

Application for Subdivision

1495 & 1547 S Fir Street

Canby, OR 97013

Applicant / Owner Information:

1495 S Fir Street / Tax Lot 1400		1547 S Fir Street / Tax Lot 1500	
Applicant/Owner	Blake DuPont 2785 SE Territorial Rd. Canby, OR 97013 (503) 502-9949	Applicant/Owner	Ralph Netter 536 NW 14 th Ave. Canby, OR 97013 (503) 789-4926
Owners	Brian & Bridget DuPont 9757 Lariat LN Aurora, OR 97002		

Location 1495 & 1547 S Fir Street
South of SW 13th Avenue on the west side of S Fir Street
opposite Hope Village.

Legal Description Tax Lots 1400 & 1500, Sec. 04CA, T4S R1E WM
(Assessor Map 4 1E 04CA)

Zoning R-1.5 (Medium Density Residential)

Site Size Tax Lot 1400: 1.31 Acres
Tax Lot 1500: 2.00 Acres

Proposal To subdivide two adjacent tax lots into a 19-lot subdivision,
with two existing homes remaining. The subdivision will
include the dedication of public right-of-way for S Fir Street
and the extension of SW 15th Avenue to S Fir Street.

Date October, 2023

Table of Contents

I.	Application Forms
II.	Written Narrative
III.	Pre-Application Meeting Information
IV.	Neighborhood Meeting Information
V.	Transportation Technical Memorandum
VI.	SW Canby Development Concept Plan & Appeal APP 18-02
VII.	Stormwater Report
VIII.	General Maps
	a. Vicinity Map
	b. Aerial Map
	c. Assessor Map
IX.	Proposed Development Maps
	a. Site Plan
	b. Street & Storm Drainage Plan & Sections
	c. Street Profiles
	d. Sanitary Sewer Plan
	e. Water Line & Franchise Utilities Plan
	f. Fire Department Access Plan
	g. Grading & Erosion Control Plan
Loose	Mailing Labels
	Full Size Plans

I. Application Forms



City of Canby
Planning Department
222 NE 2nd Avenue
PO Box 930
Canby, OR 97013
(503) 266-7001

LAND USE APPLICATION

SUBDIVISION Process Type III

APPLICANT INFORMATION: (Check ONE box below for designated contact person regarding this application)

☐ Applicant Name: Blake DuPont Phone: 503-502-9949
Address: 2785 SE Territorial Rd. Email: blake@willametteplastics.com
City/State: Canby, OR Zip: 97013

☒ Representative Name: Sisul Engineering, Pat Sisul Phone: 503-657-0188
Address: 375 Portland Avenue Email: patsisul@sisulengineering.com
City/State: Gladstone, OR Zip: 97027

☐ Property Owner Name: Blake DuPont Phone: 503-502-9949
Signature: [Signature]
Address: 2785 SE Territorial Rd. Email: blake@willametteplastics.com
City/State: Canby, OR Zip: 97013

☐ Property Owner Name: _____ Phone: _____
Signature: _____
Address: _____ Email: _____
City/State: _____ Zip: _____

NOTE: Property owners or contract purchasers are required to authorize the filing of this application and must sign above

- All property owners represent they have full legal capacity to and hereby do authorize the filing of this application and certify that the information and exhibits herewith submitted are true and correct.
- All property owners understand that they must meet all applicable Canby Municipal Code (CMC) regulations, including but not limited to CMC Chapter 16.49 Site and Design Review standards.
- All property owners hereby grant consent to the City of Canby and its officers, agents, employees, and/or independent contractors to enter the property identified herein to conduct any and all inspections that are considered appropriate by the City to process this application.

PROPERTY & PROJECT INFORMATION:

<u>1495 S Fir Street</u>	<u>1.31 Ac.</u>	<u>4 1E 04CA TL01400</u>
Street Address or Location of Subject Property	Total Size of Property	Assessor Tax Lot Numbers
<u>One existing home and smaller outbuildings</u>	<u>R-1.5</u>	<u>MDR - Medium Density Res.</u>
Existing Use, Structures, Other Improvements on Site	Zoning	Comp Plan Designation

To be combined with Tax Lot 01500 to form a 19-lot subdivision.

Describe the Proposed Development or Use of Subject Property

STAFF USE ONLY				
FILE #	DATE RECEIVED	RECEIVED BY	RECEIPT #	DATE APP COMPLETE



City of Canby
Planning Department
222 NE 2nd Avenue
PO Box 930
Canby, OR 97013
(503) 266-7001

LAND USE APPLICATION

SUBDIVISION

Process Type III

APPLICANT INFORMATION: (Check ONE box below for designated contact person regarding this application)

☐ Applicant Name: Blake DuPont Phone: 503-502-9949
Address: 2785 SE Territorial Rd. Email: blake@willametteplastics.com
City/State: Canby, OR Zip: 97013

☒ Representative Name: Sisul Engineering, Pat Sisul Phone: 503-657-0188
Address: 375 Portland Avenue Email: patsisul@sisulengineering.com
City/State: Gladstone, OR Zip: 97027

☐ Property Owner Name: Brian DuPont Phone: 503 502 8388
Signature: [Signature] Email: brian@willametteplastics.com
Address: 9757 Lariat Ln NE
City/State: Aurora, OR Zip: 97002

☐ Property Owner Name: Bridget DuPont Phone: 503-572-2147
Signature: [Signature] Email: bridgetdupont@gmail.com
Address: 9757 Lariat Ln NE
City/State: Aurora, OR Zip: 97002

NOTE: Property owners or contract purchasers are required to authorize the filing of this application and must sign above

- ① All property owners represent they have full legal capacity to and hereby do authorize the filing of this application and certify that the information and exhibits herewith submitted are true and correct.
- ② All property owners understand that they must meet all applicable Canby Municipal Code (CMC) regulations, including but not limited to CMC Chapter 16.49 Site and Design Review standards.
- ③ All property owners hereby grant consent to the City of Canby and its officers, agents, employees, and/or independent contractors to enter the property identified herein to conduct any and all inspections that are considered appropriate by the City to process this application.

PROPERTY & PROJECT INFORMATION:

<u>1495 S Fir Street</u>	<u>1.31 Ac.</u>	<u>4 1E 04CA TL01400</u>
Street Address or Location of Subject Property	Total Size of Property	Assessor Tax Lot Numbers
<u>One existing home and smaller outbuildings</u>	<u>R-1.5</u>	<u>MDR - Medium Density Res.</u>
Existing Use, Structures, Other Improvements on Site	Zoning	Comp Plan Designation

To be combined with Tax Lot 01500 to form a 19-lot subdivision.

Describe the Proposed Development or Use of Subject Property

STAFF USE ONLY				
FILE #	DATE RECEIVED	RECEIVED BY	RECEIPT #	DATE APP COMPLETE



City of Canby
Planning Department
222 NE 2nd Avenue
PO Box 930
Canby, OR 97013
(503) 266-7001

LAND USE APPLICATION

SUBDIVISION Process Type III

APPLICANT INFORMATION: (Check ONE box below for designated contact person regarding this application)

☐ Applicant Name: Ralph Netter Phone: 503-789-4926
Address: 536 NW 14th Avenue Email: trnetter@yahoo.com
City/State: Canby, OR Zip: 97013

☒ Representative Name: Sisul Engineering, Pat Sisul Phone: 503-657-0188
Address: 375 Portland Avenue Email: patsisul@sisulengineering.com
City/State: Gladstone, OR Zip: 97027

☐ Property Owner Name: Ralph A. Netter Revocable Trust Phone: 503-789-4926
Signature: Ralph Netter Trust
Address: 536 NW 14th Avenue Email: trnetter@yahoo.com
City/State: Canby, OR Zip: 97013

☐ Property Owner Name: Ralph Netter Trust Phone: 503-789-4926
Signature: _____
Address: _____ Email: _____
City/State: _____ Zip: _____

NOTE: Property owners or contract purchasers are required to authorize the filing of this application and must sign above

- All property owners represent they have full legal capacity to and hereby do authorize the filing of this application and certify that the information and exhibits herewith submitted are true and correct.
- All property owners understand that they must meet all applicable Canby Municipal Code (CMC) regulations, including but not limited to CMC Chapter 16.49 Site and Design Review standards.
- All property owners hereby grant consent to the City of Canby and its officers, agents, employees, and/or independent contractors to enter the property identified herein to conduct any and all inspections that are considered appropriate by the City to process this application.

PROPERTY & PROJECT INFORMATION:

<u>1547 S Fir Street</u>	<u>2.00 Ac.</u>	<u>4 1E 04CA TL01500</u>
Street Address or Location of Subject Property	Total Size of Property	Assessor Tax Lot Numbers
<u>One existing home and two outbuildings</u>	<u>R-1.5</u>	<u>MDR - Medium Density Res.</u>
Existing Use, Structures, Other Improvements on Site	Zoning	Comp Plan Designation

To be combined with Tax Lot 01400 to form a 19-lot subdivision.

Describe the Proposed Development or Use of Subject Property

STAFF USE ONLY				
FILE #	DATE RECEIVED	RECEIVED BY	RECEIPT #	DATE APP COMPLETE

II. Written Narrative

Application for Subdivision

Applicant / Owner Information:

1495 S Fir Street / Tax Lot 1400		1547 S Fir Street / Tax Lot 1500	
Applicant/Owner	Blake DuPont 2785 SE Territorial Rd. Canby, OR 97013 (503) 502-9949	Applicant/Owner	Ralph Netter 536 NW 14 th Ave. Canby, OR 97013 (503) 789-4926
Owners	Brian & Bridget DuPont 9757 Lariat LN Aurora, OR 97002		

Consultant Sisul Engineering, Pat Sisul
375 Portland Avenue
Gladstone, OR 97027
Phone: (503) 657-0188
Email: patsisul@sisulengineering.com

Location 1495 & 1547 S Fir Street
South of SW 13th Avenue on the west side of S Fir Street
Between the Hope Village Campus, the Beck Pond subdivision
& Elmwood Mobile Home Community.

Legal Description Tax Lots 1400 & 1500, Sec. 04CA, T4S R1E WM
(Assessor Map 4 1E 04CA)

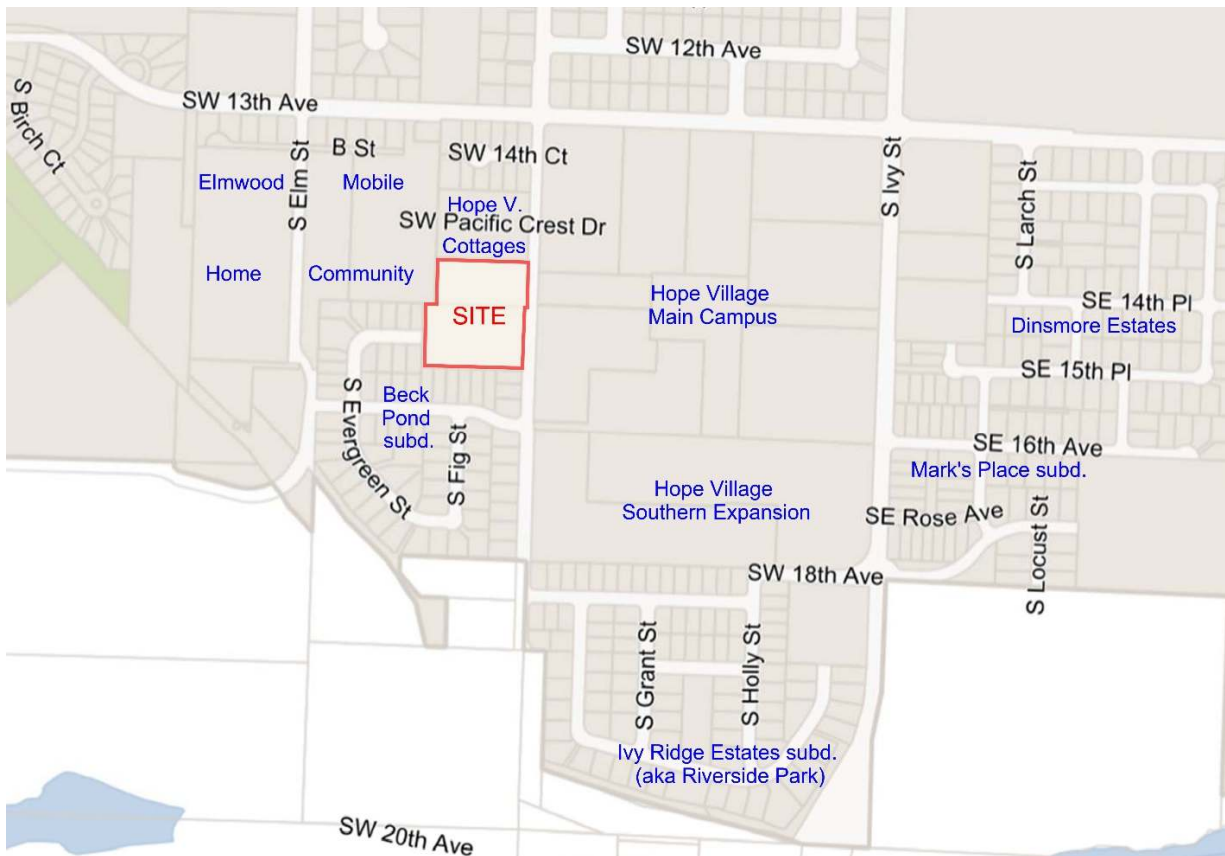
Zoning City of Canby, R-1.5

Site Size Tax Lot 1400: 1.31 Acres
Tax Lot 1500: 2.00 Acres

Proposal To subdivide two adjacent tax lots into a 19-lot subdivision,
with two existing homes remaining. The subdivision will
include the dedication of public right-of-way for S Fir Street
and the extension of SW 15th Avenue to S Fir Street. The
proposed subdivision name is "DuNett" a combination of the
last name of the owner / applicants.

Date October 2023

SITE LOCATION



SITE DESCRIPTION

The property is on the west side of S Fir Street, between SW 13th & 16th Avenues, across S Fir Street from the Hope Village Campus. To the north of the site are the Hope Village Cottages located on SW Pacific Crest Drive, west of the site is the Elmwood Mobile Home Community, and to the southwest and south is the Beck Pond subdivision.

Tax Lot 1400 has one home and two outbuildings on it. The home is near S Fir Street and the outbuildings are behind the home. The outbuildings were used as part of a small farm that operated onsite through the summer of 2019. The lot measures approximately 337 feet east-west by 169 feet north-south. S Fir Street borders the eastern side of the site and there is 169 feet of street frontage on S Fir St. The width of the S Fir Street right-of-way is 40 feet, and the pavement width varies between 30 and 38 feet within the right-of-way. Existing landscaping includes lawn, shrubs, a hedge, and several trees in the vicinity of the home, however much of the site is void of trees and significant landscaping.

Tax Lot 1500 also has one home and two outbuildings. The home is situated on the western portion of the lot and the two outbuildings, both sheds, are west of the home. The parcel measures 375 feet east-west by 233 feet north-south, it has 233 feet of frontage on S Fir Street and 50 feet of frontage on SW 15th Avenue, which was stubbed to the edge of the property when the Beck Pond subdivision plat recorded in 2019. The width of S Fir Street along the frontage of this property is 45 feet, while the pavement

varies from 29 feet to 36 feet across the S Fir St. frontage. Several trees separate the existing home from S Fir Street and a fewer number of trees are between SW 15th Avenue and home on the western side of the lot. The predominant groundcover is lawn, but there is a garden in the SE quadrant of the property.

S Fir Street & SW 15th Avenue are under the jurisdiction of the City of Canby and are designated as Local Streets in the Transportation System Plan (TSP). Along Hope Village on the east side of S. Fir St. there are curb tight sidewalks, while the nearby sidewalks on the west side of S Fir Street have planter strips adjacent to the street. Improvements for SW 15th Avenue include 34 feet of pavement within a 50-foot-wide right-of-way. With Beck Pond being a modern subdivision, 12-foot Public Utility Easements, with franchise utilities, are on the north & south sides of SW 15th Ave. where it meets the western boundary of the site.

Public sanitary sewer and water are available to the site in S Fir St. & SW 15th Ave. Both utilities already extend past the site in S Fir St. and are stubbed to the edge of the property in SW 15th Ave. Other public utilities, such as communications, natural gas, and power are also available from both adjacent streets. Fire protection is available to the property from Canby Fire District and police protection is available from the City of Canby Police Department. Storm drainage can be accommodated onsite through infiltration into the underlying soils as has been done with other adjacent developments.

The main Hope Village campus carries R-1.5 zoning as does other properties along the west side of S Fir Street to the north and south. The Elmwood Mobile Home Community and the southern portion of the Beck Pond subdivision are zoned R-1, Low Density Residential, while the Hope Village Southern Expansion area is zoned high-density R-2. Hope Village is a Planned Unit Development.

PROPOSAL

The proposal is to subdivide the 3.31 Acre property into 19 lots consistent with R-1.5 Medium Density Residential zoning standards and the MDR Comprehensive Plan designation. The proposal would develop the last remaining undeveloped properties on the west side of S Fir Street between SW 13th Ave and SW 16th Ave. The subdivision will be platted using the name "DuNett", a blend of the last names of the current owners.

A pre-application conference occurred on June 29, 2023. A Neighborhood meeting was conducted at the Canby Adult Center with a Zoom option on October 2, 2023. A Transportation Memorandum dated September 12, 2023, was completed by the City's traffic engineer, DKS Associates. The Memorandum concludes that the proposed site adequately addresses each transportation approval criteria and livability measure.

Development of the site as proposed would retain the two existing homes and allow for 17 new detached single-family residences. Dedication of additional public street right-of-way is proposed along the west side of S Fir St. and for the easterly extension of SW 15th Ave. to connect with S Fir St. The development would remove the temporary dead-end on SW 15th Ave. and extend the street to S Fir St. The S Fir St. frontage would be improved with wider pavement, curbs, planter strip with street trees, and sidewalk. Completion of the sidewalks on the west side of S Fir would complete the sidewalk network on that side of the street.

Applicable Criteria and Standards

The following sections of the City of Canby Land Development and Planning Ordinance apply to this application:

- 16.08 General Provisions
- 16.10 Off-Street Parking and Loading
- 16.18 R-1.5 Medium Density Residential Zone
- 16.46 Access Limitations on Project Density
- 16.56 Land Division Regulation – General Provisions
- 16.62 Subdivisions – Applications
- 16.64 Subdivisions – Design Standards
- 16.68 Subdivisions – Final Procedures and Recordation
- 16.86 Street Alignments
- 16.88 General Standards & Procedures
- 16.89 Application and Review Procedures
- 16.120 Parks, Open Space and Recreation Land General Provisions

Code provisions of the Land Development and Planning Ordinance of the City of Canby are listed below, followed by the applicant's response shaded.

LAND USE AND DEVELOPMENT ORDINANCE

DIVISION III - ZONING

Chapter 16.08 – GENERAL PROVISIONS

16.08.020 Zoning map.

- A. The location and boundaries of the zones designated in this division are established as shown on the map entitled “Zoning Map of the City of Canby” dated with the effective date of the ordinance codified in this title and signed by the Mayor and the city recorder and hereafter referred to as the zoning map.
- B. The signed copy of the zoning map shall be maintained on file in the office of the city recorder and is made a part of this title.

Response: The Zoning Map of the City of Canby identifies the two parcels included in this application as having the zoning designation of R-1.5, Medium Density Residential.

16.08.110 Fences.

- A. Fences not more than three and one-half feet in height may be constructed within the street setbacks of any R-1, R-1.5, R-2 or C-1 zone. Fences not more than six feet in height may be constructed in any interior yard, rear yard, or street yard along an alley; provided, however, that in no case shall a fence be constructed in violation of the requirements of a vision clearance area.

- B. On corner lots, the 3.5-foot height limit will apply within the required setback along both street-facing yards.
- C. No more than one row of fencing is allowed within a required street yard setback.
- D. The Planning Commission may require sight-blocking or noise mitigating fences for any development it reviews.
- E. Fences of up to eight feet in height are permitted for any development in C-2, C-M, M-1 or M-2, or Planned Unit Development zones.
- F. No fence/wall shall be constructed throughout a subdivision, planned unit development or be part of a project that is/was subject to site and design review approval where the effect or purpose is to wall said project off from the rest of the community unless reviewed and approved by the Planning Commission. (Ord. 890 section 8, 1993; Ord. 740 section 10.3.05(K), 1984; Ord. 955 section 2, 1996; Ord. 981 section 43, 1997)
- G. In all zones, private fences along a public pedestrian/bicycle pathway shall comply with the following in order to provide security and visibility for pathway users while maintaining privacy for the residence.
 - 1. Fencing installed as part of a new subdivision shall comply with either (a) or (b) below.
 - 2. Fencing installed by a property owner on an individual lot shall comply with either (a), (b), or (c) below.
 - a. Solid fencing shall be no greater than four (4) feet in height; or
 - b. Fencing shall be constructed with black open wire material, wooden slats, or some other material that allows visual access between the pathway and adjacent uses; or
 - c. Solid fencing shall be set back at least three (3) feet from the property line that abuts the pathway.

Response: Fences are anticipated to be constructed along the lot lines when homes in the subdivision are constructed. The provisions of subsections A. through C. will apply to lots within this development.

The provisions of subsection E. are not applicable because the site is zoned R-1.5. The provisions of subsection F. are not applicable, as no fence/wall is planned to separate the project from the rest of the community. The provisions of subsection G. are not applicable, as there is no pedestrian/bicycle pathway within or contiguous to this site.

The provisions of the applicable subsections can be addressed when building permits are reviewed and new homes are constructed in the subdivision.

16.08.150 Traffic Impact Study (TIS).

- A. Purpose. The purpose of this section of the code is to implement Section 660-012- 0045(2)(b) of the State Transportation Planning Rule, which requires the city to adopt a process to apply conditions to development proposals in order to minimize adverse impacts to and protect transportation facilities. This section establishes the standards to determine when a proposal must be reviewed for

potential traffic impacts; when a Traffic Impact Study must be submitted with a development application in order to determine whether conditions are needed to minimize impacts to and protect transportation facilities; what information must be included in a Traffic Impact Study; and who is qualified to prepare the Study.

- B. Initial scoping. During the pre-application conference, the city will review existing transportation data to determine whether a proposed development will have impacts on the transportation system. It is the responsibility of the applicant to provide enough detailed information for the city to make a determination. If the city cannot properly evaluate a proposed development's impacts without a more detailed study, a transportation impact study (TIS) will be required to evaluate the adequacy of the transportation system to serve the proposed development and determine proportionate mitigation of impacts. If a TIS is required, the city will provide the applicant with a "scoping checklist" to be used when preparing the TIS.
- C. Determination. Based on information provided by the applicant about the proposed development, the city will determine when a TIS is required and will consider the following when making that determination.
1. Changes in land use designation, zoning designation, or development standard.
 2. Changes in use or intensity of use.
 3. Projected increase in trip generation.
 4. Potential impacts to residential areas and local streets.
 5. Potential impacts to priority pedestrian and bicycle routes, including, but not limited to school routes and multimodal street improvements identified in the TSP.
 6. Potential impacts to intersection level of service (LOS).

D. TIS General Provisions

1. All transportation impact studies, including neighborhood through-trip and access studies, shall be prepared and certified by a registered Traffic or Civil Engineer in the State of Oregon.
2. Prior to TIS scope preparation and review, the applicant shall pay to the city the fees and deposits associated with TIS scope preparation and review in accordance with the adopted fee schedule. The city's costs associated with TIS scope preparation and review will be charged against the respective deposits. Additional funds may be required if actual costs exceed deposit amounts. Any unused deposit funds will be refunded to the applicant upon final billing.
3. For preparation of the TIS, the applicant may choose one of the following:
 - a. The applicant may hire a registered Oregon Traffic or Civil Engineer to prepare the TIS for submittal to the city. The city Traffic Engineer will then review the TIS and the applicant will be required to pay to the city any fees associated with the TIS review; or

- b. The applicant may request that the city Traffic Engineer prepare the TIS. The applicant will pay to the city any fees associated with preparation of the TIS by the city Traffic Engineer.
 4. The TIS shall be submitted with a concurrent land use application and associated with application materials. The city will not accept a land use application for process if it does not include the required TIS.
 5. The city may require a TIS review conference with the applicant to discuss the information provided in the TIS once it is complete. This conference would be in addition to any required pre-application conference. If such a conference is required, the city will not accept the land use application for processing until the conference has taken place. The applicant shall pay the TIS review conference fee at the time of conference scheduling, in accordance with the adopted fee schedule.
 6. A TIS determination is not a land use action and may not be appealed.
- E. TIS Scope. The city shall determine the study area, study intersections, trip rates, traffic distribution, and required content of the TIS based on information provided by the applicant about the proposed development.
1. The study area will generally comprise an area within a ½-mile radius of the development site. If the city determines that development impacts may extend more than ½ mile from the development site, a larger study area may be required. Required study intersections will generally include (in addition to the primary access points) collector/collector and above intersections with an anticipated peak hour traffic increase of five-percent from the proposed project.
 2. If notice to ODOT or other agency is required pursuant to noticing requirements in Chapter 16.89, the city will coordinate with those agencies to provide a comprehensive TIS scope. ODOT may also require a TIS directly to support an OR 99E approach permit application.
- F. TIS Content. A project-specific TIS checklist will be provided to the applicant by the city once the city has determined the TIS scope. A TIS shall include all of the following elements, unless waived by the city.
1. Introduction and Summary. This section shall include existing and projected trip generation including vehicular trips and mitigation of approved development not built to date; existing level and proposed level of service standard for city and county streets and volume to capacity for state roads; project build year and average growth in traffic between traffic count year and build year; summary of transportation operations; traffic queuing and delays at study area intersections; and proposed mitigation(s).
 2. Existing Conditions. This section shall include a study area description, including information about existing study intersection level of service.
 3. Impacts. This section should include the proposed site plan, evaluation of the proposed site plan, and a project-related trip analysis. A figure showing the assumed future year roadway network (number and type of lanes at each intersection) also shall be provided. For subdivision and other developments, the future analysis shall be for the year of proposed site build-out. For

proposed comprehensive plan and/or zoning map amendments, the future analysis year shall be 20 years from the date of the City's adopted TSP, or 15 years, whichever is greater.

4. Mitigation. This section shall include proposed site and area-wide specific mitigation measures. Mitigation measures shall be roughly proportional to potential impacts. See Subsection K below for rough proportionality determination.
5. Appendix. This section shall include traffic counts, capacity calculations, warrant analysis, and any other information necessary to convey a complete understanding of the technical adequacy of the TIS.
- G. TIS Methodology. The City will include the required TIS methodology with the TIS scope.
- H. Neighborhood Through-Trip Study. Any development projected to add more than 30 through-vehicles in a peak hour or 300 through-vehicle per day to an adjacent residential local street or neighborhood route will be require assessment and mitigation of residential street impacts. Through-trips are defined as those to and from a proposed development that have neither an origin nor a destination in the neighborhood. The through-trip study may be required as a component of the TIS or may be a stand-alone study, depending on the level of study required in the scoping checklist. The through-trip study shall include all of the following:
 1. Existing number of through-trips per day on adjacent residential local streets or neighborhood routes.
 2. Projected number of through-trips per day on adjacent residential local streets or neighborhood routes that will be added by the proposed development.
 3. Traffic management strategies to mitigate for the impacts of projected through-trip consistent.If a residential street is significantly impacted, mitigation shall be required. Thresholds used to determine if residential streets are significantly impacted are:
 1. Local residential street volumes should not increase above 1,200 average daily trips.
 2. Local residential street speeds should not exceed 28 miles per hour (85th percentile speed).
- I. Mitigation. Transportation impacts shall be mitigated at the time of development when the TIS identifies an increase in demand for vehicular, pedestrian, bicycle, or transit transportation facilities within the study area. Mitigation measures may be suggested by the applicant or recommended by ODOT or Clackamas County in circumstances where a state or county facility will be impacted by a proposed development. The city shall determine if the proposed mitigation measures are adequate and feasible. ODOT must be consulted to determine if improvements proposed for OR 99E comply with ODOT standards and are supported by ODOT. The following measures may be used to meet mitigation requirements:
 1. On-and off-site improvements beyond required standard frontage improvements.
 2. Development of a transportation demand management program.

3. Payment of a fee in lieu of construction, if construction is not feasible.
 4. Correction of off-site transportation deficiencies within the study area that are substantially exacerbated by development impacts.
 5. Construction of on-site facilities or facilities located within the right-of-way adjoining the development site that exceed minimum required standards and that have a transportation benefit to the public.
- J. Conditions of Approval. The city may deny, approve, or approve with appropriate conditions a development proposal in order to minimize impacts and protect transportation facilities.
1. Where the existing transportation system will be impacted by the proposed development, dedication of land for streets, transit facilities, sidewalks, bikeways, paths, or accessways may be required to ensure that the transportation system is adequate to handle the additional burden caused by the proposed use.
 2. Where the existing transportation system is shown to be burdened by the proposed use, improvements such as paving, curbing, installation or contribution to traffic signals, traffic channelization, construction of sidewalks, bikeways, accessways, paths, or street that serve the proposed use may be required.
 3. The city may require the development to grant a cross-over access easement(s) to adjacent parcel(s) to address access spacing standards on arterials and collector roadways or site-specific safety concerns. Construction of shared access may be required at the time of development if feasible, given existing adjacent land use. The access easement must be established by deed.
- K. Rough Proportionality Determination. Improvements to mitigate impacts identified in the TIS shall be provided in rough proportion to the transportation impacts of the proposed development.
1. The TIS shall include information regarding how the proportional share of improvements was calculated, using the ratio of development trips to growth trips and the anticipated cost of the full Canby Transportation System Plan. The calculation is provided below:

Proportionate Share Contribution =

$$\frac{\text{Net New Trips}}{(\text{Planning Period Trips} - \text{Existing Trips})} \times (\text{Estimated Construction Cost.})$$

- a. Net new trips means the estimated number of new trips that will be created by the proposed development within the study area.
- b. Planning period trips means the estimated number of total trips within the study area within the planning period identified in the TSP.
- c. Existing trips means the estimated number of existing trips within the study area at the time of TIS preparation.
- d. Estimated construction cost means the estimated total cost of construction of identified improvements in the TSP.

Response: A transportation assessment for the entire neighborhood was performed as a part of the annexation of several properties, including Tax Lot 1500, into the City of Canby in 2018. Further study was completed with annexation of Tax Lot 1400 into the City of Canby in 2021. The transportation assessment determined that the City's Transportation System Plan accounted for the proposed development of the site as an R-1.5 subdivision, consistent with the zoning and comprehensive plan designations for the property and that development of the site as an R-1.5 subdivision is consistent with the acknowledged transportation system plan.

Another traffic analysis was performed by the City of Canby's traffic engineer, DKS Associates, for the current subdivision application. In a technical memorandum dated September 12, 2023, DKS summarizes that the proposed site adequately addresses each transportation approval criteria and livability measure.

16.08.160 Safety and Functionality Standards.

The City will not issue any development permits unless the proposed development complies with the city's basic transportation safety and functionality standards, the purpose of which is to ensure that development does not occur in areas where the surrounding public facilities are inadequate. Upon submission of a development permit application, an applicant shall demonstrate that the development property has or will have the following:

- A. Adequate street drainage, as determined by the city.
- B. Safe access and clear vision at intersections, as determined by the city.
- C. Adequate public utilities, as determined by the city.
- D. Access onto a public street with the minimum paved widths as stated in Subsection E below.
- E. Adequate frontage improvements as follows:
 - 1. For local streets and neighborhood connectors, a minimum paved width of 16 feet along the site's frontage.
 - 2. For collector and arterial streets, a minimum paved width of 20 feet along the site's frontage.
 - 3. For all streets, a minimum horizontal right-of-way clearance of 20 feet along the site's frontage.
- F. Compliance with mobility standards identified in the TSP. If a mobility deficiency already exists, the development shall not create further deficiencies.

Response: The applicant will demonstrate, through information provided in this narrative and plans submitted to the City for review, that adequate street drainage is available through the installation of new drywells, that safe and clear vision can be provided for at the new intersection, that adequate public and private utilities exist, and that adequate street frontage improvements will exist following development of the site. The proposed subdivision will satisfy the provisions of this section.

Chapter 16.10 – OFF-STREET PARKING AND LOADING

16.10.030 General requirements.

- A. Should the owner or occupant of a structure change the use to which the building is put, thereby increasing parking or loading requirements, the increased parking/loading area shall be provided prior to commencement of the new use.
- B. Parking and loading requirements for structures not specifically listed herein shall be determined by the City Planner, based upon requirements of comparable uses listed.
- C. In the event several uses occupy a single structure, the total requirements for off-street parking shall be the sum of the requirements of the several uses computed separately. If the applicant can demonstrate that the uses do not have overlapping parking needs (based on days and hours of operation) and can share parking, the total requirement for combined uses may be reduced by up to 60 percent.
- D. Off-street parking spaces for dwellings shall be located on the same lot, or adjacent lot, with the dwelling. Parking spaces located within an on-site garage shall count toward the minimum parking requirement for residential uses. Other required parking spaces may be located on a separate parcel, provided the parcel is not greater than five hundred (500) feet from the entrance to the building to be served, measured along the shortest pedestrian route to the building. The applicant must prove that the parking located on another parcel is functionally located and that there is safe vehicular and pedestrian access to and from the site.
- E. Required parking spaces shall be available for the parking of operable passenger automobiles of residents, customers, patrons and employees and shall not be used for storage of vehicles or materials or for the parking of trucks used in conducting the business.

Response: The parking requirement for single family dwellings is two spaces per dwelling unit (Table 16.10.050). For the 17 lots that will not have existing homes, the requirement for two parking spaces can be satisfied when building plans are submitted for each lot.

The existing home on Lot 19 (on Fir Street) has an existing two-car garage on the home that will remain. There is also room for additional parking in the driveway in front of the garage and room for an RV or boat along the southern wall of the garage.

The existing home of Lot 3 (on SW 15th Avenue) will have the existing garage removed. This must be done in order to extend SW 15th Avenue past the home and to fit the remainder of the home on the lot behind the setback. Parking for the existing home will be on the lot, in front of the home.

The provisions of Chapter 16.10 will be met for the two lots having existing homes and can be satisfied for the remaining 17 lots at the time of building permit review.

Chapter 16.18 – R-1.5 MEDIUM DENSITY RESIDENTIAL ZONE

16.18.010 Uses permitted outright.

Uses permitted outright in the R-1.5 zone shall be as follows:

- A. Uses permitted outright in the R-1 zone;
- B. Two-family or three-family dwellings. One duplex or triplex on each lot.
- C. Single-family townhouse dwellings having common wall construction. The townhouse construction is limited to a maximum grouping of three dwelling units. If more than one group of dwellings is developed then a ten-foot distance shall be maintained between an adjacent group of dwelling units.

Response: The proposed subdivision will create 19 total lots with two of the lots accommodating existing detached single-family dwellings and the other 17 lots to accommodate new detached single-family dwellings. The proposed residential use is allowed outright in the zone (16.18.010.A).

16.18.030 Development standards.

The following subsections indicate the required development standards of the R-1.5 zone:

- A. Minimum and maximum lot area:
 - 1. For single family dwellings: five thousand (5,000) square feet minimum and six thousand five hundred (6,500) square feet maximum.

The Planning Commission may approve smaller or larger lots in accordance with subsection B, below.
- B. Lot area exceptions:
 - 1. The Planning Commission may approve an exception to the minimum and maximum lot area standards in subsection 16.18.030.A as part of a subdivision or partition application when all of the following standards are met:
 - a. The average area of all lots and open space tracts created through the subject land division, excluding required public park land dedications, surface water management facilities and similar public use areas, shall be no less than five thousand square feet and no greater than six thousand five hundred square feet. Non-required significant natural resource areas shall be included in the average lot size calculation to enable a transfer of density onto buildable portions of the site. Required areas include identified parks, wetland areas, riparian corridors, and other areas in which building is not permitted under local, state, or federal laws or regulations. For land in the North Redwood DCP area, the Planning Commission may allow public park land dedications to be included in the lot size averaging calculation in order to achieve community development goals and allow protection of natural resources; in this case, the resulting average lot size shall not be less than 4,000 square feet;
 - b. No lot shall be created that contains less than four thousand square feet, unless the alternative lot layout option provided in Section 16.64.040 is used; and

- c. As a condition of granting the exception, the city will require the owner to record a deed restriction with the final plat that prevents the re-division of oversized lots (six thousand five hundred square feet and larger), when such redivision would violate the average lot size provision in subsection 16.18.030.B.1.a. All lots approved for use by more than one dwelling shall be so designated on the final plat.
2. A public benefit must be demonstrated in order to allow more than ten percent of the lots to be outside of the minimum and maximum lot areas in subsection 16.18.030.B.1.a.
3. The Planning Commission may modify the maximum lot area requirements in subsection 16.18.030.B if these cannot be met due to existing lot dimensions, road patterns, or other site characteristics.
4. The maximum lot area standard does not apply to dwellings existing prior to subdivision or partition plan approval or to lots designated for open space.

Response: Nineteen lots are proposed in the subdivision, ranging from a minimum lot area of 5,007 sq. ft. (Lot 18) to a maximum lot area of 9,757 sq. ft. (Lot 19)

No lots are proposed to be less than the 5,000 sq. ft. minimum lot area, while seven lots, Lots 3, 13 – 17, & 19 are proposed to exceed the maximum lot area of 6,500 sq. ft.

Five of the seven lots (Lots 13 – 17) exceeding the maximum lot area will be panhandle or flag shaped lots where the home will not be adjacent to the roadway in front of the lot but will be set back away from the fronting roadway. Access to the lot will be through a shared accessway to the fronting street. These types of lots can be permitted in subdivisions through Section 16.64.040.

Two of the flag lots will share an accessway to SW 15th Avenue and three will share an accessway to S Fir Street. Per Section 16.64.040.I(6) "The area of a panhandle shaped or flag lot shall be considered to be the rear or buildable portion of the lot and shall not include the driveway or access strip." Using this criterion, the five flag lots will have areas measuring between 5,002 sq. ft. and 6,284 sq. ft.. All will be within the permitted minimum and maximum lot area requirements of this section.

The other two oversized lots are proposed to accommodate the two existing homes. Per 16.18.030.B(4), "The maximum lot area standard does not apply to dwellings existing prior to subdivision".

The minimum and maximum lot areas of this section will be met.

- C. Minimum width and frontage: forty feet, except that the Planning Commission may approve lots having less frontage subject to special conditions to assure adequate access. Twenty feet is permitted for single family attached (common wall) housing on interior lots.

Response: Fourteen of the 19 lots will front a public street, while 5 lots are proposed to be flag lots. Of the 14 non-flag style lots, the minimum lot width will be 46.0 feet. The width of Lot 2 is being dictated by the position of the existing home remaining on Lot 3.

Each of the 5 flag lots will share a twenty-foot wide paved accessway with one or two adjacent lots. The driveway width is adequate for the fire department and other emergency responders to access the proposed homes. The building area of each proposed flag lot will be at least 50 feet in width, allowing for adequate access and parking in front of the home on the lot.

The provisions of this section are met.

D. Minimum yard requirements:

1. Street yard: twenty feet on side with driveway; fifteen feet for all other street sides; except that street yards may be reduced to ten feet for covered porches only.
2. Rear yard: all corner lots, ten feet single story or fifteen feet two-story; all other lots: fifteen feet single story or twenty feet two-story. One story building components must meet the single story setback requirements; two story building components must meet the two-story setback requirements;
3. Interior yard: seven feet, except as otherwise provided for zero-lot line housing.
4. Interior and rear yards may be reduced to three feet, or the width of any existing utility easement, whichever is greater, for detached accessory structures, except accessory dwellings, erected sixty feet or more from any street other than an alley. The height limitations noted in subsection E.2 below apply. Utility easements may only be reduced with the approval of all utility providers.
5. Infill standards may also apply. See CMC 16.21.050.

Response: The yard requirements for the 17 lots that will be developed with new homes can be satisfied when building permits are applied for. Infill standards will not apply to any lot in this development as no lot will have pre-existing homes on two sides that have existed for five years.

The yard requirements for the two lots with the existing single-story homes are addressed below:

	Req'd	Lot 3	Lot 19
Street yard (garage)	20 feet	26.5 – 28.8 feet	39.5 feet
Street yard (other)	15 feet	NA	NA
Rear yard	15 feet	40+ feet	17.7 feet
Interior yard (left)	7.0 feet	7.6 feet minimum	18.7 feet
Interior yard (right)	7.0 feet	7.0 feet minimum	8.0 feet

The provisions of this section are met.

E. Maximum building height:

1. Principal building: thirty-five feet.
2. Detached accessory structure:
 - a. If located inside the allowed building footprint for the principal building, a detached accessory structure may be up to twenty-two feet tall, as measured to the highest point of the roof.

- b. If located outside the allowed building footprint for the principal building, a detached accessory structure is subject to a step-up height standard, and is allowed outright only if it meets this standard. The structure shall not exceed eight feet tall, as measured to the highest point of the roof, at a distance of three feet from the property line. The structure may increase in height by one foot vertically for every one foot horizontally away from the three foot line, up to the maximum height of twenty-two feet.
- c. A conditional use permit is required to locate the structure outside of the allowed building footprint for the principal building in violation of the stepup height standard. d. Detached accessory structures over twenty-two feet tall are not permitted. 3. For detached accessory dwellings, the Planning Commission may approve building heights over twenty-two feet through the Conditional Use process, but in no case shall the accessory dwelling be higher than the principal building. The Planning Commission may only approve the use of buildings over twenty-two feet in the case of existing structures where no substantial changes to existing roof lines are proposed.

Response: The two existing homes are single story homes having building heights well under the maximum allowed. Both existing homes will remain as single story. Building heights for the other homes can be confirmed when building permit applications and new house plans are submitted to the City for review.

The provisions of this section can be met.

- F. The maximum amount of impervious surface allowed the R-1.5 zone shall be 70 percent of the lot area.
 - 1. Impervious surface includes all surface areas that create a barrier to or hinder the entry of water into the soil in comparison with natural conditions prior to development. Impervious surface include, but are not limited to, buildings, parking areas, driveways, roads, sidewalks, patios, packed earth, and oiled surfaces. Open, uncovered retention/detention facilities, green roofs, and permeable surfacing materials shall not be considered impervious surfaces. Roof surfaces are also considered 'pervious' when 100% of the annual average roof runoff is captured and reused on-site for irrigation or approved interior uses.
 - 2. To limit impervious surface, alternative surfacing materials may be used. Alternative surfacing includes, but is not limited to paving blocks, turf block, pervious concrete, and porous asphalt. Other similar approved materials are encouraged. Utilization of alternative surfacing methods shall be subject to review and approval by the City Public Works Department for compliance with other applicable regulations and development standards. Maintenance of alternative surfacing materials located on private property are the responsibility of the property owner.

Response: The impervious surfacing for Lots 3 and 19 includes the existing home, walks, patios, gravel areas, and future improvements such as the public sidewalk along the front of the lot. The impervious surface area for Lot 3 will total 3,792 sq. ft., which will be 45.5 percent of the lot area. For Lot 19, the impervious surface area will be 5,326 sq. ft., equal to 54.6 percent of the lot area. Impervious area coverage for the other lots can

be confirmed when building plans are submitted to the City for review with the building permit process.

The provisions of this section are met for the two existing homes and can be met for the other 17 lots in the development that will have new homes on them.

G. Other regulations:

1. Vision clearance distance shall be ten feet from a street to an alley or a street to a driveway, and thirty feet from a street to any other street.
2. All setbacks to be measured from the foundation line of the building. Overhangs shall not exceed two feet; mechanical units, used for the heating/cooling of residential units are exempt from interior and/or rear yard setback requirements. A chimney for a fireplace or stove shall not exceed a two foot projection.
3. To provide shade, required yards on southern and western exposures may be reduced by not more than five feet for eaves, canopies, and patio covers, if the patio posts still comply with required setbacks.
4. Accessory buildings shall not have a larger footprint than the primary building.

Response: Vision clearance can be met at the intersection of S Fir St. and SW 15th Ave. without restrictions on the adjoining lots, as is shown on the submitted Site Plan. With six-foot sidewalks and six-foot planter strips there will be no difficulty meeting the ten-foot vision clearance distance at driveways.

Setbacks for the existing homes were measured from the foundation. Where setbacks are near the required dimension, building overhangs do not exceed two feet.

Subsections 2 through 4 are more applicable to the future homes in the subdivision than the subdivision infrastructure. Consistency with the standards of Subsections 2 through 4 can be reviewed when building permits for new homes are applied for.

The provisions of this section can be met.

Chapter 16.46 – ACCESS LIMITATIONS ON PROJECT DENSITY

16.46.010 Number of units in residential development.

A major factor in determining the appropriate density of residential development, particularly in higher density areas, is vehicular access. In order to assure that sufficient access is provided for emergency response as well as the convenience of residents, the following special limitations shall be placed on the allowable number of units in a residential development:

A. Single-family residential access, public and private roads:

1. Roads shall be a minimum of 28 feet in width with parking restricted to one side only, or a minimum of 34 feet in width with no parking restriction.
2. The number of units permitted are as follows:

One access: 30 units

Two accesses: 132 units

Three accesses: 207 units

For more than three accesses, use the following formula:

of units permitted = $(60 \times (1 + (.05 \times \# \text{ of access points}))) \times (\# \text{ of access points})$

Response: The development proposes to create detached single-family residences on individual lots, therefore Sec. 16.46.010A is the appropriate standard.

Road widths are proposed to meet or exceed the 34-foot standard allowing for parking without restriction. The development of the proposed subdivision would create 19 lots total from the two existing properties. Per the formulas above, one access would be sufficient to serve the 30 units.

Three public points of access are available to serve the S Fir Street neighborhood. These include north on S Fir Street to SW 13th Avenue, west on SW 16th Avenue to S Elm Street, and east through the Ivy Ridge Estates subdivision to S Ivy Street. Development of the site will include the extension of SW 15th Avenue through the site which will provide additional connectivity for the nearby neighborhood.

In an emergency, such as a fire, emergency services could also access S Fir Street through the Hope Village Campus. Two connections to S Fir Street from Hope Village are located on the east side of S Fir Street.

The provisions of this section will be met.

- D. All turnaround systems shall meet or exceed the requirements of the parking provisions of Chapter 16.10.

Response: Public streets developed with the subdivision will be continuous roadways without turnarounds required. In addition to the public streets, two private shared accessways will be developed to serve lots within the subdivision. The SW 15th Avenue shared accessway will serve two lots, Lots 13 & 14. The accessway will be constructed to the same structural section as SW 15th Avenue. Due to the length of the driveway and the configuration of the homes to the driveway, an emergency turnaround is not required. Vehicular spaces and potential turning areas for these two lots will be constructed with the two new homes on the lots.

The S Fir Street shared accessway will serve proposed Lots 15 – 17. An emergency turnaround is proposed in front of Lots 16 & 17 on this accessway. The structural section of the paved portion of the accessway will be the same as SW 15th Avenue. The turnaround area will be constructed using a separate material, such as concrete or paving stones, to better define it as a turnaround area. The concrete or paving stone area will be constructed to a standard that will support the required fire truck loading.

The provisions of this subsection will be met.

- E. All on-site private roads and drives shall be designed and constructed to provide safe intersections and travel surfaces which will not result in hazards for motorists, bicyclists or pedestrians.

Response: As discussed above, two shared accessways are proposed, one on S Fir Street and one on SW 15th Avenue. Both accessways are designed to intersect the

public street at or near 90 degrees, which provides for the most visibility. Throughout the subdivision, street and accessway grading will be nearly flat, with all grades being at or below three percent, therefore grading will not impact vehicular, bicycle, or pedestrian mobility. The two accessways will have a 20-foot paved surfaces, providing an amply wide stable surface allowing for two-way traffic.

The provisions of this subsection will be met.

- G. Public roads accessing any development shall be a minimum of two travel lanes (twenty-four (24) feet of paved width) to the nearest improved collector or arterial street, provided that any required improvement to provide additional pavement width to access a development meets both of the following conditions:
1. An essential nexus is proven, whereby the required improvement is directly related to the proposed development; and
 2. Rough proportionality is proven, whereby the cost of the required improvement is roughly proportional to the impact that the development will have on the infrastructure. Specific findings are required for each of the conditions listed above. If either of the two conditions are not met, the infrastructure is considered to be inadequate, and conditioning approval of a development on the widening of the access to the development is considered to be inappropriate.

Response: Two public roads will be used to access the subdivision, S Fir Street and SW 15th Avenue. Both roadways currently exceed a 24-foot paved width. With development of the subdivision, the applicants will extend SW 15th Avenue (a 34-foot-wide paved roadway) through the site to S Fir Street and will improve the western half of S Fir Street so that the roadway will be 36-feet wide and will match the curb lines to the north and south.

The provisions of this subsection will be met.

16.46.020 Ingress and egress.

Ingress and egress to any lot or parcel, the creation of which has been approved by the Planning Commission, shall be taken along that portion fronting on a public street unless otherwise approved by the Planning Commission.

- A. Vision Clearance: Vision clearance distance shall be ten feet from a street to an alley or a street to a driveway and thirty feet from a street to any other street.
- B. Where an existing alley is 20 feet or less in width, the setback abutting the alley shall increase to provide a minimum of 24 feet for maneuvering and backing movements from, garages, carports, or parking areas.

Response: Access to all lots will be from the portion of the lot fronting the public streets. Vision clearance at driveways will exceed a 10-foot distance, as planter strips separating the curbs and sidewalks will create more than 10 feet between the back of sidewalk and the curb line.

One new intersection will be created, at the intersection of S Fir Street with SW 15th Avenue. The 30-foot vision clearance area will be met at this intersection without having to restrict plantings and fencing within the yards adjacent to the intersection. See the attached Site Plan.

The provisions of subsection A can be met. No alleys are associated with the proposed subdivision and therefore the provisions of subsection B are not applicable.

16.46.030 Access connection.

- A. Spacing of accesses on City streets. The number and spacing of accesses on City streets shall be as specified in Table 16.46.030. Proposed developments or land use actions that do not comply with these standards will be required to obtain an access spacing exception and address the joint and cross access requirements of this Chapter.

TABLE 16.46.30
Access Management Guidelines for City Streets*

Street Facility	Maximum spacing** of roadways	Minimum spacing** of roadways	Minimum spacing** of roadway to driveway***	Minimum Spacing** driveway to driveway***
Arterial	1,000 feet	660 feet	330 feet	330 feet or combine
Collector	600 feet	250 feet	100 feet	100 feet or combine
Neighborhood/Local	600 feet	150 feet	50 feet****	10 feet

* Exceptions may be made in the downtown commercial district, if approved by the City Engineering or Public Works Department, where alleys and historic street grids do not conform to access spacing standards.

** Measured centerline on both sides of the street

*** Private access to arterial roadways shall only be granted through a requested variance of access spacing policies when access to a lower classification facility is not feasible (which shall include an access management plan evaluation).

**** Not applicable for single-family residential driveways; refer to section 16.10.070(B)(10) for single-family residential access standards

Note: Spacing shall be measured between access points on both sides of the street.

Response: Both S Fir Street and SW 15th Avenue are designated by the Transportation System Plan as Local Streets, the Arterial and Collector standards are not applicable to this application.

One new intersection will be created within the subdivision, at the intersection of SW 15th Avenue and S Fir Street. The proposed intersection spacing will measure between 336 and 392 feet from the nearest intersections on S Fir Street, meeting the intersection-to-intersection spacing requirements of Table 16.46.30, as noted below:

SW 15th Avenue intersection with S Fir St.

Intersection to intersection spacing on S Fir Street:

North:	SW Pacific Crest Dr	392 feet
South:	SW 16 th Avenue	336 feet

With the extension of SW 15th Avenue to S Fir Street, the SW 15th Avenue block will become longer. The distance from S Fir Street to SW 16th Avenue along SW 15th Avenue will measure approximately 840 feet with the approval of this development. Although this distance exceeds the Access Management Guidelines of Table 16.46.30, the pattern of streets in this area has been established by the other existing approved developments and there is no ability to provide a public street connection to the north or south. The inability to connect to streets to the north and south is the reason why a subdivision layout featuring multiple flag lots has been submitted for approval.

Per the requirements of Table 16.46.30, the new intersection shall measure at least 50 feet (centerline to centerline) to driveways on both sides of the street. New driveways on SW 15th Avenue and S Fir Street can be reviewed at the time of building permit submittal. The nearest existing driveways on S Fir Street are spaced as noted below:

SW 15th Avenue intersection with S Fir St.

Intersection to driveway spacing:

Along west side of Fir Street:

North:	To Lot 19, 1495 S Fir St.	123.7 feet
South:	To TL 2203, 1573 S Fir St	170 feet +/-

Along east side of S Fir Street:

North:	To Hope Village driveway	62.2 feet
South:	To Hope Village driveway	329 feet +/-

Intersection to driveway spacing on S Fir St. will meet Table 16.46.30 standards.

Driveway to driveway spacing requirements on Local Streets is 10 feet. The two proposed driveways on S Fir Street (to Lot 19 and for the shared accessway) will meet the spacing requirement from other existing driveways. Separation between existing driveways and new driveways can be confirmed by the Planning Department as building permits applications with driveway locations are submitted to the City for approval.

The provisions of this section can be met by the proposed development.

Division IV. - LAND DIVISION REGULATION

Chapter 16.56 GENERAL PROVISIONS

16.56.020 Scope of regulations. Subdivision plats and minor and major partition maps shall be reviewed by the commission in accordance with these regulations. A person desiring to divide land in any manner which is governed by these regulations shall submit tentative plans and final documents for approval as provided in these rules and the state law.

Response: The applicants for the proposed subdivision plat have submitted an application with tentative plans and other documents indicating how the proposed subdivision will comply with applicable City regulations.

The provisions of this section have been met.

16.56.030 Conformance.

- A. Comprehensive Plan. A subdivision or partition shall conform to the Comprehensive Plan. A determination of such conformity shall be based upon consideration of all applicable portions of the Comprehensive Plan and shall not be based solely upon a review of the land use map.
- B. Land Development and Planning Ordinance. A land division shall be subject to all applicable requirements of other sections of this title. Where an applicant seeks the approval of any division which requires a change in zoning, the applicant may be required to complete the rezoning process prior to submittal of an application for property division.
- C. Health, Safety, and Sanitation. A subdivision or partition shall conform to all applicable state, county and city regulations regarding health, safety and sanitation. The county will not issue any permits for on-site sewage disposal systems for any lot or parcel created in violation of these regulations, nor for the remainder of the parent parcel from which lots or parcels have been illegally created, unless and until such violation has been rectified and all legal requirements met.
- D. Building. Structures and buildings in any property division shall conform with applicable codes and regulations regarding building. The City Building Official shall not allow the issuance of a building permit on any lot or parcel created, subdivided or partitioned in violation of these requirements. No building permit shall be issued for the remainder of the parent parcel, from which any lots or parcels have been created in violation of this title, unless and until such violation has been rectified and all legal requirements met.

Response: The proposed land use application and accompanying plans and documents demonstrate compliance with applicable regulations of the Land Development and Planning Ordinance. The Land Development and Planning Ordinance implements the goals of the Comprehensive Plan. Conformance with the specific requirements of the Land Development and Planning Ordinance typically addresses the more general goals and requirements of the Comprehensive Plan.

The proposed subdivision will connect to City of Canby public sewer and the current on-site sewage disposal systems for the existing homes will be decommissioned.

All new buildings will have construction plans approved by the City of Canby and the Clackamas County Building Official.

The provisions of subsections A and B have been met and the provisions of subsections C and D will be met as the land is development following land use approval.

- E. Streets and Roads. A property division shall conform to all applicable city ordinances or policies pertaining to streets, roads, or access.

Response: The submittal demonstrates compliance with applicable City ordinances for streets, roads, and access.

The provisions of this section have been met.

16.56.050 Application required. The following land use actions shall require the filing of an appropriate application and completion of the proper procedures established therefore in this division:

- A. Minor partitions;
- B. Major partitions;
- C. Subdivisions (including planned unit developments which are also governed by the requirements of Division V);
- D. Lot line adjustments.

Response: The applicants have submitted a land use application to the City of Canby, using the appropriate City of Canby application form, and intend to follow the procedures outlined for review of a subdivision application. The provisions of this section are being followed.

16.56.060 Applicability of regulations. The regulations of this division apply to all portions of the city as it now exists or may hereafter be altered.

Response: The property that is subject to this land use application is located within the boundaries of the City of Canby. The provisions of this section are met.

Chapter 16.62 SUBDIVISIONS – APPLICATIONS

16.62.020 Standards and criteria. Applications for a subdivision shall be evaluated based upon the following standards and criteria:

- A. Conformance with other applicable requirements of the Land Development and Planning Ordinance;

Response: Applicable requirements of other sections of the Land Development and Planning Ordinance are discussed in other sections of this narrative and addressed on the maps included with the application to demonstrate that the proposed land division conforms to applicable criteria of the Land Development and Planning Ordinance.

- B. The overall design and arrangement of lots shall be functional and shall adequately provide building sites, utility easements, and access facilities deemed necessary for the development of the subject property without unduly hindering the use or development of adjacent properties;

Response: The design and layout of the site provides for desirable and functional building sites. All lots meet or exceed the minimum lot area and dimensional standards for the R-1.5 Zone. Each lot has access to a local public street and has easy connectivity to a nearby arterial street (SW 13th Avenue). Pedestrian and bicycle connectivity are provided through construction of new sidewalks and street improvements within the development. Public utilities, including sewer, water, communications, and power will be extended through the development site to loop these systems and provide redundancy.

All properties surrounding the site have already been developed and therefore, development of the site will not hinder development of other adjacent properties. The proposed use of the site is residential, specifically detached single-family residential, which will not unduly hinder the use of any of the adjoining residential properties.

The provisions of this subsection are met.

- C. Subdivision design and layout shall incorporate Low Impact Development techniques where possible to achieve the following:

1. Manage stormwater through a land development strategy that emphasizes conservation and use of onsite natural features integrated with engineered stormwater controls to more closely mimic predevelopment hydrologic conditions.
2. Encourage creative and coordinated site planning, the conservation of natural conditions and features, the use of appropriate new technologies and techniques, and the efficient layout of open space, streets, utility networks and other public improvements.
3. Minimize impervious surfaces.
4. Encourage the creation or preservation of native vegetation and permanent open space.
5. Clustering of residential dwellings where appropriate to achieve (1-4) above. The arrangement of clustered dwellings shall be designed to avoid linear development patterns.

Response: Although the Code encourages Low Impact Development techniques, other provisions of the Code, such as minimum lot area requirements, minimum width requirements for public streets, and requirements for planter strips and sidewalks to be located on both sides of public streets, make it difficult to achieve successful Low Impact Development techniques within single-family residential subdivisions.

Subsurface injection of stormwater, retention of trees, and the installation of new trees that reduce impervious surfaces and heat are Low Impact Development techniques that typically can be utilized by low to medium density residential subdivisions.

Stormwater runoff from the streets and homes in this subdivision will be injected into the ground using drywells for street runoff and underground chamber systems for roof runoff from the individual homes. These underground injection systems, which are common throughout the City of Canby, will recharge groundwater in this area.

Retention of a few existing trees will occur around the perimeter of the site. Tree retention will provide shade and will help reduce stormwater runoff through absorption. In addition, the trees will remain as a visual amenity for the neighborhood. This subdivision will either pay for or will install street trees along the street frontage of all new lots, consistent with the City of Canby Tree Planting and Maintenance Policy. In time, when street trees grow to maturity, they will provide for reduced stormwater runoff and will reduce summertime heating from streets within the development by providing shade for streets, driveways, and sidewalks.

Other than the retention of a few trees around the perimeter of the site and some landscaping around the two existing homes, little other significant vegetation is anticipated to remain. However, the subdivision layout will create lots having adequate space for new trees and additional landscaping after the homes are constructed, similar to the homes in neighboring subdivisions.

- D. It must be demonstrated that all required public facilities and services are available, or will become available through the development, to adequately meet the needs of the proposed land division.

Response: Needed public facilities and services are available for the development at the proposed R-1.5 zoning designation. A discussion of public facilities and services is listed below.

Emergency Services: Police service will be provided by the City of Canby Police Department and fire protection will be provided by Canby Fire District. Both the police and fire department can serve the proposed development site.

Sanitary Sewer: Sanitary sewer service is available to the development from both fronting roads. The proposal is to connect to and extend the existing public sanitary sewer from S Fir Street and SW 15th Avenue to serve the lots within the subdivision.

Water: Public water is also available both in S Fir Street and SW 15th Avenue.

Franchise Utilities: Franchise utility service is available in both S Fir Street and SW 15th Avenue. All franchise utilities are available or can be made available through the extension of utility systems from other nearby facilities at the time of development.

Storm Drainage: Public storm drainage will be accommodated on the development site through installation of new catch basins, water quality manholes, and drywells. Private stormwater disposal for roof and driveway runoff will be accommodated for through the installation of underground storage chambers on each lot when homes are constructed, similar as has been done in nearly every other subdivision in Canby. One private drywell is also planned that will collect shared accessway runoff from the two shared accessways and the 5 lots taking access through the shared accessways.

The provisions of this subsection have been met.

- E. The layout of subdivision streets, sidewalks, and pedestrian ways supports the objectives of the Safe Routes to Schools Program by providing safe and efficient walking and bicycling routes within the subdivision and between the subdivision and all schools within a one-mile radius. During review of a subdivision application, city staff will coordinate with the appropriate school district representative to ensure safe routes to schools are incorporated into the subdivision design to the greatest extent possible.

Response: Sidewalks will be provided along the public right-of-way at the time of home construction. Completion of the sidewalks within the subdivision would support the Safe Routes to School Program, as it would complete the sidewalk system on the west side of S Fir Street and eliminate the current dead-end street that exists on SW 15th Avenue. SW 13th Avenue is a major route to schools to the east and west. Connectivity through the development site providing a safe connection to S Fir Street and SW 13th Avenue will be supportive of this program.

The provisions of this subsection have been met.

- F. A Traffic Impact Study (TIS) may be required in accordance with Section 16.08.150.

Response: A Traffic Impact Study was commissioned by the applicants for the current subdivision application. In a technical memorandum dated September 12, 2023, DKS Associates, the City of Canby's Traffic Engineer, summarized that, "The proposed site

plan adequately addresses each transportation approval criteria and livability measure.” A copy of the memorandum is included with the submittal.

Chapter 16.64 SUBDIVISIONS – DESIGN STANDARDS

Prior to addressing the individual subsections of the Land Development Ordinance, the narrative will explain the history of these two parcels and the street system that exists today, as the existing street system and the restrictions of the Land Development Ordinance & the Public Works Design Standards have a significant impact on the subdivision layout and the need to develop the site utilizing multiple flag lots.

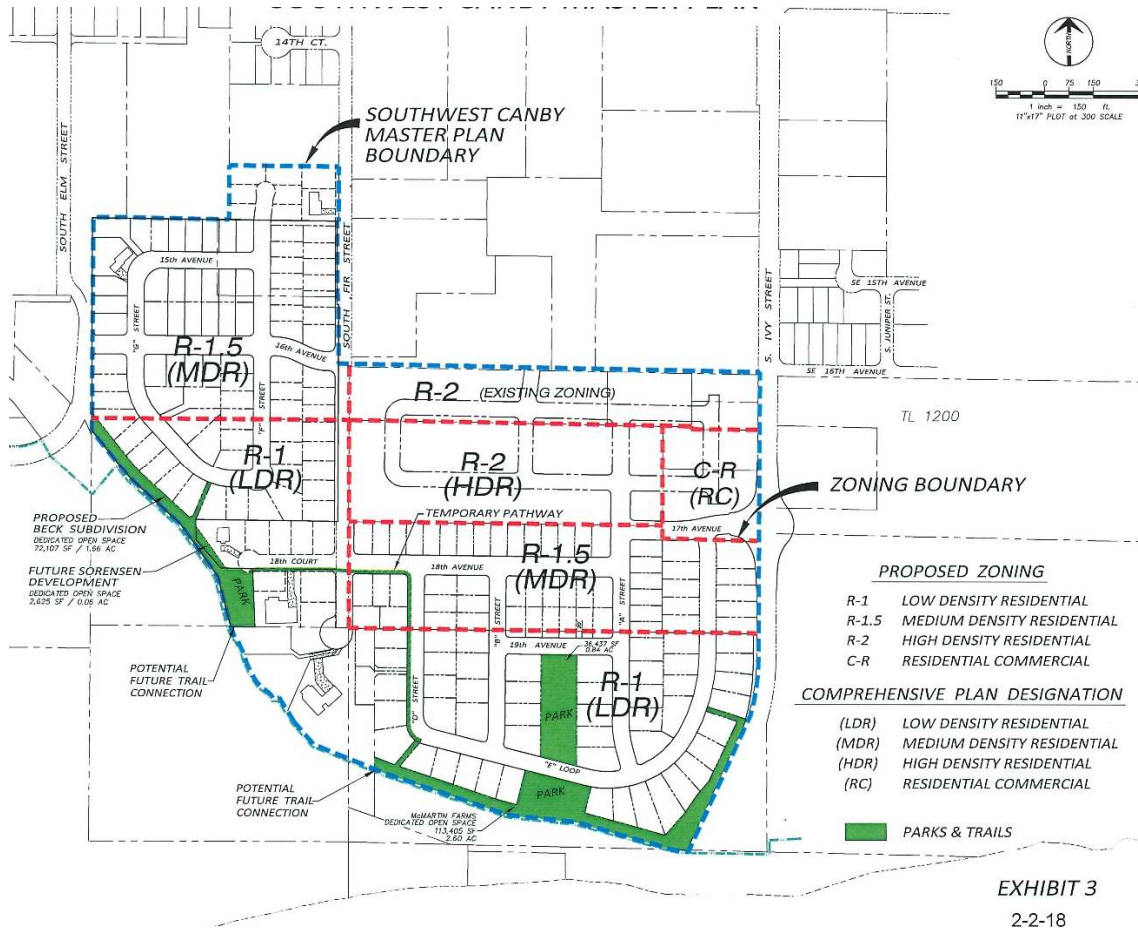
Although several conceptual plans have been prepared for these two parcels in the past, most of the layouts tended to have one or more major elements failing to meet City of Canby Standards. The applicant has tried to develop a Site Plan meeting the required elements of the Land Development Code and the Public Works Design Standards while also creating desirable building lots.

The proposed subdivision is within a Development Concept Plan area shown on the City of Canby Annexation Map. The Development Concept Plan area (identified by a red polyline on the Annexation Map below) includes an area from S Elm St to S Ivy St lying south of the Elmwood Mobile Home Community and the original Hope Village Campus. The DCP area include this subdivision site, both phases of the Beck Pond subdivision, all phases of the Ivy Ridge subdivision, and other smaller parcels:



City of Canby Annexation Map

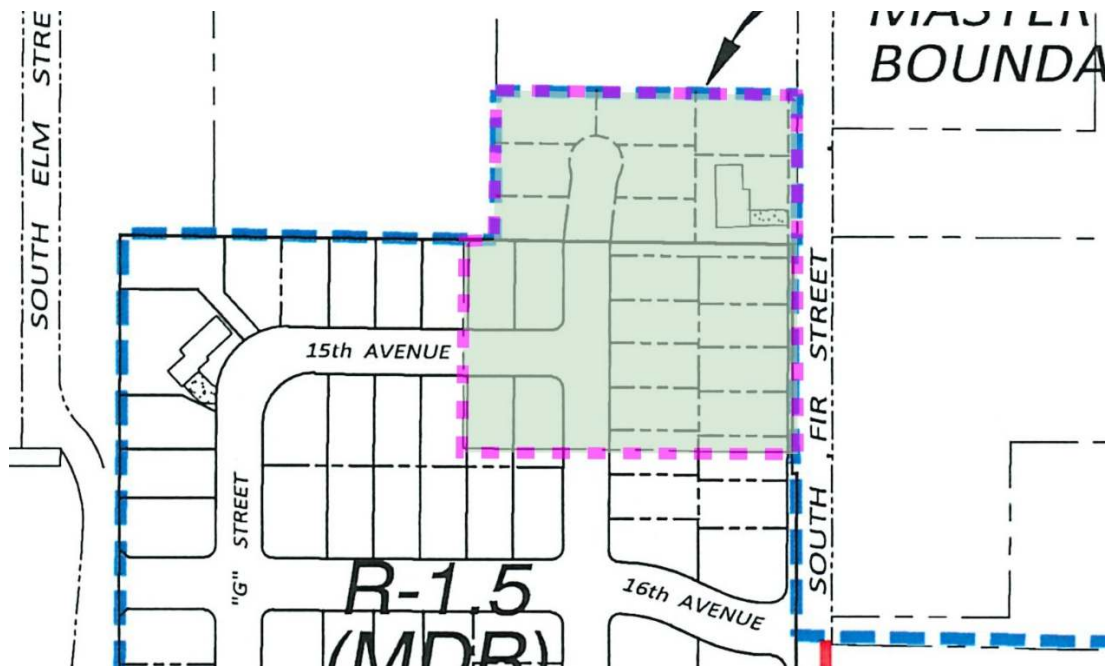
In 2018, prior to annexation of several properties in this area, the Southwest Canby Development Concept Plan was prepared by Stafford Land Company. The DCP Map (below) submitted to the City included what would eventually become the Beck Pond and Ivy Ridge Estates subdivisions and the Hope Village Southern Expansion.



Original Southwest Canby Development Concept Plan Map

An enlargement of the northern portion of the original DCP Map that is applicable to this site is below. The parcels that make up this subdivision application are noted with a pink hatched outline.

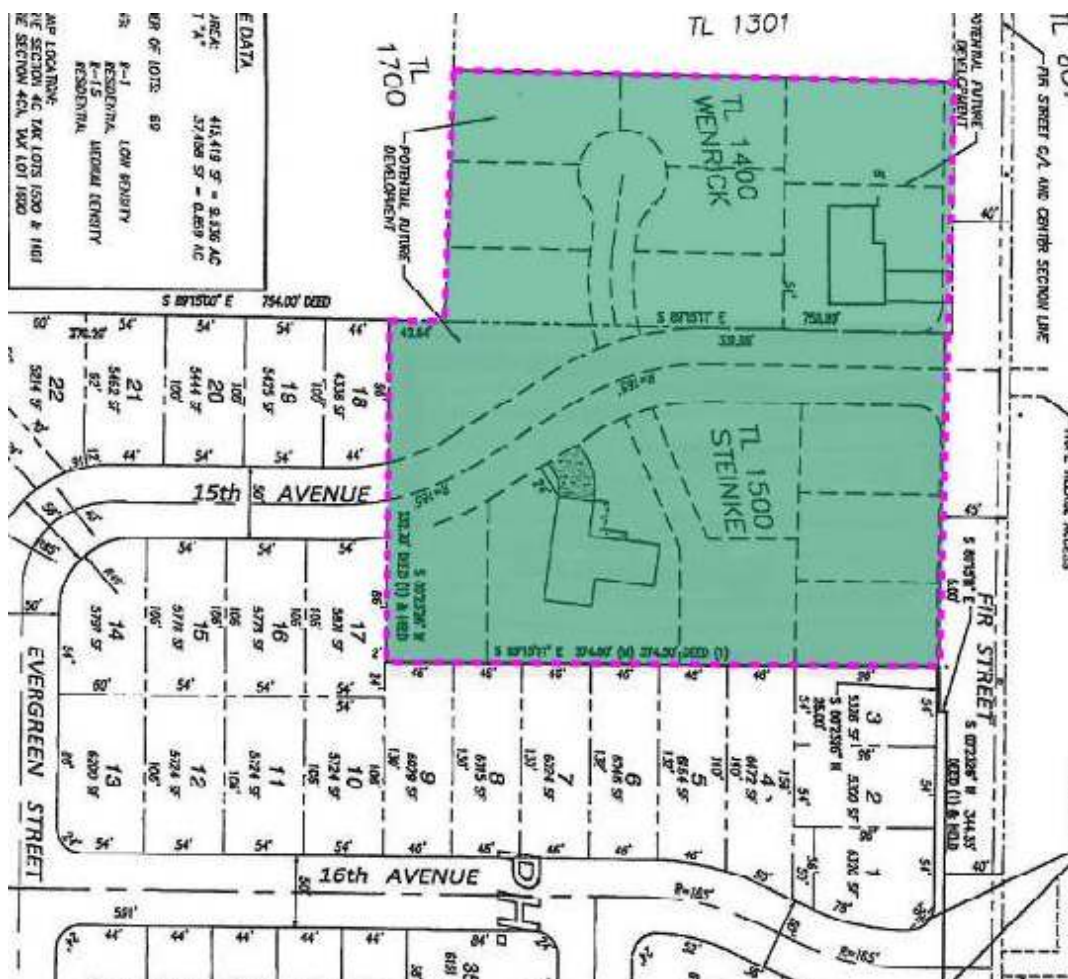
The original Development Concept Plan showed SW 15th Avenue teeing into a north-south roadway, "F" Street (not labeled), within Tax Lot 1500. The northern leg of "F" Street terminated with a substandard cul-de-sac within Tax Lot 1400 while the southern leg of "F" Street was to extend south from Tax Lot 1500 to an intersection with SW 16th Avenue.



Original Southwest Canby Development Concept Plan Map Enlargement

During the City's review and hearings process for the annexation and DCP, several discussions occurred between Stafford Land Co. (the annexation applicant), the (former) owners of Tax Lot 1500, and the City of Canby. At some point during the City's review process a new DCP Map with a new street layout was submitted by the applicant (at left). That layout was ultimately approved.

The original layout was revised to eliminate "F" Street in favor of an extension of SW 15th Avenue east to S Fir Street. The substandard cul-de-sac north into Tax Lot 1400 was revised, but the bulb remained smaller than City Public Works standards would allow and the right-of-way serving the cul-de-sac was drawn to the required street right-of-way width. Despite these substandard features, the revised DCP Plan was approved by the City of Canby.



Approved DCP Plan

Following the approval of the Southwest Canby Development Concept Plan, the (prior) owners of Tax Lot 1500 filed an appeal with the City of Canby appealing the approval of the Beck Pond subdivision and the Southwest Canby Development Concept Plan. City File No. APP 18-02 was heard by the Canby City Council in August 2018. During review of APP 18-02, the (prior) owners of Tax Lot 1500 provided the City with a map showing their vision of the future street system for their property. Their plan include an east-west roadway from the terminus of SW 15th Avenue eastward to S Fir St with no street stub to the north. Their envisioned layout for Tax Lot 1500 was roughly as indicated below:



Street Plan Desired by Previous Owners of Tax Lot 1500

The appeal of the original approval was rejected by the City Council. However, the Council did modify the original approval with the addition of a specified amendment. The specified amendment included an additional condition of approval that *“the approval of the Beck Pond subdivision shall not determine the configuration of any future development on Tax Lot 1500 and that any future development proposal on Tax Lot 1500 shall be judged upon its’ own merits at the time when an application is submitted.”*

Therefore, the approved Development Concept Plan for this area has no bearing on the street layout and it is up to the applicant, with the City’s review, to find the best way to extend a public street through the site to intersect with S Fir Street.

At S Fir Street, in order to not create conflicts between the new intersection and existing driveways or intersections, the proposed intersection must conform with the spacing guidelines of Table 16.46.030, Access Management Guidelines for the City of Canby.

The applicants looked at many different site plans and street layouts for the development site in the attempt to find the plan that would best balance neighborhood access, lot access, connectivity, and desirable building lots while meeting as many Planning and Public Works standards as possible.

One of the initial layouts considered the use of a cul-de-sac along the northern portion of the site in addition to the extension of SW 15th Avenue through the site. This plan showed the existing home on TL 1500 being removed.

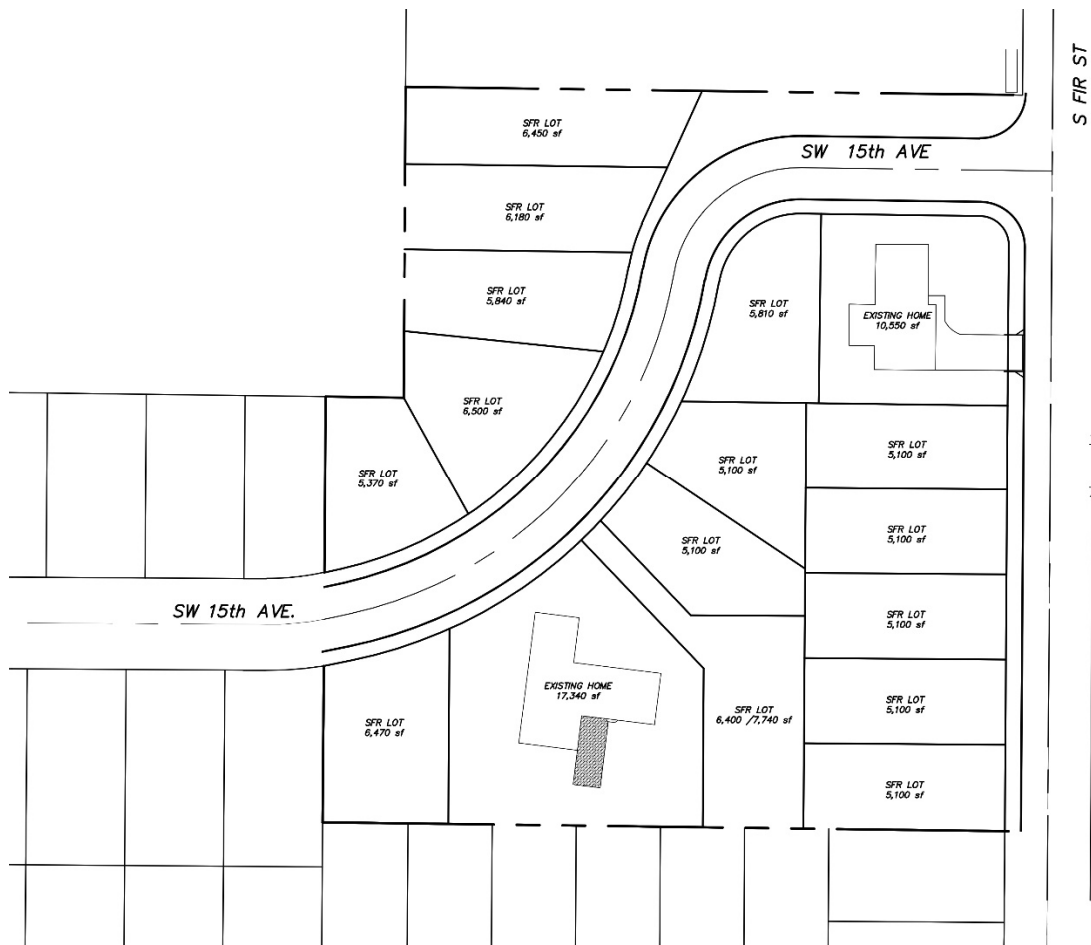


Rejected Site Plan #1

Site Plan 1 and other plans similar to it were rejected for several reasons, but the primary reasons were:

- 1) The lots around the cul-de-sac are oddly shaped and difficult to build on. Four of the lots are long and narrow and two of the four would have an awkward access onto the cul-de-sac. A fifth lot south of the cul-de-sac bulb would be very shallow, very wide, and difficult to build on.
- 2) The end of the cul-de-sac would have one long driveway approach void of any room for street trees.
- 3) The plans would require the removal of the existing home on Tax Lot 1500.

At roughly this point during the subdivision planning process Tax Lot 1500 was sold. The new owners of the lot and the owners of Tax Lot 1400 began discussing a joint venture. It was determined that the home on Tax Lot 1500 was in good condition, was very much worth keeping, and the extension of SW 15th Avenue should be worked around the existing home. The desire to retain the existing home on Tax Lot 1500 created additional layout challenges of how to extend SW 15th Avenue through the site to S Fir Street while meeting applicable zoning requirements, such as setbacks and access. Rejected Site Plan #2 below was one of several early attempts of how to accomplish the extension of SW 15th Avenue to S Fir Street while retaining the existing home on Tax Lot 1500.

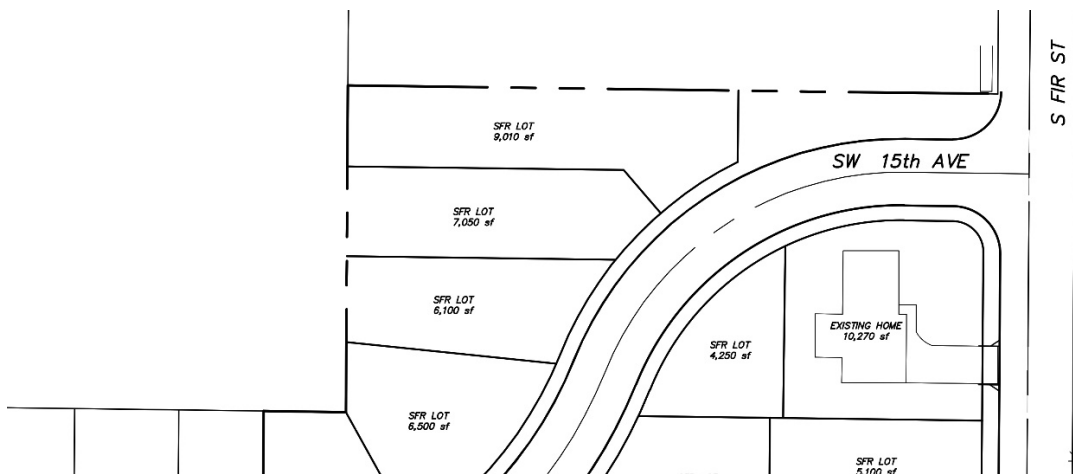


Rejected Site Plan #2

Rejected Site Plan 2 and other plans similar to it were rejected for several reasons, the primary reasons being:

- 1) The centerline radius at the northern end of the site is only 70 feet, well below the City Public Works Standards minimum required radius of 165 feet.
- 2) Although the existing home on Tax Lot 1500 would remain, the look of the home from the street would be odd in that the only the side wall of the home and the garage door would be visible from SW 15th Avenue, while the front door would be hidden. Also, while the garage would remain on the front of the home, access into the garage would be awkward as would share an accessway with the lot adjacent to it.
- 3) At least 4 of the lots being created for new home construction would be somewhat oddly shaped and not mostly rectangular.

Several variations of Rejected Site Plan #2 were studied, but ultimately it was decided that the need to meet the 165-foot centerline radius at the northern end of the site disqualified this conceptual street alignment as being possible. Below is a snapshot of what a 165-foot centerline radius at the northern portion of the site would look like.



Rejected Site Plan #2 with 165-foot centerline radius

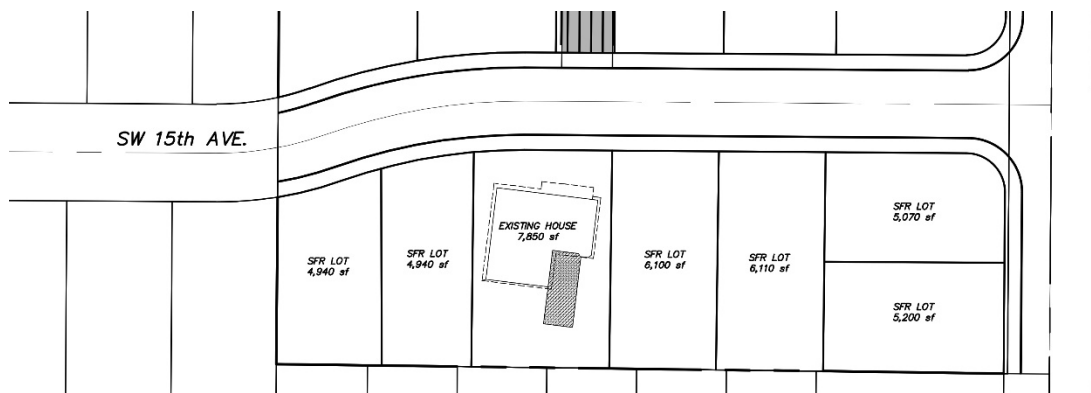
A 165-foot centerline radius alters the plan significantly in that it creates an a large oddly shaped area in the northwestern corner of the site. That area is difficult to subdivide into nicely shaped building lots that would meet R-1.5 zoning requirements. In the plan above, the two most northerly lots exceed the 6,500 sq. ft. maximum lot area, while on the inside of the curve, the lot west pf the existing home is pie shaped and reduced to only 4,250 sq. ft. This lot area is below the permitted minimum lot area for the zoning district. Having three lots outside of the maximum and minimum lot area requirements would not be allowed unless a public benefit could be demonstrated.

With poorly shaped lots and the inability to demonstrate a public benefit for the plan, the applicants explored other options. One option explored was to retain the existing home on Tax Lot 1500, but rather than keep it in its current location, move it to a new area of the site where it may be a better fit. The applicant/owners of Tax Lot 1500

explored the option with a home moving company, but it was determined that the style of construction of the home's foundation would not be conducive to it being moved.

With that information, it was determined that the existing home needed to remain where currently located. Rather than retaining the entire home, the option of retaining only a portion of the existing home was examined. The home was inspected to determine what portions needed to remain and what areas could be removed. It was determined that the garage could be removed from the northern end of the home and that a bedroom and laundry room could be removed on the eastern side of the home.

Using the new conceptual footprint for the existing home on Tax Lot 1500, the extension of SW 15th Avenue could be designed around what would remain of the home. The street alignment that created the best shaped building lots was an alignment that used a straight extension of SW 15th Avenue east to S Fir St., shown below.



The straight extension of SW 15th Avenue creates the best building lots for new construction, creates the best public street system, and works to keep the two existing homes on the property, but it makes the northwest corner of the subdivision site difficult to access without using multiple flag lots.

Code Section 16.64.040 lists many requirements for Lot within Subdivisions. The requirements of Section 16.64.040 generally require lots to front streets with flag lots, cul-de-sac lots, or other unique lots being accessible if access and building areas are deemed to be adequate. When flag lots are created, generally only one flag lot shall be behind the lot fronting the street, unless it is found that access is adequate and that multiple flag lots is the only reasonable method for developing the property.

Including the discussion of the various plans for the subject property on the preceding pages and the discussion of the various reasons to reject each plan due to non-conformance with various City requirements, was provided to demonstrate to Staff and the Planning Commission that due to the street configuration of the existing neighborhood, the desire to retain the existing homes on the property, the intersection and driveway spacing requirements of the Land Development Ordinance, and the street centerline radius requirements of the City's Public Works Design Standards, that multiple flag lots are the only reasonable method to develop the northwest corner of the subdivision site.

At least six separate public street configurations were studied, some of which were included on the preceding pages. The applicants looked at moving the existing home on Tax Lot 1500 to a new location. In the end, multiple flag lots were determined to create the best plan for the public street system and the overall neighborhood.

With it having been decided that having multiple flag lots was the only way to properly subdivide the site and using the SW 15th Avenue extension presented on the preceding page, the site plan below was created. This plan is noted as Rejected Site Plan #3:



Rejected Site Plan #3

Rejected Site Plan #3 creates (5) flag lots in the northwest corner of the site, the portion of the site that is difficult to serve with a public street. The (5) lots would share a private driveway accessing SW 15th Avenue.

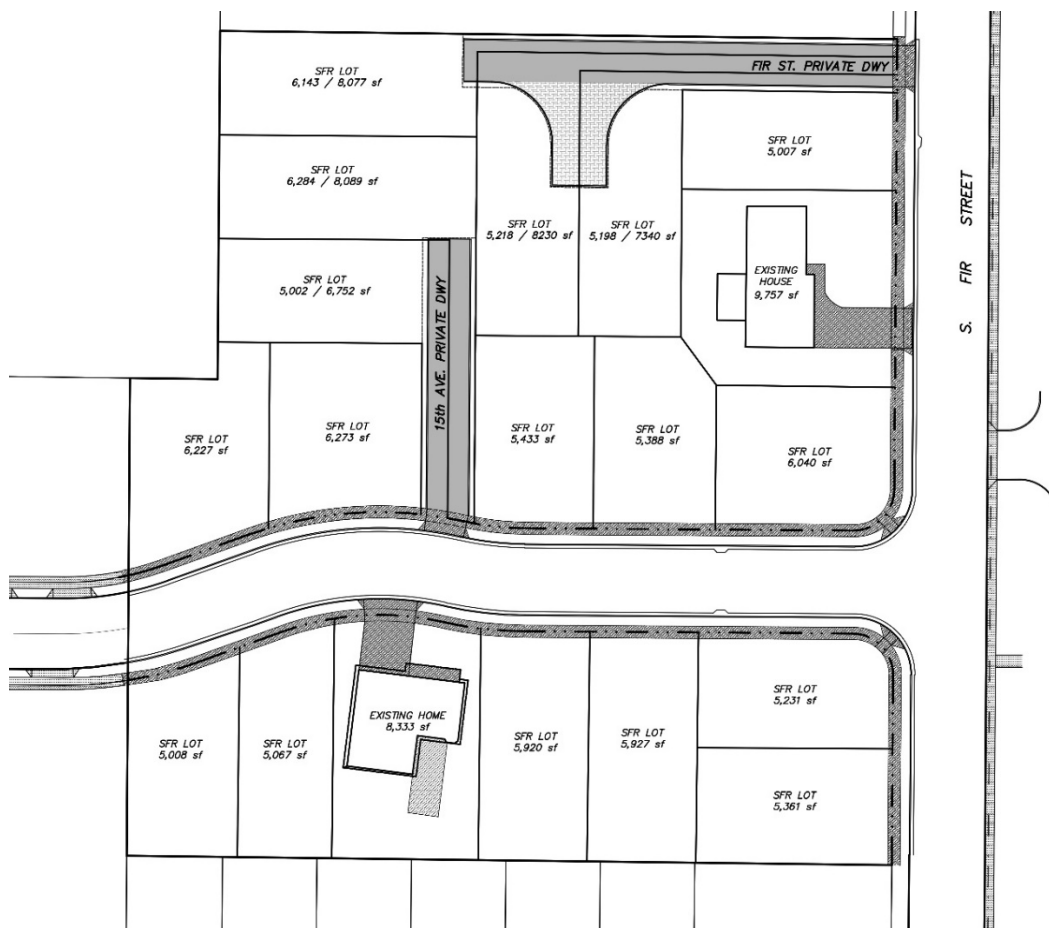
The majority of Rejected Site Plan #3 meets Code requirements. The southwestern corner of the site needed refinement because two lots on the north of SW 15th Avenue adjacent to the Beck Pond subdivision exceeded the 6,500 sq. ft. maximum lot area, while to lots south of SW 15th Avenue adjacent to the Beck Pond subdivision were below the 5,000 sq. ft. minimum lot area for the R-1.5 zone. In order to fix the lot area issues, SW 15th Avenue had to be altered and pushed a little further north prior to curving back to the south and around the existing home. This street adjustment would remove some lot area north of SW 15th Avenue and add some lot area south of SW 15th Avenue and

would hopefully allow the areas of the lots north and south of SW 15th Avenue to fall within the minimum and maximum permitted lot areas.

With Rejected Plan #3, more than one flag lot is created behind the conventional lots. Per Code Section 16.64.040.I, "Not more than one flag lot shall be created to the rear of any conventional lot and having frontage on the same street unless it is found that access will be adequate and that multiple flag lots are the only reasonable method to allow for development of the site." The 20-foot wide shared accessway would provide adequate access, and as demonstrated on the preceding pages, multiple flag lots are the only reasonable method to allow for development of the northwest corner of the site.

After making the centerline adjustment to SW 15th Ave. to make the lots fronting the street fall within the permitted maximum and minimum R-1.5 lot areas, one other significant adjustment was made. Alternatives to the flag lot design were explored. It was decided to separate access to the flag lots into two shared driveways with one accessway being shared by two lots taking access from SW 15th Ave., and a separate accessway being shared by three lots taking access from S Fir St.

Reducing the number of lots sharing each accessway seemed to be more consistent with Code Section 16.64.040 than having five lots share an accessway. The resulting plan below, is the plan submitted to the City for approval.



Site Plan #4 – Submitted for City Approval

16.64.010 Streets.

- A. Generally. The location, width and grade of streets shall be considered in relation to existing and planned streets, to topographical conditions, to public convenience and safety, and to the proposed use of land to be served by the streets. The street system shall assure an adequate traffic circulation pattern with intersection angles, grades, tangents, and curves appropriate for the traffic to be carried. Where location is not shown in a development plan, the arrangement of streets shall either:
1. Provide for the continuation or appropriate projection of existing principal streets in surrounding areas; or
 2. Conform to a plan for the neighborhood approved or adopted by the commission to meet a particular situation where topographical or other conditions make continuance of conformance to existing street patterns impractical;
 3. Minimum right-of-way and roadway width shall follow the requirements of the Canby Public Works Design Standards;
 4. Consider opportunities to incrementally extend and connect local streets to provide for safe and convenient bike and pedestrian circulation.

Response: Proposed street improvements and right-of-way dedications are consistent with the requirements of the Canby Public Works Design Standards.

- B. Permeable Surfaces. Permeable surfacing alternatives and on-site stormwater management facilities, are encouraged for street improvements. Permeable surfacing and LID stormwater management facilities shall be constructed in accordance with the Canby Public Works Design Standards and the manufacturer's recommendations. Permeable surfacing includes, but is not limited to: paving blocks, turf block, pervious concrete, porous asphalt, and other similar approved materials. Alternative surfacing methods may be approved for public and private roads, road shoulders, pedestrian ways, driveways, and easement service roads unless site constraints make use of such materials detrimental to water quality. Use of permeable surfacing methods shall meet the imposed load requirements for fire apparatus, and shall be subject to review and approval by the Canby Public Works Department.

Response: No public street improvements are proposed using permeable materials. Permeable materials, such as paving stones, may be used for the turnaround area on the S Fir Street Driveway. If permeable materials are used, they will be capable of accommodating Fire Truck Apparatus loading.

The provisions of this subsection are met by the proposal.

- C. Reserve Strips. Reserve strips or street plugs controlling the access to streets will not be approved unless such strips are necessary for the protection of the public welfare or of substantial property rights, or both, and in no case unless the control and disposal of the land composing such strips is placed within the jurisdiction of the city, under conditions approved by the commission.

Response: No reserve strips or street plugs are proposed. The provisions of this subsection are not applicable.

- D. Alignment. All streets other than minor streets or cul-de-sacs, shall, as far as possible, be in alignment with the existing streets by continuations of the center lines thereof. Jogs creating "T" intersections shall have centerline offsets of not less than one hundred fifty feet, unless it is found that community benefits of such an alignment outweigh its disadvantages.

Response: The extension of SW 15th Street will align with the current right-of-way that is stubbed to the west property line of the site. One new intersection on S Fir Street is being created, but there is no existing street on the east side of S Fir Street to align with. To the extent that the provisions of this section are applicable, the proposed plan complies with these provisions.

- E. Future Extension of Streets. Where a subdivision adjoins unplatted acreage, streets which in the opinion of the commission should be continued in the event of the subdivision of the acreage, will be required to be provided through to the boundary lines of the tract. Reserve strips, street plugs and temporary turnaround areas may be required to preserve the objectives of street extensions. Reserve strips and street plugs shall be deeded to the city prior to final plat approval. The Planning Commission may require that the costs of title insurance and recordation fees, if any, for such areas be borne by the subdivider. If, in the opinion of the city engineer, a traffic pedestrian, or safety hazard temporarily exists by the construction of a dead-end street, he may direct that a barricade of adequate design be installed at the developer's expense as one of the required improvement items for the subdivision.

Response: The site is surrounded by developed properties, but not all the developed properties are platted. The Elmwood Mobile Home Community located west of the northern half of the property is a privately maintained mobile home community on large tax lots. Although the property is not platted, it is multi-family and is unlikely to be redeveloped. If it were to be re-developed, it would likely be re-developed having a street pattern similar to the existing street pattern, which is adequate for the number of units being served.

Other properties to the north, including the Sequoia Place subdivision and the Hope Village cottages were developed with cul-de-sacs and did not extend street extensions through to the mobile home community. Due to the unlikeliness that the mobile home community would ever be platted, no public street connection to that tax lot is proposed.

The provisions of this subsection have been addressed.

- F. Intersection Angles. Streets shall intersect one another at an angle as near to a right angle as possible, and no intersections of streets at angles of less than thirty degrees will be approved unless necessitated by topographic conditions. When intersections of other than ninety degrees are unavoidable, the right-of-way lines along the acute angle shall have a minimum corner radius of twelve feet. All right-of-way lines at intersections with arterial streets shall have a corner radius of not less than twelve feet.

Response: SW 15th Avenue is proposed to intersect S Fir Street at a perpendicular angle. The provisions of this subsection are met.

- G. Existing Streets. Whenever existing streets, adjacent to or within a tract, are of inadequate width, dedication of additional right-of-way shall be provided at the time of subdivision.

Response: Additional right-of-way will be dedicated along S Fir Street. The provisions of this subsection are addressed.

- H. Half Streets. Half streets, while generally not acceptable, may be approved where essential to the reasonable development of the subdivision, when in conformity with the other requirements of these regulations, and when the commission finds it will be practical to require the dedication of the other half when the adjoining property is subdivided. Whenever a half street is adjacent to a tract to be subdivided, the other half of the street shall be platted within such tract. Reserve strips, street plugs, special signs and barricades may be required to preserve the objectives of half streets.

Response: No half streets are proposed, the provisions of this subsection are not applicable.

- I. Cul-de-sacs. A cul-de-sac shall only be allowed when environmental or topographical constraints, existing development patterns, or compliance with other standards in this code preclude street extension and through circulation. When cul-de-sacs are provided, all of the following shall be met:
1. The cul-de-sac shall not exceed a length of 400 feet. Length of the cul-de-sac shall be measured along the centerline of the roadway from the near side of the intersecting street to the farthest point of the cul-de-sac;
 2. The cul-de-sac shall be designed in accordance with the Canby Public Works Design Standards.
 3. The cul-de-sac may have a vegetated center island that will serve to treat stormwater runoff generated by the cul-de-sac. Specifications for cul-de-sac design are located in the Public Works Design Standards.
 4. The cul-de-sac shall provide a pedestrian connection between it and adjacent streets, access ways, parks, or other right-of-way. Such pedestrian ways shall conform to Section 16.64.030(C).

Response: No cul-de-sacs are proposed, the provisions of this subsection are not applicable.

- J. Marginal Access Streets. Where a subdivision abuts or contains an existing or proposed arterial street, the commission may require marginal access streets, through lots with suitable depth, screen planting contained in a nonaccess reservation along the rear property line, or such other treatment as may be necessary for adequate protection of residential properties and to afford separation of through and local traffic.

Response: No arterial streets are associated with this proposed development. The provisions of this subsection are not applicable.

K. Alleys.

1. Alleys shall be provided to commercial and industrial districts, unless other permanent provisions for access to off-street parking and loading facilities are made as approved by the commission.
2. Alleys shall be provided within residential subdivisions when streets are designed to meet the narrow “green” street standards in the Canby Public Works Design Standards. Visitor parking areas may be required by the city to mitigate the lack of on-street parking.
3. When alleys are provided as part of a new residential subdivision, streets shall be designed in accordance with the narrow “green” street standards in the Canby Public Works Design Standards. Visitor parking areas may be required by the city to mitigate the lack of on-street parking.
4. Alley intersection corners shall have a minimum radius of ten feet.

Response: No alleys are proposed, the provisions of this subsection are not applicable.

- L. Street Names. No street name shall be used which will duplicate or be confused with the name of existing streets except for extensions of existing streets. Street names and numbers shall conform to the established pattern in the city and the surrounding area and shall be subject to the approval of the commission.

Response: No new street names are proposed. The existing street names of S Fir Street and SW 15th Avenue will be used for all lots within the subdivision.

- M. Planting Easements. The Planning Commission may require additional easements for planting street trees or shrubs.

Response: The provisions of this section are not anticipated to be applicable to the proposed development.

- N. Grades and Curbs. Grades shall not exceed seven percent on arterials, ten percent on collector streets, or fifteen percent on any other street. In flat areas allowance shall be made for finished street grades having a minimum slope of .5 percent. Centerline radii of curves shall not be less than three hundred feet on major arterials, two hundred feet on secondary arterials, or one hundred feet on other streets, unless specifically approved by the City, and shall be to an even ten feet.

Response: No street grades exceeding 3 percent are proposed. A minimum street grade of 0.5 percent are proposed, except where in the bottom of a sag curve where catch basins will be placed. The proposed centerline radii will comply with the minimum 165-foot centerline radius permitted by the Public Works Design Standards for Local Streets.

- O. Streets Adjacent to Highway 99-E or Railroad Right-of-Way. Wherever the proposed subdivision contains or is adjacent to a railroad right-of-way or Highway 99-E, provisions may be required for a street approximately parallel to and on each side of such right-of-way at a distance suitable for the appropriate use of the land between the streets and the railroad or Highway 99-E. The distances shall be determined with due consideration of cross streets at a minimum

distance required for approach grades to a future grade separation and to provide sufficient depth to allow screen planting along the railroad right-of-way.

Response: This subsection is not applicable to the proposed subdivision.

- P. Private streets created within a new subdivision or partition shall be designated as a separate “tract” on the submitted plat map.

Response: Two shared driveways are proposed, but they will be designed as flag lots with reciprocal access easement as is permitted by Section 16.64.040.I.(2). No private streets are proposed. This subsection is not applicable to the proposed subdivision.

16.64.015 Access

- A. Any application that involves access to the State Highway System shall be reviewed by the Oregon Department of Transportation for conformance with state access management standards (See appendix G of the Transportation System Plan).
- B. All proposed roads shall follow the natural topography and preserve natural features of the site as much as possible. Alignments shall be planned to minimize grading.
- C. Access shall be properly placed in relation to sight distance, driveway spacing, and other related considerations, including opportunities for joint and cross access.
- D. The road system shall provide adequate access to buildings for residents, visitors, deliveries, emergency vehicles, and garbage collection.
- E. Streets shall have sidewalks on both sides. Pedestrian linkages should also be provided to the peripheral street system.
- F. Access shall be consistent with the access management standards adopted in the Transportation System Plan.

Response: The proposed road system plans to continue the public street terminated at the western boundary of the site and will make a logical extension of the roadway through to S. Fir Street. The extension of SW 15th Avenue will follow the natural topography, which is close to flat, and will create a new intersection on S Fir Street roughly midway in between SW Pacific Crest Drive and SW 16th Avenue and will meet the driveway spacing requirements on both sides of S Fir Street.

The road network continues an extension of the existing street through this site, and it allows for convenient access for residents, visitors, deliveries, emergency vehicles, and garbage collection. Once all of the homes are constructed in the subdivision, the road system will provide sidewalks on both sides of the streets.

Profiles of proposed roadways and driveways are included with the application.

16.64.020 Blocks.

- A. Generally. The lengths, widths and shapes of blocks shall be designed with due regard to providing adequate building sites suitable to the special needs of the type of use contemplated, needs for access, circulation, control and safety of street traffic and limitations and opportunities of topography.

- B. Sizes. Block length shall be limited to 300 feet in the C-1 zone, 400 feet in residential zones, 600 feet in all other zones, except for 1,000 feet on arterials. Exceptions to this prescribed block standard shall be permitted where topography, barriers such as railroads or arterial roads, or environmental constraints prevent street extension. The block depth shall be sufficient to provide two lot depths appropriate to the sizes required by Division III.

Response: Due to the two subject parcels being the final two properties in the vicinity to be developed, the street and block pattern for the neighborhood has already been established. The ability for this subdivision to create additional blocks is limited.

The proposal will create a new block on the west side of S Fir Street between SW Pacific Crest Dr. and SW 16th Avenue. The block length from SW Pacific Crest Dr. to SW 15th Avenue will be 357 feet, while the block length from SW 15th Avenue to SW 16th Avenue will be 286 feet. These lengths are consistent with the requirements of subsection B.

On SW 15th Avenue, the existing block length along the inside of the curve radius is currently 398 feet, while the length around the outside curve radius is 480 feet, already exceeding the recommended block length for a residential zone. However, due to the properties on all sides already being developed, there is no ability to create a street connection that would reduce the length of the block. With the extension of SW 15th Avenue to S Fir Street, the SW 15th Avenue block will become longer. The distance from SW 16th Avenue to S Fir Street along SW 15th Avenue will measure approximately 840 feet (along the centerline).

Although this distance exceeds the Access Management Guidelines of Table 16.46.30, and the requirements of subsection B, the pattern of streets in this area has been established by the other existing approved developments and this subdivision cannot adjust the SW 15th Avenue block length.

16.64.030 Easements.

- A. Utility Lines. Easements for electric lines or other public utilities are required, subject to the recommendations of the utility providing agency. Utility easements twelve feet in width shall be required along all street lot lines unless specifically waived. The commission may also require utility easements along side or rear lot lines when required for utility provision. The construction of buildings or other improvements on such easements shall not be permitted unless specifically allowed by the affected utility providing agency.
- B. Watercourses. Where a subdivision is traversed by a watercourse, drainage way, channel or stream, there shall be provided a storm water easement or drainage right-of-way conforming substantially with the lines of such watercourse, and such further width as will be adequate for the purpose of assuring adequate flood control. Streets parallel to watercourses may be required.
- C. Pedestrian Ways. In any block over six hundred feet in length, a pedestrian way or combination pedestrian way and utility easement shall be provided through the middle of the block. If unusual conditions require blocks longer than one thousand two hundred feet, two pedestrian ways may be required. When essential for public convenience, such ways may be required to connect to cul-

de-sacs, or between streets and other public or semipublic lands or through green way systems.

Sidewalks to city standards may be required in easements where insufficient right-of-way exists for the full street surface and the sidewalk. All pedestrian ways shall address the following standards to provide for the safety of users:

1. Length should be kept to a minimum and normally not in excess of two hundred feet;
2. Width should be maximized and shall not be below ten feet. For pathways over one hundred feet long, pathway width shall increase above the minimum by one foot for every twenty feet of length;
3. A minimum of three foot-candles illumination shall be provided. Lighting shall minimize glare on adjacent uses consistent with the outdoor lighting provisions in section 16.43 of this code;
4. Landscaping, grade differences, and other obstructions should not hinder visibility into the pedestrian way from adjacent streets and properties. Fencing along public pedestrian ways shall conform with the standards in Section 16.08.110;
5. Surrounding land uses should be designed to provide surveillance opportunities from those uses into the pedestrian way, such as with the placement of windows;
6. Exits shall be designed to maximize safety of users and traffic on adjacent streets; and
7. Use of permeable surfacing materials for pedestrian ways and sidewalks is encouraged whenever site and soil conditions make permeable surfacing feasible. Permeable surfacing includes, but is not limited to: paving blocks, turf block, pervious concrete, and porous asphalt. All permeable surfacing shall be designed, constructed, and maintained in accordance with the Canby Public Works Design Standards and the manufacturer's recommendations. Maintenance of permeable surfacing materials located on private property are the responsibility of the property owner.

Response: Easements for utilities, consistent with the provisions of subsection A are proposed. Subsections B & C are not applicable. The proposal is consistent with the applicable provisions of this subsection.

- D. Developments that abut the Molalla Forest Road multi-use path shall provide a pedestrian/bicycle access to the path. The city may determine the development to be exempt from this standard if there is an existing or planned access to the path within 300 feet of the development.

Response: The project is not near the Molalla Forest Road; therefore, the provisions of this subsection are not applicable.

- E. Solar Easements. Subdividers shall be encouraged to establish solar easements and utilize appropriate solar design in their development proposals. Solar easements shall be shown on the final plat and in the deed restrictions of the subdivision. The Planning Commission may require the recordation of special easements or other documents intended to protect solar access.

Response: Most lots in the development are oriented north-south and will meet solar design standards. Solar easements are not proposed.

16.64.040 Lots.

- A. Size and Shape. The lot size, width, shape and orientation shall be appropriate for the location of the subdivision and for the type of development and use contemplated. To provide for proper site design and prevent the creation of irregularly shaped parcels, the depth of any lot or parcel shall not exceed three times its width (or four times its width in rural areas) unless there is a topographical or environmental constraint or an existing man-made feature such as a railroad line.

Response: Lot sizes comply with dimensional requirements for the R-1.5 Zone, as previously discussed in this narrative and as shown on the proposed site plan. Lot shapes are generally rectangular to provide for desirable building lots.

B. Minimum Lot Sizes:

1. Lot sizes shall conform with requirements of Division III unless the applicant chooses to use an alternative lot layout per subsection (3) below to accommodate interconnected and continuous open space and or other natural resources. In this case, the average minimum lot size may be reduced by 5,000 square feet after subtracting access tracts. Overall development densities shall comply with the underlying maximum density allowed by the zone.
2. In areas that cannot be connected to sewer trunk lines, minimum lot sizes shall be greater than the minimum herein specified if necessary because of adverse soil structure for sewage disposal by septic systems. Such lot sizes shall conform to the requirements of Clackamas County for sewage disposal unless provisions are made for sanitary sewers.
3. Alternative lot layout. Applicants may deviate from standard lot setbacks and dimensions to accommodate dedicated interconnected open space or other natural areas. Clustered housing, lot-size averaging, and a mixture of approaches where building lots can be grouped into a smaller portion of the total development, reserving the remainder for open space or other natural areas. Alternative development layouts shall not exceed the underlying maximum density allowed by the zone.
4. When using the alternative lot layout option, the following must be met:
 - a. The arrangement of the alternative lot layout shall be designed to avoid development forms commonly known as linear, straight-line or highway strip patterns.
 - b. To the maximum extent possible, open space and natural areas, where used, shall be continuous, interconnected, and concentrated in large usable areas.
 - c. Where possible, open space shall be connected to adjacent off-site open space areas.
 - d. Open space and natural areas shall be maintained permanently by the property owner or the property owner's association.

Response: The lot sizes comply with the R-1.5 minimum lot area requirements. An alternative lot layout is not proposed. Alternative layout provisions are not applicable.

- C. Lot Frontage. All lots shall meet the requirements specified in Division III for frontage on a public street, except that the Planning Commission may allow the creation of flag lots, cul-de-sac lots and other such unique designs upon findings that access and building areas are adequate. Lots that front on more than one major street shall be required to locate motor vehicle accesses on the street with the lower functional classification.

Response: Most of the lots in the subdivision will have more than 40 feet of frontage, thereby complying with the minimum standards of the R-1.5 zone. Five lots, Lots 13 through 17, will be flag lots that will not have 40 feet of street frontage but will have more than 40 feet of width at the building line.

The Planning Commission may allow for the creation of flag lots and other unique designs upon finding that access and building sites are adequate. The applicants have studied the lot sizes and the allowable footprints for all the lots in the subdivision and there are home plans that fit every lot. Although the five flag lots will have frontage of less than 40 feet, these lots are adequately sized for the R-1.5 zone, and they allow for an ample building footprint.

Sheet C6, Fire Department Access Plan, shows how 30 ft. x 48 ft. building footprints could be placed on each of the flag lots. The 30 ft. x 48 ft. home plan modeled on this plan was constructed on several lots within the Beck Pond subdivision south of the site on similar sized lots.

- D. Double Frontage. Double frontage or through lots should be avoided except where essential to provide separation of residential development from traffic arteries or to overcome specific disadvantages of topography and orientation.

Response: No double frontage lots are proposed. The provisions of this subsection are met.

- E. Lot Side Lines. The side lines of lots shall run at right angles to the street upon which the lots face, or on curved streets they shall be radial to the curve, unless there is some recognizable advantage to a different design.

Response: Lot side lines are generally perpendicular or near perpendicular to the street or private driveway upon which the lots face. The exceptions are Lots 1 through 3, 11 and 12. These lots will have side lot lines perpendicular to the rear property line rather than radial to the centerline. Having the side lines perpendicular to the rear line will allow three of the four lot lines to be at 90-degree angles that will accommodate for floor plans on the lots than would lots having lot lines radial to the centerline. The provisions of this subsection are met.

- F. Resubdivision. In subdividing tracts into large lots which at some future time are likely to be resubdivided, the location of lot lines and other details of the layout shall be such that resubdivision may readily take place without violating the requirements of these regulations and without interfering with the orderly development of streets. Restriction of building locations in relationship to future street rights-of-way shall be made a matter of record if the commission considers it necessary.

Response: No large tracts are proposed for future development and not lots will have an area that is more than double the minimum 5,000 sq. ft. lot area. Future lot re-division is unlikely. The provisions of this subsection are met.

- G. Building Lines. If special building setback lines are to be established in the subdivision plat, they shall be shown on the subdivision plat or included in the deed restrictions. This includes lots where common wall construction is to be permitted between two single-family dwellings.

Response: No special setback lines are proposed. The provisions of this subsection are not applicable.

- H. Potentially Hazardous Lots or Parcels. The commission shall utilize its prerogative to modify or deny a tentative plat or partition map where it is found that a proposed lot or parcel is potentially hazardous due to flooding or soil instability.

Response: No hazardous situations related to flooding or soil instability have been identified on the site.

- I. Flag Lots or Panhandle-shaped Lots. The commission may allow the creation of flag lots provided that the following standards are met:
1. Not more than one flag lot shall be created to the rear of any conventional lot and having frontage on the same street unless it is found that access will be adequate and that multiple flag lots are the only reasonable method to allow for development of the site. Every flag lot shall have access to a public street.
 2. The access strip is to be a minimum of twenty feet in width and shall be paved for its full width from its connection with the public street to the main body of the lot. Except, however, that the width requirement may be reduced to twelve feet, for accessing a single flag lot, where the total length of the access strip does not exceed one hundred feet. Access strips not less than ten feet in width may be permitted where two such drives abut and are provided with reciprocal easements for use. For drives accessing more than two flag lots, the access strip shall be a minimum of twenty feet with reciprocal access and maintenance agreements for all lots.
 3. For residential flag lots, a minimum building setback of five feet from the access strip shall be maintained where such buildings exist prior to the creation of the flag lot.
 4. Design and locations of buildings on flag lots shall be such that normal traffic will have sufficient area to turn around, rather than necessitating backing motions down the access strip. The commission may establish special setback requirements at the time of approving the creation of flag lots.
 5. Flag lots shall not be permitted when the result would be to increase the number of properties requiring direct and individual access connections to the State Highway System or other arterials.
 6. The area of a panhandle shaped or flag lot shall be considered to be the rear or buildable portion of the lot and shall not include the driveway or access strip.

7. For the purposes of defining setbacks, flag lots shall have three side yards and one yard of 20 feet generally on the garage access side of the dwelling.

Response: As discussed in detail earlier in this narrative, the applicants have looked at a wide variety of conceptual lot plans for this subdivision. After exploring many options, it became clear that the northwestern corner of this subdivision site would be very difficult to serve with a public street while also creating desirable building lots. The area can be served by a public street cul-de-sac, but due to the combination of the size of the cul-de-sac and the dimensions of the parent lot, the resulting lots that were generally long and narrow, and having multiple such adjoining lots at the end of the cul-de-sac would not allow for street trees to be placed to break up the end of the street with some vegetation.

A total of (5) flag lots are proposed in the northwest corner of the site with more than one lot created to the rear of the conventional lots. The applicant has submitted several site plans in this narrative to demonstrate to the Planning Staff and the Planning Commission that multiple flag lots are the only reasonable way to access this corner of the site.

Two shared accessways are proposed, one on S Fir Street that will serve 3 lots and one on SW 15th Avenue that will serve two lots. Each shared accessway will be 20 feet paved, with a 26-foot-wide clear zone. The S Fir shared accessway would be constructed with an emergency vehicle turnaround.

Lot areas of the 5 flag lots have been calculated for the portion of the lots outside of the shared accessways and the reciprocal access easements. Each flag lot exceeds the minimum lot area and is less than the maximum permitted lot area. Conceptual building plans have been provided to demonstrate adequate fire access and to show how normal traffic may turnaround.

The applicant requests that the Planning Commission allow the creation of multiple flag lots to the rear of the conventional lots as demonstrated on the applicant's submitted Site Plan.

- J. Designation of Lots as 'Infill Home' Sites. The Planning Commission may require that homes built on one or more lots adjacent to existing development be subject to any or all of the requirements of 16.21.050 - Infill Homes. Furthermore, for subdivisions where the parent parcel(s) is less than two acres in size, the Planning Commission may require that all homes built on lots in the subdivision be subject to any or all of the requirements of 16.21.050. These requirements are to be shown on the subdivision plat or included in the deed restrictions.

Response: Infill standards are not anticipated to apply to any lot in this development. The development west of the site, the Elmwood Mobile Home Community, is a multi-family manufactured home park, the development north of the site, the Hope Village Cottages, is a newer multi-family development consisting of multiple duplex style cottages on a single property. To the south and southwest of the site is the Beck Pond subdivision. Homes in the Beck Pond subdivision adjacent to this site were completed in 2020. Therefore, as no lot in the subdivision will have pre-existing homes on two sides that have existed for five years, the site will not meet the definition of an Infill lot.

The provisions of this subsection are not anticipated to be applied.

16.64.050 Parks and recreation.

Subdivisions shall meet the requirements for park, open space and recreation as specified in Division VI.

Response: The subdivision does not plan to dedicate land for parks. The fee in lieu of dedication will be paid for the 17 lots that will have new home construction. It is understood that a park fee will not be required for the two existing homes. See additional response related to park and open space in response to Section 16.120.

16.64.060 Grading of building sites.

The commission may impose bonding requirements, similar to those described in section 16.64.070, for the purpose of ensuring that grading work will create no public hazard nor endanger public facilities where either steep slopes or unstable soil conditions are known to exist.

Response: Grading will be accomplished on the site and as needed to properly drain new roadways and to create suitable building sites. Since the site is nearly flat, cuts and fills are anticipated to generally be two feet or less, although limited areas may see slightly higher amounts. Most grading will occur along the new street improvements where subgrades will be prepared. A Grading Plan detailing anticipated final grades for the development has been submitted with the application.

16.64.070 Improvements.

- A. Improvement Procedures. In addition to other requirements, improvements installed by a land divider either as a requirement of these regulations, or at his own option, shall conform to the requirements of these regulations and improvement standards and specifications followed by the city, and shall be installed in accordance with the following procedure:
1. Improvement work shall not be commenced until plans have been checked for adequacy and approved by the city. To the extent necessary for evaluation of the proposal, the plans may be required before approval of the tentative plat of a subdivision or partition. No work shall commence until the developer has signed the necessary certificates and paid the subdivision development fees specified elsewhere in this division.
 2. Improvement work shall not commence until after the city is notified, and if work is discontinued for any reason it shall not be resumed until after the city is notified.
 3. Improvements shall be constructed under the inspection and to the satisfaction of the City. The city may require changes in typical sections and details in the public interest if unusual conditions arise during construction which warrant the change.
 4. Underground utilities, sanitary sewers and storm drains installed in streets shall be constructed prior to the surfacing of the streets. Stubs for service connections for underground utilities and sanitary sewers shall be placed to a length obviating the necessity for disturbing the street improvements when service connections are made.
 5. "As Built" construction plan revisions shall be filed with the city engineer within sixty days of the completion of any improvements.

Response: Improvements for the subdivision will be accomplished as required by this section. Plans have been submitted with this application that show the arrangement of streets and sidewalks, public utilities, and other improvements necessary to provide for the convenience, health, and safety of future residents of this subdivision and citizens of the City. Please refer to specific plans submitted with the application for additional details for streets, waterlines, sanitary sewers, and storm drainage.

- B. The following improvements shall be installed at the expense of the subdivider unless specifically exempted by the Planning Commission:
1. Streets, including drainage and street trees;
 2. Complete sanitary sewer system;
 3. Water distribution lines and fire hydrants;
 4. Sidewalks and any special pedestrian ways;
 5. Street name and traffic-control signs;
 6. Streetlights;
 7. Lot, street and perimeter monumentation;
 8. Underground power lines and related facilities;
 9. Underground telephone lines, CATV lines, natural gas lines, and related facilities;
 10. Where dedicated or undedicated open space is proposed or provided, it shall be the subdivider's responsibility to provide standard public improvements to and through that open space.
 11. If fencing is being proposed as part of subdivision development, the subdivider shall be responsible for installing fencing along public streets and pedestrian ways. Fencing shall be constructed in accordance with the standards in Section 16.08.10

Response: Following approval of the submitted subdivision plan, more detailed construction plans will be submitted to the City for plan review and approval by Public Works Staff and service providers prior to construction. Construction plans will also be submitted to the private utility service providers, such as gas and communications companies, so that they may design their system improvements needed to serve the subdivision. The improvements required to construct this subdivision will be completed by the applicants as they will be required by the approving agencies.

C. Streets.

1. All streets, including alleys, within the subdivision and streets adjoining, but only partially within the subdivision shall be improved.
2. All public and private streets shall be constructed to city standards for permanent street and alley construction. LID alternatives, such as permeable surfacing and integrated stormwater management facilities, are required where site and soil conditions make it a feasible alternative. Upon completion of the street improvement, monuments shall be reestablished and protected in monument boxes at every street intersection and all points of curvature and points of tangency of street centerlines as required by Oregon Revised Statutes Chapter 92.

3. Street Trees. Street trees shall be provided consistent with the provisions of Chapter 12.32.
4. Prior to city approval of the final subdivision plat, all perimeter and back lot line monumentation shall be installed and the installation of the front lot monumentation (along and within street rights-of-way) shall be guaranteed. Any monuments destroyed during improvement installation shall be replaced at the developer's expense.
5. If any lot abuts a street right-of-way that does not conform to the design specifications of this ordinance, the owner may be required to dedicate up to one-half of the total right-of-way width required by this ordinance.
6. The proposed use shall not impose an undue burden on the transportation system. The City may require the applicant to provide adequate information, such as a traffic impact study, to demonstrate the level of impact to the surrounding street system. The developer shall be required to mitigate impacts attributable to the project.
7. The determination of impact or effect and the scope of the impact study should be coordinated with the provider of the affected transportation facility.
8. Dedication of land for streets, transit facilities, sidewalks, bikeways, paths, or access ways shall be required where the existing transportation system will be impacted by or is inadequate to handle the additional burden caused by the proposed use.
9. Improvements such as paving, curbing, installation or contribution to traffic signals, construction of sidewalks, bikeways, access ways, paths, or streets that serve the proposed use where the existing transportation system may be burdened by the proposed use.

Response: The local streets within the subdivision will be constructed to the City's standard structural section for local streets. S Fir Street, adjoining the subdivision, will be widened to the appropriate width to match adjacent improvements to the north and south. Streets will have concrete curbs and sidewalks installed, with the sidewalks and driveway approaches along local streets inside the subdivision being constructed on a lot-by-lot basis with the home construction. Street lighting, striping, signage, and curb ramps at intersections will be constructed at the time of street improvements. Street trees will either be installed by the developer or paid for by the developer and installed by the City per the City of Canby Street Tree and Maintenance Policy.

D. Surface Drainage and Storm Sewer System.

1. Drainage facilities shall be provided within the subdivision and to connect the subdivision to drainage ways or storm sewers outside the subdivision, if necessary, as determined by the City.
2. Stormwater Management through Low Impact Development (LID). Low impact development is a stormwater management approach aimed at emulating predevelopment hydrologic conditions using a combination of site design and stormwater integrated management practices. This approach focuses on minimizing impervious surfaces, promoting rainfall evaporation and uptake by plants, and maximizing stormwater infiltration. Specific LID strategies and integrated management practices include:

- a. Protection and restoration of native vegetation and soils,
 - b. Minimizing impervious surface area through use of pervious materials (e.g. pavers and pervious concrete).
 - c. Vegetated roofs,
 - d. Rainfall reuse,
 - e. Stormwater dispersion and bioretention (recharge).
3. All new subdivisions in Canby are required to treat stormwater on site. Stormwater management using LID practices is required where feasible, pursuant to requirements of this chapter and other applicable sections of this code. LID facilities shall be constructed in accordance with Canby Public Works Design Standards.
4. A conceptual stormwater management report must be submitted with the subdivision application. The report must demonstrate how and where stormwater will be managed on site at the subdivision. Where LID practices are not used, the applicant must demonstrate why LID is not feasible. The report will be reviewed by the Canby Public Works Department and shall be consistent with the Public Works Design Standards. Generally, the stormwater management plan must include the following:
- a. A description of existing conditions including a map;
 - b. A description of the proposed stormwater system including a map;
 - c. An estimate of existing storm water run off;
 - d. An estimate of proposed storm water run off;
 - e. The detention/retention requirements; and
 - f. The discharge location, treatment method and sizing, and if discharging to the ground, the expected infiltration rates based upon soils mapping data.
5. Responsibility for maintenance of LID facilities shall be as follows:
- a. The Canby Public Works Department shall be responsible for maintaining all LID facilities located within the public right-of-way, and for providing for the safety of the public as related to LID facilities,
 - b. Private property owners shall be responsible for maintaining all LID facilities on their property. The city reserves the right to inspect such facilities at any time. Upon written notice by the city to the owner that the facility has been compromised to the point where the design capacity is no longer available or the facility is not functioning as designed and approved, the owner shall correct the problem. If the owner fails to respond to the written notice within 15 days, the city may undertake the work and bill all time and material to the owner.
 - c. For LID facilities that are not located in the public right-of-way and serve multiple private residential properties, a public easement for the LID facility shall be established and the Canby Public Works Department shall be responsible for maintenance of the facility. All property owners served

by the facility shall pay a stormwater maintenance fee to the city to cover the cost of maintenance of the facility.

Response: Stormwater will be managed through the collection of stormwater runoff in catch basin inlets, with pipes leading from the catch basins to new water quality manholes installed for stormwater treatment. Following treatment, stormwater will be disposed of through underground injection into drywells. All onsite stormwater runoff will be injected into the ground using drywells or other injection system, such as infiltrators for roof drains. This process of stormwater disposal will be similar to what is done throughout the City and in other nearby subdivisions.

LID stormwater approaches such as green roofs, pervious pavements and roadside swales are often not good fits for residential subdivisions. Green roofs tend to work best on flat roofed structures and do not work well on the pitched roof architecture common to today's residential subdivisions. Pervious pavements tend to function better in mature subdivisions where there is not a lot of ground disturbing activity taking place. The home building, landscaping, and fence building activities common in brand new subdivisions tends to deposit soil and other landscaping material onto the surface of roadways. This material would easily clog pervious pavements and prevent it from functioning as intended. Once this material works its way down inside the porous pavement, the pavement becomes nearly sealed and much like standard pavements. Roadside swales can be problematic in residential subdivisions as the swales make it difficult for people to exit cars parked against the curb line, as the planter strip is often soggy or under a few inches of water. For these reasons, LID stormwater approaches are not planned within this subdivision.

- E. Sanitary Sewers. Sanitary sewers shall be installed to serve the subdivision and to connect the subdivision to existing mains. In the event it is impractical to connect the subdivision to the city sewer system, the commission may authorize the use of septic tanks if lot areas are adequate, considering the physical characteristics of the area. The commission may require the subdivider to install and seal sewer lines to allow for future connection to the city system.

Response: Existing sanitary sewer mains are in S Fir Street and SW 15th Avenue. Connections to both sanitary sewer mains will be used to serve the subdivision.

- F. Water System. Water lines and fire hydrants serving the subdivision and connecting the subdivision to city mains shall be installed to the satisfaction of the supervisor of the water department and the Fire Marshal.

Response: With a 12-inch water main in S Fir Street and an 8-inch water main in SW 15th Avenue, the neighborhood is well served by water. Two new fire hydrants are planned, one on S Fir Street and one on SW 15th Avenue. Planned improvements include looping of the water main in SW 15th Avenue that will improve water quality and the firefighting capacity of that water main.

- G. Sidewalks. Sidewalks shall be required on both sides of a public street and in any special pedestrian way within the subdivision, except that in the case of identified arterials, or industrial districts, the commission may approve a subdivision without sidewalks if alternative pedestrian routes are available. Sidewalk construction may be postponed until the actual construction of buildings on the lots, provided that adequate assurance is given that such sidewalks will be installed. Where LID practices are implemented in subdivision street design,

alternative sidewalk design may be permitted with the approval from the city. Alternative sidewalk design resulting from LID best management practices may include, but not limited to: flat curbs, LID bioretention areas incorporated in conjunction with required landscaping, and alternative sidewalk widths. LID best management practices shall be designed in accordance with the Canby Public Works Design Standards.

Response: Six-foot wide sidewalks are planned to be constructed along all new curb improvements. Sidewalks will be separated from the curb by a planter strip with street trees. Alternative sidewalk design to accommodate LID approaches is not proposed for this subdivision.

- H. Bicycle Routes. If appropriate to the extension of a system of bicycle routes, existing or planned, the commission may require the installation of bicycle lanes within streets or the construction of separate bicycle paths.

Response: No bicycle routes or lanes are in this neighborhood. The provisions of this subsection are not applicable.

- I. Street Name Signs. Street name signs shall be installed at all intersections according to city standards or deposit made with the city of an amount equal to the cost of installation.

Response: A stop sign with a street name tree will be installed at the intersection of SW 15th Avenue and S Fir Street. The sign will either be manufactured for and installed by the developer or the City will be paid by the developer to manufacture the sign.

- J. Street Lighting System. Streetlights shall be required to the satisfaction of the manager of the Canby Utility Board.

Response: Street lighting will be paid for by the applicant and installed by Canby Utility.

- K. Other Improvements.

1. Curb cuts and driveway installation are not required of the subdivider but, if installed, shall be according to city standards.
2. Street tree planting is required of the subdivider and shall be according to city requirements.
3. The developer shall make necessary arrangements with utility companies or other persons or corporations affected, for the installation of underground lines and facilities. Electrical lines and other wires, including but not limited to communication, street lighting and cable television, shall be placed underground, unless overhead installation has been specifically approved by the commission because of unique circumstances at the site.
4. Developments along existing rail lines may be required to provide barrier fences or walls if necessary ensure safety for development occupants. City may also require noise mitigation such as sound walls, or triple-pane windows in order to reduce the health impacts of train noises. Noise mitigation requirements shall be based on measured db levels when trains are in the vicinity and specific building construction features.

Response: The applicants will install or pay the City of Canby to install the street trees. They also will make arrangements with the utility companies for electrical, gas, and

communications service. Curb cuts will generally not be installed by the developer but will be done at the time of home building. Subsection 4 is not applicable, as the site is not near a rail line.

L. Improvements in Areas of Flood or Slope Hazard.

Response: The site is not in an area of flood or slope hazard. The provisions of this subsection are not applicable.

M. Survey Accuracy and Requirements. In addition to meeting the requirements as set forth in Oregon Revised Statutes relative to required lot, street and perimeter monumentation, the following shall be required:

1. An accuracy ratio of subdivision plat boundary line closure of one in ten thousand (.0001) feet as found in the field.
2. Two primary perimeter monuments (one of which can be the initial point) having the same physical characteristics as the initial point. The monuments are to be on a common line visible, if possible, one to the other at time of approval and preferably at angle points in the perimeter. They shall be points as far apart as practicable. A survey monument witness sign of a design acceptable to the city engineer shall be placed within eighteen inches of both monuments. The position for the initial point and other primary perimeter monuments shall be selected with due consideration to possible damage during construction and desirability of witness sign location.
3. Street centerline monumentation shall consist of a two-inch diameter brass cap set in a concrete base within and separate from a standard monument box with cover (standard city details applicable) at locations specified by the city engineer (generally at intersections with centerline of arterial or collector streets and within streets proposed to be greatly extended into adjacent future subdivisions). All other street centerline points (intersections, points of tangent intersections, cul-de-sac center lines, cul-de-sac off-set points) shall be monumented with a five-eighths-inch diameter steel rod thirty inches long with an approved metal cap driven over the rod and set visible just below the finish surface of the street. If any points of tangent intersection fall outside of a paved section street, the above monumentation will be required at point of curvature and point of tangency of the curve. All centerline monuments are to be accurately placed after street construction is complete.

Response: Boundary surveys and the subdivision plat will be completed to the laws of the State of Oregon and the requirement of the Clackamas County Surveyor. Monumentation will include centerline monuments and iron rod property corners having plastic surveyor caps.

N. Agreement for Improvements. Before commission approval of a subdivision plat or partition map, the land divider shall either install required improvements and repair existing streets and other public facilities damaged in the development of the property, or execute and file with the city engineer, an agreement specifying the period within which required improvements and repairs shall be completed and provided that, if the work is not completed within the period specified, the city may complete the work and recover the full cost and expense, together with court costs and reasonable attorney fees necessary to collect the amounts from the

land divider. The agreement shall also provide for reimbursement to the city for the cost of inspection by the city which shall not exceed ten percent of the improvements to be installed.

Response: The applicants will either construct the required improvements, including repair of existing streets, prior to seeking approval of the subdivision plat, or will execute and file an agreement with the City. The provisions of this subsection will be met.

O. Performance Bond.

Response: If the applicants seek sign approval of the subdivision plat prior to completing all required improvements, a performance bond will be submitted to the City to cover the cost of the yet-to-be completed improvements. The provisions of this subsection will be met.

- P. Guarantee. All improvements installed by the subdivider shall be guaranteed as to workmanship and materials for a period of one year following written notice of acceptance by the city to the developer. This guarantee can be warranted under the same options listed in Section O above.

Response: Following construction, improvements will be guaranteed to the satisfaction of the City of Canby. The provisions of this subsection will be met.

Q. Large Scale or Solar Efficient Development.

Response: The provisions of this subsection are not applicable to the proposed development.

- R. No fence/wall shall be constructed throughout a subdivision where the effect or purpose is to wall said project off from the rest of the community unless reviewed and approved by the Planning Commission.

Response: Although fencing at lot lines is anticipated to be constructed with construction of the homes, no fence or wall will be constructed for the purpose of walling the development off from the rest of the community. The provisions of this subsection are met.

16.64.80 Low Impact Development Incentives

The purpose of this section is to encourage the use of certain low impact development (LID) practices in subdivision development beyond the minimum requirements of this code. The provisions in this section are voluntary and are not required of new subdivisions. These provisions are applicable only when an applicant elects to utilize the incentives provided in this section. Only one incentive is permitted at a time. For example, an applicant cannot utilize a height bonus and density bonus in the same subdivision application.

Response: The project does not plan to increase density or building heights allowed through the incentives offered in this section.

16.86.020 General provisions.

- A. The Transportation System Plan shall be used to determine which streets are to be arterials, collectors, and neighborhood connectors. All new streets are

required to comply with the roadway design standards provided in Chapter 7 of the TSP. The city may require right-of-way dedication and/or special setbacks as necessary to ensure adequate right-of-way is available to accommodate future road widening projects identified in the TSP.

- B. Right-of-way widths and cross section standards for new streets shall be in conformance with the Canby Transportation System Plan and the Public Works Design Standards.
- C. The Public Works Director shall be responsible for establishing and updating appropriate alignments for all streets.
- D. No building permit shall be issued for the construction of a new structure within the planned right-of-way of a new street, or the appropriate setback from such a street as established in Division III.
- E. Existing structures which were legally established within a planned road alignment or abutting setback shall be regarded as nonconforming structures.
- F. Bikeways and bike lanes shall be provided consistent with the Bicycle Plan element of the Transportation System Plan.
- G. Pedestrian facilities shall be provided consistent with the Pedestrian Plan element of the Transportation System Plan.

16.86.040 Recommended Roadway Standards

Specific standards for roadway design are located in the Transportation System Plan and Canby Public Works Design Standards.

16.86.060 Street Connectivity

When developing the street network in Canby, the emphasis should be upon a connected continuous grid pattern of local, collector, and arterial streets rather than discontinuous curvilinear streets and cul-de-sacs. Deviation from this pattern of connected streets shall only be permitted in cases of extreme topographical challenges including excessive slopes (35 percent plus), hazard areas, steep drainage-ways and wetlands. In such cases, deviations may be allowed but the connected continuous pattern must be reestablished once the topographic challenge is passed.

Response: As discussed in earlier sections of this narrative, development of this subdivision will result in the extension of SW 15th Ave, which currently terminates into the southwestern corner of the property, through the site to S Fir St. S Fir St will be improved along the eastern edge of the site by widening the pavement and the installation of curbs, planter strip, and sidewalks. Proposed street improvements will be designed to meet the requirements of the Transportation System Plan and the Public Works Design Standards. Sidewalks will typically be constructed with the new homes and these sidewalks will meet the Pedestrian Plan element of the Transportation System Plan and will promote Safe Routes to Schools.

The Southwest Canby Development Concept Plan initially included this property but following an appeal of the Southwest Canby Development Concept Plan and the Beck Pond subdivision by the (former) owners of Tax Lot 1500, the property was removed from the DCP by a Finding of the City Council. Therefore, there is no guiding Concept Plan for how the street network for this subdivision should be developed. The applicant looked at many design alternatives and decided upon the submitted design as it allows

both existing homes to remain, it creates desirable shaped building lots for new home construction, the street design meets the requirements of the Public Works Design Standards, and the new intersection on S Fir Street meets the Access Spacing Standards of the Transportation System Plan.

The provision of this section are met.

Division VIII. – GENERAL STANDARDS

Chapter 16.88 Standards and Procedures: General, Text Amendments, Comprehensive Plan Amendments, and Transportation Planning

16.88.010 Applicability. The general standards and procedures set out in this chapter apply to the regulations of all sections of this title, except as may be specifically noted.

Response: The general standards and procedures noted in Chapter 16.88 include a wide array of standards and procedures that apply to applicants, City Staff and officials, and to the public, that apply to all sections of this title. The applicants duly note that the regulations and procedures of Chapter 16.88 are applicable to the submitted application for land division.

Chapter 16.89 Application and Review Procedures

C. Type III Procedure (Quasi-Judicial/Legislative). Type III decisions are made by the Planning Commission after a public hearing, with appeals reviewed by the City Council. Type III procedures generally use discretionary approval criteria.

16.89.050 Type III Decision.

- A. Pre-application conference. A pre-application conference may be required by the Planning Director for Type III applications.
- B. Neighborhood meetings. As directed in Table 16.89.020, the applicant may be required to present their development proposal at a neighborhood meeting before the City accepts the application as complete. See Section 16.89.070.
- C. Application requirements. Type III applications shall be made on forms provided by the Planning Director. The application shall be accompanied by all required information and fees.
- D. Public notice.
- E. Conduct of public hearing.
- F. Decision process.
- G. Notice of Decision.
- H. Effective Date.
- I. Appeal.
- J. Any decision of the Planning Commission may be appealed to the City Council unless otherwise specified in this Title. Such appeals will be processed using the Type III procedures unless otherwise specified in this Title.

- K. The decision of the City Council regarding a Type IV decision, appeal of a Planning Commission decision, or any other process contained within this title, is the final decision of the City.

Response: The applicants had a pre-application conference with City of Canby Planning Staff, Public Works Staff, and utility service providers on June 29, 2023, to discuss the proposed subdivision. No issues with provisions of public services to the subdivision site were noted at the meeting. A Neighborhood meeting with surrounding residents and property owners was held on October 2, 2023. Notes from the meeting are included with the submittal package. Application forms signed by the property owners have been included with the application.

The applicants duly note that the procedures noted in Section 16.89.050 Type III Decision are applicable to this application for subdivision.

16.89.070 Neighborhood Meetings.

- A. Applicants are encouraged to meet with adjacent property owners and neighborhood representatives prior to submitting their application in order to solicit input, identify issues, and exchange information about the proposed meeting.
- B. The Planning Commission or Planning Director may require an applicant to hold a meeting in the neighborhood prior to accepting an application as complete. A neighborhood meeting is required for some application types, as shown in Table 16.89.020, unless this requirement is waived by the Planning Director.
- C. At least two weeks prior to the neighborhood meeting, the applicant shall mail notice of the meeting to:
 - 1. The appointed chair of any neighborhood association in whose boundaries the application lies; and
 - 2. All of those who would receive notice of the application's public hearing before the Planning Commission.
- D. The meeting shall be held in a fully accessible location approved by the City.
- E. Following a required neighborhood meeting, applicants shall prepare a written summary of pertinent issues raised and shall prepare a detailed response to each issue. This material shall be submitted to the Planning Department in electronic format at least two weeks before the initial public hearing.
- F. Applicants or attendees may make audio or video recordings of the neighborhood meeting if desired.

Response: The applicant held an in person neighborhood meeting with a Zoom option for neighbors of the project at the Canby Adult Center on Monday, October 2, 2023. The Zoom option allowed residents to watch the meeting remotely and ask questions. Approximately 375 letters with notice of the meeting were mailed to surrounding residents and property owners, including a list of resident addresses provided by Hope Village management for the entire Hope Village campus. Attendance at the meeting included eight nearby residents, five of whom live in Hope Village. Two neighbors from the Beck Pond subdivision also attended in person. Two people viewed the meeting using the Zoom option.

A presentation was provided explaining the land division process, the R-1.5 zone requirements, and large site plans were provided. After roughly a 20-minute presentation, the meeting was opened for attendees to ask questions. After 50 minutes of presentation, questions and answers, there were no additional questions and the meeting ended. A summary of the meeting is provided in the submitted packet.

Division XI. – PARKS, OPEN SPACE AND RECREATION LAND

Chapter 16.120 GENERAL PROVISION

16.120.020 Minimum standard for park, open space and recreation land

- A. Parkland Dedication: All new residential, commercial and industrial developments shall be required to provide park, open space and recreation sites to serve existing and future residents and employees of those developments. Multi-family developments which provide some “congregate” services and/or facilities, such as group transportation, dining halls, emergency monitoring systems, etc., but which have individual dwelling units rather than sleeping quarters only, are considered to be multifamily developments for the purpose of parkland dedication. Licensed adult congregate living facilities, nursing homes, and all other similar facilities which provide their clients with individual beds and sleeping quarters, but in which all other care and service are communal and provided by facility employees, are specifically exempt from park land dedication and system development fee requirements.
1. The required parkland shall be dedicated as a condition of approval for:
 - a. Approval of a tentative plat of a subdivision or partition.
 - b. Approval of site and design review for all development but single-family and duplex development.
 - c. The replat or amendment of any site plan for multi-family development or manufactured home park where dedication has not previously been made or where the density of the development involved will be increased.
 2. The City shall require land dedication or payment of the system development charge (SDC) in lieu of land dedication (Section 4.20.170). In addition, the City may credit private on-site park, open space and recreation area(s) and facilities (Section 16.120.060). The City may approve any combination of these elements. Prior to parkland dedication, a Level I Environmental Assessment of the lands proposed for dedication shall be performed by the applicant as part of the site plan approval for the project.

Response: The two parcels that make up this subdivision are rather small, there are no significant natural resources that make areas of this site particularly extraordinary, and there are no connections to existing amenities or trails available to this site. Therefore, park land dedication from this site is not proposed by the applicant or desired by the City. For these reasons the applicants intend to pay the park SDC fee in lieu of land dedication.

Conclusion

The foregoing narrative describes a proposal to subdivide a 3.31 Acre property, consisting of two existing tax lots, into 19 subdivision lots consistent with R-1.5 Medium Density Residential zoning standards. The proposal would develop the last remaining undeveloped properties on the west side of S Fir Street between SW 13th Avenue and SW 16th Avenue.

Development of the site as proposed would retain the two existing homes and would allow for 17 new detached single-family residences. Dedication of additional public street right-of-way is proposed along the western side of S Fir Street and for the easterly extension of SW 15th Avenue to connect with S Fir Street.

The foregoing narrative, accompanying plans and documents, together demonstrate that the proposed DuNett subdivision, generally conforms to the applicable criteria and standards of the City of Canby's Land Development and Planning Ordinance, the Transportation System Plan, and the Public Works Design Standards. Therefore, the applicants request that the Planning Commission approve the application for this subdivision.

III. Pre-Application Meeting Information



City of Canby
Planning Department
222 NE 2nd Avenue
PO Box 930
Canby, OR 97013
(503) 266-7001

LAND USE APPLICATION

Pre-Application Conference

APPLICANT INFORMATION: *(Check ONE box below for designated contact person regarding this application)*

☐ Applicant Name: Ralph Netter Phone: 503-789-4926
Address: 536 NW 14th Avenue Email: trnetter@yahoo.com
City/State: Canby, OR Zip: 97013

☒ Representative Name: Sisul Engineering, Pat Sisul Phone: 503-657-0188
Address: 375 Portland Ave Email: patsisul@sisulengineering.com
City/State: Gladstone, OR Zip: 97027

☐ Property Owner Name(s)*: Ralph & Keeley Netter Phone: 503-789-4926

Signature: _____

Address: 536 NW 14th Avenue Email: trnetter@yahoo.com keeleysellshouses@gmail.com
City/State: Canby, OR Zip: 97013

NOTE: Property owners or contract purchasers are required to authorize the filing of this application and must sign above

* All property owners represent they have full legal capacity to and hereby do authorize the filing of this application and certify that the information and exhibits herewith submitted are true and correct.

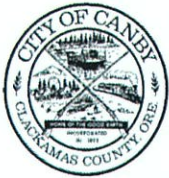
PROPERTY & PROJECT INFORMATION:

1547 S Fir Street 2.00 Ac. 4 1E 04CA TL 1500
Street Address or Location of Subject Property Total Size of Property Assessor Tax Lot Numbers

One existing home and two outbuildings R-1.5 MDR
Existing Use, Structures, Other Improvements on Site Zoning Comp Plan Designation

To subdivide the property together with Tax Lot 1400
Brief description of proposed development or use

STAFF USE ONLY				
FILE #	DATE RECEIVED	RECEIVED BY	RECEIPT #	DATE APP COMPLETE



City of Canby
Planning Department
222 NE 2nd Avenue
PO Box 930
Canby, OR 97013
(503) 266-7001

LAND USE APPLICATION

Pre-Application Conference

APPLICANT INFORMATION: (Check ONE box below for designated contact person regarding this application)

☐ Applicant Name: Blake DuPont Phone: 503-502-9949
Address: 2785 SE Territorial Rd Email: blake@willametteplastics.com
City/State: Canby, OR Zip: 97013

☒ Representative Name: Sisul Engineering, Pat Sisul Phone: 503-657-0188
Address: 375 Portland Ave Email: patsisul@sisulengineering.com
City/State: Gladstone, OR Zip: 97027

☐ Property Owner Name(s)*: Blake, Brian & Bridget DuPont Phone: 503-502-9949
Signature: Blake DuPont Bridget DuPont
Address: 2785 SE Territorial Rd. Email: blake@willametteplastics.com
City/State: Canby, OR Zip: 97013

NOTE: Property owners or contract purchasers are required to authorize the filing of this application and must sign above

* All property owners represent they have full legal capacity to and hereby do authorize the filing of this application and certify that the information and exhibits herewith submitted are true and correct.

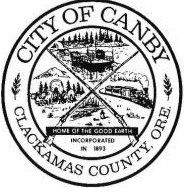
PROPERTY & PROJECT INFORMATION:

<u>1495 S Fir Street</u>	<u>1.31 Ac.</u>	<u>4 1E 04CA TL 1400</u>
Street Address or Location of Subject Property	Total Size of Property	Assessor Tax Lot Numbers
<u>One existing home and smaller outbuildings</u>	<u>R-1.5</u>	<u>MDR</u>
Existing Use, Structures, Other Improvements on Site	Zoning	Comp Plan Designation

To subdivide the property together with Tax Lot 1500

Brief description of proposed development or use

STAFF USE ONLY				
FILE #	DATE RECEIVED	RECEIVED BY	RECEIPT #	DATE APP COMPLETE



City of Canby
Planning Department
222 NE 2nd Avenue
P.O. Box 930
Canby, OR 97013
Ph: 503-266-7001
Fax: 503-266-1574

CHECKLIST

PRE-APPLICATION CONFERENCE

All required application submittals detailed below must also be submitted in electronic format on a CD, flash drive or via email to: PlanningApps@canbyoregon.gov

Pre-Application Conferences are designed to provide applicants the opportunity to present land use development proposals to City staff prior to the actual land use application process. This advance discussion allows applicants an opportunity to ask questions about the applicable city codes, required permits, hearing and noticing and estimated processing timelines. The Pre-Application Conference also allows City staff an opportunity to review preliminary plans, and to provide comments to applicants regarding the project and design. This feedback early in the planning process can help applicants avoid major plan revisions that are more cumbersome to change after an actual application submittal.

Applicants should keep in mind that, due to the preliminary nature of information discussed during Pre-Application Conferences; City staff reserves the right to determine permitting requirements upon receipt of an official application. Information obtained during a Pre-Application Conference is subject to subsequent changes in the Canby Comprehensive Plan, Canby Municipal Code, and/or any other applicable regulations. A Pre-Application Conference does not “vest” (lock in any fees or development requirements) a project in any way.

Once your pre-application has been submitted, it will be reviewed by the Planning Department. You will be notified of any changes and returned to the Planner for approval. The Office Specialist at Public Works will contact you to set up your pre-application conference. At this conference representatives from the following City departments and public agencies will be in attendance: Public Works, water, telephone, cable, gas, electric, Clackamas County (if needed), Canby Fire District, Oregon Department of Transportation (if needed), Planning, Engineering, and Parks.

Applicant	City
Check	Check

- | | | |
|-------------------------------------|--------------------------|--|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Submit one copy of your proposed pre-application submittal, addressing the minimum pre- application requirements listed below, to the Planner for review and comments. |
| <input type="checkbox"/> | <input type="checkbox"/> | Once you have made any needed changes per the Planning Department, submit two (2) paper copies of this application packet to the Planning Department |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Submit an electronic copy of the complete application packet to the Planning Department |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Payment of appropriate fees – cash or check only. Refer to the city’s Master Fee Schedule. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Narrative – A detailed narrative description of your proposal and any specific questions you want the City to respond to at the Pre-Application Conference. |

☐

Site/Plot Plan drawn to scale showing:

- ☐ Property lines (legal lot of record boundaries)
- ☐ Lot area
- ☐ Impervious surface area
- ☐ Location and size of all proposed hardscape, including driveways, parking lots, compact cars and handicapped spaces, loading areas, bicycle paths, bicycle parking, sidewalks, and pedestrian ways
- ☐ Location, size, & heights of existing and proposed structures
- ☐ Proposed elevations
- ☐ Distances between structures and other significant features, including property lines, yards and setbacks, building area,
- ☐ Layout of all proposed structures, such as buildings, fences, signs, solid waste collection containers, mailboxes, exterior storage areas, and exterior mechanical and utility equipment
- ☐ Significant tree locations (all trees over 6 inches)
- ☐ Location and dimensions of easements
- ☐ Location of utilities – storm, sanitary sewers and water (including size of service and street location)
- ☐ Location, width, and names of all existing or planned streets, other public ways, and easements within or adjacent to the property, and other important features
- ☐ Existing and proposed driveway widths
- ☐ Location of any forested/wetland area, water bodies, or other significant natural features
- ☐ Location of and distance to fire hydrant(s)
- ☐ Location and profile drawings of all proposed exterior signage

☐

~~Slope map (if area is over 25% slope)~~

~~**Nonresidential Projects Wastewater Information**~~

***Businesses are required to complete an Environmental Survey from the City of Canby Public Works Department prior to receiving a business license.*

Do you plan on discharging anything other than domestic waste?

☐ Yes ☐ No

Will you be discharging any wastes that were produced during an industrial process or the manufacturing of a product?

☐ Yes ☐ No

Are you proposed to have floor drains that will be connected to sanitary sewer?

☐ Yes ☐ No

**DuNett Subdivision:
Pre-Application Meeting, 19-lot Subdivision:**

Legal Description: Map 41E 04CA, Tax Lots 1400 & 1500

Site Area: 3.31 Acres
(before dedication)

Addresses: 1495 (DuPont) & 1547 (Netter) S Fir Street

Current use: Two existing homes and outbuildings. Outbuildings will be removed, homes will remain.

Proposed Use: 19-lot subdivision
(the existing home on 1495 & most of the existing home on 1547 will remain)

Zoning: R-1.5

Comments & Questions for Service Providers & Staff:

Overall: The proposal is to seek application to subdivide two existing tax lots into a 19-lot subdivision. Tax Lot 1495 is owned by the DuPont family and was annexed into the City roughly a year ago. Tax Lot 1547 used to be owned by Steinke and is now owned by Ralph and Keeley Netter. The two families are submitting one application to subdivide the property with one subdivision plat.

The Site Plan continues SW 15th Street east to S Fir Street. Two private driveways are proposed to be used to access flag lots in the NW corner of the site. We've tried multiple public street layouts to find a plan without flag lots or having fewer flag lots, but all of the plans end up having several oddly shaped lots that would be difficult to build a home on. We feel that this plan with the private streets is the preferred option as it results in standard shaped lots that will be easy to build on.

Planning: Lots would conform to R-1.5 requirements for size and width. The lots with the two existing homes would be oversized. Other lots would exceed the maximum lot size when the flag pole portion of the lot is included, but would meet the maximum lot area when the flag pole portion of the lot is deducted from the calculation.

We would like to inquire regarding the need for a traffic study since both properties have already been studied in recent years.

What SDC's would have to be paid for the two existing homes that will remain?

Streets: This subdivision would continue the street pattern established in the adjacent Beck Pond subdivision and would extend SW 15th Avenue east to S Fir Street. S Fir Street would be improved across the frontage of the site. The SW 15th Avenue street right-of-way is proposed to be 50-feet, with a 34-foot wide paved street, and 6-foot wide separated sidewalk. S Fir Street would have right of way dedicated to 27 feet from the center of the right-of-way to match the Beck Pond dedication to the south. The street improvement would be to 18 feet from centerline, for a 36-foot wide street. The sidewalk would be a 6-foot separated sidewalk. Up to four driveways would be on S Fir Street.

Two 20-foot side shared driveways are proposed with 26-foot wide clear zones. The S. Fir St driveway would be shared by three lots and would include a fire-truck turnaround. The SW 15th Ave driveway would be shared by two lots and is short enough that a turnaround is not necessary. The driveways will be constructed to public street structural standards.

Storm Drainage: Drywells would be used for the public street and private driveways. The two private driveways would share one drywell.

Water System: The water main in SW 15th Avenue would be extended to connect to the main in S Fir Street. One dead end main would be eliminated. Due to shallow sanitary sewers in this area, the water

main would need to cross underneath several sanitary sewer laterals to lots on the south side of SW 15th Avenue.

Sanitary Sewer: Sanitary sewer is shallow in this area. Sanitary is proposed to come from S Fir Street to the east and SW 15th Avenue in the SW corner of the site. Public sewer will be extended up each private driveway, with private laterals.

Parks: We anticipate the Parks SDC fee in lieu being paid for at the time of subdivision.

Questions:

1. Planning: Is a traffic study necessary?
2. Planning: What SDC's would have to be paid for the two existing homes that will remain?
3. Planning: Any concerns regarding the lot configuration? We are aware that Jason Padden was not a fan of private driveways and would likely not approve of this plan if he remained on the Planning Commission. What is the temperature of the current Planning Commission toward private driveways?
4. Planning: Are any City permits required to remove a portion of the existing home?
5. Fire: Any concerns regarding access or water supply?
6. Public Works: Will a rebuild of S Fir Street to centerline be required, or a widening and overlay?
7. Canby Utility Water: Is an air release needed on S Fir?
8. Canby Utility Water: Are you OK with deflecting the water main up to 4.5 degrees per joint?
9. Canby Utility Power: Where would transformers need to be placed to serve Lots 13-17?

TENTATIVE
SUBDIVISION PLAN
JUNE, 2023



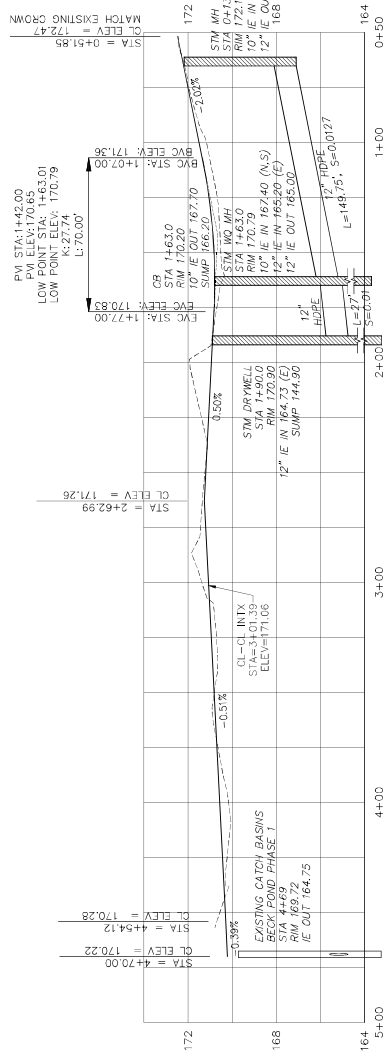
REVISIONS	BY

DuNett subdivision
DuPont and Netter

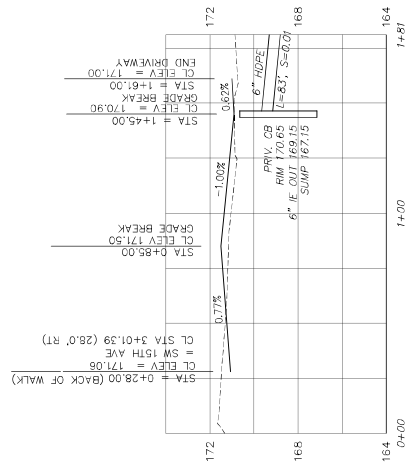
Site Plan

JSJL ENGINEERING
3145 PORTLAND AVENUE
CLATSOP, OREGON 97027
(503) 657-0188

DATE: JUNE, 2023	SCALE: 1" = 40'
DRAWN: -	SHEET: -
JOB: SOLER-018	OF 6 SHEETS

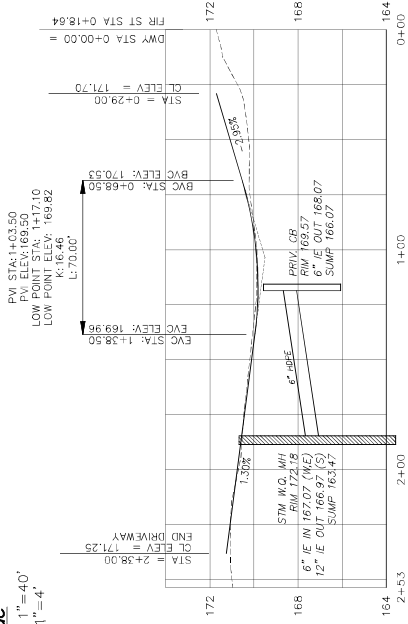


SW 15th Avenue
HORIZONTAL SCALE: 1"=40'
VERTICAL SCALE: 1"=4'



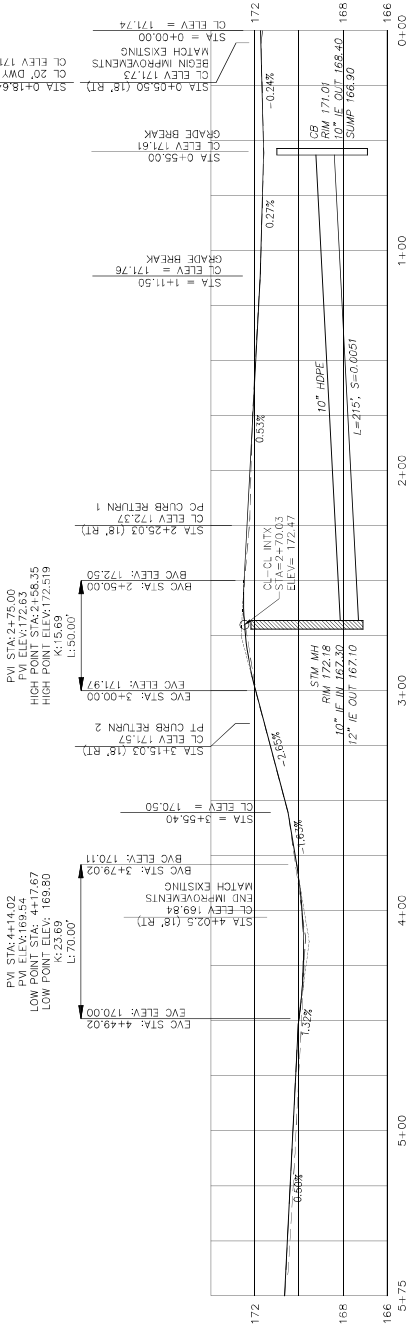
15th Ave. Dwy.

HORIZONTAL SCALE: 1"=40'
VERTICAL SCALE: 1"=4'



Fir St. Dwy.

HORIZONTAL SCALE: 1"=40'
VERTICAL SCALE: 1"=4'



S Fir Street

HORIZONTAL SCALE: 1"=40'
VERTICAL SCALE: 1"=4'

0 40' 80'

GRAPHIC SCALE 1"=40'



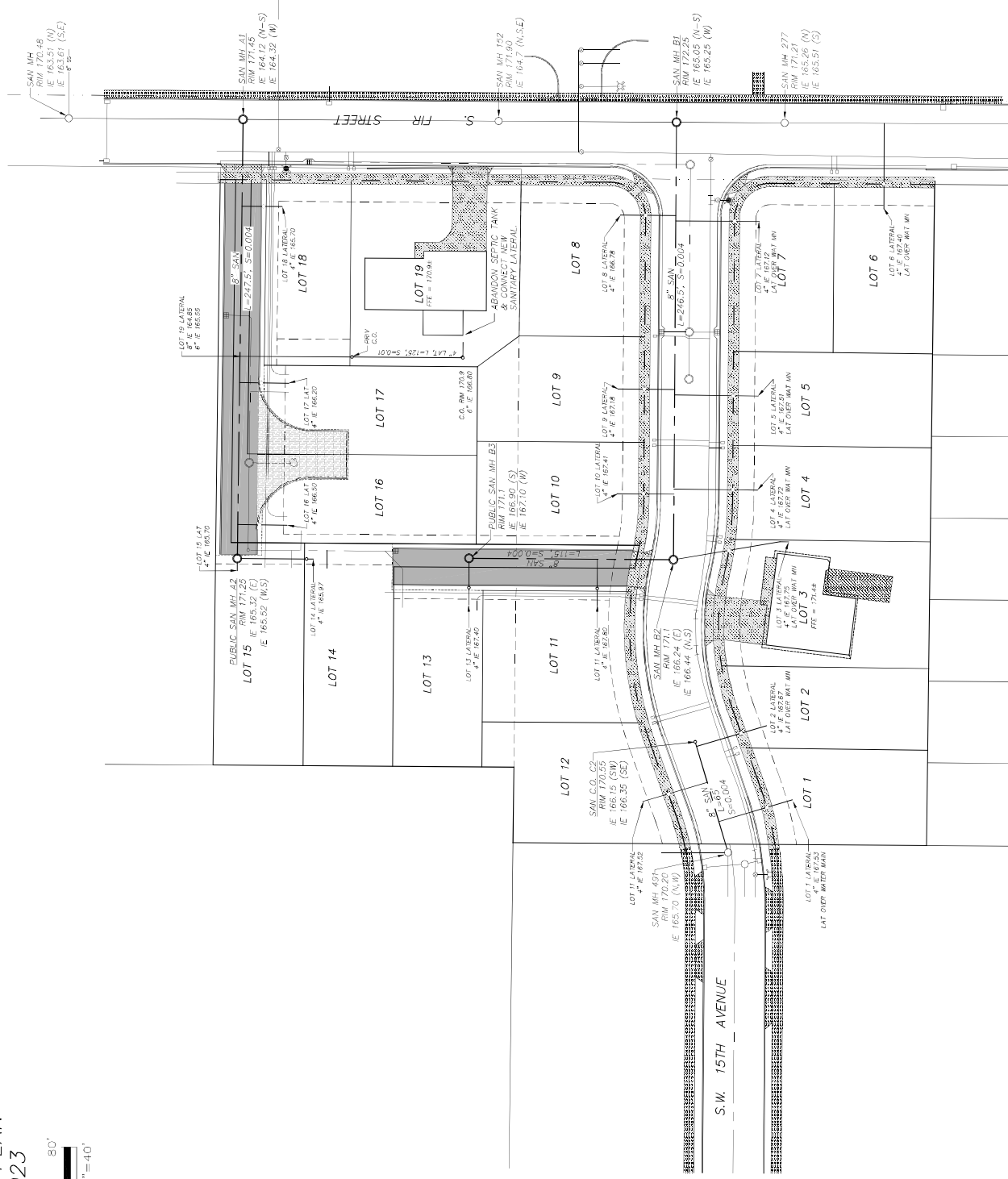
0 40' 80'

GRAPHIC SCALE 1"=40'

DuNett subdivision
DuPont and NetterSanitary Sewer
Plan

SISUL ENGINEERING
375 PORTLAND AVENUE
GLADSTONE, OREGON 97027
(503) 657-0188

DATE	JUNE, 2023
SCALE	1" = 40'
DRAWN	-
JOB	SCL21-01B
SHEET	C4
OF	6 SHEETS



REVISIONS	BY

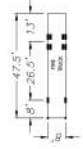
DuNett subdivision
DuPont and Netter

Fire Department
Access Plan

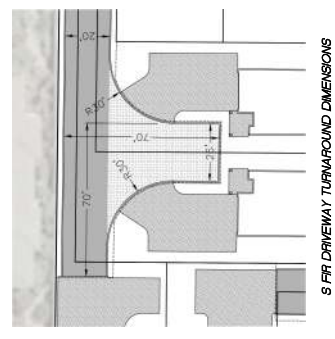
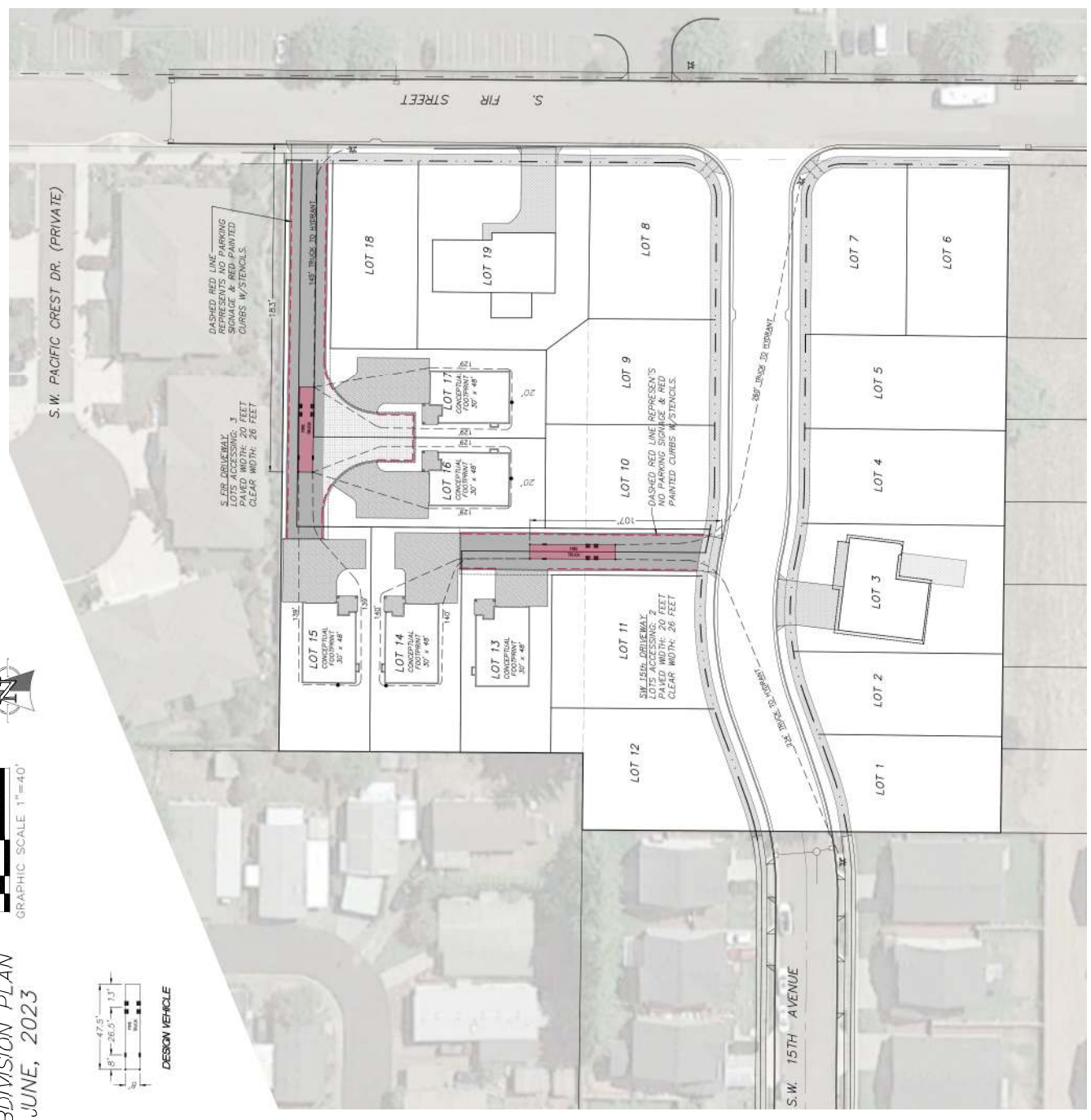
SISUL ENGINEERING
375 PORTLAND AVENUE
GLADSTONE, OREGON 97027
(503) 657-0188

DATE: JUNE, 2023	375 PORTLAND AVENUE GLADSTONE, OREGON 97027 (503) 657-0188
SCALE: 1" = 40'	
DRAWN: -	
CHECKED: -	
DATE: JUNE, 2023	
SHEET	
OF 6 SHEETS	

TENTATIVE
SUBDIVISION PLAN
JUNE, 2023



DESIGN VEHICLE



9' FIR DRIVEWAY TURNAROUND DIMENSIONS



City of Canby

Planning & Development Services

222 NE 2nd Ave / PO Box 930 / Canby, OR 97013

Phone: 503.266.7001

www.canbyoregon.gov

PRE-APPLICATION MEETING NOTICE

DATE: October 1, 2023

TO:

Planning Director, Don Hardy	503-266-0775	Public Works Director, Jerry Nelzen	503-266-0759
Planning Manager, Ryan Potter	503-266-0712	Public Works Supervisor, Jeff Snyder	503-266-0732
Associate Planner, Brianna Addotta	503-266-0686	Public Works Lead, Spencer Polack	503-266-0780
Associate Planner, Emma Porricolo	503-266-0723	Curran-McLeod Eng., Curt McLeod	503-684-3478
Planning Technician, Laney Fouse Lawrence	503-266-0685	Canby Erosion Control, Neil Olsen	503-266-0698
Econ Develop Director, Jamie Stickel	503-266-0701	Canby Public Works, Ronda Rozzell	503-266-0798
Econ Dev & Tour Coord, Tyler Nizer	503-266-0772	Canby Utility, Jason Berning	971-563-1375
WWTP, Daryll Hughes	503-266-0647	Canby Utility, Jason Peterson	503-263-4308
Clackamas County Engineering	503-742-4689	Canby Utility, Lonnie Benham	503-263-6315
Clackamas County Bldg, Shirley Cass-Crosby	503-742-4240	Canby Utility, Josh Muravez	503-263-4307
Fire District #62, Matt English	503-266-5821	Veolia, Brian Hutchins	503-266-6400
Fire District #62, Jim Walker	503-266-5851	Waste Connections, Kris Wright	503-504-6457
Canby Disposal	503-266-3900	Astound, Mike Barney	971-338-8127
DirectLink, Engineering	503-266-8201	NW Natural, Gary Callahan	503-806-9324
US Postal Service, Mary Vanderzanden	503-266-3353	NW Natural, Andrew Schurter	503-910-8768
US Postal Service, Kenny Yang	503-263-3353	Canby Area Transit, Todd Wood	503-266-0751
		Canby Area Transit, Heidi Muller	503-266-0717

FROM: Canby Planning Department

RE: Pre-Application Meeting for **PRA 23-12 Dupont-Netter Subdivision, 1495 & 1574 S Fir St**

Please review the attached plans, and if you have any comments please fill out and return this form to me at publiccomments@canbyoregon.gov on or before the pre-application meeting scheduled for **Thursday, June 29, 2023 at 10:30 am in the Mt. Hood Room, City Hall or via Zoom.**

PLEASE CHECK ONE BOX:

- ☐ The plans meet with the approval of this agency. There are no additional concerns.
- ☐ The plans **do not** meet with this agency's approval. (Please explain below.)

COMMENTS OR CONCERNS:

Click here to enter text.

If your agency has further comments, concerns or wants to talk to the applicant about scheduling or billing, please attend the pre-construction conference.

Click here to enter text.

Signature

Click here to enter text.

Date

Click here to enter text.

Title

Click here to enter text.

Company

Patrick Sisul

From: Laney Fouse Lawrence <Fousel@canbyoregon.gov>
Sent: Thursday, June 29, 2023 11:55 AM
To: Patrick Sisul
Cc: Brianna Addotta
Subject: Zoom link & Traffic Scope application
Attachments: Traffic Analysis Request Application.pdf

Hi Pat,

Here is the link to the pre-app Zoom meeting for your project. I also attached a Traffic Analysis Request application. The fee for the Traffic Scope is \$1,000.

PRA 23-12 DuNett Subdivision Zoom Link:

https://us02web.zoom.us/rec/share/3fWB9n4VoTaMZEw90YTnRHZIZDV-jAubml7am_4nc3WsBbwCF8FI3AjaYjzar_Qg.qXnxjtqbUhL_OF1Z

Passcode: e%f8V+3X

Please let me know if you need anything else.

Thanks, and it always good to see you,

Laney



Laney Fouse Lawrence | Planning Technician

City of Canby / Development Services

222 NE 2nd Ave, 2nd Floor / PO Box 930

Canby, OR 97013

Direct Line: 503-266-0685

Main Line: 503-266-7001

Email: fousel@canbyoregon.gov

Send Applications to: PlanningApps@canbyoregon.gov

City Website: www.canbyoregon.gov

"Life isn't about waiting for the storm to pass, it's about learning to dance in the rain." (Vivian Greene)

PUBLIC RECORDS LAW DISCLOSURE

This email is a public record of the City of Canby and is subject to public disclosure unless exempt from disclosure under Oregon Public Records Law. This email is subject to the State Retention Schedule.

IV. Neighborhood Meeting Information

September 15, 2023

375 PORTLAND AVENUE, GLADSTONE, OREGON 97027

(503) 657-0188

FAX (503) 657-5779

RE: Neighborhood Meeting for proposed subdivision
Assessor Map 41E04CA, Tax Lots 1400 & 1500
1495 & 1547 S Fir Street, Canby, OR

Dear Neighborhood Property Owner or Resident,

An application for a 19-lot subdivision will be submitted to the City of Canby for the two tax lots described above. In compliance with Canby Municipal Code requirements, a Neighborhood Informational Meeting will be held to provide you with an opportunity to become fully aware of the proposed subdivision. You are receiving this notice because you own land or reside within 500 feet of the site. The Neighborhood Informational Meeting will be held at the Canby Adult Center at 6:30 PM on Monday, October 2, 2023.

An aerial map and a proposed Site Plan of the subdivision are on the reverse of this letter. We will provide a short presentation showing larger versions of these maps along with other information regarding the proposed subdivision site. We will also explain the City of Canby land division process and then we will open the meeting for questions or comments. The meeting is anticipated to last approximately 60 minutes.

Tax Lot 1400 is owned by Blake, Brian, & Bridget DuPont and Tax Lot 1500 is owned by the Ralph A. Netter Revocable Trust. The two ownership groups will be joint applicants for the subdivision. Blake DuPont and Ralph Netter will attend the meeting and will be available for questions.

Please feel free to attend the meeting at the Adult Center. If you cannot attend and barring any technical difficulties, the meeting will be available to view on Zoom from your computer, tablet or smartphone beginning at 6:30 PM on Monday, October 2, 2023, using the information below:

Topic: Neighborhood Informational Meeting for South Fir St. Subdivision, Canby

Time: Oct 2, 2023 18:30 Pacific Time (US and Canada)

To Join Zoom Meeting in your browser type in: zoom.us/join

Use the Meeting ID: 869 7710 6717

Use the Passcode: 248528

Thank you,



Patrick A. Sisul, P.E.

Neighborhood Meeting Attendance Sheet

October 2, 2023

	Name	Address
1.	PAT SISUL	375 PORTLAND AVE, GLADSTONE
2.	Jensen Williamson	1441 S. IVY ST. CANBY, OR
3.	Dale Williamson	" " "
4.	Evan Snyder	" " "
5.	David Muck	435 S.W. Pacific Crest Dr
6.	GERRY SNAVEL	Hope Village
7.	Kerley Wether	Muline Rd
8.	Ralph Wether	536 N.W. 14 th Ave Canby
9.	Emma Moody	1555 S Evergreen
10.	Blake Dupont	2785 SE Territorial Rd Canby
11.	Alexis Creedon	1712 Fig St Canby
12.	W. Shalen	4675 W 15 th Canby
13.		
14.		
15.		
16.		
17.		
18.		
19.		
20.		
21.		
22.		
23.		
24.		
25.		
26.		
27.		
28.		
29.		

DuNett subdivision - Neighborhood Meeting
Monday, October 2, 2023, 6:30 pm @ Canby Adult Center

Approximately 370 invitations were mailed out for the neighborhood meeting. In addition to the applicants and applicant's representatives who were present, eight neighbors attended the meeting in person, and two attended on a virtual feed. A sign in sheet for those who attended the meeting at the Canby Adult Center is attached.

The meeting began at 6:30. Two of the neighbors who attended the meeting were not present at 6:30 but came in during the meeting.

Pat Sisul, the applicant's representative ran the meeting. Several large exhibits were provided showing the proposed development together with surrounding properties in the vicinity of the development site. The initial 20 minutes of the project were spent informing the attendees about the City of Canby land use process, the likely timing for construction in their neighborhood, the permitted uses and setback requirements in the R-1.5 zone, and proposed subdivision.

Following the opening presentation, the meeting was turned over for questions. One question was asked on Zoom, the others came from the in-person attendees.

Below is a summary of topics and questions that were discussed concerning the project:

- The swimming pool is really crowded, what can developers do to relieve crowding? The kids need something to do other than look at their phones and the pool is something that they could do but it is too crowded. *There is little that any one developer can do for the swimming pool. Home builders in this subdivision will pay a Park Systems Development fee on the order of \$5,500 for each building permit. That money will go into the Parks Fund to fund certain improvements, including pool expansion if the City and School District desire.*
- What is the timing? *It is anticipated that the project will go to the Planning Commission is late 2023. Infrastructure construction is likely to occur in summer of 2024 and the first home construction may occur in fall of 2024.*
- You mentioned that the traffic study said that there will be no traffic issues. Traffic at the intersection of Fir and 13th Avenue is busy in the mornings. Will there be more traffic studies for this area that may require a traffic light at that intersection in time? *The traffic study did not mention any potential future improvements to that intersection. Where possible, traffic roundabouts are being installed in many communities rather than installing signals. There isn't adequate space at 13th and Fir for a traffic roundabout however. We do not recall anything listed in the Transportation System Plan recommending a future signal at this intersection.*
- I'm concerned about traffic through the existing neighborhood of SW 15th Avenue and Evergreen Way. *The bulk of the traffic will be in the opposite direction. The trips generated by this subdivision will primarily be toward S Fir Street and then to SW 13th Avenue.*
- There are a lot of kids that live on Evergreen Way / SW 15th Avenue. Will construction traffic use that street? *There is no reason that construction traffic would need to use the*

existing portion of SW 15th Avenue. It would be more convenient for construction traffic to come into the project from S Fir Street.

- *Can the barricade at the end of SW 15th Avenue remain in place during construction? Yes, the barricade should be able to remain in place throughout the majority of construction. Utilities will have to connect to other utilities at the end of the street, but that work can be done while leaving the barricade standing. Once it is time to rock and pave the new street, the barricade will have to be removed.*
- *Are the existing homes remaining? The existing home at 1495 S Fir Street that faces S Fir will remain in place. The home at 1547 S Fir Street that is mostly hidden from the street will also remain, but portions of the garage and one wing of the home will be removed.*
- *What will the size and price of the homes be? The homes will likely be in the 1600 to 1800 square foot range. The size will be similar to the other homes nearby in Beck Pond. Pricing will depend upon upgrades, but starting pricing will likely be \$600,000.*
- *How many builders will there be? DuPont's will build the homes on their lots within the subdivision. Ralph Netter's sons will build on most of their lots, but another builder may build in the subdivision too.*
- *What style will the construction be? One story or two? There will likely be a mix of single and two-story homes. Ralph Netter cannot say for sure because he is not going to be building the homes in his portion of the subdivision. The style of the new homes will be similar to the newer homes in Beck Pond.*
- *Why are Lots 1 and 2 narrower than the other lots? Those two lots are narrower due to the location of the existing home. Lot areas for new homes must be between 5,000 sf minimum and 6,500 sf maximum. The area west of the existing home is too large for one lot, and therefore was made into two lots. The narrower of the two lots, Lot 2, will be 46 feet, the same width as some of the narrower lots nearby in the Beck Pond subdivision.*
- *The existing homes in Beck Pond maintain a straight line in the back yards that protects their views. Will this project agree to maintain that view along the southern property line? The southern property line of the DuNett subdivision is more than 20 feet north of the rear lot lines west of the subdivision in Beck Pond. Construction of new homes will have to maintain a 15- to 20-foot setback, so the rear yard views to the west should not be impacted.*

The meeting ended at approximately 7:20 PM.

Notes prepared by Pat Sisul, Sisul Engineering



First American Title Radius Search Disclaimer

Subject: 1495 & 1547 S Fir St Canby, OR
Date of Production: 07.05.2023

The ownership information enclosed is time sensitive and should be utilized as soon as possible.

This mailing list was produced from third party sources. No liability is assumed for any errors with this report.

Thank you for your business and for choosing First American Title.

503.219.TRIO (8746)
cs.oregon@firstam.com

©2018 First American Financial Corporation and/or its affiliates. All rights reserved. | NYSE: FAF | 39207150718

First American Title Insurance Company, and the operating divisions thereof, make no express or implied warranty respecting the information presented and assume no responsibility for errors or omissions. First American, the eagle logo, First American Title, and firstam.com are registered trademarks or trademarks of First American Financial Corporation and/or its affiliates.



First American Title™

Date of Production: 07/05/2023

TERMS AND CONDITIONS OF INFORMATION REPORTS

IMPORTANT - READ CAREFULLY: AN INFORMATION REPORT IS **NOT** AN INSURED PRODUCT OR SERVICE OR A REPRESENTATION OF THE CONDITION OF TITLE TO REAL PROPERTY. IT IS NOT AN ABSTRACT, LEGAL OPINION, OPINION OF TITLE, TITLE INSURANCE COMMITMENT OR PRELIMINARY REPORT, OR ANY FORM OF TITLE INSURANCE OR GUARANTY. THE INFORMATION REPORT IS ISSUED EXCLUSIVELY FOR THE BENEFIT OF THE REQUESTOR, AND MAY NOT BE USED OR RELIED UPON BY ANY OTHER PERSON. THE INFORMATION REPORT MAY NOT BE REPRODUCED IN ANY MANNER WITHOUT FIRST AMERICAN TITLE'S PRIOR WRITTEN CONSENT. FIRST AMERICAN TITLE DOES NOT REPRESENT OR WARRANT THAT THE INFORMATION CONTAINED IN THE INFORMATION REPORT IS COMPLETE OR FREE FROM ERROR, AND THE INFORMATION THEREIN IS PROVIDED WITHOUT ANY WARRANTIES OF ANY KIND, AS-IS, AND WITH ALL FAULTS. AS A MATERIAL PART OF THE CONSIDERATION GIVEN IN EXCHANGE FOR THE ISSUANCE OF AN INFORMATION REPORT, REQUESTOR AGREES THAT FIRST AMERICAN TITLE'S SOLE LIABILITY FOR ANY LOSS OR DAMAGE CAUSED BY AN ERROR OR OMISSION DUE TO INACCURATE INFORMATION OR NEGLIGENCE IN PREPARING THE INFORMATION REPORT SHALL BE LIMITED TO THE GREATOR OF THE FEE CHARGED FOR THE INFORMATION REPORT OR \$15. REQUESTOR ACCEPTS THE INFORMATION REPORT WITH THIS LIMITATION AND AGREES THAT FIRST AMERICAN TITLE WOULD NOT HAVE ISSUED THE INFORMATION REPORT BUT FOR THE LIMITATION OF LIABILITY DESCRIBED ABOVE. FIRST AMERICAN TITLE MAKES NO REPRESENTATION OR WARRANTY AS TO THE LEGALITY OR PROPRIETY OF REQUESTOR'S USE OF THE INFORMATION CONTAINED IN THE INFORMATION REPORT.

41E04CA02235
Elizabeth & Elizabeth Whitney
1697 S Fig St
Canby, OR 97013

41E04CA02219
Christopher & Annieka Wardle
464 SW 15th Ave
Canby, OR 97013

41E04CA02267
Donald Waage & Kay Kim
1739 S Fig St
Canby, OR 97013

41E04CA02265
Vickie Dinnel & Robert Vondra
1749 S Fig St
Canby, OR 97013

41E04C 01303
Village On The Lochs Mhc LLC
18006 Sky Park Cir STE 200
Irvine, CA 92614

41E04CA02256
Caitlin & Vinh Tran
1072 NW 8th Way
Canby, OR 97013

41E04CA02261
Theirawoot & Pungthong Thanyawatpokin
1714 S Evergreen St # 5
Canby, OR 97013

41E04CA02207
Daniel Tapia & Stephanie Cruz
448 SW 16th Ave
Canby, OR 97013

41E04CA01212
Michael Szczerba
405 SW 14th Ct
Canby, OR 97013

41E04CA02245
Jennier Sobolewski & Jeffrey Meek
1747 S Fir St
Canby, OR 97013

41E04CA02241
Paul & Sally Hemson
1723 S Fir St
Canby, OR 97013

41E04CA02231
Jeffrey & Kanae Simpkins
483 SW 16th Ave
Canby, OR 97013

41E04CA02215
Wendy Sheldon
467 SW 15th Ave
Canby, OR 97013

41E04CA02226
Nichole Franzen & Ryan Seifert
1567 S Evergreen St
Canby, OR 97013

41E04CA01206
S T J 1 LLC
130 SW 2nd Ave STE 103
Canby, OR 97013

41E04CA01207
S T J 1 LLC
130 SW 2nd Ave STE 103
Canby, OR 97013

41E04CA01000
Daniel & Ruth Rydell
443 SW 13th Ave
Canby, OR 97013

41E04CA01204
Vance & Molly Roderick
9030 SW 72nd Ave
Portland, OR 97223

41E04CA02206
Cassi & Jimmy Rocha
442 SW 16th Ave
Canby, OR 97013

41E04CA02222
Timothy Poundstone
490 SW 15th Ave
Canby, OR 97013

41E04CA02233
Gary & Clydeen Phillips
703 Village Park Ln
Lake Oswego, OR 97034

41E04C 01201
Gordon & Taylor-Pears Pearson
1625 S Elm St
Canby, OR 97013

41E04CA01210
Jennie & John Peakes
425 SW 14th Ct
Canby, OR 97013

41E04CA02239
Kenneth Patton
1711 S Fir St
Canby, OR 97013

41E04CA02264
Corey Oswald
1764 S Evergreen St
Canby, OR 97013

41E04CA01500
Ralph Netter
536 NW 14th Ave
Canby, OR 97013

41E04CA02257
John & Silvia Mui
1749 S Evergreen St
Canby, OR 97013

41E04CA02224
Chase & Emma Moody
1555 S Evergreen St
Canby, OR 97013

41E04CA02205
Ashley & Zachary Misenhimer
438 SW 16th Ave
Canby, OR 97013

41E04CA02211
Anneliese & Anthony Misenhimer
468 SW 16th Ave
Canby, OR 97013

41E04CA02210
Whitney & Allen Miller
466 SW 16th Ave
Canby, OR 97013

41E04D 00809
Meadows At Hope Village Lp
1535 S Ivy St
Canby, OR 97013

41E04CA02244
William & Carla Mccauley
1748 S Fig St
Canby, OR 97013

41E04CA02266
Jeremy & Amy Mccamish
6004 Cobblestone Dr
Ventura, CA 93003

41E04CA00800
John & Anna Makin
473 SW 13th Ave
Canby, OR 97013

41E04CA02230
Jesse Garratt & Ashley Morris
487 SW 16th Ave
Canby, OR 97013

41E04CA02236
David & Michelle Lingel
1690 S Fig St
Canby, OR 97013

41E04CA00900
Kristin Lemelson & Brian Terranova
453 SW 13th Ave
Canby, OR 97013

41E04CA02204
Anthony Lemanski
432 SW 16th Ave
Canby, OR 97013

41E04CA02242
Amanda & Richard Leetch
1736 S Fig St
Canby, OR 97013

41E04CA02262
Kim Lee
1726 S Evergreen St
Canby, OR 97013

41E04CA01202
Terry & Cheryl Learfield
23899 S Rondevic Dr
Canby, OR 97013

41E04CA02202
Phu & Paula Lau
1595 S Fir St
Canby, OR 97013

41E04CA02201
Karyakos Lange & Paul Karyakos
1667 S Fir St
Canby, OR 97013

41E04CA02255
Jill Downs & David Kruse
1755 S Evergreen St
Canby, OR 97013

41E04CA02218
Melody & Vann Keo
462 SW 15th Ave
Canby, OR 97013

41E04CA02269
Kayla Jordan & Jeffrey Nogle
1713 S Fig St
Canby, OR 97013

41E04CA01211
Joshua & Jennifer Jensen
37565 S Blair Rd
Molalla, OR 97038

41E04CA01301
Hope Village Inc
1535 S Ivy St
Canby, OR 97013

41E04D 00806
Hope Village Inc
1535 S Ivy St
Canby, OR 97013

41E04D 00807
Hope Village Inc
1535 S Ivy St
Canby, OR 97013

41E04D 00808
Hope Village Inc
1535 S Ivy St
Canby, OR 97013

41E04D 00811
Hope Village Inc
1535 S Ivy St
Canby, OR 97013

41E04DC00700
Hope Village Inc
1535 S Ivy St
Canby, OR 97013

41E04DC00701
Hope Village Inc
1535 S Ivy St
Canby, OR 97013

41E04CA02225
Emily & Kevin Hill
1561 S Evergreen St
Canby, OR 97013

41E04CA02203
Selene Hernandez
1573 S Fir St
Canby, OR 97013

41E04CA02234
Brooke Henry
469 SW 16th Ave
Canby, OR 97013

41E04CA02209
Trenton & Heather Hartill
454 SW 16th Ave
Canby, OR 97013

41E04CA02240
Shirley Harris
3228 SW 33rd St
Gresham, OR 97080

41E04CA02258
McLaine & John Grim
1737 S Evergreen St
Canby, OR 97013

41E04CA01208
Susan Graper
7168 Olalla Canyon Rd
Cashmere, WA 98815

41E04CA02268
Alejandro & Aracely Gopar
1727 S Fig St
Canby, OR 97013

41E04CA02220
Chayse Gillespie & Lynnsey Yates
476 SW 15th Ave
Canby, OR 97013

41E04CA02229
Robert & Valerie Guertze
23255 SW Pine St
Canby, OR 97013

41E04CA01100
Finzer Properties LLC
13567 SE Deana Way
Clackamas, OR 97015

41E04CA02100
Elmwood Park Homeowners Lts 6-10
NO MAILING ADDRESS AVAILABLE

41E04CA01205
Abigail & Brandon Ellis
440 SW 14th Ct
Canby, OR 97013

41E04CA02221
Brianna & Togamau Elisara
488 SW 15th Ave
Canby, OR 97013

41E04CA02217
Julie & Paul Duris
463 SW 15th Ave
Canby, OR 97013

41E04CA01201
Shawn & Kaylee Durand
400 SW 14th Ct
Canby, OR 97013

41E04CA01400
Brian & Bridget Dupont
9757 Lariat Ln NE
Aurora, OR 97002

41E04CA02216
Andrew & Christine Duncan
465 SW 15th Ave
Canby, OR 97013

41E04CA02243
Diane & Patrick Drebin
1735 S Fir St
Canby, OR 97013

41E04CA02232
David & Lucinda Downs
475 SW 16th Ave
Canby, OR 97013

41E04CA02227
Ryan Dixon & Rochelle Mckenzi
1573 S Evergreen St
Canby, OR 97013

41E04CA02237
Joaquin Diaz & Diana Apodaca
1687 S Fir St
Canby, OR 97013

41E04CA01700
Teresa Desimone
Po Box 98757
Seattle, WA 98198

41E04CA01800
Teresa Desimone
Po Box 98757
Seattle, WA 98198

41E04CA01900
Teresa Desimone
Po Box 98757
Seattle, WA 98198

41E04CA02212
Michael & Cheryl Cropper
472 SW 16th Ave
Canby, OR 97013

41E04CA02238
Doris Creedon
5740 Childs Rd
Lake Oswego, OR 97035

41E04CA01203
Michael & Mary Coy
3307 NE 141st St
Vancouver, WA 98686

41E04D 00810
Cascade House Hope Vlg Lp
9600 SW Oak St STE 200
Portland, OR 97223

41E04CA02223
Cambridge Collin Brock & Candi
492 SW 15th Ave
Canby, OR 97013

41E04CA02214
Vicenta Camacho & Victor Vazquez
489 SW 15th Ave
Canby, OR 97013

41E04CA02259
Jennifer & Roy Burchett
1725 S Evergreen St
Canby, OR 97013

41E04CA02260
Martie & Robert Buckley
1713 S Evergreen St
Canby, OR 97013

41E04CA02228
Christopher & Courtney Bryan
1579 S Evergreen St
Canby, OR 97013

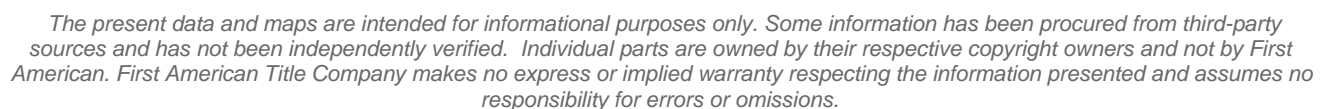
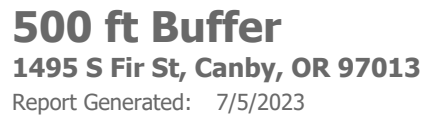
41E04CA02213
Christopher & Erika Brand
484 SW 16th Ave
Canby, OR 97013

41E04CA01209
Lynn Bloomfield
435 SW 14th Ct
Canby, OR 97013

41E04CA02263
Joseph & Annie Aispuro
1752 S Evergreen St
Canby, OR 97013

41E04CA02208
Abdo Horcos & Tori Scott
452 SW 16th Ave
Canby, OR 97013

41E04D 00811
Hope Village Inc
1535 S Ivy St
Canby, OR 97013





Customer Service Department
Phone: 503.219.8746(TRIO)
Email: cs.oregon@firstam.com
Report Generated: 7/5/2023

Ownership

Legal Owner(s): Ralph A Netter Revocable Trust
Site Address: 1547 S Fir St Canby, OR 97013
Mailing Address: 536 NW 14th Ave Canby, OR 97013

Parcel #: 41E04CA01500
APN: 01002417
County: Clackamas

Property Characteristics

Bedrooms: 3
Total Bathrooms: 2.5
Full Bathrooms: 2
Half Bathrooms: 1
Units: 1
Stories: 1.00
Fire Place: Y
Air Conditioning:
Heating Type: Heat Pump
Electric Type:

Year Built: 1983
Building SqFt: 2616
First Floor SqFt: 0
Basement Sqft: 0
Basment Type:

Lot SqFt: 87120
Lot Acres: 2.00
Roof Type: Composition
Roof Shape: GABLE
Porch Type:
Building Style:
Garage: Garage
Garage SqFt: 616
Parking Spots: 2
Pool:

Property Information

Land Use: RESIDENTIAL
Improvement Type: Single Family Residential
Legal Description: SECTION 04 TOWNSHIP 4S RANGE 1E QUARTER CA TAX LOT
01500

Zoning: R1.5
School District: Canby School
Neighborhood: Canby
Subdivision:

Assessor & Tax

2022 Market Land: \$332,201
2022 Market Total: \$745,511
2022 Market Structure: \$413,310
2022 Assessed Total: \$436,317

2022 Taxes \$7,551.42
% Improved: 55
Levy Code: 086002
Millage Rate:

Sale History

Last Sale Date: 7/26/2022
Prior Sale Date: 4/1/1988

Doc #: 42146
Prior Doc #: 1988-013806

Last Sale Price: \$950,000
Prior Sale Price: \$69,000

Mortgage

1st Mortgage Date: 7/26/2022
1st Mortgage Type:
2nd Mortgage Type:

Doc #: 42147
1st Mortgage Lender: Steinke Cheryl

1st Mortgage: \$0
2nd Mortgage: \$0



Customer Service Department
Phone: 503.219.8746(TRIO)
Email: cs.oregon@firstam.com
Report Generated: 7/5/2023

Ownership

Legal Owner(s): Brian & Bridget Dupont
Site Address: 1495 S Fir St Canby, OR 97013
Mailing Address: 9757 Lariat Ln NE Aurora, OR 97002

Parcel #: 41E04CA01400
APN: 01002408
County: Clackamas

Property Characteristics

Bedrooms: 3
Total Bathrooms: 2.5
Full Bathrooms: 2
Half Bathrooms: 1
Units: 1
Stories: 1.00
Fire Place: Y
Air Conditioning:
Heating Type: Heat Pump
Electric Type:

Year Built: 1973
Building SqFt: 1655
First Floor SqFt: 0
Basement Sqft: 0
Basment Type:

Lot SqFt: 57064
Lot Acres: 1.31
Roof Type: Tile
Roof Shape: GABLE
Porch Type:
Building Style:
Garage: Garage
Garage SqFt: 441
Parking Spots: 2
Pool:

Property Information

Land Use: RESIDENTIAL
Improvement Type: Single Family Residential
Legal Description: SECTION 04 TOWNSHIP 4S RANGE 1E QUARTER CA TAX LOT
01400

Zoning:
School District: Canby School
Neighborhood: Canby
Subdivision:

Assessor & Tax

2022 Market Land: \$323,284
2022 Market Total: \$692,894
2022 Market Structure: \$369,610
2022 Assessed Total: \$380,451

2022 Taxes \$5,288.65
% Improved: 53
Levy Code: 086020
Millage Rate:

Sale History

Last Sale Date: 2/9/2021
Prior Sale Date: 6/7/2000

Doc #: 2021-013997
Prior Doc #: 2000-036713

Last Sale Price: \$610,000
Prior Sale Price: \$22,000

Mortgage

1st Mortgage Date: 2/9/2021
1st Mortgage Type:
2nd Mortgage Type:

Doc #: 2021-013998
1st Mortgage Lender: Caliber Home
Loans Inc

1st Mortgage: \$0
2nd Mortgage: \$0



Customer Service Department
Phone: 503.219.8746(TRIO)
Email: cs.oregon@firstam.com
Report Generated: 7/5/2023

02210 0.13 ac
02208 0.14 ac
02206 0.14 ac

02233 0.12 ac
02235 0.14 ac
02236 0.15 ac
02234 0.12 ac
02269 0.12 ac
02238 0.15 ac
02262 0.23 ac
02268 0.13 ac
02240 0.15 ac

Legal Owner: Elizabeth & Elizabeth Whitney
Site Address: 1697 S Fig St Canby, OR 97013
Mailing Address: 1697 S Fig St Canby, OR 97013
Bedrooms: 5
Bathrooms: 3
Building SqFt: 2,422 Lot Acres: 0.14
Year Built: 2019
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 4585 LT 35

APN: 5035145
Ref Parcel #: 41E04CA02235
Taxes: \$5,530.79
Market Value: \$588,887
Assessed Value: \$319,566
Sales Price: \$479,500
Transfer Date: 5/26/2020

01700 4.17 ac
02221 0.13 ac
02219 0.12 ac
02218 0.1 ac
02220 0.13 ac
01500 2 ac
SW 15th Ave
02214 0.13 ac
02217 0.13 ac

Legal Owner: Christopher & Annieka Wardle
Site Address: 464 SW 15th Ave Canby, OR 97013
Mailing Address: 464 SW 15th Ave Canby, OR 97013
Bedrooms: 5
Bathrooms: 3
Building SqFt: 2,422 Lot Acres: 0.12
Year Built: 2019
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 4585 LT 19

APN: 5035129
Ref Parcel #: 41E04CA02219
Taxes: \$5,616.40
Market Value: \$576,469
Assessed Value: \$324,512
Sales Price: \$469,500
Transfer Date: 1/7/2020

02233 0.12 ac
02269 0.12 ac
02236 0.15 ac
02262 0.23 ac
02268 0.13 ac
02238 0.15 ac
02263 0.21 ac
02267 0.15 ac
02240 0.15 ac
02266 0.15 ac
02242 0.16 ac
02264 0.19 ac
02265 0.17 ac
02244 0.16 ac

Legal Owner: Donald Waage & Kay Kim
Site Address: 1739 S Fig St Canby, OR 97013
Mailing Address: 1739 S Fig St Canby, OR 97013
Bedrooms: 3
Bathrooms: 2
Building SqFt: 1,914 Lot Acres: 0.15
Year Built: 2020
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 2 4596 LT 67

APN: 5035416
Ref Parcel #: 41E04CA02267
Taxes: \$5,472.43
Market Value: \$579,097
Assessed Value: \$316,194
Sales Price: \$459,900
Transfer Date: 6/25/2020

02262 0.23 ac
02267 0.15 ac
02240 0.15 ac
02264 0.19 ac
02266 0.15 ac
02242 0.16 ac
02265 0.17 ac
02244 0.16 ac
02254 0.16 ac
02246 0.16 ac
02270 0.89 ac
02251 0.17 ac
02249 0.2 ac

Legal Owner: Vickie Dinnel & Robert Vondra
Site Address: 1749 S Fig St Canby, OR 97013
Mailing Address: 1749 S Fig St Canby, OR 97013
Bedrooms: 4
Bathrooms: 2
Building SqFt: 1,942 Lot Acres: 0.17
Year Built: 2020
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 2 4596 LT 65

APN: 5035414
Ref Parcel #: 41E04CA02265
Taxes: \$5,432.12
Market Value: \$574,170
Assessed Value: \$313,865
Sales Price: \$455,900
Transfer Date: 8/6/2020



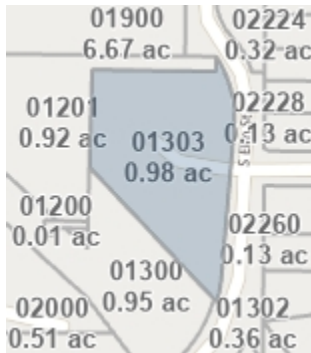
First American Title™

Customer Service Department

Phone: 503.219.8746(TRIO)

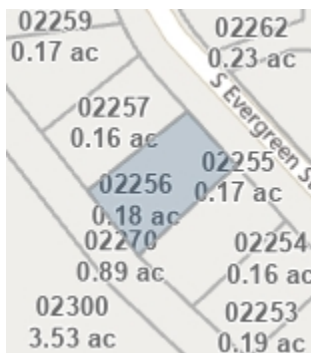
Email: cs.oregon@firstam.com

Report Generated: 7/5/2023



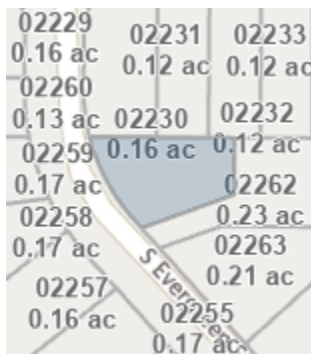
Legal Owner: Village On The Lochs Mhc Llc
Site Address: 1619 S Elm St Canby, OR 97013
Mailing Address: 18006 Sky Park Cir STE 200 Irvine, CA
Bedrooms: 2
Bathrooms: 1
Building SqFt: 1 Lot Acres: 0.98
Year Built: 1993
School District: Canby School District 86
Neighborhood: Canby
Legal: SECTION 04 TOWNSHIP 4S RANGE 1E QUARTER C TAX LOT 01303

APN: 1554507
Ref Parcel #: 41E04C 01303
Taxes: \$3,842.32
Market Value: \$563,069
Assessed Value: \$222,007
Sales Price: \$0
Transfer Date: 6/30/2017



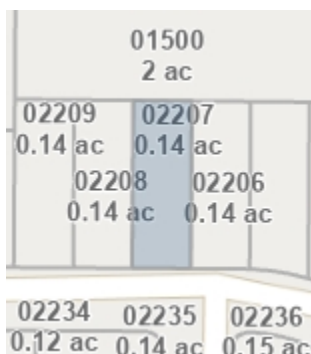
Legal Owner: Caitlin & Vinh Tran
Site Address: 1751 S Evergreen St Canby, OR 97013
Mailing Address: 1072 NW 8th Way Canby, OR 97013
Bedrooms: 5
Bathrooms: 3
Building SqFt: 2,383 Lot Acres: 0.18
Year Built: 2020
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 2 4596 LT 56

APN: 5035405
Ref Parcel #: 41E04CA02256
Taxes: \$5,933.77
Market Value: \$627,540
Assessed Value: \$342,850
Sales Price: \$523,500
Transfer Date: 10/15/2020



Legal Owner: Theirawoot & Pungthong Thanyawatpokin
Site Address: 1714 S Evergreen St Canby, OR 97013
Mailing Address: 1714 S Evergreen St # 5 Canby, OR 97013
Bedrooms: 3
Bathrooms: 2
Building SqFt: 1,680 Lot Acres: 0.16
Year Built: 2020
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 2 4596 LT 61

APN: 5035410
Ref Parcel #: 41E04CA02261
Taxes: \$5,265.73
Market Value: \$556,380
Assessed Value: \$304,251
Sales Price: \$439,900
Transfer Date: 12/9/2020



Legal Owner: Daniel Tapia & Stephanie Cruz
Site Address: 448 SW 16th Ave Canby, OR 97013
Mailing Address: 448 SW 16th Ave Canby, OR 97013
Bedrooms: 3
Bathrooms: 2.5
Building SqFt: 2,112 Lot Acres: 0.14
Year Built: 2020
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 4585 LT 7

APN: 5035117
Ref Parcel #: 41E04CA02207
Taxes: \$5,270.90
Market Value: \$557,728
Assessed Value: \$304,550
Sales Price: \$460,900
Transfer Date: 1/20/2021



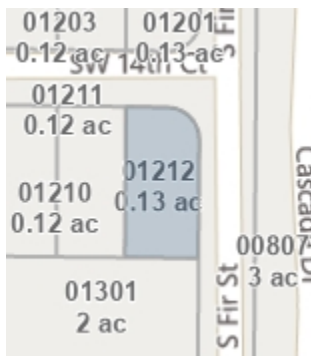
First American Title™

Customer Service Department

Phone: 503.219.8746(TRIO)

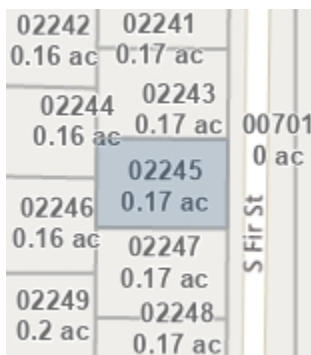
Email: cs.oregon@firstam.com

Report Generated: 7/5/2023



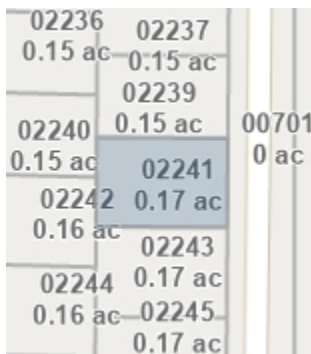
Legal Owner: Michael Szczerba
Site Address: 405 SW 14th Ct Canby, OR 97013
Mailing Address: 405 SW 14th Ct Canby, OR 97013
Bedrooms: 3
Bathrooms: 2.5
Building SqFt: 1,768 Lot Acres: 0.13
Year Built: 2004
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION SEQUOIA PLACE LT 12 3820

APN: 5008147
Ref Parcel #: 41E04CA01212
Taxes: \$4,729.07
Market Value: \$464,090
Assessed Value: \$273,243
Sales Price: \$397,000
Transfer Date: 12/23/2019



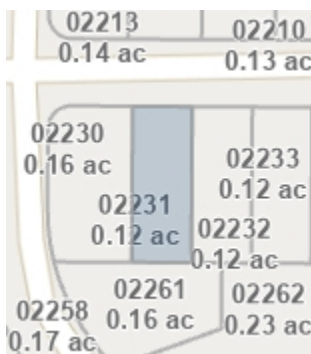
Legal Owner: Jennier Sobolewski & Jeffrey Meek
Site Address: 1747 S Fir St Canby, OR 97013
Mailing Address: 1747 S Fir St Canby, OR 97013
Bedrooms: 3
Bathrooms: 2
Building SqFt: 1,817 Lot Acres: 0.17
Year Built: 2020
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 2 4596 LT 45

APN: 5035394
Ref Parcel #: 41E04CA02245
Taxes: \$5,481.75
Market Value: \$581,800
Assessed Value: \$316,732
Sales Price: \$509,400
Transfer Date: 3/16/2021



Legal Owner: Paul & Sally Hemson
Site Address: 1723 S Fir St Canby, OR 97013
Mailing Address: 1723 S Fir St Canby, OR 97013
Bedrooms: 3
Bathrooms: 2
Building SqFt: 1,817 Lot Acres: 0.17
Year Built: 2020
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 2 4596 LT 41

APN: 5035390
Ref Parcel #: 41E04CA02241
Taxes: \$5,472.63
Market Value: \$581,800
Assessed Value: \$316,205
Sales Price: \$505,900
Transfer Date: 3/9/2021



Legal Owner: Jeffrey & Kanae Simpkins
Site Address: 483 SW 16th Ave Canby, OR 97013
Mailing Address: 483 SW 16th Ave Canby, OR 97013
Bedrooms: 3
Bathrooms: 2.5
Building SqFt: 2,112 Lot Acres: 0.12
Year Built: 2020
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 4585 LT 31

APN: 5035141
Ref Parcel #: 41E04CA02231
Taxes: \$5,197.18
Market Value: \$550,139
Assessed Value: \$300,290
Sales Price: \$435,900
Transfer Date: 9/23/2020



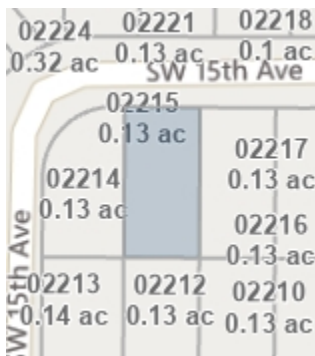
First American Title™

Customer Service Department

Phone: 503.219.8746(TRIO)

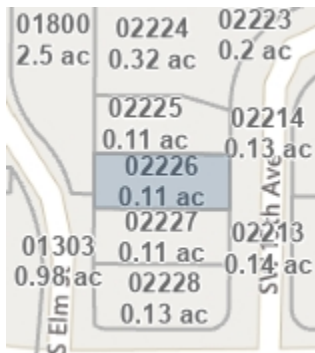
Email: cs.oregon@firstam.com

Report Generated: 7/5/2023



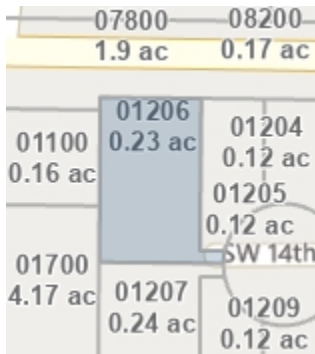
Legal Owner: Sheldon Wendy Trustee
Site Address: 467 SW 15th Ave Canby, OR 97013
Mailing Address: 467 SW 15th Ave Canby, OR 97013
Bedrooms: 3
Bathrooms: 2
Building SqFt: 1,660 Lot Acres: 0.13
Year Built: 2019
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 4585 LT 15

APN: 5035125
Ref Parcel #: 41E04CA02215
Taxes: \$4,906.62
Market Value: \$503,818
Assessed Value: \$283,502
Sales Price: \$421,900
Transfer Date: 12/17/2019



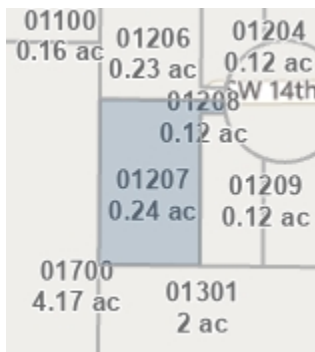
Legal Owner: Nichole Franzen & Ryan Seifert
Site Address: 1567 S Evergreen St Canby, OR 97013
Mailing Address: 1567 S Evergreen St Canby, OR 97013
Bedrooms: 4
Bathrooms: 2.5
Building SqFt: 2,364 Lot Acres: 0.11
Year Built: 2019
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 4585 LT 26

APN: 5035136
Ref Parcel #: 41E04CA02226
Taxes: \$5,380.57
Market Value: \$565,718
Assessed Value: \$310,886
Sales Price: \$449,900
Transfer Date: 5/26/2020



Legal Owner: S T J 1 Llc
Site Address: 450 SW 14th Ct Canby, OR 97013
Mailing Address: 130 SW 2nd Ave STE 103 Canby, OR 97013
Bedrooms: 6
Bathrooms: 5
Building SqFt: 3,512 Lot Acres: 0.23
Year Built: 2004
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION SEQUOIA PLACE LT 6 3820

APN: 5008141
Ref Parcel #: 41E04CA01206
Taxes: \$6,885.88
Market Value: \$764,754
Assessed Value: \$397,862
Sales Price: \$0
Transfer Date: 4/17/2015

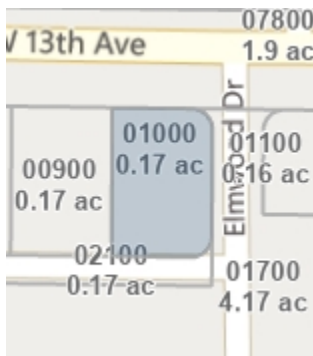


Legal Owner: S T J 1 Llc
Site Address: 455 SW 14th Ct Canby, OR 97013
Mailing Address: 130 SW 2nd Ave STE 103 Canby, OR 97013
Bedrooms: 6
Bathrooms: 5
Building SqFt: 3,512 Lot Acres: 0.24
Year Built: 2004
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION SEQUOIA PLACE LT 7 3820

APN: 5008142
Ref Parcel #: 41E04CA01207
Taxes: \$6,885.88
Market Value: \$764,754
Assessed Value: \$397,862
Sales Price: \$0
Transfer Date: 4/17/2015

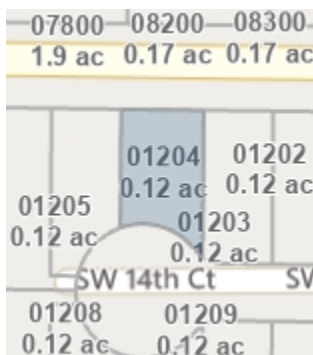


Customer Service Department
 Phone: 503.219.8746(TRIO)
 Email: cs.oregon@firstam.com
 Report Generated: 7/5/2023



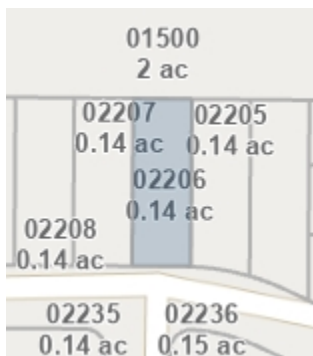
Legal Owner: Daniel & Ruth Rydell
 Site Address: 443 SW 13th Ave Canby, OR 97013
 Mailing Address: 443 SW 13th Ave Canby, OR 97013
 Bedrooms: 3
 Bathrooms: 2
 Building SqFt: 1,100 Lot Acres: 0.17
 Year Built: 1989
 School District: Canby School District 86
 Neighborhood: Canby
 Legal: 2715 ELMWOOD PARK LT 10 SEE RELATED 1/5 INT TRACT C

APN: 1002364
 Ref Parcel #: 41E04CA01000
 Taxes: \$3,535.08
 Market Value: \$393,332
 Assessed Value: \$204,255
 Sales Price: \$390,000
 Transfer Date: 9/15/2022



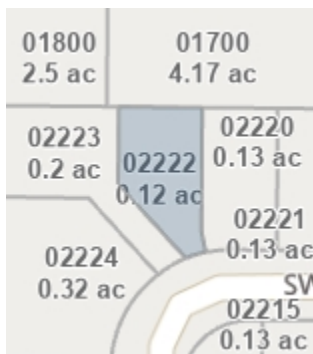
Legal Owner: Vance & Molly Roderick
 Site Address: 430 SW 14th Ct Canby, OR 97013
 Mailing Address: 9030 SW 72nd Ave Portland, OR 97223
 Bedrooms: 3
 Bathrooms: 2.5
 Building SqFt: 1,634 Lot Acres: 0.12
 Year Built: 2004
 School District: Canby School District 86
 Neighborhood: Canby
 Legal: SUBDIVISION SEQUOIA PLACE LT 4 3820

APN: 5008139
 Ref Parcel #: 41E04CA01204
 Taxes: \$4,481.44
 Market Value: \$444,947
 Assessed Value: \$258,935
 Sales Price: \$239,051
 Transfer Date: 3/3/2005



Legal Owner: Cassi & Jimmy Rocha
 Site Address: 442 SW 16th Ave Canby, OR 97013
 Mailing Address: 442 SW 16th Ave Canby, OR 97013
 Bedrooms: 3
 Bathrooms: 2.5
 Building SqFt: 2,112 Lot Acres: 0.14
 Year Built: 2020
 School District: Canby School District 86
 Neighborhood: Canby
 Legal: SUBDIVISION BECK POND 4585 LT 6

APN: 5035116
 Ref Parcel #: 41E04CA02206
 Taxes: \$5,260.34
 Market Value: \$557,728
 Assessed Value: \$303,939
 Sales Price: \$463,900
 Transfer Date: 2/4/2021

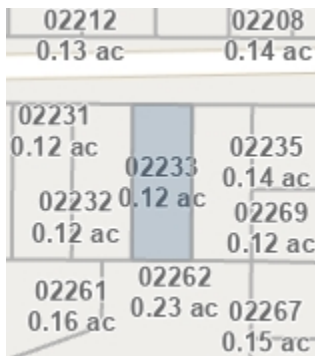


Legal Owner: Timothy Poundstone
 Site Address: 490 SW 15th Ave Canby, OR 97013
 Mailing Address: 490 SW 15th Ave Canby, OR 97013
 Bedrooms: 3
 Bathrooms: 2.5
 Building SqFt: 2,116 Lot Acres: 0.12
 Year Built: 2019
 School District: Canby School District 86
 Neighborhood: Canby
 Legal: SUBDIVISION BECK POND 4585 LT 22

APN: 5035132
 Ref Parcel #: 41E04CA02222
 Taxes: \$5,332.62
 Market Value: \$551,619
 Assessed Value: \$308,116
 Sales Price: \$431,900
 Transfer Date: 2/14/2020



Customer Service Department
Phone: 503.219.8746(TRIO)
Email: cs.oregon@firstam.com
Report Generated: 7/5/2023



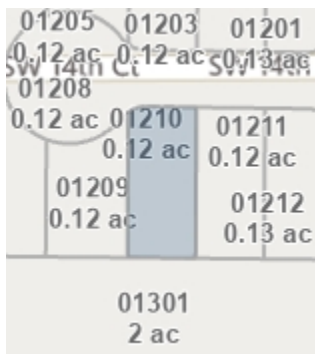
Legal Owner: Gary & Clydeen Phillips
Site Address: 467 SW 16th Ave Canby, OR 97013
Mailing Address: 703 Village Park Ln Lake Oswego, OR
Bedrooms: 4
Bathrooms: 2.5
Building SqFt: 2,292 Lot Acres: 0.12
Year Built: 2020
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 4585 LT 33

APN: 5035143
Ref Parcel #: 41E04CA02233
Taxes: \$5,320.48
Market Value: \$563,319
Assessed Value: \$307,414
Sales Price: \$467,900
Transfer Date: 12/4/2020



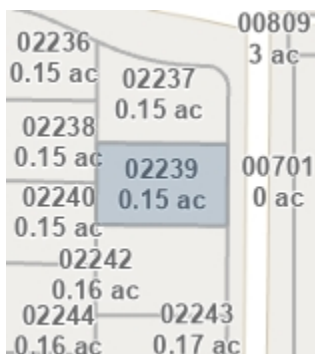
Legal Owner: Gordon & Taylor-Pears Pearson
Site Address: 1625 S Elm St Canby, OR 97013
Mailing Address: 1625 S Elm St Canby, OR 97013
Bedrooms: 3
Bathrooms: 2
Building SqFt: 1,465 Lot Acres: 0.92
Year Built: 1976
School District: Canby School District 86
Neighborhood: Canby
Legal: SECTION 04 TOWNSHIP 4S RANGE 1E QUARTER C TAX LOT 01201

APN: 1002177
Ref Parcel #: 41E04C 01201
Taxes: \$4,463.63
Market Value: \$506,696
Assessed Value: \$257,906
Sales Price: \$0
Transfer Date: 10/23/1998



Legal Owner: Jennie & John Peakes
Site Address: 425 SW 14th Ct Canby, OR 97013
Mailing Address: 425 SW 14th Ct Canby, OR 97013
Bedrooms: 3
Bathrooms: 2.5
Building SqFt: 1,879 Lot Acres: 0.12
Year Built: 2004
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION SEQUOIA PLACE LT 10 3820

APN: 5008145
Ref Parcel #: 41E04CA01210
Taxes: \$4,805.48
Market Value: \$468,827
Assessed Value: \$277,658
Sales Price: \$221,500
Transfer Date: 4/11/2012



Legal Owner: Kenneth Patton
Site Address: 1711 S Fir St Canby, OR 97013
Mailing Address: 1711 S Fir St Canby, OR 97013
Bedrooms: 3
Bathrooms: 2
Building SqFt: 1,914 Lot Acres: 0.15
Year Built: 2019
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 2 4596 LT 39

APN: 5035388
Ref Parcel #: 41E04CA02239
Taxes: \$5,316.48
Market Value: \$616,938
Assessed Value: \$307,183
Sales Price: \$554,445
Transfer Date: 2/11/2021



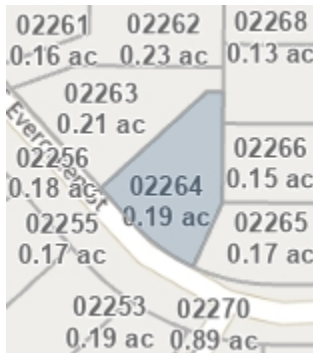
First American Title™

Customer Service Department

Phone: 503.219.8746(TRIO)

Email: cs.oregon@firstam.com

Report Generated: 7/5/2023



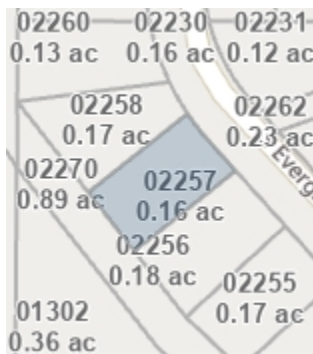
Legal Owner: Corey Oswald
Site Address: 1764 S Evergreen St Canby, OR 97013
Mailing Address: 1764 S Evergreen St Canby, OR 97013
Bedrooms: 4
Bathrooms: 3
Building SqFt: 2,403 Lot Acres: 0.19
Year Built: 2020
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 2 4596 LT 64

APN: 5035413
Ref Parcel #: 41E04CA02264
Taxes: \$5,938.83
Market Value: \$628,080
Assessed Value: \$343,142
Sales Price: \$508,500
Transfer Date: 9/9/2020



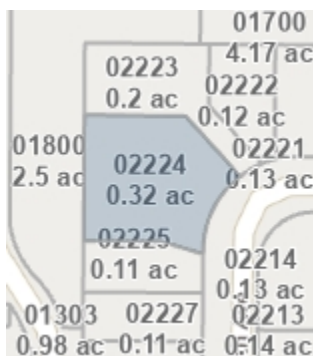
Legal Owner: Ralph A Netter Revocable Trust
Site Address: 1547 S Fir St Canby, OR 97013
Mailing Address: 536 NW 14th Ave Canby, OR 97013
Bedrooms: 3
Bathrooms: 2.5
Building SqFt: 2,616 Lot Acres: 2.00
Year Built: 1983
School District: Canby School District 86
Neighborhood: Canby
Legal: SECTION 04 TOWNSHIP 4S RANGE 1E QUARTER CA TAX LOT 01500

APN: 1002417
Ref Parcel #: 41E04CA01500
Taxes: \$7,551.42
Market Value: \$745,511
Assessed Value: \$436,317
Sales Price: \$950,000
Transfer Date: 7/26/2022



Legal Owner: Mui Family Trust
Site Address: 1749 S Evergreen St Canby, OR 97013
Mailing Address: 1749 S Evergreen St Canby, OR 97013
Bedrooms: 3
Bathrooms: 2
Building SqFt: 1,879 Lot Acres: 0.16
Year Built: 2020
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 2 4596 LT 57

APN: 5035406
Ref Parcel #: 41E04CA02257
Taxes: \$5,592.63
Market Value: \$591,320
Assessed Value: \$323,139
Sales Price: \$512,900
Transfer Date: 12/14/2020

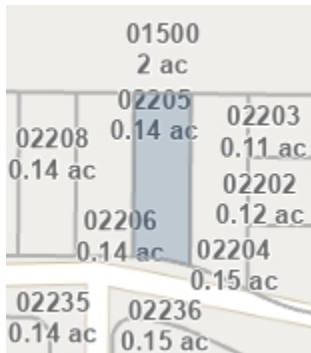


Legal Owner: Chase & Emma Moody
Site Address: 1555 S Evergreen St Canby, OR 97013
Mailing Address: 1555 S Evergreen St Canby, OR 97013
Bedrooms: 4
Bathrooms: 2.5
Building SqFt: 2,480 Lot Acres: 0.32
Year Built: 1983
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 4585 LT 24

APN: 5035134
Ref Parcel #: 41E04CA02224
Taxes: \$6,794.41
Market Value: \$562,602
Assessed Value: \$356,858
Sales Price: \$0
Transfer Date:

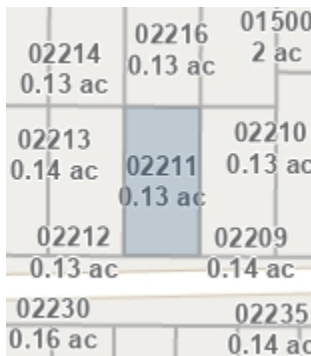


Customer Service Department
 Phone: 503.219.8746(TRIO)
 Email: cs.oregon@firstam.com
 Report Generated: 7/5/2023



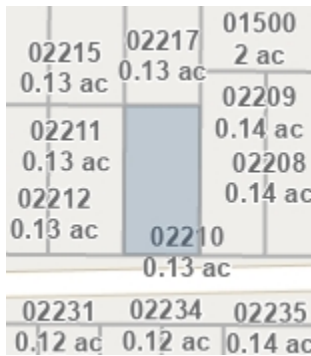
Legal Owner: Ashley & Zachary Misenhimer
 Site Address: 438 SW 16th Ave Canby, OR 97013
 Mailing Address: 438 SW 16th Ave Canby, OR 97013
 Bedrooms: 4
 Bathrooms: 2.5
 Building SqFt: 2,343 Lot Acres: 0.14
 Year Built: 2020
 School District: Canby School District 86
 Neighborhood: Canby
 Legal: SUBDIVISION BECK POND 4585 LT 5

APN: 5035115
 Ref Parcel #: 41E04CA02205
 Taxes: \$5,466.49
 Market Value: \$581,027
 Assessed Value: \$315,851
 Sales Price: \$483,900
 Transfer Date: 2/18/2021



Legal Owner: Anneliese & Anthony Misenhimer
 Site Address: 468 SW 16th Ave Canby, OR 97013
 Mailing Address: 468 SW 16th Ave Canby, OR 97013
 Bedrooms: 5
 Bathrooms: 3
 Building SqFt: 2,422 Lot Acres: 0.13
 Year Built: 2020
 School District: Canby School District 86
 Neighborhood: Canby
 Legal: SUBDIVISION BECK POND 4585 LT 11

APN: 5035121
 Ref Parcel #: 41E04CA02211
 Taxes: \$5,517.07
 Market Value: \$584,058
 Assessed Value: \$318,773
 Sales Price: \$494,500
 Transfer Date: 11/12/2020



Legal Owner: Whitney & Allen Miller
 Site Address: 466 SW 16th Ave Canby, OR 97013
 Mailing Address: 466 SW 16th Ave Canby, OR 97013
 Bedrooms: 3
 Bathrooms: 2
 Building SqFt: 1,680 Lot Acres: 0.13
 Year Built: 2020
 School District: Canby School District 86
 Neighborhood: Canby
 Legal: SUBDIVISION BECK POND 4585 LT 10

APN: 5035120
 Ref Parcel #: 41E04CA02210
 Taxes: \$5,003.58
 Market Value: \$529,158
 Assessed Value: \$289,104
 Sales Price: \$442,900
 Transfer Date: 12/10/2020



Legal Owner: Meadows At Hope Village Lp
 Site Address: 1546 S Fir St Canby, OR 97013
 Mailing Address: 1535 S Ivy St Canby, OR 97013
 Bedrooms: 0
 Bathrooms: 0
 Building SqFt: 0 Lot Acres: 3.00
 Year Built: 0
 School District: Canby School District 86
 Neighborhood: Canby
 Legal: SUBDIVISION HOPE CAMPUS LT 7 & PT LT 8 3345

APN: 1783537
 Ref Parcel #: 41E04D 00809
 Taxes: \$29,098.72
 Market Value: \$1,462,057
 Assessed Value: \$1,681,307
 Sales Price: \$370,000
 Transfer Date: 4/7/2003



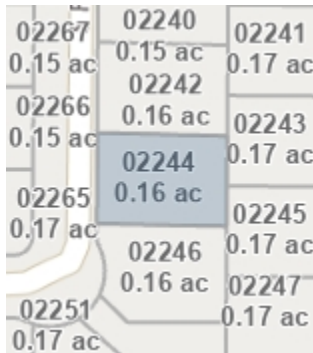
First American Title™

Customer Service Department

Phone: 503.219.8746(TRIO)

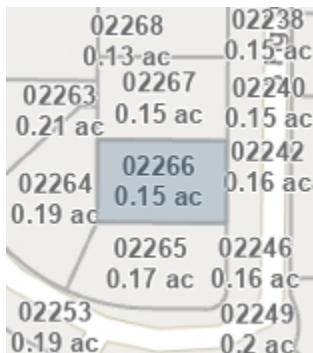
Email: cs.oregon@firstam.com

Report Generated: 7/5/2023



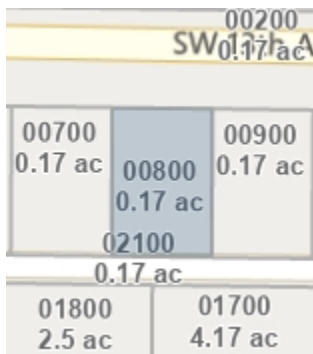
Legal Owner: William & Carla Mccauley
Site Address: 1748 S Fig St Canby, OR 97013
Mailing Address: 1748 S Fig St Canby, OR 97013
Bedrooms: 3
Bathrooms: 2
Building SqFt: 1,893 Lot Acres: 0.16
Year Built: 2020
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 2 4596 LT 44

APN: 5035393
Ref Parcel #: 41E04CA02244
Taxes: \$5,617.35
Market Value: \$593,970
Assessed Value: \$324,567
Sales Price: \$0
Transfer Date:



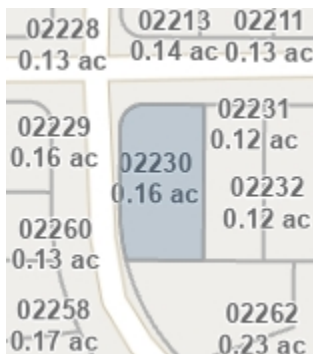
Legal Owner: Jeremy & Amy Mccamish
Site Address: 1741 S Fig St Canby, OR 97013
Mailing Address: 6004 Cobblestone Dr Ventura, CA 93003
Bedrooms: 3
Bathrooms: 2
Building SqFt: 1,817 Lot Acres: 0.15
Year Built: 2020
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 2 4596 LT 66

APN: 5035415
Ref Parcel #: 41E04CA02266
Taxes: \$5,349.34
Market Value: \$565,927
Assessed Value: \$309,082
Sales Price: \$455,900
Transfer Date: 7/14/2020



Legal Owner: John & Anna Makin
Site Address: 473 SW 13th Ave Canby, OR 97013
Mailing Address: 473 SW 13th Ave Canby, OR 97013
Bedrooms: 3
Bathrooms: 2
Building SqFt: 1,204 Lot Acres: 0.17
Year Built: 1986
School District: Canby School District 86
Neighborhood: Canby
Legal: 2715 ELMWOOD PARK LT 8 SEE RELATED 1/5 INT TRACT C

APN: 1002346
Ref Parcel #: 41E04CA00800
Taxes: \$3,520.81
Market Value: \$393,302
Assessed Value: \$203,430
Sales Price: \$89,500
Transfer Date: 4/1/1993



Legal Owner: Jesse Garratt & Ashley Morris
Site Address: 487 SW 16th Ave Canby, OR 97013
Mailing Address: 487 SW 16th Ave Canby, OR 97013
Bedrooms: 4
Bathrooms: 3
Building SqFt: 2,406 Lot Acres: 0.16
Year Built: 2020
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 4585 LT 30

APN: 5035140
Ref Parcel #: 41E04CA02230
Taxes: \$5,613.54
Market Value: \$593,979
Assessed Value: \$324,347
Sales Price: \$625,000
Transfer Date: 4/7/2023



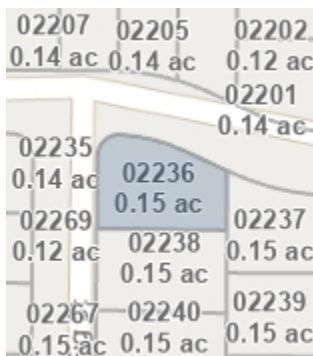
First American Title™

Customer Service Department

Phone: 503.219.8746(TRIO)

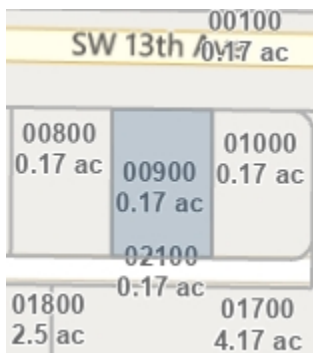
Email: cs.oregon@firstam.com

Report Generated: 7/5/2023



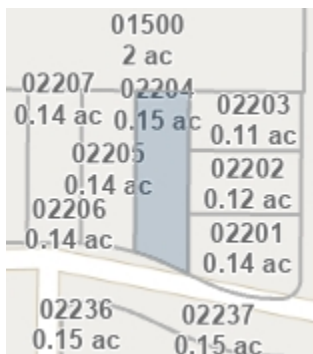
Legal Owner: David & Michelle Lingel
Site Address: 1690 S Fig St Canby, OR 97013
Mailing Address: 1690 S Fig St Canby, OR 97013
Bedrooms: 4
Bathrooms: 2.5
Building SqFt: 2,364 Lot Acres: 0.15
Year Built: 2020
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 4585 LT 36

APN: 5035146
Ref Parcel #: 41E04CA02236
Taxes: \$5,436.19
Market Value: \$581,587
Assessed Value: \$314,100
Sales Price: \$510,400
Transfer Date: 4/20/2021



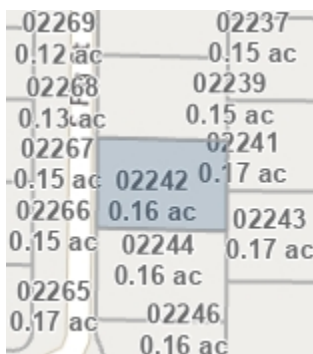
Legal Owner: Kristin Lemelson & Brian Terranova
Site Address: 453 SW 13th Ave Canby, OR 97013
Mailing Address: 453 SW 13th Ave Canby, OR 97013
Bedrooms: 2
Bathrooms: 2
Building SqFt: 1,288 Lot Acres: 0.17
Year Built: 1989
School District: Canby School District 86
Neighborhood: Canby
Legal: 2715 ELMWOOD PARK LT 9 SEE RELATED 1/5 INT TRACT C

APN: 1002355
Ref Parcel #: 41E04CA00900
Taxes: \$3,756.58
Market Value: \$405,202
Assessed Value: \$217,053
Sales Price: \$305,241
Transfer Date: 6/26/2017



Legal Owner: Anthony Lemanski
Site Address: 432 SW 16th Ave Canby, OR 97013
Mailing Address: 432 SW 16th Ave Canby, OR 97013
Bedrooms: 3
Bathrooms: 2.5
Building SqFt: 2,096 Lot Acres: 0.15
Year Built: 2020
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 4585 LT 4

APN: 5035114
Ref Parcel #: 41E04CA02204
Taxes: \$5,344.36
Market Value: \$567,629
Assessed Value: \$308,794
Sales Price: \$471,900
Transfer Date: 2/23/2021

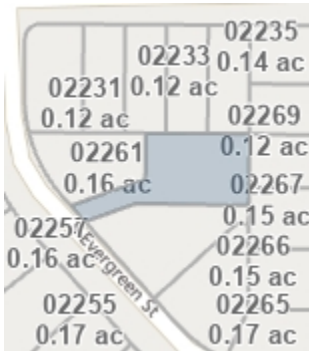


Legal Owner: Amanda & Richard Leetch
Site Address: 1736 S Fig St Canby, OR 97013
Mailing Address: 1736 S Fig St Canby, OR 97013
Bedrooms: 5
Bathrooms: 3
Building SqFt: 2,383 Lot Acres: 0.16
Year Built: 2020
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 2 4596 LT 42

APN: 5035391
Ref Parcel #: 41E04CA02242
Taxes: \$5,866.74
Market Value: \$620,640
Assessed Value: \$338,977
Sales Price: \$498,000
Transfer Date: 7/1/2020

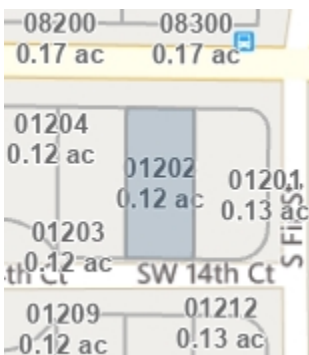


Customer Service Department
Phone: 503.219.8746(TRIO)
Email: cs.oregon@firstam.com
Report Generated: 7/5/2023



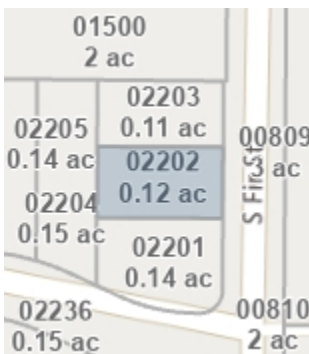
Legal Owner: Kim Lee
Site Address: 1726 S Evergreen St Canby, OR 97013
Mailing Address: 1726 S Evergreen St Canby, OR 97013
Bedrooms: 4
Bathrooms: 2.5
Building SqFt: 2,292 Lot Acres: 0.23
Year Built: 2020
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 2 4596 LT 62

APN: 5035411
Ref Parcel #: 41E04CA02262
Taxes: \$5,795.31
Market Value: \$612,753
Assessed Value: \$334,850
Sales Price: \$489,900
Transfer Date: 12/15/2020



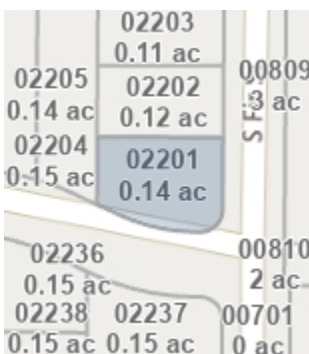
Legal Owner: Learfield Family Revocable Living Trust
Site Address: 410 SW 14th Ct Canby, OR 97013
Mailing Address: 23899 S Rondevic Dr Canby, OR 97013
Bedrooms: 2
Bathrooms: 2.5
Building SqFt: 1,696 Lot Acres: 0.12
Year Built: 2004
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION SEQUOIA PLACE LT 2 3820

APN: 5008137
Ref Parcel #: 41E04CA01202
Taxes: \$4,658.28
Market Value: \$461,137
Assessed Value: \$269,153
Sales Price: \$275,000
Transfer Date: 9/17/2009



Legal Owner: Phu & Paula Lau
Site Address: 1595 S Fir St Canby, OR 97013
Mailing Address: 1595 S Fir St Canby, OR 97013
Bedrooms: 4
Bathrooms: 2.5
Building SqFt: 2,364 Lot Acres: 0.12
Year Built: 2020
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 4585 LT 2

APN: 5035112
Ref Parcel #: 41E04CA02202
Taxes: \$5,441.64
Market Value: \$583,409
Assessed Value: \$314,415
Sales Price: \$526,900
Transfer Date: 4/15/2021

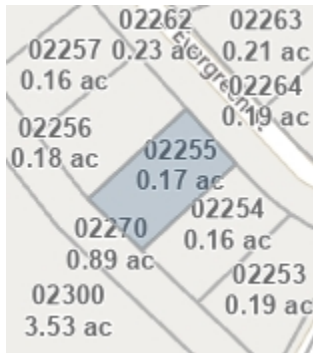


Legal Owner: Karyakos Lange & Paul Karyakos
Site Address: 1667 S Fir St Canby, OR 97013
Mailing Address: 1667 S Fir St Canby, OR 97013
Bedrooms: 3
Bathrooms: 2.5
Building SqFt: 2,112 Lot Acres: 0.14
Year Built: 2020
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 4585 LT 1

APN: 5035111
Ref Parcel #: 41E04CA02201
Taxes: \$5,255.75
Market Value: \$562,557
Assessed Value: \$303,674
Sales Price: \$492,400
Transfer Date: 4/19/2021

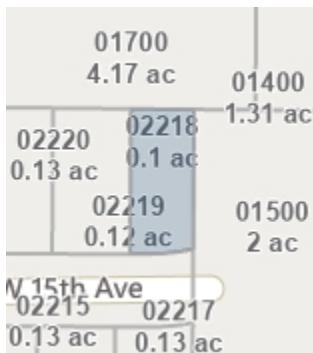


Customer Service Department
Phone: 503.219.8746(TRIO)
Email: cs.oregon@firstam.com
Report Generated: 7/5/2023



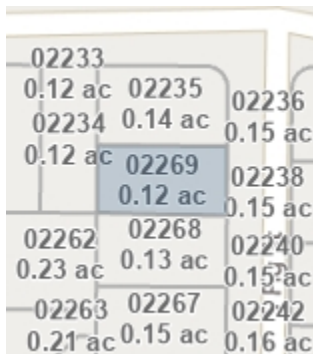
Legal Owner: Jill Downs & David Kruse
Site Address: 1755 S Evergreen St Canby, OR 97013
Mailing Address: 1755 S Evergreen St Canby, OR 97013
Bedrooms: 3
Bathrooms: 2
Building SqFt: 1,802 Lot Acres: 0.17
Year Built: 2020
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 2 4596 LT 55

APN: 5035404
Ref Parcel #: 41E04CA02255
Taxes: \$5,520.07
Market Value: \$583,570
Assessed Value: \$318,946
Sales Price: \$482,900
Transfer Date: 9/29/2020



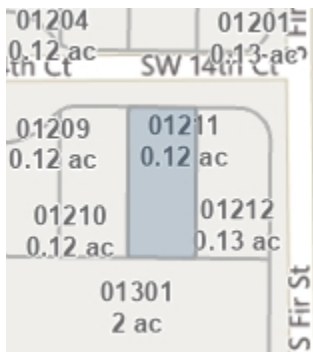
Legal Owner: Melody & Vann Keo
Site Address: 462 SW 15th Ave Canby, OR 97013
Mailing Address: 462 SW 15th Ave Canby, OR 97013
Bedrooms: 3
Bathrooms: 2.5
Building SqFt: 2,116 Lot Acres: 0.10
Year Built: 2019
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 4585 LT 18

APN: 5035128
Ref Parcel #: 41E04CA02218
Taxes: \$5,259.78
Market Value: \$539,887
Assessed Value: \$303,907
Sales Price: \$586,000
Transfer Date: 2/14/2022



Legal Owner: Kayla Jordan & Jeffrey Nogle
Site Address: 1713 S Fig St Canby, OR 97013
Mailing Address: 1713 S Fig St Canby, OR 97013
Bedrooms: 4
Bathrooms: 2.5
Building SqFt: 2,364 Lot Acres: 0.12
Year Built: 2020
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 2 4596 LT 69

APN: 5035418
Ref Parcel #: 41E04CA02269
Taxes: \$5,581.99
Market Value: \$590,998
Assessed Value: \$322,524
Sales Price: \$479,900
Transfer Date: 5/28/2020



Legal Owner: Joshua & Jennifer Jensen
Site Address: 415 SW 14th Ct Canby, OR 97013
Mailing Address: 37565 S Blair Rd Molalla, OR 97038
Bedrooms: 3
Bathrooms: 2.5
Building SqFt: 1,915 Lot Acres: 0.12
Year Built: 2004
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION SEQUOIA PLACE LT 11 3820

APN: 5008146
Ref Parcel #: 41E04CA01211
Taxes: \$4,879.29
Market Value: \$475,057
Assessed Value: \$281,923
Sales Price: \$290,000
Transfer Date: 8/6/2009



Customer Service Department
Phone: 503.219.8746(TRIO)
Email: cs.oregon@firstam.com
Report Generated: 7/5/2023



Legal Owner: Hope Village Inc
Site Address: 400 SW Pacific Crest Dr Canby, OR 97013
Mailing Address: 1535 S Ivy St Canby, OR 97013
Bedrooms: 3
Bathrooms: 2
Building SqFt: 1,548 Lot Acres: 2.00
Year Built: 1958
School District: Canby School District 86
Neighborhood: Canby
Legal: SECTION 04 TOWNSHIP 4S RANGE 1E QUARTER CA TAX LOT 01301

APN: 1543486
Ref Parcel #: 41E04CA01301
Taxes: \$29,480.38
Market Value: \$788,042
Assessed Value: \$1,703,359
Sales Price: \$625,000
Transfer Date: 12/10/2014



Legal Owner: Hope Village Inc
Site Address: 1441 S Ivy St Canby, OR 97013
Mailing Address: 1535 S Ivy St Canby, OR 97013
Bedrooms: 0
Bathrooms: 0
Building SqFt: 0 Lot Acres: 2.00
Year Built: 0
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION HOPE CAMPUS PT LT 4 3345

APN: 1783500
Ref Parcel #: 41E04D 00806
Taxes: \$32,650.40
Market Value: \$359,718
Assessed Value: \$1,886,521
Sales Price: \$0
Transfer Date:



Legal Owner: Hope Village Inc
Site Address: 1441 S Ivy St Canby, OR 97013
Mailing Address: 1535 S Ivy St Canby, OR 97013
Bedrooms: 0
Bathrooms: 0
Building SqFt: 0 Lot Acres: 3.00
Year Built: 0
School District: Canby School District 86
Neighborhood: Canby
Legal: 3345 HOPE CAMPUS LT 5

APN: 1783519
Ref Parcel #: 41E04D 00807
Taxes: \$33,596.87
Market Value: \$2,400,509
Assessed Value: \$1,941,208
Sales Price: \$139,719
Transfer Date: 10/28/1999



Legal Owner: Hope Village Inc
Site Address: 1441 S Ivy St Canby, OR 97013
Mailing Address: 1535 S Ivy St Canby, OR 97013
Bedrooms: 0
Bathrooms: 0
Building SqFt: 0 Lot Acres: 1.00
Year Built: 0
School District: Canby School District 86
Neighborhood: Canby
Legal: 3345 HOPE CAMPUS LT 6

APN: 1783528
Ref Parcel #: 41E04D 00808
Taxes: \$14,302.88
Market Value: \$140,216
Assessed Value: \$826,412
Sales Price: \$0
Transfer Date:



Customer Service Department
Phone: 503.219.8746(TRIO)
Email: cs.oregon@firstam.com
Report Generated: 7/5/2023



Legal Owner: Hope Village Inc
Site Address: 1535 S Ivy St Canby, OR 97013
Mailing Address: 1535 S Ivy St Canby, OR 97013
Bedrooms: 0
Bathrooms: 0
Building SqFt: 0 Lot Acres: 3.00
Year Built: 0
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION HOPE CAMPUS LT 9 PT LTS 3 & 4 3345 SEE EXEMPT PORTION 00811E1

APN: 1783555
Ref Parcel #: 41E04D 00811
Taxes: \$18,230.67
Market Value: \$1,236,680
Assessed Value: \$1,053,357
Sales Price: \$0
Transfer Date:



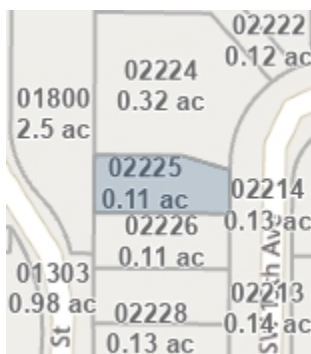
Legal Owner: Hope Village Inc
Site Address: 1603 S Ivy St Canby, OR 97013
Mailing Address: 1535 S Ivy St Canby, OR 97013
Bedrooms: 0
Bathrooms: 0
Building SqFt: 0 Lot Acres: 7.06
Year Built: 0
School District: Canby School District 86
Neighborhood: Canby
Legal: PARTITION PLAT 2022-071 PARCEL 1

APN: 1002630
Ref Parcel #: 41E04DC00700
Taxes: \$221.54
Market Value: \$682,896
Assessed Value: \$12,800
Sales Price: \$2,200,000
Transfer Date: 12/6/2018



Legal Owner: Hope Village Inc
Site Address: 1703 S Ivy St Canby, OR 97013
Mailing Address: 1535 S Ivy St Canby, OR 97013
Bedrooms: 0
Bathrooms: 0
Building SqFt: 0 Lot Acres: 0.00
Year Built: 0
School District: Canby School District 86
Neighborhood: Canby
Legal: PARTITION PLAT 2022-071 PARCEL 2

APN: 5038778
Ref Parcel #: 41E04DC00701
Taxes: \$0.00
Market Value: \$0
Assessed Value: \$0
Sales Price: \$0
Transfer Date:

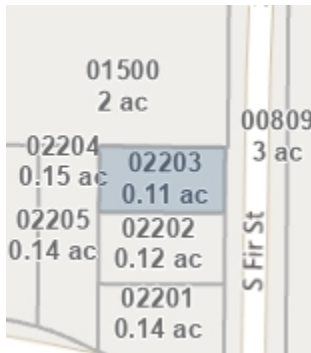


Legal Owner: Emily & Kevin Hill
Site Address: 1561 S Evergreen St Canby, OR 97013
Mailing Address: 1561 S Evergreen St Canby, OR 97013
Bedrooms: 3
Bathrooms: 2.5
Building SqFt: 2,112 Lot Acres: 0.11
Year Built: 2019
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 4585 LT 25

APN: 5035135
Ref Parcel #: 41E04CA02225
Taxes: \$5,231.43
Market Value: \$546,688
Assessed Value: \$302,269
Sales Price: \$431,900
Transfer Date: 4/3/2020

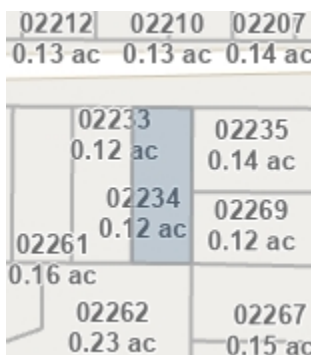


Customer Service Department
 Phone: 503.219.8746(TRIO)
 Email: cs.oregon@firstam.com
 Report Generated: 7/5/2023



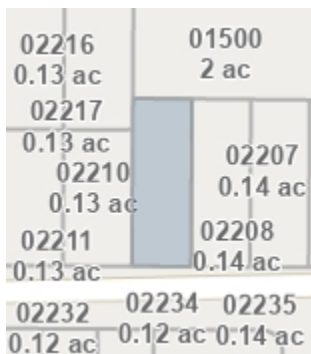
Legal Owner: Selene Hernandez
 Site Address: 1573 S Fir St Canby, OR 97013
 Mailing Address: 1573 S Fir St Canby, OR 97013
 Bedrooms: 4
 Bathrooms: 3
 Building SqFt: 2,422 Lot Acres: 0.11
 Year Built: 2020
 School District: Canby School District 86
 Neighborhood: Canby
 Legal: SUBDIVISION BECK POND 4585 LT 3

APN: 5035113
 Ref Parcel #: 41E04CA02203
 Taxes: \$5,373.96
 Market Value: \$573,018
 Assessed Value: \$310,504
 Sales Price: \$650,000
 Transfer Date: 3/24/2022



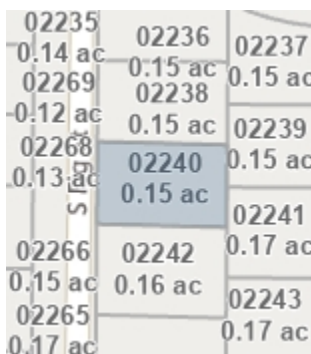
Legal Owner: Brooke Henry
 Site Address: 469 SW 16th Ave Canby, OR 97013
 Mailing Address: 469 SW 16th Ave Canby, OR 97013
 Bedrooms: 3
 Bathrooms: 2.5
 Building SqFt: 2,112 Lot Acres: 0.12
 Year Built: 2020
 School District: Canby School District 86
 Neighborhood: Canby
 Legal: SUBDIVISION BECK POND 4585 LT 34

APN: 5035144
 Ref Parcel #: 41E04CA02234
 Taxes: \$5,197.18
 Market Value: \$550,139
 Assessed Value: \$300,290
 Sales Price: \$450,900
 Transfer Date: 12/10/2020



Legal Owner: Trenton & Heather Hartill
 Site Address: 454 SW 16th Ave Canby, OR 97013
 Mailing Address: 454 SW 16th Ave Canby, OR 97013
 Bedrooms: 3
 Bathrooms: 2.5
 Building SqFt: 2,112 Lot Acres: 0.14
 Year Built: 2020
 School District: Canby School District 86
 Neighborhood: Canby
 Legal: SUBDIVISION BECK POND 4585 LT 9

APN: 5035119
 Ref Parcel #: 41E04CA02209
 Taxes: \$5,317.85
 Market Value: \$562,557
 Assessed Value: \$307,262
 Sales Price: \$459,900
 Transfer Date: 1/15/2021



Legal Owner: Shirley Harris
 Site Address: 1724 S Fig St Canby, OR 97013
 Mailing Address: 3228 SW 33rd St Gresham, OR 97080
 Bedrooms: 3
 Bathrooms: 2
 Building SqFt: 1,817 Lot Acres: 0.15
 Year Built: 2020
 School District: Canby School District 86
 Neighborhood: Canby
 Legal: SUBDIVISION BECK POND 2 4596 LT 40

APN: 5035389
 Ref Parcel #: 41E04CA02240
 Taxes: \$5,309.59
 Market Value: \$565,927
 Assessed Value: \$306,785
 Sales Price: \$514,400
 Transfer Date: 4/13/2021



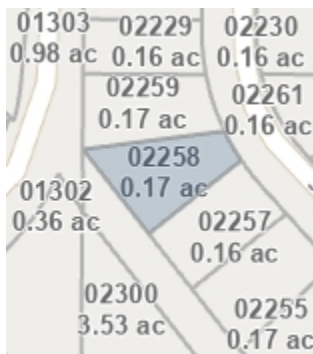
First American Title™

Customer Service Department

Phone: 503.219.8746(TRIO)

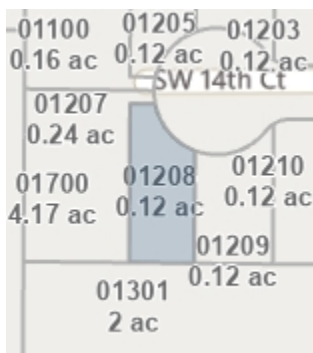
Email: cs.oregon@firstam.com

Report Generated: 7/5/2023



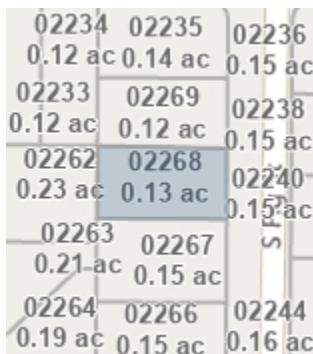
Legal Owner: Mclaine & John Grim
Site Address: 1737 S Evergreen St Canby, OR 97013
Mailing Address: 1737 S Evergreen St Canby, OR 97013
Bedrooms: 5
Bathrooms: 3
Building SqFt: 2,422 Lot Acres: 0.17
Year Built: 2019
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 2 4596 LT 58

APN: 5035407
Ref Parcel #: 41E04CA02258
Taxes: \$5,684.99
Market Value: \$604,760
Assessed Value: \$328,475
Sales Price: \$514,500
Transfer Date: 12/21/2020



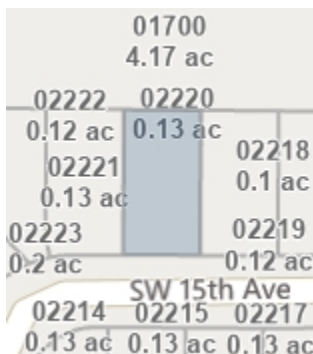
Legal Owner: Susan Graper
Site Address: 445 SW 14th Ct Canby, OR 97013
Mailing Address: 7168 Olalla Canyon Rd Cashmere, WA
Bedrooms: 3
Bathrooms: 2.5
Building SqFt: 1,488 Lot Acres: 0.12
Year Built: 2004
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION SEQUOIA PLACE LT 8 3820

APN: 5008143
Ref Parcel #: 41E04CA01208
Taxes: \$4,452.52
Market Value: \$436,797
Assessed Value: \$257,264
Sales Price: \$206,800
Transfer Date: 10/29/2004



Legal Owner: Alejandro & Aracely Gopar
Site Address: 1727 S Fig St Canby, OR 97013
Mailing Address: 1727 S Fig St Canby, OR 97013
Bedrooms: 5
Bathrooms: 3
Building SqFt: 2,422 Lot Acres: 0.13
Year Built: 2020
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 2 4596 LT 68

APN: 5035417
Ref Parcel #: 41E04CA02268
Taxes: \$5,517.07
Market Value: \$584,058
Assessed Value: \$318,773
Sales Price: \$484,500
Transfer Date: 5/28/2020

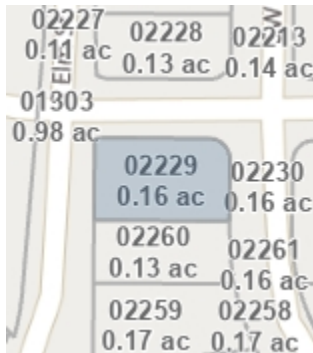


Legal Owner: Chayse Gillespie & Lynnsey Yates
Site Address: 476 SW 15th Ave Canby, OR 97013
Mailing Address: 476 SW 15th Ave Canby, OR 97013
Bedrooms: 4
Bathrooms: 2.5
Building SqFt: 2,345 Lot Acres: 0.13
Year Built: 2019
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 4585 LT 20

APN: 5035130
Ref Parcel #: 41E04CA02220
Taxes: \$5,680.14
Market Value: \$583,009
Assessed Value: \$328,195
Sales Price: \$660,000
Transfer Date: 5/31/2022

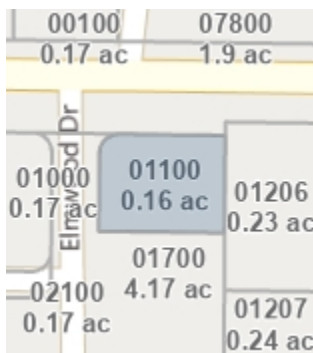


Customer Service Department
Phone: 503.219.8746(TRIO)
Email: cs.oregon@firstam.com
Report Generated: 7/5/2023



Legal Owner: Robert & Valerie Guertze
Site Address: 1699 S Evergreen St Canby, OR 97013
Mailing Address: 23255 SW Pine St Canby, OR 97013
Bedrooms: 4
Bathrooms: 2
Building SqFt: 1,962 Lot Acres: 0.16
Year Built: 2019
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 4585 LT 29

APN: 5035139
Ref Parcel #: 41E04CA02229
Taxes: \$5,467.60
Market Value: \$581,300
Assessed Value: \$315,915
Sales Price: \$486,900
Transfer Date: 1/21/2021



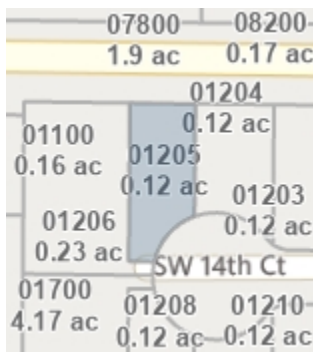
Legal Owner: Finzer Properties Llc
Site Address: 433 SW 13th Ave Canby, OR 97013
Mailing Address: 13567 SE Deana Way Clackamas, OR
Bedrooms: 3
Bathrooms: 2
Building SqFt: 1,107 Lot Acres: 0.16
Year Built: 1986
School District: Canby School District 86
Neighborhood: Canby
Legal: 2715 ELMWOOD PARK LT 11

APN: 1002373
Ref Parcel #: 41E04CA01100
Taxes: \$3,523.17
Market Value: \$394,232
Assessed Value: \$203,567
Sales Price: \$323,000
Transfer Date: 9/18/2019



Legal Owner: Elmwood Park Homeowners Lts 6-
Site Address: No Site Address , OR
Mailing Address: ,
Bedrooms: 0
Bathrooms: 0
Building SqFt: 0 Lot Acres: 0.17
Year Built: 0
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION ELMWOOD PARK 2715 TRACT C PRIVATE ROAD SEE RELATED 1/5

APN: 5014580
Ref Parcel #: 41E04CA02100
Taxes: \$0.00
Market Value: \$0
Assessed Value: \$0
Sales Price: \$0
Transfer Date:

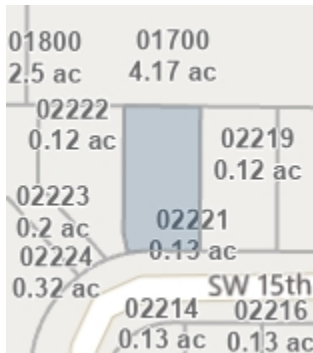


Legal Owner: Abigail & Brandon Ellis
Site Address: 440 SW 14th Ct Canby, OR 97013
Mailing Address: 440 SW 14th Ct Canby, OR 97013
Bedrooms: 3
Bathrooms: 2.5
Building SqFt: 1,604 Lot Acres: 0.12
Year Built: 2004
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION SEQUOIA PLACE LT 5 3820

APN: 5008140
Ref Parcel #: 41E04CA01205
Taxes: \$4,503.88
Market Value: \$444,247
Assessed Value: \$260,232
Sales Price: \$0
Transfer Date: 11/3/2014

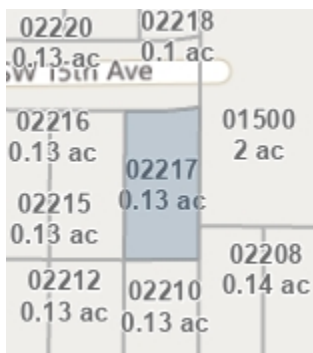


Customer Service Department
Phone: 503.219.8746(TRIO)
Email: cs.oregon@firstam.com
Report Generated: 7/5/2023



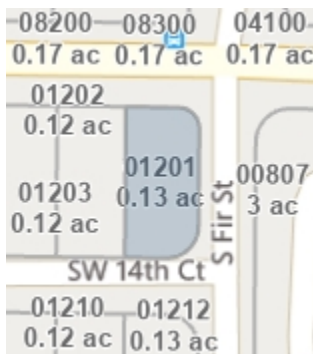
Legal Owner: Brianna & Togamau Elisara
Site Address: 488 SW 15th Ave Canby, OR 97013
Mailing Address: 488 SW 15th Ave Canby, OR 97013
Bedrooms: 5
Bathrooms: 3
Building SqFt: 2,422 Lot Acres: 0.13
Year Built: 2019
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 4585 LT 21

APN: 5035131
Ref Parcel #: 41E04CA02221
Taxes: \$5,616.40
Market Value: \$576,469
Assessed Value: \$324,512
Sales Price: \$462,500
Transfer Date: 1/13/2020



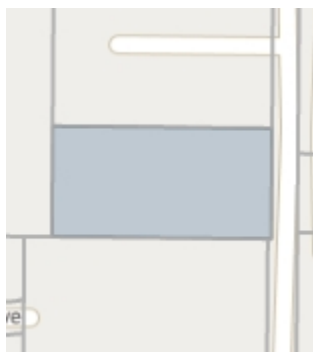
Legal Owner: Julie & Paul Duris
Site Address: 463 SW 15th Ave Canby, OR 97013
Mailing Address: 463 SW 15th Ave Canby, OR 97013
Bedrooms: 3
Bathrooms: 2
Building SqFt: 1,664 Lot Acres: 0.13
Year Built: 2019
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 4585 LT 17

APN: 5035127
Ref Parcel #: 41E04CA02217
Taxes: \$4,907.80
Market Value: \$503,948
Assessed Value: \$283,570
Sales Price: \$419,900
Transfer Date: 11/12/2019



Legal Owner: Shawn & Kaylee Durand
Site Address: 400 SW 14th Ct Canby, OR 97013
Mailing Address: 400 SW 14th Ct Canby, OR 97013
Bedrooms: 3
Bathrooms: 2.5
Building SqFt: 1,506 Lot Acres: 0.13
Year Built: 2004
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION SEQUOIA PLACE LT 1 3820

APN: 5008136
Ref Parcel #: 41E04CA01201
Taxes: \$4,409.35
Market Value: \$438,040
Assessed Value: \$254,770
Sales Price: \$364,000
Transfer Date: 5/30/2019



Legal Owner: Brian & Bridget Dupont
Site Address: 1495 S Fir St Canby, OR 97013
Mailing Address: 9757 Lariat Ln NE Aurora, OR 97002
Bedrooms: 3
Bathrooms: 2.5
Building SqFt: 1,655 Lot Acres: 1.31
Year Built: 1973
School District: Canby School District 86
Neighborhood: Canby
Legal: SECTION 04 TOWNSHIP 4S RANGE 1E QUARTER CA TAX LOT 01400

APN: 1002408
Ref Parcel #: 41E04CA01400
Taxes: \$5,288.65
Market Value: \$692,894
Assessed Value: \$380,451
Sales Price: \$610,000
Transfer Date: 2/9/2021



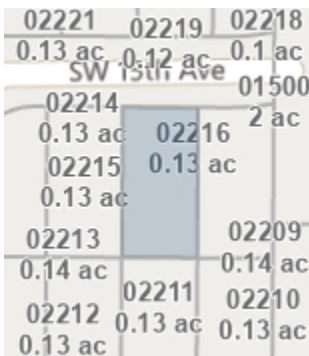
First American Title™

Customer Service Department

Phone: 503.219.8746(TRIO)

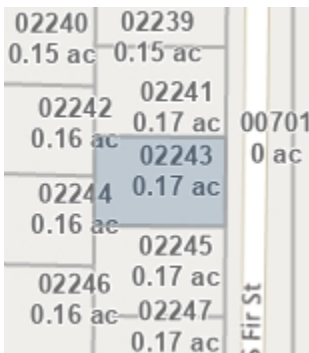
Email: cs.oregon@firstam.com

Report Generated: 7/5/2023



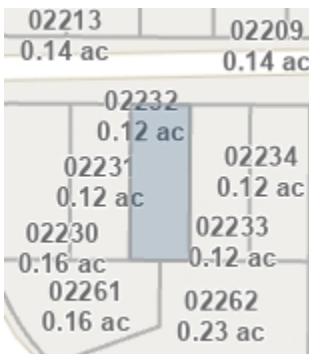
Legal Owner: Andrew & Christine Duncan
Site Address: 465 SW 15th Ave Canby, OR 97013
Mailing Address: 465 SW 15th Ave Canby, OR 97013
Bedrooms: 4
Bathrooms: 2.5
Building SqFt: 2,364 Lot Acres: 0.13
Year Built: 2019
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 4585 LT 16

APN: 5035126
Ref Parcel #: 41E04CA02216
Taxes: \$5,757.88
Market Value: \$590,998
Assessed Value: \$332,687
Sales Price: \$469,900
Transfer Date: 11/27/2019



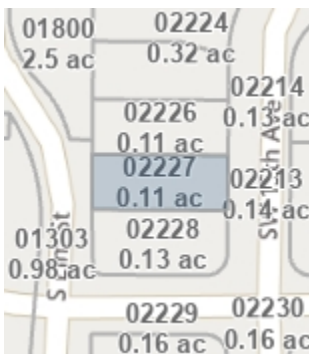
Legal Owner: Diane & Patrick Drebin
Site Address: 1735 S Fir St Canby, OR 97013
Mailing Address: 1735 S Fir St Canby, OR 97013
Bedrooms: 3
Bathrooms: 2
Building SqFt: 1,909 Lot Acres: 0.17
Year Built: 2019
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 2 4596 LT 43

APN: 5035392
Ref Parcel #: 41E04CA02243
Taxes: \$5,618.85
Market Value: \$599,020
Assessed Value: \$324,654
Sales Price: \$508,900
Transfer Date: 3/12/2021



Legal Owner: David & Lucinda Downs
Site Address: 475 SW 16th Ave Canby, OR 97013
Mailing Address: 475 SW 16th Ave Canby, OR 97013
Bedrooms: 3
Bathrooms: 2.5
Building SqFt: 2,092 Lot Acres: 0.12
Year Built: 2020
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 4585 LT 32

APN: 5035142
Ref Parcel #: 41E04CA02232
Taxes: \$5,191.92
Market Value: \$549,579
Assessed Value: \$299,986
Sales Price: \$443,900
Transfer Date: 11/16/2020



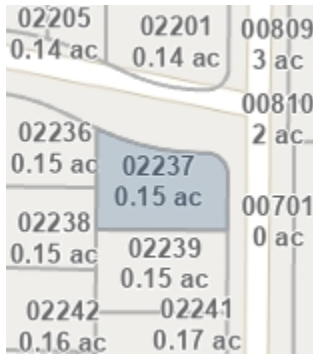
Legal Owner: Ryan Dixon & Rochelle Mckenzi
Site Address: 1573 S Evergreen St Canby, OR 97013
Mailing Address: 1573 S Evergreen St Canby, OR 97013
Bedrooms: 3
Bathrooms: 2.5
Building SqFt: 2,112 Lot Acres: 0.11
Year Built: 2019
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 4585 LT 27

APN: 5035137
Ref Parcel #: 41E04CA02227
Taxes: \$5,097.47
Market Value: \$538,407
Assessed Value: \$294,529
Sales Price: \$429,900
Transfer Date: 3/31/2020



First American Title™

Customer Service Department
Phone: 503.219.8746(TRIO)
Email: cs.oregon@firstam.com
Report Generated: 7/5/2023



Legal Owner: Joaquin Diaz & Diana Apodaca
Site Address: 1687 S Fir St Canby, OR 97013
Mailing Address: 1687 S Fir St Canby, OR 97013
Bedrooms: 5
Bathrooms: 3
Building SqFt: 2,422 Lot Acres: 0.15
Year Built: 2019
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 4585 LT 37

APN: 5035147
Ref Parcel #: 41E04CA02237
Taxes: \$5,790.69
Market Value: \$626,289
Assessed Value: \$334,583
Sales Price: \$575,000
Transfer Date: 3/31/2021



Legal Owner: Teresa Desimone
Site Address: 1400 S Elm St Canby, OR 97013
Mailing Address: Po Box 98757 Seattle, WA 98198
Bedrooms: 0
Bathrooms: 0
Building SqFt: 1 Lot Acres: 4.17
Year Built: 1986
School District: Canby School District 86
Neighborhood: Canby
Legal: SECTION 04 TOWNSHIP 4S RANGE 1E QUARTER CA TAX LOT 01700

APN: 1002435
Ref Parcel #: 41E04CA01700
Taxes: \$22,558.46
Market Value: \$3,444,578
Assessed Value: \$1,303,415
Sales Price: \$0
Transfer Date:



Legal Owner: Teresa Desimone
Site Address: 1400 S Elm St Canby, OR 97013
Mailing Address: Po Box 98757 Seattle, WA 98198
Bedrooms: 0
Bathrooms: 0
Building SqFt: 1 Lot Acres: 2.50
Year Built: 1986
School District: Canby School District 86
Neighborhood: Canby
Legal: SECTION 04 TOWNSHIP 4S RANGE 1E QUARTER CA TAX LOT 01800

APN: 1002444
Ref Parcel #: 41E04CA01800
Taxes: \$11,278.68
Market Value: \$1,722,204
Assessed Value: \$651,676
Sales Price: \$0
Transfer Date: 4/17/2015



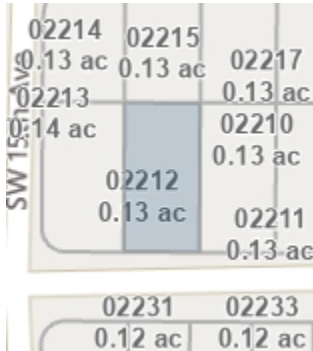
Legal Owner: Teresa Desimone
Site Address: 1400 S Elm St Canby, OR 97013
Mailing Address: Po Box 98757 Seattle, WA 98198
Bedrooms: 0
Bathrooms: 0
Building SqFt: 1 Lot Acres: 6.67
Year Built: 1986
School District: Canby School District 86
Neighborhood: Canby
Legal: SECTION 04 TOWNSHIP 4S RANGE 1E QUARTER CA TAX LOT 01900

APN: 1002453
Ref Parcel #: 41E04CA01900
Taxes: \$38,673.11
Market Value: \$5,905,302
Assessed Value: \$2,234,510
Sales Price: \$0
Transfer Date: 4/17/2015



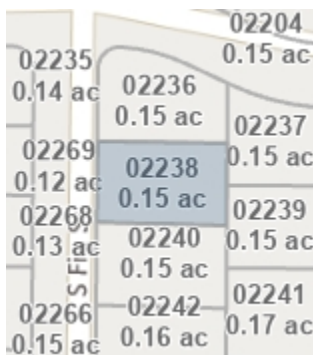
First American Title™

Customer Service Department
Phone: 503.219.8746(TRIO)
Email: cs.oregon@firstam.com
Report Generated: 7/5/2023



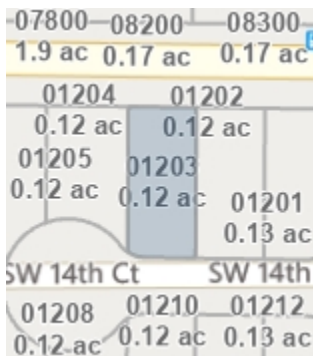
Legal Owner: Michael & Cheryl Cropper
Site Address: 472 SW 16th Ave Canby, OR 97013
Mailing Address: 472 SW 16th Ave Canby, OR 97013
Bedrooms: 3
Bathrooms: 2
Building SqFt: 1,680 Lot Acres: 0.13
Year Built: 2020
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 4585 LT 12

APN: 5035122
Ref Parcel #: 41E04CA02212
Taxes: \$5,003.58
Market Value: \$529,158
Assessed Value: \$289,104
Sales Price: \$438,900
Transfer Date: 10/27/2020



Legal Owner: Doris Creedon
Site Address: 1712 S Fig St Canby, OR 97013
Mailing Address: 5740 Childs Rd Lake Oswego, OR 97035
Bedrooms: 3
Bathrooms: 2
Building SqFt: 1,914 Lot Acres: 0.15
Year Built: 2020
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 2 4596 LT 38

APN: 5035387
Ref Parcel #: 41E04CA02238
Taxes: \$5,426.10
Market Value: \$579,097
Assessed Value: \$313,517
Sales Price: \$517,400
Transfer Date: 4/19/2021



Legal Owner: Michael & Mary Coy
Site Address: 420 SW 14th Ct Canby, OR 97013
Mailing Address: 3307 NE 141st St Vancouver, WA 98686
Bedrooms: 3
Bathrooms: 2.5
Building SqFt: 1,866 Lot Acres: 0.12
Year Built: 2004
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION SEQUOIA PLACE LT 3 3820

APN: 5008138
Ref Parcel #: 41E04CA01203
Taxes: \$4,814.84
Market Value: \$468,687
Assessed Value: \$278,199
Sales Price: \$249,900
Transfer Date: 2/10/2014

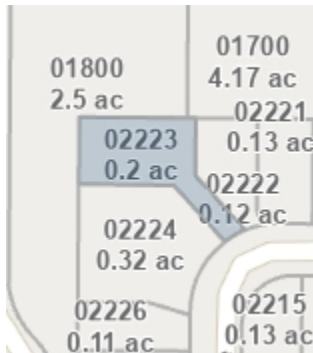


Legal Owner: Cascade House Hope Vlg Lp
Site Address: 1555 S Ivy St Canby, OR 97013
Mailing Address: 9600 SW Oak St STE 200 Portland, OR
Bedrooms: 0
Bathrooms: 0
Building SqFt: 0 Lot Acres: 2.00
Year Built: 1997
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION HOPE CAMPUS PT LT 8 3345

APN: 1783546
Ref Parcel #: 41E04D 00810
Taxes: \$24,921.54
Market Value: \$1,462,057
Assessed Value: \$1,439,952
Sales Price: \$0
Transfer Date:

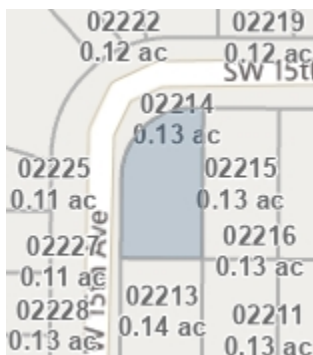


Customer Service Department
Phone: 503.219.8746(TRIO)
Email: cs.oregon@firstam.com
Report Generated: 7/5/2023



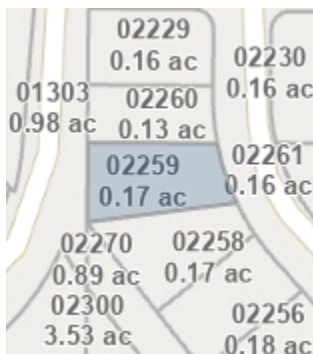
Legal Owner: Cambridge Collin Brock & Candi
Site Address: 492 SW 15th Ave Canby, OR 97013
Mailing Address: 492 SW 15th Ave Canby, OR 97013
Bedrooms: 5
Bathrooms: 3
Building SqFt: 2,387 Lot Acres: 0.20
Year Built: 2019
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 4585 LT 23

APN: 5035133
Ref Parcel #: 41E04CA02223
Taxes: \$5,942.04
Market Value: \$620,750
Assessed Value: \$343,328
Sales Price: \$475,000
Transfer Date: 3/23/2020



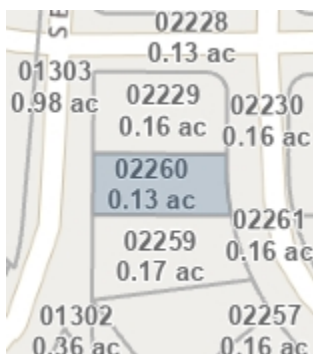
Legal Owner: Vicenta Camacho & Victor Vazquez
Site Address: 489 SW 15th Ave Canby, OR 97013
Mailing Address: 489 SW 15th Ave Canby, OR 97013
Bedrooms: 3
Bathrooms: 2.5
Building SqFt: 2,116 Lot Acres: 0.13
Year Built: 2019
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 4585 LT 14

APN: 5035124
Ref Parcel #: 41E04CA02214
Taxes: \$5,447.49
Market Value: \$559,208
Assessed Value: \$314,753
Sales Price: \$427,900
Transfer Date: 3/16/2020



Legal Owner: Jennifer & Roy Burchett
Site Address: 1725 S Evergreen St Canby, OR 97013
Mailing Address: 1725 S Evergreen St Canby, OR 97013
Bedrooms: 4
Bathrooms: 2
Building SqFt: 1,950 Lot Acres: 0.17
Year Built: 2020
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 2 4596 LT 59

APN: 5035408
Ref Parcel #: 41E04CA02259
Taxes: \$5,495.45
Market Value: \$580,940
Assessed Value: \$317,524
Sales Price: \$521,900
Transfer Date: 12/29/2020

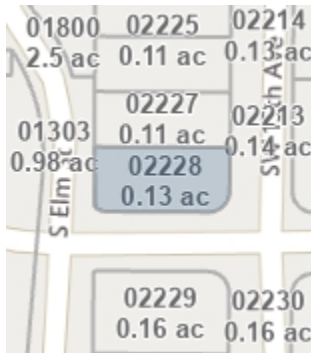


Legal Owner: Martie & Robert Buckley
Site Address: 1713 S Evergreen St Canby, OR 97013
Mailing Address: 1713 S Evergreen St Canby, OR 97013
Bedrooms: 5
Bathrooms: 3
Building SqFt: 2,422 Lot Acres: 0.13
Year Built: 2019
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 2 4596 LT 60

APN: 5035409
Ref Parcel #: 41E04CA02260
Taxes: \$5,483.86
Market Value: \$584,058
Assessed Value: \$316,854
Sales Price: \$512,500
Transfer Date: 1/6/2021

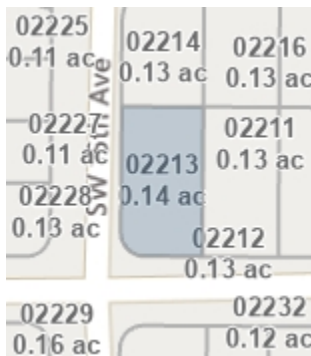


Customer Service Department
Phone: 503.219.8746(TRIO)
Email: cs.oregon@firstam.com
Report Generated: 7/5/2023



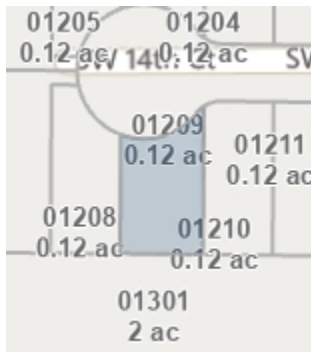
Legal Owner: Christopher & Courtney Bryan
Site Address: 1579 S Evergreen St Canby, OR 97013
Mailing Address: 1579 S Evergreen St Canby, OR 97013
Bedrooms: 4
Bathrooms: 2.5
Building SqFt: 2,364 Lot Acres: 0.13
Year Built: 2019
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 4585 LT 28

APN: 5035138
Ref Parcel #: 41E04CA02228
Taxes: \$5,463.18
Market Value: \$581,587
Assessed Value: \$315,659
Sales Price: \$571,000
Transfer Date: 11/18/2021



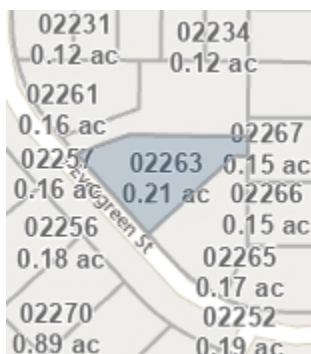
Legal Owner: Christopher & Erika Brand
Site Address: 484 SW 16th Ave Canby, OR 97013
Mailing Address: 484 SW 16th Ave Canby, OR 97013
Bedrooms: 4
Bathrooms: 2.5
Building SqFt: 2,364 Lot Acres: 0.14
Year Built: 2020
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 4585 LT 13

APN: 5035123
Ref Parcel #: 41E04CA02213
Taxes: \$5,448.81
Market Value: \$576,758
Assessed Value: \$314,829
Sales Price: \$468,445
Transfer Date: 10/19/2020



Legal Owner: Lynn Bloomfield
Site Address: 435 SW 14th Ct Canby, OR 97013
Mailing Address: 435 SW 14th Ct Canby, OR 97013
Bedrooms: 3
Bathrooms: 2.5
Building SqFt: 1,447 Lot Acres: 0.12
Year Built: 2004
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION SEQUOIA PLACE LT 9 3820

APN: 5008144
Ref Parcel #: 41E04CA01209
Taxes: \$4,599.93
Market Value: \$459,863
Assessed Value: \$265,781
Sales Price: \$194,900
Transfer Date: 10/4/2004

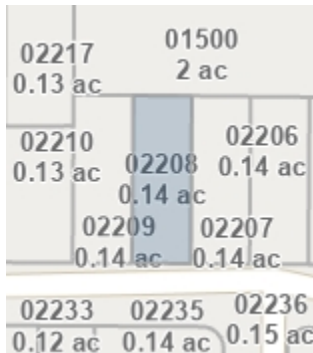


Legal Owner: Joseph & Annie Aispuro
Site Address: 1752 S Evergreen St Canby, OR 97013
Mailing Address: 1752 S Evergreen St Canby, OR 97013
Bedrooms: 4
Bathrooms: 2
Building SqFt: 1,942 Lot Acres: 0.21
Year Built: 2020
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 2 4596 LT 63

APN: 5035412
Ref Parcel #: 41E04CA02263
Taxes: \$5,120.30
Market Value: \$593,722
Assessed Value: \$324,734
Sales Price: \$463,350
Transfer Date: 10/5/2020



Customer Service Department
Phone: 503.219.8746(TRIO)
Email: cs.oregon@firstam.com
Report Generated: 7/5/2023



Legal Owner: Abdo Horcos & Tori Scott
Site Address: 452 SW 16th Ave Canby, OR 97013
Mailing Address: 452 SW 16th Ave Canby, OR 97013
Bedrooms: 4
Bathrooms: 2.5
Building SqFt: 2,343 Lot Acres: 0.14
Year Built: 2020
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION BECK POND 4585 LT 8

APN: 5035118
Ref Parcel #: 41E04CA02208
Taxes: \$5,443.67
Market Value: \$576,198
Assessed Value: \$314,532
Sales Price: \$475,900
Transfer Date: 1/20/2021



Legal Owner: Hope Village Inc
Site Address: 1535 S Ivy St Canby, OR 97013
Mailing Address: 1535 S Ivy St Canby, OR 97013
Bedrooms: 0
Bathrooms: 0
Building SqFt: 0 Lot Acres: 3.85
Year Built: 0
School District: Canby School District 86
Neighborhood: Canby
Legal: SUBDIVISION HOPE CAMPUS LT 9 PT LTS 3 & 4 3345

APN: 5004772
Ref Parcel #: 41E04D 00811
Taxes: \$0.00
Market Value: \$1,658,750
Assessed Value: \$769,660
Sales Price: \$0
Transfer Date:

S T J 1 Llc
130 SW 2nd Ave STE 103
Canby, OR 97013

Finzer Properties Llc
13567 SE Deana Way
Clackamas, OR 97015

Elmwood MHC
1400 S Elm St
Canby, OR 97013

Resident
1400 S Elm St, UNIT #1
Canby, OR 97013

Resident
1400 S Elm St, UNIT #10
Canby, OR 97013

Resident
1400 S Elm St, UNIT #11
Canby, OR 97013

Resident
1400 S Elm St, UNIT #12
Canby, OR 97013

Resident
1400 S Elm St, UNIT #13
Canby, OR 97013

Resident
1400 S Elm St, UNIT #14
Canby, OR 97013

Resident
1400 S Elm St, UNIT #15
Canby, OR 97013

Resident
1400 S Elm St, UNIT #16
Canby, OR 97013

Resident
1400 S Elm St, UNIT #17
Canby, OR 97013

Resident
1400 S Elm St, UNIT #18
Canby, OR 97013

Resident
1400 S Elm St, UNIT #19
Canby, OR 97013

Resident
1400 S Elm St, UNIT #2
Canby, OR 97013

Resident
1400 S Elm St, UNIT #20
Canby, OR 97013

Resident
1400 S Elm St, UNIT #21
Canby, OR 97013

Resident
1400 S Elm St, UNIT #22
Canby, OR 97013

Resident
1400 S Elm St, UNIT #23
Canby, OR 97013

Resident
1400 S Elm St, UNIT #24
Canby, OR 97013

Resident
1400 S Elm St, UNIT #25
Canby, OR 97013

Resident
1400 S Elm St, UNIT #26
Canby, OR 97013

Resident
1400 S Elm St, UNIT #27
Canby, OR 97013

Resident
1400 S Elm St, UNIT #28
Canby, OR 97013

Resident
1400 S Elm St, UNIT #29
Canby, OR 97013

Resident
1400 S Elm St, UNIT #3
Canby, OR 97013

Resident
1400 S Elm St, UNIT #30
Canby, OR 97013

Resident
1400 S Elm St, UNIT #31
Canby, OR 97013

Resident
1400 S Elm St, UNIT #32
Canby, OR 97013

Resident
1400 S Elm St, UNIT #33
Canby, OR 97013

Resident
1400 S Elm St, UNIT #34
Canby, OR 97013

Resident
1400 S Elm St, UNIT #35
Canby, OR 97013

Resident
1400 S Elm St, UNIT #36
Canby, OR 97013

Resident
1400 S Elm St, UNIT #37
Canby, OR 97013

Resident
1400 S Elm St, UNIT #38
Canby, OR 97013

Resident
1400 S Elm St, UNIT #39
Canby, OR 97013

Resident
1400 S Elm St, UNIT #4
Canby, OR 97013

Resident
1400 S Elm St, UNIT #40
Canby, OR 97013

Resident
1400 S Elm St, UNIT #41
Canby, OR 97013

Resident
1400 S Elm St, UNIT #42
Canby, OR 97013

Resident
1400 S Elm St, UNIT #5
Canby, OR 97013

Resident
1400 S Elm St, UNIT #6
Canby, OR 97013

Resident
1400 S Elm St, UNIT #7
Canby, OR 97013

Resident
1400 S Elm St, UNIT #8
Canby, OR 97013

Resident
1400 S Elm St, UNIT #9
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 1001
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 1002
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 1003
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 1004
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 1005
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 1006
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 101
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 102
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 103
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 104
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 105
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 106
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 107
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 108
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 109
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 110
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 1101
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 1102
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 1103
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 1104
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 1105
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 1106
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 111
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 112
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 1201
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 1202
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 1203
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 1204
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 1205
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 1206
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 1301
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 1302
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 1303
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 1304
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 1305
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 1306
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 201
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 202
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 203
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 204
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 205
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 206
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 207
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 208
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 209
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 210
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 301
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 302
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 303
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 304
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 305
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 306
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 307
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 308
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 309
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 310
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 401
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 402
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 403
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 404
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 405
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 406
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 407
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 408
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 409
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 410
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 411
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 412
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 501
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 502
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 503
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 504
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 505
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 506
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 507
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 508
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 509
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 510
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 511
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 512
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 601
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 602
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 603
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 604
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 805
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 806
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 807
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 808
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 809
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 810
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 811
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 812
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 901
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 902
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 903
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 904
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 905
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 906
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 907
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 908
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 909
Canby, OR 97013

Resident
1441 S Ivy St, UNIT # 910
Canby, OR 97013

Lew & Sharon Lehr
14872 NE Thompson St
Portland, OR 97230

Hope Village Inc
1535 S Ivy St
Canby, OR 97013

Meadows @ Hope Village Lp
1535 S Ivy St
Canby, OR 97013

Hope Village Inc
1535 S. Ivy St.
Canby, OR 97013

Resident
1546 S Fir St, Apt # 100
Canby, OR 97013

Resident
1546 S Fir St, Apt # 101
Canby, OR 97013

Resident
1546 S Fir St, Apt # 102
Canby, OR 97013

Resident
1546 S Fir St, Apt # 103
Canby, OR 97013

Resident
1546 S Fir St, Apt # 104
Canby, OR 97013

Resident
1546 S Fir St, Apt # 105
Canby, OR 97013

Resident
1546 S Fir St, Apt # 106
Canby, OR 97013

Resident
1546 S Fir St, Apt # 107
Canby, OR 97013

Resident
1546 S Fir St, Apt # 108
Canby, OR 97013

Resident
1546 S Fir St, Apt # 109
Canby, OR 97013

Resident
1546 S Fir St, Apt # 110
Canby, OR 97013

Resident
1546 S Fir St, Apt # 111
Canby, OR 97013

Resident
1546 S Fir St, Apt # 112
Canby, OR 97013

Resident
1546 S Fir St, Apt # 113
Canby, OR 97013

Resident
1546 S Fir St, Apt # 114
Canby, OR 97013

Resident
1546 S Fir St, Apt # 115
Canby, OR 97013

Resident
1546 S Fir St, Apt # 116
Canby, OR 97013

Resident
1546 S Fir St, Apt # 117
Canby, OR 97013

Resident
1546 S Fir St, Apt # 118
Canby, OR 97013

Resident
1546 S Fir St, Apt # 119
Canby, OR 97013

Resident
1546 S Fir St, Apt # 120
Canby, OR 97013

Resident
1546 S Fir St, Apt # 121
Canby, OR 97013

Resident
1546 S Fir St, Apt # 122
Canby, OR 97013

Resident
1546 S Fir St, Apt # 123
Canby, OR 97013

Resident
1546 S Fir St, Apt # 124
Canby, OR 97013

Resident
1546 S Fir St, Apt # 200
Canby, OR 97013

Resident
1546 S Fir St, Apt # 201
Canby, OR 97013

Resident
1546 S Fir St, Apt # 202
Canby, OR 97013

Resident
1546 S Fir St, Apt # 203
Canby, OR 97013

Resident
1546 S Fir St, Apt # 204
Canby, OR 97013

Resident
1546 S Fir St, Apt # 205
Canby, OR 97013

Resident
1546 S Fir St, Apt # 206
Canby, OR 97013

Resident
1546 S Fir St, Apt # 207
Canby, OR 97013

Resident
1546 S Fir St, Apt # 208
Canby, OR 97013

Resident
1546 S Fir St, Apt # 209
Canby, OR 97013

Resident
1546 S Fir St, Apt # 210
Canby, OR 97013

Resident
1546 S Fir St, Apt # 211
Canby, OR 97013

Resident
1546 S Fir St, Apt # 212
Canby, OR 97013

Resident
1546 S Fir St, Apt # 213
Canby, OR 97013

Resident
1546 S Fir St, Apt # 214
Canby, OR 97013

Resident
1546 S Fir St, Apt # 215
Canby, OR 97013

Resident
1546 S Fir St, Apt # 216
Canby, OR 97013

Resident
1546 S Fir St, Apt # 217
Canby, OR 97013

Resident
1546 S Fir St, Apt # 218
Canby, OR 97013

Resident
1546 S Fir St, Apt # 219
Canby, OR 97013

Resident
1546 S Fir St, Apt # 220
Canby, OR 97013

Resident
1546 S Fir St, Apt # 221
Canby, OR 97013

Resident
1546 S Fir St, Apt # 222
Canby, OR 97013

Resident
1546 S Fir St, Apt # 223
Canby, OR 97013

Resident
1546 S Fir St, Apt # 224
Canby, OR 97013

Resident
1555 S Evergreen St
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 101
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 102
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 103
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 104
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 105
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 106
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 107
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 111
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 112
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 113
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 114
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 115
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 116
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 117
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 118
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 119
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 120
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 121
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 122
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 123
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 124
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 125
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 126
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 201
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 202
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 203
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 204
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 205
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 206
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 207
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 208
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 209
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 210
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 211
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 212
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 213
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 214
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 215
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 216
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 217
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 218
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 219
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 220
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 221
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 222
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 223
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 224
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 225
Canby, OR 97013

Resident
1555 S Ivy St, Apt # 226
Canby, OR 97013

Resident
1555 S Ivy St, Apt #108
Canby, OR 97013

Resident
1555 S Ivy St, Apt #109
Canby, OR 97013

Resident
1555 S Ivy St, Apt #110
Canby, OR 97013

Emily & Kevin Hill
1561 S Evergreen St
Canby, OR 97013

Ryan Seifert & Nichole Franzen
1567 S Evergreen St
Canby, OR 97013

Ryan & Mckenzi Dixon
1573 S Evergreen St
Canby, OR 97013

Resident
1573 S Fir St
Canby, OR 97013

Resident
1595 S Fir St
Canby, OR 97013

Resident
1667 S Fir St
Canby, OR 97013

Resident
1687 S Fir St
Canby, OR 97013

Resident
1690 S Fig St
Canby, OR 97013

Whitney Zarate & Carlos Ramirez
1697 S Fig St
Canby, OR 97013

Resident
1712 S Fig St
Canby, OR 97013

Kayla Jordan & Jeffrey Nogle
1713 S Fig St
Canby, OR 97013

Daniel Gardner & Theresa Scoggins
19672 Sun Cir
West Linn, OR 97068

Timothy Poundstone
290 NE Greenway Dr
Gresham, OR 97030

Shawn & Kaylee Durand
400 SW 14th Ct
Canby, OR 97013

Resident
400 SW Pacific Crest Drive
Canby, OR 97013

Michael Szczerba
405 SW 14th Ct
Canby, OR 97013

Resident
405 SW Pacific Crest Drive
Canby, OR 97013

Resident
410 SW Pacific Crest Drive
Canby, OR 97013

Resident
415 SW Pacific Crest Drive
Canby, OR 97013

Resident
420 SW Pacific Crest Drive
Canby, OR 97013

Jennie & John Peakes
425 SW 14th Ct
Canby, OR 97013

Resident
425 SW Pacific Crest Drive
Canby, OR 97013

Resident
430 SW Pacific Crest Drive
Canby, OR 97013

Resident
432 SW 16th Ave
Canby, OR 97013

Resident
433 SW 13th Ave
Canby, OR 97013

Lynn Bloomfield
435 SW 14th Ct
Canby, OR 97013

Resident
435 SW Pacific Crest Drive
Canby, OR 97013

Resident
438 SW 16th Ave
Canby, OR 97013

Abigail & Brandon Ellis
440 SW 14th Ct
Canby, OR 97013

Resident
440 SW Pacific Crest Drive
Canby, OR 97013

Resident
442 SW 16th Ave
Canby, OR 97013

Resident
445 SW Pacific Crest Drive
Canby, OR 97013

Daniel Tapia & Stephanie Cruz
448 SW 16th Ave
Canby, OR 97013

Resident
450 SW 14th Ct
Canby, OR 97013

Resident
450 SW Pacific Crest Drive
Canby, OR 97013

Abdo Horcos & Tori Scott
452 SW 16th Ave
Canby, OR 97013

Brian Terranova & Kristin Lemelson
453 SW 13th Ave
Canby, OR 97013

Resident
454 SW 14th Ct
Canby, OR 97013

Trenton & Heather Hartill
454 SW 16th Ave
Canby, OR 97013

Resident
455 SW 14th Ct
Canby, OR 97013

Resident
455 SW Pacific Crest Drive
Canby, OR 97013

Resident
457 SW 14th Ct
Canby, OR 97013

Julie & Paul Duris
463 SW 15th Ave
Canby, OR 97013

Wardle & Marie Troy
464 SW 15th Ave
Canby, OR 97013

Andrew & Christine Duncan
465 SW 15th Ave
Canby, OR 97013

Whitney & Allen Miller
466 SW 16th Ave
Canby, OR 97013

Wendy Sheldon
467 SW 15th Ave
Canby, OR 97013

Anneliese & Anthony Misenhimer
468 SW 16th Ave
Canby, OR 97013

Brooke Henry
469 SW 16th Ave
Canby, OR 97013

Michael & Cheryl Cropper
472 SW 16th Ave
Canby, OR 97013

John & Anna Makin
473 SW 13th Ave
Canby, OR 97013

David & Lucinda Downs
475 SW 16th Ave
Canby, OR 97013

Jeffrey & Kanae Simpkins
483 SW 16th Ave
Canby, OR 97013

Christopher & Erika Brand
484 SW 16th Ave
Canby, OR 97013

Stafford Development Company Llc
485 S State St
Lake Oswego, OR 97034

Brianna & Togamau Elisara
488 SW 15th Ave
Canby, OR 97013

Vicenta Camacho & Victor Vazquez
489 SW 15th Ave
Canby, OR 97013

Cambridge Collin Brock & Candice
492 SW 15th Ave
Canby, OR 97013

Susan Graper
7168 Olalla Canyon Rd
Cashmere,, WA 98815

Joshua & Jennifer Jensen
9915 Marquam Cir
Molalla, OR 97038

Wilmes Wenrick
Po Box 1204
Canby, OR 97013

Elw Llc
Po Box 98757
Seattle, WA 98198

Elw Llc
Po Box 98757
Seattle, WA 98198

Christopher & Courtney Bryan 1579 S Evergreen St Canby, OR 97013	Gordon & Taylor-Pears Pearson 1625 S Elm St Canby, OR 97013	Kenneth Patton 1711 S Fir St Canby, OR 97013
Martie & Robert Buckley 1713 S Evergreen St Canby, OR 97013	Theirawoot & Pungthong Thanyawatpokin 1714 S Evergreen St # 5 Canby, OR 97013	Paul & Sally Hemson 1723 S Fir St Canby, OR 97013
Jennifer & Roy Burchett 1725 S Evergreen St Canby, OR 97013	Kim Lee 1726 S Evergreen St Canby, OR 97013	Alejandro & Aracely Gopar 1727 S Fig St Canby, OR 97013
Diane & Patrick Drebin 1735 S Fir St Canby, OR 97013	Amanda & Richard Leetch 1736 S Fig St Canby, OR 97013	Mclaine & John Grim 1737 S Evergreen St Canby, OR 97013
Donald Waage & Kay Kim 1739 S Fig St Canby, OR 97013	Jennier Sobolewski & Jeffrey Meek 1747 S Fir St Canby, OR 97013	William & Carla Mccauley 1748 S Fig St Canby, OR 97013
John & Silvia Mui 1749 S Evergreen St Canby, OR 97013	Vickie Dinnel & Robert Vondra 1749 S Fig St Canby, OR 97013	Joseph & Annie Aispuro 1752 S Evergreen St Canby, OR 97013
Jill Downs & David Kruse 1755 S Evergreen St Canby, OR 97013	Corey Oswald 1764 S Evergreen St Canby, OR 97013	Village On The Lochs Mhc LLC 18006 Sky Park Cir STE 200 Irvine, CA 92614
Robert & Valerie Guertze 23255 SW Pine St Canby, OR 97013	Terry & Cheryl Learfield 23899 S Rondevic Dr Canby, OR 97013	Shirley Harris 3228 SW 33rd St Gresham, OR 97080
Michael & Mary Coy 3307 NE 141st St Vancouver, WA 98686	Joshua & Jennifer Jensen 37565 S Blair Rd Molalla, OR 97038	Anthony Lemanski 432 SW 16th Ave Canby, OR 97013
Ashley & Zachary Misenhimer 438 SW 16th Ave Canby, OR 97013	Daniel & Ruth Rydell 443 SW 13th Ave Canby, OR 97013	Melody & Vann Keo 462 SW 15th Ave Canby, OR 97013

RESIDENT
1751 S Evergreen St
Canby, OR 97013

RESIDENT
1714 S Evergreen St
Canby, OR 97013

RESIDENT
1619 S Elm St
Canby, OR 97013

RESIDENT
1699 S Evergreen St
Canby, OR 97013

RESIDENT
410 SW 14th Ct
Canby, OR 97013

RESIDENT
1724 S Fig St
Canby, OR 97013

RESIDENT
420 SW 14th Ct
Canby, OR 97013

RESIDENT
415 SW 14th Ct
Canby, OR 97013

RESIDENT
1547 S Fir St
Canby, OR 97013

RESIDENT
1741 S Fig St
Canby, OR 97013

RESIDENT
467 SW 16th Ave
Canby, OR 97013

RESIDENT
445 SW 14th Ct
Canby, OR 97013

RESIDENT
430 SW 14th Ct
Canby, OR 97013

RESIDENT
1495 S Fir St
Canby, OR 97013

V. Transportation Technical Memorandum



TECHNICAL MEMORANDUM

DATE: September 12th, 2023

TO: Don Hardy and Brianna Addotta | City of Canby

FROM: Kevin Chewuk | DKS Associates

SUBJECT: Canby DuNett Subdivision
Transportation Analysis Letter

EXECUTIVE SUMMARY

A summary of key findings from the Canby DuNett Subdivision Transportation Analysis Letter is provided below:

- **Expected Net Change in Vehicle Trips:**
 - The proposed site will result in a net increase of approximately 16 or fewer peak trips, and 160 daily trips.
 - The adjacent local street (i.e., N Fir Street) will maintain a level of traffic volume that is consistent with its classifications and planned growth from the TSP.
- **Site Access:**
 - Access to the site will be via two new and one existing connection to S Fir Street.
 - The proposed connections to S Fir Street will comply with applicable spacing standards and a preliminary sight distance evaluation suggests adequate sight distance.
 - If additional driveways are required to serve lots adjacent to S Fir Street they would need to meet minimum spacing and sight distance requirements.
- **Proposed Circulation:**
 - The site proposes to extend SW 15th Avenue as a Local Street to form a new intersection with S Fir Street.
 - A second proposed access to S Fir Street would be a private driveway serving the four lots at the north end of the site.
- **Transportation Approval Criteria and Livability Measures:**
 - The proposed site adequately addresses each transportation approval criteria and livability measure.

INTRODUCTION

This memorandum summarizes the transportation impacts associated with the proposed DuNett Subdivision located along S Fir Street near SW 15th Avenue in Canby, Oregon. The proposal is to divide the current site into 19 separate tax lots, two lots with existing single-family homes that will remain, and 17 lots with new construction single-family homes.

LEVEL OF TRANSPORTATION ANALYSIS REQUIRED

The City requires transportation impacts to be assessed with any proposed development that will increase trips on the transportation system, consistent with requirements in the Canby Municipal Code 16.08.150. These transportation studies implement Sections 660-012-0045(2)(a), -0045(2)(b) and -0045(2)(e) of the State Transportation Planning Rule (TPR), which require the City to adopt access spacing and performance standards and a process to apply conditions to land use proposals to minimize impacts on and protect transportation facilities. These standards are specified in the Canby Municipal Code 16.08.160, with each proposed development approval dependent on meeting the specified criteria. In addition, the City assesses livability measures to each study for neighborhood traffic and pedestrian and bicycle circulation.

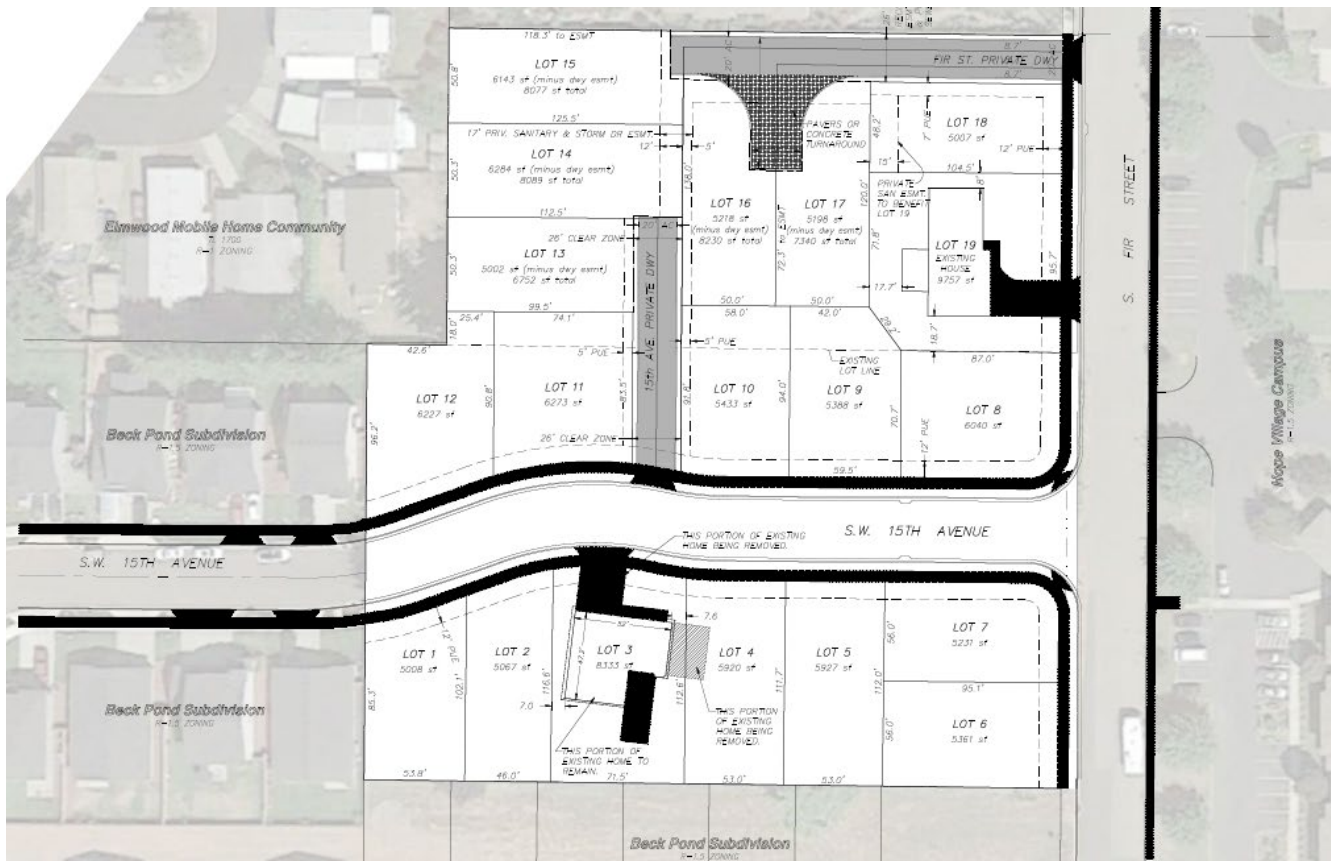
Transportation impacts are assessed by comparing the adopted standards to conditions before and after the proposed development is constructed. In general terms, a full transportation impact analysis (TIA) is required of developments that are presumed to generate a significant number of additional trips (i.e., the site is expected to generate 25 or more trips during the weekday AM and/or PM peak hours or 250 or more daily trips), while those that will not provide analysis consistent with the City Transportation Analysis Letter (TAL) requirements. The key difference between the two levels of analysis is that the TAL does not require peak hour intersection operations to be analyzed. Peak hour intersection operations will not be degraded by proposed developments that generate fewer than 25 AM and/or PM peak trips since these trips are distributed system wide and do not all impact a single location, including intersections and roadway segments. Therefore, these proposed developments are consistent with the approval criteria 16.08.160.F (i.e., adopted intersection mobility standards) and only need to provide a level of analysis that is consistent with the other specified approval criteria included in the Canby Municipal Code 16.08.160, and the various neighborhood traffic and pedestrian and bicycle livability measures.

The proposed development will not result in a significant increase of additional trips (i.e., the site is expected to generate 25 or fewer net new trips during the weekday AM and/or PM peak hours and fewer than 250 net new daily trips), so this analysis is consistent with the City TAL requirements.

PROPOSED PROJECT DESCRIPTION

The proposed project, located along S Fir Street near SW 15th Avenue, would divide the current site into 19 separate tax lots, two lots with existing single-family homes that will remain, and 17 lots with new construction single-family homes. The site plan can be seen in Figure 1.

FIGURE 1: SITE PLAN



PROPOSED SITE ACCESS AND CIRCULATION

SITE ACCESS

Access to the site is proposed via two new and one existing connection to S Fir Street, which is classified as a local street and is under City Jurisdiction. One of the proposed accesses would be an extension of SW 15th Avenue to form a new intersection with S Fir Street about 200 feet north of SW 16th Avenue. The second proposed access would be a private driveway serving the four lots at the north end of the site. The existing driveway is located between the two new proposed accesses and serves the single-family home that will remain on the site. City standards for a Local Street

requires a minimum of 10 feet between accesses along the same side of the street¹. The proposed connections to S Fir Street would be at least 80 feet apart from the nearest accesses, complying with the spacing standard. If additional driveways are required to serve lots adjacent to S Fir Street they would need to be spaced at least 10 feet from other accesses.

SIGHT DISTANCE

The sight triangle at intersections should be clear of objects (large signs, landscaping, parked cars, etc.) that could potentially limit vehicle sight distance. In addition, all proposed accesses should meet AASHTO sight distance requirements as measured from 15 feet back from the edge of the traveled way².

The proposed accesses to S Fir Street would require a minimum of 280 feet of sight distance based on an assumed 25-mph design speed. Preliminary sight distance evaluation for the approximate location of the proposed driveways indicates that they would be expected to provide sight distance of at least 300-feet looking to the north and south, suggesting adequate sight distance.

However, prior to occupancy, sight distance at all proposed accesses will need to be verified, documented, and stamped by a registered professional Civil or Traffic Engineer licensed in the State of Oregon.

SITE FRONTAGE

The proposed site has frontage along S Fir Street. As documented earlier, the City of Canby has jurisdiction over it and applies a functional classification of "Local" to it. The existing paved width of S Fir Street varies between 30 and 34 feet adjacent to the proposed site, while the current standard requires a 34-foot paved width. The proposed site frontage also lacks a sidewalk. The applicant must provide for the additional paved width and construct a 6-foot sidewalk along the frontage. The existing roadway, with the frontage improvements, can adequately accommodate the additional vehicle, pedestrian, and bicycle traffic expected.

INTERNAL SITE CIRCULATION

The site plan (shown earlier in Figure 1) shows a proposed extension of SW 15th Avenue to form a new intersection with S Fir Street. This street should be constructed as a Local Street. The second proposed access to S Fir Street would be a private driveway serving the four lots at the north end of the site. It will be constructed with a 20-foot drive aisle and a 26-foot clear width. A proposed internal driveway would also connect to the SW 15th Avenue extension and provide access to two lots. It will be constructed with a 20-foot drive aisle and a 26-foot clear width.

¹ Canby Municipal Code 16.46.030. Retrieved January 2023.

² AASHTO – *Geometric Design of Highways and Streets*, 7th edition, 2018.

The proposed site will provide sidewalk improvements along the frontage of S Fir Street, and the SW 15th Avenue extension will include sidewalks on both sides. Bicyclists will share the roadways with motor vehicles along the internal local streets. The proposed internal site circulation and connections to external public streets meets City requirements and can adequately accommodate all users.

PROPOSED PROJECT TRIP GENERATION

The amount of new vehicle trips generated by the proposed land use was estimated using the trip generation estimates based on ITE Code 210 (Single-Family Detached Housing) using the latest version of the ITE Trip Generation Manual (11th Edition). Trip generation estimates for the proposed development are provided for daily, morning, and evening peak hours, and are summarized in Table 1. The proposed site will be expected to generate 12 new a.m. peak trips, 16 new p.m. peak trips, and 160 new daily trips. The estimated trip generation of the proposed project would not result in an increase in site trip generation significant enough to warrant an off-site impact evaluation.

TABLE 1: TRIP GENERATION FOR THE PROPOSED PROJECT

LAND USE (SIZE)	AM PEAK			PM PEAK			DAILY TRIPS
	IN	OUT	TOTAL	IN	OUT	TOTAL	
SINGLE-FAMILY DETACHED HOUSING - ITE CODE 210 (17 NEW UNITS)	3	9	12	10	6	16	160

NEIGHBORHOOD TRIPS

A neighborhood trip impact is triggered when a proposed project adds 30 peak trips or 300 daily trips to a residential local street³. As shown earlier in Table 1, the proposed site is expected to generate 16 or fewer peak trips, and 160 daily trips, well under this standard.

APPROVAL CRITERIA AND LIVABILITY MEASURES

The following sections summarize how the proposed project adequately addresses the transportation approval criteria and the livability measures for neighborhood traffic and pedestrian and bicycle circulation.

³ Canby Municipal Code 16.08.150.H.

TRANSPORTATION APPROVAL CRITERIA

The Canby Municipal Code 16.08.160 includes transportation approval criteria that each proposed development must satisfy. This includes criteria B, D, E, and F, as summarized below. While Criteria A and C are not transportation related criteria, they are still applicable for approval. See the respective documents or plans for more details on how this proposed development meets Criteria A and C.

B. SAFE ACCESS AND CLEAR VISION AT INTERSECTIONS, AS DETERMINED BY THE CITY.

Access to the site is proposed via two new and one existing connection to S Fir Street. The proposed connections to S Fir Street would be at least 80 feet apart from the nearest accesses, complying with the spacing standard. If additional driveways are required to serve lots adjacent to S Fir Street they would need to be spaced at least 10 feet from other accesses.

Prior to occupancy, sight distance at all proposed accesses will need to be verified, documented, and stamped by a registered professional Civil or Traffic Engineer licensed in the State of Oregon. Preliminary sight distance evaluation from the approximate location of the proposed accesses indicates that they would be expected to provide adequate sight distance.

D. ACCESS ONTO A PUBLIC STREET WITH THE MINIMUM PAVED WIDTHS AS STATED IN SUBSECTION E BELOW.

The site includes a proposed extension of SW 15th Avenue to form a new intersection with S Fir Street. This street should be constructed as a Local Street. The second proposed access to S Fir Street would be a private driveway serving the four lots at the north end of the site. It will be constructed with a 20-foot drive aisle and a 26-foot clear width. A proposed internal driveway would also connect to the SW 15th Avenue extension and provide access to two lots. It will be constructed with a 20-foot drive aisle and a 26-foot clear width.

The proposed site will provide sidewalk improvements along the frontage of S Fir Street, and the SW 15th Avenue extension will include sidewalks on both sides. Bicyclists will share the roadways with motor vehicles along the internal local streets. The proposed internal site circulation and connections to external public streets meets City requirements and can adequately accommodate all users.

E. ADEQUATE FRONTAGE IMPROVEMENTS AS FOLLOWS:

- 1. For local streets and neighborhood connectors, a minimum paved width of 16 feet along the site's frontage.**
- 2. For collector and arterial streets, a minimum paved width of 20 feet along the site's frontage.**
- 3. For all streets, a minimum horizontal right-of-way clearance of 20 feet along the site's frontage.**

The proposed site has frontage along S Fir Street. The existing paved width of S Fir Street varies between 30 and 34 feet adjacent to the proposed site, while the current standard requires a 34-foot paved width. The proposed site frontage also lacks a sidewalk. The applicant must provide for the additional paved width and construct a 6-foot sidewalk along the frontage.

F. COMPLIANCE WITH MOBILITY STANDARDS IDENTIFIED IN THE TSP. IF A MOBILITY DEFICIENCY ALREADY EXISTS, THE DEVELOPMENT SHALL NOT CREATE FURTHER DEFICIENCIES.

The proposed site is expected to result in 16 or fewer peak trips, and 160 daily trips and met criteria for a TAL level of analysis. Peak hour intersection operations will not be degraded by proposed developments that generate fewer than 25 AM and/or PM peak trips since these trips are distributed system wide and do not all impact a single location, including intersections and roadway segments. Proposed developments that meet the TAL criteria are deemed consistent with this approval criteria (i.e., adopted intersection mobility standards).

This proposed project will contribute its proportional share towards the System Development Charge improvement projects.

LIVABILITY CRITERIA

In addition, each project must comply with livability measures for neighborhood traffic and pedestrian and bicycle circulation. A summary is provided below for the proposed project.

NEIGHBORHOOD TRAFFIC

The proposed site is expected to generate 16 or fewer peak trips, and 160 daily trips, well under the neighborhood trip impact standard.

PEDESTRIAN AND BICYCLE CIRCULATION

The proposed site will provide sidewalks improvements along the frontage of S Fir Street, and the SW 15th Avenue extension will include sidewalks on both sides. Bicyclists will share the roadways with motor vehicles along the internal local streets. The proposed internal site circulation and connections to external public streets meets City requirements and can adequately accommodate all users.

TRANSPORTATION CONDITIONS OF APPROVAL

The following is a summary of the transportation conditions of approval:

1. The development shall pay Transportation System Development Charges to address citywide impacts.
2. The development shall design and reconstruct the frontage of S Fir Street to include a 34-foot paved width and a 6-foot sidewalk.
3. The development shall design and construct and extension of SW 15th Avenue as a Local Street to provide a new connection with S Fir Street.
4. Minimum spacing and sight distance requirements shall be met at all site accesses. Sight distances should be verified in the final engineering/construction stages of development.

VI. SW Canby Development Concept Plan and
City File No. APP 18-02

BEFORE THE CITY COUNCIL
FOR THE CITY OF CANBY, OREGON

)	
)	FINDINGS OF FACT
In the Matter of a Request for a)	AND CONCLUSIONS OF LAW
Subdivision/Variance Approval for)	REJECTING THE APPEAL
Property Located at 1555, 1715 S Fir Street)	AND APPROVING THE
In the City of Canby, located in the R-1 and)	SUBDIVISION APPLICATION
R-1.5 Zoning Districts Within the)	WITH SPECIFIED AMENDMENT
Southwest Canby Development Concept)	
Plan Area for Approval of Sixty-Nine Lot)	FINAL ORDER FOR CITY OF
Subdivision)	CANBY FILE NOS. APPEAL APP 18-02
)	OF SUB 18-01/VAR 18-01 DECISION

I. INTRODUCTION.

This Final Order is the Canby City Council's ("City Council") approval of an Application for approval of a sixty-nine lot subdivision in the R-1 and R 1.5 Zoning Districts located within the Southwest Canby Development Concept Plan area. As explained further below, the City Council moved to reject the appeal and affirm the Planning Commission's decision as amended by adding a specified additional condition of approval submitted by the appellant and adopted the revised preliminary plat map. Therefore, the City Council approves the Application with the Planning Commission's conditions of approval contained in their decision dated June 11, 2018. The Planning Commission decision is hereby incorporated in its entirety along with the specified additional condition of approval submitted by Appellant along with a revised preliminary plat map as it pertains to the Appellant's property adjacent to the approved Beck Pond subdivision.

II. PROCEDURAL STATUS.

The Applicant submitted the Application on April 2, 2018 and the City declared the application with additional necessary submittals complete on May 5, 2018 and proceeded to schedule an initial evidentiary hearing before the Canby Planning Commission for June 11, 2018. The Planning Commission issued a Final Decision approving the Application on June 13, 2018. The Appellants filed a timely appeal of that decision on June 25, 2018. The City Council considered the appeal at a public hearing on August 1, 2018. A final decision is expected to occur with approval of these findings by the City Council on 8.15.18 within the applicable 120-day clock of receiving all necessary application materials and declaring the application complete.

The City Council opened the public hearing with the announcements required by ORS 197.763(5). A quorum of the City Council was present. The City Council had before it the entire Planning Department file for the Application. The City Council did not exclude any documents physically before it. The City Council disclosed *ex parte* contacts and conflicts of interest. No party asked for an opportunity to respond to the *ex parte* disclosures, nor did any party challenge

a City Councilor's ability to hear the appeal. No party raised any other procedural objections during the course of the hearing.

The City Council heard a brief Staff Report, the Applicant, the Appellant's attorney, and those in support of, or opposed to, the appeal. The City Council then heard the Applicant's rebuttal. Following deliberation, the City Council, on a motion by Councilor Smith, seconded by Councilor Hensley, voted 5-0 to reject the appeal and affirm the Planning Commission's decision as amended by adding the additional condition of approval submitted by the applicant and adopting the revised preliminary plat map. The Planning Department returned with proposed written findings for adoption by the City Council at a public meeting on August 15, 2018.

The Canby Land Development and Planning Ordinance (CZO) 16.89.050.J provides that appeals of the Planning Commission to the City Council will be processed using the Type III procedures unless otherwise specified in CZO Title 16. No other procedures apply to this Application. Further, CZO 16.89.050.I.4 provides that the City Council's action on appeal shall be governed by the same general regulations, standards and criteria as applied to the Planning Commission in the original consideration of the Application. Further, the City Council notes that CZO 16.89.050.F.1 provides that approval or denial of a Type III decision shall be based on standards and criteria located in the Canby Zoning Ordinance. The City Council is required to issue a final written order containing findings and conclusions that approve, in this case, the Application as amended with an additional condition of approval and a revised preliminary plat map as it pertains to the appellant's adjacent property to the Beck Pond subdivision preliminary plat map. The following written decision shall set forth the facts relied upon in rendering the decision and justify the decision according to the criteria, standards and facts provided by CZO 16.89.050F.2 and .3

III. SUPPLEMENTAL FINDINGS IN ADDITION TO THE PLANNING COMMISSION DECISION.

1. ADDITIONAL CONDITION OF APPROVAL

The subdivision applicant, appellant through their attorney, and City planning staff reviewed a proposed statement to be presented at the City Council appeal public hearing ahead of the meeting arriving at general agreement in recommending to the City Council that they approve the appellant's request for amending the Planning Commission decision by adding the statement outlined below along with a revised preliminary plat map as a satisfactory way to resolve the area of disagreement set forth in the Appeal Statement:

The Council's decision to approve the preliminary plat for the Beck Pond subdivision shall not determine the configuration of any future development on the Roger and Cheryl Steinke property, Tax Lot 1500 on Tax Map 4S1E04CA. Any future development proposal for the Steinke property shall be judged upon its own merits if and when submitted and shall not be bound by any shadow plat which has previously come before the City.

2. ADOPTION OF REVISED PRELIMINARY PLAT MAP

The City Council finds that the revised preliminary plat map submitted to reinforce the previously outlined statement proposed to be adopted as an additional condition of approval; was helpful in clarifying the amended decision to not bound the applicant to or adopt any previous illustrated future development possibility outlined in the course of the subdivision approval process as it pertains to the adjacent Tax Lot 1500 of Tax Map 4S1E04CA. The revised preliminary plat map is attached to these findings as (Exhibit 1).

3. PREFERRED FUTURE STREET ALIGNMENT ACROSS Tax Lot 1500

The appellant also requested that the subdivision applicant prepare and present at the Council Hearing an illustration of the appellant's current preferred future street alignment across the property. This illustration is attached to these findings as (Exhibit 2). The presentation of Exhibit 2 is not in any way adopted nor meant to be binding in any way on the appellant in the future, but was shown at the appellant's request to provide reassurance that the preliminary plat map as proposed for approval would not prevent the possible extension of SE 15th Avenue eastward to Fir Street through the property in a manner that could divide the property exactly in half north to south with equal future lot depths on each side. The City Council acknowledged that this was one of several viable possible future development options for Tax Lot 1500.

4. SOUTHWEST CANBY ANNEXATION DEVELOPMENT CONCEPT PLAN

City staff and the subdivision applicant indicated at the hearing that the previous City Council adopted Southwest Canby Annexation Development Concept Plan which is applicable to properties recently annexed as a part of the Beck Pond subdivision and many other surrounding properties – including the Appellant's Tax Lot 1500 – will continue to provide guidance to City staff and the Planning Commission in the future as to the suitability of future redevelopment scenarios presented by property owners within the adopted DCP area. Amendments to the adopted DCP are possible but must be justified when presented.

5. GENERAL FINDINGS

The City Council finds that the approval criterion utilized by the Planning Commission in their decision were suitable and criterion is satisfied. City Council had before it the entire Planning Department file for this Application, including all testimony from the Planning Commission hearing. The City Council considered all of the oral and written testimony by all parties to the appeal proceeding. The City Council fully considered all relevant information presented by the appellant. The City Council balanced the evidence and determined that the subdivision should be approved and that the appellant's requested action with regard to the subdivision presented at the hearing could also be successfully incorporated into the approval record for the subdivision.

The Council, the Mayor in particular, indicated sincere appreciation for the efforts set forth by Stafford Land Development and Mr. Steinke to work together and arrive at an agreeable amendment to the Planning Commission decision on SUB 18-01/VAR 18-01.

IV. CONCLUSION AND ORDER

For the reasons contained herein, the City Council hereby rejects the appeal (APP 18-02) and affirms the Planning Commission's decision as amended by adding the additional condition of approval submitted by the applicant and adopting the revised plat map indicated in the attached Exhibit 1. Therefore, **IT IS ORDERED BY THE CITY COUNCIL** of the City of Canby that **SUB 18-01/VAR 18-01** approving the sixty-nine lot Beck Pond subdivision including the forty-seven conditions of approval in the Planning Commission Decision as if incorporated herein and the additional condition of approval as set forth below:

The Council's decision to approve the preliminary plat for the Beck Pond subdivision shall not determine the configuration of any future development on the Roger and Cheryl Steinke property, Tax Lot 1500 on Tax Map 4S1E04CA. Any future development proposal for the Steinke property shall be judged upon its own merits if and when submitted and shall not be bound by any shadow plat which has previously come before the City.

DATED this 15th day of August 2018.

Brian Hodson
Mayor

Bryan Brown
Planning Director

Approved as to Legal Form:

Joseph Lindsay
City Attorney

ORAL DECISION – August 1, 2018

AYES: Smith, Parker, Hensley, Dale & Heidt

NOES: None.

ABSTAIN: None.

ABSENT: Spoon.

WRITTEN FINDINGS – August 15, 2018

AYES:

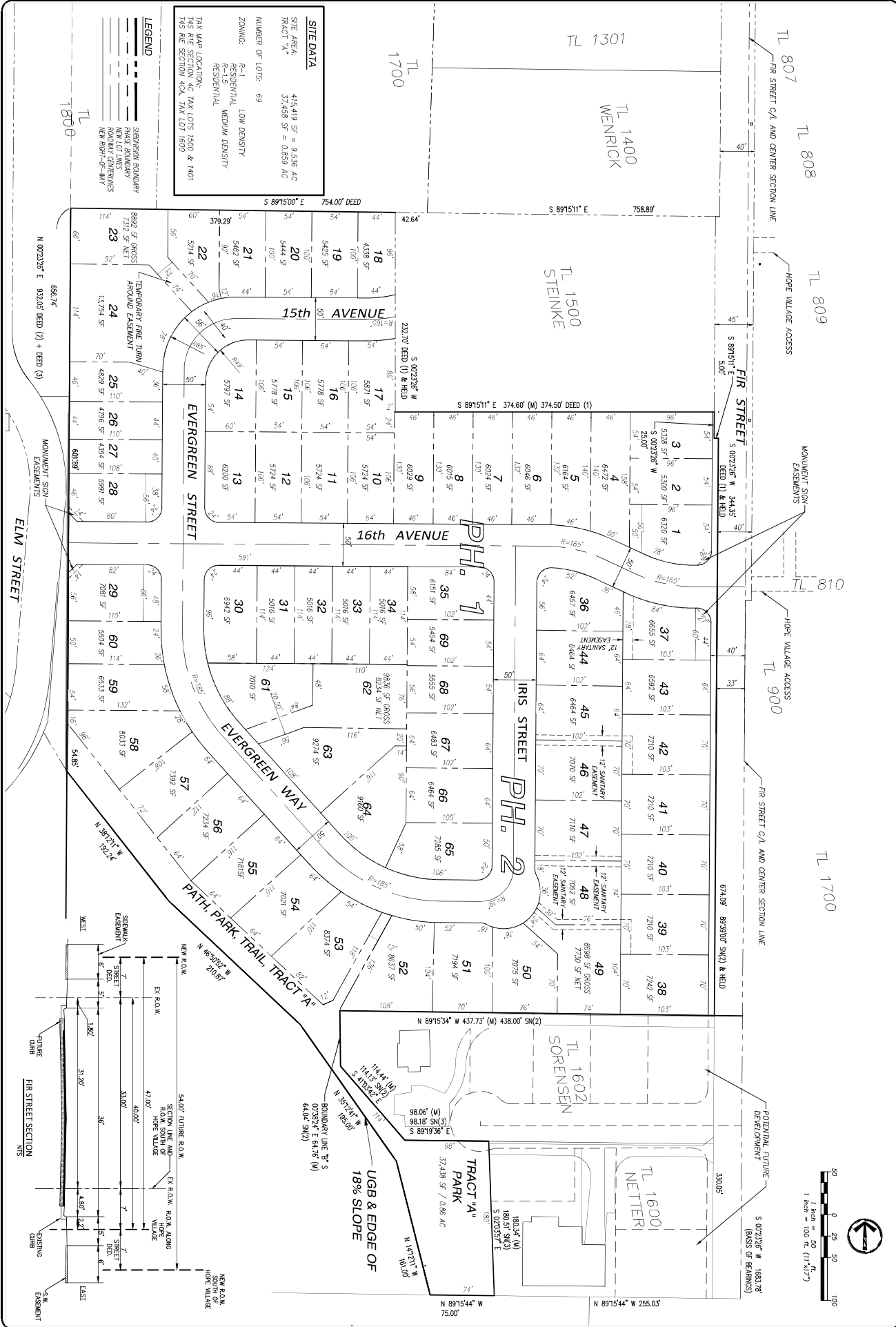
NOES:

ABSTAIN:

ABSENT:

ATTEST:

Kimberly Scheafer, MMC
City Recorder



3
OF
11

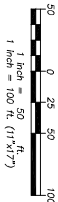
PLANNING & LAND DESIGN
1862 NE ESTATE DRIVE
HILLSBORO, OREGON 97124
RYAN O'BRIEN
(503)780-4061

REVISIONS	
NO.	DATE

BECK POND
PRELIMINARY
PLAT

STAFFORD
DEVELOPMENT COMPANY, LLC
486 SOUTH STATE STREET
LAKE OSWEGO, OREGON 97034

SOUTHWEST CANBY
TAX MAP T4S, R1E, SECTION 4
SEC. 4C TAX LOTS 1600
SEC. 4C TAX LOTS 1401, 1500
CITY OF CANBY, OREGON



54.00' DEED

S 89°15'11" E

758.89'

42.64'

116'

114'

R=165'

R=165'

S 00°23'26" W
232.70' DEED (1) & HELD

116'

114'

S 89°15'11" E
5.00'

S 89°15'11" E 374.60' (M) 374.50' DEED (1)

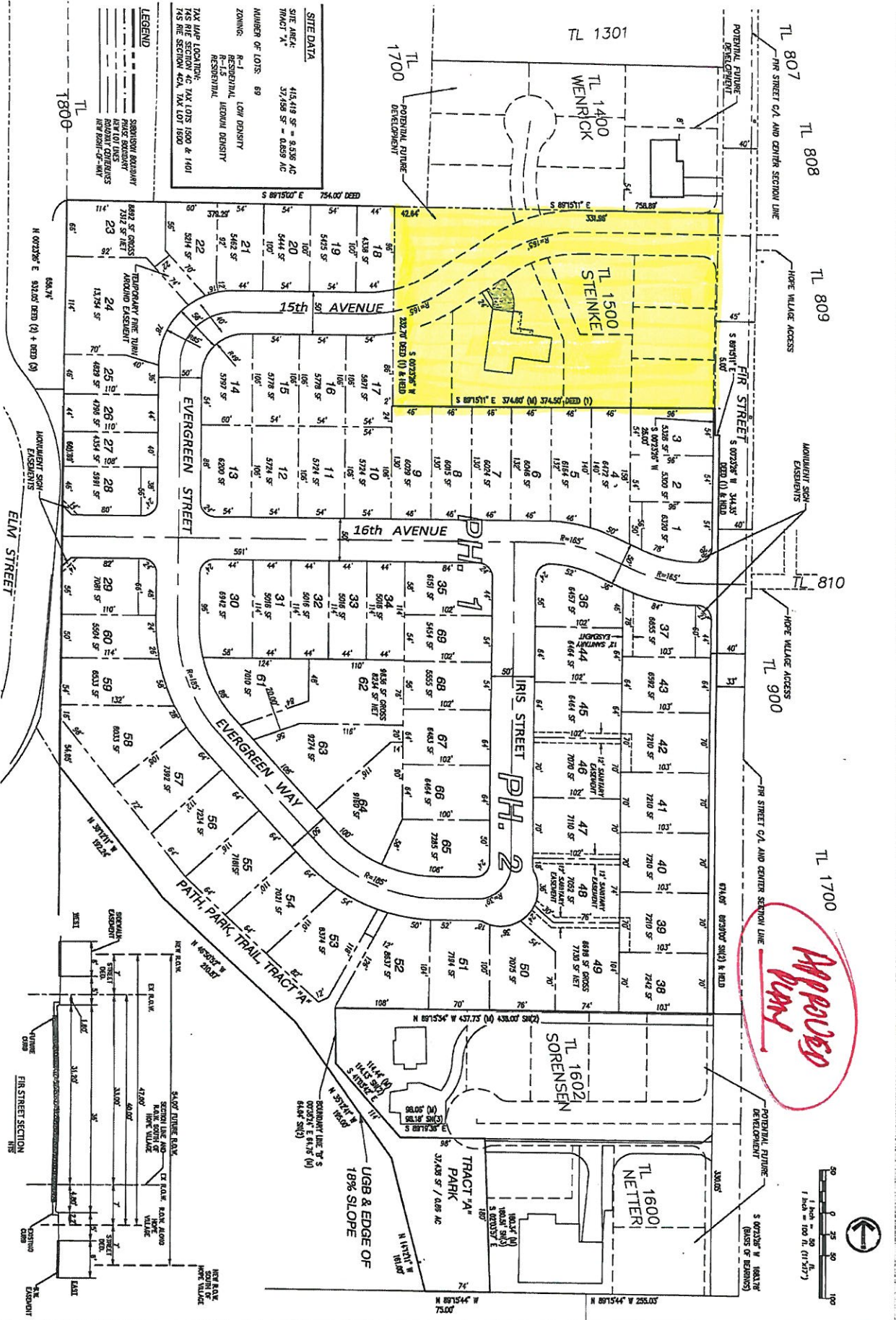
S 00°23'26" W
25.00'

S 00°23'26" W 344.35'
DEED (1) & HELD

R=165'

R=165'

12' SANITARY
EASEMENT



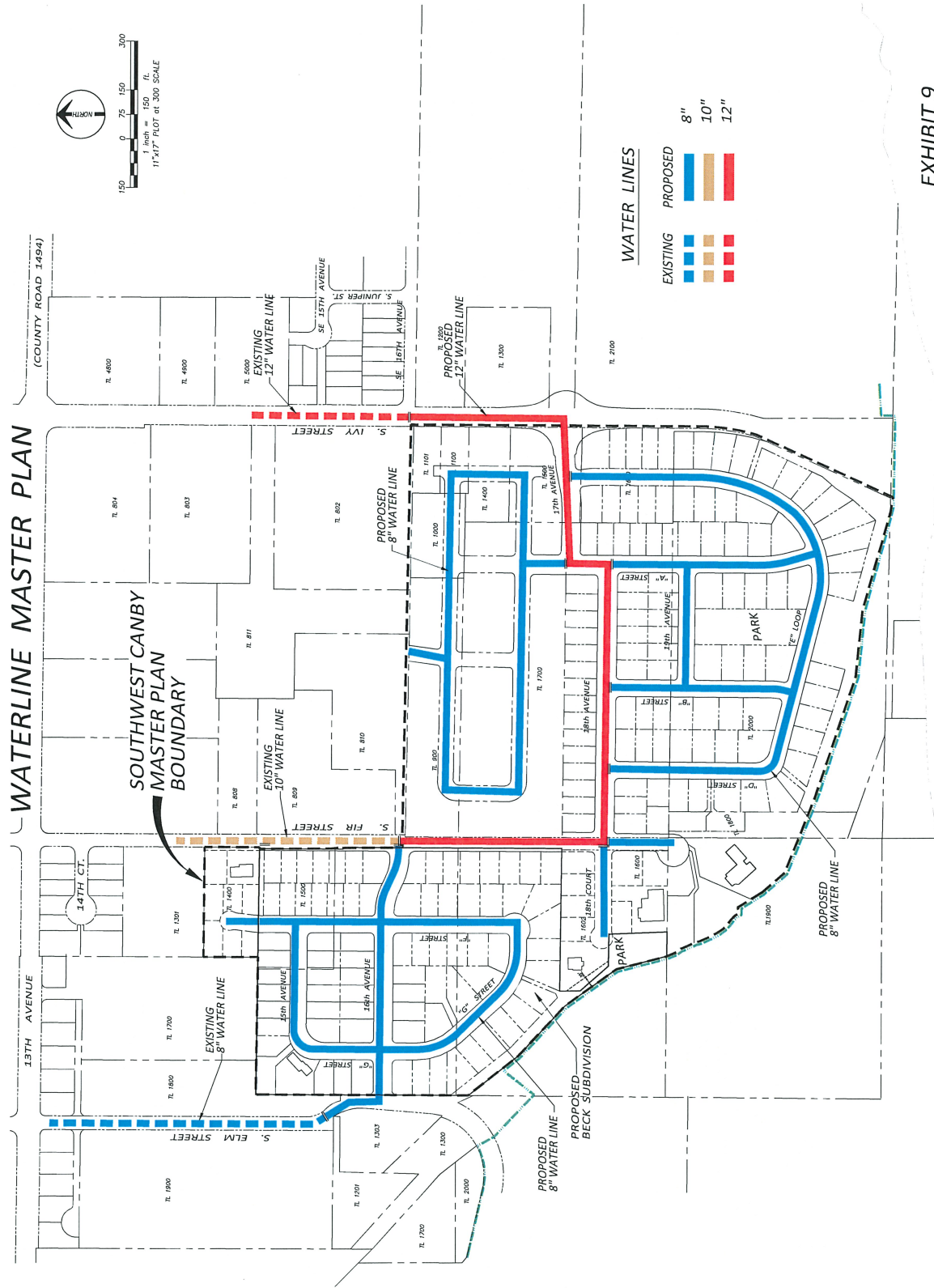
SHEET 3 OF 11	PLANNING & LAND DESIGN 1862 NE ESTATE DRIVE HILLSBORO, OREGON 97124 RYAN O'BRIEN (503)780-4061	REVISIONS <table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	NO.	DATE	DESCRIPTION				BECK POND PRELIMINARY PLAT	STAFFORD DEVELOPMENT COMPANY, LLC 485 SOUTH STATE STREET LAKE OSWEGO, OREGON 97034	SOUTHWEST CANBY TAX MAP T4S, R1E, SECTION 4 SEC. 40A TAX LOTS 1600 SEC. 40 TAX LOTS 1401, 1500 CITY OF CANBY, OREGON
	NO.	DATE	DESCRIPTION								

Southwest Canby Development Concept Plan



Prepared by Planning & Land Design LLC
1862 NE Estate Drive, Hillsboro, Oregon 97124
Ryan O'Brien Phone (503) 780-4061
ryanobrien1@frontier.com

NOTE: Property owners are not bound to lot size and lines as proposed



NOTE: Property owners are not bound to lot size and lines as proposed


Winter, 2020 09:53:34 AM

VIII. City Approval

I CERTIFY THAT THIS ORDER recommending **APPROVAL** of the **SOUTHWEST CANBY DEVELOPMENT CONCEPT PLAN** was presented to and **APPROVED** by the City Council of the City of Canby.

DATED this 21 st day of February, 2018



Brian Hodson
Mayor

Bryan C. Brown
Planning Director

ORAL DECISION - February 7, 2018

AYES: Smith, Parker, Hensley, Dale, Heidt & Spoon

NOES: none.

ABSTAIN: none.

ABSENT: 0

WRITTEN FINDINGS – February 21, 2018

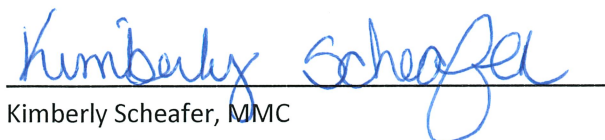
AYES: Smith, Parker, Hensley, Dale, Heidt & Spoon

NOES: none.

ABSTAIN: none.

ABSENT: none.

ATTEST:



Kimberly Scheafer, MMC
City Recorder

VII. Stormwater Report

Storm Drainage Report

DuNett subdivision

J.O. SGL 21-018A



SISUL ENGINEERING

A Division of Sisul Enterprises, Inc.

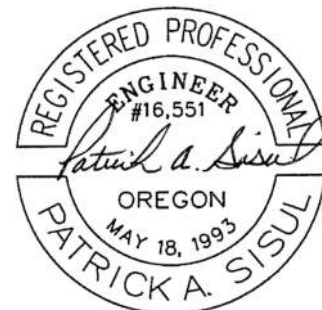
375 PORTLAND AVE.

Gladstone, OR 97027

phone: (503) 657-0188

fax: (503) 657-5779

October, 2023



EXPIRES: 6/30/24

DATED: 10/4/23

DuNett subdivision:

Site Description:

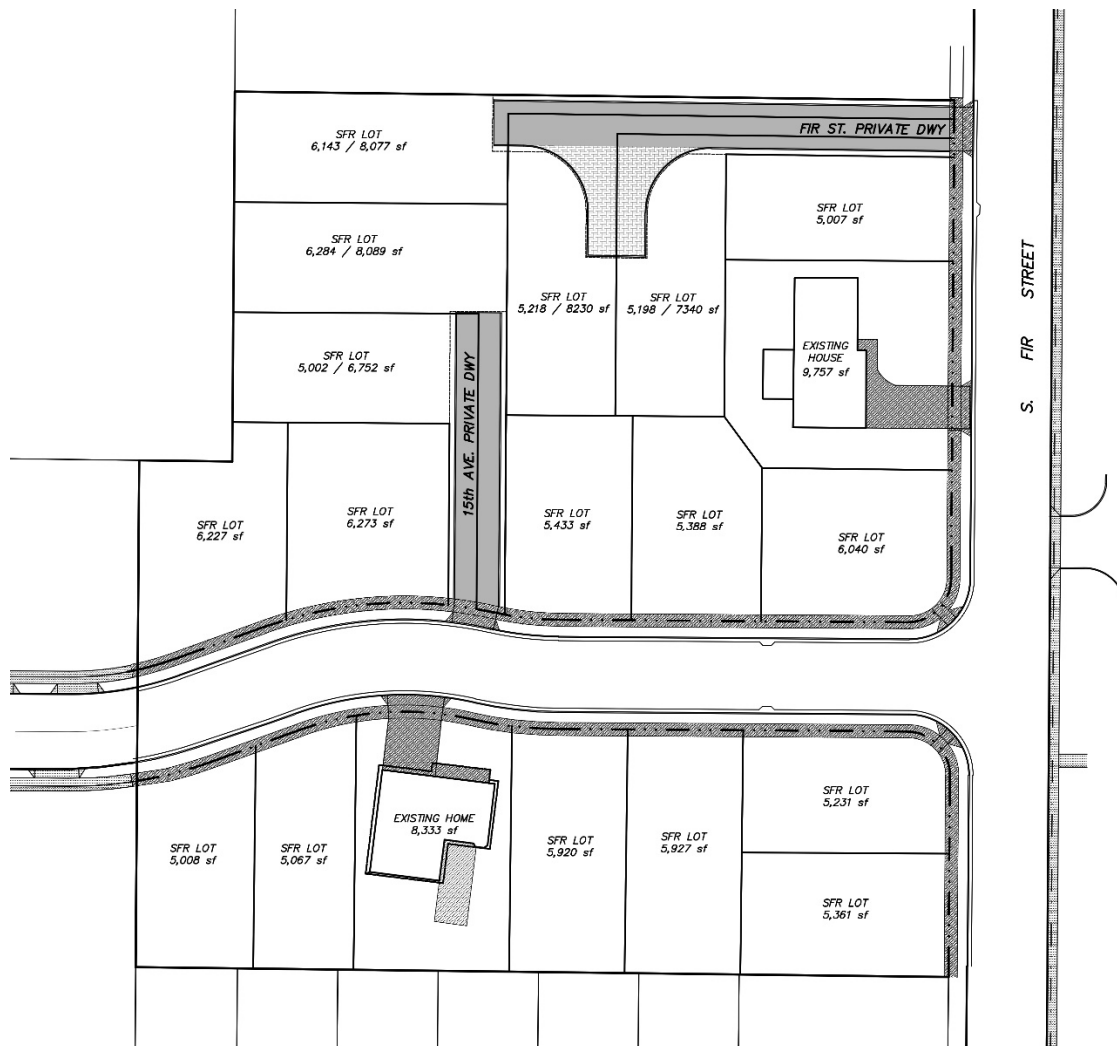
The DuNett subdivision will include (2) parcels on the west side of S Fir Street between SW 13th Avenue and SW 16th Avenue in SW Canby. The subdivision will be west of the Hope Village Campus, south of the Hope Village Cottages, east of the Elmwood Mobile Home Community, and north and east of the Beck Pond subdivision. The proposal is to develop the two existing tax lots with 17 new homes and retain the two existing homes on the two lots. In the image below, the DuNett subdivision site is noted in orange.



The neighborhood around the subdivision is being built out. The Beck Pond and Ivy Ridge Estates subdivisions to the south and east have constructed more than 150 homes in this neighborhood within the past 5 years and Phase 4 of Ivy Ridge Estates is planned in the near future. The Hope Village Southern Expansion is also being constructed south of the main Hope Village Campus with new single story and multi-story units planned on a 13-acre site. Hope Village is currently constructing Phase 2 of a seven-phase project. With the build out of the Hope Village project and development of the DuNett subdivision, the only under developed properties remaining between S Elm Street and S Ivy Street will be four County EFU zoned properties at the southern end of S Fir Street.

Development of the site as proposed would retain the two existing homes and would allow for 17 new detached single-family residences. Dedication of additional public street right-of-way is proposed along the western side of S Fir Street and for the easterly extension of SW 15th Avenue to connect with S Fir Street. Street improvements would remove the temporary dead-end at the end of SW 15th Avenue and would extend SW 15th Avenue to S Fir St. The S Fir St. frontage would be improved with wider pavement, curbs, planter strip with street trees, and sidewalk. Completion of the sidewalks on the west side of S Fir Street would complete the sidewalk network on that side of the street.

A map of the proposed site plan is below:



Drainage Pattern and Description of Storm Drainage System:

Like much of the City of Canby, the public storm drainage system in this portion of Canby generally consists of catch basin inlets draining to drywells. There is no piped storm drainage system to a stream or river.

Along the east side of S Fir Street, Hope Village has three rock infiltration pits located behind the sidewalk. These pits were installed in the early 2000's when Oregon DEQ adopted rules making the installation of drywells more difficult in the vicinity of water wells. With the west side of S Fir Street undeveloped and having homes using water wells, use of drywells for storm water disposal of runoff from S Fir Street was not an option. These infiltration pits don't function exceptionally well and some of them have been connected to drywells as S Fir Street has developed. The City of Canby stated at the pre-application meeting that the DuNett subdivision should construct a connection to one of the rock infiltration pits to relieve common flooding of S Fir Street.

S Fir Street generally slopes toward SW 16th Avenue, but a sag curve exists along the frontage of the DuNett development. The east/west street, SW 15th Avenue, will have a high point in the middle of the site near the existing home and will drain both east and west. The eastern portion of the site will drain to a new

public drywell being installed in SW 15th Avenue, while the western portion of the site will drain to the Beck Pond subdivision drainage system.

Private drainage from roof tops and area drains will be accommodated through the installation of private stormwater facilities. Most lots in the subdivision will have an underground Infiltrator system installed in the rear yard of the home that the roof drains for that lot will drain to. At the northern end of the site, a private drywell will be installed in the Fir Street Private Driveway that will be used to dispose of runoff from the Fir Street and 15th Avenue Private Driveways and from the roof drains for Lots 13 through 17.

Design Storm:

The table in Section 4.301.a of the City of Canby Public Works Design Standards (December 2019) identifies the minimum design storm recurrence interval for a variety of storm drainage facilities. The table identifies that the following facilities shall be designed using a design storm with the noted recurrence intervals below:

Infiltration Facilities: UIC, LID elements	10 years
Minor: Streets, curbs, gutters, inlets, catch basin & connector drains	10 years
Major: Laterals (collectors) <250 tributary acres	10 years

1973 NOAA Atlas 2, Volume X and U.S. Department of Agriculture Isolpluvials for 24-hour storms in Oregon identify the 10-year, 24-hour storm event for Canby as having less than 3.5 inches of precipitation. The Oregon Department of Transportation TranGIS website identifies the 24-Hour Precipitation for this area of Canby as being 3.03 inches. A 24-hour storm having total rainfall of 3.5 inches therefore meets the meets or exceeds these two sources.

Drywell Capacity and Infiltration Testing:

The City of Canby Public Works Design Standards, December 2019, Section 4.312 Infiltration Facilities, subsection c.3 states, "Drywells (UIC's) shall be located to collect up to a maximum of one half of an acre-foot of runoff. Gutter flow shall be limited to 400-500 lineal feet, provided the flow does not exceed 3" in height against the curb line. Any variation from this guideline shall be based on field infiltration tests."

Nearby Testing:

Dinsmore Estates: On October 21, 2013, at the request of Scott Investments, GeoPacific Engineering, Inc. conducted performance testing of drywells located on SE 16th Avenue in the Dinsmore Estates subdivision east of Hope Village for the purpose of establishing a maximum rate of flow for a 26-foot-deep drywell in this part of Canby. Using three fire hoses connected to three separate fire hydrants, none of the drywells tested could be filled to its maximum capacity. A November 5, 2013 Report from GeoPacific Engineering states that "Drywells one through four may be assumed to infiltrate at a maximum estimated rate of 2,500 gpm."¹ The Dinsmore Estates drywells are located between 800 and 1,000 feet east of S Ivy Street and between 2,200 & 2,400 feet east of the proposed drywell in the DuNett subdivision.

¹ GeoPacific Engineering, Inc., James D. Imbrie PE, CEG, Infiltration Testing of As-Built Drywells, Dinsmore Estates, Canby, Oregon, November 5, 2013. See Appendix A.

Hope Village: On November 16, 2018 Geo Consultants Northwest excavated test pits on the Hope Village Southern Expansion site and performed infiltration testing on TP-1, located in the NW corner of the expansion area, roughly 250 feet NW of the Phase 2 DW-2.2. The infiltration test was performed at a depth of 12 feet, which is roughly ½ the depth of the proposed drywells. Per the January 9, 2020 report prepared by Geo Consultants Northwest for Hope Village², “We conducted a falling head, open pit, infiltration test in TP-1 at a depth of 12 feet below the ground surface. The water was introduced into the test pit from a 1,000-gallon tank under gravity pressure using a 4-inch diameter fire hose. There was no water accumulation in the test pit throughout the duration of the test. The test data is summarized in Table 1.”

TABLE 1 – INFILTRATION TEST PARAMETERS

FALLING HEAD, OPEN PIT INFILTRATION TEST DATA - TP-1	
DEPTH (FEET)	12
FLOW RATE (GALLONS/MINUTE)	9.1
START TIME	0946
END TIME	0956
WETTED AREA (SQUARE FEET)	1
DOWN-HOLE FLOW RATE (GALLONS/HOUR)	900
ACCUMULATION (INCHES)	0

Ivy Ridge Estates (Riverside Park): The Ivy Ridge Estates subdivision to the south of Hope Village was originally designed as Riverside Park, prior to being platted as Ivy Ridge Estates. An August 19, 2019 Drainage Report, Downstream Analysis and Certification of Investigation for the Riverside Park 90-lot subdivision prepared by NW Engineers³, states on Page 5, that, “Geo Consultants Northwest, Inc. has performed a site specific geotechnical investigation for the project site. Infiltration rates were tested at a depth of 14.5 ft. below ground surface in a hole that was roughly 4 ft. The result of the test was a flow rate of 4,200 gal/hr, which equates to 1,685 in/hr. The design rate is 400 in/hr. which is a factor of safety of 4.” The storm drainage analysis for the Riverside Park subdivision assumed the 400 in/hr design rate. The Riverside Park drywells are located approximately 1,250 feet south of the proposed SW 15th Avenue intersection with S Fir Street.

Beck Pond: There are 4 drywells located in the public drainage system in the Beck Pond subdivision. Each is 48-inches inside diameter and approximately 26-feet deep, per City of Canby Public Works standards. The 4 drywells are in SW 16th Avenue, and all were installed with Beck Pond Phase 1. According to the drainage report for the subdivision⁴, geotechnical testing was performed onsite in drywell test pits and infiltration rates were found to be between 1,800 and 3,600 in/hr. For the purposes of their analysis, a Factor of Safety was used on the tested infiltration rate and a design rate of 400 in/hour was used. The 4 drywells are in SW 16th Avenue, less than 300 feet south of SW 15th Avenue.

Summary: Of the 4 tests, two were performed at the actual drywell depth of 26 feet, Dinsmore Estates and Beck Pond. The other two were performed at depths of 12 to 14 feet. Because the infiltration rate of the soils tends to improve with depth as the gravels become more course, it is believed that the infiltration rates found within Hope Village Expansion Site and the Riverside Park subdivision would have been higher if the excavations had been deeper.

² Geo Consultants Northwest Inc., Brad L. Hupy & Britton W. Gentry, PE, Geotechnical Site Evaluation, Hope Village Expansion – Canby, GCN Project 1399, January 9, 2020. See Appendix B.

³ NW Engineers Engineering and Planning, Drainage Report, Downstream Analysis and Certification of Investigation Riverside Park 90-Lot subdivision, August 19, 2019. See Appendix C.

⁴ Kitteridge Engineers, LLC, Chris Kitteridge PE, Final Storm Drainage Report, Beck Pond 69 Lot Subdivision, Phases 1 and 2, November 21, 2018. See Appendix D.

It is believed that the soils and the percolation rate for the two new drywells will be like other nearby drywells. For the DuNett subdivision drywells, we will assume the same 400 in/hr rate used for design the Riverside Park and Beck Pond drywells. This will be a Factor of Safety of 4 on the tested rate at Ivy Ridge Estes/Riverside Park, a Factor of Safety of 4.5 to 9 on the tested rate for the Beck Pond drywells, and a Factor of Safety of more than 6 on the completed Dinsmore Estates drywells east of S Ivy Street.

Design Infiltration rate for drywell = 400 in/hr,

It will be assumed that only the bottom 10 feet of the drywell will allow for infiltration for conservatism.

Contributing Basin Areas:

Public Drywell in DuNett:

The new public drywell in the DuNett subdivision will receive runoff from the west side of S Fir Street and from the eastern portion of SW 15th Avenue. As discussed at the pre-application meeting for the DuNett subdivision, there is a gravel infiltration pit within the Hope Village site on the east side of S Ivy Street that does not drain very well. The City of Canby wants this subdivision to connect to the existing catch basin on the east side of the street to act as an overflow for that gravel infiltration pit. The assumption will be that the existing pit has no benefit.

The area draining to the new drywell will include public street pavement, concrete sidewalks, and improved landscaping areas within the public right-of-way. In addition, private driveways will be expected to drain back into the street. Driveways will be assumed to be 24 feet wide by 20 feet long from the back of the sidewalk to the garage door. The planter strip area will assume that driveways will reduce the area of the planter strip. For the existing home at 1495 S Fir Street that will be on Lot 19, the private drainage area will include the entire existing driveway and the gravel area south of the existing home. The drainage basin draining to the new public drywell is noted below:

Landscape Strip Area (in public r.o.w.) (good condition) 1,736 sq. ft.

Impervious Area	(in public r.o.w.)	22,740 sq. ft.
	(private driveways)	3,760 sq. ft.
	(gravel private driveway)	200 sq. ft.

Total pervious basin area (good condition)	1,736 sq. ft.
Total impervious basin area	26,700 sq. ft.

Private Drywell in DuNett:

The new private drywell in the DuNett subdivision will receive runoff from Lots 13 through 17, the Fir St. private driveway and the 15th Ave private driveway. The area draining to this drywell includes private street and driveway pavement, private walks, roofs, and yards. For the purposes of the design of this drywell, it will be assumed that each of the 5 lots utilizing the drywell will be constructed to the maximum permitted impervious coverage, which is 70 percent of the lot area in the R-1.5 zoning district.

Total Lot Area for Lots 13 through 17	38,488 sq. ft.
---------------------------------------	----------------

Landscape Area	(30% of total)	11,546 sq. ft.
Impervious Area	(70% of total)	26,942 sq. ft.

Portion of DuNett draining into Beck Pond:

The western end of SW 15th Avenue and the portion of S Fir Street south of the new SW 15th Avenue intersection will drain to inlets installed with the Beck Pond subdivision that drain into the 4 drywells installed with Beck Pond. The portion of the DuNett site contributing runoff to the Beck Pond system will include public street, public sidewalk, driveways, and the improved public landscape strip. Private driveways expected to drain back into the street will be assumed to be 24 feet wide by 20 feet long from the back of the sidewalk to the garage door. The driveways will be assumed to reduce the area of the landscaped planter strip. The drainage basin contributing to the public drywells in Beck Pond are noted below:

Landscape Strip Area	(S Fir r.o.w.) (good condition)	238 sq. ft.
	(SW 15 th r.o.w.)(good condition)	1,043 sq. ft.
Impervious Area	(S Fir public r.o.w.)	3,182 sq. ft.
	(private driveway S Fir)	960 sq. ft.
	(SW 15 th public r.o.w.)	9,713 sq. ft.
	(private driveways SW 15 th)	2,681 sq. ft.

S Fir St. basin:		
Total pervious basin area (good condition)		238 sq. ft.
Total impervious basin area		4,142 sq. ft.

SW 15 th Avenue basin:		
Total pervious basin area (good condition)		1,043 sq. ft.
Total impervious basin area		12,394 sq. ft.

The contributory area within the DuNett subdivision will add runoff into the existing storm drainage system receiving runoff from the existing Beck Pond subdivision. Per the Beck Pond Storm Drainage Report, the Post Development Impervious Area for the Beck Pond Subdivision included the following area:

BASINS 1-8 (4 drywells – On-site Drywell System – 16th Avenue)		
Post Developed Impervious		
230,532 SF / 5.29 acres	(includes/ LOT 29, 50-64 ROOFS)	

Adding the DuNett subdivision area to the Beck Pond subdivision area, the Total Contributing Area to the Beck Pond drywells system would be:

Total pervious basin area	(good condition)	1,281 sq. ft.
Total impervious basin area		247,068 sq. ft.

Calculation Methodology:

Stormwater flow from the developed site will be calculated using the Santa Barbara Urban Hydrograph (SBUH) method using a Type 1A SCS storm.

Runoff Curve Numbers:

Per the Web Soil Survey, the site has Latourell Loam soils, 53A. This soil is hydrologic soil group B. CN numbers for the site are identified below per Appendix D: Table 28 Runoff Curve Numbers, Clackamas County Water Environment Services Stormwater Standards, April 2023:

Paved streets, Sidewalks, Driveways,	CN = 98
Gravel	CN = 85
Landscaping areas (good condition landscaping)	CN = 61
Gravel will be assumed to be 98, since the contributing area is minor	

Time of Concentration:

Time of concentration will be a combination of sheet flow, shallow concentrated flow and pipe flow. The time of concentration is from the hydraulically most distance point in the drainage basin. Following development, sheet flow distances will be minimal. For the purposes of this study, the time of concentration will be assumed to be 5 minutes.

King County SBUH Computations for 10-Year, 24-Hour Storm Event & Drywell Analysis:

New DuNett Public Drywell:

SBUH/SCS METHOD FOR COMPUTING RUNOFF HYDROGRAPH

STORM OPTIONS:

- 1 - S.C.S. TYPE-1A
- 2 - 7-DAY DESIGN STORM
- 3 - STORM DATA FILE

SPECIFY STORM OPTION: 1

S.C.S. TYPE-1A RAINFALL DISTRIBUTION

ENTER: FREQ(YEAR), DURATION(HOUR), PRECIP(INCHES)

10,24,3.5

***** S.C.S. TYPE-1A DISTRIBUTION *****
***** 10-YEAR 24-HOUR STORM **** 3.50" TOTAL PRECIP. *****

ENTER: A(PERV), CN(PERV), A(IMPERV), CN(IMPERV), TC FOR BASIN NO. 1

0.04,61,0.613,98,5.0

DATA PRINT-OUT:

AREA(ACRES)	PERVIOUS	IMPERVIOUS	TC(MINUTES)		
	A	CN	A	CN	
0.7	.0	61.0	0.6	98.0	5.0

PEAK-Q (CFS) T-PEAK (HRS) VOL (CU-FT)
0.56 7.67 7351

ENTER [d:][path]filename[.ext] FOR STORAGE OF COMPUTED HYDROGRAPH:
 DuNett1.dev

DESIGN STORM ROUTING:

One 26-foot-deep drywell will be used. The drywell will have a 4-foot interior diameter, 5-foot exterior diameter, with an annulus rock zone around the exterior of the drywells measuring 9 feet diameter.

Drywell Calculations									
SGL 21-018A									
DuNett Subdivision									
Manhole Inside Diameter (ft) =		4.0	Infiltration rate per 1' section =		0.26180 (cfs)				
Manhole Outside Diameter (ft) =		5.0							
Rock Thickness (ft) =		2.0							
Infiltration Rate (cubic in/sq. in/hr) =		1600.0000							
Infiltration Rate (ft/sec) =		0.03704							
Factor of Safety =		4							
Wetted Area for 1' tall section (sf)		28.3							
Porosity of Rock =		40%							
Depth		One Drywell							
Bebw Grade	Water Depth		Drywell Storage Volume	Rock Layer Storage Volume	Total Storage Volume				
(ft)	(ft)	Qout (cfs)	(cu. ft.)	(cu. ft.)	(cu. ft.)				
26	0	0.00	0.00	0.00	0.00				
25	1	0.26	12.56	13.19	25.75				
24	2	0.52	25.12	26.38	51.50				
23	3	0.79	37.68	39.56	77.24				
22	4	1.05	50.24	52.75	102.99				
21	5	1.31	62.80	65.94	128.74				
20	6	1.57	75.36	79.13	154.49				
19	7	1.83	87.92	92.32	180.24				
18	8	2.09	100.48	105.50	205.98				
17	9	2.36	113.04	118.69	231.73				
16	10	2.62	125.60	131.88	257.48				
15	11	2.62	138.16	145.07	283.23				
14	12	2.62	150.72	158.26	308.98				
13	13	2.62	163.28	171.44	334.72				
12	14	2.62	175.84	184.63	360.47				
11	15	2.62	188.40	197.82	386.22				
10	16	2.62	200.96	211.01	411.97				
9	17	2.62	213.52	224.20	437.72				
8	18	2.62	226.08	237.38	463.46				
7	19	2.62	238.64	250.57	489.21				
6	20	2.62	251.20	263.76	514.96				
5	21	2.62	263.76	276.95	540.71				
4	22	2.62	276.32	290.14	566.46				
3	23	2.62	288.88	303.32	592.20				
2	24	2.62	301.44	316.51	617.95				
1	25	2.62	314.00	329.70	643.70				
0	26	2.62	326.56	342.89	669.45				

There will be no piped overflow. The bottom ten feet of the drywell will be perforated and that will be assumed to be the only portion of the system infiltrating into surrounding soils. The perimeter gravel layer will extend upwards to the ground surface, so infiltration will be able to occur along the entire water level, however, the exceedingly high infiltration rates are only anticipated to occur in the deeper soils. Neglecting the infiltration into the shallower soils will add additional conservatism into the design.

Routing of the design storm is performed using the Santa Barbara Urban Hydrograph (SBUH) Method. (KING COUNTY DEPARTMENT OF PUBLIC WORKS Surface Water Management Division, HYDROGRAPH PROGRAMS Version 4.20)

RESERVOIR ROUTING INFLOW/OUTFLOW ROUTINE

SPECIFY [d:][path]filename[.ext] OF ROUTING DATA DuNett.dat
 DISPLAY ROUTING DATA (Y or N)? y

ROUTING DATA:

STAGE (FT)	DISCHARGE (CFS)	STORAGE (CU-FT)	PERM-AREA (SQ-FT)
.00	.00	.0	.0
1.00	.26	25.8	.0
2.00	.52	51.5	.0
3.00	.79	77.2	.0
4.00	1.05	103.0	.0
5.00	1.31	128.7	.0
6.00	1.57	154.5	.0
7.00	1.83	180.2	.0
8.00	2.09	206.0	.0
9.00	2.36	231.7	.0
10.00	2.62	257.5	.0
11.00	2.62	283.2	.0
12.00	2.62	309.0	.0
13.00	2.62	334.7	.0
14.00	2.62	360.5	.0
15.00	2.62	386.2	.0
16.00	2.62	412.0	.0
17.00	2.62	437.7	.0
18.00	2.62	463.5	.0
19.00	2.62	489.2	.0
20.00	2.62	515.0	.0
21.00	2.62	540.7	.0
22.00	2.62	566.5	.0
23.00	2.62	592.2	.0
24.00	2.62	618.0	.0
25.00	2.62	643.7	.0
26.00	2.62	669.5	.0

AVERAGE PERM-RATE: .0 MINUTES/INCH

ENTER [d:][path]filename[.ext] OF COMPUTED HYDROGRAPH:
 DuNett1.dev

INFLOW/OUTFLOW ANALYSIS:

PEAK-INFLOW (CFS)	PEAK-OUTFLOW (CFS)	OUTFLOW-VOL (CU-FT)
0.56	0.55	7248

INITIAL-STAGE (FT)	TIME-OF-PEAK (HRS)	PEAK-STAGE-ELEV (FT)
144.90	7.83	147.02

PEAK STORAGE: 50 CU-FT

ENTER [d:][path]filename[.ext] FOR STORAGE OF COMPUTED HYDROGRAPH:
DuNett1.rte

The water level in the public drywell will only reach a depth of just over 2 feet (elevation 147.02 feet) in a 10-year storm event. This is approximately 24 feet below the rim elevation and more than 23 feet below the lowest catch basin grate where runoff could back out of the system.

The new public drywell is adequate to accommodate the contributory area. ✓

New DuNett Private Drywell:

SBUH/SCS METHOD FOR COMPUTING RUNOFF HYDROGRAPH

STORM OPTIONS:

- 1 - S.C.S. TYPE-1A
- 2 - 7-DAY DESIGN STORM
- 3 - STORM DATA FILE

SPECIFY STORM OPTION: 1

S.C.S. TYPE-1A RAINFALL DISTRIBUTION

ENTER: FREQ (YEAR), DURATION (HOUR), PRECIP (INCHES)
10,24,3.5

***** S.C.S. TYPE-1A DISTRIBUTION *****
***** 10-YEAR 24-HOUR STORM ***** 3.50" TOTAL PRECIP. *****

ENTER: A(PERV), CN(PERV), A(IMPERV), CN(IMPERV), TC FOR BASIN NO. 1
0.265,61,0.619,98,5.0

DATA PRINT-OUT:

AREA (ACRES)	PERVIOUS		IMPERVIOUS		TC (MINUTES)
	A	CN	A	CN	
0.9	.3	61.0	0.6	98.0	5.0

PEAK-Q (CFS)	T-PEAK (HRS)	VOL (CU-FT)
0.57	7.67	7890

ENTER [d:][path]filename[.ext] FOR STORAGE OF COMPUTED HYDROGRAPH:
DuNett2.dev

DESIGN STORM ROUTING:

One 26-foot-deep drywell will be used. The drywell will have a 4-foot interior diameter, 5-foot exterior diameter, with an annulus rock zone around the exterior of the drywells measuring 9 feet diameter.

Drywell Calculations						
SGL 21-018A						
DuNett Subdivision						
Manhole Inside Diameter (ft) =		4.0	Infiltration rate per 1' section =		0.26180 (cfs)	
Manhole Outside Diameter (ft) =		5.0				
Rock Thickness (ft) =		2.0				
Infiltration Rate (cubic in/sq. in/hr) =		1600.0000				
Infiltration Rate (ft/sec) =		0.03704				
Factor of Safety =		4				
Wetted Area for 1' tall section (sf)		28.3				
Porosity of Rock =		40%				
Depth		One Drywell				
Bebw Grade	Water Depth	Qout	Drywell Storage Volume	Rock Layer Storage Volume	Total Storage Volume	
(ft)	(ft)	(cfs)	(cu. ft.)	(cu. ft.)	(cu. ft.)	
26	0	0.00	0.00	0.00	0.00	
25	1	0.26	12.56	13.19	25.75	
24	2	0.52	25.12	26.38	51.50	
23	3	0.79	37.68	39.56	77.24	
22	4	1.05	50.24	52.75	102.99	
21	5	1.31	62.80	65.94	128.74	
20	6	1.57	75.36	79.13	154.49	
19	7	1.83	87.92	92.32	180.24	
18	8	2.09	100.48	105.50	205.98	
17	9	2.36	113.04	118.69	231.73	
16	10	2.62	125.60	131.88	257.48	
15	11	2.62	138.16	145.07	283.23	
14	12	2.62	150.72	158.26	308.98	
13	13	2.62	163.28	171.44	334.72	
12	14	2.62	175.84	184.63	360.47	
11	15	2.62	188.40	197.82	386.22	
10	16	2.62	200.96	211.01	411.97	
9	17	2.62	213.52	224.20	437.72	
8	18	2.62	226.08	237.38	463.46	
7	19	2.62	238.64	250.57	489.21	
6	20	2.62	251.20	263.76	514.96	
5	21	2.62	263.76	276.95	540.71	
4	22	2.62	276.32	290.14	566.46	
3	23	2.62	288.88	303.32	592.20	
2	24	2.62	301.44	316.51	617.95	
1	25	2.62	314.00	329.70	643.70	
0	26	2.62	326.56	342.89	669.45	

There will be no piped overflow. The bottom ten feet of the drywell will be perforated and that will be assumed to be the only portion of the system infiltrating into surrounding soils. The perimeter gravel layer will extend upwards to the ground surface, so infiltration will be able to occur along the entire water level, however, the exceedingly high infiltration rates are only anticipated to occur in the deeper soils. Neglecting the infiltration into the shallower soils will add additional conservatism into the design.

Routing of the design storm is performed using the Santa Barbara Urban Hydrograph (SBUH) Method.
(KING COUNTY DEPARTMENT OF PUBLIC WORKS Surface Water Management Division,
HYDROGRAPH PROGRAMS Version 4.20)

RESERVOIR ROUTING INFLOW/OUTFLOW ROUTINE

SPECIFY [d:][path]filename[.ext] OF ROUTING DATA DuNett.dat
DISPLAY ROUTING DATA (Y or N)? y

ROUTING DATA:

STAGE (FT)	DISCHARGE (CFS)	STORAGE (CU-FT)	PERM-AREA (SQ-FT)
.00	.00	.0	.0
1.00	.26	25.8	.0
2.00	.52	51.5	.0
3.00	.79	77.2	.0
4.00	1.05	103.0	.0
5.00	1.31	128.7	.0
6.00	1.57	154.5	.0
7.00	1.83	180.2	.0
8.00	2.09	206.0	.0
9.00	2.36	231.7	.0
10.00	2.62	257.5	.0
11.00	2.62	283.2	.0
12.00	2.62	309.0	.0
13.00	2.62	334.7	.0
14.00	2.62	360.5	.0
15.00	2.62	386.2	.0
16.00	2.62	412.0	.0
17.00	2.62	437.7	.0
18.00	2.62	463.5	.0
19.00	2.62	489.2	.0
20.00	2.62	515.0	.0
21.00	2.62	540.7	.0
22.00	2.62	566.5	.0
23.00	2.62	592.2	.0
24.00	2.62	618.0	.0
25.00	2.62	643.7	.0
26.00	2.62	669.5	.0

AVERAGE PERM-RATE: .0 MINUTES/INCH

ENTER [d:][path]filename[.ext] OF COMPUTED HYDROGRAPH:
DuNett2.dev

INFLOW/OUTFLOW ANALYSIS:

PEAK-INFLOW (CFS)	PEAK-OUTFLOW (CFS)	OUTFLOW-VOL (CU-FT)
0.57	0.56	7770
INITIAL-STAGE (FT)	TIME-OF-PEAK (HRS)	PEAK-STAGE-ELEV (FT)
144.90	7.83	147.06
PEAK STORAGE:	50 CU-FT	

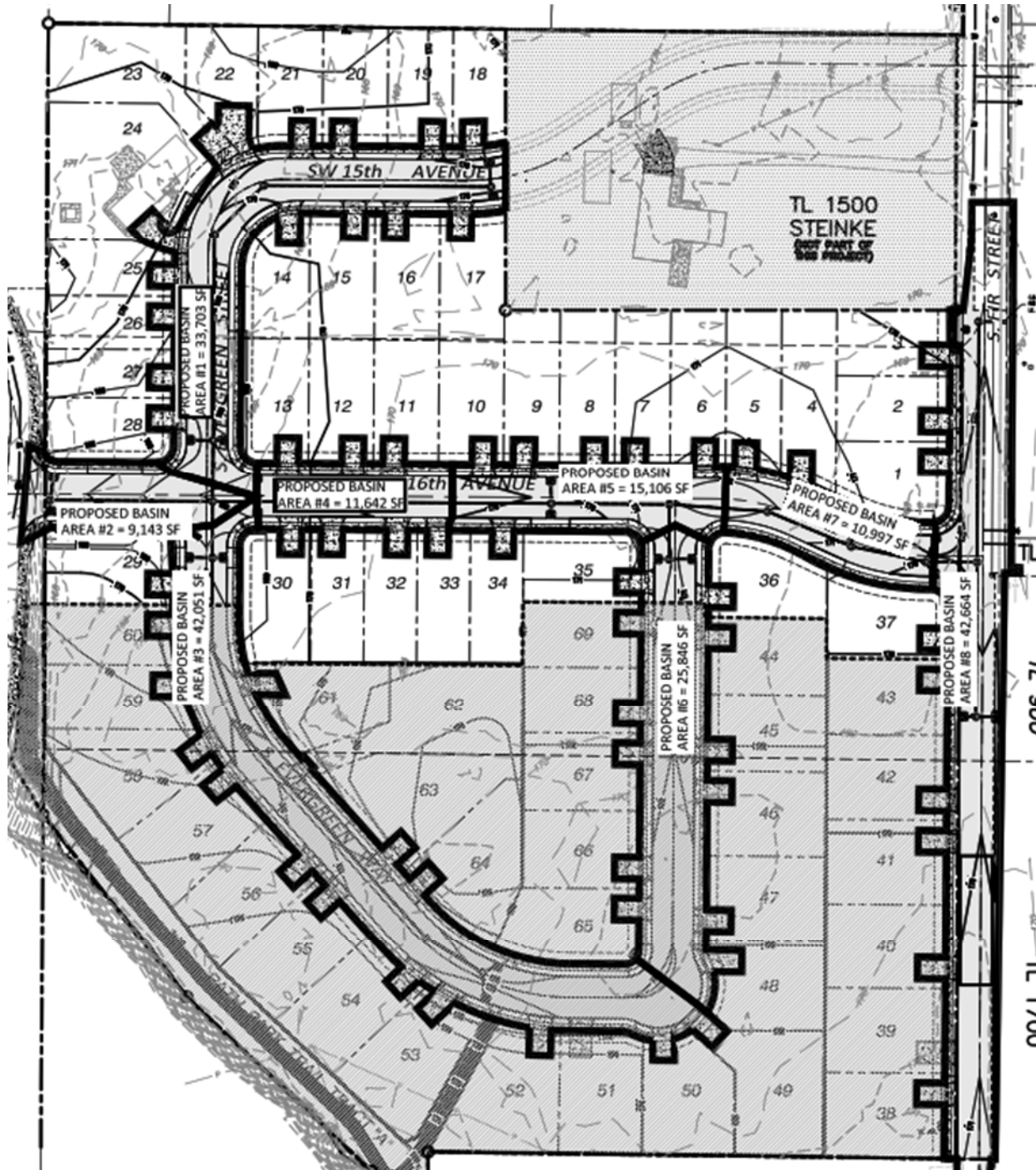
ENTER [d:][path]filename[.ext] FOR STORAGE OF COMPUTED HYDROGRAPH:
DuNett2.rte

The water level in the private drywell will reach a depth of just over 2 feet (elevation 147.06 feet) in a 10-year storm event. This is approximately 24 feet below the rim elevation and more than 23 feet below the lowest catch basin grate where runoff could back out of the system.

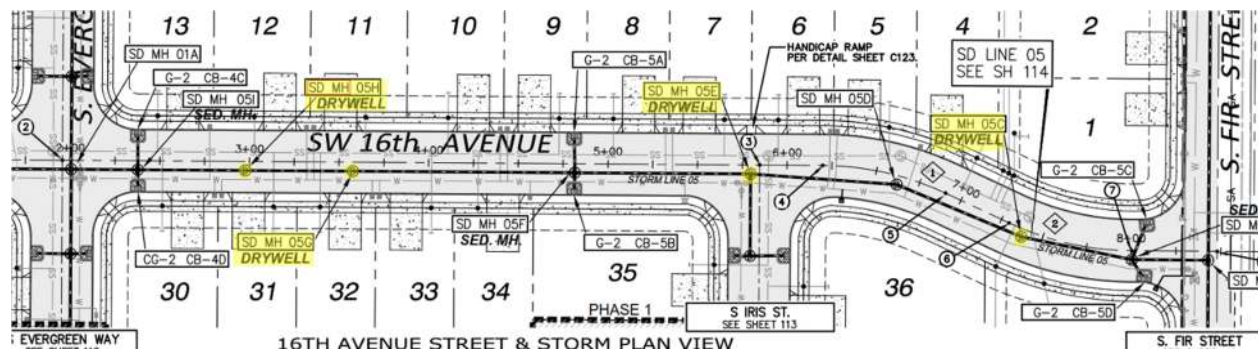
The new private drywell is adequate to accommodate the contributory area. ✓

**HydroCAD SBUH Computations for 10-Year, 24-Hour Storm Event & Drywell Analysis:
Beck Pond Storm Drain System:**

The Beck Pond drainage system consists of public storm drain pipe, inlets, manholes and drywells located between S Elm Street on the west, S Fir Street on the east, SW 15th Avenue on the north, and the looped connection of S Evergreen Way to S Fig Street on the southern end. A map of the Beck Pond drainage basins used by Kitteridge Engineers, LLC in the Beck Pond Drainage report is below:



Beck Pond has an interconnected system of 4 public drywells in SW 16th Ave. Each drywell is 48-inches I.D. and approximately 26-feet deep. A map showing the storm drainage system in SW 16th Avenue and the four drywell locations is below:



The lowest catch basin rim in the Beck Pond drainage system is gutter inlet CB 04B, located on the south side of SW 16th Avenue at the intersection with S Elm Street. The inlet has a curb gutter line elevation of 165.88, slightly lower than Gutter inlet CB 04A, on the north side of SW 16th Avenue which has a curb gutter line elevation of 165.95. These two inlets are where storm water would first pool above ground if the drywell infiltration rate failed to maintain as high of a rate as the incoming flow from runoff.

Other inlets in Beck Pond, such as the 4 inlets located around the intersection of SW 16th Ave with S Evergreen Way, have curb gutter lines between 167.46 & 167.65. Inlets along S Fir Street that drain to this system are considerably higher. The lowest contributing inlet on S Fir Street is Area Drain AD-06C on the Hope Village side (east side), which has a rim of 168.28. By comparison, all curb gutter lines within the DuNett subdivision will be above 169.0, and several feet above the lowest inlets in Beck Pond.

Per the Beck Pond as-built plans, there are internal overflow pipes connecting the drywells as noted below:

15-inch pipe connecting	MH 05H to MH 05G	invert elevation 159.74
12-inch pipe connecting	MH 05G to MH 05E	invert elevation 160.99
12-inch pipe connecting	MH 05E to MH 05C	invert elevation 162.11

Kitteridge Engineers, LLC used HydroCAD software to model the storm water runoff for Beck Pond. We re-created their HydroCAD model to show how the additional flow from the DuNett subdivision will impact the anticipated water levels in the system during the 10-year design storm event. The results of the modelling is in the table below with the maximum water levels in the four drywells noted for the Beck Pond runoff only, and for the Beck Pond subdivision & the DuNett subdivision combined.

10-Year Design Storm:

Drywell	Bottom (feet)	10-year Design Storm Max Water Elevation (Beck Pond only) (feet)	10-year Design Storm Max Water Elevation (Beck Pond & DuNett) (feet)	Change (feet)	Rim Elev (feet)
MH 05C	144.88	146.79	147.11	0.32	170.87
MH 05E	145.81	145.81	145.81	0.00	171.87
MH 05G	144.48	146.08	147.02	0.94	170.48
MH 05H	144.01	160.24	160.33	0.09	170.04

The modelling shows that the addition of the portions of the DuNett subdivision will cause a minor increase in the maximum anticipated water elevation for drywells MH 05C, MH 05G, & MH 05H. There will be no water entering drywell MH 05E under either scenario.

The highest water level will occur in MH 05H, calculated at 160.33. This is not surprising since the bulk of the stormwater flow will enter the drywell system at the western and eastern ends. The contributory area to the west side of the system is larger than the area contributing to the eastern side of the system. There is little direct flow to the middle drywells, MH 05E and MH 05G. Under normal conditions, no flow will get to Drywell MH 05E, but in intense storms, water will build up in two outside manholes and will flow through the connecting pipes when the water level of the internal pipes is reached, and flow will spill into the two middle drywells.

Modelling of the 10-year storm event shows that flow will spill from drywell MH 05H into drywell MH 05G, but the water level in MH 05C and MH 05G does not rise to the level that flow will reach the overflow piping and spill into drywell MH 05E. The modelling shows that the water levels in the Beck Pond drywell system will remain well below the level of the lowest catch basin, CB 04B, located on the south side of SW 16th Avenue at the intersection with S Elm Street, which has a curb gutter line elevation of 165.88. The highest maximum water level anticipated is elevation 160.33 in Drywell MH 05H. Water from Drywell MH 05H will spill into the other three drywells in SW 16th Avenue through 12 and 15-inch piping that connects the drywells between elevation 159.74 & 162.11.

10-year storm event modelling shows that the anticipated water levels in the four drywells range from 5.55 to 20.07 feet below the curb line elevation of CB 04B. HydroCAD modelling contained in the following Appendices demonstrates that the drywell system in the Beck Pond subdivision is adequate to accommodate the additional flow from the two small drainage areas in DuNett subdivision that will contribute flow to the Beck Pond storm drain system. The system is adequate. ✓

Conclusion:

Santa Barbara Urban Hydrograph modelling of proposed stormwater drywells in the DuNett subdivision on the preceding pages and HydroCAD modelling of existing drywells in the neighboring Beck Pond subdivision within the Appendix that follows demonstrates that the stormwater improvements will adequately accommodate the 10-year design storm event for areas draining into the public street. Private stormwater systems to accommodate roof runoff shall be designed as required by Clackamas County Building Codes Division.

Supporting Documentation follows in Appendices:

Appendix A: Letter from GeoPacific Engineering re: Dinsmore Estates Drywell Testing

Appendix B: Geotechnical Investigation for Hope Village, Geo Consulting Northwest

Appendix C: Portion of Drainage Report for Riverside Park Subdivision, NW Engineers

Appendix D: Portion of Drainage Report for Beck Pond, Kitteridge Engineers, LLC

Appendix E: HydroCAD Modelling for Beck Pond Only Condition, Sisul Engineering

Appendix F: HydroCAD Modelling for Beck Pond + DuNett subdivision, Sisul Engineering

Appendix A: Letter from GeoPacific Engineering re: Dinsmore Estates Drywell Testing



November 5, 2013
Project No. 07-1252

Scott Investments
130 SW 2nd Avenue
Canby, Oregon 97013
Email: Tomscott @scott-investments.com

Copy: Email PatSisul@Sisulengineering.com

**SUBJECT: INFILTRATION TESTING OF AS-BUILT DRYWELLS
DINSMORE ESTATES
CANBY, OREGON**

This report presents the results of recent and higher capacity infiltration testing conducted by GeoPacific Engineering, Inc. (GeoPacific) for the above referenced project. Six years ago some dry well testing was performed, but the maximum flow rate achieved was only 300 to 400 gpm and no appreciable level of water was observed in the well. The purpose of our recent testing was to determine a constant head infiltration rate of the as-built drywells with a larger flow rate. Drywells were designed by Sisul Engineering Inc. for subsurface disposal of storm water. A total of four drywells were constructed within SE 16th Avenue. We measured the depth of the dry wells **one** (westernmost) and **four** (easternmost) at 27.5 and 26.5 feet deep feet, respectively. The contractor previously indicated that clean gravels were encountered during the construction of all of the drywells at a depth of 5 to 6 feet and gravel extended to the bottom of the drywell.

INFILTRATION TESTING

On October 31, 2013, GeoPacific observed infiltration tests in Drywell one and Drywell four. Tests were performed by using three 2½ inch fire hoses drained into the drywell from the only three fire hydrants in the area. Water meter readings, the volume of water in the water truck and the start and end time of each test was recorded. The rate of infiltration did not allow a significant depth of water to accumulate in the drywells, and falling head tests were not feasible since they drained in less than 30 seconds. An observed constant head infiltration rate was obtained by calculating the total volume of water introduced into the drywell divided by the time required for the dry well to empty.

The observed, constant head infiltration test rates of Drywell one and four was 633 gpm with 2.5 feet of head pressure. Tests were performed from about one to three hours long. No change was noted after the 3 hour test. We understand there is approximately 16 vertical feet from the bottom of the drywells to the inverts of the incoming pipes. It is our opinion that the tested drywells are capable of infiltrating stormwater at a rate of at least 4 times what was delivered into the wells. Infiltration testing was limited by the ability to pump water into the drywell. For planning purposes, Drywells one through four may be assumed to infiltrate at a maximum estimated rate of 2,500 gpm.

Project No. 07-1252
Dinsmore Estates

ENVIRONMENTAL CONSIDERATIONS AND LIMITATIONS

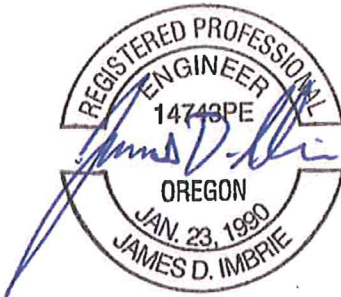
Subsurface stormwater disposal systems have the potential to affect groundwater quality, since they provide a more direct pathway for infiltrating surface water to reach groundwater aquifers. Consequently, disposal systems should be constructed and maintained in accordance with Oregon Department of Environmental Quality requirements for groundwater protection. Systems receiving runoff from pavement areas, typically include water quality elements such as oil traps, filters or similar measures.

Infiltration test methods and procedures attempt to simulate the as-built conditions of the planned subsurface disposal system or systems. However, due to natural variations in soil properties, actual infiltration rates may vary from the measured and/or recommended design rates. Storm events in excess of the design event are inevitable. All systems should be constructed such that potential overflow is discharged in a controlled manner away from structures.

We appreciate this opportunity to be of service. Please call if you have any questions.

Sincerely,

GEO PACIFIC ENGINEERING, INC.



James D. Imbrie, P.E., C.E.G.
Geotechnical Engineer

Appendix B: Geotechnical Investigation for Hope Village, Geo Consulting Northwest

January 9, 2020

Hope Village
1535 South Ivy Street
Canby, Oregon 97013

Attention: Craig Gingerich

Subject: Geotechnical Site Evaluation
Hope Village Expansion - Canby
GCN Project: 1399

This report presents our Geotechnical Site Evaluation for the proposed Hope Village Subdivision in Canby, Oregon. This report was prepared in accordance with our Professional Services Agreement dated October 10, 2018. The report summarizes the work accomplished and provides our recommendations for site development.

PROJECT INFORMATION

The approximately 12-acre site that will be an expansion to Hope Village site lies south of the existing development across Ivy Street in Canby. The site is bordered by South Ivy Street on the east and north, and by south Fir Street on the west. The site relative to surrounding features is shown in Figure 1.

The expansion will include fifteen to thirty residential buildings of varying scale, mostly single story but including some two- and three- story buildings. As with the existing development, the project will include private streets, underground utilities, and private storm water facilities. Off-site improvements will be made to South Ivy and South Fir Streets that will include storm water facilities. Stormwater in the site vicinity is commonly disposed of in 26-foot deep dry wells.

Most of the site is currently farmed with grass and hay. Several single-family homes with outbuildings, located in the eastern portion of the site, will be demolished.

SCOPE OF WORK

The purpose of our services was to explore the site conditions and provide recommendations for design and construction. The following describes our specific scope of work:

- Coordinated and managed the field investigation, including utility locates, authorization for site access, access preparation, scheduling of contractors and GCN staff. Provided principal level management of the field and post field activity to complete the project scope of work.
- Reviewed available background geologic and geologic hazard mapping includes current aerial photographic and LiDAR imagery and conduct a site reconnaissance to identify surface features relevant to the development.
- Observed excavation of 5 test pits to depths up to 12 feet below the existing ground surface using a Case 580 backhoe.
- Conducted falling head, open pit, infiltration tests within one test pit using a 1,000-gallon water tank.
- Maintain a log of soil, rock, and groundwater conditions encountered during the explorations and obtain soil samples for laboratory testing. The samples obtained were classified in the field and returned to our laboratory for further evaluation and testing. We classified the soil in general accordance with the Unified Soil Classification System (USCS).

- Determined the moisture content, unit weight, and fines content of selected samples in general accordance with guidelines presented in ASTM D 2216, and ASTM D 2937, and D1140 respectively.
- Provide a written Geotechnical Report summarizing our explorations, geotechnical analysis, conclusions, and recommendations that include:
 - A discussion on the regional geology, the seismic setting of the site, tectonic faulting, and seismic design criteria in accordance with the Oregon Structural Specialty Code.
 - Recommendations for site earthwork including site preparation, grading, drainage, compaction criteria, and wet-weather earthwork procedures.
 - Recommendations for use of on-site soil, types of imported material, compaction criteria, and cut and fill slope criteria.
 - Recommendations for excavation, utility trenches, backfill materials, and backfill compaction.
 - Recommendations for design and construction of shallow-spread foundations, including allowable design bearing pressures, minimum footing depth and width, lateral resistance to sliding, and estimates of settlement.
 - Recommendations for the design and construction of concrete floor slabs, including an anticipated value for subgrade modulus.
 - Design criteria for cast-in-place retaining walls and embedded building walls including lateral earth pressure, drainage, backfill material, and backfill compaction.
 - Recommendations for design and construction of asphalt pavements for on-site access roads and parking areas including subbase, base course, and asphalt paving thickness.
 - A discussion of groundwater conditions and recommendations for subsurface drainage of foundations, floor slabs, and pavement.

SITE CONDITIONS

The approximately 12-acre site is located in southwest Canby on a nearly flat topographic bench about ¼ mile north of the Molalla River. The following paragraphs describe the site geology, surface conditions, site topography, and subsurface conditions. The site relative to surrounding features is shown in Figure 1.

SITE GEOLOGY

The site lies on a broad lowland formed by tectonic forces separating the Cascade Mountains to the east and the Coast Mountains to the west. Uplifted marine sedimentary formations that form the basement rocks are overlain by Columbia River Basalt. Near-surface soil is silt, sand, and gravel placed by Glacial Lake Missoula outburst flooding that occurred in the later Quaternary period, between 10,000 and 14,000 thousand years ago¹.

SURFACE CONDITIONS

The proposed development is located north of the Molalla River on a nearly flat topographic bench. Most of the site is an unimproved hay field. A residential zone borders the area to the north. Large rural residential lots are located to the east. The area to the south and west

¹ M. Gannett, R. Caldwell, 1998, Generalized Geologic Map of the Willamette Lowland Aquifer System; Oregon and Washington, USGS Professional Paper 1424-A.

remains farmland. The site is vegetated with grass hay with residential landscaping on the residential parcels making up the east portion of the site.

The site is mostly flat and level, site elevations vary from about 173 feet along the western side of the property to 183 feet along the eastern side.

SUBSURFACE CONDITIONS

We explored subsurface conditions at the site by observing excavation of five test pits (TP-1 through TP-5) to depths up to 12 feet below the ground surface (bgs) on November 16, 2018. The exploration locations are shown in Figure 2.

Soil samples obtained from the test pits were returned to our laboratory for additional evaluation and determination of the natural moisture content. Descriptions of field and laboratory procedures and the exploration logs are included in Attachment A.

We encountered very stiff sandy silt at the ground surface. The silt soil graded to dense gravel with sand, cobbles, occasional boulders, and trace silt at about 4 feet below the ground surface.

GROUNDWATER/INFILTRATION TESTING

Groundwater was not encountered during the exploration. A review of historical well logs indicates that groundwater is unlikely to be encountered during site development.

We conducted a falling head, open pit, infiltration test in TP-1 at a depth of 12 feet below the ground surface. The water was introduced into the test pit from a 1,000-gallon tank under gravity pressure using a 4-inch diameter fire hose. There was no water accumulation in the test pit throughout the duration of the test. The test data is summarized in Table 1.

TABLE 1 - INFILTRATION TEST PARAMETERS

FALLING HEAD, OPEN PIT INFILTRATION TEST DATA - TP-1	
DEPTH (FEET)	12
FLOW RATE (GALLONS/MINUTE)	9.1
START TIME	0946
END TIME	0956
WETTED AREA (SQUARE FEET)	1
DOWN-HOLE FLOW RATE (GALLONS/HOUR)	900
ACCUMULATION (INCHES)	0

SEISMIC SETTING

The Portland area is subject to seismic events stemming from three possible sources: the Cascadia Subduction Zone (CSZ), intraslab faults within the Juan de Fuca Plate, and crustal faults in the North American Plate.

Maximum magnitude for a CSZ event is expected to be in the range of Moment Magnitude (MW) 9.0. Intraslab events have occurred on a frequent basis in the Puget Sound, contributing small magnitude ground motions in Western Oregon.

Quaternary crustal faults within 10 miles of the site are the Grant Butte-Damascus-Tickle Creek Fault Zone that surrounds the site, the closest trace about 0.4 miles to the southeast. Other

nearby faults are the East Bank fault about 2.5 miles to the northwest and the Portland Hills and Oatfield Faults about 4.9 and 45.8 miles to the southwest, respectively².

The contribution of potential earthquake-induced ground motion from all known sources, including the faults described above, are included in probabilistic ground motion maps developed by the USGS. Based on site explorations and geologic mapping, the site falls into Site Class D for seismic design. Seismic design parameters for the project site are provided in Table 1.

TABLE 2 – SEISMIC DESIGN PARAMETERS

2015 IBC CODE BASED RESPONSE SPECTRUM	
MCE_R GROUND MOTION - 5% DAMPING	
S_s	0.896g
S_1	0.396g
Mapped maximum considered earthquake spectral response acceleration parameter (Site class C)	
F_a	1.042
F_v	1.404
S_{MS}	0.933g
S_{M1}	0.556g
Design spectral response acceleration parameter	
S_{DS}	0.622g
S_{D1}	0.371g

The site is not subject to liquefaction.

CONCLUSIONS AND RECOMMENDATIONS

Based on the results of our field explorations and our engineering analysis, it is our opinion that the site can be developed as proposed. On-site soil conditions are favorable for mass grading in dry weather conditions. Extra costs will accrue if earthwork is planned for the winter months.

CONSTRUCTION CONSIDERATIONS

Fine-grained soils on the site are easily disturbed during the wet season. If not carefully executed, site preparation, utility trench work, and roadway excavation can create extensive soft areas and significant repair costs can result. Earthwork should be planned and executed to minimize subgrade disturbance.

²United States Geological Survey, 2014, Quaternary Fault and Fold Database of the United States; USGS Earthquake Hazards Program.

The base rock thickness for project streets, as described below in the section titled "Pavement Recommendations," are intended to support post-construction design traffic loads. The base rock thickness determined for post-construction traffic will not support construction traffic or pavement construction when the subgrade soils are wet. Accordingly, if construction is planned for periods when the subgrade soils are not dry and firm, then an increased thickness of base rock or other methods to support construction traffic will be required.

If construction occurs during wet conditions, site preparation activities may need to be accomplished using track-mounted equipment, loading removed material into trucks supported on granular haul roads. The use of granular haul roads or staging areas will be necessary for the support of construction traffic during wet conditions.

The imported granular material should be placed in one lift over the prepared or undisturbed subgrade and compacted using a smooth drum, non-vibratory roller. We recommend that geotextile be placed as a barrier between the subgrade and imported fill in areas of repeated construction traffic. The geotextile should have a minimum Mullen burst strength of 250 pounds per square inch (psi) for puncture resistance and an apparent opening size between the U.S. Standard No. 70 and No. 100 Sieve to minimize migration of fines into the imported granular material.

We recommend that a minimum of 2 inches of lightly compacted granular material be placed at the base of footing excavations made in wet weather conditions. The granular material reduces water softening of subgrade soils and reduces subgrade disturbance during placement of forms and reinforcement.

SITE PREPARATION

The existing heavily rooted zone that covers the ground surface should be removed from building and structural areas to the depth of firm compacted fill or native soil. We estimate the stripping depth will generally be 2 to 4 inches. The actual stripping depth should be based on field observations at the time of construction. Stripped material should be transported off-site for disposal or used in landscaping areas.

Trees, shrubs, and brush should be removed from all building and paved areas. Root balls should be grubbed out to a depth such that roots greater than ½-inch in diameter are removed. The depth of excavation to remove root balls of trees could exceed 5 feet bgs.

Depending on the methods used, considerable disturbance and loosening of the subgrade could occur during grubbing and stripping. Soil disturbed during these operations should be removed to expose firm undisturbed subgrade. The resulting excavations should be backfilled with structural fill.

The existing building footings, floor slabs, septic tanks, drain fields, and other structural elements should be removed from the site. Any remaining utilities should be abandoned by removing the conduit and backfilling with granular structural fill. Soil disturbed during building demolition and grubbing operations be removed to expose firm undisturbed subgrade. The resulting excavations should be backfilled with structural fill.

If basements are present, they should be backfilled with granular structural fill after breaking and removing the sidewalls. The basement floors may be left in place but should be broken with an excavator bucket to allow the movement of groundwater.

After stripping, scarification, required site cutting has been completed, we recommend proof rolling the subgrade with a fully loaded dump truck or similar size, rubber-tire construction equipment to identify areas of excessive yielding. The proof rolling should be observed by a member of our geotechnical staff, who will evaluate the subgrade. If areas of excessive yielding are identified, the material should be excavated and replaced with compacted materials recommended for structural fill. Areas that appear to be too wet and soft to support proof rolling equipment should be prepared in accordance with the recommendations for wet weather construction presented above.

The test pits were backfilled using little compactive effort and soft spots can be expected at these locations. We recommend that these soft soils be removed from the test pits that are located within the proposed building and paved areas to a depth of 3 feet below finished subgrade. The resulting excavation should be brought back to grade with structural fill.

UTILITY TRENCH EXCAVATIONS

Trench construction and maintenance of safe working conditions, including temporary excavation stability, is the responsibility of the contractor. Applicable local, state and federal safety codes should be followed. Temporary excavations should either be shored or sloped in accordance with Safety Standards for Excavation, Oregon Administrative Rules (OARs) 1926.650.

Trench backfill should consist of well-graded granular material with a maximum particle size of $\frac{3}{4}$ -inch and less than 8 percent by weight passing the U.S. Standard No. 200 Sieve. The material should be free of roots, organic matter, and other unsuitable materials.

Trench backfill in the bedding zone and pipe zone should be placed and compacted in maximum lifts of 6 inches. Trench backfill above the pipe zone should be placed and compacted with a minimum of two lifts. A minimum cover of 3 feet over the top of the pipe should be placed before compacting with a hydraulic plate compactor (hoe-pack).

Trench backfill should be compacted to at least 90 percent of the maximum dry density at depths greater than 4 feet below finished grade and to 95 percent of the maximum dry density within 4 feet of finished grade. Compaction is based on ASTM D698, the standard proctor test or as recommended by the pipe manufacturer.

PERMANENT SLOPES

Permanent cut and fill slopes should not exceed a grade of 2H:1V (Horizontal to Vertical). Slopes that will be maintained by mowing should not be constructed steeper than 3H:1V. Structures and paved surfaces should be located at least 5 feet from the slope face.

The slopes should be planted with vegetation to provide protection against erosion. Surface water runoff should be collected and directed away from slopes steeper than 3H:1V to prevent water from running down the face of the slope.

STRUCTURAL FILL

General. Fill within building, pavement, and sidewalk areas should be placed as compacted structural fill. Structural fill should be compacted to at least 95% of the maximum dry density as determined by ASTM D 698.

Brush, roots, construction debris, and other deleterious material not should be placed in the structural fill. Additional information regarding specific types of fill is provided below.

On-Site Silt: The near-surface on-site silt soil is suitable for use as structural fill provided it can be moisture-conditioned, separated from concentrations of organics and other unsuitable material, and compacted to the specified density. The fill should be placed in lifts with a maximum loose thickness of 8 inches.

Imported Granular Material: Imported granular fill material may include sand, gravel, or fragmented rock with a maximum size of 4 inches and with not more than about 5% passing the No. 200 sieve (washed analysis). Material satisfying these requirements can usually be placed during periods of wet weather. The first lift of granular fill placed over a fine-grained subgrade should be about 18 inches thick and subsequent lifts about 12 inches thick when using medium- to heavy-weight vibratory rollers. Granular structural fill should be limited to a maximum size of about 1-½ inch when compacted with hand-operated equipment. Lift thicknesses should be limited to less than 8 inches when using hand-operated vibratory plate compactors.

Free-Draining Fill: Free-draining material should have less than 2% passing the No. 200 sieve (washed analysis). Examples of materials that would satisfy this requirement include ¾ to ¼ inch, 1½ to ¾ inch, or 3- to 1-inch crushed rock.

SHALLOW FOUNDATIONS

In our opinion, the proposed structures can be supported on continuous spread footings or isolated column footings founded on new structural fill, or on undisturbed native silt.

Continuous wall and spread footings and retaining wall footings should be proportioned for an allowable bearing pressure of 2,500 pounds per square foot (psf). For this allowable bearing pressure, foundations should be at least 14 inches wide. Footing embedment should be as required by the Oregon Structural Specialty Code.

The recommended allowable bearing pressure applies to the total of dead plus long-term live loads. The allowable bearing pressure may be increased by a factor of 1/3 for short-term wind or seismic loads.

Differential and total settlement of footings is anticipated to be less than ½ inch and 1-inch under static conditions, respectively.

SLAB-ON-GRADE FLOORS

Satisfactory subgrade support for lightly-loaded building floor slabs can be obtained on the undisturbed native soil or on engineered structural fill. A subgrade modulus of 100 pounds per cubic inch may be used to design floor slabs.

A minimum 6-inch-thick layer of free draining fill should be placed and compacted over the prepared subgrade to assist as a capillary break and blanket drain. The free-draining fill layer may be capped with a 1- to 2-inch-thick layer of clean ¾ inch minus crushed rock that contains no more than 5% fines.

A vapor retarder manufactured for use beneath floor slabs should be installed above the free draining fill in inhabited spaces and spaces that will receive floor coverings. Careful attention should be made during construction to prevent perforating the retarder and to seal edges and

utility penetrations. We recommend following ACI 302.1, Chapter 3 regarding the installation of a vapor retarder.

RETAINING WALLS & EMBEDDED BUILDING WALLS

The following recommendations assume that the walls are less than 12 feet in height, backfill extends a distance behind the wall equal to the wall height and that the backfill is well drained and meets the requirements detailed above for imported granular material. Reevaluation of our recommendations will be required if retaining walls vary from these assumptions.

In general, cantilever retaining walls yield under lateral loads and should be designed with active lateral earth pressures. Restrained walls, such as embedded building walls and vaults should be designed to withstand at-rest lateral earth pressures. We recommend using the lateral earth pressures shown in Table 2. The loads are provided as equivalent fluid density (G). Diagrams showing the use of the lateral earth pressures in design calculations are provided in Figure 3.

TABLE 2 – EQUIVALENT FLUID DENSITY (G) ACTING ON RETAINING WALLS

WALL TYPE	BACKFILL CONDITION	BACKFILL COMPONENT (PCF)	SURCHARGE COMPONENT (PSF)	SEISMIC COMPONENT (PCF)
YIELDING WALL	FLAT	30	80	15
	2H:1V	45		28
NON-YIELDING WALL	FLAT	50	120	15
	2H:1V	70		28

Static lateral earth pressures acting on a retaining wall should be increased to account for surcharge loadings resulting from any traffic, construction equipment, material stockpiles, or structures located within a horizontal distance equal to the wall height. We have included lateral earth pressures for surcharge loads up to 250 psf placed as a distributed load within the distance H from the wall face.

Retaining wall drains should consist of a perforated drainpipe embedded in a minimum 1-foot-wide zone of free draining fill that is wrapped 360 degrees around by a geotextile filter that overlaps a minimum of 6 inches. The geotextile filter should be placed between the granular materials and the native soil to prevent the movement of fines into the clean granular material. The geotextile filter should be a non-woven fabric with an apparent opening size between the U.S. Standard No. 70 and No. 100 Sieve sizes and a water permittivity of greater than 1.5 sec^{-1} .

Backfill for retaining walls should extend a horizontal distance of $H/2$ from the back of the wall, where H is the embedded wall height. Backfill should be compacted as recommended for structural fill, with the exception of backfill placed immediately adjacent to walls. To reduce pressure on walls, backfill located within a horizontal distance of 3 feet from retaining walls should be compacted to approximately 90% of the maximum dry density, as determined by

ASTM D698, and should be compacted in lifts less than 6 inches thick using hand-operated tamping equipment (such as a jumping jack or vibratory plate compactor).

LATERAL RESISTANCE

Lateral loads of buildings and retaining walls can be resisted by passive earth pressure on the sides of footings or by friction on the base of the footings but not both. We recommend using the equivalent fluid pressures and coefficients of friction provided in Table 3.

TABLE 3 - LATERAL RESISTANCE FACTORS

SOIL TYPE	EQUIVALENT FLUID PRESSURE (γ - PCF)	FRICTION COEFFICIENT (μ)
ON-SITE SILT	300	0.35
IMPORTED CRUSHED ROCK	800	0.45

The tabulated values above are ultimate values. The project structural engineer should apply appropriate factors of safety for static and dynamic conditions. Typical factors of safety values for static conditions are 2 to 3 for equivalent fluid pressure and 1.5 to 2 for friction coefficients. Factors of safety for dynamic conditions are usually 1.1.

In order to develop the tabulated capacity for passive resistance using on-site silt, concrete must be placed directly against the walls of the footing excavations. When using the value for imported crushed rock, the rock should extend a minimum horizontal distance equal to half the footing embedment and should be compacted to not less than 95% of the dry density as determined by ASTM D698. Adjacent floor slabs, pavements, or the upper 12-inch depth of adjacent, unpaved areas should not be considered when calculating passive resistance.

SITE DRAINAGE

Roof drains should be connected to a tightline drainpipe leading to storm drain outlet facilities. Pavement surfaces and open space areas should be sloped such that surface water runoff is collected and routed to suitable discharge points. Ground surfaces adjacent to buildings should be sloped to drain away from the buildings.

ON-SITE ASPHALT PAVEMENT

The pavement subgrade should be prepared in accordance with the previously described recommendations described in the "Site Preparation," "Wet Weather Construction," and "Structural Fill" sections of this report.

Our pavement recommendations are based on a subgrade stiffness using a California Bearing Ratio value of 3. We do not have specific information on the frequency and type of vehicles that will use the area; however, we have assumed that post construction traffic conditions will consist of no more than five heavy trucks per day.

Our analysis shows that a pavement section consisting of a minimum of 3 inches of AC pavement underlain by a minimum of 10.0 inches of crushed rock base will be required to support anticipated traffic loads over a design life of 20 years.

These thicknesses are intended to be the minimum acceptable and assume that construction will be completed during an extended period of dry weather. Construction of pavement when subgrade soils are wet will require an increased thickness of crushed rock base.

The AC pavement should conform to Section 00745 of the Standard Specification for Highway Construction, Oregon Highway Specifications. We recommend half inch dense graded Hot Mix Asphalt Concrete for Design Level 2 using Performance Grade Asphalt PG-64-22. The aggregate base should conform to Section 02630 of the specifications with the addition that no more than 5 percent of the material by dry weight passes a U.S. Standard No. 200 Sieve.

The aggregate base should be placed in one lift and compacted to not less than 95 percent of the maximum dry density as determined by ASTM D 698. Aggregate base contaminated with soil during construction should be removed and replaced before paving.

ADDITIONAL SERVICES

Because the future performance and integrity of the structural elements will depend largely on proper site preparation, drainage, fill placement, and construction procedures, monitoring and testing (geotechnical special inspection) by experienced geotechnical personnel should be considered an integral part of the design and construction process. Consequently, we recommend that GCN be retained to provide the following post-investigation services:

- Review construction plans and specifications to verify that our design criteria presented in this report have been properly integrated into the design.
- Attend a pre-construction conference with the design team and contractor to discuss geotechnical related construction issues.
- Observe fill areas and footing subgrade both before fill material or base rock is placed and before footings are constructed in order to verify the soil conditions.
- Prepare a post-construction letter-of-compliance summarizing our field observations, inspections, and test results.

LIMITATIONS

This report was prepared for the exclusive use of Hope Village, Inc. and members of the design team for this specific project. It should be made available to prospective contractors for information on the factual data only, and not as a warranty of subsurface conditions, such as those interpreted from the explorations and discussed in this report.

The recommendations contained in this report are preliminary and are based on information derived through site reconnaissance, subsurface testing, and knowledge of the site area. Variation of conditions within the area and the presence of unsuitable materials are possible and cannot be determined until exposed during construction. Accordingly, GCN's recommendations can be finalized only through GCN's observation of the project's earthwork construction. GCN accepts no responsibility or liability for any party's reliance on GCN's preliminary recommendations.

Unanticipated soil conditions are commonly encountered and cannot fully be determined by exploratory methods. Such unexpected conditions frequently require that additional

expenditures be made to attain properly-constructed projects. Therefore, a contingency fund is recommended to accommodate the potential for extra costs.

Within the limitations of the scope of work, schedule, and budget, the analyses, conclusions, and recommendations presented in this report were prepared in accordance with generally-accepted professional geotechnical engineering principles and practice in this area at the time this report was prepared. We make no warranty, either express or implied.

◆ ◆ ◆

We appreciate the opportunity to be of continued service to you. Please call if you have questions concerning this report or if we can provide additional services.

Sincerely,
GEO Consultants Northwest, Inc.



Brad L. Hupy
Managing Principal



EXPIRES 06/30/2021

Britton W. Gentry, PE, GE
Principal Engineer

Figures: Figure 1 - Site Vicinity
 Figure 2 - Preliminary Site Layout & Explorations
 Figure 3 - Retaining Wall Pressures
 Attachment A - Field Exploration and Laboratory Testing

Appendix C: Portion of Drainage Report for Riverside Park Subdivision, NW Engineers



Drainage Report, Downstream Analysis and Certification of Investigation

***Riverside Park
90-Lot Subdivision***

August 19, 2019

Prepared For: Riverside Park, LLC
10801 SW Riverside Drive
Portland, OR 97219

Prepared By: NW Engineers
3409 NE John Olsen Ave.
Hillsboro, OR 97124

Submitted To: City of Canby

Riverside Park, Project N0581

Table of Contents:

Introduction	3
Existing Conditions	3
Proposed Conditions.....	3
Drainage Calculations.....	4
Geotechnical Report.....	4
Downstream Analysis.....	4
Conclusions	4

Appendices:

Appendix A -	Existing Conditions Plan
Appendix B -	Soil Classification and Map
Appendix C -	Proposed Improvements Plan
Appendix D -	Basin Map
Appendix E -	Hydrologic/Hydraulic Calculations

DOWNSTREAM STORM DRAINAGE REPORT SUMMARY

Riverside Park 90-Lot Subdivision Tax Map 41E04D Tax Lot 2000

Introduction

The purpose of this report is to address how storm drainage run-off is being adequately controlled for this project. Included herein are calculations for sizing of the proposed conveyance and infiltration system. This report also provides verification that this development does not create negative impacts to adjacent properties.

Existing Conditions

The site area is 1,031,947 sf (23.69 acres). The site contains a single family residence and an outbuilding with paved driveways but the large majority of the site is open grassland. In general, the site slopes moderately at a 1.0% grade to the northwest (See Appendix A for Existing Conditions Map).

The United States Department of Agriculture Soil Conservation Service Soil Survey of Clackamas County, Oregon classifies the existing soils as Latourell loam. This soil type is further classified as being in hydrologic group B (See Appendix B for soil classification information).

Proposed Conditions

Proposed on-site improvements include a 90-Lot Subdivision with public streets and utilities. The project will be divided into three design and construction phases. Phase one will include a $\frac{3}{4}$ street improvement to S. Fir St. with access from S. Fir St. into the new development. Phases two and three will include a street connection to S. Ivy St. with frontage improvements along S. Ivy St.

On-Site Treatment and Infiltration System:

Stormwater runoff from the interior streets and driveways will be collected and conveyed to a series of drywells located in the public R.O.W. Lots 15-21, 23-24 and 55-63 will drain to the street via curb weepholes and will be collected by this drywell system as well. The drywell system was designed based on a 10 year design storm frequency per City of Canby Public Works Standards – section 4.301.a. Upstream of the drywell system will be water quality manholes that will provide pre-treatment. Additionally, the catch basins will be sumped structures which will provide additional pre-treatment. Each drywell was designed to have a depth of 26' per City of Canby Public Works Standards – section 4.312.c.2. The bottom 10' of each drywell will be perforated which will allow for infiltration.

On-Lot Stormwater Disposal:

Lots that are not required to discharge to the public storm system via weepholes located in the curb, will have individual backyard downspout infiltration systems.

Drainage Calculations

See table below for pre and post impervious area totals (The post developed total does not include roof areas for lots that will have backyard infiltration systems):

Impervious Area Totals	
Pre	Post
7,830 ft ²	311,581 ft ²

Runoff volumes were calculated using the Santa Barbara Urban Hydrograph based on a Type 1A 24-hr storm event. See tables below for 24-hr rainfall depths and pre and post discharge rates for each design storm.

24-Hour Rainfall Depths (inches)			
2 year	5 year	10 year	25 year
2.50	3.10	3.45	3.90

Peak Runoff Totals				
	2 year	5 year	10 year	25 year
Pre	0.65	1.21	1.73	2.50
Post	4.25	5.56	5.98	6.79

The time of concentration for the pre-developed condition is 55.6 min. The post-developed drainage area was divided into smaller sub-basins and a 5 min. time of concentration was used for each sub-basin. See the table below for curve numbers (CN) used for drainage calculations:

Curve Numbers (CN)		
	Pre	Post
Pervious Area	69	69
Impervious Area	98	98

The storm conveyance system was designed to pass the 10 year storm event without surcharge, and a 25 year event with surcharge but keeping the hydraulic grade line below any surface structure per City of Canby Public Works Standards – section 4.203.b.

Peak Elevations		
Reach	10 year	25 year
31R	165.99	166.01
2P	163.38	163.41
4P	151.42	151.68
3P	151.31	151.00
5P	163.02	163.00
32R	166.95	166.93

Geotechnical Report

Geo Consultants Northwest, Inc. has performed a site specific geotechnical investigation for the project site. Infiltration rates were tested at a depth of 14.5 ft. below ground surface in a hole that was roughly 4 ft². The result of the test was a flow rate of 4,200 gal/hr. which equates to 1,685 in/hr. The design rate is 400 in/hr. which is a factor of safety of 4.

Downstream Analysis

All stormwater will be disposed of on-site, therefore, no downstream analysis is required for this project.

Conclusions

Based on our analysis and calculations, it has been determined that the proposed storm sewer system has been adequately designed for capacity. Stormwater treatment methods have been designed in accordance with all applicable standards. The proposed design ensures that adjacent properties will not be negatively impacted due to the development of this property.

Appendix D: Portion of Drainage Report for Beck Pond Subdivision, Kitteridge Engineers, LLC

Final Storm Drainage Report

Beck Pond 69 Lot Subdivision Phases 1 and 2 -Stafford Land Company-

City of Canby, Oregon

November 21, 2018

Prepared for:

**STAFFORD LAND COMPANY
485 S. State Street
Lake Oswego, Oregon 97034**

Prepared by:

KITTREDGE ENGINEERS, LLC
Site Development and Infrastructure Design
Civil Engineering and Land Use Services
Specializing in Commercial, Residential and Public Utility Projects

6565 SW 207th Avenue
Aloha, Oregon 97078
Office: 503. 708-3942

www.kitengs.com



Table of Contents:

Table of Contents/Appendices	1
Purpose.....	2
Introduction.....	2
Existing Conditions.....	2
Proposed Conditions.....	3
Hydraulic Basin Analysis.....	3
Infiltration System and Water Quality Design.....	4
Conveyance system design and analysis.....	5
Conclusions.....	6
Hydrologic Methodology	6

Appendices:

Appendix A -	Location Map, Vicinity Map, Existing Conditions Plan
Appendix B -	Soil Maps & Classification, Runoff Curve Numbers
Appendix C -	Site Construction Plans
Appendix D -	On-site Basin Map (Post developed), HydroCAD Basin calculations 10-Year (Post Developed), HydroCAD Infiltration – Calculations 10-Year (Post Developed), On-site Conveyance calculations – 25 year Storm event.
Appendix E -	On-site Geotechnical Report and supporting infiltration data

STORM DRAINAGE REPORT – BECK POND SUBDIVISION

City of Canby, Clackamas County, OR
TAX MAP T4S R1E, SW ¼ Section 4
TAX LOTS 1401, 1500-41EAC & 1600

Purpose

The purpose of this analysis is to:

- Describe existing and proposed site conditions.
- Provide data and analysis for the storm water impacts due to the proposed Beck Pond 69 Lot Subdivision Development.
- Provide water quality, infiltration and conveyance information and design for the proposed site.
- Demonstrate that the proposed Beck Pond Subdivision does not significantly impact adjacent properties.

Introduction/Project Overview

This storm drainage report is for a 69 Lot Subdivision site located in the City of Canby known as The Beck Pond Subdivision. The project is located between S. Fir Street and S. Elm Street and located on tax lots 1401, 1500-EAC & 1600. The site area including the proposed S. Fir Street improvements is 14.24 Acres.

Existing Conditions

The existing site is for the most part undeveloped open space & farm land. There are two houses currently residing on the parcels to be developed which will be demolished with new construction. Along with the existing home structures are several smaller outbuildings, driveways and fencing also to be removed. The site is flat for the most part with grades varying perhaps a foot or so across the development area. The project site is bounded by S. Fir Street to the east and S. Elm Street to the west, and by similar existing home and farm land developments to the north and south.

Proposed Conditions

The entire site area is 14.23 acres and all will be included in the Beck Pond Subdivision development site. The project will consist of 69 subdivision lots and interior streets. A $\frac{3}{4}$ street improvement will also be performed along the projects east boundary at S. Fir Street. No work will be performed along the projects western boundary with S. Elm Street other than a proposed sewer connection and proposed interior street connection for SW 16th Avenue. Interior Streets, sidewalks and driveways will be constructed on-site along with the residential home structures themselves. All the interior streets will be collected and infiltrated via drywells in the various street ROW's.

With exception of lots 29 & 50-64, the individual subdivision roof tops will be infiltrated in each corresponding backyard via downspout infiltration systems. Lots 29 & 50-64 will be collected on-site and routed out the face of curb to then be infiltrated in the drywells for the interior streets. Due to concerns by the site geotechnical engineer, it was not appropriate to infiltrate these lots in backyard downspout infiltration systems. The City of Canby has agreed to let stormwater from these lots infiltrate in the public street ROW's.

Water Quality in the public ROW will be provided by Individual sedimentation manholes placed upstream of each drywell infiltration system.

The backyard infiltration systems are not included for design or permitting in this report or with the project drawing set. A general Clackamas County standard detail has been included on Detail Sheet C125 for reference however. See Appendix "C" for the construction drawing set. Clackamas County will permit the backyard infiltration systems separately as part of the residential building permit issuance.

Hydraulic Basin Analysis

Storm flows were calculated for post developed basins. Basin maps and summary basin calculations are included with this report as Appendix "D".

The basin design criteria are as follows;

Design Criteria:

- Open channel flow
- 2-year, 24-hour event = 2.50 inches
- 10-year, 24-hour event = 3.50 inches
- 25-year, 24-hour event = 4.00 inches
- 100-year, 24-hour event = 4.50 inches
- Conveyance system design storm = 25-year event
- Santa Barbara Urban Hydrograph methodology – SCS Type 1A

Infiltration Design and Water Quality Design

INFILTRATION DRYWELLS IN THE PUBLIC ROW:

Storm water runoff from the entire site ROW area and 16 lots shall be discharged into one interior street ROW infiltration facility (see Appendix “D” for proposed basin locations and Appendix “C” for design plans). One of these infiltration facilities is located in the SW 16th Avenue ROW on the east side of the project near the S. Fir Street intersection and consists of (4) sedimentation manholes and (4) infiltration drywells.

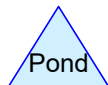
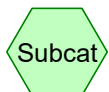
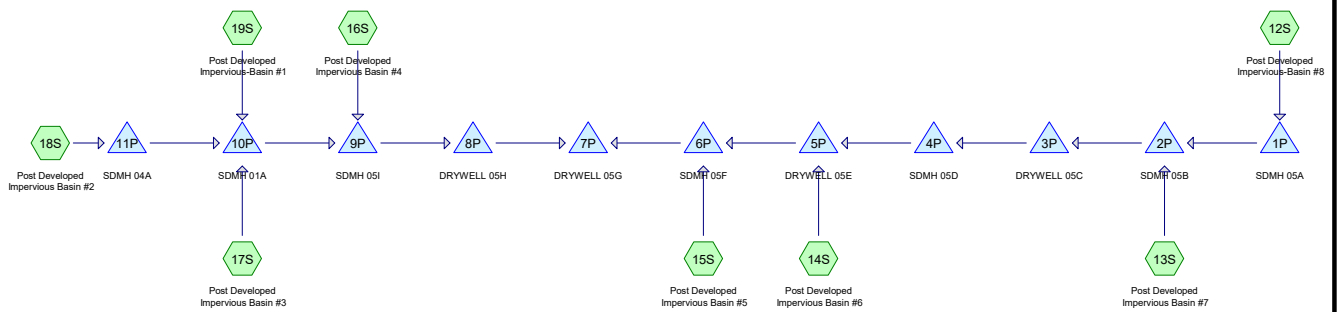
Infiltration Calculations (see Appendix “D”) are based upon infiltration test results provided by the site geo-technical engineer (see attached Soils Report prepared by GeoPacific Engineering, Inc dated May 16th, 2018 – Appendix “E”). In addition to the geotechnical report, please reference attached e-mail correspondence attached behind the geotechnical report that further details the tested infiltration rates on site. The drywells were configured to be 26’ deep per city standards.

Additionally, only the bottom 5’ of the site drywells were calculated for infiltration since this is the area with highest infiltration rates. In truth however, infiltration will be occurring for the full height of the designed drywells up to the designed pipe inverts which provides yet another factor of safety in on-site drywell design. Drain rock (1-1/2” -) and Mirafi 140N fabric will be used in the area of drywell construction from the bottom of the proposed drywells up to the bottom pipe invert into the various drywells on-site. Above this point, (3/4” -)crushed rock will be placed from the drywell pipe inverts up to finished drywell grade.

Based on the infiltration data provide in the project geotechnical report and email correspondence data, the tested ROW drywell infiltration rates appear to be between 1800 in/hr. (east side – after onsite Drywell testing) and perhaps as high as 3600 in/hr. (west side). After the first drywell (SDMH 05D) was constructed and tested on the east side of the site, the site geotech performed (2) individual drywell tests and found tested infiltration rates to be approx. 1800 in/hr. Based on the infiltration rates tested on-site and recommendations from the City and project geotech, a design infiltration rate of 400 in/hr was used for design. This amounts to a safety factor of between 4 and 9 on-site.

The infiltration design was performed and routed using the “HydroCAD” computer software model. A SCS Type 1A rainfall model was used for calculation purposes. Infiltration calculations were performed for the 10 year design storm event per City of Canby Public Works Standards – section 4.300. Design rainfall events were taken from isopluvial maps for the area and confirmed with City engineering staff. The design infiltration systems were designed so that no surcharging would occur in the on-site conveyance system for the infiltration design 10 year storm event. On-site conveyance pipe sizing was designed to convey the 25 year design storm event based on the SBUH method of design. See the conveyance portion of this report below for further detail regarding conveyance pipe sizing and design.

Appendix E: HydroCAD Modelling for Beck Pond Only condition, Sisul Engineering



Beck Pond-Storm Analysis

Prepared by {enter your company name here}

Printed 7/7/2023

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Page 2

Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
5.292	98	Impervious ROW Area (12S, 13S, 14S, 15S, 16S, 17S, 18S, 19S)
5.292	98	TOTAL AREA

Beck Pond-Storm Analysis

Prepared by {enter your company name here}

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Printed 7/7/2023

Page 3

Soil Listing (selected nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
0.000	HSG C	
0.000	HSG D	
5.292	Other	12S, 13S, 14S, 15S, 16S, 17S, 18S, 19S
5.292		TOTAL AREA

Beck Pond-Storm Analysis

Prepared by {enter your company name here}

Printed 7/7/2023

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Page 4

Ground Covers (selected nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.000	0.000	5.292	5.292	Impervious ROW Area	12S, 13S, 14S, 15S, 16S, 17S, 18S, 19S
0.000	0.000	0.000	0.000	5.292	5.292	TOTAL AREA	

Beck Pond-Storm Analysis

Prepared by {enter your company name here}

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Printed 7/7/2023

Page 5

Pipe Listing (selected nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Diam/Width (inches)	Height (inches)	Inside-Fill (inches)
1	1P	162.58	162.36	42.6	0.0052	0.013	12.0	0.0	0.0
2	2P	162.27	161.85	63.0	0.0067	0.013	12.0	0.0	0.0
3	3P	162.11	161.61	75.3	0.0066	0.013	12.0	0.0	0.0
4	4P	161.48	161.09	81.7	0.0048	0.013	12.0	0.0	0.0
5	5P	160.99	160.31	98.1	0.0069	0.013	12.0	0.0	0.0
6	6P	160.27	159.68	123.8	0.0048	0.013	12.0	0.0	0.0
7	8P	159.74	159.60	60.0	0.0023	0.013	15.0	0.0	0.0
8	9P	159.94	159.74	60.0	0.0033	0.013	15.0	0.0	0.0
9	10P	160.06	159.94	37.1	0.0032	0.013	15.0	0.0	0.0
10	11P	160.87	160.14	135.2	0.0054	0.013	12.0	0.0	0.0

Beck Pond-Storm Analysis

Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

Prepared by {enter your company name here}

Printed 7/7/2023

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Page 6

Time span=0.01-48.00 hrs, dt=0.001 hrs, 47991 points

Runoff by SBUH method, Split Pervious/Imperv.

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 12S: Post Developed	Runoff Area=42,644 sf 100.00% Impervious Runoff Depth=3.27" Tc=5.0 min CN=0/98 Runoff=0.80 cfs 0.266 af
Subcatchment 13S: Post Developed	Runoff Area=10,997 sf 100.00% Impervious Runoff Depth=3.27" Tc=5.0 min CN=0/98 Runoff=0.21 cfs 0.069 af
Subcatchment 14S: Post Developed	Runoff Area=25,846 sf 100.00% Impervious Runoff Depth=3.27" Tc=5.0 min CN=0/98 Runoff=0.49 cfs 0.162 af
Subcatchment 15S: Post Developed	Runoff Area=15,106 sf 100.00% Impervious Runoff Depth=3.27" Tc=5.0 min CN=0/98 Runoff=0.28 cfs 0.094 af
Subcatchment 16S: Post Developed	Runoff Area=11,642 sf 100.00% Impervious Runoff Depth=3.27" Tc=5.0 min CN=0/98 Runoff=0.22 cfs 0.073 af
Subcatchment 17S: Post Developed	Runoff Area=81,451 sf 100.00% Impervious Runoff Depth=3.27" Tc=5.0 min CN=0/98 Runoff=1.53 cfs 0.509 af
Subcatchment 18S: Post Developed	Runoff Area=9,143 sf 100.00% Impervious Runoff Depth=3.27" Tc=5.0 min CN=0/98 Runoff=0.17 cfs 0.057 af
Subcatchment 19S: Post Developed	Runoff Area=33,703 sf 100.00% Impervious Runoff Depth=3.27" Tc=5.0 min CN=0/98 Runoff=0.63 cfs 0.211 af
Pond 1P: SDMH 05A	Peak Elev=163.17' Storage=7 cf Inflow=0.80 cfs 0.266 af 12.0" Round Culvert n=0.013 L=42.6' S=0.0052 '/' Outflow=0.80 cfs 0.266 af
Pond 2P: SDMH 05B	Peak Elev=162.86' Storage=12 cf Inflow=1.01 cfs 0.335 af 12.0" Round Culvert n=0.013 L=63.0' S=0.0067 '/' Outflow=1.01 cfs 0.335 af
Pond 3P: DRYWELL 05C	Peak Elev=146.79' Storage=49 cf Inflow=1.01 cfs 0.335 af Discarded=1.01 cfs 0.335 af Primary=0.00 cfs 0.000 af Outflow=1.01 cfs 0.335 af
Pond 4P: SDMH 05D	Peak Elev=161.48' Storage=0 cf Inflow=0.00 cfs 0.000 af 12.0" Round Culvert n=0.013 L=81.7' S=0.0048 '/' Outflow=0.00 cfs 0.000 af
Pond 5P: DRYWELL 05E	Peak Elev=145.81' Storage=0 cf Inflow=0.49 cfs 0.162 af Discarded=0.49 cfs 0.162 af Primary=0.00 cfs 0.000 af Outflow=0.49 cfs 0.162 af
Pond 6P: SDMH 05F	Peak Elev=160.58' Storage=6 cf Inflow=0.28 cfs 0.094 af 12.0" Round Culvert n=0.013 L=123.8' S=0.0048 '/' Outflow=0.28 cfs 0.094 af
Pond 7P: DRYWELL 05G	Peak Elev=146.08' Storage=41 cf Inflow=0.94 cfs 0.108 af Outflow=0.93 cfs 0.108 af
Pond 8P: DRYWELL 05H	Peak Elev=160.24' Storage=419 cf Inflow=2.56 cfs 0.849 af Discarded=1.90 cfs 0.836 af Primary=0.65 cfs 0.013 af Outflow=2.56 cfs 0.849 af

Beck Pond-Storm Analysis

Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

Prepared by {enter your company name here}

Printed 7/7/2023

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Page 7

Pond 9P: SDMH 05I

Peak Elev=161.00' Storage=21 cf Inflow=2.56 cfs 0.849 af
15.0" Round Culvert n=0.013 L=60.0' S=0.0033 '/ Outflow=2.56 cfs 0.849 af

Pond 10P: SDMH 01A

Peak Elev=161.26' Storage=15 cf Inflow=2.34 cfs 0.777 af
15.0" Round Culvert n=0.013 L=37.1' S=0.0032 '/ Outflow=2.34 cfs 0.777 af

Pond 11P: SDMH 04A

Peak Elev=161.32' Storage=6 cf Inflow=0.17 cfs 0.057 af
12.0" Round Culvert n=0.013 L=135.2' S=0.0054 '/ Outflow=0.17 cfs 0.057 af

Total Runoff Area = 5.292 ac Runoff Volume = 1.441 af Average Runoff Depth = 3.27"
0.00% Pervious = 0.000 ac 100.00% Impervious = 5.292 ac

Beck Pond-Storm Analysis

Prepared by {enter your company name here}

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

Printed 7/7/2023

Page 8

Summary for Subcatchment 12S: Post Developed Impervious-Basin #8

Runoff = 0.80 cfs @ 7.87 hrs, Volume= 0.266 af, Depth= 3.27"

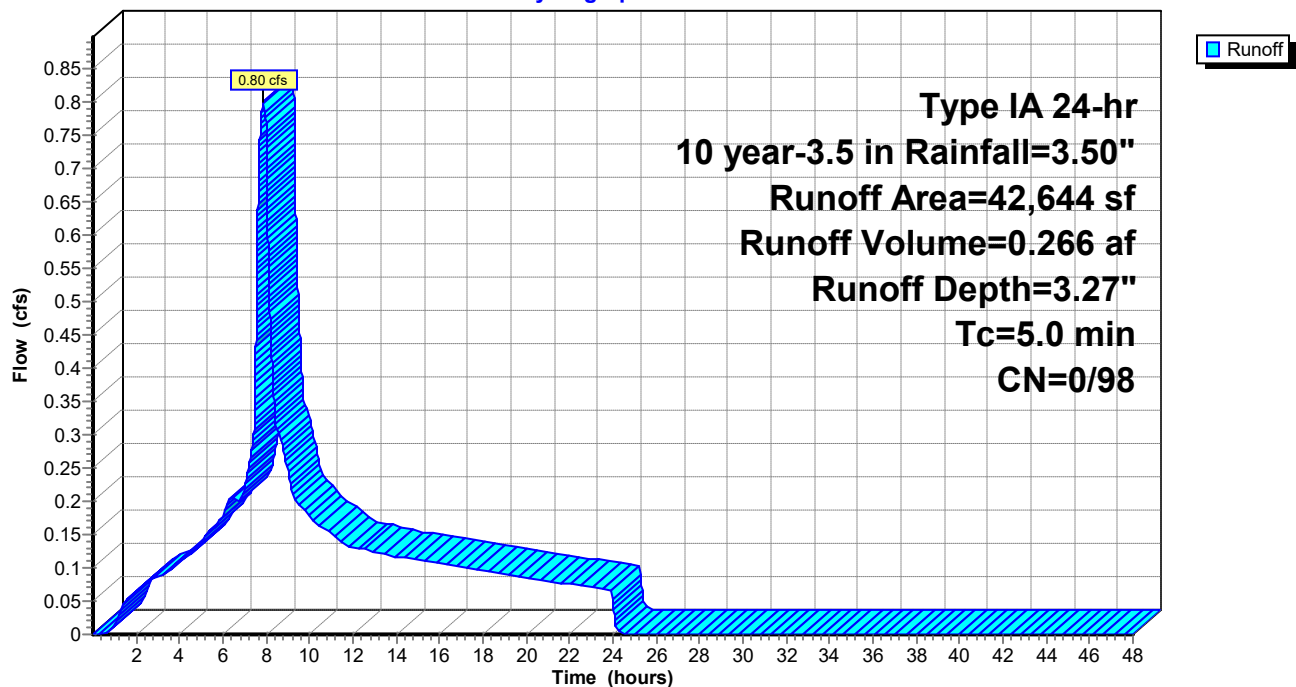
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.01-48.00 hrs, dt= 0.001 hrs
Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

	Area (sf)	CN	Description
*	42,644	98	Impervious ROW Area
	42,644	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 12S: Post Developed Impervious-Basin #8

Hydrograph



Beck Pond-Storm Analysis

Prepared by {enter your company name here}

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

Printed 7/7/2023

Page 9

Summary for Subcatchment 13S: Post Developed Impervious Basin #7

Runoff = 0.21 cfs @ 7.87 hrs, Volume= 0.069 af, Depth= 3.27"

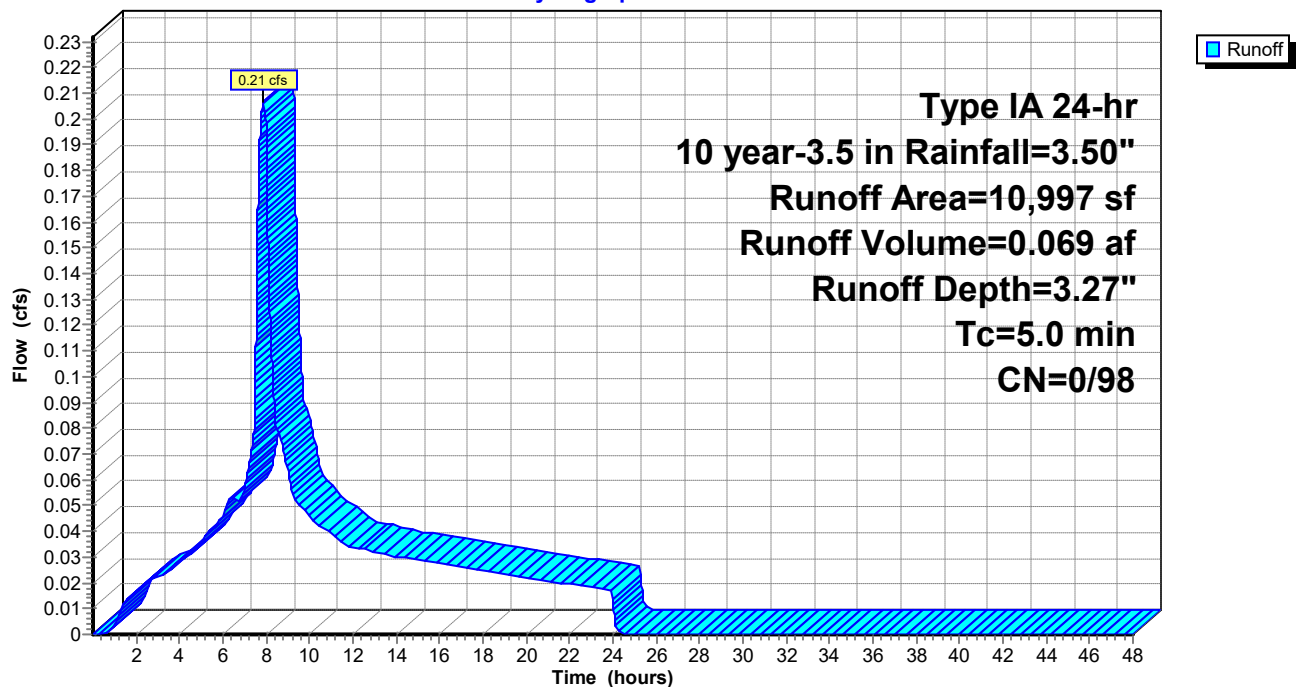
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.01-48.00 hrs, dt= 0.001 hrs
Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

	Area (sf)	CN	Description
*	10,997	98	Impervious ROW Area
	10,997	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 13S: Post Developed Impervious Basin #7

Hydrograph



Beck Pond-Storm Analysis

Prepared by {enter your company name here}

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

Printed 7/7/2023

Page 10

Summary for Subcatchment 14S: Post Developed Impervious Basin #6

Runoff = 0.49 cfs @ 7.87 hrs, Volume= 0.162 af, Depth= 3.27"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.01-48.00 hrs, dt= 0.001 hrs

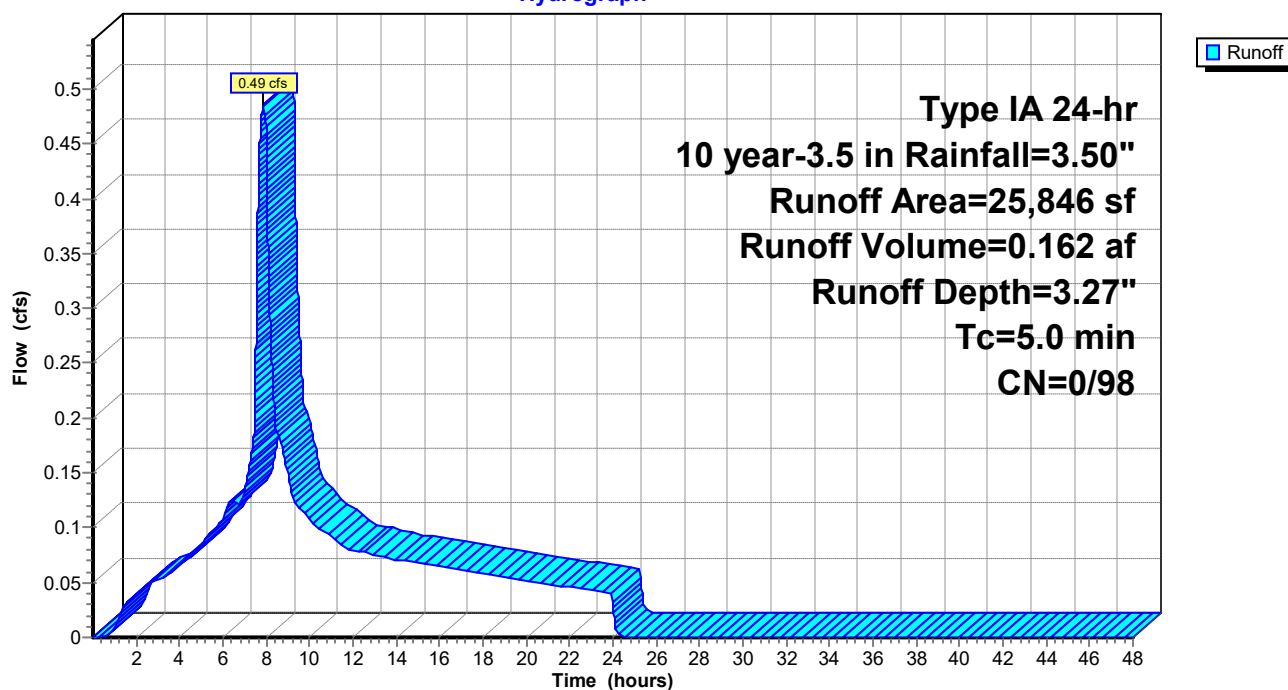
Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

	Area (sf)	CN	Description
*	25,846	98	Impervious ROW Area
	25,846	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 14S: Post Developed Impervious Basin #6

Hydrograph



Beck Pond-Storm Analysis

Prepared by {enter your company name here}

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

Printed 7/7/2023

Page 11

Summary for Subcatchment 15S: Post Developed Impervious Basin #5

Runoff = 0.28 cfs @ 7.87 hrs, Volume= 0.094 af, Depth= 3.27"

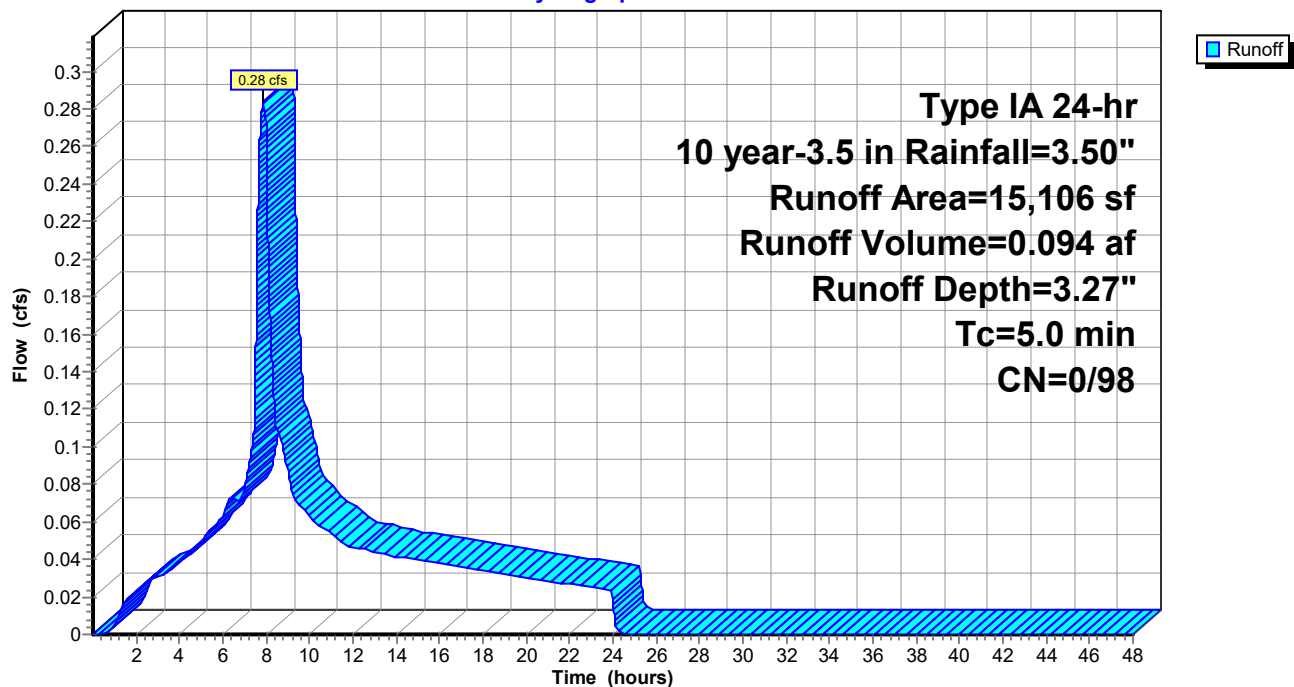
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.01-48.00 hrs, dt= 0.001 hrs
Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

	Area (sf)	CN	Description
*	15,106	98	Impervious ROW Area
	15,106	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 15S: Post Developed Impervious Basin #5

Hydrograph



Beck Pond-Storm Analysis

Prepared by {enter your company name here}

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

Printed 7/7/2023

Page 12

Summary for Subcatchment 16S: Post Developed Impervious Basin #4

Runoff = 0.22 cfs @ 7.87 hrs, Volume= 0.073 af, Depth= 3.27"

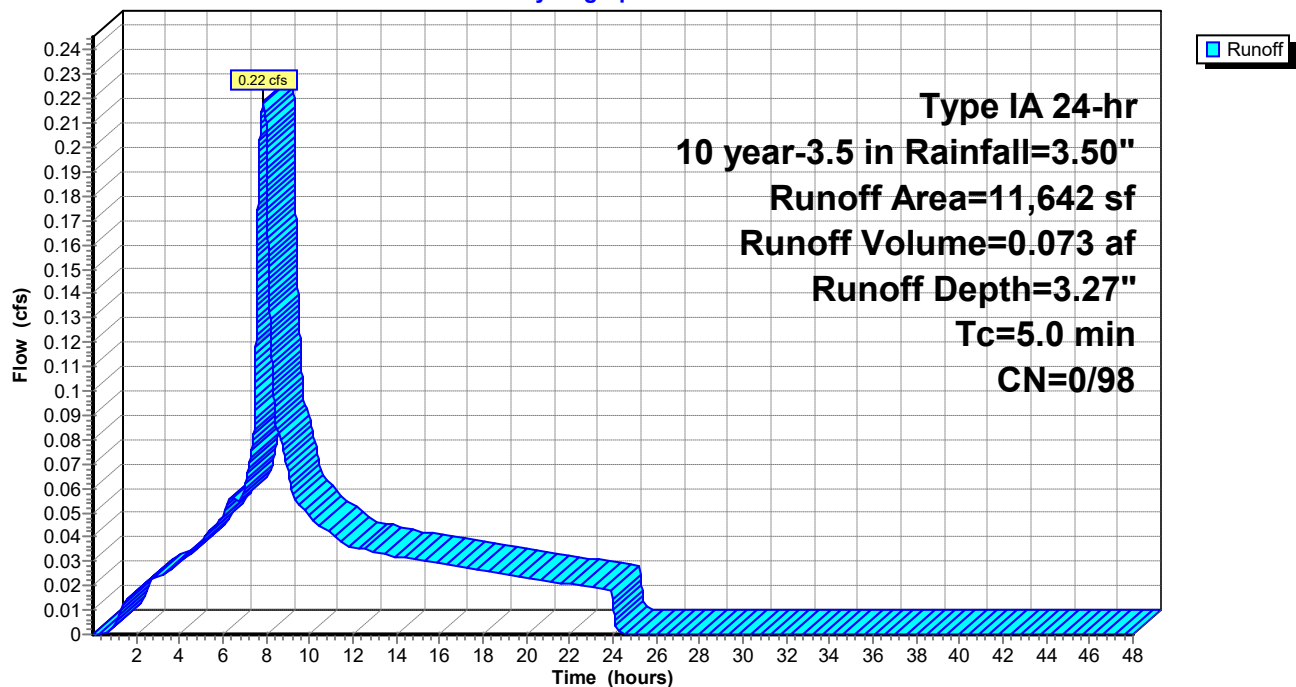
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.01-48.00 hrs, dt= 0.001 hrs
Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

	Area (sf)	CN	Description
*	11,642	98	Impervious ROW Area
	11,642	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 16S: Post Developed Impervious Basin #4

Hydrograph



Beck Pond-Storm Analysis

Prepared by {enter your company name here}

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

Printed 7/7/2023

Page 13

Summary for Subcatchment 17S: Post Developed Impervious Basin #3

Runoff = 1.53 cfs @ 7.87 hrs, Volume= 0.509 af, Depth= 3.27"

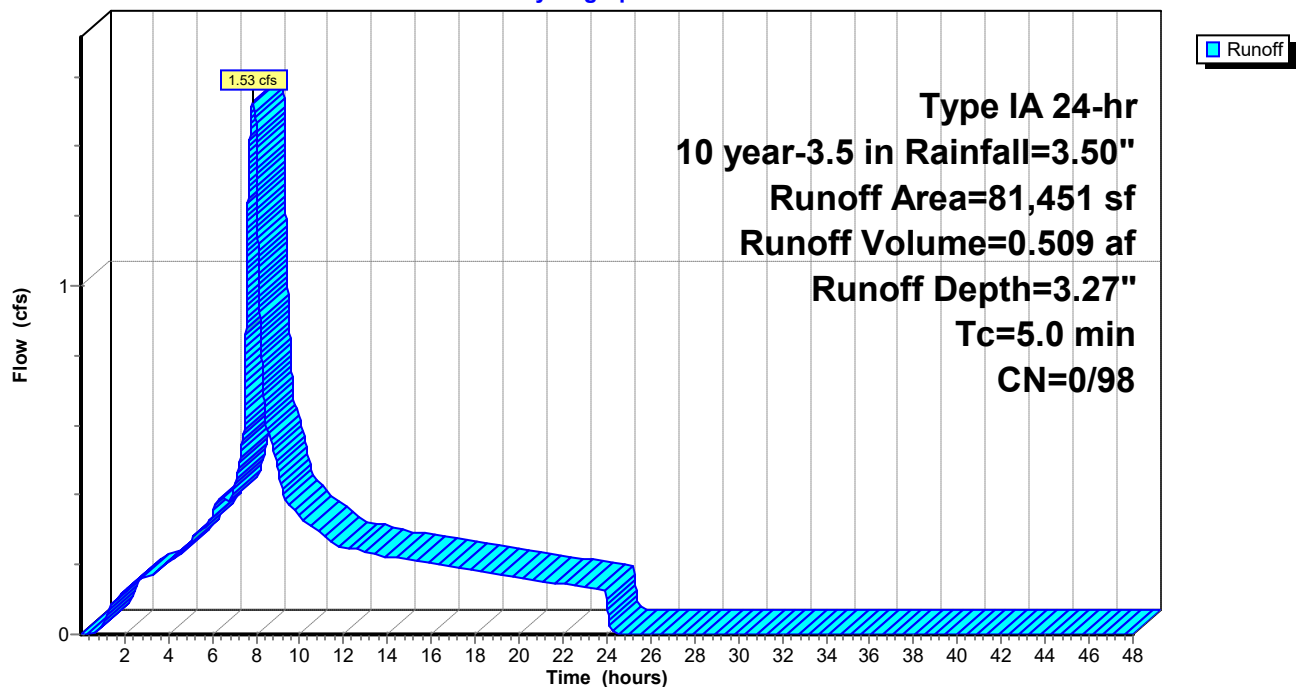
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.01-48.00 hrs, dt= 0.001 hrs
Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

	Area (sf)	CN	Description
*	81,451	98	Impervious ROW Area
	81,451	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 17S: Post Developed Impervious Basin #3

Hydrograph



Beck Pond-Storm Analysis

Prepared by {enter your company name here}

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

Printed 7/7/2023

Page 14

Summary for Subcatchment 18S: Post Developed Impervious Basin #2

Runoff = 0.17 cfs @ 7.87 hrs, Volume= 0.057 af, Depth= 3.27"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.01-48.00 hrs, dt= 0.001 hrs

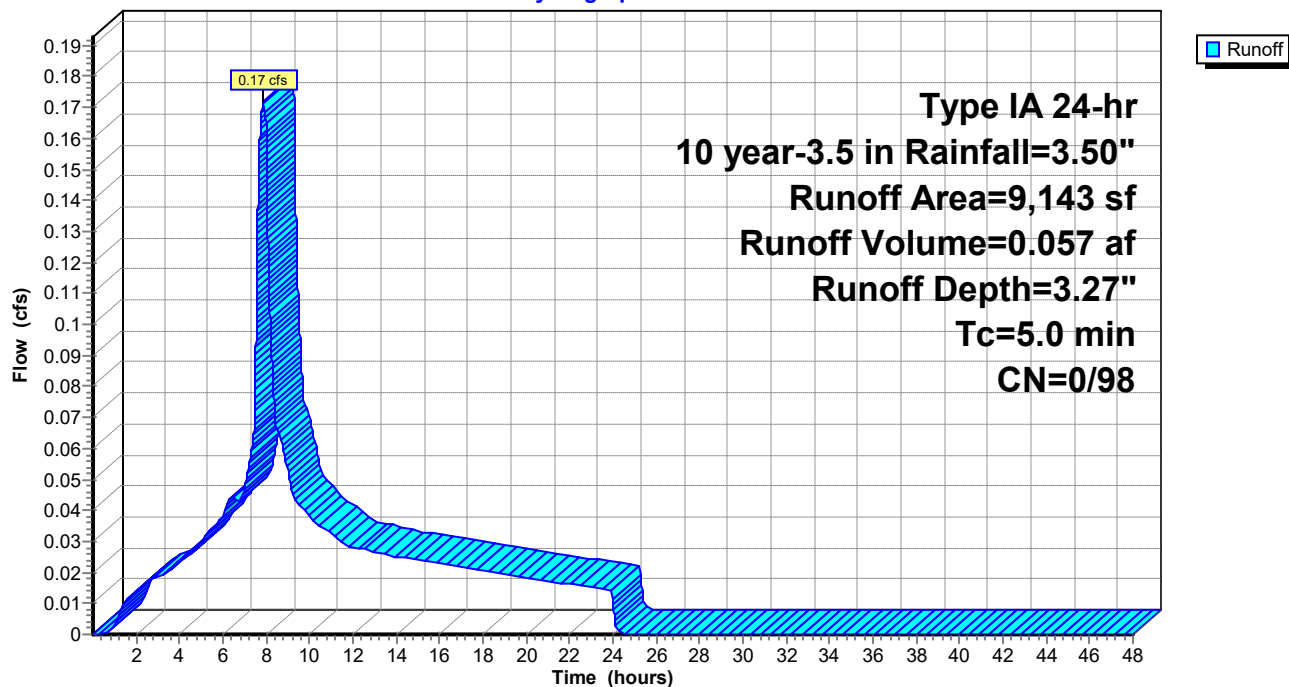
Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

	Area (sf)	CN	Description
*	9,143	98	Impervious ROW Area
	9,143	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 18S: Post Developed Impervious Basin #2

Hydrograph



Beck Pond-Storm Analysis

Prepared by {enter your company name here}

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

Printed 7/7/2023

Page 15

Summary for Subcatchment 19S: Post Developed Impervious-Basin #1

Runoff = 0.63 cfs @ 7.87 hrs, Volume= 0.211 af, Depth= 3.27"

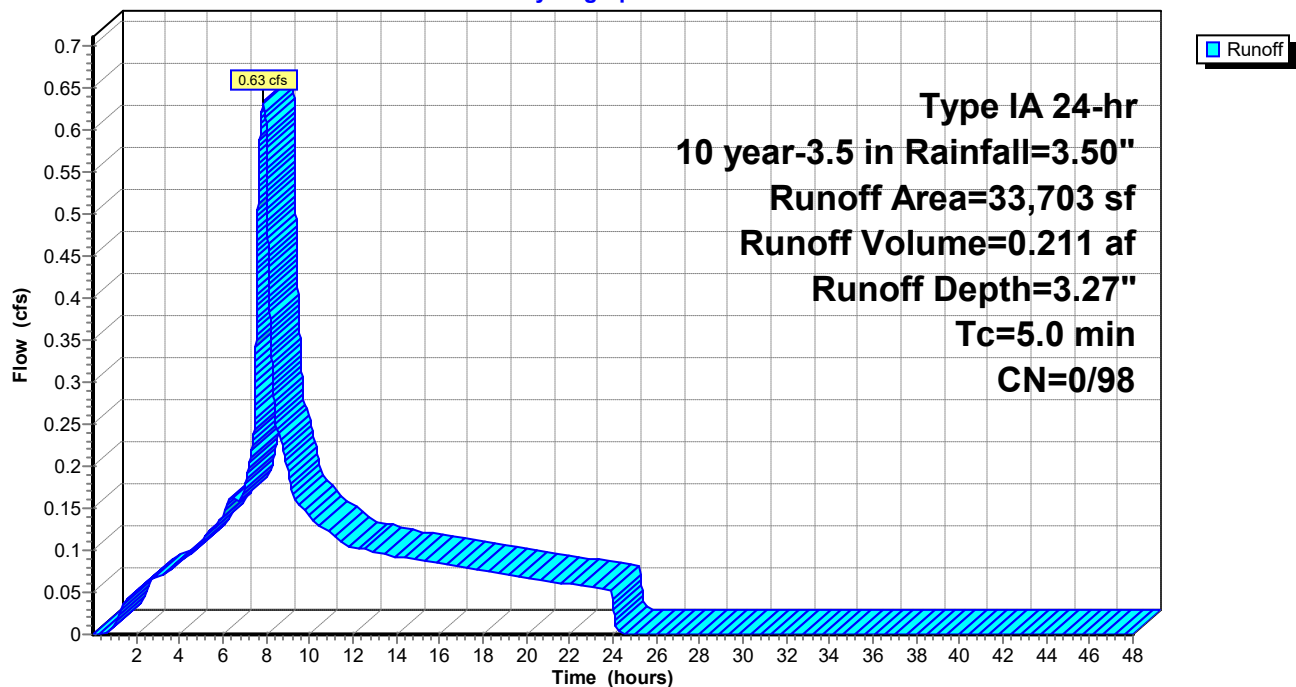
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.01-48.00 hrs, dt= 0.001 hrs
Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

	Area (sf)	CN	Description
*	33,703	98	Impervious ROW Area
	33,703	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 19S: Post Developed Impervious-Basin #1

Hydrograph



Beck Pond-Storm Analysis

Prepared by {enter your company name here}

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

Printed 7/7/2023

Page 16

Summary for Pond 1P: SDMH 05A

Inflow Area = 0.979 ac, 100.00% Impervious, Inflow Depth = 3.27" for 10 year-3.5 in event
Inflow = 0.80 cfs @ 7.87 hrs, Volume= 0.266 af
Outflow = 0.80 cfs @ 7.87 hrs, Volume= 0.266 af, Atten= 0%, Lag= 0.1 min
Primary = 0.80 cfs @ 7.87 hrs, Volume= 0.266 af

Routing by Dyn-Stor-Ind method, Time Span= 0.01-48.00 hrs, dt= 0.001 hrs
Peak Elev= 163.17' @ 7.88 hrs Surf.Area= 13 sf Storage= 7 cf

Plug-Flow detention time= 0.3 min calculated for 0.266 af (100% of inflow)
Center-of-Mass det. time= 0.3 min (662.9 - 662.6)

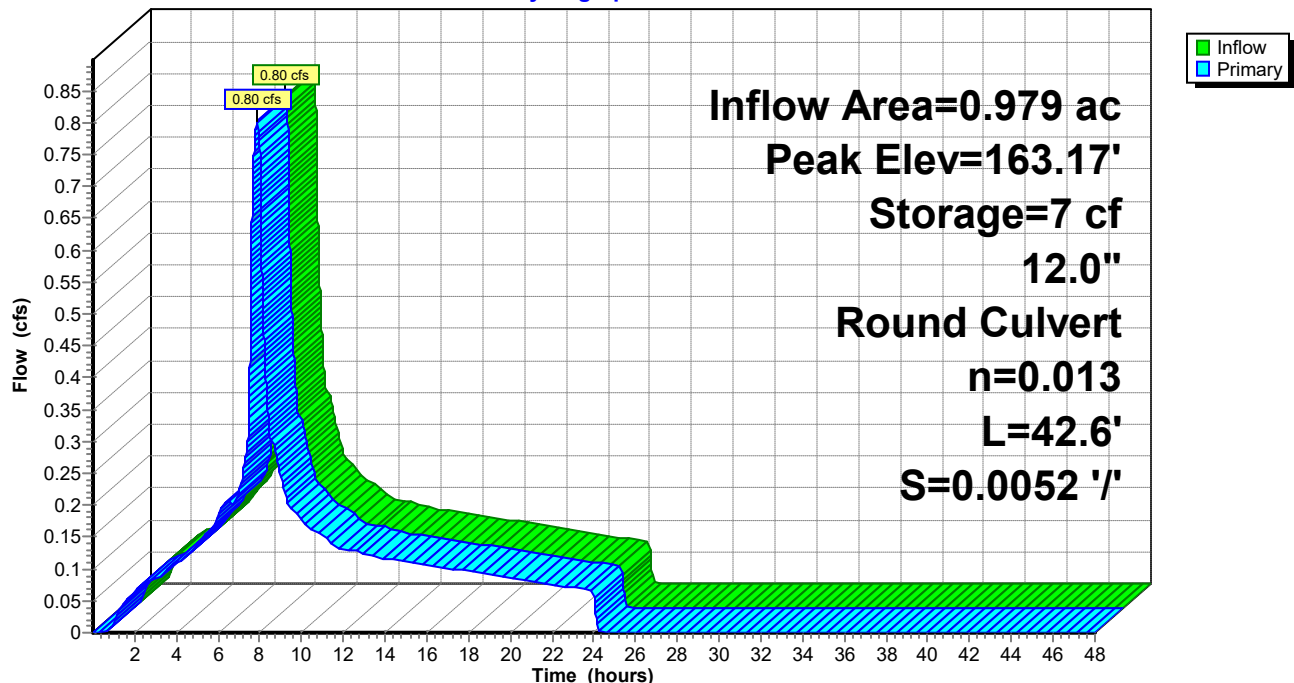
Volume	Invert	Avail.Storage	Storage Description
#1	162.58'	102 cf	4.00'D x 8.09'H Vertical Cone/Cylinder

Device	Routing	Invert	Outlet Devices
#1	Primary	162.58'	12.0" Round Culvert L= 42.6' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 162.58' / 162.36' S= 0.0052 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.80 cfs @ 7.87 hrs HW=163.17' TW=162.86' (Dynamic Tailwater)
←1=Culvert (Outlet Controls 0.80 cfs @ 2.40 fps)

Pond 1P: SDMH 05A

Hydrograph



Beck Pond-Storm Analysis

Prepared by {enter your company name here}

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

Printed 7/7/2023

Page 17

Summary for Pond 2P: SDMH 05B

Inflow Area = 1.231 ac, 100.00% Impervious, Inflow Depth = 3.27" for 10 year-3.5 in event
Inflow = 1.01 cfs @ 7.87 hrs, Volume= 0.335 af
Outflow = 1.01 cfs @ 7.88 hrs, Volume= 0.335 af, Atten= 0%, Lag= 0.1 min
Primary = 1.01 cfs @ 7.88 hrs, Volume= 0.335 af

Routing by Dyn-Stor-Ind method, Time Span= 0.01-48.00 hrs, dt= 0.001 hrs
Peak Elev= 162.86' @ 7.88 hrs Surf.Area= 20 sf Storage= 12 cf

Plug-Flow detention time= 0.4 min calculated for 0.335 af (100% of inflow)
Center-of-Mass det. time= 0.4 min (663.2 - 662.8)

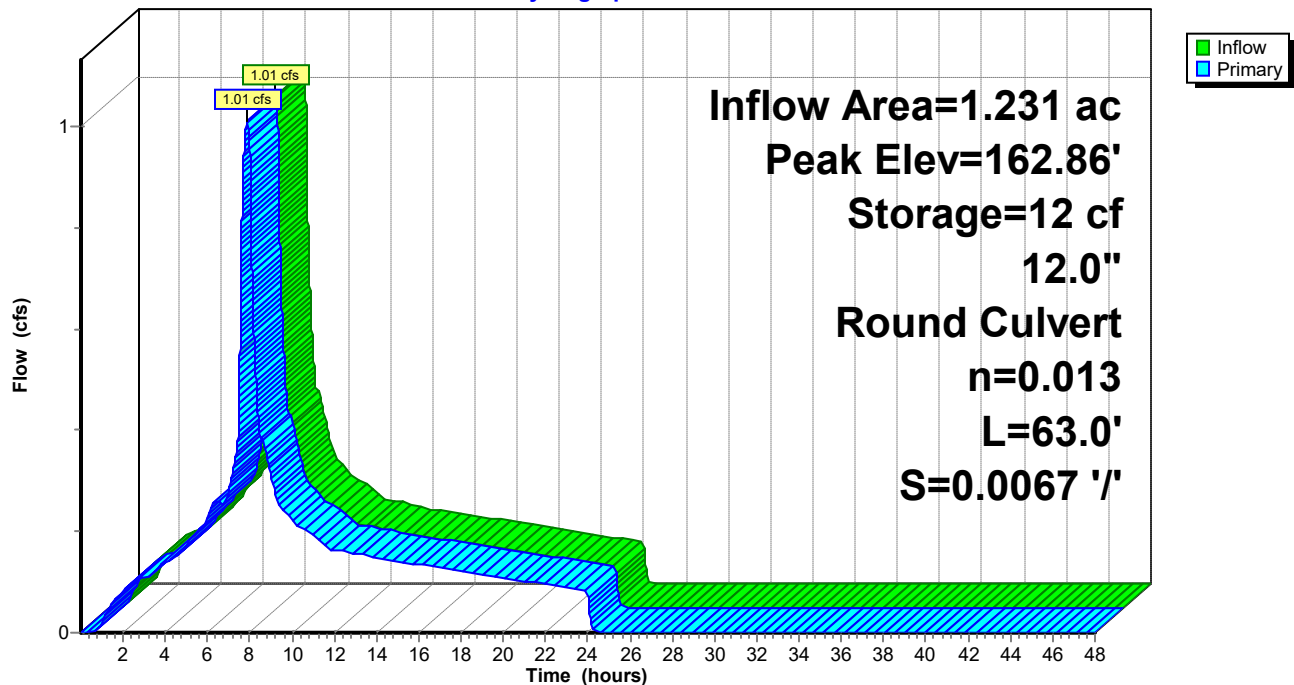
Volume	Invert	Avail.Storage	Storage Description
#1	162.27'	152 cf	5.00'D x 7.75'H Vertical Cone/Cylinder

Device	Routing	Invert	Outlet Devices
#1	Primary	162.27'	12.0" Round Culvert L= 63.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 162.27' / 161.85' S= 0.0067 ' / Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=1.01 cfs @ 7.88 hrs HW=162.86' TW=146.79' (Dynamic Tailwater)
←**1=Culvert** (Inlet Controls 1.01 cfs @ 2.07 fps)

Pond 2P: SDMH 05B

Hydrograph



Beck Pond-Storm Analysis

Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

Prepared by {enter your company name here}

Printed 7/7/2023

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Page 18

Summary for Pond 3P: DRYWELL 05C

Inflow Area = 1.231 ac, 100.00% Impervious, Inflow Depth = 3.27" for 10 year-3.5 in event
 Inflow = 1.01 cfs @ 7.88 hrs, Volume= 0.335 af
 Outflow = 1.01 cfs @ 7.90 hrs, Volume= 0.335 af, Atten= 0%, Lag= 1.7 min
 Discarded = 1.01 cfs @ 7.90 hrs, Volume= 0.335 af
 Primary = 0.00 cfs @ 0.01 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.01-48.00 hrs, dt= 0.001 hrs

Peak Elev= 146.79' @ 7.90 hrs Surf.Area= 57 sf Storage= 49 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)

Center-of-Mass det. time= 0.1 min (663.3 - 663.2)

Volume	Invert	Avail.Storage	Storage Description
#1	144.88'	345 cf	8.50'D x 26.00'H Vertical Cone/Cylinder 1,475 cf Overall - 327 cf Embedded = 1,149 cf x 30.0% Voids
#2	144.88'	327 cf	4.00'D x 26.00'H Vertical Cone/Cylinder Inside #1
		671 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	144.88'	400.000 in/hr Exfiltration over Wetted area from 144.87' - 149.87' Conductivity to Groundwater Elevation = -30.00' Excluded Wetted area = 0 sf
#2	Primary	162.11'	12.0" Round Culvert L= 75.3' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 162.11' / 161.61' S= 0.0066 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Discarded OutFlow Max=1.01 cfs @ 7.90 hrs HW=146.79' (Free Discharge)↑**1=Exfiltration** (Controls 1.01 cfs)**Primary OutFlow** Max=0.00 cfs @ 0.01 hrs HW=144.88' TW=161.48' (Dynamic Tailwater)↑**2=Culvert** (Controls 0.00 cfs)

Beck Pond-Storm Analysis

Prepared by {enter your company name here}

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

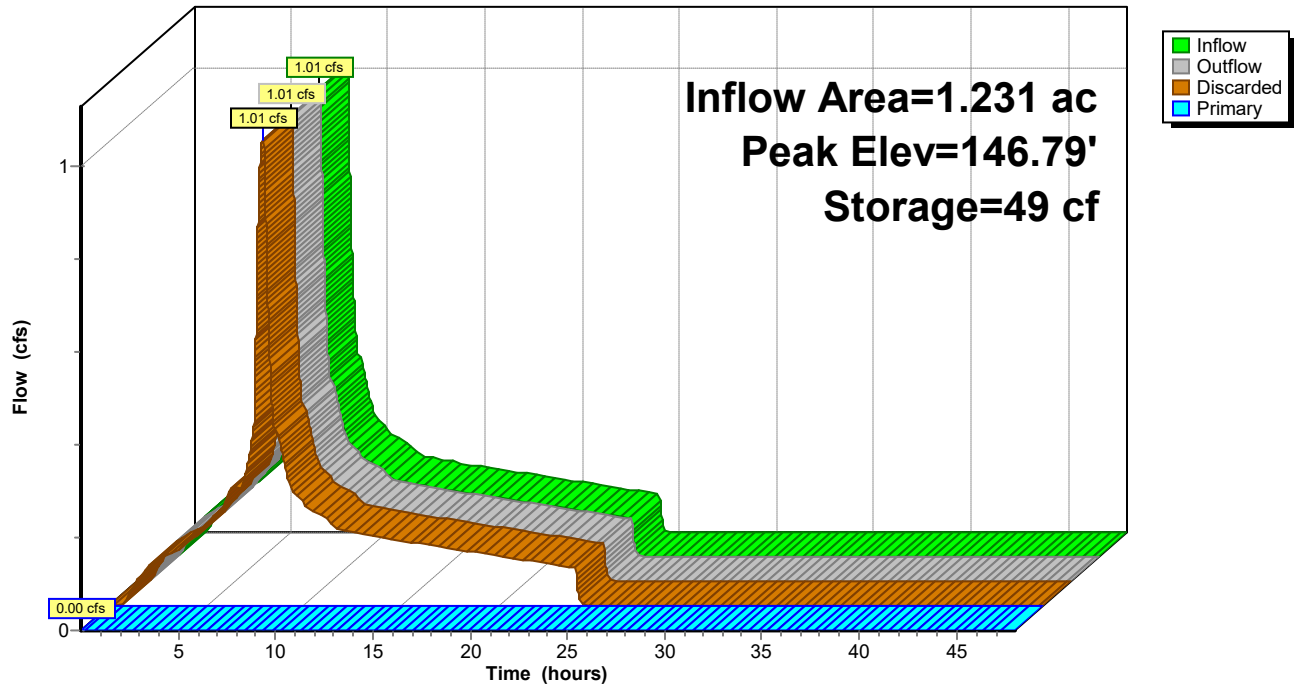
Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

Printed 7/7/2023

Page 19

Pond 3P: DRYWELL 05C

Hydrograph



Beck Pond-Storm Analysis

Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

Prepared by {enter your company name here}

Printed 7/7/2023

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Page 20

Summary for Pond 4P: SDMH 05D

Inflow Area = 1.231 ac, 100.00% Impervious, Inflow Depth = 0.00" for 10 year-3.5 in event
Inflow = 0.00 cfs @ 0.01 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.01 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.01 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.01-48.00 hrs, dt= 0.001 hrs
Peak Elev= 161.48' @ 0.01 hrs Surf.Area= 13 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

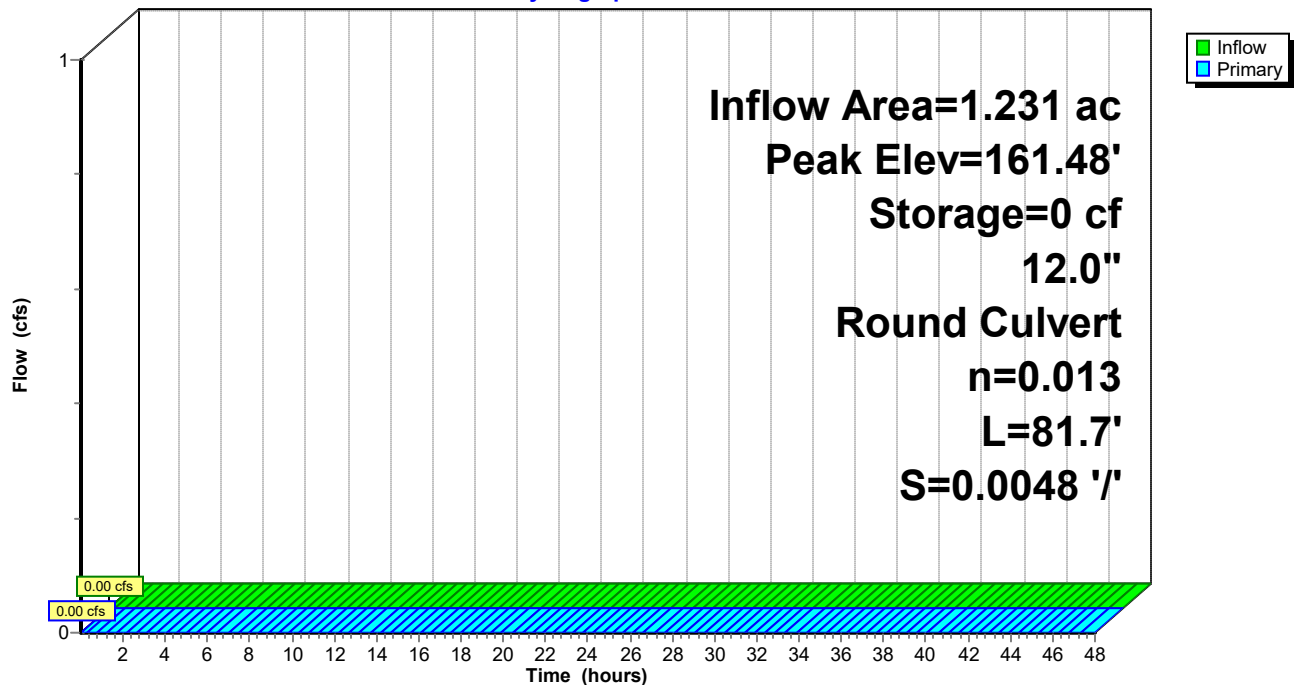
Volume	Invert	Avail.Storage	Storage Description
#1	161.48'	108 cf	4.00'D x 8.56'H Vertical Cone/Cylinder

Device	Routing	Invert	Outlet Devices
#1	Primary	161.48'	12.0" Round Culvert L= 81.7' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 161.48' / 161.09' S= 0.0048 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.00 cfs @ 0.01 hrs HW=161.48' TW=145.81' (Dynamic Tailwater)
←1=Culvert (Controls 0.00 cfs)

Pond 4P: SDMH 05D

Hydrograph



Beck Pond-Storm Analysis

Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

Prepared by {enter your company name here}

Printed 7/7/2023

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Page 21

Summary for Pond 5P: DRYWELL 05E

Inflow Area = 1.825 ac, 100.00% Impervious, Inflow Depth = 1.06" for 10 year-3.5 in event
 Inflow = 0.49 cfs @ 7.87 hrs, Volume= 0.162 af
 Outflow = 0.49 cfs @ 7.87 hrs, Volume= 0.162 af, Atten= 0%, Lag= 0.0 min
 Discarded = 0.49 cfs @ 7.87 hrs, Volume= 0.162 af
 Primary = 0.00 cfs @ 0.01 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.01-48.00 hrs, dt= 0.001 hrs

Peak Elev= 145.81' @ 7.87 hrs Surf.Area= 57 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)

Center-of-Mass det. time= 0.0 min (662.6 - 662.6)

Volume	Invert	Avail.Storage	Storage Description
#1	145.81'	345 cf	8.50'D x 26.00'H Vertical Cone/Cylinder 1,475 cf Overall - 327 cf Embedded = 1,149 cf x 30.0% Voids
#2	145.81'	327 cf	4.00'D x 26.00'H Vertical Cone/Cylinder Inside #1
		671 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	145.81'	400.000 in/hr Exfiltration over Wetted area from 145.80' - 150.80' Conductivity to Groundwater Elevation = -30.00' Excluded Wetted area = 0 sf
#2	Primary	160.99'	12.0" Round Culvert L= 98.1' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 160.99' / 160.31' S= 0.0069 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Discarded OutFlow Max=0.53 cfs @ 7.87 hrs HW=145.81' (Free Discharge)↑**1=Exfiltration** (Controls 0.53 cfs)**Primary OutFlow** Max=0.00 cfs @ 0.01 hrs HW=145.81' TW=160.27' (Dynamic Tailwater)↑**2=Culvert** (Controls 0.00 cfs)

Beck Pond-Storm Analysis

Prepared by {enter your company name here}

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

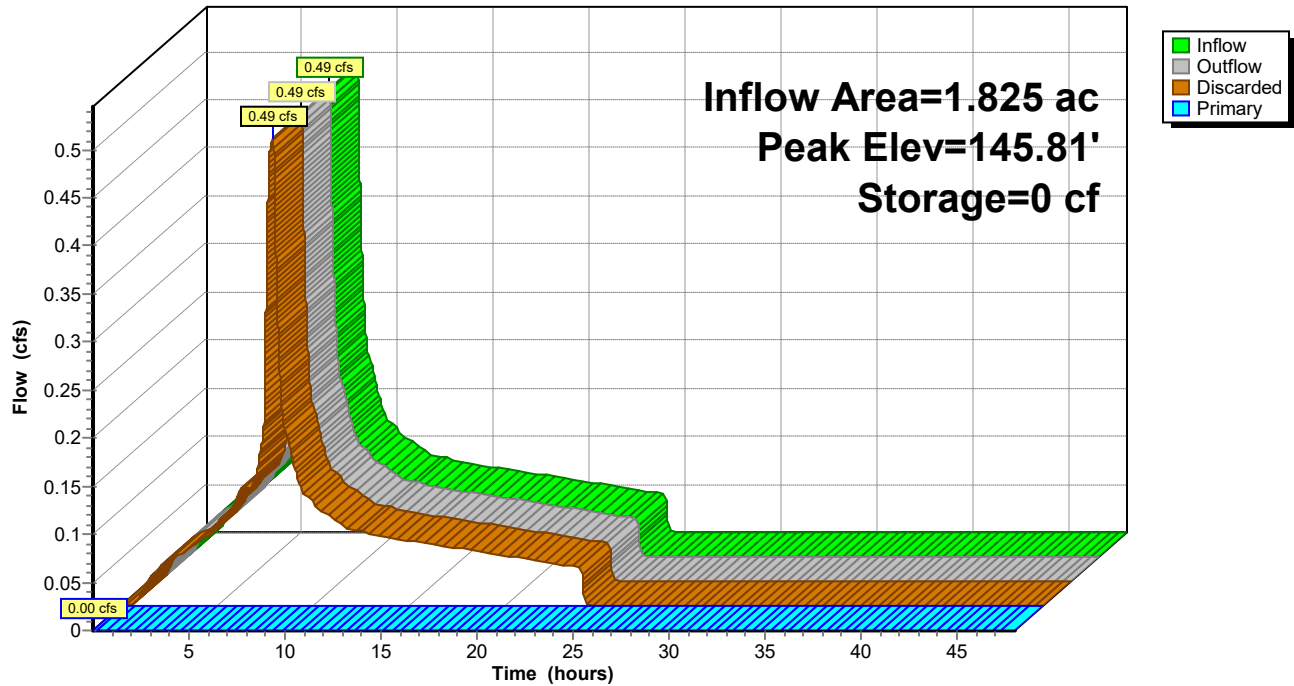
Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

Printed 7/7/2023

Page 22

Pond 5P: DRYWELL 05E

Hydrograph



Beck Pond-Storm Analysis

Prepared by {enter your company name here}

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

Printed 7/7/2023

Page 23

Summary for Pond 6P: SDMH 05F

Inflow Area = 2.172 ac, 100.00% Impervious, Inflow Depth = 0.52" for 10 year-3.5 in event
Inflow = 0.28 cfs @ 7.87 hrs, Volume= 0.094 af
Outflow = 0.28 cfs @ 7.88 hrs, Volume= 0.094 af, Atten= 0%, Lag= 0.2 min
Primary = 0.28 cfs @ 7.88 hrs, Volume= 0.094 af

Routing by Dyn-Stor-Ind method, Time Span= 0.01-48.00 hrs, dt= 0.001 hrs
Peak Elev= 160.58' @ 7.88 hrs Surf.Area= 20 sf Storage= 6 cf

Plug-Flow detention time= 0.8 min calculated for 0.094 af (100% of inflow)
Center-of-Mass det. time= 0.8 min (663.4 - 662.6)

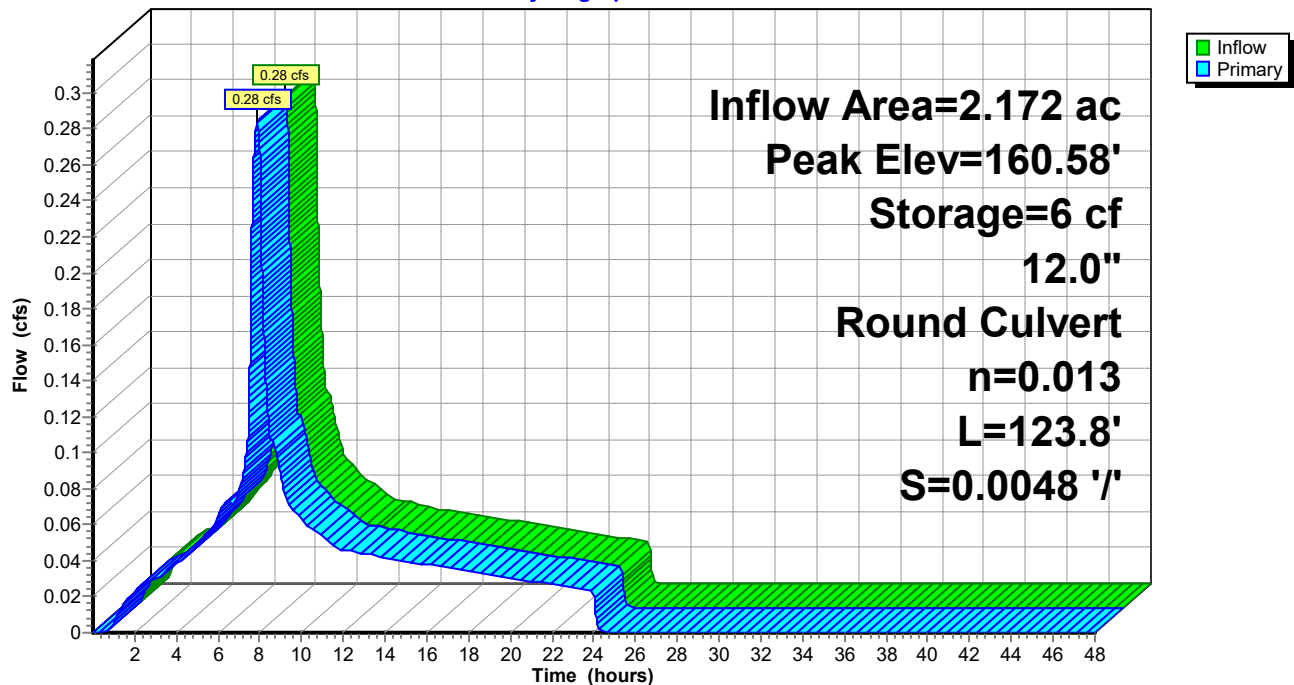
Volume	Invert	Avail.Storage	Storage Description
#1	160.27'	187 cf	5.00'D x 9.50'H Vertical Cone/Cylinder

Device	Routing	Invert	Outlet Devices
#1	Primary	160.27'	12.0" Round Culvert L= 123.8' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 160.27' / 159.68' S= 0.0048 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.28 cfs @ 7.88 hrs HW=160.58' TW=146.01' (Dynamic Tailwater)
←**1=Culvert** (Barrel Controls 0.28 cfs @ 2.03 fps)

Pond 6P: SDMH 05F

Hydrograph



Beck Pond-Storm Analysis

Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

Prepared by {enter your company name here}

Printed 7/7/2023

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Page 24

Summary for Pond 7P: DRYWELL 05G

Inflow Area = 5.292 ac, 100.00% Impervious, Inflow Depth = 0.24" for 10 year-3.5 in event
Inflow = 0.94 cfs @ 7.88 hrs, Volume= 0.108 af
Outflow = 0.93 cfs @ 7.92 hrs, Volume= 0.108 af, Atten= 1%, Lag= 2.2 min
Discarded = 0.93 cfs @ 7.92 hrs, Volume= 0.108 af

Routing by Dyn-Stor-Ind method, Time Span= 0.01-48.00 hrs, dt= 0.001 hrs
Peak Elev= 146.08' @ 7.92 hrs Surf.Area= 57 sf Storage= 41 cf

Plug-Flow detention time= 0.1 min calculated for 0.108 af (100% of inflow)
Center-of-Mass det. time= 0.1 min (640.5 - 640.4)

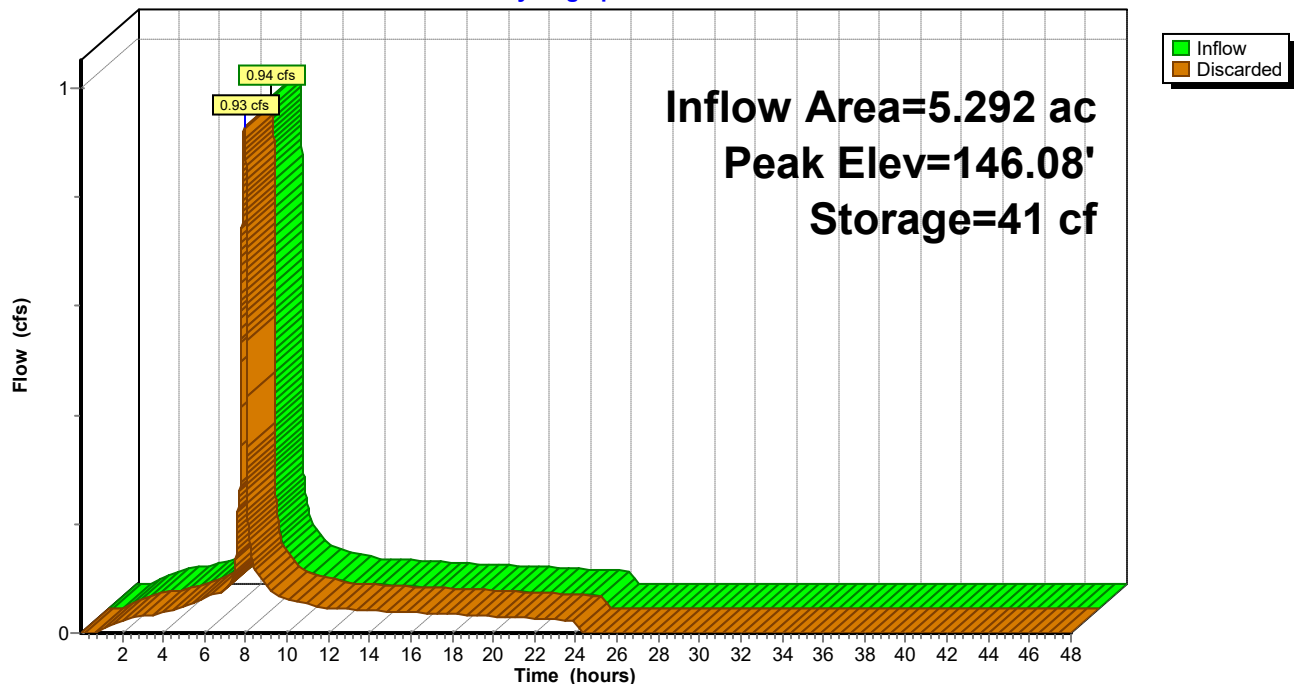
Volume	Invert	Avail.Storage	Storage Description
#1	144.48'	345 cf	8.50'D x 26.00'H Vertical Cone/Cylinder 1,475 cf Overall - 327 cf Embedded = 1,149 cf x 30.0% Voids
#2	144.48'	327 cf	4.00'D x 26.00'H Vertical Cone/Cylinder Inside #1
		671 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	144.48'	400.000 in/hr Exfiltration over Wetted area from 144.47' - 149.47' Conductivity to Groundwater Elevation = -30.00' Excluded Wetted area = 0 sf Phase-In= 0.02'

Discarded OutFlow Max=0.93 cfs @ 7.92 hrs HW=146.08' (Free Discharge)
↑1=Exfiltration (Controls 0.93 cfs)

Pond 7P: DRYWELL 05G

Hydrograph



Beck Pond-Storm Analysis

Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

Prepared by {enter your company name here}

Printed 7/7/2023

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Page 25

Summary for Pond 8P: DRYWELL 05H

Inflow Area = 3.121 ac, 100.00% Impervious, Inflow Depth = 3.27" for 10 year-3.5 in event
 Inflow = 2.56 cfs @ 7.88 hrs, Volume= 0.849 af
 Outflow = 2.56 cfs @ 7.88 hrs, Volume= 0.849 af, Atten= 0%, Lag= 0.2 min
 Discarded = 1.90 cfs @ 7.88 hrs, Volume= 0.836 af
 Primary = 0.65 cfs @ 7.88 hrs, Volume= 0.013 af

Routing by Dyn-Stor-Ind method, Time Span= 0.01-48.00 hrs, dt= 0.001 hrs

Peak Elev= 160.24' @ 7.88 hrs Surf.Area= 57 sf Storage= 419 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)

Center-of-Mass det. time= 0.5 min (663.6 - 663.1)

Volume	Invert	Avail.Storage	Storage Description
#1	144.01'	345 cf	8.50'D x 26.00'H Vertical Cone/Cylinder 1,475 cf Overall - 327 cf Embedded = 1,149 cf x 30.0% Voids
#2	144.01'	327 cf	4.00'D x 26.00'H Vertical Cone/Cylinder Inside #1
		671 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	144.01'	400.000 in/hr Exfiltration over Wetted area from 144.00' - 149.00' Conductivity to Groundwater Elevation = -30.00' Excluded Wetted area = 0 sf
#2	Primary	159.74'	15.0" Round Culvert L= 60.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 159.74' / 159.60' S= 0.0023 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Discarded OutFlow Max=1.90 cfs @ 7.88 hrs HW=160.24' (Free Discharge)↑ **1=Exfiltration** (Controls 1.90 cfs)**Primary OutFlow** Max=0.65 cfs @ 7.88 hrs HW=160.24' TW=146.02' (Dynamic Tailwater)↑ **2=Culvert** (Barrel Controls 0.65 cfs @ 2.11 fps)

Beck Pond-Storm Analysis

Prepared by {enter your company name here}

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

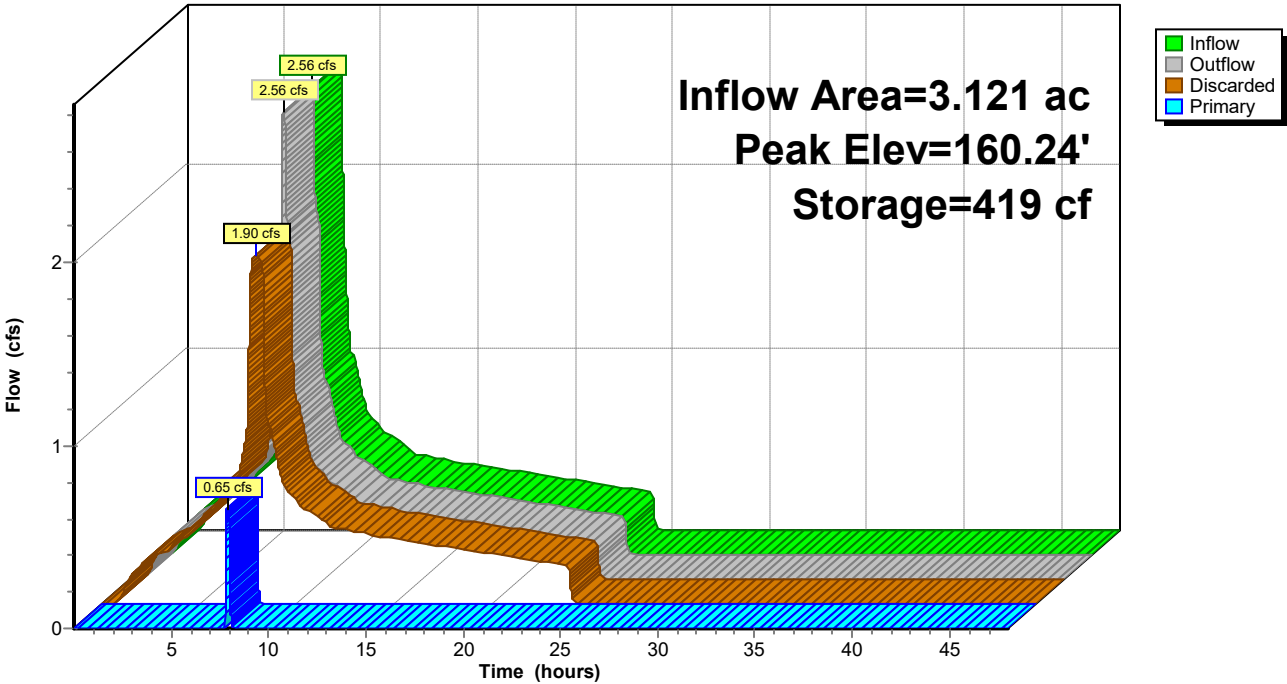
Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

Printed 7/7/2023

Page 26

Pond 8P: DRYWELL 05H

Hydrograph



Beck Pond-Storm Analysis

Prepared by {enter your company name here}

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

Printed 7/7/2023

Page 27

Summary for Pond 9P: SDMH 05I

Inflow Area = 3.121 ac, 100.00% Impervious, Inflow Depth = 3.27" for 10 year-3.5 in event
Inflow = 2.56 cfs @ 7.87 hrs, Volume= 0.849 af
Outflow = 2.56 cfs @ 7.88 hrs, Volume= 0.849 af, Atten= 0%, Lag= 0.1 min
Primary = 2.56 cfs @ 7.88 hrs, Volume= 0.849 af

Routing by Dyn-Stor-Ind method, Time Span= 0.01-48.00 hrs, dt= 0.001 hrs
Peak Elev= 161.00' @ 7.88 hrs Surf.Area= 20 sf Storage= 21 cf

Plug-Flow detention time= 0.3 min calculated for 0.849 af (100% of inflow)
Center-of-Mass det. time= 0.3 min (663.1 - 662.8)

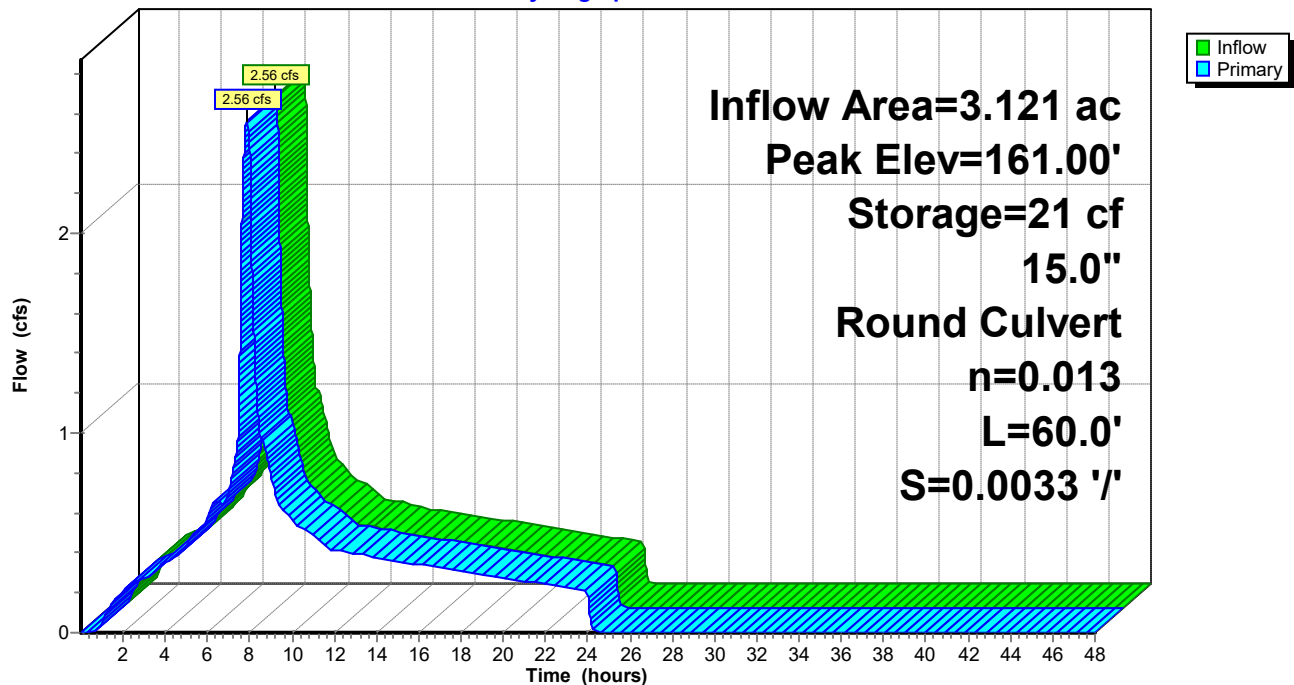
Volume	Invert	Avail.Storage	Storage Description
#1	159.94'	186 cf	5.00'D x 9.47'H Vertical Cone/Cylinder

Device	Routing	Invert	Outlet Devices
#1	Primary	159.94'	15.0" Round Culvert L= 60.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 159.94' / 159.74' S= 0.0033 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=2.56 cfs @ 7.88 hrs HW=161.00' TW=160.24' (Dynamic Tailwater)
←**1=Culvert** (Barrel Controls 2.56 cfs @ 3.12 fps)

Pond 9P: SDMH 05I

Hydrograph



Beck Pond-Storm Analysis

Prepared by {enter your company name here}

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

Printed 7/7/2023

Page 28

Summary for Pond 10P: SDMH 01A

Inflow Area = 2.853 ac, 100.00% Impervious, Inflow Depth = 3.27" for 10 year-3.5 in event
Inflow = 2.34 cfs @ 7.87 hrs, Volume= 0.777 af
Outflow = 2.34 cfs @ 7.88 hrs, Volume= 0.777 af, Atten= 0%, Lag= 0.1 min
Primary = 2.34 cfs @ 7.88 hrs, Volume= 0.777 af

Routing by Dyn-Stor-Ind method, Time Span= 0.01-48.00 hrs, dt= 0.001 hrs
Peak Elev= 161.26' @ 7.88 hrs Surf.Area= 13 sf Storage= 15 cf

Plug-Flow detention time= 0.2 min calculated for 0.777 af (100% of inflow)
Center-of-Mass det. time= 0.2 min (662.8 - 662.6)

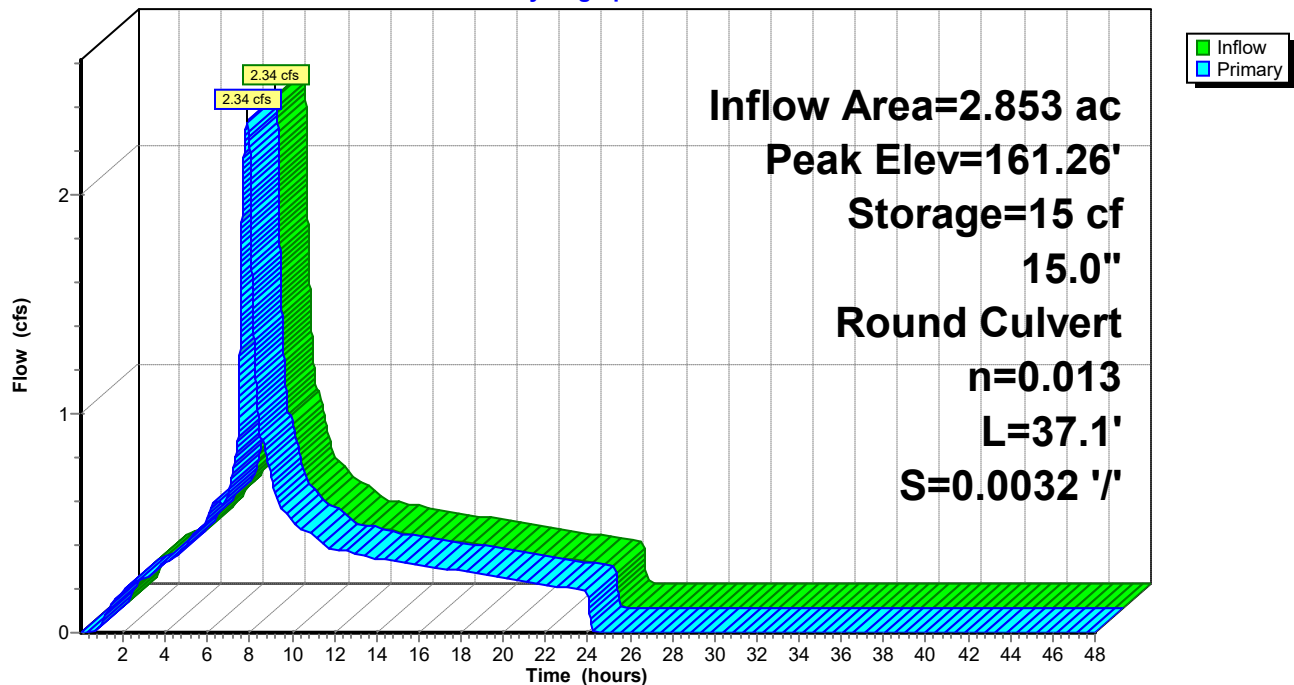
Volume	Invert	Avail.Storage	Storage Description
#1	160.06'	110 cf	4.00'D x 8.72'H Vertical Cone/Cylinder

Device	Routing	Invert	Outlet Devices
#1	Primary	160.06'	15.0" Round Culvert L= 37.1' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 160.06' / 159.94' S= 0.0032 '/ Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=2.34 cfs @ 7.88 hrs HW=161.26' TW=161.00' (Dynamic Tailwater)
←1=Culvert (Inlet Controls 2.34 cfs @ 1.94 fps)

Pond 10P: SDMH 01A

Hydrograph



Beck Pond-Storm Analysis

Prepared by {enter your company name here}

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

Printed 7/7/2023

Page 29

Summary for Pond 11P: SDMH 04A

Inflow Area = 0.210 ac, 100.00% Impervious, Inflow Depth = 3.27" for 10 year-3.5 in event
Inflow = 0.17 cfs @ 7.87 hrs, Volume= 0.057 af
Outflow = 0.17 cfs @ 7.89 hrs, Volume= 0.057 af, Atten= 0%, Lag= 0.9 min
Primary = 0.17 cfs @ 7.89 hrs, Volume= 0.057 af

Routing by Dyn-Stor-Ind method, Time Span= 0.01-48.00 hrs, dt= 0.001 hrs
Peak Elev= 161.32' @ 7.88 hrs Surf.Area= 13 sf Storage= 6 cf

Plug-Flow detention time= 0.8 min calculated for 0.057 af (100% of inflow)
Center-of-Mass det. time= 0.8 min (663.3 - 662.6)

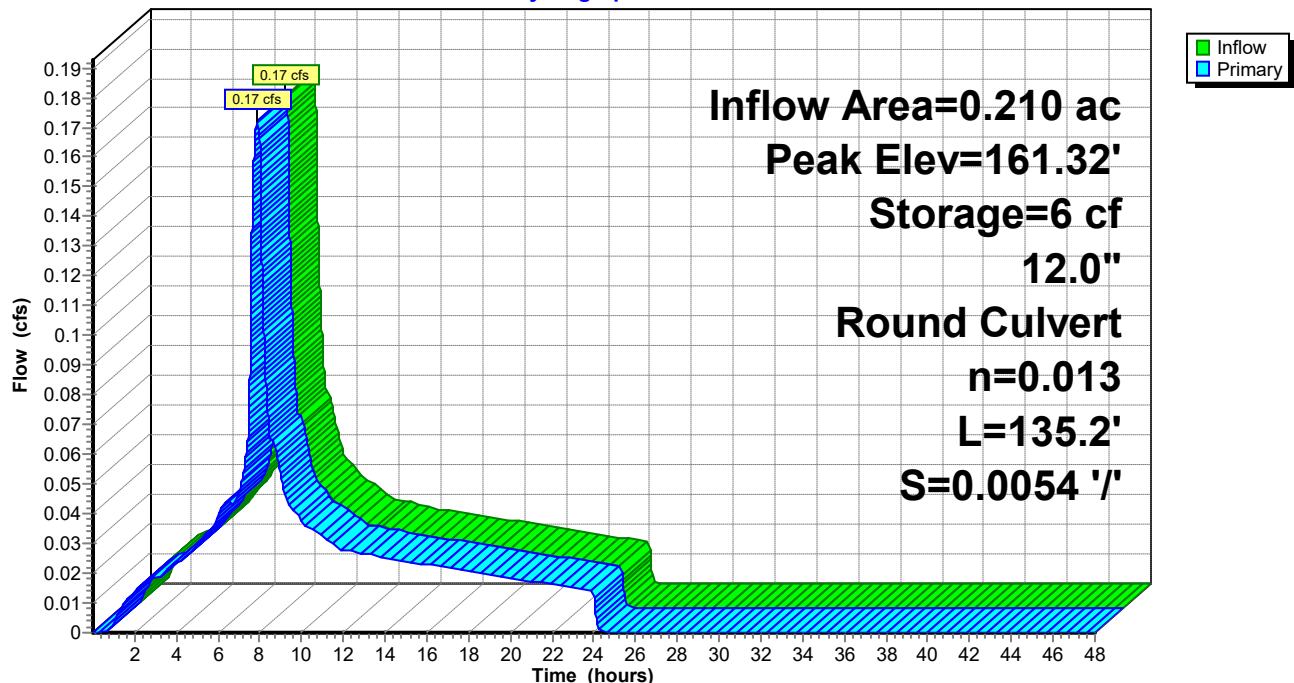
Volume	Invert	Avail.Storage	Storage Description
#1	160.87'	68 cf	4.00'D x 5.44'H Vertical Cone/Cylinder

Device	Routing	Invert	Outlet Devices
#1	Primary	160.87'	12.0" Round Culvert L= 135.2' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 160.87' / 160.14' S= 0.0054 '/ Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

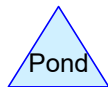
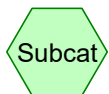
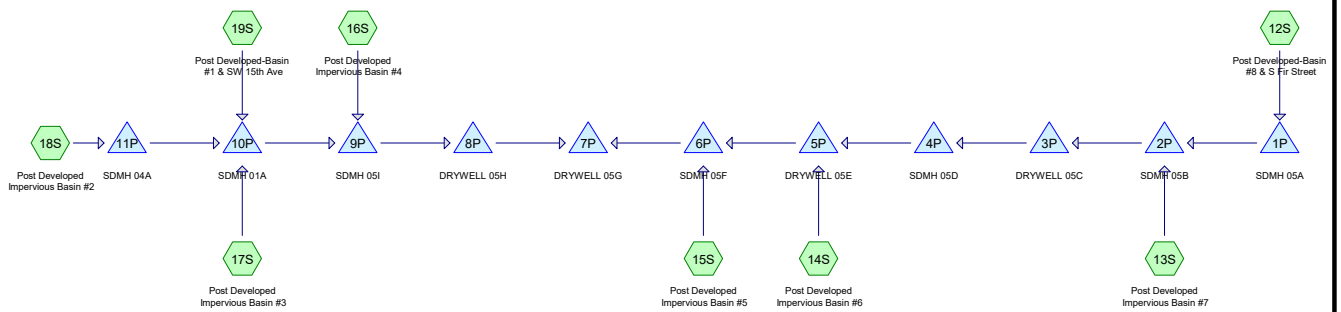
Primary OutFlow Max=0.17 cfs @ 7.89 hrs HW=161.32' TW=161.26' (Dynamic Tailwater)
←1=Culvert (Outlet Controls 0.17 cfs @ 0.73 fps)

Pond 11P: SDMH 04A

Hydrograph



Appendix F: HydroCAD Modelling for Beck Pond + DuNett subdivision, Sisul Engineering



Routing Diagram for Beck Pond-DuNett Storm Analysis
 Prepared by {enter your company name here}, Printed 7/6/2023
 HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Beck Pond-DuNett Storm Analysis

Prepared by {enter your company name here}

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Printed 7/6/2023

Page 2

Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.095	98	Impervious Area S Fir Street (12S)
0.285	98	Impervious Area SW 15th Ave (19S)
5.292	98	Impervious ROW Area (12S, 13S, 14S, 15S, 16S, 17S, 18S, 19S)
0.005	69	Pervious Area S Fir Street (12S)
0.024	69	Pervious Area SW 15th Ave (19S)
5.701	98	TOTAL AREA

Beck Pond-DuNett Storm Analysis

Prepared by {enter your company name here}

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Printed 7/6/2023

Page 3

Soil Listing (selected nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
0.000	HSG C	
0.000	HSG D	
5.701	Other	12S, 13S, 14S, 15S, 16S, 17S, 18S, 19S
5.701		TOTAL AREA

Beck Pond-DuNett Storm Analysis

Prepared by {enter your company name here}

Printed 7/6/2023

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Page 4

Ground Covers (selected nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.000	0.000	0.095	0.095	Impervious Area S Fir Street	12S
0.000	0.000	0.000	0.000	0.285	0.285	Impervious Area SW 15th Ave	19S
0.000	0.000	0.000	0.000	5.292	5.292	Impervious ROW Area	12S
							,
							13S
							,
							14S
							,
							15S
							,
							16S
							,
							17S
							,
							18S
							,
							19S
0.000	0.000	0.000	0.000	0.005	0.005	Pervious Area S Fir Street	12S
0.000	0.000	0.000	0.000	0.024	0.024	Pervious Area SW 15th Ave	19S
0.000	0.000	0.000	0.000	5.701	5.701	TOTAL AREA	

Beck Pond-DuNett Storm Analysis

Prepared by {enter your company name here}

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Printed 7/6/2023

Page 5

Pipe Listing (selected nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Diam/Width (inches)	Height (inches)	Inside-Fill (inches)
1	1P	162.58	162.36	42.6	0.0052	0.013	12.0	0.0	0.0
2	2P	162.27	161.85	63.0	0.0067	0.013	12.0	0.0	0.0
3	3P	162.11	161.61	75.3	0.0066	0.013	12.0	0.0	0.0
4	4P	161.48	161.09	81.7	0.0048	0.013	12.0	0.0	0.0
5	5P	160.99	160.31	98.1	0.0069	0.013	12.0	0.0	0.0
6	6P	160.27	159.68	123.8	0.0048	0.013	12.0	0.0	0.0
7	8P	159.74	159.60	60.0	0.0023	0.013	15.0	0.0	0.0
8	9P	159.94	159.74	60.0	0.0033	0.013	15.0	0.0	0.0
9	10P	160.06	159.94	37.1	0.0032	0.013	15.0	0.0	0.0
10	11P	160.87	160.14	135.2	0.0054	0.013	12.0	0.0	0.0

Beck Pond-DuNett Storm Analysis

Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

Prepared by {enter your company name here}

Printed 7/6/2023

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Page 6

Time span=0.01-48.00 hrs, dt=0.001 hrs, 47991 points

Runoff by SBUH method, Split Pervious/Imperv.

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 12S: Post Developed-Basin Runoff Area=47,024 sf 99.49% Impervious Runoff Depth=3.25"
Tc=5.0 min CN=69/98 Runoff=0.88 cfs 0.293 af

Subcatchment 13S: Post Developed Runoff Area=10,997 sf 100.00% Impervious Runoff Depth=3.27"
Tc=5.0 min CN=0/98 Runoff=0.21 cfs 0.069 af

Subcatchment 14S: Post Developed Runoff Area=25,846 sf 100.00% Impervious Runoff Depth=3.27"
Tc=5.0 min CN=0/98 Runoff=0.49 cfs 0.162 af

Subcatchment 15S: Post Developed Runoff Area=15,106 sf 100.00% Impervious Runoff Depth=3.27"
Tc=5.0 min CN=0/98 Runoff=0.28 cfs 0.094 af

Subcatchment 16S: Post Developed Runoff Area=11,642 sf 100.00% Impervious Runoff Depth=3.27"
Tc=5.0 min CN=0/98 Runoff=0.22 cfs 0.073 af

Subcatchment 17S: Post Developed Runoff Area=81,451 sf 100.00% Impervious Runoff Depth=3.27"
Tc=5.0 min CN=0/98 Runoff=1.53 cfs 0.509 af

Subcatchment 18S: Post Developed Runoff Area=9,143 sf 100.00% Impervious Runoff Depth=3.27"
Tc=5.0 min CN=0/98 Runoff=0.17 cfs 0.057 af

Subcatchment 19S: Post Developed-Basin Runoff Area=47,140 sf 97.79% Impervious Runoff Depth=3.22"
Tc=5.0 min CN=69/98 Runoff=0.87 cfs 0.290 af

Pond 1P: SDMH 05A Peak Elev=163.20' Storage=8 cf Inflow=0.88 cfs 0.293 af
12.0" Round Culvert n=0.013 L=42.6' S=0.0052 '/' Outflow=0.88 cfs 0.293 af

Pond 2P: SDMH 05B Peak Elev=162.89' Storage=12 cf Inflow=1.09 cfs 0.362 af
12.0" Round Culvert n=0.013 L=63.0' S=0.0067 '/' Outflow=1.09 cfs 0.362 af

Pond 3P: DRYWELL 05C Peak Elev=147.11' Storage=57 cf Inflow=1.09 cfs 0.362 af
Discarded=1.09 cfs 0.362 af Primary=0.00 cfs 0.000 af Outflow=1.09 cfs 0.362 af

Pond 4P: SDMH 05D Peak Elev=161.48' Storage=0 cf Inflow=0.00 cfs 0.000 af
12.0" Round Culvert n=0.013 L=81.7' S=0.0048 '/' Outflow=0.00 cfs 0.000 af

Pond 5P: DRYWELL 05E Peak Elev=145.81' Storage=0 cf Inflow=0.49 cfs 0.162 af
Discarded=0.49 cfs 0.162 af Primary=0.00 cfs 0.000 af Outflow=0.49 cfs 0.162 af

Pond 6P: SDMH 05F Peak Elev=160.58' Storage=6 cf Inflow=0.28 cfs 0.094 af
12.0" Round Culvert n=0.013 L=123.8' S=0.0048 '/' Outflow=0.28 cfs 0.094 af

Pond 7P: DRYWELL 05G Peak Elev=147.02' Storage=66 cf Inflow=1.17 cfs 0.117 af
Outflow=1.17 cfs 0.117 af

Pond 8P: DRYWELL 05H Peak Elev=160.33' Storage=421 cf Inflow=2.79 cfs 0.929 af
Discarded=1.90 cfs 0.907 af Primary=0.89 cfs 0.022 af Outflow=2.79 cfs 0.929 af

Beck Pond-DuNett Storm Analysis

Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

Prepared by {enter your company name here}

Printed 7/6/2023

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Page 7

Pond 9P: SDMH 05I

Peak Elev=161.06' Storage=22 cf Inflow=2.79 cfs 0.929 af
15.0" Round Culvert n=0.013 L=60.0' S=0.0033 '/ Outflow=2.79 cfs 0.929 af

Pond 10P: SDMH 01A

Peak Elev=161.36' Storage=16 cf Inflow=2.58 cfs 0.856 af
15.0" Round Culvert n=0.013 L=37.1' S=0.0032 '/ Outflow=2.57 cfs 0.856 af

Pond 11P: SDMH 04A

Peak Elev=161.40' Storage=7 cf Inflow=0.17 cfs 0.057 af
12.0" Round Culvert n=0.013 L=135.2' S=0.0054 '/ Outflow=0.17 cfs 0.057 af

Total Runoff Area = 5.701 ac Runoff Volume = 1.546 af Average Runoff Depth = 3.25"
0.52% Pervious = 0.029 ac 99.48% Impervious = 5.672 ac

Beck Pond-DuNett Storm Analysis

Prepared by {enter your company name here}

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

Printed 7/6/2023

Page 8

Summary for Subcatchment 12S: Post Developed-Basin #8 & S Fir Street

Runoff = 0.88 cfs @ 7.87 hrs, Volume= 0.293 af, Depth= 3.25"

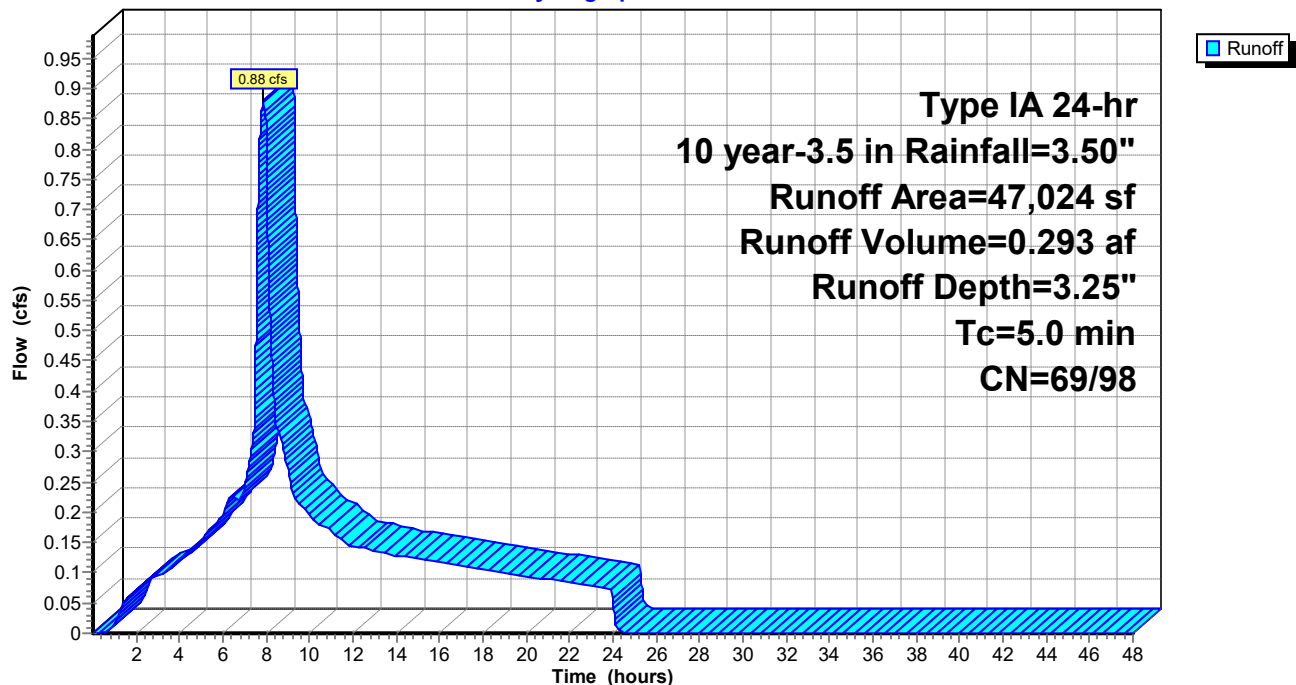
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.01-48.00 hrs, dt= 0.001 hrs
Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

	Area (sf)	CN	Description
*	42,644	98	Impervious ROW Area
*	238	69	Pervious Area S Fir Street
*	4,142	98	Impervious Area S Fir Street
	47,024	98	Weighted Average
	238	69	0.51% Pervious Area
	46,786	98	99.49% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 12S: Post Developed-Basin #8 & S Fir Street

Hydrograph



Beck Pond-DuNett Storm Analysis

Prepared by {enter your company name here}

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

Printed 7/6/2023

Page 9

Summary for Subcatchment 13S: Post Developed Impervious Basin #7

Runoff = 0.21 cfs @ 7.87 hrs, Volume= 0.069 af, Depth= 3.27"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.01-48.00 hrs, dt= 0.001 hrs

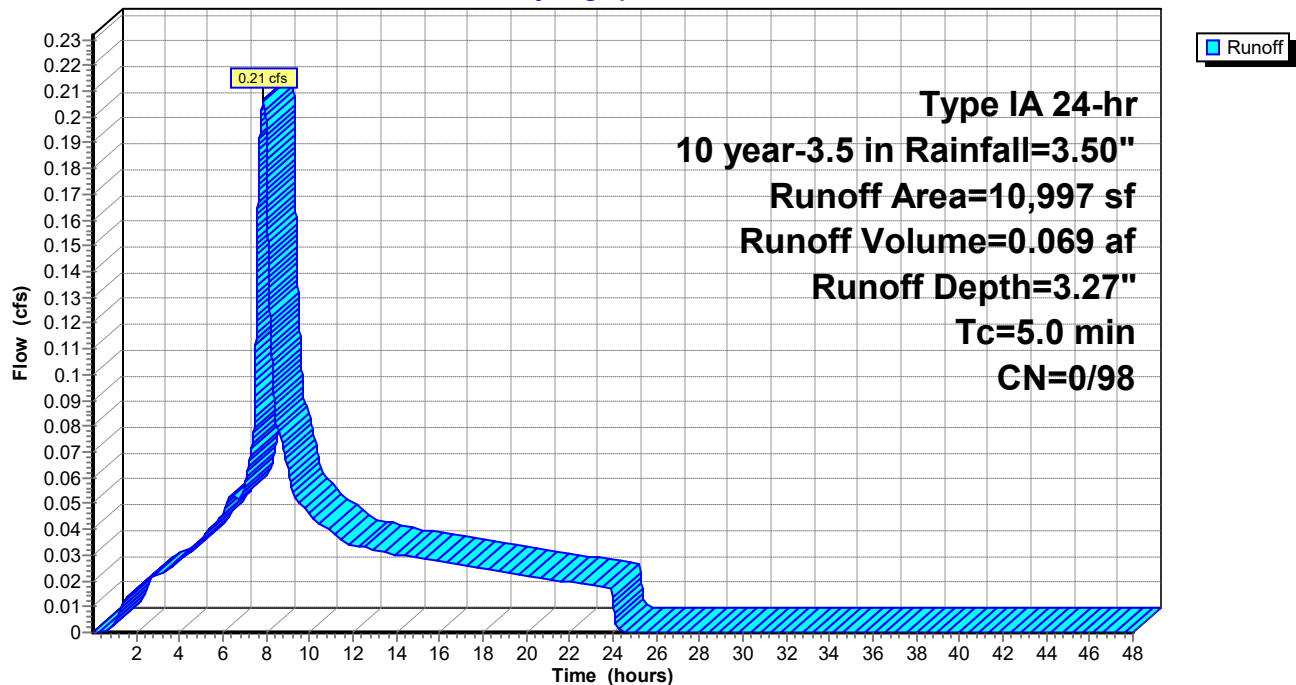
Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

	Area (sf)	CN	Description
*	10,997	98	Impervious ROW Area
	10,997	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 13S: Post Developed Impervious Basin #7

Hydrograph



Beck Pond-DuNett Storm Analysis

Prepared by {enter your company name here}

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

Printed 7/6/2023

Page 10

Summary for Subcatchment 14S: Post Developed Impervious Basin #6

Runoff = 0.49 cfs @ 7.87 hrs, Volume= 0.162 af, Depth= 3.27"

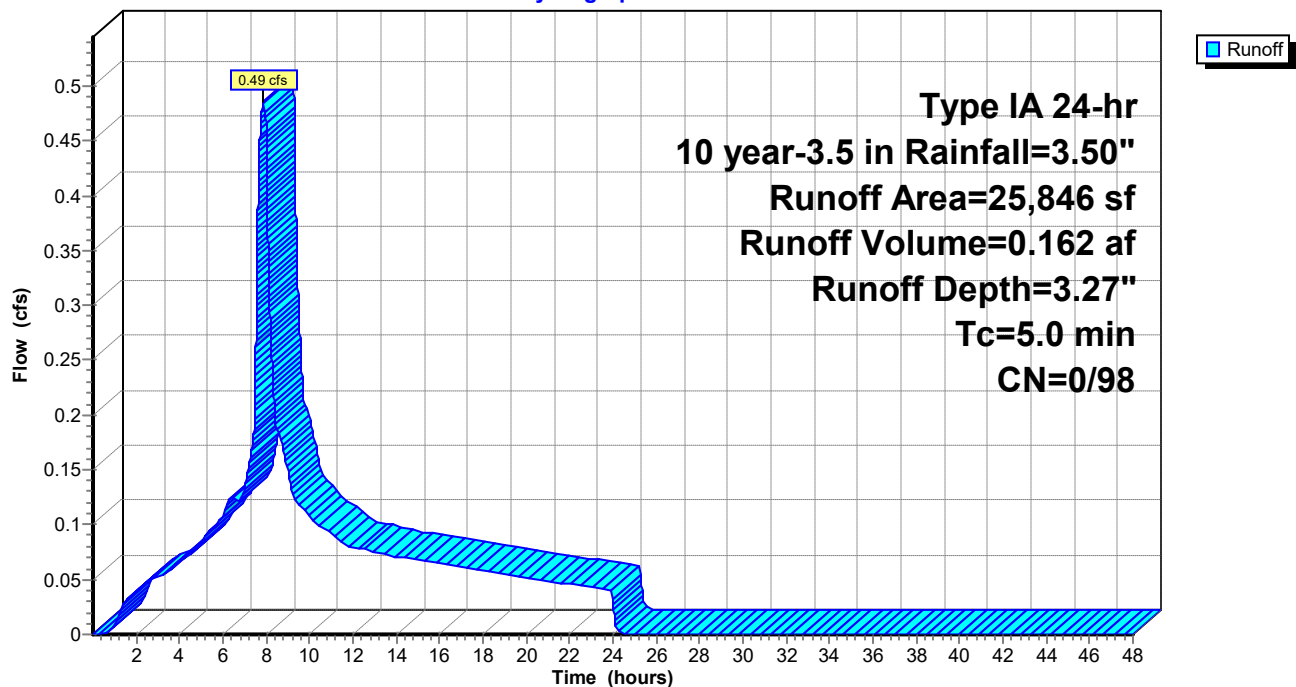
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.01-48.00 hrs, dt= 0.001 hrs
Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

	Area (sf)	CN	Description
*	25,846	98	Impervious ROW Area
	25,846	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 14S: Post Developed Impervious Basin #6

Hydrograph



Beck Pond-DuNett Storm Analysis

Prepared by {enter your company name here}

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

Printed 7/6/2023

Page 11

Summary for Subcatchment 15S: Post Developed Impervious Basin #5

Runoff = 0.28 cfs @ 7.87 hrs, Volume= 0.094 af, Depth= 3.27"

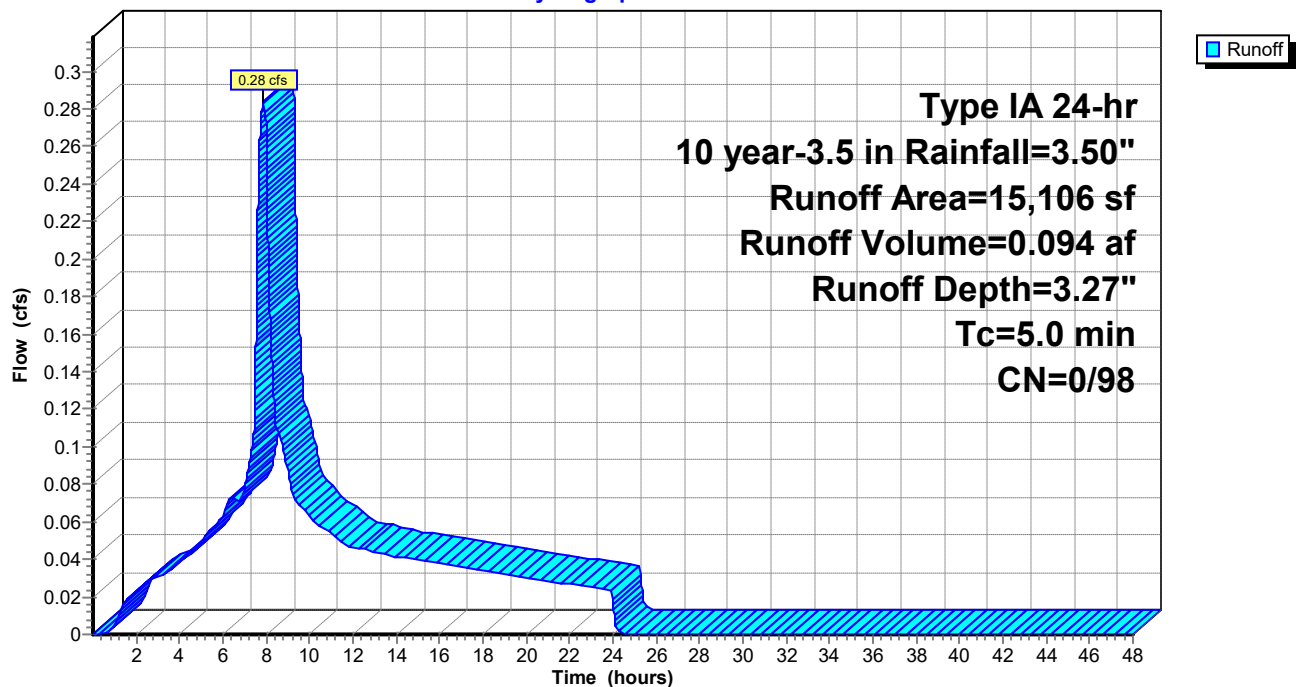
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.01-48.00 hrs, dt= 0.001 hrs
Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

	Area (sf)	CN	Description
*	15,106	98	Impervious ROW Area
	15,106	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 15S: Post Developed Impervious Basin #5

Hydrograph



Beck Pond-DuNett Storm Analysis

Prepared by {enter your company name here}

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

Printed 7/6/2023

Page 12

Summary for Subcatchment 16S: Post Developed Impervious Basin #4

Runoff = 0.22 cfs @ 7.87 hrs, Volume= 0.073 af, Depth= 3.27"

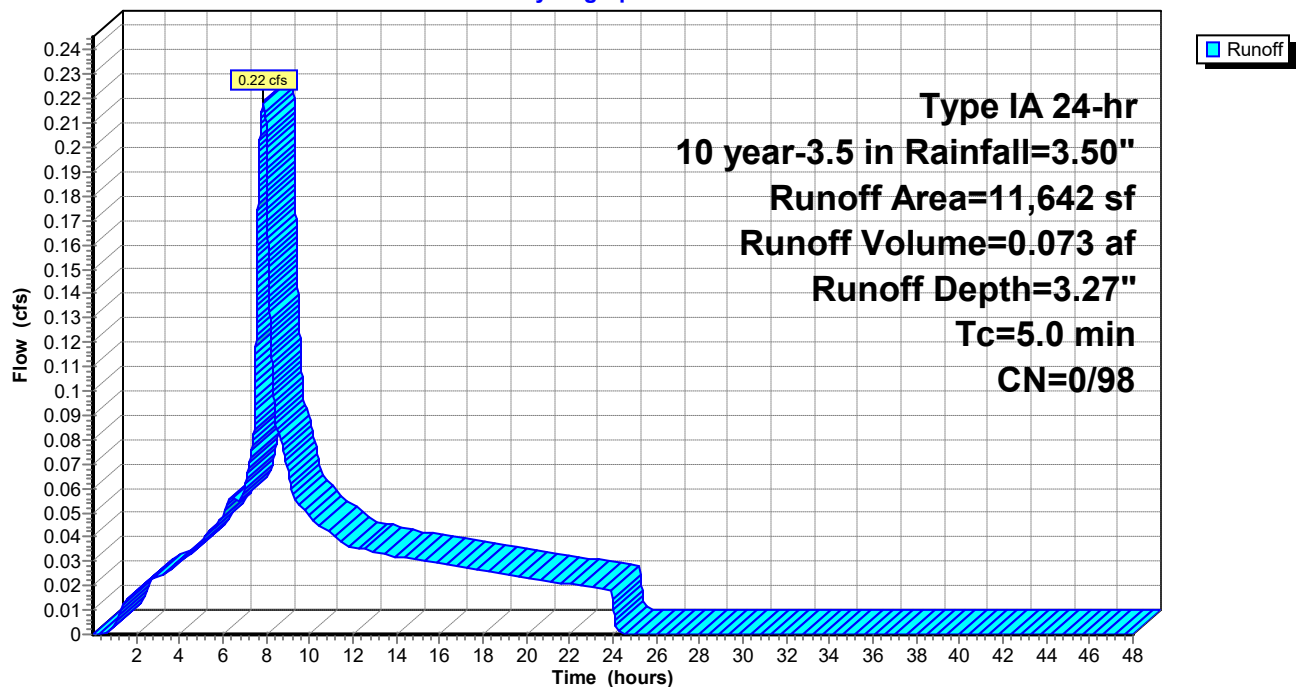
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.01-48.00 hrs, dt= 0.001 hrs
Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

	Area (sf)	CN	Description
*	11,642	98	Impervious ROW Area
	11,642	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 16S: Post Developed Impervious Basin #4

Hydrograph



Beck Pond-DuNett Storm Analysis

Prepared by {enter your company name here}

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

Printed 7/6/2023

Page 13

Summary for Subcatchment 17S: Post Developed Impervious Basin #3

Runoff = 1.53 cfs @ 7.87 hrs, Volume= 0.509 af, Depth= 3.27"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.01-48.00 hrs, dt= 0.001 hrs

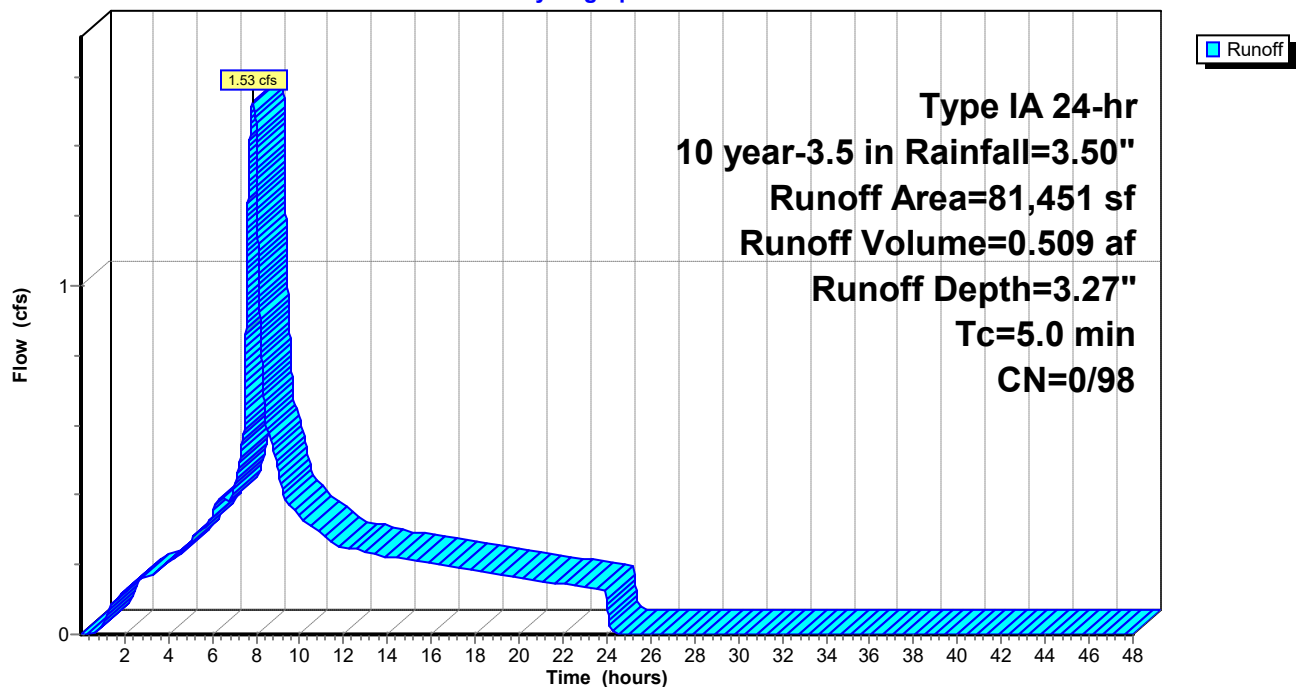
Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

	Area (sf)	CN	Description
*	81,451	98	Impervious ROW Area
	81,451	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 17S: Post Developed Impervious Basin #3

Hydrograph



Beck Pond-DuNett Storm Analysis

Prepared by {enter your company name here}

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

Printed 7/6/2023

Page 14

Summary for Subcatchment 18S: Post Developed Impervious Basin #2

Runoff = 0.17 cfs @ 7.87 hrs, Volume= 0.057 af, Depth= 3.27"

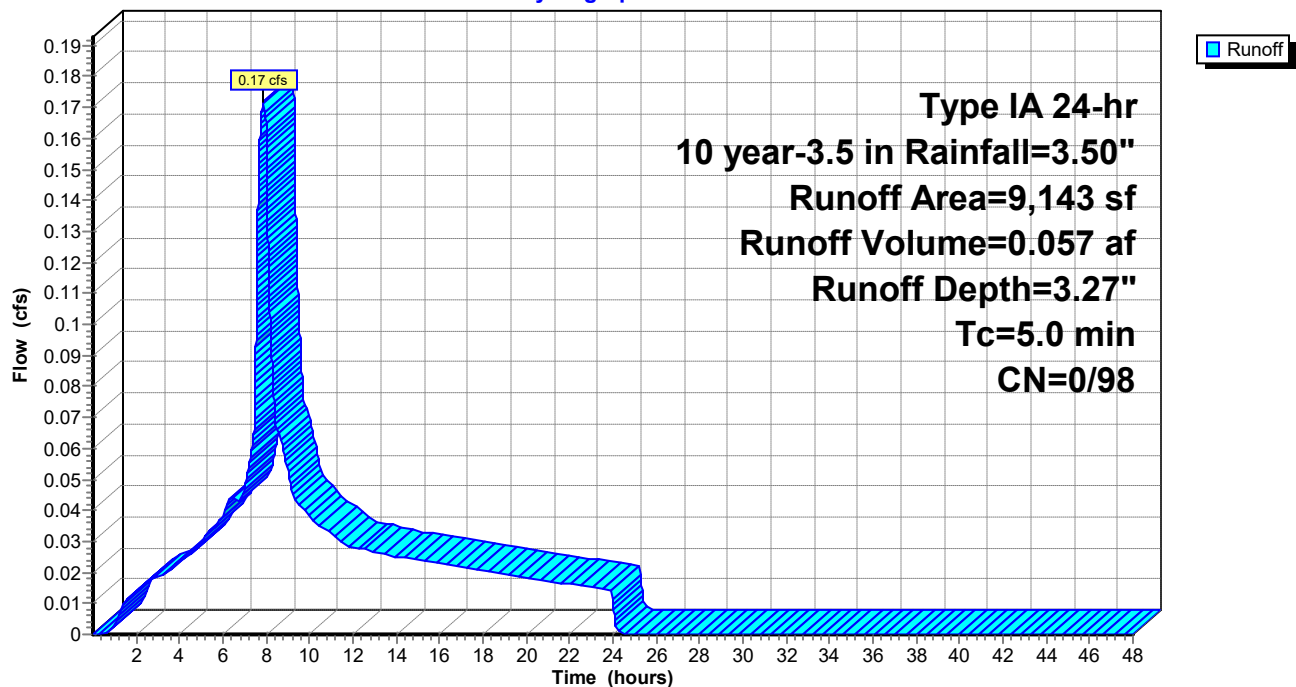
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.01-48.00 hrs, dt= 0.001 hrs
Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

	Area (sf)	CN	Description
*	9,143	98	Impervious ROW Area
	9,143	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 18S: Post Developed Impervious Basin #2

Hydrograph



Beck Pond-DuNett Storm Analysis

Prepared by {enter your company name here}

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

Printed 7/6/2023

Page 15

Summary for Subcatchment 19S: Post Developed-Basin #1 & SW 15th Ave

Runoff = 0.87 cfs @ 7.87 hrs, Volume= 0.290 af, Depth= 3.22"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.01-48.00 hrs, dt= 0.001 hrs

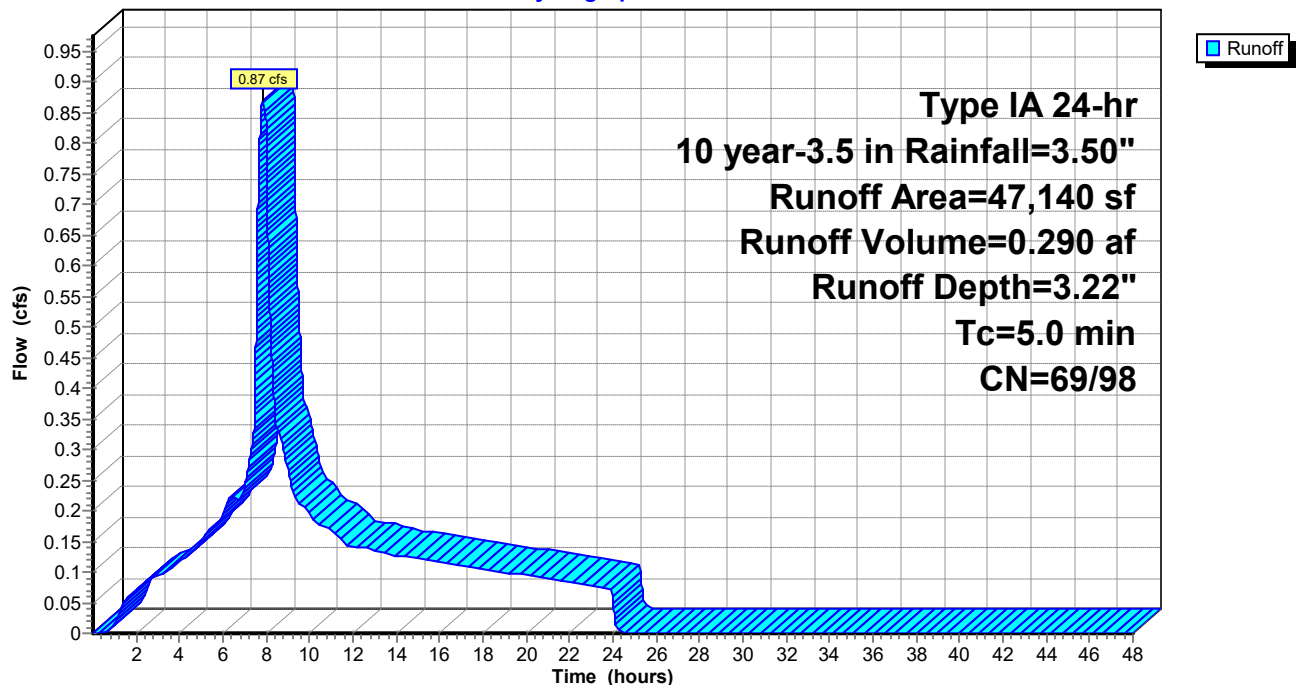
Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

	Area (sf)	CN	Description
*	33,703	98	Impervious ROW Area
*	1,043	69	Pervious Area SW 15th Ave
*	12,394	98	Impervious Area SW 15th Ave
	47,140	97	Weighted Average
	1,043	69	2.21% Pervious Area
	46,097	98	97.79% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 19S: Post Developed-Basin #1 & SW 15th Ave

Hydrograph



Beck Pond-DuNett Storm Analysis

Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

Prepared by {enter your company name here}

Printed 7/6/2023

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Page 16

Summary for Pond 1P: SDMH 05A

Inflow Area = 1.080 ac, 99.49% Impervious, Inflow Depth = 3.25" for 10 year-3.5 in event
Inflow = 0.88 cfs @ 7.87 hrs, Volume= 0.293 af
Outflow = 0.88 cfs @ 7.87 hrs, Volume= 0.293 af, Atten= 0%, Lag= 0.1 min
Primary = 0.88 cfs @ 7.87 hrs, Volume= 0.293 af

Routing by Dyn-Stor-Ind method, Time Span= 0.01-48.00 hrs, dt= 0.001 hrs
Peak Elev= 163.20' @ 7.88 hrs Surf.Area= 13 sf Storage= 8 cf

Plug-Flow detention time= 0.3 min calculated for 0.293 af (100% of inflow)
Center-of-Mass det. time= 0.3 min (663.2 - 662.9)

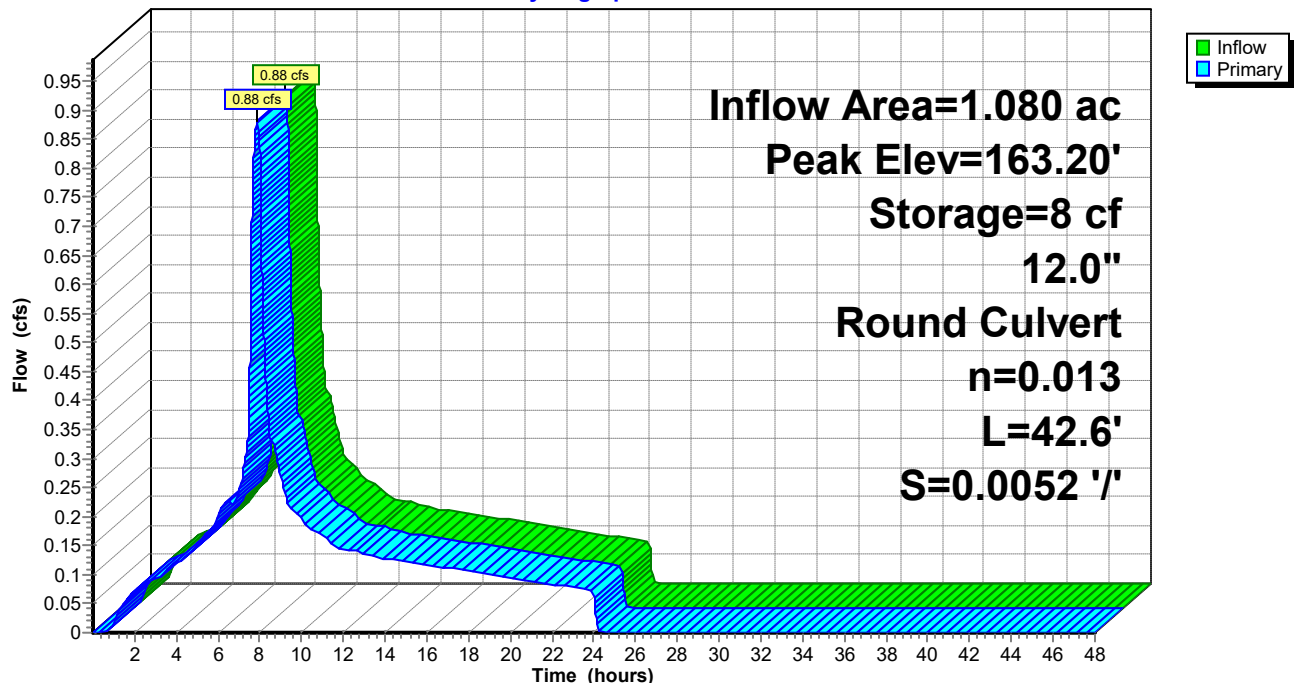
Volume	Invert	Avail.Storage	Storage Description
#1	162.58'	102 cf	4.00'D x 8.09'H Vertical Cone/Cylinder

Device	Routing	Invert	Outlet Devices
#1	Primary	162.58'	12.0" Round Culvert L= 42.6' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 162.58' / 162.36' S= 0.0052 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.88 cfs @ 7.87 hrs HW=163.20' TW=162.89' (Dynamic Tailwater)
←**1=Culvert** (Outlet Controls 0.88 cfs @ 2.45 fps)

Pond 1P: SDMH 05A

Hydrograph



Beck Pond-DuNett Storm Analysis

Prepared by {enter your company name here}

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

Printed 7/6/2023

Page 17

Summary for Pond 2P: SDMH 05B

Inflow Area = 1.332 ac, 99.59% Impervious, Inflow Depth = 3.26" for 10 year-3.5 in event
Inflow = 1.09 cfs @ 7.87 hrs, Volume= 0.362 af
Outflow = 1.09 cfs @ 7.88 hrs, Volume= 0.362 af, Atten= 0%, Lag= 0.1 min
Primary = 1.09 cfs @ 7.88 hrs, Volume= 0.362 af

Routing by Dyn-Stor-Ind method, Time Span= 0.01-48.00 hrs, dt= 0.001 hrs
Peak Elev= 162.89' @ 7.88 hrs Surf.Area= 20 sf Storage= 12 cf

Plug-Flow detention time= 0.4 min calculated for 0.362 af (100% of inflow)
Center-of-Mass det. time= 0.4 min (663.5 - 663.1)

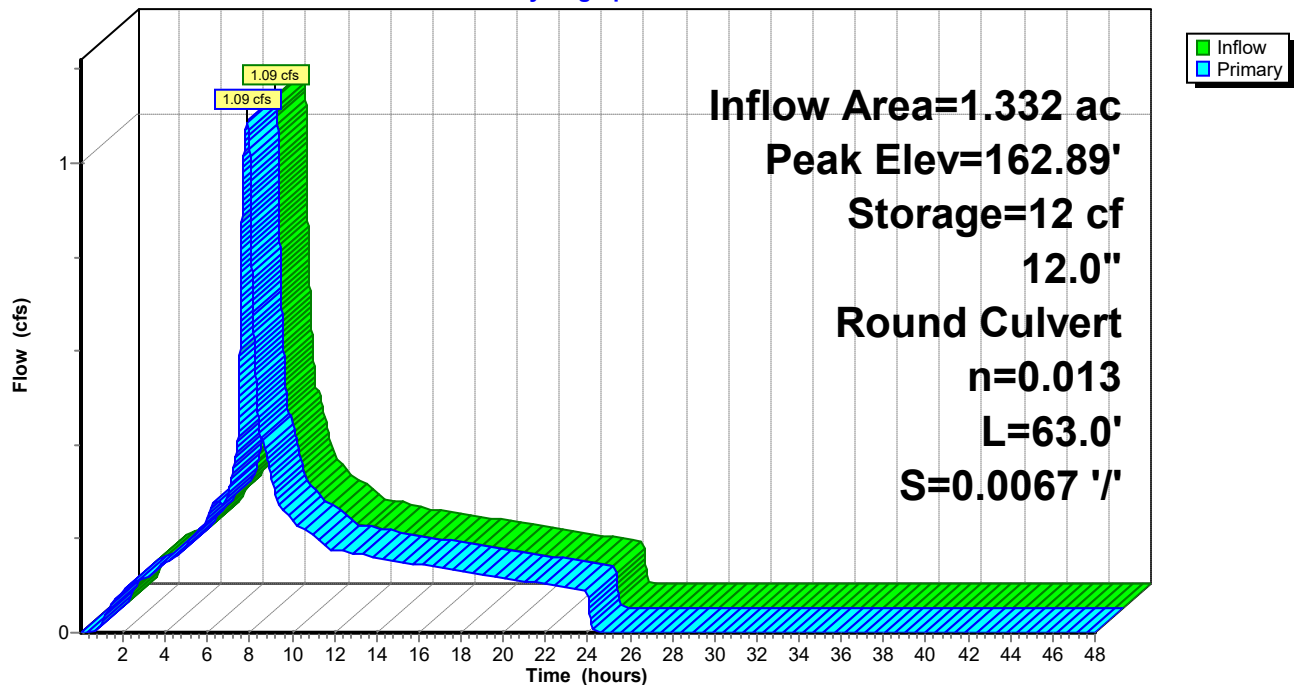
Volume	Invert	Avail.Storage	Storage Description
#1	162.27'	152 cf	5.00'D x 7.75'H Vertical Cone/Cylinder

Device	Routing	Invert	Outlet Devices
#1	Primary	162.27'	12.0" Round Culvert L= 63.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 162.27' / 161.85' S= 0.0067 '/ Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=1.09 cfs @ 7.88 hrs HW=162.89' TW=147.10' (Dynamic Tailwater)
←**1=Culvert** (Inlet Controls 1.09 cfs @ 2.12 fps)

Pond 2P: SDMH 05B

Hydrograph



Beck Pond-DuNett Storm Analysis

Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

Prepared by {enter your company name here}

Printed 7/6/2023

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Page 18

Summary for Pond 3P: DRYWELL 05C

Inflow Area = 1.332 ac, 99.59% Impervious, Inflow Depth = 3.26" for 10 year-3.5 in event
 Inflow = 1.09 cfs @ 7.88 hrs, Volume= 0.362 af
 Outflow = 1.09 cfs @ 7.90 hrs, Volume= 0.362 af, Atten= 0%, Lag= 1.7 min
 Discarded = 1.09 cfs @ 7.90 hrs, Volume= 0.362 af
 Primary = 0.00 cfs @ 0.01 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.01-48.00 hrs, dt= 0.001 hrs

Peak Elev= 147.11' @ 7.90 hrs Surf.Area= 57 sf Storage= 57 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)

Center-of-Mass det. time= 0.1 min (663.6 - 663.5)

Volume	Invert	Avail.Storage	Storage Description
#1	144.88'	345 cf	8.50'D x 26.00'H Vertical Cone/Cylinder 1,475 cf Overall - 327 cf Embedded = 1,149 cf x 30.0% Voids
#2	144.88'	327 cf	4.00'D x 26.00'H Vertical Cone/Cylinder Inside #1
		671 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	144.88'	400.000 in/hr Exfiltration over Wetted area from 144.87' - 149.87' Conductivity to Groundwater Elevation = -30.00' Excluded Wetted area = 0 sf
#2	Primary	162.11'	12.0" Round Culvert L= 75.3' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 162.11' / 161.61' S= 0.0066 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Discarded OutFlow Max=1.09 cfs @ 7.90 hrs HW=147.11' (Free Discharge)↑**1=Exfiltration** (Controls 1.09 cfs)**Primary OutFlow** Max=0.00 cfs @ 0.01 hrs HW=144.88' TW=161.48' (Dynamic Tailwater)↑**2=Culvert** (Controls 0.00 cfs)

Beck Pond-DuNett Storm Analysis

Prepared by {enter your company name here}

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

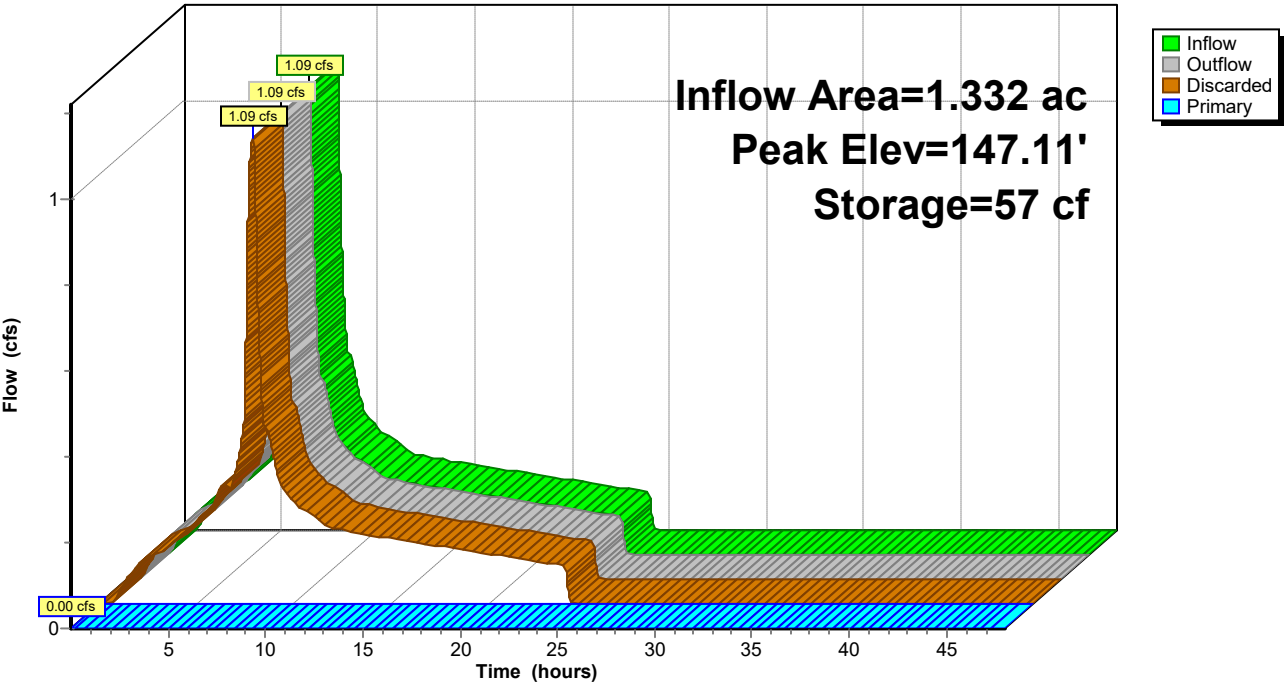
Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

Printed 7/6/2023

Page 19

Pond 3P: DRYWELL 05C

Hydrograph



Beck Pond-DuNett Storm Analysis

Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

Prepared by {enter your company name here}

Printed 7/6/2023

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Page 20

Summary for Pond 4P: SDMH 05D

Inflow Area = 1.332 ac, 99.59% Impervious, Inflow Depth = 0.00" for 10 year-3.5 in event
Inflow = 0.00 cfs @ 0.01 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.01 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.01 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.01-48.00 hrs, dt= 0.001 hrs
Peak Elev= 161.48' @ 0.01 hrs Surf.Area= 13 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

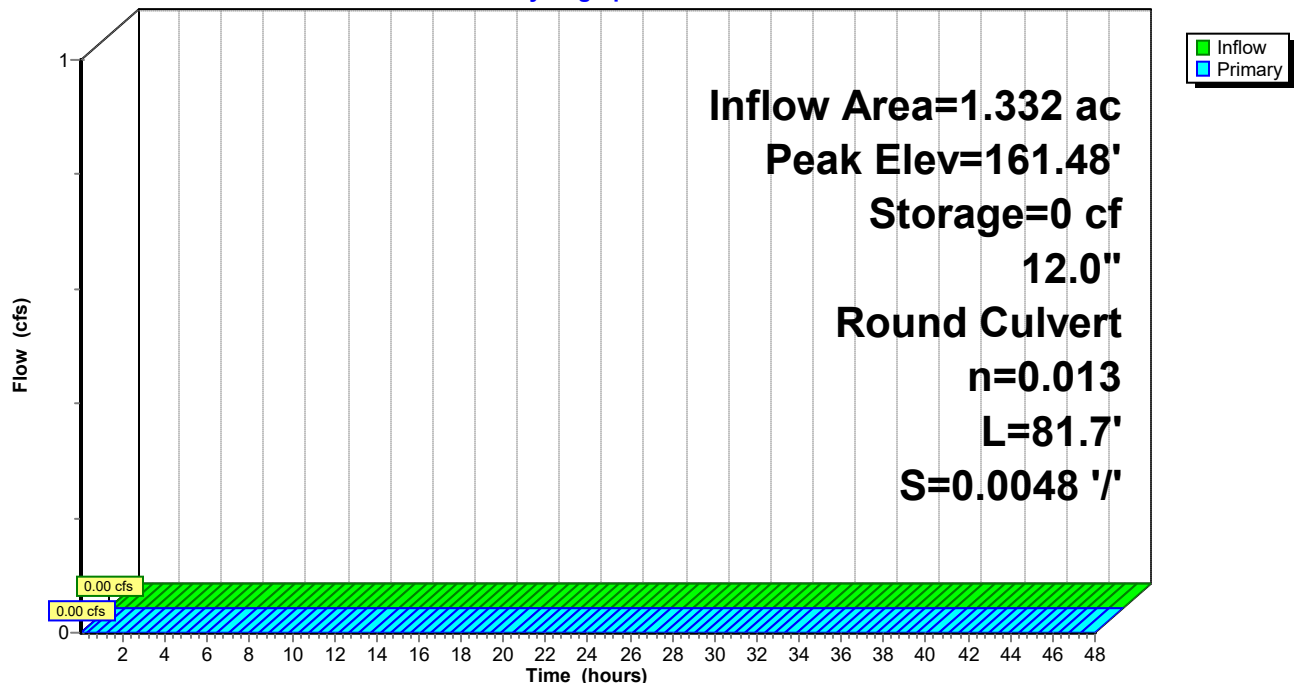
Volume	Invert	Avail.Storage	Storage Description
#1	161.48'	108 cf	4.00'D x 8.56'H Vertical Cone/Cylinder

Device	Routing	Invert	Outlet Devices
#1	Primary	161.48'	12.0" Round Culvert L= 81.7' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 161.48' / 161.09' S= 0.0048 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.00 cfs @ 0.01 hrs HW=161.48' TW=145.81' (Dynamic Tailwater)
←**1=Culvert** (Controls 0.00 cfs)

Pond 4P: SDMH 05D

Hydrograph



Beck Pond-DuNett Storm Analysis

Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

Prepared by {enter your company name here}

Printed 7/6/2023

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Page 21

Summary for Pond 5P: DRYWELL 05E

Inflow Area = 1.925 ac, 99.72% Impervious, Inflow Depth = 1.01" for 10 year-3.5 in event
 Inflow = 0.49 cfs @ 7.87 hrs, Volume= 0.162 af
 Outflow = 0.49 cfs @ 7.87 hrs, Volume= 0.162 af, Atten= 0%, Lag= 0.0 min
 Discarded = 0.49 cfs @ 7.87 hrs, Volume= 0.162 af
 Primary = 0.00 cfs @ 0.01 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.01-48.00 hrs, dt= 0.001 hrs

Peak Elev= 145.81' @ 7.87 hrs Surf.Area= 57 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)

Center-of-Mass det. time= 0.0 min (662.6 - 662.6)

Volume	Invert	Avail.Storage	Storage Description
#1	145.81'	345 cf	8.50'D x 26.00'H Vertical Cone/Cylinder 1,475 cf Overall - 327 cf Embedded = 1,149 cf x 30.0% Voids
#2	145.81'	327 cf	4.00'D x 26.00'H Vertical Cone/Cylinder Inside #1
		671 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	145.81'	400.000 in/hr Exfiltration over Wetted area from 145.80' - 150.80' Conductivity to Groundwater Elevation = -30.00' Excluded Wetted area = 0 sf
#2	Primary	160.99'	12.0" Round Culvert L= 98.1' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 160.99' / 160.31' S= 0.0069 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Discarded OutFlow Max=0.53 cfs @ 7.87 hrs HW=145.81' (Free Discharge)↑**1=Exfiltration** (Controls 0.53 cfs)**Primary OutFlow** Max=0.00 cfs @ 0.01 hrs HW=145.81' TW=160.27' (Dynamic Tailwater)↑**2=Culvert** (Controls 0.00 cfs)

Beck Pond-DuNett Storm Analysis

Prepared by {enter your company name here}

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

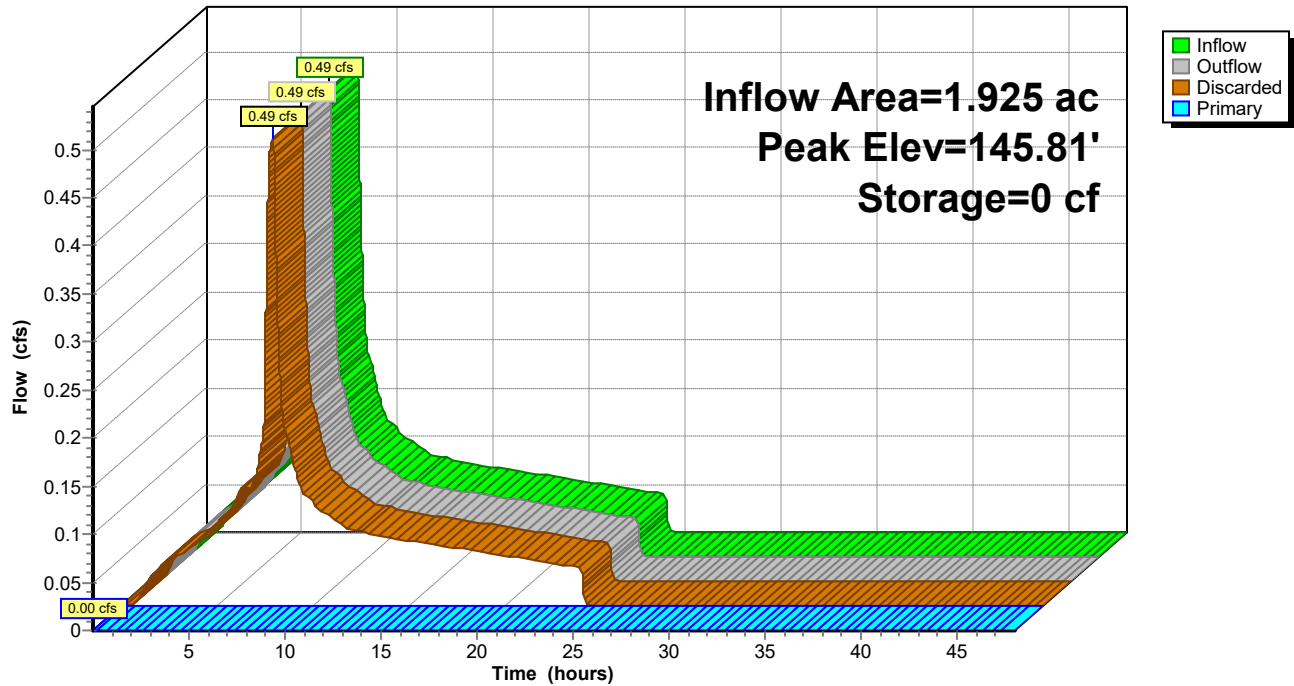
Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

Printed 7/6/2023

Page 22

Pond 5P: DRYWELL 05E

Hydrograph



Beck Pond-DuNett Storm Analysis

Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

Prepared by {enter your company name here}

Printed 7/6/2023

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Page 23

Summary for Pond 6P: SDMH 05F

Inflow Area = 2.272 ac, 99.76% Impervious, Inflow Depth = 0.50" for 10 year-3.5 in event
Inflow = 0.28 cfs @ 7.87 hrs, Volume= 0.094 af
Outflow = 0.28 cfs @ 7.88 hrs, Volume= 0.094 af, Atten= 0%, Lag= 0.2 min
Primary = 0.28 cfs @ 7.88 hrs, Volume= 0.094 af

Routing by Dyn-Stor-Ind method, Time Span= 0.01-48.00 hrs, dt= 0.001 hrs
Peak Elev= 160.58' @ 7.88 hrs Surf.Area= 20 sf Storage= 6 cf

Plug-Flow detention time= 0.8 min calculated for 0.094 af (100% of inflow)
Center-of-Mass det. time= 0.8 min (663.4 - 662.6)

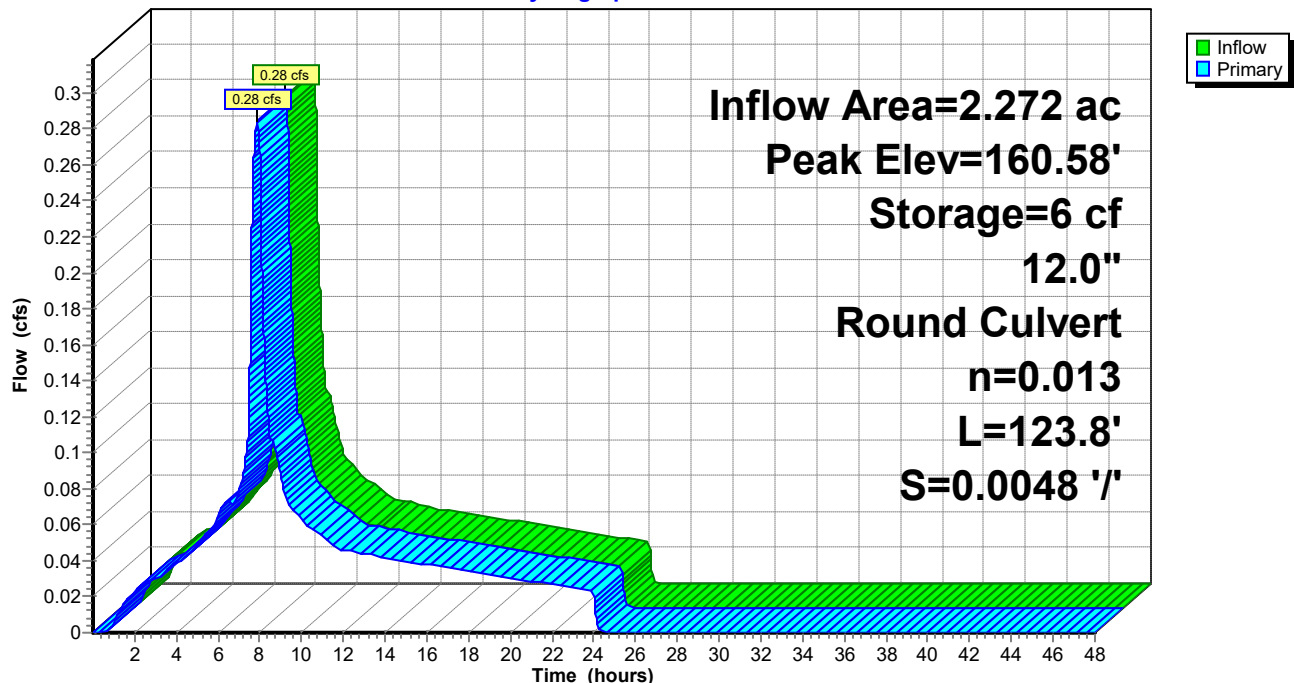
Volume	Invert	Avail.Storage	Storage Description
#1	160.27'	187 cf	5.00'D x 9.50'H Vertical Cone/Cylinder

Device	Routing	Invert	Outlet Devices
#1	Primary	160.27'	12.0" Round Culvert L= 123.8' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 160.27' / 159.68' S= 0.0048 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.28 cfs @ 7.88 hrs HW=160.58' TW=146.98' (Dynamic Tailwater)
←1=Culvert (Barrel Controls 0.28 cfs @ 2.03 fps)

Pond 6P: SDMH 05F

Hydrograph



Beck Pond-DuNett Storm Analysis

Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

Prepared by {enter your company name here}

Printed 7/6/2023

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Page 24

Summary for Pond 7P: DRYWELL 05G

Inflow Area = 5.701 ac, 99.48% Impervious, Inflow Depth = 0.25" for 10 year-3.5 in event
Inflow = 1.17 cfs @ 7.88 hrs, Volume= 0.117 af
Outflow = 1.17 cfs @ 7.91 hrs, Volume= 0.117 af, Atten= 1%, Lag= 1.9 min
Discarded = 1.17 cfs @ 7.91 hrs, Volume= 0.117 af

Routing by Dyn-Stor-Ind method, Time Span= 0.01-48.00 hrs, dt= 0.001 hrs
Peak Elev= 147.02' @ 7.91 hrs Surf.Area= 57 sf Storage= 66 cf

Plug-Flow detention time= 0.2 min calculated for 0.117 af (100% of inflow)
Center-of-Mass det. time= 0.2 min (627.6 - 627.4)

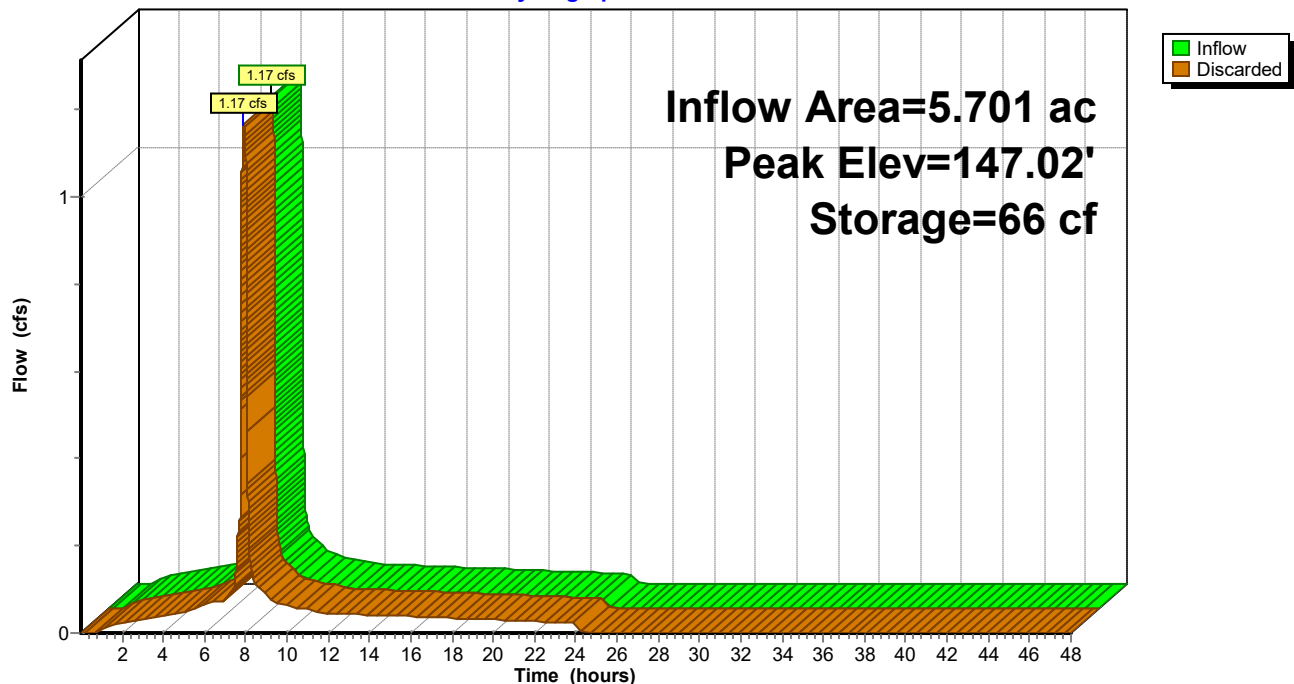
Volume	Invert	Avail.Storage	Storage Description
#1	144.48'	345 cf	8.50'D x 26.00'H Vertical Cone/Cylinder 1,475 cf Overall - 327 cf Embedded = 1,149 cf x 30.0% Voids
#2	144.48'	327 cf	4.00'D x 26.00'H Vertical Cone/Cylinder Inside #1
		671 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	144.48'	400.000 in/hr Exfiltration over Wetted area from 144.47' - 149.47' Conductivity to Groundwater Elevation = -30.00' Excluded Wetted area = 0 sf Phase-In= 0.02'

Discarded OutFlow Max=1.17 cfs @ 7.91 hrs HW=147.02' (Free Discharge)
↑1=Exfiltration (Controls 1.17 cfs)

Pond 7P: DRYWELL 05G

Hydrograph



Beck Pond-DuNett Storm Analysis

Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

Prepared by {enter your company name here}

Printed 7/6/2023

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Page 25

Summary for Pond 8P: DRYWELL 05H

Inflow Area = 3.429 ac, 99.30% Impervious, Inflow Depth = 3.25" for 10 year-3.5 in event
 Inflow = 2.79 cfs @ 7.88 hrs, Volume= 0.929 af
 Outflow = 2.79 cfs @ 7.88 hrs, Volume= 0.929 af, Atten= 0%, Lag= 0.1 min
 Discarded = 1.90 cfs @ 7.88 hrs, Volume= 0.907 af
 Primary = 0.89 cfs @ 7.88 hrs, Volume= 0.022 af

Routing by Dyn-Stor-Ind method, Time Span= 0.01-48.00 hrs, dt= 0.001 hrs

Peak Elev= 160.33' @ 7.88 hrs Surf.Area= 57 sf Storage= 421 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)

Center-of-Mass det. time= 0.6 min (664.1 - 663.5)

Volume	Invert	Avail.Storage	Storage Description
#1	144.01'	345 cf	8.50'D x 26.00'H Vertical Cone/Cylinder 1,475 cf Overall - 327 cf Embedded = 1,149 cf x 30.0% Voids
#2	144.01'	327 cf	4.00'D x 26.00'H Vertical Cone/Cylinder Inside #1
		671 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	144.01'	400.000 in/hr Exfiltration over Wetted area from 144.00' - 149.00' Conductivity to Groundwater Elevation = -30.00' Excluded Wetted area = 0 sf
#2	Primary	159.74'	15.0" Round Culvert L= 60.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 159.74' / 159.60' S= 0.0023 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Discarded OutFlow Max=1.90 cfs @ 7.88 hrs HW=160.33' (Free Discharge)↑ **1=Exfiltration** (Controls 1.90 cfs)**Primary OutFlow** Max=0.89 cfs @ 7.88 hrs HW=160.33' TW=146.99' (Dynamic Tailwater)↑ **2=Culvert** (Barrel Controls 0.89 cfs @ 2.31 fps)

Beck Pond-DuNett Storm Analysis

Prepared by {enter your company name here}

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

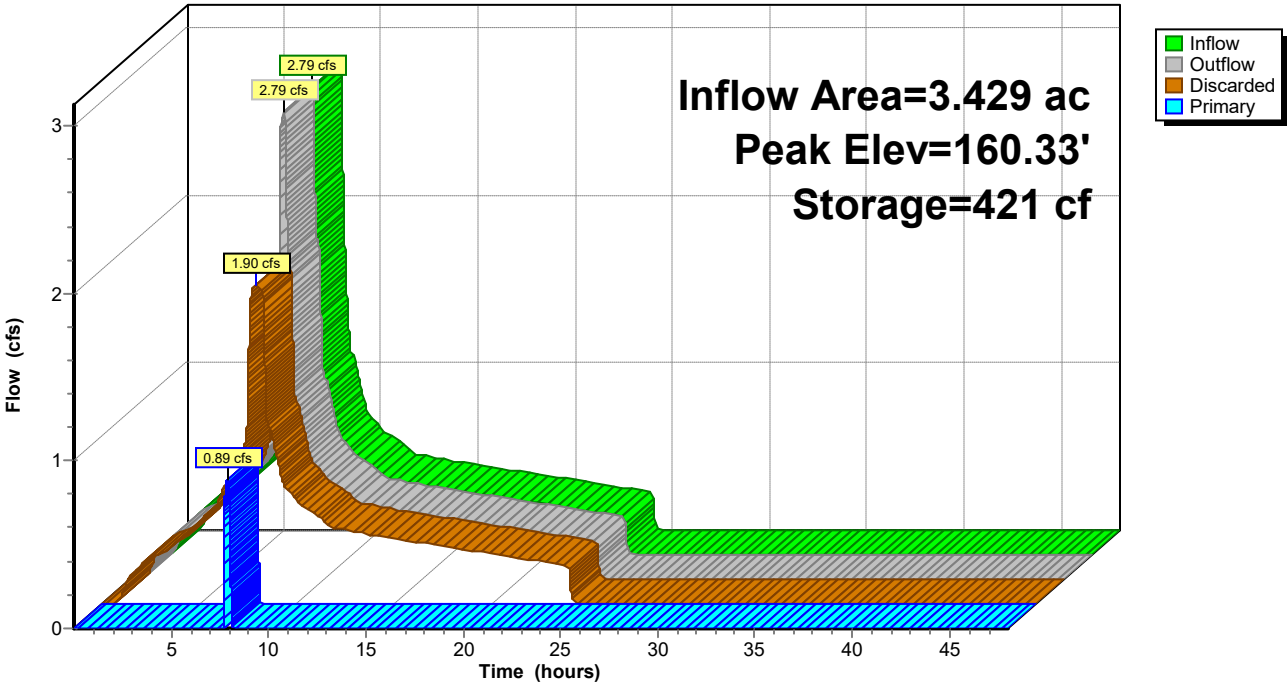
Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

Printed 7/6/2023

Page 26

Pond 8P: DRYWELL 05H

Hydrograph



Beck Pond-DuNett Storm Analysis

Prepared by {enter your company name here}

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

Printed 7/6/2023

Page 27

Summary for Pond 9P: SDMH 05I

Inflow Area = 3.429 ac, 99.30% Impervious, Inflow Depth = 3.25" for 10 year-3.5 in event
Inflow = 2.79 cfs @ 7.88 hrs, Volume= 0.929 af
Outflow = 2.79 cfs @ 7.88 hrs, Volume= 0.929 af, Atten= 0%, Lag= 0.1 min
Primary = 2.79 cfs @ 7.88 hrs, Volume= 0.929 af

Routing by Dyn-Stor-Ind method, Time Span= 0.01-48.00 hrs, dt= 0.001 hrs
Peak Elev= 161.06' @ 7.88 hrs Surf.Area= 20 sf Storage= 22 cf

Plug-Flow detention time= 0.3 min calculated for 0.929 af (100% of inflow)
Center-of-Mass det. time= 0.3 min (663.5 - 663.3)

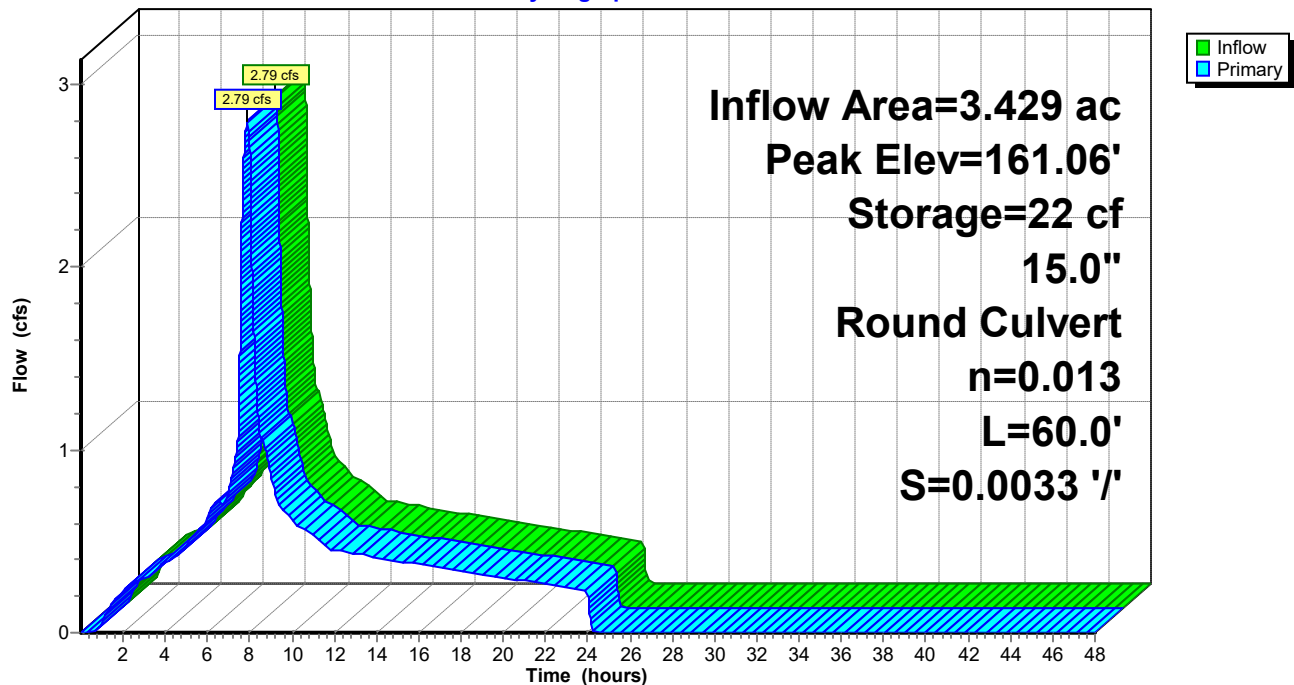
Volume	Invert	Avail.Storage	Storage Description
#1	159.94'	186 cf	5.00'D x 9.47'H Vertical Cone/Cylinder

Device	Routing	Invert	Outlet Devices
#1	Primary	159.94'	15.0" Round Culvert L= 60.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 159.94' / 159.74' S= 0.0033 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=2.79 cfs @ 7.88 hrs HW=161.06' TW=160.33' (Dynamic Tailwater)
←**1=Culvert** (Barrel Controls 2.79 cfs @ 3.19 fps)

Pond 9P: SDMH 05I

Hydrograph



Beck Pond-DuNett Storm Analysis

Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

Prepared by {enter your company name here}

Printed 7/6/2023

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Page 28

Summary for Pond 10P: SDMH 01A

Inflow Area = 3.162 ac, 99.24% Impervious, Inflow Depth = 3.25" for 10 year-3.5 in event
Inflow = 2.58 cfs @ 7.87 hrs, Volume= 0.856 af
Outflow = 2.57 cfs @ 7.88 hrs, Volume= 0.856 af, Atten= 0%, Lag= 0.1 min
Primary = 2.57 cfs @ 7.88 hrs, Volume= 0.856 af

Routing by Dyn-Stor-Ind method, Time Span= 0.01-48.00 hrs, dt= 0.001 hrs
Peak Elev= 161.36' @ 7.88 hrs Surf.Area= 13 sf Storage= 16 cf

Plug-Flow detention time= 0.2 min calculated for 0.856 af (100% of inflow)
Center-of-Mass det. time= 0.2 min (663.3 - 663.1)

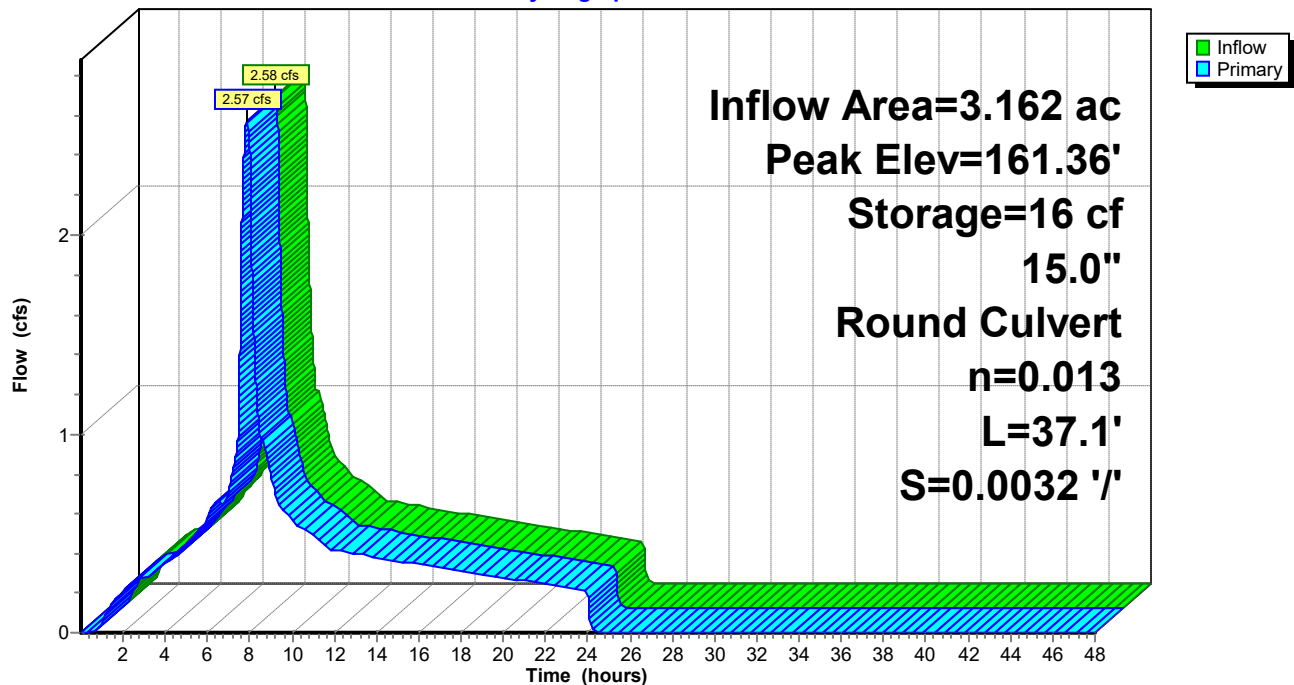
Volume	Invert	Avail.Storage	Storage Description
#1	160.06'	110 cf	4.00'D x 8.72'H Vertical Cone/Cylinder

Device	Routing	Invert	Outlet Devices
#1	Primary	160.06'	15.0" Round Culvert L= 37.1' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 160.06' / 159.94' S= 0.0032 '/ Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=2.57 cfs @ 7.88 hrs HW=161.36' TW=161.06' (Dynamic Tailwater)
←1=Culvert (Inlet Controls 2.57 cfs @ 2.10 fps)

Pond 10P: SDMH 01A

Hydrograph



Beck Pond-DuNett Storm Analysis

Type IA 24-hr 10 year-3.5 in Rainfall=3.50"

Prepared by {enter your company name here}

Printed 7/6/2023

HydroCAD® 10.10-4a s/n 11432 © 2020 HydroCAD Software Solutions LLC

Page 29

Summary for Pond 11P: SDMH 04A

Inflow Area = 0.210 ac, 100.00% Impervious, Inflow Depth = 3.27" for 10 year-3.5 in event
Inflow = 0.17 cfs @ 7.87 hrs, Volume= 0.057 af
Outflow = 0.17 cfs @ 7.90 hrs, Volume= 0.057 af, Atten= 0%, Lag= 1.4 min
Primary = 0.17 cfs @ 7.90 hrs, Volume= 0.057 af

Routing by Dyn-Stor-Ind method, Time Span= 0.01-48.00 hrs, dt= 0.001 hrs
Peak Elev= 161.40' @ 7.88 hrs Surf.Area= 13 sf Storage= 7 cf

Plug-Flow detention time= 0.8 min calculated for 0.057 af (100% of inflow)
Center-of-Mass det. time= 0.8 min (663.4 - 662.6)

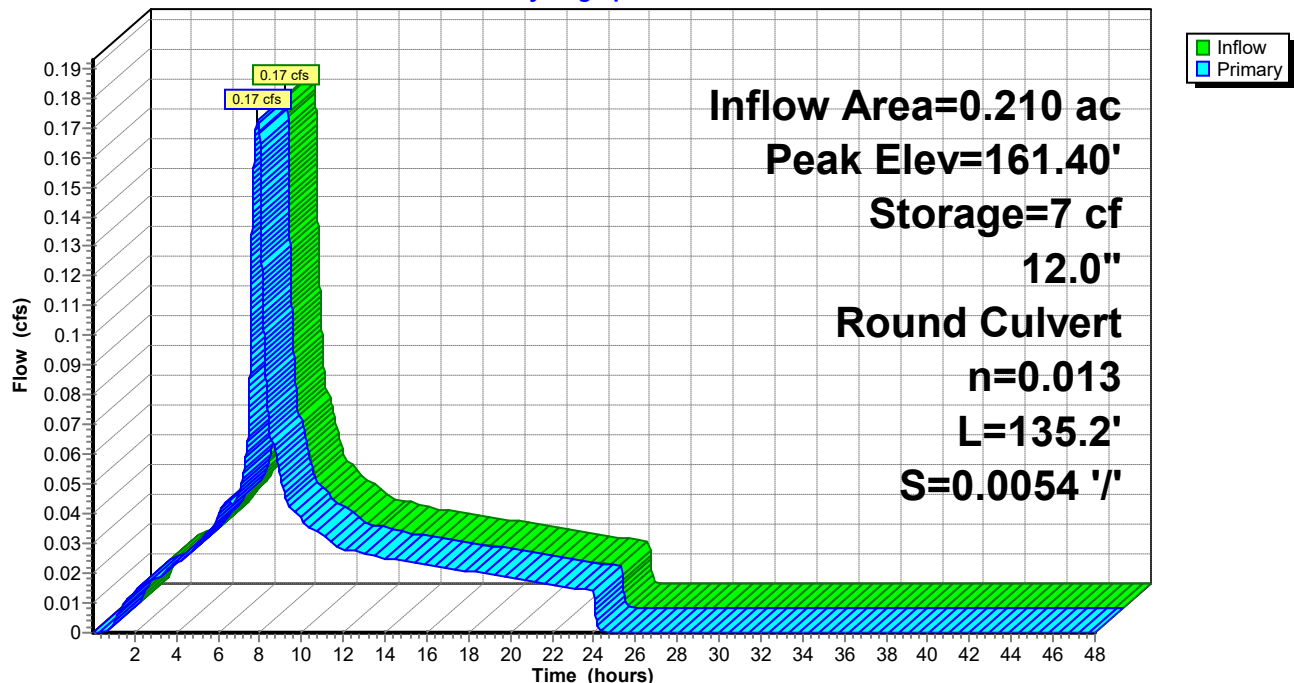
Volume	Invert	Avail.Storage	Storage Description
#1	160.87'	68 cf	4.00'D x 5.44'H Vertical Cone/Cylinder

Device	Routing	Invert	Outlet Devices
#1	Primary	160.87'	12.0" Round Culvert L= 135.2' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 160.87' / 160.14' S= 0.0054 '/ Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.17 cfs @ 7.90 hrs HW=161.40' TW=161.36' (Dynamic Tailwater)
←1=Culvert (Outlet Controls 0.17 cfs @ 0.59 fps)

Pond 11P: SDMH 04A

Hydrograph



VIII. General Maps

a. Vicinity Map

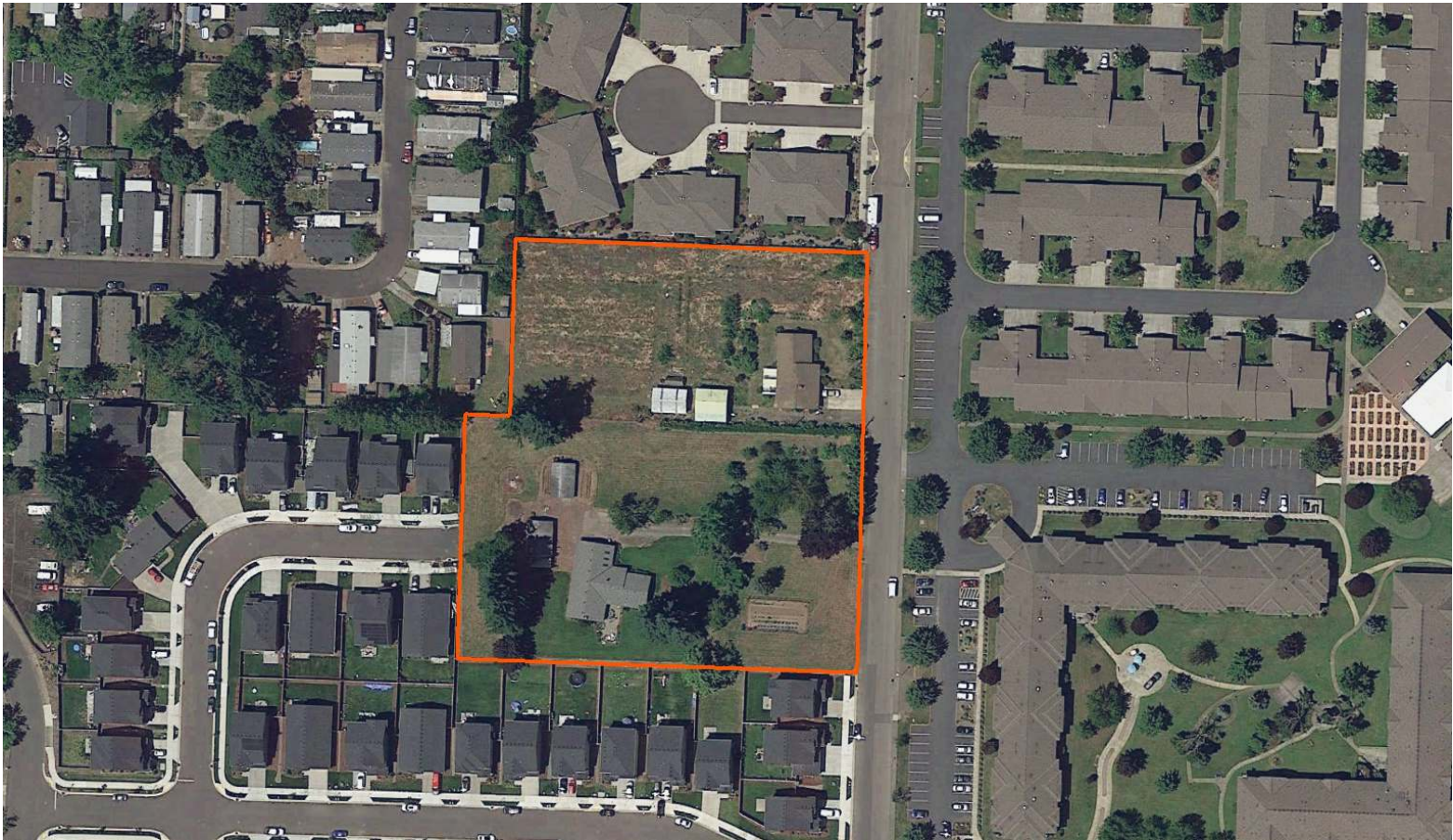
b. Aerial Map

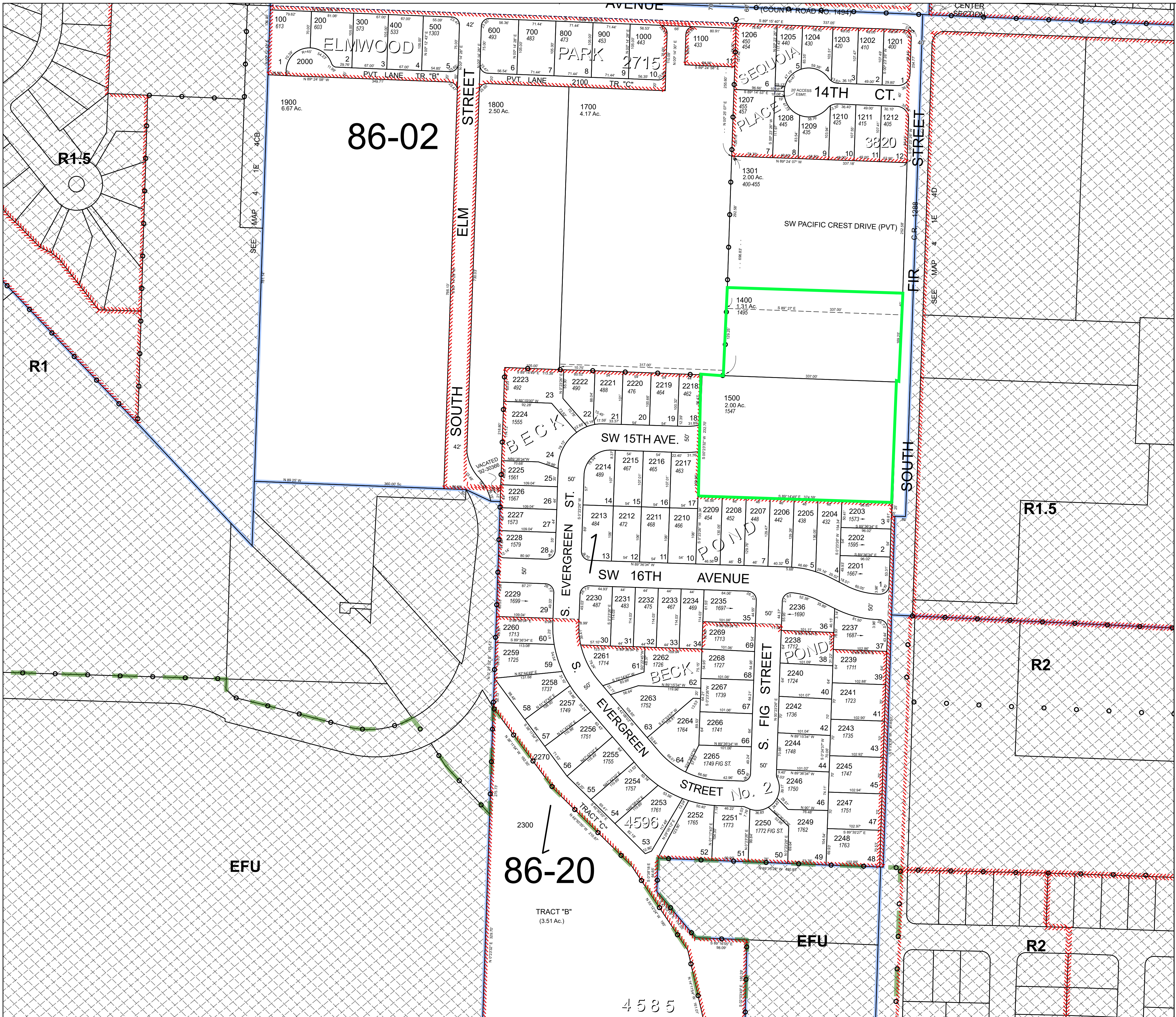
c. Assessor Map

VICINITY MAP:



2021 AERIAL MAP:





4 1E 04CA
CANBY

N.E.1/4 S.W.1/4 SEC.04 T.4S. R.1E. W. M.

CLACKAMAS COUNTY

1" = 72,835'

Cancelled

1200

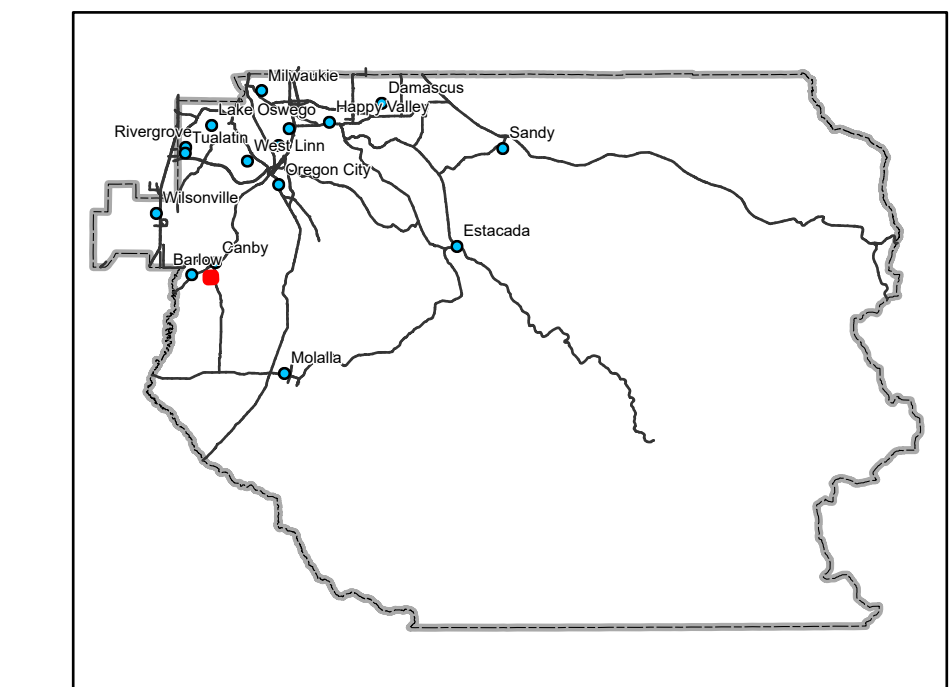
1300

1600

2290

2200

- Parcel Boundary
- Private Road ROW
- Historical Boundary
- Railroad Centerline
- Tax Code Lines
- Map Index
- Water Lines
- Land Use Zoning
- Plats
- Water
- Corner
- Section Corner
- 1/16th Line
- Govt Lot Line
- DLC Line
- Meander Line
- PLSS Section Line
- Historic Corridor 40'
- Historic Corridor 20'



THIS MAP IS FOR ASSESSMENT
PURPOSES ONLY

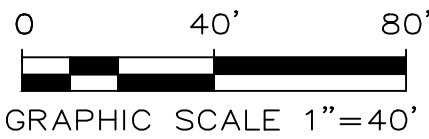
Print Date: 4/25/2023

4 1E 04CA
CANBY

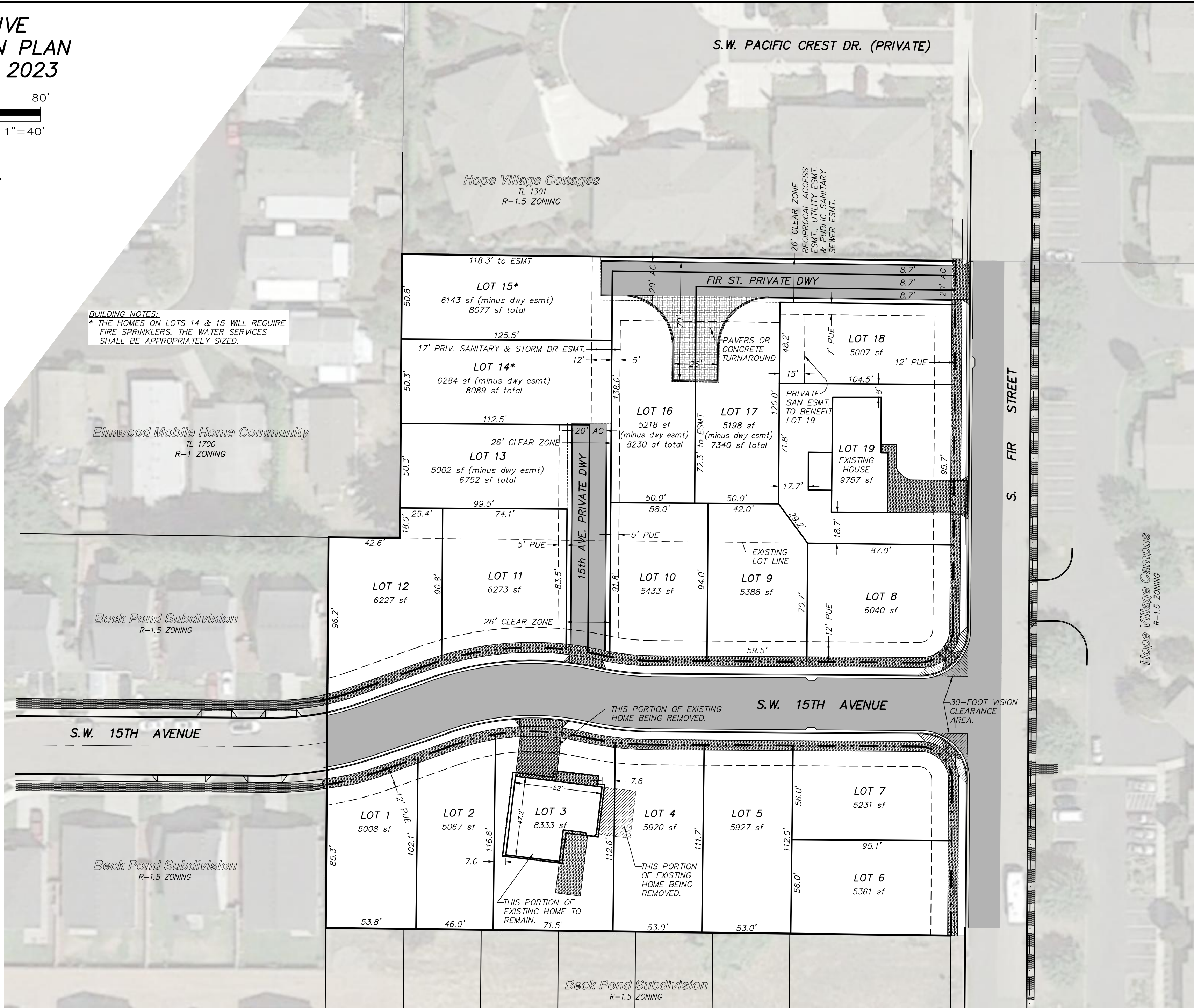
IX. Maps

- a. Site Plan
- b. Street & Storm Drain Plan
- c. Street Profiles
- d. Sanitary Sewer Plan
- e. Water Line and Franchise Utility Plan
- f. Fire Department Access Plan
- g. Grading & Erosion Control Plan

TENTATIVE
SUBDIVISION PLAN
OCTOBER, 2023



BUILDING NOTES:
* THE HOMES ON LOTS 14 & 15 WILL REQUIRE
FIRE SPRINKLERS. THE WATER SERVICES
SHALL BE APPROPRIATELY SIZED.



REVISIONS	BY

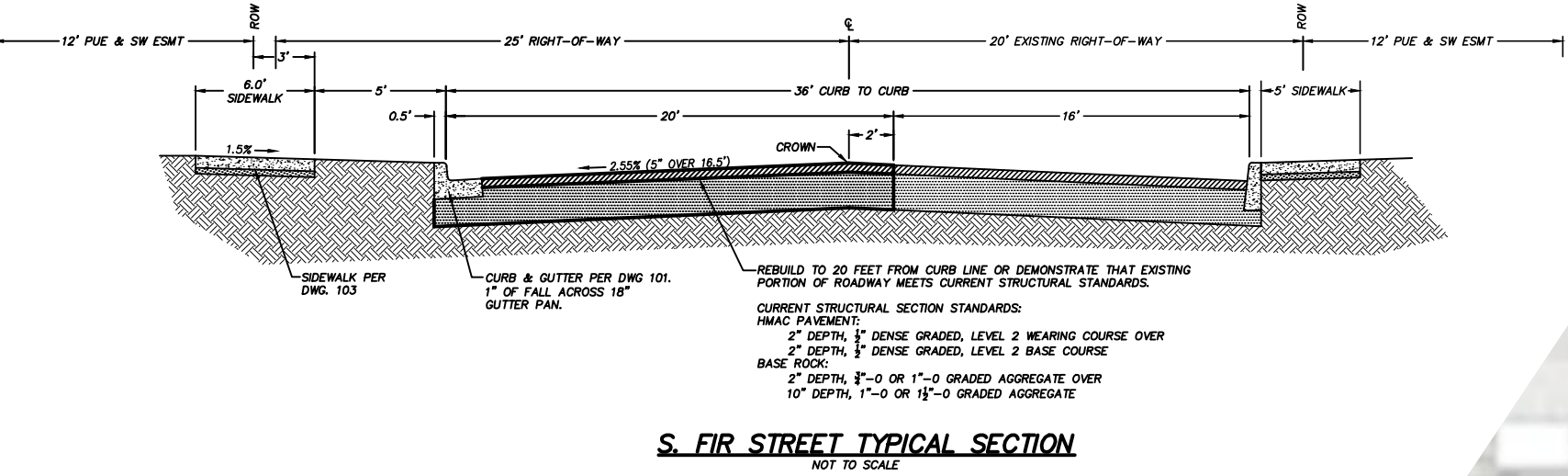
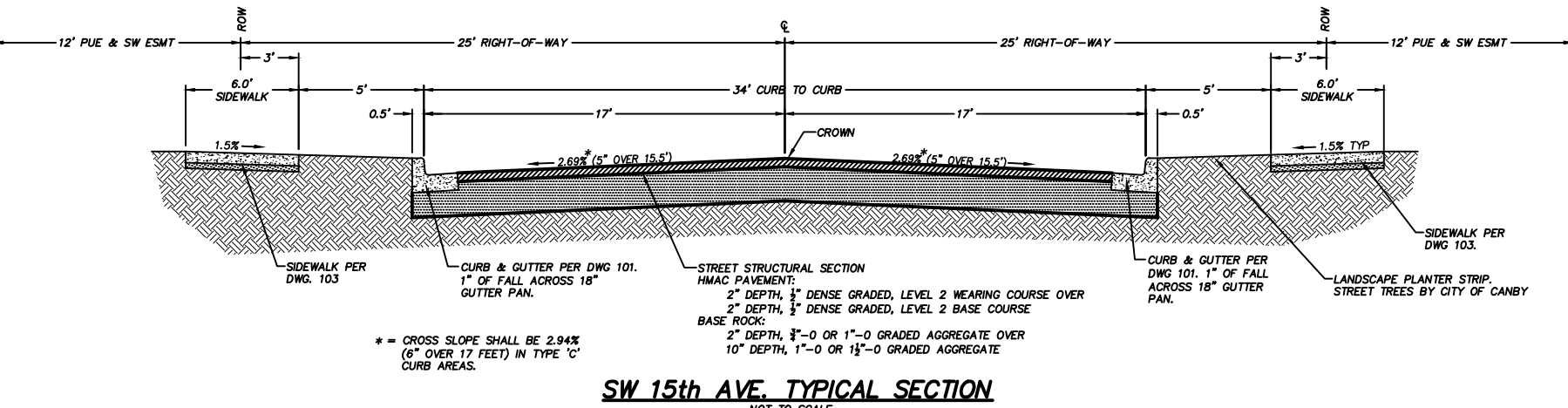
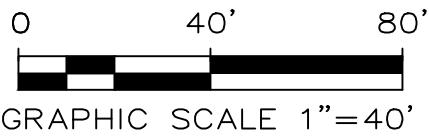
DuNett subdivision
DuPont and Netter

Site Plan

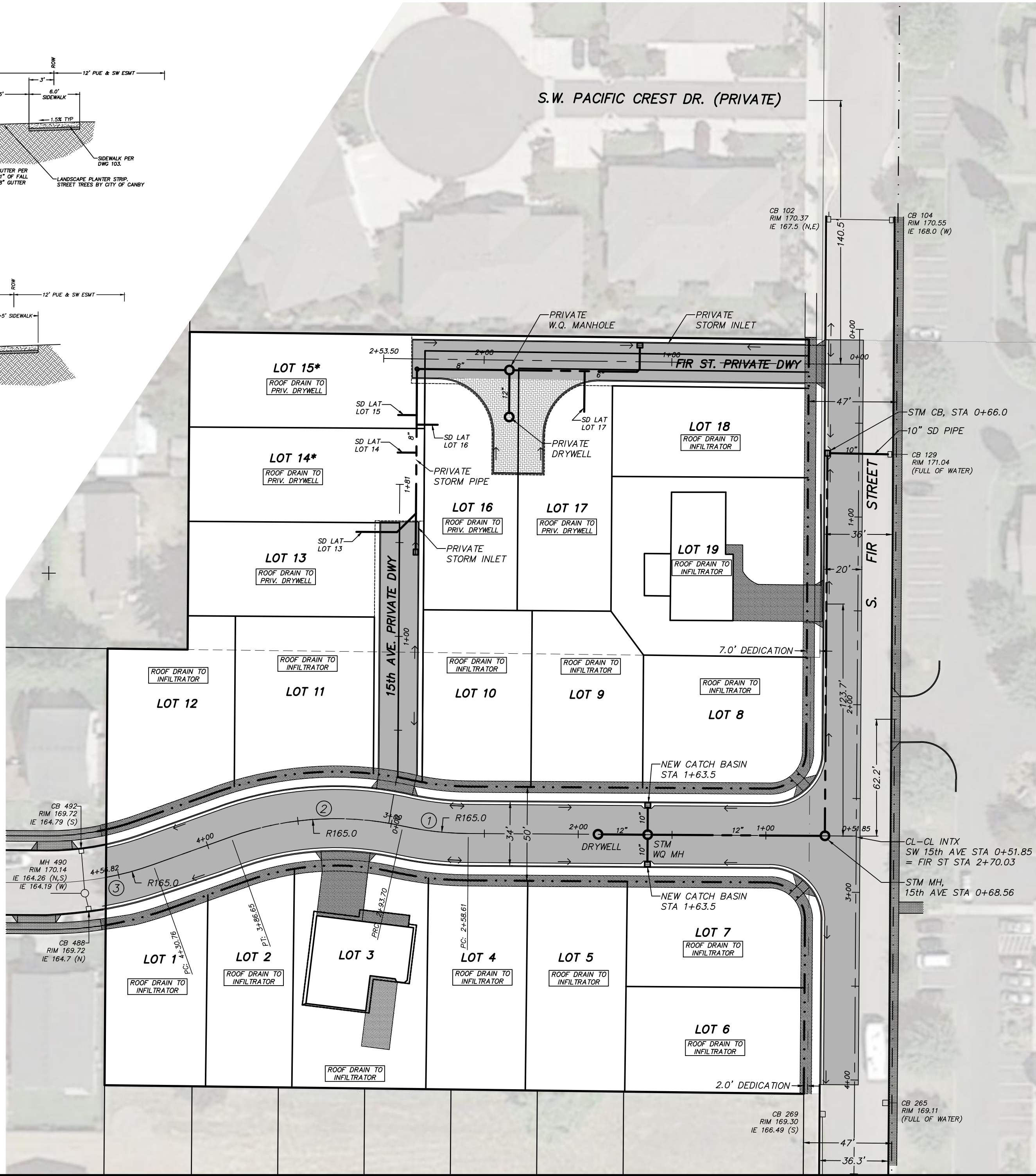
SISUL ENGINEERING
375 PORTLAND AVENUE
GLADSTONE, OREGON 97027
(503) 657-0188

DATE	OCT, 2023
SCALE	1" = 40'
DRAWN	-
JOB	SGL21-018
SHEET	C1
OF	7 SHEETS

TENTATIVE
SUBDIVISION PLAN
OCTOBER, 2023



CENTERLINE CURVE TABLE					
#	PC STA	PT STA	RADIUS (ft)	LENGTH (FT)	DELTA (D-MM-SS)
1	PC STA	PT STA	165.00	35.09	12.1848 (d)
2	PC STA	PT STA	165.00	92.95	32.2774 (d)
3	PC STA	PT STA	165.00	26.05	09.0470 (d)



REVISIONS	BY

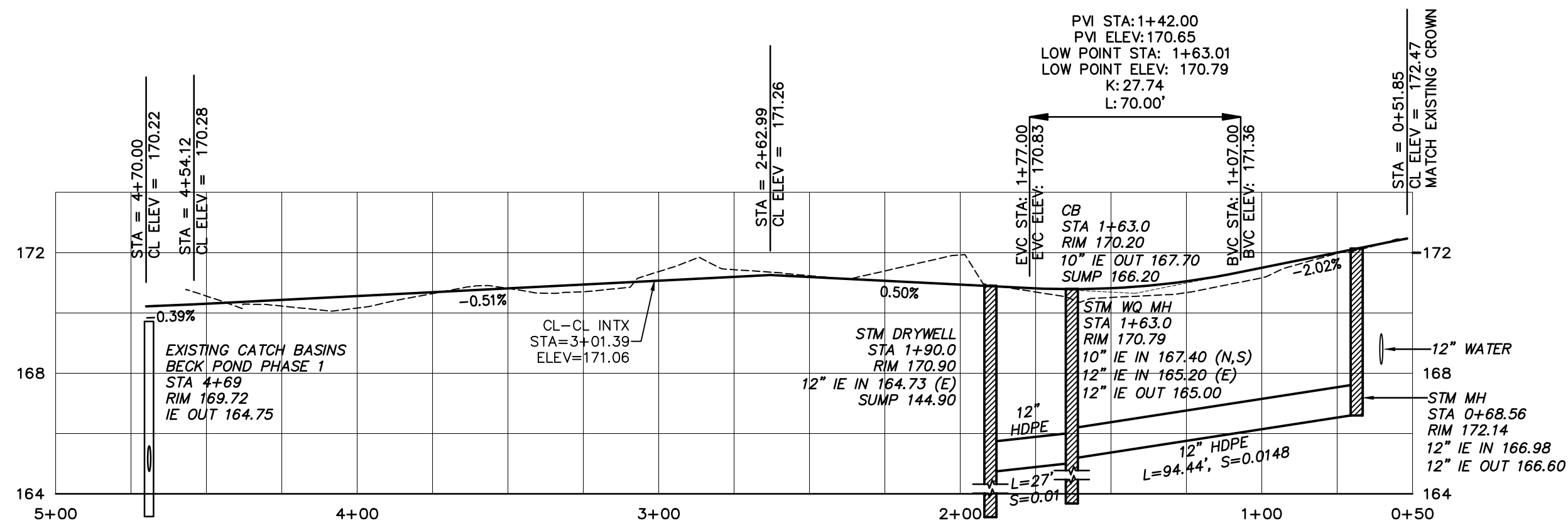
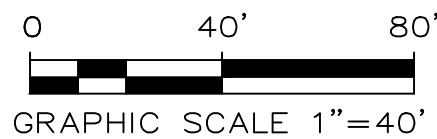
DuNett subdivision
DuPont and Netter

Street and Storm
Drain Plan

SISUL ENGINEERING
375 PORTLAND AVENUE
GLADSTONE, OREGON 97027
(503) 657-0188

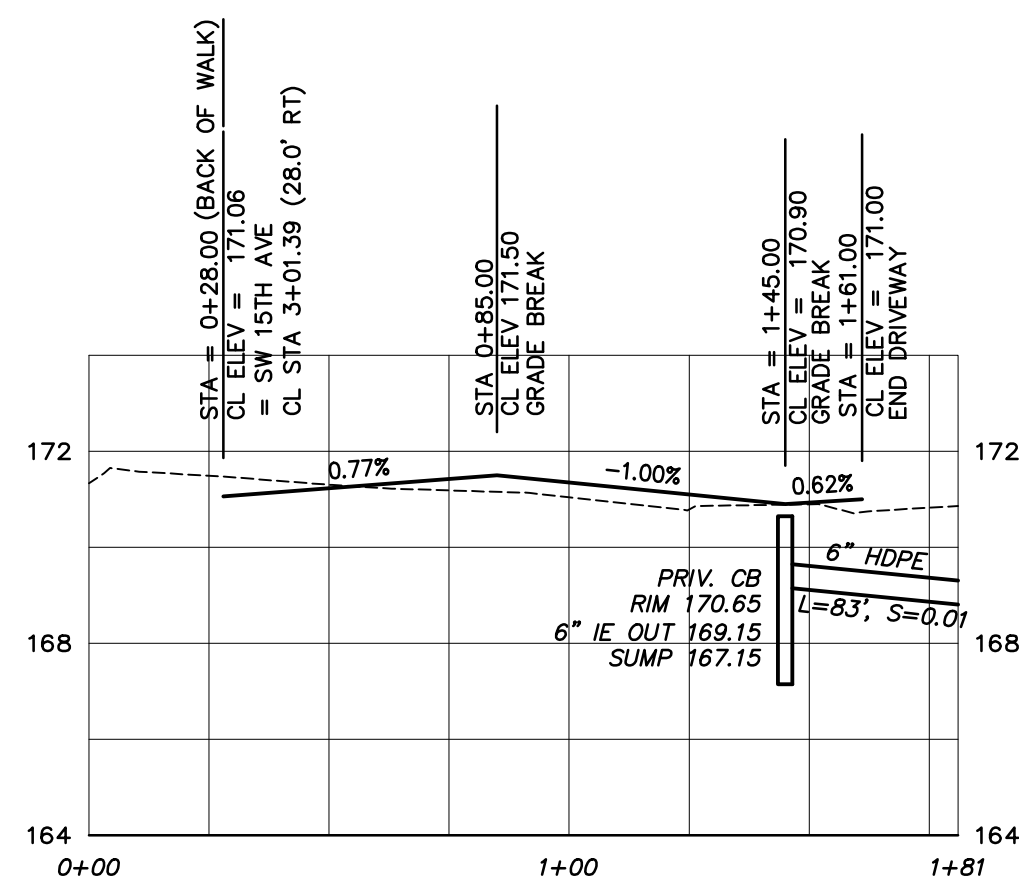
DATE OCT., 2023
SCALE 1" = 40'
DRAWN -
JOB SGL21-018
SHEET C2
OF 7 SHEETS

TENTATIVE
SUBDIVISION PLAN
OCTOBER, 2023



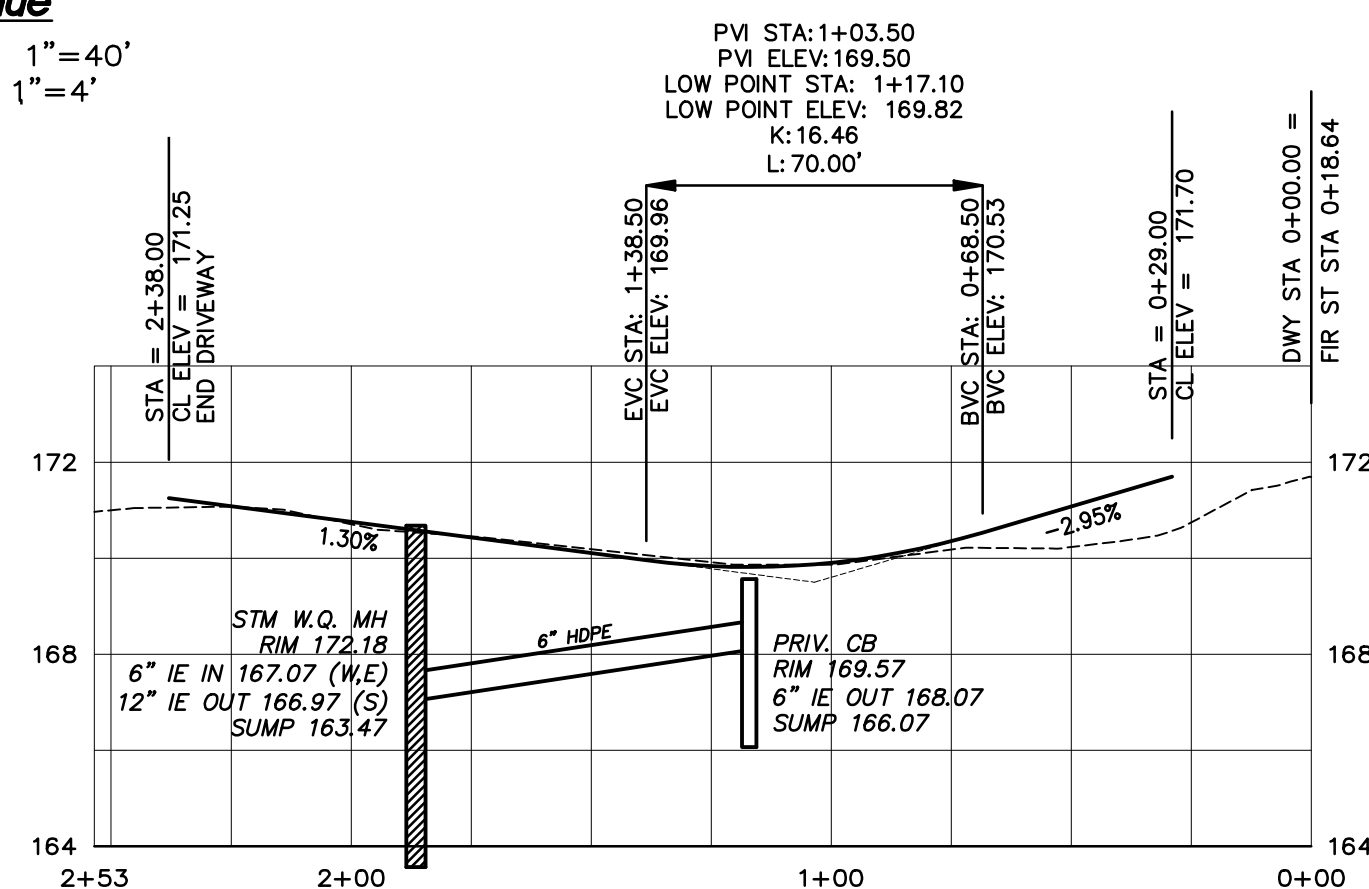
SW 15th Avenue

HORIZONTAL SCALE: 1"=40'
VERTICAL SCALE: 1"=4'



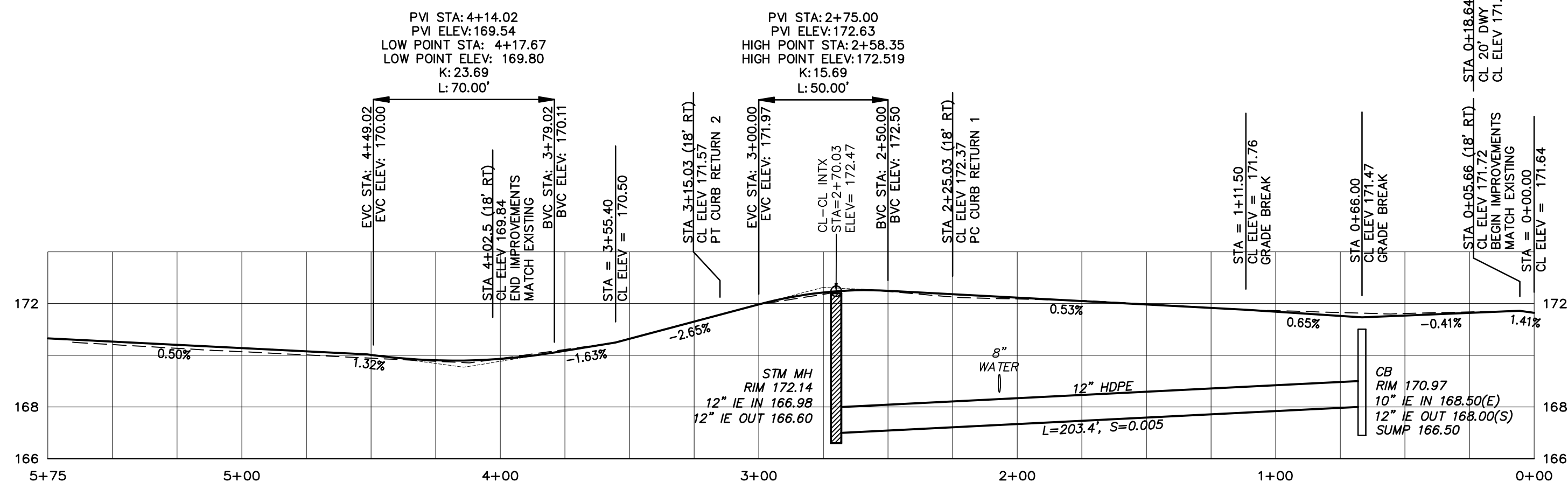
15th Ave. Dwy

HORIZONTAL SCALE: 1"=40'
VERTICAL SCALE: 1"=4'



Fir St. Dwy

HORIZONTAL SCALE: 1"=40'
VERTICAL SCALE: 1"=4'



S Fir Street

HORIZONTAL SCALE: 1"=40'
VERTICAL SCALE: 1"=4'

REVISIONS	BY

DuNett subdivision
DuPont and Netter

Profiles

SISUL ENGINEERING
375 PORTLAND AVENUE
GLADSTONE, OREGON 97027
(503) 657-0188

DATE OCT., 2023

SCALE 1" = 40'

DRAWN -

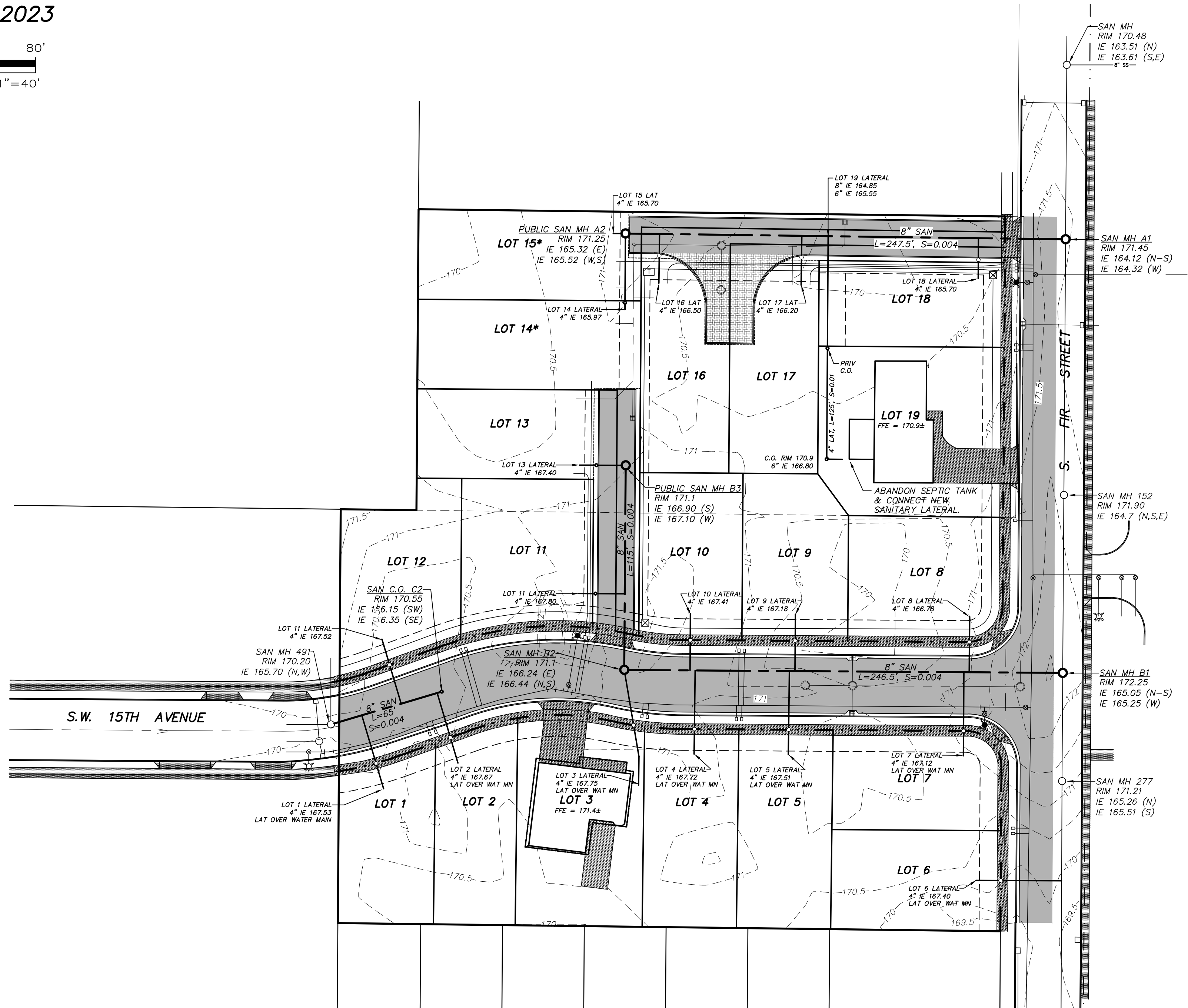
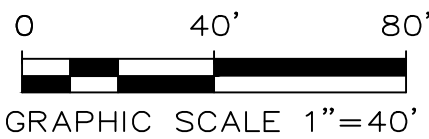
JOB SGL21-018

SHEET

C3

OF 7 SHEETS

TENTATIVE
SUBDIVISION PLAN
OCTOBER, 2023



REVISIONS	BY

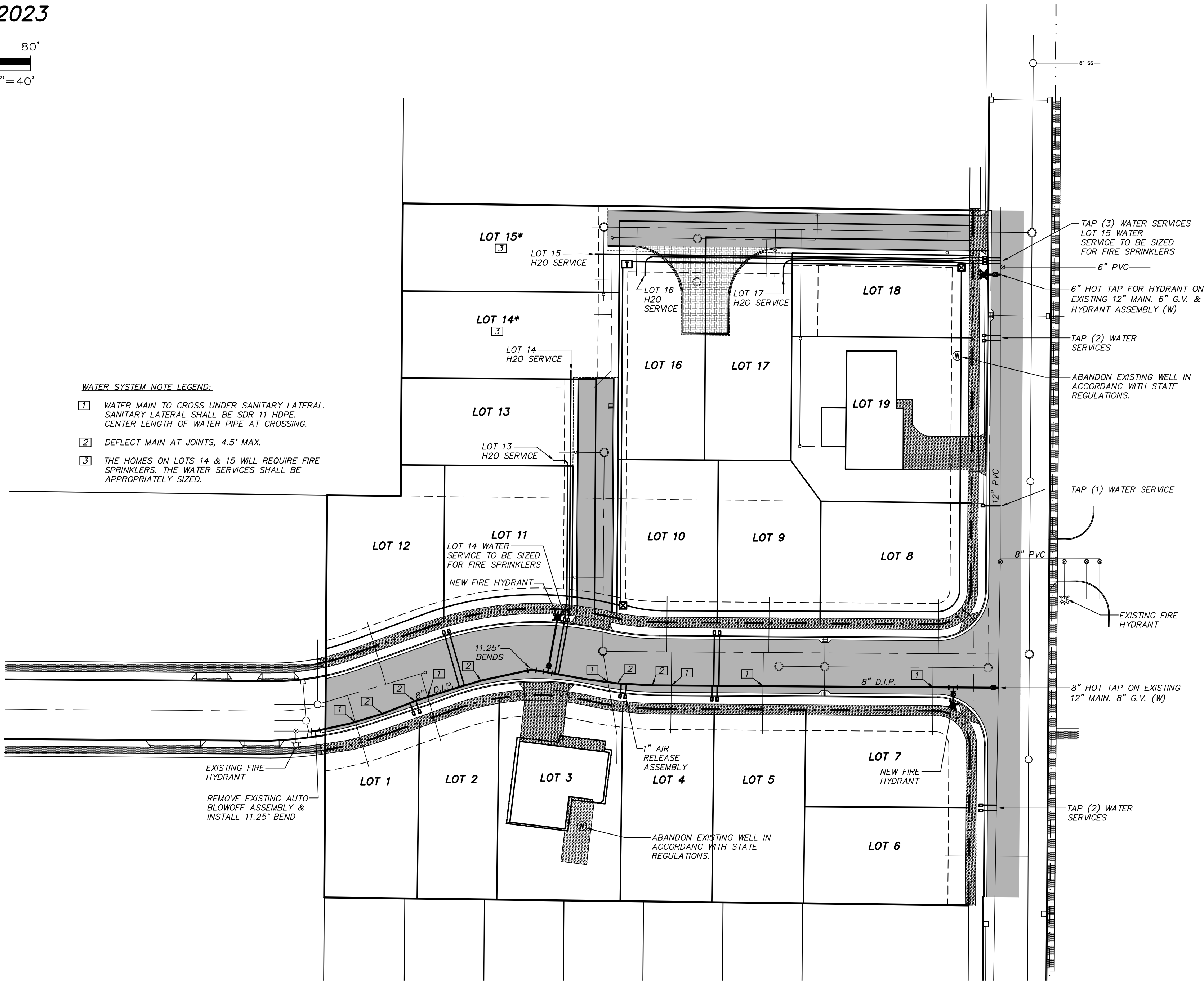
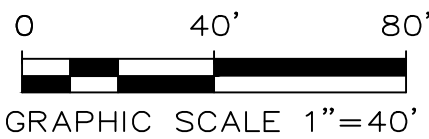
DuNett subdivision
DuPont and Netter

Sanitary Sewer
Plan

SISUL ENGINEERING
375 PORTLAND AVENUE
GLADSTONE, OREGON 97027
(503) 657-0188

DATE	OCT., 2023
SCALE	1" = 40'
DRAWN	-
JOB	SGL21-018
SHEET	C4
OF	7 SHEETS

TENTATIVE
SUBDIVISION PLAN
OCTOBER, 2023



- WATER SYSTEM NOTE LEGEND:
- 1 WATER MAIN TO CROSS UNDER SANITARY LATERAL. SANITARY LATERAL SHALL BE SDR 11 HDPE. CENTER LENGTH OF WATER PIPE AT CROSSING.
 - 2 DEFLECT MAIN AT JOINTS, 4.5° MAX.
 - 3 THE HOMES ON LOTS 14 & 15 WILL REQUIRE FIRE SPRINKLERS. THE WATER SERVICES SHALL BE APPROPRIATELY SIZED.

REVISIONS	BY

DuNett subdivision

DuPont and Netter

Water System

and Power Plan

SISUL ENGINEERING

375 PORTLAND AVENUE
GLADSTONE, OREGON 97027
(503) 657-0188

DATE

OCT., 2023

SCALE

1" = 40'

DRAWN

-

JOB

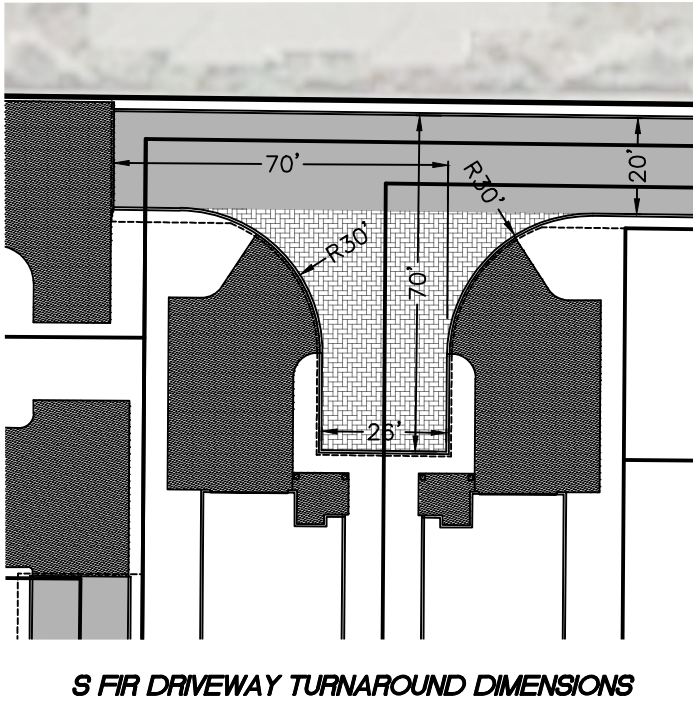
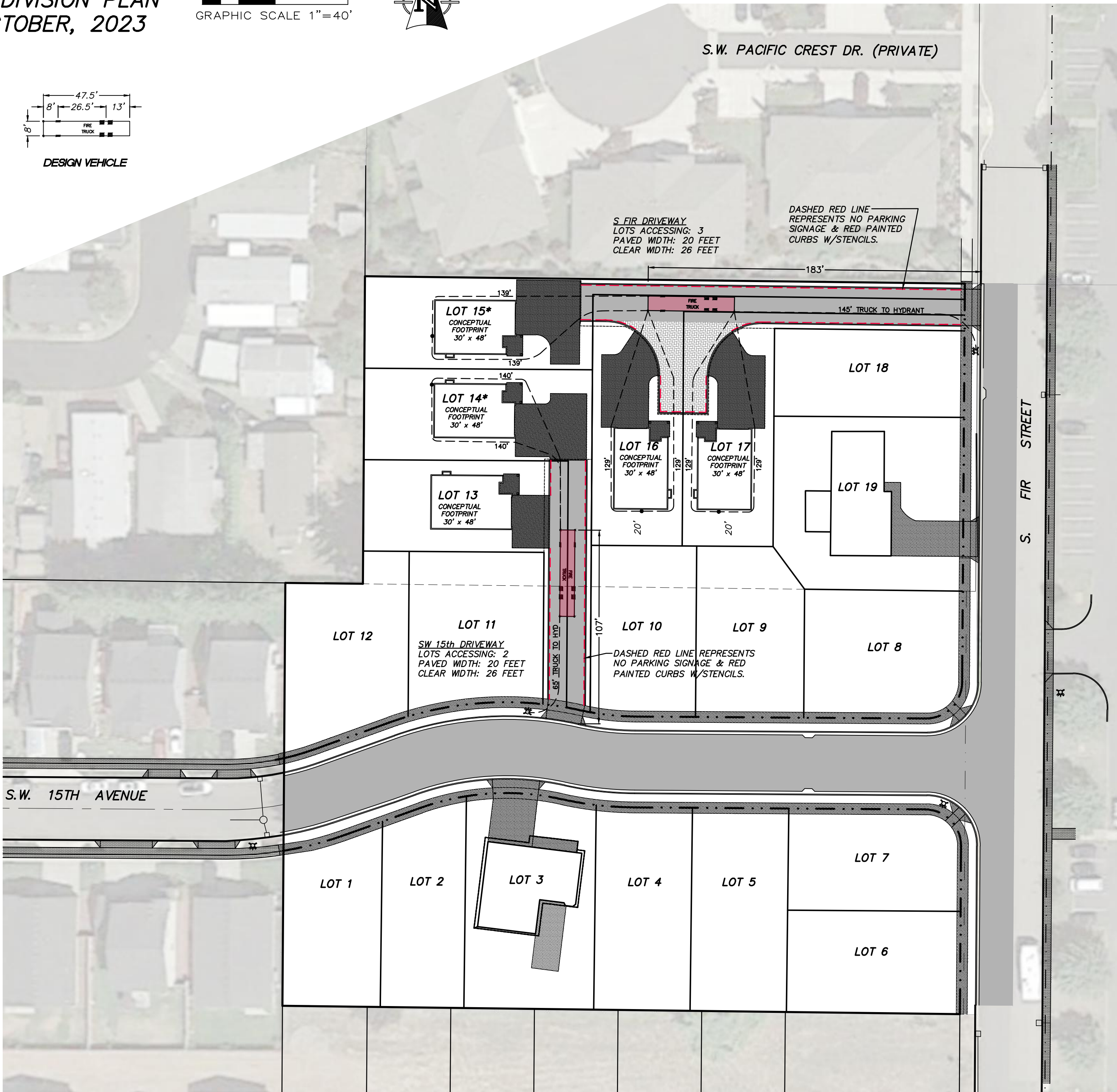
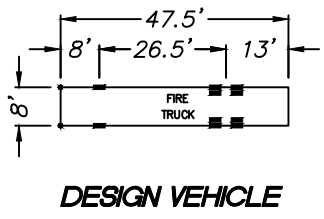
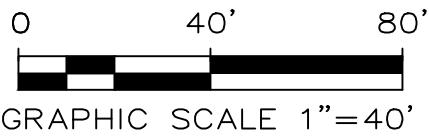
SGL21-018

SHEET

C5

OF 7 SHEETS

TENTATIVE
SUBDIVISION PLAN
OCTOBER, 2023



REVISIONS	BY

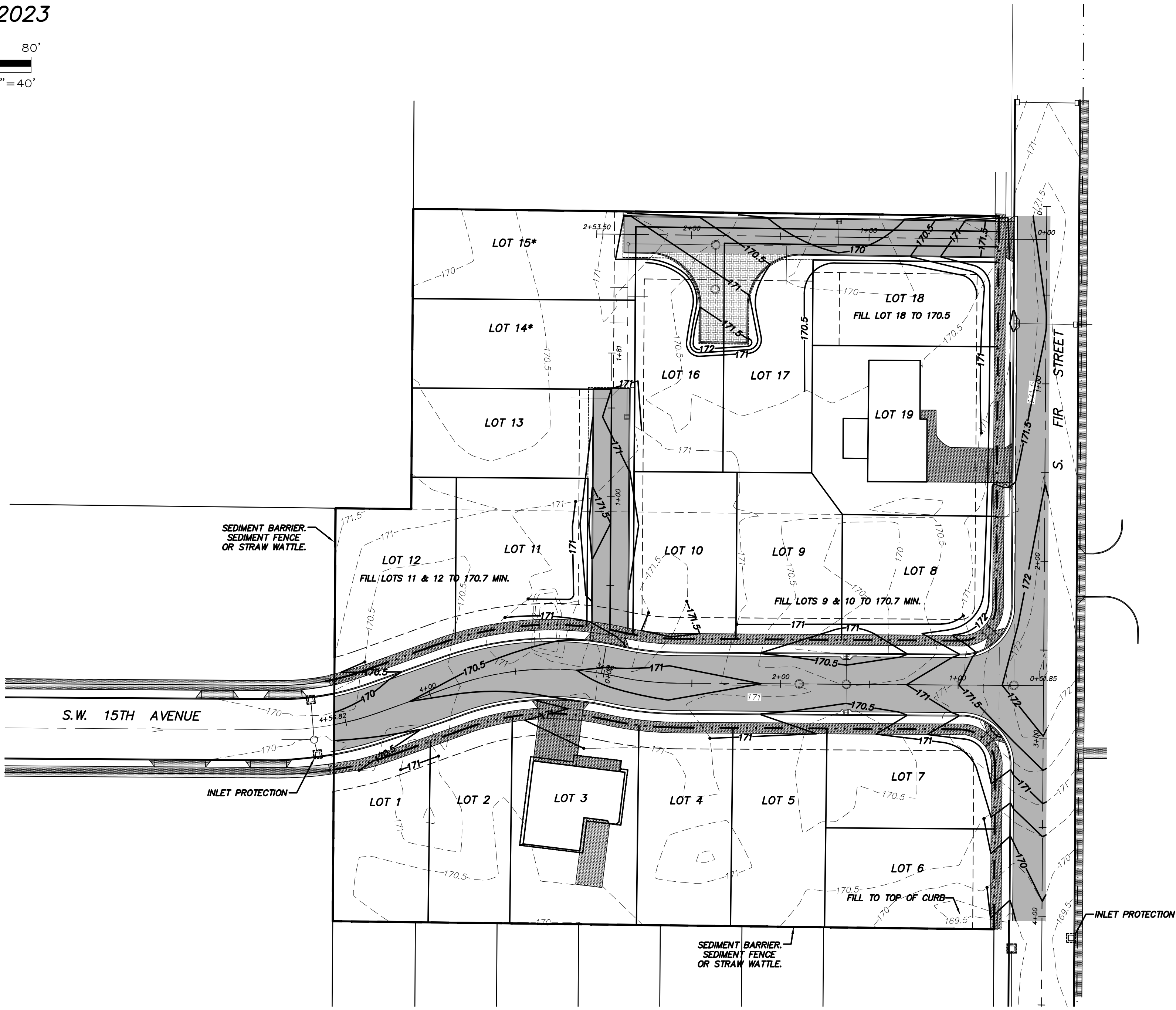
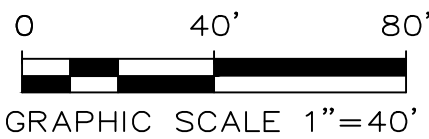
DuNett subdivision
DuPont and Netter

Fire Department
Access Plan

SISUL ENGINEERING
375 PORTLAND AVENUE
GLADSTONE, OREGON 97027
(503) 657-0188

DATE	OCT., 2023
SCALE	1" = 40'
DRAWN	-
JOB	SGL21-018
SHEET	C6
OF	7 SHEETS

TENTATIVE
SUBDIVISION PLAN
OCTOBER, 2023



REVISIONS	BY

DuNett subdivision
DuPont and Netter

Grading and
Erosion Control Plan

SISUL ENGINEERING
375 PORTLAND AVENUE
GLADSTONE, OREGON 97027
(503) 657-0188

DATE	OCT., 2023
SCALE	1" = 40'
DRAWN	-
JOB	SGL21-018
SHEET	C7
OF	7 SHEETS