetation or a screen made of materials matching the building materials.

Response: The approved Sentinel Self-Storage Annex II facility does not contain existing parking stalls. According to the Staff Report & Notice of Decision for Langer Farms Subdivision (City of Sherwood File No. MLP 16-02 and SP 16-06), Section 16.94: Off-Street Parking and Loading, “the site will only serve as a space to store materials and recreational vehicles...no parking is required at this time.” However, at the pre-application conference held on October 28, 2021, City Staff voiced the desire for a temporary parking and loading area to be implemented for the planned self-storage building. Due to the nature of the enclosed three-story building, patrons will need to briefly leave their vehicle to enter the building and access their storage materials for loading (rather than idle the vehicle at an existing ground floor garage door to the single-story buildings along the perimeter of the site).

As shown on the Preliminary Plans (Exhibit A) and Preliminary Architectural Materials (Exhibit D), a loading area is provided adjacent to the west side of the new building, located at grade. The loading area is planned to be striped for pedestrian movement into the ground floor of the building (and there are two stories above the loading area). The new loading area is not visible from SW Langer Farms Parkway (classified as a collector street) due to the existing buildings along the perimeter of the site’s western boundary. Therefore, the intent of the parking and loading criteria, above, are met.

- 6) All roof-mounted equipment is screened with materials complimentary to the building design materials.

Response: As noted on Sheet A-3 of the Preliminary Architectural Materials (Exhibit D), roof-mounted equipment is not planned on the future building. The criterion is met.

8. Driveways that are more than twenty-four (24) feet in width shall align with existing streets or planned streets as shown in the Local Street Connectivity Map in the adopted Transportation System Plan (Figure 17), except where prevented by topography, rail lines, freeways, pre-existing development, or leases, easements, or covenants.

Response: This Major Modification application does not involve updates or changes to existing site access. The existing Sentinel Self-Storage Annex II facility contains two existing site accesses along the east side of SW Langer Farms Parkway. Both accesses are planned to remain as they currently exist. Therefore, the criterion above is not applicable.

E. Approvals

The application is reviewed pursuant to Chapter 16.72 and action taken to approve, approve with conditions, or deny the application for site plan review. Conditions may be imposed by the Review Authority if necessary to fulfill the requirements of the adopted Comprehensive Plan, Transportation System Plan or the Zoning and Community Development Code. The action must include appropriate findings of fact as required by Section 16.90.020. The action may be appealed to the Council in accordance with Chapter 16.76.

F. Time Limits

Site plan approvals are void after two (2) years unless construction on the site has begun, as determined by the City. The City may extend site plan approvals for an additional period not to exceed one (1) year, upon written request from the applicant showing adequate cause for such extension, and payment of an extension application fee as per Section 16.74.010. A site plan approval granted on or after January 1, 2007 through December 31, 2009, is extended until December 31, 2013.

Response: The criteria above are understood.

16.90.030 - Site Plan Modifications and Revocation

A. Modifications to Approved Site Plans

1. Major Modifications to Approved Site Plans

a. Defined. A major modification review is required if one or more of the changes listed below are proposed:

...

(5) An increase in the floor area or height proposed for non-residential use by more than ten (10) percent;

Response: This application involves a Major Modification to an Approved Site Plan, to review an increase in floor area on site by more than 10 percent. The project involves removal and replacement of a ±14,850-square-foot RV storage canopy with an enclosed three-story self-storage building. As shown on the Preliminary Plans (Exhibit A) and Preliminary Architectural Materials (Exhibit D), the 3-story building is planned to include ±74,000 square feet of total floor area and a height of ±35 feet. Therefore, this application meets the criteria for a Major Modification.

...

b. Approval Criteria. An applicant may request a major modification as follows:

-
- (1) Upon the review authority determining that the proposed modification is a major modification, the applicant must submit an application form, filing fee and narrative, and a site plan using the same plan format as in the original approval. The review authority may require other relevant information, as necessary, to evaluate the request.

Response: This application submittal contains the narrative, filing fee, and additional items listed above. The City of Sherwood application forms and checklist are included as Exhibit B. The Preliminary Plans (Exhibit A) and Preliminary Architectural Materials (Exhibit D) contain the information necessary for the review authority to determine compliance with the major site plan modification criteria. Please see the accompanying materials; the submittal requirements are met.

- (2) The application is subject to the same review procedure (Type II, III or IV), decision making body, and approval criteria used for the initial project approval, except that adding a Conditional Use to an approved Type II project is reviewed using a Type III procedure.

Response: As discussed at the pre-application conference, the application should be reviewed through a Type IV process.

- (3) The scope of review is limited to the modification request and does not open the entire site up for additional review unless impacted by the proposed modification. For example, a request to modify a parking lot requires site design review only for the proposed parking lot and any changes to associated access, circulation, pathways, lighting, trees, and landscaping.

Response: It is understood that the scope of the review is limited to the modified elements of the approved site plan. This application involves removal and replacement of the existing RV storage canopy on site with an enclosed self-storage building. As shown on the Preliminary Plans (Exhibit A), the site is fully constructed and contains the applicable improvements required by SZCDC Section 16.90. The existing site improvements are planned to remain unchanged, aside from the new building and associated loading area. The criteria are met, as applicable.

- (4) Notice must be provided in accordance with Chapter 16.72.020.
- (5) The decision maker approves, denies, or approves with conditions an application for major modification based on written findings of the criteria.

Response: The criteria above are understood.

Chapter 16.92 - LANDSCAPING

16.92.010 - Landscaping Plan Required

All proposed developments for which a site plan is required pursuant to Section 16.90.020 shall submit a landscaping plan that meets the standards of this Chapter. All areas not occupied by structures, paved roadways, walkways, or patios shall be landscaped or maintained according to an approved site plan.

Response: It is understood that the scope of the review is limited to the modified elements of the approved site plan. This application involves removal and replacement of the existing RV storage canopy on site with an enclosed self-storage building. The modifications do not involve additional impervious surface, long-term parking stalls, or impacts to existing landscaped areas on site. Therefore, a landscaping plan is not required, and the criterion above is not applicable.

Chapter 16.94 - OFF-STREET PARKING AND LOADING

16.94.010 - General Requirements

Response: It is understood that the scope of the review is limited to the modified elements of the approved site plan. This application involves removal and replacement of the existing RV storage canopy on site with an enclosed self-storage building. As shown on the Preliminary Plans (Exhibit A) and Preliminary Architectural Materials (Exhibit D), a new loading zone/temporary parking area is planned outside the new building to accommodate customers who may leave their vehicle on the ground level while accessing the interior upper floor units. As demonstrated on the Preliminary Site Plan (Exhibit A), emergency vehicle and fire apparatus circulation are maintained onsite.

Additionally, staff findings (Staff Report and Decision SP16-06) indicate the self-storage business by its very nature does not require parking and no parking was required with the original application. As such, the site plan modifications remain in compliance with the approved site plan and existing improvements.

Chapter 16.96 - ON-SITE CIRCULATION

...

16.96.030 - Minimum Non-Residential Standards

Minimum standards for private, on-site circulation improvements in non-residential developments:

A. Driveways

...

2. Industrial: Improved hard surface driveways are required as follows:

Required		Minimum Width	
Parking Spaces	# Driveways	One-Way Pair	Two-Way
1-249	1	15 feet	24 feet
250 & Above	2	15 feet	24 feet

...

16.96.040 - On-Site Vehicle Circulation

...

Response: It is understood that the scope of the review is limited to the modified elements of the approved site plan. As shown on the Preliminary Plans (Exhibit A), the scope of the planned improvements includes a new self-storage building central to the site and a striped vehicle loading zone. On-site circulation for pedestrians and vehicles remains unchanged from the approved site plan (City of Sherwood File No. SP 16-06). The circulation aisles adjacent to the new building meet the 24-foot minimum width listed above. However, the site does not contain or require parking stalls (per the table above) and the addition of a parking area is not required or included with this application. Therefore, the criteria above are met, as applicable.

Chapter 16.98 - ON-SITE STORAGE

16.98.010 - Recreational Vehicles and Equipment

16.98.020 - Solid Waste and Recycling Storage

16.98.030 - Material Storage

16.98.040 - Outdoor Sales and Merchandise Display

Response: It is understood that the scope of the review is limited to the modified elements of the approved site plan. As shown on the Preliminary Plans (Exhibit A), the scope of the planned improvements includes a new self-storage building central to the site and a striped vehicle loading zone. The criteria listed above involve site elements which remain unchanged from the approved site plan (City of Sherwood No. SP 16-06). Therefore, the criteria above are not applicable to this application.

Division VI. - PUBLIC INFRASTRUCTURE

Chapter 16.106 - TRANSPORTATION FACILITIES

16.106.010 – Generally

16.106.020 - Required Improvements

16.106.030 – Location

16.106.040 – Design

16.106.060 – Sidewalks

16.106.070 - Bike Lanes

16.106.080 - Traffic Impact Analysis (TIA)

16.106.090 - Rough Proportionality

Response:

It is understood that the scope of the review is limited to the modified elements of the approved site plan. The transportation criteria listed above involve site elements which remain unchanged from the approved site plan (City of Sherwood No. SP 16-06). Adequate improvements to the property's frontage along SW Langer Farms Parkway currently exist, including sidewalks, bike lanes, and required right-of-way dedications. Therefore, the criteria above are not relevant to this application.

Chapter 16.108 - IMPROVEMENT PLAN REVIEW

16.108.010 - Preparation and Submission

An improvement plan shall be prepared and stamped by a Registered Civil Engineer certifying compliance with City specifications. Two (2) sets of the plan shall be submitted to the City for review. An improvements plan shall be accompanied by a review fee as per this Section.

A. Review Fee

Plan review fees are calculated as a percentage of the estimated total cost of improvements and are set by the "Schedule of Development and Business Fees" adopted by Resolution of the Council. This schedule is included herein for the purposes of information, but is deemed to be separate from and independent of this Code.

B. Engineering Agreement

A copy of an agreement or contract between the applicant and Registered Civil Engineer for:

1. Surveying sufficient to prepare construction plans.
2. Preparation of construction plans and specifications.
3. Construction staking, and adequate inspection.
4. Construction notes sufficient to develop accurate as-built plans.
5. Drawing of accurate as-built plans and submission of reproducible mylars for finals to the City.
6. Certificate stating that construction was completed in accordance with required plans and specifications.

Response:

Plans prepared by a registered Civil Engineer certifying compliance with City specifications will be submitted as part of construction permit submittal.

Chapter 16.110 - SANITARY SEWERS

16.110.010 - Required Improvements

Sanitary sewers shall be installed to serve all new developments and shall connect to existing sanitary sewer mains. Provided, however, that when impractical to immediately connect to a trunk sewer system, the use of septic tanks may be approved, if sealed sewer laterals are installed for future connection and the temporary system meets all other applicable City, Clean Water Services, Washington County and State sewage disposal standards.

16.110.020 - Design Standards

A. Capacity

Sanitary sewers shall be constructed, located, sized, and installed at standards consistent with this Code, the Sanitary Sewer Service Plan

Map in the Sanitary Sewer Master Plan, and other applicable Clean Water Services and City standards, in order to adequately serve the proposed development and allow for future extensions.

B. Over-Sizing

1. When sewer facilities will, without further construction, directly serve property outside a proposed development, gradual reimbursement may be used to equitably distribute the cost of that over-sized system.
2. Reimbursement shall be in an amount estimated by the City to be a proportionate share of the cost for each connection made to the sewer by property owners outside of the development, for a period of ten (10) years from the time of installation of the sewers. The boundary of the reimbursement area and the method of determining proportionate shares shall be determined by the City. Reimbursement shall only be made as additional connections are made and shall be collected as a surcharge in addition to normal connection charges.

16.110.030 - Service Availability

Approval of construction plans for new facilities pursuant to Chapter 16.106, and the issuance of building permits for new development to be served by existing sewer systems shall include certification by the City that existing or proposed sewer facilities are adequate to serve the development.

Response: The subject site has existing sanitary sewer service and the project does not involve the installation of additional sanitary sewer fixtures. Information related to sanitary sewer is shown on the Preliminary Composite Utility Plan in Exhibit A. The applicable standards are met.

Chapter 16.114 - STORM WATER*

16.114.010 - Required Improvements

Storm water facilities, including appropriate source control and conveyance facilities, shall be installed in new developments and shall connect to the existing downstream drainage systems consistent with the Comprehensive Plan and the requirements of the Clean Water Services water quality regulations contained in their Design and Construction Standards R&O 04-9, or its replacement.

16.114.020 - Design Standards

A. Capacity

Storm water drainage systems shall be sized, constructed, located, and installed at standards consistent with this Code, the Storm Drainage Master Plan Map, attached as Exhibit E, Chapter 7 of the Community Development Plan, other applicable City standards, the Clean Water Services Design and Construction standards R&O 04-9 or its replacement, and hydrologic data and improvement plans submitted by the developer.

B. On-Site Source Control

Storm water detention and groundwater recharge improvements, including but not limited to such facilities as dry wells, detention

ponds, and roof top ponds shall be constructed according to Clean Water Services Design and Construction Standards.

C. Conveyance System

The size, capacity and location of storm water sewers and other storm water conveyance improvements shall be adequate to serve the development and accommodate upstream and downstream flow. If an upstream area discharges through the property proposed for development, the drainage system shall provide capacity to the receive storm water discharge from the upstream area. If downstream drainage systems are not sufficient to receive an increase in storm water caused by new development, provisions shall be made by the developer to increase the downstream capacity or to provide detention such that the new development will not increase the storm water caused by the new development.

16.114.030 - Service Availability

Approval of construction plans for new storm water drainage facilities pursuant to Chapter 16.106, and the issuance of building permits for new development to be served by existing storm water drainage systems shall include certification by the City that existing or proposed drainage facilities are adequate to serve the development.

Response: As shown on the Preliminary Plans (Exhibit A) and discussed in the Pre-Application Documentation (Exhibit I), there will be no increase of impervious area on the site. The subject site currently has access to public storm sewer service and the existing facilities will provide for the water quality treatment related to this site plan modification. The planned improvements related to stormwater are shown on the Preliminary Composite Utility Plan in Exhibit A. The applicable standards are met.

Chapter 16.116 - FIRE PROTECTION*

16.116.010 - Required Improvements

When land is developed so that any commercial or industrial structure is further than two hundred and fifty (250) feet or any residential structure is further than five hundred (500) feet from an adequate water supply for fire protection, as determined by the Fire District, the developer shall provide fire protection facilities necessary to provide adequate water supply and fire safety.

16.116.020 - Standards

A. Capacity

All fire protection facilities shall be approved by and meet the specifications of the Fire District, and shall be sized, constructed, located, and installed consistent with this Code, Chapter 7 of the Community Development Plan, and other applicable City standards, in order to adequately protect life and property in the proposed development.

B. Fire Flow

Standards published by the Insurance Services Office, entitled "Guide for Determination of Required Fire Flows" shall determine the capacity of facilities required to furnish an adequate fire flow. Fire protection facilities shall be adequate to convey quantities of water, as determined by ISO standards, to any outlet in the system, at no

less than twenty (20) pounds per square inch residual pressure. Water supply for fire protection purposes shall be restricted to that available from the City water system. The location of hydrants shall be taken into account in determining whether an adequate water supply exists.

C. Access to Facilities

Whenever any hydrant or other appurtenance for use by the Fire District is required by this Chapter, adequate ingress and egress shall be provided. Access shall be in the form of an improved, permanently maintained roadway or open paved area, or any combination thereof, designed, constructed, and at all times maintained, to be clear and unobstructed. Widths, height clearances, ingress and egress shall be adequate for District firefighting equipment. The Fire District, may further prohibit vehicular parking along private accessways in order to keep them clear and unobstructed, and cause notice to that effect to be posted.

D. Hydrants

Hydrants located along private, accessways shall either have curbs painted yellow or otherwise marked prohibiting parking for a distance of at least fifteen (15) feet in either direction, or where curbs do not exist, markings shall be painted on the pavement, or signs erected, or both, given notice that parking is prohibited for at least fifteen (15) feet in either direction.

Response: Adequate water supply is currently available to the subject site. As shown on the Preliminary Composite Utility Plan (Exhibit A), one existing fire hydrant will be relocated and placed at a location approved by the City and Tualatin Valley Fire & Rescue to ensure adequate access and flows for the new structure. No deficiencies have been identified. The applicable criteria are met.

16.116.030 - Miscellaneous Requirements

A. Timing of Installation

When fire protection facilities are required, such facilities shall be installed and made serviceable prior to or at the time any combustible construction begins on the land unless, in the opinion of the Fire District, the nature or circumstances of said construction makes immediate installation impractical.

B. Maintenance of Facilities

All on-site fire protection facilities, shall be maintained in good working order. The Fire District may conduct periodic tests and inspection of fire protection and may order the necessary repairs or changes be made within ten (10) days.

C. Modification of Facilities

On-site fire protection facilities, may be altered or repaired with the consent of the Fire District; provided that such alteration or repairs shall be carried out in conformity with the provisions of this Chapter.

Response: These standards are understood and fire protection installation will be timed so as to be serviceable prior to or at the time that combustible construction begins on the project site. These criteria are met or will be met as applicable.

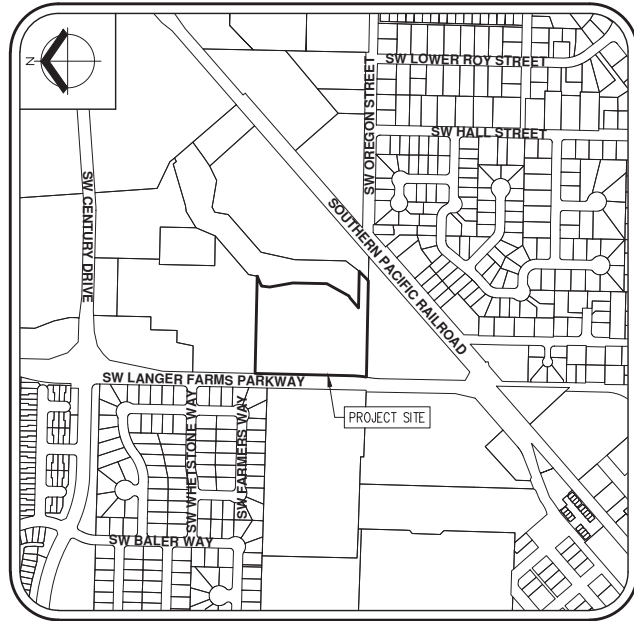
IV. Conclusion

The required findings have been made, and this narrative and accompanying documentation demonstrate that the application is consistent with the applicable provisions of the City of Sherwood Zoning and Community Development Code. The evidence in the record is substantial and supports approval of the application. The City of Sherwood can rely upon this information in its approval of the application.

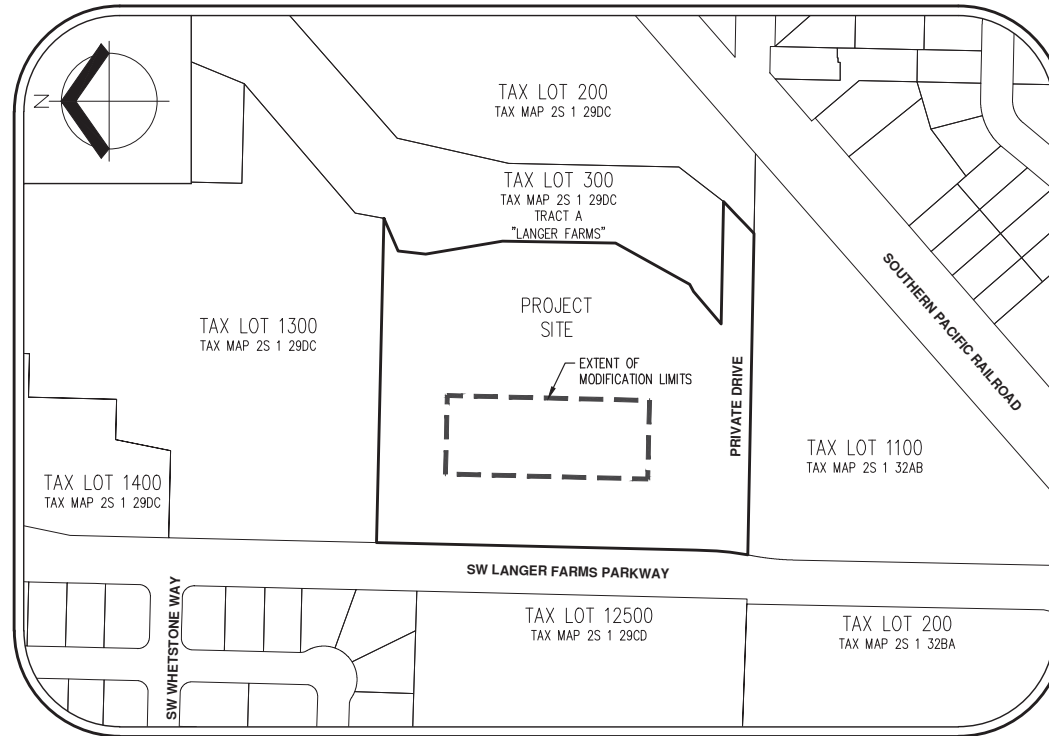
Exhibit A: Preliminary Plans

SENTINEL STORAGE ANNEX II

SITE PLAN MODIFICATION



VICINITY MAP
NTS



SITE MAP
1"=150'

PROPERTY OWNER/APPLICANT:

LANGER STORAGE 2, LLC
15585 SW TUALATIN-SHERWOOD ROAD
SHERWOOD, OR 97140

**PLANNING/CIVIL ENGINEERING/
SURVEYING FIRM:**

AKS ENGINEERING & FORESTRY, LLC.
CONTACT: JOHN P. CHRISTIANSEN, PE, CWRE – PRINCIPAL
CHRIS GOODELL, AICP, LEED – ASSOCIATE
12965 SW HERMAN RD STE 100
TUALATIN, OR 97062
P: (503) 563-6151
F: (503) 563-6152

SITE DESCRIPTION:

TAX LOT 900 WASHINGTON COUNTY ASSESSOR'S MAP 2S 1 29DC
LOCATED IN THE SOUTHEAST 1/4 OF SECTION 29, TOWNSHIP 2
SOUTH, RANGE 1 WEST, WILLAMETTE MERIDIAN, WASHINGTON
COUNTY, OREGON.

SITE AREA:

±267,458 SF = ±6.14 ACRES

EXISTING LAND USE:

SELF-STORAGE FACILITY.

PROJECT PURPOSE:

REPLACEMENT OF RECREATIONAL VEHICLE STORAGE CANOPY
WITH ENCLOSED SELF-STORAGE BUILDING.

VERTICAL DATUM:

ELEVATIONS ARE BASED ON WASHINGTON COUNTY BENCHMARK
NO. 103, A BRASS DISK IN CONCRETE AT THE SW CORNER OF
THE INTERSECTION OF SW TUALATIN-SHERWOOD ROAD AND THE
RAILROAD CROSSING, APPROXIMATELY 1.1 MILE EAST OF SIX
CORNERS. WITH A NGVD 29 ELEVATION OF 171.38 FEET.

SHEET INDEX

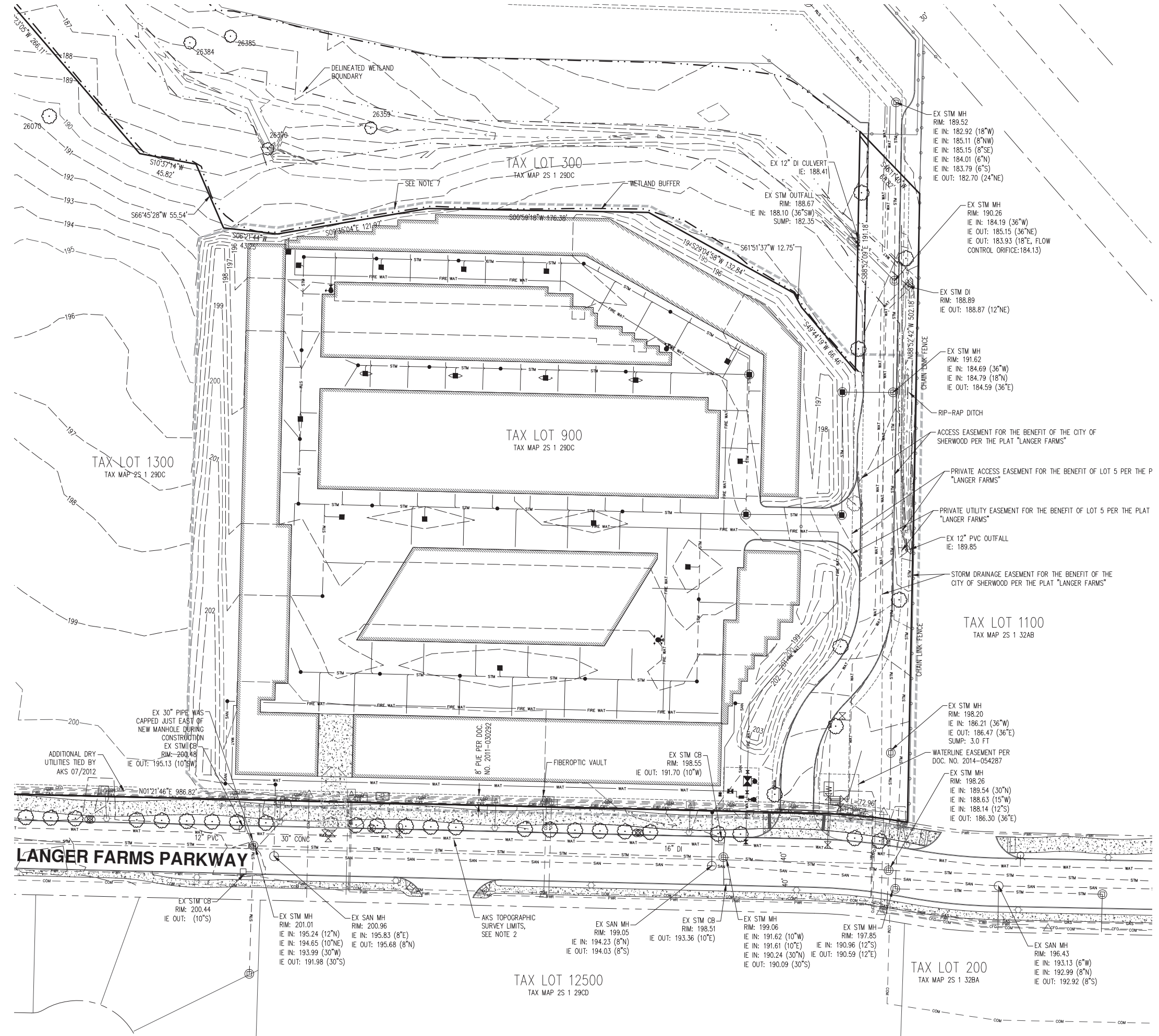
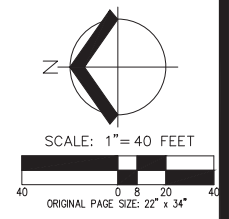
- P01 COVER SHEET WITH VICINITY AND SITE MAPS
- P02 EXISTING CONDITIONS PLAN
- P03 PRELIMINARY DEMOLITION PLAN
- P04 PRELIMINARY SITE PLAN
- P05 PRELIMINARY GRADING AND EROSION AND SEDIMENT CONTROL PLAN
- P06 PRELIMINARY COMPOSITE UTILITY PLAN
- P07 SURROUNDING LAND USES AND TRANSPORTATION CIRCULATION PLAN
- P08 PRELIMINARY LIGHTING PLAN

LEGEND

	EXISTING	PROPOSED		EXISTING	PROPOSED
DECIDUOUS TREE			STORM DRAIN CLEAN OUT		
CONIFEROUS TREE			STORM DRAIN CATCH BASIN		
FIRE HYDRANT			STORM DRAIN AREA DRAIN		
WATER BLOWOFF			STORM DRAIN MANHOLE		
WATER METER			GAS METER		
WATER VALVE			GAS VALVE		
DOUBLE CHECK VALVE			GUY WIRE ANCHOR		
AIR RELEASE VALVE			UTILITY POLE		
SANITARY SEWER CLEAN OUT			POWER VAULT		
SANITARY SEWER MANHOLE			POWER JUNCTION BOX		
SIGN			POWER PEDESTAL		
STREET LIGHT			COMMUNICATIONS VAULT		
MAILBOX			COMMUNICATIONS JUNCTION BOX		
			COMMUNICATIONS RISER		
	EXISTING	PROPOSED			
RIGHT-OF-WAY LINE					
BOUNDARY LINE					
PROPERTY LINE					
CENTERLINE					
DITCH					
CURB					
EDGE OF PAVEMENT					
EASEMENT					
FENCE LINE					
GRAVEL EDGE					
POWER LINE					
OVERHEAD WIRE					
COMMUNICATIONS LINE					
FIBER OPTIC LINE					
GAS LINE					
STORM DRAIN LINE					
SANITARY SEWER LINE					
WATER LINE					



RENEWAL DATE: 12/31/23
JOB NUMBER: 4668-01
DATE: 02/22/2022
DESIGNED BY: APC
DRAWN BY: APC
CHECKED BY: JPC



NOTES:

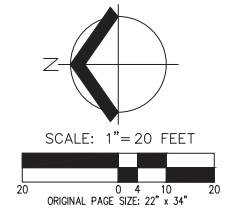
- INFORMATION SHOWN IS BASED ON DIGITAL INFORMATION PROVIDED BY OTHERS (INCLUDING CES NW AND HDJ DESIGN GROUP). AKS ENGINEERING & FORESTRY MAKES NO GUARANTEE THAT THE UTILITIES SHOWN REPRESENT THE ONLY UTILITIES IN THE AREA. CONTRACTORS ARE RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS PRIOR TO BEGINNING CONSTRUCTION.
- PORTIONS OF SITE TOPOGRAPHY ARE PER A SURVEY BY CES NW (CES NW JOB NO. 2723), AND PER DRAWINGS PROVIDED ON 12/05/11 BY HDJ, AND ARE LABELED. SITE TOPOGRAPHY FOR TAX LOT 100 AND THE REMAINING PORTIONS OF CENTURY DRIVE AND THE ACCESS DRIVE AT THE SOUTH END OF THE SITE WERE TIED BY AKS.
- VERTICAL DATUM: ELEVATIONS ARE BASED ON WASHINGTON COUNTY BENCHMARK NO. 103, A BRASS DISK IN CONCRETE AT THE SW CORNER OF THE INTERSECTION OF SW TUALATIN-SHERWOOD ROAD AND THE RAILROAD CROSSING, APPROXIMATELY 1.1 MILE EAST OF SIX CORNERS. WITH A NGVD 29 ELEVATION OF 171.38 FEET.
- THIS MAP DOES NOT CONSTITUTE A PROPERTY BOUNDARY SURVEY.
- CONTOUR INTERVAL IS 1 FOOT.
- ALL TREES SHOWN ARE APPROXIMATE LOCATION.
- DENOTED PORTION OF SENTINEL STORAGE ANNEX II HAS NOT BEEN SURVEYED AND IS BASED ON APPROVED CONSTRUCTION PLANS AND AVAILABLE AS-BUILTS.

CURVE TABLE				
CURVE	RADIUS	DELTA	LENGTH	CHORD
C1	431.00'	5°27'23"	41.04'	N88°46'48"E 41.03'
C2	485.00'	8°37'09"	72.96'	N5°40'21"E 72.89'

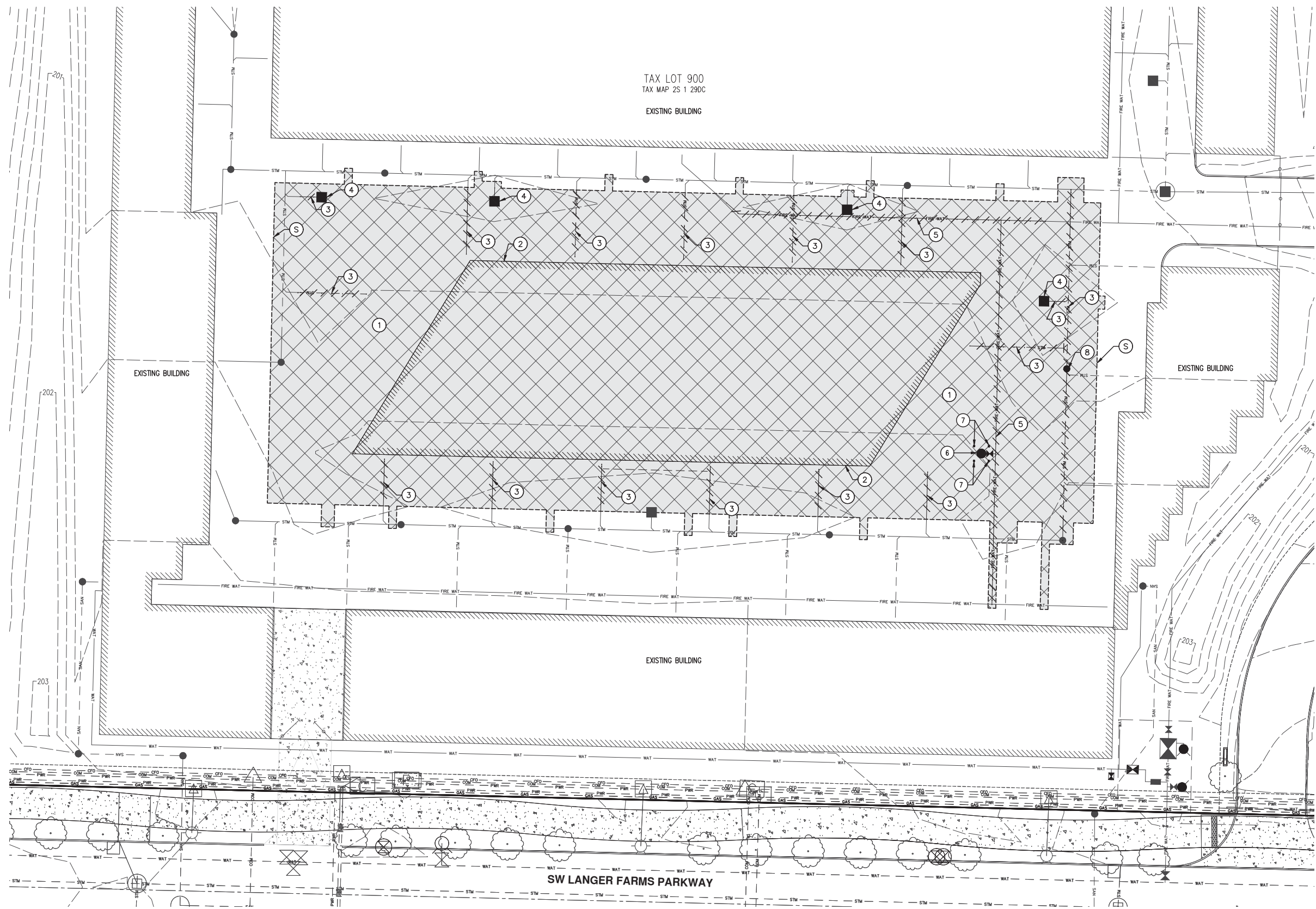
**EXISTING CONDITIONS PLAN
 SENTINEL STORAGE ANNEX II
 SITE PLAN MODIFICATION
 SHERWOOD, OREGON**



RENEWAL DATE: 12/31/23
 JOB NUMBER: 4688-01
 DATE: 02/22/2022
 DESIGNED BY: APC
 DRAWN BY: APC
 CHECKED BY: JPC



TAX LOT 900
 TAX MAP 2S 1 29DC
 EXISTING BUILDING



KEYED DEMOLITION NOTES:

- S. SAWCUT LINE (TYP).
- 1. REMOVE EXISTING AC PAVEMENT.
- 2. REMOVE EXISTING 14,850 SF RECREATIONAL VEHICLE STORAGE CANOPY.
- 3. REMOVE PORTION OF EXISTING STORM DRAINAGE LINE.
- 4. REMOVE/RELOCATE EXISTING STORM CATCH BASIN.
- 5. REMOVE EXISTING FIRE WATER LINE.
- 6. REMOVE/RELOCATE EXISTING FIRE HYDRANT.
- 7. REMOVE EXISTING BOLLARDS.
- 8. REMOVE EXISTING STORM CLEANOUT.

LEGEND:

- EXISTING AC PAVEMENT TO BE REMOVED
- EXISTING UTILITY TO BE REMOVED

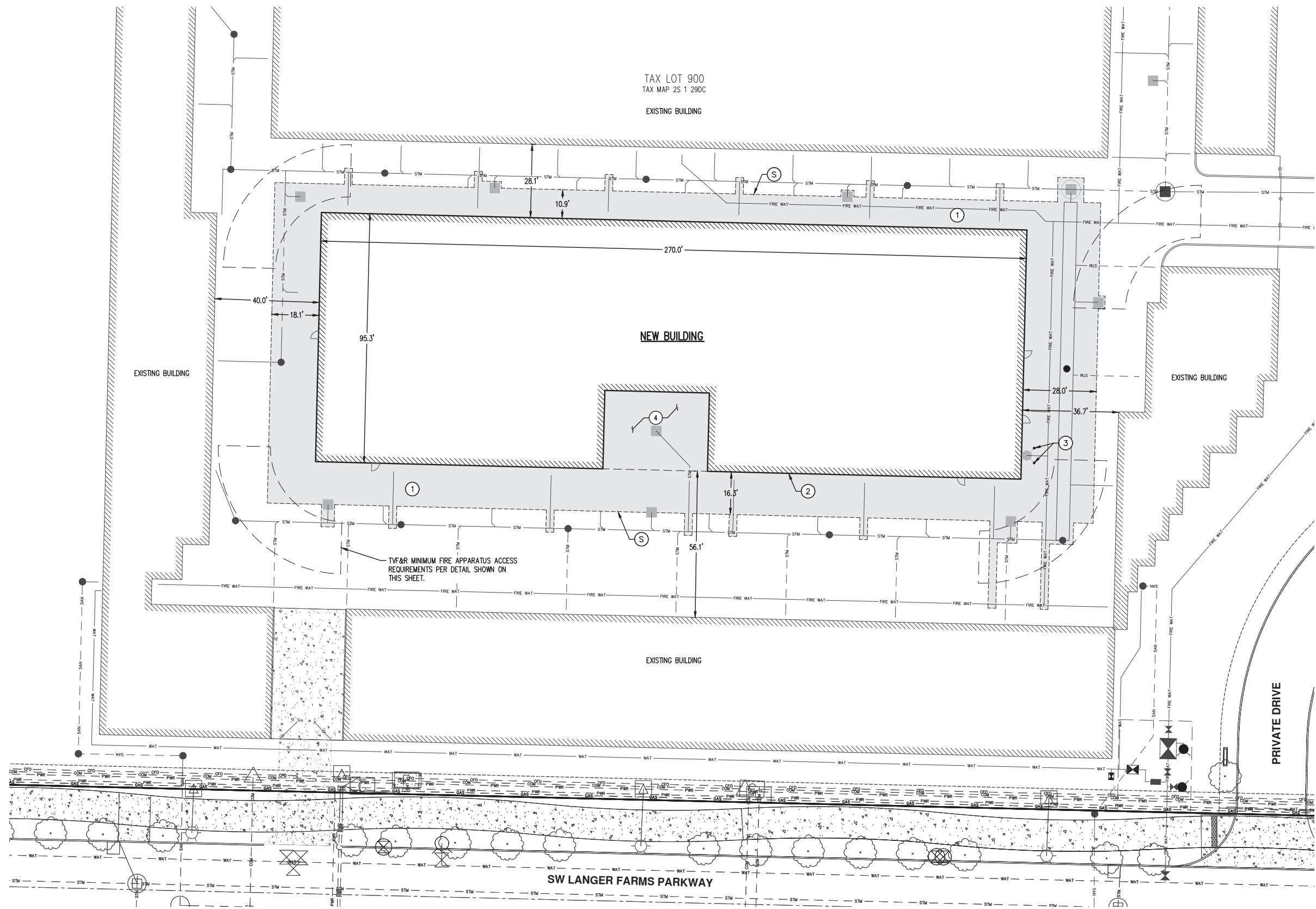
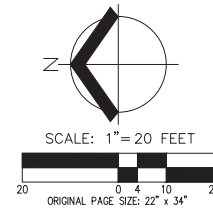
CONTOUR LEGEND

- EXISTING GROUND CONTOUR (1 FT) ---419---
- EXISTING GROUND CONTOUR (5 FT) ---420---

**PRELIMINARY DEMOLITION PLAN
 SENTINEL STORAGE ANNEX II
 SITE PLAN MODIFICATION
 SHERWOOD, OREGON**



RENEWAL DATE: 12/31/23
 JOB NUMBER: 4668-01
 DATE: 02/22/2022
 DESIGNED BY: APC
 DRAWN BY: APC
 CHECKED BY: JPC



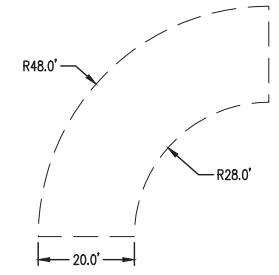
NEW BUILDING SUMMARY		
LEVEL	AREA (SF)	BUILDING STORAGE USE
L1	23,897	MINI STORAGE
L2	24,540	MINI STORAGE
L3	25,740	MINI STORAGE
TOTAL	74,177	

SITE KEYED NOTES:

- S. SAWCUT LINE (TYP).
- 1. NEW AC PAVEMENT.
- 2. NEW THREE STORY MINI STORAGE BUILDING.
- 3. NEW BOLLARD.
- 4. NEW COVERED LOADING AREA.

LEGEND:

- NEW AC PAVEMENT



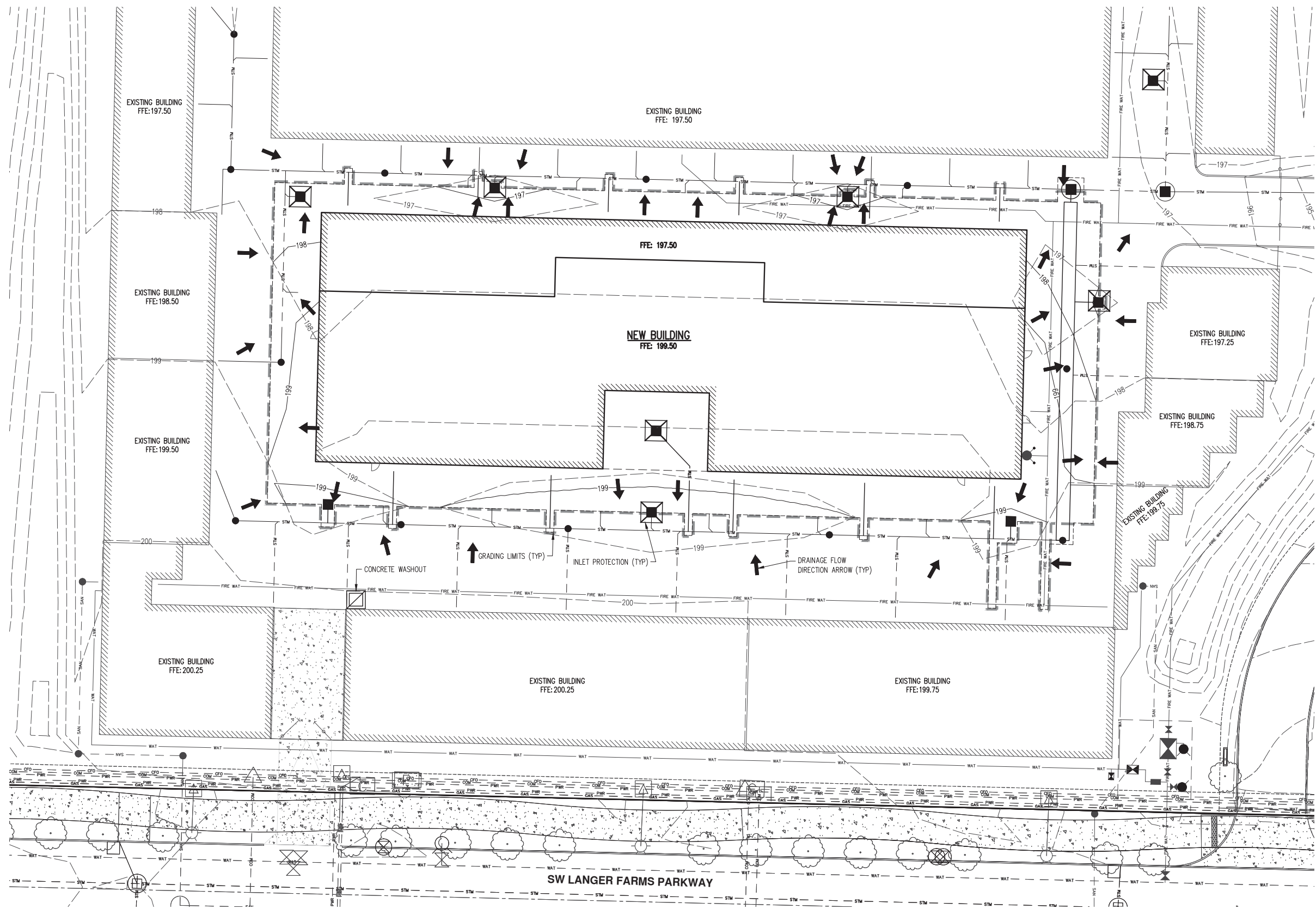
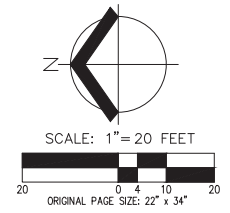
TVF&R MINIMUM FIRE APPARATUS ACCESS REQUIREMENTS DETAIL
 1"=20'

NOTE:
 EXISTING BUILDINGS, DRIVEWAY ACCESS, LANDSCAPING AND OTHER SITE ELEMENTS OUTSIDE THE EXTENT OF MODIFICATION LIMITS TO REMAIN UNCHANGED.

**PRELIMINARY SITE PLAN
 SENTINEL STORAGE ANNEX II
 SITE PLAN MODIFICATION
 SHERWOOD, OREGON**



RENEWAL DATE: 12/31/23
 JOB NUMBER: 4668-01
 DATE: 02/22/2022
 DESIGNED BY: APC
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 CHECKED BY: JPC



LEGEND

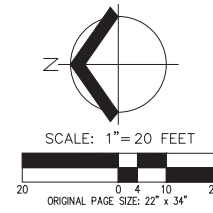
EXISTING GROUND CONTOUR (1 FT)	---
EXISTING GROUND CONTOUR (5 FT)	---
FINISHED GRADE CONTOUR (1 FT)	---
FINISHED GRADE CONTOUR (5 FT)	---
INLET PROTECTION (TYP)	
CONCRETE WASHOUT AREA (ECO PAN)	
DRAINAGE FLOW DIRECTION ARROW	
GRADING LIMITS	---

PRELIMINARY GRADING AND EROSION AND SEDIMENT CONTROL PLAN
SENTINEL STORAGE ANNEX II
 SITE PLAN MODIFICATION
 SHERWOOD, OREGON



RENEWAL DATE: 12/31/23
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 DESIGNED BY: APC
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 CHECKED BY: JPC

AKS DRAWING FILE: 4668-01_P05 GRADING AND EROSION CONTROL.DWG | LAYOUT: P05



TAX LOT 900
TAX MAP 2S 1 29DC
EXISTING BUILDING

NEW BUILDING

EXISTING BUILDING

EXISTING BUILDING

EXISTING BUILDING

SW LANGER FARMS PARKWAY

- # UTILITY KEYED NOTES:
- STORM:**
1. NEW STORM AREA DRAIN.
 2. NEW STORM MAIN.
 3. NEW STORM DETENTION PIPE.
 4. NEW STORM LATERAL FOR BUILDING DOWNSPOUT CONNECTION.
 5. NEW FLOW CONTROL MANHOLE.
- FIRE WATER:**
6. NEW FIRE SERVICE WATER.
 7. NEW FIRE HYDRANT.
 8. NEW BUILDING FIRE SERVICE.
 9. CONNECT TO EXISTING FIRE MAIN.

**PRELIMINARY COMPOSITE UTILITY PLAN
SENTINEL STORAGE ANNEX II
SITE PLAN MODIFICATION
SHERWOOD, OREGON**

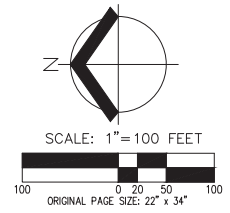
AKS
AKS ENGINEERING & FORESTRY, LLC
12965 SW HERMAN RD., STE. 100
TULALATIN, OR 97062
503.563.6151
WWW.AKS-ENG.COM
ENGINEERING • SURVEYING • NATURAL RESOURCES
FORESTRY • PLANNING • LANDSCAPE ARCHITECTURE



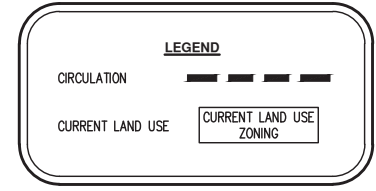
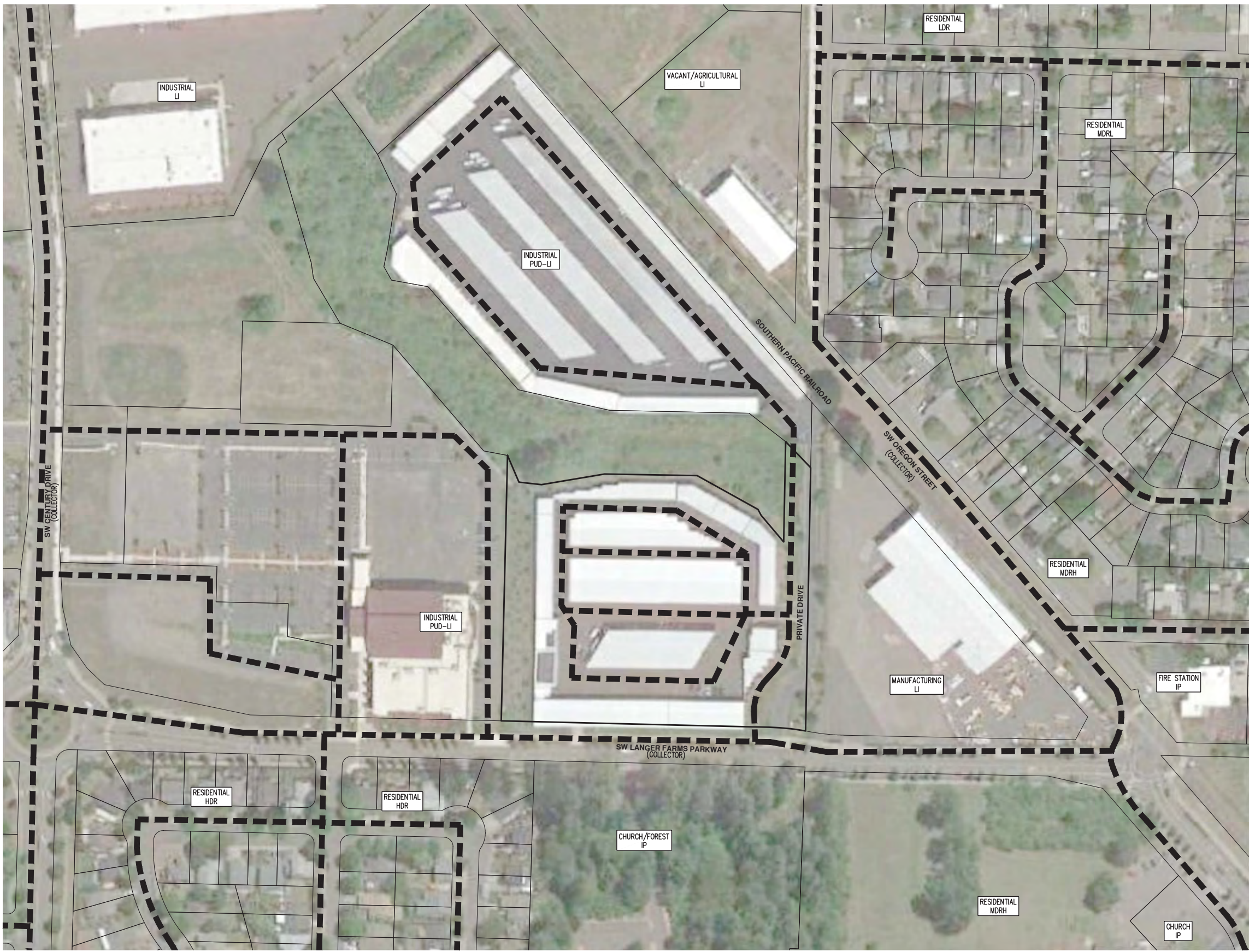
RENEWAL DATE: 12/31/23
JOB NUMBER: 4668-01
DATE: 02/22/2022
DESIGNED BY: APC
DRAWN BY: APC
CHECKED BY: JPC

P06

AKS DRAWING FILE: 4668-01_P07_COMPOSITE UTILITY.DWG | LAYOUT: P07



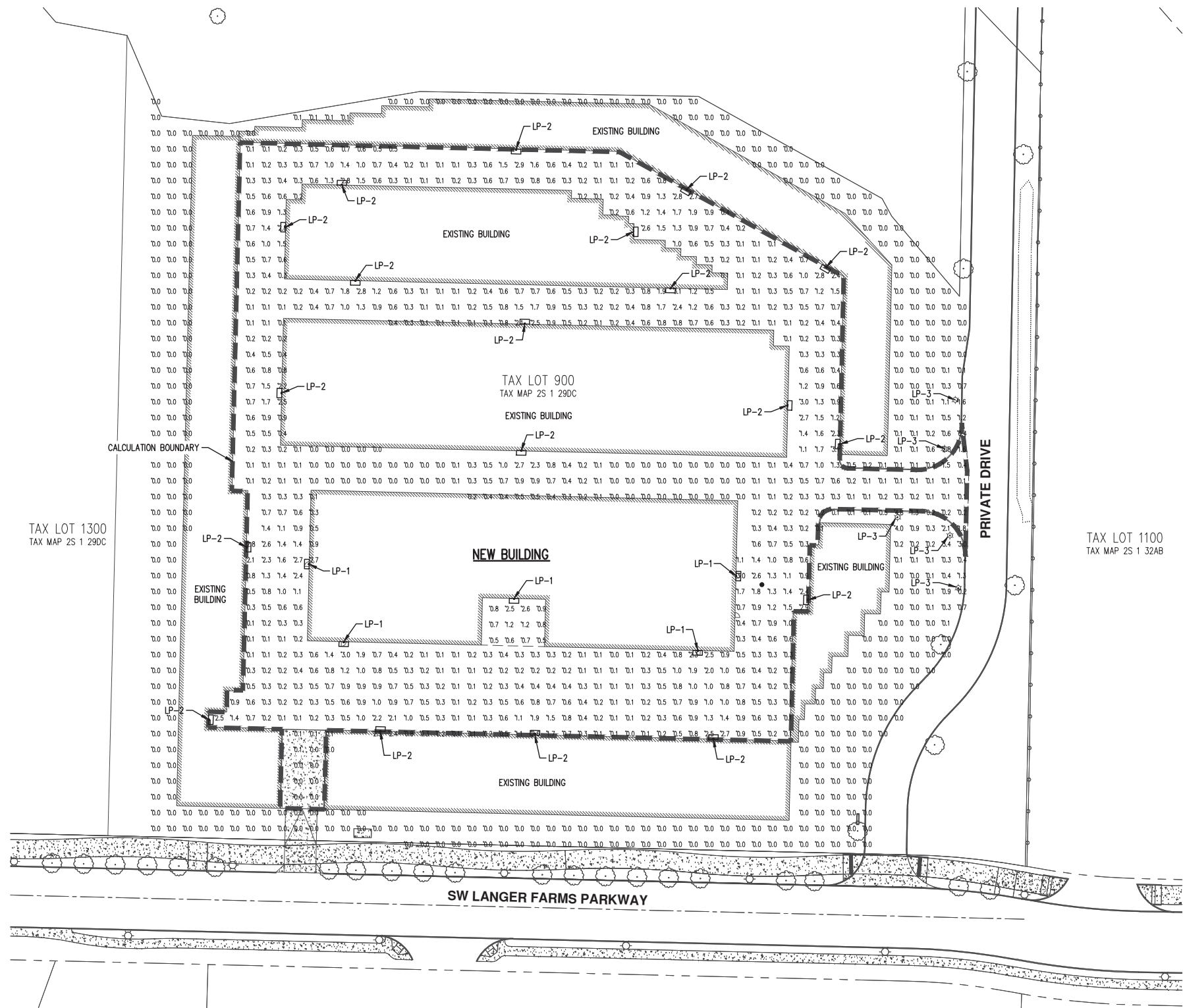
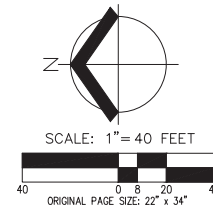
SURROUNDING LAND USES AND TRANSPORTATION CIRCULATION PLAN
SENTINEL STORAGE ANNEX II
SITE PLAN MODIFICATION
SHERWOOD, OREGON



NOTE: AERIAL PHOTO FROM GOOGLE EARTH (JUNE 2021)



RENEWAL DATE:	12/31/23
JOB NUMBER:	4668-01
DATE:	02/22/2022
DESIGNED BY:	APC
DRAWN BY:	APC
CHECKED BY:	JPC



LUMINAIRE SCHEDULE							
SYMBOL	LABEL	TAG	DESCRIPTION	QTY	TOTAL LAMP LUMENS	LUM. WATTS	LLF
□	LP-1	NEW	VISIONAIRE MALIBU LED (15' MOUNTING HEIGHT)	5	2,863	27	0.90
□	LP-2	EXISTING	VISIONAIRE MALIBU LED (15' MOUNTING HEIGHT)	29	2,863	27	0.90
☆	LP-3	EXISTING	ROUND CLEAR BOLLARD WITH 180 DEGREE SHIELD (3' MOUNTING HEIGHT)	5	5,600	70	0.70

CALCULATION SUMMARY						
LABEL	CALCTYPE	UNITS	AVG	MAX	MIN	AVG/MIN
CALCULATION AREA	Illuminance	Fc	0.6	4.8	0.0	N.A.

- NOTES:
- PROPOSED LIGHTING MODELED TO MEET CITY OF SHERWOOD MUNICIPAL CODE 16.154.010
 - EXISTING LIGHTING ON SW LANGER FARMS PARKWAY NOT MODELED

PRELIMINARY LIGHTING PLAN
SENTINEL STORAGE ANNEX II
SITE PLAN MODIFICATION
SHERWOOD, OREGON



RENEWAL DATE: 12/31/23
 JOB NUMBER: 4668-01
 DATE: 02/22/2022
 DESIGNED BY: APC
 DRAWN BY: APC
 CHECKED BY: JPC

Exhibit B: City of Sherwood Land Use Application Forms & Checklists



Home of the Tualatin River National Wildlife Refuge

Case No. _____
Fee _____
Receipt # _____
Date _____
TYPE _____

City of Sherwood Application for Land Use Action

Type of Land Use Action Requested: (check all that apply)

- | | |
|--|--|
| <input type="checkbox"/> Annexation | <input type="checkbox"/> Conditional Use |
| <input type="checkbox"/> Plan Amendment (Proposed Zone _____) | <input type="checkbox"/> Partition (# of lots _____) |
| <input type="checkbox"/> Planned Unit Development | <input type="checkbox"/> Subdivision (# of lots _____) |
| <input type="checkbox"/> Site Plan (square footage of building and parking area) | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Variance (list standards to be varied in description) | |

By submitting this form the Owner, or Owner's authorized agent/ representative, acknowledges and agrees that City of Sherwood employees, and appointed or elected City Officials, have authority to enter the project site at all reasonable times for the purpose of inspecting project site conditions and gathering information related specifically to the project site.

Note: See City of Sherwood current Fee Schedule, which includes the "Publication/Distribution of Notice" fee, at www.sherwoodoregon.gov. Click on Government/Finance/Fee Schedule.

Owner/Applicant Information:

Applicant: _____	Phone: _____
Applicant Address: _____	Email: _____
Owner: _____	Phone: _____
Owner Address: _____	Email: _____
Contact for Additional Information: _____	

Address: 12965 SW Herman Road, Suite 100, Tualatin, OR 97062
Phone: (503) 563-6151; Email: chrisg@aks-eng.com

Property Information:

Street Location: _____
 Tax Lot and Map No: _____
 Existing Structures/Use: _____
 Existing Plan/Zone Designation: _____
 Size of Property(ies) _____

Proposed Action:

Purpose and Description of Proposed Action: _____

Proposed Use: _____

Proposed No. of Phases (one year each): _____

LAND USE APPLICATION FORM

Authorizing Signatures:

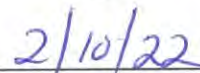
I am the owner/authorized agent of the owner empowered to submit this application and affirm that the information submitted with this application is correct to the best of my knowledge.

I further acknowledge that I have read the applicable standards for review of the land use action I am requesting and understand that I must demonstrate to the City review authorities compliance with these standards prior to approval of my request.

Applicant's Signature


Owner's Signature

Date



Date

The following materials must be submitted with your application or it will not be accepted at the counter. Once taken at the counter, the City has up to 30 days to review the materials submitted to determine if we have everything we need to complete the review. Applicant can verify submittal includes specific materials necessary for the application per checklist.

- 3 Copies of Application Form*** completely filled out and signed by the property owner (or person with authority to make decisions on the property).
- Copy of Deed** to verify ownership, easements, etc.
- At least 3 folded** sets of plans*
- At least 3 copies** of narrative addressing application criteria*
- Fee** (along with calculations utilized to determine fee if applicable)
- Neighborhood Meeting Verification** including affidavit, sign-in sheet and meeting summary (required for Type III, IV and V projects)

* **Note** that the required numbers of copies identified on the checklist are required for completeness; however, upon initial submittal applicants are encouraged to submit only 3 copies for completeness review. Prior to completeness, the required number of copies identified on the checklist and one full electronic copy will be required to be submitted.



APPLICATION MATERIALS REQUIRED FOR SITE PLAN REVIEW

Submit the following to the City of Sherwood Planning Department, 22560 SW Pine St., Sherwood, OR 97140: (503) 925-2308.

It is strongly suggested that you have a pre-application meeting with the City prior to submitting for Site Plan Review. (See *Pre-application Process* form for information.)

Note: Clean Water Services (CWS) requires a pre-screening to determine if water quality sensitive areas exist on the property. If these sensitive areas exist, a Site Assessment and Service Provider Letter are required prior to submitting for Site Plan Review or undertaking any development. **This application will not be accepted without a completed Pre-Screening Form and if required a Service Provider Letter.** Please contact CWS at (503) 681-3600.

If the proposal is next to a Washington County roadway, the applicant must submit an Access Report (Traffic Study) to Washington County Department of Land Use and Transportation (503) 846-8761. **This application will not be accepted until an Access Report (Traffic Study) is submitted to Washington County and the Access Report is deemed complete by the County; or written verification from Washington County that an Access Report is not required is provided.**

✓ I. **FEES** - See City of Sherwood current Fee Schedule, which includes the “Publication/ Distribution of Notice” fee, at <http://www.sherwoodoregon.gov> Click on Government/Planning/Planning Fees.

Note: The above fees are required at the time you submit for site plan review. Additional fees will be charged for building permit, system development charges, impact fees and other fees applicable to the development. These fees will be charged when you make application for building permit. Building permit application will not be accepted until site plan approval is issued.

✓ II. **BACKGROUND INFORMATION** (All materials to be collated & folded (not rolled) to create *fifteen (15) sets).

*Note that the *final* application must contain fifteen (15) folded sets of the above, however, upon initial submittal of the application and prior to completeness review, the applicant may submit three (3) complete folded sets with the application in lieu of fifteen (15), with the understanding that fifteen (15) complete sets of the application materials will be required before the application is deemed complete and scheduled for review.

✓ **Application Form** – One original and fourteen (14) copies of a completed **City of Sherwood Application for Land Use Action** form. Original signatures from all owners must be on the application form.

✓ **Documentation of Neighborhood Meeting (Type III- Type V)** - Affidavits of mailing, sign-in sheets and a summary of the meeting notes shall be included with the application.

✓ **Tax Map** - Fifteen (15) copies of the latest Tax Map available from the Washington County Assessor's Office showing property within at least 300 feet with scale (1"=100' or 1"= 200') north point, date and legend.

✓ **Mailing Labels** – Two (2) sets of mailing labels for property owners within 1,000 feet of the subject site, including a map of the area showing the properties to receive notice. Mailing labels can be obtained from a private title insurance company. Ownership records shall be based on the most current available information from the Tax Assessor's office. *It is the applicant's responsibility to provide mailing labels that accurately reflect all property owners that reside within 1,000 feet of the subject site.*

✓ **Vicinity Map** – Fifteen (15) copies of a vicinity map showing the City limits and the Urban Growth Boundary.

✓ **Narrative** – Fifteen (15) copies and **an electronic copy** of a narrative explaining the proposal in detail and a response to the Required Findings for Site Plan Review, located in Chapter 16 of the Municipal Code/Zoning & Development, Section 16.90.010. The Municipal Code/Zoning & Development is available online at www.sherwoodoregon.gov, Click on Government/Municipal Code.

✓ **Electronic Copy** – An electronic copy of the **entire** application packet. This should include all submittal materials (narrative, vicinity map, mailing labels, site plan, preliminary plat, etc.).

✓ III. **REQUIRED PLANS**

Submit fifteen (15) sets of the following folded full-size plans and **an electronic copy in .PDF format.** Plans must have:

- 1) The proposed name of the development. If a proposed project name is the same as or similar to other existing projects in the City of Sherwood, the applicant may be required to modify the project name.
- 2) The name, address and phone of the owner, developer, applicant and plan producer.
- 3) North arrow,
- 4) Legend,
- 5) Date plans were prepared and date of any revisions
- 6) Scale clearly shown. Other than architectural elevations, all plans must be drawn to an engineer scale.
- 7) All dimensions clearly shown.

✓ **Existing Conditions Plan** - Existing conditions plan drawn to scale showing: property lines and dimensions, existing structures and other improvements such as streets and utilities, existing vegetation including trees, any floodplains or wetlands and any easements on the property. The existing conditions plan shall also include the slope of the site at 5-foot contour intervals



Preliminary Development Plans- Plans must be sufficient for the Hearing Authority to determine compliance with applicable standards. The following information is typically needed for adequate review:

1. The subject parcel (s), its dimensions and area.
2. The location and dimensions of proposed development, including the following:

Transportation

- a. Public and private streets with proposed frontage improvements including curb, gutters, sidewalks, planter strip, street lighting, distances to street centerline, pavement width, right-of-way width, bike lanes and driveway drops.
- b. Public and private access easements, width and location.
- c. General circulation plan showing location, widths and direction of existing and proposed streets, bicycle and pedestrian ways, and transit routes and facilities within ½ mile of the subject property.
- d. Show the location and distance to neighboring driveways and the width and locations of driveways located across the street.
- e. The location and size of accesses, sight distance and any fixed objects on collectors or arterial streets.
- f. Emergency accesses.
- g. Indicate the location and size of off-street parking spaces including curbing and wheel stop locations.
- h. Proposed transit facilities.
- i. Indicate loading and maneuvering areas.
- j. Delivery truck and bus circulation patterns.

Grading and Erosion Control

- k. Indicate the proposed grade at two (2)-foot contour intervals.
- l. Indicate the proposed erosion control measures to CWS standards (refer to CWS R&O 07-20).
- m. Show areas of cut and fill with areas of structural fill.
- n. Show the location of all retaining walls, the type of material to be used, the height of the retaining wall from the bottom of the footing to the top of the wall and the exposed height of the wall.

Utilities

- o. Utilities must be shown after proposed grade with 2-foot contour intervals.
- p. Map location, purpose, dimensions and ownership of easements.
- q. Fire hydrant locations and fire flows.
- r. Water, sewer and stormwater line locations, types and sizes.
- s. Clearly indicate the private and public portions of the system.
- t. Above-ground utilities and manhole locations.

Preliminary Stormwater Plan

- u. Show location, size and slope of water quality facility.
- v. Preliminary calculations justifying size of facility.

- w. The total square footage of the new and existing impervious area.
- x. The stormwater facility to CWS standards. (R&O 07-20).

Sensitive Areas

- y. Show any and all streams, ponds, wetlands and drainage ways.
- z. Indicate the vegetative corridor for sensitive areas to CWS standards. (R&O 07-20).
- aa. Indicate measures to avoid environmental degradation that meet CWS, DSL and Army Corp requirements.
- bb. Flood elevation.
- cc. Wetland delineation and buffering proposed.
- dd. Location and size of all trees greater than 5 inches DBH (indicate if trees are proposed for removal).

Land Use

- ee. The square footage of each building and a breakdown of square footage by use. (i.e. retail, office, industrial, residential, etc.).
- ff. Net buildable acres. (The land remaining after unbuildable areas are taken out, such as the floodplain and wetland areas).
- gg. Net density calculation for residential use.
- hh. Landscaping areas including the square footage of the site covered by landscaping and planting types. (refer to Ch. 5 of the Community Development Code).
- ii. Existing trees proposed to remain and trees to be removed and the drip-lines of trees proposed to remain.
- jj. Street tree location, size and type. (refer to Ch. 8, Section 8.304.06 of the Community Development Code).
- kk. Bicycle parking areas. (Refer to Ch 5 of the Community Development Code).
- ll. On-site pathways and sidewalk locations.
- mm. Structures proposed to be built and structures proposed to remain with their dimensions and the distances to property lines.
- nn. Outdoor storage areas and proposed screening.
- oo. Outdoor sales and merchandise display areas and proposed screening.
- pp. Truck loading and maneuvering areas.
- qq. Number of parking spaces and required parking calculations based on Section 5.302 of the Community Development Code.
- rr. The size and location of solid waste and recycle storage areas and screening.
- ss. Location, size and height of proposed free-standing signs.
- tt. Location, height and type of fencing and walls.
- uu. For each lot indicated the building envelope.



Reduced - Proposed Development Plans – One (1) reduced copies of the Proposed Development Plan on 8 1/2” by 11” sheets and fifteen (15) reduced copies on 11” by 17” sheets.



Lighting Plan – Photometric lighting plan indicating foot candle power on and along the perimeter of the site. Proposed locations, height and size of lights. (If outdoor lighting is proposed).



Surrounding Land Uses – Existing land use including nature, size and location of existing structures within 300 feet.



Architectural Exterior – Scaled architectural sketches and elevations of all proposed structures. Include a description of materials, textures and colors. Show the size, placement and dimensions of proposed wall signs on the elevation drawings. These drawings can be done at an architectural or engineering scale. If color is used, two color copies and eight black and white copies are acceptable.

IV. DOCUMENTS REQUIRED



Title Report – Two (2) copies of a current preliminary title report available from a private title insurance company.



CWS Service Provider Letter – Four (4) copies of the CWS service provider letter

N/A V. ADDITIONAL DOCUMENTS THAT MAY BE REQUIRED

- Army Corps and DSL wetland applications and/or permits** – Four (4) copies of required Divisions of State Lands and/or Army Corp of Engineers permits and/or permit applications if applicable.
- Traffic Study** – Four (4) copies of a traffic study. (If required by the City Engineer).
- Soils Analysis and/or Geotechnical Report** – Four (4) copies completed by a registered Soils Engineer or Geologist including measures to protect natural hazards. (If required by the City Engineer).
- Tree Report** – Two (2) copies of a tree report prepared by an arborist, forester, landscape architect, botanist or other qualified professional. (If required trees are on-site).
- Natural Resource Assessment** – If required by Clean Water Services (CWS). The CWS Pre-Screening indicates as to whether this report is required or not.
- Wetland Delineation Study** – if required by Oregon Division of State Lands (DSL) or the Army Corps of Engineers.
- Other Special Studies and/or Reports** – if required by the Planning Director or the City Engineer to address issues identified in the pre-application meeting or during project review.
- Verification of compliance with other agency standards such as CWS, DSL, Army Corps of Engineers, ODOT, PGE, BPA, Washington County.

Exhibit C: Preliminary Title Report



1433 SW 6th Avenue
(503)646-4444

OWNERSHIP AND ENCUMBRANCES REPORT WITH GENERAL INDEX LIENS
Informational Report of Ownership and Monetary and Non-Monetary Encumbrances

To ("Customer"): Matt Langer
21650 SW Langer Farms Parkway
Sherwood, OR 97140

Customer Ref.: _____
Order No.: 472521008337
Effective Date: November 8, 2021 at 08:00 AM
Charge: \$350.00

The information contained in this report is furnished by Chicago Title Company of Oregon (the "Company") as a real property information service based on the records and indices maintained by the Company for the county identified below. THIS IS NOT TITLE INSURANCE OR A PRELIMINARY TITLE REPORT FOR, OR COMMITMENT FOR, TITLE INSURANCE. No examination has been made of the title to the herein described property, other than as specifically set forth herein. Liability for any loss arising from errors and/or omissions is limited to the lesser of the charge or the actual loss, and the Company will have no greater liability by reason of this report. THIS REPORT IS SUBJECT TO THE LIMITATIONS OF LIABILITY STATED BELOW, WHICH LIMITATIONS OF LIABILITY ARE A PART OF THIS REPORT.

THIS REPORT INCLUDES MONETARY AND NON-MONETARY ENCUMBRANCES.

Part One - Ownership and Property Description

Owner. The apparent vested owner of property ("the Property") as of the Effective Date is:

Langer Storage 2 LLC, an Oregon limited liability company

Premises. The Property is:

(a) Street Address:

21900 S.W. Langer Farms Parkway, Sherwood, OR 97140

(b) Legal Description:

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

Part Two - Encumbrances

Encumbrances. As of the Effective Date, the Property appears subject to the following monetary and non-monetary encumbrances of record, not necessarily listed in order of priority, including liens specific to the subject property and general index liens (liens that are not property specific but affect any real property of the named person in the same county):

EXCEPTIONS

1. Unpaid Property Taxes are as follows:
Fiscal Year: 2021-2022
Amount: \$68,726.07, plus interest, if any
Levy Code: 088.10
[Account No.: R2201837](#)
Map No.: 2S129DC00900

Prior to close of escrow, please contact the Tax Collector's Office to confirm all amounts owing, including current fiscal year taxes, supplemental taxes, escaped assessments and any delinquencies.

2. City Liens, if any, in favor of the City of Sherwood. No search has been made as to the existence of any liens. A search will be conducted, for an additional charge, only upon request of the Assured herein named.
3. Easement for the purpose shown below and rights incidental thereto, as granted in a document:
Granted to: The City of Sherwood
Purpose: Storm sewer
Recording Date: December 6, 1994
[Recording No.: 94-109104](#)
Affects: The Northerly and Easterly portions

And as shown on the recorded [plat of LANGER FARMS.](#)

4. Easement for the purpose shown below and rights incidental thereto, as granted in a document:
Granted to: The City of Sherwood
Purpose: Public utilities
Recording Date: April 22, 2011
[Recording No.: 2011-030292](#)
Affects: The West 8 feet

And as shown on recorded [PARTITION PLAT NO. 2017-019.](#)

5. Easement for the purpose shown below and rights incidental thereto, as granted in a document:
Granted to: The City of Sherwood
Purpose: Stormwater
Recording Date: April 22, 2011
[Recording No.: 2011-030294](#)
Affects: A strip through the central portion

And as shown on the recorded [plat of LANGER FARMS.](#)

6. Easements for the purposes shown below and rights incidental thereto as delineated or as offered for dedication on the recorded [plat of LANGER FARMS:](#)
a: Purpose: Private utility
Affects: A strip through the Southerly portion

b: Purpose: Private access
Affects: A strip through the Southerly portion

c: Purpose: Storm drainage
Affects: A strip through the Southerly portion

Said Easements are also shown on recorded [PARTITION PLAT NO. 2017-019](#).

7. Easement for the purpose shown below and rights incidental thereto, as granted in a document:
Granted to: The City of Sherwood
Purpose: Water line
Recording Date: August 27, 2014
[Recording No.: 2014-054287](#)
Affects: The Southwesterly portion

And as shown on recorded [PARTITION PLAT NO. 2017-019](#).

8. Restrictions, but omitting restrictions, if any, based upon race, color, religion, sex, sexual orientation, familial status, marital status, disability, handicap, national origin, ancestry, or source of income, as set forth in applicable state or federal laws, except to the extent that said restriction is permitted by applicable law, as shown on recorded [PARTITION PLAT NO. 2017-019](#):
Recording Date: June 27, 2017
Recording No.: 2017-050998
9. Building Setback Covenant and Agreement, including the terms and provisions thereof;
Recording Date: July 19, 2017
[Recording No.: 2017-056720](#)
10. A Line of Credit Deed of Trust to secure an indebtedness in the amount shown below,
Amount: \$5,530,000.00
Dated: August 1, 2018
Grantor: Langer Storage 2 LLC, an Oregon limited liability company
Trustee: Brad L. Williams, C/O UPF Services, LLC
Beneficiary: Riverview Community Bank
Loan No.: 840068874
Recording Date: August 21, 2018
[Recording No.: 2018-058024](#)
11. An Assignment of Rents of all moneys due, or to become due as rental or otherwise from said Land, to secure payment of an indebtedness, shown below and upon the terms and conditions therein;
Assigned to: Riverview Community Bank
Recording Date: August 21, 2018
[Recording No.: 2018-058037](#)
12. Existing leases and tenancies, if any, and any interests that may appear upon examination of such leases.

ADDITIONAL
NOTES _____

NONE

Chicago Title Company of Oregon
Order No. 472521008337

End of Reported Information

There will be additional charges for additional information or copies. For questions or additional requests, contact:

Tony Schadle
5034694150
Tony.Schadle@TitleGroup.FNTG.com
Chicago Title Company of Oregon
1433 SW 6th Avenue
Portland, OR 97201

EXHIBIT "A"
[Legal Description](#)

Parcel 1, PARTITION PLAT NO. 2017-019, recorded June 27, 2017 as Recorder's Fee No. 2017-050998, in the City of Sherwood, County of Washington and State of Oregon.

LIMITATIONS OF LIABILITY

"CUSTOMER" REFERS TO THE RECIPIENT OF THIS REPORT.

CUSTOMER EXPRESSLY AGREES AND ACKNOWLEDGES THAT IT IS EXTREMELY DIFFICULT, IF NOT IMPOSSIBLE, TO DETERMINE THE EXTENT OF LOSS WHICH COULD ARISE FROM ERRORS OR OMISSIONS IN, OR THE COMPANY'S NEGLIGENCE IN PRODUCING, THE REQUESTED REPORT, HEREIN "THE REPORT." CUSTOMER RECOGNIZES THAT THE FEE CHARGED IS NOMINAL IN RELATION TO THE POTENTIAL LIABILITY WHICH COULD ARISE FROM SUCH ERRORS OR OMISSIONS OR NEGLIGENCE. THEREFORE, CUSTOMER UNDERSTANDS THAT THE COMPANY IS NOT WILLING TO PROCEED IN THE PREPARATION AND ISSUANCE OF THE REPORT UNLESS THE COMPANY'S LIABILITY IS STRICTLY LIMITED. CUSTOMER AGREES WITH THE PROPRIETY OF SUCH LIMITATION AND AGREES TO BE BOUND BY ITS TERMS

THE LIMITATIONS ARE AS FOLLOWS AND THE LIMITATIONS WILL SURVIVE THE CONTRACT:

ONLY MATTERS IDENTIFIED IN THIS REPORT AS THE SUBJECT OF THE REPORT ARE WITHIN ITS SCOPE. ALL OTHER MATTERS ARE OUTSIDE THE SCOPE OF THE REPORT.

CUSTOMER AGREES, AS PART OF THE CONSIDERATION FOR THE ISSUANCE OF THE REPORT AND TO THE FULLEST EXTENT PERMITTED BY LAW, TO LIMIT THE LIABILITY OF THE COMPANY, ITS LICENSORS, AGENTS, SUPPLIERS, RESELLERS, SERVICE PROVIDERS, CONTENT PROVIDERS AND ALL OTHER SUBSCRIBERS OR SUPPLIERS, SUBSIDIARIES, AFFILIATES, EMPLOYEES, AND SUBCONTRACTORS FOR ANY AND ALL CLAIMS, LIABILITIES, CAUSES OF ACTION, LOSSES, COSTS, DAMAGES AND EXPENSES OF ANY NATURE WHATSOEVER, INCLUDING ATTORNEY'S FEES, HOWEVER ALLEGED OR ARISING, INCLUDING BUT NOT LIMITED TO THOSE ARISING FROM BREACH OF CONTRACT, NEGLIGENCE, THE COMPANY'S OWN FAULT AND/OR NEGLIGENCE, ERRORS, OMISSIONS, STRICT LIABILITY, BREACH OF WARRANTY, EQUITY, THE COMMON LAW, STATUTE OR ANY OTHER THEORY OF RECOVERY, OR FROM ANY PERSON'S USE, MISUSE, OR INABILITY TO USE THE REPORT OR ANY OF THE MATERIALS CONTAINED THEREIN OR PRODUCED, **SO THAT THE TOTAL AGGREGATE LIABILITY OF THE COMPANY AND ITS AGENTS, SUBSIDIARIES, AFFILIATES, EMPLOYEES, AND SUBCONTRACTORS SHALL NOT IN ANY EVENT EXCEED THE COMPANY'S TOTAL FEE FOR THE REPORT.**

CUSTOMER AGREES THAT THE FOREGOING LIMITATION ON LIABILITY IS A TERM MATERIAL TO THE PRICE THE CUSTOMER IS PAYING, WHICH PRICE IS LOWER THAN WOULD OTHERWISE BE OFFERED TO THE CUSTOMER WITHOUT SAID TERM. CUSTOMER RECOGNIZES THAT THE COMPANY WOULD NOT ISSUE THE REPORT BUT FOR THIS CUSTOMER AGREEMENT, AS PART OF THE CONSIDERATION GIVEN FOR THE REPORT, TO THE FOREGOING LIMITATION OF LIABILITY AND THAT ANY SUCH LIABILITY IS CONDITIONED AND PREDICATED UPON THE FULL AND TIMELY PAYMENT OF THE COMPANY'S INVOICE FOR THE REPORT.

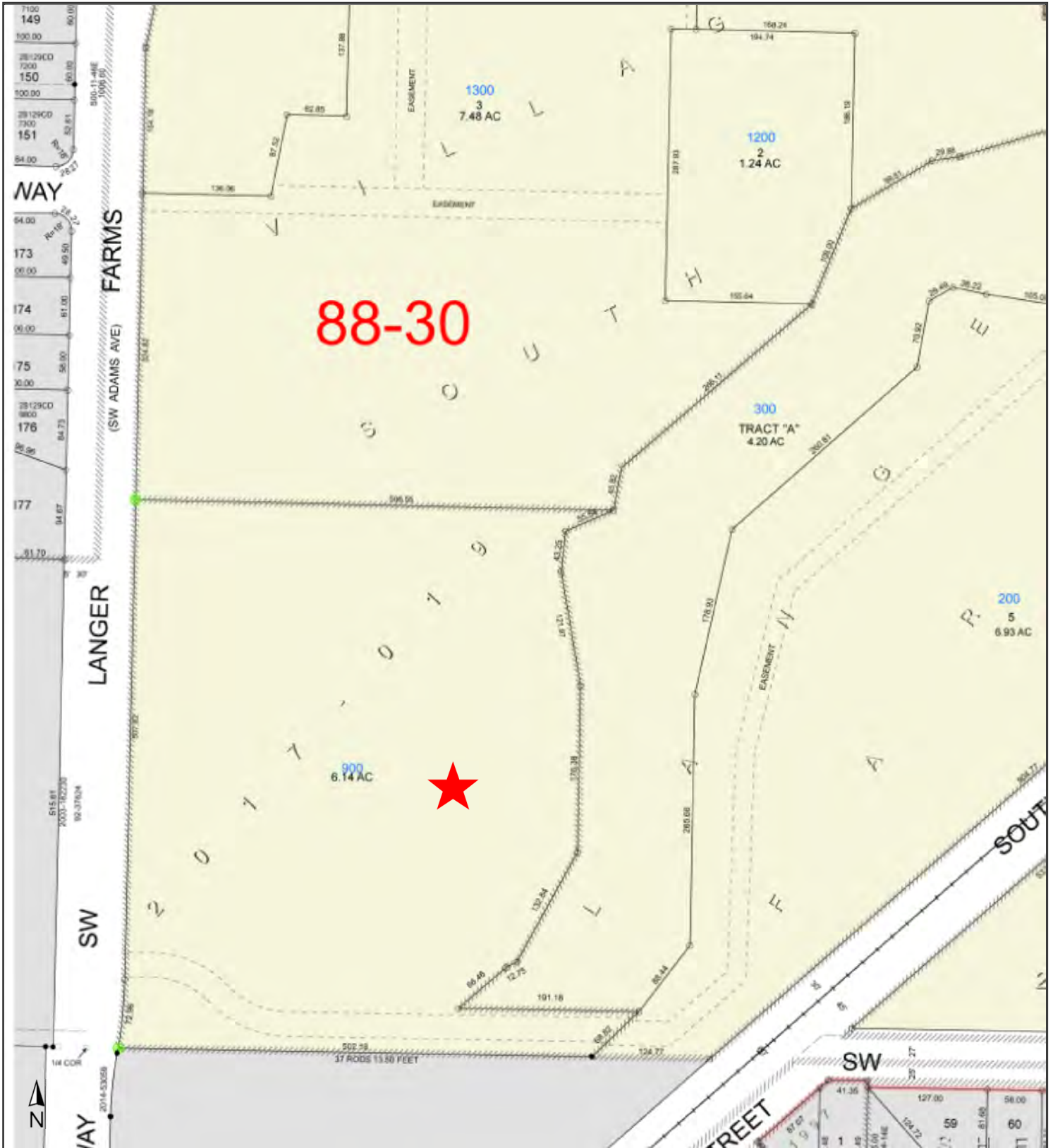
THE REPORT IS LIMITED IN SCOPE AND IS NOT AN ABSTRACT OF TITLE, TITLE OPINION, PRELIMINARY TITLE REPORT, TITLE REPORT, COMMITMENT TO ISSUE TITLE INSURANCE, OR A TITLE POLICY, AND SHOULD NOT BE RELIED UPON AS SUCH. THE REPORT DOES NOT PROVIDE OR OFFER ANY TITLE INSURANCE, LIABILITY COVERAGE OR ERRORS AND OMISSIONS COVERAGE. THE REPORT IS NOT TO BE RELIED UPON AS A REPRESENTATION OF THE STATUS OF TITLE TO THE PROPERTY. THE COMPANY MAKES NO REPRESENTATIONS AS TO THE REPORT'S ACCURACY, DISCLAIMS ANY WARRANTY AS TO THE REPORT, ASSUMES NO DUTIES TO CUSTOMER, DOES NOT INTEND FOR CUSTOMER TO RELY ON THE REPORT, AND ASSUMES NO LIABILITY FOR ANY LOSS OCCURRING BY REASON OF RELIANCE ON THE REPORT OR OTHERWISE.

IF CUSTOMER (A) HAS OR WILL HAVE AN INSURABLE INTEREST IN THE SUBJECT REAL PROPERTY, (B) DOES NOT WISH TO LIMIT LIABILITY AS STATED HEREIN AND (C) DESIRES THAT ADDITIONAL LIABILITY BE ASSUMED BY THE COMPANY, THEN CUSTOMER MAY REQUEST AND PURCHASE A POLICY OF TITLE INSURANCE, A BINDER, OR A COMMITMENT TO ISSUE A POLICY OF TITLE INSURANCE. NO ASSURANCE IS GIVEN AS TO THE INSURABILITY OF THE TITLE OR STATUS OF TITLE. CUSTOMER EXPRESSLY AGREES AND ACKNOWLEDGES IT HAS AN INDEPENDENT DUTY TO ENSURE AND/OR RESEARCH THE ACCURACY OF ANY INFORMATION OBTAINED FROM THE COMPANY OR ANY PRODUCT OR SERVICE PURCHASED.

NO THIRD PARTY IS PERMITTED TO USE OR RELY UPON THE INFORMATION SET FORTH IN THE REPORT, AND NO LIABILITY TO ANY THIRD PARTY IS UNDERTAKEN BY THE COMPANY.

CUSTOMER AGREES THAT, TO THE FULLEST EXTENT PERMITTED BY LAW, IN NO EVENT WILL THE COMPANY, ITS LICENSORS, AGENTS, SUPPLIERS, RESELLERS, SERVICE PROVIDERS, CONTENT PROVIDERS, AND ALL OTHER SUBSCRIBERS OR SUPPLIERS, SUBSIDIARIES, AFFILIATES, EMPLOYEES AND SUBCONTRACTORS BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, INDIRECT, PUNITIVE, EXEMPLARY, OR SPECIAL DAMAGES, OR LOSS OF PROFITS, REVENUE, INCOME, SAVINGS, DATA, BUSINESS, OPPORTUNITY, OR GOODWILL, PAIN AND SUFFERING, EMOTIONAL DISTRESS, NON-OPERATION OR INCREASED EXPENSE OF OPERATION, BUSINESS INTERRUPTION OR DELAY, COST OF CAPITAL, OR COST OF REPLACEMENT PRODUCTS OR SERVICES, REGARDLESS OF WHETHER SUCH LIABILITY IS BASED ON BREACH OF CONTRACT, TORT, NEGLIGENCE, THE COMPANY'S OWN FAULT AND/OR NEGLIGENCE, STRICT LIABILITY, BREACH OF WARRANTIES, FAILURE OF ESSENTIAL PURPOSE, OR OTHERWISE AND WHETHER CAUSED BY NEGLIGENCE, ERRORS, OMISSIONS, STRICT LIABILITY, BREACH OF CONTRACT, BREACH OF WARRANTY, THE COMPANY'S OWN FAULT AND/OR NEGLIGENCE OR ANY OTHER CAUSE WHATSOEVER, AND EVEN IF THE COMPANY HAS BEEN ADVISED OF THE LIKELIHOOD OF SUCH DAMAGES OR KNEW OR SHOULD HAVE KNOWN OF THE POSSIBILITY FOR SUCH DAMAGES.

END OF THE LIMITATIONS OF LIABILITY



ParcelID: R2201837

Tax Account #: 2S129DC00900

21900 SW Langer Farms Pkwy, Sherwood OR 97140

This map/plat is being furnished as an aid in locating the herein described land in relation to adjoining streets, natural boundaries and other land, and is not a survey of the land depicted. Except to the extent a policy of title insurance is expressly modified by endorsement, if any, the company does not insure dimensions, distances, location of easements, acreage or other matters shown thereon.

Washington County, Oregon **2018-058023**
D-DBS
Stn=6 M FERNANDES **08/21/2018 12:44:15 PM**
\$10.00 \$11.00 \$5.00 \$60.00 **\$86.00**

I, Richard Hobernicht, Director of Assessment and Taxation and Ex-Officio County Clerk for Washington County, Oregon, do hereby certify that the within instrument of writing was received and recorded in the book of records of said county.

Richard Hobernicht, Director of
Assessment and Taxation, Ex-Officio

After recording return to:

Dean T. Sandow
Farleigh Wada Witt
121 SW Morrison #600
Portland, Oregon 97204

Send tax statements to:

same as above
No change

BARGAIN AND SALE DEED

Langer Family LLC, an Oregon limited liability company, Grantor, conveys to Langer Storage 2 LLC, an Oregon limited liability company, Grantee, all right, title, and interest in the real property described as follows:

Parcel 1, PARTITION PLAT NO. 2017-019, recorded June 27, 2017, Recorder's No. 2017-050998, in the City of Sherwood, County of Washington and State of Oregon.

The property is otherwise known as 21900 SW Langer Farms Parkway, Sherwood, Oregon 97140. The true consideration for this conveyance is other than monetary consideration.

BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON TRANSFERRING FEE TITLE SHOULD INQUIRE ABOUT THE PERSON'S RIGHTS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007, SECTIONS 2 TO 9 AND 17, CHAPTER 855, OREGON LAWS 2009, AND SECTIONS 2 TO 7, CHAPTER 8, OREGON LAWS 2010. THIS INSTRUMENT DOES NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY THAT THE UNIT OF LAND BEING TRANSFERRED IS A LAWFULLY ESTABLISHED LOT OR PARCEL, AS DEFINED IN ORS 92.010 OR 215.010, TO VERIFY THE APPROVED USES OF THE LOT OR PARCEL, TO DETERMINE ANY LIMITS ON LAWSUITS AGAINST FARMING OR FOREST PRACTICES, AS DEFINED IN ORS 30.930, AND TO INQUIRE ABOUT THE RIGHTS OF NEIGHBORING PROPERTY OWNERS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007, SECTIONS 2 TO 9 AND 17, CHAPTER 855, OREGON LAWS 2009, AND SECTIONS 2 TO 7, CHAPTER 8, OREGON LAWS 2010.

Dated as of June ^{25th} 2018.

Langer Family LLC

By Langer Asset Management, Inc., Manager

By 
Matthew D. Langer, President

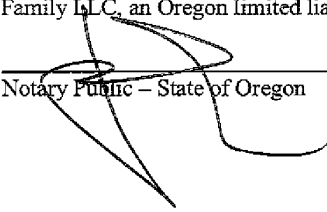
1 - BARGAIN AND SALE DEED
P:\DOCS\LANFAM45298\DOC\3SM9726.DOC

LAWYERS TITLE 901800245JLB

STATE OF OREGON)

County of Washington) ss.

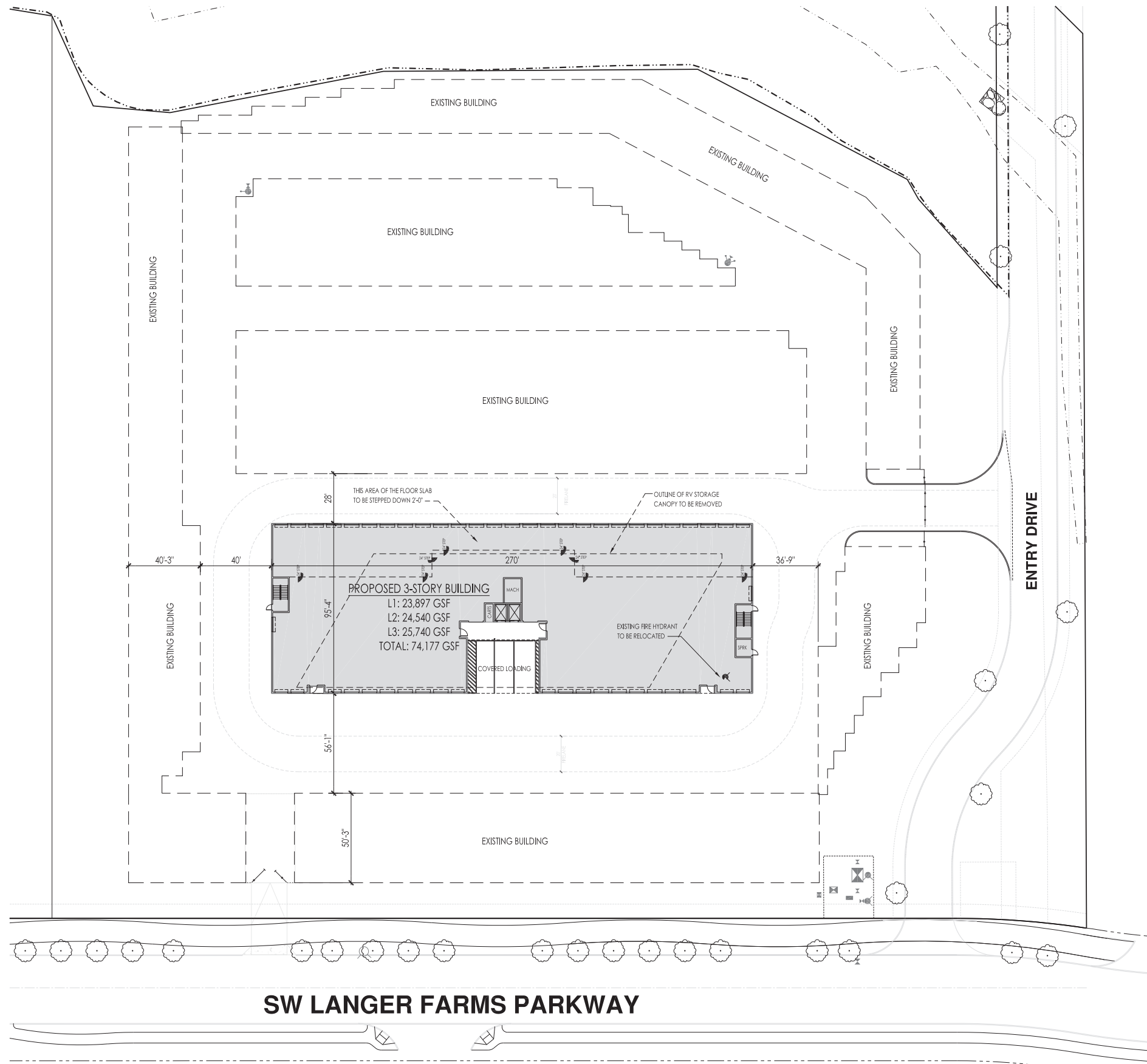
Subscribed and sworn to before me on June 25th, 2018, by Matthew D. Langer, president of Langer Asset Management, Inc., an Oregon corporation, manager of Langer Family LLC, an Oregon limited liability company.



Notary Public - State of Oregon



Exhibit D: Preliminary Architectural Materials



SENTINEL STORAGE ANNEX 2
SITE PLAN MODIFICATION
 21900 SW LANGER FARMS PARKWAY
 SHERWOOD, OR 97140

NO.	DATE	REVISION

PROJECT ARCHITECT _____
 DRAWN BY _____
 CHECKED BY _____
 STAMP _____

TITLE: **SITE PLAN**
 SUBTITLE: _____
 PROJECT REF: _____
 DATE: 01 FEBRUARY 2022
 ISSUE: **SITE PLAN REVIEW SUBMITTAL**

1 PROPOSED BUILDING LOCATION PLAN
 SCALE: 1" = 40'-0"

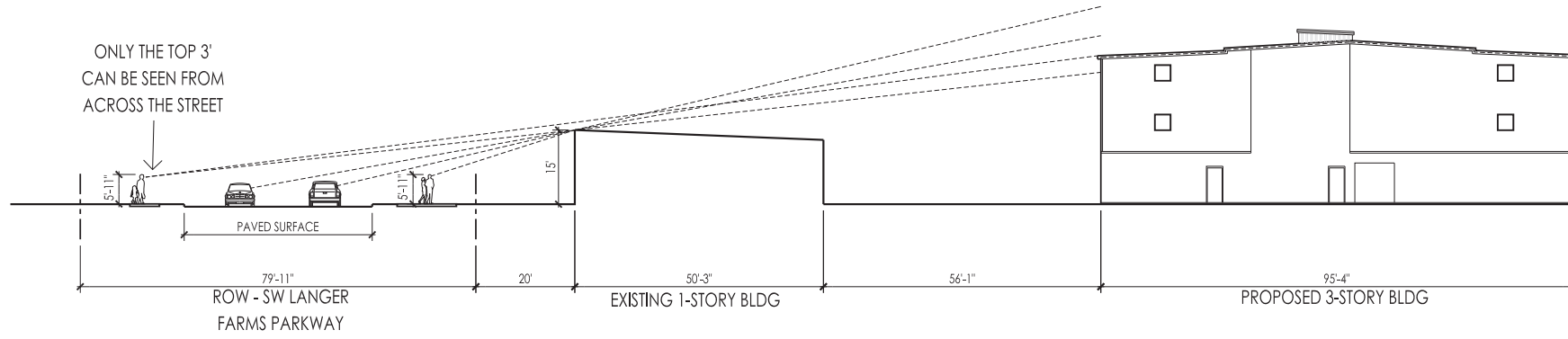


SHEET NUMBER
A-1

GENERAL NOTES

1. ARCHITECTURAL ELEMENTS ARE DESIGNED TO MATCH AND COMPLEMENT THE EXISTING FACILITY.
2. THERE WILL BE NO ROOF-MOUNTED EQUIPMENT ON THIS BUILDING.

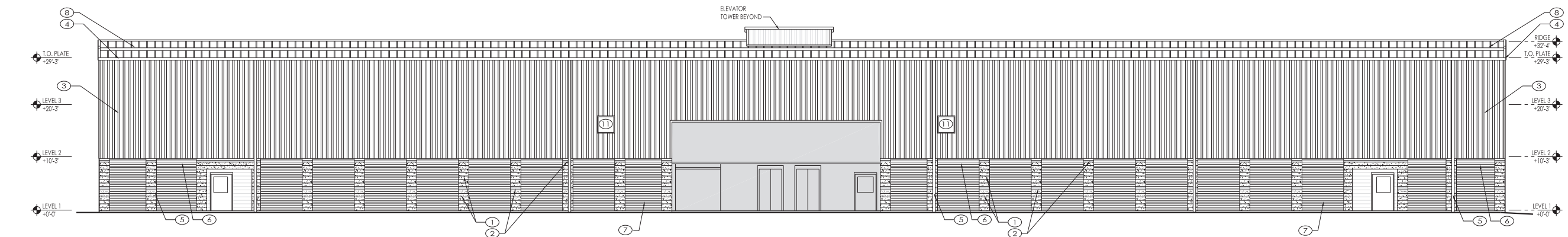
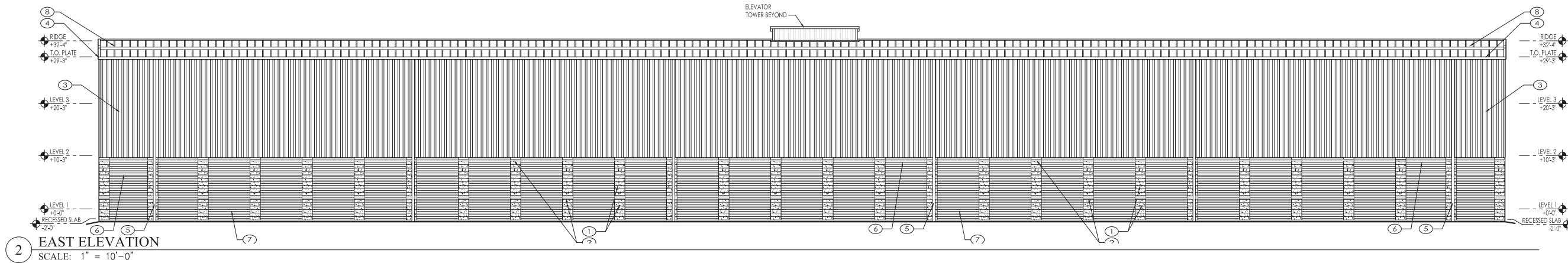
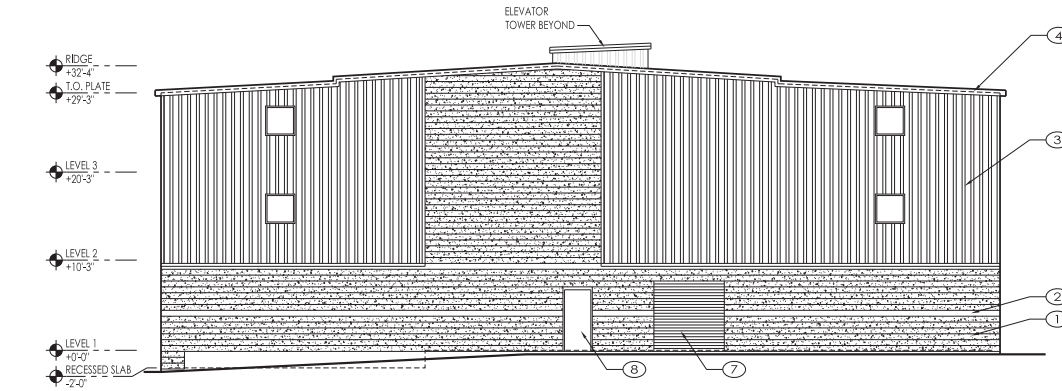
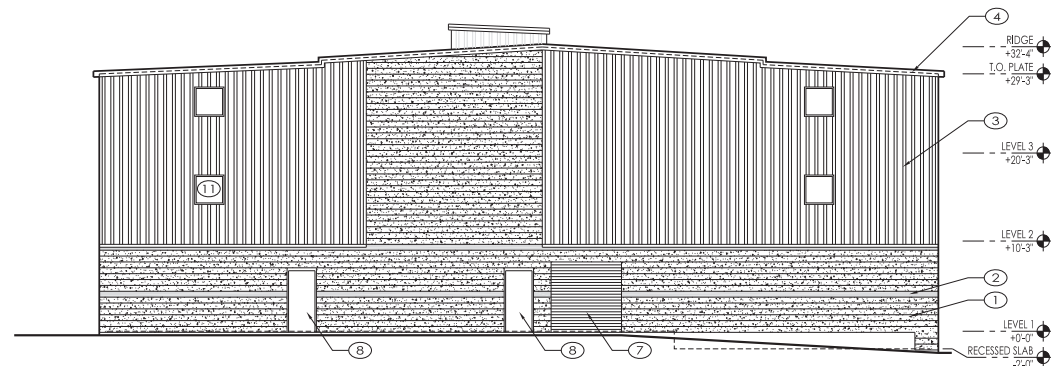
ONLY THE TOP 3'
CAN BE SEEN FROM
ACROSS THE STREET



5 VIEW SECTION LOOKING NORTH THROUGH STREET
SCALE: 1/16" = 1'-0"

MATERIAL KEY

- 1 SPLIT-FACE CMU (CHARCOAL)
- 2 SMOOTH-FACE CMU BAND (NATURAL)
- 3 VERT. 'MEGA RIB' METAL SIDING (TERRA COTTA)
- 4 GUTTER / 8" RAKE COPING (SLATE GRAY)
- 5 DOWNPOUT (MATCH SIDING)
- 6 METAL HEADER PANEL (SLATE GRAY)
- 7 COIL DOOR (CEDAR RED)
- 8 GALV. METAL ROOFING
- 9 FIRE EXIT/UTILITY DOOR (BLACK)
- 10 LED WALL PAK LIGHT
- 11 ALUM. STOREFRONT WINDOW SYSTEM (DARK BRONZE)



SENTINEL STORAGE ANNEX 2
SITE PLAN MODIFICATION
21900 SW LANGER FARMS PARKWAY
SHERWOOD, OR 97140

NO. DATE REVISION

PROJECT ARCHITECT

DRAWN BY

SAB

CHECKED BY

STAMP

TITLE

EXTERIOR ELEVATIONS

SUBTITLE

PROJECT REF:

DATE

01 FEBRUARY 2022

DISK

SITE PLAN REVIEW SUBMITTAL

SHEET NUMBER

A-3

SENTINEL STORAGE COLORS & MATERIALS

CONCRETE MASONRY



SPLIT-FACE CMU - CHARCOAL



SMOOTH-FACE CMU - NATURAL

METAL SIDING COLORS



TERRA COTTA
VERT "MEGA RIB" METAL SIDING



SLATE GRAY
8" COPING & GUTTER
UNIT DOOR HEADER PANELS



CEDAR RED
UNIT COIL DOORS

METAL SIDING PROFILES



VERTICAL "MEGA RIB"
METAL SIDING

GALVANIZED ROOFING



Exhibit E: CWS Service Provider Letter

SENSITIVE AREA PRE-SCREENING SITE ASSESSMENT

Clean Water Services File Number

21-003065

1. **Jurisdiction:** Sherwood

2. **Property Information** (example: 1S234AB01400)

Tax lot ID(s): _____
2S129DC00900

OR Site Address: 21900 SW Langer Farms Parkway

City, State, Zip: Sherwood, OR, 97140

Nearest cross street: SW Langer Farms Parkway and SW Oregon Street

3. **Owner Information**

Name: Matt Langer

Company: Langer Family LLC

Address: 15595 SW Tualatin Sherwood Road

City, State, Zip: Sherwood, OR, 97140

Phone/fax: _____

Email: _____

4. **Development Activity** (check **all** that apply)

- Addition to single family residence (rooms, deck, garage)
 Lot line adjustment Minor land partition
 Residential condominium Commercial condominium
 Residential subdivision Commercial subdivision
 Single lot commercial Multi lot commercial
 Other Commercial redevelopment

4. **Applicant Information**

Name: Sonya Templeton

Company: AKS Engineering & Forestry, LLC

Address: 12965 SW Herman Road, Suite 100

City, State, Zip: Tualatin, OR, 97062

Phone/fax: 503-563-6151

Email: templetons@aks-eng.com

6. **Will the project involve any off-site work?** Yes No Unknown

Location and description of off-site work: _____

7. **Additional comments or information that may be needed to understand your project:** Redevelopment project property platted after 9/9/95
~~Proposed work does not meet definition of development under Section 1.03.15(b)(5) as work does not add impervious area.~~

This application does NOT replace Grading and Erosion Control Permits, Connection Permits, Building Permits, Site Development Permits, DEQ 1200-C Permit or other permits as issued by the Department of Environmental Quality, Department of State Lands and/or Department of the Army COE. All required permits and approvals must be obtained and completed under applicable local, state, and federal law.

By signing this form, the Owner or Owner's authorized agent or representative, acknowledges and agrees that employees of Clean Water Services have authority to enter the project site at all reasonable times for the purpose of inspecting project site conditions and gathering information related to the project site. I certify that I am familiar with the information contained in this document, and to the best of my knowledge and belief, this information is true, complete, and accurate.

Print/type name Sonya Templeton

Print/type title Natural Resource Specialist

Signature ONLINE SUBMITTAL

Date 11/2/2021

FOR DISTRICT USE ONLY

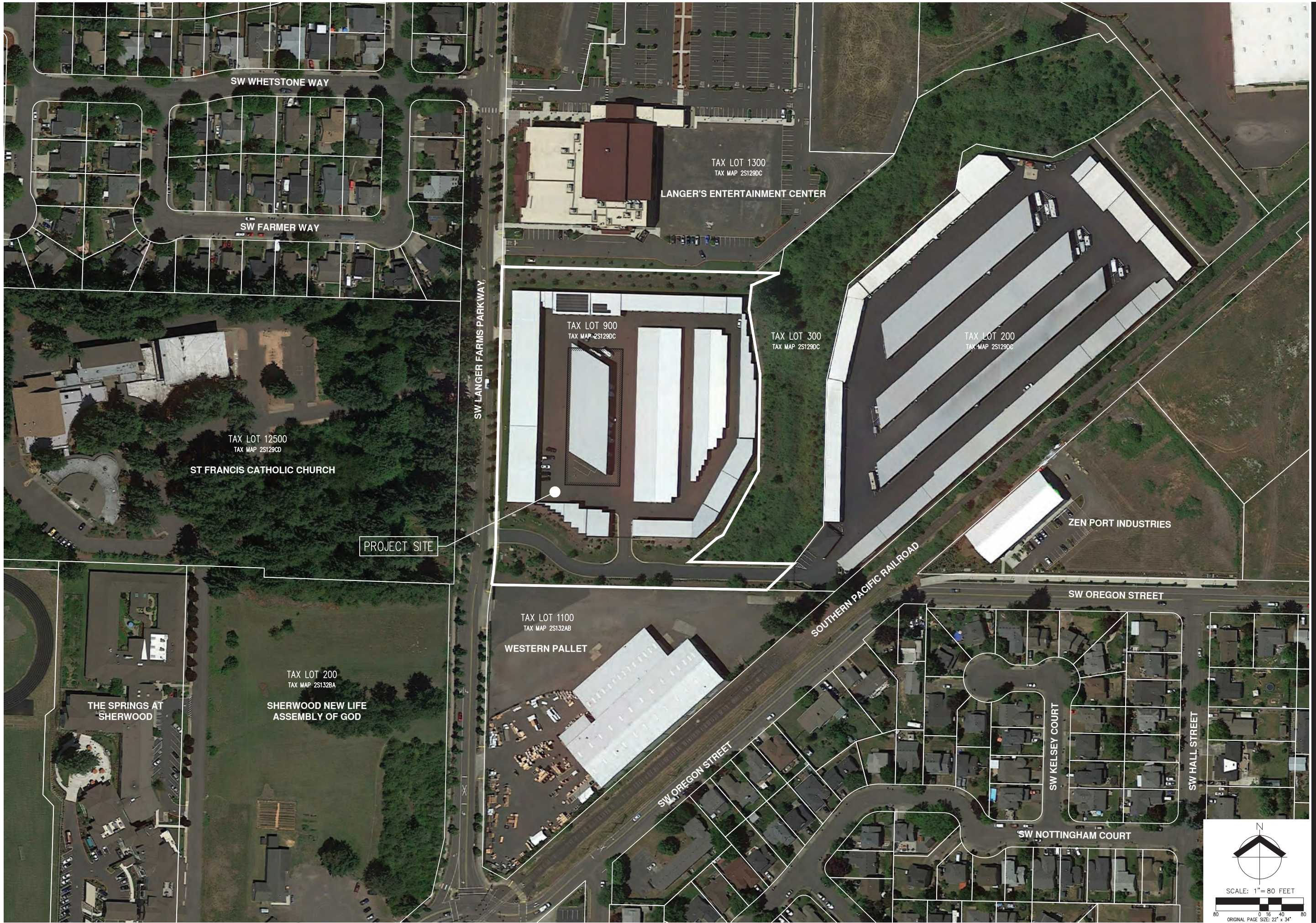
- Sensitive areas potentially exist on site or within 200' of the site. **THE APPLICANT MUST PERFORM A SITE ASSESSMENT PRIOR TO ISSUANCE OF A SERVICE PROVIDER LETTER.** If Sensitive Areas exist on the site or within 200 feet on adjacent properties, a Natural Resources Assessment Report may also be required.
- Based on review of the submitted materials and best available information sensitive areas do not appear to exist on site or within 200' of the site. This Sensitive Area Pre-Screening Site Assessment does NOT eliminate the need to evaluate and protect water quality sensitive areas if they are subsequently discovered. This document will serve as your Service Provider Letter as required by Resolution and Order 19-5, Section 3.02.1, as amended by Resolution and Order 19-22. All required permits and approvals must be obtained and completed under applicable local, State and federal law.
- Based on review of the submitted materials and best available information the above referenced project will not significantly impact the existing or potentially sensitive area(s) found near the site. This Sensitive Area Pre-Screening Site Assessment does NOT eliminate the need to evaluate and protect additional water quality sensitive areas if they are subsequently discovered. This document will serve as your Service Provider Letter as required by Resolution and Order 19-5, Section 3.02.1, as amended by Resolution and Order 19-22. All required permits and approvals must be obtained and completed under applicable local, state and federal law.
- THIS SERVICE PROVIDER LETTER IS NOT VALID UNLESS _____ CWS APPROVED SITE PLAN(S) ARE ATTACHED.**
- The proposed activity does not meet the definition of development or the lot was platted after 9/9/95 ORS 92.040(2). **NO SITE ASSESSMENT OR SERVICE PROVIDER LETTER IS REQUIRED.**

Reviewed by Lindsay Obermiller

Date 12/8/2021

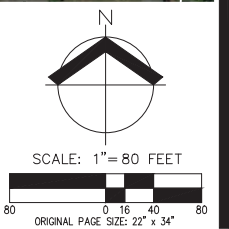
Once complete, email to: SPLReview@cleanwaterservices.org • Fax: (503) 681-4439

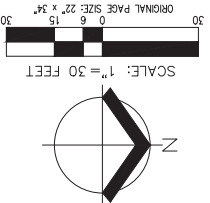
OR mail to: SPL Review, Clean Water Services, 2550 SW Hillsboro Highway, Hillsboro, Oregon 97123



VICINITY MAP WITH AERIAL PHOTOGRAPH OVERLAY
SENTINEL STORAGE NO. 2 MODIFICATION
21900 SW LANGER FARMS PARKWAY
SHERWOOD, OR

JOB NUMBER:	4668-01
DATE:	10/04/2021
DESIGNED BY:	APC
DRAWN BY:	APC
CHECKED BY:	JPC





JOB NUMBER:	4668-01
DATE:	10/04/2021
DESIGNED BY:	APC
DRAWN BY:	APC
CHECKED BY:	JPC

02

FULL SITE EXHIBIT WITH AERIAL PHOTOGRAPH OVERLAY
SENTINEL STORAGE NO. 2 MODIFICATION
21900 SW LANGER FARMS PARKWAY
SHERWOOD, OR

AKS ENGINEERING & FORESTRY, LLC
 70965 SW HERMAN RD., STE. 100
 TULALAIN, OR 97062
 503.563.6151
 WWW.AKS-ENG.COM

AKS

ENGINEERING • SURVEYING • NATURAL RESOURCES
 FORESTRY • PLANNING • LANDSCAPE ARCHITECTURE

DETAILED SITE LAYOUT
SENTINEL STORAGE NO. 2 MODIFICATION
21900 SW LANGER FARMS PARKWAY
SHERWOOD, OR

JOB NUMBER:	4668-01
DATE:	10/04/2021
DESIGNED BY:	APC
DRAWN BY:	APC
CHECKED BY:	JPC

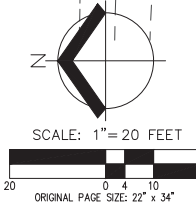
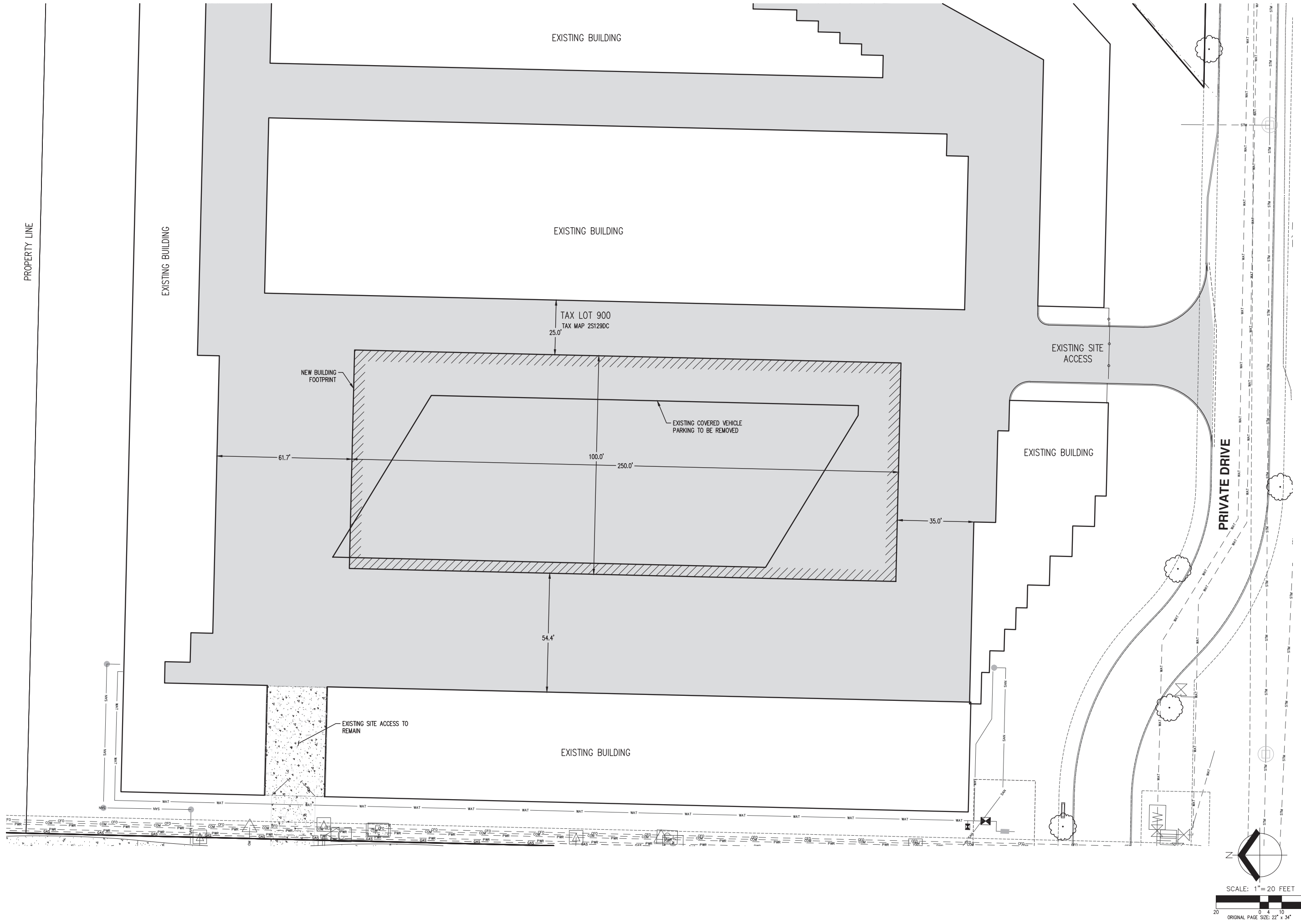


Exhibit F: Neighborhood Meeting Documentation



January 7, 2022

Neighborhood Meeting Summary: Langer's Sentinel Storage II Facility

Meeting Date: January 6, 2022

Time: 6:00 PM

Location: Virtual Meeting via Zoom Webinar

The following serves as a summary of the Neighborhood Meeting process in accordance with the applicable City regulations. On December 22, 2021, property owners within 1,000 feet of the project site were sent notification of the planned land use application. This notification included the project description, the neighborhood meeting date and time, and a map of the project location and vicinity area. Information on how to join the meeting remotely was provided in the notification letter.

On January 6, 2022, Chris Goodell, Marie Holladay, and John Christiansen from AKS Engineering & Forestry, LLC and Frank Schmidt from Schmidt Architects, P.C. and Stephen Bourne from Site Plan Mix, LLC (the Applicant) were prepared to make a presentation to attendees. One member of the public had registered to attend the meeting, and no one joined the meeting within 15 minutes of the scheduled start time. At 6:15 PM, the meeting concluded. Materials planned to be presented at the meeting were available on the AKS Engineering & Forestry website 2 days prior to the meeting and until January 31, 2021.

Sincerely,

AKS ENGINEERING & FORESTRY, LLC

A handwritten signature in black ink, appearing to read 'MH', written over a light blue horizontal line.

Marie Holladay

12965 SW Herman Road, Suite 100 | Tualatin, OR 97062

P: 503.563.6151 | www.aks-eng.com | HolladayM@aks-eng.com

Attendee Report : Langer's Sentinel Storage II Facility – Neighborhood Meeting

Report Generated: 1/7/2022 8:59

Topic	Webinar ID	Actual Start Time	Actual Duration	# Registered
Neighborhood Meeting	897 8995 3494	1/7/2022 1:46	28 Minutes	1

Panelist Details

Attended	User Name	Email	Join Time	Leave Time
Yes	AKS Engineering	tcr1@aks-eng.com	1/6/2022 17:46	1/6/2022 18:15
Yes	Chris Goodell	chrisg@aks-eng.com	1/6/2022 17:59	1/6/2022 18:13
Yes	Stephen Bourne	stephen.bourne@comcast.net	1/6/2022 17:56	1/6/2022 18:13
Yes	John Christiansen	johnc@aks-eng.com	1/6/2022 17:57	1/6/2022 18:11
Yes	Frank Schmidt	frankschmidt@tilandschmidt.com	1/6/2022 17:53	1/6/2022 18:13

Attendee Details

Attended	User Name	Email	Registration Time	Approval Status
No	Randy Killion	randykzen@hotmail.com	12/31/2021 11:32	approved

The meeting
will start
shortly...

Visit

If you haven't already, please visit

<https://www.aks-eng.com/langer-storage-2/>

to register for this event.

Call

If you are having audio difficulties, please call

+1-253-215-8782

Zoom ID **897 8995 3494**, Password **6151**

OR one of the telephone numbers listed on the Virtual Meeting Instructions sheet at the above website.

Submit

During the Question/Answer period, you can also "**Raise Your Hand**" to be called on to provide your questions and comments.

You can submit questions by typing them into the **Group Chat Box** – they will go directly to the Meeting Moderator. Questions will be answered after the presentation.

Sentinel Storage II Facility Neighborhood Meeting

City of Sherwood
January 6, 2022



Meeting Format – Zoom Webinar

Audio Help

- Meeting attendees will be muted throughout the presentation.
- Make sure your speakers are turned on and not muted.
- If you do not have speakers on your computer, you can join the audio by calling any of these numbers:

+1-669-900-6833	+1-346-248-7799
+1-929-205-6099	+1-253-215-8782
+1-301-715-8592	+1-312-626-6799

- Enter the Webinar ID: **897 8995 3494**
- Enter the Passcode: **6151**

Project Team



Tiland Schmidt
Architects, PC



- » Applicant
 - » Langer Storage 2, LLC
- » AKS Engineering & Forestry, LLC
 - » Land Use Planning, Civil Engineering, Surveying, Landscape Architecture, Arborist, and Natural Resources Consultant
 - » Marie Holladay, Chris Goodell, John Christiansen
- » Tiland Schmidt Architects, PC
 - » Architectural Consultant
 - » Frank Schmidt
- » Site Plan Mix, LLC
 - » Architectural Consultant
 - » Stephen Bourne



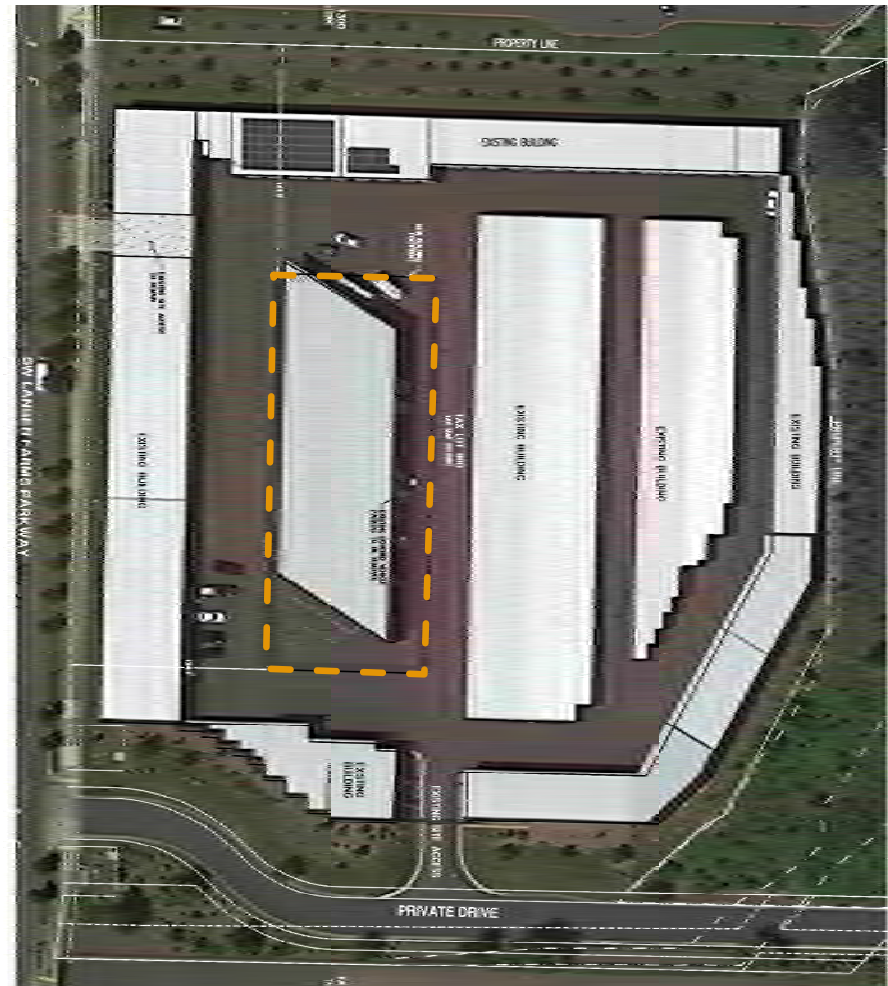
Project Overview

- » 21980 SW Langer Farms Parkway
- » Existing self-storage facility currently operating
- » ±6.14 acres
- » Light Industrial (LI) Planned Unit Development (PUD) zoning designation
- » Site Plan Modification/ Review Application



Site Plan

- » Remove and replace existing RV canopy
 - » ±14,250 square feet
- » New enclosed storage building
 - » ±75,000 square feet
 - » 3 stories
- » Existing site improvements (access, landscaping & screening, circulation, stormwater management, etc.) to remain unchanged

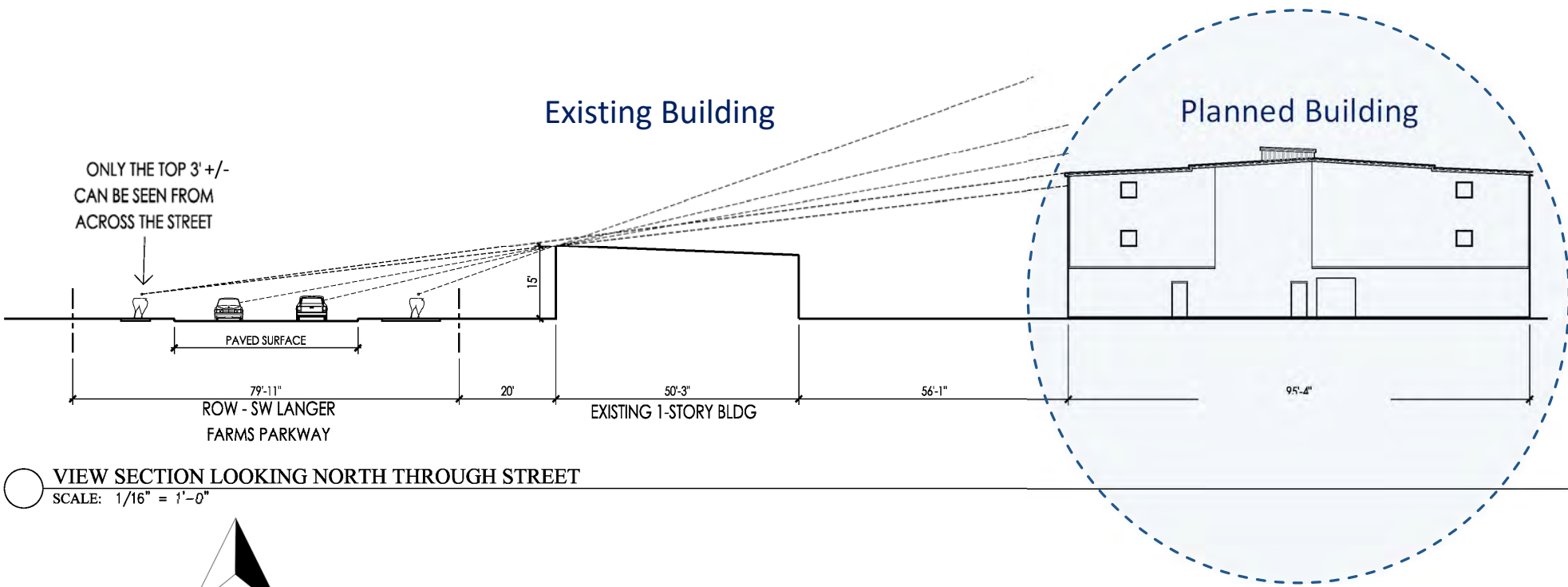


Existing Facility Photograph



*Photo taken southwest of the facility, oriented to the northeast.

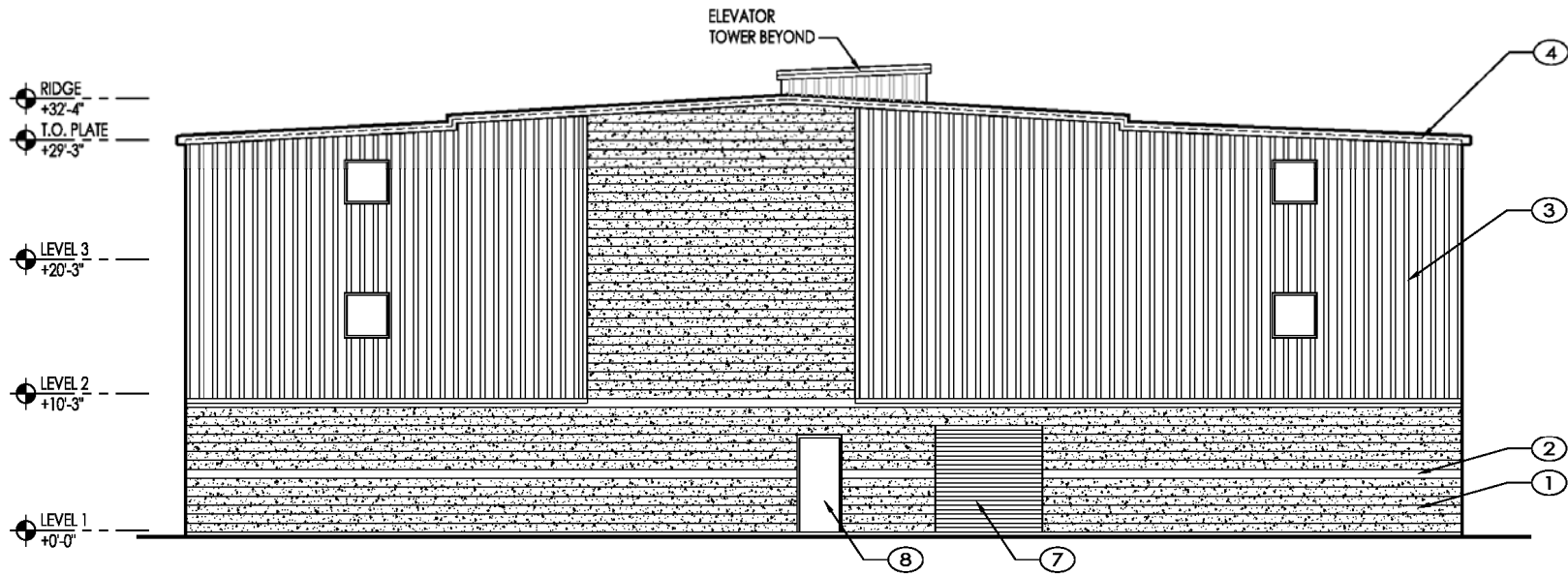
Conceptual View Section




*Dimensions are approximate

North Elevation

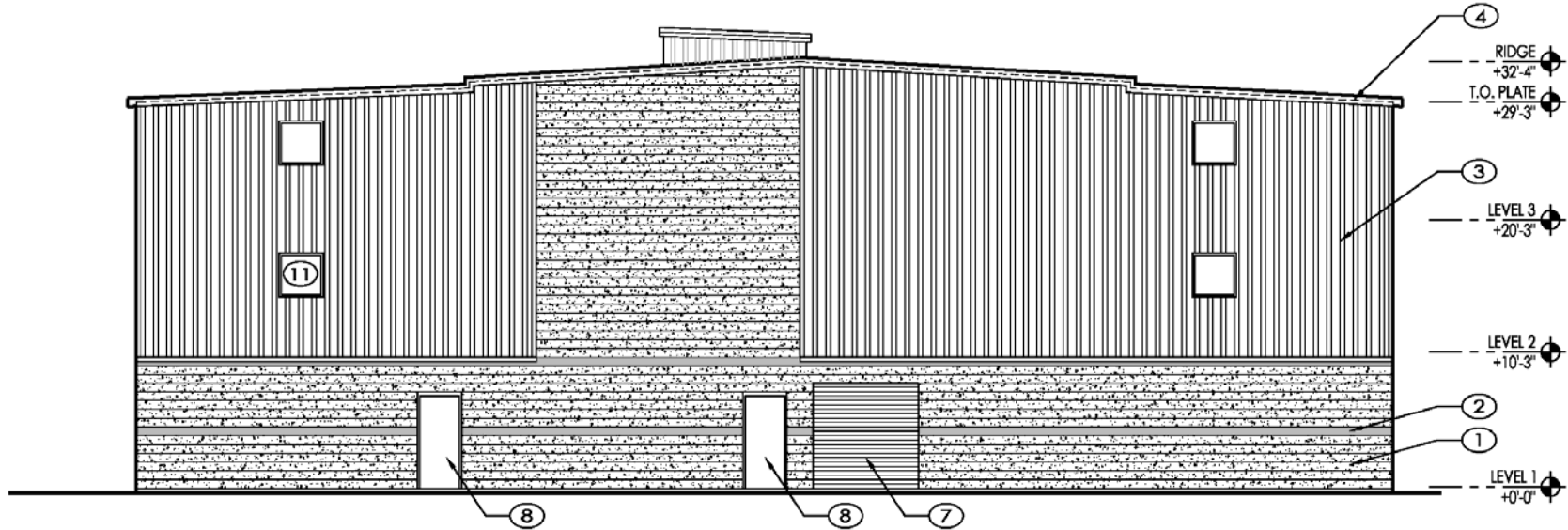
*Architectural elements to match existing facility



 NORTH ELEVATION
SCALE: 1" = 10'-0"

South Elevation

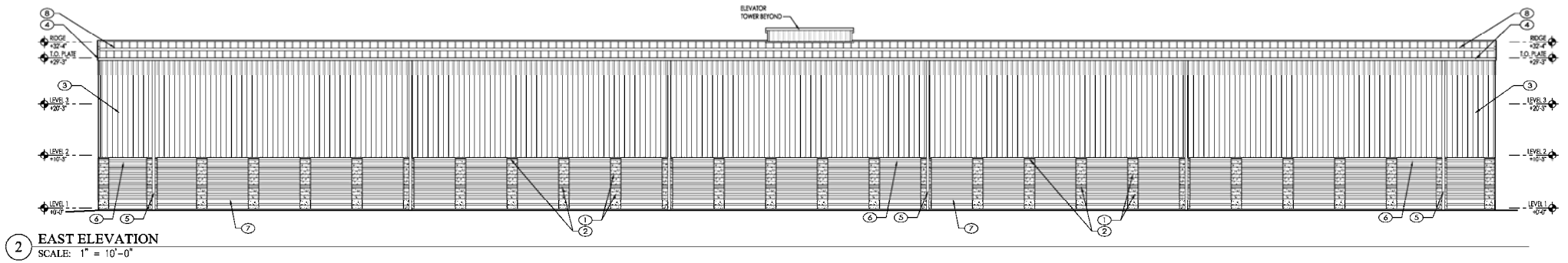
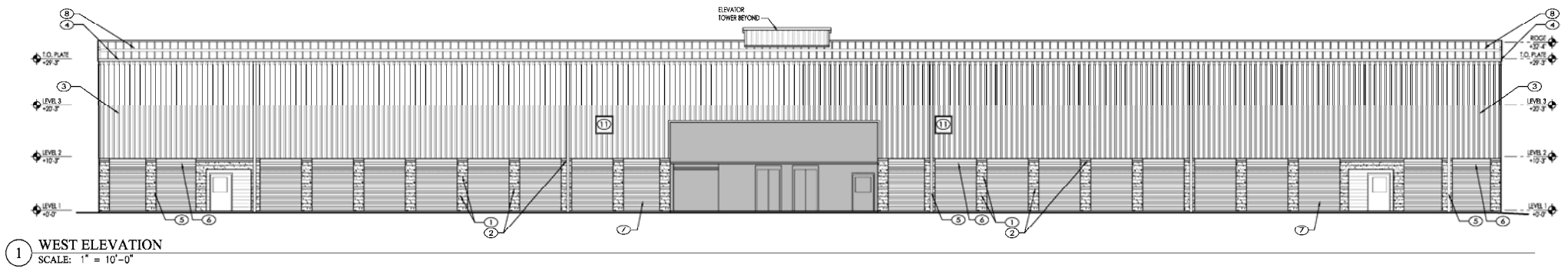
*Architectural elements to match existing facility



SOUTH ELEVATION
SCALE: 1" = 10'-0"

West & East Elevations

*Architectural elements to match existing facility



Summary of City of Sherwood Type IV Land Use Application Process



Questions?

Marie Holladay

AKS Engineering & Forestry, LLC
12965 SW Herman Road, Suite 100
Tualatin, OR 97068
HolladayM@aks-eng.com
(503) 563-6151

Press “**Raise Your Hand**” to be called on to provide your questions and comments.

You can submit questions by typing them into the **Group Chat Box** – they will go directly to the Meeting Moderator.

Affidavit of Mailing

DATE: 12/22/2021

STATE OF OREGON)
)
Washington County)

I, Mitchell Godwin, representative for the Langer's Storage II Site Plan Modification proposed development project do hereby certify that the attached notice to adjacent property owners and recognized neighborhood organizations that are within 1,000 feet of the subject project, was placed in a U.S. Postal receptacle on 12/22/21.



Representatives Name: Mitch Godwin

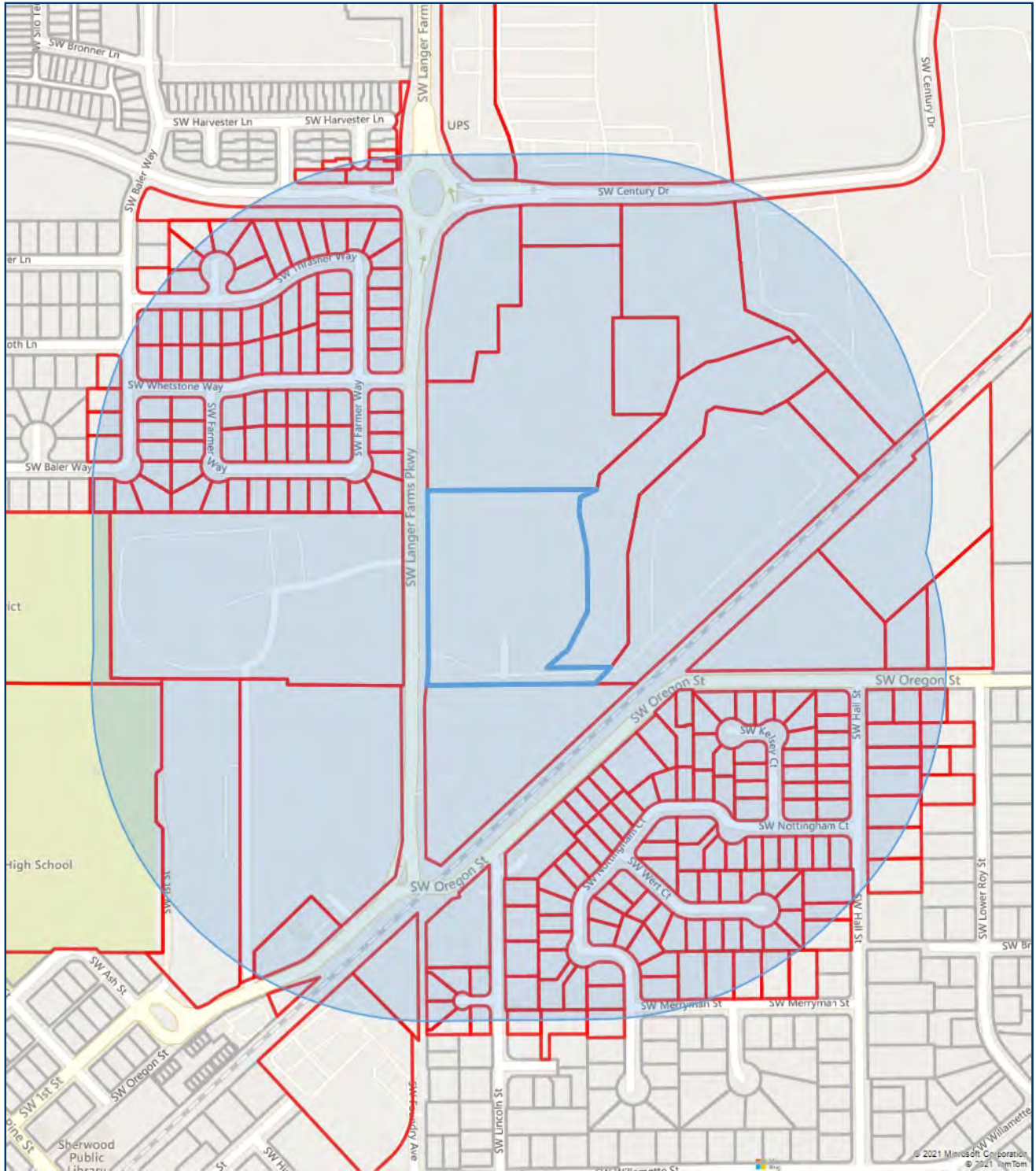
Name of the Organization: AKS Engineering & Forestry, LLC
12965 SW Herman Road, Suite 100
Tualatin, OR 97062



1000 ft Buffer

21900 SW Langer Farms Pkwy, Sherwood, OR 9714

Report Generated: 11/2/2021



The present data and maps are intended for informational purposes only. Some information has been procured from third-party sources and has not been independently verified. Individual parts are owned by their respective copyright owners and not by First American. First American Title Company makes no express or implied warranty respecting the information presented and assumes no responsibility for errors or omissions.

2S129CD-11800
Brannon Yeldell
15534 SW Whetstone Way
Sherwood, OR 97140

2S129CD-11000
Jerome Witle & Mary Knight
1320 Welling Rd
Bellingham, WA 98226

2S132AB-11900
Brian & Shannon Wilkins
22120 SW Kelsey Ct
Sherwood, OR 97140

2S132AA-00405
Robert White Jr
14938 SW Oregon St
Sherwood, OR 97140

2S129CD-07700
Scott & Gail Whitcomb
12919 SW Morgan Rd
Sherwood, OR 97140

2S129DC-00500
Wfg Investments Llc & Grabowski Family
8312 W Northview St STE 120
Boise, ID 83704

2S129CA-15100
Jonathan Wetter
21490 SW Fallow Ter
Sherwood, OR 97140

2S132AB-07600
Teresa & Darrell Wegscheid
15294 SW Oregon St
Sherwood, OR 97140

2S129CD-08600
Don & Charlotte Washington
15774 SW Thrasher Way
Sherwood, OR 97140

2S129CD-10200
Don & Charlotte Washington
15774 SW Thrasher Way
Sherwood, OR 97140

2S129DB-00200
Wal-Mart Real Estate Business Trust
Po Box 8050
Bentonville, AR 72712

2S132AA-00612
Mario & Nicole Vivanco
22117 SW Lower Roy St
Sherwood, OR 97140

2S132AB-14200
Roger Vidal-Roque & Evelyn Castellanos
22260 SW Nottingham Ct
Sherwood, OR 97140

2S129CA-15200
Hector Viay & Maritza Ortiz
21481 SW Fallow Ter
Sherwood, OR 97140

2S129CD-05700
Verboort Barbara A Trust
23905 Butteville Rd NE
Aurora, OR 97002

2S129CD-04800
Christopher & Crystal Ventura
15875 SW Baler Way
Sherwood, OR 97140

2S132AB-03400
Angela & Lao Vaughn
15039 SW Merryman St
Sherwood, OR 97140

2S132AB-05900
Trisha & Dustin Valdez
22451 SW Nottingham Ct
Sherwood, OR 97140

2S132AB-07400
Pedro & Teresa Urzua
22315 SW Nottingham Ct
Sherwood, OR 97140

2S132AB-07700
Stephen & Jennifer Turner
1272 S Pine St
Canby, OR 97013

2S132AB-01200
Tualatin Valley Fire & Rescue
11945 SW 70th Ave
Portland, OR 97223

2S132AB-11600
James & Julie Tone
22105 SW Kelsey Ct
Sherwood, OR 97140

2S129CD-08900
Tilley Zhenya Trust & Tilley Michelle
23334 SW Saint Charles Way
Sherwood, OR 97140

2S129CD-07900
Justin & Tawny Tikkala
15662 SW Thrasher Way
Sherwood, OR 97140

2S132AB-00901
Alice & Daniel Thornton
22324 SW Lincoln St
Sherwood, OR 97140

2S132AB-09801
Gary & Janet Thompson
15224 SW Wert Ct
Sherwood, OR 97140

2S129CD-06300
Joel Theiss & Fred Wiedemann
16627 SW Villa Rd
Sherwood, OR 97140

2S132AB-07500
Todd Tebo & Maki Bishop
15310 SW Oregon St
Sherwood, OR 97140

2S129CD-08500
Tatone Properties Llc
Po Box 576
Condon, OR 97823

2S129CD-11900
Tamarisk Llc
3 Crestwind Dr
Rancho Palos Verdes, CA 90275

2S129CD-12000
William & Marilyn Sykes
15577 SW Farmer Way
Sherwood, OR 97140

2S129CD-09100
Theresa & Erik Strot
15645 SW Whetstone Way
Sherwood, OR 97140

2S129CD-05000
Sasha & Matthew Sten
22820 SW Saunders Dr
Sherwood, OR 97140

2S129CD-04700
St Francis Catholic Church
15887 SW Baler Way
Sherwood, OR 97140

2S129CD-12500
St Francis Catholic Church
15651 SW Oregon St
Sherwood, OR 97140

2S132BA-00200
St Francis Catholic Church
15651 SW Oregon St
Sherwood, OR 97140

2S129CD-09300
Charles & Michelle Spencer
15593 SW Whetstone Way
Sherwood, OR 97140

2S129CD-09900
Jeffery & Nicole Smith
15550 SW Farmer Way
Sherwood, OR 97140

2S132AB-08900
Joan & Patrick Smith
15105 SW Wert Ct
Sherwood, OR 97140

2S129CA-00200
Sherwood City Of
22560 SW Pine St
Sherwood, OR 97140

2S129CA-18500
Sherwood City Of
22560 SW Pine St
Sherwood, OR 97140

2S129CC-10600
Sherwood School Dist #88J
23295 SW Main St
Sherwood, OR 97140

2S129CD-05500
Sherwood City Of
22560 SW Pine St
Sherwood, OR 97140

2S129DC-00300
Sherwood City Of
22560 SW Pine St
Sherwood, OR 97140

2S129DC-00400
Sherwood City Of
22560 SW Pine St
Sherwood, OR 97140

2S132AB-01400
Sherwood City Of
22560 SW Pine St
Sherwood, OR 97140

2S132BA-00800
Sherwood School Dist #88J
23295 SW Main St
Sherwood, OR 97140

2S132BA-04100
Sherwood City Of
22560 SW Pine St
Sherwood, OR 97140

2S129CD-05200
Melissa Schweitzer
15821 SW Baler Way
Sherwood, OR 97140

2S132AB-09100
Michael Schafer
22291 SW Hall St
Sherwood, OR 97140

2S132AB-10300
Brent Savage
22348 SW Nottingham Ct
Sherwood, OR 97140

2S132AB-10200
S & P Nottingham Properties Llc
2020 Maltby Rd STE 7
Bothell, WA 98021

2S129CD-07500
Douglas Rux
15532 SW Thrasher Way
Sherwood, OR 97140

2S132AB-13600
Presley & Mark Segoviano
22214 SW Nottingham Ct
Sherwood, OR 97140

2S132AA-00403
Kyle & Traci Rossi
2034 NE Hancock St
Portland, OR 97212

2S132AB-11400
Suphawadee Ross
22137 SW Kelsey Ct
Sherwood, OR 97140

2S132AB-07000
Michael & Faye Roscoe
22331 SW Nottingham Ct
Sherwood, OR 97140

2S132AB-14600
Michael & Linda Rooke
15240 SW Oregon St
Sherwood, OR 97140

2S129CD-12100
Dustyn Rondema
15585 SW Farmer Way
Sherwood, OR 97140

2S132AB-15100
Jarrod & Patrice Rogers
15428 SW Darla Kay Ct
Sherwood, OR 97140

2S132AB-09900
Kimberly Rocha
15246 SW Wert Ct
Sherwood, OR 97140

2S132AB-09500
Travis & Crystal Roberts
15156 SW Wert Ct
Sherwood, OR 97140

2S132AB-10900
Jill & Mark Roberts
22273 SW Nottingham Ct
Sherwood, OR 97140

2S132AB-00203
Sean & Shelley Roark
22235 SW Hall St
Sherwood, OR 97140

2S129CD-07100
Ismael & Alice Rios
15549 SW Thrasher Way
Sherwood, OR 97140

2S132AB-13800
Jon & Emily Rievley
22228 SW Nottingham Ct
Sherwood, OR 97140

2S132AB-07100
Joseph & Imaya Remenak
15352 SW Oregon St
Sherwood, OR 97140

2S132AB-09300
Marcy & John Ratcliff
15118 SW Wert Ct
Sherwood, OR 97140

2S129CD-07000
Rosemary Potter
15561 SW Thrasher Way
Sherwood, OR 97140

2S129CD-03000
Todd & Laura Portinga
15882 SW Baler Way
Sherwood, OR 97140

2S129CD-10600
Daniel & Tami Platt
15618 SW Farmer Way
Sherwood, OR 97140

2S132AA-00603
Michael Peterson
22176 SW Hall St
Sherwood, OR 97140

2S132AB-06200
Sabino & Yeraldy Perez
22393 SW Nottingham Ct
Sherwood, OR 97140

2S132AB-12300
Christopher Peet
22148 SW Kelsey Ct
Sherwood, OR 97140

2S132AB-00902
David & Cindy Parish
5204 Lake Crest Dr
Mckinney, TX 75071

2S129D0-00150
Orwa Sherwood Llc
8320 NE Highway 99
Vancouver, WA 98665

2S132AB-12400
Stephen & Katie Orsolini
22156 SW Kelsey Ct
Sherwood, OR 97140

2S129CD-02800
Galen & Susan Onizuka
15858 SW Baler Way
Sherwood, OR 97140

2S129CD-06900
Wendi & John Oliver
15573 SW Thrasher Way
Sherwood, OR 97140

2S132AB-06100
Scott & Anne Ohman
22401 SW Nottingham Ct
Sherwood, OR 97140

2S132AB-12200
Kim Nickel & Lynne Taffert
22140 SW Kelsey Ct
Sherwood, OR 97140

2S132AB-07200
Vinh Nguyen & Trang Tran
15336 SW Oregon St
Sherwood, OR 97140

2S132AB-15300
Cuong & Marisol Nguyen
15149 SW Darla Kay Ct
Sherwood, OR 97140

2S132AB-03600
Sean Newbury
15083 SW Merryman St
Sherwood, OR 97140

2S132BA-00201
New Life Assembly Of God
Po Box 878
Sherwood, OR 97140

2S132AB-08000
Carrie Nelson
22293 SW Nottingham Ct
Sherwood, OR 97140

2S132AB-14900
Cynthia Nelson
15404 SW Darla Kay Ct
Sherwood, OR 97140

2S132AA-00402
Kerry Neill
22112 SW Hall St
Sherwood, OR 97140

2S132AB-00904
Therese Nair
22443 SW Nottingham Ct
Sherwood, OR 97140

2S129CD-08400
Shannon Myrick
15742 SW Thrasher Way
Sherwood, OR 97140

2S132AB-12600
James & Lindsay Myers
22170 SW Kelsey Ct
Sherwood, OR 97140

2S132AB-11100
Michael & Colette Musselman
22183 SW Kelsey Ct
Sherwood, OR 97140

2S132AB-08500
Alfred & Shirlee Musgrove
15183 SW Wert Ct
Sherwood, OR 97140

2S132BA-04400
Mountain High Apartments Llc & Tsl
401 NE Evans St
Mcminnville, OR 97128

2S129CD-10900
Brenden & Katlyn Motte
15654 SW Farmer Way
Sherwood, OR 97140

2S132AB-00800
Kristina Moore
22282 SW Lincoln St
Sherwood, OR 97140

2S132AB-13500
Derek & Apryl Mires
22206 SW Nottingham Ct
Sherwood, OR 97140

2S132AB-14000
Paul & Rebecca Mickel
22244 SW Nottingham Ct
Sherwood, OR 97140

2S132AA-00500
Robert & Kathleen Michaud-Tradd
Po Box 623
Sherwood, OR 97140

2S129CD-05100
Michael Mckee
15790 SW Thrasher Way
Sherwood, OR 97140

2S129CD-02700
Robert & Hou McIntyre
15826 SW Springtooth Ln
Sherwood, OR 97140

2S129CD-09800
Andrew & Andrew Mcconnell
10 Antley St
Greenville, SC 29601

2S129CD-09200
Mccauley Anthony V & Christi L Rev Liv
15619 SW Whetstone Way
Sherwood, OR 97140

2S129CD-06400
Jeannine Matteson
15649 SW Thrasher Way
Sherwood, OR 97140

2S129CD-12200
Jose Martinez
15599 SW Farmer Way
Sherwood, OR 97140

2S132AB-00801
Nels & Ruth Martin
22296 SW Lincoln St
Sherwood, OR 97140

2S132AB-10000
David & Mariah Marshall
15268 SW Wert Ct
Sherwood, OR 97140

2S129CD-11400
Michael Maddy
15638 SW Whetstone Way
Sherwood, OR 97140

2S132AA-14300
Calli Luikart
22145 SW Lower Roy St
Sherwood, OR 97140

2S129CD-05800
Lloyd & Lacey Lockhart
21525 SW Grainery Pl
Sherwood, OR 97140

2S132AB-15000
George & Jennifer Lockhart
15416 SW Darla Kay Ct
Sherwood, OR 97140

2S129CD-07800
Wei & Siska Lin
15564 SW Thrasher Way
Sherwood, OR 97140

2S129CA-15000
Colwell Liedtke & Bruce Colwell
3895 SW 185th Ave STE 170
Beaverton, OR 97078

2S132AB-09600
Jiankun Li & Jia Wang
15178 SW Wert Ct
Sherwood, OR 97140

2S132AB-13100
David Schelman & Deborah Lewis
22151 SW Hall St
Sherwood, OR 97140

2S132AB-14700
Leonard Enterprises Llc
17850 SW Sheppard Ter
Sherwood, OR 97140

2S132AB-14800
Leonard Enterprises Llc
17850 SW Sheppard Ter
Sherwood, OR 97140

2S132AB-08300
Timothy & Susan Lebrun
13275 SW Greenfield Dr
Portland, OR 97223

2S132AB-00702
Randall & Deena Leavitt
22346 SW Lincoln St
Sherwood, OR 97140

2S132AB-15200
Deborah Leake
15431 SW Darla Kay Ct
Sherwood, OR 97140

2S129CD-07300
Langer Family Llc
15585 SW Tualatin Sherwood Rd
Sherwood, OR 97140

2S129DB-00300
Langer Gramor Llc
19767 SW 72nd Ave STE 100
Tualatin, OR 97062

2S129DC-00200
Langer Storage Llc
15585 SW Tualatin Sherwood Rd
Sherwood, OR 97140

2S129DC-00900
Langer Storage 2 Llc
15585 SW Tualatin Sherwood Rd
Sherwood, OR 97140

2S129DC-01100
Langer Parkway South Llc
15585 SW Tualatin Sherwood Rd
Sherwood, OR 97140

2S129DC-01200
Langer Parkway South Llc
15585 SW Tualatin Sherwood Rd
Sherwood, OR 97140

2S129DC-01300
Langer Entertainment Llc
15585 SW Tualatin Sherwood Rd
Sherwood, OR 97140

2S129DC-01400
Langer Parkway South Llc
15585 SW Tualatin Sherwood Rd
Sherwood, OR 97140

2S129DC-01500
Langer Parkway South Llc
15585 SW Tualatin Sherwood Rd
Sherwood, OR 97140

2S129CD-10500
Michael & Judith Kulland
15606 SW Farmer Way
Sherwood, OR 97140

2S132AB-03700
Gabriele Kruger
15117 SW Merryman St
Sherwood, OR 97140

2S129CD-09700
Carol King
15530 SW Farmer Way
Sherwood, OR 97140

2S129DC-00800
Killion Real Estate Partnership
11825 SW Katherine St
Portland, OR 97223

2S129CD-10700
Megan & Brandon Kerekes
15630 SW Farmer Way
Sherwood, OR 97140

2S129CD-04500
Erin Kelly
15911 SW Baler Way
Sherwood, OR 97140

2S132AB-11200
Clyde & Anne Keebaugh
22165 SW Kelsey Ct
Sherwood, OR 97140

2S132AA-00602
David & Laura Kaufman
22246 SW Hall St
Sherwood, OR 97140

2S132AB-07800
Kimberly Kaholo
22301 SW Nottingham Ct
Sherwood, OR 97140

2S132AB-09400
Sood & Eddie Eoff
Po Box 1515
Tualatin, OR 97062

2S129CD-10300
Jones Ryan N Rev Trust
1133 Windsor Pl
South Pasadena, CA 91030

2S129CD-11100
Richard Jones & Maria Schmidt
15680 SW Farmer Way
Sherwood, OR 97140

2S129CD-06000
Kelly & Jill Johnson
21552 SW Grainery Pl
Sherwood, OR 97140

2S132AB-06600
Roger Johnson & Maria Ho
1242 Deep Creek Rd
Livermore, CA 94550

2S132AB-13900
Lorrin Johnson
22236 SW Nottingham Ct
Sherwood, OR 97140

2S129CD-11300
Jonathan & Rebekah Suh
15664 SW Whetstone Way
Sherwood, OR 97140

2S132BA-90002
Jdr Llc
23225 NE Dillon Rd
Newberg, OR 97132

2S132AB-12100
Chris & Simone Huff
22134 SW Kelsey Ct
Sherwood, OR 97140

2S132AB-11000
Joseph & Jennifer Hovanic
22269 SW Nottingham Ct
Sherwood, OR 97140

2S132AB-00906
Housing Authority Of Washington County
111 NE Lincoln St # 200-L
Hillsboro, OR 97124

2S129CD-11600
Kassandra Honeywell
7550 SW Mapleleaf St
Portland, OR 97223

2S129CD-12400
Karen Hogue
15623 SW Farmer Way
Sherwood, OR 97140

2S129CD-06600
Steve Hobson
15617 SW Thrasher Way
Sherwood, OR 97140

2S132AB-11500
Dana Hiserote
22113 SW Kelsey Ct
Sherwood, OR 97140

2S132AB-09700
Matthew Hintz
15200 SW Wert Ct
Sherwood, OR 97140

2S132AB-06000
Jamie & Jason Scott
22435 SW Nottingham Ct
Sherwood, OR 97140

2S129CD-07200
Taylor & Robert Hickernell
15537 SW Thrasher Way
Sherwood, OR 97140

2S129CD-04900
Cynthia Herring
15863 SW Baler Way
Sherwood, OR 97140

2S132AB-11800
Travis & Jill Harper
22112 SW Kelsey Ct
Sherwood, OR 97140

2S132AB-00703
Hannah & Matthew Hansen
15355 SW Clifford Ct
Sherwood, OR 97140

2S132AA-14100
George & Loretta Haliski
22159 SW Lower Roy St
Sherwood, OR 97140

2S129CD-11200
Calkins Doman
15692 SW Farmer Way
Sherwood, OR 97140

2S129CD-10800
Andre Hage
15642 SW Farmer Way
Sherwood, OR 97140

2S132AB-12000
Joel & Nancy Griffin
22126 SW Kelsey Ct
Sherwood, OR 97140

2S132AB-14100
Mary Green-Zwemke & Christopher
22252 SW Nottingham Ct
Sherwood, OR 97140

2S132AB-06900
Paul & Rayna Graham
22337 SW Nottingham Ct
Sherwood, OR 97140

2S129DC-00600
Grabowski Family Trust
Po Box 5678
Ketchum, ID 83340

2S129DC-00700
Grabowski Family Trust
Po Box 5678
Ketchum, ID 83340

2S132AB-06400
Godfrey Rev Trust
22377 SW Nottingham Ct
Sherwood, OR 97140

2S132AB-03500
Kalen Garrison & Garrison Lee
15061 SW Merryman St
Sherwood, OR 97140

2S129CD-07400
Lori Gallagher
15520 SW Thrasher Way
Sherwood, OR 97140

2S129CD-08200
Yoonhee & Minho Song
15710 SW Thrasher Way
Sherwood, OR 97140

2S129CD-09000
Aleksandr & Valentina Fursov
15671 SW Whetstone Way
Sherwood, OR 97140

2S132AB-08100
Eli & Olivia Fults
22306 SW Nottingham Ct
Sherwood, OR 97140

2S132AB-01100
Fre 596 Llc
707 Old County Rd
Belmont, CA 94002

2S129CD-04400
Joshua Fravel
15923 SW Baler Way
Sherwood, OR 97140

2S129CD-09400
Elise Fraser
15567 SW Whetstone Way
Sherwood, OR 97140

2S132AB-06500
Terrance Foster
22369 SW Nottingham Ct
Sherwood, OR 97140

2S129CD-06100
Angi Ford
21584 SW Grainery Pl
Sherwood, OR 97140

2S129CD-10400
Sheila & David Fisher
15594 SW Farmer Way
Sherwood, OR 97140

2S132AB-03800
Dennis & Shirley Finch
15149 SW Merryman St
Sherwood, OR 97140

2S129CD-10000
Scott & Sydney Fender
15558 SW Farmer Way
Sherwood, OR 97140

2S132AB-10500
Nancy Falk
22412 SW Nottingham Ct
Sherwood, OR 97140

2S132AB-06700
Zachary & Crystal Englen
22353 SW Nottingham Ct
Sherwood, OR 97140

2S132AB-10100
Thomas & Dawn Ekerson
22334 SW Nottingham Ct
Sherwood, OR 97140

2S132AB-11700
Julia & Eric Ediger
22102 SW Kelsey Ct
Sherwood, OR 97140

2S129CD-09600
Jon & Theresa Easton
15522 SW Farmer Way
Sherwood, OR 97140

2S129CD-06800
Joseph & Jennifer Domingo
15585 SW Thrasher Way
Sherwood, OR 97140

2S132AB-00905
Stacy Dirks
15173 SW Merryman St
Sherwood, OR 97140

2S129CD-02900
Dario Survivors Trust
Po Box 967
Tualatin, OR 97062

2S129CD-08300
Joseph & Kelly Cutler
15726 SW Thrasher Way
Sherwood, OR 97140

2S129CD-07600
David Crawford
15544 SW Thrasher Way
Sherwood, OR 97140

2S132AB-08700
Brian & Jessica Crow
15135 SW Wert Ct
Sherwood, OR 97140

2S132AB-13700
Destiny Cowan
22220 SW Nottingham Ct
Sherwood, OR 97140

2S129CD-05600
Cornejo Gustavo Aguilar & Real Graciela
21589 SW Grainery Pl
Sherwood, OR 97140

2S129CD-10100
Melissa Cooper
15566 SW Farmer Way
Sherwood, OR 97140

2S132AB-08800
Jacob Cooper
15123 SW Wert Ct
Sherwood, OR 97140

2S132AB-13000
Patricia Cole
22165 SW Hall St
Sherwood, OR 97140

2S132AB-07300
Clarke Elizabeth F & Timothy W Liv Trust
22323 SW Nottingham Ct
Sherwood, OR 97140

2S132AB-12500
Carissa Clark & Nicole Harmon
22162 SW Kelsey Ct
Sherwood, OR 97140

2S129CD-06700
Maria Chavez
15601 SW Thrasher Way
Sherwood, OR 97140

2S129CD-04300
Chan Family Trust
19030 SW Chesapeake Dr
Tualatin, OR 97062

2S132AB-14300
Anne Cerling
22268 SW Nottingham Ct
Sherwood, OR 97140

2S132AA-00404
James Catron
14960 SW Oregon St
Sherwood, OR 97140

2S132AB-06300
Francisco & Kelly Catibayan
22385 SW Nottingham Ct
Sherwood, OR 97140

2S129CD-08100
Scott & Stacie Cannon
15694 SW Thrasher Way
Sherwood, OR 97140

2S132AB-12900
Jose Campuzano
22179 SW Hall St
Sherwood, OR 97140

2S132AB-09200
Justin & Katelyn Callistini
15100 SW Wert Ct
Sherwood, OR 97140

2S129CD-12300
Juana Calidonio
15611 SW Farmer Way
Sherwood, OR 97140

2S132AB-12700
Kylie Euscher
22188 SW Kelsey Ct
Sherwood, OR 97140

2S132AB-10700
Maury Hutchins
22428 SW Nottingham Ct
Sherwood, OR 97140

2S129CD-08800
Joshua & Kristin Burnham
15735 SW Whetstone Way
Sherwood, OR 97140

2S132AB-13400
Christie Burks
22109 SW Hall St
Sherwood, OR 97140

2S132AA-00604
Patrick & Adrienne Bridge
22204 SW Hall St
Sherwood, OR 97140

2S132AB-14500
Dion Breshears & Larry Cutshall
15258 SW Oregon St
Sherwood, OR 97140

2S129CD-11500
Harold Bray
15612 SW Whetstone Way
Sherwood, OR 97140

2S129CD-06500
Nolan & Lana Booth
15633 SW Thrasher Way
Sherwood, OR 97140

2S129CD-11700
Daniel & Ilona Bobosh
15560 SW Whetstone Way
Sherwood, OR 97140

2S132AB-08200
Blue Water Holdings Llc
20 Cervantes Cir
Lake Oswego, OR 97035

2S129CD-08000
Alison Bingham
15678 SW Thrasher Way
Sherwood, OR 97140

2S132AB-11300
Carla & Jason Bietz
22159 SW Kelsey Ct
Sherwood, OR 97140

2S132AB-09000
Bradford & Rebecca Bertram
22269 SW Hall St
Sherwood, OR 97140

2S132AB-13200
Tom & Carmen Berger
22137 SW Hall St
Sherwood, OR 97140

2S132AB-10800
George Stavrakis & Stavrakis Nise
22281 SW Nottingham Ct
Sherwood, OR 97140

2S132AB-13300
Terrell & Analia Bennett
22123 SW Hall St
Sherwood, OR 97140

2S132AB-08600
Gaylene Beck
15151 SW Wert Ct
Sherwood, OR 97140

2S129CD-05900
Beatriz Bazan
21520 SW Grainery Pl
Sherwood, OR 97140

2S132AB-10600
Dawn Bambusch
22420 SW Nottingham Ct
Sherwood, OR 97140

2S129CD-09500
Baldoni Darla J Rev Liv Trust
15514 SW Farmer Way
Sherwood, OR 97140

2S132AB-15400
Lisa & Mohammed Baggia
15407 SW Darla Kay Ct
Sherwood, OR 97140

2S129CD-04600
Elisabeth Bacon
15899 SW Baler Way
Sherwood, OR 97140

2S132AB-10400
Randy & Pamela August
22372 SW Nottingham Ct
Sherwood, OR 97140

2S132AB-14400
Aaron & Jo Atkins
22284 SW Nottingham Ct
Sherwood, OR 97140

2S129CA-18400
Arbor Terrace Hoa

2S129CA-18600
Arbor Terrace Hoa

2S132AB-12800
Eduardo Aragon & Ulma Valenzuela
22193 SW Hall St
Sherwood, OR 97140

2S132AB-06800
Kayla Anderson
16130 SW Holland Ln
Sherwood, OR 97140

2S132AB-08400
Brian & Kori Almquist
15207 SW Wert Ct
Sherwood, OR 97140

2S132AA-00501
Jose Alegria
22148 SW Hall St
Sherwood, OR 97140

2S129CD-08700
Morteza Aleali & Fatemeh Jannesai
15767 SW Whetstone Way
Sherwood, OR 97140

2S129CD-06200
Abdumadzhid Achilov & Galina Achilova
15681 SW Thrasher Way
Sherwood, OR 97140

December 22, 2021



RE: VIRTUAL NEIGHBORHOOD MEETING NOTICE
City of Sherwood Land Use Application for a Site Plan Modification

Dear Property Owner/Neighbor:

AKS Engineering & Forestry, LLC is holding a virtual neighborhood meeting regarding the existing Langer's Sentinel Storage II facility. The ±6-acre site is located northeast of the intersection of SW Langer Farms Parkway and SW Oregon Street (Tax Lot 900 of Washington County Assessor's Map 2S 1 29DC). The project involves removal and replacement of an existing recreational vehicle storage structure with an enclosed building. The attached map shows the specific location of the subject site and the planned improvements, surrounded by existing buildings.

The purpose of this virtual meeting is to provide a forum for the applicant and surrounding property owners/neighbors to review the proposal and to identify issues so that they may be considered before a land use application is submitted to the City of Sherwood. This meeting gives you the opportunity to share with us any special information you know about the property involved. We will attempt to answer questions which may be relevant to meeting development standards consistent with the City of Sherwood Development Code.

You are invited to attend the virtual meeting on:

January 6, 2022 at 6:00 PM
See enclosed instructions to join the meeting.

Please note this meeting will be an informational meeting on preliminary development plans. These plans may be altered prior to submittal of the application to the City of Sherwood.

I look forward to discussing this project with you. If you have questions but will be unable to attend, please feel free to call me at 503-563-6151.

Sincerely,

AKS ENGINEERING & FORESTRY, LLC

A handwritten signature in black ink, appearing to read 'MH' or similar initials, written in a cursive style.

Marie Holladay

AKS ENGINEERING & FORESTRY, LLC

12965 SW Herman Road, Suite 100 | Tualatin, OR 97062
P: 503.563.6151 | www.aks-eng.com | HolladayM@aks-eng.com

Enclosures:

Preliminary Site Plan

Instructions for Joining & Participating in the Public Neighborhood Meeting

Instructions for Joining & Participating in the Public Neighborhood Meeting for Langer's Sentinel Storage II Site Plan Modification

Virtual Meeting provided via Zoom Webinar

January 6, 2022 at 6:00 PM

Please Register in Advance

(a list of attendees will be submitted to the City of Sherwood):

- Go online to <https://www.aks-eng.com/langer-storage-2/>
- Click on the link provided to complete the online registration form.
- You will receive a confirmation email containing a link to join the Zoom webinar at the scheduled time as well as additional instructions.
- Meeting materials will be available upon request at least 10 days after the meeting concludes.

How to Join the Meeting:

Join by computer, tablet or smartphone

- **This is the preferred method as it allows you to see the Presenter's materials on screen.**
- Click on the "Click this URL join" link provided in your registration confirmation email.
- (If you registered but did not receive a confirmation email, please check your junk/spam folder before contacting the Meeting Administrator.)
- You may be prompted to "download and run Zoom" or to install the App (ZOOM cloud meetings). Follow the prompts or bypass this process by clicking "join from your browser".
- You should automatically be connected to the virtual neighborhood meeting.

Join by telephone

- Dial any of the toll-free Zoom numbers below to connect to the neighborhood meeting:

+ 1-346-248-7799	+ 1-669-900-6833
+ 1-253-215-8782	+ 1-312-626-6799
+ 1-929-205-6099	+ 1-301-715-8592

- If you experience trouble connecting, please pick another number and try again.
- After dialing in, enter this Zoom ID when prompted: **897 8995 3494**
- The Password if needed is: **6151**

MEETING ADMINISTRATOR:

For technical assistance or to submit a question for the meeting:

Email: holladaym@aks-eng.com

During the Meeting

Audio Help

- Meeting attendees will be muted throughout the presentation. This will allow everyone to hear the presentation clearly without added distractions.
- Make sure that the speakers on your device are turned on and not muted.
- If you do not have speakers on your computer, you can join by phone (using the “Join by telephone” instructions) to hear the presentation while watching the presentation on your computer monitor.

Questions & Answers

Your questions are important to us. There will be time reserved during the meeting to take questions, using one of the submission options below. Our presentation team will make their best effort to answer all question(s) during the meeting.

Prior to the Meeting:

- If you cannot attend the meeting, you can email your question(s) in advance to the Meeting Administrator.

Email holladaym@aks-eng.com

During the Meeting:

- ***Preferred Method:*** Participants may ask questions live at the meeting and through the "Chat" button on the bottom of the presentation screen to submit a question in real time.

After the Meeting:

- We will continue to take questions after the meeting has ended. Please submit your question(s) to the Meeting Administrator:

Email holladaym@aks-eng.com

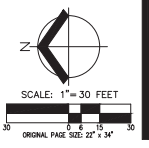
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PROJECT AREA



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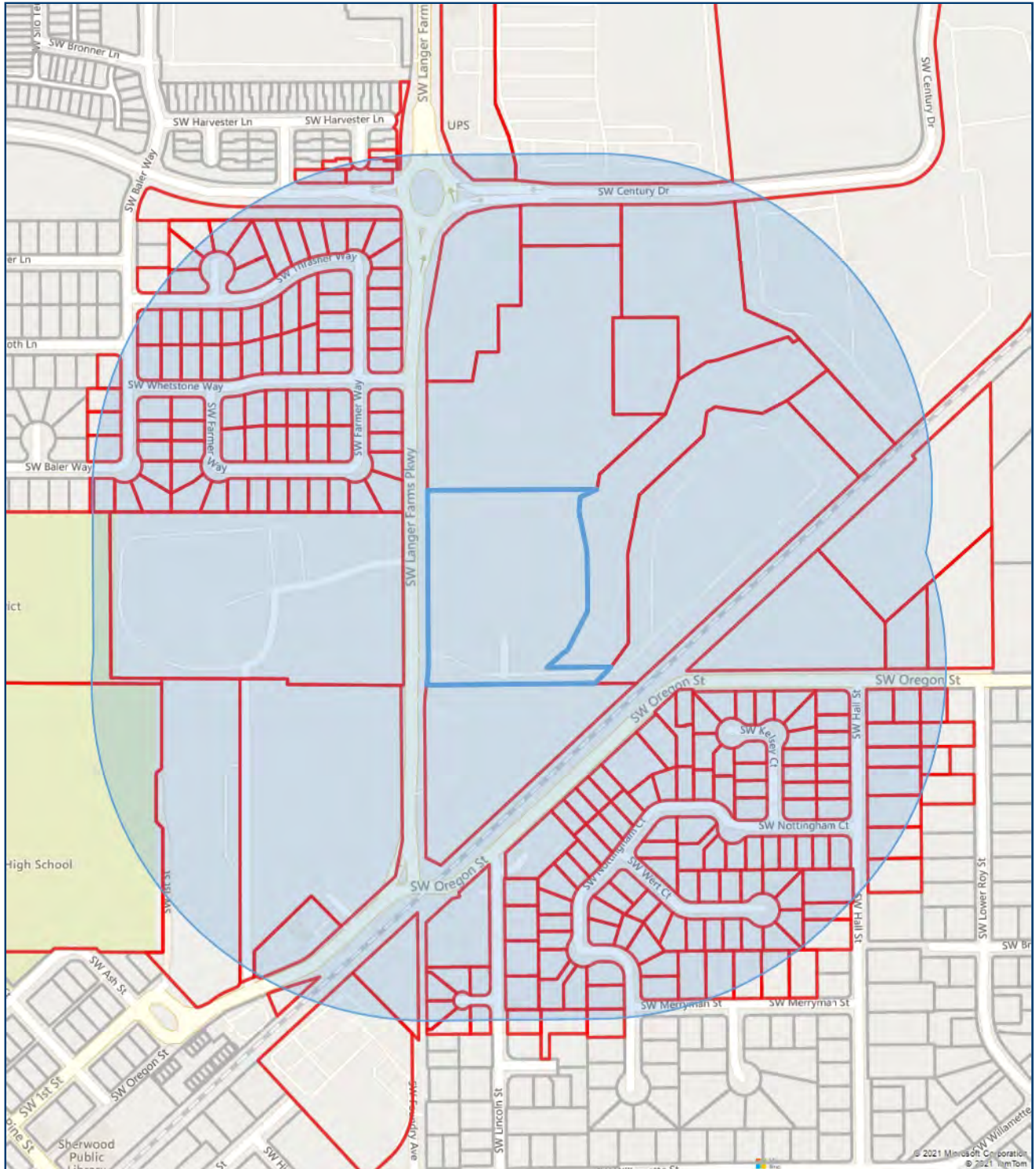
Exhibit G: Public Notice Information



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St Francis Catholic Church
15651 SW Oregon St
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22560 SW Pine St
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Sherwood City Of
22560 SW Pine St
Sherwood, OR 97140

2S129CC-10600
Sherwood School Dist #88J
23295 SW Main St
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Sherwood City Of
22560 SW Pine St
Sherwood, OR 97140

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Sherwood City Of
22560 SW Pine St
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Sherwood City Of
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2S132AB-13600
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22137 SW Kelsey Ct
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22331 SW Nottingham Ct
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15428 SW Darla Kay Ct
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15561 SW Thrasher Way
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15416 SW Darla Kay Ct
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22151 SW Hall St
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Leonard Enterprises Llc
17850 SW Sheppard Ter
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Leonard Enterprises Llc
17850 SW Sheppard Ter
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13275 SW Greenfield Dr
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2S132AB-00702
Randall & Deena Leavitt
22346 SW Lincoln St
Sherwood, OR 97140

2S132AB-15200
Deborah Leake
15431 SW Darla Kay Ct
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2S129CD-07300
Langer Family Llc
15585 SW Tualatin Sherwood Rd
Sherwood, OR 97140

2S129DB-00300
Langer Gramor Llc
19767 SW 72nd Ave STE 100
Tualatin, OR 97062

2S129DC-00200
Langer Storage Llc
15585 SW Tualatin Sherwood Rd
Sherwood, OR 97140

2S129DC-00900
Langer Storage 2 Llc
15585 SW Tualatin Sherwood Rd
Sherwood, OR 97140

2S129DC-01100
Langer Parkway South Llc
15585 SW Tualatin Sherwood Rd
Sherwood, OR 97140

2S129DC-01200
Langer Parkway South Llc
15585 SW Tualatin Sherwood Rd
Sherwood, OR 97140

2S129DC-01300
Langer Entertainment Llc
15585 SW Tualatin Sherwood Rd
Sherwood, OR 97140

2S129DC-01400
Langer Parkway South Llc
15585 SW Tualatin Sherwood Rd
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2S129DC-01500
Langer Parkway South Llc
15585 SW Tualatin Sherwood Rd
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Sherwood, OR 97140

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Sherwood, OR 97140

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15594 SW Farmer Way
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Dennis & Shirley Finch
15149 SW Merryman St
Sherwood, OR 97140

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22412 SW Nottingham Ct
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22353 SW Nottingham Ct
Sherwood, OR 97140

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Thomas & Dawn Ekerson
22334 SW Nottingham Ct
Sherwood, OR 97140

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Julia & Eric Ediger
22102 SW Kelsey Ct
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Joseph & Jennifer Domingo
15585 SW Thrasher Way
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Brian & Jessica Crow
15135 SW Wert Ct
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2S132AB-13700
Destiny Cowan
22220 SW Nottingham Ct
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2S129CD-05600
Cornejo Gustavo Aguilar & Real Graciela
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2S129CD-10100
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2S132AB-08800
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2S132AB-13000
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22165 SW Hall St
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2S132AB-07300
Clarke Elizabeth F & Timothy W Liv Trust
22323 SW Nottingham Ct
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2S132AA-00404
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2S132AB-12900
Jose Campuzano
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2S132AB-09200
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15100 SW Wert Ct
Sherwood, OR 97140

2S129CD-12300
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15735 SW Whetstone Way
Sherwood, OR 97140

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22109 SW Hall St
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Patrick & Adrienne Bridge
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2S129CD-11700
Daniel & Ilona Bobosh
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2S132AB-08200
Blue Water Holdings Llc
20 Cervantes Cir
Lake Oswego, OR 97035

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22269 SW Hall St
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2S132AB-13200
Tom & Carmen Berger
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George Stavrakis & Stavrakis Nise
22281 SW Nottingham Ct
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Terrell & Analia Bennett
22123 SW Hall St
Sherwood, OR 97140

2S132AB-08600
Gaylene Beck
15151 SW Wert Ct
Sherwood, OR 97140

2S129CD-05900
Beatriz Bazan
21520 SW Grainery Pl
Sherwood, OR 97140

2S132AB-10600
Dawn Bambusch
22420 SW Nottingham Ct
Sherwood, OR 97140

2S129CD-09500
Baldoni Darla J Rev Liv Trust
15514 SW Farmer Way
Sherwood, OR 97140

2S132AB-15400
Lisa & Mohammed Baggia
15407 SW Darla Kay Ct
Sherwood, OR 97140

2S129CD-04600
Elisabeth Bacon
15899 SW Baler Way
Sherwood, OR 97140

2S132AB-10400
Randy & Pamela August
22372 SW Nottingham Ct
Sherwood, OR 97140

2S132AB-14400
Aaron & Jo Atkins
22284 SW Nottingham Ct
Sherwood, OR 97140

2S129CA-18400
Arbor Terrace Hoa

2S129CA-18600
Arbor Terrace Hoa

2S132AB-12800
Eduardo Aragon & Ulma Valenzuela
22193 SW Hall St
Sherwood, OR 97140

2S132AB-06800
Kayla Anderson
16130 SW Holland Ln
Sherwood, OR 97140

2S132AB-08400
Brian & Kori Almquist
15207 SW Wert Ct
Sherwood, OR 97140

2S132AA-00501
Jose Alegria
22148 SW Hall St
Sherwood, OR 97140

2S129CD-08700
Morteza Aleali & Fatemeh Jannesai
15767 SW Whetstone Way
Sherwood, OR 97140

2S129CD-06200
Abdumadzhid Achilov & Galina Achilova
15681 SW Thrasher Way
Sherwood, OR 97140

Exhibit H: Amended and Restated Development Agreement (2010)

CURRENTLY IN-USE 5-4-11
AMENDED AND RESTATED DEVELOPMENT AGREEMENT

PARTIES

The Parties to this Amended and Restated Development Agreement ("Agreement") are the City of Sherwood, Oregon ("City") and Pamela and Clarence Langer, as to Phase 4, and the Langer Family, LLC, as to the remainder of the PUD (collectively, "Langer").

RECITALS

1. On April 26, 1995, the City approved a Preliminary Development Plan for a Planned Unit Development ("PUD") on property owned by Langer. The subject property is located generally southeast of Hwy 99W and south of the Tualatin-Sherwood Road, in the City.
2. The decision approved development of the property in eight (8) separate phases. The decision contemplated and assigned specific uses to each phase, including High Density Residential, Retail/Commercial, and Light Industrial (LI).
3. The portions of the PUD designated LI have not yet developed, except for a portion of Phase 4, which was developed as a mini-warehouse use under the General Retail Trade category of allowed uses in the LI zone. Since the approval of the PUD, the City has amended its list of permitted and conditional uses in the LI zone, subject to the City's Zoning and Community Development Code ("ZCDC") 16.32.020.H, which provides the following: "Approved PUDs may elect to establish uses which are permitted or conditionally permitted under the base zone text at the time of final approval of the PUD."
4. The PUD approval contained conditions of approval including: a requirement for a wetlands delineation prior to development of Phase 8; the construction of Adams Drive at the time of development of Phase 6; and the elimination of the then-proposed extension of Century Drive east of Adams Drive.
5. The Final Development Plan was approved August 3, 1995. Neither the Preliminary Development Plan nor the Final Development Plan approvals related to a site plan. Thus, site plan review is required for each phase as development is proposed for that phase.
6. Phases 1 through 3 and 5 have been developed, and a portion of Phase 4 was developed as above-described and is anticipated for future redevelopment. The purpose of this Agreement is to clarify and refine the intent of the Parties regarding the following issues (collectively, the "PUD Issues"):

- (a) The allowed uses of Phases 4, 6, 7 and 8 of the PUD, all of which are designated for LI uses;
 - (b) The timing of related improvements, including the construction of Adams Drive and Century Drive;
 - (c) The cost-sharing of public improvements, including the construction of Adams Drive and Century Drive; and
 - (d) Certain related matters.
7. The City and Langer previously set forth their respective commitments relative to the PUD Issues in that certain Development Agreement dated January 3, 2008 ("2008 Agreement"), which was a condition of approval to a companion Minor Change to the PUD approved contemporaneously by the City.
8. Subsequent to entering into the 2008 Agreement, economic conditions have changed such that the Parties find it necessary to re-evaluate their respective commitments under the 2008 Agreement. The City and Langer now desire to amend and restate their commitments relative to the PUD Issues set forth below.
9. This Agreement represents the only Agreement between the City and Langer with respect to the PUD Issues and does not preclude or require any conditions that may arise from a subsequent application for site plan review. It is the intent of the parties that the site plan review conditions should not be inconsistent with this Agreement.
10. This Agreement is only between the City and Langer and does not affect any conditions or improvements that may be required by other jurisdictions.

AGREEMENT

A. PUD USES

1. Applicable Code. ZCDC 16.32.020.H, provides that "Approved PUDs may elect to establish uses which are permitted or conditionally permitted under the base zone text at the time of final approval of the PUD." The Langer PUD was approved and Phases 4, 6, 7 and 8 were assigned the Light Industrial ("LI") base zone designation on August 3, 1995.
2. Permitted and Conditional Uses. Accordingly, Langer elects to establish uses on the LI-designated phases of the PUD that were permitted or conditionally permitted under the LI base zone text applicable on August 3, 1995, including: "Uses permitted outright in the GC zone Section 2.109.02, except for adult entertainment businesses, which are prohibited." A copy of the uses permitted in the LI and GC zones on August 3, 1995 is set forth in Attachment A, attached hereto and incorporated herein by reference.

3. Election of Uses and Acceptance. The City acknowledges and accepts Langer's decision to elect to develop Phases 4, 6, 7 and 8 under ZCDC 16.32.020.H, including the ability to develop those phases for General Retail Trade under Section 2.109.02 of the 1995 ZCDC. Accordingly, the current provisions of ZCDC 16.32.030.K, which restrict retail uses in the LI zone to a maximum of 60,000 square feet, will not apply to site plan review of the PUD.

B. ADAMS DRIVE SOUTH EXTENSION

1. City Commitments. Except as otherwise provided in this section, as soon as reasonably practicable and in any event prior to Langer's construction of any portion of Adams Drive south of the PUD's southern boundary, the City, at the City's sole cost and expense, will take the following actions:
 - a. Acquire the necessary right-of-way and complete the design and engineering for construction of the extension of Adams Drive ("South Extension") south from its present terminus up to but not including the railroad crossing between the southern PUD boundary and Oregon Street ("Rail Crossing");
 - b. Obtain all necessary permits for the construction and operation of the South Extension, including without limitation, all permits associated with allowing impacts to wetlands;
 - c. Provide for the mitigation of any impacts to wetlands related to the alignment and construction of the South Extension; and
 - d. Pursuant to the City's standard timeline and procedure in such instances, accept Langer's dedication of that portion of the South Extension located within the boundaries of the PUD following final inspection approval and thereupon assume maintenance obligations for all of the South Extension.
2. Langer Commitments. Subsequent to the City's performance of its obligations set forth in Section B.1.a. to B.1.c. of this Agreement but prior to issuance of final occupancy permits for any structures included in Phases 6 or 7, Langer will substantially construct the South Extension, including the traffic circle and island at the intersection with Century Drive and the twelve-foot (12') wide multi-use path extending the length of the South Extension as identified in the City Transportation Systems Plan (the "Path"). The street will be aligned and constructed in a manner consistent with the "90-percent drawings" prepared by Hopper Dennis Jellison, PLLC dated April 2008 and on file with the City (the "South Extension Plans"). Upon completion of the construction of the South Extension, Langer will dedicate and record a public right-of-way easement to the City for Adams Drive south from its present terminus to the southern boundary of the PUD (the "South Extension Right-of-Way").

3. Alternative Commitments.
- a. Alternatively, in the event the City has completed the obligations set forth in Section B.1.a. to B.1.c. of this Agreement and the City receives or accrues funding equal to the cost estimate for the construction of the South Extension prior to the time Langer has substantially commenced the obligations set forth in Section B.2. of this Agreement, the City may, in its sole discretion, elect to construct the South Extension, including the traffic circle and island at the intersection with Century Drive, the Path, and if warranted, the traffic signal at Tualatin-Sherwood Road, at the City's sole expense. In the event the City undertakes construction of the South Extension, the City will deliver written notice ("Written Election") to Langer of the City's intent in accordance with Section I.7. of this Agreement prior to undertaking construction of the South Extension.
- b. The City will issue a Notice to Proceed to the selected bidder(s) ("Contractor") for completion of the physical construction of the South Extension within ninety (90) days after delivery of the Written Election to Langer ("Commencement Date"). In the event the City fails to issue the Notice to Proceed by the Commencement Date and Langer has obtained final site plan approval for either Phases 6 and/or 7 by said date, the City will forfeit its right to undertake construction of the South Extension, and Langer will re-assume the obligation to substantially construct the South Extension in accordance with Section B.2. of this Agreement, unless Langer agrees in writing to extend the Commencement Date. If the City has not forfeited its right to undertake construction of the South Extension, the City will substantially complete the construction of the South Extension within fourteen (14) months after the Commencement Date ("Completion Date"), and in any event, prior to the issuance of an occupancy permit for any structure included in Phases 6 or 7.
- c. To ensure the Completion Date is met, the City will include the required Completion Date and penalties for late completion in the contract ("Contract") the City enters with the Contractor. The penalties shall be an amount calculated to reimburse Langer for any losses incurred by Langer due to Contractor's failure to substantially complete construction by the Completion Date when such failure prevents the reasonable use of Phases 6 or 7 for retail commercial purposes, but in any event not less than \$10,000.00 per day Langer is unable to make reasonable use of Phases 6 or 7 for commercial retail purposes. The City shall take all necessary and appropriate action to enforce the penalty provision in the Contract and forward any amounts collected to Langer within 30 days of the date the City receives payment.
- d. If the City elects to construct the South Extension under this Section B.3, the City will perform its construction activities in a manner that minimizes obstruction or interference with access to, from, or within the PUD and

Langer's construction, if any, and use of the subject property in accordance with the PUD. The City will mobilize, conduct, and maintain all construction activities, equipment and materials on and around the PUD in such manner to allow use of the South Extension and access between the PUD and the South Extension through all access driveways. The City's agreement to perform its construction activities consistent with this section is a material inducement for Langer to enter this Agreement as it will facilitate Langer's timely completion of the PUD in accordance with Langer's agreement with its end users of the PUD.

e. If the City elects to construct the South Extension, Langer will take the following actions prior to the City's commencement of construction:

(A) Grant the South Extension Right-of-Way to the City, provided the City shall bear the expense of preparing the legal description for the South Extension Right-of-Way.

(B) Grant to the City reasonable temporary construction easement(s) to allow the City to complete its construction commitments, provided Langer's grant of an easement(s) may be conditioned to ensure that the City's use of the PUD property does not unreasonably interfere with Langer's use and development of the PUD.

(C) If Langer has not yet constructed the stormwater facility on Phase 8 as provided in Section F.1 of this Agreement ("Stormwater Facility"), allow temporary location of stormwater detention and treatment from the South Extension on Phase 8 in either a temporary facility ("Temporary Facility") or the existing stormwater facilities located on Phase 7 and Phase 8 ("Existing Facilities"). To the extent that the Temporary Facility or the Existing Facilities will require any expenses for engineering, construction, design, maintenance, or modification to existing land use approvals, the City will bear the expenses. If applicable, Langer and the City shall execute and record appropriate easement documents or amendments to the existing easement for the Existing Facilities to formalize the parties' respective obligations under this subsection (C).

(D) Use reasonable best efforts to avoid damaging the Path during construction and development of the PUD, provided that if Langer causes any such damage, Langer shall, at its sole expense, repair and replace the Path back to its original condition.

C. ADAMS DRIVE NORTH EXTENSION

1. City Commitments. Except as otherwise provided in this section, as soon as reasonably practicable and in any event prior to Langer's construction of any portion of Adams Drive north of the PUD's northern boundary, the City, at the City's sole cost and expense, will take the following actions:
 - a. Acquire the necessary right-of-way for and complete the surveying, design, and engineering for construction of an extension of Adams Drive ("North Extension") from the north side of the intersection with Tualatin-Sherwood Road, north to the existing stub road connecting to Highway 99W, with the alignment to curve east around the PGE substation and connect to the east end of the Home Depot stub road. The street will be aligned and constructed in a manner consistent with the "60-percent drawings" prepared by Harper Hoff Peterson Righellis Inc, dated February 2010 and on file with the City (the "North Extension Plans"). The right-of-way, design and engineering shall anticipate and include at least 43 p.m. peak-hour vehicle trips per acre from Phase 4 to accommodate redevelopment of Phase 4.

Any substantial changes to the alignment and cross-section shall require an amendment to this Agreement. Such amendment shall only relate to this section of the Agreement, and all other terms and conditions of this Agreement shall remain in full force and effect. A "substantial change" may include but is not limited to an increase in the number of lanes, an increase in the right-of-way width by 10 or more feet, requiring additional landscaping, medians, or pedestrian paths, shifting the alignment east or west by fifty (50) or more feet, and/or any other changes that will substantially increase the cost of construction.

- b. Obtain all necessary permits for the construction and operation of the North Extension, including without limitation, all permits associated with impacts to wetlands, all approach and/or signal permits required by the Oregon Department of Transportation for the intersection of Highway 99W and the existing stub road, and all approach permits required by Washington County for the connection of the North Extension and Tualatin-Sherwood Road.
- c. Provide for the mitigation of any impacts to wetlands associated with the alignment and construction of the North Extension.
- d. Otherwise remove any legal or planning constraints to the construction of the North Extension.
- e. Pay any extraordinary labor costs associated with Langer's performance of its obligations under Section C.2., where "extraordinary labor costs" means any

costs required by law to exceed an arms-length privately negotiated rate solely due to the nature of the improvement.

- f. Pay any extraordinary construction costs associated with Langer's performance of its obligations under Section C.2. that are attributable to extraordinary environmental or geographic conditions.
- g. Pursuant to the City's standard timeline and procedure in such instances, assume maintenance obligations for all of the North Extension following the City's final inspection approval of the North Extension.
- h. Permit Langer to assume, for purposes of completing the required traffic study, that the North Extension has been planned and funded for construction prior to development of Phases 6 and 7 pursuant to Langer's alternative commitments to construct the North Extension or make a payment in lieu thereof pursuant to Section C.2. below.
- i. Permit Langer to assume, for purposes of completing the required traffic study, that the North Extension has been planned and funded for construction prior to the redevelopment of Phases 4 pursuant to Langer's alternative commitments to construct the North Extension or make a payment in lieu thereof pursuant to Section C.2. below.
- j. The City will not require the closure of any residential access to Phase 4 from Tualatin-Sherwood Road until redevelopment of Phase 4. The City will reimburse Langer for the cost of relocating and rebuilding any access to and from the existing commercial uses on Phase 4 resulting from the closure of any access due to the construction of the North Extension, including any necessary relocation of administrative facilities associated with the commercial use.
- k. In the event Langer pays a fee in lieu of construction as described in Section C.2. below, the City will:
 - (A) Place the payment into an existing or newly-created interest-bearing City Trust and Agency Fund;
 - (B) Grant credits for transportation System Development Charges ("SDC's") otherwise payable by Langer as if Langer had constructed the North Extension; and
 - (C) Use the payment-in-lieu exclusively for the construction of the North Extension. However, if the City has not entered into a contract for the construction of the North Extension or any portion thereof within five (5) years after Langer deposits the fee with the City, the City shall return the fee-in lieu, together with any interest thereon to Langer, Langer's successor or a

person designated by Langer's successor, minus any amount provided as a credit against transportation SDC's under paragraph (B) above. This Agreement does not constitute a "contract for construction of the North Extension" for purposes of this subsection.

2. Langer Commitments. Langer agrees to take the following actions with respect to the North Extension:
 - a. Subsequent to the City's performance of its obligations set forth in Section C.1. of this Agreement but prior to issuance of the final occupancy permit for any structure included in the development of Phase 6, Langer will substantially construct the North Extension consistent with the alignment and cross-section described in Section C.1.a. of this Agreement. However, in the event the City exercises its option to construct the South Extension under Section B.3. of this Agreement, Langer will substantially construct the North Extension prior to issuance of the final occupancy permit for any structure included in the development of Phases 6 or 7.
 - b. Alternatively, in the event the City has not substantially performed the obligations set forth in Section C. 1.a. to C.1.d. of this Agreement by a date that is sixty (60) days after Langer submits construction drawings for public improvements associated with the development of Phase 6 to the City, Langer shall submit a fee in lieu of construction in an amount equal to the cost estimate for the construction of the North Extension prior to the issuance of an occupancy permit for any structure included in the development of Phase 6. Langer's timely deposit of a fee in lieu under this paragraph shall fully satisfy Langer's obligations under Section C.2.a. of this Agreement and shall trigger the City's performance of its commitments under Section C.1.k. of this Agreement. In the event the City exercises its option to construct the South Extension under Section B.3. of this Agreement, the references to "Phase 6" in this subparagraph b. shall be replaced with "Phases 6 or 7."
 - c. In the event the City refunds the fee-in-lieu as described in Section C.1.k(C) of this Agreement prior to the redevelopment of Phase 4, and subsequent to the performance of the City's other obligations under Section C.1., Langer will substantially construct the North Extension consistent with the alignment and cross-section provided by the City prior to the issuance of an occupancy permit for any structure included in the redevelopment of Phase 4. In the event the City is still in possession of the fee-in-lieu at the time Phase 4 redevelops, the City will refund the fee to Langer, including any interest thereon, or will not require the construction of the North Extension as a condition of redevelopment.

D. RAIL CROSSING

1. City Commitments. As soon as reasonably practicable, the City, at the City's sole cost and expense, will take the following actions with respect to the Rail Crossing:
 - a. Acquire the necessary right-of-way for the Rail Crossing;
 - b. Obtain all required crossing or other permits from ODOT Rail and any other applicable agencies associated with the Rail Crossing;
 - c. Complete the design, engineering, and construction of the Rail Crossing; and
 - d. Use all reasonable best efforts to complete these actions and connect the South Extension to Oregon Street via the Rail Crossing no later than the date of issuance of occupancy permits for the development of Phases 6 and 7; provided, however, the failure to complete these actions by such date shall not be grounds to deny the issuance of such occupancy permits.
2. Langer Commitments. None.

E. CENTURY DRIVE

1. Langer Commitments. Langer agrees to take the following actions with respect to Century Drive:
 - a. Prior to issuance of final occupancy permits for any structure located in Phase 6 or Phase 7, design and substantially construct a reasonably direct vehicular connection between the existing terminus of Century Drive on the western boundary of the PUD and existing City right-of-way at the eastern boundary of the PUD ("Century Drive Connection"). The Century Drive Connection shall be constructed to the adjusted street standard described in Section E.2.a. below.
 - b. Following construction, dedicate a right-of-way easement to the City for the Century Drive Connection.
 - c. Provide the City with copies of receipts of eligible expenses where "eligible expenses" is defined to include all hard and soft costs of labor and materials associated with all aspects of the design, engineering, and construction, including applicable consultant fees, of the Century Drive Connection that exceed the cost of designing and constructing the Century Drive Connection as a standard parking lot drive aisle ("Eligible Expenses").

2. City Commitments. The City agrees to take the following actions with respect to Century Drive:
 - a. To work with Langer to achieve an adjustment to the relevant City street standards so that the nature, location, and design of the Century Drive Connection requires the minimum necessary right-of-way to provide a vehicular connection and includes traffic calming measures such as restrictions on through traffic for trucks.
 - b. Reimburse Langer for all undisputed Eligible Expenses within thirty (30) days after the City receives the receipts described in Section E.1.c.. City will immediately contact Langer regarding any disputed expenses and attempt to resolve the dispute within 90 days of the date the receipt containing the expense is received by the City. Any disputed expense that remains unresolved after 90 days shall be submitted to mediation as provided in Section I.12. of this Agreement; and
 - c. Pursuant to the City's standard timeline and procedure in such instances, accept Langer's dedication of the Century Drive Connection following final inspection approval and thereafter assume maintenance obligations for same.

F. STORMWATER FACILITY

1. Langer Commitments.
 - a. Prior to issuance of a final occupancy permit for the first structures located in Phases 6 or 7, Langer will design and substantially construct the "Stormwater Facility on Phase 8 (including any necessary portions of Phase 6), to accommodate existing stormwater detention and treatment for the PUD (including development of Phases 6, 7 and 8), and any detention and treatment associated with the South Extension and the Century Drive Connection. In conjunction with this construction, Langer retains the right to terminate use of the Existing Facilities and any Temporary Facility constructed pursuant to Section B.3.c. of this Agreement, provided the stormwater detention and treatment functions of the Existing Facilities and any Temporary Facility are incorporated into the Stormwater Facility and subject to any written agreements relating to the Existing Facilities. Langer retains the right to expand the Stormwater Facility to serve other public rights-of-way and uses outside the PUD in Langer's sole discretion, provided such expansion otherwise complies with City standards, including without limitation, awarding credits for SDC's.
 - b. Following construction, Langer will dedicate the Stormwater Facility to the public for use as a stormwater detention and treatment facility.

2. City Commitments.

- a. The City agrees to work with Langer, to the extent allowed by law, to issue any land use approvals related to termination of the Existing Facilities through an administrative process, to facilitate any related process for the vacation of any prior public dedications associated with the Existing Facilities, and to modify the existing recorded easement document among Langer and the City relating to the Existing Facilities.
- b. The City agrees to accept the dedication of the Stormwater Facility following final inspection approval and thereafter assume the maintenance obligations for same.

G. RENAMING OF ADAMS DRIVE

1. Langer Commitments. Prior to Langer's dedication of any portion of Adams Drive as described in this Agreement, Langer will submit a petition to the City to rename the completed portion of Adams Drive in accordance with the street name standards of ZCDC 16.108.010.4.A-C. Langer agrees to select a single name for Adams Drive from the southern end of the South Extension to the northern end of the North Extension.
2. City Commitments.
 - a. Provided the petition is submitted in the manner described in ZCDC 16.108.010.3, the City will support a petition received from Langer to rename the completed portion of Adams Drive.
 - b. If the petition is approved by the City Council, the City shall install standard City street signage identifying Adams Drive by its new name.

H. TRANSPORTATION CHARGES, FEES, AND CREDITS

1. Transportation Development Tax. The calculation and assessment of any Transportation Development Tax ("TDT"), including any TDT credits, will be made according to the Washington County TDT ordinance. Improvements to Tualatin-Sherwood Road will be creditable towards Washington County TDT's as allowed in Washington County's ordinance. It is the parties' mutual understanding that this ordinance provides full TDT credits for turn lanes and 50% or 66.67% for traffic signals for a four- and three-leg intersection, respectively. The City's commitment to this provision is a material inducement for Langer's agreement to complete the various public improvements set forth in this Agreement.

For the purpose of determining the number of weekday trips generated by all commercial land uses in Phases 4, 6, 7, and 8 of the PUD, the land use

category "Shopping Center" from ITE Trip Generation, 7th Edition, shall be applied to the Washington County TDT Ordinance for the calculations of the Washington County TDT.

2. Transportation SDC's.

The City shall calculate and assess the Project with SDC's and credits for SDC's, pursuant to the City's Municipal Code, as it may be amended from time to time, and subject to any resolutions adopted by the City implementing same.

For the purpose of determining the number of weekday trips generated by all commercial land uses in Phases 4, 6, 7, and 8 of the PUD, the land use category "Shopping Center" from ITE Trip Generation, 7th Edition, shall be applied to the City's SDC ordinance for the calculations of the City's SDC's.

3. Credits.

- a. Langer shall be entitled to seek SDC credits from the City and TDT credits from Washington County for all qualifying improvements and right-of-way dedications made by Langer, subject to the then applicable provisions of Oregon law and applicable ordinances. To the extent allowed by law, the City shall apportion SDC and TDT charges in the manner that maximizes the beneficial use of any resulting credits for Langer. In the event the City amends its SDC ordinance to eliminate the Transportation SDC prior to Langer's redemption of otherwise valid SDC credits, the City shall exercise good faith and best efforts to provide Langer a financial benefit in an amount equal to the value of any unredeemed credits in a manner consistent with applicable law, provided the City is not obligated to ensure such benefit or other return on the unredeemed credits.
 - b. The City hereby determines that, for purposes of qualifying for and administering SDC and TDT credits, Langer's construction of public improvements and dedication of right-of-way to the City pursuant to this Agreement are existing condition(s) of approval of the PUD, as it has been modified by the Minor Change approved in 2007.
4. Highway 99W Capacity Allocation Program. For purposes of calculating whether the trips associated with the regulated activities in Phases 6, 7, and 8 of the PUD exceed the trip limit of ZCDC 6.306.D.4, the City shall aggregate the trips and acreage of all such phases. As a result, the trips associated with the regulated activities of a single phase may exceed the trip limit that would otherwise apply if that phase were calculated individually, provided that the trips associated with all regulated activities for Phases 6, 7, and 8 do not exceed the trip limit in the aggregate. At each phase of development of the PUD, the number of reserve trips for the remaining phases will be identified in the applicable Trip Allocation Certificate.

I. TERMS AND CONDITIONS

1. Further Assurances. Each party shall execute and deliver any and all additional papers, documents and other assurances, and shall do any and all acts and things reasonably necessary in connection with the performance of its obligations hereunder in good faith, to carry out the intent of the parties hereto.
2. Modification of Amendment. No amendment, change or modification of this Agreement shall be valid, unless in writing and signed by the parties hereto.
3. Relationship. Nothing herein shall be construed to create an agency relationship or a partnership or joint venture between the parties.
4. Waiver of Default or Condition. In the event a party defaults in the performance of one or more of its obligations under this Agreement or in the event of the failure of a condition precedent to be satisfied under this Agreement, the nondefaulting party or beneficiary of the condition may, in its discretion, waive, as applicable, the default or satisfaction of condition hereunder and rescind any consequence of such default or failure of a condition, and in case of any such waiver or rescission, the parties shall be restored to their former positions and rights hereunder respectively, but no such waiver or rescission shall extend to or affect any subsequent or other default or condition precedent, or impair any right consequent thereon. No such waiver or rescission shall be in effect unless the same is in writing and signed by the nondefaulting party.
5. Burden and Benefit; Assignment. The covenants and agreements contained herein shall be binding upon and inure to the benefit of the parties and their successors and assigns and shall run with the land. Neither party may assign this Agreement without the prior written consent of the other party, which consent shall not be unreasonably withheld, conditioned or delayed.
6. Applicable Law. This Agreement shall be interpreted under the laws of the State of Oregon.
7. Notices. All notices, demands, consents, approvals and other communications which are required or desired to be given by either party to the other hereunder shall be in writing and shall be faxed, hand delivered, or sent by overnight courier or United States mail at its address set forth below, or at such other address as such party shall have last designated by notice to the other. Notices, demands, consents, approvals, and other communications shall be deemed given when delivered, three days after mailing by United States Mail or upon receipt if sent by courier; provided, however, that if any such notice or other communication shall also be sent by telecopy or fax machines,

such notice shall be deemed given at the time and on the date of machine transmittal.

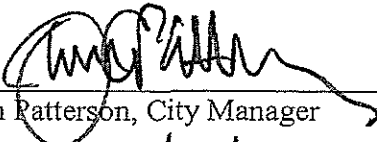
8. Merger. This Agreement contains the entire agreement among the parties hereto with respect to the subject matter hereof and cannot be amended or supplemented except by a written agreement signed by all parties.
9. Rights Cumulative. All rights, remedies, powers and privileges conferred under this Agreement on the parties shall be cumulative of and in addition to, but not restrictive of or in lien of, those conferred by law.
10. No Third Party Beneficiaries. None of the duties and obligations of any party under this Agreement shall in any way or in any manner be deemed to create any rights in, any person or entity other than the parties hereto.
11. Force Majeure. The parties shall use reasonable diligence to accomplish the purpose of this Agreement but shall not be liable to each other, or their successors or assigns, for damages, costs, attorneys' fees (including costs or attorneys' fees on appeal) for breach of contract, or otherwise for failure, suspension, diminution, or other variations of services occasioned by any cause beyond the control and without the fault of the parties. Such causes may include but shall not be limited to acts of God, acts of terrorism or the public enemy, acts of other governments (including regulatory entities or courts) in their sovereign or contractual capacity, fires, floods, epidemics, quarantines, restrictions, strikes, or failure or breakdown of transmission or other facilities ("Force Majeure"). If any party is delayed, hindered, or prevented in or from performing its respective obligations under this Agreement by any occurrence or event of Force Majeure, then the period for such performance shall be extended for that period that such performance is delayed, hindered, or prevented.
12. Mediation. Should the parties arrive at an impasse regarding any of the provisions of this Agreement, the parties agree to submit to the dispute to mediation prior to the commencement of litigation. The mediator shall be an individual mutually acceptable to both parties, but in the absence of agreement, either party may apply to the Presiding Judge, Washington County Circuit for appointment of a mediator. Each party shall share equally in the fees and costs of the mediator. Each party shall be responsible for its own attorneys fees and other expert fees. Mediation shall be at Portland, Oregon unless the parties agree otherwise. Both parties agree to exercise their best effort in good faith to resolve all disputes in mediation. Participation in mediation is a mandatory requirement of both the City and Langer and failure to comply with this requirement is a material breach of this Agreement. The schedule and time allowed for mediation will be mutually acceptable. If the dispute is not resolved by mediation, either party may file a lawsuit to resolve the dispute in a court with proper jurisdiction located in Washington County,

Oregon. Any trial shall be to the court without a jury. In the event of any such mediation or litigation, each party shall bear its own attorneys' fees and costs.

13. Conditions Precedent to Langer's Performance. Langer's commitments set forth in this Agreement are conditioned entirely upon the City's performance of all of its commitments that are precedent to the City's commitments under and in accordance with this Agreement, and the City's timely issuance of a PUD modification for the subject property.
14. Conditions Precedent to City's Performance. City's commitments set forth in this Agreement are conditioned entirely upon Langer's performance of all of its commitments that are precedent to the City's commitments under and in accordance with this Agreement.
15. Nature of Agreement. The City hereby confirms that it has approved and executed this Agreement pursuant to its governing charter and not pursuant to ORS 94.504 *et seq.*, and does further confirm that this Agreement does not constitute or concern the adoption, amendment, or application of the Statewide Planning Goals, a comprehensive plan provision, or a land use regulation, the City and Langer acknowledging and agreeing that any and all land use approvals required for the PUD are to be obtained (or have been obtained) in due course on another date in accordance with all applicable laws and regulations.
16. Amendment and Restatement. The Parties intend that this Agreement acts as a full and amended restatement of the original 2008 Agreement. Upon this Amended and Restated Agreement taking effect, the original 2008 Agreement shall no further force or effect.
17. Duration. This Agreement expires not later than January 1, 2015; provided, however, the expiration date of this Agreement shall be automatically extended to January 1, 2017 in the event that on January 1, 2015, Langer is not in material default of any provisions of this Agreement, has substantially built out Phase 7, and has obtained a certificate of occupancy for at least one (1) structure in Phase 6.

IN WITNESS WHEREOF,

For the City of Sherwood:



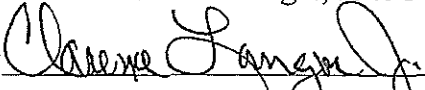
Jim Patterson, City Manager

James A. Patterson
City Manager
Sherwood, Oregon 97140

Date: 8/7/2010

For Langer:

Pamela and Clarence Langer, as to Phase 4:

By: 

Clarence Langer Jr.

Print Name: CLARENCE LANGER JR.

Date: 8-6-10

By: 

Pamela A. Langer

Print Name: Pamela A. Langer

Date: August 6, 2010

Langer Family, LLC, as to remainder of PUD:

By: 

Clarence Langer Jr.

Print Name: CLARENCE LANGER JR.

Title: Manager

Date: 8-6-10



Home of the Tualatin River National Wildlife Refuge

**SHERWOOD
COMPREHENSIVE PLAN
PART 3**

**ZONING & COMMUNITY
DEVELOPMENT CODE**

Prepared by
City of Sherwood, Oregon
20 NW Washington
Sherwood, OR 97140
(503) 625-5522

February 28, 1995

2.109 GENERAL COMMERCIAL (GC)

2.109.01 Purpose

The GC zoning district provides for wholesale and commercial uses which require larger parcels of land, and or uses which involve products or activities which require special attention to environmental impacts as per Chapter 8.

2.109.02 Permitted Uses

The following uses are permitted outright, provided such uses meet the applicable environmental performance standards contained in Chapter 8:

- A. Professional services, including but not limited to financial, medical and dental, social services, real estate, legal, artistic, and similar uses.
- B. General retail trade, including bakeries where product distribution is limited to retailing on the premises only.
- C. Personal and business services, including day cares, preschools, and kindergartens.
- D. Postal substations when located entirely within and incidental to a use permitted outright.
- E. Temporary uses, including but not limited to portable construction offices and real estate sales offices, subject to Section 4.500.
- F. Farm and garden supply stores, and retail plant nurseries, but excluding wholesale plant nurseries, and commercial farm equipment and vehicle sales which are prohibited.
- G. Agricultural uses such as truck farming and horticulture, excluding commercial buildings and structures, or the raising of animals other than household pets.
- H. Commercial trade schools.
- I. Motion picture and live theaters, but excluding drive-ins which are prohibited.
- J. Restaurants, taverns, and lounges.

- K. Automotive and other appliance and equipment parts sales, but excluding junkyards and salvage yards which are prohibited.
- L. Blueprinting, printing, publishing, or other reproduction services.
- M. Automobile, recreational vehicle, motorcycle, truck, manufactured home, boat, farm, and other equipment sales, parts sales, repairs, rentals or service.
- N. Wholesale trade, warehousing, commercial storage and mini-warehousing, except as prohibited in Sections 2.110.04E and 2.111.04E.
- O. Limited manufacturing, including only: beverage bottling plants, commercial bakeries, machine shops, and handicraft manufacturing.
- P. Building material sales, lumberyards, contractors storage and equipment yards, building maintenance services, and similar uses.
- Q. Veterinarian offices and animal hospitals.
- R. Agricultural uses including but not limited to farming, and wholesale and retail plant nurseries, with customarily associated commercial buildings and structures permitted.
- S. Medical, dental, and similar laboratories.
- T. Truck and bus yards and terminals.
- U. Adult entertainment businesses, subject to Section 2.208.

2.109.03 Conditional Uses

The following uses are permitted as conditional uses, provided such uses meet the applicable environmental performance standards contained in Chapter 8, and are approved in accordance with Section 4.300:

- A. Special care facilities, including but not limited to hospitals, sanitariums, convalescent homes, correctional institutions, and residential care facilities.
- B. Radio, television, and similar communication stations, including transmitters.
- C. Churches and parsonages.

- D. Cemeteries and crematory mausoleums.
- E. Public and private utility buildings, including but not limited to telephone exchanges, electric substation, gas regulator stations, treatment plants, water wells, and public works yards.
- F. Government offices, including but not limited to administrative office, post offices, and police and fire stations.
- G. Public use buildings including but not limited to libraries, museums, community centers and senior centers.
- H. Private lodges, fraternal organizations, country clubs, sports and racquet clubs, and other similar clubs, but excluding golf courses which are prohibited.
- I. Motels or hotels.
- J. Residential apartments when located on the upper floors, in the rear of, or otherwise clearly secondary to a commercial building.
- K. Public recreational facilities, including but not limited to parks, playfields, and sports and racquet courts, but excluding golf courses which are prohibited.
- L. Public and private schools providing education at the elementary school level or higher.
- M. Any incidental business, service, process, storage or display, not otherwise permitted by Section 2.109, that is essential to and customarily associated with any use permitted outright.

2.109.04 Prohibited Uses

The following uses are expressly prohibited:

- A. Junkyards and salvage yards.
- B. Industrial and manufacturing uses, except as specifically permitted by Sections 2.109.02 and 2.109.03.
- C. Any other prohibited use noted in Section 2.109.03.

2.109.05 Dimensional Standards

No lot area, setback, yard, landscaped area, open space, off-street parking or loading area, or other site dimension or

requirement, existing on, or after, the effective date of this Code shall be reduced below the minimum required by this Code. Nor shall the conveyance of any portion of a lot, for other than a public use or right-of-way, leave a lot or structure on the remainder of said lot with less than minimum Code dimensions, area, setbacks or other requirements, except as permitted by Section 4.400.

A. Lot Dimensions

Except as otherwise provided, required minimum lot areas and dimensions shall be:

1. Lot area: 10,000 square feet
2. Lot width at front property line: 70 feet
3. Lot width at building line: 70 feet

B. Setbacks

Except as otherwise provided, required minimum setbacks shall be:

1. Front yard: None, unless the lot abuts a residential zone, then the front yard shall be that required in the residential zone.
2. Side yards: None, unless abutting a residential zone or public park property, then there shall be a minimum of twenty (20) feet.
3. Rear yard: None, unless abutting a residential zone, then there shall be a minimum of twenty (20) feet.
4. Existing residential uses shall maintain setbacks specified in Section 2.105.04.

C. Height

Except as otherwise provided, the maximum height of structures shall be fifty (50) feet, except structures within one hundred (100) feet of a residential zone shall be limited to the height requirements of that residential area. Structures over fifty (50) feet in height may be permitted as conditional uses, subject to Section 4.300.

2.109.06 Community Design

For standards relating to off-street parking and loading, energy conservation, historic resources, environmental resources, landscaping, access and egress, signs, parks and open space, on-site storage, and site design, see Chapters 5, 8 and 9.

2.109.07 Flood Plain

Except as otherwise provided, Section 8.202 shall apply.

2.110 LIGHT INDUSTRIAL (LI)

2.110.01 Purpose

The LI zoning district provides for the manufacturing, processing, assembling, packaging and treatment of products which have been previously prepared from raw materials. Industrial establishments shall not have objectionable external features and shall feature well-landscaped sites and attractive architectural design, as determined by the Commission.

2.110.02 Permitted Uses

The following uses are permitted outright, provided such uses meet the applicable environmental performance standards contained in Chapter 8.

- A. Veterinarians offices and animal hospitals.
- B. Contractor's offices, and other offices associated with a use permitted in the LI zone.
- C. Public and private utilities including but not limited to telephone exchanges, electric substations, gas regulator stations, sewage treatment plants, water wells and public works yards.
- D. Glass installation and sales.
- E. Government offices, including but not limited to postal stations, administrative offices, police and fire stations.
- F. Automobile, boat, trailer, and recreational vehicle storage.
- G. Laboratories for testing and medical, dental, photographic, or motion picture processing, except as prohibited by Section 2.110.04E.
- H. Industrial hand tool and supply sales, primarily wholesaled to other industrial firms or industrial workers.
- I. Other similar light industrial uses subject to Section 4.600.
- J. Uses permitted outright in the GC zone, Section 2.109.02, except for adult entertainment businesses which are prohibited.

- K. Dwelling unit for one (1) security person employed on the premises, and their immediate family.
- L. PUDs, subject to the provisions of Section 2.202.
- M. Temporary uses, including but not limited to construction and real estate sales offices, subject to Section 4.500.

2.110.03 Conditional Uses

The following uses are permitted as Conditional Uses provided such uses meet the applicable environmental performance standards contained in Chapter 8 and are approved in accordance with Section 4.300:

- A. Manufacture, compounding, processing, assembling, packaging, treatment, fabrication, wholesaling, warehousing or storage of the following articles or products:
 - 1. Food products, including but not limited to candy, dairy products, beverages, coffee, canned goods and baked goods, and meat and poultry, except as prohibited by Section 2.110.03.
 - 2. Appliances, including but not limited to, refrigerators, freezers, washing machines, dryers; small electronic motors and generators; heating and cooling equipment; lawn mowers, rototillers, and chain saws; vending machines; and similar products and associated small parts.
 - 3. Cosmetics, drugs, pharmaceutical, toiletries, chemicals and similar products, except as prohibited by Section 2.110.04.
 - 4. Electrical, radio, television, optical, scientific, hearing aids, electronic, computer, communications and similar instruments, components, appliances and systems, and similar products and associated small parts.
 - 5. Building components and household fixtures, including but not limited to furniture, cabinets, and upholstery; ladders; mattresses, doors and windows; signs and display structures; and similar products and associated small parts.
 - 6. Recreational vehicles and equipment, including but not limited to bicycles, recreational watercraft, exercise equipment, and similar products and

associated small parts, but excluding motorized equipment unless otherwise permitted by Section 2.110.02 or 2.110.03.

7. Musical instruments, toys and novelties.
 8. Pottery and ceramics, limited to products using previously pulverized clay.
 9. Textiles and fiber products.
 10. Other small products and tools manufactured from previously prepared or semi-finished materials, including but not limited to bone, fur, leather, feathers, textiles, plastics, glass, wood products, metals, tobacco, rubber, and precious or semi-precious stones.
- B. Laundry, dry cleaning, dyeing or rug cleaning plants.
- C. Light metal fabrication, machining, welding and electroplating and casting or molding of semi-finished or finished metals.
- D. Offices associated with a use conditionally permitted in the LI Zone.
- E. Sawmills.

2.110.04 Prohibited Uses

The following uses are expressly prohibited:

- A. Adult Entertainment Businesses.
- B. Any use permitted or conditionally permitted under Section 2.111 that is not specifically listed in this Section, and any use listed in Section 2.111.04.
- C. Auto wrecking and junk or salvage yards.
- D. Distillation of oil, coal, wood or tar compounds and the creosote treatment of any products.
- E. Manufacture, compounding, processing, assembling, packaging, treatment, fabrication, wholesale, warehousing, or storage of the following products of substances, except for any incidental business, service, process, storage, or display that is essential to and customarily associated, in the City's determination, with any otherwise permitted or conditionally permitted use:

1. Abrasives, acids, disinfectants, dyes and paints, bleaching powder and soaps and similar products.
 2. Ammonia, chlorine, sodium compounds, toxics, and similar chemicals.
 3. Celluloid or pyroxylin.
 4. Cement, lime, gypsum, plaster of Paris, clay, creosote, coal and coke, tar and tar-based roofing and waterproofing materials and similar substances.
 5. Explosives and radioactive materials.
 6. Fertilizer, herbicides and insect poison.
- F. Metal rolling and extraction mills, forge plants, smelters and blast furnaces.
- G. Pulp mills and paper mills.
- H. Slaughter of livestock or poultry, the manufacture of animal by-products or fat rendering.
- I. Leather tanneries.
- J. General purpose solid waste landfills, incinerators, and other solid waste facilities.

2.110.05 Dimensional Standards

No lot area, setback, yard, landscaped area, open space, off-street parking or loading area, or other site dimension or requirement, existing on, or after, the effective date of this Code shall be reduced below the minimum required by this Code. Nor shall the conveyance of any portion of a lot, for other than a public use or right-of-way, leave a lot or structure on the remainder of said lot with less than minimum Code dimensions, area, setbacks or other requirements, except as permitted by Section 4.400.

A. Lot Dimensions

Except as otherwise provided, required minimum lot area and dimensions shall be:

1. Lot area: 10,000 sq. feet
2. Lot width at front property line: 100 feet
3. Lot width at building line: 100 feet

B. Setbacks

Except as otherwise provided, required minimum setbacks shall be:

1. Front yard: Twenty (20) feet, except when abutting a residential zone or public park, then there shall be a minimum of forty (40) feet.
2. Side yards: None, except when abutting a residential zone, then there shall be a minimum of forty (40) feet.
3. Rear yard: None, except when abutting a residential zone, then there shall be a minimum of forty (40) feet.
4. Corner lots: Twenty (20) feet on any side facing a street, except when abutting a residential zone, then there shall be a minimum of forty (40) feet.

C. Height

Except as otherwise provided, the maximum height shall be fifty (50) feet, except that structures within one hundred (100) feet of a residential zone shall be limited to the height requirements of the residential zone.

2.110.06 Community Design

For standards relating to off-street parking and loading, energy conservation, historic resources, environmental resources, landscaping, access and egress, signs, parks and open space, on-site storage, and site design, see Chapters 5, 8 and 9.

2.110.07 Flood Plain

Except as otherwise provided, Section 8.202 shall apply.

Exhibit I: Pre-Application Conference Documentation



Pre-Application Conference Notes

File # PAC 2021-012 Sentinel Storage 3

Meeting Date – September 28, 2021

Staff Contact - Eric Rutledge

rutledge@sherwoodoregon.gov

503-625-4242

Type IV Major Modification

Revised Final Notes dated 12-6-2021

The pre-application conference and notes cannot cover all code requirements and aspects that apply to the proposal. Failure of staff to provide information required by the code does not constitute a waiver of the applicable standards or requirements. It is recommended that a prospective applicant obtain and read the Zoning and Community Development Code and/or ask any questions of City staff relative to code requirements prior to submitting an application.

PROJECT SUMMARY

Proposed Project Name: Sentinel Storage 3

Proposal Description: Currently the subject site contains four storage buildings, a recreational vehicle (RV) parking canopy, site landscaping and associated improvements, and driveway access onto a private driveway and SW Langer Farms Parkway. The site is zoned Light Industrial – LI PUD.

The applicant is considering removing the existing ±14,250 sf RV parking canopy and replacing it with an enclosed 3-story mini-storage building with a ground floor footprint of ±25,000 sf. The total building area will be approximately 75,000 SF.

Applicant: Langer Storage 2, LLC
15585 SW Tualatin-Sherwood Rd.
Sherwood, OR 97140

Property Owner: Same as above

Site Address: 21900 SW Langer Farms Parkway

Tax Lot ID: 2S129DC000900

Land Use Designation: Light Industrial PUD

APPLICATION TYPE, TIMELINE & FEES

Full details on application type, noticing, and public hearing procedures listed under 16.72

Application Type and Hearing Authority

Type IV Major Modification

- The Type IV Hearing Authority is the Planning Commission and the Appeal Authority is City Council

Estimated Approval Timeline

- 30 day completeness review
- 30-45 days for public hearing date after application is deemed complete
- 14 day appeal period for all land use decisions

Land Use Fees

Fees as of July 1, 2021. Please confirm fees with staff prior to submittal as fee schedule is revised annually. Engineering plan review, building permit, and SDC fees separate.

- | | |
|--|------------|
| • Major Modification to Approved Site Plan (Type IV) | \$2,667.12 |
| • Final Site Plan Review | \$713.13 |
| • Publication and Distribution of Type IV Notice | \$466 |

APPLICATION SUBMITTAL REQUIREMENTS

See attached form Land Use Application and Site Plan Review Checklist. A Neighborhood Meeting is required prior to submitting a Type IV land use application. Please see attached Neighborhood Meeting Packet and Virtual Neighborhood Meeting Guidelines.

Note: Applicants are encouraged to submit 4 full and reduced size paper copies and one electronic copy for completeness review. The full number of paper copies and one updated electronic copy will be required after the application is deemed complete

SUMMARY OF APPLICABLE CODE CRITERIA (SZCDC Title 16)

*These sections **must** be addressed in the narrative submitted with the land use application*

<u>Division II. - LAND USE AND DEVELOPMENT</u>		<u>Division VI. - PUBLIC INFRASTRUCTURE</u>	
Chapter 16.12 - RESIDENTIAL LAND USE DISTRICTS		Chapter 16.104 - GENERAL PROVISIONS	
Chapter 16.22 - COMMERCIAL LAND USE DISTRICTS		Chapter 16.106 - TRANSPORTATION FACILITIES	X
Chapter 16.31 - INDUSTRIAL LAND USE DISTRICTS	X	Chapter 16.108 - IMPROVEMENT PLAN REVIEW	X
Chapter 16.36 - INSTITUTIONAL AND PUBLIC (IP) LAND USE DISTRICT		Chapter 16.110 - SANITARY SEWERS	X
Chapter 16.38 - SPECIAL USES		Chapter 16.112 - WATER SUPPLY	X
Chapter 16.40 - PLANNED UNIT DEVELOPMENT (PUD)		Chapter 16.114 - STORM WATER	X
Chapter 16.42 - HOME OCCUPATIONS		Chapter 16.116 - FIRE PROTECTION	X
Chapter 16.44 - TOWNHOMES		Chapter 16.118 - PUBLIC AND PRIVATE UTILITIES	X
Chapter 16.46 - MANUFACTURED HOMES			
Chapter 16.48 - NON-CONFORMING USES		<u>Division VII. - LAND DIVISIONS, SUBDIVISIONS, PARTITIONS, LOT LINE ADJUSTMENTS AND MODIFICATIONS</u>	
Chapter 16.50 - ACCESSORY STRUCTURES, ARCHITECTURAL FEATURES AND DECKS		Chapter 16.120 - SUBDIVISIONS	
Chapter 16.52 - ACCESSORY DWELLING UNITS		Chapter 16.122 - LAND PARTITIONS	
Chapter 16.54 - ADULT ENTERTAINMENT		Chapter 16.124 - PROPERTY LINE ADJUSTMENTS AND LOT CONSOLIDATIONS	
Chapter 16.56 - OTHER LAND USE ACTIONS		Chapter 16.126 - REPLATTING, LOT CONSOLIDATIONS AND VACATION OF PLATS	
Chapter 16.58 - CLEAR VISION AND FENCE STANDARDS		Chapter 16.128 - LAND DIVISION DESIGN STANDARDS	
Chapter 16.60 - YARD REQUIREMENTS			
Chapter 16.62 - CHIMNEYS, SPIRES, ANTENNAS, AND SIMILAR STRUCTURES		<u>Division VIII. - ENVIRONMENTAL RESOURCES</u>	
Chapter 16.64 - DUAL USE OF REQUIRED SPACE		Chapter 16.134 - FLOODPLAIN (FP) OVERLAY	
Chapter 16.66 - TRANSPORTATION FACILITIES AND IMPROVEMENTS		Chapter 16.136 - PROCEDURES	
Chapter 16.68 - INFILL DEVELOPMENT STANDARDS		Chapter 16.138 - MINERAL RESOURCES	
		Chapter 16.140 - SOLID WASTE	
<u>Division III. - ADMINISTRATIVE PROCEDURES</u>		Chapter 16.142 - PARKS, TREES AND OPEN SPACES	
Chapter 16.70 - GENERAL PROVISIONS		Chapter 16.144 - WETLAND, HABITAT AND NATURAL AREAS	
Chapter 16.72 - PROCEDURES FOR PROCESSING DEVELOPMENT PERMITS	X	Chapter 16.146 - NOISE	X
Chapter 16.76 - APPEALS		Chapter 16.148 - VIBRATIONS	X
		Chapter 16.150 - AIR QUALITY	X
<u>Division IV. - PLANNING PROCEDURES</u>		Chapter 16.152 - ODORS	X
Chapter 16.80 - PLAN AMENDMENTS		Chapter 16.154 - HEAT AND GLARE	X
Chapter 16.82 - CONDITIONAL USES		Chapter 16.156 - ENERGY CONSERVATION	X
Chapter 16.84 - VARIANCES			
Chapter 16.86 - TEMPORARY USES		<u>Division IX. - HISTORIC RESOURCES</u>	
Chapter 16.88 - INTERPRETATION OF SIMILAR USES		Chapter 16.160 - SPECIAL RESOURCE ZONES	
		Chapter 16.162 - OLD TOWN (OT) OVERLAY DISTRICT	
<u>Division V. - COMMUNITY DESIGN</u>		Chapter 16.164 - LANDMARK REVIEW	
Chapter 16.90 - SITE PLANNING	X	Chapter 16.166 - LANDMARK DESIGNATION	
Chapter 16.92 - LANDSCAPING	X	Chapter 16.168 - LANDMARK ALTERATION 16.168.010 - PROCEDURES	
Chapter 16.94 - OFF-STREET PARKING AND LOADING	X	16.168.020 - ALTERATION STANDARDS	
Chapter 16.96 - ON-SITE CIRCULATION	X	16.168.030 - VARIANCES TO ALTERATION STANDARDS	
Chapter 16.98 - ON-SITE STORAGE	X		
Chapter 16.100 - PERMANENT SIGNS			
Chapter 16.102 - TEMPORARY, PORTABLE AND BANNER SIGNS			

STAFF COMMENTS ON APPLICABLE CRITERIA AND GENERAL REQUIREMENTS

The following comments are based on staff's review of the information provided on the pre-application form and accompanying attachments.

Summary of important issues / information:

Required Land Use Permits

- Type IV Major Modification to Approved Site Plan
 - An increase in the floor area or height proposed for non-residential use by more than ten (10) percent requires a Major Modification.
- Type I Final Site Plan Review

Zoning & Proposed Land Uses

- The proposed land use of self-storage is not permitted in the LI zone under the current development code; however, “mini-warehousing” was a permitted use on the site in 2012 when the subject property was created by subdivision (Case File SUB 12-012). Mini-warehousing or “self-storage” is therefore a permitted use on the site until August 28, 2022 pursuant to ORS 92.040.
 - To avoid the risk of an appeal on the timing of the 10-year vesting period, the applicant is encouraged to obtain a final local decision on the application before August 28, 2022, the expiration date of the 10-year vesting period under ORS 92.040.

Major Modification Site Plan Review

- The scope of review for a Major Modification is limited to the modification request and does not open the entire site up for additional review unless impacted by the proposed modification.
- A Neighborhood Meeting is required prior to submitting a Type III - V application. See attached Neighborhood Meeting and Virtual Neighborhood Meeting packets.
- The development is located along a collector street (SW Langer Farms Pkwy.) and the industrial design standards under SZCDC § 16.90.020(D)(7) apply to portions of the building visible from and within 200 ft. of the street.
 - Based on the preliminary plans a 124 ft. setback is proposed for the three-story building. The existing building height along SW Langer Farms Parkway is approximately 18 ft. and the proposed 3-story building will likely be visible from the street when approached from the north and south. Portions of the building visible from the street shall meet the industrial design standards.

Development Standards

- As proposed in the preliminary site plan, the development meets the development standards for the LI zone. The proposed building appears to be approximately 200 ft. from the nearest residential zone and the height requirement under Footnote 11 does not apply

Development Standards	LI Zone
Lot area - industrial uses:	10,000 SF
Lot area - commercial uses (subject to <u>Section 16.31.050</u>):	10,000 SF
Lot width at front property line:	100 feet
Lot width at building line:	100 feet
Front yard setback ¹¹	20 ft.
Side yard setback ¹⁰	None
Rear yard setback ¹¹	None
Corner lot street side ¹¹	20 ft.
Height ¹¹	50 feet

¹⁰ When a yard is abutting a residential zone or public park, there shall be a minimum setback of forty (40) feet provided for properties zoned Employment Industrial and Light Industrial zones, and a minimum setback of fifty (50) feet provided for properties zoned General Industrial.

¹¹ Structures located within one hundred (100) feet of a residential zone shall be limited to the height requirements of that residential zone.

Landscaping

- The proposal does not appear to impact the on-site landscaping. No changes to the landscaping are required. New parking stalls added to the site would require parking lot landscaping.

Parking, Loading, and Maneuvering Areas

- A parking or loading zone is required outside of the new building to accommodate customers leaving their vehicle on the ground level while accessing the upper floor units. The applicant is encouraged to design a loading zone that meets the demand created by the new building while maintaining adequate emergency vehicle / fire apparatus circulation.

Utilities, Transportation, and Public Improvements

- Utilities, Stormwater, Transportation, and Public Improvement Requirements – please refer to the City of Sherwood Engineering Comments (attached)

AGENCY COMMENTS

City of Sherwood Engineering Comments

Please refer to the attached City of Sherwood Engineering comments from Craig Christensen, P.E. For questions contact christensenc@sherwoodoregon.gov / 503-925-2301

City of Sherwood Building Division

No written comments provided. Please contact Scott McKie, Building Official, with building code questions at mckies@sherwoodoregon.gov / 503-625-4217

Tualatin Valley Fire & Rescue Comments

No written comments provided. Please Contact Ty Darby at ty.darby@tvfr.com / 503-259-1409

APPLICANT QUESTIONS

Land Use

1. Please confirm that the site plan shown is acceptable, given the requirements of the City of Sherwood Zoning and Community Development Code (SZCDC).

The proposed site plan appears to meet the development standards (height, setback, etc.) of the Light Industrial zone.

2. Please discuss the process for a site plan modification of this type (City of Sherwood Local File no. MLP 16-02 and SP16-06).

A Major Modification is required. See details above.

3. Please confirm the existing use (self-storage) is permitted under Oregon Revised Statutes (ORS) 92.040 and the existing site approvals (City of Sherwood Local File No. MLP 16-02 and SP 16-06).

See response in notes above. The proposed use of self-storage is permitted outright on the site until August 28, 2022.

4. Are there any special building construction requirements (per the building code) for the planned ±75,000 sf building, aside from fire sprinklers and aerial apparatus access?

Please contact Scott McKie (Sherwood Building Official) and Ty Darby (Deputy Fire Marshal). No written comments were provided.

5. Please confirm the applicable minimum building setbacks and how they will be applied to the new building shown on the Preliminary Plans.

See comments above.

6. Please confirm the maximum floor area ratio and/or lot coverage requirements, if any.

No FAR or lot coverage standards are applicable.

7. The nature of the land use will remain the same (self-storage) and requires few parking spaces. Please confirm the parking requirements for the project will remain unchanged.

No new parking stalls will be required if adequate loading is provided outside of the new building.

8. Please confirm the existing site elements (trash roll-can service, 30% tree canopy, landscaping, etc.) will continue to be in conformance with City standards.

No issues were identified related to existing site improvements and landscaping.

9. Please let us know if any additional studies or analyses are necessary. Is a transportation impact study (TIS) required for this project?

A photometric plan is required with the land use submittal. A Geotech report may be required with the building permit application submittal (contact Scott McKie). No additional studies are anticipated.

10. Please confirm the applicability of the commercial/industrial design matrices.

The proposed building is within 200 ft. of a collector street and at 3 stories will be visible from the collector street. The building is required to comply with the industrial design standards.

11. Please discuss the anticipated review process and timelines for this application.

See above.

12. Please discuss all application fees (Land Use, SDCs, TDTs, etc.).

See above for land use fees. SDC fees can be determined using the link below. Building permit fees can be determined by contacting the Building Dept. See contact info for Karen Abdill below.

<https://www.sherwoodoregon.gov/engineering/page/system-development-charges-sdc>

13. Please discuss any future changes to the Zoning and Community Development Code and what impact those Code changes may have on this project.

No changes are anticipated that would impact this project

Street/Transportation/Circulation

14. Please confirm the site circulation (minimum 25-foot drive aisles) as shown on the Preliminary Plans is sufficient and meets City standards.

Two-way industrial drive aisles are required to be 24 ft. wide. The site plan should consider fire apparatus access requirements and any new loading zones to serve the building.

15. Please confirm the existing site access is permitted to remain unchanged.

No changes are anticipated to the access.

Public Services/Utilities/Natural Resources

16. CWS R&O 19-5 lists “Construction on lots in subdivisions meeting the criteria of ORS 92.040(2) are not included in the definition of development (See 1.03.15.b.2 of R&O 19-5). ORS 92.040(2) reads After September 9, 1995, when a local government makes a decision on a land use application for a subdivision inside an urban growth boundary, only those local government laws implemented under an acknowledged comprehensive plan that are in effect at the time of application shall govern subsequent construction on the property unless the applicant elects otherwise.” The project site is part of the Langer Farms Subdivision which was submitted on March 30, 2012. The stormwater regulations in effect at the time of the subdivision application, was Clean Water Services R&O 07-20, therefore, R7O 07-20 should govern ‘development’ on this property. Please confirm the project does not meet the definition of ‘development’ per CWS R&O 19-5.

Please refer to the City of Sherwood Engineering comments.

17. Are there any special requirements or considerations for connecting to public services?

Please refer to the City of Sherwood Engineering comments.

Contact Information and Helpful Links

PLANNING DEPARTMENT INFORMATION

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Eric Rutledge , Associate Planner	rutledgee@sherwoodoregon.gov / 503-625-4242
Joy Chang , Senior Planner	changj@sherwoodoregon.gov / 503-625-4214

Current Project Page:

https://www.sherwoodoregon.gov/projects?tid=All&field_project_status_value=All&field_project_type_tid=93&keys=&=Apply

Planning Applications and Checklists:

<https://www.sherwoodoregon.gov/planning/page/land-use-applications-and-checklists>

ENGINEERING DEPARTMENT INFORMATION

Jo Guediri , Engineering Program Associate	guedirij@sherwoodoregon.gov / 503-925-2309
Craig Christensen , Civil Engineer P.E.	christensenc@sherwoodoregon.gov / 503-925-2301
Bob Galati , City Engineer P.E.	galatib@sherwoodoregon.gov / 503-925-2303

FOR WATER FLOW INFORMATION: RICH SATTLER sattlerr@sherwoodoregon.gov

Engineering Department Home Page: <https://www.sherwoodoregon.gov/engineering>

Permit Process Packet: www.sherwoodoregon.gov/engineering/page/eng-permit-process-packet-forms

System Development Charges (SDC) Information:

<https://www.sherwoodoregon.gov/engineering/page/system-development-charges-sdc>

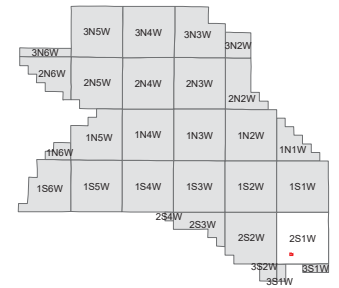
BUILDING DEPARTMENT INFORMATION

Karen Abdill , Lead Building Permit Specialist	abdillk@sherwoodoreong.gov / 503-625-4226
Scott McKie , Building Official	mckies@sherwoodoregon.gov / 503-625-4217

Building Department Home Page: <https://www.sherwoodoregon.gov/building>

Building Permit Forms: <https://www.sherwoodoregon.gov/building/page/permit-forms>

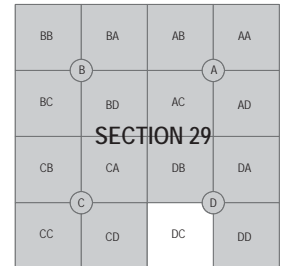
Exhibit J: Washington County Assessor's Map



WASHINGTON COUNTY OREGON
SW 1/4 SE 1/4 SECTION 29 T2S R1W W.M.
SCALE 1"= 100'

36	31	32	33	34	35	36	31
1	6	5	4	3	2	1	6
12	7	8	9	10	11	12	7
13	18	17	16	15	14	13	18
24	19	20	21	22	23	24	19
25	30	29	28	27	26	25	30
36	31	32	33	34	35	36	31
1	6	5	4	3	2	1	6

FOR ADDITIONAL MAPS VISIT OUR WEBSITE AT
www.co.washington.or.us

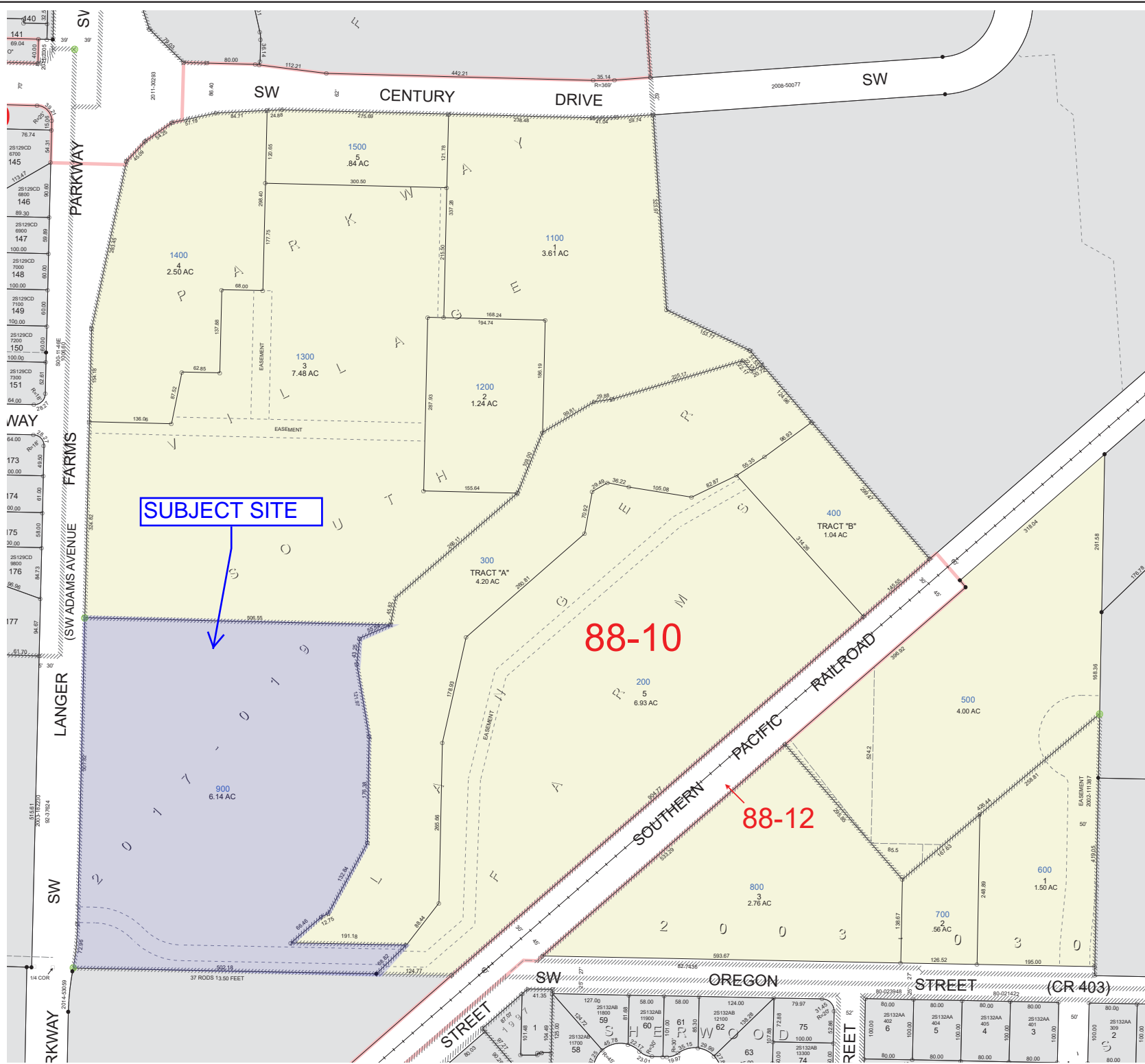


Cancelled Taxlots For: 2S129DC
 100,1000,



PLOT DATE: 2/18/2021
 Rotation: 0
FOR ASSESSMENT PURPOSES
ONLY - DO NOT RELY ON
FOR OTHER USE

Map areas delineated by either gray shading or a cross-hatched pattern are for reference only and may not indicate the most current property boundaries. Please consult the appropriate map for the most current information.



SUBJECT SITE

88-10

88-12

Exhibit K: Preliminary Stormwater Report

Sentinel Storage Annex II Site Modification Sherwood, Oregon Stormwater Report

Date: February 2022

Client: Langer Storage 2, LLC
15585 SW Tualatin-Sherwood Road
Sherwood, OR 97140

Engineering Contact: John Christiansen, PE, CWRE - Principal
(503) 563-6151 | johnc@aks-eng.com

Prepared By: Andreas Collins
(503) 563-6151 | collinsa@aks-eng.com

Engineering Firm: AKS Engineering & Forestry, LLC
12965 SW Herman Road, Suite 100
Tualatin, OR 97062

AKS Job Number: 4668-01



RENEWAL DATE: 12/31/23



www.aks-eng.com

Contents

1.0	Purpose of Report	2
2.0	Project Location/Description	2
3.0	Regulatory Design Criteria	2
3.1	Stormwater Quantity	2
3.2	Hydromodification	2
3.3	Stormwater Quality.....	3
4.0	Design Methodology	4
5.0	Design Parameters	4
5.1	Design Storms	4
5.2	Predeveloped Site Conditions.....	4
5.2.1	Site Topography	4
5.2.2	Land Use.....	4
5.3	Soil Type	5
5.4	Post-Developed Site Conditions.....	5
5.4.1	Site Topography	5
5.4.2	Land Use.....	5
5.4.3	Description of Off-Site Contributing Basins	5
6.0	Stormwater Analyses	5
6.1	Proposed Stormwater Conduit Sizing and Inlet Spacing.....	5
6.2	Proposed Stormwater Quality Control Facility	5
6.3	Hydromodification	5
6.4	Proposed Stormwater Quantity Control Facility.....	6
6.5	Downstream Analysis.....	6
7.0	Stormwater Analyses	7

Tables

Table 5-1: Rainfall Intensities.....	4
Table 5-2: Hydrologic Soil Group Ratings.....	5
Table 6-1: Stormwater Runoff Flow Summary	6

Appendices

Appendix A: Vicinity Map

Appendix B: Post-Developed Basin Maps

Appendix C: Predeveloped and Post-Developed HydroCAD Analysis

Appendix D: NRCS Soil Resource Report

Appendix E: TR55 Runoff Curve Numbers

Appendix F: Post-Development Catchment Basins Map from Langer Farms Regional Facility Final Stormwater Report, Prepared by AKS Engineering (with annotations)

Preliminary Stormwater Report
SENTINEL STORAGE ANNEX II SITE MODIFICATION
SHERWOOD, OREGON

1.0 Purpose of Report

The purpose of this report is to analyze the effects the proposed development will have on the existing stormwater conveyance system; document the criteria, methodology, and informational sources used to design the proposed stormwater system; and present the results of the preliminary hydraulic analysis.

2.0 Project Location/Description

The proposed improvements are positioned on the western half of Sentinel Storage Annex II, located at 21900 SW Langer Farms Pkwy, Sherwood, Oregon 97140 (Tax Lot 900, Washington County Assessor's Map 2S 1 29DC).

The proposed project consists of the replacement of an existing recreational vehicle storage canopy with an enclosed self-storage building. The site improvements will include the construction of a new stormwater detention facility and associated underground utilities.

The stormwater facility will use a detention pipe and flow control manhole designed to provide detention per the Clean Water Services (CWS) hydromodification standards.

3.0 Regulatory Design Criteria

3.1 Stormwater Quantity

Per *CWS Design and Construction Standards Manual for Sanitary Sewer and Surface Water Management* (R&O 19-5, as amended by R&O 19-22), Section 4.02.1, Mitigation Requirement, the District or City shall determine which of the following techniques may be used:

- a. *Construction of permanent on-site stormwater quantity detention facilities designed in accordance with this Chapter; or*
- b. *Enlargement or improvement of the downstream conveyance system in accordance with this Chapter and Chapter 5; or*
- c. *Payment of a Storm and Surface Water Management System Development Charge (SWM SDC), as provided in CWS Ordinance 28, which includes a water quantity component to meet these requirements. If district or City requires that an on-site detention facility be constructed, the development shall be eligible for a credit against SWM SDC fees, as provided in District Ordinance and Rules.*

Per R&O 19-5, as amended by R&O 19-22, Section 4.02.2, Criteria for Requiring On-Site Detention for Conveyance Capacity, on-site detention is required when any of the following conditions exist:

1. *There is an identified downstream deficiency and the District or City determines that detention rather than conveyance system enlargement is the more effective solution.*
2. *There is an identified regional detention site within the boundary of the development.*
3. *Water quantity facilities are required by District-adopted watershed management plans or subbasin master plans or District- approved subbasin strategy.*

3.2 Hydromodification

Per R&O 19-5, as amended by R&O 19-22, Section 4.03, Hydromodification Approach Requirements, implementing or funding techniques to reduce impacts to the downstream receiving water body is

required when a new development or other activities create or modify 1,000 square feet or more of impervious surfaces or increase the amount or rate of surface water leaving the site. The funding can be directed, or the following techniques can be implemented to reduce impacts to the downstream receiving water body:

- a. Construction of permanent LIDA designed in accordance with this Chapter; or
- b. Construction of a permanent stormwater detention facility designed in accordance with this Chapter; or
- c. Construction or funding of a hydromodification approach that is consistent with a District-approved subbasin strategy; or
- d. Payment of a Hydromodification Fee-In-Lieu.

Per R&O 19-5, as amended by R&O 19-22, Section 4.03.3, the receiving reach for this project is Rock Creek. The Risk Level for the receiving reach identified for this project is Low. The Development Class was determined using the Hydromodification Map provided by CWS. The project site is classified as a Developed Area. Per Section 4.08.1, Impervious Area Used in Design, the project site is classified as a Medium Project as it is greater than 12,000 and less than 80,000 square feet. Using these input parameters, per Table 4-2, Hydromodification Approach Project Category Table (shown below), the project falls within Category 2. See details in the appendices of this report for further information.

TABLE 4-2
HYDROMODIFICATION APPROACH PROJECT CATEGORY TABLE

Development Class/ Risk Level	Small Project 1,000 – 12,000 SF	Medium Project >12,000 – 80,000 SF	Large Project > 80,000 SF
Expansion/High	Category 1	Category 3	Category 3
Expansion/ Moderate		Category 2	
Expansion/ Low		Category 3	
Developed/ High		Category 2	Category 2
Developed/ Moderate		Category 3	
Developed/ Low		Category 2	

Table 4-2 from R&O 19-5, as amended by R&O 19-22

Per R&O 19-5, as amended by R&O 19-22, Section 4.03.5b, Hydromodification Approach Selection – Category 2, any of the following options may be used to address hydromodification:

1. Infiltration facility, using the Standard LIDA Sizing, described in Section 4.08.5; or
2. Peak-Flow Matching Detention, using design criteria described in Section 4.08.6; or
3. Combination of Infiltration facility and Peak-Flow Matching Detention, using criteria described in Section 4.08.5 and 4.08.6; or
4. Any option listed in Category 3.

3.3 Stormwater Quality

Per R&O 19-5, as amended by R&O 19-22, Section 4.04, Water Quality Treatment Requirements, implementing or funding a permanent water quality approach is required when a new development or

other activities create or modify 1,000 square feet or more of impervious surfaces, or increase the amount of stormwater runoff or pollution leaving the site. Unless there is a more efficient and effective regional approach within the subbasin that was designed to incorporate the development, or there is an approach in the subbasin which is demonstrated to have the capacity to treat the site.

A drainage report, titled *Langer Farms Regional Stormwater Facility Final Stormwater Report (Regional Facility Report)* and dated May 2013 by AKS Engineering, LLC (AKS), was prepared for the Langer Farms Regional Stormwater Facility (Regional Facility) constructed during the summer of 2013. Based on the information provided in the report, the subject site was included within the planning area of the Regional Facility. The previous report includes an exhibit that shows the “Area to be Treated by Regional Stormwater Facility.” An annotated version of this exhibit highlighting the subject site is included in Appendix A of this report. Therefore, the Sentinel Storage Annex II Site Modification will utilize the existing Regional Facility for Stormwater quality management.

4.0 Design Methodology

The Santa Barbara Urban Hydrograph (SBUH) Method was used to analyze stormwater runoff from the site. This method uses the Soil Conservation Service (SCS) Type 1A 24-hour design storm. HydroCAD 10.00-22 computer software aided in the analysis. Representative runoff curve numbers (CN) were obtained from the Natural Resources Conservation Service (NRCS) *Technical Release 55* and are included in the appendices.

5.0 Design Parameters

5.1 Design Storms

Stormwater mains, inlets, and laterals for the site are placed at locations that adequately collect and convey the stormwater for the proposed improvements. Per R&O 19-5, as amended by R&O 19-22, Section 5.05.2, the stormwater analysis used the 24-hour design storm for the evaluation and design of the existing and proposed stormwater facilities. The following 24-hour rainfall intensities from CWS Standard Drawing No. 1280 were used as the design storms for the recurrence interval:

Table 5-1: Rainfall Intensities

Recurrence Interval (Years)	Total Precipitation Depth (Inches)
2	2.50
5	3.10
10	3.45
25	3.90

5.2 Predeveloped Site Conditions

5.2.1 Site Topography

Existing on-site grades generally vary from ± 1 to 5 percent, with most of the site draining towards catch basins at local low points on site. The site elevations range from ± 203 feet to ± 193 feet above mean sea level (AMSL).

5.2.2 Land Use

The existing site consists of mini storage buildings, recreational vehicle storage canopy, asphalt drive isles, and landscaping.

5.3 Soil Type

The soil beneath the project area is classified as Quatama Loam, according to the NRCS Web Soil Survey for Washington County. The following table outlines the Hydrologic Soil Group rating for the soil type:

Table 5-2: Hydrologic Soil Group Ratings

NRCS Map Unit Identification	NRCS Soil Classification	Hydrologic Soil Group Rating
37A	Quatama Loam	C
37B	Quatama Loam	C

Further information on this soil type is included in the NRCS Soil Resource Report located in the appendices of this report.

5.4 Post-Developed Site Conditions

5.4.1 Site Topography

The on-site slopes will remain largely the same but will be modified to accommodate the construction of the new enclosed self-storage building. All stormwater from the modified impervious area will be collected by new or existing stormwater infrastructure and will not impact surrounding properties.

5.4.2 Land Use

The site's land use will remain unchanged.

5.4.3 Description of Off-Site Contributing Basins

The surrounding properties do not direct any stormwater runoff towards the development area.

6.0 Stormwater Analyses

6.1 Proposed Stormwater Conduit Sizing and Inlet Spacing

The proposed storm system pipes will be sized using Manning's equation to convey the peak flows from the 25-year storm event.

6.2 Proposed Stormwater Quality Control Facility

This project is comprised of redevelopment. Therefore, per R&O 19-5, as amended by R&O 19-22, Section 4.08, Stormwater Management Approach Sizing, the impervious area requiring treatment is defined as: "all new impervious and three times the modified impervious surface, up to the total existing impervious surface on the site". A regional facility constructed in 2013 provides water quality treatment for the total onsite impervious area of the Sentinel Storage Annex II. Since this project is comprised entirely of redeveloped impervious area and the regional facility already provides treatment for the total onsite impervious no additional water quality improvements area required.

6.3 Hydromodification

The proposed site improvements will reduce impacts to the downstream receiving water body by implementing an underground detention pipe and flow control manhole designed per CWS standards. Per R&O 19-5, as amended by R&O 19-22, Section 4.03.5b, Hydromodification Approach Selection – Category 2, hydromodification will be met to the fullest potential of the site by peak-flow matching. Post-developed runoff rates from the site will not exceed the predeveloped runoff rates for the 2-year, 5-year, 10-year, and 25-year design storms, when on-site stormwater infrastructure is accounted for.

6.4 Proposed Stormwater Quantity Control Facility

The proposed on-site improvements will use an underground detention pipe to provide detention for runoff from the redeveloped impervious areas, per CWS standards.

Basin 4.3-M and 4.4-M are composed of modified impervious area whose runoff will be collected and detained in the new underground detention pipe. All runoff from Basins 4.3-M and 4.4-M will be detained, with the allowable release meeting stormwater quantity mitigation requirements.

Allowable releases from Basins 4.3-M and 4.4-M will be reduced to or below 50 percent of the 2, 2, 5, 10, and 25-year storm events.

See Equations 1 & 2 for additional information regarding the allowable release rate for each storm event. Equation 1 defines the allowable release for only 50 percent of the 2-year storm event analysis, while Equation 2 defines the allowable release for the remainder of the storm events.

Equation 1: 50 percent of the 2-Year Storm Only

$$Allowable = 4.3E + 4.4E + \frac{4.3M + 4.4M}{2}$$

$$Allowable (50\% \text{ of } 2 \text{ Year}) = 0.35 \text{ cfs} + 0.58 + \frac{(0.04 \text{ cfs} + 0.05 \text{ cfs})}{2} = 0.98 \text{ cfs}$$

Equation 2: 2, 5, 10, and 25-year Storm Events

$$Allowable = 4.3E + 4.4E + 4.3M = 4.4M$$

cubic feet per second = cfs

Basins 4.3E and 4.4E are captured by the same area drains as Basins 4.3M and 4.4M. Therefore they are included in the pre to post flow comparison calculations.

Table 6-1: Stormwater Runoff Flow Summary

Storm Event	Predeveloped Flows from Areas to be Collected (cfs)	Post-Developed Detained Flows (cfs)	Difference (cfs)
50% of 2-year	0.98	0.98	-0.00
2-year	1.01	0.98	-0.03
5-year	1.33	1.29	-0.04
10-year	1.52	1.46	-0.06
25-year	1.77	1.77	0.00

6.5 Downstream Analysis

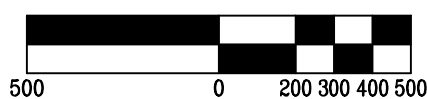
On-site detention is being provided, resulting in post-developed release rates that are equal to or less than the predeveloped conditions. Therefore, this development will not increase impacts nor reduce capacities in the downstream system. Consequently, a downstream analysis is not required for the project site.

Before entering the public system, all stormwater runoff for the development area will be detained by a new stormwater detention facility. Stormwater will then be conveyed via the existing stormwater

Appendix A: Vicinity Map



SCALE 1" = 500 FEET



DATE: 02/16/2022

VICINITY MAP

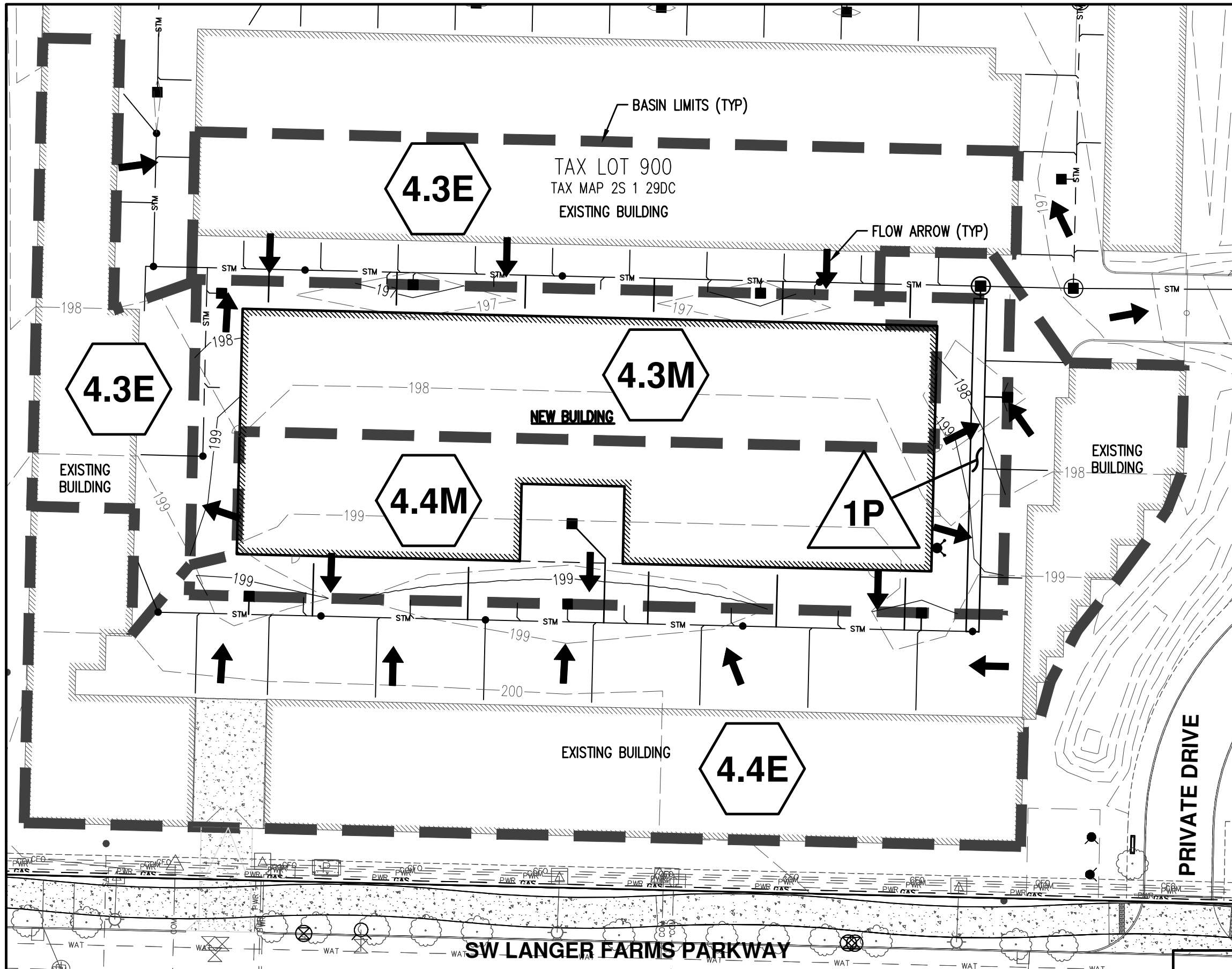
EXHIBIT
A

AKS ENGINEERING & FORESTRY, LLC
 12965 SW HERMAN RD, STE 100
 TUALATIN, OR 97062
 P: 503.563.6151 F: 503.563.6152 aks-eng.com



DRWN: APC
 CHKD: JPC
 AKS JOB:
 4668-01

Appendix B: Post-Developed Basin Maps



LEGEND

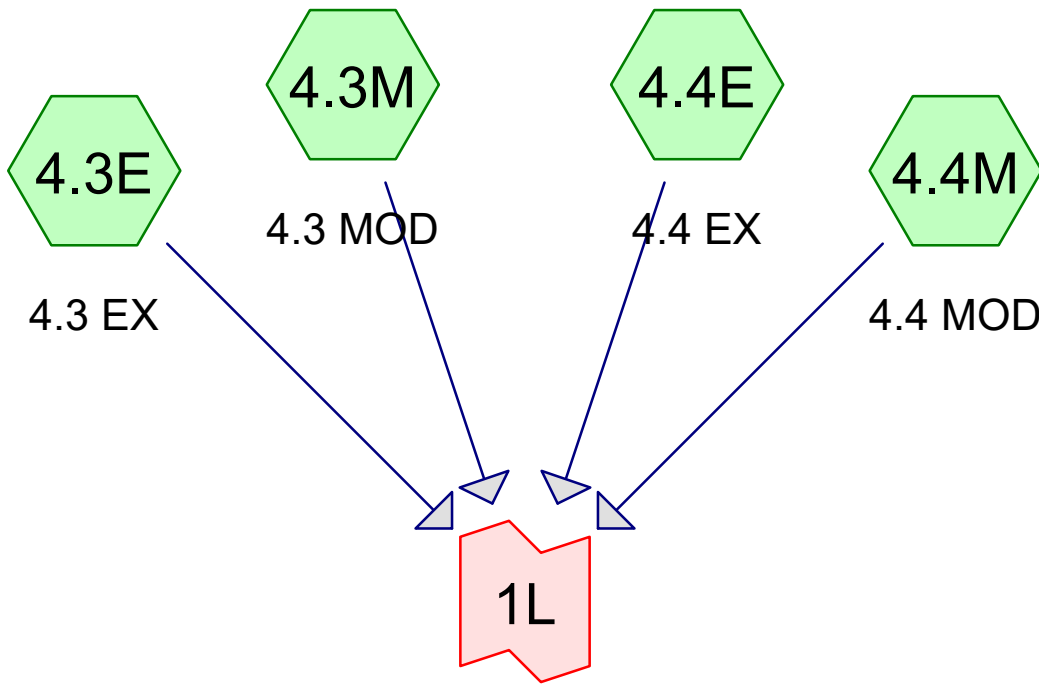
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EXISTING CONTOUR (5-FT)	--- 435 ---
FINISHED CONTOUR (1-FT)	— 434 —
FINISHED CONTOUR (5-FT)	— 435 —
SUBBASIN DELINEATION	— — — —
SUBBASIN	XX
STORMWATER POND	X
FLOW ARROW	→

DATE: 02/16/2022

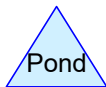
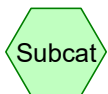
POST-DEVELOPED SITE STORMWATER CATCHMENT MAP	EXHIBIT B
SENTINEL STORAGE ANNEX II MODIFICATION	
AKS ENGINEERING & FORESTRY, LLC 12965 SW HERMAN RD, STE 100 TUALATIN, OR 97062 P: 503.563.6151 F: 503.563.6152 aks-eng.com	
DRWN: APC CHKD: JPC AKS JOB: 4668-01	

Appendix C: Predeveloped and Post-Developed HydroCAD Analysis

Pre-Developed HydroCAD Analysis



Flow Summary



4668-01 Pre-DEV

Prepared by {enter your company name here}

HydroCAD® 10.00-22 s/n 01338 © 2018 HydroCAD Software Solutions LLC

Printed 2/16/2022

Page 2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
1.610	98	Roof/Drive Aisle (4.3E, 4.4E)
0.890	75	Roof/Drive Aisle (4.3M, 4.4M)
2.500	90	TOTAL AREA

4668-01 Pre-DEV

Type IA 24-hr 2-YR Rainfall=2.50"

Prepared by {enter your company name here}

Printed 2/16/2022

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Page 3

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points x 2

Runoff by SBUH method, Split Pervious/Imperv.

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment4.3E: 4.3 EX

Runoff Area=26,357 sf 100.00% Impervious Runoff Depth=2.27"
Tc=5.0 min CN=0/98 Runoff=0.35 cfs 0.114 af

Subcatchment4.3M: 4.3 MOD

Runoff Area=17,554 sf 0.00% Impervious Runoff Depth=0.65"
Tc=5.0 min CN=75/0 Runoff=0.04 cfs 0.022 af

Subcatchment4.4E: 4.4 EX

Runoff Area=43,771 sf 100.00% Impervious Runoff Depth=2.27"
Tc=5.0 min CN=0/98 Runoff=0.58 cfs 0.190 af

Subcatchment4.4M: 4.4 MOD

Runoff Area=21,198 sf 0.00% Impervious Runoff Depth=0.65"
Tc=5.0 min CN=75/0 Runoff=0.05 cfs 0.026 af

Link 1L: Flow Summary

Inflow=1.01 cfs 0.353 af
Primary=1.01 cfs 0.353 af

Total Runoff Area = 2.500 ac Runoff Volume = 0.353 af Average Runoff Depth = 1.69"
35.59% Pervious = 0.890 ac 64.41% Impervious = 1.610 ac

Summary for Subcatchment 4.3E: 4.3 EX

Runoff = 0.35 cfs @ 7.88 hrs, Volume= 0.114 af, Depth= 2.27"

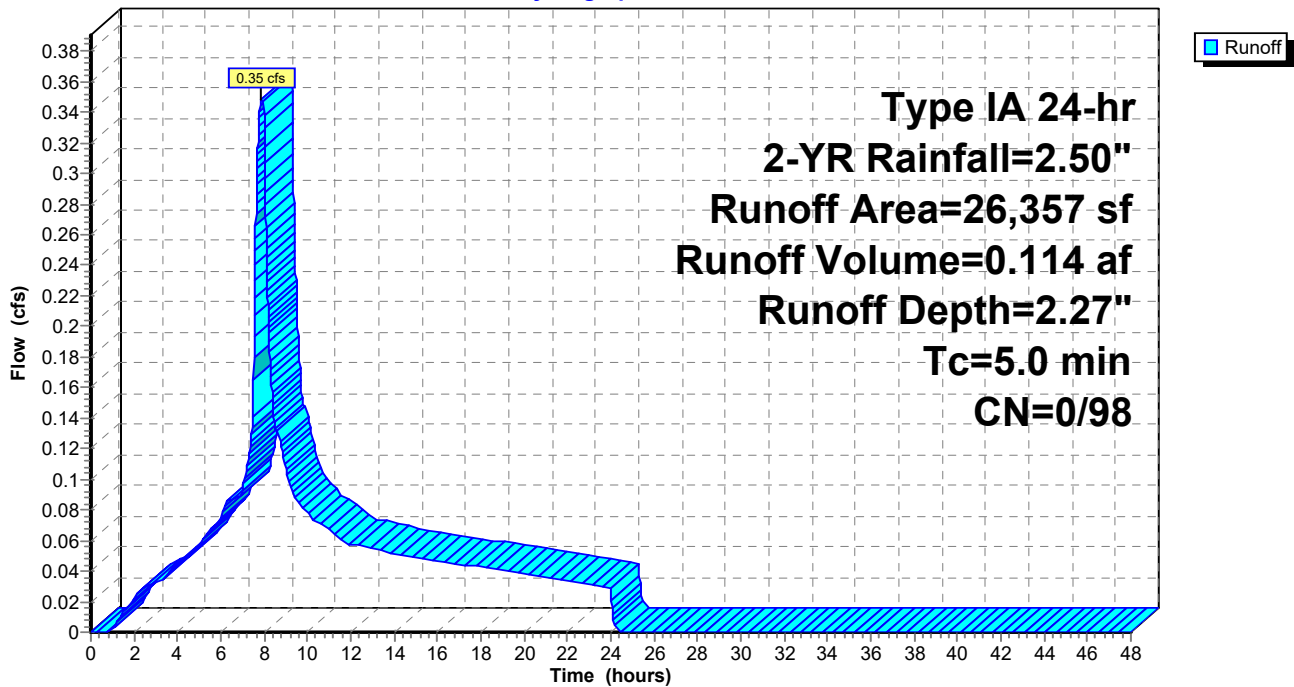
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type IA 24-hr 2-YR Rainfall=2.50"

Area (sf)	CN	Description
* 26,357	98	Roof/Drive Aisle
26,357		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 4.3E: 4.3 EX

Hydrograph



Summary for Subcatchment 4.3M: 4.3 MOD

Runoff = 0.04 cfs @ 8.00 hrs, Volume= 0.022 af, Depth= 0.65"

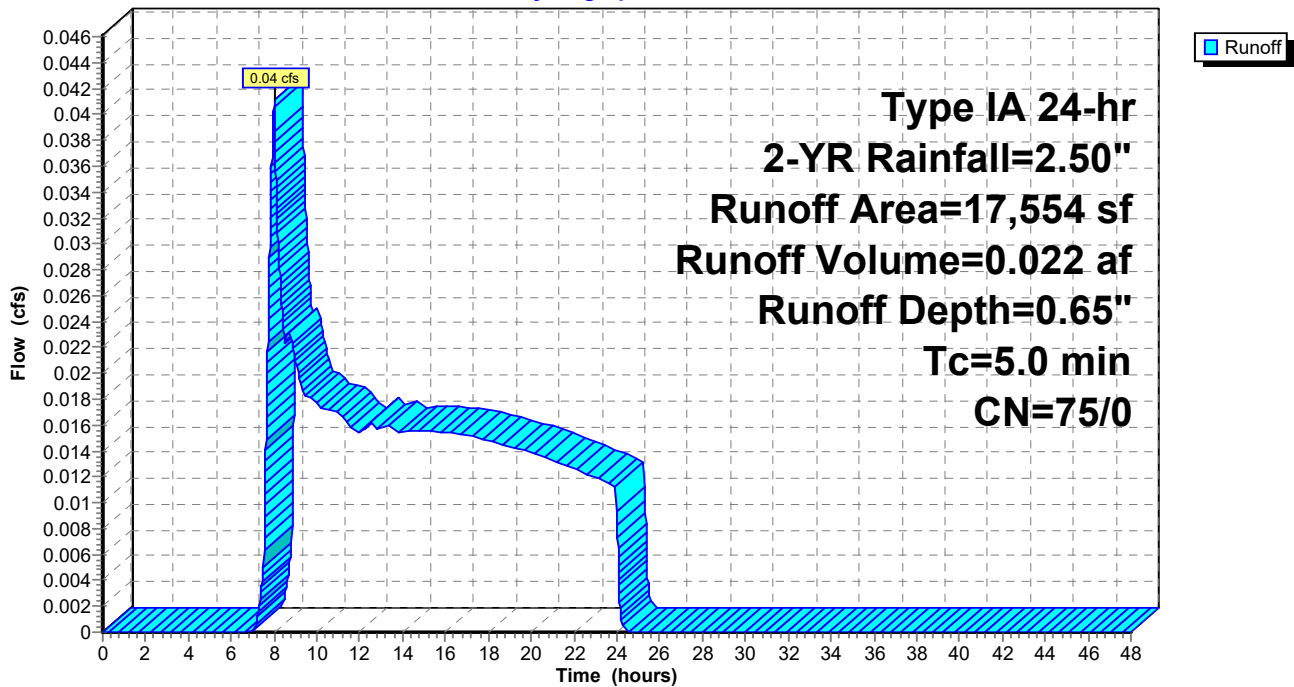
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type IA 24-hr 2-YR Rainfall=2.50"

Area (sf)	CN	Description
* 17,554	75	Roof/Drive Aisle
17,554		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 4.3M: 4.3 MOD

Hydrograph



Summary for Subcatchment 4.4E: 4.4 EX

Runoff = 0.58 cfs @ 7.88 hrs, Volume= 0.190 af, Depth= 2.27"

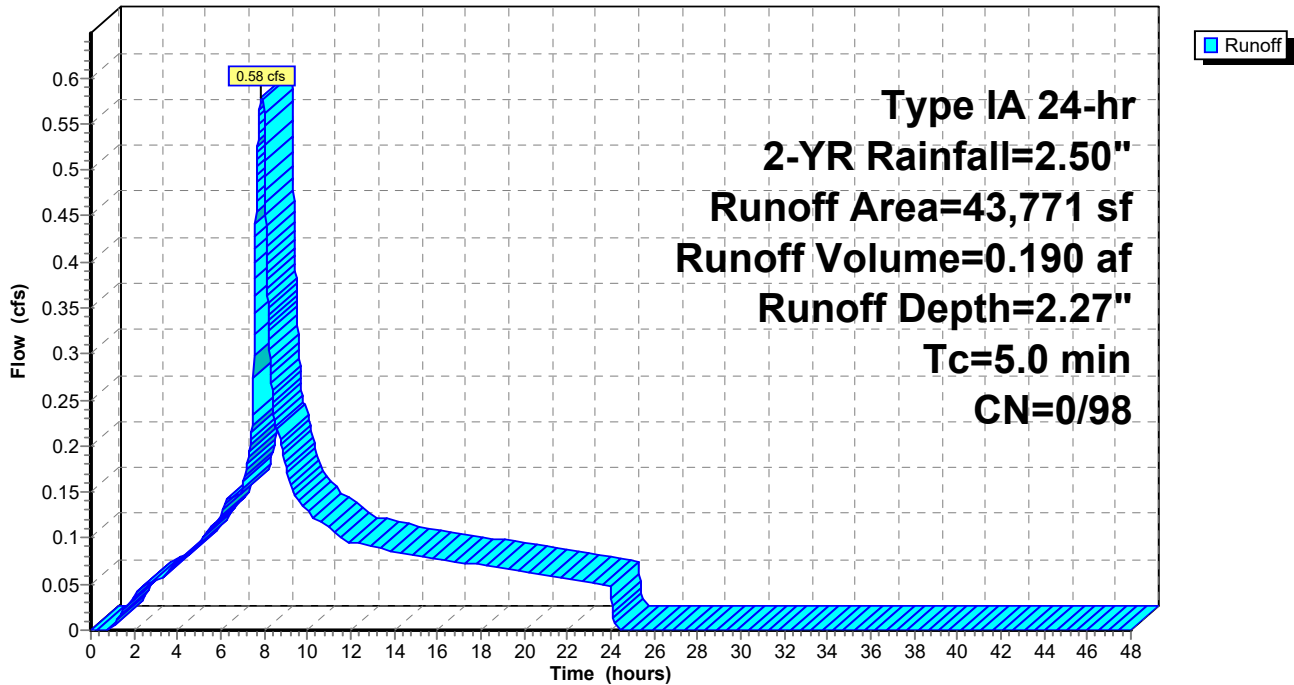
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type IA 24-hr 2-YR Rainfall=2.50"

Area (sf)	CN	Description
* 43,771	98	Roof/Drive Aisle
43,771		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 4.4E: 4.4 EX

Hydrograph



Summary for Subcatchment 4.4M: 4.4 MOD

Runoff = 0.05 cfs @ 8.00 hrs, Volume= 0.026 af, Depth= 0.65"

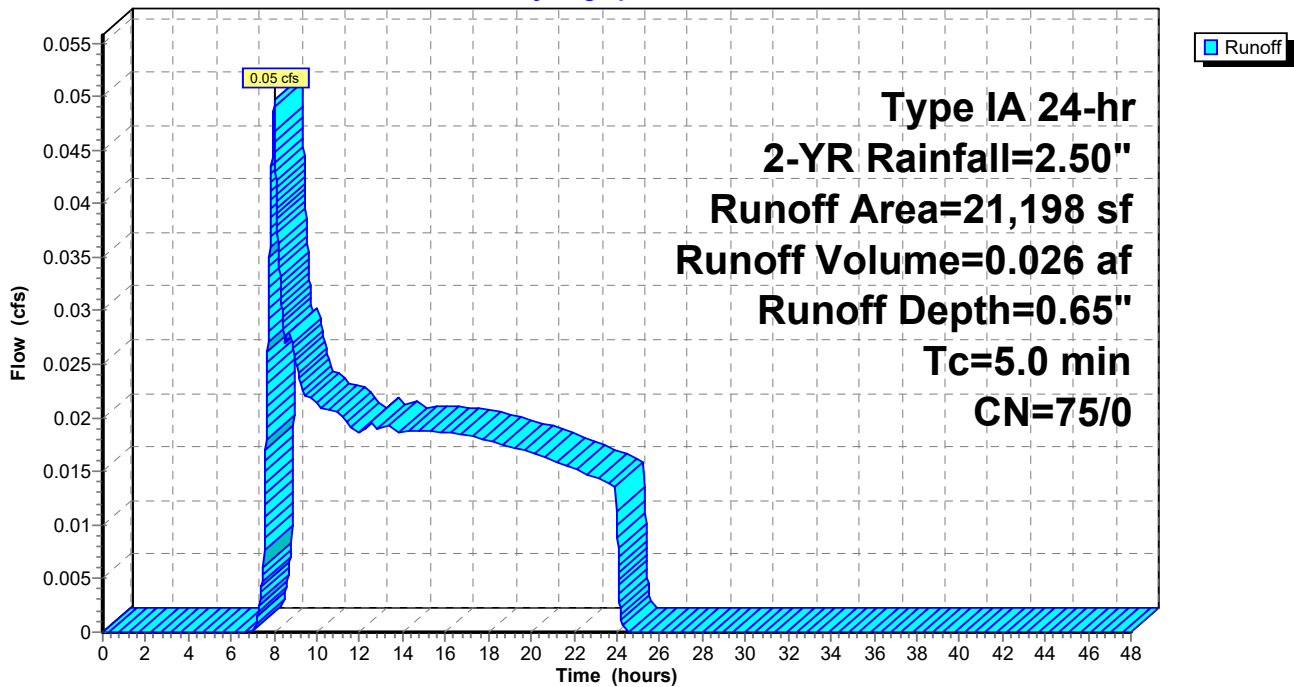
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type IA 24-hr 2-YR Rainfall=2.50"

Area (sf)	CN	Description
* 21,198	75	Roof/Drive Aisle
21,198		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 4.4M: 4.4 MOD

Hydrograph



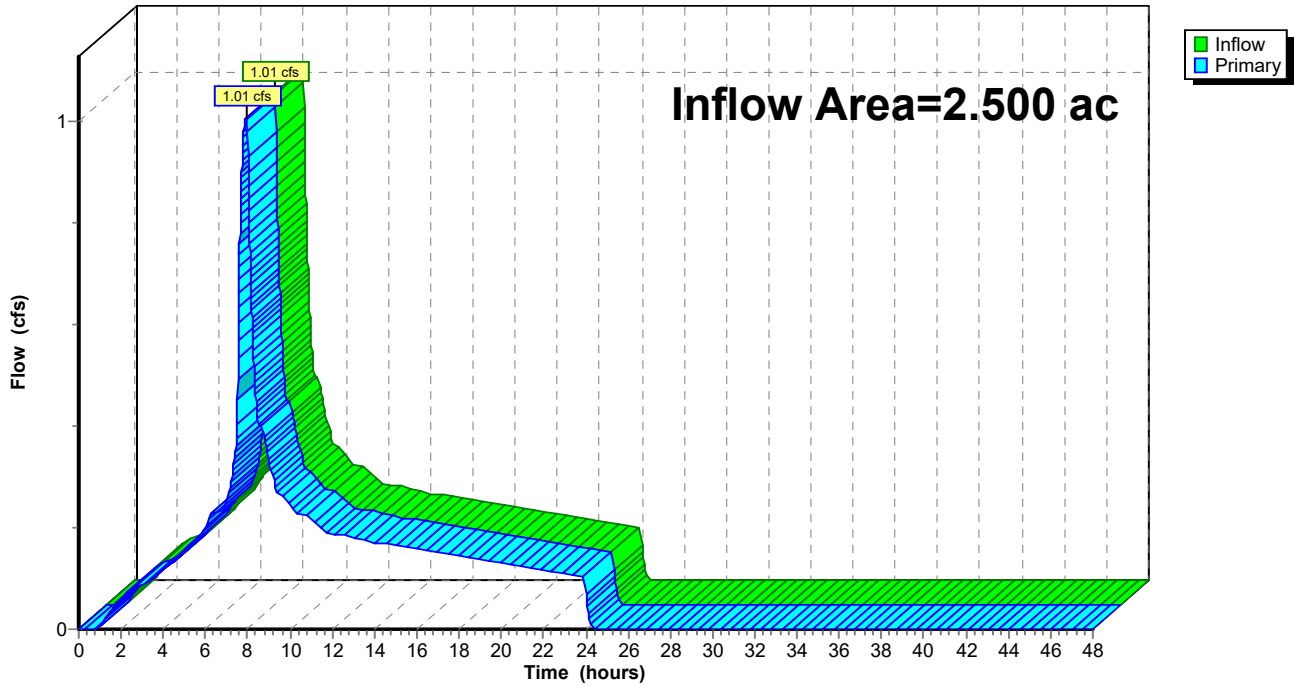
Summary for Link 1L: Flow Summary

Inflow Area = 2.500 ac, 64.41% Impervious, Inflow Depth = 1.69" for 2-YR event
Inflow = 1.01 cfs @ 7.91 hrs, Volume= 0.353 af
Primary = 1.01 cfs @ 7.91 hrs, Volume= 0.353 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Link 1L: Flow Summary

Hydrograph



4668-01 Pre-DEV

Type IA 24-hr 5-YR Rainfall=3.10"

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Page 9

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points x 2

Runoff by SBUH method, Split Pervious/Imperv.

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment4.3E: 4.3 EX

Runoff Area=26,357 sf 100.00% Impervious Runoff Depth=2.87"
Tc=5.0 min CN=0/98 Runoff=0.44 cfs 0.145 af

Subcatchment4.3M: 4.3 MOD

Runoff Area=17,554 sf 0.00% Impervious Runoff Depth=1.03"
Tc=5.0 min CN=75/0 Runoff=0.08 cfs 0.034 af

Subcatchment4.4E: 4.4 EX

Runoff Area=43,771 sf 100.00% Impervious Runoff Depth=2.87"
Tc=5.0 min CN=0/98 Runoff=0.73 cfs 0.240 af

Subcatchment4.4M: 4.4 MOD

Runoff Area=21,198 sf 0.00% Impervious Runoff Depth=1.03"
Tc=5.0 min CN=75/0 Runoff=0.10 cfs 0.042 af

Link 1L: Flow Summary

Inflow=1.33 cfs 0.461 af
Primary=1.33 cfs 0.461 af

Total Runoff Area = 2.500 ac Runoff Volume = 0.461 af Average Runoff Depth = 2.21"
35.59% Pervious = 0.890 ac 64.41% Impervious = 1.610 ac

Summary for Subcatchment 4.3E: 4.3 EX

Runoff = 0.44 cfs @ 7.88 hrs, Volume= 0.145 af, Depth= 2.87"

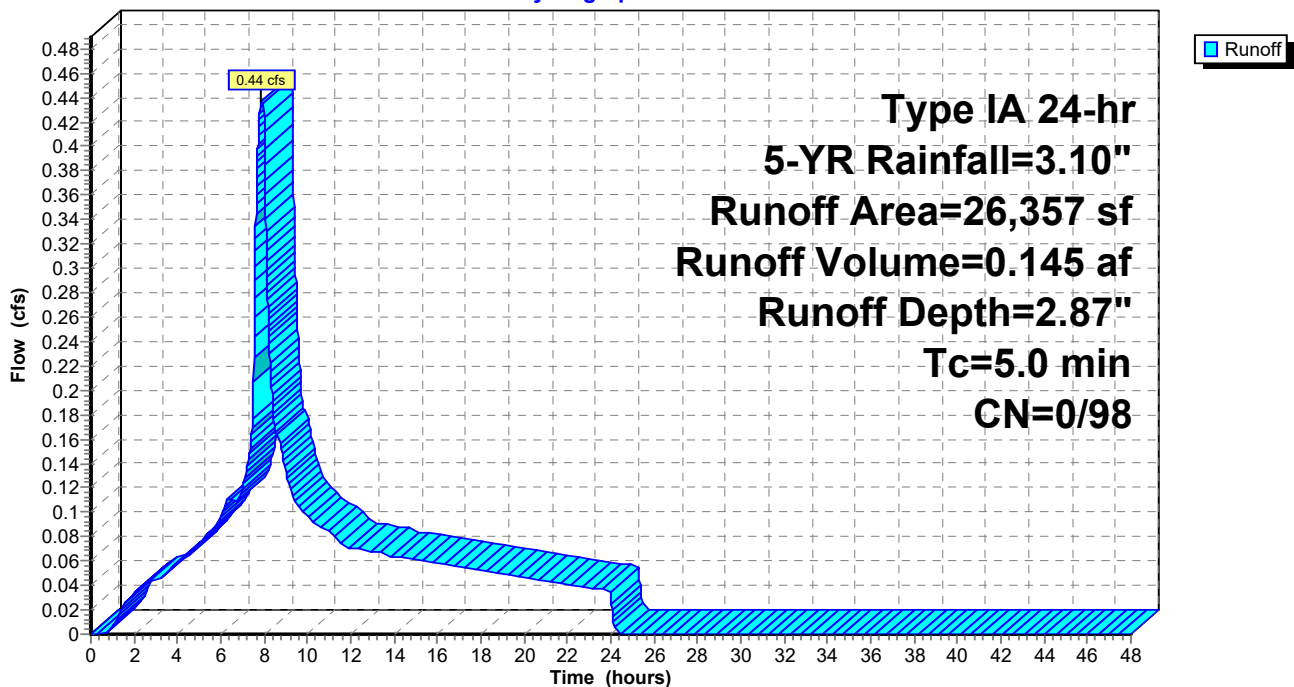
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type IA 24-hr 5-YR Rainfall=3.10"

Area (sf)	CN	Description
* 26,357	98	Roof/Drive Aisle
26,357		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 4.3E: 4.3 EX

Hydrograph



Summary for Subcatchment 4.3M: 4.3 MOD

Runoff = 0.08 cfs @ 8.00 hrs, Volume= 0.034 af, Depth= 1.03"

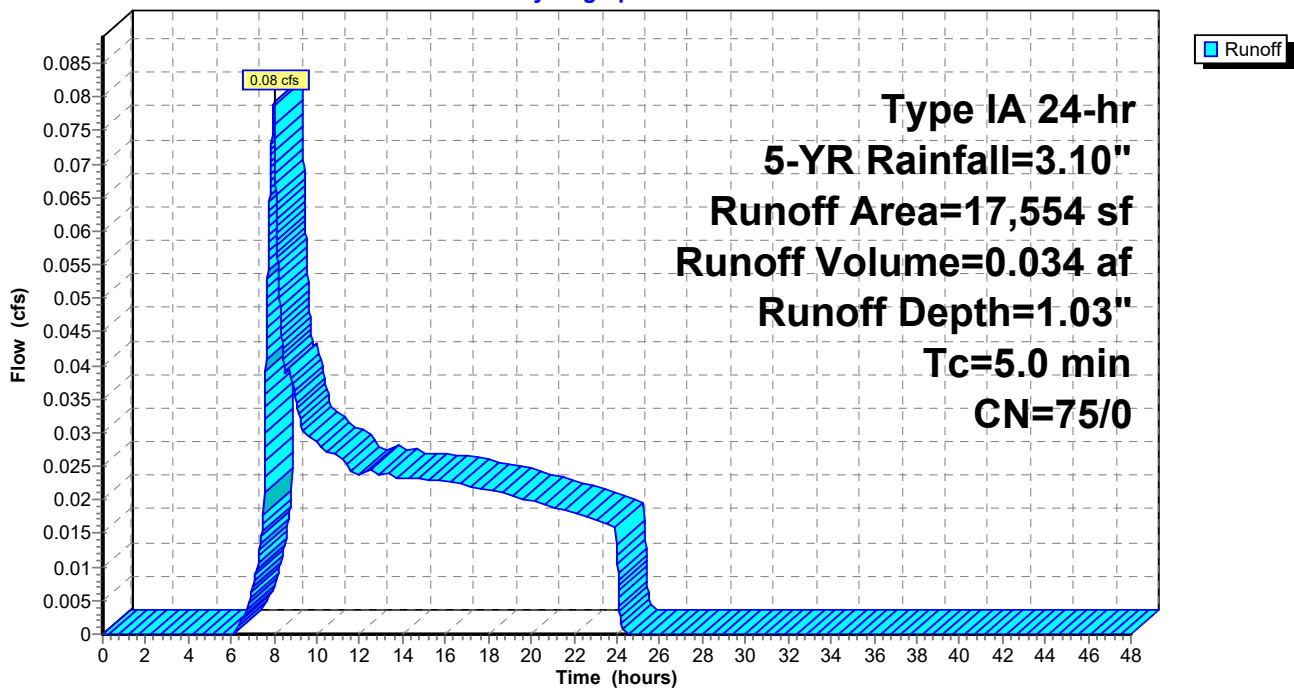
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type IA 24-hr 5-YR Rainfall=3.10"

Area (sf)	CN	Description
* 17,554	75	Roof/Drive Aisle
17,554		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 4.3M: 4.3 MOD

Hydrograph



Summary for Subcatchment 4.4E: 4.4 EX

Runoff = 0.73 cfs @ 7.88 hrs, Volume= 0.240 af, Depth= 2.87"

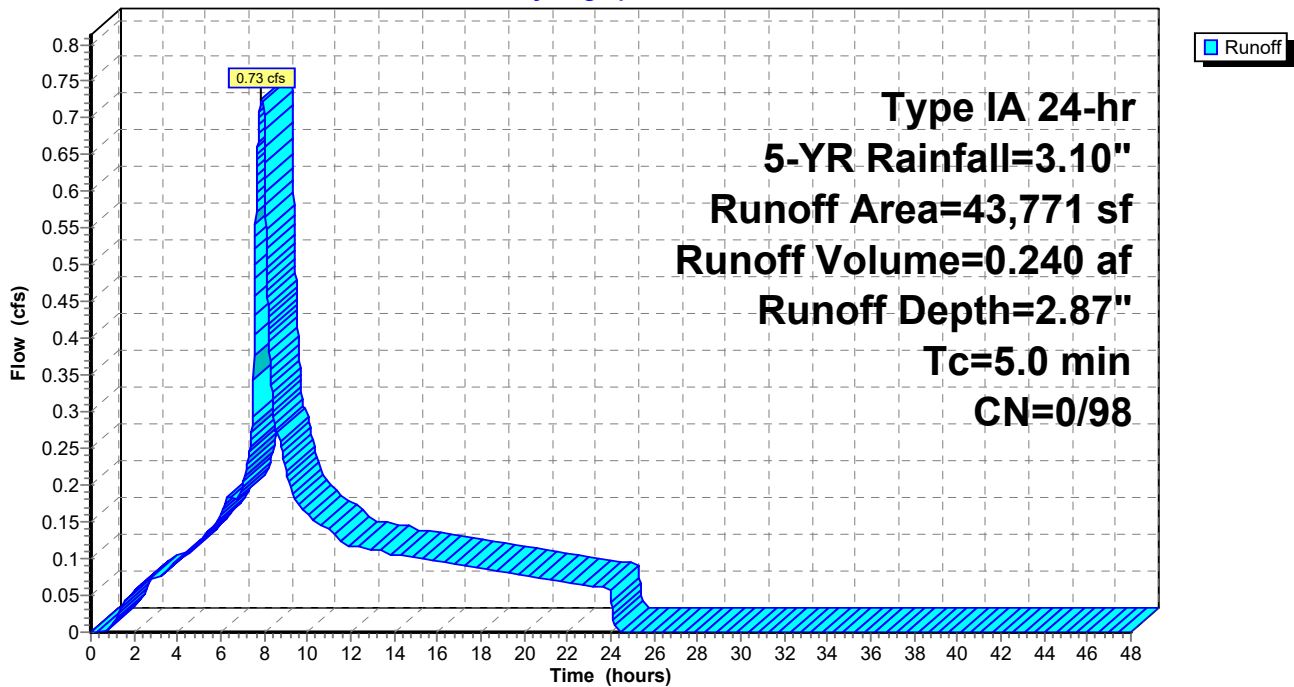
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type IA 24-hr 5-YR Rainfall=3.10"

Area (sf)	CN	Description
* 43,771	98	Roof/Drive Aisle
43,771		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 4.4E: 4.4 EX

Hydrograph



Summary for Subcatchment 4.4M: 4.4 MOD

Runoff = 0.10 cfs @ 8.00 hrs, Volume= 0.042 af, Depth= 1.03"

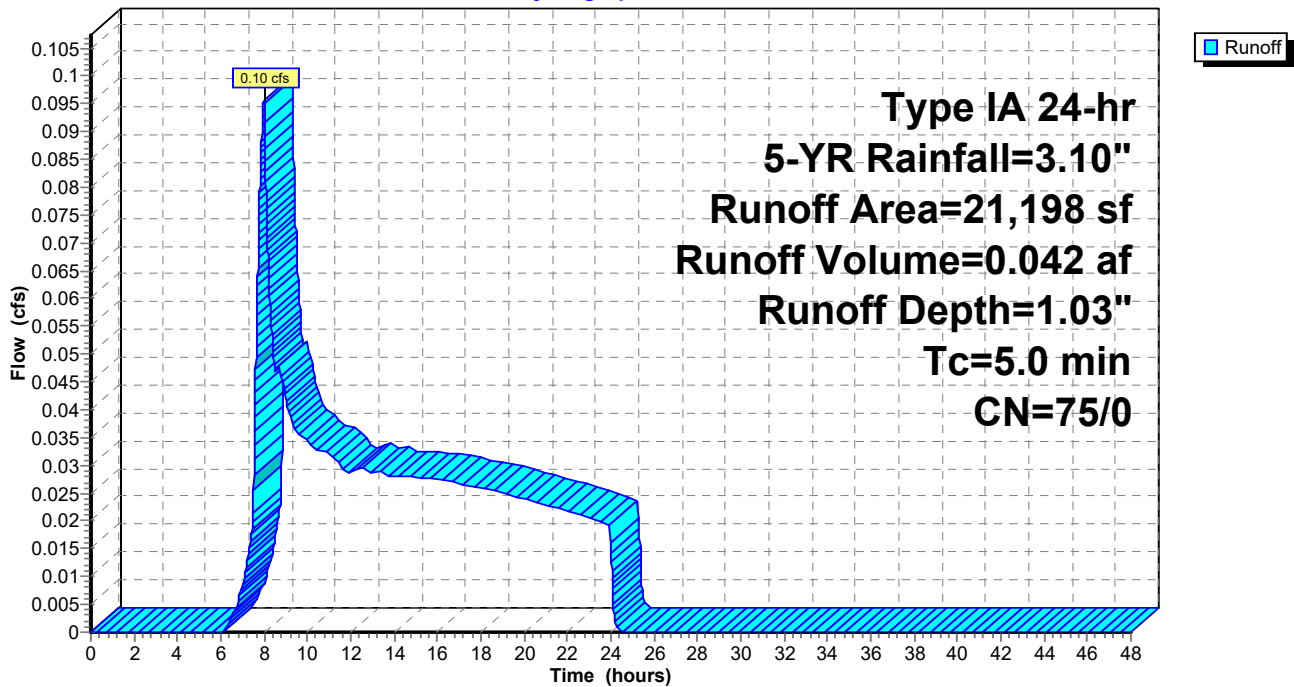
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type IA 24-hr 5-YR Rainfall=3.10"

Area (sf)	CN	Description
* 21,198	75	Roof/Drive Aisle
21,198		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 4.4M: 4.4 MOD

Hydrograph



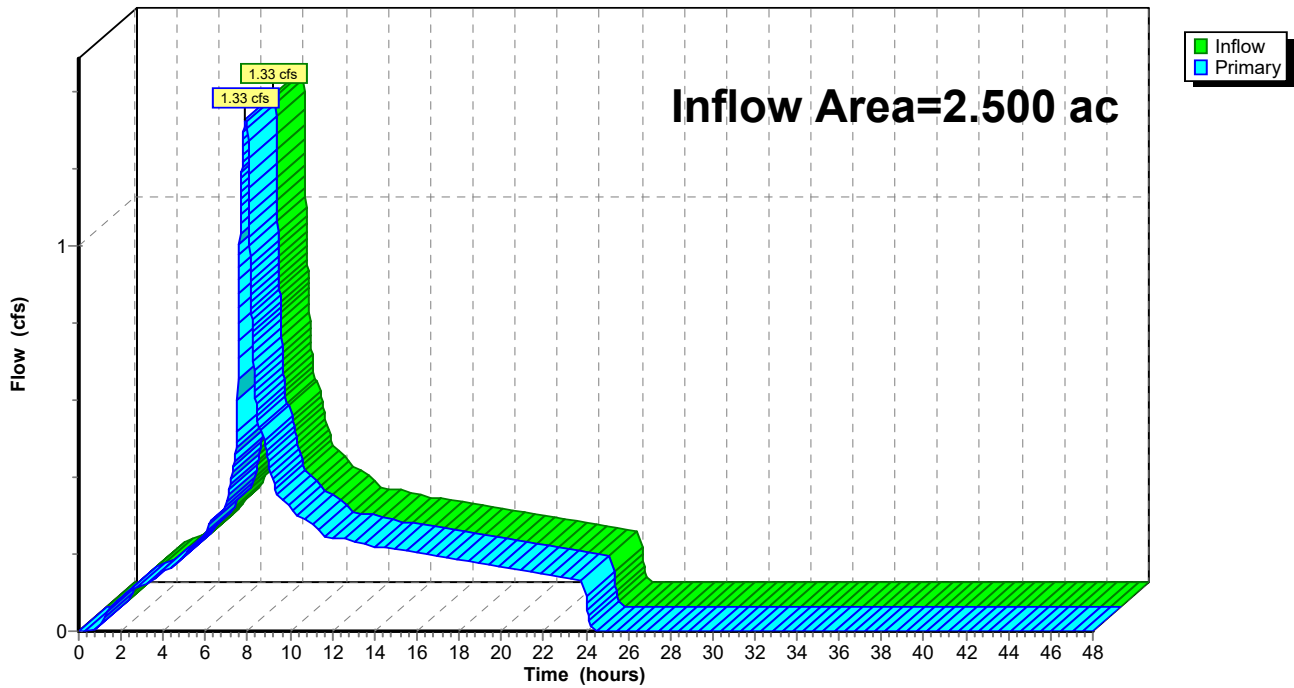
Summary for Link 1L: Flow Summary

Inflow Area = 2.500 ac, 64.41% Impervious, Inflow Depth = 2.21" for 5-YR event
Inflow = 1.33 cfs @ 7.90 hrs, Volume= 0.461 af
Primary = 1.33 cfs @ 7.90 hrs, Volume= 0.461 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Link 1L: Flow Summary

Hydrograph



4668-01 Pre-DEV

Type IA 24-hr 10-YR Rainfall=3.45"

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Page 15

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points x 2

Runoff by SBUH method, Split Pervious/Imperv.

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment4.3E: 4.3 EX

Runoff Area=26,357 sf 100.00% Impervious Runoff Depth=3.22"
Tc=5.0 min CN=0/98 Runoff=0.49 cfs 0.162 af

Subcatchment4.3M: 4.3 MOD

Runoff Area=17,554 sf 0.00% Impervious Runoff Depth=1.27"
Tc=5.0 min CN=75/0 Runoff=0.10 cfs 0.043 af

Subcatchment4.4E: 4.4 EX

Runoff Area=43,771 sf 100.00% Impervious Runoff Depth=3.22"
Tc=5.0 min CN=0/98 Runoff=0.81 cfs 0.269 af

Subcatchment4.4M: 4.4 MOD

Runoff Area=21,198 sf 0.00% Impervious Runoff Depth=1.27"
Tc=5.0 min CN=75/0 Runoff=0.13 cfs 0.051 af

Link 1L: Flow Summary

Inflow=1.52 cfs 0.525 af
Primary=1.52 cfs 0.525 af

Total Runoff Area = 2.500 ac Runoff Volume = 0.525 af Average Runoff Depth = 2.52"
35.59% Pervious = 0.890 ac 64.41% Impervious = 1.610 ac

Summary for Subcatchment 4.3E: 4.3 EX

Runoff = 0.49 cfs @ 7.88 hrs, Volume= 0.162 af, Depth= 3.22"

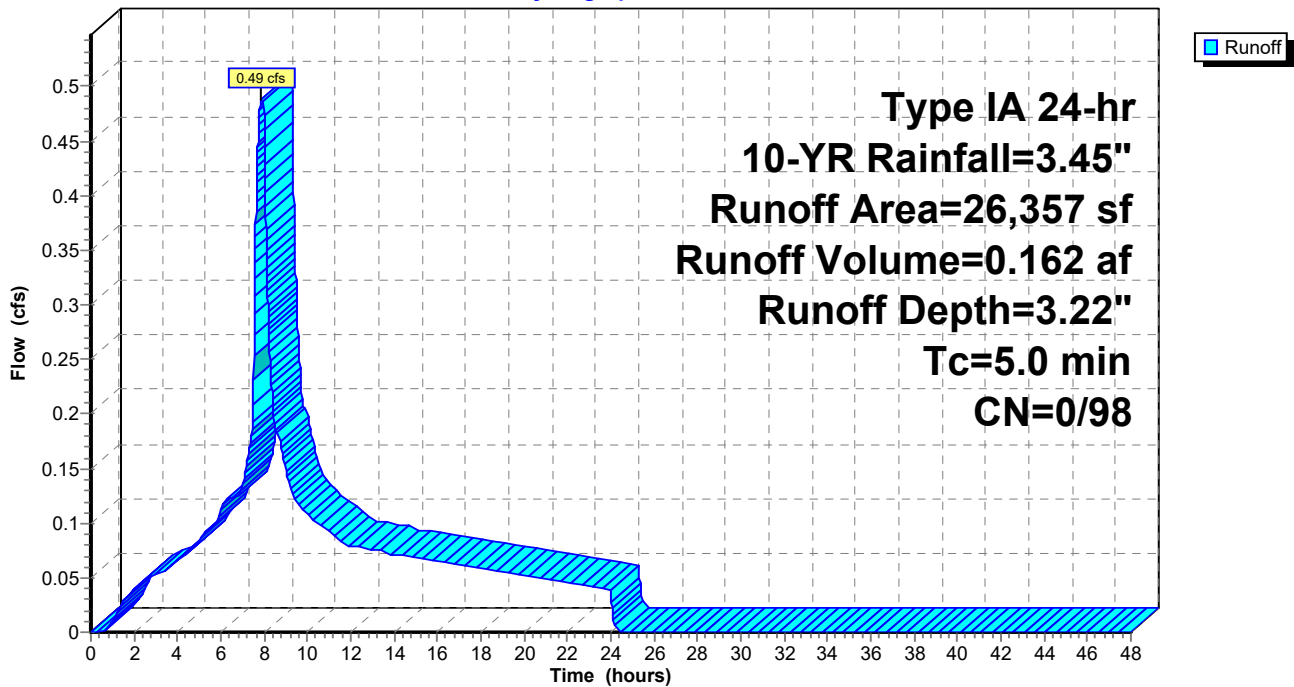
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type IA 24-hr 10-YR Rainfall=3.45"

Area (sf)	CN	Description
* 26,357	98	Roof/Drive Aisle
26,357		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 4.3E: 4.3 EX

Hydrograph



Summary for Subcatchment 4.3M: 4.3 MOD

Runoff = 0.10 cfs @ 8.00 hrs, Volume= 0.043 af, Depth= 1.27"

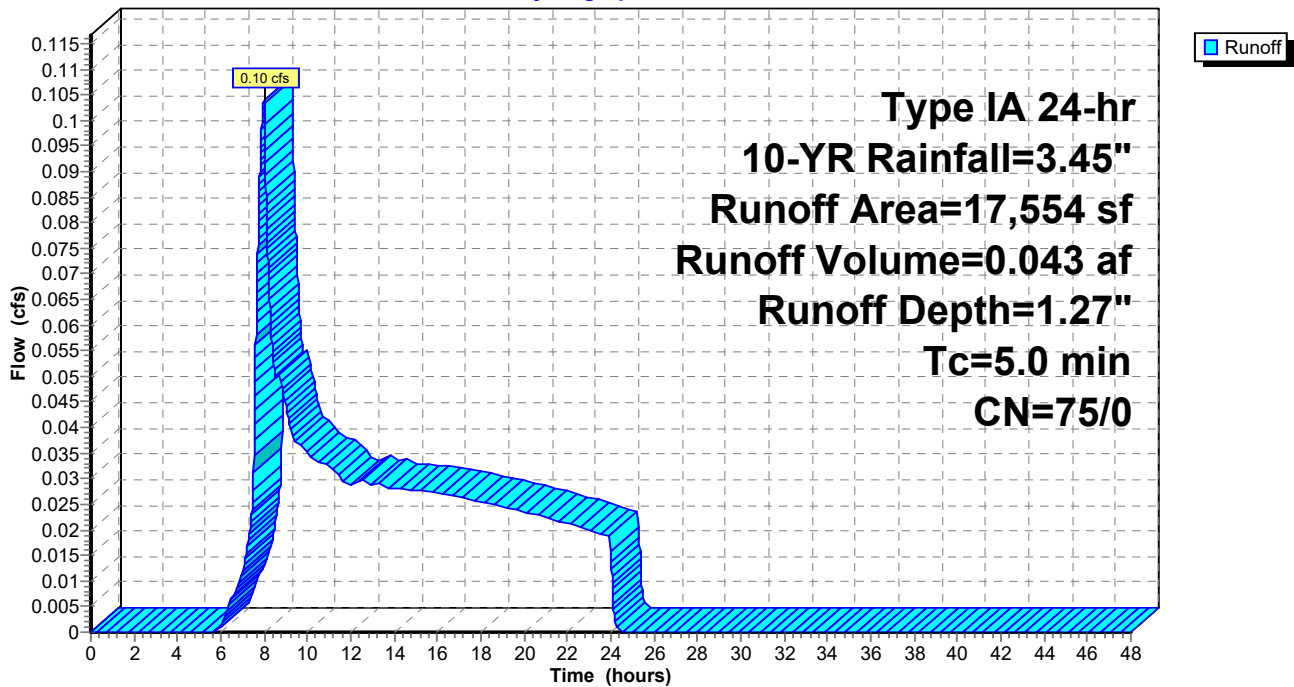
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type IA 24-hr 10-YR Rainfall=3.45"

Area (sf)	CN	Description
* 17,554	75	Roof/Drive Aisle
17,554		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 4.3M: 4.3 MOD

Hydrograph



Summary for Subcatchment 4.4E: 4.4 EX

Runoff = 0.81 cfs @ 7.88 hrs, Volume= 0.269 af, Depth= 3.22"

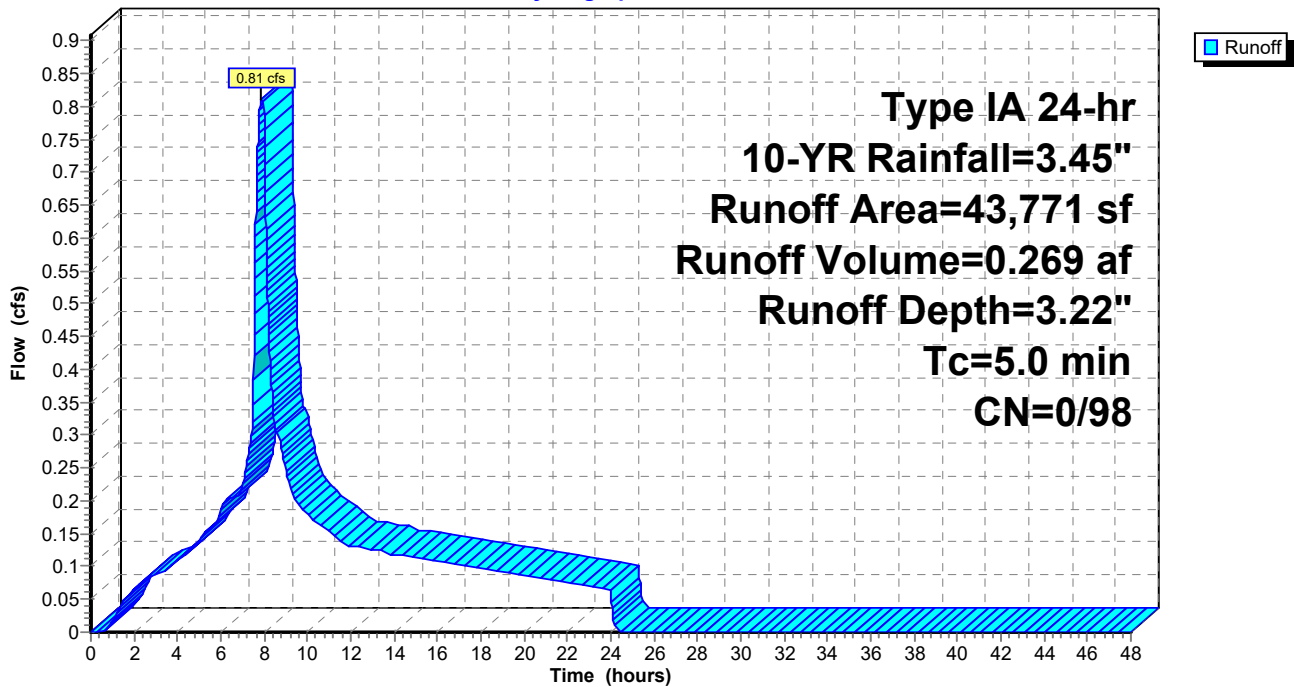
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type IA 24-hr 10-YR Rainfall=3.45"

Area (sf)	CN	Description
* 43,771	98	Roof/Drive Aisle
43,771		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 4.4E: 4.4 EX

Hydrograph



Summary for Subcatchment 4.4M: 4.4 MOD

Runoff = 0.13 cfs @ 8.00 hrs, Volume= 0.051 af, Depth= 1.27"

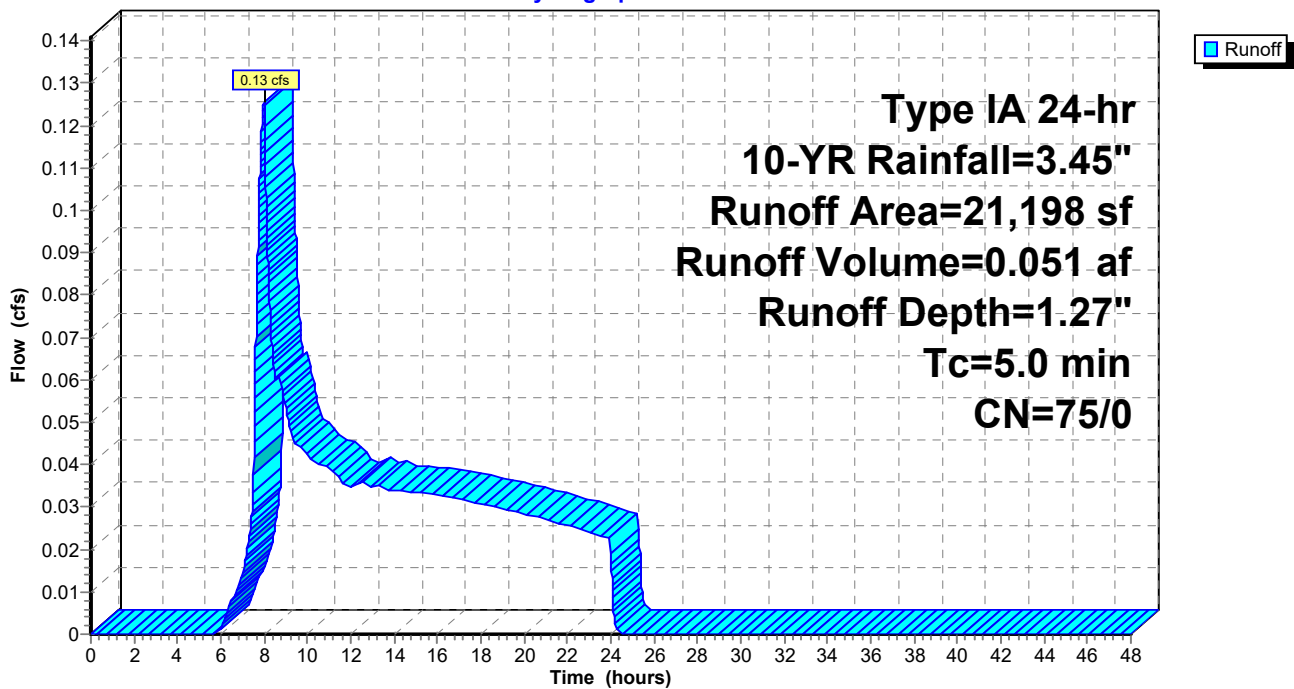
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type IA 24-hr 10-YR Rainfall=3.45"

Area (sf)	CN	Description
* 21,198	75	Roof/Drive Aisle
21,198		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 4.4M: 4.4 MOD

Hydrograph



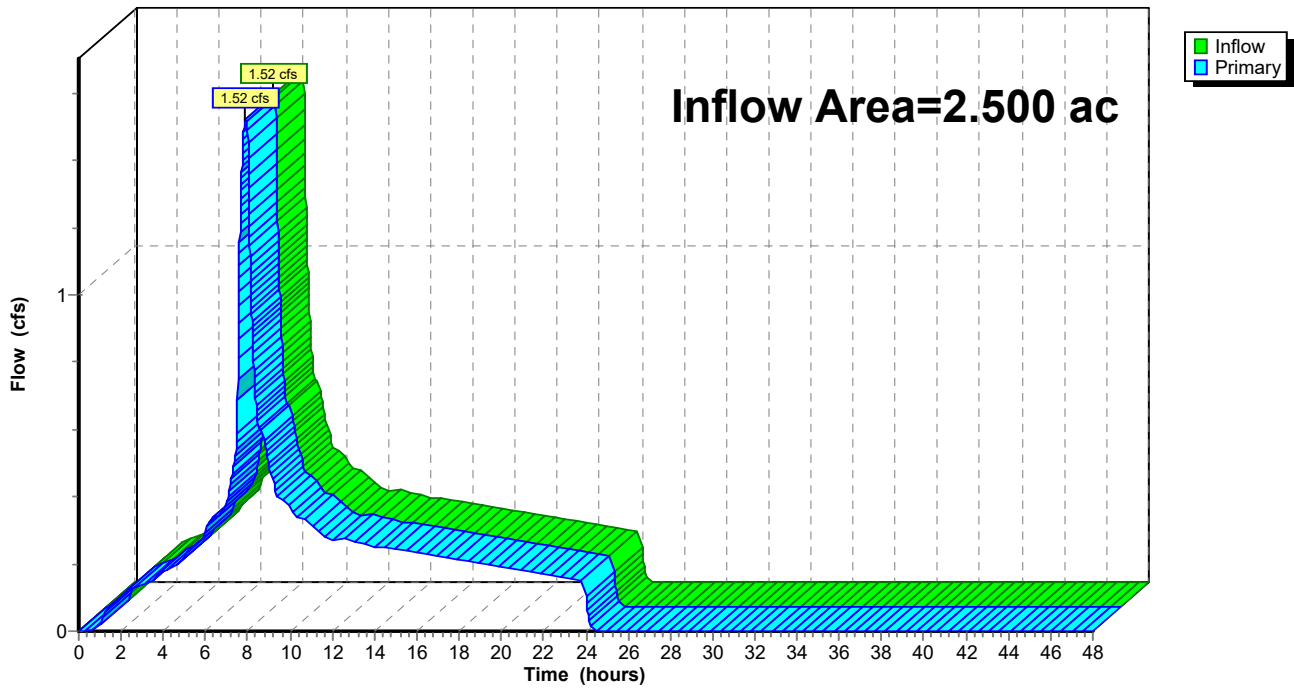
Summary for Link 1L: Flow Summary

Inflow Area = 2.500 ac, 64.41% Impervious, Inflow Depth = 2.52" for 10-YR event
Inflow = 1.52 cfs @ 7.90 hrs, Volume= 0.525 af
Primary = 1.52 cfs @ 7.90 hrs, Volume= 0.525 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Link 1L: Flow Summary

Hydrograph



4668-01 Pre-DEV

Type IA 24-hr 25-YR Rainfall=3.90"

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Page 21

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points x 2

Runoff by SBUH method, Split Pervious/Imperv.

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment4.3E: 4.3 EX

Runoff Area=26,357 sf 100.00% Impervious Runoff Depth=3.67"
Tc=5.0 min CN=0/98 Runoff=0.55 cfs 0.185 af

Subcatchment4.3M: 4.3 MOD

Runoff Area=17,554 sf 0.00% Impervious Runoff Depth=1.59"
Tc=5.0 min CN=75/0 Runoff=0.14 cfs 0.053 af

Subcatchment4.4E: 4.4 EX

Runoff Area=43,771 sf 100.00% Impervious Runoff Depth=3.67"
Tc=5.0 min CN=0/98 Runoff=0.92 cfs 0.307 af

Subcatchment4.4M: 4.4 MOD

Runoff Area=21,198 sf 0.00% Impervious Runoff Depth=1.59"
Tc=5.0 min CN=75/0 Runoff=0.17 cfs 0.065 af

Link 1L: Flow Summary

Inflow=1.77 cfs 0.610 af
Primary=1.77 cfs 0.610 af

Total Runoff Area = 2.500 ac Runoff Volume = 0.610 af Average Runoff Depth = 2.93"
35.59% Pervious = 0.890 ac 64.41% Impervious = 1.610 ac

Summary for Subcatchment 4.3E: 4.3 EX

Runoff = 0.55 cfs @ 7.88 hrs, Volume= 0.185 af, Depth= 3.67"

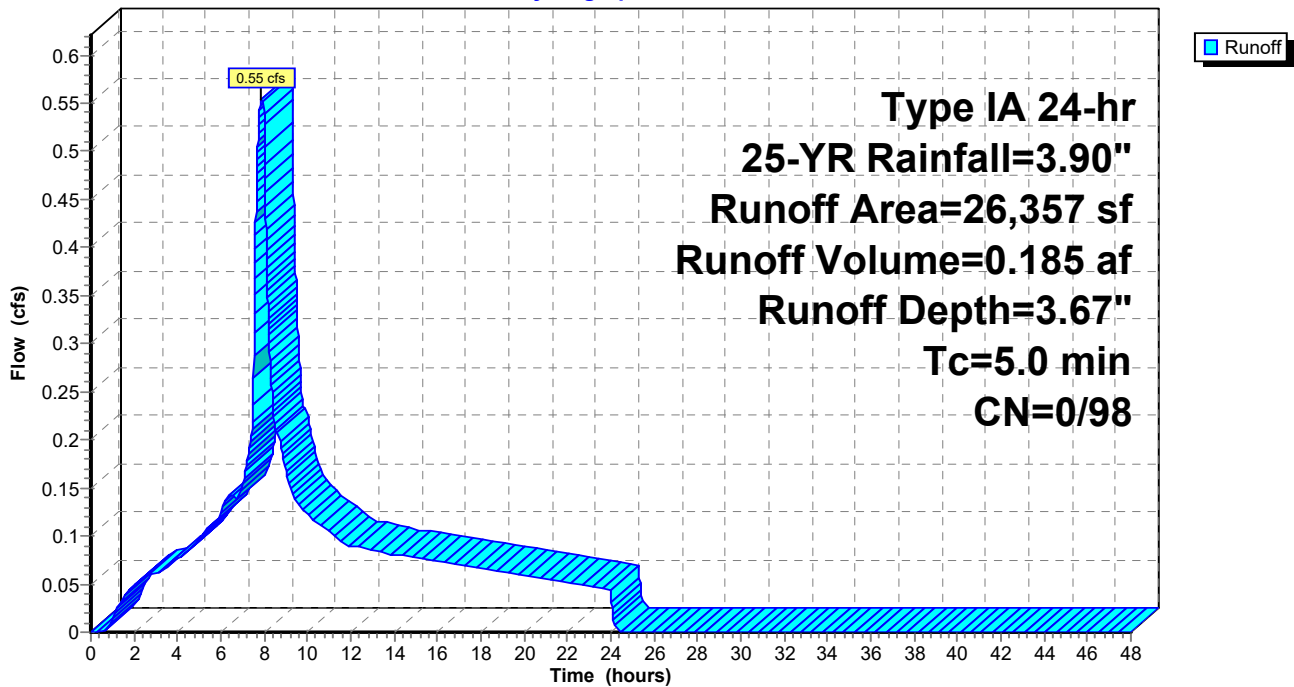
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type IA 24-hr 25-YR Rainfall=3.90"

Area (sf)	CN	Description
* 26,357	98	Roof/Drive Aisle
26,357		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 4.3E: 4.3 EX

Hydrograph



Summary for Subcatchment 4.3M: 4.3 MOD

Runoff = 0.14 cfs @ 8.00 hrs, Volume= 0.053 af, Depth= 1.59"

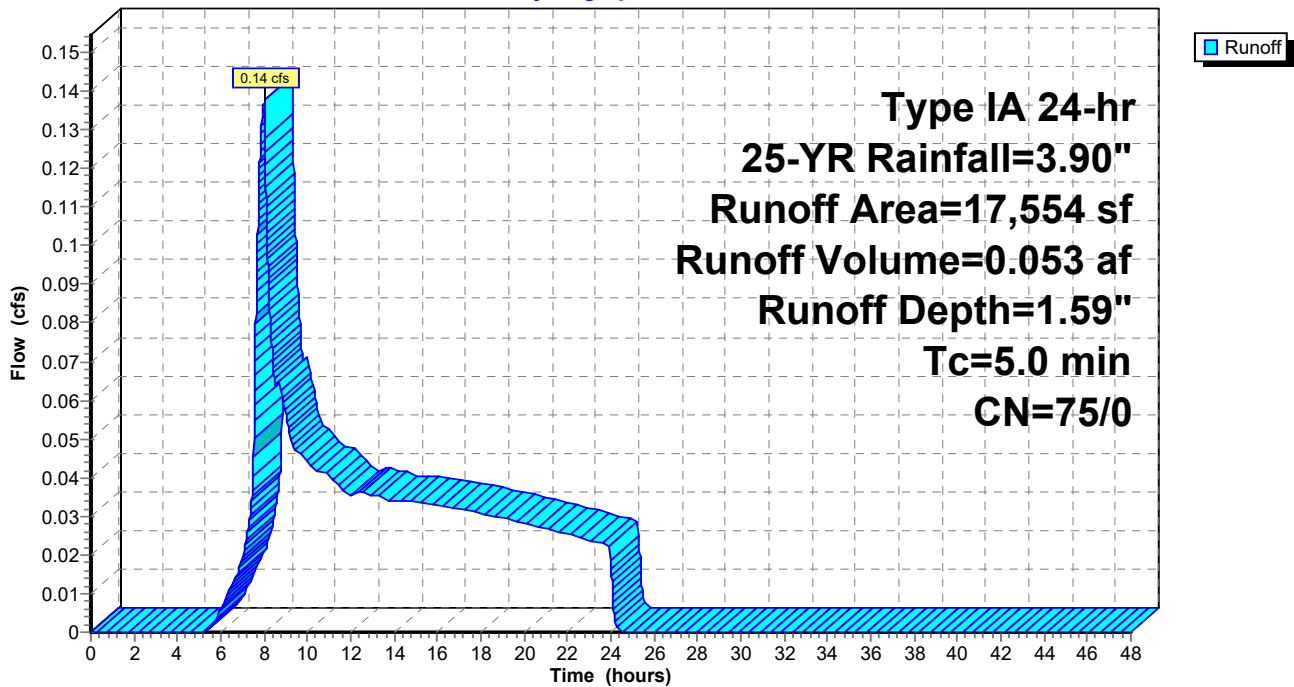
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type IA 24-hr 25-YR Rainfall=3.90"

Area (sf)	CN	Description
* 17,554	75	Roof/Drive Aisle
17,554		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 4.3M: 4.3 MOD

Hydrograph



Summary for Subcatchment 4.4E: 4.4 EX

Runoff = 0.92 cfs @ 7.88 hrs, Volume= 0.307 af, Depth= 3.67"

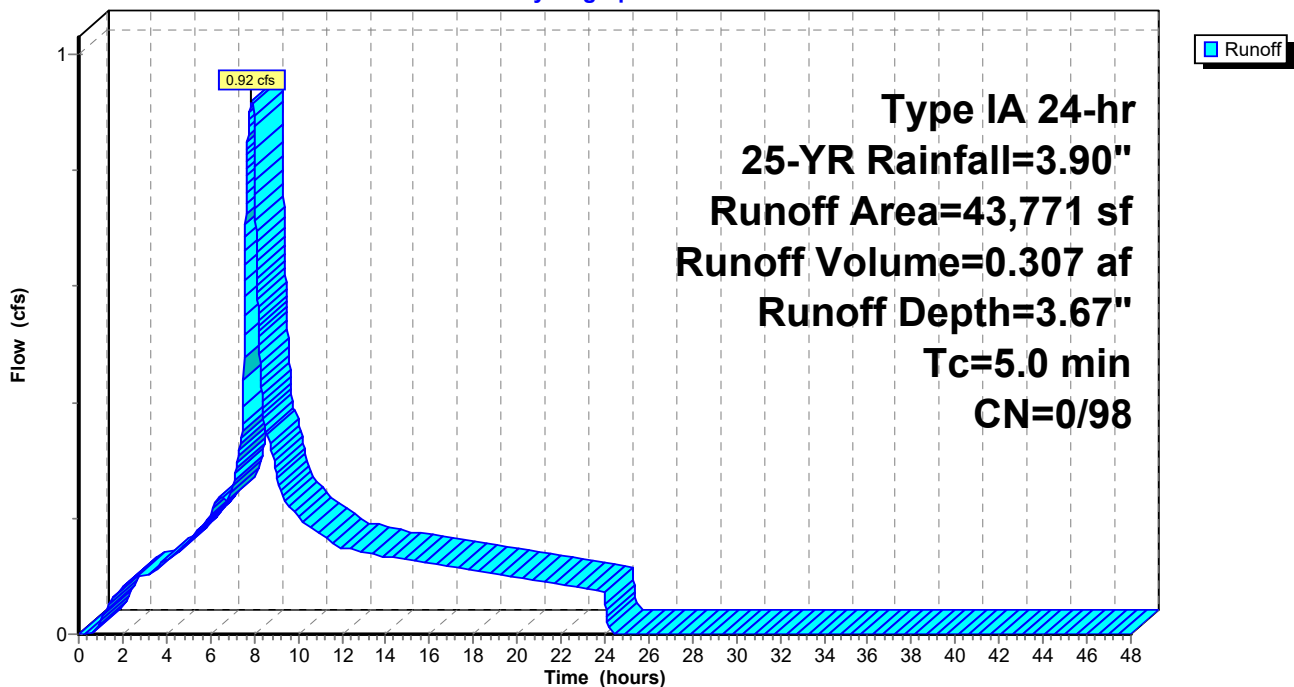
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type IA 24-hr 25-YR Rainfall=3.90"

Area (sf)	CN	Description
* 43,771	98	Roof/Drive Aisle
43,771		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 4.4E: 4.4 EX

Hydrograph



Summary for Subcatchment 4.4M: 4.4 MOD

Runoff = 0.17 cfs @ 8.00 hrs, Volume= 0.065 af, Depth= 1.59"

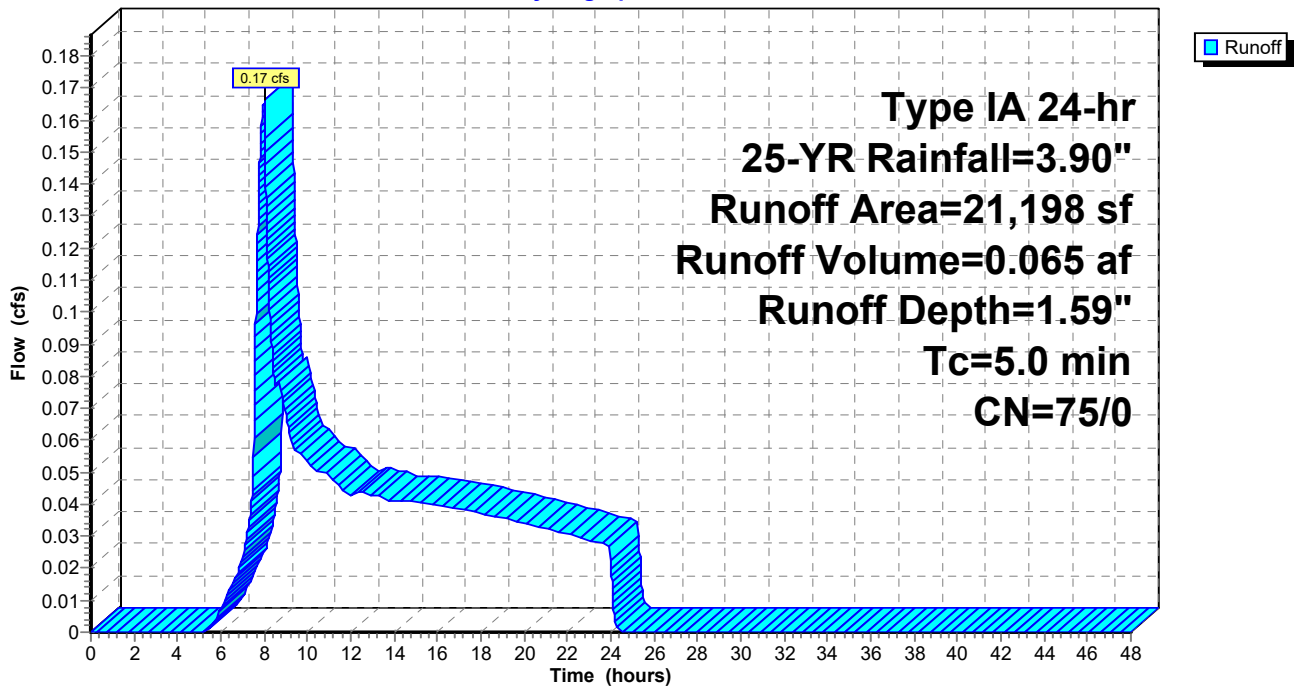
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type IA 24-hr 25-YR Rainfall=3.90"

Area (sf)	CN	Description
* 21,198	75	Roof/Drive Aisle
21,198		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 4.4M: 4.4 MOD

Hydrograph



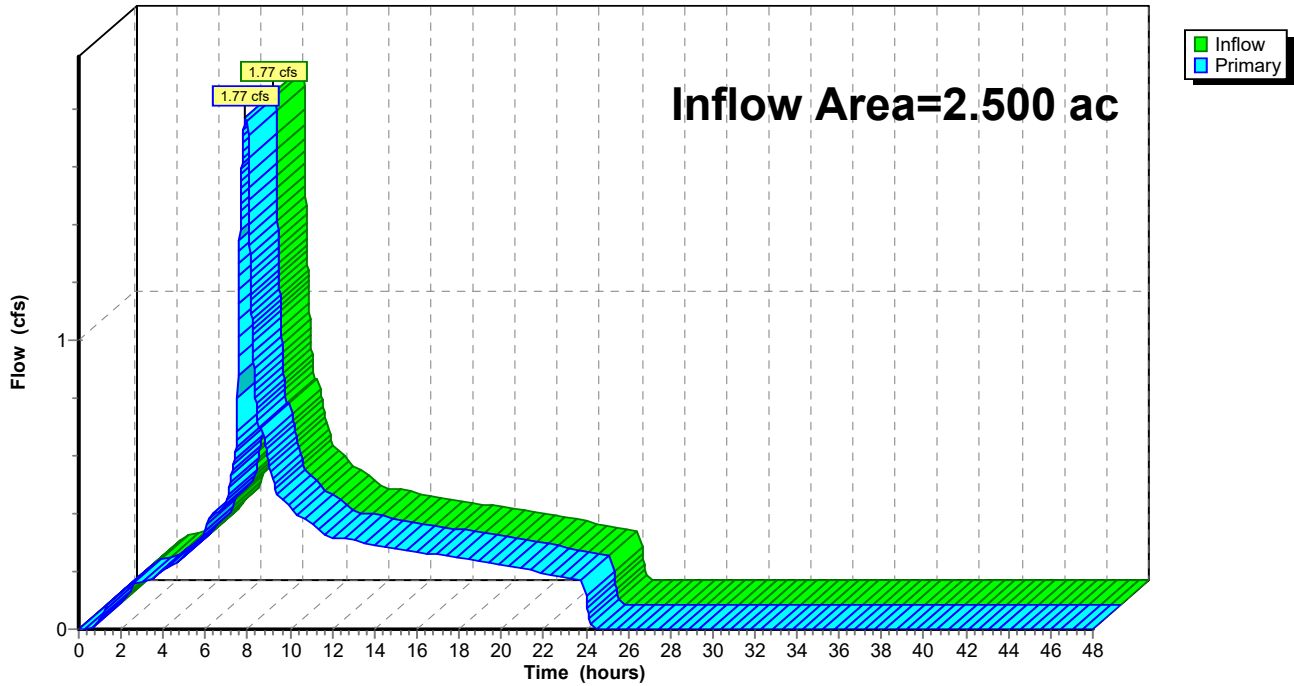
Summary for Link 1L: Flow Summary

Inflow Area = 2.500 ac, 64.41% Impervious, Inflow Depth = 2.93" for 25-YR event
Inflow = 1.77 cfs @ 7.90 hrs, Volume= 0.610 af
Primary = 1.77 cfs @ 7.90 hrs, Volume= 0.610 af, Atten= 0%, Lag= 0.0 min

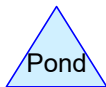
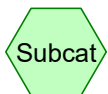
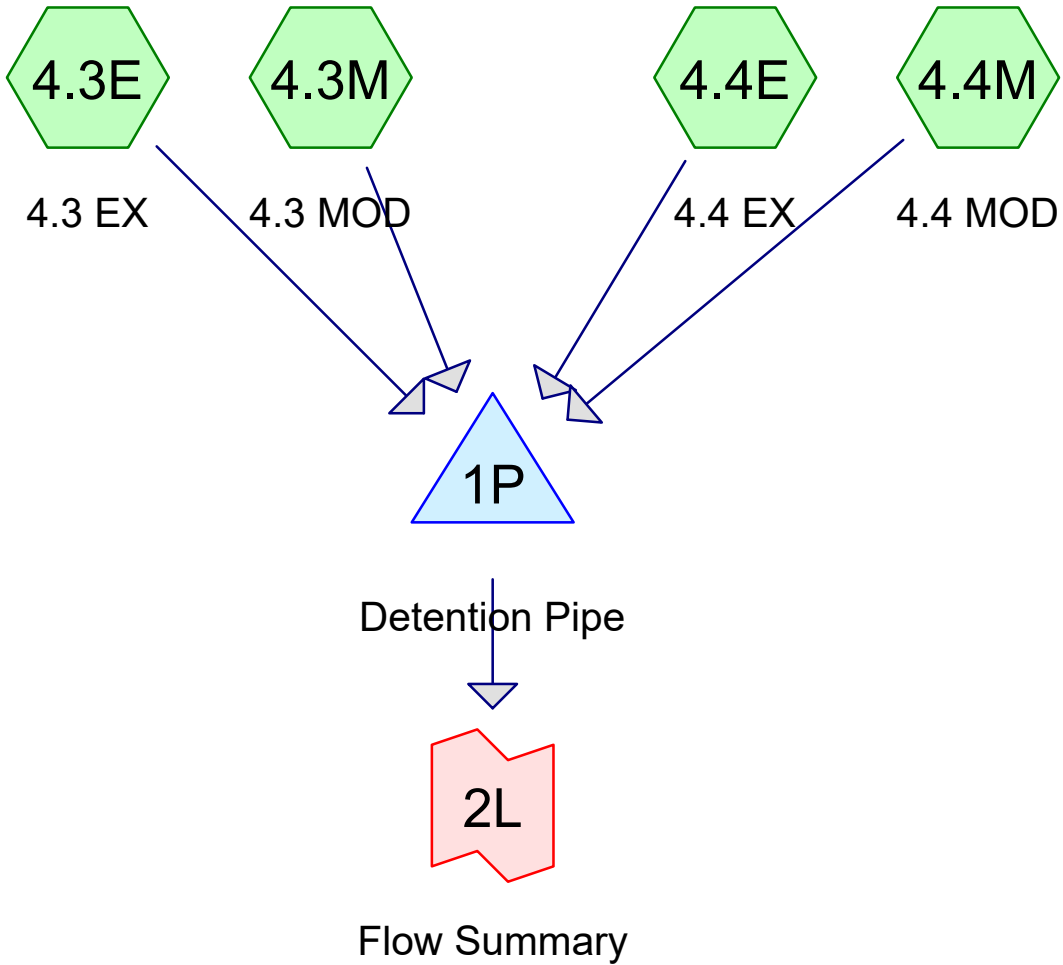
Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Link 1L: Flow Summary

Hydrograph



Post-Developed HydroCAD Analysis



4668-01 POST-DEV

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Page 2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
2.500	98	Roof/Drive Aisle (4.3E, 4.3M, 4.4E, 4.4M)
2.500	98	TOTAL AREA

4668-01 POST-DEV

Type IA 24-hr 2-YR Rainfall=2.50"

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Page 3

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points x 2

Runoff by SBUH method, Split Pervious/Imperv.

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment4.3E: 4.3 EX

Runoff Area=26,357 sf 100.00% Impervious Runoff Depth=2.27"
Tc=5.0 min CN=0/98 Runoff=0.35 cfs 0.114 af

Subcatchment4.3M: 4.3 MOD

Runoff Area=17,554 sf 100.00% Impervious Runoff Depth=2.27"
Tc=5.0 min CN=0/98 Runoff=0.23 cfs 0.076 af

Subcatchment4.4E: 4.4 EX

Runoff Area=43,771 sf 100.00% Impervious Runoff Depth=2.27"
Tc=5.0 min CN=0/98 Runoff=0.58 cfs 0.190 af

Subcatchment4.4M: 4.4 MOD

Runoff Area=21,198 sf 100.00% Impervious Runoff Depth=2.27"
Tc=5.0 min CN=0/98 Runoff=0.28 cfs 0.092 af

Pond 1P: Detention Pipe

Peak Elev=193.63' Storage=1,253 cf Inflow=1.44 cfs 0.473 af
Outflow=0.98 cfs 0.473 af

Link 2L: Flow Summary

Inflow=0.98 cfs 0.473 af
Primary=0.98 cfs 0.473 af

Total Runoff Area = 2.500 ac Runoff Volume = 0.473 af Average Runoff Depth = 2.27"
0.00% Pervious = 0.000 ac 100.00% Impervious = 2.500 ac

Summary for Subcatchment 4.3E: 4.3 EX

Runoff = 0.35 cfs @ 7.88 hrs, Volume= 0.114 af, Depth= 2.27"

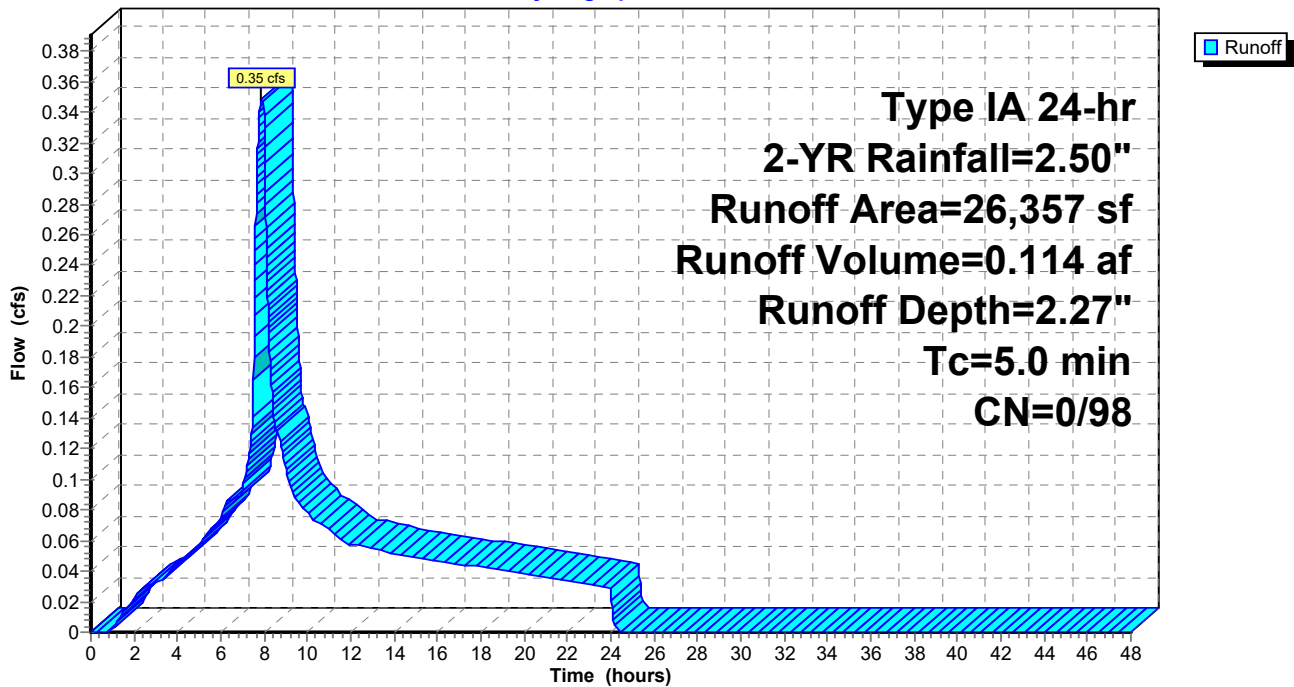
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type IA 24-hr 2-YR Rainfall=2.50"

Area (sf)	CN	Description
* 26,357	98	Roof/Drive Aisle
26,357		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 4.3E: 4.3 EX

Hydrograph



Summary for Subcatchment 4.3M: 4.3 MOD

Runoff = 0.23 cfs @ 7.88 hrs, Volume= 0.076 af, Depth= 2.27"

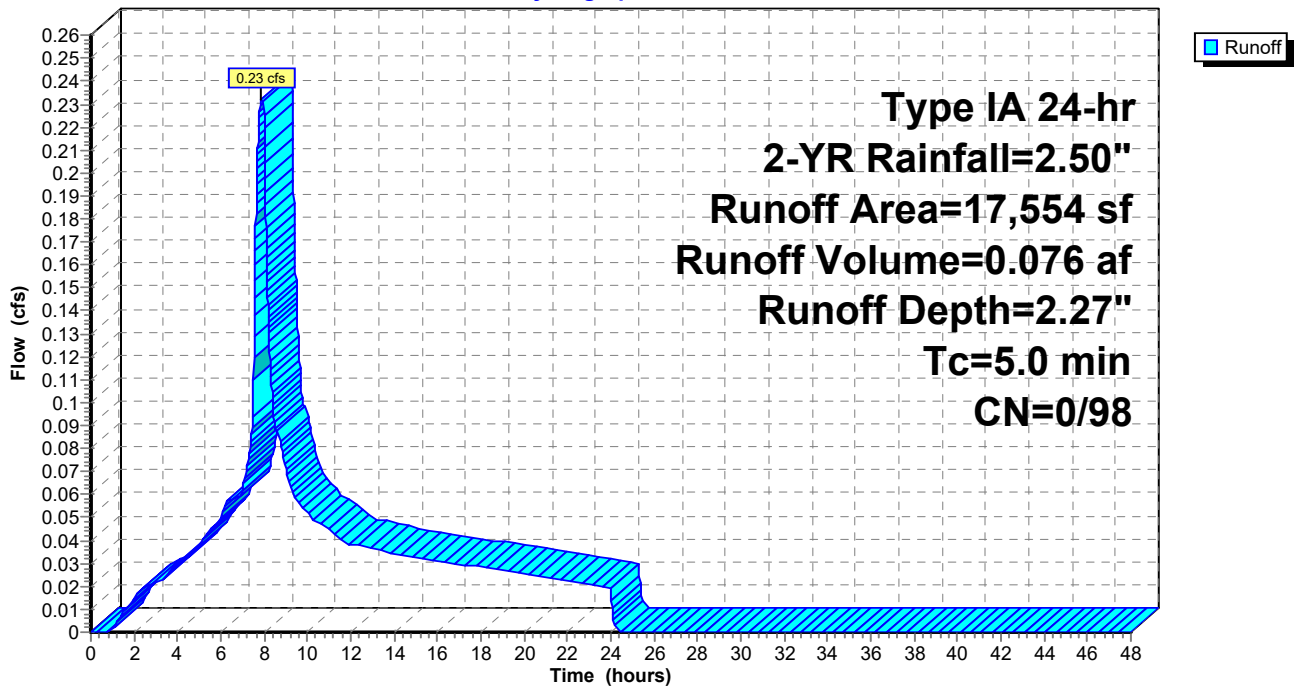
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type IA 24-hr 2-YR Rainfall=2.50"

Area (sf)	CN	Description
* 17,554	98	Roof/Drive Aisle
17,554		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 4.3M: 4.3 MOD

Hydrograph



Summary for Subcatchment 4.4E: 4.4 EX

Runoff = 0.58 cfs @ 7.88 hrs, Volume= 0.190 af, Depth= 2.27"

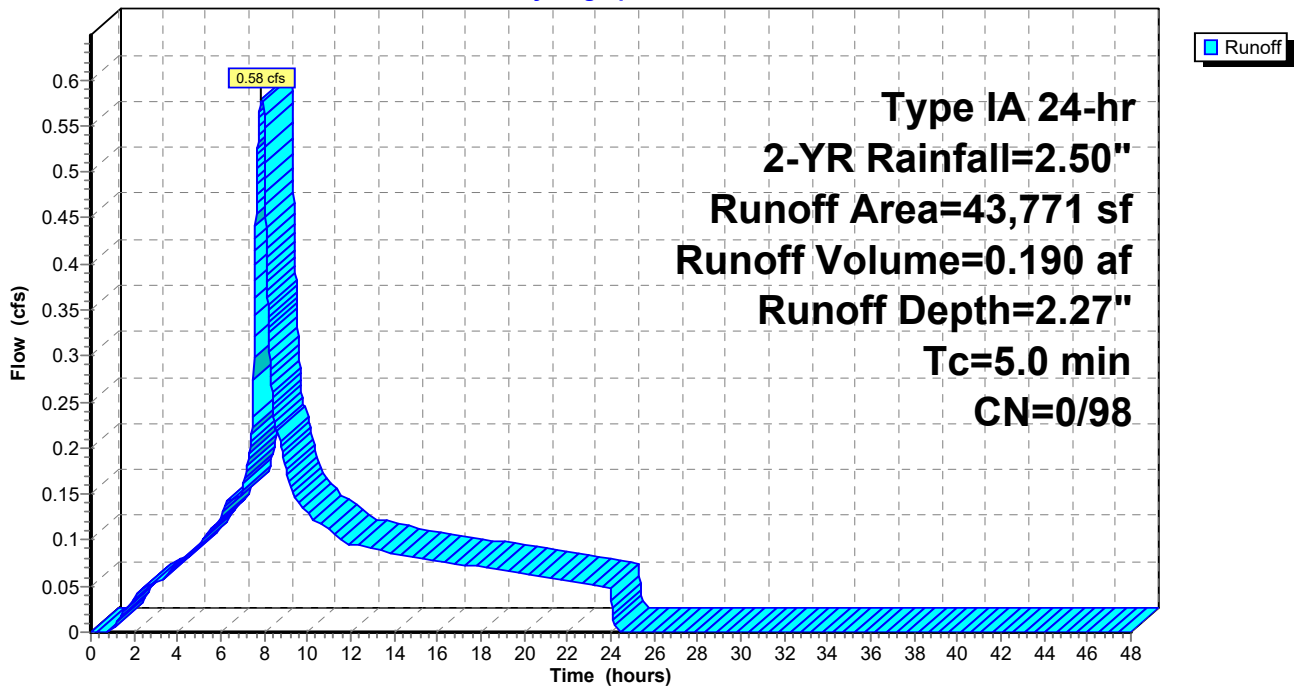
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type IA 24-hr 2-YR Rainfall=2.50"

Area (sf)	CN	Description
* 43,771	98	Roof/Drive Aisle
43,771		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 4.4E: 4.4 EX

Hydrograph



Summary for Subcatchment 4.4M: 4.4 MOD

Runoff = 0.28 cfs @ 7.88 hrs, Volume= 0.092 af, Depth= 2.27"

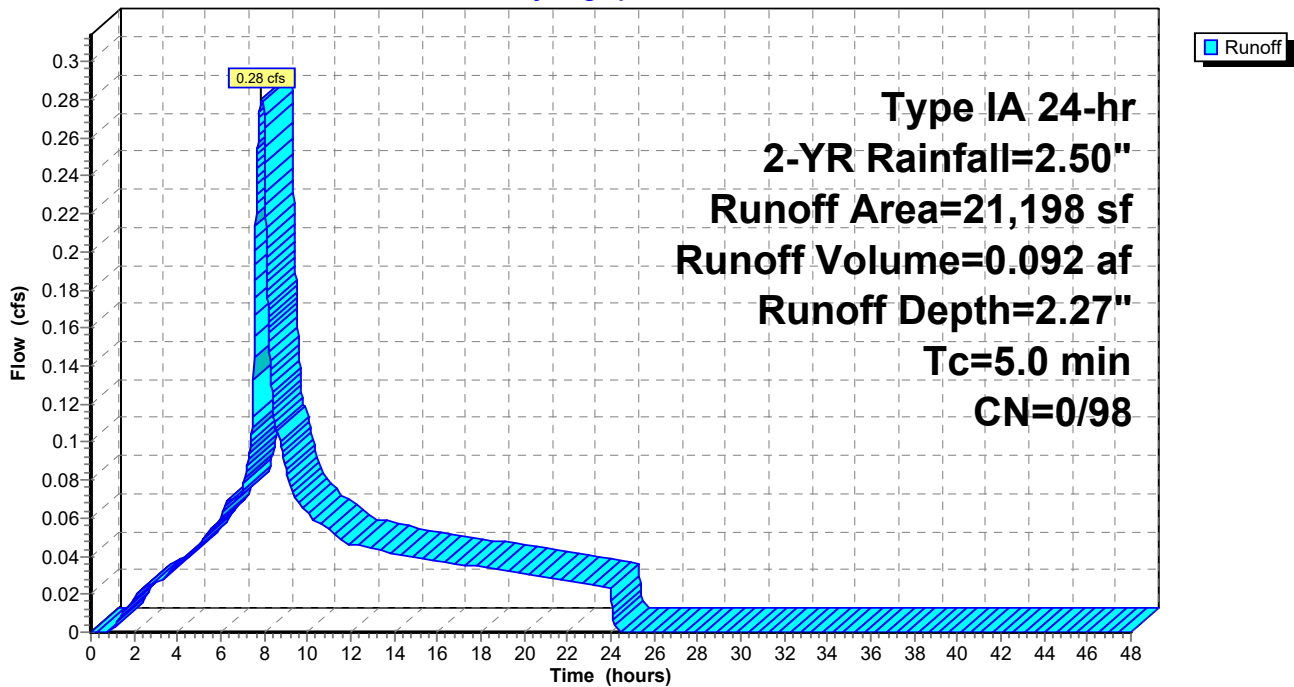
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type IA 24-hr 2-YR Rainfall=2.50"

Area (sf)	CN	Description
* 21,198	98	Roof/Drive Aisle
21,198		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 4.4M: 4.4 MOD

Hydrograph



Summary for Pond 1P: Detention Pipe

Inflow Area = 2.500 ac, 100.00% Impervious, Inflow Depth = 2.27" for 2-YR event
 Inflow = 1.44 cfs @ 7.88 hrs, Volume= 0.473 af
 Outflow = 0.98 cfs @ 8.12 hrs, Volume= 0.473 af, Atten= 32%, Lag= 14.6 min
 Primary = 0.98 cfs @ 8.12 hrs, Volume= 0.473 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 2
 Peak Elev= 193.63' @ 8.12 hrs Surf.Area= 599 sf Storage= 1,253 cf

Plug-Flow detention time= 8.1 min calculated for 0.473 af (100% of inflow)
 Center-of-Mass det. time= 8.1 min (680.7 - 672.6)

Volume	Invert	Avail.Storage	Storage Description
#1	191.00'	2,356 cf	60.0" Round Pipe Storage L= 120.0'

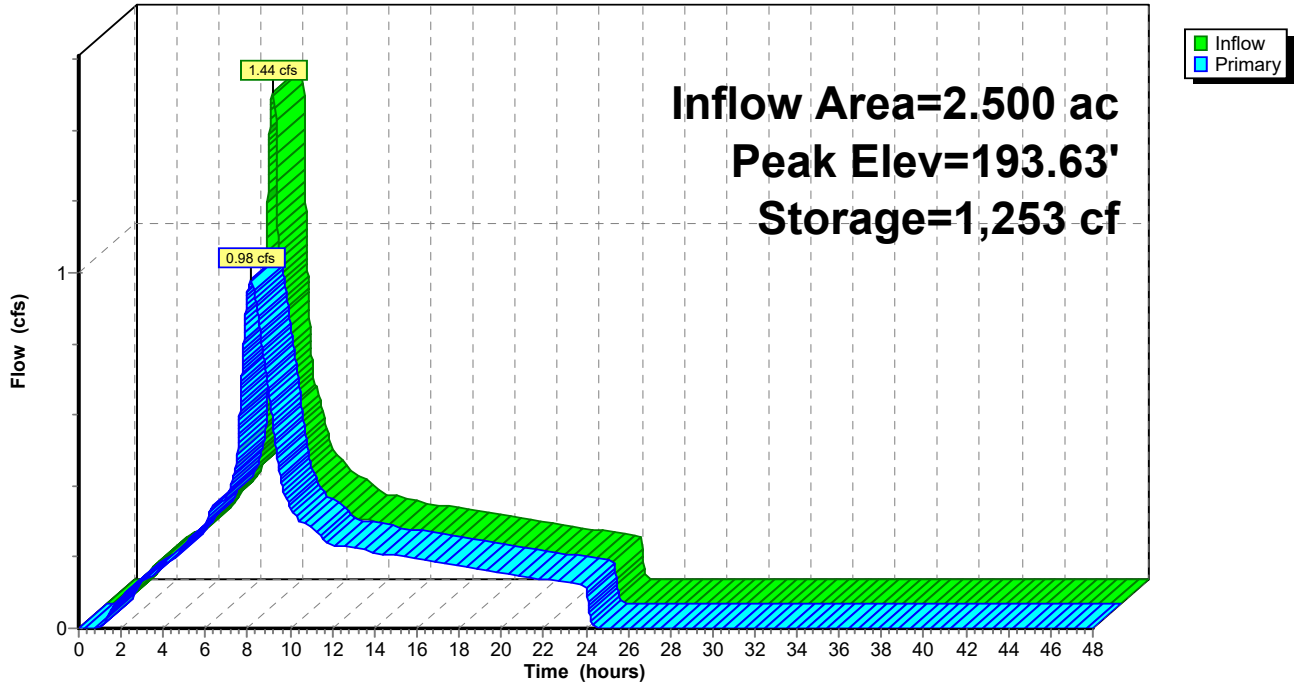
Device	Routing	Invert	Outlet Devices
#1	Primary	191.00'	8.0" Round Culvert L= 10.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 191.00' / 190.81' S= 0.0190'/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.35 sf
#2	Device 1	191.00'	4.9" Vert. Orifice/Grate C= 0.600
#3	Device 1	194.00'	3.3" Vert. Orifice/Grate C= 0.600
#4	Primary	195.00'	2.7" Vert. Orifice/Grate C= 0.600
#5	Device 1	195.90'	8.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.98 cfs @ 8.12 hrs HW=193.63' TW=0.00' (Dynamic Tailwater)

- 1=Culvert (Passes 0.98 cfs of 2.54 cfs potential flow)
- 2=Orifice/Grate (Orifice Controls 0.98 cfs @ 7.49 fps)
- 3=Orifice/Grate (Controls 0.00 cfs)
- 5=Orifice/Grate (Controls 0.00 cfs)
- 4=Orifice/Grate (Controls 0.00 cfs)

Pond 1P: Detention Pipe

Hydrograph



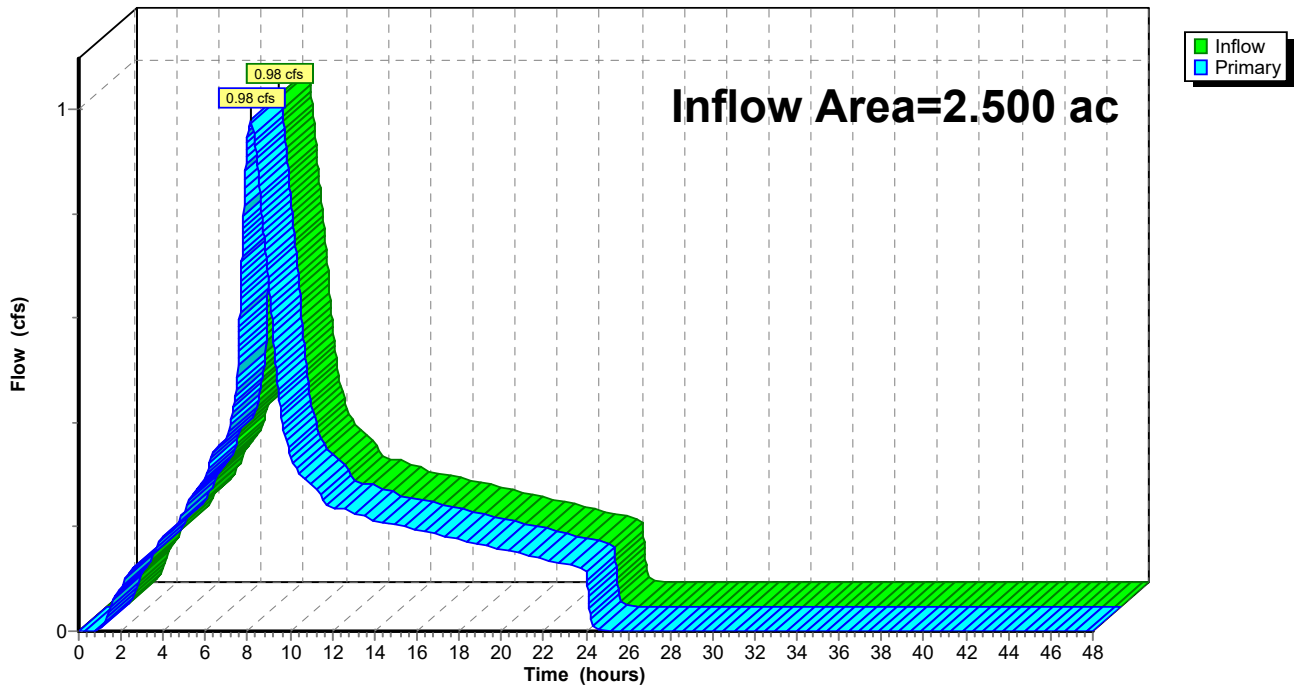
Summary for Link 2L: Flow Summary

Inflow Area = 2.500 ac, 100.00% Impervious, Inflow Depth = 2.27" for 2-YR event
Inflow = 0.98 cfs @ 8.12 hrs, Volume= 0.473 af
Primary = 0.98 cfs @ 8.12 hrs, Volume= 0.473 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Link 2L: Flow Summary

Hydrograph



4668-01 POST-DEV

Type IA 24-hr 5-YR Rainfall=3.10"

Prepared by {enter your company name here}

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Page 11

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points x 2

Runoff by SBUH method, Split Pervious/Imperv.

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment4.3E: 4.3 EX

Runoff Area=26,357 sf 100.00% Impervious Runoff Depth=2.87"
Tc=5.0 min CN=0/98 Runoff=0.44 cfs 0.145 af

Subcatchment4.3M: 4.3 MOD

Runoff Area=17,554 sf 100.00% Impervious Runoff Depth=2.87"
Tc=5.0 min CN=0/98 Runoff=0.29 cfs 0.096 af

Subcatchment4.4E: 4.4 EX

Runoff Area=43,771 sf 100.00% Impervious Runoff Depth=2.87"
Tc=5.0 min CN=0/98 Runoff=0.73 cfs 0.240 af

Subcatchment4.4M: 4.4 MOD

Runoff Area=21,198 sf 100.00% Impervious Runoff Depth=2.87"
Tc=5.0 min CN=0/98 Runoff=0.35 cfs 0.116 af

Pond 1P: Detention Pipe

Peak Elev=194.43' Storage=1,724 cf Inflow=1.81 cfs 0.597 af
Outflow=1.29 cfs 0.597 af

Link 2L: Flow Summary

Inflow=1.29 cfs 0.597 af
Primary=1.29 cfs 0.597 af

Total Runoff Area = 2.500 ac Runoff Volume = 0.597 af Average Runoff Depth = 2.87"
0.00% Pervious = 0.000 ac 100.00% Impervious = 2.500 ac

Summary for Subcatchment 4.3E: 4.3 EX

Runoff = 0.44 cfs @ 7.88 hrs, Volume= 0.145 af, Depth= 2.87"

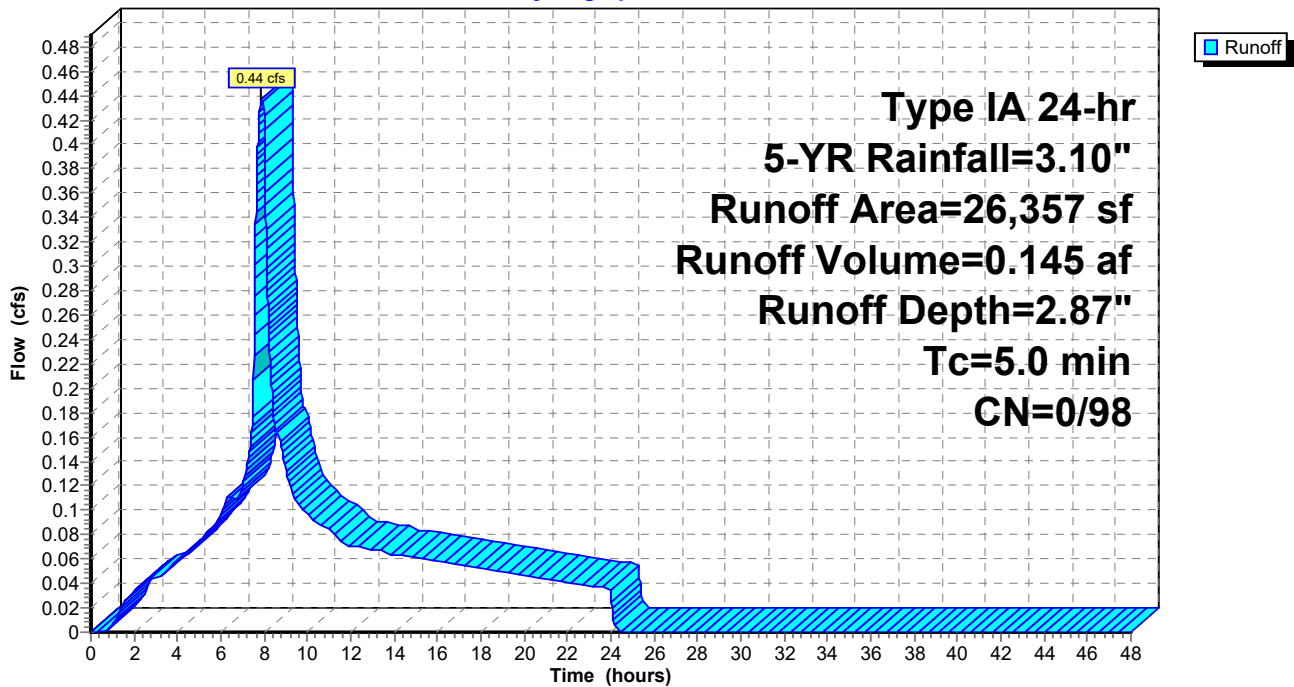
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type IA 24-hr 5-YR Rainfall=3.10"

Area (sf)	CN	Description
* 26,357	98	Roof/Drive Aisle
26,357		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 4.3E: 4.3 EX

Hydrograph



Summary for Subcatchment 4.3M: 4.3 MOD

Runoff = 0.29 cfs @ 7.88 hrs, Volume= 0.096 af, Depth= 2.87"

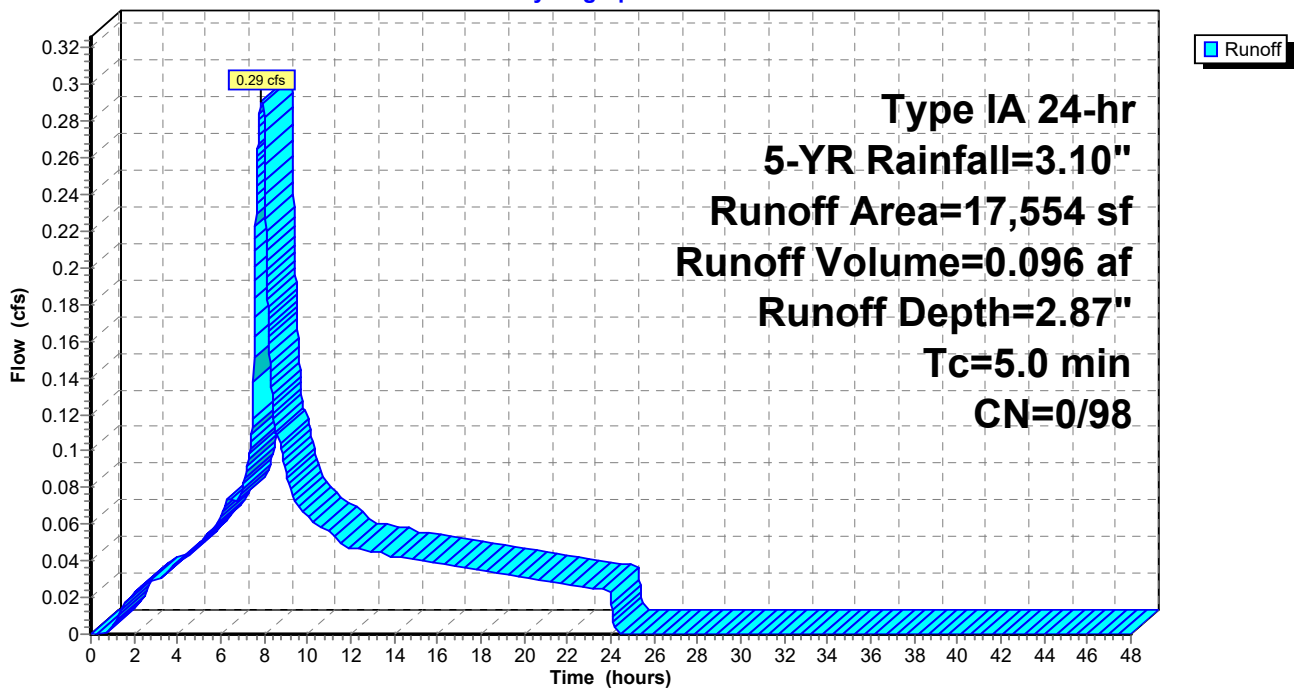
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type IA 24-hr 5-YR Rainfall=3.10"

Area (sf)	CN	Description
* 17,554	98	Roof/Drive Aisle
17,554		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 4.3M: 4.3 MOD

Hydrograph



Summary for Subcatchment 4.4E: 4.4 EX

Runoff = 0.73 cfs @ 7.88 hrs, Volume= 0.240 af, Depth= 2.87"

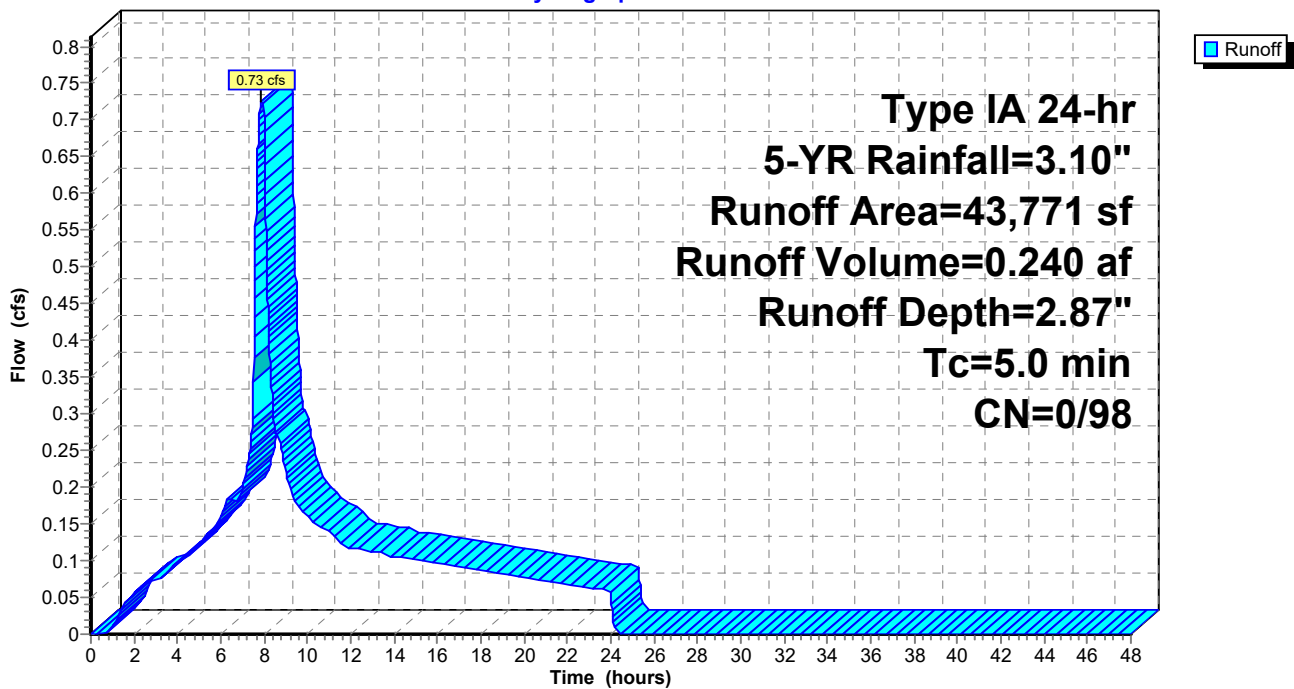
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type IA 24-hr 5-YR Rainfall=3.10"

Area (sf)	CN	Description
* 43,771	98	Roof/Drive Aisle
43,771		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 4.4E: 4.4 EX

Hydrograph



Summary for Subcatchment 4.4M: 4.4 MOD

Runoff = 0.35 cfs @ 7.88 hrs, Volume= 0.116 af, Depth= 2.87"

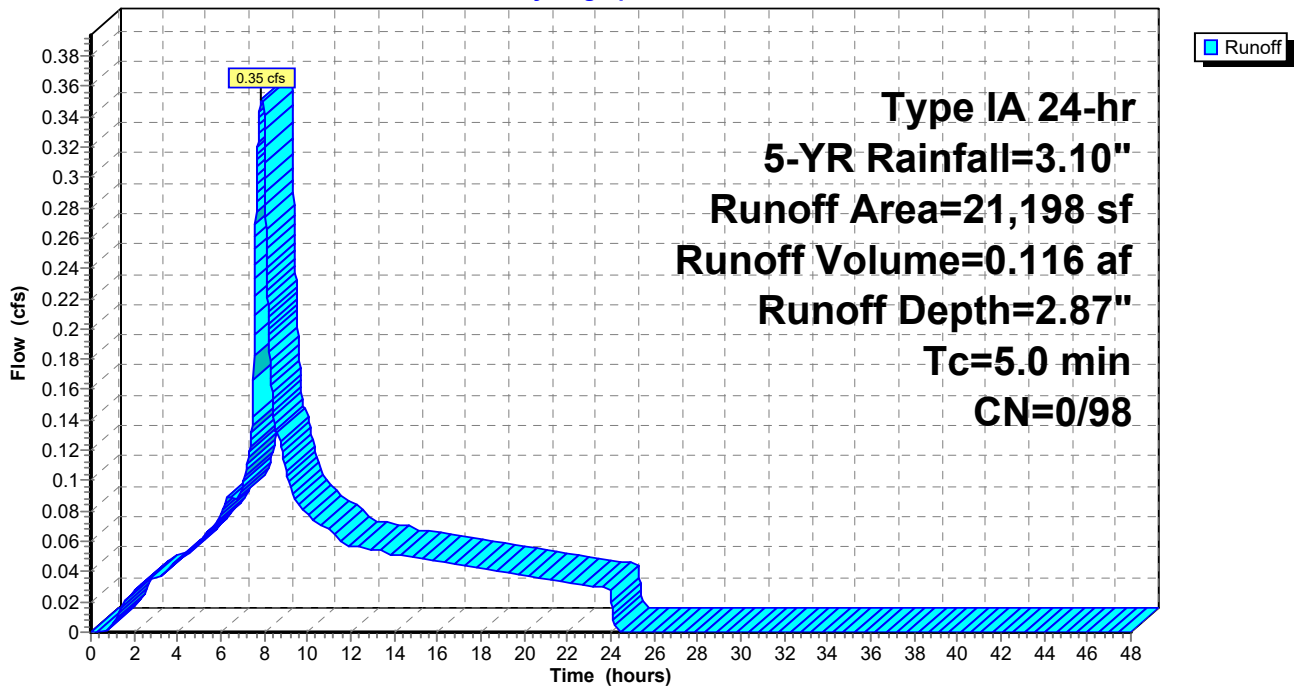
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type IA 24-hr 5-YR Rainfall=3.10"

	Area (sf)	CN	Description
*	21,198	98	Roof/Drive Aisle
	21,198		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 4.4M: 4.4 MOD

Hydrograph



Summary for Pond 1P: Detention Pipe

Inflow Area = 2.500 ac, 100.00% Impervious, Inflow Depth = 2.87" for 5-YR event
 Inflow = 1.81 cfs @ 7.88 hrs, Volume= 0.597 af
 Outflow = 1.29 cfs @ 8.10 hrs, Volume= 0.597 af, Atten= 29%, Lag= 13.5 min
 Primary = 1.29 cfs @ 8.10 hrs, Volume= 0.597 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 2
 Peak Elev= 194.43' @ 8.10 hrs Surf.Area= 557 sf Storage= 1,724 cf

Plug-Flow detention time= 9.3 min calculated for 0.597 af (100% of inflow)
 Center-of-Mass det. time= 9.3 min (675.4 - 666.1)

Volume	Invert	Avail.Storage	Storage Description
#1	191.00'	2,356 cf	60.0" Round Pipe Storage L= 120.0'

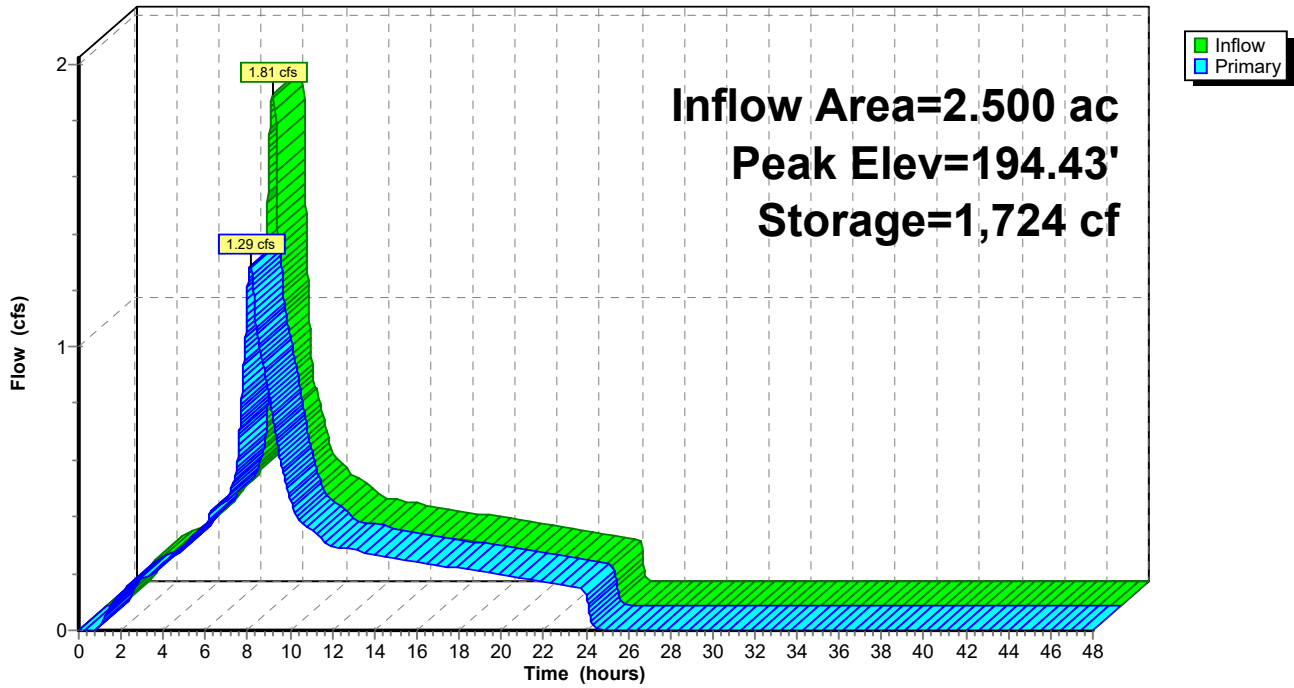
Device	Routing	Invert	Outlet Devices
#1	Primary	191.00'	8.0" Round Culvert L= 10.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 191.00' / 190.81' S= 0.0190' /' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.35 sf
#2	Device 1	191.00'	4.9" Vert. Orifice/Grate C= 0.600
#3	Device 1	194.00'	3.3" Vert. Orifice/Grate C= 0.600
#4	Primary	195.00'	2.7" Vert. Orifice/Grate C= 0.600
#5	Device 1	195.90'	8.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=1.29 cfs @ 8.10 hrs HW=194.43' TW=0.00' (Dynamic Tailwater)

- 1=Culvert (Passes 1.29 cfs of 2.96 cfs potential flow)
- 2=Orifice/Grate (Orifice Controls 1.13 cfs @ 8.65 fps)
- 3=Orifice/Grate (Orifice Controls 0.15 cfs @ 2.61 fps)
- 5=Orifice/Grate (Controls 0.00 cfs)
- 4=Orifice/Grate (Controls 0.00 cfs)

Pond 1P: Detention Pipe

Hydrograph



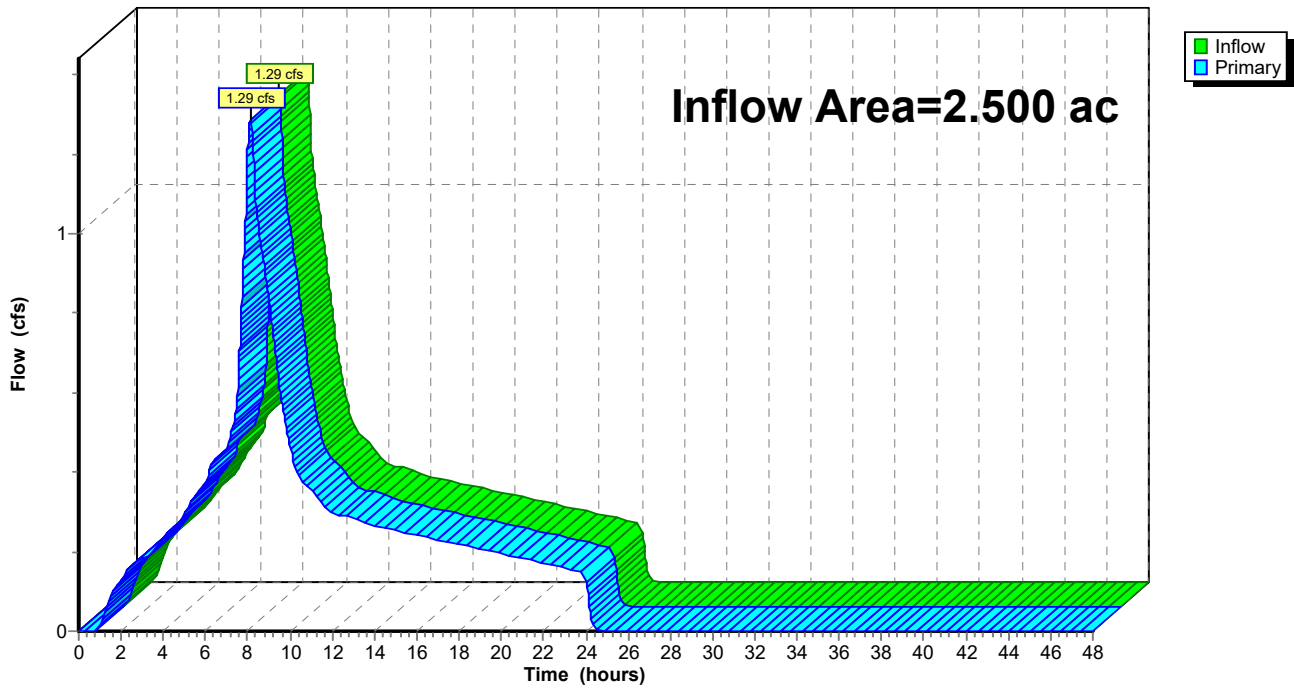
Summary for Link 2L: Flow Summary

Inflow Area = 2.500 ac, 100.00% Impervious, Inflow Depth = 2.87" for 5-YR event
Inflow = 1.29 cfs @ 8.10 hrs, Volume= 0.597 af
Primary = 1.29 cfs @ 8.10 hrs, Volume= 0.597 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Link 2L: Flow Summary

Hydrograph



4668-01 POST-DEV

Type IA 24-hr 10-YR Rainfall=3.45"

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Page 19

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points x 2

Runoff by SBUH method, Split Pervious/Imperv.

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment4.3E: 4.3 EX

Runoff Area=26,357 sf 100.00% Impervious Runoff Depth=3.22"
Tc=5.0 min CN=0/98 Runoff=0.49 cfs 0.162 af

Subcatchment4.3M: 4.3 MOD

Runoff Area=17,554 sf 100.00% Impervious Runoff Depth=3.22"
Tc=5.0 min CN=0/98 Runoff=0.33 cfs 0.108 af

Subcatchment4.4E: 4.4 EX

Runoff Area=43,771 sf 100.00% Impervious Runoff Depth=3.22"
Tc=5.0 min CN=0/98 Runoff=0.81 cfs 0.269 af

Subcatchment4.4M: 4.4 MOD

Runoff Area=21,198 sf 100.00% Impervious Runoff Depth=3.22"
Tc=5.0 min CN=0/98 Runoff=0.39 cfs 0.130 af

Pond 1P: Detention Pipe

Peak Elev=194.89' Storage=1,966 cf Inflow=2.02 cfs 0.670 af
Outflow=1.46 cfs 0.670 af

Link 2L: Flow Summary

Inflow=1.46 cfs 0.670 af
Primary=1.46 cfs 0.670 af

Total Runoff Area = 2.500 ac Runoff Volume = 0.670 af Average Runoff Depth = 3.22"
0.00% Pervious = 0.000 ac 100.00% Impervious = 2.500 ac

Summary for Subcatchment 4.3E: 4.3 EX

Runoff = 0.49 cfs @ 7.88 hrs, Volume= 0.162 af, Depth= 3.22"

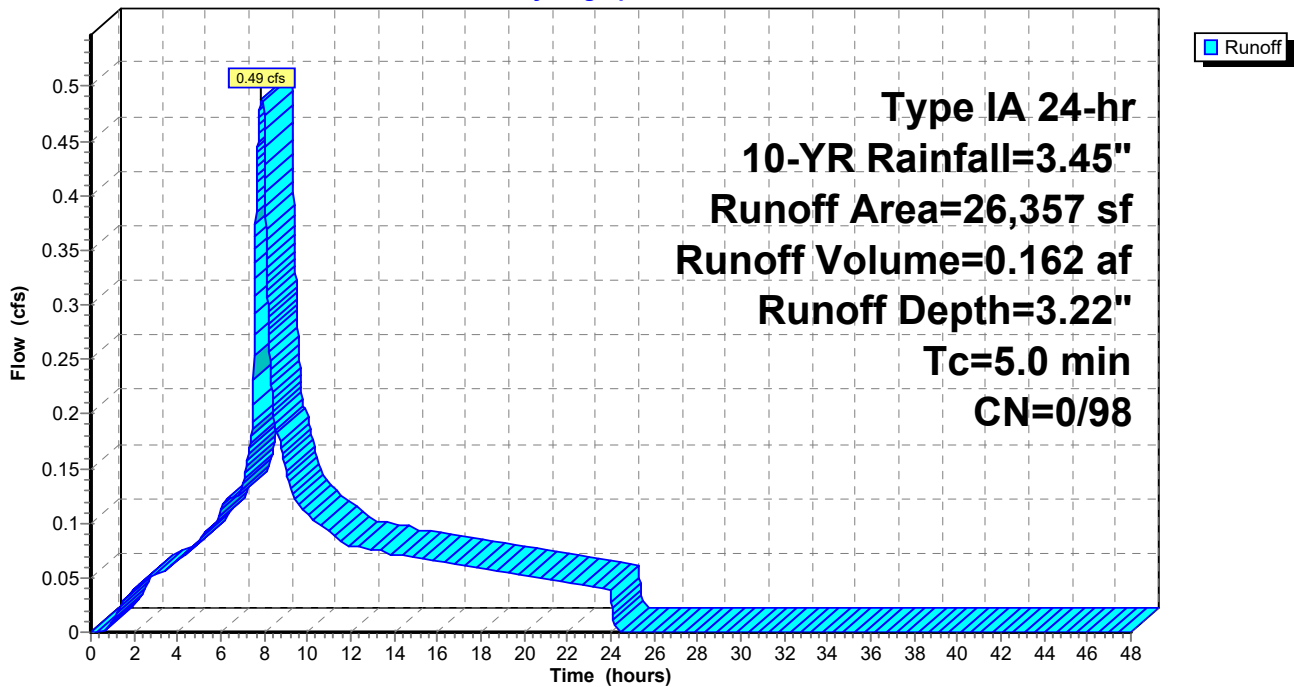
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type IA 24-hr 10-YR Rainfall=3.45"

Area (sf)	CN	Description
* 26,357	98	Roof/Drive Aisle
26,357		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 4.3E: 4.3 EX

Hydrograph



Summary for Subcatchment 4.3M: 4.3 MOD

Runoff = 0.33 cfs @ 7.88 hrs, Volume= 0.108 af, Depth= 3.22"

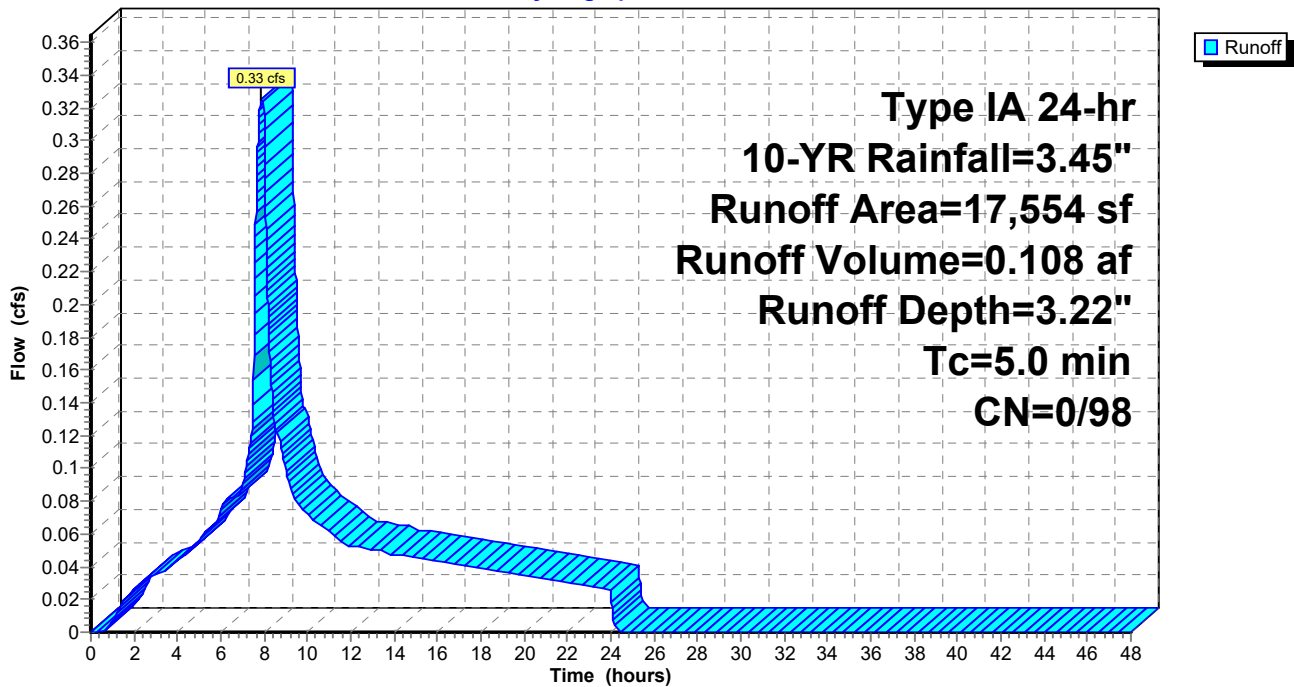
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type IA 24-hr 10-YR Rainfall=3.45"

Area (sf)	CN	Description
* 17,554	98	Roof/Drive Aisle
17,554		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 4.3M: 4.3 MOD

Hydrograph



Summary for Subcatchment 4.4E: 4.4 EX

Runoff = 0.81 cfs @ 7.88 hrs, Volume= 0.269 af, Depth= 3.22"

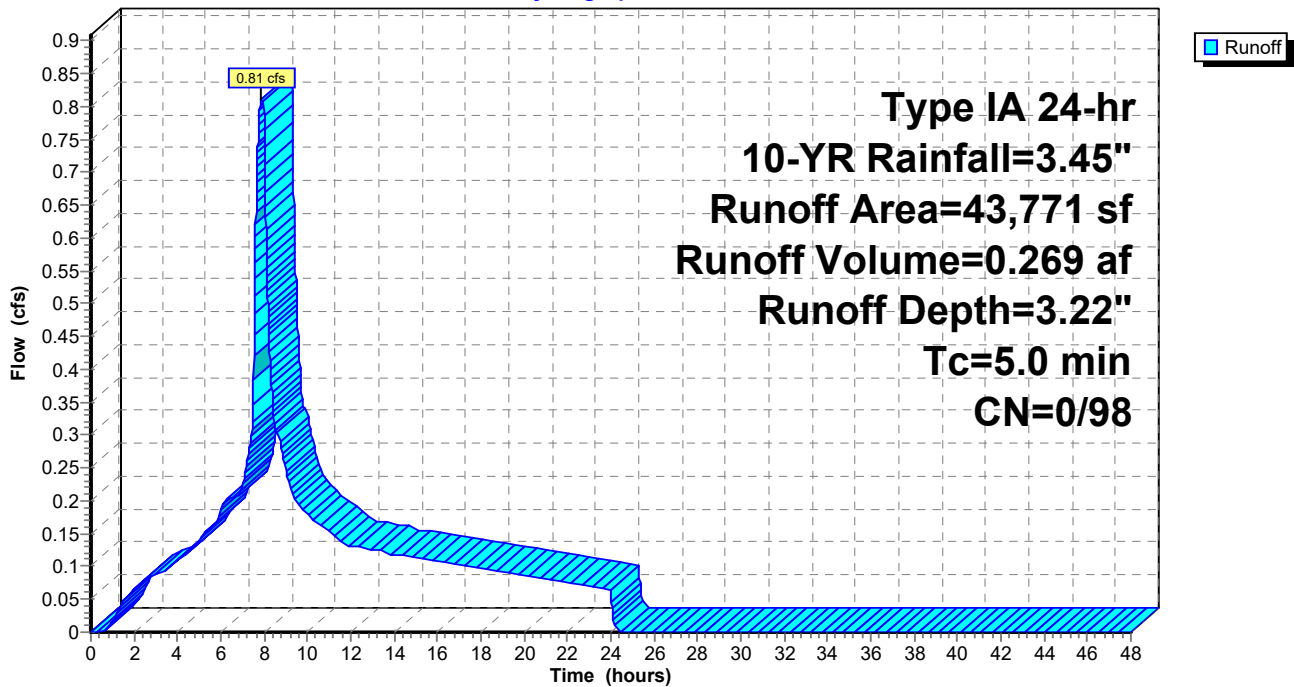
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type IA 24-hr 10-YR Rainfall=3.45"

Area (sf)	CN	Description
* 43,771	98	Roof/Drive Aisle
43,771		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 4.4E: 4.4 EX

Hydrograph



Summary for Subcatchment 4.4M: 4.4 MOD

Runoff = 0.39 cfs @ 7.88 hrs, Volume= 0.130 af, Depth= 3.22"

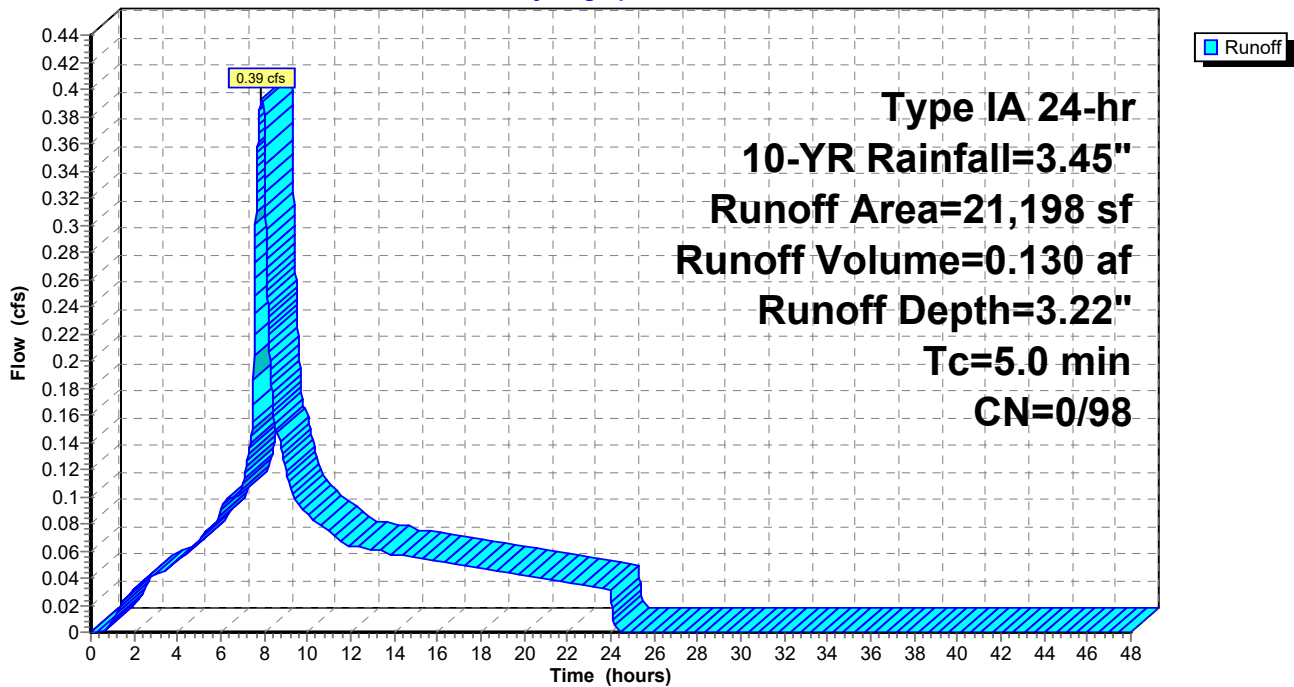
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type IA 24-hr 10-YR Rainfall=3.45"

Area (sf)	CN	Description
* 21,198	98	Roof/Drive Aisle
21,198		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 4.4M: 4.4 MOD

Hydrograph



Summary for Pond 1P: Detention Pipe

Inflow Area = 2.500 ac, 100.00% Impervious, Inflow Depth = 3.22" for 10-YR event
 Inflow = 2.02 cfs @ 7.88 hrs, Volume= 0.670 af
 Outflow = 1.46 cfs @ 8.10 hrs, Volume= 0.670 af, Atten= 28%, Lag= 13.2 min
 Primary = 1.46 cfs @ 8.10 hrs, Volume= 0.670 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 2
 Peak Elev= 194.89' @ 8.10 hrs Surf.Area= 499 sf Storage= 1,966 cf

Plug-Flow detention time= 9.9 min calculated for 0.670 af (100% of inflow)
 Center-of-Mass det. time= 9.9 min (673.1 - 663.2)

Volume	Invert	Avail.Storage	Storage Description
#1	191.00'	2,356 cf	60.0" Round Pipe Storage L= 120.0'

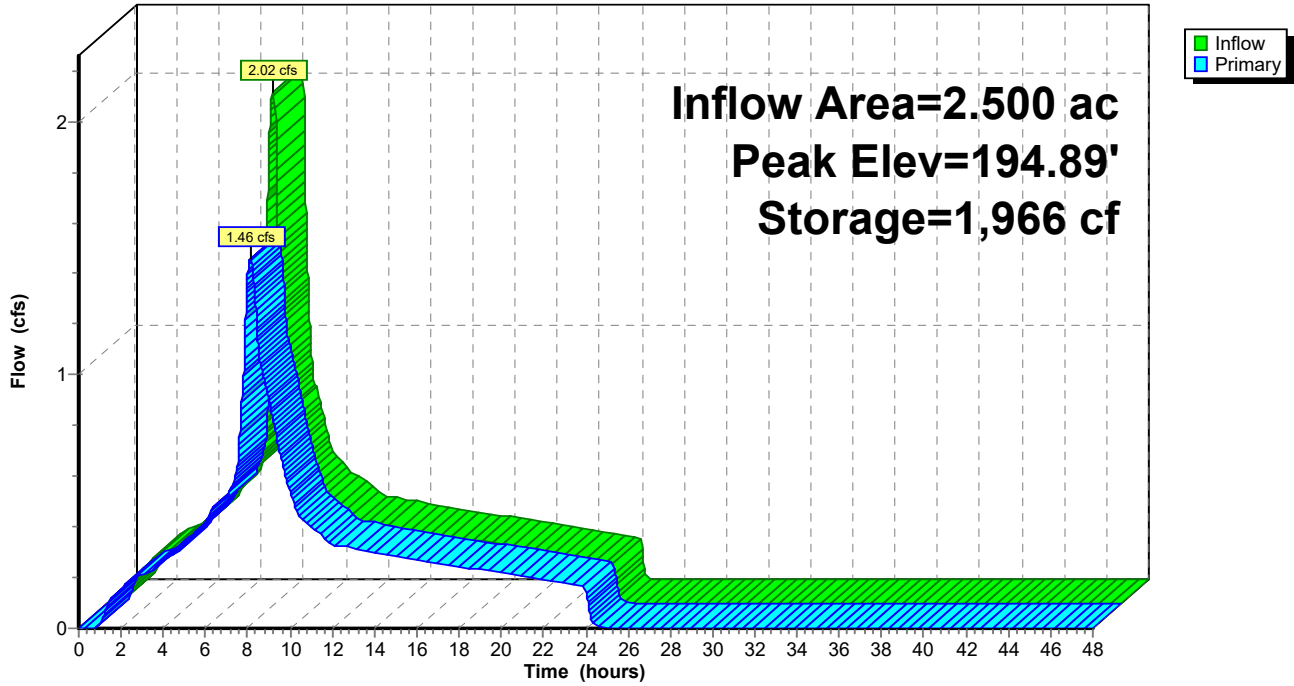
Device	Routing	Invert	Outlet Devices
#1	Primary	191.00'	8.0" Round Culvert L= 10.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 191.00' / 190.81' S= 0.0190' /' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.35 sf
#2	Device 1	191.00'	4.9" Vert. Orifice/Grate C= 0.600
#3	Device 1	194.00'	3.3" Vert. Orifice/Grate C= 0.600
#4	Primary	195.00'	2.7" Vert. Orifice/Grate C= 0.600
#5	Device 1	195.90'	8.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=1.46 cfs @ 8.10 hrs HW=194.89' TW=0.00' (Dynamic Tailwater)

- 1=Culvert (Passes 1.46 cfs of 3.17 cfs potential flow)
- 2=Orifice/Grate (Orifice Controls 1.21 cfs @ 9.24 fps)
- 3=Orifice/Grate (Orifice Controls 0.25 cfs @ 4.17 fps)
- 5=Orifice/Grate (Controls 0.00 cfs)
- 4=Orifice/Grate (Controls 0.00 cfs)

Pond 1P: Detention Pipe

Hydrograph



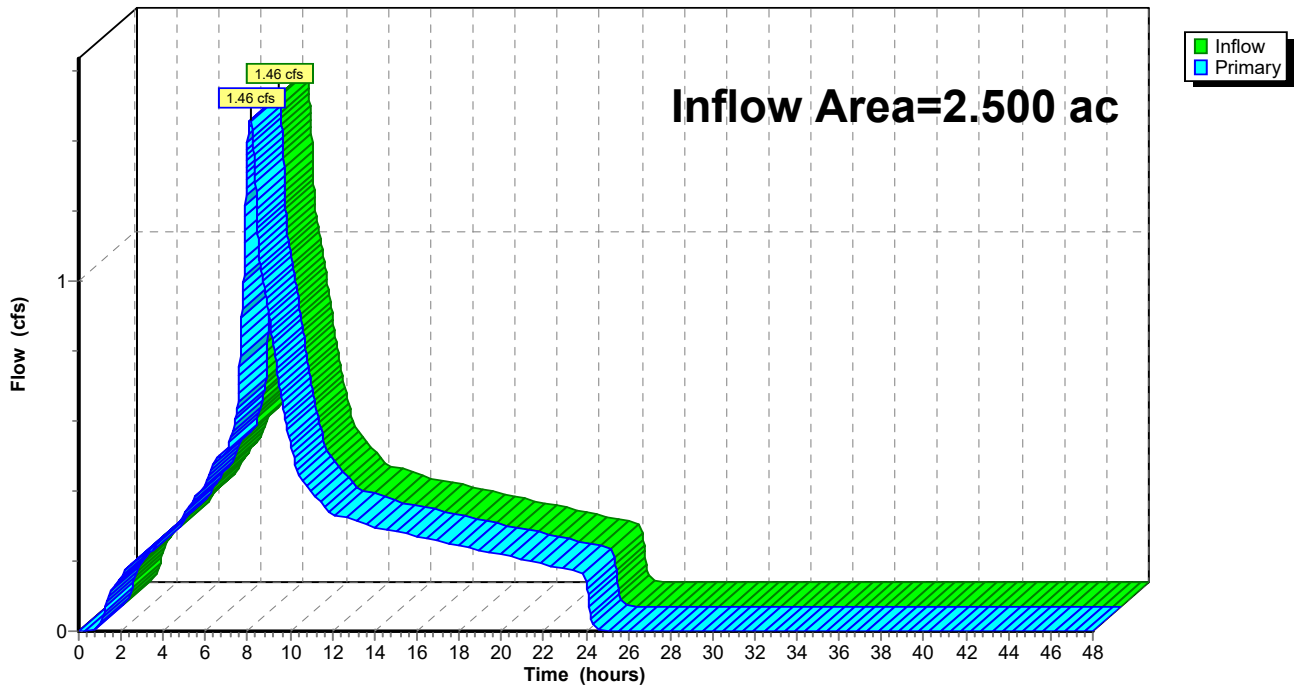
Summary for Link 2L: Flow Summary

Inflow Area = 2.500 ac, 100.00% Impervious, Inflow Depth = 3.22" for 10-YR event
Inflow = 1.46 cfs @ 8.10 hrs, Volume= 0.670 af
Primary = 1.46 cfs @ 8.10 hrs, Volume= 0.670 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Link 2L: Flow Summary

Hydrograph



4668-01 POST-DEV

Type IA 24-hr 25-YR Rainfall=3.90"

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Page 27

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points x 2

Runoff by SBUH method, Split Pervious/Imperv.

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment4.3E: 4.3 EX

Runoff Area=26,357 sf 100.00% Impervious Runoff Depth=3.67"
Tc=5.0 min CN=0/98 Runoff=0.55 cfs 0.185 af

Subcatchment4.3M: 4.3 MOD

Runoff Area=17,554 sf 100.00% Impervious Runoff Depth=3.67"
Tc=5.0 min CN=0/98 Runoff=0.37 cfs 0.123 af

Subcatchment4.4E: 4.4 EX

Runoff Area=43,771 sf 100.00% Impervious Runoff Depth=3.67"
Tc=5.0 min CN=0/98 Runoff=0.92 cfs 0.307 af

Subcatchment4.4M: 4.4 MOD

Runoff Area=21,198 sf 100.00% Impervious Runoff Depth=3.67"
Tc=5.0 min CN=0/98 Runoff=0.45 cfs 0.149 af

Pond 1P: Detention Pipe

Peak Elev=195.52' Storage=2,242 cf Inflow=2.29 cfs 0.763 af
Outflow=1.77 cfs 0.763 af

Link 2L: Flow Summary

Inflow=1.77 cfs 0.763 af
Primary=1.77 cfs 0.763 af

Total Runoff Area = 2.500 ac Runoff Volume = 0.763 af Average Runoff Depth = 3.67"
0.00% Pervious = 0.000 ac 100.00% Impervious = 2.500 ac

Summary for Subcatchment 4.3E: 4.3 EX

Runoff = 0.55 cfs @ 7.88 hrs, Volume= 0.185 af, Depth= 3.67"

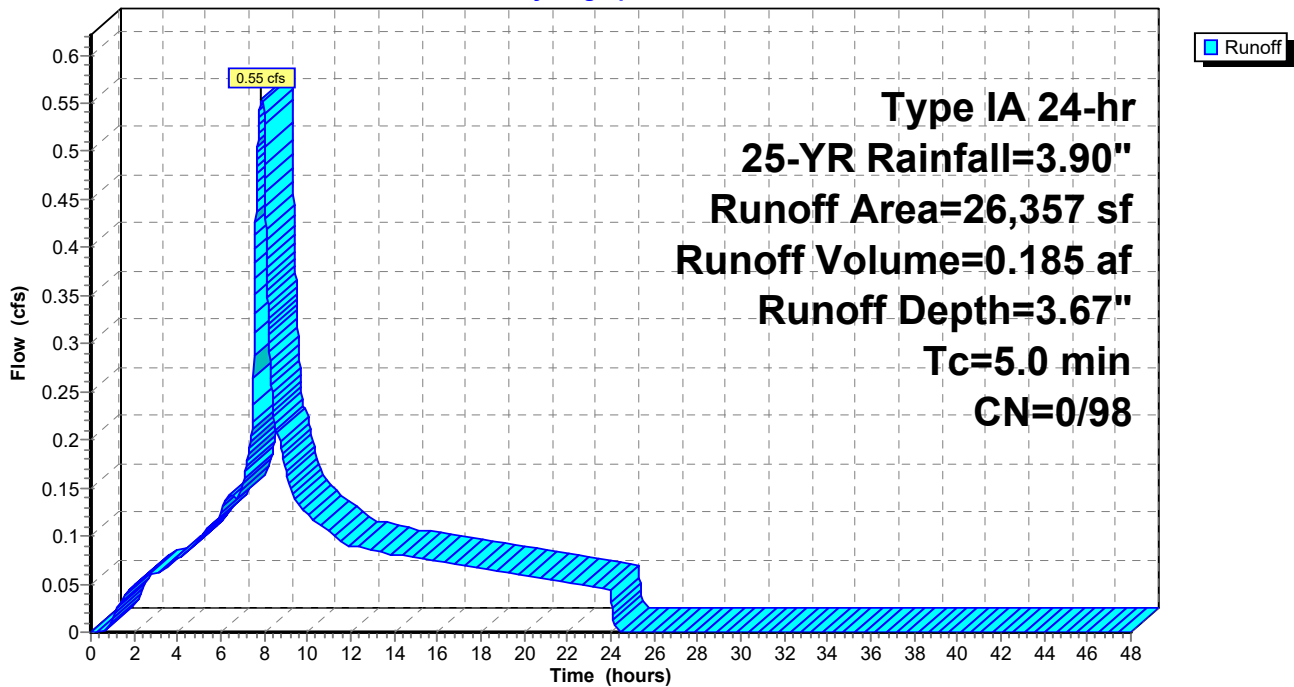
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type IA 24-hr 25-YR Rainfall=3.90"

Area (sf)	CN	Description
* 26,357	98	Roof/Drive Aisle
26,357		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 4.3E: 4.3 EX

Hydrograph



Summary for Subcatchment 4.3M: 4.3 MOD

Runoff = 0.37 cfs @ 7.88 hrs, Volume= 0.123 af, Depth= 3.67"

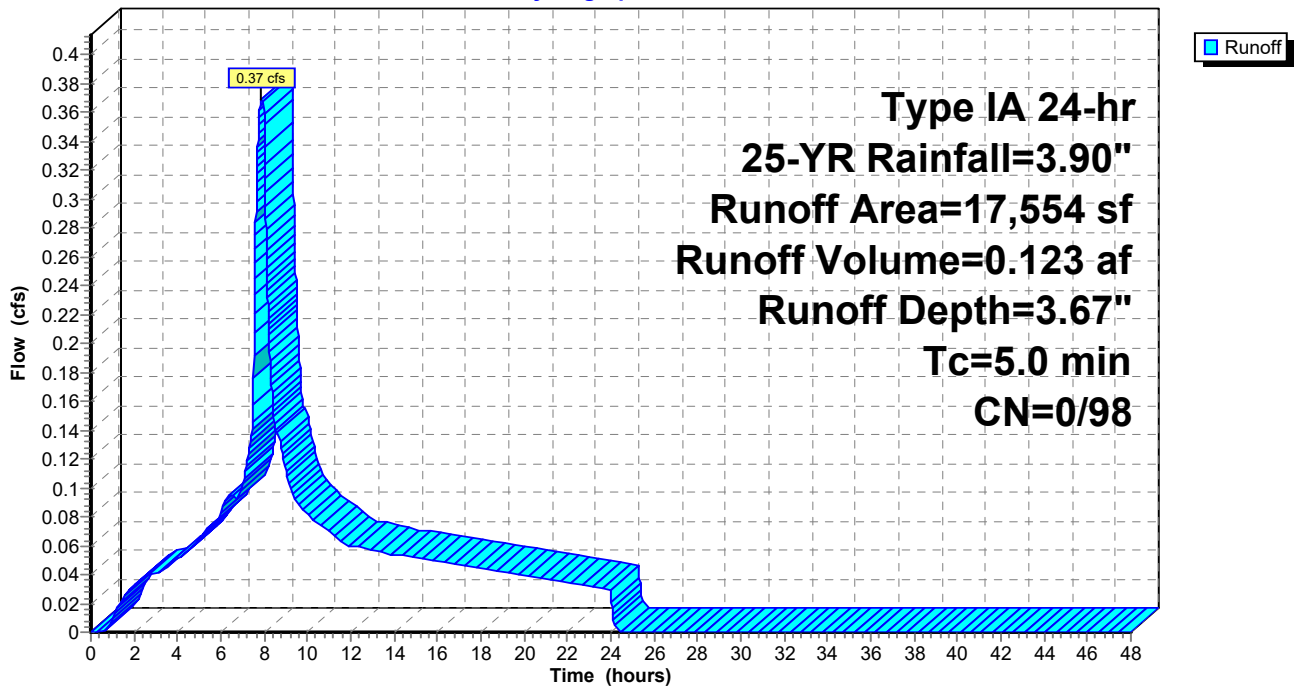
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type IA 24-hr 25-YR Rainfall=3.90"

Area (sf)	CN	Description
* 17,554	98	Roof/Drive Aisle
17,554		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 4.3M: 4.3 MOD

Hydrograph



Summary for Subcatchment 4.4E: 4.4 EX

Runoff = 0.92 cfs @ 7.88 hrs, Volume= 0.307 af, Depth= 3.67"

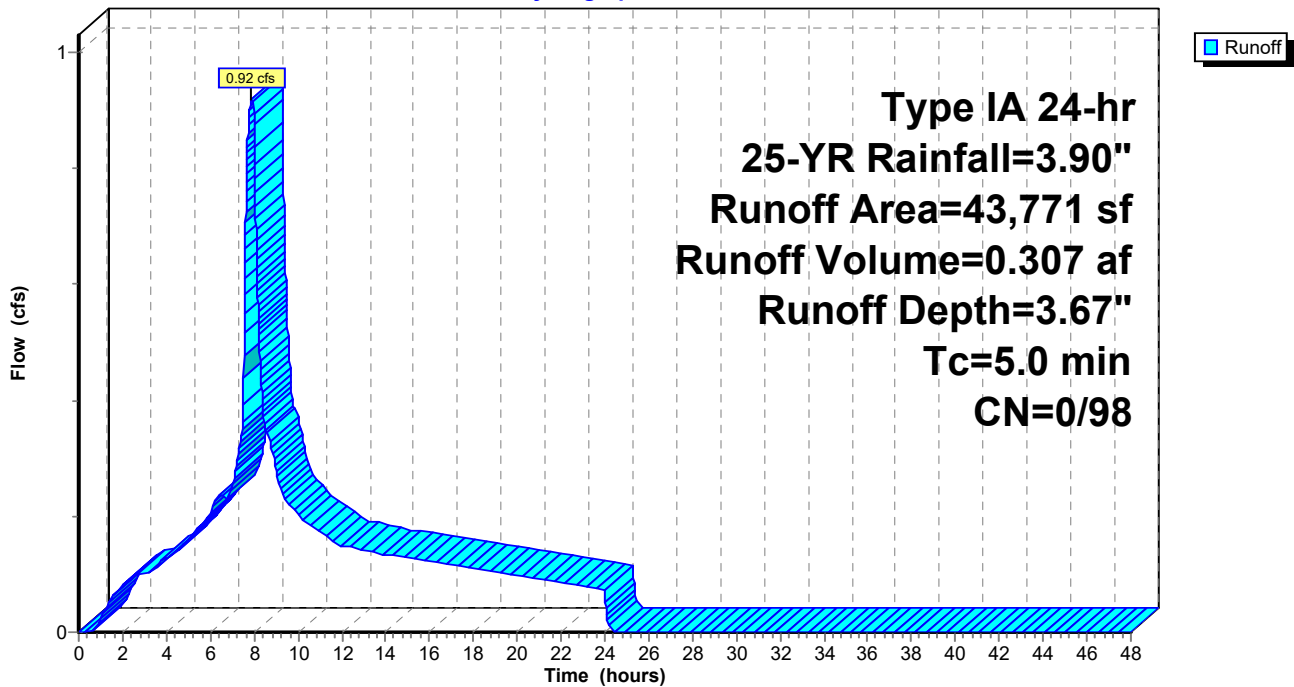
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type IA 24-hr 25-YR Rainfall=3.90"

Area (sf)	CN	Description
* 43,771	98	Roof/Drive Aisle
43,771		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 4.4E: 4.4 EX

Hydrograph



Summary for Subcatchment 4.4M: 4.4 MOD

Runoff = 0.45 cfs @ 7.88 hrs, Volume= 0.149 af, Depth= 3.67"

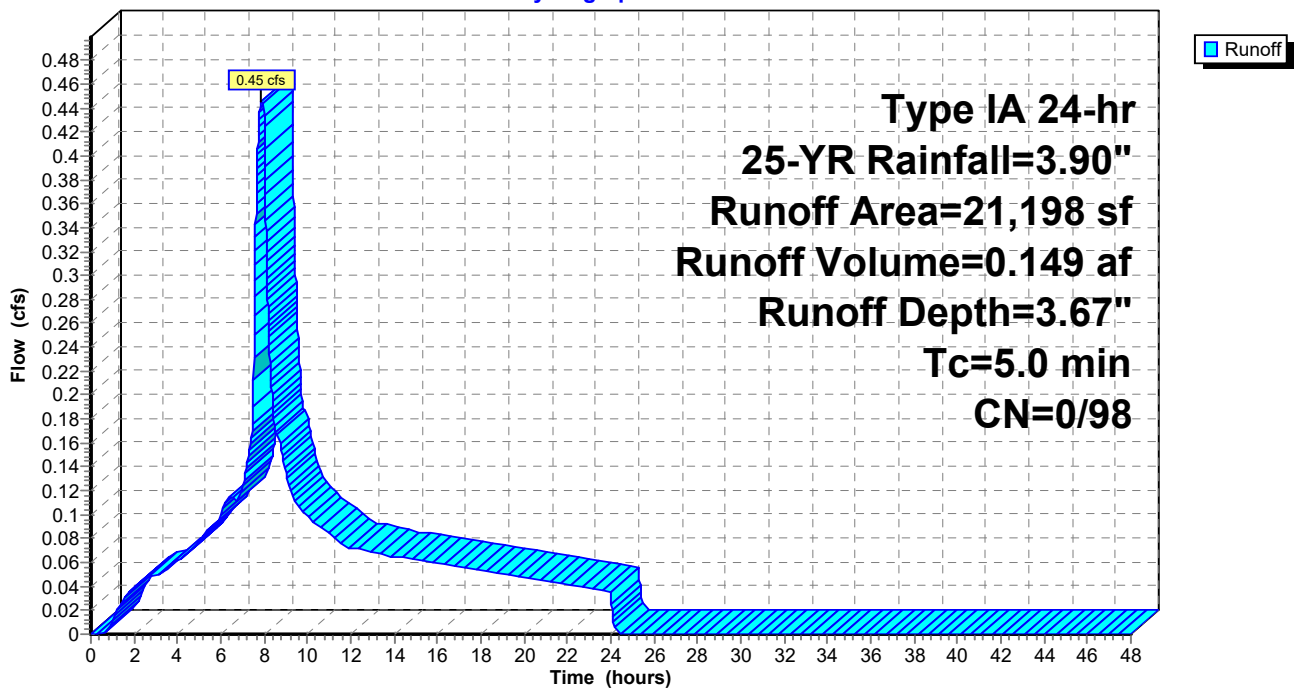
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type IA 24-hr 25-YR Rainfall=3.90"

Area (sf)	CN	Description
* 21,198	98	Roof/Drive Aisle
21,198		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 4.4M: 4.4 MOD

Hydrograph



Summary for Pond 1P: Detention Pipe

Inflow Area = 2.500 ac, 100.00% Impervious, Inflow Depth = 3.67" for 25-YR event
 Inflow = 2.29 cfs @ 7.88 hrs, Volume= 0.763 af
 Outflow = 1.77 cfs @ 8.07 hrs, Volume= 0.763 af, Atten= 23%, Lag= 11.7 min
 Primary = 1.77 cfs @ 8.07 hrs, Volume= 0.763 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 2
 Peak Elev= 195.52' @ 8.07 hrs Surf.Area= 352 sf Storage= 2,242 cf

Plug-Flow detention time= 10.5 min calculated for 0.763 af (100% of inflow)
 Center-of-Mass det. time= 10.5 min (670.7 - 660.1)

Volume	Invert	Avail.Storage	Storage Description
#1	191.00'	2,356 cf	60.0" Round Pipe Storage L= 120.0'

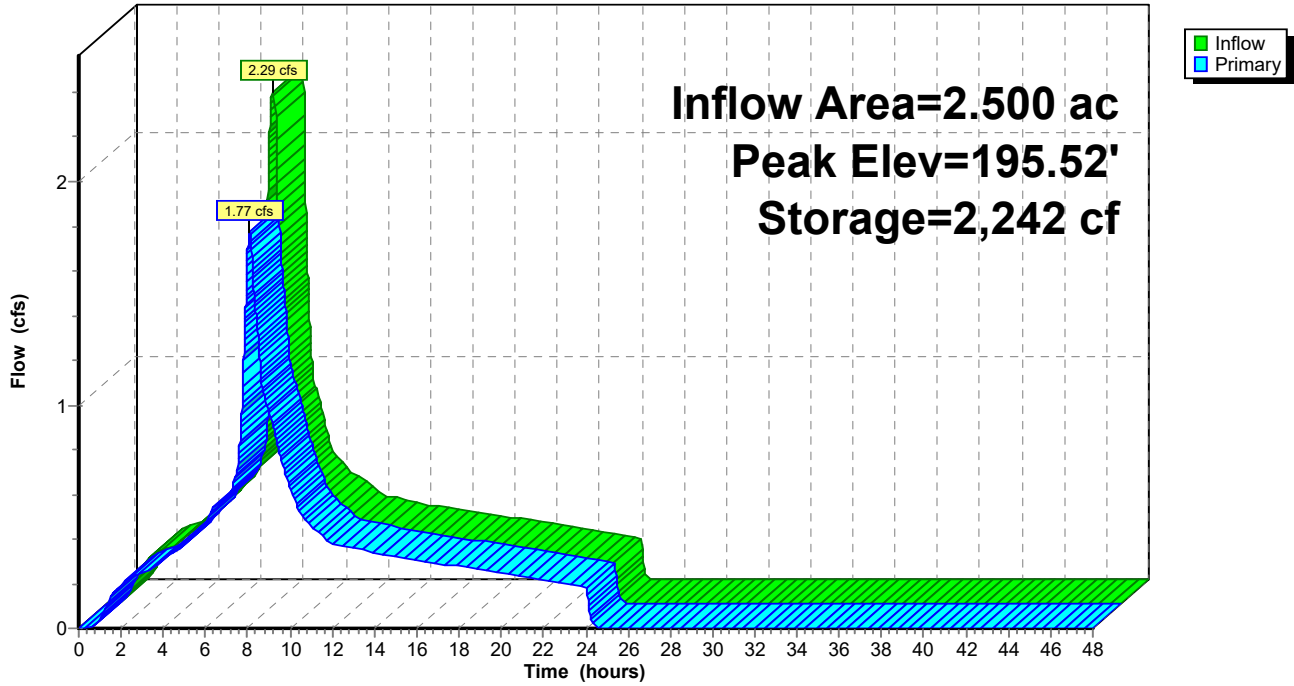
Device	Routing	Invert	Outlet Devices
#1	Primary	191.00'	8.0" Round Culvert L= 10.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 191.00' / 190.81' S= 0.0190 '/ Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.35 sf
#2	Device 1	191.00'	4.9" Vert. Orifice/Grate C= 0.600
#3	Device 1	194.00'	3.3" Vert. Orifice/Grate C= 0.600
#4	Primary	195.00'	2.7" Vert. Orifice/Grate C= 0.600
#5	Device 1	195.90'	8.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=1.77 cfs @ 8.07 hrs HW=195.52' TW=0.00' (Dynamic Tailwater)

- 1=Culvert (Passes 1.65 cfs of 3.44 cfs potential flow)
- 2=Orifice/Grate (Orifice Controls 1.31 cfs @ 10.01 fps)
- 3=Orifice/Grate (Orifice Controls 0.34 cfs @ 5.67 fps)
- 5=Orifice/Grate (Controls 0.00 cfs)
- 4=Orifice/Grate (Orifice Controls 0.12 cfs @ 3.08 fps)

Pond 1P: Detention Pipe

Hydrograph



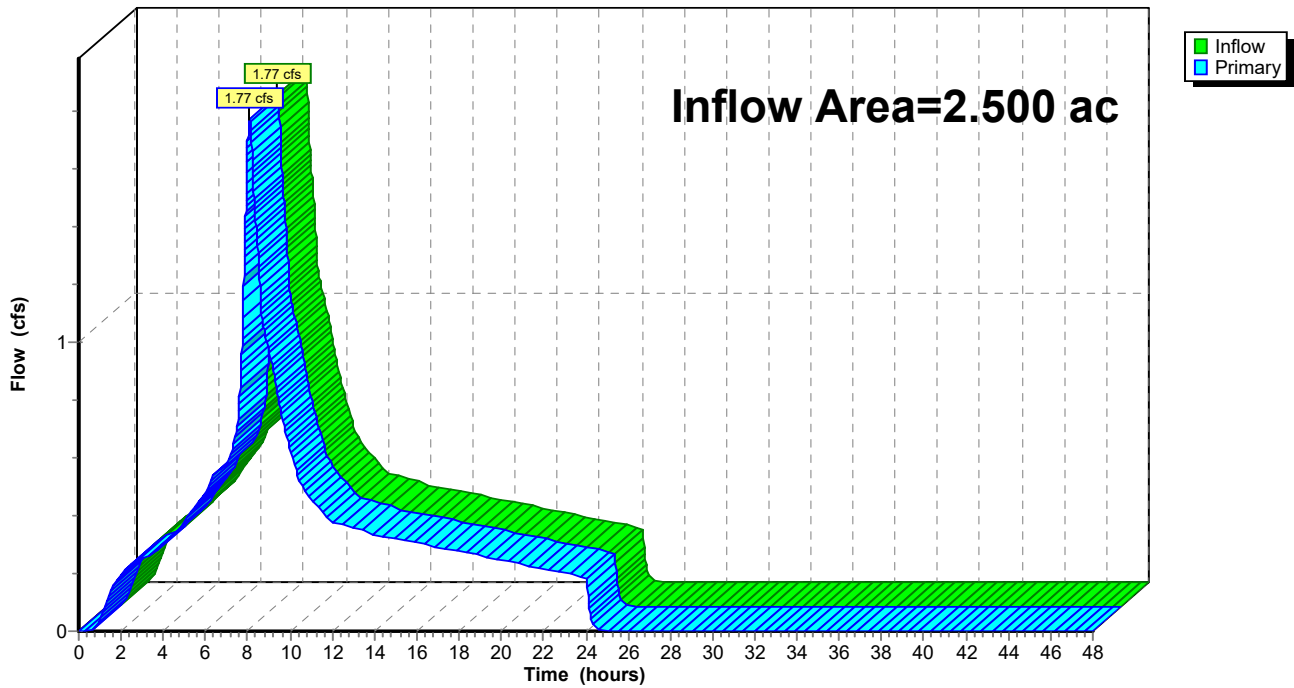
Summary for Link 2L: Flow Summary

Inflow Area = 2.500 ac, 100.00% Impervious, Inflow Depth = 3.67" for 25-YR event
Inflow = 1.77 cfs @ 8.07 hrs, Volume= 0.763 af
Primary = 1.77 cfs @ 8.07 hrs, Volume= 0.763 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Link 2L: Flow Summary

Hydrograph



Appendix D: NRCS Soil Resource Report



United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for **Washington County, Oregon**

Sentinel Storage Annex II Mod.



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Contents

Preface	2
How Soil Surveys Are Made	5
Soil Map	8
Soil Map.....	9
Legend.....	10
Map Unit Legend.....	11
Map Unit Descriptions.....	11
Washington County, Oregon.....	13
37A—Quatama loam, 0 to 3 percent slopes.....	13
37B—Quatama loam, 3 to 7 percent slopes.....	14
References	16

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

Custom Soil Resource Report

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

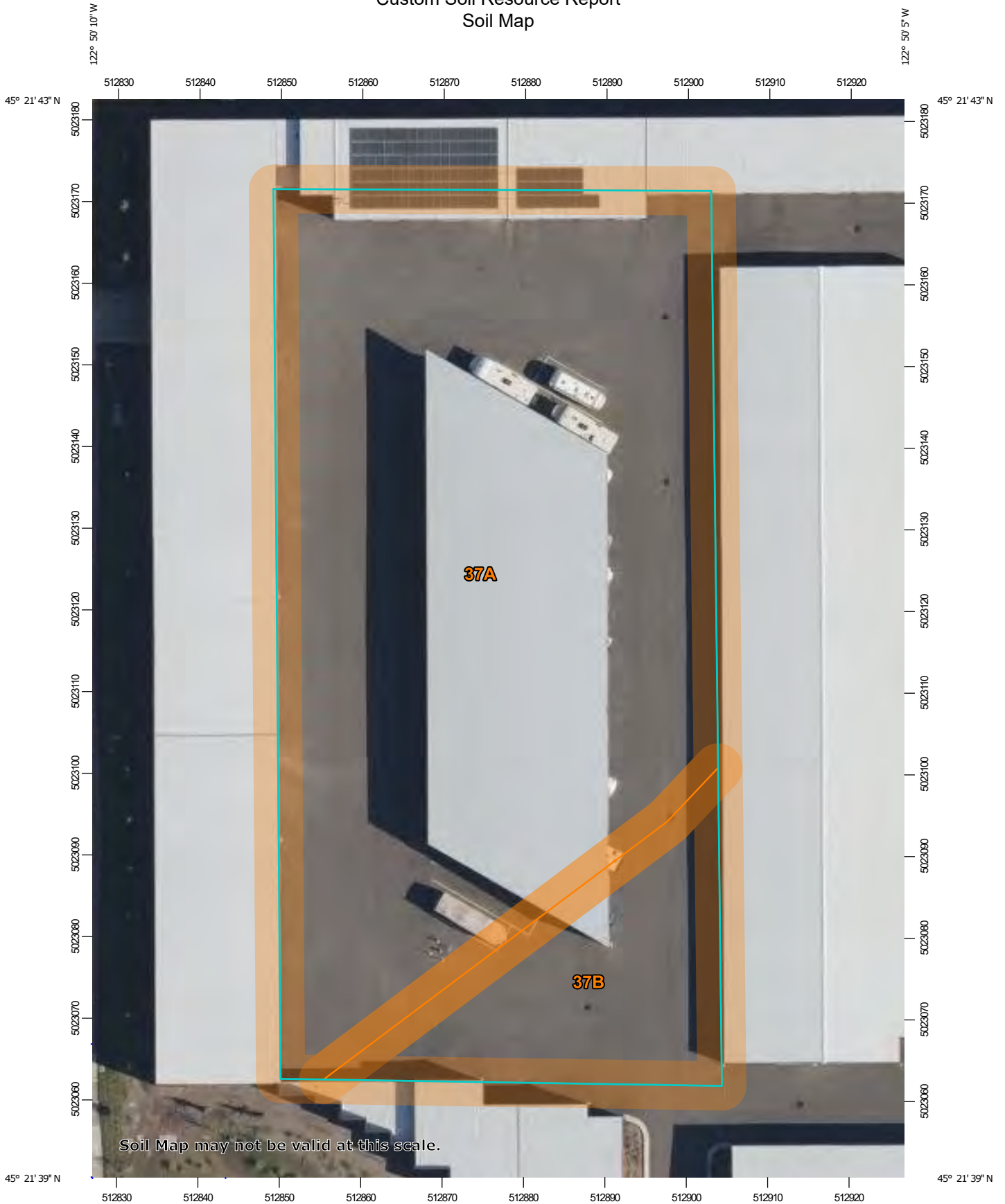
Custom Soil Resource Report

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map



Map Scale: 1:643 if printed on A portrait (8.5" x 11") sheet.


0 5 10 20 30 Meters

0 30 60 120 180 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84


MAP LEGEND


Area of Interest (AOI)

 Area of Interest (AOI)




















Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines


 Soil Map Unit Points

Special Point Features






-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features


Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Washington County, Oregon
 Survey Area Data: Version 21, Oct 27, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 16, 2021—Apr 18, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
37A	Quatama loam, 0 to 3 percent slopes	1.2	84.5%
37B	Quatama loam, 3 to 7 percent slopes	0.2	15.5%
Totals for Area of Interest		1.5	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

Custom Soil Resource Report

onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Washington County, Oregon

37A—Quatama loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 21zl
Elevation: 140 to 250 feet
Mean annual precipitation: 40 to 50 inches
Mean annual air temperature: 52 to 54 degrees F
Frost-free period: 165 to 210 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Quatama and similar soils: 85 percent
Minor components: 4 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Quatama

Setting

Landform: Terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loamy alluvium

Typical profile

H1 - 0 to 15 inches: loam
H2 - 15 to 30 inches: clay loam
H3 - 30 to 62 inches: loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: About 24 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 8.8 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C
Ecological site: R002XC008OR - Valley Terrace Group
Forage suitability group: Moderately Well Drained < 15% Slopes (G002XY004OR)
Other vegetative classification: Moderately Well Drained < 15% Slopes (G002XY004OR)
Hydric soil rating: No

Minor Components

Huberly

Percent of map unit: 4 percent

Custom Soil Resource Report

Landform: Terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Other vegetative classification: Poorly Drained (G002XY006OR)
Hydric soil rating: Yes

37B—Quatama loam, 3 to 7 percent slopes

Map Unit Setting

National map unit symbol: 21zm
Elevation: 140 to 250 feet
Mean annual precipitation: 40 to 50 inches
Mean annual air temperature: 52 to 54 degrees F
Frost-free period: 165 to 210 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Quatama and similar soils: 85 percent
Minor components: 4 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Quatama

Setting

Landform: Terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loamy alluvium

Typical profile

H1 - 0 to 15 inches: loam
H2 - 15 to 30 inches: clay loam
H3 - 30 to 62 inches: loam

Properties and qualities

Slope: 3 to 7 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: About 24 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 8.8 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: C

Custom Soil Resource Report

Ecological site: R002XC008OR - Valley Terrace Group
Forage suitability group: Moderately Well Drained < 15% Slopes (G002XY004OR)
Other vegetative classification: Moderately Well Drained < 15% Slopes
(G002XY004OR)
Hydric soil rating: No

Minor Components

Huberly

Percent of map unit: 4 percent
Landform: Terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Other vegetative classification: Poorly Drained (G002XY006OR)
Hydric soil rating: Yes

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Custom Soil Resource Report

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Appendix E: TR55 Runoff Curve Numbers

Table 2-2a Runoff curve numbers for urban areas ^{1/}

Cover description	Average percent impervious area ^{2/}	Curve numbers for hydrologic soil group			
		A	B	C	D
Fully developed urban areas (vegetation established)					
Open space (lawns, parks, golf courses, cemeteries, etc.) ^{3/} :					
Poor condition (grass cover < 50%)		68	79	86	89
Fair condition (grass cover 50% to 75%)		49	69	79	84
Good condition (grass cover > 75%)		39	61	74	80
Impervious areas:					
Paved parking lots, roofs, driveways, etc. (excluding right-of-way)		98	98	98	98
Streets and roads:					
Paved; curbs and storm sewers (excluding right-of-way)		98	98	98	98
Paved; open ditches (including right-of-way)		83	89	92	93
Gravel (including right-of-way)		76	85	89	91
Dirt (including right-of-way)		72	82	87	89
Western desert urban areas:					
Natural desert landscaping (pervious areas only) ^{4/}		63	77	85	88
Artificial desert landscaping (impervious weed barrier, desert shrub with 1- to 2-inch sand or gravel mulch and basin borders)		96	96	96	96
Urban districts:					
Commercial and business	85	89	92	94	95
Industrial	72	81	88	91	93
Residential districts by average lot size:					
1/8 acre or less (town houses)	65	77	85	90	92
1/4 acre	38	61	75	83	87
1/3 acre	30	57	72	81	86
1/2 acre	25	54	70	80	85
1 acre	20	51	68	79	84
2 acres	12	46	65	77	82

Developing urban areas

Newly graded areas
(pervious areas only, no vegetation) ^{5/}

	77	86	91	94
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Idle lands (CN's are determined using cover types
similar to those in table 2-2c).

¹ Average runoff condition, and $I_a = 0.2S$.

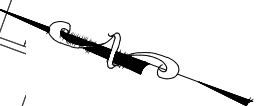
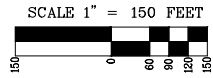
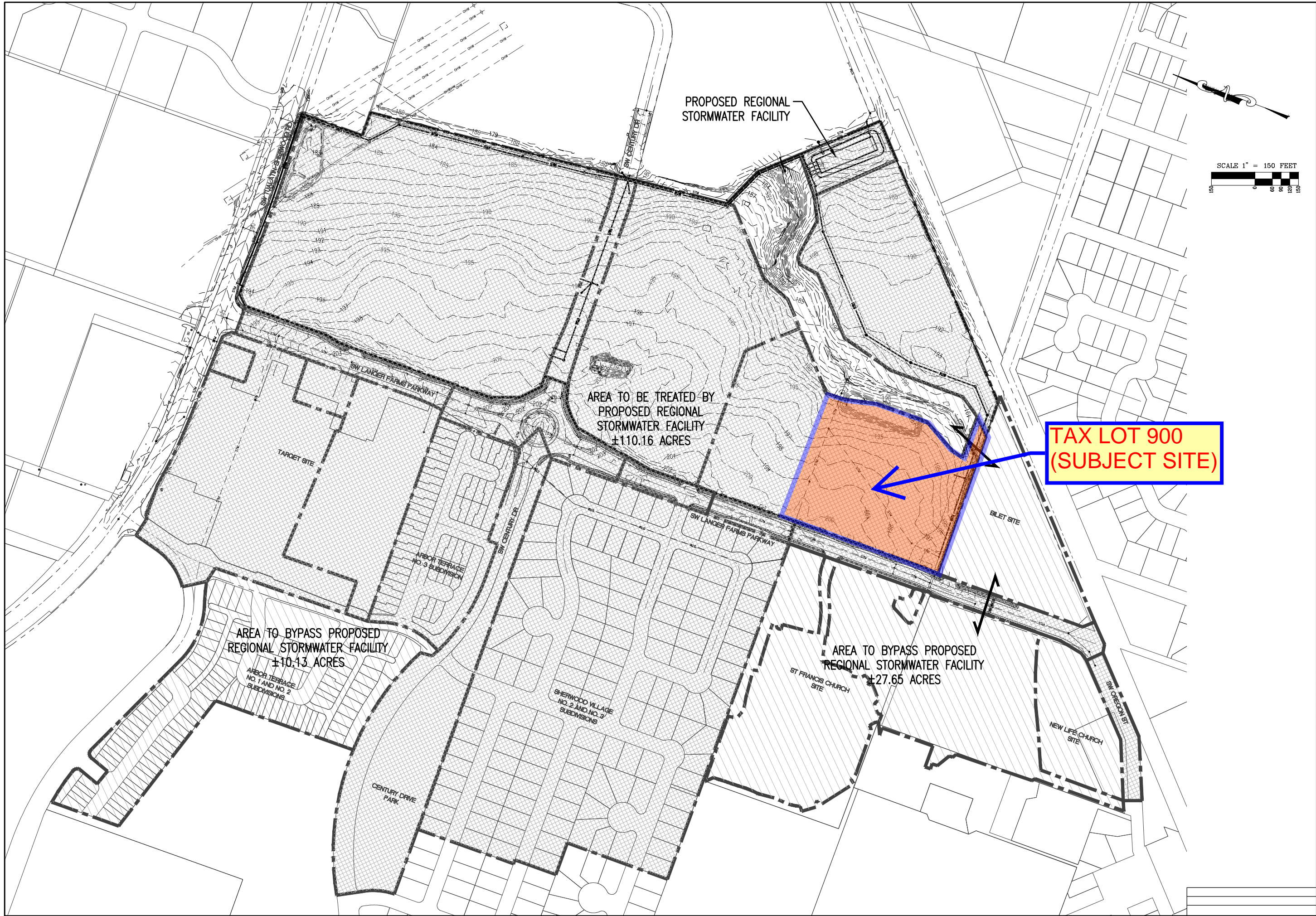
² The average percent impervious area shown was used to develop the composite CN's. Other assumptions are as follows: impervious areas are directly connected to the drainage system, impervious areas have a CN of 98, and pervious areas are considered equivalent to open space in good hydrologic condition. CN's for other combinations of conditions may be computed using figure 2-3 or 2-4.

³ CN's shown are equivalent to those of pasture. Composite CN's may be computed for other combinations of open space cover type.

⁴ Composite CN's for natural desert landscaping should be computed using figures 2-3 or 2-4 based on the impervious area percentage (CN = 98) and the pervious area CN. The pervious area CN's are assumed equivalent to desert shrub in poor hydrologic condition.

⁵ Composite CN's to use for the design of temporary measures during grading and construction should be computed using figure 2-3 or 2-4 based on the degree of development (impervious area percentage) and the CN's for the newly graded pervious areas.

Appendix F: Post-Development Catchment Basins
Map from Langer Farms Regional Facility Final
Stormwater Report, Prepared by AKS Engineering
(with annotations)



**TAX LOT 900
(SUBJECT SITE)**

**POST-DEVELOPMENT
CATCHMENT
BASINS MAP**

**LANGER FARMS
REGIONAL STORMWATER FACILITY
SHERWOOD OREGON**
WASHINGTON COUNTY TAX MAP 25.1 29D
TAX LOT 300



AKS
ENGINEERING & FORESTRY
13910 SW GALBREATH DR.,
SUITE 100
SHERWOOD, OR 97140
PHONE: (503) 925-8799
FAX: (503) 925-8869

DESIGNED BY: AHH
DRAWN BY: QMP
CHECKED BY: AHH
DRAWING NO.: 2929STM
SCALE: AS NOTED

PREPARED FOR:
TILAND/SCHMIDT ARCHITECTS
3611 SW HOOD AVE, SUITE 200
PORTLAND, OR 97239

DATE:

JOB NUMBER
2929

SHEET
2 OF 2

**FIRE CODE / LAND USE / BUILDING REVIEW
APPLICATION**



North Operating Center
11945 SW 70th Avenue
Tigard, OR 97223
Phone: 503-649-8577

South Operating Center
8445 SW Elligsen Rd
Wilsonville, OR 97070
Phone: 503-649-8577

REV 6-30-20

Project Information

Applicant Name: John Christiansen
Address: 12965 SW Herman Rd., Suite 100 Tualatin, OR 97062
Phone: 503-563-6151
Email: johnc@aks-eng.com
Site Address: 21900 SW Langer Farms Parkway
City: Sherwood
Map & Tax Lot #: 2S 1 29DC, Tax Lot 900
Business Name: Langer Storage 2, LLC
Land Use/Building Jurisdiction: industrial self-storage facility
Land Use/ Building Permit # TBD by City of Sherwood
Choose from: Sherwood

Project Description

Removal and replacement of an existing RV canopy with a ±75,000-square-foot self-storage building.

Permit/Review Type (check one):

- Land Use / Building Review - Service Provider Permit
- Emergency Radio Responder Coverage Install/Test
- LPG Tank (Greater than 2,000 gallons)
- Flammable or Combustible Liquid Tank Installation (Greater than 1,000 gallons)
 - * Exception: Underground Storage Tanks (UST) are deferred to DEQ for regulation.
- Explosives Blasting (Blasting plan is required)
- Exterior Toxic, Pyrophoric or Corrosive Gas Installation (in excess of 810 cu.ft.)
- Tents or Temporary Membrane Structures (in excess of 10,000 square feet)
- Temporary Haunted House or similar
- OLCC Cannabis Extraction License Review
- Ceremonial Fire or Bonfire (For gathering, ceremony or other assembly)

For Fire Marshal's Office Use Only

TVFR Permit # 2022-0028
Permit Type: SPP
Submittal Date: _____
Assigned To: _____
Due Date: _____
Fees Due: _____
Fees Paid: _____

Approval/Inspection Conditions

(For Fire Marshal's Office Use Only)

This section is for application approval only

Ty Darby 3/15/22

Fire Marshal or Designee _____ Date _____

Conditions:

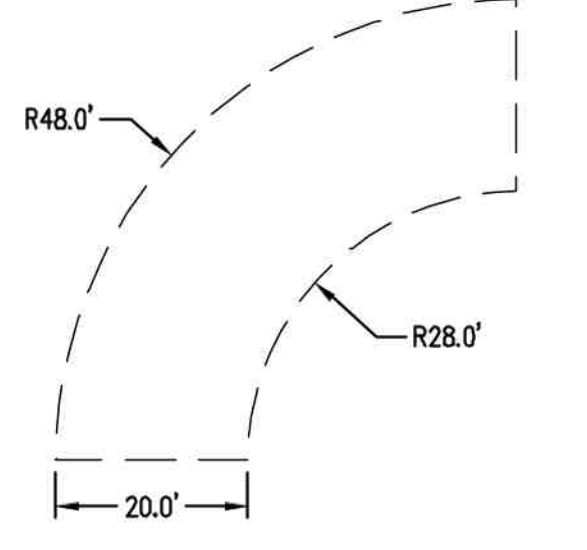
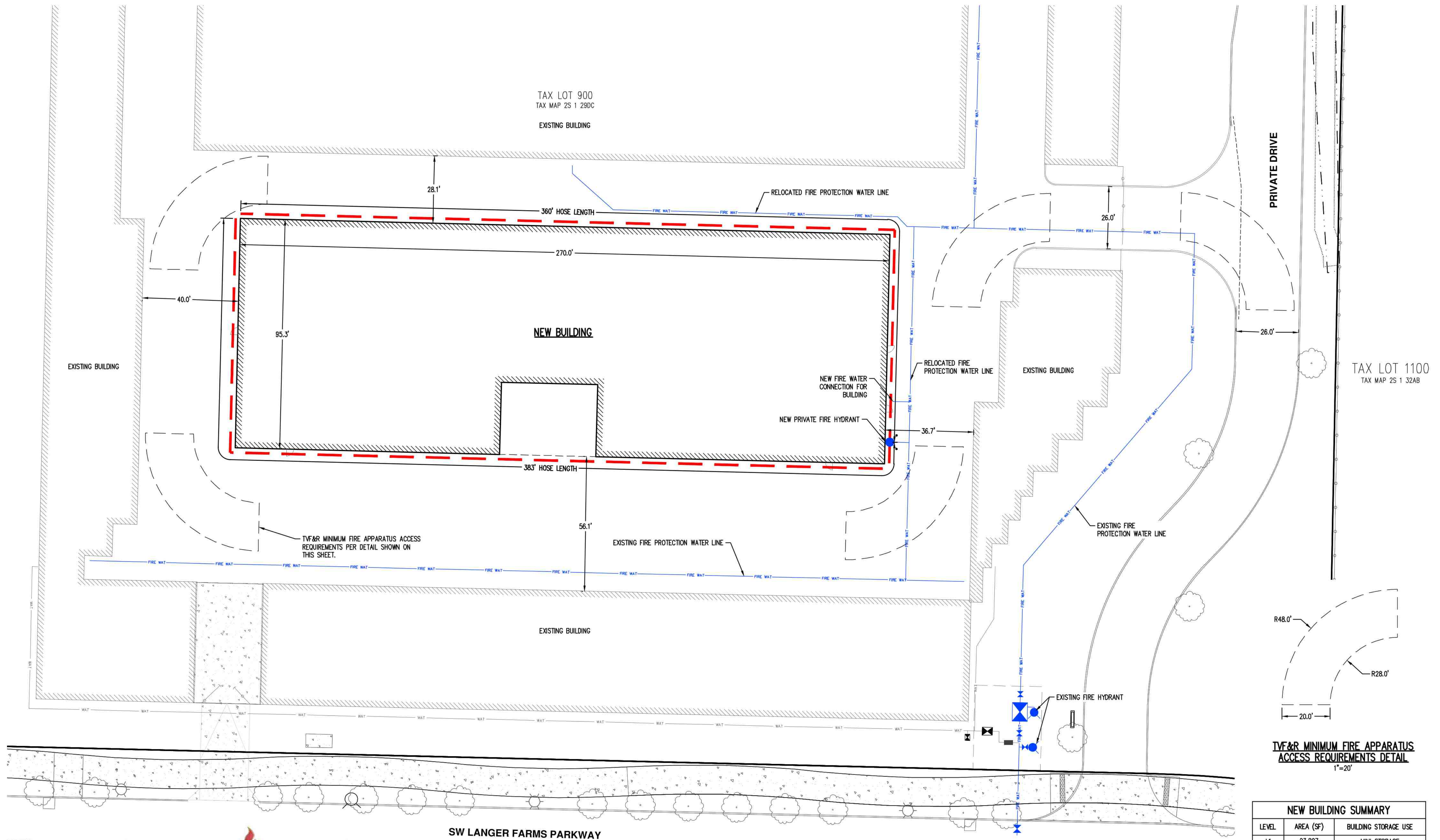
See Attached Conditions: Yes No

Site Inspection Required: Yes No

This section used when site inspection is required

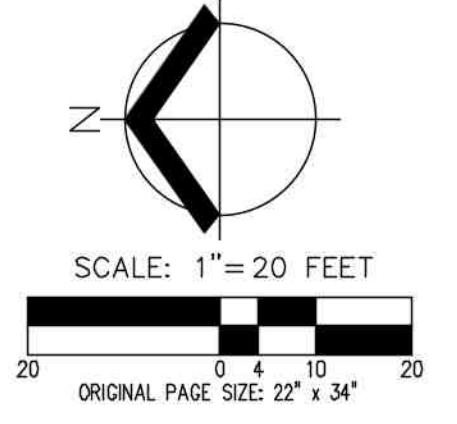
Inspection Comments:

Final TVFR Approval Signature & Emp ID _____ Date _____



TVF&R MINIMUM FIRE APPARATUS ACCESS REQUIREMENTS DETAIL
 1"=20'

NEW BUILDING SUMMARY		
LEVEL	AREA (SF)	BUILDING STORAGE USE
L1	23,897	MINI STORAGE
L2	24,540	MINI STORAGE
L3	25,740	MINI STORAGE
TOTAL	74,177	



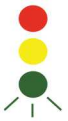
CONDITIONALLY APPROVED PLANS
 (see attached letter)

APPROVAL OF PLANS IS NOT AN APPROVAL
 OF OMISSIONS OR OVERSIGHTS.

TJ DARBY
 Deputy Fire Marshal II

**TVF&R SITE PLAN
 SENTINEL STORAGE ANNEX II
 SITE PLAN MODIFICATION
 SHERWOOD, OREGON**

JOB NUMBER: 4668-01
 DATE: 03/07/2022
 DESIGNED BY: APC
 DRAWN BY: APC
 CHECKED BY: JPC



April 14, 2016

Brad Kilby, Planning Manager
City of Sherwood
22560 SW Pine Street
Sherwood, OR 97140

Subject: Sentinel Storage Annex Phase 2

Dear Mr. Kilby

As requested by AKS Engineering and Forestry, Greenlight Engineering has conducted an analysis of the need for a traffic impact analysis for a proposed mini storage/rv/boat storage facility to be located on Langer Farms Parkway north of Oregon Street in Sherwood, Oregon.

The development consists of a 436 unit mini storage/rv/boat storage facility. Access to the site will be provided via an existing driveway to Langer Farms Parkway that is already used by an adjacent storage facility, Sentinel Storage Annex.

According to Section 16.106.080 of the City of Sherwood Zoning and Development Code, a traffic impact analysis is required for a number of different reasons. The development code section is provided below in italics, while our response is in regular typeface.

A traffic impact analysis (TIA) shall be required to be submitted to the City with a land use application at the request of the City Engineer or if the proposal is expected to involve one (1) or more of the following:

1. *An amendment to the Sherwood Comprehensive Plan or zoning map.*

The proposed development does not require an amendment to the Sherwood Comprehensive Plan or zoning map.

2. *A new direct property approach road to Highway 99W is proposed.*

No direct access to Highway 99W is proposed.

3. *The proposed development generates fifty (50) or more PM peak-hour trips on Highway 99W, or one hundred (100) PM peak-hour trips on the local transportation system.*

Vehicle trip generation rates from the 9th Edition of the ITE Trip Generation Manual were applied in establishing the site's generated trips for the proposed storage facility. Table 1 summarizes these trip generation projections for the site. As established below, far fewer than 50 PM peak hour trips will be generated by the proposed development.

Table 1. Trip Generation

Description & ITE Code	# of Units	Weekday Daily	Weekday AM Peak Hour			Weekday PM Peak Hour		
			Total	In	Out	Total	In	Out
Mini-warehouse (#151)	436	109	9	5	4	9	4	5
New Trips		109	9	5	4	9	4	5

Source: Institute of Transportation Engineers *Trip Generation Manual*, 9th Edition

4. *An increase in use of any adjacent street or direct property approach road to Highway 99W by ten (10) vehicles or more per day that exceed the twenty thousand-pound gross vehicle weight.*

The proposed development will not generate ten vehicle trips per day that exceed a twenty thousand-pound gross vehicle weight.

5. *The location of an existing or proposed access driveway does not meet minimum spacing or sight distance requirements, or is located where vehicles entering or leaving the property are restricted, or such vehicles are likely to queue or hesitate at an approach or access connection, thereby creating a safety hazard.*

The proposed access is via an existing access to the Sentinel Storage Annex facility that will be shared with this new storage facility and has been previously approved by the City of Sherwood. Additionally, the proposed development will be constructed with a long, unobstructed driveway throat and as described as above, has a very low trip generation.

6. *A change in internal traffic patterns that may cause safety problems, such as back up onto the highway or traffic crashes in the approach area.*

See discussion above in criterion #5.

There are no safety issues associated with this proposed development and the requirements of the City of Sherwood can be met. According to the City of Sherwood Zoning and Development Code, a full traffic impact study is not required. Should you have any questions, feel free to contact me at 503-317-4559.

Sincerely,



Rick Nys, P.E.
Principal Traffic Engineer



Mini-Warehouse (151)

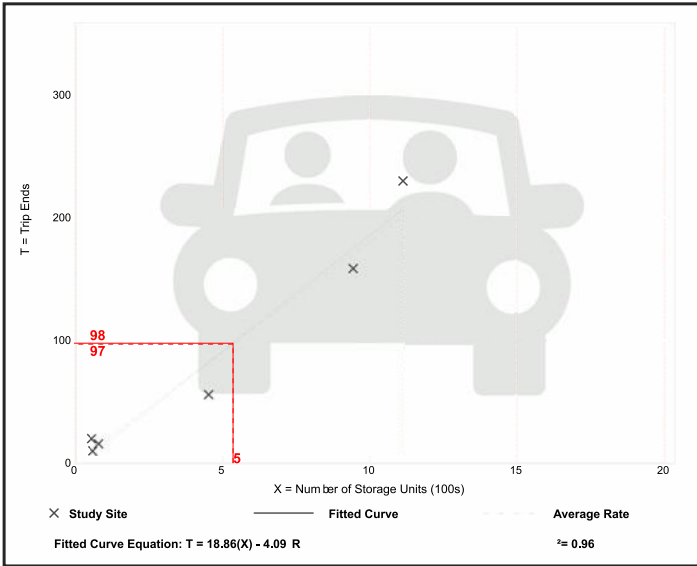
Vehicle Trip Ends vs: Storage Units (100s)
 On: Weekday

Setting/Location: General Urban/Suburban
 Number of Studies: 6
 Avg. Number of Storage Units (100s): 5
 Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Storage Unit (100s)

Average Rate R	Range of Rates S	Standard Deviation
17.96	2.25 - 33.33	4.13

Data Plot and Equation



Mini-Warehouse (151)

Vehicle Trip Ends vs: Storage Units (100s)
 On: Weekday

Setting/Location: General Urban/Suburban
 Number of Studies: 6
 Avg. Number of Storage Units (100s): 5
 Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Storage Unit (100s)

Average Rate R	Standard Deviation S	Standard Deviation
17.96	2.25 - 33.33	4.13

Data Plot and Equation

