PLANNING COMMISSION STAFF REPORT
100 S GARFIELD STREET SUBDIVISION – PRELIMINARY PLAT
SUB322-0001/ADJC23-0002

FILE NO:	SUB322-0001 / ADJC23-0002
REQUEST:	Subdivide a 1.93acre property into 8 residential lots
LOCATION:	100 S Garfield Street
TAX LOT:	R3219DB 04690
PROPERTY SIZE:	1.93 acres (84,022 sq ft)
APPLICANT:	Scott Holden
OWNER:	Scott Holden
ZONE:	R-2 (Medium Density Residential)
PLAN DISTRICT:	MDR (Medium Density Residential)
OVERLAY:	Stream Corridor Subdistrict Overlay

ATTACHMENTS:
Planning Commission Order 2022-15 with:
Exhibit “A”: Findings
Exhibit “B”: Conditions of Approval
Exhibit “C”: Preliminary

Attachments:
1: Application
2: Agency Comments
3: Public Comments

Section I: Application Information

A. DESCRIPTION OF APPLICATION: The applicant originally submitted plans for a 12-lot subdivision and have since submitted revised plans for an 8-lot subdivision along with a code adjustment application to reduce the front yard setbacks for the existing duplex. All criteria, findings, and conditions are based on the revised set of plans.

The applicant is requesting preliminary plat approval for an 8-lot subdivision of an existing 1.93-acre property addressed as 100 S Garfield Street, tax lot R3219DB 04690. The applicant anticipates future construction of residential homes on each of the proposed lots, including dedication and improvement of a street with the future potential to connect with S Blaine Street, emergency vehicle turnaround, stormwater facility, and other utility improvements. The property is zoned R-2 and is within the Stream Corridor Overlay Subdistrict. The existing duplex will remain on newly created lot 8.

B. SITE INFOMRMATION:

1. Location: 100 S Garfield Street, West of S Blaine Street and North of E Eighth Street.

2. Size: 1.93 acres

3. Topography: The majority of the property is flat. The northwest corner has steady incline to the northwest and then slopes down into the stream corridor of the unnamed tributary to

Chehalem Creek.

4. Current Land Uses: Duplex Dwelling

5. Natural Features: Stream corridor vegetation, groundcover and trees associated with the existing house.

6. Adjacent Land Uses:
    a. North: Low Density Residential (Residential)
    b. East: Medium and High Density Residential (Chehalem Creek Apartments and Newberg School District 29J Physical Plant Services, Residential)
    c. South: Medium Density Residential (Residential)
    d. West: Low and Medium Density Residential (Residential)

7. Zoning:
    a. North: R-1 (Low Density Residential)
    b. East: R-2 / R-3 (Medium / High Density Residential)
    c. South: R-2 (Medium Density Residential)
    d. West: R-1 / R-2 (Low / Medium Density Residential)

8. Access and Transportation: Access to the proposed development is provided from E Eighth Street via S Garfield Street. Both are classified as a Local Residential Street under the jurisdiction of the City of Newberg.

9. Utilities:

    a. Water: The City's GIS system shows an existing 4-inch water line that terminates within the applicant's property boundary. The applicant will need to perform an analysis of the water system to determine if the line needs to be upsized to serve the proposed development. The applicant will need to perform fire flow testing and submit results of the fire flow test at the time of the permit submittals.

    b. Wastewater: The City's GIS system shows an existing 8-inch wastewater line that terminates at the southern end of the property line. The applicant will be required to decommission any existing septic and connect to the public wastewater line.

    c. Stormwater: There are no public storm lines adjacent to the property.

    d. Overhead Lines: Existing overhead utilities will be required to be undergrounded. New utility connections will need to be underground.

C. **PROCESS:** This subdivision application is a Type III application per Newberg Municipal Code 15.100.050(B)(10) and 15.235.030(A). Type III development actions shall be decided through a Quasi-Judicial procedure with the Planning Commission. The decision shall be made after public notice and a public hearing is held in accordance with the requirements of NMC 15.100.090 et seq. A Type III decision may be appealed to the City Council by a Type III affected party in accordance with NMC 15.100.160 et seq. Important dates related to this application are as follows:

11/04/2022: The Community Development Director deemed the application complete.

11/17/2022: The applicant mailed notice to the property owners within 500 feet of the site.

11/23/2022: The Newberg Graphic published notice of the Planning Commission hearing and notice was posted in four public places.

11/28/2022: The applicant posted notice on the site.

12/08/2022: The Planning Commission approved the request to continue the hearing to 02/09/2023.

02/07/2023: The Community Development Director deemed the revised application complete.

02/08/2023: The applicant mailed notice to the property owners within 500 feet of the site.

02/09/2023: The Planning Commission approved the request to continue the hearing to 03/09/2023.

03/09/2023: The Planning Commission will hold a quasi-judicial hearing to consider the application.

D. AGENCY COMMENTS: The application was routed to several public agencies for review and comment. Comments and recommendations from City departments have been incorporated into the findings and conditions. Original comments can be referenced in Attachment 2. As of the writing of this report the city received the following agency comments:

1. **City Manager:** Reviewed, no conflict.
2. **Community Development Director:** Reviewed, no conflict.
3. **Building Official:** Reviewed, no conflict.
4. **Finance:** Reviewed, no conflict.
5. **Police Department:**

   Comments from Chief Jeff Kosmiki: "As I look at this project, I am concerned about the parking issues that will come up with this development. The lots are extremely small, and there is a shared driveway for lots 1,2,3,4,7,8,9 with no on street parking. Although it's not covered in this application, I have the same concerns with Tract B as well if it will be developed in the same fashion."

   Staff Response: All proposed lots surpass the minimum lot size requirement for the R-2 zone. The average lot size will be 4,656.5 square feet which is 1,656.5 square feet larger than the minimum required lot size. All proposed lots meet lot size and access requirements of the NMC. The only shared driveway will be for lots 1, 2, 3, and 4. Parking standards will be reviewed during the building permit process and are not an applicable criteria of the preliminary plat review. All dwellings will be required to provide a minimum number of off-street parking space(s) dependent on dwelling type. Tract B will not be developed as it is within the stream corridor boundary overlay and where the stormwater facility is planned to discharge.

6. **Public Works, Maintenance Superintendent:** Reviewed, no conflict.
7. **Public Works, Water Treatment Plant Superintendent:** Reviewed, no conflict.
8. **Public Works, Wastewater Plant Superintendent:** Reviewed, No conflict.
9. **Tualatin Valley Fire & Rescue:** Approved. Approval in Attachment 2.
10. **Ziply Fiber:** Reviewed, no conflict.
11. **Department of State Lands:** Approved Wetland Delineation Report, WD#2022-0367. The full letter can be found in Attachment 2.

E. PUBLIC COMMENTS:

All public comments as originally submitted can be viewed in Attachment 3.

Deborah Roberts, received December 2, 2023 (prior to revised plans):

1. What type of duplexes are planned? Due to the lot sizes, they will have to be 2-story or 3-story. This will cut down on the natural lighting on the backside of the existing residences to the south, as well as infringe on our privacy.
    a. Are the duplexes going to be rental units, or for sale?
    b. There is also concern about the quality of the development and how it will affect the property values of the existing residences.

Staff Response: Staff find that the concerns brought forward in this comment are not applicable to the preliminary plat approval criteria. The applicant submitted revised plans that show the existing duplex will remain which should address the concerns regarding lighting and privacy concerns related to the existing residences to the south. All residential buildings will be required to be permitted, built, and inspected according to the Oregon Residential Specialty Code.

2. South Garfield Street is a small street with no other outlet. It is currently accessed by 5 residences (not including the duplex which will be removed). This subdivisions proposing 12 lots, or 24 new residences, which will mean up to 48 additional vehicles. This equates to approximately 58 to 116 trips per day, minimum, on this street.
    a. Who will be responsible for the maintenance of the street due to the increased wear and tear?

Staff Response: This will be a public street and the maintenance will performed by the City of Newberg.

3. The subdivision plan states there will be 2 parking spots per residence, 1 in the garage and 1 in the driveway. However, most people with a single-car garage, use it for storage and /or work area, not parking. This leaves 1 off-street parking spot per residence. Unless there is also enough on-street parking planned, within the subdivisions, to accommodate the 24 new residences (averaging 2 vehicles per residence), there will be an overflow onto the limited remainder of Garfield Street and onto 8th Street.

Staff Response: Staff find this comment does not address applicable criteria for a preliminary plat approval. Parking requirements outlined in NMC 15.440.030 are not required to be detailed at this time. The specific parking requirements will be determined by the type of dwelling to be proposed and reviewed during the building permit process. The proposed lots have to meet specific lot criteria to ensure they are feasible to have a dwellings and access. This proposal is meeting these criteria.

4. Regarding the small grassy area across from proposed lots 10 through 12, and the gravel to the south of these lots, the plans do not show any frontage improvement to these areas. Will these areas be improved to connect to the sidewalk improvements included for the subdivision?
    a. Is the subdivision homeowners' association going to be responsible for the maintenance and upkeep to these areas? (The grassy area has only been mowed (and not trimmed) maybe twice since the property sold in August of 2021.)

Staff Response: Frontage improvements are required for all property that is within this development. Frontage improvements will not be required in front of properties that are not within the scope of this development. Lots 10, 11, and 12, are now the proposed lots 5, 6, and 7. Sidewalks will be required in front of these lots and S Garfield Street will also be improved to a full 60 feet of right-of-way and 32-feet of curb-to-curb pavement width. Staff believe this will develop the grassy area Ms. Roberts is referring to.

5. Up to this point in time, this area has been a quiet neighborhood. The subdivision as planned is going to substantially increase the noise level.

Staff Response: Staff find that this comment does not address the criteria of a preliminary plat approval criteria. The Newberg Municipal Code does address unnecessary noise through NMC 8.15.150. A complaint would be handled through the Newberg Dundee Police Department.

6. What is the projected time period for construction of this subdivision, start to finish? This is also going to substantially increase the noise level in this neighborhood, as well as create inconvenience to the existing residents, during this period.

    Note: My residence, which is directly south and next to the proposed subdivisions, includes a young, special needs autistic child who has a hard time with loud noise. She currently gets anxious and upset from lawn mowers, etc in the area. The increased noised ruing the construction period, as well as in the future from the proposed subdivision is going to create an excess of anxiety for her.

Staff Response: Staff find the comment does not address the applicable criteria for a preliminary plat review. The Newberg Municipal Code allows construction noise to occur between 7:00 am and 7:00 pm on weekdays. A construction time frame is not required to be outlined. If the Planning Commission adopts the order approving this subdivision, the applicant must obtain building permits within two years of date of the decision. Public Improvements must occur within this time frame and be substantial complete before building construction may begin. Once a building permit is issued, inspections are required to be called in every 180 days or else the building permit will expire.

7. If this subdivision is approved, I want a row of trees between my back fence and the duplexes directly behind me. These trees should be tall enough to act as a noise buffer as well as to retain our privacy from the windows of the new duplexes. Also, I want an extension of my fence, along my property line, between the frontage improvement and my driveway area.

Staff Response: Staff find the comment does not address the applicable criteria for a preliminary plat review. The applicant has submitted revised plans showing the existing duplex will remain. If the applicant wants to add landscaping requested by Ms. Roberts this would be at their own discretion, as it is not required through the development process.

Deborah Roberts, received December 8, 2023 (prior to revised plans):

8. The information states that the street name will be changed, and existing residences will be renumbered. This change is going to create a burden on the existing homeowners/ residents and require us to change ALL our personal accounts (bank, utilities, insurance, mortgages/deeds, wills, passports, etc, etc), not to mention the time and possible expense involved. Why do our address number have to be changed since we are not part of the subdivision? And can't they just change the name from S Garfield St to S Garfield Ct?

Staff Response: The layout has changed since this comment was received. Staff understand the vast implications to address changes and will take that into consideration. An address change will occur if it is determined to be needed to meet emergency response addressing standards.

Debby Thomas, received February 5, 2023 (prior to revised plans):

Please see Attachment 3 for original public comment submission. An excerpt from the submission summarizing concerns is included here:

> "I support the development of new homes in Newberg. I also support Newberg providing livable communities. This proposed development introduces a density that is not well supported. The stormwater system, parking and traffic are concerns that I believe need to be addressed before approving this proposal. I suggest this become single family dwellings and not duplexes, and that additional parking is provided, and a traffic study done. I also ask that I not be held responsible for the stormwater system that the developer puts into place for the new development."

Staff Response:

1. A preliminary stormwater report has been submitted for review. Final stormwater report and plans will be reviewed during the Public Improvement permit stage. Any properties not utilizing the stormwater system will not be required to maintain the system. The preliminary stormwater report shows the system is intended to support the new lots created within this subdivision approval and not intended to collect stormwater from 733 S Garfield Street.

2. The Planning Commission order that was included with the original staff report, including the recital states public hearing testimony was considered. This Order was

drafted in anticipation of what would have occurred at the hearing if a continuation was not requested. The prepared order is to clearly show what the Commissioners are considering for adoption. This order was not adopted because the hearing was postponed. A new order with updated recital information will be included with this staff report and if the Commission chooses to approve the subdivision, they will adopt the Order by vote during the hearing.

3. The Newberg Municipal Code does not require traffic studies if the proposed project will generate less than 40 trips during the pm peak hours, which this development falls within according to the Institute of Transportation Engineers (ITE), Trip Generation Manual, 10th Edition. Therefore, the traffic study requirement does not apply to this project as addressed in NMC 15.220.030(14) Traffic Study findings.

4. Lot coverage is not a standard that is applied during this development stage (except to lot 8, that will have the existing duplex on it). Lot and parking coverage will be evaluated during the building permit stage. The City does not require developers to choose the design of the homes during the preliminary or final subdivision plat approval, and consequently does require them to show parking coverage requirements. The lot's themselves are required to meet several standards to ensure they will be suitable to residential development. These standards are addressed in the NMC 15.405 Lot Requirements findings which the applicant has shown to meet all listed criteria.

5. The City does not control how people manage their personal space such as garages. NMC 15.440.030 requires one off-street parking space per duplex dwelling unit, and two off-street parking spaces for single-family dwellings. If a garage meets the required dimensions listed in NMC 15.440.070, that area can be counted as an off-street parking space. If residents choose not to utilize their garage as a parking space the City cannot control that. The City does have authority if cars are parked in areas that do not allow parking or if they are parked in areas longer than allowed.

6. Ms. Thomas stated the application was not meeting the criteria for the 18 single-family dwellings on a cul-de-sac. The revised plans do show a reduction in the number of lots, from an original 12 lots to 8 lots. The developer has not stated what type of homes will be constructed, nor are they required to at this stage.

F. **ANALYSIS:** The property is zoned R-2, where the minimum lot size is 3,000 square feet and lot size averaging is permitted. The proposed subdivision would create eight lots that meet the average lot size standards and other standards for lot dimensions. The application also includes frontage improvements along the extension of S Garfield Street and the creation of a private stormwater facility. The northwest portion of the property contains a stream corridor. A wetland determination report has been obtained from Department of State Lands showing the proposal will not be within a determined wetland area. The stormwater facility will occur within the stream corridor boundary. Mitigation is required for the installation and further mitigation will be determined for the output of the stormwater and rain garden proposal.

G. **PRELIMINARY STAFF RECOMMENDATION:** At this time, staff recommends the following motion:

Move to adopt Planning Commission Order 2022-15, which approves the requested Subdivision preliminary plat with the attached conditions of approval.

PLANNING COMMISSION ORDER 2022-15

AN ORDER APPROVING SUB322-0001 AND ADJC23-0002 FOR THE PRELIMINARY PLAT OF A SUBDIVISION AT 100 S GARFIELD STREET, YAMHILL COUNTY TAX LOT R3219DB 04690.

RECITALS

1. Scott Holden submitted an application for a preliminary plat approval of an 8-lot subdivision on property zoned R-2 (Medium Density) addressed as 100 S Garfield Street, Tax Lot R3219DB 04690.

2. After proper notice, the Newberg Planning Commission held a public hearing on March 9, 2023, to consider the application. The Commission considered testimony and deliberated.

3. The Newberg Planning Commission finds that the application, as conditioned in Exhibit "B", meets the applicable Newberg Municipal Code criteria as shown in the findings in Exhibit "A".

The Newberg Planning Commission orders as follows:

1. The subdivision preliminary plat application SUB322-0001 and associated code adjustment ADJC23-0002 is hereby approved, subject to the conditions contained in Exhibit "B". Exhibit "B" is hereby adopted and by this reference incorporated.

2. The findings shown in Exhibit "A" are hereby adopted. Exhibit "A" is hereby adopted and by this reference incorporated.

3. This Order shall be effective on March 23, 2023, unless appealed prior to this date.

4. This order shall expire two years after the effective date above if the applicant does not record the final plat by that time unless an extension is granted per Newberg Development Code 15.235.030(C).

Adopted by the Newberg Planning Commission this 9th day of March 2023.

ATTEST:

Planning Commission Chair

Planning Commission Secretary

List of Exhibits:
Exhibit "A": Findings
Exhibit "B": Conditions of Approval

Exhibit A: Findings – File ADJC23-0002
100 S Garfield Street – Front Yard Setback Reduction

Division 15.200 LAND USE APPLICATIONS

Chapter 15.210 Code Adjustments

15.210.020 Type I adjustments and approval criteria.

The director may authorize adjustments from the following requirements through a Type I procedure subject to the following:

A. Yard Setback Dimensions, Lot Area, Percentage of Lot Coverage, Lot Dimensions.

1. The director may approve adjustments to:

a. Setbacks/Street Trees. Maximum adjustment of 25 percent of the dimensional standards for front yard setback requirements and the spacing of street trees.

Findings: This application is requesting a 25 percent reduction to the garage front yard setback and a 19 percent reduction to the street side yard setback for the existing duplex within this development, proposed tax lot 8. The existing duplex originally was on a single lot which is now being divided into 8 lots. Included in the proposal is an extension of the existing S Garfield Street and a new street that will extend from S Garfield Street and run west to east, terminating at the east property line. These developments create substandard front yard setbacks for the existing duplex that were previously being met with the original site layout. The placement of the new street that is aligned to connect with S Blaine Street creates a substandard garage front yard setback for the duplex. Due to the extension and location of the existing S Garfield, the street side yard on the west duplex dwelling is proposed to be substandard. A front yard is a yard extending between lot lines which intersect a street line; therefore, a street side yard is a front yard and this adjustment criteria is applicable. The director may approve adjustments to front yard setbacks. This criterion is met.

	Standard	Proposed	Reduction
Garage Front Yard Setback	20 feet	15 feet	25%
Street Side Yard Setback	15 feet	12.1 feet	19%

2. Approval Criteria. Approval of an adjustment shall be based on written findings. The director shall find that approval will result in:

a. More efficient use of the site.

Findings: Both the new street and the extension of S Garfield Street are required to maintain 60-foot rights-of-way. The site provides multiple elements that are being taken into consideration to identify the best overall use of the site. These elements include incorporating the required street width, proper alignment of the future connection to S Blaine Street, the stream corridor overlay and the location of the existing duplex. Given all of these elements the proposed placement of this new street and the direct extension of S Garfield Street are proposed as the most efficient use of the site. Further detailing of these elements is outlined in the following subsections.

This criterion is met.

b. Preservation of natural features, where appropriate.

Findings: The proposed street layout does not enter the stream corridor boundary. Allowing a reduction of the garage setback to the existing duplex garages and the street side yard to west duplex dwelling does not negatively impact the preservation of natural features but helps increase the proposed street distance from the stream corridor boundary.

This criterion is met.

c. Adequate provisions of light, air and privacy to adjoining properties.

Findings: The reduction of the garage setback to the existing duplex due to the placement of the proposed street does not impact adequate provisions of light, air, and privacy to adjoining properties as it is already an existing structure. The adjoining properties to the south are already developed and the rear yard abuts the duplex. The adjoining property to the west is currently used as a storage yard for the Newberg School District. Staff find that any future improvements would not be negatively impacted with this reduction.

The reduction to the street side yard setback is due the direct extension of S Garfield Street. The impact of this reduction does not impact provisions of light, air and privacy of adjoining properties as it is already an existing structure.

This criterion is met.

d. Adequate emergency access.

Findings: The proposed street placement incorporates an emergency access turnaround and a required street width. The reduction in the garage setback for the duplex does not interfere with this, nor does the reduction in the street side yard setback.

This criterion is met.

e. The adjustment is consistent with the setbacks, lot area, and/or coverage of buildings or structures previously existing in the immediate vicinity.

Findings: This is a unique situation given the location of the existing duplex and the placement requirements for the proposed street and extension of the existing S Garfield Street. The duplex's interior setbacks to the east, and rear setbacks to the south are already existing. Those property lines are not being altered with this subdivision. The building front yard setbacks will be met. The reduction of the garage setback does reduce the driveway to a length that technically does not qualify the driveway as an off-street parking space. However, the applicant has stated that the existing garages for the duplex are 11 ft x 24 ft which surpass the garage dimensions required to be considered an off-street parking space. Therefore, even with the reduction they will be meeting parking requirements of this code. The lot area and coverage criterion will still be met. These criteria are addressed in the subdivision application findings.

This criterion is met.

Exhibit A: Findings – File SUB322-0001
100 S Garfield Street Subdivision Preliminary Plat

Division 15.200 LAND USE APPLICATIONS

Chapter 15.235 Land Divisions

15.235.050 Preliminary plat approval criteria.

A. Approval Criteria. By means of a Type II procedure for a partition, or a Type II or III procedure for a subdivision per NMC 15.235.030(A), the applicable review body shall approve, approve with conditions, or deny an application for a preliminary plat. The decision shall be based on findings of compliance with all of the following approval criteria:

1. The land division application shall conform to the requirements of this chapter;

Finding: The application included all the required submittal elements and follows the proper process and public notice requirements for a subdivision.

2. All proposed lots, blocks, and proposed land uses shall conform to the applicable provisions of NMC Division 15.400, Development Standards;

Finding: Compliance with provisions of NMC 15.400, Development Standards, are addressed in detail below.

3. Access to individual lots, and public improvements necessary to serve the development, including but not limited to water, wastewater, stormwater, and streets, shall conform to NMC 15.500 Public Improvement Standards;

Finding: Compliance with provisions of NMC 15.500, Development Standards, are addressed in detail below.

4. The proposed plat name is not already recorded for another subdivision, and satisfies the provision of ORS Chapter 92;

Finding: The applicant states a plat name has not been decided at this time but will be provided for approval during the final plat review. A plat name not already recorded, and meeting ORS Chapter 92 will be required during the final plat review. If this condition is adhered to then this criterion will be met.

5. The proposed streets, utilities, and stormwater facilities are adequate to serve the proposed development at adopted level of service standards, conform to the city of Newberg adopted master plans and applicable Newberg public works design and construction standards, and allow for transitions to existing and potential future development on adjacent lands. The preliminary

plat shall identify all proposed public improvements and dedications;

Finding: The proposed plans will meet the above criteria when the conditions of approval detailed in the NMC Chapter 15 section of this staff report are met and final plans that comply with the Newberg Public Works Design and Construction Standards are submitted and approved.

6. All proposed private common areas and improvements, if any, are identified on the preliminary plat and maintenance of such areas is assured through the appropriate legal instrument.

Finding: The applicant has shown on the preliminary plat the stormwater facility that will be in a private common area, Tract A and Tract B. Tract A and Tract B maintenance agreements will need to be recorded and accompany future development submittals. If this condition is adhered to this criterion will be met.

7. Evidence that any required state and federal permits, as applicable, have been obtained or can reasonably be obtained prior to development; and

Finding: The application materials indicate that there is a wetland northwest of the site and an unnamed tributary to Chehalem Creek within the northwestern area of the property. A wetland delineation / determination report was submitted to the Department of State Lands (DSL) who subsequently reviewed the report and approved it. This approved report can be found in Agency Comments. DSL did note that one wetland and three waterways were identified and are subject to the permit requirements of the state Removal-Fill Law. The approval letter further clarifies that a state permit is required for cumulative fill on annual excavation of 50 cubic yards or more in wetlands or below the ordinary high-water line (OHWL) of the waterway. DSL also noted that avoidance of wetland impacts is preferred and recommend the applicant work with DSL staff regarding development design prior to land use approval. City staff have determined that no proposed buildable lots are within the identified stream area or determined wetland. The determined wetland is located on the property directly to the north, tax lot R3219AC 05912. The stormwater retention facility will partially be located in the stream corridor boundary, which is not the same as the OHWL, and will discharge into that area. Prior to final plat approval the applicant is encouraged to work with DSL to ensure development design meets their preference as established in state law as stated in the DSL WD# 2022-0367 approval letter date December 8, 2022. The applicant is required to obtain any state and federal permits as required for this development.

The criterion will be met if the aforementioned condition of approval is adhered to.

8. Evidence that improvements or conditions required by the city, road authority, Yamhill County, special districts, utilities, and/or other service providers, as applicable to the project, have been or can be met.

Finding: A service provider permit was obtained and approved from Tualatin Valley Fire and Rescue on the preliminary plat. This can be viewed in Attachment 3, Public Agency Comments. This criterion is met.

15.220.030 Site design review requirements.

B. Type II. The following information is required to be submitted with all Type II applications for a site design review:

13. Roadways and Utilities. The proposed plans shall indicate any public improvements that will be constructed as part of the project, including, but not limited to, roadway and utility improvements.

Findings: The applicant's proposed plans show new sidewalks, curb and gutter, planter strip, new pavement and new water and wastewater mains and service laterals.

This criterion is met.

14. Traffic Study. A traffic study shall be submitted for any project that generates in excess of 40 trips per p.m. peak hour. This requirement may be waived by the director when a determination is made that a previous traffic study adequately addresses the proposal and/or when off-site and frontage improvements have already been completed which adequately mitigate any traffic impacts and/or the proposed use is not in a location which is adjacent to an intersection which is functioning at a poor level of service. A traffic study may be required by the director for projects below 40 trips per p.m. peak hour where the use is located immediately adjacent to an intersection functioning at a poor level of service. The traffic study shall be conducted according to the City of Newberg design standards. [Ord. 2619, 5-16-05; Ord. 2451, 12-2-96. Code 2001 § 151.192.]

Finding: Based on the Institute of Transportation Engineers (ITE), Trip Generation Manual, 10th Edition used to estimate the number of trips, the project use falls under ITE Code 210 for single family detached housing, with an estimated 1 vehicle trip per dwelling. The estimated trips for the proposed project are less than the threshold of 40 peak pm trips required for a traffic study.

This criterion does not apply.

Division 15.300 ZONING DISTRICTS

Chapter 15.342 STREAM CORRIDOR OVERLAY (SC) SUBDISTRICT

15.342.020 Where these regulations apply.

The regulations of this chapter apply to the portion of any lot or development site which is within an SC overlay subdistrict. Unless specifically exempted by NMC 15.342.040, these regulations apply to the following:

A. ***New structures, additions, accessory structures, decks, addition of concrete or other impervious surfaces;***

B. ***Any action requiring a development permit by this code;***

C. ***Changing of topography by filling or grading;***

D. ***Installation or expansion of utilities including but not limited to phone, cable TV, electrical, wastewater, storm drain, water or other utilities;***

E. ***Installation of pathways, bridges, or other physical improvements which alter the lands within the stream corridor overlay subdistrict. [Ord. 2451, 12-2-96. Code 2001 § 151.466.]***

Finding: Tax lot R3219DB 04690 is an 84,021 square foot lot that contains approximately 22,436 square feet of stream corridor overlay subdistrict. Subsection B of this section states that the stream corridor overlay subdistrict regulations apply to any action requiring a development permit. The Newberg Municipal Code (NMC) defines a development permit as any land use or construction permit. The proposal for a preliminary plat for a subdivision does require a land use permit per NMC 15.235.030 and is not listed as exempt activity in NMC 15.342.040. Therefore, the regulations of this chapter apply to the portion of this lot that is within the stream corridor overlay subdistrict.

15.342.040 Activities exempt from these regulations.
The following public or private uses and activities are exempt from the regulations of this chapter:

A. ***Emergency procedures or emergency activities undertaken by public or private parties which are necessary for the protection of public health, safety and welfare.***

B. ***Maintenance and repair of buildings, structures, yards, gardens or other activities or uses that were in existence prior to the effective date of the ordinance codified in these regulations.***

C. ***Alterations of buildings or accessory structures which do not increase building coverage.***

D. ***The expansion of an existing structure, building, improvements, or accessory structures, provided the expansion is located completely outside of the stream corridor delineation boundary.***

E. ***The following agricultural activities lawfully in existence as of December 4, 1996:***

1. ***Mowing of hay, grass or grain crops.***

2. ***Tilling, discing, planting, seeding, harvesting and related activities for pasture, trees, food crops or business crops;***

provided, that no additional lands within the stream corridor boundary are converted to these uses.

F. Operation, maintenance and repair of existing irrigation, drainage ditches, ponds, wastewater facilities, stormwater detention or retention facilities, and water treatment facilities.

G. Normal and routine maintenance of existing streets and utilities.

H. Normal and routine maintenance of any public improvement or public recreational area.

I. Measures to remove or abate hazards and nuisances including but not limited to removal of fallen, hazardous or diseased trees.

J. Roadway and related improvements associated with a final alignment of the Newberg bypass road project.

K. Maintenance and repair of existing railroad trackage and related improvements.

L. Airport Area.

1. The removal or pruning of trees or other vegetation located within the airport overlay subdistrict, as established on the City of Newberg zoning map, that either exceed the height limits established by the overlay subdistrict or are otherwise demonstrated to pose a threat to the health, safety, welfare, and general operation of the airport.

2. The removal of undergrowth, within 500 feet east and west of the runway and 1,000 feet south of the runway, as necessary to maintain the safe operation of the airport facilities and activities.

M. Utilities installed above or below existing street rights-of-way.

N. Utility services using an existing pole or installation of other utilities where no more than 100 square feet of ground area is disturbed, no native trees are removed, and the area is replanted to preconstruction conditions using native plants selected from the Newberg plant list.

O. Utility services within existing access roads or other previously improved areas where the utility service can be installed without expanding the previously improved area.

P. ***The removal of any plant identified on the Newberg plant list as a nuisance plant such as Himalayan blackberry, English ivy, periwinkle, poison oak, or Scotch broom.***

Q. ***The planting or propagation of any plant identified as native on the Newberg plant list.***

R. ***The planting or propagation of any nonnative plant; provided, that the area to be planted covers less than 10 percent of the total site area within the SC overlay subdistrict and does not include any nuisance plants as identified on the Newberg plant list. [Ord. 2451, 12-2-96. Code 2001 § 151.468.]***

Finding: A subdivision preliminary plat land use action is not listed as an exempt activity, there for NMC 15.342.040 regulations apply.

15.342.050 Activities requiring a Type I process.
The following uses shall be processed as a Type I decision and shall be approved by the director upon submittal of a plan indicating compliance with the accompanying criteria and the restoration standards indicated in NMC 15.342.060.

A. ***The expansion of an existing single-family, duplex, triplex or quadplex dwelling, structure, building, improvements, or accessory structures inside the corridor delineation boundary, including any expansion associated with conversion of an existing single-family dwelling into a duplex, triplex or quadplex dwelling; provided, that the following criteria have been satisfied:***

1. ***The expansion of a single-family, duplex, triplex or quadplex dwelling, structure or improvement (including decks and patios); provided, that it is located no closer to the stream or wetland area than the existing structure or improvement;***

2. ***The coverage of all structures within the SC overlay subdistrict on the subject parcel shall not be increased by more than 1,000 square feet of the coverage in existence as of December 4, 1996;***

3. ***The disturbed area is restored pursuant to NMC 15.342.060; and***

4. ***No portion of the improvement is located within the 100-year flood boundary.***

B. ***Private or public service connection laterals and service utilities extensions where the disturbed area shall be restored pursuant to NMC 15.342.060.***

C. Private or public sidewalks, stairs and related lighting where the disturbed area is restored pursuant to NMC 15.342.060.

D. Bicycle and pedestrian paths; provided, that the area is restored pursuant to NMC 15.342.060.

E. Temporary construction access associated with authorized Type I uses. The disturbed area associated with temporary construction access shall be restored pursuant to NMC 15.342.060.

F. The removal of nonnative vegetation (such as blackberries) by mechanical means; provided, that the site is restored pursuant to NMC 15.342.060.

G. Single-family, duplex, triplex or quadplex dwellings or structures which are nonconforming to the standards of this chapter may be rebuilt in the event of damage due to fire or other natural hazard; provided, that the single-family, duplex, triplex or quadplex dwelling or structure is placed within the same foundation lines. [Ord. 2889 § 2 (Exh. B §§ 17, 18), 12-6-21; Ord. 2880 § 2 (Exh. B §§ 20, 21), 6-7-21; Ord. 2451, 12-2-96. Code 2001 § 151.469.]

Finding: The preliminary plat shows that the proposed stormwater facility, Tract A, will encroach into the stream corridor overlay area and disturb two separate areas totaling approximately 665 square feet. The stormwater facility will discharge into Tract B, that is located within the stream corridor area. The applicant's narrative does address that the area disturbed by the installation of the stormwater facility will be replanted per the included mitigation plan, sheet 6. The proposed stormwater facility is not listed within an approved City of Newberg master infrastructure plan. Therefore, does not qualify as a Type II activity per NMC 15.342.070(D). The installation of a stormwater facility, not within an approved master plan, is most closely related to the activity described in subsection B and therefore, will processed as a Type I procedure. However, due to the requirements of NMC 15.235 that requires proposed subdivisions within a stream corridor to be decided by the Planning Commission, this criterion will also be reviewed by the Planning Commission and not the approved by the director as this section directs.

15.342.060 Restoration standards for Type I process.
A plan shall be approved only if the following standards can be met. This shall be shown on a plan submitted along with a Type I application.

A. Disturbed areas, other than authorized improvements, shall be regraded and contoured to appear natural. All fill material shall be native soil. Native soil may include soil associations commonly found within the vicinity, as identified from USDA Soil Conservation Service, Soil Survey of Yamhill Area, Oregon.

B. Replanting shall be required using a combination of trees, shrubs and grasses. Species shall be selected from natives on the Newberg plant list.

C. Removed trees over six inches in diameter, as measured at breast height, shall be replaced at a ratio of three new trees for every one removed. All trees replaced pursuant to this section shall have an average caliper measurement of a minimum of one inch. Additional trees of any caliper may be used to further enhance the mitigation site.

D. All disturbed areas, other than authorized improvements, shall be replanted to achieve 90 percent cover in one year.

E. All disturbed areas shall be protected with erosion control devices prior to construction activity. The erosion control devices shall remain in place until 90 percent cover is achieved.

F. Except as provided below, all restoration work must occur within the SC overlay subdistrict and be on the same property. The director may authorize work to be performed on properties within the general vicinity or adjacent to the overlay subdistrict; provided, that the applicant demonstrates that this will provide greater overall benefit to the stream corridor areas. [Ord. 2451, 12-2-96. Code 2001 § 151.470.]

Finding: The applicants narrative states they will comply with all mitigation requirements for Type II activities, however, it was determined that this proposal most closely fits the Type I activities listed in NMC 15.342.040(B) as described in the previous finding. The mitigation requirements for Type I and Type II vary slightly. The applicant's mitigation and replanting plan noted on sheet 6 of submitted plans meet all the requirements for a Type I mitigation plan. The only subsection not noted was subsection C regarding the removal of trees over six inches. It is unclear if trees of this size will be removed. If trees over six inches in diameter, as measured at breast height are to be removed, they shall be replaced at a ratio of three new trees for every one removed. All trees replaced pursuant to this section shall have an average caliper measurement of a minimum of one inch. Additional trees of any caliper may be used to further enhance the mitigation site.

If the aforementioned condition is adhered to, this criterion will be met.

15.342.120 Density transfer.
For residential development proposals on lands which contain the SC overlay subdistrict, a transfer of density shall be permitted within the development proposal site. The following formula shall be used to calculate the density that shall be permitted for allowed residential use on the property:

A. Step 1. Calculate expected maximum density. The expected maximum density (EMD) is calculated by multiplying the acreage of the property by the density permitted within the Newberg comprehensive plan.

B. Step 2. The density that shall be permitted on the property shall be equal to the EMD obtained in Step 1, provided:

1. ***The density credit can only be transferred to that portion of the development site that is not located within the designated stream corridor; and***

2. ***The minimum lot size required for residential dwellings, in the base zone, shall not be reduced by more than 20 percent; and***

3. ***The maximum dwelling units per net acre of buildable land, outside the SC boundary, shall not be increased by more than 20 percent; and***

4. ***The types of residential uses and other applicable standards permitted in the zone shall remain the same; and***

5. ***All other uses shall comply with applicable standards and criteria of the Newberg development code. [Ord. 2451, 12-2-96. Code 2001 § 151.476.]***

Finding: The applicant is not requesting a density transfer; these criteria do not apply.

15.342.130 Procedure for adjusting and amending the delineated stream corridor.

A. ***Type II Process. The manager shall authorize an adjustment to the delineated stream corridor by a maximum of 15 percent of the corridor width as measured from the centerline of the stream to the upper edge of the stream corridor boundary (from the boundary location originally adopted as part of this chapter), provided the applicant demonstrates that the following standards are met:***

1. ***The location of the delineated stream corridor boundary is not reduced to less than 50 feet from the edge of a wetland or 100-year flood elevation, whichever is higher; and***

2. ***The lands to be eliminated do not contain sloped areas in excess of 20 percent; and***

3. ***The lands to be eliminated do not significantly contribute to the protection of the remaining stream corridor for water quality, stormwater control and wildlife habitat; and***

4. ***A stream corridor impact report which complies with the provisions of this chapter is provided; and***

5. ***The line to be adjusted has not been previously adjusted from the boundary location originally adopted as part of this chapter.***

B. ***Type III Process. The applicant may propose to amend the delineated stream corridor boundary through a Type III quasi-judicial zone***

change proceeding consistent with the provisions of this code (see standard zone change criteria). [Ord. 2451, 12-2-96. Code 2001 § 151.477.]

Finding: The applicant is not requesting a stream corridor adjustment; these criteria do not apply.

15.342.140 Stream corridor impact report (SCIR) and review criteria.
A stream corridor impact report (SCIR) is a report which analyzes impacts of development within delineated stream corridors based upon the requirements of this section. The director shall consult with a professional with appropriate expertise to evaluate the report prepared under this section, in order to properly evaluate the conclusions reached in it. If outside consulting services are required to review the report, the cost of such review shall be paid by the applicant. By resolution, the city council shall establish a maximum fee which will be paid by the applicant.

A. Application Requirements. In addition to required materials for the site design review application, a stream corridor impact report (SCIR) must be submitted. The SCIR shall be conducted and prepared by experienced professionals who are knowledgeable and qualified to complete such a report. The qualifications of the person or persons preparing each element of the analysis shall be included with the SCIR. The SCIR shall include the following:

1. Physical Analysis. The analysis shall include, at a minimum, a description of the soil types, geology, and hydrology of the site plus related development limitations. The analysis shall include development recommendations including grading procedures, soil erosion control measures, slope stabilization measures, and methods of mitigating hydrologic impacts. For projects which affect possible wetlands, a copy of the state wetland inventory map pertaining to the site shall be provided. Notice of the proposal shall be given to the Oregon Division of State Lands and the Army Corp of Engineers.

2. Ecological Analysis. The analysis shall include, at a minimum, an inventory of plant and animal species occurring on the site, a description of the relationship of the plants and animals with the environment, and recommended measures for minimizing the adverse impacts of the proposed development on unique and/or significant features of the ecosystem, including but not limited to migratory and travel routes of wildlife.

3. Enhancement Proposal. The applicant must propose a stream corridor or wetland enhancement to be completed along with the proposed development. The enhancement shall increase the natural values and quality of the remaining stream corridor lands located on the lot.

B. SCIR Review Criteria. The following standards shall apply to the issuance of permits requiring an SCIR, and the SCIR must demonstrate how these standards are met in a manner that meets the project purpose.

1. Where possible, the applicant shall avoid the impact altogether.

2. Impact on the stream corridor shall be minimized by limiting the degree or magnitude of the action, by using appropriate technology, or by taking affirmative steps to avoid, reduce or mitigate impacts.

3. The impacts to the stream corridor will be rectified by restoring, rehabilitating, or creating comparable resource values on the site or within the same stream corridor.

4. The remaining resource values on the stream corridor site shall be protected and enhanced, with consideration given to the following:

a. Impacts to wildlife travel and migratory functions shall be maintained to the maximum extent possible; and

b. Native vegetation shall be utilized for landscaping to the extent practicable; and

c. The stream bed shall not be unnecessarily or detrimentally altered.

5. The fill shall primarily consist of natural materials such as earth or soil aggregate, including sand, gravel, rock, and concrete. Culverts, bridges, reinforced retaining walls, or other similar structures which require manmade structural materials shall be permitted.

6. The amount of fill used shall be the minimum required to practically achieve the project purpose.

7. If the fill or grading is within a designated floodway, the proposed action shall maintain the flood storage capacity of the site.

8. The proposed fill or grading shall not significantly increase existing hazardous conditions or create significant new hazardous conditions related to geology, hydrology, or soil erosion.

9. Stream turbidity shall not be significantly increased by any change in a watercourse that results from the fill. Measures shall be taken to minimize turbidity during construction.

10. The removal of trees over six inches in diameter shall be minimized to the extent possible to provide the necessary improvements authorized by this chapter. [Ord. 2451, 12-2-96. Code 2001 § 151.478.]

Finding: The applicant is not required by this code to submit a stream corridor impact report; these criteria do not apply.

Division 15.400 DEVELOPMENT STANDARDS

Chapter 15.405 LOT REQUIREMENTS

15.405.010 Minimum and maximum lot area.

A. In the following districts, each lot or development site shall have an area as shown below except as otherwise permitted by this code:

1. In the R-1, R-2, R-3, R-P and AR districts, the following minimum lot area standards apply:

Zone	*Minimum lot area for single family*	*Minimum lot area for duplex dwelling*	*Minimum lot area for triplex dwelling*	*Minimum lot area for quadplex dwelling*	*Minimum lot area for townhouse*	*Minimum lot area for cottage cluster*	*Minimum lot area per dwelling unit for multifamily*
R-2	*3,000 sq ft*	*3,000 sq ft*	*5,000 sq ft*	*7,000 sq ft*	*1,500 sq ft*	*7,000 sq ft*	*3,000 sq ft*

B. Maximum Lot or Development Site Area per Dwelling Unit.

2. In the R-2 and R-P districts, the average size of lots in a subdivision intended for single-family development shall not exceed 5,000 square feet.

Finding: The applicant has chosen to comply with lot size standard by averaging lot sizes. As described below, the average lot size per dwelling in the subdivision is 4,656.5 square feet. For R-2 the average minimum lot size is 3,000 and the average maximum lot size is 5,000 square feet. The criteria of subsections A and B are met.

C. In calculating lot area for this section, lot area for this section, lot area does not include land within public or private streets. In calculating lot area for maximum lot area/minimum density requirements, lot area does not include land within stream corridors, land reserved for public parks or opens spaces, commons buildings, land for preservation of natural, scenic, or historic resources, land on slopes exceeding 15 percent or for avoidance of identified natural hazards, land in shared access easements, public walkways, or entirely used for utilities, land held in reserve in accordance with future development plan, or land for uses not appurtenant to the residence.

Finding: The applicant did not utilize any of the listed areas in the subsection to calculate lot area. This criterion is met.

D. ***Lot size averaging is allowed for any subdivision. Some lots may be under the minimum lot size required in the zone where the subdivisions is located, as long as the average size of all lots is at least the minimum lot size.***

Finding: The lot sizes of each lot in the subdivision are as follows:

Lot Number	Lot Size in Square Feet
1	4,285
2	4,263
3	4,421
4	5,819
5	3,810
6	3,798
7	3,785
8	7,071
Average Lot Size: 4,656.5 square feet	

The average lot size in the subdivision is 4,656.5 square feet. Not required to be included in these calculations is Tract A Stormwater Facility of 1,847 square feet and the Tract B the delineated stream corridor overlay area, 23,865 square feet. Therefore, through lot size averaging in the subdivision, the average lot size is within the average minimum and average maximum square footage permitted by the NMC for single-family and duplex dwellings in the R-2/Medium Density Residential zone.

The criterion of this section is met.

15.405.030 ***Lot Dimension and Frontage***

A. ***Width. Width of lots shall conform to the standards of this code.***

Finding: See NMC 15.405.030(E)(b) for findings regarding width.

B. ***Depth to Width Ratio. Each lot and parcel shall have an average depth between the front and the rear lines of not more than two and one-half times the average width between the side lines. Depths of lots shall conform the standards of this code. Development of lots under 15,000 square feet are exempt from lot dept the width ration requirement.***

Finding: The proposed lots are under 15,000 square feet. Therefore, the criterion of subsection B does not apply.

C. ***Area. Lot sizes shall conform to standards set forth in this code. Lot area calculations shall not include area contained in public or private streets as defined by this code.***

Finding: The proposed lots conform to the lot area requirements for lots in the R-2 zone. The criteria are met as shown in the previous findings for NMC 15.405.010.

D. Frontage

1. No lot or development site shall have less than the following lot frontage standards:

a. ***Each lot or development site shall have either frontage on a public street for a distance of at least 25 feet or have access to a public street through and easement that is at least 25 feet wide. No new private streets, as defined in NMC 15.05.030, shall be created to* provide *frontage or access except as allowed by NMC 15.240.020(L)(2).***

Finding: Lots 1, 2, 3, and 4 share a 25-foot access easement to the new dead end street. The access easement will need to be recorded with Yamhill County as part of this plat, including a maintenance agreement. Lots 5, 6, and 7 each have a minimum of 39.93 feet of frontage along the public street. Lot 8 will contain the existing duplex and have 117.71 feet of frontage to the new public street. No new private streets are proposed to be created. This criterion is met.

b. Each lot in R-2 zone shall have a minimum width of 25 feet at the front building line and R-3 zone shall have a minimum width of 30 feet at the front building line, except that duplex, triplex, quadplex and cottage cluster project lots in the R-3 zone shall have a minimum width of 25 feet at the front building line.

Finding: Except for Lot 8 which will contain the existing duplex, building locations are not proposed as a part of this subdivision plat application. The duplex on Lot 8 will have a width of 101.5 feet at the front building line. The front building line minimum width for all new dwellings will be determined during the building permit review process.

15.405.040 Lot coverage and parking coverage requirements.

B. Residential uses in residential zones shall meet the following maximum lot coverage and parking coverage standards; however, cottage cluster projects shall be exempt from the standards. See the definitions in NMC 15.05.030 and Appendix A, Figure 4.

1. Maximum Lot Coverage.

b. R-2 and RP: 60 percent.

Finding: This proposed subdivision is zoned R-2. For all lots, other than Lot 8 which will contain the existing duplex, this section of the NMC will be reviewed during the building permit review process. The applicant's narrative states that future structures will comply with lot coverage requirements.

Lot coverage is defined as the portion of a lot which, when viewed directly from above, would be covered by a building, or any part of a building, except any area covered by a structure where 50 percent or more of the perimeter of such structure is open from grade, or any exempt accessory structure. Lot 8 is proposed to be 7,071 square feet. The existing duplex has

approximately 2,653.8 square feet of the lot is covered by applicable buildings and an additional 1,169 square feet of existing concrete surfaces (not included in parking coverage) for 54% maximum lot coverage.

This criterion is met.

2. Maximum Parking Coverage. R-1, R-2, R-3, and RP: 30 percent.

Finding: "Parking coverage" means that portion of a lot covered by parking lots, aisles and access, and parking structures, where 50 percent or more of the perimeter of such structure is open on its sides. It includes one-half the area covered by approved pervious paving materials such as grasscrete, permeable asphalt, or permeable pavers. The site has approximately 400 square feet of existing concrete that will be used as access to the off-street parking space in the garage. For a total of 5% parking coverage.
This criterion is met.

3. Combined Maximum Lot and Parking Coverage.
b. R-2, R-3, RP and townhouse dwellings in R-1: 70 percent

Finding: For Lot 8, maximum lot coverage is 3,822.8 square feet and parking coverage is 400 square feet, for a total combined maximum of lot and parking coverage of 4222.8 square feet, or 60%.

This criterion is met.

R-2 Standards	Lot Size	Lot Coverage 60% Maximum	Parking Coverage 30% Maximum	Combined 70% Maximum
Lot 8 Existing Duplex	7,071 sq. ft.	3,822.8 sq. ft. (54%)	400 sq. ft. (5%)	4,222.8 sq ft (60%)
All other lots will be determined during building permit reviews				

Chapter 15.410 YARD SETBACK REQUIREMENTS

Finding: The following findings are specific to Lot 8 which will have the existing duplex. All other lot developments will have their setback requirements verified during the building permit process. The applicant's narrative states that future structures will comply with lot coverage requirements.

15.410.020 Front yard setback.
A. Residential (see Appendix A, Figure 10).
1. AR, R-1 and R-2 districts shall have a front yard of not less than 15 feet. Said yard shall be landscaped and maintained.

Finding: Through the platting of this this subdivision the duplex will be on a single corner lot, Lot 8. Therefore, it will have a front yard setback along the new street that will terminate at the east property line, and a street side yard setback along the new extension of S Garfield Street. This new street configuration will provide the duplex a 15-foot front yard setback to the building from the new terminated street. The extension of S Garfield Street however does not

provide the required 15-feet for the street side yard. This was reviewed under the associated code adjustment (ADJC23-0002) requesting a reduction to the street side yard by 19%. Staff found this reduction meets all adjustment criteria and the street side yard will be reduced to 12.1 feet.

This criterion is met.

> ***3. The entrance to a garage or carport, whether or not attached to a dwelling, shall be set back at least 20 feet from the nearest property line of the street to which access will be provided. However, the foregoing setback requirement shall not apply where the garage or carport will be provided with access to an alley only.***

Finding: The location of the new street does not provide the required 20-foot garage setback from the street. This was reviewed under the associated code adjustment (ADJC23-0002) requesting a reduction to the garage front yard setback by 25%. Staff determined this reduction meets all adjustment criteria and the garage will have a 15-foot setback.

This criterion is met.

> ***15.410.030 Interior yard setback.***
>
> ***A. Residential.***
>
> ***1. All lots or development sites in the AR, R-1, R-2 and R-3 districts shall have interior yards of not less than five feet, except that where a utility easement is recorded adjacent to a side lot line, there shall be a side yard no less than the width of the easement.***

Finding: The interior yards for the duplex are located along the south property line and the east property line of the new Lot 8. Prior to the subdivision, these yards would be defined as interior yards. The property lines associated with these yards will not be adjusted with this subdivision, and therefore remain at the same location, distance from property line to dwelling, and identified yard type as they were prior to the subdivision approval.

This criterion is not applicable.

> ***15.410.060 Vision clearance setback.***
>
> ***The following vision clearance standards shall apply in all zones (see Appendix A, Figure 9).***
>
> ***A. At the intersection of two streets, including private streets, a triangle formed by the intersection of the curb lines, each leg of the vision clearance triangle shall be a minimum of 50 feet in length.***
>
> ***B. At the intersection of a private drive and a street, a triangle formed by the intersection of the curb lines, each leg of the vision clearance triangle shall be a minimum of 25 feet in length.***
>
> ***C. Vision clearance triangles shall be kept free of all visual obstructions from two and one-half feet to nine feet above the curb line. Where curbs are absent,***

the edge of the asphalt or future curb location shall be used as a guide, whichever provides the greatest amount of vision clearance.

Finding: The submitted site plan shows all structures outside the 25- and 50-foot vision clearance triangles.

This criterion is met.

Chapter 15.415 BUILDING AND SITE DESIGN STANDARDS

Finding: This section of NMC will be reviewed during the building permit review process. This section is not applicable at this stage of the subdivision review process because it is more appropriately reviewed during the building permit review process. The applicant's narrative states that future structures will comply with lot coverage requirements.

Chapter 15.420 LANDSCAPING AND OUTDOOR AREAS

15.420.010 Required minimum standards.

B. Required Landscaped Area.

4. Trees, Shrubs and Ground Covers. The species of street trees required under this section shall conform to those authorized by the city council through resolution. The director shall have the responsibility for preparing and updating the street tree species list which shall be adopted in resolution form by the city council.

a. Arterial and minor arterial street trees shall have spacing of approximately 50 feet on center. These trees shall have a minimum two-inch caliper tree trunk or stalk at a measurement of two feet up from the base and shall be balled and burlapped or boxed.

b. Collector and local street trees shall be spaced approximately 35 to 40 feet on center. These trees shall have a minimum of a one and one-half or one and three-fourths inch tree trunk or stalk and shall be balled and burlapped or boxed.

e. Ground Cover Plant Material. Ground cover plant material such as greening juniper, cotoneaster, minor Bowles, English ivy, hypericum and the like shall be one of the following sizes in specified spacing for that size:

Gallon cans	***3 feet on center***
4'' containers	***2 feet on center***
2-1/4'' containers	***18'' on center***
Rooted cuttings	***12'' on center***

C. Installation of Landscaping. All landscaping required by these provisions shall be installed prior to the issuance of occupancy permits, unless security equal to 110 percent of the cost of the landscaping as determined by the director is filed with the city, insuring such installation within six months of occupancy. A security – cash, certified check, time certificates of deposit, assignment of a savings account, bond or such other assurance of completion as shall meet with the

approval of the city attorney – shall satisfy the security requirements. If the installation of the landscaping is not completed within the six-month period, or within an extension of time authorized by the director, the security may be used by the city to complete the installation. Upon completion of the installation, any portion of the remaining security deposited with the city shall be returned to the applicant. [Ord. 2880 § 2 (Exh. B §§ 42, 43), 6-7-21; Ord. 2720 § 1(16, 17), 11-2-09; Ord. 2647, 6-5-06; Ord. 2564, 4-15-02; Ord. 2561, 4-1-02; Ord. 2513, 8-2-99; Ord. 2451, 12-2-96. Code 2001 § 151.580.]

Finding: The applicant is showing creation of a planter strip along the proposed new terminated street and extension of S Garfield Street. Street trees will need to be from the approved street trees species list. The applicant will also need to ensure the planter strip contains grass, shrubs, and ground cover per NMC 15.420.010 required minimum standards for landscaping. The street trees will need to be planted prior to occupancy of Lots 4, 5, 6, and 7. Final street tree locations will be determined through the infrastructure permitting process and an ownership and maintenance agreement shall be signed and recorded on the final plat concerning the responsibility of the street trees. If the landscaping cannot be completed prior to issuance of occupancy the applicant may place a security on file per NMC 15.420.010(C). Lots 1, 2, and 3 do not have street frontage, only access to the new terminated street through a 25-foot shared access and utility easement and therefore, it would be unreasonable to require the installation of street trees prior to their occupancy.

Chapter 15.425 EXTERIOR LIGHTING

Finding: This requirement will be reviewed during the building permit review application.

Chapter 15.430 UNDERGROUND UTILITY INSTALLATION

15.430.010 Underground utility installation.

A. All new utility lines, including but not limited to electric, communication, natural gas, and cable television transmission lines, shall be placed underground. This does not include surface-mounted transformers, connections boxes, meter cabinets, service cabinets, temporary facilities during construction, and high-capacity electric lines operating at 50,000 volts or above.

B. Existing utility lines shall be placed underground when they are relocated, or when an addition or remodel requiring a Type II design review is proposed, or when a developed area is annexed to the city.

C. The director may make exceptions to the requirement to underground utilities based on one or more of the following criteria:

1. The cost of undergrounding the utility is extraordinarily expensive.

2. There are physical factors that make undergrounding extraordinarily difficult.

3. Existing utility facilities in the area are primarily overhead and are unlikely to be changed. [Ord. 2537, 11-6-00. Code 2001 § 151.589.]

Finding: The submitted narrative and plans describe the relocation of existing power poles that are in conflict with proposed street improvements and undergrounding of existing overhead utility lines. In addition all new utilities for the development are shown to be installed underground. Because final plans have not been submitted, final plans showing existing utilities within the property and project limits undergrounded and new utilities installed underground will be required with permit applications. Undergrounding of existing overhead utility lines might require work outside of the project work limits shown on the preliminary plans.

This criterion will be met if the aforementioned condition of approval is adhered to.

Chapter 15.440 OFF STREET PARKING, BICYCLE PARKING, AND PRIVATE WALKWAYS

15.440.010 Required off-street parking.

A. Off-street parking shall be provided on the development site for all R-1, C-1, M-1, M-2, and M-3 zones. In all other zones, the required parking shall be on the development site or within 400 feet of the development site which parking is required to serve. All required parking must be under the same ownership as the development site served except through special covenant agreements as approved by the city attorney, which bind the parking to the development site.

Finding: The applicant states that each new dwelling will provide a one car garage and one car driveway for a total of two parking places. Final review of off-street parking requirements will be reviewed at time of building permit review process.

15.440.030 Parking spaces required.

Finding: The following findings are specific to Lot 8 which will have the existing duplex. All other parking space requirements will be verified during the building permit process. The applicant's narrative states that future structures will comply with parking space requirements.

Use	***Minimum Parking Spaces Required***
Dwelling, duplex	***1 for each dwelling unit***

Finding: The existing dwelling on proposed Lot 8 is a duplex dwelling. Therefore, each dwelling unit is required to provide one off-street parking space. The applicant has stated that the existing duplex garages will provide the one-off street parking space, as detailed in the next finding.

This criterion is met.

15.440.075 Residential garage standards.

A. Single-car garages for residential uses shall have a minimum inside width of 10 feet by 20 feet.

Finding: The applicant has stated that the existing duplex garages are 11 feet by 24 feet which surpass the required dimensions for a single-car garage and can be used as the one-off street parking space.

This criterion is met.

Division 15.500 PUBLIC IMPROVEMENT STANDRDS

Chapter 15.505 PUBLIC IMPROVEMENT STANDARDS

15.505.010 Purpose.

This chapter provides standards for public infrastructure and utilities installed with new development, consistent with the policies of the City of Newberg comprehensive plan and adopted city master plans. The standards are intended to minimize disturbance to natural features, promote energy conservation and efficiency, minimize and maintain development impacts on surrounding properties and neighborhoods, and ensure timely completion of adequate public facilities to serve new development. [Ord. 2810 § 2 (Exhs. B, C), 1219-16.]

15.505.020 Applicability.

The provision and utilization of public facilities and services within the City of Newberg shall apply to all land developments in accordance with this chapter. No development shall be approved unless the following improvements are provided for prior to occupancy or operation, unless future provision is assured in accordance with NMC 15.505.030(E).

A. Public Works Design and Construction Standards. The design and construction of all improvements within existing and proposed rights-of-way and easements, all improvements to be maintained by the city, and all improvements for which city approval is required shall comply with the requirements of the most recently adopted Newberg public works design and construction standards.

B. Street Improvements. All projects subject to a Type II design review, partition, or subdivision approval must construct street improvements necessary to serve the development.

Finding: The applicant's preliminary plans show an extension of S Garfield Street, a local residential street. Because the applicant has not submitted construction plans, final street improvement plans meeting the requirements within the Newberg Public Works Design and Construction Standards will need to be submitted for approval as part of the public improvement permit application. Public improvements are to be completed prior to applying for the final plat and building permits.

This criterion will be met if all improvements necessary to serve the development meet City standards and are completed, see conditions in Section 15.505.030.

C. Water. All developments, lots, and parcels within the City of Newberg shall be served by the municipal water system as specified in Chapter 13.15 NMC.

Finding: Preliminary plans show an extension of an existing 4-inch water line in the extension of S Garfield Street. Because the applicant has not submitted construction plans, final water line plans meeting the requirements within the Newberg Public Works Design and Construction Standards will need to be submitted for approval as part of the public improvement permit application. New water mains are to be a minimum of 8-inches in diameter. Public improvements are to be completed prior to applying for the final plat and building permits.

This criterion will be met if all improvements necessary to service the development meet City standards and are completed, see conditions in Section 15.505.040(D).

D. Wastewater. All developments, lots, and parcels within the City of Newberg shall be served by the municipal wastewater system as specified in Chapter 13.10 NMC.

Finding: Preliminary plans show a new wastewater line connecting to an existing wastewater line in S Garfield Street. Preliminary plans also show service laterals to each proposed lot. Because the applicant has not submitted construction plans, final plans for the proposed wastewater line with individual service laterals to each lot meeting the requirements within the Newberg Public Works Design and Construction Standards will need to be submitted for approval as part of the public improvement permit application. The public main will need to terminate at a manhole within the public street right-of-way. Private service laterals are to be extended from the public main to each lot, and to each dwelling if under separate ownership. Private "party" wastewater service lines are not allowed.

This criterion will be met if all wastewater improvements necessary to service the development meet City standards and are completed, see conditions in Section 15.505.040(E).

E. Stormwater. All developments, lots, and parcels within the City of Newberg shall manage stormwater runoff as specified in Chapters 13.20 and 13.25 NMC.

Finding: A combination of new private and public stormwater facilities are proposed by the submitted preliminary plans and the preliminary stormwater report.

A new private stormwater line is shown routed through the shared driveway for proposed lots 1 through 4 to a private rain garden and a private underground stormwater detention facility in Tract A of the preliminary plat. The outfall of the private stormwater facility is shown within Tract B of the preliminary plat and within the stream corridor. It appears that construction of the proposed rain gardens could encroach into the stream corridor. If construction of the rain

gardens encroaches into the stream corridor additional mitigation measures beyond that shown on the preliminary plans would be required as part of the permit plan review process.

Public stormwater runoff from the street is proposed to be managed through public stormwater planters and a public rain garden. The preliminary stormwater report references that outflows from stormwater planters will be routed to underground detention pipes. The proposed public rain garden, shown within Tract B containing the stream corridor, is described as having its overflow directed to a stream outfall.

A preliminary stormwater report prepared by Firwood Design Group was submitted as part of the application. Because a final stormwater management report has not been submitted and final stormwater plans have not been reviewed and approved, a final stormwater management report and construction plans meeting the City's Public Works Design and Construction Standards will be required as part of the public works improvement permit application. The applicant will need to demonstrate compliance with the facility selection hierarchy described in section 4.6.8 of the Public Works Design and Construction Standards.

As shown on the preliminary plans the entire proposed stormwater system might need to be private as public stormwater is to be separated from the management of private stormwater runoff and it is unclear from the materials submitted if this could be achieved with the proposed preliminary design.

A private stormwater facility maintenance agreement shall be required for any private stormwater facility or stormwater system. The private stormwater facility maintenance agreement shall be recorded as part of the final plat approval.

This criterion will be met if all stormwater improvements necessary to service the development meet City standards and are completed, see conditions in Section 15.505.050.

F. Utility Easements. Utility easements shall be provided as necessary and required by the review body to provide needed facilities for present or future development of the area.

Finding: The applicant's preliminary plans do not show 10-foot-wide public utility easements along the frontages of all proposed lots along the extension of S Garfield Street. The plans do show shared access and utility easements for Lots 1 through 4. Because the applicant has not submitted construction plans, final plans showing needed utility easements will be required as part of the public works improvement permit application.

This criterion will be met if all easements necessary to service the development meet City standards and are completed, see conditions in Section 15.505.040(F).

G. City Approval of Public Improvements Required. No building permit may be issued until all required public facility improvements are in place and approved by the director, or are otherwise bonded for in a

manner approved by the review authority, in conformance with the provisions of this code and the Newberg Public Works Design and Construction Standards. [Ord. 2810 § 2 (Exhs. B, C), 12-19-16.]

Finding: Any required public improvement permit(s) for this project must be submitted, approved and the improvements constructed prior to applying for the final plat and building permits.

15.505.030 Street standards.

A. Purpose. The purpose of this section is to:

1. Provide for safe, efficient, and convenient multi-modal transportation within the City of Newberg.

2. Provide adequate access to all proposed and anticipated developments in the City of Newberg. For purposes of this section, "adequate access" means direct routes of travel between destinations; such destinations may include residential neighborhoods, parks, schools, shopping areas, and employment centers.

3. Provide adequate area in all public rights-of-way for sidewalks, wastewater and water lines, stormwater facilities, natural gas lines, power lines, and other utilities commonly and appropriately placed in such rights-of-way. For purposes of this section, "adequate area" means space sufficient to provide all required public services to standards defined in this code and in the Newberg public works design and construction standards.

B. Applicability. The provisions of this section apply to:

1. The creation, dedication, and/or construction of all public streets, bike facilities, or pedestrian facilities in all subdivisions, partitions, or other developments in the City of Newberg.

2. The extension or widening of existing public street rights-of-way, easements, or street improvements including those which may be proposed by an individual or the city, or which may be required by the city in association with other development approvals.

3. The construction or modification of any utilities, pedestrian facilities, or bike facilities in public rights-of-way or easements.

4. The designation of planter strips. Street trees are required subject to Chapter 15.420 NMC.

5. Developments outside the city that tie into or take access from city streets.

C. Layout of Streets, Alleys, Bikeways, and Walkways. Streets, alleys, bikeways, and walkways shall be laid out and constructed as shown in the Newberg transportation system plan. In areas where the

transportation system plan or future street plans do not show specific transportation improvements, roads and streets shall be laid out so as to conform to previously approved subdivisions, partitions, and other developments for adjoining properties, unless it is found in the public interest to modify these patterns. Transportation improvements shall conform to the standards within the Newberg Municipal Code, the Newberg public works design and construction standards, the Newberg transportation system plan, and other adopted city plans.

D. Construction of New Streets. Where new streets are necessary to serve a new development, subdivision, or partition, right-of-way dedication and full street improvements shall be required. Three-quarter streets may be approved in lieu of full street improvements when the city finds it to be practical to require the completion of the other one-quarter street improvement when the adjoining property is developed; in such cases, three-quarter street improvements may be allowed by the city only where all of the following criteria are met:

1. The land abutting the opposite side of the new street is undeveloped and not part of the new development; and

2. The adjoining land abutting the opposite side of the street is within the city limits and the urban growth boundary.

Finding: As part of the proposed subdivision, the applicant is proposing an extension of S Garfield Street, a local residential street. Because the applicant has not submitted construction plans, final street improvement plans meeting the requirements within the Newberg Public Works Design and Construction Standards will need to be submitted for approval as part of the public improvement permit application. Public improvements are to be completed prior to applying for the final plat and building permits.

This criterion will be met if all improvements necessary to serve the development meet City standards and are completed, see conditions in Section 15.505.030.

E. Improvements to Existing Streets.

1. All projects subject to partition, subdivision, or Type II design review approval shall dedicate right-of-way sufficient to improve the street to the width specified in subsection (G) of this section.

Finding: The applicant is proposing an extension of S Garfield Street, a local residential street, with a cross section consisting of 60-feet of right-of-way and 32-feet of curb-to-curb pavement width. The applicant's preliminary plat and plans also show existing S Garfield Street with 60-feet of existing right-of-way. This is adequate right-of-way for improving the street to the width specified in 505.505.030(G).

This criterion is met.

2. All projects subject to partition, subdivision, or Type II design review approval must construct a minimum of a three-quarter street improvement to all existing streets adjacent to, within, or necessary to serve the development. The director may waive or modify this requirement where the applicant demonstrates that the condition of existing streets to serve the development meets city standards and is in satisfactory condition to handle the projected traffic loads from the development. Where a development has frontage on both sides of an existing street, full street improvements are required.

Finding: The applicant is proposing an extension of S Garfield Street, a local residential street, with a full width street improvement cross section consisting of 60-feet of right-of-way and 32-feet of curb-to-curb pavement width. The applicant's preliminary plat and plans also show existing S Garfield Street with 60-feet of existing right-of-way. This is adequate for improving the street to the width specified in 505.505.030(G).

This criterion will be met if all improvements necessary to serve the development meet City standards and are completed, see conditions in Section 15.505.030.

3. In lieu of the street improvement requirements outlined in NMC 15.505.040(B), the review authority may elect to accept from the applicant monies to be placed in a fund dedicated to the future reconstruction of the subject street(s). The amount of money deposited with the city shall be 100 percent of the estimated cost of the required street improvements (including any associated utility improvements), and 10 percent of the estimated cost for inflation. Cost estimates used for this purpose shall be based on preliminary design of the constructed street provided by the applicant's engineer and shall be approved by the director.

Finding: The Applicant is not proposing a fee in lieu of street improvements.

This criterion is not applicable.

F. Improvements Relating to Impacts. Improvements required as a condition of development approval shall be roughly proportional to the impact of the development on public facilities and services. The review body must make findings in the development approval that indicate how the required improvements are roughly proportional to the impact. Development may not occur until required transportation facilities are in place or guaranteed, in conformance with the provisions of this code. If required transportation facilities cannot be put in place or be guaranteed, then the review body shall deny the requested land use application.

Finding: The proposed development is an 8-lot subdivision. Improvements required as conditions of approval are required for the proposed development to be adequately served by public facilities as described in conditions in Sections 15.505.030, 15.505.040 and 15.505.050.

The criterion is met.

G. Street Width and Design Standards.

1. Design Standards. All streets shall conform with the standards contained in Table 15.505.030(G). Where a range of values is listed, the director shall determine the width based on a consideration of the total street section width needed, existing street widths, and existing development patterns. Preference shall be given to the higher value. Where values may be modified by the director, the overall width shall be determined using the standards under subsections (G)(2) through (10) of this section.

Table 15.505.030(G) Street ***Design Standards***

Type of Street	Right-of-Way ***Width***	***Curb-to-Curb Pavement Width***	***Motor Vehicle Travel Lanes***	***Median Type***	***Striped*** Bike Lane ***(Both Sides)***	***On-Street Parking***
Arterial ***Streets***						
Expressway**	ODOT	ODOT	ODOT	ODOT	ODOT	ODOT
Major arterial	***95 – 100 feet***	***74 feet***	***4 lanes***	***TWLTL or median****	***Yes***	***No****
Minor arterial	***69 – 80 feet***	***48 feet***	***2 lanes***	***TWLTL or median****	***Yes***	***No****
Collectors						
Major	***57 – 80 feet***	***36 feet***	***2 lanes***	***None****	***Yes***	***No****
Minor	***61 – 65 feet***	***40 feet***	***2 lanes***	***None****	***Yes****	***Yes****
Local Streets						
Local residential	***54 – 60 feet***	***32 feet***	***2 lanes***	***None***	***No***	***Yes***
Limited residential, parking both sides	***44 – 50 feet***	***28 feet***	***2 lanes***	***None***	***No***	***Yes***

Table 15.505.030(G) Street ***Design Standards***

Type of Street	Right-of-Way ***Width***	***Curb-to-Curb Pavement Width***	***Motor Vehicle Travel Lanes***	***Median Type***	***Striped*** Bike Lane ***(Both Sides)***	***On-Street Parking***
Limited residential, parking one side	***40 – 46 feet***	***26 feet***	***2 lanes***	***None***	***No***	***One side***
Local commercial/ industrial	***55 – 65 feet***	***34 feet***	***2 lanes***	***None****	***No****	***Yes****

* ***May be modified with approval of the*** director***. Modification will change overall curb-to-curb and*** right-of-way ***width. Where a center turn lane is not required, a landscaped median shall be provided instead, with turning pockets as necessary to preserve roadway functions.***

** ***All standards shall be per*** ODOT ***expressway standards.***

Finding: The applicant is proposing an extension of S Garfield Street, a local residential street, with a full width street improvement cross section consisting of 60-feet of right-of-way and 32-feet of curb-to-curb pavement width. The proposed street extension is shown turning east and terminating at the east property boundary of the project site. The applicant's preliminary plat and plans also show existing S Garfield Street with 60-feet of existing right-of-way. This is adequate for improving the street to the width specified in 505.505.030(G). Because construction plans have not been submitted, final plans showing the proposed street extension as a local residential street in accordance with City of Newberg Public Works Design and Construction Standards shall be submitted as part of the public improvement permit.

This criterion will be met if all improvements necessary to serve the development meet City standards and are completed, see conditions in Section 15.505.030.

2. Motor Vehicle Travel Lanes. Collector and arterial streets shall have a minimum width of 12 feet.

Finding: No new collector or arterial streets are proposed.

This criterion is not applicable.

3. Bike Lanes. Striped bike lanes shall be a minimum of six feet wide. Bike lanes shall be provided where shown in the Newberg transportation system plan.

Finding: Bike lanes are not required on local residential streets.

This criterion is not applicable.

4. Parking Lanes. Where on-street parking is allowed on collector and arterial streets, the parking lane shall be a minimum of eight feet wide.

Finding: There are no collector or arterial streets proposed.

This criterion is not applicable.

5. Center Turn Lanes. Where a center turn lane is provided, it shall be a minimum of 12 feet wide.

Finding: No center turn lanes are proposed and none are required.

This criterion is not applicable.

6. Limited Residential Streets. Limited residential streets shall be allowed only at the discretion of the review authority, and only in consideration of the following factors:

- ***a. The requirements of the fire chief shall be followed.***
- ***b. The estimated traffic volume on the street is low, and in no case more than 600 average daily trips.***
- ***c. Use for through streets or looped streets is preferred over cul-de-sac streets.***
- ***d. Use for short blocks (under 400 feet) is preferred over longer blocks.***
- ***e. The total number of residences or other uses accessing the street in that block is small, and in no case more than 30 residences.***
- ***f. On-street parking usage is limited, such as by providing ample off-street parking, or by staggering driveways so there are few areas where parking is allowable on both sides.***

Finding: Limited residential streets are not proposed.

This criterion is not applicable.

7. Sidewalks. Sidewalks shall be provided on both sides of all public streets. Minimum width is five feet.

Finding: The submitted plans show 5-foot-wide sidewalks and the narrative describes 5-foot-wide sidewalks are proposed along the subject parcel frontages. Sidewalks along frontages of

properties that are not part of the proposed development are not required as part of this development.

This criterion will be met if all improvements necessary to serve the development meet City standards and are completed, see conditions in Section 15.505.030.

8. Planter Strips. Except where infeasible, a pl. er strip shall be provided between the sidewalk and the curb line, with a minimum width of five feet. This strip shall be landscaped in accordance with the standards in NMC 15.420.020. Curb-side sidewalks may be allowed on limited residential streets. Where curbside sidewalks are allowed, the following shall be provided:

a. Additional reinforcement is done to the sidewalk section at corners.

b. Sidewalk width is six feet.

Finding: The submitted plans show 5.5-foot-wide planter strips and the narrative describes 5.5-foot-wide planter strips are proposed along the subject parcel frontages. Planter strips along frontages of properties that are not part of the proposed development are not required as part of this development.

This criterion will be met if all improvements necessary to serve the development meet City standards and are completed.

9. Slope Easements. Slope easements shall be provided adjacent to the street where required to maintain the stability of the street.

Finding: The applicant is not proposing a slope easement.

This criterion is not applicable**.**

10. Intersections and Street Design. The street design standards in the Newberg public works design and construction standards shall apply to all public streets, alleys, bike facilities, and sidewalks in the city.

Finding: The design of the intersection and street will be reviewed through the Public Improvement Permit process to meet requirements.

This criterion will be met if all improvements necessary to serve the development meet City standards and are completed.

11. The planning commission may approve modifications to street standards for the purpose of ingress or egress to a minimum of

three and a maximum of six lots through a conditional use permit.

Finding: Modifications to street standards for the purpose of ingress or egress are not proposed.

This criterion is not applicable.

H. Modification of Street Right-of-Way and Improvement Width. The director, pursuant to the Type II review procedures of Chapter 15.220 NMC, may allow modification to the public street standards of subsection (G) of this section, when the criteria in both subsections (H)(1) and (2) of this section are satisfied:

1. The modification is necessary to provide design flexibility in instances where:

a. Unusual topographic conditions require a reduced width or grade separation of improved surfaces; or

b. Lot shape or configuration precludes accessing a proposed development with a street which meets the full standards of this section; or

c. A modification is necessary to preserve trees or other natural features determined by the city to be significant to the aesthetic character of the area; or

d. A planned unit development is proposed and the modification of street standards is necessary to provide greater privacy or aesthetic quality to the development.

2. Modification of the standards of this section shall only be approved if the director finds that the specific design proposed provides adequate vehicular access based on anticipated traffic volumes.

Finding: The applicant has not proposed modifications to these street standards.

This criterion is not applicable.

I. Temporary Turnarounds. Where a street will be extended as part of a future phase of a development, or as part of development of an abutting property, the street may be terminated with a temporary turnaround in lieu of a standard street connection or circular cul-de-sac bulb. The director and fire chief shall approve the temporary turnaround. It shall have an all-weather surface, and may include a hammerhead-type turnaround meeting fire apparatus access road standards, a paved or graveled circular turnaround, or a paved or graveled temporary access road. For streets extending less than 150 feet and/or with no significant access, the director may approve the

street without a temporary turnaround. Easements or right-of-way may be required as necessary to preserve access to the turnaround.

Finding: The applicant is not proposing a temporary turnaround. This criterion does not apply.

J. Topography. The layout of streets shall give suitable recognition to surrounding topographical conditions in accordance with the purpose of this code.

Finding: The applicant has given suitable recognition to surrounding topographical conditions.

This criterion is met.

K. Future Extension of Streets. All new streets required for a subdivision, partition, or a project requiring site design review shall be constructed to be "to and through": through the development and to the edges of the project site to serve adjacent properties for future development.

Finding: The applicant is proposing an extension of S Garfield Street, a local residential street. The proposed street extension is shown turning east and terminating at the east property boundary of the project site to serve the adjacent property for future development.

This criterion is met.

L. Cul-de-Sacs.

1. Cul-de-sacs shall only be permitted when one or more of the circumstances listed in this section exist. When cul-de-sacs are justified, public walkway connections shall be provided wherever practical to connect with another street, walkway, school, or similar destination.

a. Physical or topographic conditions make a street connection impracticable. These conditions include but are not limited to controlled access streets, railroads, steep slopes, wetlands, or water bodies where a connection could not be reasonably made.

b. Buildings or other existing development on adjacent lands physically preclude a connection now or in the future, considering the potential for redevelopment.

c. Where streets or accessways would violate provisions of leases, easements, or similar restrictions.

d. Where the streets or accessways abut the urban growth boundary and rural resource land in farm or forest use,

except where the adjoining land is designated as an urban reserve area.

2. Cul-de-sacs shall be no more than 400 feet long (measured from the centerline of the intersection to the radius point of the bulb).

3. Cul-de-sacs shall not serve more than 18 single-family dwellings.

Each cul-de-sac shall have a circular end with a minimum diameter of 96 feet, curb-to-curb, within a 109-foot minimum diameter right-of-way. For residential uses, a 35-foot radius may be allowed if the street has no parking, a mountable curb, curbside sidewalks, and sprinkler systems in every building along the street.

Finding: The applicant is not proposing a cul-de-sac.

This criterion is not applicable.

M. Street Names and Street Signs. Streets that are in alignment with existing named streets shall bear the names of such existing streets. Names for new streets not in alignment with existing streets are subject to approval by the director and the fire chief and shall not unnecessarily duplicate or resemble the name of any existing or platted street in the city. It shall be the responsibility of the land divider to provide street signs.

Finding: The applicant is not proposing street names of the proposed residential street. It should be noted that the segment of the S Garfield Street extension that turns east will need to have a different name to adhere to typical street naming standards. The applicant is required to coordinate with the City Planning Division in selecting the name for the street and to adhere to typical naming standards for streets.

This criterion will be met if the aforementioned condition of approval is adhered to.

N. Platting Standards for Alleys.

1. An alley may be required to be dedicated and constructed to provide adequate access for a development, as deemed necessary by the director.

2. The right-of-way width and paving design for alleys shall be not less than 20 feet wide. Slope easements shall be dedicated in accordance with specifications adopted by the city council under NMC 15.505.010 et seq.

3. Where two alleys intersect, 10-foot corner cut-offs shall be provided.

4. ***Unless otherwise approved by the city engineer where topographical conditions will not reasonably permit, grades shall not exceed 12 percent on alleys, and centerline radii on curves shall be not less than 100 feet.***

5. ***All provisions and requirements with respect to streets identified in this code shall apply to alleys the same in all respects as if the word "street" or "streets" therein appeared as the word "alley" or "alleys" respectively.***

Finding: The applicant is not proposing alleys.

This criterion is not applicable.

O. Platting Standards for Blocks.

1. ***Purpose. Streets and walkways can provide convenient travel within a neighborhood and can serve to connect people and land uses. Large, uninterrupted blocks can serve as a barrier to travel, especially walking and biking. Large blocks also can divide rather than unite neighborhoods. To promote connected neighborhoods and to shorten travel distances, the following minimum standards for block lengths are established.***

2. ***Maximum Block Length and Perimeter. The maximum length and perimeters of blocks in the zones listed below shall be according to the following table. The review body for a subdivision, partition, conditional use permit, or a Type II design review may require installation of streets or walkways as necessary to meet the standards below.***

Zone(s)	***Maximum*** Block Length	***Maximum*** Block ***Perimeter***
R-1	***800 feet***	***2,000 feet***
R-2, R-3, RP, I	***1,200 feet***	***3,000 feet***

3. ***Exceptions.***
   a. ***If a public walkway is installed mid-block, the maximum block length and perimeter may be increased by 25 percent.***
   b. ***Where a proposed street divides a block, one of the resulting blocks may exceed the maximum block length and perimeter standards provided the average block length and perimeter of the two resulting blocks do not exceed these standards.***

c. ***Blocks in excess of the above standards are allowed where access controlled streets, street access spacing standards, railroads, steep slopes, wetlands, water bodies, preexisting development, ownership patterns or similar circumstances restrict street and walkway location and design. In these cases, block length and perimeter shall be as small as practical. Where a street cannot be provided because of these circumstances but a public walkway is still feasible, a public walkway shall be provided.***

d. ***Institutional campuses located in an R1 zone may apply the standards for the institutional zone.***

e. ***Where a block is in more than one zone, the standards of the majority of land in the proposed block shall apply.***

f. ***Where a local street plan, concept master site development plan, or specific plan has been approved for an area, the block standards shall follow those approved in the plan. In approving such a plan, the review body shall follow the block standards listed above to the extent appropriate for the plan area.***

Finding: The applicant is not proposing blocks.

This criterion is not applicable.

P. ***Private Streets. New private streets, as defined in NMC 15.05.030, shall not be created, except as allowed by NMC 15.240.020(L)(2).***

Finding: The applicant is not proposing private streets.

This criterion is not applicable.

Q. ***Traffic Calming.***

1. ***The following roadway design features may be required in new street construction where traffic calming needs are anticipated:***

a. ***Serpentine alignment.***

b. ***Curb extensions.***

c. ***Traffic diverters/circles.***

d. ***Raised medians and landscaping.***

e. ***Other methods shown effective through engineering studies.***

2. ***Traffic-calming measures such as speed humps should be applied to mitigate traffic operations and/or safety problems on existing streets. They should not be applied with new street constructions.***

Finding: The applicant is not proposing traffic calming.

This criterion is not applicable.

R. Vehicular Access Standards.

1. Purpose. The purpose of these standards is to manage vehicle access to maintain traffic flow, safety, roadway capacity, and efficiency. They help to maintain an adequate level of service consistent with the functional classification of the street. Major roadways, including arterials and collectors, serve as the primary system for moving people and goods within and through the city. Access is limited and managed on these roads to promote efficient through movement. Local streets and alleys provide access to individual properties. Access is managed on these roads to maintain safe maneuvering of vehicles in and out of properties and to allow safe through movements. If vehicular access and circulation are not properly designed, these roadways will be unable to accommodate the needs of development and serve their transportation function.

2. Access Spacing Standards. Public street intersection and driveway spacing shall follow the standards in Table 15.505.R below. The Oregon Department of Transportation (ODOT) has jurisdiction of some roadways within the Newberg city limits, and ODOT access standards will apply on those roadways.

Table 15.505.R. Access ***Spacing Standards***

Roadway Functional Classification	***Area***[1]	***Minimum Public*** Street ***Intersection Spacing (Feet)***[2]	Driveway ***Setback from Intersecting*** Street[3]
Expressway	***All***	***Refer to*** ODOT ***Access Spacing Standards***	***NA***
Major arterial	***Urban*** ***CBD***	***Refer to*** ODOT ***Access Spacing Standards***	
Minor arterial	***Urban*** ***CBD***	***500*** ***200***	***150*** ***100***
Major collector	***All***	***400***	***150***
Minor collector	***All***	***300***	***100***

Table 15.505.R. Access ***Spacing Standards***

Roadway Functional Classification	***Area***[1]	***Minimum Public*** Street ***Intersection Spacing (Feet)***[2]	Driveway ***Setback from Intersecting*** Street[3]

[1] ***"Urban" refers to intersections inside the*** city ***urban growth boundary outside the central business district (C-3 zone).***

"CBD" refers to intersections within the central business district (C-3 zone).

"All" refers to all intersections within the Newberg urban growth boundary.

[2] ***Measured centerline to centerline.***

[3] ***The setback is based on the higher classification of the intersecting*** streets***. Measured from the*** curb line ***of the intersecting*** street ***to the beginning of the*** driveway***, excluding flares. If the*** driveway ***setback listed above would preclude a*** lot ***from having at least one*** driveway***, including shared*** driveways ***or*** driveways ***on adjoining*** streets***, one*** driveway ***is allowed as far from the intersection as possible.***

Finding: The project does not include an arterial of collector roadway and none are adjacent to the site.

This criterion is not applicable***.***

3. Properties with Multiple Frontages. Where a property has frontage on more than one street, access shall be limited to the street with the lesser classification.

Finding: Only Lot 8 of the proposed lots is proposed to have frontage onto more than one street. The applicant's submitted materials indicate that the existing duplex on proposed Lot 8 will remain with the access to existing driveways to be from the east-west segment of the proposed street extension. Both segments of the proposed street extension are classified as local residential streets.

This criterion is not applicable.

4. Driveways. More than one driveway is permitted on a lot accessed from either a minor collector or local street as long as there is at least 40 feet of lot frontage separating each driveway approach. More than one driveway is permitted on a lot accessed from a major collector as long as there is at least 100 feet of lot frontage separating each driveway approach.

Finding: Only Lot 8 of the proposed lots are proposed to have more than one driveway. The applicant's submitted materials indicate that the existing duplex on proposed Lot 8 will remain with the access to existing driveways to be from the east-west segment of the proposed street extension. The existing driveways for proposed Lot 8 with the existing duplex are shown on the preliminary plans with more than 22-feet of separation.

This criterion is met.

> ***5. Alley Access. Where a property has frontage on an alley and the only other frontages are on collector or arterial streets, access shall be taken from the alley only. The review body may allow creation of an alley for access to lots that do not otherwise have frontage on a public street provided all of the following are met:***
>
> ***a. The review body finds that creating a public street frontage is not feasible.***
> ***b. The alley access is for no more than six dwellings and no more than six lots.***
> ***c. The alley has through access to streets on both ends.***
> ***d. One additional parking space over those otherwise required is provided for each dwelling. Where feasible, this shall be provided as a public use parking space adjacent to the alley.***

Finding: The applicant's property does not have alley access.

This criterion is not applicable.

> ***6. Closure of Existing Accesses. Existing accesses that are not used as part of development or redevelopment of a property shall be closed and replaced with curbing, sidewalks, and landscaping, as appropriate.***

Finding: No existing access not used with the proposed development are proposed to be closed and none are required to be closed.

This criterion is not applicable.

> ***7. Shared Driveways.***
> ***a. The number of driveways onto arterial streets shall be minimized by the use of shared driveways with adjoining lots where feasible. The city shall require shared driveways as a condition of land division or site design review, as applicable, for traffic safety and access management purposes. Where there is an abutting developable property, a shared driveway shall be provided as appropriate. When shared driveways are***

required, they shall be stubbed to adjacent developable parcels to indicate future extension. "Stub" means that a driveway temporarily ends at the property line, but may be accessed or extended in the future as the adjacent parcel develops. "Developable" means that a parcel is either vacant or it is likely to receive additional development (i.e., due to infill or redevelopment potential).

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

c. ***No more than four lots may access one shared driveway.***

d. ***Shared driveways shall be posted as no parking fire lanes where required by the fire marshal.***

e. ***Where three lots or three dwellings share one driveway, one additional parking space over those otherwise required shall be provided for each dwelling. Where feasible, this shall be provided as a common use parking space adjacent to the driveway.***

Finding: The applicant is proposing one shared driveway to serve Lots 1 through 4. A 25-foot access and utility easement is shown on the proposed shared driveway. Maintenance agreements are required as well. Access and utility easements and maintenance agreements for the shared driveway shall be recorded as part of the final plat approval.

This criterion will be met when the access easements and maintenance agreements are recorded and submitted to the city.

8. ***Frontage Streets and Alleys. The review body for a partition, subdivision, or design review may require construction of a frontage street to provide access to properties fronting an arterial or collector street.***

Finding: The proposed lots do not front on an arterial or collector street.

This criterion is not applicable.

9. ***ODOT or Yamhill County Right-of-Way. Where a property abuts an ODOT or Yamhill County right-of-way, the applicant for any development project shall obtain an access permit from ODOT or Yamhill County.***

Finding: The proposed property does not abut an ODOT or Yamhill County right-of-way.

This criterion is not applicable.

10. ***Exceptions. The director may allow exceptions to the access standards above in any of the following circumstances:***
    a. ***Where existing and planned future development patterns or physical constraints, such as topography, parcel configuration, and similar conditions, prevent access in accordance with the above standards.***
    b. ***Where the proposal is to relocate an existing access for existing development, where the relocated access is closer to conformance with the standards above and does not increase the type or volume of access.***
    c. ***Where the proposed access results in safer access, less congestion, a better level of service, and more functional circulation, both on street and on site, than access otherwise allowed under these standards.***

11. ***Where an exception is approved, the access shall be as safe and functional as practical in the particular circumstance. The director may require that the applicant submit a traffic study by a registered engineer to show the proposed access meets these criteria.***

Finding: The applicant is not proposing any exceptions to the access standards.

These criteria are not applicable.

S. Public Walkways.

1. ***Projects subject to Type II design review, partition, or subdivision approval may be required to provide public walkways where necessary for public safety and convenience, or where necessary to meet the standards of this code. Public walkways are meant to connect cul-de-sacs to adjacent areas, to pass through oddly shaped or unusually long blocks, to provide for networks of public paths according to adopted plans, or to provide access to schools, parks or other community destinations or public areas. Where practical, public walkway easements and locations may also be used to accommodate public utilities.***

2. ***Public walkways shall be located within a public access easement that is a minimum of 15 feet in width.***

3. ***A walk strip, not less than 10 feet in width, shall be paved in the center of all public walkway easements. Such paving shall conform to specifications in the Newberg public works design and construction standards.***

4. ***Public walkways shall be designed to meet the Americans with Disabilities Act requirements.***

5. ***Public walkways connecting one right-of-way to another shall be designed to provide as short and straight of a route as practical.***

6. ***The developer of the public walkway may be required to provide a homeowners' association or similar entity to maintain the public walkway and associated improvements.***

7. ***Lighting may be required for public walkways in excess of 250 feet in length.***

8. ***The review body may modify these requirements where it finds that topographic, preexisting development, or similar constraints exist.***

Finding: Public walkways are not proposed and none are required.

These criteria are not applicable.

T. Street Trees. Street trees shall be provided for all projects subject to Type II design review, partition, or subdivision. Street trees shall be installed in accordance with the provisions of NMC 15.420.010(B)(4).

Finding: The applicant is showing creation of a planter strip with preliminary tree locations. Please see findings NMC 15.420.010(B)(4) for further findings.

U. Street Lights. All developments shall include underground electric service, light standards, wiring and lamps for street lights according to the specifications and standards of the Newberg public works design and construction standards. The developer shall install all such facilities and make the necessary arrangements with the serving electric utility as approved by the city. Upon the city's acceptance of the public improvements associated with the development, the street lighting system, exclusive of utility-owned service lines, shall be and become property of the city unless otherwise designated by the city through agreement with a private utility.

Finding: The applicant's plans show proposed street lighting. However, it is unclear if the City's requirements for street lighting are being met. Because a lighting analysis has not been provided, the applicant will be required to show via a lighting analysis that the proposed street lighting meets City standards or provide additional Option A street lighting that is compliant with the City's Public Works Design and Construction Standards.

The criterion will be met if the aforementioned condition of approval is adhered to.

V. Transit Improvements. Development proposals for sites that include or are adjacent to existing or planned transit facilities, as shown in the Newberg transportation system plan or adopted local or regional transit

plan, shall be required to provide any of the following, as applicable and required by the review authority:

1. Reasonably direct pedestrian connections between the transit facility and building entrances of the site. For the purpose of this section, "reasonably direct" means a route that does not deviate unnecessarily from a straight line or a route that does not involve a significant amount of out-of-direction travel for users.

2. A transit passenger landing pad accessible to disabled persons.

3. An easement of dedication for a passenger shelter or bench if such facility is in an adopted plan.

4. Lighting at the transit facility. [Ord. 2822 § 1 (Exh. A), 2-5-18; Ord. 2810 § 2 (Exhs. B, C), 12-19-16; Ord. 2763 § 1 (Exh. A § 19), 9-16-13; Ord. 2736 § 1 (Exh. A §§ 1, 3, 4), 3-21-11; Ord. 2619, 5-16-05; Ord. 2513, 8-2-99; Ord. 2507, 3-1-99; Ord. 2494, 4-6-98; Ord. 2451, 12-2-96. Code 2001 §§ 151.681, 151.683, 151.684 – 151.686, 151.689 – 151.692, 151.694, 151.695, 151.701 – 151.703, 151.705.]

Finding: The applicant is not proposing transit improvements and the site is not adjacent to existing or planned transit facilities.

These criteria are not applicable.

15.505.040 Public utility standards.

A. Purpose. The purpose of this section is to provide adequate services and facilities appropriate to the scale and type of development.

B. Applicability. This section applies to all development where installation, extension or improvement of water, wastewater, or private utilities is required to serve the development or use of the subject property.

C. General Standards.

1. The design and construction of all improvements within existing and proposed rights-of-way and easements, all improvements to be maintained by the city, and all improvements for which city approval is required shall conform to the Newberg public works design and construction standards and require a public improvements permit.

2. The location, design, installation and maintenance of all utility lines and facilities shall be carried out with minimum feasible disturbances of soil and site. Installation of all proposed public and private utilities shall be coordinated by the developer and

be approved by the city to ensure the orderly extension of such utilities within public right-of-way and easements.

D. Standards for Water Improvements. All development that has a need for water service shall install the facilities pursuant to the requirements of the city and all of the following standards. Installation of such facilities shall be coordinated with the extension or improvement of necessary wastewater and stormwater facilities, as applicable.

1. All developments shall be required to be linked to existing water facilities adequately sized to serve their intended area by the construction of water distribution lines, reservoirs and pumping stations which connect to such water service facilities. All necessary easements required for the construction of these facilities shall be obtained by the developer and granted to the city pursuant to the requirements of the city.

2. Specific location, size and capacity of such facilities will be subject to the approval of the director with reference to the applicable water master plan. All water facilities shall conform with city pressure zones and shall be looped where necessary to provide adequate pressure and fire flows during peak demand at every point within the system in the development to which the water facilities will be connected. Installation costs shall remain entirely the developer's responsibility.

3. The design of the water facilities shall take into account provisions for the future extension beyond the development to serve adjacent properties, which, in the judgment of the city, cannot be feasibly served otherwise.

4. Design, construction and material standards shall be as specified by the director for the construction of such public water facilities in the city.

Finding: Preliminary plans show an extension of an existing 4-inch water line in the extension of S Garfield Street. The extension of the public water line will need to extend to the end of the public street extension. With the extension of the public water main, it appears that that a fire hydrant will need to be installed off the proposed new 8-inch public water line to meet the fire hydrant spacing of 500-feet required in residential areas per Section 3.3.5 of the City of Newberg Public Works Design and Construction Standards. Because the applicant has not submitted construction plans, final water line plans meeting the requirements within the Newberg Public Works Design and Construction Standards will need to be submitted for approval as part of the public improvement permit application. New water mains are to be a minimum of 8-inches in diameter.

The proposed new 8-inch public water line will need to be installed to the end of the public street extension in accordance with Section 3.2.3 of the City of Newberg Public Works Design and Construction Standards.

If it is determined during permit plan reviews that a fire hydrant is needed, the existing 4-inch public water line will need to be replaced with a new 8-inch public water line. The replacement water line that would serve the fire hydrant would need to be from the existing public water line in E Eighth Street in accordance with Section 3.3.5 of the City of Newberg Public Works Design and Construction Standards.

Utility designs and alignments will be reviewed as part of the Public Improvement Permit.

Public improvements are to be completed prior to applying for the final plat and building permits.

Results of fire flow tests performed by a private contractor hired by the applicant shall be submitted as part of permit applications in accordance with requirements of the fire marshal.

This criterion will be met if all improvements necessary to service the development meet City standards and are completed.

E. Standards for wastewater Improvements. All development that has a need for wastewater services shall install the facilities pursuant to the requirements of the city and all of the following standards. Installation of such facilities shall be coordinated with the extension or improvement of necessary water services and stormwater facilities, as applicable.

1. All septic tank systems and on-site sewage systems are prohibited. Existing septic systems must be abandoned or removed in accordance with Yamhill County standards.

2. All properties shall be provided with gravity service to the city wastewater system, except for lots that have unique topographic or other natural features that make gravity wastewater extension impractical as determined by the director. Where gravity service is impractical, the developer shall provide all necessary pumps/lift stations and other improvements, as determined by the director.

3. All developments shall be required to be linked to existing wastewater collection facilities adequately sized to serve their intended area by the construction of wastewater lines which connect to existing adequately sized wastewater facilities. All necessary easements required for the construction of these facilities shall be obtained by the developer and granted to the city pursuant to the requirements of the city.

4. ***Specific location, size and capacity of wastewater facilities will be subject to the approval of the director with reference to the applicable wastewater master plan. All wastewater facilities shall be sized to provide adequate capacity during peak flows from the entire area potentially served by such facilities. Installation costs shall remain entirely the developer's responsibility.***

5. ***Temporary wastewater service facilities, including pumping stations, will be permitted only if the director approves the temporary facilities, and the developer provides for all facilities that are necessary for transition to permanent facilities.***

6. ***The design of the wastewater facilities shall take into account provisions for the future extension beyond the development to serve upstream properties, which, in the judgment of the city, cannot be feasibly served otherwise.***

7. ***Design, construction and material standards shall be as specified by the director for the construction of such wastewater facilities in the city.***

Finding: Preliminary plans show a wastewater line connecting to an existing wastewater line in S Garfield Street. Preliminary plans also show service laterals to each proposed lot. Because the applicant has not submitted construction plans, final plans for the proposed wastewater line with individual service laterals to each lot meeting the requirements within the Newberg Public Works Design and Construction Standards will need to be submitted for approval as part of the public improvement permit application. The public main will need to terminate at a manhole within the public street right-of-way. Private service laterals are to be extended from the public main to each lot, and to each dwelling if under separate ownership. Private "party" wastewater service lines are not allowed.

Utility designs and alignments will be reviewed as part of the Public Improvement Permit.

Any existing septic system is to be decommissioned according to Yamhill County standards. Documentation of the septic system abandonment or removal in accordance with Yamhill County standards shall be submitted with the public improvement permit application.

Public improvements are to be completed prior to applying for the final plat and building permits.

These criteria will be met if all wastewater improvements necessary to service the development meet City standards and are completed.

F. Easements. Easements for public and private utilities shall be provided as deemed necessary by the city, special districts, and utility companies.

Easements for special purpose uses shall be of a width deemed appropriate by the responsible agency. Such easements shall be recorded on easement forms approved by the city and designated on the final plat of all subdivisions and partitions. Minimum required easement width and locations are as provided in the Newberg public works design and construction standards. [Ord. 2810 § 2 (Exhs. B, C), 12-19-16.]

Finding: The applicant has submitted preliminary plans that do not show 10-foot public utility easements along all lot frontages. The plans do show a shared access and utility easement for Lots 1 through 4. Because the applicant has not recorded all utility easements needed for the proposed development, the applicant will be required to submit recorded documents that include necessary utility easements meeting the specifications and standards of the City's Public Works Design and Construction Standards, this includes but not necessarily limited to:

1) 10-foot public utility easements along all public street frontages of the proposed lots.
2) 25-foot access and utility easement for the water and sewer lines in the shared driveway.

The criterion will be met if the aforementioned condition of approval is adhered to.

15.505.050 Stormwater system standards.

A. Purpose. The purpose of this section is to provide for the drainage of surface water from all development; to minimize erosion; and to reduce degradation of water quality due to sediments and pollutants in stormwater runoff.

B. Applicability. The provisions of this section apply to all developments subject to site development review or land division review and to the reconstruction or expansion of such developments that increases the flow or changes the point of discharge to the city stormwater system. Additionally, the provisions of this section shall apply to all drainage facilities that impact any public storm drain system, public right-of-way or public easement, including but not limited to off-street parking and loading areas.

C. General Requirement. All stormwater runoff shall be conveyed to a public storm wastewater or natural drainage channel having adequate capacity to carry the flow without overflowing or otherwise causing damage to public and/or private property. The developer shall pay all costs associated with designing and constructing the facilities necessary to meet this requirement.

Finding: The proposed development will create more than 500 square feet of impervious area, public and private. The applicant proposes to manage both public and private stormwater

runoff. A combination of new private and public stormwater facilities are proposed by the submitted preliminary plans and the preliminary stormwater report.

A new private stormwater line is shown routed through the shared driveway for proposed lots 1 through 4 to a private rain garden and a private underground stormwater detention facility in Tract A of the preliminary plat. The outfall of the private stormwater facility is shown within Tract B of the preliminary plat and within the stream corridor. It appears that construction of the proposed rain gardens could encroach into the stream corridor. If construction of the rain gardens encroach into the stream corridor additional mitigation measures beyond that shown on the preliminary plans would be required as part of the permit plan review process.

Public stormwater runoff from the street is proposed to be managed through public stormwater planters and a public rain garden. The preliminary stormwater report references that outflows from stormwater planters will be routed to underground detention pipes. The proposed public rain garden, shown within Tract B containing the stream corridor, is described as having its overflow directed to a stream outfall.

A preliminary stormwater report prepared by Firwood Design Group was submitted as part of the application. Because a final stormwater management report has not been submitted and final stormwater plans have not been reviewed and approved, a final stormwater management report and construction plans meeting the City's Public Works Design and Construction Standards will be required as part of the public works improvement permit application. The applicant will need to demonstrate compliance with the facility selection hierarchy described in section 4.6.8 of the Public Works Design and Construction Standards.

As shown on the preliminary plans the entire proposed stormwater system might need to be private as public stormwater is to be separated from the management of private stormwater runoff and it is unclear from the materials submitted if this could be achieved with the proposed preliminary design.

If during the permit plan review process, it is determined that the proposed rain garden shown within Tract B containing the stream corridor will be a public facility, a separate tract will need to be created for the public facility. A tract for any public facility must not contain any stream corridor, wetland, or similar encumbrances.

The responsibility for maintenance of private stormwater facilities or stormwater systems shall be the responsibility of a Homeowner's Association (HOA) or adjacent property owners.

A private stormwater facility maintenance agreement shall be required for any private stormwater facility or stormwater system. The private stormwater facility maintenance agreement shall be recorded as part of the final plat approval.

Utility designs and alignments, along with the stormwater management report, will be reviewed as part of the Public Improvement Permit.

The criterion will be met if the aforementioned condition of approval is adhered to.

D. Plan for Stormwater and Erosion Control. No construction of any facilities in a development included in subsection (B) of this section shall be permitted until an engineer registered in the State of Oregon prepares a stormwater report and erosion control plan for the project. This plan shall contain at a minimum:

1. The methods to be used to minimize the amount of runoff, sedimentation, and pollution created from the development both during and after construction.

2. Plans for the construction of stormwater facilities and any other facilities that depict line sizes, profiles, construction specifications, and other such information as is necessary for the city to review the adequacy of the stormwater plans.

3. Design calculations shall be submitted for all drainage facilities. These drainage calculations shall be included in the stormwater report and shall be stamped by a licensed professional engineer in the State of Oregon. Peak design discharges shall be computed based upon the design criteria outlined in the public works design and construction standards for the city.

Finding: The applicant's plans show site disturbance of greater than one acre. Because the applicant as not provided documentation of an erosion and sedimentation control permit for the development site, the applicant will be required to obtain and submit a DEQ 1200-C permit prior to issuance of a public improvement permit.

The applicant has submitted a preliminary stormwater management report. Because the applicant has not submitted a final stormwater report or construction plans, the applicant will need to submit a final stormwater report and construction plans meeting the City's Public Works Design and Construction Standards and NMC 13.25 Stormwater Management requirements and obtain a Public Improvement Permit.

Utility designs and alignments will be reviewed as part of the Public Improvement Permit.

The final stormwater report and plans shall address erosion control downstream of the proposed stormwater outfalls within the stream corridor. Additional erosion control and stream corridor mitigation measures beyond that shown on the preliminary plans might be required as part of the permit plan review process.

The criterion will be met if the aforementioned condition of approval is adhered to.

E. Development Standards. Development subject to this section shall be planned, designed, constructed, and maintained in compliance with the

Newberg public works design and construction standards. [Ord. 2810 § 2 (Exhs. B, C), 12-19-16.]

Finding: A preliminary stormwater report prepared by Firwood Design Group was submitted as part of the application. Because a final stormwater management report has not been submitted and final stormwater plans have not been reviewed and approved, a final stormwater management report and construction plans meeting the City's Public Works Design and Construction Standards will be required as part of the public works improvement permit application. The applicant will need to demonstrate compliance with the facility selection hierarchy described in section 4.6.8 of the Public Works Design and Construction Standards.

As shown on the preliminary plans the entire proposed stormwater system might need to be private as public stormwater is to be separated from the management of private stormwater runoff and it is unclear from the materials submitted if this could be achieved with the proposed preliminary design.

A private stormwater facility maintenance agreement shall be required for any private stormwater facility or stormwater system. The private stormwater facility maintenance agreement shall be recorded as part of the final plat approval.

Utility designs and alignments will be reviewed as part of the Public Improvement Permit.

The criterion will be met if the aforementioned condition of approval is adhered to.

Exhibit B:
Conditions of Approval – ADJC23-0002 and SUB322-0001 – 100 S Garfield Street Subdivision Preliminary Plat

A. The applicant is conditioned to complete construction (i.e. required public improvements, utilities, streets) for the subdivision phase within two years of the preliminary plat approval.

The applicant is conditioned to record the final plat within the subdivision approval period. The applicant must provide the following information for review and approval prior to construction of any improvements:

1. Access easements and maintenance agreements shall be recorded for the shared driveways as part of the final platting process.

2. Construction plans must be submitted for all infrastructure, per the requirements below.

3. Future construction will be reviewed for compliance with all applicable lot and parking coverage requirements during the building permit review process.

General Requirements for the Public Improvement Permit:
The Public Works Design and Construction Standards require that the applicant submit engineered construction plans for review and approval of all utilities, public street improvements, and any new public streets being constructed. Please note that additional Engineering Department plan review application and fees apply for review of plans. Submit any required easements for review and approval and record approved easements. No construction of, or connection to, any existing or proposed public utility/improvements will be permitted until all plans are approved and all necessary permits have been obtained.

a. Public utility infrastructure improvements not limited to street improvements, public walkways, water, wastewater, and stormwater will require permits from partner agencies to authorize different work tasks. All other agency permitting will be required prior to the City of Newberg issuing a Public Improvement Permit.

B. The applicant must provide the following information for review and approval prior to construction of any improvements:

1. **Final Plat Name:**
   a. A plat name not already recorded, and meeting ORS Chapter 92 will be required during the final plat review.

2. **Private Common Areas:**
   a. Tract A and Tract B maintenance agreements will need to be recorded and accompany future development submittals.

3. **State and Federal Permits:**
    a. Prior to final plat approval the applicant is encouraged to work with DSL to ensure development design meets their preference as established in state law as stated in the DSL WD# 2022-0367 approval letter date December 8, 2022. The applicant is required to obtain any state and federal permits as required for this development.

4. **Stream Corridor Mitigation:**
    a. If trees over six inches in diameter, as measured at breast height are to be removed, they shall be replaced at a ratio of three new trees for every one removed. All trees replaced pursuant to this section shall have an average caliper measurement of a minimum of one inch. Additional trees of any caliper may be used to further enhance the mitigation site**.**

5. **Easements:**
    a. The access easement will need to be recorded with Yamhill County as part of this plat, including a maintenance agreement.

6. **Street Trees**
    a. Street trees will need to be from the approved street trees species list. The applicant will also need to ensure the planter strip contains grass, shrubs, and ground cover per NMC 15.420.010 required minimum standards for landscaping. The street trees will need to be planted prior to occupancy of Lots 4, 5, 6, and 7. Final street tree locations will be determined through the infrastructure permitting process and an ownership and maintenance agreement shall be signed and recorded on the final plat concerning the responsibility of the street trees. If the landscaping cannot be completed prior to issuance of occupancy the applicant may place a security on file per NMC 15.420.010(C).

7. **Underground Utilities:**
    a. Final plans showing existing utilities within the property and project limits undergrounded and new utilities installed underground will be required with permit applications. Undergrounding of existing overhead utility lines might require work outside of the project work limits shown on the preliminary plans.

8. **Public Improvements:**
    a. Final street improvement plans meeting the requirements within the Newberg Public Works Design and Construction Standards will need to be submitted for approval as part of the public improvement permit application. Public improvements are to be completed prior to applying for the final plat and building permits.

9. **Water:**
    a. Final water line plans meeting the requirements within the Newberg Public Works Design and Construction Standards will need to be submitted for approval as part of the public improvement permit application. New water

mains are to be a minimum of 8-inches in diameter. Public improvements are to be completed prior to applying for the final plat and building permits.

10. Wastewater:

a. Final plans for the proposed wastewater line with individual service laterals to each lot meeting the requirements within the Newberg Public Works Design and Construction Standards will need to be submitted for approval as part of the public improvement permit application. The public main will need to terminate at a manhole within the public street right-of-way. Private service laterals are to be extended from the public main to each lot, and to each dwelling if under separate ownership. Private "party" wastewater service lines are not allowed.

11. Stormwater:

a. A final stormwater management report and construction plans meeting the City's Public Works Design and Construction Standards will be required as part of the public works improvement permit application. The applicant will need to demonstrate compliance with the facility selection hierarchy described in section 4.6.8 of the Public Works Design and Construction Standards.

b. As shown on the preliminary plans the entire proposed stormwater system might need to be private as public stormwater is to be separated from the management of private stormwater runoff and it is unclear from the materials submitted if this could be achieved with the proposed preliminary design.

c. A private stormwater facility maintenance agreement shall be required for any private stormwater facility or stormwater system. The private stormwater facility maintenance agreement shall be recorded as part of the final plat approval.

12. Utility Easements:

a. Final plans showing needed utility easements will be required as part of the public works improvement permit application.

13. Public Improvement Permits:

a. Any required public improvement permit(s) for this project must be submitted, approved and the improvements constructed prior to applying for the final plat and building permits.

14. Streets and Street Naming:

a. Final street improvement plans meeting the requirements within the Newberg Public Works Design and Construction Standards will need to be submitted for approval as part of the public improvement permit application. Public improvements are to be completed prior to applying for the final plat and building permits.

b. Final plans showing the proposed street extension as a local residential street in accordance with City of Newberg Public Works Design and Construction Standards shall be submitted as part of the public improvement permit.

c. The applicant is required to coordinate with the City Planning Division in selecting the name for the street and to adhere to typical naming standards for streets.

15. Shared Driveways:

a. Access and utility easements and maintenance agreements for the shared driveway shall be recorded as part of the final plat approval.

16. Street Lights:

a. The applicant will be required to show via a lighting analysis that the proposed street lighting meets City standards or provide additional Option A street lighting that is compliant with the City's Public Works Design and Construction Standards.

17. Water Improvements:

a. Final water line plans meeting the requirements within the Newberg Public Works Design and Construction Standards will need to be submitted for approval as part of the public improvement permit application. New water mains are to be a minimum of 8-inches in diameter.

b. The proposed new 8-inch public water line will need to be installed to the end of the public street extension in accordance with Section 3.2.3 of the City of Newberg Public Works Design and Construction Standards.

c. If it is determined during permit plan reviews that a fire hydrant is needed, the existing 4-inch public water line will need to be replaced with a new 8-inch public water line. The replacement water line that would serve the fire hydrant would need to be from the existing public water line in E Eighth Street in accordance with Section 3.3.5 of the City of Newberg Public Works Design and Construction Standards.

d. Utility designs and alignments will be reviewed as part of the Public Improvement Permit.

e. Public improvements are to be completed prior to applying for the final plat and building permits.

f. Results of fire flow tests performed by a private contractor hired by the applicant shall be submitted as part of permit applications in accordance with requirements of the fire marshal.

18. Wastewater Improvements:

a. Final plans for the proposed wastewater line with individual service laterals to each lot meeting the requirements within the Newberg Public Works

Design and Construction Standards will need to be submitted for approval as part of the public improvement permit application. The public main will need to terminate at a manhole within the public street right-of-way. Private service laterals are to be extended from the public main to each lot, and to each dwelling if under separate ownership. Private "party" wastewater service lines are not allowed.

b. Utility designs and alignments will be reviewed as part of the Public Improvement Permit.

c. Any existing septic system is to be decommissioned according to Yamhill County standards. Documentation of the septic system abandonment or removal in accordance with Yamhill County standards shall be submitted with the public improvement permit application.

d. Public improvements are to be completed prior to applying for the final plat and building permits.

19. Public and Private Utility Easements:

a. The applicant will be required to submit recorded documents that include necessary utility easements meeting the specifications and standards of the City's Public Works Design and Construction Standards, this includes but not necessarily limited to:
   i. 10-foot public utility easements along all public street frontages of the proposed lots.
   ii. 25-foot access and utility easement for the water and sewer lines in the shared driveway.

20. Stormwater System Standards:

a. If construction of the rain gardens encroach into the stream corridor additional mitigation measures beyond that shown on the preliminary plans would be required as part of the permit plan review process.

b. A final stormwater management report and construction plans meeting the City's Public Works Design and Construction Standards will be required as part of the public works improvement permit application. The applicant will need to demonstrate compliance with the facility selection hierarchy described in section 4.6.8 of the Public Works Design and Construction Standards.

c. As shown on the preliminary plans the entire proposed stormwater system might need to be private as public stormwater is to be separated from the management of private stormwater runoff and it is unclear from the materials submitted if this could be achieved with the proposed preliminary design.

d. If during the permit plan review process, it is determined that the proposed rain garden shown within Tract B containing the stream corridor will be a public facility, a separate tract will need to be created for the public facility.

A tract for any public facility must not contain any stream corridor, wetland, or similar encumbrances.

e. The responsibility for maintenance of private stormwater facilities or stormwater systems shall be the responsibility of a Homeowner's Association (HOA) or adjacent property owners.

f. A private stormwater facility maintenance agreement shall be required for any private stormwater facility or stormwater system. The private stormwater facility maintenance agreement shall be recorded as part of the final plat approval.

g. Utility designs and alignments, along with the stormwater management report, will be reviewed as part of the Public Improvement Permit.

21. Stormwater and Erosion Control:

a. The applicant will be required to obtain and submit a DEQ 1200-C permit prior to issuance of a public improvement permit.

b. The applicant will need to submit a final stormwater report and construction plans meeting the City's Public Works Design and Construction Standards and NMC 13.25 Stormwater Management requirements and obtain a Public Improvement Permit.

c. Utility designs and alignments will be reviewed as part of the Public Improvement Permit.

d. The final stormwater report and plans shall address erosion control downstream of the proposed stormwater outfalls within the stream corridor. Additional erosion control and stream corridor mitigation measures beyond that shown on the preliminary plans might be required as part of the permit plan review process.

22. Development Standards:

a. A final stormwater management report and construction plans meeting the City's Public Works Design and Construction Standards will be required as part of the public works improvement permit application. The applicant will need to demonstrate compliance with the facility selection hierarchy described in section 4.6.8 of the Public Works Design and Construction Standards.

b. As shown on the preliminary plans the entire proposed stormwater system might need to be private as public stormwater is to be separated from the management of private stormwater runoff and it is unclear from the materials submitted if this could be achieved with the proposed preliminary design.

c. A private stormwater facility maintenance agreement shall be required for any private stormwater facility or stormwater system. The private stormwater

facility maintenance agreement shall be recorded as part of the final plat approval.

d. Utility designs and alignments will be reviewed as part of the Public Improvement Permit.

C. The applicant must complete the following prior to final plat approval.

1. **Substantially Complete the Construction Improvements:** Prior to final plat approval, the applicant must substantially complete the construction improvements and secure for inspection with the Engineering Division (503-537-1273). In addition to those items listed below, the inspector will also be looking for completion of items such as sidewalks, street signs, streetlights, and fire hydrants.

ORS455.174 defines substantial completion as the completion of the:

a. Water supply system;
b. Fire hydrant system;
c. Sewage disposal system;
d. Storm water drainage system;
e. Curbs;
f. Demarcating of street signs acceptable for emergency responders; and
g. Roads necessary for access by emergency vehicles.

D. Final plat submission requirements and approval criteria: In accordance with NDC final plans showing utility easements will be required prior to submitting for building permits.15.235.070, final plats require review and approval by the director prior to recording with Yamhill County. The final plat submission requirements, approval criteria, and procedure are as follows:

1. Submission Requirements:

The applicant shall submit the final plat within two years, or as otherwise provided for in NMC 15.235.030. The format of the plat shall conform to ORS Chapter 92. The final plat application shall include the following items:

a. One original and one identical copy of the final plat for signature. The plat copies shall be printed on mylar, and must meet the requirements of the county recorder and county surveyor. The plat must contain a signature block for approval by the city recorder and community development director, in addition to other required signature blocks for county approval. Preliminary paper copies of the plat are acceptable for review at the time of final plat application.

b. Written response to any conditions of approval assigned to the land division.

c. A title report for the property, current within six months of the final plat application date.

d. Copies of any required dedications, easements, or other documents.

e. Copies of all homeowner's agreements, codes, covenants, and restrictions, or other bylaws, as applicable. This shall include documentation of the formation of a homeowner's association, including but not limited to a draft homeowner's association agreement regarding the maintenance of planter strips adjacent to the rear yard of proposed through lots.

f. Copies of any required maintenance agreements for common property.

g. A bond, as approved by the city engineer, for public infrastructure improvements, if the improvements are not substantially complete prior to the final plat.

h. Any other item required by the city to meet the conditions of approval assigned to the land division.

2. Approval Process and Criteria. By means of a Type I procedure, the director shall review and approve, or deny, the final plat application based on findings of compliance or noncompliance with the preliminary plat conditions of approval.

E. Filing and recording: In accordance with NMC 15.235.080, a new lot is not a legal lot for purposes of ownership (title), sale, lease, or development/land use until a final plat is recorded for the subdivision or partition containing the lot. The final plat filing and recording requirements are as follows:

1. Filing Plat with County. Within 60 days of the city approval of the final plat, the applicant shall submit the final plat to Yamhill County for signatures of county officials as required by ORS Chapter 92.

2. Proof of Recording. Upon final recording with the county, the applicant shall submit to the city a paper copy of all sheets of the recorded final plat. This shall occur prior to the issuance of building permits for the newly created lots.

3. Prerequisites to Recording the Plat.

a. No plat shall be recorded unless all ad valorem taxes and all special assessments, fees, or other charges required by law to be placed on the tax roll have been paid in the manner provided by ORS Chapter 92;

b. No plat shall be recorded until the county surveyor approves it in the manner provided by ORS Chapter 92.

Development Notes:

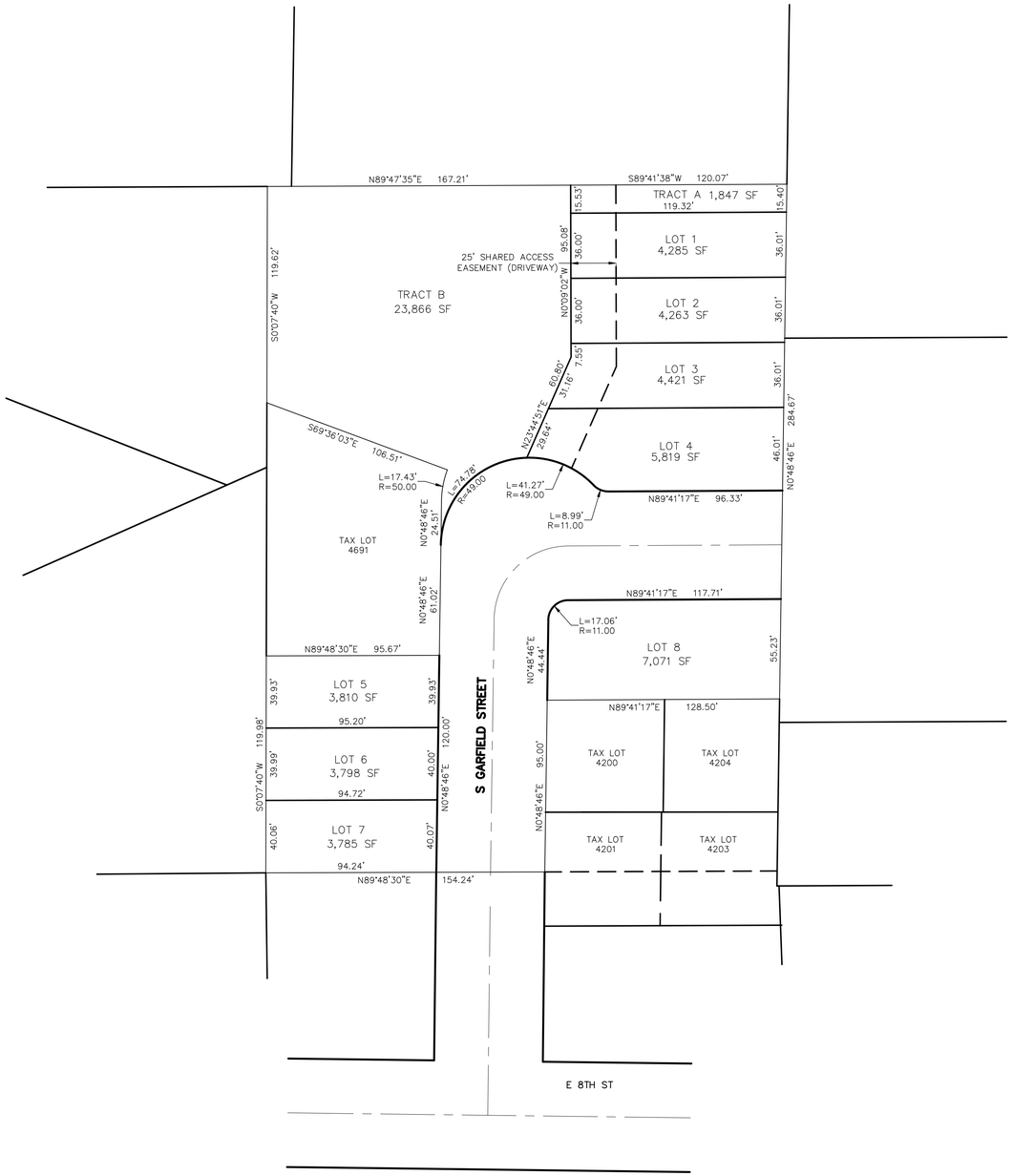
1. **Postal Service:** The applicant shall submit plans to the Newberg Postmaster for approval of proposed mailbox delivery locations. Contact the Newberg Post Office for assistance at 503-554-8014.

2. **PGE:** PGE can provide electrical service to the project under terms of the current tariff which will involve developer expense and easements. Contact the Service & Design Supervisor, PGE, at 503-463-4348.

3. **Ziply:** The developer must coordinate trench/conduit requirements with Ziply. Contact the Engineering Division, Ziply, at 541-269-3375.

4. **Addresses:** The Planning Division will assign address for the new subdivision. Planning Division staff will send out notice of the new address after they receive a recorded copy of the final subdivision plat.

Exhibit C:
Preliminary Plat



N

SCALE 1" = 40'

PRELIMINARY SUBDIVISION PLAT

100 S GARFIELD STREET

SE 1/4 SEC 19, T3S, R2W, W.M.

CITY OF NEWBERG
YAMHILL COUNTY, OREGON
JANUARY 30, 2023
DRAWN: DMR CHECKED: SPF
SCALE 1"=40' ACCOUNT #500-1106
Y:\500-1106\DWG\5001106PRELIM

CMT SURVEYING AND CONSULTING
20330 SE HIGHWAY 212
DAMASCUS, OR 97089
PHONE (503) 850-4672 FAX (503) 850-4590

DATE:	NO.	REVISION

DRAWN: | DESIGNED: | CHECKED:
SCALE: AS SHOWN | DATE: JANUARY 2023
PROJECT NO. E21-049

FIRWOOD DESIGN GROUP
359 EAST HISTORIC COLUMBIA RIVER HIGHWAY
TROUTDALE, OREGON 97060
BUS: (503) 668-3737 ✦ FAX: (503) 668-3788

SCOTT HOLDEN
100 S GARFIELD ST
NEWBERG, OR 97132

PRELIMINARY PLAT
8-LOT SUBDIVISION

Attachment 1:
Application

TYPE III APPLICATION (QUASI-JUDICIAL REVIEW)

File #: SUB322-0001

TYPES – PLEASE CHECK ONE:

- ☐ **Annexation**
- ☐ **Comprehensive Plan Amendment (site specific)**
- ☐ **Zoning Amendment (site specific)**
- ☐ **Historic Landmark Modification/alteration**
- ☐ **Conditional Use Permit**
- ☐ **Type III Major Modification**
- ☐ **Planned Unit Development**
- ☒ **Other: (Explain)** Subdivision in stream corridor

APPLICANT INFORMATION:

APPLICANT: Scott Holden
ADDRESS: 100 S. Garfield St., Newberg, OR 97132
EMAIL ADDRESS: Scottholden2007@outlook.com
PHONE: 503-502-8006 MOBILE: _____ FAX: _____
OWNER (if different from above): _____ PHONE: _____
ADDRESS: _____
ENGINEER/SURVEYOR: Kelli Grover PHONE: 503-668-3737
ADDRESS: 359 E Historic Columbia River Hwy, Troutdale, OR 97060

GENERAL INFORMATION:

PROJECT NAME: Garfield St. Partition PROJECT LOCATION: 100 S Garfield St., Newberg, OR 97132
PROJECT DESCRIPTION/USE: Create a 12 lot subdivision with new residences on each property.
MAP/TAX LOT NO. (i.e.3200AB-400): R3219DB 04690 ZONE: R-2 SITE SIZE: 1.95 SQ. FT. ☐ ACRE ☒
COMP PLAN DESIGNATION: _____ TOPOGRAPHY: _____
CURRENT USE: The lot currently contains a duplex
SURROUNDING USES:
NORTH: Unoccupied/Stream SOUTH: Residential
EAST: Business WEST: Residential/Stream

SPECIFIC PROJECT CRITERIA AND REQUIREMENTS ARE ATTACHED

General Checklist: ☐ Fees ☐ Public Notice Information ☐ Current Title Report ☐ Written Criteria Response ☐ Owner Signature

For detailed checklists, applicable criteria for the written criteria response, and number of copies per application type, turn to:

The above statements and information herein contained are in all respects true, complete, and correct to the best of my knowledge and belief. Tentative plans must substantially conform to all standards, regulations, and procedures officially adopted by the City of Newberg. All owners must sign the application or submit letters of consent. Incomplete or missing information may delay the approval process.

Scott Holden — Digitally signed by Scott Holden Date: 2022.09.16 12:22:21 -07'00'
Applicant Signature Date

Scott Holden — Digitally signed by Scott Holden Date: 2022.09.16 12:22:35 -07'00'
Owner Signature Date

Scott Holden
Print Name

Scott Holden
Print Name

Type III Application Narrative

Project Name: **Garfield St. Newberg Partition**
SUB322-0001

Site Address: 100 S Garfield St., Newberg, OR 97132

Prepared By:

359 E. Historic Columbia River Highway
Troutdale, OR 97060
503.668.3737- fax 503.668.3788

Table of Contents

I. Executive Summary

Location:
100 S Garfield St., Newberg, OR

Zoning:
R-2 Medium Density Residential

Site Size:
±1.95 acres

Legal Description:
3.2.19DB Tax Lot 4690

Applicant:
Scott Holden
100 S Garfield St., Newberg, OR 97132
Scottholden2007@outlook.com

Applicants Consultant:
Firwood Design Group LLC
359 E Historic Columbia River Hwy
Troutdale, OR 97060

Contact: Kelli Grover
Email: kg@firwooddesign.com
Phone: 503-668-3737

The applicant requests approval from the City of Newberg to divide the subject property into 8 residential lots. A preliminary plat and preliminary civil plans are provided that illustrate the proposed lot configurations, driveway approaches, utilities, stormwater management features, etc. The proposed improvements include extending S. Garfield Street with a full width section for 340 feet +/- with a ninety degree "eye brow" turn to a terminus at the north easterly side of the site.

This written narrative includes responses to the approval criteria demonstrating the applicant's compliance with the applicable criteria. The narrative is supported by additional information provided with this application including preliminary plans, supporting studies and documentation. The information presented herein provides the City with the supporting documentation in request for approval of the application.

II. Site Description/ Setting :

The subject site for this proposed subdivision is located at 100 S Garfield St., Newberg, OR 97132. It is tax lot 4690 on assessors map T3.R2.Sectio19 DB and ±1.95 acres in total size. The lot is located north of E 8th St., east of S Garfield St., south and west of E 7th St.

The property includes an existing duplex, unpaved road and driveway, open grass area, mature trees, and a stream. There are mature trees and stream to the north, a residence directly to the west of the property, a business to the east, and residential properties to the south.

III. Applicable Review Criteria:

Below is a list of the criteria addressed followed by detailed sections.

NMC 15.100
NMC 15.235
NMC 15.342
NMC 15 400
NMC 15 410
NMC 15 420
NMC 15 500

Chapter 15.100 Land Use Processes and Procedures

15.100.050 Type III procedure – Quasi-judicial hearing

A. All Type III decisions shall be heard and decided by the planning commission. The planning commission's decision shall be final unless the decision is appealed or the decision is a recommendation to the city council.

B. Type III actions include, but are not limited to:

1. An appeal of a Type I or Type II decision: This action of the planning commission is a final decision unless appealed to the city council.

2. Conditional use permits: This action is a final decision unless appealed.

3. Planned unit developments: This action is a final decision unless appealed.

4. Substantial change to the exterior appearance of a historic landmark: This action is final unless appealed.

5. Establishment of a historic landmark: This is a final decision by the planning commission, unless appealed.

6. Establishment of a historic landmark subdistrict: This is a recommendation to the city council.

7. Comprehensive plan map amendments: This action is a recommendation to the city council.

8. Zoning map amendments and designation of subdistricts: This action is a recommendation to the city council.

9. Annexation: This action is a recommendation to the city council.

10. Subdivisions with certain conditions requiring them to be processed using the Type III process, pursuant to NMC 15.235.030(A).

C. Planning Commission Decisions and Recommendation Actions.

1. Planning Commission Decision. Development actions shall be decided by the planning commission for those land use actions that require a Type III procedure and do not require the adoption of an ordinance. The decision shall be made after public notice and a public hearing is held in accordance with the requirements of NMC 15.100.090 et seq. A Type III decision may be appealed to the city council by a Type III affected party in accordance with NMC 15.100.160 et seq.

2. Planning Commission Recommendation to City Council. Land use actions that would require the adoption of an ordinance shall be referred to the city council by the planning commission together with the record and a recommendation. The recommendation shall be made after public notice and a public hearing is held in accordance with the requirements of NMC 15.100.090 et seq.

D. City Council Action. If a recommendation to the city council is required, the matter shall be reviewed by the city council as a new hearing. The final decision on these actions is made by the city council.

E. The applicant shall provide notice pursuant to NMC 15.100.200 et seq.

F. The hearing body may attach certain conditions necessary to ensure compliance with this code.

G. If the application is approved, the director shall issue a building permit when the applicant has complied with all of the conditions and other requirements of this code.

H. If a Type III application is denied, or if the applicant wishes to make substantive modifications to an approved application, the applicant may modify the application after the planning commission hearing and request a new planning commission hearing to consider the application. An application so modified shall be considered a new application for purposes of the 120-day time limit for processing applications in accordance with NMC 15.100.100 and state statutes. The applicant shall acknowledge in writing that this is a new application for purposes of the 120-day rule. The city council shall establish a fee for such a reconsideration or modification by resolution. Application of this provision is limited to three times during a continuous calendar year.

Response: This project falls under a Type III procedure due to the stream corridor overlay.

15.100.210 Mailed notice

B. Type II and Type III Actions. The applicant shall provide public notice to:

1. The owner of the site for which the application is made; and

2. Owners of property within 500 feet of the entire site for which the application is made. The list shall be compiled from the most recent property tax assessment roll. For purposes of review, this requirement shall be deemed met when the applicant can provide an affidavit or other certification that such notice was deposited in the mail or personally delivered.

3. To the owner of a public use airport, subject to the provisions ofORS 215.416 or 227.175.

C. The director may request that the applicant provide notice to people other than those required in this section if the director believes they are affected or otherwise represent an interest that may be affected by the proposed development. This includes, but is not limited to, neighborhood associations, other governmental agencies, or other parties the director believes may be affected by the decision.

Response: The applicant will mail notices upon notification of planning commission hearing date.

D. The director shall provide the applicant with the following information regarding the mailing of notice:

1. The latest date by which the notice must be mailed;

2. An affidavit of mailing (to be signed and returned) certifying that the notice was mailed, acknowledging that a failure to mail the notice in a timely manner constitutes an agreement by the applicant to defer the 120-day process limit and acknowledging that failure to mail will result in the automatic postponement of a decision on the application; and

3. A sample notice.

Response: Applicant acknowledges this process and will adhere to the requirements.

E. The notice of a Type II and Type III development application shall be reasonably calculated to give actual notice and shall:

1. Set forth the street address or other easily understood geographical reference to the subject property;

2. List, by commonly used citation, the applicable criteria for the decision;

3. Include the name and phone number of a local government contact person, the telephone number where additional information may be obtained and where information may be examined;

4. Explain the nature of the application and the proposed use or uses which could be authorized;

5. State that a copy of the application, all documents and evidence relied upon by the applicant and applicable criteria are available for inspection at no cost and will be provided at a reasonable cost.

Response: Not applicable

F. Prior to mailing or posting any notice required by this code, the applicant shall submit a copy of the notice to the director.

[...]

H. The applicant shall mail the notice for Type III actions at least 20 days before the first new hearing, or if two or more new hearings are allowed, 10 days before the first new hearing. The applicant shall file with the director an affidavit of mailing as identified in subsection (D) of this section within two business days after notice is mailed.

Response: Applicant acknowledges this process and will adhere to the requirements

I. All public notices shall be deemed to have been provided or received upon the date the notice is deposited in the mail or personally delivered, whichever occurs first. The failure of a property owner to receive notice shall not invalidate an action if a good faith attempt was made to notify all persons entitled to notice. An affidavit of mailing issued by the person conducting the mailing shall be conclusive evidence of a good faith attempt to contact all persons listed in the affidavit.

J. Failure to mail the notice and affirm that the mailing was completed in conformance with the code shall result in:

1. Postponement of a decision until the mailing requirements have been met; or

2. Postponement of the hearing to the next regularly scheduled meeting or to such other meeting as may be available for the hearing; or

3. The entire process being invalidated; or

4. Denial of the application.

Response: Applicant acknowledges this process and will adhere to the requirements

15.100.230 Additional notice procedures for Type III quasi-judicial hearing.

In addition to the requirements of NMC 15.100.210, mailed notice for Type III development actions shall also contain the following:

A. State that an issue which may be the basis for an appeal to the Land Use Board of Appeals shall be raised not later than the close of the record at or following the final new hearing on the proposal before the city. Such issues shall be raised with sufficient specificity so as to afford the hearing body and the parties an adequate opportunity to respond to each issue;

B. State the date, time and location of the hearing;

C. State that the failure of an issue to be raised in a hearing, in person or by letter, or failure to provide sufficient specificity to afford the hearing body an opportunity to respond to the issue may preclude appeal to the Land Use Board of Appeals on that issue;

D. State that a copy of the staff report will be available for inspection at no cost at least seven calendar days prior to the hearing and will be provided at reasonable cost;

E. Include a general explanation of the requirements for submission of testimony and the procedure for conduct of hearings.

Response: Applicant acknowledges this process and will adhere to the requirements

15.100.270 Procedure for published notice on Type III and Type IV procedures.

A. Notice shall be provided within a newspaper of general circulation within the city at least 10 days prior to the first public hearing on the action

B. The notice shall reasonably describe:

1. Type III Proceedings. The proposed development permit request, location, file number, the name and phone number of a local government contact person and the location where information may be examined.

[...]

C. The notice shall include a statement that all interested persons may appear and provide testimony and that only those persons who participate either orally or in writing in the hearing proceedings leading to the adoption of the action may appeal the decision.

D. The notice shall state the place, date and time of the hearing.

E. See NMC 15.100.240 for Type III notice for annexations.

Response: Applicant acknowledges this process and will adhere to the requirements

Chapter 15.235 Land Divisions

15.235.020 General requirements.

A. Subdivision and Partition Approval through a Two-Step Process. Applications for subdivision or partition approval shall be processed by means of a preliminary plat evaluation and a final plat evaluation, according to the following two steps:

1. The preliminary plat must be approved before the final plat can be submitted for approval consideration; and

2. The final plat must demonstrate compliance with all conditions of approval of the preliminary plat.

Response: Applicant acknowledges this process and will adhere to the requirements

[...]

C. Compliance with ORS Chapter 92. All subdivision and partition proposals shall conform to state regulations in ORS Chapter 92, Subdivisions and Partitions.

D. Adequate Utilities. All lots created through land division shall have adequate public utilities and facilities such as streets, water, wastewater, gas, and electrical systems, pursuant to Chapters 15.430 and 15.505 NMC.

E. Adequate Drainage. All subdivision and partition proposals shall have adequate surface water drainage facilities that reduce exposure to flood damage and improve water quality. Water quality or quantity control improvements may be required, pursuant to NMC 15.505.050.

F. Adequate Access. All lots created or reconfigured shall have adequate vehicle access and parking, as may be required, pursuant to Chapter 15.440 NMC and NMC 15.505.030.

Response: Applicant acknowledges this process and will adhere to the requirements

15.235.050 Preliminary plat approval criteria.

A. Approval Criteria. By means of a Type II procedure for a partition, or a Type II or III procedure for a subdivision per NMC 15.235.030(A), the applicable review body shall approve, approve with conditions, or deny an application for a preliminary plat. The decision shall be based on findings of compliance with all of the following approval criteria:

1. The land division application shall conform to the requirements of this chapter;

2. All proposed lots, blocks, and proposed land uses shall conform to the applicable provisions of NMC Division 15.400, Development Standards;

Response: SEE DETAILED 15.400 CODE RESPONSES BELOW

3. Access to individual lots, and public improvements necessary to serve the development, including but not limited to water, wastewater, stormwater, and streets, shall conform to NMC Division 15.500, Public Improvement Standards;

Response: SEE DETAILED 15.500 CODE RESPONSES BELOW

4. The proposed plat name is not already recorded for another subdivision, and satisfies the provisions of ORS Chapter 92;

Response: A Plat name has not been decided upon at this time but will be provided for approval prior to final plat review.

5. The proposed streets, utilities, and stormwater facilities are adequate to serve the proposed development at adopted level of service standards, conform to city of Newberg adopted master plans and applicable Newberg public works design and construction standards, and allow for transitions to existing and potential future development on adjacent lands. The preliminary plat shall identify all proposed public improvements and dedications;

Response: The proposed streets, utilities and stormwater facilities are adequate and meet adopted level of service standards.

6. All proposed private common areas and improvements, if any, are identified on the preliminary plat and maintenance of such areas is assured through the appropriate legal instrument;

Response: Proposed common areas such as private access areas will have a maintenance agreement assured through recording and plat reference.

7. Evidence that any required state and federal permits, as applicable, have been obtained or can reasonably be obtained prior to development; and

Response: The applicant is not aware of any state or federal permits that apply to this application.

8. Evidence that improvements or conditions required by the city, road authority, Yamhill County, special districts, utilities, and/or other service providers, as applicable to the project, have been or can be met.

Response: All required approvals and permits from City or other agency or jurisdiction will be secured and approvals will be provided to the City as necessary.

15.235.070 Final plat submission requirements and approval criteria.

Final plats require review and approval by the director prior to recording with Yamhill County. The final plat submission requirements, approval criteria, and procedure are as follows:

A. Submission Requirements. The applicant shall submit the final plat within two years, or as otherwise provided for in NMC 15.235.030. The format of the plat shall conform to ORS Chapter 92. The final plat application shall include the following items:

1. One original and one identical copy of the final plat for signature. The plat copies shall be printed on mylar, and must meet the requirements of the county recorder and county surveyor. The plat must contain a signature block

for approval by the city recorder and community development director, in addition to other required signature blocks for county approval. Preliminary paper copies of the plat are acceptable for review at the time of final plat application.

2. Written response to any conditions of approval assigned to the land division.

3. A title report for the property, current within six months of the final plat application date.

4. Copies of any required dedications, easements, or other documents.

5. Copies of all homeowner's agreements, codes, covenants, and restrictions, or other bylaws, as applicable. This shall include documentation of the formation of a homeowner's association, including but not limited to a draft homeowner's association agreement regarding the maintenance of planter strips adjacent to the rear yard of proposed through lots.

6. Copies of any required maintenance agreements for common property.

7. A bond, as approved by the city engineer, for public infrastructure improvements, if the improvements are not substantially complete prior to the final plat.

8. Any other item required by the city to meet the conditions of approval assigned to the land division.

Response: A final plat conforming to the aforementioned standards will be submitted for approval.

Chapter 15.342 STREAM CORRIDOR OVERLAY (SC) SUBDISTRICT
15.342.090 Mitigation requirements for Type II activities.

The following mitigation requirements apply to Type II activities. The plans required pursuant to NMC 15.342.080 shall be submitted indicating the following mitigation requirements will be met.

A. Disturbed areas, other than authorized improvements, shall be regraded and contoured to appear natural. All fill material shall be native soil. Native soil may include soil associations commonly found within the vicinity, as identified from USDA Soil Conservation Service, Soil Survey of Yamhill Area, Oregon.

B. Replanting shall be required using a combination of trees, shrubs and grass. Species shall be selected from the Newberg native plant list. Planting shall be as follows:

1. At least eight species of plants shall be used.

2. At least two species must be trees and two species must be shrubs.

3. No more than 50 percent of any seed mix used can be grass.

4. A minimum of one tree and three shrubs shall be used for every 500 square feet of planting area.

5. Areas to be replanted must be completed at the time of final inspection or completion of the work, except as otherwise allowed by this code.

6. Existing vegetation that can be saved and replanted is encouraged, although not required.

RESPONSE: All disturbed areas for construction of proposed stormwater facilities will be replanted according to this criteria. See sheet 6, Mitigation and Replanting Plan in the preliminary plan set.

C. Removed trees over six inches in diameter, as measured at breast height, shall be replaced as follows:

1. Trees from six to 18 inches in diameter shall be replaced with a minimum of three new trees for every tree removed.

2. Trees over 18 inches but less than 30 inches shall be replaced with a minimum of five trees for every tree removed.

3. Trees over 30 inches shall be replaced with a minimum of eight trees for every tree removed.

4. All trees replaced pursuant to this section shall have an average caliper measurement of a minimum of one inch. Additional trees of any size caliper may be used to further enhance the mitigation site.

RESPONSE: The applicant will adhere to this criteria.

D. All disturbed areas, other than authorized improvements, shall be replanted to achieve 90 percent cover in one year. The director may require a bond or other form of security instrument to insure completion of the restoration plan. The director shall authorize the release of the bond or other security instrument when, after one year, the restoration site has achieved the purposes and standards of this section.

RESPONSE: See sheet 6, Mitigation and Replanting Plan in the preliminary plan set, and the erosion control plans.

> E. All disturbed areas shall be protected with erosion control devices prior to construction activity. The erosion control devices shall remain in place until 90 percent cover is achieved.

RESPONSE: The applicant will adhere to this criteria.

Division 15.400 Development Standards

Chapter 15.405 LOT REQUIREMENTS

15.405.010 Lot area – Lot areas per dwelling unit.

> A. In the following districts, each lot or development site shall have an area as shown below except as otherwise permitted by this code:
>
> > 1. In the R-1, R-2, R-3, R-P and AR districts, the following minimum lot area standards apply:

Zone	Minimum lot area for single family	Minimum lot area for duplex dwelling	Minimum lot area for triplex dwelling	Minimum lot area for quadplex dwelling	Minimum lot area for townhouse	Minimum lot area for cottage cluster	Minimum lot area per dwelling unit for multifamily
R-1	5,000 SF	5,000 SF	5,000 SF	7,000 SF	1,500 SF	7,000 SF	Per conditional use review
R-2	3,000 SF	3,000 SF	5,000 SF	7,000 SF	1,500 SF	7,000 SF	3,000 SF
R-3	2,500 SF	2,500 SF	4,500 SF	6,000 SF	1,500 SF	6,000 SF	1,500 SF
R-P	3,000 SF	3,000 SF	5,000 SF	7,000 SF	1,500 SF	7,000 SF	3,000 SF
AR	5,000 SF	5,000 SF	5,000 SF	7,000 SF	1,500 SF	7,000 SF	—

> [...]
>
> B. Maximum Lot or Development Site Area per Dwelling Unit.
>
> [...]
>
> > 2. In the R-2 and R-P districts, the average size of lots in a subdivision intended for single-family development shall not exceed 5,000 square feet.

3. In the R-2, AR and R-P districts, lots or development sites in excess of 15,000 square feet used for multiple single-family, duplex, triplex, quadplex, multifamily dwellings or cottage cluster projects shall be developed at a minimum of one dwelling per 5,000 square feet lot area.

[...]

C. In calculating lot area for this section, lot area does not include land within public or private streets. In calculating lot area for maximum lot area/minimum density requirements, lot area does not include land within stream corridors, land reserved for public parks or open spaces, commons buildings, land for preservation of natural, scenic, or historic resources, land on slopes exceeding 15 percent or for avoidance of identified natural hazards, land in shared access easements, public walkways, or entirely used for utilities, land held in reserve in accordance with a future development plan, or land for uses not appurtenant to the residence.

D. Lot size averaging is allowed for any subdivision. Some lots may be under the minimum lot size required in the zone where the subdivision is located, as long as the average size of all lots is at least the minimum lot size.

Response: The average lot size for the eight lot subdivision is 4656.50, therefore this criteria is met.

LOT	1	4285
LOT	2	4263
LOT	3	4421
LOT	4	5819
LOT	5	3810
LOT	6	3798
LOT	7	3785
LOT	8	7071
	AVERAGE	4656.5

15.405.030 Lot dimensions and frontage.

A. Width. Widths of lots shall conform to the standards of this code.

B. Depth to Width Ratio. Each lot and parcel shall have an average depth between the front and rear lines of not more than two and one-half times the average width between the side lines. Depths of lots shall conform to the standards of this code. Development of lots under 15,000 square feet are exempt from the lot depth to width ratio requirement.

Response: The proposed lots are under 15,000 square feet therefore this criteria does not apply.

C. Area. Lot sizes shall conform to standards set forth in this code. Lot area calculations shall not include area contained in public or private streets as defined by this code.

D. Frontage.

1. No lot or development site shall have less than the following lot frontage standards:

a. Each lot or development site shall have either frontage on a public street for a distance of at least 25 feet or have access to a public street through an easement that is at least 25 feet wide. No new private streets, as defined in NMC 15.05.030, shall be created to provide frontage or access except as allowed by NMC 15.240.020(L)(2).

b. Each lot in R-2 zone shall have a minimum width of 25 feet at the front building line and R-3 zone shall have a minimum width of 30 feet at the front building line, except that duplex, triplex, quadplex and cottage cluster project lots in the R-3 zone shall have a minimum width of 25 feet at the front building line.

[...]

2. The above standards apply with the following exceptions:

[...]

b. Legally created lots of record in existence prior to the effective date of the ordinance codified in this code.

c. Lots or development sites which, as a process of their creation, were approved with sub-standard widths in accordance with provisions of this code.

d. Existing private streets may not be used for new dwelling units, except private streets that were created prior to March 1, 1999, including paving to fire access roads standards and installation of necessary utilities, and private streets allowed in the airport residential and airport industrial districts. However, existing single-family detached dwellings on existing private streets may be converted to duplex, triplex, or quadplex dwellings.

Response: Each lot has a minimum 25 ft frontage either on a public street or a private access.

15.405.040 Lot coverage and parking coverage requirements.

A. Purpose. The lot coverage and parking coverage requirements below are intended to:

1. Limit the amount of impervious surface and storm drain runoff on residential lots.

2. Provide open space and recreational space on the same lot for occupants of that lot.

3. Limit the bulk of residential development to that appropriate in the applicable zone.

B. Residential uses in residential zones shall meet the following maximum lot coverage and parking coverage standards; however, cottage cluster projects shall be exempt from the standards. See the definitions in NMC 15.05.030 and Appendix A, Figure 4.

1. Maximum Lot Coverage.

[...]

b. R-2 and RP: 60 percent.

[...]

2. Maximum Parking Coverage. R-1, R-2, R-3, and RP: 30 percent.

3. Combined Maximum Lot and Parking Coverage.

[...]

b. R-2, R-3, RP and townhouse dwellings in R-1: 70 percent.

[...]

Response: The future structures will adhere to the lot coverage requirements, this criteria can be satisfied through condition.

Chapter 15.410 YARD SETBACK REQUIREMENTS

15.410.010 General yard regulations.

A. No yard or open space provided around any building for the purpose of complying with the provisions of this code shall be considered as providing a yard or open space for any other building.

B. No yard or open space on adjoining property shall be considered as providing required yard or open space for another lot or development site under the provisions of this code.

C. No front yards provided around any building for the purpose of complying with the regulations of this code shall be used for public or private parking areas or garages, or other accessory buildings, except as specifically provided elsewhere in this code.

D. When the common property line separating two or more contiguous lots is covered by a building or a permitted group of buildings with respect to such common property line or lines does not fully conform to the required yard spaces on each side of such common property line or lines, such lots shall constitute a single development site and the yards as required by this code shall then not apply to such common property lines.

E. Dwellings Where Permitted above Nonresidential Buildings. The front and interior yard requirements for residential uses shall not be applicable; provided, that all yard requirements for the district in which such building is located are complied with.

[...]

Response: The applicant will adhere to this standard, this criteria can be satisfied through condition of approval.

15.410.020 Front yard setback.

A. Residential (see Appendix A, Figure 10).

1. AR, R-1 and R-2 districts shall have a front yard of not less than 15 feet. Said yard shall be landscaped and maintained.

[...]

3. The entrance to a garage or carport, whether or not attached to a dwelling, shall be set back at least 20 feet from the nearest property line of the street to which access will be provided. However, the foregoing setback requirement shall not apply where the garage or carport will be provided with access to an alley only.

[...]

Response: The applicant will adhere to this standard for the new lots. There is an existing duplex dwelling that will require an exception to the 20ft garage setback. The 15ft to the face of the house is met, however because the house is constructed with the garage along the same face of the house and no articulation between the house and the garage the applicant requests for an exception to this setback requirement.

15.410.030 Interior yard setback

A. Residential.

1. All lots or development sites in the AR, R-1, R-2 and R-3 districts shall have interior yards of not less than five feet, except that where a utility easement is recorded adjacent to a side lot line, there shall be a side yard no less than the width of the easement.

[...]

Response: The applicant will adhere to this standard, this criteria can be satisfied through condition of approval.

Chapter 15.415 BUILDING AND SITE DESIGN STANDARDS

15.415.010 Main buildings and uses as accessory buildings.

A. Hereinafter, any building which is the only building on a lot is a main building.

B. In any residential district except RP, there shall be only one main use per lot or development site; provided, that home occupations shall be allowed where permitted.

C. In any residential district, there shall be no more than two accessory buildings on any lot or development site.

Response: The applicant will adhere to this standard, this criteria can be satisfied through condition of approval.

15.415.020 Building height limitation.

A. Residential.

[...]

2. In the R-2, AR, and RP districts, no main building shall exceed 35 feet in height.

[...]

4. Accessory buildings in the R-1, R-2, R-3, AR, and RP districts are limited to 16 feet in height, except as follows:

[...]

C. The maximum height of buildings and uses permitted conditionally shall be stated in the conditional use permits.

Response: The future building structure will adhere to this standard, this criteria can be satisfied through condition of approval.

15.415.040 Public access required.

No building or structure shall be erected or altered except on a lot fronting or abutting on a public street or having access to a public street over a private street or easement of record approved in accordance with provisions contained in this code.

Response: All proposed lots are fronting a public street except lots 1, 2 & 3 which access a public street via a private access easement. This criteria is met.

Response:

Chapter 15.430 UNDERGROUND UTILITY INSTALLATION

A. All new utility lines, including but not limited to electric, communication, natural gas, and cable television transmission lines, shall be placed underground. This does not include surface-mounted transformers, connections boxes, meter cabinets, service cabinets, temporary facilities during construction, and high-capacity electric lines operating at 50,000 volts or above.

B. Existing utility lines shall be placed underground when they are relocated, or when an addition or remodel requiring a Type II design review is proposed, or when a developed area is annexed to the city.

C. The director may make exceptions to the requirement to underground utilities based on one or more of the following criteria:

1. The cost of undergrounding the utility is extraordinarily expensive.

2. There are physical factors that make undergrounding extraordinarily difficult.

3. Existing utility facilities in the area are primarily overhead and are unlikely to be changed.

Response: The applicant will adhere to this standard, this criteria can be satisfied through condition of approval.

Chapter 15.440 OFF-STREET PARKING, BICYCLE PARKING, AND PRIVATE WALKWAYS

15.440.010 Required off-street parking

A. Off-street parking shall be provided on the lot or development site for all R-1, C-1, M-1, M-2 and M-3 zones. In all other zones, the required parking shall be on the lot or development site or within 400 feet of the lot or development site which the parking is required to serve. All required parking must be under the same ownership as the lot or development site served except through special covenant agreements as approved by the city attorney, which bind the parking to the lot or development site.

1. In cases where the applicant is proposing off-street parking, refer to subsection (F) of this section for the maximum number of parking spaces.

[...]

F. Maximum Number of Off-Street Automobile Parking Spaces. The maximum number of off-street automobile parking spaces allowed per site equals the minimum number of required spaces, pursuant to NMC 15.440.030, multiplied by a factor of:

1. One and one-fifth spaces for uses fronting a street with adjacent on-street parking spaces; or

2. One and one-half spaces for uses fronting no street with adjacent on-street parking; or

3. A factor determined according to a parking analysis.

Response: Off-street parking is provided via one car in each garage and one car in each driveway. This criteria is satisfied.

15.440.030 Parking spaces required.

Use	Minimum Parking Spaces Required
Dwelling, duplex	1 for each dwelling unit

Dwelling, triplex	1 for each dwelling unit, Except that conversion of a detached single-family dwelling to a triplex dwelling shall not be subject to this requirement

Notes:

* "1-E" refers to fraternities, sororities, cooperatives and dormitories that require one parking space for each three occupants for whom sleeping facilities are provided.

** "3.-G(1)" refers to establishments or enterprises of a recreational or an entertainment nature (spectator type, e.g., auditoriums, assembly halls, theaters, stadiums, places of public assembly) that require one parking space for each four seats.

Response: Off-street parking is provided via one car in each garage and one car in each driveway. This criteria is satisfied

15.440.075 Residential garage standards.

A. Single-car garages for residential uses shall have a minimum inside width of 10 feet by 20 feet.

B. Two-car garages for residential uses shall have a minimum inside width of 20 feet by 20 feet.

C. Three-car garages for residential uses shall have a minimum inside width of 30 feet by 20 feet.

Response: The future building structure will adhere to this standard, this criteria can be satisfied through condition of approval.

Chapter 15.505 PUBLIC IMPROVEMENTS STANDARDS

15.505.030 Street standards.

A. Purpose. The purpose of this section is to:

1. Provide for safe, efficient, and convenient multi-modal transportation within the City of Newberg.

2. Provide adequate access to all proposed and anticipated developments in the City of Newberg. For purposes of this section, "adequate access" means direct routes of travel between destinations; such destinations may include residential neighborhoods, parks, schools, shopping areas, and employment centers.

3. Provide adequate area in all public rights-of-way for sidewalks, wastewater and water lines, stormwater facilities, natural gas lines, power lines, and other utilities commonly and appropriately placed in such rights-of-way. For purposes of this section, "adequate area" means space sufficient to provide all required public services to standards defined in this code and in the Newberg public works design and construction standards.

B. Applicability. The provisions of this section apply to:

1. The creation, dedication, and/or construction of all public streets, bike facilities, or pedestrian facilities in all subdivisions, partitions, or other developments in the City of Newberg.

2. The extension or widening of existing public street rights-of-way, easements, or street improvements including those which may be proposed by an individual or the city, or which may be required by the city in association with other development approvals.

3. The construction or modification of any utilities, pedestrian facilities, or bike facilities in public rights-of-way or easements.

4. The designation of planter strips. Street trees are required subject to Chapter 15.420 NMC.

Response: The proposed project will extend Garfield Street therefore this section applies.

5. Developments outside the city that tie into or take access from city streets.

C. Layout of Streets, Alleys, Bikeways, and Walkways. Streets, alleys, bikeways, and walkways shall be laid out and constructed as shown in the Newberg transportation system plan. In areas where the transportation system plan or future street plans do not show specific transportation improvements, roads and streets shall be laid out so as to conform to previously approved subdivisions, partitions, and other developments for adjoining properties, unless it is found in the public interest to modify these patterns. Transportation improvements shall conform to the standards within the Newberg Municipal Code, the Newberg public works design and construction standards, the Newberg transportation system plan, and other adopted city plans.

D. Construction of New Streets. Where new streets are necessary to serve a new development, subdivision, or partition, right-of-way dedication and full street improvements shall be required. Three-quarter streets may be approved in lieu of full street improvements when the city finds it to be practical to require the completion of the other one-quarter street improvement when the adjoining property is developed; in such cases, three-quarter street improvements may be allowed by the city only where all of the following criteria are met:

1. The land abutting the opposite side of the new street is undeveloped and not part of the new development; and

2. The adjoining land abutting the opposite side of the street is within the city limits and the urban growth boundary.

Response: The proposed street improvements conform to the City standards. This criteria is satisfied.

[...]

G. Street Width and Design Standards.

1. Design Standards. All streets shall conform with the standards contained in Table 15.505.030(G). Where a range of values is listed, the director shall determine the width based on a consideration of the total street section width needed, existing street widths, and existing development patterns. Preference

shall be given to the higher value. Where values may be modified by the director, the overall width shall be determined using the standards under subsections (G)(2) through (10) of this section.

Table 15.505.030(G) Street Design Standards

Type of Street	Right-of-Way Width	Curb-to-Curb Pavement Width	Motor Vehicle Travel Lanes	Median Type	Striped Bike Lane (Both Sides)	On-Street Parking
Arterial Streets						
Major arterial	95 – 100 feet	74 feet	4 lanes	TWLTL or median*	Yes	No*
Minor arterial	69 – 80 feet	48 feet	2 lanes	TWLTL or median*	Yes	No*
Collectors						
Major	57 – 80 feet	36 feet	2 lanes	None*	Yes	No*
Minor	61 – 65 feet	40 feet	2 lanes	None*	Yes*	Yes*
Local Streets						
Local residential	54 – 60 feet	32 feet	2 lanes	None	No	Yes
Limited residential, parking both sides	44 – 50 feet	28 feet	2 lanes	None	No	Yes
Limited residential, parking one side	40 – 46 feet	26 feet	2 lanes	None	No	One side

2. Motor Vehicle Travel Lanes. Collector and arterial streets shall have a minimum width of 12 feet.

a. Exception.
i. Minimum lane width of 11 feet along S River Street from E First Street to E Fourteenth Street.

Response: The proposed street improvements conform to the Local residential street design standards. This criteria is satisfied.

3. Bike Lanes. Striped bike lanes shall be a minimum of six feet wide. Bike lanes shall be provided where shown in the Newberg transportation system plan.

a. Exception.
i. Minimum striped bike lane width of six feet with a one-foot wide buffer along S River Street from E First Street to the bypass.

Response: this criteria is not applicable for a local residential street.

4. Parking Lanes. Where on-street parking is allowed on collector and arterial streets, the parking lane shall be a minimum of eight feet wide.

a. Exception.
i. Minimum parking lane width of seven feet along S River Street from the bypass to E Fourteenth Street.

Response: Parking lanes on each side of the street improvements are proposed, this criteria is satisfied.

5. Center Turn Lanes. Where a center turn lane is provided, it shall be a minimum of 12 feet wide.

Response: this criteria is not applicable for a local residential street.

6. Limited Residential Streets. Limited residential streets shall be allowed only at the discretion of the review authority, and only in consideration of the following factors:

a. The requirements of the fire chief shall be followed.

b. The estimated traffic volume on the street is low, and in no case more than 600 average daily trips.

c. Use for through streets or looped streets is preferred over cul-de-sac streets.

d. Use for short blocks (under 400 feet) is preferred over longer blocks.

e. The total number of residences or other uses accessing the street in that block is small, and in no case more than 30 residences.

f. On-street parking usage is limited, such as by providing ample off-street parking, or by staggering driveways so there are few areas where parking is allowable on both sides.

Response: The street adheres to the short block criteria and falls under the limited residential street criteria. This standard can be satisfied through condition.

7. Sidewalks. Sidewalks shall be provided on both sides of all public streets. Minimum width is five feet.

a. Exception.
i. Twelve-foot-wide sidewalks, inclusive of the curb, with tree wells along S River Street from the bypass to E Fourteenth Street.
ii. Twelve-foot-wide shared-use path and four-foot buffer, inclusive of the curb, with tree wells along the east side of S River Street from the bypass to E Fourteenth Street.

Response: 5ft sidewalks are proposed along the subject parcel frontage, this criteria is satisfied.

8. Planter Strips. Except where infeasible, a planter strip shall be provided between the sidewalk and the curb line, with a minimum width of five feet. This strip shall be landscaped in accordance with the standards in NMC 15.420.020.

Curb-side sidewalks may be allowed on limited residential streets. Where curb-side sidewalks are allowed, the following shall be provided:

a. Additional reinforcement is done to the sidewalk section at corners.

b. Sidewalk width is six feet.

Response: 5.5ft planter strips are proposed along the subject parcel frontage, this criteria is satisfied.

9. Slope Easements. Slope easements shall be provided adjacent to the street where required to maintain the stability of the street.

Response: Not applicable

10. Intersections and Street Design. The street design standards in the Newberg public works design and construction standards shall apply to all public streets, alleys, bike facilities, and sidewalks in the city.

Response: The street design standards are adhered to, this criteria is satisfied.

11. The planning commission may approve modifications to street standards for the purpose of ingress or egress to a minimum of three and a maximum of six lots through a conditional use permit.

H. Modification of Street Right-of-Way and Improvement Width. The director, pursuant to the Type II review procedures of Chapter 15.220 NMC, may allow modification to the public street standards of subsection (G) of this section, when the criteria in both subsections (H)(1) and (2) of this section are satisfied:

1. The modification is necessary to provide design flexibility in instances where:

a. Unusual topographic conditions require a reduced width or grade separation of improved surfaces; or

b. Lot shape or configuration precludes accessing a proposed development with a street which meets the full standards of this section; or

c. A modification is necessary to preserve trees or other natural features determined by the city to be significant to the aesthetic character of the area; or

d. A planned unit development is proposed and the modification of street standards is necessary to provide greater privacy or aesthetic quality to the development.

2. Modification of the standards of this section shall only be approved if the director finds that the specific design proposed provides adequate vehicular access based on anticipated traffic volumes.

Response:. No modification requests are necessary, improvements will adhere to City road standards.

I. Temporary Turnarounds. Where a street will be extended as part of a future phase of a development, or as part of development of an abutting property, the street may be terminated with a temporary turnaround in lieu of a standard street connection or circular cul-de-sac bulb. The director and fire chief shall approve the temporary turnaround. It shall have an all-weather surface and may include a hammerhead-type turnaround meeting fire apparatus access road standards, a paved or graveled circular turnaround, or a paved or graveled temporary access road. For streets extending less than 150 feet and/or with no significant access, the director may approve the street without a temporary turnaround. Easements or right-of-way may be required as necessary to preserve access to the turnaround.

Response: Not applicable.

J. Topography. The layout of streets shall give suitable recognition to surrounding topographical conditions in accordance with the purpose of this code.

Response: This criterial is adhered to.

K. Future Extension of Streets. All new streets required for a subdivision, partition, or a project requiring site design review shall be constructed to be “to and through”: through the development and to the edges of the project site to serve adjacent properties for future development.

Response: Not applicable.

L. Cul-de-Sacs.

1. Cul-de-sacs shall only be permitted when one or more of the circumstances listed in this section exist. When cul-de-sacs are justified, public walkway connections shall be provided wherever practical to connect with another street, walkway, school, or similar destination.

a. Physical or topographic conditions make a street connection impracticable. These conditions include but are not limited to controlled access streets, railroads, steep slopes, wetlands, or water bodies where a connection could not be reasonably made.

b. Buildings or other existing development on adjacent lands physically preclude a connection now or in the future, considering the potential for redevelopment.

c. Where streets or accessways would violate provisions of leases, easements, or similar restrictions.

d. Where the streets or accessways abut the urban growth boundary and rural resource land in farm or forest use, except where the adjoining land is designated as an urban reserve area.

2. Cul-de-sacs shall be no more than 400 feet long (measured from the centerline of the intersection to the radius point of the bulb).

3. Cul-de-sacs shall not serve more than 18 single-family dwellings.

Each cul-de-sac shall have a circular end with a minimum diameter of 96 feet, curb-to-curb, within a 109-foot minimum diameter right-of-way. For residential uses, a 35-foot radius may be allowed if the street has no parking, a mountable curb, curbside sidewalks, and sprinkler systems in every building along the street.

Response: Not applicable

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M. Street Names and Street Signs. Streets that are in alignment with existing named streets shall bear the names of such existing streets. Names for new streets not in alignment with existing streets are subject to approval by the director and the fire chief and shall not unnecessarily duplicate or resemble the name of any existing or platted street in the city. It shall be the responsibility of the land divider to provide street signs.

Response: Not applicable

N. Platting Standards for Alleys.

1. An alley may be required to be dedicated and constructed to provide adequate access for a development, as deemed necessary by the director.

2. The right-of-way width and paving design for alleys shall be not less than 20 feet wide. Slope easements shall be dedicated in accordance with specifications adopted by the city council under NMC 15.505.010 et seq.

3. Where two alleys intersect, 10-foot corner cut-offs shall be provided.

4. Unless otherwise approved by the city engineer where topographical conditions will not reasonably permit, grades shall not exceed 12 percent on alleys, and centerline radii on curves shall be not less than 100 feet.

5. All provisions and requirements with respect to streets identified in this code shall apply to alleys the same in all respects as if the word “street” or “streets” therein appeared as the word “alley” or “alleys” respectively.

Response: Not applicable

O. Platting Standards for Blocks.

1. Purpose. Streets and walkways can provide convenient travel within a neighborhood and can serve to connect people and land uses. Large, uninterrupted blocks can serve as a barrier to travel, especially walking and biking. Large blocks also can divide rather than unite neighborhoods. To promote connected neighborhoods and to shorten travel distances, the following minimum standards for block lengths are established.

2. Maximum Block Length and Perimeter. The maximum length and perimeters of blocks in the zones listed below shall be according to the following table. The review body for a subdivision, partition, conditional use permit, or a Type II design review may require installation of streets or walkways as necessary to meet the standards below.

Zone(s)	Maximum Block Length	Maximum Block Perimeter
R-2	1,200 feet	3,000 feet

3. Exceptions.

a. If a public walkway is installed mid-block, the maximum block length and perimeter may be increased by 25 percent.

b. Where a proposed street divides a block, one of the resulting blocks may exceed the maximum block length and perimeter standards provided the average block length and perimeter of the two resulting blocks do not exceed these standards.

c. Blocks in excess of the above standards are allowed where access controlled streets, street access spacing standards, railroads, steep slopes, wetlands, water bodies, preexisting development, ownership patterns or similar circumstances restrict street and walkway location and design. In these cases, block length and perimeter shall be as small as practical. Where a street cannot be provided because of these circumstances but a public walkway is still feasible, a public walkway shall be provided.

d. Institutional campuses located in an R-1 zone may apply the standards for the institutional zone.

e. Where a block is in more than one zone, the standards of the majority of land in the proposed block shall apply.

f. Where a local street plan, concept master site development plan, or specific plan has been approved for an area, the block standards shall follow those approved in the plan. In approving such a plan, the review body shall follow the block standards listed above to the extent appropriate for the plan area.

4. Public Pedestrian Walkways and Bicycle Access. The approval authority in approving a land use application with conditions may require a developer to provide an access way where the creation of a street consistent with street spacing standards is infeasible and the creation of a cul-de-sac or dead-end street is unavoidable. A public walkway provides a connection through a block that is longer than established standards or connects the end of the street to another right-of-way or a public access easement. A public walkway shall be contained within a public right-of-way or public access easement, as required by the city. A public walkway shall be a minimum of 10 feet wide and shall provide a minimum six-foot-wide paved surface or other all-weather surface approved by the city (see subsection (S) of this section for public walkway standards).

Design features should be considered that allow access to emergency vehicles but that restrict access to non-emergency motorized vehicles.

Response: Not applicable

[…]

R. Vehicular Access Standards.

1. Purpose. The purpose of these standards is to manage vehicle access to maintain traffic flow, safety, roadway capacity, and efficiency. They help to maintain an adequate level of service consistent with the functional classification of the street. Major roadways, including arterials and collectors, serve as the primary system for moving people and goods within and through the city. Access is limited and managed on these roads to promote efficient through movement. Local streets and alleys provide access to individual properties. Access is managed on these roads to maintain safe maneuvering of vehicles in and out of properties and to allow safe through movements. If vehicular access and circulation are not properly designed, these roadways will be unable to accommodate the needs of development and serve their transportation function.

2. 2. Access Spacing Standards. Public street intersection and driveway spacing shall follow the standards in Table 15.505.R below. The Oregon Department of Transportation (ODOT) has jurisdiction of some roadways within the Newberg city limits, and ODOT access standards will apply on those roadways.

Table 15.505.R. Access Spacing Standards

Roadway Functional Classification	Area[1]	Minimum Public Street Intersection Spacing (Feet)[2]	Driveway Setback from Intersecting Street[3]
Major arterial	Urban CBD	Refer to ODOT Access Spacing Standards	
Minor arterial	Urban CBD	500 200	150 100
Major collector	All	400	150
Minor collector	All	300	100

[1] "Urban" refers to intersections inside the city urban growth boundary outside the central business district (C-3 zone).
"CBD" refers to intersections within the central business district (C-3 zone).
"All" refers to all intersections within the Newberg urban growth boundary.
[2] Measured centerline to centerline.
[3] The setback is based on the higher classification of the intersecting streets. Measured from the curb line of the intersecting street to the beginning of the driveway, excluding flares. If the driveway setback listed above would preclude a lot from having at least one driveway, including shared driveways or driveways on adjoining streets, one driveway is allowed as far from the intersection as possible.

[…]

Response: Not applicable

4. Driveways. More than one driveway is permitted on a lot accessed from either a minor collector or local street as long as there is at least 40 feet of lot frontage separating each driveway approach. More than one driveway is

permitted on a lot accessed from a major collector as long as there is at least 100 feet of lot frontage separating each driveway approach.

a. For a duplex, triplex or quadplex dwelling or a cottage cluster project, more than one driveway is permitted on a lot accessed from either a minor collector or local street as long as there is at least 22 feet of lot frontage separating each driveway approach.

Response: Only one driveway for each lot is proposed, criterial not applicable.

5. Alley Access. Where a property has frontage on an alley and the only other frontages are on collector or arterial streets, access shall be taken from the alley only. The review body may allow creation of an alley for access to lots that do not otherwise have frontage on a public street provided all of the following are met:

a. The review body finds that creating a public street frontage is not feasible.

b. The alley access is for no more than six dwellings and no more than six lots.

c. The alley has through access to streets on both ends.

d. One additional parking space over those otherwise required is provided for each dwelling. Where feasible, this shall be provided as a public use parking space adjacent to the alley.

Response: Not applicable

6. Closure of Existing Accesses. Existing accesses that are not used as part of development or redevelopment of a property shall be closed and replaced with curbing, sidewalks, and landscaping, as appropriate.

Response: Not applicable7. Shared Driveways.

a. The number of driveways onto arterial streets shall be minimized by the use of shared driveways with adjoining lots where feasible. The city shall require shared driveways as a condition of land division or site design review, as applicable, for traffic safety and access management purposes. Where there is an abutting developable property, a shared driveway shall be provided as appropriate. When shared driveways are required, they shall be stubbed to adjacent developable parcels to indicate future extension. “Stub” means that a driveway temporarily ends at the property line, but may be accessed or extended in the future as the adjacent parcel develops. “Developable” means that a parcel is either vacant or it is likely to receive additional development (i.e., due to infill or redevelopment potential).

b. Access easements (i.e., for the benefit of affected properties) and maintenance agreements shall be recorded for all shared driveways,

including pathways, at the time of final plat approval or as a condition of site development approval.

c. No more than four lots may access one shared driveway, with the exception of cottage dwellings on individual lots that are part of a cottage cluster.

d. Shared driveways shall be posted as no parking fire lanes where required by the fire marshal.

e. Where three or more lots share one driveway, one additional parking space over those otherwise required shall be provided for each dwelling. Where feasible, this shall be provided as a common use parking space adjacent to the driveway. However, duplex, triplex, quadplex, townhouse and cottage dwellings with shared driveways shall be exempt from this standard.

Response: Three lots are proposed to be accessed via a proposed access easement at the north end of the street. Each lot will have an independent driveway in front of a garage structure. This criteria is met.

8. Frontage Streets and Alleys. The review body for a partition, subdivision, or design review may require construction of a frontage street to provide access to properties fronting an arterial or collector street.

Response: Not applicable, no frontage along an arterial or collector exists.

9. ODOT or Yamhill County Right-of-Way. Where a property abuts an ODOT or Yamhill County right-of-way, the applicant for any development project shall obtain an access permit from ODOT or Yamhill County.

10. Exceptions. The director may allow exceptions to the access standards above in any of the following circumstances:

a. Where existing and planned future development patterns or physical constraints, such as topography, parcel configuration, and similar conditions, prevent access in accordance with the above standards.

b. Where the proposal is to relocate an existing access for existing development, where the relocated access is closer to conformance with the standards above and does not increase the type or volume of access.

c. Where the proposed access results in safer access, less congestion, a better level of service, and more functional circulation, both on street and on site, than access otherwise allowed under these standards.

11. Where an exception is approved, the access shall be as safe and functional as practical in the particular circumstance. The director may require that the applicant submit a traffic study by a registered engineer to show the proposed access meets these criteria.

Response:

S. Public Walkways.

1. Projects subject to Type II design review, partition, or subdivision approval may be required to provide public walkways where necessary for public safety and convenience, or where necessary to meet the standards of this code. Public walkways are meant to connect cul-de-sacs to adjacent areas, to pass through oddly shaped or unusually long blocks, to provide for networks of public paths according to adopted plans, or to provide access to schools, parks or other community destinations or public areas. Where practical, public walkway easements and locations may also be used to accommodate public utilities.

2. Public walkways shall be located within a public access easement that is a minimum of 15 feet in width.

3. A walk strip, not less than 10 feet in width, shall be paved in the center of all public walkway easements. Such paving shall conform to specifications in the Newberg public works design and construction standards.

4. Public walkways shall be designed to meet the Americans with Disabilities Act requirements.

5. Public walkways connecting one right-of-way to another shall be designed to provide as short and straight of a route as practical.

6. The developer of the public walkway may be required to provide a homeowners' association or similar entity to maintain the public walkway and associated improvements.

7. Lighting may be required for public walkways in excess of 250 feet in length.

8. The review body may modify these requirements where it finds that topographic, preexisting development, or similar constraints exist.

Response: Not applicable

T. Street Trees. Street trees shall be provided for all projects subject to Type II design review, partition, or subdivision. Street trees shall be installed in accordance with the provisions of NMC 15.420.010(B)(4).

Response: The proposed plans illustrate the proposed street tree locations. This criteria can be satisfied through condition.

U. Street Lights. All developments shall include underground electric service, light standards, wiring and lamps for street lights according to the specifications and standards of the Newberg public works design and construction standards. The developer shall install all such facilities and make the necessary arrangements with the serving electric utility as approved by the city. Upon the city's acceptance of the public improvements associated with the development, the street lighting system, exclusive of utility-owned service lines, shall be and become property of the city unless otherwise designated by the city through agreement with a private utility.

Response: The applicant proposes new street lights in conformance with City of Newberg requirements. This can be satisfied through condition of approval.

V. Transit Improvements. Development proposals for sites that include or are adjacent to existing or planned transit facilities, as shown in the Newberg transportation system plan or adopted local or regional transit plan, shall be required to provide any of the following, as applicable and required by the review authority:

1. Reasonably direct pedestrian connections between the transit facility and building entrances of the site. For the purpose of this section, "reasonably direct" means a route that does not deviate unnecessarily from a straight line or a route that does not involve a significant amount of out-of-direction travel for users.

2. A transit passenger landing pad accessible to disabled persons.

3. An easement of dedication for a passenger shelter or bench if such facility is in an adopted plan.

4. Lighting at the transit facility.

Response: Not applicable.

15.505.040 Public utility standards.

A. Purpose. The purpose of this section is to provide adequate services and facilities appropriate to the scale and type of development.

B. Applicability. This section applies to all development where installation, extension or improvement of water, wastewater, or private utilities is required to serve the development or use of the subject property.

C. General Standards.

1. The design and construction of all improvements within existing and proposed rights-of-way and easements, all improvements to be maintained by the city, and all improvements for which city approval is required shall conform to the Newberg public works design and construction standards and require a public improvements permit.

2. The location, design, installation and maintenance of all utility lines and facilities shall be carried out with minimum feasible disturbances of soil and site. Installation of all proposed public and private utilities shall be coordinated by the developer and be approved by the city to ensure the orderly extension of such utilities within public right-of-way and easements.

D. Standards for Water Improvements. All development that has a need for water service shall install the facilities pursuant to the requirements of the city and all of the following standards. Installation of such facilities shall be coordinated with the extension or improvement of necessary wastewater and stormwater facilities, as applicable.

1. All developments shall be required to be linked to existing water facilities adequately sized to serve their intended area by the construction of water distribution lines, reservoirs and pumping stations which connect to such water service facilities. All necessary easements required for the construction of these facilities shall be obtained by the developer and granted to the city pursuant to the requirements of the city.

2. Specific location, size and capacity of such facilities will be subject to the approval of the director with reference to the applicable water master plan. All water facilities shall conform with city pressure zones and shall be looped where necessary to provide adequate pressure and fire flows during peak demand at every point within the system in the development to which the water facilities will be connected. Installation costs shall remain entirely the developer's responsibility.

3. The design of the water facilities shall take into account provisions for the future extension beyond the development to serve adjacent properties, which, in the judgment of the city, cannot be feasibly served otherwise.

4. Design, construction and material standards shall be as specified by the director for the construction of such public water facilities in the city.

Response: The proposed improvements include connecting to the existing 4-inch water line and extending with an 8-inch line to a terminus to serve the proposed new lots.This standard can be satisfied through condition of approval.

E. Standards for Wastewater Improvements. All development that has a need for wastewater services shall install the facilities pursuant to the requirements of the city and all of the following standards. Installation of such facilities shall be coordinated with the extension or improvement of necessary water services and stormwater facilities, as applicable.

1. All septic tank systems and on-site sewage systems are prohibited. Existing septic systems must be abandoned or removed in accordance with Yamhill County standards.

2. All properties shall be provided with gravity service to the city wastewater system, except for lots that have unique topographic or other natural features that make gravity wastewater extension impractical as determined by the director. Where gravity service is impractical, the developer shall provide all necessary pumps/lift stations and other improvements, as determined by the director.

3. All developments shall be required to be linked to existing wastewater collection facilities adequately sized to serve their intended area by the construction of wastewater lines which connect to existing adequately sized wastewater facilities. All necessary easements required for the construction of these facilities shall be obtained by the developer and granted to the city pursuant to the requirements of the city.

4. Specific location, size and capacity of wastewater facilities will be subject to the approval of the director with reference to the applicable wastewater master plan. All wastewater facilities shall be sized to provide adequate capacity during

peak flows from the entire area potentially served by such facilities. Installation costs shall remain entirely the developer's responsibility.

5. Temporary wastewater service facilities, including pumping stations, will be permitted only if the director approves the temporary facilities, and the developer provides for all facilities that are necessary for transition to permanent facilities.

6. The design of the wastewater facilities shall take into account provisions for the future extension beyond the development to serve upstream properties, which, in the judgment of the city, cannot be feasibly served otherwise.

7. Design, construction and material standards shall be as specified by the director for the construction of such wastewater facilities in the city.

Response: A public sanitary sewer main line is in Garfield Street and runs through a portion of the subject property. A new public mainline is proposed to connect into the existing system and extend north to provide lateral service connections to lots 1-3. This standard can be satisfied through condition of approval.

F. Easements. Easements for public and private utilities shall be provided as deemed necessary by the city, special districts, and utility companies. Easements for special purpose uses shall be of a width deemed appropriate by the responsible agency. Such easements shall be recorded on easement forms approved by the city and designated on the final plat of all subdivisions and partitions. Minimum required easement width and locations are as provided in the Newberg public works design and construction standards.

Response: Proposed and existing easements are illustrated on the preliminary plat. This standard can be satisfied through condition of approval.

15.505.050 Stormwater system standards.

A. Purpose. The purpose of this section is to provide for the drainage of surface water from all development; to minimize erosion; and to reduce degradation of water quality due to sediments and pollutants in stormwater runoff.

B. Applicability. The provisions of this section apply to all developments subject to site development review or land division review and to the reconstruction or expansion of such developments that increases the flow or changes the point of discharge to the city stormwater system. Additionally, the provisions of this section shall apply to all drainage facilities that impact any public storm drain system, public right-of-way or public easement, including but not limited to off-street parking and loading areas.

C. General Requirement. All stormwater runoff shall be conveyed to a public storm wastewater or natural drainage channel having adequate capacity to carry the flow without overflowing or otherwise causing damage to public and/or private property. The developer shall pay all costs associated with designing and constructing the facilities necessary to meet this requirement.

D. Plan for Stormwater and Erosion Control. No construction of any facilities in a development included in subsection (B) of this section shall be permitted until an engineer registered in the State of Oregon prepares a stormwater report and erosion control plan for the project. This plan shall contain at a minimum:

1. The methods to be used to minimize the amount of runoff, sedimentation, and pollution created from the development both during and after construction.

2. Plans for the construction of stormwater facilities and any other facilities that depict line sizes, profiles, construction specifications, and other such information as is necessary for the city to review the adequacy of the stormwater plans.

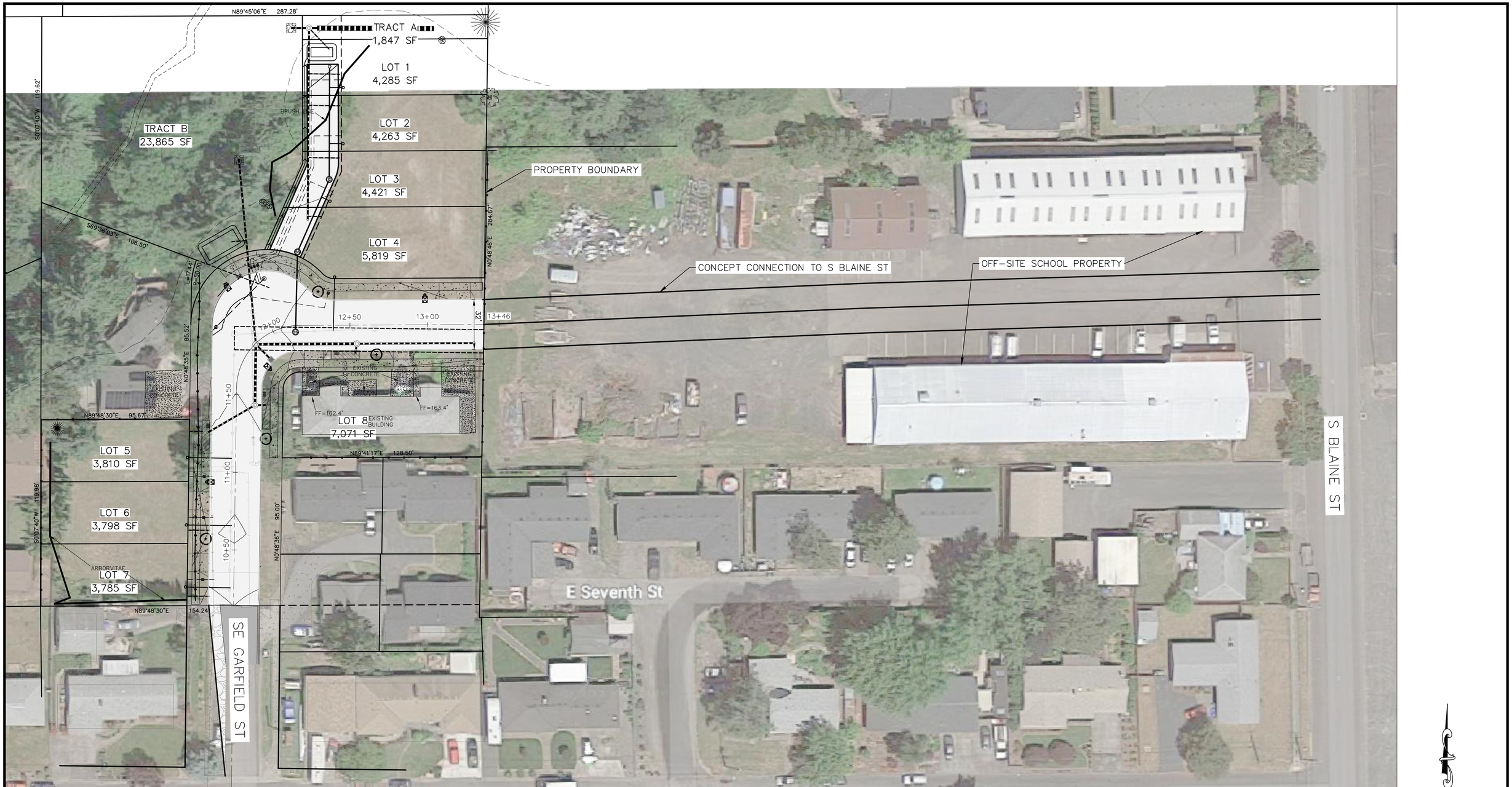
3. Design calculations shall be submitted for all drainage facilities. These drainage calculations shall be included in the stormwater report and shall be stamped by a licensed professional engineer in the State of Oregon. Peak design discharges shall be computed based upon the design criteria outlined in the public works design and construction standards for the city.

E. Development Standards. Development subject to this section shall be planned, designed, constructed, and maintained in compliance with the Newberg public works design and construction standards.

Response: Public Stormwater runoff from the street is proposed to be managed through vegetated infiltration planters that will have an overflow for events larger than the 25 year storm and any overflow runoff will discharge to the riparian area of the existing creek.

IV Conclusions:

The proposed application meets the criteria and or can be conditioned to conform to the standards.



			DRAWN:	DESIGNED:	CHECKED:
			SCALE: AS SHOWN	DATE: JANUARY 2023	
			PROJECT NO. E21-049		
DATE:	NO.	REVISION			

FIRWOOD DESIGN GROUP
359 EAST HISTORIC COLUMBIA RIVER HIGHWAY
TROUTDALE, OREGON 97060
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SCOTT HOLDEN
100 S GARFIELD ST
NEWBERG, OR 97132

SHADOW STREET EXHIBIT
8-LOT SUBDIVISION

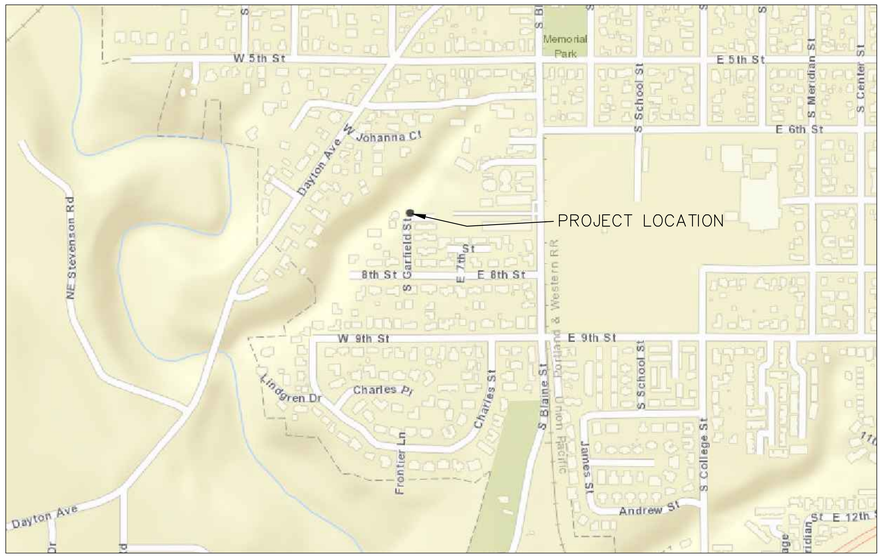
1/1

GARFIELD ST 8-LOT SUBDIVISION

TYPE III SITE IMPROVEMENTS

LAND USE APPLICATION SUB322-0001

100 S GARFIELD ST, NEWBERG, OR 97132



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VICINITY MAP

SCALE: 1"=400'

SHEET INDEX

PROPOSED LEGEND

- PROPERTY LINE
- EASEMENT
- ROAD CENTERLINE
- STANDARD 6" CURB
- PAVEMENT SAWCUT
- AC PAVEMENT
- CONCRETE SIDEWALK
- PLANTER STRIP
- VEGETATED STORMWATER PLANTER
- WATER LINE
- WATER SERVICE & METER
- DEAD-END BLOWOFF
- VALVE
- SANITARY SEWER LINE
- SANITARY MANHOLE
- SANITARY CLEANOUT
- STORM DRAIN PIPE
- CURB INLET
- STORM DRAIN MANHOLE
- MAJOR CONTOUR 100
- MINOR CONTOUR 101
- STREET TREE
- STREET LIGHT

OWNER

SCOTT HOLDEN
100 S GARFIELD ST
NEWBERG, OR 97132
PHONE: (503) 502-8006
EMAIL: scottholden2007@outlook.com

PROJECT ENGINEER

KELLI A. GROVER, P.E.
FIRWOOD DESIGN GROUP, LLC
359 E. HISTORIC COLUMBIA RIVER HWY.
TROUTDALE, OR 97060
PHONE: (503) 668-3737
EMAIL: kg@firwooddesign.com

PROJECT SURVEYOR

DAVE ROEGER, PLS
CMT SURVEYING & CONSULTING
20330 SE HIGHWAY 212
DAMASCUS, OR 97089
PHONE: (503) 850-4672
EMAIL: dave@cmtsc.net

LEGAL DESCRIPTION:

TAX LOT 4690
MAP # R3219DB
YAMHILL COUNTY, OREGON

REGISTERED PROFESSIONAL ENGINEER
67149PE
OREGON
JAN. 14, 2003
KELLI A. GROVER

PRELIMINARY

EXPIRES: 06/30/23
SIGNATURE DATE: 01/31/23

DATE:	NO.	REVISION

DRAWN: | DESIGNED: | CHECKED:
SCALE: AS SHOWN | DATE: JANUARY 2023
PROJECT NO. E21-049

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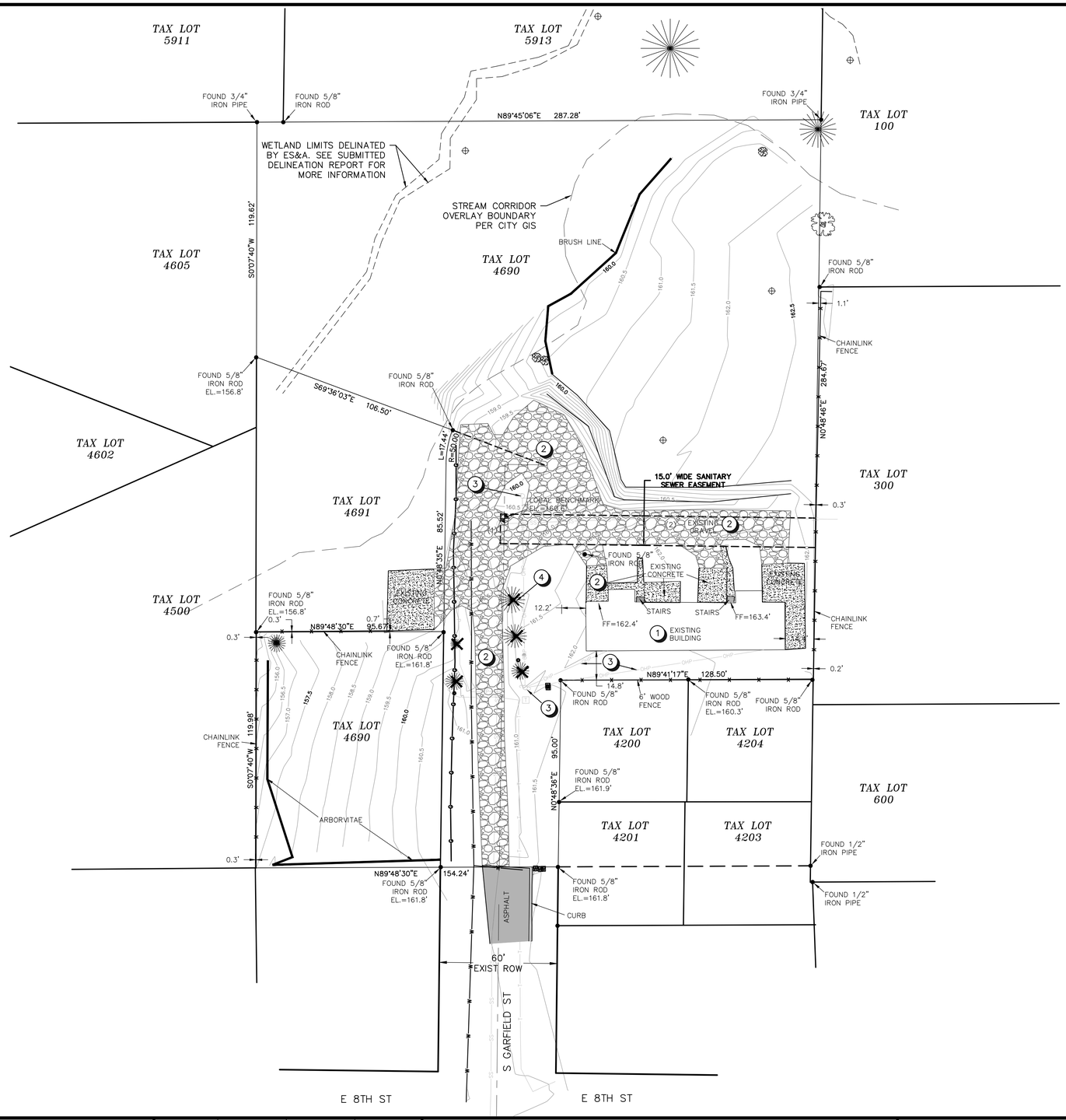
SCOTT HOLDEN
100 S GARFIELD ST
NEWBERG, OR 97132

COVER SHEET
8-LOT SUBDIVISION



SCALE 1" = 30'

KEY NOTES

1. EXISTING DUPLEX STRUCTURE TO REMAIN.
2. REMOVE ALL EXISTING CONCRETE AND GRAVEL ROAD / DRIVEWAYS AS NECESSARY FOR NEW ROAD CONSTRUCTION.
3. RELOCATE EXISTING POWER POLES
4. REMOVE TREES WITHIN CONSTRUCTION AREA (TYP)

SANITARY STRUCTRES

(1) SSMH
RIM EL.=160.6'
I.E. IN EAST=154.7'
I.E. OUT SOUTH=154.4'

(2) SSMH
RIM EL.=161.8'
I.E. IN EAST=155.9'
I.E. OUT WEST=155.8'

NOTES

1. THE PURPOSE OF THIS MAP WAS TO SHOW THE EXISTING CONDITIONS FOR 100 S GARFIELD STREET.
2. THE BASIS OF BEARINGS WAS PER RECORD OF SURVEY NO. CSP-8417 YAMHILL COUNTY RECORDS.
3. LOCAL DATUM WAS ESTABLISHED BY GPS OBSERVATION, NAVD88.
4. THIS MAP WAS PREPARED FOR THE EXCLUSIVE USE OF HOLDEN NEWBERG QOZB LLC.
5. THIS MAP WAS PREPARED BY PLAT RECORDS, CALCULATED DATA, AND FIELD MEASUREMENTS, A RECORDED BOUNDARY SURVEY WILL BE FILED AT A DATE TO BE DETERMINED.
6. ALL UTILITY LOCATIONS ARE SHOWN BY ABOVE GROUND FEATURES AND LOCATION OF PAINT MARKS SUPPLIED BY THE LOCAL UTILITY COMPANIES. CMT TAKES NO RESPONSIBILTY OF UNDERGROUND LOCATION. PLEASE NOTIFY THE UTILITY NOTIFICATION CENTER BEFORE ANY DIGGING 1-800-332-2344.

LEGEND

- EXISTING DECIDUOUS TREE W/ TRUNK DIAMETER (INCHES)(CL=CLUSTER)
- EXISTING CONIFEROUS TREE W/ TRUNK DIAMETER (INCHES)(CL=CLUSTER)
- EXISTING UNDERGROUND TELEPHONE
- EXISTING POWER POLE
- EXISTING UNDERGROUND POWER LINES
- EXISTING OVERHEAD POWER LINES
- EXISTING WATER METER
- EXISTING UNDERGROUND WATER
- EXISTING UNDERGROUND GAS LINE
- EXISTING SANITARY MANHOLE
- EXISTING SANITARY SEWER LINE
- EXISTING UTILITY RISER
- EXISTING FENCE
- FOUND MONUMENTS
- LOCAL BENCHMARK ESTABLISHED
- EXISTING WETLAND DATA POINT
- EXISTING WETLAND LIMITS
- EXISTING GRAVEL
- EXISTING CONCRETE
- EXISTING ASPHALT

REGISTERED PROFESSIONAL LAND SURVEYOR

OREGON
SEPTEMBER 11, 2018
DAVID ROEGER
86811

EXPIRES DECEMBER 31, 2022

DATE:	NO.	REVISION

DRAWN: | DESIGNED: | CHECKED:
SCALE: AS SHOWN | DATE: JANUARY 2023
PROJECT NO. E21-049

FIRWOOD DESIGN GROUP
359 EAST HISTORIC COLUMBIA RIVER HIGHWAY
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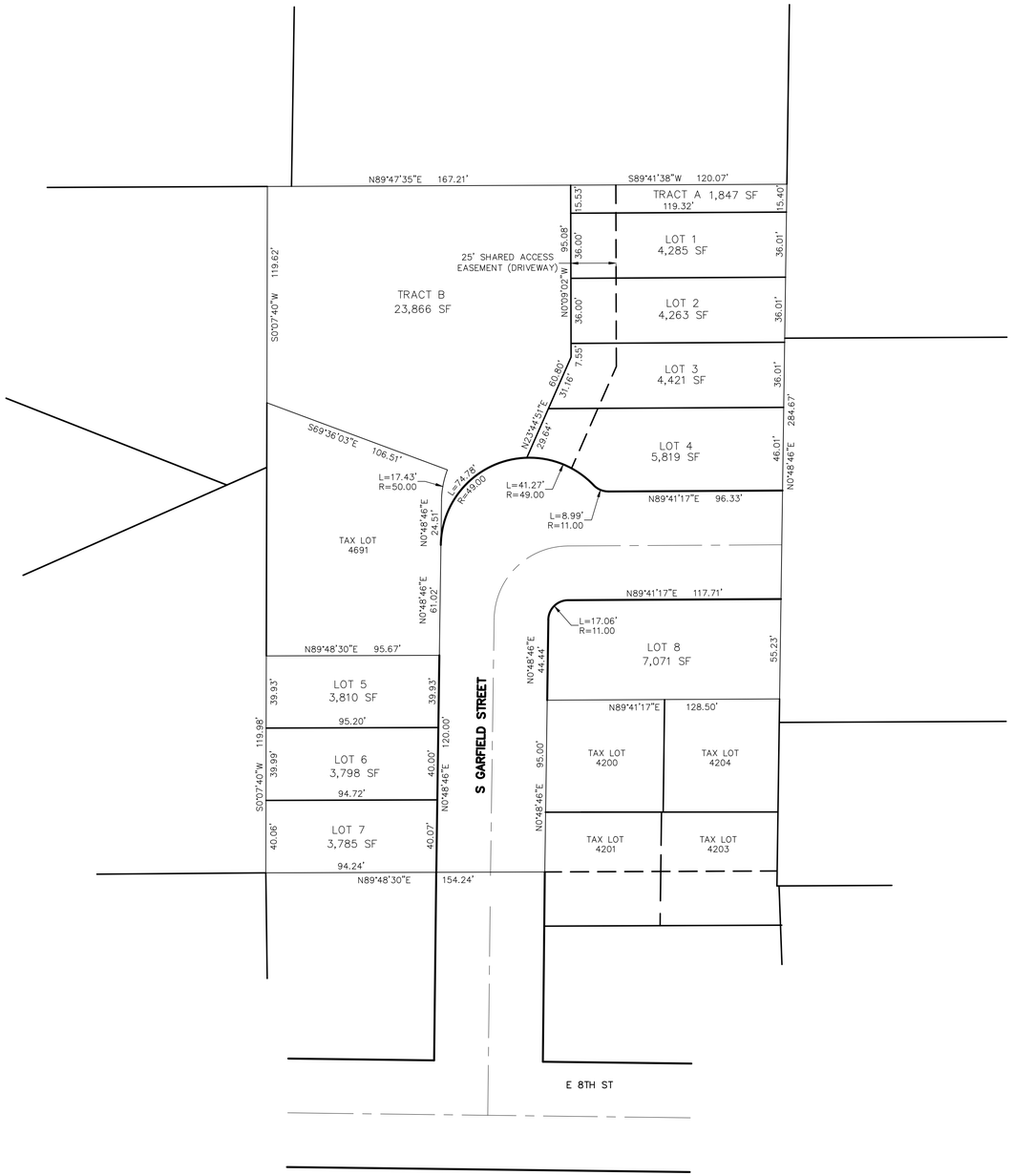
SCOTT HOLDEN
100 S GARFIELD ST
NEWBERG, OR 97132

EXISTING CONDITIONS & DEMO PLAN
8-LOT SUBDIVISION



N

SCALE 1" = 40'

PRELIMINARY SUBDIVISION PLAT

100 S GARFIELD STREET

SE 1/4 SEC 19, T3S, R2W, W.M.

CITY OF NEWBERG
YAMHILL COUNTY, OREGON
JANUARY 30, 2023
DRAWN: DMR CHECKED: SPF
SCALE 1"=40' ACCOUNT #500-1106
Y:\500-1106\DWG\5001106PRELIM

CMT SURVEYING AND CONSULTING
20330 SE HIGHWAY 212
DAMASCUS, OR 97089
PHONE (503) 850-4672 FAX (503) 850-4590

DATE:	NO.	REVISION

DRAWN: | DESIGNED: | CHECKED:
SCALE: AS SHOWN | DATE: JANUARY 2023
PROJECT NO. E21-049

FIRWOOD DESIGN GROUP
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SCOTT HOLDEN
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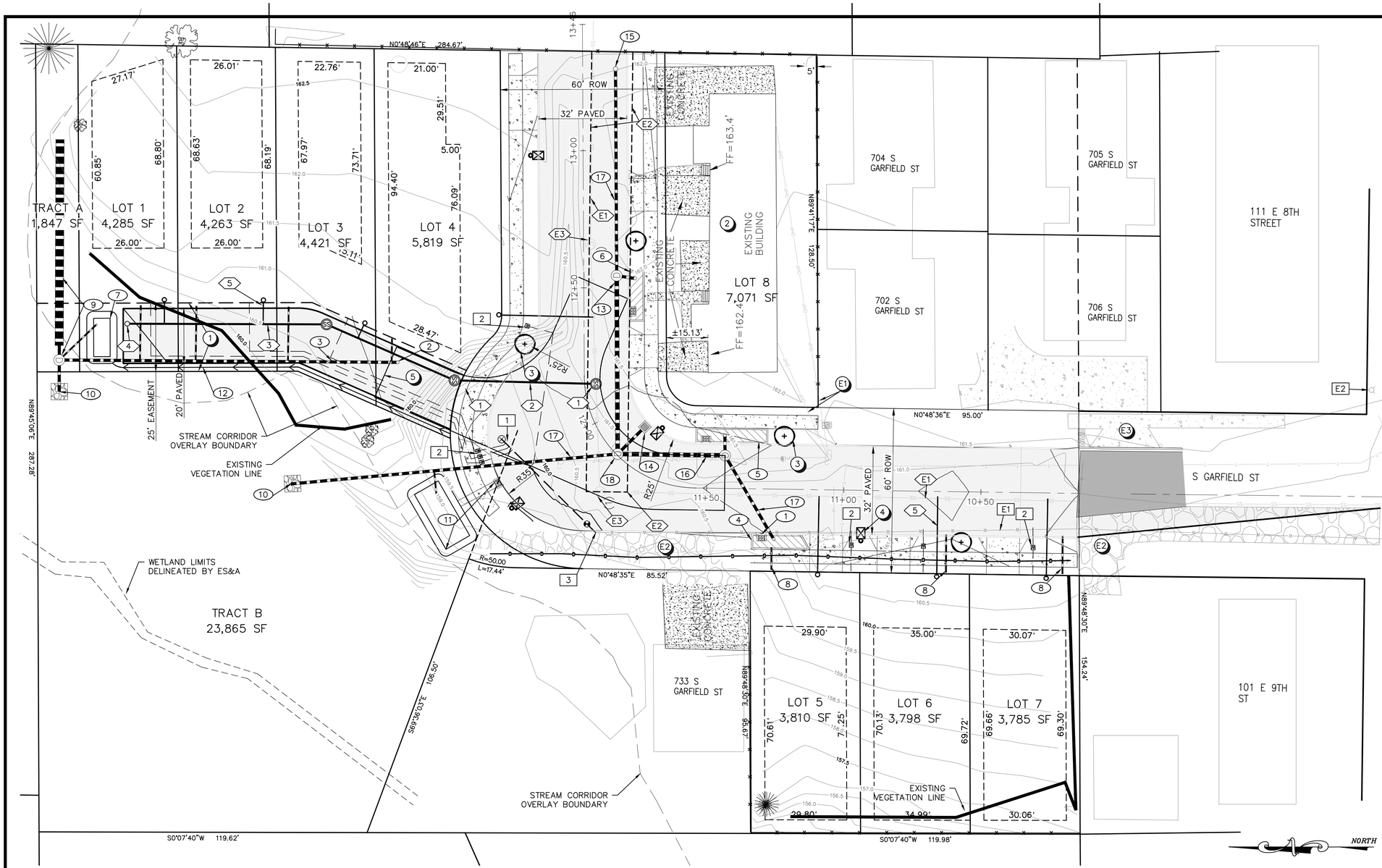
NEWBERG, OR 97132

PRELIMINARY PLAT
8-LOT SUBDIVISION



SITE NOTES:

E1 EXISTING OVERHEAD TO BE RELOCATED (BY OTHERS).

E2 EXISTING GRAVEL TO REMAIN

E3 EXISTING CONCRETE APPROACH TO REMAIN

1 NEW 25' UTILITY AND ACCESS EASEMENT FOR LOTS 1–4

2 EX BUILDING TO REMAIN. SEWER CONNECTION TO REMAIN. WATER METERS TO BE RELOCATED AS NECESSARY.

3 NEW STREET TREE (TYP).

4 NEW STREET LIGHT (TYP), SEE NOTE 3 THIS SHEET.

5 FIRE TRUCK TURNAROUND. TEMPLATE OVERLAY FOR ILLUSTRATIVE PURPOSES ONLY.

WATER NOTES:

E1 EXISTING PUBLIC 4" DUCTILE IRON WATER MAIN. SEE NOTE 7 THIS SHEET.

1 CONSTRUCT 8" 48.3LF WATER MAIN AND CONSTRUCT BLOWOFF ASSEMBLY AT TERMINUS.

2 NEW 3/4" WATER SERVICE & METER (TYP, ALL LOTS). WATER METER TO BE PLACED IN PLANTER STRIP.

3 CONNECT NEW 8" TO EXISTING 4" WATER MAIN.

E2 EXISTING FIRE HYDRANT.

STORM NOTES:

1 NEW CURB INLET (TYP, 4 TOTAL)

2 NEW PRIVATE STORM CLEANOUT.

3 NEW PRIVATE 12" HDPE STORM MAIN

4 NEW PUBLIC 18.5' LONG VEGETATED STORM PLANTER #2, CONSTRUCTED WITH BEEHIVE GRATE WITH OVERFLOW TO PRIVATE STORM MAIN.

5 NEW PUBLIC 18.5' LONG VEGETATED STORM PLANTER #3, CONSTRUCTED WITH BEEHIVE GRATE WITH OVERFLOW TO PRIVATE STORM MAIN.

6 NEW PUBLIC 25.5' LONG VEGETATED STORM PLANTER #1, CONSTRUCTED WITH BEEHIVE GRATE WITH OVERFLOW TO PRIVATE STORM MAIN.

7 NEW RAINGARDEN #2 (6'W X 14'L) WITH BEEHIVE OVERFLOW LEADING TO FLOW CONTROL MANHOLE DETENTION SYSTEM.

8 LOTS 5–7 TO BE CONSTRUCTED WITH WEEP HOLE IN CURB FOR OVERFLOW FROM ROOF DRAINS (LOT 5 TO FLOW INTO STORM PLANTER).

9 NEW PRIVATE 36" DIAMETER, 75 LF CMP FOR UNDERGROUND DETENTION, CONSTRUCT WITH FLOW CONTROL MANHOLE.

10 NEW 12" OUTFALL INTO STREAM CORRIDOR WITH RIP–RAP EROSION CONTROL PROTECTION. 12" (NORTHEAST OUTFALL IE = 593.8', SOUTHWEST OUTFALL IE = 154.9). DISTURBED AREA TO BE MITIGATED PER MITIGATION PLAN (BY OTHERS)

11 NEW RAINGARDEN #1 (10'W X 25'L) WITH OVERFLOW TEE CONNECTION TO OUTFALL PIPE TO STREAM CORRIDOR. CURB INLET TO ALLOW STORMWATER FLOW UNDER METAL PANEL IN SIDEWALK.

12 NEW CONCRETE CHANNEL DIRECTED TOWARDS RAINGARDEN.

13 NEW PUBLIC STORM DRAIN MANHOLE (TYP, 2 TOTAL)
14 NEW PUBLIC STORM CATCH BASIN.
15 NEW PUBLIC STORM CLEANOUT.
16 NEW PUBLIC 18" HDPE STORM MAIN.
17 NEW PUBLIC 12" HDPE STORM MAIN.
18 NEW PUBLIC FLOW CONTROL MANHOLE.

SANITARY NOTES:

E1 EXISTING PUBLIC 8" SANITARY MAIN

E2 EXISTING 15' SANITARY EASEMENT

E3 EXISTING SANITARY MANHOLE

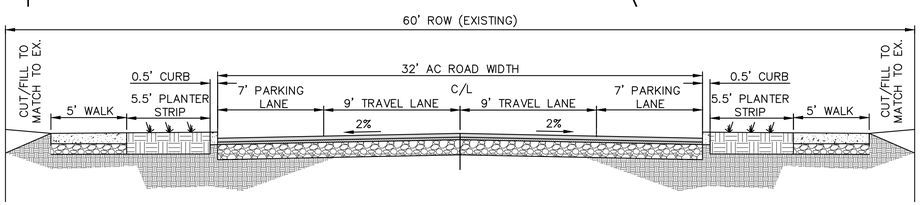
1 NEW SANITARY SEWER MANHOLE (TYP, 3 TOTAL)

2 NEW PUBLIC 6" PVC SANITARY MAIN

3 NEW PRIVATE 6" PVC SANITARY MAIN CONTAINED WITHIN EASEMENT

4 NEW PRIVATE MAINLINE CLEANOUT

5 NEW 4" SANITARY SEWER SERVICE AND CLEANOUT (TYP, ALL LOTS)



S GARFIELD ST TYPICAL SECTION
SCALE: N.T.S.

NOTES:

1. DEVELOPER / CONTRACTOR RESPONSIBLE FOR COORDINATION OF INSTALLATION OF OTHER UTILITIES NOT SHOWN ON THESE PLANS, INCLUDING GAS, ELECTRICITY, AND COMMUNICATIONS.
2. ALL STORMWATER MANAGEMENT FACILITIES AS A PART OF THIS PROJECT ARE PROPOSED TO MANAGE BOTH NEWLY CREATED PUBLIC IMPERVIOUS AREA AND STORMWATER FROM FUTURE IMPERVIOUS AREA ON EACH OF THE LOTS. SEE SUBMITTED STORMWATER REPORT FOR MORE INFORMATION. NEWLY CREATED TRACT A WILL BE DEDICATED TO STORMWATER MANAGEMENT FOR LOTS 1–9 AND PUBLIC OVERFLOW STORMWATER.
3. STREET LIGHTING TO BE INSTALLED ALONG NEW STREET AS NECESSARY TO COMPLY WITH NEWBERG PUBLIC WORKS DESIGN AND CONSTRUCTION STANDARDS. STREET LIGHTS SHOWN CONCEPTUALLY ON THIS PLAN. FINAL STREET LIGHTING & PHOTOMETRIC PLAN TO BE PROVIDED WITH CONSTRUCTION PLAN SET.
4. 12' WIDE STANDARD DRIVEWAYS SHOWN CONCEPTUALLY FOR EACH LOT PER CITY OF NEWBERG STANDARD DETAIL 508.

NOTES (CONT.):

5. NEW S GARFIELD ST FULL ROAD SECTION TO BE CENTERED ON THE EXISTING ROW. NO ROW DEDICATION IS PROPOSED. SEE TYPICAL ROAD SECTION THIS SHEET. NO FRONTAGE IMPROVEMENTS WILL BE CONSTRUCTED ALONG NEIGHBORING LOTS (SIDEWALK & PLANTER STRIP)
6. PUE = PUBLIC UTILITY EASEMENT WITH THE CITY OF NEWBERG
   10' PUE TO BE CREATED ON ALL PROPERTY FRONTAGES
7. THE EXISTING 4" WATER MAIN IN S GARFIELD ST IS UNDERSIZED PER CITY STANDARDS. HOWEVER, A WATER SYSTEM ANALYSIS WAS PERFORMED BY WESTERN STATES FIRE PROTECTION TO VERIFY THE MAIN IS OF ADEQUATE SIZE TO SERVICE THE NEW SUBDIVISION. A COPY OF THIS ANALYSIS REPORT IS SUBMITTED WITH THE LAND USE APPLICATION TO THE CITY.

REGISTERED PROFESSIONAL ENGINEER
67149PE
PRELIMINARY
OREGON
JULY 14, 2000
KELLI A. GROVER

EXPIRES: 06/30/23
SIGNATURE DATE: 01/31/23

0 20 40
SCALE IN FEET

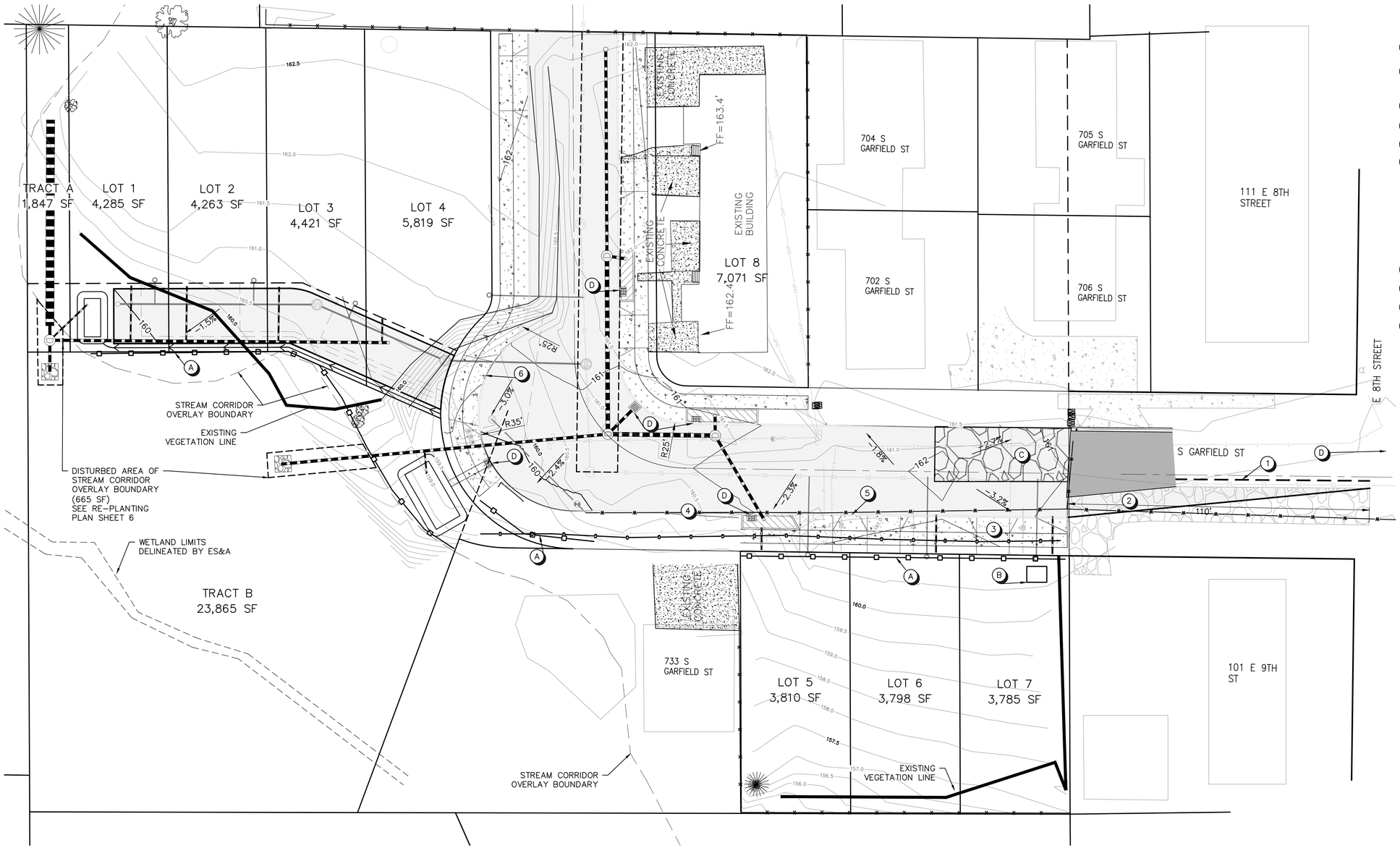
DATE:	NO.	REVISION

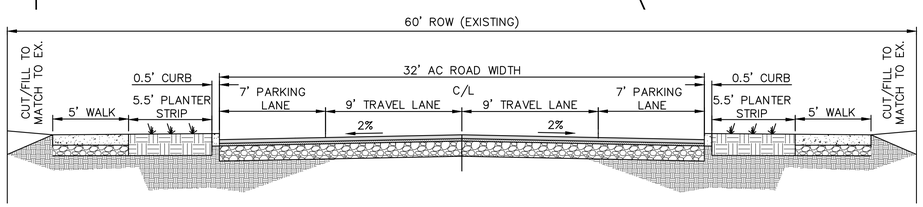
DRAWN: | DESIGNED: | CHECKED:
SCALE: AS SHOWN | DATE: JANUARY 2023
PROJECT NO. E21–049

FIRWOOD DESIGN GROUP
359 EAST HISTORIC COLUMBIA RIVER HIGHWAY
TROUTDALE, OREGON 97060
BUS: (503) 668-3737 ✦ FAX: (503) 668-3788

SCOTT HOLDEN
100 S GARFIELD ST
NEWBERG, OR 97132

PRELIMINARY SITE & UTILITY PLAN
8-LOT SUBDIVISION





S GARFIELD ST TYPICAL SECTION
SCALE: N.T.S.

STREET NOTES:

1. SAWCUT LINE, MIN. 2' INTO EXISTING ASPHALT
2. 110' ASPHALT TAPER TO EXISTING ROAD EDGE, PER AASTHO GREEN BOOK CHAPTER 5C-2, BASED ON 25 MPH DESIGN SPEED AND 11' ROAD WIDTH LOSS.
3. NEW 12' DRIVEWAY APPROACH FOR EACH LOT (TYP)
4. 12' CURB CUT FOR EXISTING HOME AT 733 S GARFIELD ST
5. NEW 6" EXPOSURE STANDARD CUTB AND GUTTER ALONG NEW S GARFIELD ST
6. NEW 24' WIDE DRIVEWAY.

ESC NOTES:

- A INSTALL SEDIMENT FENCE DOWNHILL OF ALL GRADING ACTIVITIES
- B CONCRETE WASH OUT
- C GRAVEL CONSTRUCTION ENTRANCE
- D INSTALL INLET PROTECTION ON ALL EXISTING AND PROPOSED STORM DRAIN INLETS WITHIN 200' DOWNSTREAM OF THE PROJECT SITE.

ESTIMATED SITE DATA:

AREA OF DISTURBANCE: 57,800 SF [1.3 ACRES] (INCLUDE ALL OF LOTS 1-7 AND TRACT A, AND DISTURBED AREA OF LOT 8 AND TRACT B)

NEW ASPHALT ROAD: 14,860 SF

NEW CONCRETE SIDEWALK: 3,090 SF

PROPOSED FINISH GRADE TO EXISTING GRADE
CUT: 120 CY
FILL: 290 CY

ENGINEER'S ESTIMATE IS APPROXIMATE AND PROVIDED FOR REFERENCE ONLY. CONTRACTOR RESPONSIBLE FOR TAKEOFFS USED IN BIDDING AND ACTUAL QUANTITIES OF IMPORTED/EXPORTED MATERIAL AS NEEDED FOR CONSTRUCTION

NORTH

0 20 40
SCALE IN FEET

REGISTERED PROFESSIONAL ENGINEER
67149PE
OREGON
JAN. 14, 2005
KELLI A. GROVER
PRELIMINARY

EXPIRES: 06/30/23
SIGNATURE DATE: 01/31/23

DATE:	NO.	REVISION

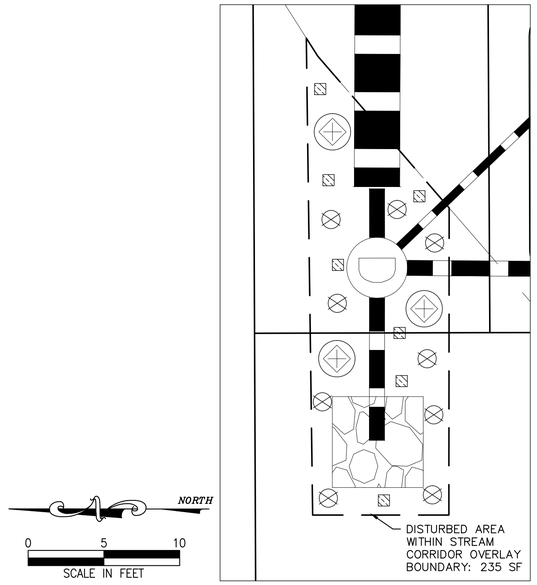
DRAWN: | DESIGNED: | CHECKED:
SCALE: AS SHOWN | DATE: JANUARY 2023
PROJECT NO. E21-049

FIRWOOD DESIGN GROUP
359 EAST HISTORIC COLUMBIA RIVER HIGHWAY
TROUTDALE, OREGON 97060
BUS: (503) 668-3737 ✦ FAX: (503) 668-3788

SCOTT HOLDEN
100 S GARFIELD ST
NEWBERG, OR 97132

PRELIMINARY GRADING & ESC PLAN
8-LOT SUBDIVISION

5
7



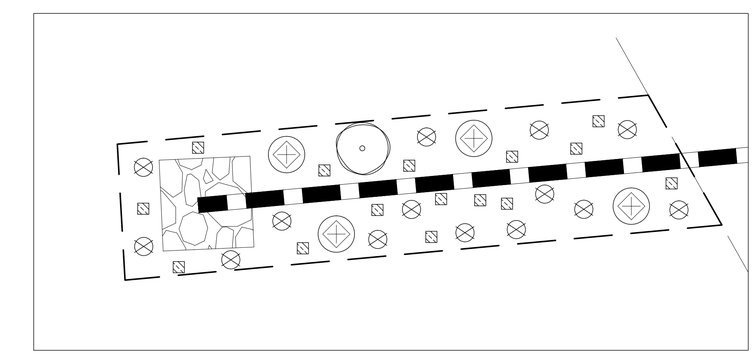
MITIGATION REPLANTING DETAIL
SCALE: 1"=5'

LEGEND

- TREE
- LARGE SHRUB
- SMALL SHRUB
- GRASSES, GROUNDCOVER

MITIGATION NOTES:

- ALL DISTURBED AREAS SHALL BE REGRADED AND CONTOURED TO APPEAR NATURAL.
- ALL FILL MATERIAL SHALL BE NATIVE SOIL
- REPLANTING SHALL BE REQUIRED USING A COMBINATION OF TREES, SHRUBS AND GRASS
- AREAS TO BE REPLANTED MUST BE COMPLETED AT THE TIME OF FINAL INSPECTION OR COMPLETEION OF THE WORK
- EXISTING VEGETATION THAT CAN BE SAVED AND REPLANTED IS ENCOURAGED, ALTHOUGH NOT REQUIRED
- ALL DISTURBED AREAS SHALL BE REPLANTED TO ACHIEVE 90 PERCENT COVER IN ONE YEAR.
- ALL DISTURBED AREAS SHALL BE PROTECTED WITH EROSION CONTROL DEVICES PRIOR TO CONSTRUCTION ACTIVITY. THESE DEVICES SHALL REMAIN IN PLACE UNTIL 90 PERCENT COVER IS ACHIEVED.



MITIGATION REPLANTING DETAIL
SCALE: 1"=5'

PLANTING NOTES:

1. ALL PLANTS AND PLANTINGS SHALL CONFORM TO CITY OF NEWBERG STANDARDS.
2. CONTRACTOR IS RESPONSIBLE FOR VERIFYING PLANT QUANTITIES. IF DISCREPANCIES OCCUR, DESIGN INTENT PREVAILS OVER QUANTITIES LISTED.
3. SOIL PREPARATION: GROWING MEDIUM SHALL MEET CITY OF NEWBERG AND YAMHILL COUNTY STANDARDS FOR NATIVE SOIL MIXES.
4. PLANTING SYMBOLS ARE MEANT TO CONVEY GENERAL PLANT LOCATION. PLANT COVERAGE, SPACING, AND LAYOUT SHALL BE CONSISTENT WITH THE SPACING LISTED IN THE PLANT LEGEND FOR FULL COVERAGE. ADJUST AS NECESSARY TO AVOID CONFLICTS WITH UTILITIES, LIGHTS, EXISTING VEGETATION, ETC.

PLANTING SCHEDULE

TYPE	QTY	BOTANICAL NAME	COMMON NAME	SIZE/HEIGHT	SPACING/WIDTH
	1	RHAMNUS PURHSIANA	CASCARA	30'	20'
	4	AMELANCHIER ALNIFOLIA	WESTERN SERVICEBERRY	6'	10'
	3	SAMBUCUS RACEMOSA	RED ELDERBERRY	8'	6'
	7	SYMPHORICARPOS ALBUS	COMMON SNOWBERRY	3'	2'
	7	RIBES LOBBI	GUMMY GOOSEBERRY	4'	4'
	6	ROSA GYMNOCARPA	BALDHIP ROSE	5'	2'
AS NECESSARY		JUNCUS ENSIFOLIUS	DAGGER-LEAF RUSH	1'	1'
		ATHYRIUM FILIX-FEMINA	LADY FERN	4'	2'

REGISTERED PROFESSIONAL ENGINEER
67149PE
OREGON
JAN. 14, 2003
KELLI A. GROVER
PRELIMINARY
EXPIRES: 06/30/23
SIGNATURE DATE: 01/31/23

DATE:	NO.	REVISION

DRAWN: | DESIGNED: | CHECKED:
SCALE: AS SHOWN | DATE: JANUARY 2023
PROJECT NO. E21-049

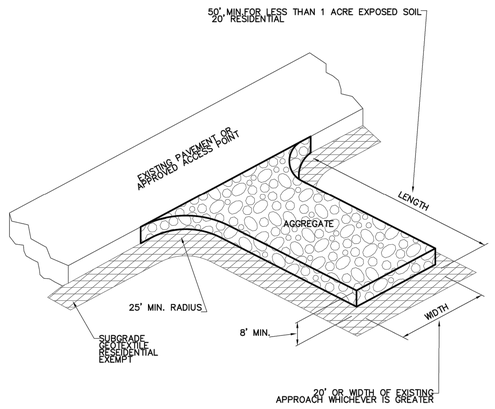
FIRWOOD DESIGN GROUP
359 EAST HISTORIC COLUMBIA RIVER HIGHWAY
TROUTDALE, OREGON 97060
BUS: (503) 668-3737 ✦ FAX: (503) 668-3788

SCOTT HOLDEN
100 S GARFIELD ST
NEWBERG, OR 97132

MITIGATION & RE-PLANTING PLAN
8-LOT SUBDIVISION

CITY OF NEWBERG EROSION CONTROL GENERAL NOTES

1. THE IMPLEMENTATION OF THIS ESC PLAN AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THE ESC FACILITIES IS THE RESPONSIBILITY OF THE APPLICANT/CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED, APPROVED AND VEGETATION/LANDSCAPING IS ESTABLISHED.
2. THE ESC PLAN, ANY REVISIONS, AND INSPECTION LOGS SHALL BE KEPT ONSITE AT ALL TIMES.
3. THE ESC MEASURES SHOWN ON THE PLAN ARE THE MINIMUM REQUIREMENTS FOR THE PROJECT SITE AND SHALL BE UPGRADED AS NEEDED TO MAINTAIN COMPLIANCE WITH ALL REGULATIONS.
4. ALL ESC MEASURES SHALL BE APPROVED, IN PLACE, AND FUNCTIONAL PRIOR TO ANY GROUND DISTURBANCE OF THE SITE. CONTRACTOR SHALL MAINTAIN ALL ESC MEASURES THROUGHOUT CONSTRUCTION.
5. CLEARING LIMITS, CRITICAL RIPARIAN AREAS, BUFFER ZONES, AND PRESERVED VEGETATION (INCLUDING IMPORTANT TREES AND ASSOCIATED CRITICAL ROOT ZONES) SHALL HAVE HIGH VISIBILITY FENCE INSTALLED BEFORE GRADING OR CONSTRUCTION TO IDENTIFY, MARK, AND PROTECT THE AREAS.
6. CONSTRUCTION ACTIVITIES WILL AVOID OR MINIMIZE ANY EXCAVATION OR OTHER SOIL DESTABILIZATION FROM OCTOBER 1ST TO MAY 31ST OF THE FOLLOWING YEAR.
7. TEMPORARY SITE STABILIZATION MEASURES WILL BE INSTALLED AT THE END OF THE SHIFT BEFORE A HOLIDAY OR WEEKEND OR AT THE END OF EACH WORKDAY IF RAIN IS FORECAST IN THE NEXT 24 HOURS.
8. SEDIMENT CONTROLS MUST BE INSTALLED AND MAINTAINED ALONG THE SITE PERIMETER ON ALL DOWN-GRADIENT SIDES OF THE CONSTRUCTION SITE AND AT ALL ACTIVE AND OPERATIONAL INTERNAL STORMDRAINS AT ALL TIMES DURING CONSTRUCTION.
9. DRY METHODS MUST BE USED TO REMOVE SEDIMENT AND CONCRETE SWEEPINGS FROM AREAS WHERE DISCHARGE IS LIKELY TO THE STORM DRAINS, STREETS, WATERCOURSES, OR SENSITIVE AREAS.
10. ALL DIRT AND DEBRIS TRACKED ONTO STREETS MUST BE REMOVED IMMEDIATELY IF IT CAN BE SPREAD BY TRAFFIC OR OTHERWISE REACH STORM DRAINS, WATERCOURSES, OR SENSITIVE AREAS.
11. SEDIMENT DISCHARGED OFFSITE MUST BE PLACED BACK ONSITE WITHIN 24 HOURS AND STABILIZED. IN-STREAM WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROCEDURES AND TIMEFRAMES OF THE OREGON DEPARTMENT OF STATE LANDS.
12. NO SEDIMENT-LADEN WATER MAY BE PUMPED, DIVERTED, OR OTHERWISE DISCHARGED OFFSITE UNLESS APPROVED BY THE ESC PLAN.
13. SEDIMENT MUST BE REMOVED WHEN IT HAS REACHED THE LEVEL SPECIFIED IN THE STANDARD DETAIL.
14. SEDIMENT MUST BE REMOVED FROM SUMPED STRUCTURES WHEN THE SEDIMENT RETENTION CAPACITY HAS BEEN REDUCED BY 1/3RD AND WITHIN 30 DAYS OF PROJECT COMPLETION.
15. WHEN REMOVING SATURATED SOILS FROM THE SITE, EITHER WATERTIGHT TRUCKS MUST BE USED OR LOADS MUST BE DRAINED ONSITE UNTIL DRIPPING HAS BEEN REDUCED TO MINIMIZE SPILLAGE.
16. EROSION CONTROL MEASURES WILL BE INSPECTED ON ACTIVE SITES AT LEAST WEEKLY OR AFTER PRECIPITATION IN EXCESS OF 0.5 INCHES IN 24 HOURS. IF A SITE WILL BE INACTIVE MORE THANFOURTEEN (14) DAYS, EROSION CONTROL MEASURES WILL BE INSPECTED PRIOR TO THE INACTIVE PERIOD AND EVERY TWO (2) WEEKS DURING THE INACTIVE PERIOD.
17. ALL CONSTRUCTION SITES MUST FOLLOW PROPER STORAGE, APPLICATION, AND DISPOSAL PROCEDURES OF CONSTRUCTION MATERIALS. NO DUMPING OR DISPOSAL OF CONSTRUCTION DEBRIS, WASTE, OR SPOIL MATERIAL WILL OCCUR IN ANY STREAM, STORMWATER SYSTEM, WETLANDS, SURFACE WATERS, OR OTHER WATERCOURSES OR SENSITIVE AREAS.
18. WRITTEN SPILL PREVENTION AND RESPONSE PROCEDURES ARE REQUIRED FOR ALL SITES.
19. TOXIC AND HAZARDOUS MATERIALS MUST HAVE COVER AND SECONDARY CONTAINMENT.
20. CONCRETE TRUCKS SHALL NOT DISCHARGE WASHWATER WHERE IT IS LIKELY TO FLOW INTO STORM DRAINS, STREETS, WATERCOURSES, OR SENSITIVE AREAS.
21. PAVING ACTIVITIES SHALL BE MINIMIZED BETWEEN OCTOBER 1ST AND MAY 31ST OF THE FOLLOWING YEAR TO AVOID POTENTIAL DISCHARGE OF PAVING CHEMICALS INTO THE STORM DRAINS, STREETS, WATERCOURSES, OR SENSITIVE AREAS.
22. ALL ESC MEASURES SHALL BE REMOVED FROM THE SITE 30 DAYS AFTER CONSTRUCTION IS COMPLETED AND APPROVED BY THE CITY.



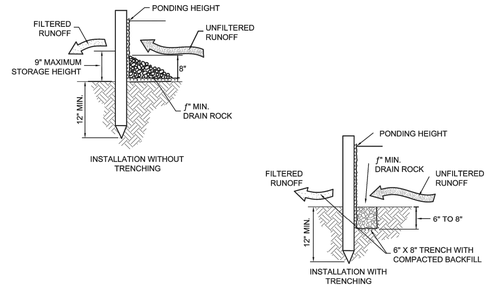
NOTES:
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-RIGH-OF WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
4. WHERE RUNOFF CONTAINING SEDIMENT-LADEN WATER IS LEAVING THE SITE VIA THE CONSTRUCTION ENTRANCE, OTHER MEASURES SHALL BE IMPLEMENTED TO DIVERT RUNOFF THROUGH AN APPROVED FILTERING SYSTEM.
5. DIMENSIONS
   SINGLE FAMILY AND DUPLEX
   20' LONG BY 20' WIDE, 8" DEEP OF 3/4 " MINUS CLEAN ROCK.
   COMMERCIAL
   50' LONG BY 20' WIDE, 3-6" DEEP CLEAN ROCK.
   GOVERNING AUTHORITY MAY REQUIRE GEOTEXTILE FABRIC TO PREVENT SUB-SOIL PUMPING.

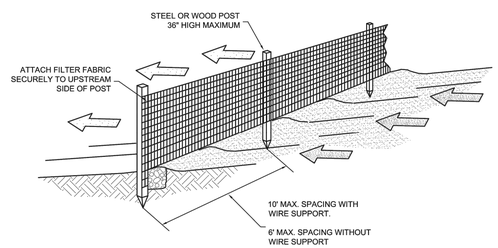
City of Newberg
PUBLIC WORKS ENGINEERING DIVISION
414 E. FIRST STREET NEWBERG, OR 97132
PHONE: 503-537-1240
FAX: 503-537-1277

REVISIONS:	

CONSTRUCTION ENTRANCE

SCALE:	N.T.S
DATE:	May 2007
APPROVED BY:	D. Danicic
STANDARD DRAWING	601



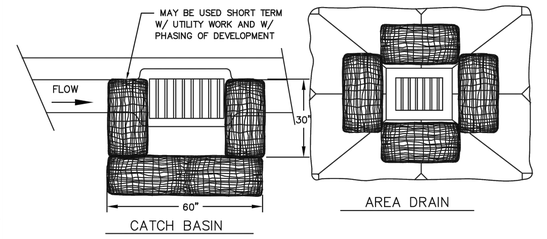


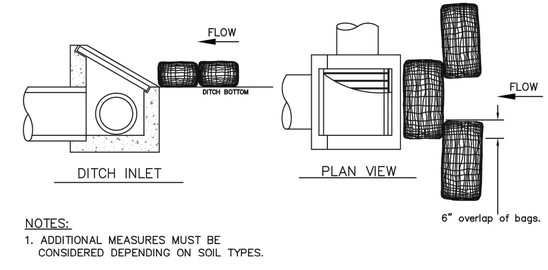
City of Newberg
PUBLIC WORKS ENGINEERING DIVISION
414 E. FIRST STREET NEWBERG, OR 97132
PHONE: 503-537-1240
FAX: 503-537-1277

REVISIONS:	

SILT FENCE

SCALE:	N.T.S.
DATE:	MAY 2007
APPROVED BY:	D. DANICIC
STANDARD DRAWING	602





NOTES:
1. ADDITIONAL MEASURES MUST BE CONSIDERED DEPENDING ON SOIL TYPES.
2. BIO-FILTER BAGS SHOULD BE STAKED WHERE APPLICABLE USING (2) 1"x2"WOODEN STAKES OR APPROVED EQUAL PER BAG.
3. WHEN USING 30" BIO-BAGS TO PROTECT A CATCH BASIN YOU MUST HAVE 4 BAGS AND THEY SHALL BE OVERLAPPED BY 6".

City of Newberg
PUBLIC WORKS ENGINEERING DIVISION
414 E. FIRST STREET NEWBERG, OR 97132
PHONE: 503-537-1240
FAX: 503-537-1277

REVISIONS:	
12/10/2013	

INLET PROTECTION

SCALE:	N.T.S.
DATE:	04/04/2009
APPROVED BY:	PAUL CHIU
STANDARD DRAWING	605

REGISTERED PROFESSIONAL ENGINEER
67149PE
PRELIMINARY
OREGON
Jan. 14, 2003
KELLI A. GROVER

EXPIRES: 06/30/23
SIGNATURE DATE: 01/31/23

DATE:	NO.	REVISION

DRAWN: | DESIGNED: | CHECKED:
SCALE: AS SHOWN | DATE: JANUARY 2023
PROJECT NO. E21-049

FIRWOOD DESIGN GROUP
359 EAST HISTORIC COLUMBIA RIVER HIGHWAY
TROUTDALE, OREGON 97060
BUS: (503) 668-3737 ✦ FAX: (503) 668-3788

SCOTT HOLDEN
100 S GARFIELD ST
NEWBERG, OR 97132

ESC DETAILS & NOTES
8-LOT SUBDIVISION

7/7

Type I Application (Administrative Review)

File #: ADJC123-0002

TYPES – PLEASE CHECK ONE:

- [X] Code Adjustment
- [ ] Final Plat
- [✓] Minor Design Review
- [ ] Property Line Adjustment
- [ ] ADU or Cottage Cluster Design Review
- [ ] Property Line Consolidation
- [ ] Type I Extension or Type I Minor/Major Modification
- [ ] Type II or Type III Extension or Minor Modification
- [ ] Other: (Explain) _____

APPLICANT INFORMATION:

APPLICANT: SCOTT HOLDEN

ADDRESS: 100 S. GARFIELD CITY: NEWBERG STATE: OR ZIP: 97132

EMAIL ADDRESS: SCOTTHOLDEN2007@OUTLOOK.COM PHONE: 5035028006 MOBILE:

OWNER *(if different from above)*: SAME

ADDRESS: _____ CITY: _____ STATE: _____ ZIP: _____ PHONE: _____

ENGINEER/SURVEYOR: FIRWOOD DESIGN GROUP CONTACT: KELLI GROVER

EMAIL ADDRESS: KG@FIRWOODDESIGN.COM PHONE: 5036683737 MOBILE:

GENERAL INFORMATION:

PROJECT LOCATION: 100 S. GARFIELD ST. PROJECT VALUATION: $ A LOT OF MONEY

PROJECT DESCRIPTION/USE: CREATE A 12 LOT SUBDIVISION

MAP/TAX LOT NO. (i.e.3200AB-400): R3219DB 04690 SITE SIZE: 1.95 SQ. FT. [ ] ACRE [✓]

COMP PLAN DESIGNATION: _____ CURRENT ZONING: R-2

CURRENT USE: CURRENTLY ON DUPLEX OCCUPIES A PORTION OF THE PROPERTY

SURROUNDING USES:

NORTH: OPEN AREA/ WATER RESOURCE SOUTH: RESIDENTIAL

EAST: BUSINESS WEST: RESIDENTIAL/ OPEN AREA

ATTACHED PROJECT CRITERIA AND REQUIREMENTS *(check all that apply)*

General Checklist: [✓] Fees [✓] Current Title Report [✓] Written Criteria Response [✓] Owner Signature [ ] 2 Copies of full Application Packet

For detailed checklists, applicable criteria for the written criteria response, and number of copies per application type, turn to:

The above statements and information herein contained are in all respects true, complete, and correct to the best of my knowledge and belief. Tentative plans must substantially conform to all standards, regulations, and procedures officially adopted by the City of Newberg. All owners must sign the application or submit letters of consent. Incomplete or missing information may delay the approval process.

Applicant Signature 2/23/23 Date

Owner Signature Date

SCOTT HOLDEN
Print Name

SAME AS APPLICANT
Print Name

Type I Application Narrative

Project Name: **Garfield St. Newberg Partition**

Site Address: 100 S Garfield St., Newberg, OR 97132

Prepared By:

359 E. Historic Columbia River Highway
Troutdale, OR 97060
503.668.3737- fax 503.668.3788

Table of Contents

I. Executive Summary

Location:
100 S Garfield St., Newberg, OR

Zoning:
R-2 Medium Density Residential

Site Size:
±1.95 acres

Legal Description:
3.2.19DB Tax Lot 4690

Applicant:
Scott Holden
100 S Garfield St., Newberg, OR 97132
Scottholden2007@outlook.com

Applicants Consultant:
Firwood Design Group LLC
359 E Historic Columbia River Hwy
Troutdale, OR 97060

Contact: Kelli Grover
Email: kg@firwooddesign.com
Phone: 503-668-3737

The applicant requests approval from the City of Newberg to divide the subject property into 12 lots with residential dwelling units. A preliminary plat and preliminary civil plans are provided that illustrate the proposed lot configurations, driveway approaches, utilities, stormwater management features, etc. The proposed improvements include extending S. Garfield Street with a full width section for 240 feet +/- and terminating in a modified cul-de-sac.

This written narrative includes responses to the approval criteria for a Type I Application request for a variance to the garage setback. The information presented herein provides the City with the supporting documentation to allow for approval of the application with conditions.

II. Site Description/ Setting :

The subject site for this proposed subdivision is located at 100 S Garfield St., Newberg, OR 97132. It is tax lot 4690 on assessors map T3.R2.Sectio19 DB and ±1.95 acres in total size. The lot is located north of E 8th St., east of S Garfield St., south and west of E 7th St.

The property includes an existing duplex, unpaved road and driveway, open grass area, mature trees, and a stream. There are mature trees and stream to the north, a residence directly to the west of the property, a business to the east, and residential properties to the south.

The proposed land division will retain the existing duplex and construct a new public street that will border the north and west sides of the lot that will contain the existing duplex. In order to meet road design criteria, avoid the existing resource overlay and match with the proposed future through road location, the alignment of the new road is limited. With the proposed alignment the existing garages for the existing duplex do not meet the required 20ft set back. Therefore this application requests a 25% reduction in the setback requirement to allow the duplex building to remain in the location as proposed. The setback is requested to be reduced by 5ft to a 15ft setback.

III. Applicable Review Criteria:

15.210.020 Type I adjustments and approval criteria.

The director may authorize adjustments from the following requirements through a Type I procedure subject to the following:

A. Yard Setback Dimensions, Lot Area, Percentage of Lot Coverage, Lot Dimensions.

1. The director may approve adjustments to:

a. Setbacks/Street Trees. Maximum adjustment of 25 percent of the dimensional standards for front yard setback requirements and the spacing of street trees.

2. Approval Criteria. Approval of an adjustment shall be based on written findings. The director shall find that approval will result in:

a. More efficient use of the site.

RESPONSE: With the proposed alignment of the public street and the existing buildings the proposed layout is the most efficient use of the site. This criteria is satisfied.

b. Preservation of natural features, where appropriate.

RESPONSE: With the proposed alignment of the public street will not impact the stream overlay and the natural features within this overall area are preserved. This criteria is satisfied.

c. Adequate provisions of light, air and privacy to adjoining properties.

RESPONSE: The proposed public street alignment and location of the existing dublex structure do not impede existing conditions for adequate light, air and privacy to adjoining properties. This criteria is satisfied.

d. Adequate emergency access.

RESPONSE: The proposed public street alignment provides adequate emergency access and has been reviewed and accepted by Tualatin Valley Fire District. This criteria is satisfied.

e. The adjustment is consistent with the setbacks, lot area, and/or coverage of buildings or structures previously existing in the immediate vicinity

RESPONSE: The adjustment is consistent with the zoning lot area requirements for a duplex building meeting the minimum 3000 sq. ft. area.

Additionally the reduced set back allows for one off street parking as the existing garages for the duplex units meets the single car garage required dimension of 10ft x 20ft. the existing garages are 11ft x 24ft.

Community Development Department
P.O. Box 970 ▪ 414 E First Street ▪ Newberg, Oregon 97132
503-537-1240. Fax 503-537-1272 www.newbergoregon.gov

NOTICE OF PLANNING COMMISSION HEARING ON A SUBDIVISION PRELMINARY PLAT

A property owner in your neighborhood submitted an application to the City of Newberg for a preliminary plat of a 12-lot subdivision. The Newberg Planning Commission will hold a hearing on ***December 8, 2022,*** at 7 p.m. at the Newberg Public Safety Building, 401 E. Third Street, Newberg, OR, to evaluate the proposal. You are invited to take part in the City's review of this project by sending in your written comments or by testifying before the Planning Commission. For more details about giving comments, please see the back of this sheet.

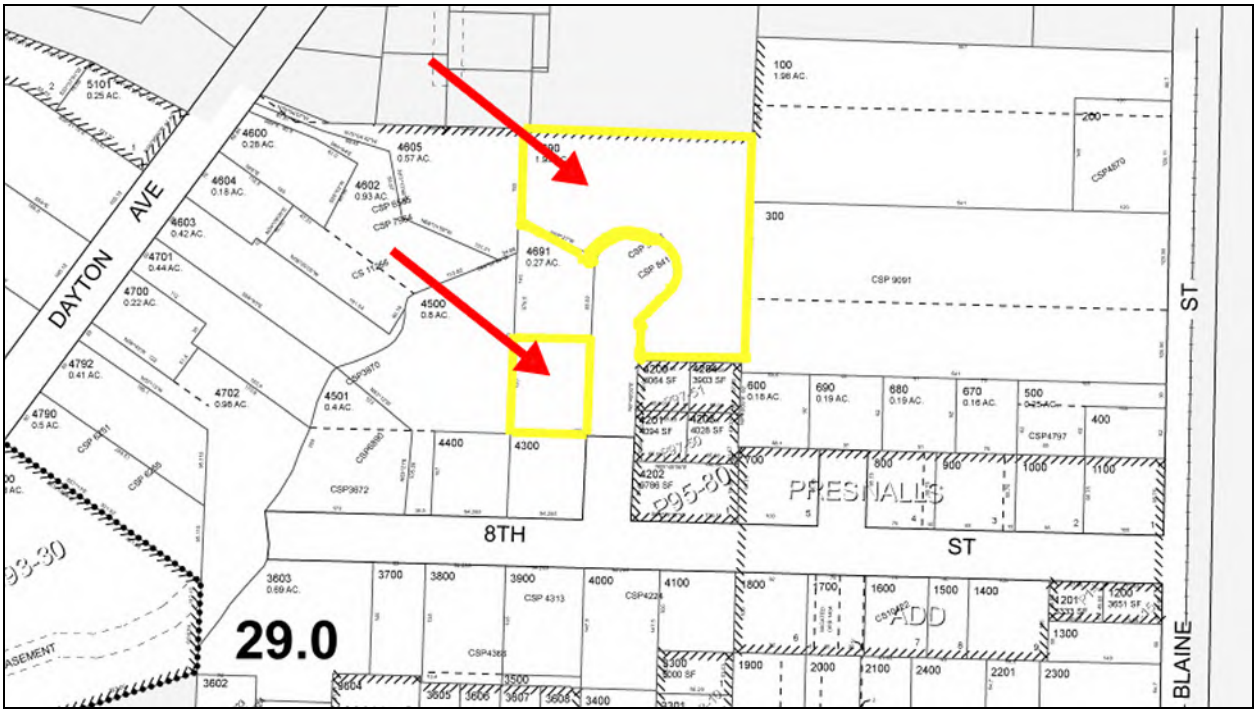
Part of the property contains a stream corridor overlay area. Therefore, the decision for the subdivision approval will be presented to the Newberg Planning Commission as a Type III Quasi-Judicial procedure per NMC 15.100.050(B)(10) and 15.235.030(A). The commission will review both the land division (NMC 15.235) and stream corridor criteria (NMC 15.342) during the public hearing.

APPLICANT: ***Scott Holden***
TELEPHONE: ***503-502-8006***

PROPERTY OWNER: ***Scott Holden***

LOCATION: ***100 S Garfield Street, Newberg, OR 97132***

TAX LOT NUMBER: ***R3219DB 04690***



Working Together For A Better Community-Serious About Service"

We are mailing you information about this project because you own land within 500 feet of the proposed subdivision. We invite you to participate in the land use hearing scheduled before the Planning Commission. If you wish to participate in the hearing, you may do so in person or be represented by someone else. Oral testimony typically is limited to five minutes per speaker.

If you mail your comments to the City, please put the following information on the outside of the envelope:

Written Comments: File No.SUB322-0001
City of Newberg
Community Development Department
PO Box 970
Newberg, OR 97132

All written comments must be turned in by noon on Monday, ***(December 5, 2022).*** Written information received after this time will be read out loud at the hearing subject to time limits for speakers, and will be included in the record if there are further proceedings.

You can look over all the information about this project or drop comments off at Newberg City Hall, 414 E. First Street. You can also buy copies of the information for a cost of 25 cents a page. A staff report relating to the proposal will be available for inspection at no cost seven days prior to the public hearing. Documents are also available at https://www.newbergoregon.gov/planning/page/sub322-0001-garfield-street-12-lot-subdivision If you have any questions about the project, you can call the Newberg Planning Division at 503-537-1240.

Any issue which might be raised in an appeal of this case to the Land Use Board of Appeals (LUBA) must be raised during the public hearing process. You must include enough detail to enable the decision maker an opportunity to respond. The applicable criteria used to make a decision on this application for a conditional use permit are found in Newberg Development Code Section 15.235 (Land Divisions) and 15.342 (Stream Corridor Overlay Subdistrict).

Prior to the conclusion of the initial evidentiary hearing, any participant may request an opportunity to present additional evidence, arguments or testimony regarding the application through a continuance or extension of the record. Failure of an issue to be raised in the hearing, in person or by letter, or failure to provide statements or evidence sufficient to afford the decision maker an opportunity to respond to the issue precludes appeal to the State Land Use Board of Appeals based on that issue.

If you participate in the public hearing process, either by testifying at the public hearing, or by sending in written comments, you will be sent information about any decision made by the City relating to this project.

Date Mailed: ***November 18, 2022***

***ACCOMMODATION OF PHYSICAL IMPAIRMENTS*:**

In order to accommodate persons with physical impairments, please notify the City Recorder's office of any special physical or language accommodations you may need as far in advance of the meeting as possible and no later than 48 hours prior to the meeting. To request these arrangements, please contact the City Recorder at 503-537-1283. For TTY services please dial 711.

City of Newberg
Community Development Department
P.O. Box 970 ▪ 414 E First Street ▪ Newberg, Oregon 97132
503-537-1240. Fax 503-537-1272 www.newbergoregon.gov

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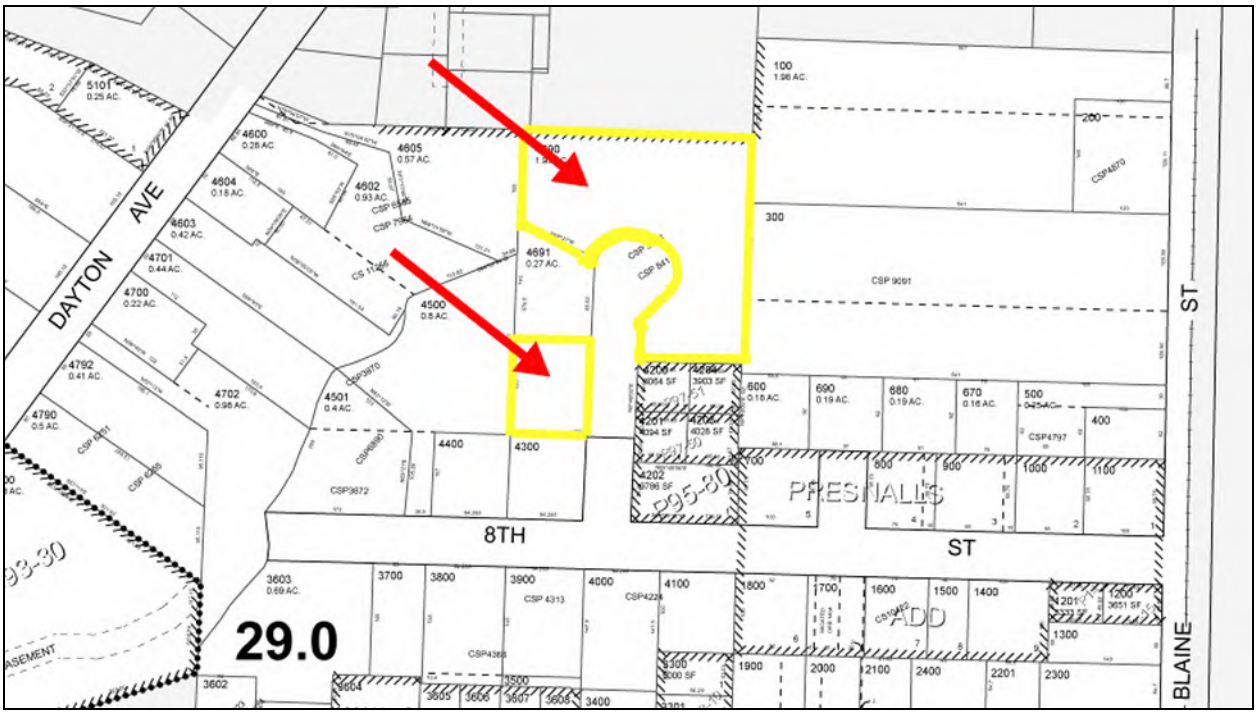
The application would create 8 new legal lots of record for residential units. The subdivision will extend the public street north and then to the east and terminate with a dead end. Public infrastructure to support the 8 lots will also be constructed. Part of the property contains a stream corridor overlay area. Therefore, the decision for the subdivision approval will be presented to the Newberg Planning Commission as a Type III Quasi-Judicial procedure per NMC 15.100.050(B)(10) and 15.235.030(A).

APPLICANT: ***Scott Holden***
TELEPHONE: ***503-502-8006***

PROPERTY OWNER: ***Scott Holden***

LOCATION: ***100 S Garfield Street, Newberg, OR 97132***

TAX LOT NUMBER: ***R3219DB 04690***



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PO Box 970
Newberg, OR 97132

All written comments must be turned in by noon on Monday, ***March 6, 2023.*** Written information received after this time will be read out loud at the hearing subject to time limits for speakers, and will be included in the record if there are further proceedings.

You can look over all the information about this project or drop comments off at Newberg City Hall, 414 E. First Street. You can also buy copies of the information for a cost of 25 cents a page. A staff report relating to the proposal will be available for inspection at no cost seven days prior to the public hearing. Documents are also available at https://www.newbergoregon.gov/planning under "Current Planning Projects". If you have any questions about the project, you can call the Newberg Planning Division at 503-537-1240.

Any issue which might be raised in an appeal of this case to the Land Use Board of Appeals (LUBA) must be raised during the public hearing process. You must include enough detail to enable the decision maker an opportunity to respond. The applicable criteria used to make a decision on this application for a Preliminary Subdivision Plan are found in Newberg Development Code Section 15.235 (Land Divisions) and 15.342 (Stream Corridor Overlay Subdistrict).

Prior to the conclusion of the initial evidentiary hearing, any participant may request an opportunity to present additional evidence, arguments or testimony regarding the application through a continuance or extension of the record. Failure of an issue to be raised in the hearing, in person or by letter, or failure to provide statements or evidence sufficient to afford the decision maker an opportunity to respond to the issue precludes appeal to the State Land Use Board of Appeals based on that issue.

The Planning Commission will make a decision at the end of the public hearing process. If you participate in the public hearing process, either by testifying at the public hearing, or by sending in written comments, you will be sent information about any decision made by the City relating to this project.

Date Mailed: ***February 13, 2023***

***ACCOMMODATION OF PHYSICAL IMPAIRMENTS*:**

In order to accommodate persons with physical impairments, please notify the City Recorder's office of any special physical or language accommodations you may need as far in advance of the meeting as possible and no later than 48 hours prior to the meeting. To request these arrangements, please contact the City Recorder at 503-537-1283. For TTY services please dial 711.

Land Use Notice

FILE #:

PROPOSAL: 12-lot subdivision for single-family residences, street, and associated utilities

FOR FURTHER INFORMATION, CONTACT:

City of Newberg
Community Development Department
414 E First Street
Phone: 503-537-1240


Land Use Notice
FILE #: SUB322-0001


Land Use Notice
FILE #: SUB322-0001

Owner Name(s) Fi	Property A	City	State	ZIP Code	ZIP4	Compl	Owner 1 Full Name	Mailing Address	Mailir	Mailing Str	Mailing Str	Mailing	Mailing Cit	Mailing	Mailing ZIP	Mailing Comp	Do Not Ma	Latitude	Longitude	County Na	APN
Stewart & Laura V	115 W Johi	Newberg	OR	97132	3000	Yes	Weed, Stewart Wendell	115 W Johanna Ct	115	W	Johanna	Ct	Newberg	OR	97132	3000	Yes	Exclude	45.29585	-122.979	Yamhill Cou	R3219Ac 05902
Paul & Emily Bach	120 W Johi	Newberg	OR	97132	3000	Yes	Bachand, Paul B	120 W Johanna Ct	120	W	Johanna	Ct	Newberg	OR	97132	3000	Yes	Exclude	45.29559	-122.979	Yamhill Cou	R3219Ac 05906
Monica Chapman	130 W Johi	Newberg	OR	97132	3000	Yes	Chapman, Monica	130 W Johanna Ct	130	W	Johanna	Ct	Newberg	OR	97132	3000	Yes	Exclude	45.29523	-122.98	Yamhill Cou	R3219Ac 05907
John & Ekaterina I	140 W Johi	Newberg	OR	97132	3000	Yes	Lomperis, John	140 W Johanna Ct	140	W	Johanna	Ct	Newberg	OR	97132	3000	Yes	Exclude	45.29545	-122.98	Yamhill Cou	R3219Ac 05908
Theodore & Paige	124 W Johi	Newberg	OR	97132	3000	Yes	Reuter, Theodore W	124 W Johanna Ct	124	W	Johanna	Ct	Newberg	OR	97132	3000	Yes		45.29543	-122.979	Yamhill Cou	R3219Ac 05910
Harry Banister & J	128 W Johi	Newberg	OR	97132	3000	Yes	Banister, Harry S	128 W Johanna Ct	128	W	Johanna	Ct	Newberg	OR	97132	3000	Yes	Exclude	45.29522	-122.979	Yamhill Cou	R3219Ac 05911
Rae Andrew	100 W Johi	Newberg	OR	97132	3000	Yes	Andrew, Rae J	100 W Johanna Ct	100	W	Johanna	Ct	Newberg	OR	97132	3000	Yes	Exclude	45.29551	-122.979	Yamhill Cou	R3219Ac 05912
Theodore & Paige	124 W Johi	Newberg	OR	97132		Yes	Reuter, Theodore W		124	W	Johanna	Ct	Newberg	OR	97132	3000	Yes	Exclude	45.29549	-122.98	Yamhill Cou	R3219Ac 05913
Timothy Thielen	606 S Dayt	Newberg	OR	97132	2536	Yes	Thielen, Timothy J	606 S Dayton Ave	606	S	Dayton	Ave	Newberg	OR	97132	2536	Yes	Exclude	45.29547	-122.98	Yamhill Cou	R3219Ac 06000
Andrea & Christop	610 S Dayt	Newberg	OR	97132	2536	Yes	Mooney, Andrea Nicole	610 S Dayton Ave	610	S	Dayton	Ave	Newberg	OR	97132	2536	Yes	Exclude	45.29523	-122.98	Yamhill Cou	R3219Ac 06100
Li Ren Equity Llc	611 S Blain	Newberg	OR	97132	3329	No	Li Ren Equity Llc	13025 Sw Allen Blvd	####	Sw	Allen	Blvd	Beaverton	OR	97005	4529	Yes	Exclude	45.29516	-122.977	Yamhill Cou	R3219Db 00100
School District No	703 S Blain	Newberg	OR	97132	3333	No	School District No 29	535 Ne 5Th St	535	Ne	5Th	St	Mcminnvill	OR	97128	4531	Yes	Exclude	45.29443	-122.977	Yamhill Cou	R3219Db 00300
Jose & Aniceto Ba	207 E 7Th S	Newberg	OR	97132	2552	Yes	Baca, Jose Juan	2618 Nw Hayes Rd	2618	Nw	Hayes	Rd	Woodland	WA	98674	2219	Yes	Exclude	45.29422	-122.978	Yamhill Cou	R3219Db 00600
Timothy & Laurel	109 E 7Th S	Newberg	OR	97132	2509	Yes	Mueller, Timothy L	PO BOX 157	157		PO BOX		Carlton	OR	97111	157	Yes	Exclude	45.29416	-122.977	Yamhill Cou	R3219Db 00670
Timothy & Laurel	113 E 7Th S	Newberg	OR	97132	2509	Yes	Mueller, Timothy L	PO BOX 157	157		PO BOX		Carlton	OR	97111	157	Yes	Exclude	45.29423	-122.977	Yamhill Cou	R3219Db 00680
Jose Baca	201 E 7Th S	Newberg	OR	97132	2552	Yes	Baca, Jose Juan	201 E 7Th St	201	E	7Th	St	Newberg	OR	97132	2552	Yes	Exclude	45.2942	-122.978	Yamhill Cou	R3219Db 00690
Av & Claudia Tow	115 E 8Th S	Newberg	OR	97132	4601	Yes	Townsend, Av	115 E 8Th St	115	E	8Th	St	Newberg	OR	97132	4601	Yes	Exclude	45.29391	-122.978	Yamhill Cou	R3219Db 00700
Frank & Margaret	201 E 8Th S	Newberg	OR	97132	2512	Yes	Roberts, Frank E	201 E 8Th St	201	E	8Th	St	Newberg	OR	97132	2512	Yes	Exclude	45.29391	-122.977	Yamhill Cou	R3219Db 00800
John Russell	205 E 8Th S	Newberg	OR	97132	2512	Yes	Russell, John M	205 E 8Th St	205	E	8Th	St	Newberg	OR	97132	2512	Yes	Exclude	45.29389	-122.977	Yamhill Cou	R3219Db 00900
Jack & Angela Ma	200 E 8Th S	Newberg	OR	97132	2542	Yes	May, Jack B	2220 N Thorne St	2220	N	Thorne	St	Newberg	OR	97132	9517	Yes	Exclude	45.29351	-122.978	Yamhill Cou	R3219Db 01600
Daniel & Julie Oliv	116 E 8Th S	Newberg	OR	97132	2511	Yes	Olivas, Daniel	116 E 8Th St	116	E	8Th	St	Newberg	OR	97132	2511	Yes		45.29349	-122.978	Yamhill Cou	R3219Db 01700
Cozad Ventures Ll	114 E 8Th S	Newberg	OR	97132	2511	No	Cozad Ventures Llc	***Redacted***	3077	N	Pankratz	Ave	Meridian	ID	83646	7065	Yes	Exclude	45.29351	-122.978	Yamhill Cou	R3219Db 01800
Steven Porter	107 E 9Th S	Newberg	OR	97132	2519	Yes	Porter, Steven Daniel	107 9Th St	107		9Th	St	San Francis	CA	94103		Yes	Exclude	45.29327	-122.978	Yamhill Cou	R3219Db 03300
Mark & Sarah Sta	110 W 8Th	Newberg	OR	97132	2517	Yes	Staples Kelley, Mark	110 W 8Th St	110	W	8Th	St	Newberg	OR	97132	2517	Yes	Exclude	45.29345	-122.98	Yamhill Cou	R3219Db 03700
Christopher & Am	106 W 8Th	Newberg	OR	97132	2517	Yes	Pucci, Christopher A	106 W 8Th St	106	W	8Th	St	Newberg	OR	97132	2517	Yes		45.29347	-122.98	Yamhill Cou	R3219Db 03800
Ronald Nyman	102 E 8Th S	Newberg	OR	97132	2511	Yes	Nyman, Ronald W	102 E 8Th St	102	E	8Th	St	Newberg	OR	97132	2511	Yes	Exclude	45.29343	-122.979	Yamhill Cou	R3219Db 03900
Rodney & Cindy T	104 E 8Th S	Newberg	OR	97132	2511	Yes	Thrall, Rodney G	104 E 8Th St	104	E	8Th	St	Newberg	OR	97132	2511	Yes	Exclude	45.29352	-122.979	Yamhill Cou	R3219Db 04000
Joseph & Brandy (	110 E 8Th S	Newberg	OR	97132	2511	Yes	Campbell, Joseph	110 E 8Th St	110	E	8Th	St	Newberg	OR	97132	2511	Yes	Exclude	45.29353	-122.978	Yamhill Cou	R3219Db 04100
Deborah Roberts	702 S Garfi	Newberg	OR	97132	2510	Yes	Roberts, Deborah R	702 S Garfield St	702	S	Garfield	St	Newberg	OR	97132	2510	Yes	Exclude	45.29427	-122.979	Yamhill Cou	R3219Db 04200
Delmar & Darlene	706 S Garfi	Newberg	OR	97132	2510	Yes	Washburn, Delmar C	10820 Ne Stevenson Rd	####	Ne	Stevenson	Rd	Newberg	OR	97132	6849	Yes	Exclude	45.29407	-122.979	Yamhill Cou	R3219Db 04201
Israel & Laura Alle	111 E 8Th S	Newberg	OR	97132	4601	Yes	Allen, Israel E	111 E 8Th St	111	E	8Th	St	Newberg	OR	97132	4601	Yes	Exclude	45.29389	-122.979	Yamhill Cou	R3219Db 04202
Rodolfo Gonzales	708 S Garfi	Newberg	OR	97132	2510	Yes	Gonzales, Rodolfo	708 S Garfield St	708	S	Garfield	St	Newberg	OR	97132	2510	Yes	Exclude	45.29407	-122.978	Yamhill Cou	R3219Db 04203
Ronnie & Ruth Pal	704 S Garfi	Newberg	OR	97132	2510	Yes	Palmer, Ronnie W	704 S Garfield St	704	S	Garfield	St	Newberg	OR	97132	2510	Yes	Exclude	45.29427	-122.978	Yamhill Cou	R3219Db 04204
Timothy Vanberge	101 W 8Th	Newberg	OR	97132	4603	Yes	Vanbergen, Timothy W	101 W 8Th St	101	W	8Th	St	Newberg	OR	97132	4603	Yes	Exclude	45.29394	-122.979	Yamhill Cou	R3219Db 04300
Timothy & Pamel	109 W 8Th	Newberg	OR	97132	4603	Yes	Smith, Timothy A	109 W 8Th St	109	W	8Th	St	Newberg	OR	97132	4603	Yes		45.29389	-122.98	Yamhill Cou	R3219Db 04400
Thomas & Julie Bi	115 W 8Th	Newberg	OR	97132	4606	Yes	Birmingham, Thomas M	117 W 8Th St	117	W	8Th	St	Newberg	OR	97132	4603	Yes	Exclude	45.29429	-122.98	Yamhill Cou	R3219Db 04500
Thomas & Julie Bi	117 W 8Th	Newberg	OR	97132	4603	Yes	Birmingham Iii, Thomas M	117 W 8Th St	117	W	8Th	St	Newberg	OR	97132	4603	Yes	Exclude	45.29397	-122.98	Yamhill Cou	R3219Db 04501
Donald Norman	700 S Dayt	Newberg	OR	97132	2538	Yes	Norman, Donald E	700 S Dayton Ave	700	S	Dayton	Ave	Newberg	OR	97132	2538	Yes	Exclude	45.295	-122.98	Yamhill Cou	R3219Db 04600
Kennedy Reese	618 S Dayt	Newberg	OR	97132	2536	No	Kennedy Reese C & Ruth U	618 S Dayton Ave	618	S	Dayton	Ave	Newberg	OR	97132	2536	Yes	Exclude	45.29483	-122.98	Yamhill Cou	R3219Db 04602
Carrie Spray & Sh	712 S Dayt	Newberg	OR	97132	2538	Yes	Spray, Carrie E	712 S Dayton Ave	712	S	Dayton	Ave	Newberg	OR	97132	2538	Yes	Exclude	45.29461	-122.981	Yamhill Cou	R3219Db 04603
Daniel Allenby	614 S Dayt	Newberg	OR	97132	2536	Yes	Allenby, Daniel J	614 S Dayton Ave	614	S	Dayton	Ave	Newberg	OR	97132	2536	Yes		45.29498	-122.98	Yamhill Cou	R3219Db 04605
Holden New Berg	100 S Garfi	Newberg	OR	97132	2590	No	Holden New Berg Qozb Llc	5652 Sw Northwood Ave	5652	Sw	Northwood	Ave	Portland	OR	97239		Yes	Exclude	45.29443	-122.979	Yamhill Cou	R3219Db 04690
David & Debby Th	733 S Garfi	Newberg	OR	97132	2560	Yes	Thomas, David	733 S Garfield St	733	S	Garfield	St	Newberg	OR	97132	2560	Yes	Exclude	45.29459	-122.979	Yamhill Cou	R3219Db 04691
Andrew & Lestey	714 S Dayt	Newberg	OR	97132	2538	Yes	Parker, Andrew S	714 S Dayton Ave	714	S	Dayton	Ave	Newberg	OR	97132	2538	Yes	Exclude	45.29438	-122.981	Yamhill Cou	R3219Db 04701

Preliminary Report

Fidelity National Title - Oregon

File No.: 45142301036

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Fidelity National Title
Company of Oregon

PUBLIC RECORD REPORT FOR NEW SUBDIVISION OR LAND PARTITION

THIS REPORT IS ISSUED BY THE ABOVE-NAMED COMPANY ("THE COMPANY") FOR THE EXCLUSIVE USE OF THE FOLLOWING CUSTOMER:

Fidelity National Title - Builder Services
Phone No.: (503)796-6654

Date Prepared: February 8, 2023
Effective Date: February 6, 2023 / 08:00 AM
Charge: $300.00
Order No.: 45142301036
Reference:

The information contained in this report is furnished to the Customer by Fidelity National Title Company of Oregon (the "Company") as an information service based on the records and indices maintained by the Company for the county identified below. This report is not title insurance, is not a preliminary title report for title insurance, and is not a commitment for title insurance. No examination has been made of the Company's records, other than as specifically set forth in this report ("the Report"). Liability for any loss arising from errors and/or omissions is limited to the lesser of the fee paid or the actual loss to the Customer, and the Company will have no greater liability by reason of this report. This report is subject to the Definitions, Conditions and Stipulations contained in it.

REPORT

A. The Land referred to in this report is located in the County of Yamhill, State of Oregon, and is described as follows:

As fully set forth on Exhibit "A" attached hereto and by this reference made a part hereof.

B. As of the Effective Date, the tax account and map references pertinent to the Land are as follows:

As fully set forth on Exhibit "B" attached hereto and by this reference made a part hereof.

C. As of the Effective Date and according to the Public Records, we find title to the land apparently vested in:

As fully set forth on Exhibit "C" attached hereto and by this reference made a part hereof.

D. As of the Effective Date and according to the Public Records, the Land is subject to the following liens and encumbrances, which are not necessarily shown in the order of priority:

As fully set forth on Exhibit "D" attached hereto and by this reference made a part hereof.

EXHIBIT "A"
(Land Description)

For APN/Parcel ID(s): 56478
For Tax Map ID(s): R3219DB 04690

Part of the Joseph B. Rogers Donation Land Claim No. 55 in Township 3 South, Range 2 West, Willamette Meridian, County of Yamhill, State of Oregon, described as follows:

Beginning at a point where the centerline of Ninth Street in the City of Newberg produced West intersects the West line of said Claim; thence East along the centerline of said street 660 feet; thence North 462 feet to the Northeast corner of that tract conveyed to Lewis C. Hodgdon, et ux by Deed recorded June 23, 1948 in Book 149, page 216, Yamhill County Records; thence North along the East line of that certain most Easterly tract conveyed to W. R. Weatherly, et ux by Deed recorded May 28, 1948 in Book 148, page 774, Yamhill County Records, 95 feet to the true point of beginning; thence continuing North along said East line 284.5 feet, more or less, to the Northeast corner of said Weatherly tract; thence West along the North line of said Weatherly tract 287 feet to the Northeast corner of that tract conveyed to E. F. Hubert by Deed recorded January 3, 1902 in Book 41, page 593, Yamhill County Records; thence South along the East line of said Hubert tract 379.5 feet to the North line of the aforesaid Hodgdon tract; thence East along said North line 158.5 feet to a point; thence North parallel to the East line of aforesaid Weatherly tract 95 feet to a point; thence East parallel to the North line of said Hodgdon tract 128.5 feet to the point of beginning.

EXCEPTING THEREFROM that parcel conveyed to Gwain E. Streed and Laurie J. Streed by Warranty Deed recorded March 6, 1987 in Film Volume 211, page 1126, Yamhill County Records, described as follows:

Part of the Joseph B. Rogers Donation Land Claim No. 55 in Township 3 South, Range 2 West, Willamette Meridian, County of Yamhill, State of Oregon, and being a portion of that tract conveyed to Dennis L. Streed and Elaine M. Streed by Deed recorded April 19, 1968 in Film Volume 67, page 462, Yamhill County Records, more particularly described as follows:

Beginning at a point on the West line of said Streed tract which bears North 00° 09' 24" East 120.0 feet from the Southwest corner thereof; thence North 89° 48' 30" East 95.62 feet; thence North 00° 48' 46" East 85.52 feet; thence along the arc of a 50 foot radius curve to the right (long chord of which bears North 10° 40' 46" East 17.13 feet) 17.21 feet; thence North 69° 27' 28" West 106.39 feet to a point on the West line of said Streed tract; thence along the West line thereof South 00° 09' 24" West 140.00 feet to the point of beginning.

EXHIBIT "B"
(Tax Account and Map)

APN/Parcel ID(s) 56478 as well as Tax/Map ID(s) R3219DB 04690

EXHIBIT "C"
(Vesting)

Holden Newberg QOZB LLC, an Oregon limited liability company

EXHIBIT "D"
(Liens and Encumbrances)

1. City Liens, if any, in favor of the City of Newberg.

2. Rights of the public to any portion of the Land lying within the area commonly known as streets, roads and/or highways.

3. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

   Granted to: Gwain E. Streed and Laurie J. Streed
   Purpose: Access and utilities
   Recording Date: July 6, 1995
   Recording No: 199508561
   Affects: Reference is hereby made to said document for full particulars

4. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

   Granted to: Newberg School District No. 29
   Purpose: Private sewer
   Recording Date: August 6, 2003
   Recording No: 200319737
   Affects: Reference is hereby made to said document for full particulars

5. A deed of trust to secure an indebtedness in the amount shown below,

Amount:	$621,434.00
Dated:	August 16, 2021
Trustor/Grantor:	Holden Newberg QOZB LLC, an Oregon limited liability company
Trustee:	Fidelity National Title Insurance Company
Beneficiary:	First Republic Bank
Loan No.:	22-07976848
Recording Date:	August 26, 2021
Recording No.:	202117495

End of Liens & Encumbrances

Note: Property taxes for the fiscal year shown below are paid in full.

Fiscal Year:	2022-2023
Amount:	$4,154.89
Levy Code:	29.0
Account No.:	56478
Map No.:	R3219DB 04690

EXHIBIT "D"
(Liens and Encumbrances)
(continued)

NOTE: Boundary Deeds

Bargain and Sale Deed
Grantor: Orma Jean Vanbergen, who took title as Jeannie O. Vanbergen
Grantee: Timothy W. Vanbergen
Recording Date: October 22, 2018
Recording No.: 201814998
Affects: Taxlot 4300

Bargain and Sale Deed
Grantor: Thomas M. Birmingham, III and Julie C. Birmingham
Grantee: Thomas M. Birmingham, III and Julie C. Birmingham, Co-Trustees of the Birmingham Trust dated 4/21/92
Recording Date: April 27, 1992
Recording No.: Film Volume 268, page 147
Affects: Taxlot 4500

Statutory Bargain and Sale Deed
Grantor: Daniel J. Allenby and Heather M. Moriarty
Grantee: Daniel J. Allenby
Recording Date: December 8, 2017
Recording No.: 202200179
Affects: Taxlot 4605

Statutory Warranty Deed
Grantor: Tassy L. Davis Builder, Inc.
Grantee: Harry S. Banister and Jennifer L. Dittmer
Recording Date: March 5, 2013
Recording No.: 201303282
Affects: Taxlot 5911 (Map R3219AC)

Statutory Warranty Deed
Grantor: Rea Andrew
Grantee: Rea Andrew, Trustee of the Rea Andrew Trust u/i/d December 20, 2021
Recording Date: December 22, 2021
Recording No.: 202124553
Affects: Taxlot 5912 (Map 3219AC)

Statutory Warranty Deed
Grantor: Li Ren Equity LLC
Grantee: Blaine Street Apartments LLC
Recording Date: June 21, 2022
Recording No.: 202208585
Affects: Taxlot 100

EXHIBIT "D"
(Liens and Encumbrances)
(continued)

Warranty Deed
Grantor: O. H. Livengood and Lois A. Livengood
Grantee: School District No. 29, Yamhill County
Recording Date: July 3, 1957
Recording No.: Volume 184, page 666
Affects: Taxlot 300

Warranty Deed
Grantor: Henry W. Cook and Audrey R. Cook
Grantee: School District No. 29, Yamhill County
Recording Date: July 3, 1957
Recording No.: Volume 184, page 667
Affects: Taxlot 300

Warranty Deed
Grantor: Debra A. Dimone and Vincent P. Dimone
Grantee: Deborah R. Roberts
Recording Date: January 18, 2005
Recording No.: 200501042
Affects: Taxlot 4200

Statutory Warranty Deed
Grantor: Delmar C. Washburn
Grantee: Ronnie W. Palmer and Ruth E. Palmer
Recording Date: September 10, 1997
Recording No.: 199715269
Affects: Taxlot 4204

Warranty Deed
Grantor: Delmar C. Washburn
Grantee: Delmar C. Washburn and Darlene J. Washburn
Recording Date: December 11, 1998
Recording No.: 199824465
Affects: Taxlot 4201

Fidelity National Title Company of Oregon
Public Record Report for New Subdivision or Land Partition
Order No. 45142301036

DEFINITIONS, CONDITIONS AND STIPULATIONS

1. **Definitions.** The following terms have the stated meaning when used in this report:
   (a) "Customer": The person or persons named or shown as the addressee of this report.
   (b) "Effective Date": The effective date stated in this report.
   (c) "Land": The land specifically described in this report and improvements affixed thereto which by law constitute real property.
   (d) "Public Records": Those records which by the laws of the state of Oregon impart constructive notice of matters relating to the Land.
2. **Liability of Company.**
   (a) This is not a commitment to issue title insurance and does not constitute a policy of title insurance.
   (b) The liability of the Company for errors or omissions in this public record report is limited to the amount of the charge paid by the Customer, provided, however, that the Company has no liability in the event of no actual loss to the Customer.
   (c) No costs (including without limitation attorney fees and other expenses) of defense, or prosecution of any action, is afforded to the Customer.
   (d) In any event, the Company assumes no liability for loss or damage by reason of the following:
      (1) Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records.
      (2) Any facts, rights, interests or claims which are not shown by the Public Records but which could be ascertained by an inspection of the land or by making inquiry of persons in possession thereof.
      (3) Easements, liens or encumbrances, or claims thereof, which are not shown by the Public Records.
      (4) Discrepancies, encroachments, shortage in area, conflicts in boundary lines or any other facts which a survey would disclose.
      (5) (i) Unpatented mining claims; (ii) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (iii) water rights or claims or title to water.
      (6) Any right, title, interest, estate or easement in land beyond the lines of the area specifically described or referred to in this report, or in abutting streets, roads, avenues, alleys, lanes, ways or waterways.
      (7) Any law, ordinance or governmental regulation (including but not limited to building and zoning laws, ordinances or regulations) restricting, regulating, prohibiting or relating to (i) the occupancy, use or enjoyment of the land; (ii) the character, dimensions or location of any improvement now or hereafter erected on the land; (iii) a separation in ownership or a change in the dimensions or area of the land or any parcel of which the land is or was a part; or (iv) environmental protection, or the effect of any violation of these laws, ordinances or governmental regulations, except to the extent that a notice of the enforcement thereof or a notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the Public Records at the effective date hereof.
      (8) Any governmental police power not excluded by 2(d)(7) above, except to the extent that notice of the exercise thereof or a notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the Public Records at the effective date hereof.
      (9) Defects, liens, encumbrances, adverse claims or other matters created, suffered, assumed, agreed to or actually known by the Customer.
3. **Report Entire Contract.** Any right or action or right of action that the Customer may have or may bring against the Company arising out of the subject matter of this report must be based on the provisions of this report. No provision or condition of this report can be waived or changed except by a writing signed by an authorized officer of the Company. By accepting this form report, the Customer acknowledges and agrees that the Customer has elected to utilize this form of public record report and accepts the limitation of liability of the Company as set forth herein.
4. **Charge.** The charge for this report does not include supplemental reports, updates or other additional services of the Company.

LIMITATIONS OF LIABILITY

"CUSTOMER" REFERS TO THE RECIPIENT OF THIS REPORT.

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

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

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

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

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

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

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

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

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

END OF THE LIMITATIONS OF LIABILITY

Property Detail Report

Prepared For:

Linda

Owner Name:

Holden Newberg Qozb LLC

Property Address:

100 S Garfield St

Newberg OR 97132

Tax Account #:

56478

Thank you for the opportunity to assist you!

Chad Cripe

Customer Service

503.581.1431

valleycs@ameritite.com

Mid-Willamette Valley Locations

Salem
320 Church St. NE
503.581.1431

South Salem
3240 Commercial St. SE, Ste. 140
971.701.2591

Silverton
105 N Water St.
503.873.7200

Albany
1393 Clay St. SE
541.928.3368

Corvallis
525 NW 2nd St. Ste. 2
541.752.3415

Lebanon
1475 S Main St
541.259.3736

Monmouth
283 N Pacific Hwy
503.838.2259

Yamhill County Parcel Detail

Site Address:	100 S Garfield St
	Newberg OR 97132 - 2590
Parcel ID:	56478
Tax Lot:	R3219DB04690
Owner:	Holden Newberg Qozb LLC
Owner2:	
Owner Address:	5652 NW Crady Ln
	Portland OR 97229 - 2341
Parcel Size:	1.95 Acres (84,942 SqFt)
Neighborhood:	
Subdivision:	
Lot / Block:	
Twn/Range/Section:	03S / 02W / 19 / SE
Legal	See Metes & Bounds

Assessment and Taxes

Market Land Value:	$1,000,145.00	**Levy Code Area:**	29.0	**Annual Tax History**
Market Improved Value:	$229,850.00	**Levy Rate:**	15.9711	**2021 : $4,042.43**
Market Total Value:	$1,229,995.00	**Tax Year:**	2021	**2020 : $3,640.13**
Assessed Value:	$253,109.00	**Exemption Desc:**		**2019 : $3,591.06**

Land Information

Land Use:	111 - Residential - Residential zone - Improved (typical of class)	**School District:**	29J - Newberg School District
Building Use:	22 - Duplex	**Watershed:**	Chehalem Creek-Willamette River
Zoning:	R-2 - Medium Density Residential	**Longitude:**	-122.978805
Primary School:	EDWARDS ELEMENTARY SCHOOL	**Latitude:**	45.294658
Middle School:	CHEHALEM VALLEY MIDDLE SCHOOL	**Recreation:**	
High School:	NEWBERG SENIOR HIGH SCHOOL		

Improvement Details

Year Built:	1970	**Bed:**	4	**Garage:**	576 SqFt
Stories:		**Baths:**	3	**Exterior Walls:**	Wood
Bldg SqFt:	2,004	**Bsmt SqFt:**		**Roof Cover:**	Shingle
Finished SqFt:	2,004	**Attic SqFt:**		**Heat:**	
Bldg Type:	MD0 - Duplex	**Flr 1/ Flr 2 SqFt:**	2,004 / 0	**A/C:**	

Transfer Information

Rec. Date:	08/26/2021	**Sale Price:**	$887,763.00	**Doc Num:**	2021-17494	**Doc Type:**	Deed
Owner:	Holden Newberg Qozb LLC			**Grantor:**	SURVIVORS D & E S TRUST		
Orig. Loan Amt:	$621,434.00			**Title Co:**	FIRST AMERICAN		
Finance Type:	ADJ	**Loan Type:**	Conventional	**Lender:**	FIRST REPUBLIC BK		

Assessor Map

Parcel ID: 56478

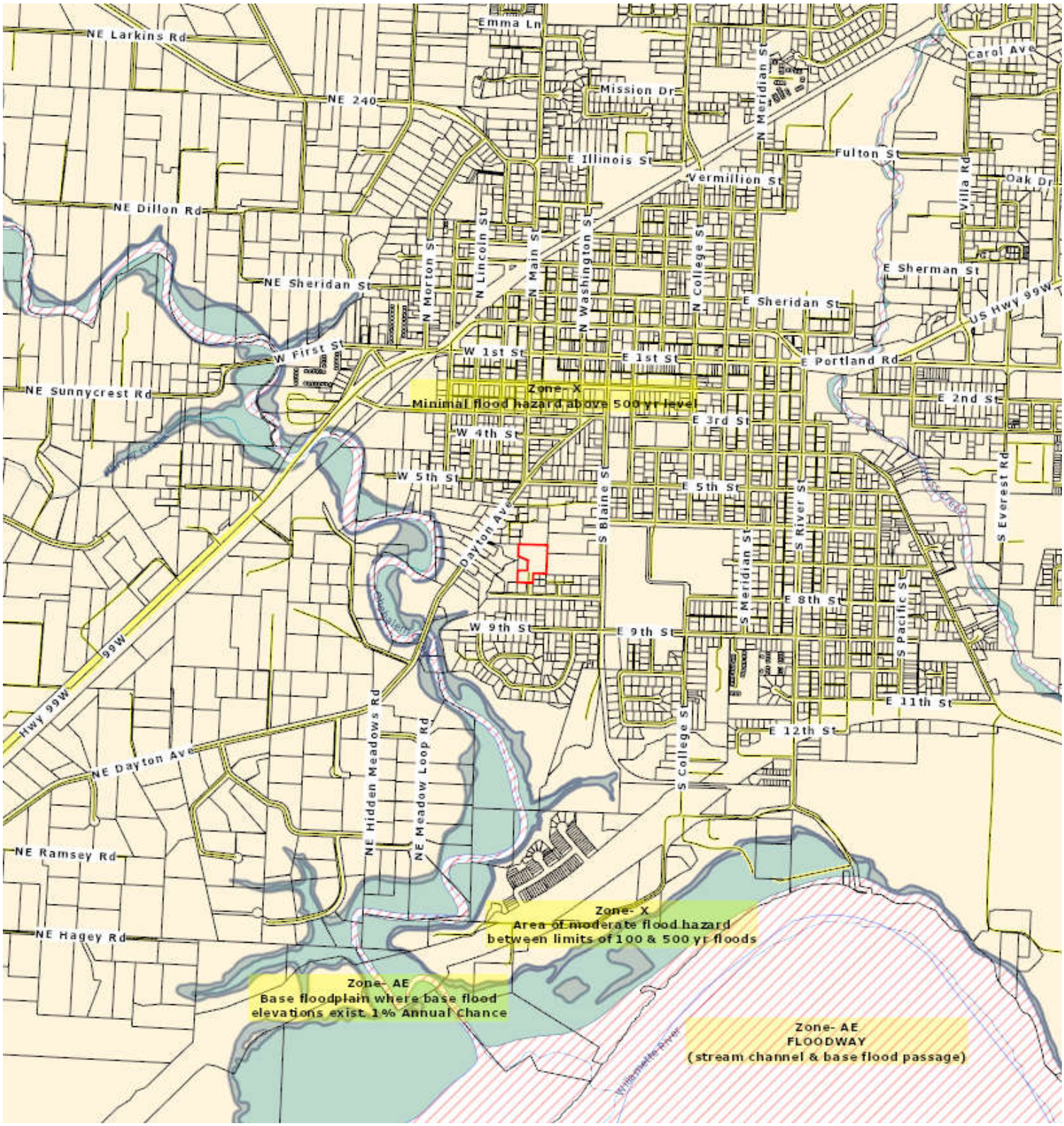
Site Address: 100 S Garfield St

Aerial Map

Parcel ID: 56478

Sentry Dynamics, Inc. and its customers make no representations, warranties or conditions, express or implied, as to the accuracy or completeness of information contained in this report.

Flood Map



AmeriTitle

Parcel ID: 56478

7/1/2021 to 6/30/2022 REAL PROPERTY TAX STATEMENT

YAMHILL COUNTY, OREGON 535 NE 5TH ST., ROOM 42, MCMINNVILLE, OR 97128 (503) 434-7521

PROPERTY LOCATION

100 S GARFIELD ST
NEWBERG, OR 97132

ALT NO: R3219DB 04690

Account Acres: 1.9500

ACCOUNT NO: 56478

Tax Code Area: 29.0

VALUES:	LAST YEAR	THIS YEAR
REAL MARKET VALUES (RMV):		
LAND	905,750	1,000,145
STRUCTURES	200,223	229,850
RMV TOTAL	1,105,973	1,229,995
ASSESSED VALUE:	245,737	253,109
TOTAL TAXABLE	245,737	253,109
PROPERTY TAXES:	3,640.13	4,042.43

2021 - CURRENT TAX BY DISTRICT:

NEWBERG SD 29J	1,179.89
PORTLAND C C	71.58
WILLAMETTE REG ESD	75.10
EDUCATION TOTAL:	**1,326.57**
CHEHALEM PARK & REC	229.72
NEWBERG	691.47
TUALATIN VALLEY F & R	386.04
TVF&R LOCAL OPTION	113.90
YAMHILL CO EXT SERVICE	11.36
YAMHILL CO SOIL & WATER	8.96
YAMHILL COUNTY	652.39
GENERAL GOVERNMENT TOTAL:	**2,093.84**
CHEHALEM PARK & REC BOND	101.85
NEWBERG SD 29J BOND	388.20
PORTLAND COMM COLEGE BOND	96.26
TUALATIN VALLEY F & R BOND	35.71
BONDS AND OTHER TOTAL:	**622.02**
2021 - 2022 TAX BEFORE DISCOUNT	**4,042.43**

When a mortgage company requests your tax information this statement is yellow and for your records only.

Online or Telephone payment options available - for instructions and conditions go to: www.co.yamhill.or.us/assessor

TOTAL (after discount): **3,921.16**

Delinquent tax amount is included in payment options listed below.

(See back of statement for instructions)

TAX PAYMENT OPTIONS

Payment Options	Date Due	Discount Allowed		Net Amount Due
FULL PAYMENT	Nov 15, 2021	121.27	3% Discount.....	$3,921.16
2/3 PAYMENT	Nov 15, 2021	53.90	2% Discount.....	$2,641.05
1/3 PAYMENT	Nov 15, 2021		No Discount.....	$1,347.47

NO STATEMENTS ARE SENT FOR THE FEBRUARY 15 OR MAY 15 INSTALLMENT DATES IF PAYING THE 2/3 OR 1/3 OPTION.

↑ TEAR HERE **PLEASE RETURN THIS PORTION WITH YOUR PAYMENT See back of statement for instructions** TEAR HERE ↑

2021 - 2022 Property Tax Payment Yamhill County, Oregon

ACCOUNT NO: 56478

PROPERTY LOCATION: 100 S GARFIELD ST

Delinquent tax amount is included in payment options listed below

FULL PAYMENT	**(Includes 3% Discount)**	**DUE Nov 15, 2021**	.....	**$3,921.16**
2/3 PAYMENT	**(Includes 2% Discount)**	**DUE Nov 15, 2021**	.....	**$2,641.05**
1/3 PAYMENT	**(No Discount offered)**	**DUE Nov 15, 2021**	.....	**$1,347.47**

DISCOUNT IS LOST AND INTEREST APPLIES AFTER DUE DATE

☐ Mailing address change on back

Enter Amount Paid

Please make payment to:
YAMHILL COUNTY TAX COLLECTOR
PO BOX 6369
PORTLAND, OR 97228-6369

1/1 13189

36 00056478 0000392116 0000264105 0000134747 1

FIRST AMERICAN 3684350

After recording return to:
Holden Newberg QOZB LLC
5652 Northwest Crady Lane
Portland, OR 97229

Until a change is requested all tax statements shall be sent to the following address:
Holden Newberg QOZB LLC
5652 Northwest Crady Lane
Portland, OR 97229

File No.: 1032-3684350 (kd)
Date: August 26, 2021

THIS SPACE RESERVED FOR RECORDER'S USE

Yamhill County Official Records **202117494**
DMR-DDMR
Stn=3 SUTTONS **08/26/2021 02:02:01 PM**
3Pgs $15.00 $11.00 $5.00 $60.00 **$91.00**

I, Brian Van Bergen, County Clerk for Yamhill County, Oregon, certify that the instrument identified herein was recorded in the Clerk records.
Brian Van Bergen - County Clerk

STATUTORY WARRANTY DEED

Elaine M. Streed and Rowena E. Shafer and Roman D. Streed, Co-Trustees or their successors in trust under The D & E Streed Survivor's Trust dated June 8, 1995, Grantor, conveys and warrants to **Holden Newberg QOZB LLC, an Oregon limited liability company** , Grantee, the following described real property free of liens and encumbrances, except as specifically set forth herein:

See Legal Description attached hereto as Exhibit A and by this reference incorporated herein.

Subject to:
1. Covenants, conditions, restrictions and/or easements, if any, affecting title, which may appear in the public record, including those shown on any recorded plat or survey.
2. The **2021-2022** Taxes, a lien not yet payable.

The true consideration for this conveyance is **$887,763.00**. (Here comply with requirements of ORS 93.030)

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

Dated this 13 day of AUGUST, 2021.

The D & E Streed Survivor's Trust dated June 8, 1995

Gwain E. Streed, Trustee

STATE OF Oregon)
)ss.
County of Lincoln)

This instrument was acknowledged before me on this 13th day of August, 2021 by Gwain E. Streed as Trustee of The D & E Streed Survivor's Trust dated June 8, 1995, on behalf of the Trustee.

OFFICIAL STAMP
DAWN E. BALLEW
NOTARY PUBLIC - OREGON
COMMISSION NO. 998783
MY COMMISSION EXPIRES APRIL 05, 2024

Notary Public for Oregon
My commission expires: 4/5/2024

EXHIBIT A

LEGAL DESCRIPTION: Real property in the County of Yamhill, State of Oregon, described as follows:

Part of Joseph B. Rogers Donation Land Claim #55 in Township 3 South, Range 2 West of the Willamette Meridian in Yamhill County, Oregon, described as follows:

Beginning at a point where the center line of Ninth Street in the City of Newberg producted West intersects the West line of said Claim; thence East along the center line of said Street, 660 feet; thence North 462 feet to the Northeast corner of that tract conveyed to Lewis C. Hodgdon et ux. by deed recorded June 23, 1948 in Book 149, Page 216, Deed records; thence North along the East line of that certain most Easterly tract conveyed to W.R. Weatherly et ux. by deed recorded May 28, 1948 in Book 148, Page 774, Deed records; 95 feet to the true point of beginning; thence continuing North along said East line 284.5 feet, more or less to the Northeast corner of said Weatherly tract, thence West along the North line of said Weatherly tract 287 feet to the Northeast corner of that tract conveyed to E.F. Hubert by deed recorded January 3, 1902 in Book 41, Page 593, Deed records; thence South along the East line of said Hubert tract 379.5 feet to the North line of the aforesaid Hodgdon tract; thence East along the said North line 158.5 feet to a point; thence North parallel to the East line of the aforesaid Weatherly tract, 95 feet to a point; thence East parallel to the North line of said Hodgdon tract, 128.5 feet to the true place of beginning.

SAVE AND EXCEPT that portion conveyed to Gwain E. Streed and Laurie J Streed in Warranty Deed recorded March 6, 1987 in Film Volume 211, Page 1126.

WETLAND DELINEATION / DETERMINATION REPORT COVER FORM

A complete report and signed report cover form, along with applicable review fee, are required before a report review timeline can be initiated by the Department of State Lands. All applicants will receive an emailed confirmation that includes the report's unique file number and other information.

Ways to submit report:

- **Under 50MB** - A single unlocked PDF can be emailed to: wetland.delineation@dsl.oregon.gov.
- **50MB or larger** - A single unlocked PDF can be uploaded to DSL's Box.com website. After upload notify DSL by email at: wetland.delineation@dsl.oregon.gov.
- OR a hard copy of the unbound report and signed cover form can be mailed to: Oregon Department of State Lands, 775 Summer Street NE, Suite 100, Salem, OR 97301-1279.

Ways to pay review fee:

- By credit card on DSL's epayment portal after receiving the unique file number from DSL's emailed confirmation.
- By check payable to the Oregon Department of State Lands attached to the unbound mailed hardcopy OR attached to the complete signed cover form if report submitted electronically.

Contact and Authorization Information

☐ Applicant ☒ Owner Name, Firm and Address:
Scott Holden
Newburg QOZB LLC
5652 NW Crady Lane
Portland, OR 97229

Business phone # (503) 502-8006
Mobile phone # (optional)
E-mail: ScottHolden2007@outlook.com

☒ Authorized Legal Agent, Name and Address (if different):
Alex Sherman
Environmental Science & Assessment
4831 NE Fremont Street, Suite 2B
Portland, OR 97213

Business phone # (360) 979-8903
Mobile phone # (optional)
E-mail: alex@esapdx.com

I either own the property described below or I have legal authority to allow access to the property. I authorize the Department to access the property for the purpose of confirming the information in the report, after prior notification to the primary contact.

Typed/Printed Name: Alex Sherman **Signature:** Alex Sherman

Date: 06/30/2022 Special instructions regarding site access: _____

Project and Site Information

Project Name: 100 S Garfield St

Latitude: 45.294456 Longitude: -122.978643
decimal degree - centroid of site or start & end points of linear project

Proposed Use:
Subdivide parcel into 8 lots for duplex and tripelx residential development

Tax Map # 3219DB
Tax Lot(s) 04690

Tax Map #
Tax Lot(s)

Project Street Address (or other descriptive location):
100 S Garfield St

Township 3S Range 2W Section 19 QQ
Use separate sheet for additional tax and location information

City: Newburg County: Yamhill

Waterway: River Mile:

Wetland Delineation Information

Wetland Consultant Name, Firm and Address:
Alex Sherman
Environmental Science & Assessment LLC
4831 NE Fremont St, Ste. 2B
Portland, OR 97213

Phone # (360) 979-8903
Mobile phone # (if applicable)
E-mail: alex@esapdx.com

The information and conclusions on this form and in the attached report are true and correct to the best of my knowledge.

Consultant Signature: Alex Sherman Date: 06/30/2022

Primary Contact for report review and site access is ☒ Consultant ☐ Applicant/Owner ☐ Authorized Agent

Wetland/Waters Present? ☒ Yes ☐ No Study Area size: 1.95 Total Wetland Acreage: 0.0062

Check Applicable Boxes Below

☐ R-F permit application submitted
☐ Mitigation bank site
☐ EFSC/ODOE Proj. Mgr: _____
☐ Wetland restoration/enhancement project (not mitigation)
☐ Previous delineation/application on parcel
If known, previous DSL # _____

☐ Fee payment submitted **$** _____
☐ Resubmittal of rejected report ($100)
☐ Request for Reissuance. See eligibility criteria. (no fee)
DSL # _____ Expiration date _____
☐ LWI shows wetlands or waters on parcel
Wetland ID code _____

For Office Use Only

DSL Reviewer: _____ Fee Paid Date: ____ / ____ / ____ DSL WD # _____

Date Delineation Received: ___/___/___ DSL App.# _____

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INTRODUCTION

Environmental Science & Assessment, LLC (ES&A) was contracted by Firwood Design Group to conduct a wetland delineation on a 1.95-acre site located at 100 S Garfield Street in Newburg, Yamhill County, Oregon (Figure 1). The study area includes one tax lot (TL 3219DB 4690) located in the northwest quarter and southeast quarter of Section 19, Township 3 South, Range 2 West on Yamhill County's assessor's map 3219DB (Figure 2).

LANDSCAPE SETTING AND LAND USE

The project site is bordered on the south by residential development and by an intermittent tributary to Chehalem Creek at its north and west boundaries. Residential development is present beyond the creek to the northwest. A sand and gravel stockpile yard with discarded heavy equipment and storage is located to the northwest of the property. Edwards Elementary School is located further east across S Blaine Street. Access to the site is via a cul-de-sac at the terminus of S Garfield St from the south side (Photo 1; Figure 5).

There is one residential structure present on tax lot 4690, which is located in the southeastern lot corner across the driveway at S Garfield Street (Photo 1). The structure is adjacent to offsite structures on tax lot 4691. There are no other structures except for wooden treehouse in the riparian forest that borders the northwest part of the open field (Photo 2).

The south portion of the site a mowed and maintained grassy field, which extends from the northeastern corner of the cul-de-sac to the eastern property boundary (Photo 1). The A forested upland plant community is present in the northeast property corner, which transitions to forested riparian plant community as the landscape slopes in the direction of the unnamed tributary that borders the site from the north and west (Photo 3).

Site topography is relatively flat within the mowed and maintained grassy field. The field slopes upward slightly to the treeline and then sharply downwards toward the offsite creek, where it terraces in the southeast corner before it reaches the incised stream channel.

The plant community within the open field consists predominately of annual blue grass (*Poa annua, FAC*), velvet grass (*Holcus lanatus, FAC)*, field meadow foxtail (*Alopecurus pratensis, FAC)*, spreading bent *(Agrostis stolonifera, FAC)*, with traces of ox eye daisy (*Leucanthemum vulgare, FACU)*, common dandelion *(Taraxacum officinale, FACU)*, Queen Anne's lace (*Daucus carota, FACU)*, and English plantain *(Plantago lanceolata, FACU)* with about 10% cover throughout of white clover (*Trifolium repens*), and scattered populations of hairy cat's ear (*Hypochaeris radicata*).

The plant community surrounding the grassy field along at the top of the slope consists of upland tree canopy consisting of Douglas-fir (*Pseudotsuga menziesii, FACU)*, big-leaf maple (*Acer macrophyllum, FACU)*, and cherry plum (*Prunus cerasifera* ,NL), an understory of beaked hazelnut (*Corylus cornuta, FACU)*, English holly (*Ilex aquifolium, FACU)*, Himalayan Blackberry (*Rubus armeniacus, FAC),* and a herbaceous stratum consisting of heavy cover of English ivy (*Hedera helix, FACU)* (VC-3).

Soils mapped on site are all rated non-hydric.Soils in the southeastern portion of the site are recorded as Aloha silt loam, 0 to 3 percent slopes (map unit 2300A, Hydric rating 3). The northwestern portion of the site that encompasses the area of the unnamed tributary is mapped as Woodburn silt loam, 20 to 55 percent slopes (map unit 2310F, Hydric rating 0) (NRCS Soil Survey, 2020).

SITE ALTERATIONS

Review of historic aerial photographs indicates that no major alterations have taken place on the site since at least 1994.

PRECIPITATION DATA AND ANALYSIS

Precipitation data collected during a field visit March 16th, 2022. Observed precipitation on the day of the field investigation totaled 0.07 inches. There were 4.21-inches of precipitation recorded in the two weeks prior to the March field visit. Water year-to-date (WYTD) total was 90% of normal during the March visit (Table 1). Observed data for the May field visit in Table 1 were recorded at CoCORaHS station NEWBURG 0.3 N, OR (1.3-miles to the north of the site). WTYD and WYTD normal value was collected at NWS station REX 1 S, OR (approximately 3-miles to the northeast).

According to the WETS table for NWS station REX 1 S, OR, observed precipitation in December 2021 was higher than normal. January and February 2022 were within normal range. (Table 2).

Table 1. Precipitation Data Prior to Field Observations

Field Date	Rainfall on Field Date	Rainfall Two Weeks Prior to Field Date	[1]Observed Rainfall for the Water Year-to- Date (WYTD)	[1]Percent Normal Water Year-to-Date
March 16, 2022	0.07	4.21	28.49	90

Source: Natural Resource Conservation Service (NRCS) Agricultural Climate Information System (AgCIS) for Washington County, CoCoRaHS station: NEWBURG 0.3 N, OR [1]WYTD and WYTD Normal is value from REX 1 S, OR station because closer stations for observed values have insufficient data for this product

Table 2. Monthly Observed Precipitation Preceding Three Field Dates of field observations

Prior Three Months	[1]Avg. Precip.	[1]30% Chance Will Have Less Than	[1]30% Chance Will Have More Than	Observed Precip.	Within Normal Range?
December 2021	7.24	5.18	8.57	8.78	No, higher
January 2022	6.30	4.31	7.52	5.55	Yes
February 2022	4.07	2.62	4.90	2.78	Yes

Source: Natural Resource Conservation Service (NRCS) Agricultural Climate Information System (AgCIS) for Washington County, WETS station: REX 1 S, OR. [1]Average and exceedance values based on years 2000-2021 to represent normal.

SITE SPECIFIC METHODOLOGY

All boundaries of wetlands and waterways were determined using the methodology provided in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region* (USACE, 2010). Field data was collected in accordance with the Oregon Administrative Rules for Wetland Delineation Report Requirements and for Jurisdictional Determination for the Purpose of Regulating Fill and Removal within Waters of the State (OAR 141-90-0005-141-90-0055).

Two levels of investigation for the wetland delineation included a review of existing information and an on-site investigation of the study area. Prior to conducting the on-site investigation, ES&A reviewed available data pertaining to the wetland delineation.

Reviewed data included:

- Aerial Photographs: 1952-1994 (USGS Earth Explorer); 1994-2021 (Google Earth);
- Natural Resource Conservation Service (NRCS) *Soil Survey of Yamhill County Area, Oregon* (Web Soil Survey, 2020);
- Oregon Department of Geology and Mineral Industries (DOGAMI) Lidar Viewer;
- U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) Map Yamhill County, OR area (Wetlands Mapper, 2020);

ES&A wetland scientists Alex Sherman and Racine Robinson conducted the site investigation on March 16th, 2022. ES&A collected wetland delineation data at four (4) locations to define the wetland boundaries or to document a lack of wetland conditions, and collected vegetation data at three (3) data plots (Figure 6).

Wetland A was delineated mainly based on a break in vegetation between water parsley (*Oenanthe sarmentosa*, OBL) and English ivy. Soils in data plot 2 (DP-2) showed prominent redox indications starting at 5 inches of the soil profile, and gley matrix colors starting at 10 inches. Soils at data plot 1 (DP-1) had less prominent redox colors with most of the indications occurring at nine inches and beyond.

WETLANDS

One wetland was delineated onsite, totaling 272 square feet. An unnamed tributary runs adjacent to the northern property boundary and meanders towards the northwestern corner.

Wetland A

Wetland A (Photo 4) is a 272-square foot Riverine Emergent Nonpersistent (REM2), or Riverine Impounding (RI) class wetland that is terraced and expands from the Ordinary High Water Line (OHWL) of the tributary to Chehalem Creek to the toe of the slope; The wetland is located near the convergence of two tributaries that flow into Chehalem Creek (Photo 4).

The primary hydrology of wetland A appears to be upslope surface runoff and subsurface flow, both of which drain towards the adjacent stream from habitat similar to that of Photo 5 – forested slopes. The wetland is likely to experience flooding at least once every two (2) years (biennial flooding) and impound overbank flow that create conditions conducive to hydric soils and hydrophytic vegetation.

The plant community is mature canopy cover of mostly Douglas-fir (*Pseudotsuga menzensii*, FACU) and big leaf maple *(Acer macrophyllum*, FACU), and an understory dominated by Himalayan blackberry. The herbaceous stratum of the wetland is comprised of water parsley, cleavers (*Galium aparine, FACU)*, and meadow foxtail (*Alopecurus pratensis, FAC)* (Photo 4).

The waters of Wetland A continue offsite to the west via the tributary to Chehalem Creek.

Tributary to Chehalem Creek
The tributary to Chehalem Creek is an unnamed tributary. It converges with another unnamed drainage north of the study area and then flows south offsite of the study area to the east (Photo 3). The tributary flows into Chehalem Creek. The average width based on the ordinary high water elevation is approximately 10 to 12 feet wide, with an incised channel narrowing the OHWL to approximately 8 feet in width (Photo 6)

DEVIATION FROM LWI OR NWI

The National Wetland Inventory does not map any wetlands or waters on the site. No Local Wetland Inventory is available for the study area.

MAPPING METHOD

Data plot locations, wetland boundary flags, and stream features were mapped utilizing a Trimble Catalyst GPS Receiver (Model: DA2), a piece of GPS hardware that connects to Trimble software on a cell phone called TerraFlex. Geographic features are mapped with an accuracy of 10 cm (0.1 m).

The GPS data is exported into a CSV file utilizing Trimble's web-based Connect application and subsequently converted into a DXF file for mapping in Computer Assisted Design (CAD) software. The collected GPS data is superimposed onto a base topographic or existing conditions map in CAD.

The flagging was recorded and surveyed by CMT Surveying and Consulting LLC, who also provided the tax lot boundaries.

ADDITIONAL INFORMATION

Other areas along the stream were investigated to see if conditions matched those of Wetland A, as the habitat at the bottom of the ravine suggested probability of such. However, but there were no other areas that hosted hydrophytic vegetation as it was mostly English ivy and Himalayan blackberry. The south side of the unnamed tributary was mostly sloped habitat (Photo 6), which is not the type of topography to allow for depressions that impound overbank flooding, at least enough to create hydric soils.

RESULTS AND CONCLUSIONS

ES&A delineated one wetland and one unnamed tributary on-site (Table 3).

Table 3. Waters/Wetlands Summary

Feature	Area (acres/square feet)	HGM Class	Cowardin Class	Notes
Wetland A	272 square feet	Riverine Impounding	Riverine Emergent Nonpersistent	Offsite to the northwest.
Tributary to Chehalem Creek	N/A		N/A	Onsite within the western area of the property.

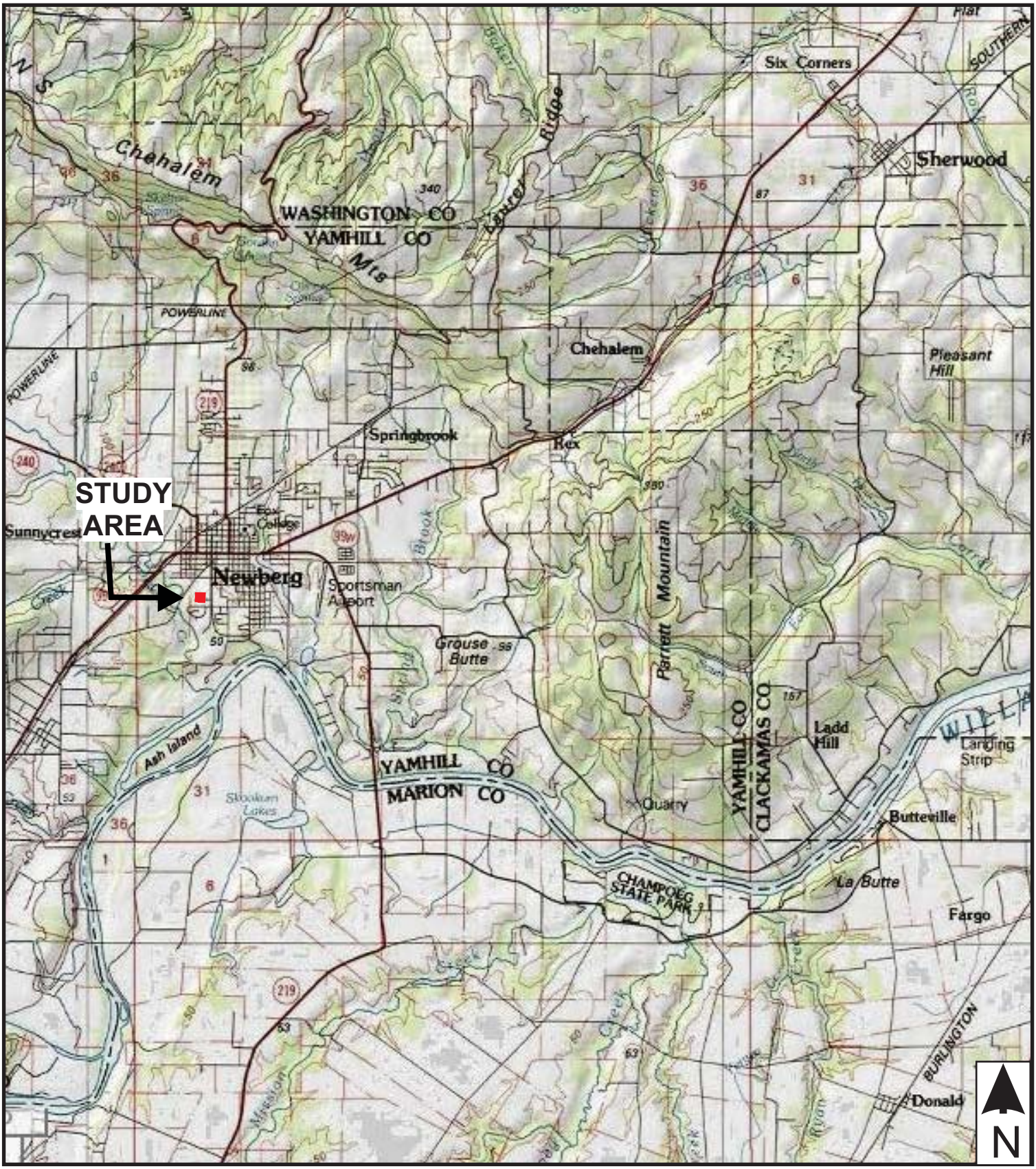
DISCLAIMER

As required by the Administrative Rules for Wetland Delineation Report Requirements and for Jurisdictional Determination for the Purpose of Regulating Fill and Removal within Waters of the State the following statement is made:

"This report documents the investigation, best professional judgment and conclusions of the investigator. It is correct and complete to the best of my knowledge. It should be considered a Preliminary Jurisdictional Determination of wetlands and other waters and used at your own risk unless it has been reviewed and approved in writing by the Oregon Department of State Lands in accordance with OAR 141-090-0005 through 141-090-0055."

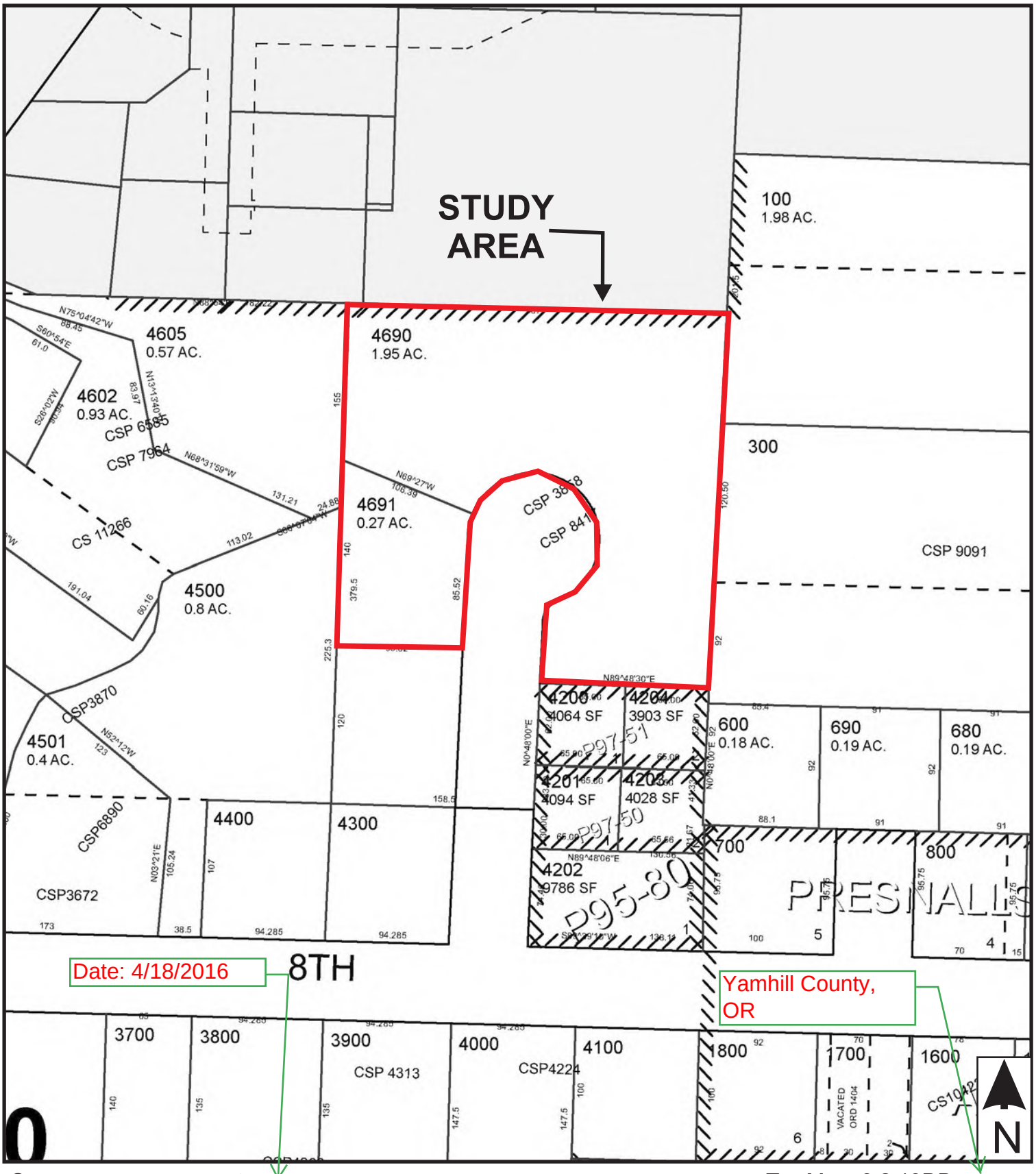
Wetlands are by definition transitional areas; wetland boundaries may change with time. All wetland delineations performed for this study, as well as the conclusions drawn in this report, should be reviewed by the appropriate regulatory agencies prior to any detailed site planning or construction activities. ES&A, therefore, recommends that this wetlands study be verified with the appropriate regulatory agencies as soon as practical. The results and conclusions of this report represent the authors' best professional judgment, based upon information provided by the project proponent in addition to that obtained during the course of this study. No other warranty, expressed or implied, is made by ES&A.

APPENDIX A. FIGURES



Source: Metro Data Resource Center. http://gis.oregonmetro.gov/metromap/

Environmental Science & Assessment, LLC	Vicinity Map 100 S Garfield Street Newburg, Oregon	Figure 1 0 .625 1.25 mi



Source: www.ormap.net

Tax Map: 3 2 19DB

Environmental Science & Assessment, LLC

e s a

Tax Lot Map
100 S Garfield Street
Newburg, Oregon

Figure 2

0 50 100 ft

U.S. Fish and Wildlife Service

National Wetlands Inventory

NWI

Source: Metro Data Resource Center. http://gis.oregonmetro.gov/metromap/

Environmental Science & Assessment, LLC	National Wetland Inventory 100 S Garfield Street Newburg, Oregon	0 330 660 ft	Figure 3

Mapped Soils:

2300A - Aloha silt loam, 0 to 3 percent slopes Hydric Rating = 3
2310F- Woodburn silt loam, 20 to 55 percent slopes Hydric Rating = 0

N

Source: Web Soil Survey, Yamhill County, Oregon http://websoilsurvey.nrcs.usda.gov/app/.

Environmental Science & Assessment, LLC e s & a	NRCS Soil Survey Map 100 S Garfield Street Newburg, Oregon	Figure 4 0 65 130 ft

Source: earth.google.com

Imagery Date: 06/17/2021

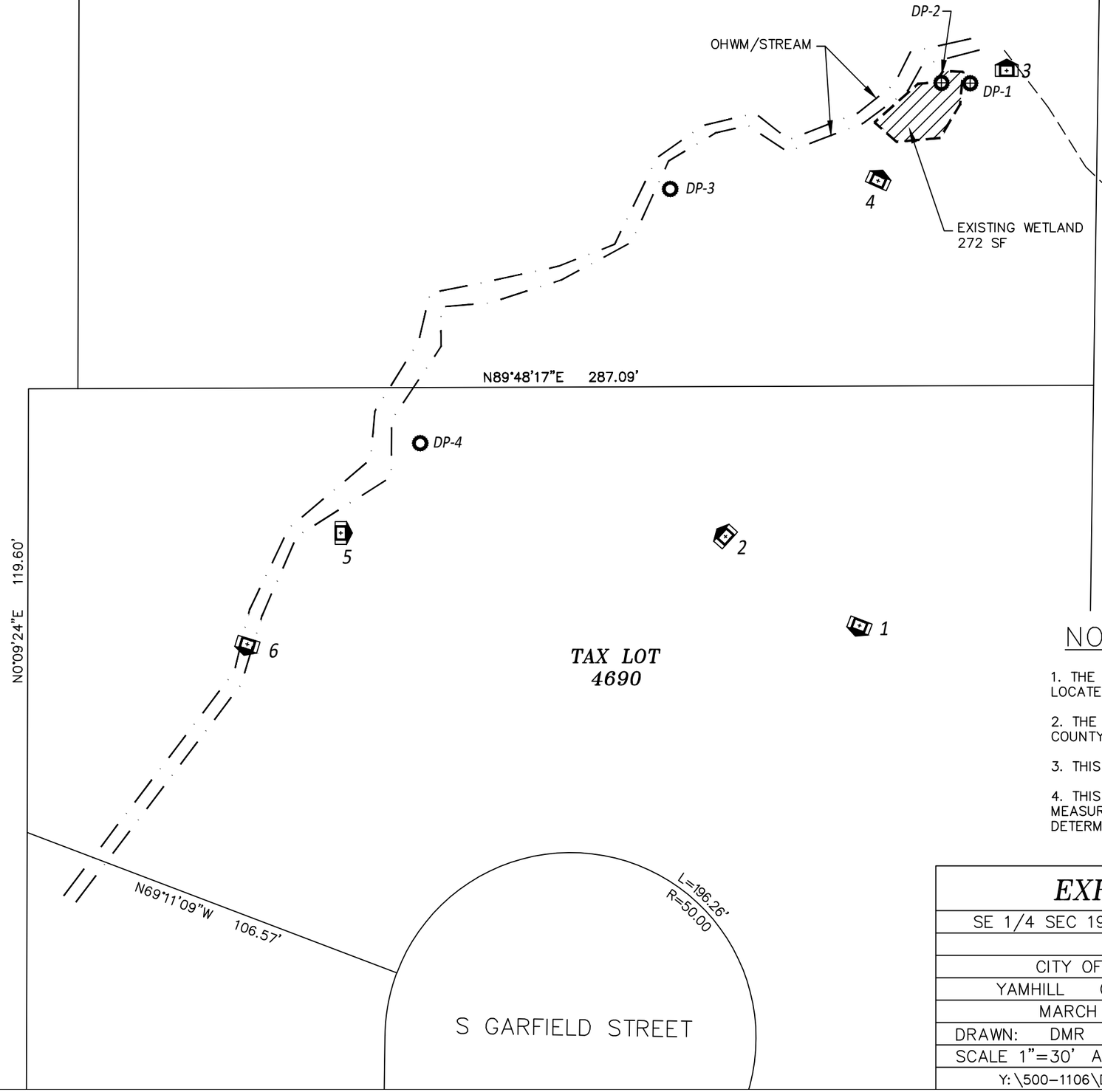
Environmental Science & Assessment, LLC

e s a

Aerial Photograph
100 S Garfield Street
Newburg, Oregon

Figure 5

0 42.5 85 ft



LEGEND

- EXISTING WETLAND LINE
- EXISTING OHML/STREAM
- DP-1 DATA POINT
- 1 PHOTO POINT

TAX LOT
100

N

SCALE 1" = 30'

REGISTERED
PROFESSIONAL
LAND SURVEYOR

OREGON
SEPTEMBER 11, 2018
DAVID ROEGER
86811

EXPIRES DECEMBER 31, 2022

NOTES

1. THE PURPOSE OF THIS MAP WAS TO SHOW THE LOCATION OF WETLAND FLAGGING LOCATED AT 100 S. GARFIELD STREET.
2. THE BASIS OF BEARINGS WAS PER THE RECORD OF SURVEY NO. CSP–8417, YAMHILL COUNTY RECORDS.
3. THIS MAP WAS PREPARED FOR THE EXCLUSIVE USE OF HOLDEN NEWBERG Q02B LLC.
4. THIS MAP WAS PREPARED BY PLAT RECORDS, CALCULATED DATA, AND FIELD MEASUREMENTS, A RECORDED BOUNDARY SURVEY WILL BE FILED AT A DATE TO BE DETERMINED.

EXHIBIT	*100 S GARFIELD ST*
SE 1/4 SEC 19, T3S, R2W, W.M.	
CITY OF NEWBERG	
YAMHILL COUNTY, OREGON	
MARCH 28, 2022	
DRAWN: DMR CHECKED: SPF	
SCALE 1"=30' ACCOUNT #500–1106	
Y:\500–1106\DWG\5001106BASE	

CMT SURVEYING AND CONSULTING
20330 SE HIGHWAY 212
DAMASCUS, OR 97089
PHONE (503) 850–4672 FAX (503) 850–4590

APPENDIX B. DATA SHEETS

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Garfield Newburg City/County: Newburg / Yamhill County Sampling Date: 3/16/2022

Applicant/Owner: Firwood Design State: OR Sampling Point: DP-1

Investigator(s): Alex Yanez-Sherman, Racine Robinson Section, Township, Range: T3S R2W Sec 19

Landform (hillslope, terrace, etc.): forested terrace Local relief (concave, convex, none): none Slope (%): 1

Subregion (LRR): A-Northwest Forests and Coasts Lat: 45.3953228 Long: -122.978375 Datum: NAD 83

Soil Map Unit Name: Woodburn silt loam, 20 to 55 percent slopes (2310F), Hydric rating = 0 NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes X	No _____	

Remarks: At confluence of streams within the northwest property corner, plot long the wetland boundary of the wetland bench adjacent to stream.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' diameter)	Absolute % Cover	Dominant Species?	Indicator Status
1. Acer macrophyllum	30	x	FACU
2. Pseudotsuga menziesii	20	x	FACU
3.			
4.			
	50	= Total Cover	
Sapling/Shrub Stratum (Plot size: 30' diameter)			
1. Rubus armeniacus	95	x	FAC
2. Polystichum munitum	5		
3.			
4.			
5.			
	100	= Total Cover	
Herb Stratum (Plot size: 5' diameter)			
1. Oenanthe sarmentosa	3		OBL
2.			OBL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	3	= Total Cover	
Woody Vine Stratum (Plot size: 5')			
1. Hedera Helix	25	x	FACU
2.			
	25	= Total Cover	

% Bare Ground in Herb Stratum 5

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 25 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ 5 - Wetland Non-Vascular Plants[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:

SOIL

Sampling Point: DP-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 3/2	100					Silt clay loam	
5-9	10YR 3/2	98	7.5YR 3/3	2	C	M	Silt clay loam	
9-14	10YR 3/1	94	7.5YR 3/4	6	C	M	Silt clay loam	
14-16	10YR 3/1	92	10YR 4/4	8	C	M	Clay loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (**except MLRA 1**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ×

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) (**LRR A**)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) (**LRR A**)
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes ✓ No _____ Depth (inches): 13

Saturation Present? (includes capillary fringe) Yes ✓ No _____ Depth (inches): 7

Wetland Hydrology Present? Yes × No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Data plot was on the border of the wetland boundary, so hydric indicators were identified via saturation but did not meet for soils or vegetation.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Garfield Newburg City/County: Newburg / Yamhill County Sampling Date: 3/16/2022

Applicant/Owner: Firwood Design State: OR Sampling Point: DP-2

Investigator(s): Alex Yanez-Sherman, Racine Robinson Section, Township, Range: T3S R2W Sec 19

Landform (hillslope, terrace, etc.): forested terrace Local relief (concave, convex, none): none Slope (%): 1

Subregion (LRR): A-Northwest Forests and Coasts Lat: 45. 295308 Long: -122.978484 Datum: NAD 83

Soil Map Unit Name: Woodburn silt loam, 20 to 55 percent slopes (2310F), Hydric rating = 0 NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks: Opposite of DP-1 inside wetland.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' diameter)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 30' diameter)			
1. Rubus armeniacus	40	x	FAC
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 5' diameter)			
1.			
2. Oenanthe sarmentosa	15	x	OBL
3. Galium aparine	5	x	FACU
4. Alopecurus pratensis	3		FAC
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	23 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			FACU
2.			
	= Total Cover		

% Bare Ground in Herb Stratum 30

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 67 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- ✓ 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ 5 - Wetland Non-Vascular Plants[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

SOIL

Sampling Point: DP-2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10 YR 2/1	98	10 YR 3/6	2	C	M	clay loam	
5-10	7.5 YR 2.5/1	92	10 YR 3/6	8	C	M	clay loam	
10-15	N 3/1	92	10 YR 3/6	8	C	M	clay loam	
15-17	10 YR 2/1	90						
	10 YR 3/2	10						

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (**except MLRA 1**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ✓ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X **No** _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ✓ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) (**LRR A**)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) (**LRR A**)
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes ✓ No _____ Depth (inches): 11

Saturation Present? (includes capillary fringe) Yes ✓ No _____ Depth (inches): 2

Wetland Hydrology Present? Yes X **No** _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Garfield Newburg City/County: Newburg / Yamhill County Sampling Date: 3/16/2022

Applicant/Owner: Firwood Design State: OR Sampling Point: DP-3

Investigator(s): Alex Yanez-Sherman, Racine Robinson Section, Township, Range: T3S R2W Sec 19

Landform (hillslope, terrace, etc.): forested terrace Local relief (concave, convex, none): none Slope (%): 1

Subregion (LRR): A-Northwest Forests and Coasts Lat: 45.295234 Long: -122.978768 Datum: NAD 83

Soil Map Unit Name: Woodburn silt loam, 20 to 55 percent slopes (2310F), Hydric rating = 0 NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes X	No _____	

Remarks: Bench of bank adjacent to stream, between OHWL flags 13 and 15. Some saturation in soil but plot was determined as not within a wetland, saturation could come from seasonal rain and collect within animal paths.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' diameter)	Absolute % Cover	Dominant Species?	Indicator Status
1. Pseudotsuga menziesii	30	x	FACU
2. Acer macrophyllum	20	x	FACU
3.			
4.			
	50	= Total Cover	
Sapling/Shrub Stratum (Plot size: 30' diameter)			
1. Rubus armeniacus	90	x	FAC
2. Corylus cornuta	10		FACU
3. Omeleria cerasiformis	T		FACU
4.			
5.			
	100	= Total Cover	
Herb Stratum (Plot size: 5' diameter)			
1. Rubus ursinus	T		FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	1	= Total Cover	
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 5

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ 5 - Wetland Non-Vascular Plants[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:

SOIL

Sampling Point: DP-3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-9	10YR 3/2	100					Silt clay loam	Small white roots in top four inches
9-11	10YR 3/2	98	7.5YR 3/3	2	C	M	Silt clay loam	
11-13	10YR 3/2	97	7.5YR 3/4	3	C	M	Silt clay loam	
13-17	10YR 3/1	95	7.5YR 4/4	5	C	M	Silt clay loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (**except MLRA 1**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) (**LRR A**)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) (**LRR A**)
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes ✓ No _____ Depth (inches): 8

Saturation Present? (includes capillary fringe) Yes ✓ No _____ Depth (inches): 5

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Hydrological indicators likely due to water table of creek adjacent to bank.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Garfield Newburg City/County: Newburg / Yamhill County Sampling Date: 3/16/2022

Applicant/Owner: Firwood Design State: OR Sampling Point: DP-4

Investigator(s): Alex Yanez-Sherman, Racine Robinson Section, Township, Range: T3S R2W Sec 19

Landform (hillslope, terrace, etc.): forested terrace Local relief (concave, convex, none): none Slope (%): 1

Subregion (LRR): A-Northwest Forests and Coasts Lat: 45.294277 Long: -122.979136 Datum: NAD 83

Soil Map Unit Name: Woodburn silt loam, 20 to 55 percent slopes (2310F), Hydric rating = 0 NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes X	No _____	

Remarks: On bench from bank between OHWL flags 27-29.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' diameter)	Absolute % Cover	Dominant Species?	Indicator Status
1. Acer macrophyllum	65	x	FACU
2.			
3.			
4.			
	65	= Total Cover	
Sapling/Shrub Stratum (Plot size: 30' diameter)			
1. Omeleria cerasiformis	30	x	FACU
2. Ilex aquifolium	20	x	FACU
3. Symphoricarpos albus	15	x	FACU
4. Rubus armeniacus	5		FAC
5.			
	70	= Total Cover	
Herb Stratum (Plot size: 5' diameter)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	0	= Total Cover	
Woody Vine Stratum (Plot size: _____)			
1. Hedera helix	95	x	FACU
2.			
	95	= Total Cover	

% Bare Ground in Herb Stratum 5

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ 5 - Wetland Non-Vascular Plants[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:

SOIL

Sampling Point: DP-4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
6-10	10YR 3/2	100					Silt clay loam	
10-16	10YR 3/2	95	7.5YR 3/4	5	C	M	Silt clay loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (**except MLRA 1**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ×

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) (**LRR A**)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) (**LRR A**)
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes ✓ No _____ Depth (inches): 13

Saturation Present? (includes capillary fringe) Yes ✓ No _____ Depth (inches): 11

Wetland Hydrology Present? Yes × No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Watere table from adjacent creek was high along the bank, resulting in saturation coming in above a foot as a hydric indicator while the rest of the plot is upland.

APPENDIX C. SITE PHOTOGRAPHS

Photo 1: View southwest of open grass field in southeast portion of the study area.

Photo 2: View northeast of wooden structure onsite within tree dripline.

Photo 3: View north of confluence of unnamed tributaries to Chehalem Creek.

Photo 4: View north of wetland bench off of unnamed tributary after confluence.

Photo 5: View east of high incline slope and upland forest conditions near unnamed tributary.

Photo 6: View south of incised channel and upland plant community along banks of unnamed tributary.

APPENDIX D. REFERENCES

REFERENCES

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Western States Fire Protection Co.
Protecting Lives and Property
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(O) 503-657-5155 | (F) 503-657-5182
17500 SW 65th Ave. | Lake Oswego, OR 97035

August 26, 2022

100 S Garfield St
Newberg, OR

RE: 4-inch Water Line

The property at 100 S Garfield St is proposed to be subdivided into 12 new lots for duplex residences. These new duplex residences will be protected with NFPA 13D fire sprinkler systems. The planning documents propose that the sprinkler systems and domestic water systems will be supplied by an existing 4" water line serving the property. The 4" line also serves one existing house and one existing four-plex that will remain. There are no hydrants on the existing line.

NFPA 13D, 2016 ed. section 6.5.2 states *"In common water supply connections serving more than one dwelling unit, 5 gpm shall be added to the sprinkler system demand to determine the size of common piping and the size of the total water supply requirements where no provision is made to prevent flow into the domestic water system upon operation of a sprinkler."* This existing 4" water line can be viewed as a common water supply for these 12 new duplex residences, the existing four-plex, and the existing house. Accounting for 5 gpm per new duplex, 10 gpm for the existing four-plex, and 5 gpm for the existing house, that yields a domestic water allowance of 75 gpm.

NFPA 13D system calculations require up to two fire sprinklers flowing up to 20 gpm apiece, depending on spacing. These systems can easily operate on system pressure 50 psi or less. In those calculations, one sprinkler is provided with the minimum flow and the second receives slightly more than the required flow rate. 5 gpm is a conservative estimate to account for that overflow. This yields a total estimated fire sprinkler system demand of 50 psi flowing 45 gpm.

The combined domestic and fire sprinkler demands will be approximately 50 psi flowing 120 gpm. Friction loss in approximately 350' of 4" ductile iron pipe is 1.07 psi when flowing 120 gpm. Rounding up, the 4" line will need 52 psi when flowing 120 gpm at the point of connection to the larger city main.

A hydrant flow test was performed on 8/25/22 at the intersection of Garfield and 8th where the 4" line connects to larger city main. The resulting curve shows that there will be 95.8 psi available when flowing 120 gpm. The flow test report is attached.

A 4" ductile iron water line will be adequate to serve the demands of the development.

Feel free to contact me with any questions.

Sincerely,

Jared A. Hill
Fire Protection Engineer

Western States Fire Protection Co.
Protecting Lives and Property

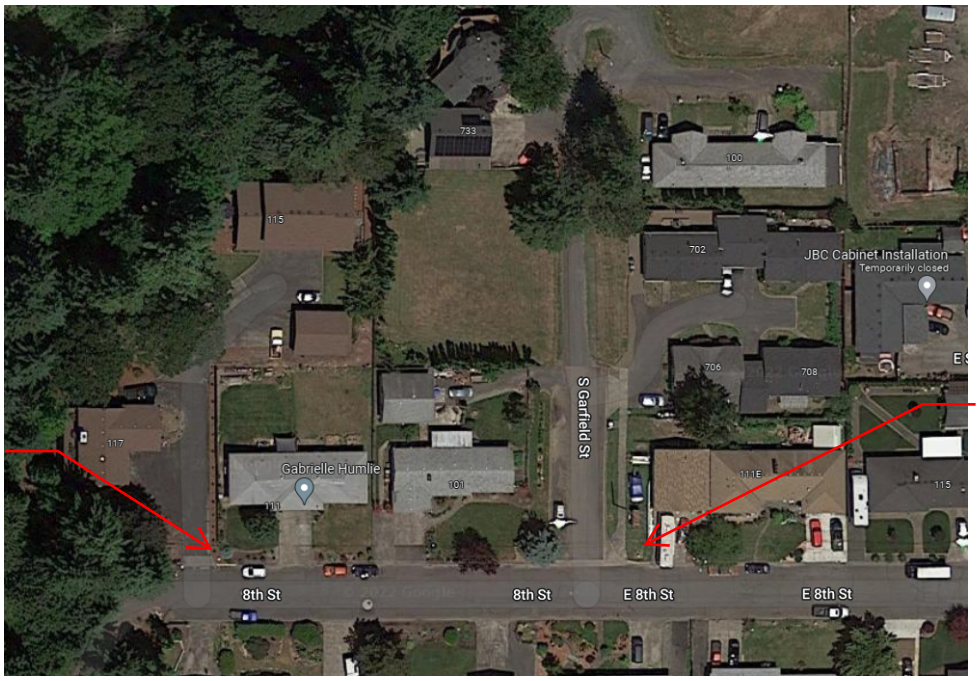
17500 SW 65th Avenue, Lake Oswego, OR 97035
Phone: (503) 657-5155 ● Fax: (503) 657-5182

HYDRANT FLOW TEST REPORT

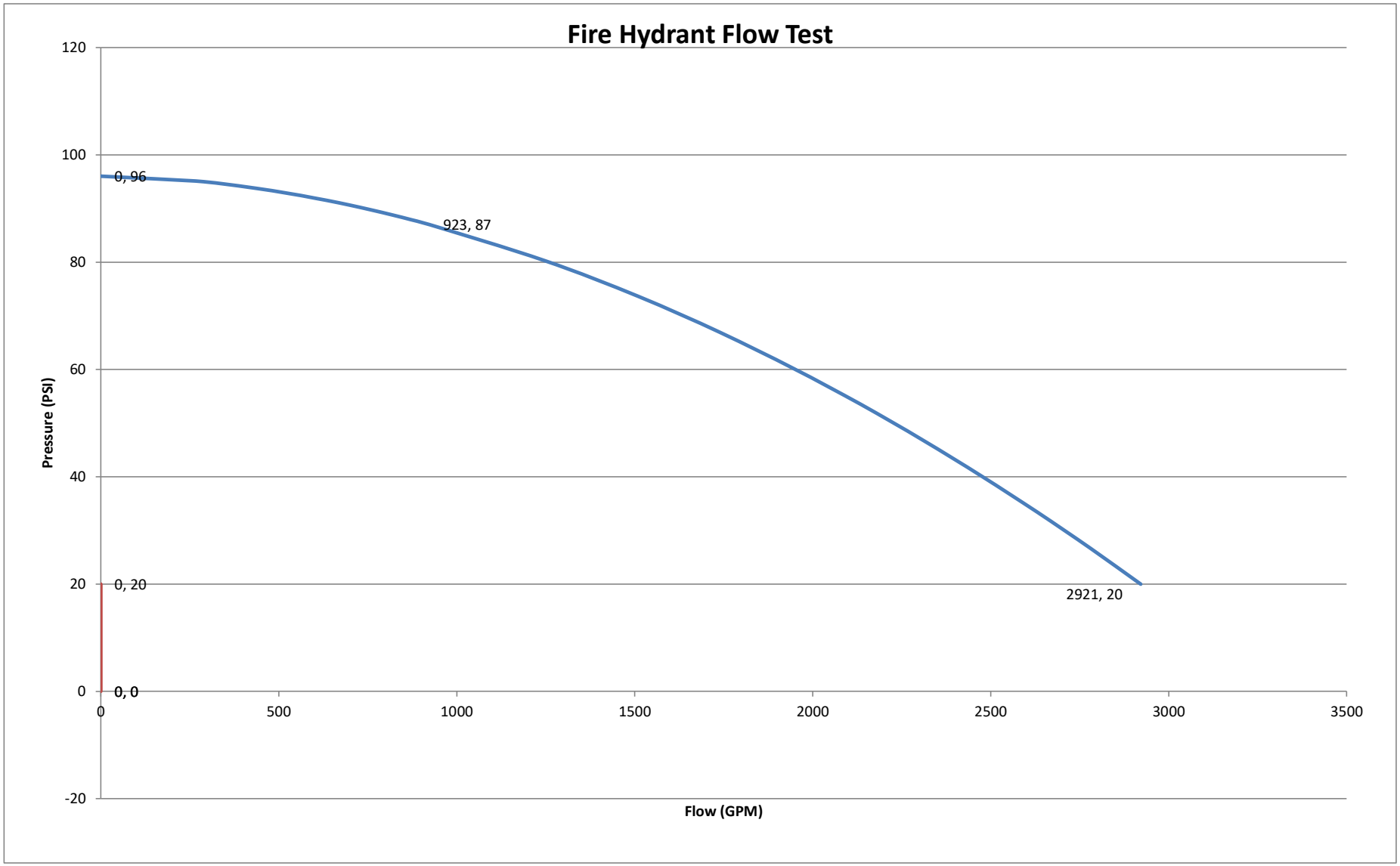
PROJECT:	Garfield Analysis	JOB NO:	
LOCATION:	100 S Garfield St.	DATE:	08/25/22
	Newberg, OR	TIME:	8:15 AM
MAJOR CROSS STREETS:	Garfield & 8th		
JURISDICTION:	Newberg Water		
TEST MADE BY:	Jared Hill		
REPRESENTING:	Western States Fire Protection		
WITNESSED BY:	Adam Clausen		
REPRESENTING:	Newberg Water		
PURPOSE OF TEST:	Water supply available for fire sprinkler system demand		

FLOW HYDRANTS	A-1	A-2	A-3	B-2	C-1	C-2	
SIZE NOZZLE - 2.50 / 4.00	2.50						INCH
PITOT READING	35						PSI
DISCHARGE COEFFICIENT	-	-	-				
FLOW	923						GPM
ELEVATION							FEET

STATIC PRESSURE:	96	PSI	STATIC HYDRANT ELEVATION:		FEET
RESIDUAL PRESSURE:	87	PSI			
TOTAL FLOW:	923	GPM	FLOW @ 20 PSI:	2924	GPM



REMARKS: Test conducted using a Little Hose Monster with 2" pitotless nozzle.


Fire Hydrant Flow Test
120
100
80
60
40
20
0
-20
Pressure (PSI)
0, 96
923, 87
0, 20
2921, 20
0, 0
0
500
1000
1500
2000
2500
3000
3500
Flow (GPM)

Scott Holden
503-502-8006
scottholden2007@outlook.com

31 August 2022

Re: Infiltration testing for 100 S Garfield Street, Newberg, OR

Dear Mr. Holden,

Field Investigation:
Rapid Soil Solutions (RSS) has attempted to performed one (1) infiltration tests. Figure 1 below shows the project site location. Soils found on site match those in by DOGMI. RSS found stiff fine grained flood deposits.

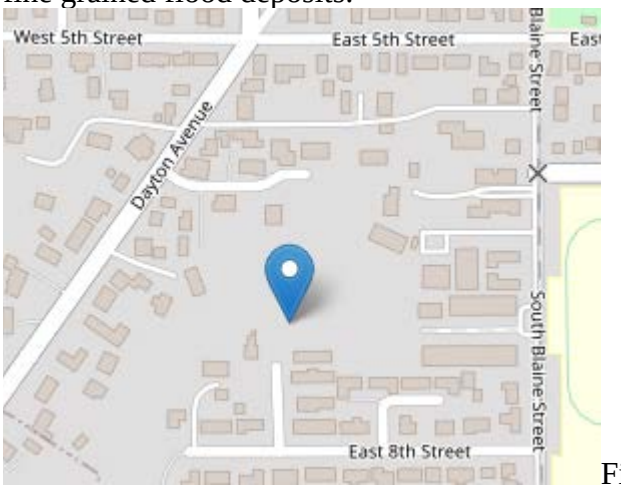


Figure 1

Infiltration Testing:
RSS perform an infiltration test per the Clean Water Services for Washington County. RSS excavated a 6ft deep holes into and started a pre-soak for four (4) hours then testing took place for three hours. The below table summarized the rates and depths. For soil details and locations please see the following infiltration testing sheets.

Location	rate (in/hr.)	Depth (ft)
HA#1	0.5	6
HA#2	2.0	6
HA#3	1.0	6

Groundwater
Based upon the three (3) well logs at are the closest to the site and of similar elevation ground water is 180-200 below the sites elevations.

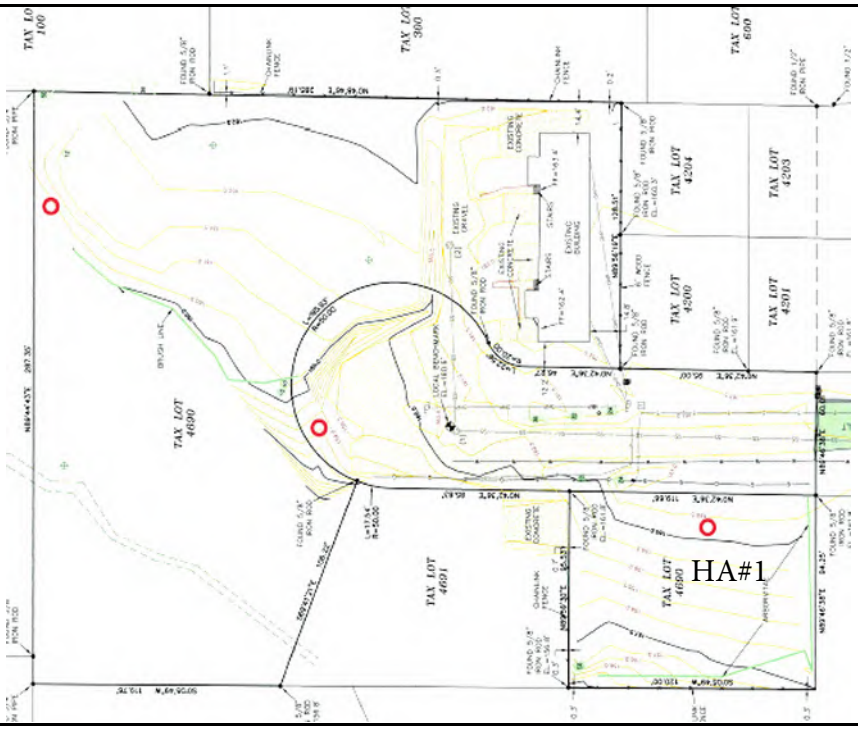
The analysis, conclusions and recommendations contained in this report are based on site conditions as they existed at the time of explorations. Any questions regarding this report please contact me at the below number or email.

Sincerely,

Mia Mahedy, PE GE.

Rapid Soil Solutions INC 503-816-3689 mia@rapidsoilsolutions.com

Rapid Soil Solutions Infiltration Test Results

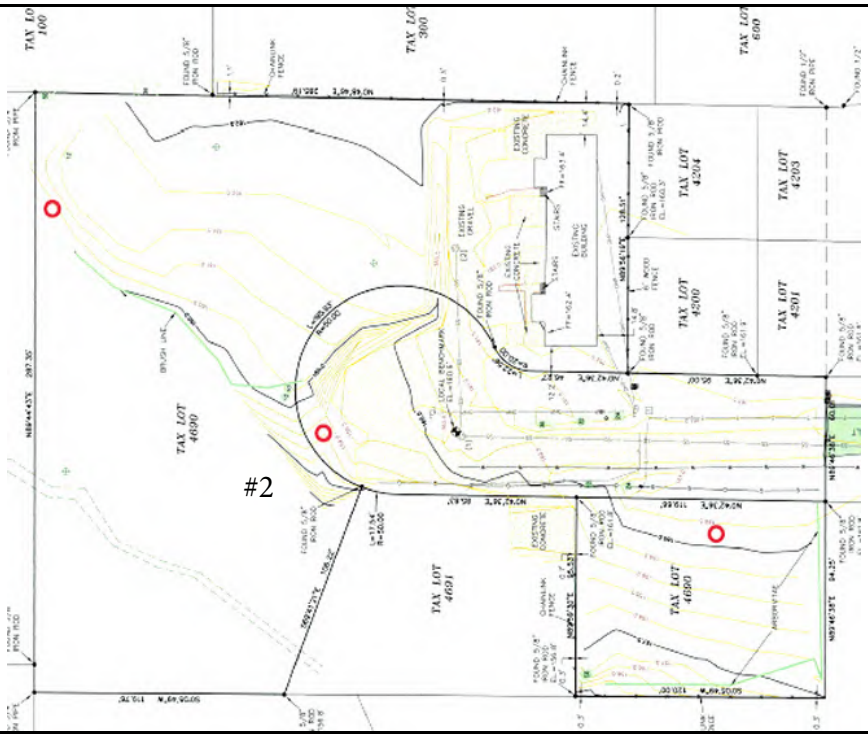


Preliminary Information			
Location:	100 S Garfield St, Newberg OR.	**Performed By: (Supervised by Mia Mahedy, PE, GE)**	Rick Sands
Date & Time:	8-29-22, 8:45	**Instrument Used:**	3 inch hand auger
Weather:	Sunny, 65	**Depth:**	6 ft

HA #1	
Soil	2-4ft damp light brown silty clay , medium stiffness , 4-6ft, damp, brown , medium stiffness
Presoak	9:00, 16.25, 10:00, 15, fill 18.75, 11:00, 18, fill 19:50, 12:00, 19, fill 21.75, 1:00, 21, fill 23,

Time	Measurement (inches)	Level Refilled To (inches)	Rate (inches/hour)
1:20	22.50		
1:40	22.50		
2:00	22.25	23.25	
2:20	24		
2:40	23.75		
3:00	23.50	25	
3:20	24.75		
3:40	24.75		
4:00	24.50		
Site Infiltration Rate (inches/hour)			**0.50in/hr**

Rapid Soil Solutions Infiltration Test Results

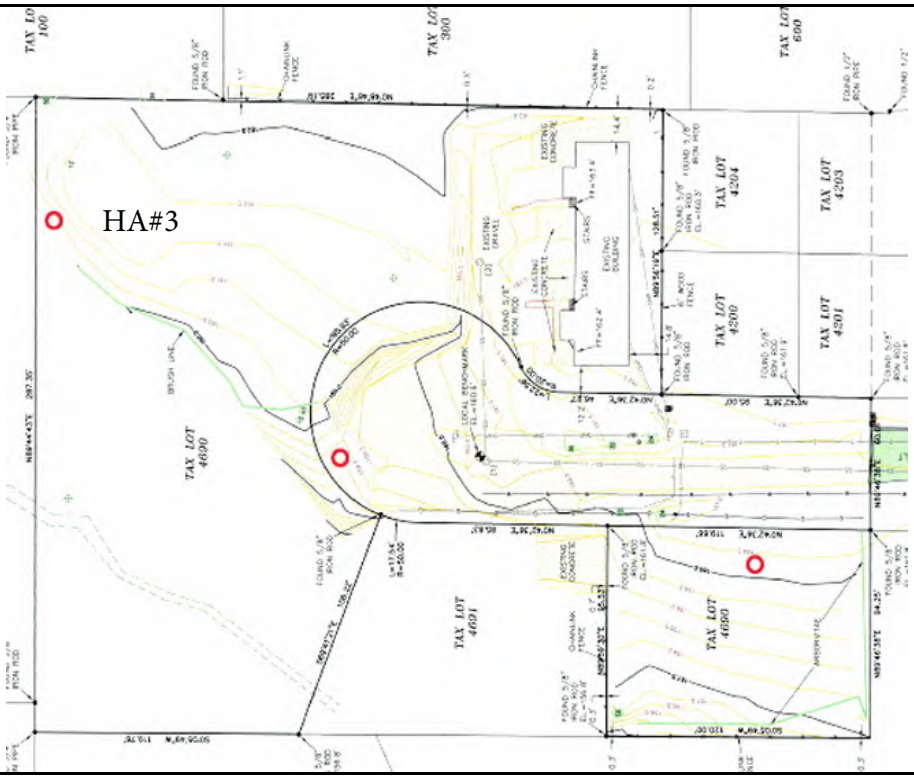


Preliminary Information			
Location:	100 S Garfield St, Newberg OR.	**Performed By: (Supervised by Mia Mahedy, PE, GE)**	Rick Sands
Date & Time:	8-29-22, 8:45 am	**Instrument Used:**	3-inch hand auger
Weather:	Sunny, 65	**Depth:**	6 ft

HA # 2			
Soil	2-4 ft, medium stiffness damp silty clay, brown , 4-6 ft, medium stiffness damp silty clay , brown		
Presoak	9:00, 15.25, 10:00, 12:25, fill 18.25, 11:00, 17, fill 18.50, 12:00, 16.50, fill 19, 1:00, 17, fill 19		
Time	**Measurement (inches)**	**Level Refilled To (inches)**	**Rate (inches/hour)**
1:20	18.25		
1:40	17.75		
2:00	17.25	19	
2:20	18.25		
2:40	17.25		
3:00	17	19.50	
3:20	18.50		
3:40	18		
4:00	17.50		
Site Infiltration Rate (inches/hour)			**2in/hr.**

Rapid Soil Solutions INC | 503-816-3689 | mia@rapidsoilsolutions.com

Rapid Soil Solutions Infiltration Test Results



Preliminary Information			
Location:	100 S Garfield St, Newberg OR.	**Performed By: (Supervised by Mia Mahedy, PE, GE)**	Rick Sands
Date & Time:	8-29-22, 8:45 am	**Instrument Used:**	3 inch hand auger
Weather:	Sunny, 65	**Depth:**	6 ft

HA # 3			
Soil	2-4 ft light brown silty clay medium stiffness damp, 4-6 ft, damp, brown , medium stiffness, silty clay		
Presoak	9:00, 19.50, 10:00, 18.25, fill 20, 11:00, 18.50, fill 20.75, 12:00, 20.25, fill 22, 1:00, 20.50, fill 22.25		
Time	**Measurement (inches)**	**Level Refilled To (inches)**	**Rate (inches/hour)**
1:20	22		
1:40	21.25		
2:00	21.25	23.75	
2:20	23.25		
2:40	23		
3:00	22.75	24.25	
3:20	24		
3:40	23.50		
4:00	23.25’		
Site Infiltration Rate (inches/hour)			**1in/hr.**

NOTICE TO WATER WELL CONTRACTOR
The original and first copy of this report are to be filed with the

WATER RESOURCES DEPARTMENT,
SALEM, OREGON 97310
within 30 days from the date of well completion.

WATER WELL REPORT
STATE OF OREGON
(Please type or print)
(Do not write above this line)

Yamhill 302

State Well No. 3S/2W-19

State Permit No.

(1) OWNER:
Name Millard Ward
Address Rt 1 Box 333A
Newberg Ore

(2) TYPE OF WORK (check):
New Well ☑ Deepening ☐ Reconditioning ☐ Abandon ☐
If abandonment, describe material and procedure in Item 12.

(3) TYPE OF WELL:
Rotary ☐ Driven ☐
Cable ☑ Jetted ☐
[illegible] ☐ Bored ☐

(4) PROPOSED USE (check):
Domestic ☑ Industrial ☐ Municipal ☐
Irrigation ☐ Test Well ☐ Other ☐

(5) CASING INSTALLED:
Threaded ☐ Welded ☑
6 " Diam. from +14" ft. to 49 ft. Gage 1/4 wall
" Diam. from ft. to ft. Gage
4 " Diam. from 40 ft. to 80 ft. Gage SDR 26

(6) PERFORATIONS:
Perforated? ☑ Yes ☐ No
Type of perforator used Drill
Size of perforations 3/8 in. DIA by in.
perforations from ft. to ft.
100 perforations from 50 ft. to 80 ft.
perforations from ft. to ft.

(7) SCREENS:
Well screen installed? ☐ Yes ☑ No
Manufacturer's Name
Type Model No.
Diam. Slot size Set from ft. to ft.
Diam. Slot size Set from ft. to ft.

(8) WELL TESTS:
Drawdown is amount water level is lowered below static level
Was a pump test made? ☐ Yes ☑ No If yes, by whom?
[illegible]: gal./min. with ft. drawdown after hrs.
" " " "
" " " "
Bailer test 2 gal./min. with TOTAL ft. drawdown after 1 hrs.
Artesian flow — g.p.m.
Temperature of water NORMAL Depth artesian flow encountered — ft.

(9) CONSTRUCTION:
Well seal—Material used Cement
Well sealed from land surface to 29 ft.
Diameter of well bore to bottom of seal 9 1/2 in.
Diameter of well bore below seal 6 in.
Number of sacks of cement used in well seal 12 sacks
How was cement grout placed? pressure Control
Was a drive shoe used? ☐ Yes ☑ No Plugs — Size: location — ft.
Did any strata contain unusable water? ☐ Yes ☑ No
Type of water? — depth of strata —
Method of sealing strata off —
Was well gravel packed? ☐ Yes ☑ No Size of gravel: —
Gravel placed from — ft. to — ft.

(10) LOCATION OF WELL:
County Yamhill Driller's well number
¼ ¼ Section 19 T. 3S R. 2W W.M.
Bearing and distance from section or subdivision corner

(11) WATER LEVEL: Completed well.
Depth at which water was first found 50 ft.
Static level 18 ft. below land surface. Date 15 Feb
Artesian pressure — lbs. per square inch. Date —

(12) WELL LOG:
Diameter of well below casing
Depth drilled 80 ft. Depth of completed well 79 ft.

Formation: Describe color, texture, grain size and structure of materials; and show thickness and nature of each stratum and aquifer penetrated, with at least one entry for each change of formation. Report each change in position of Static Water Level and indicate principal water-bearing strata.

MATERIAL	From	To	SWL
Brown Sandy Clay	0	23	
Grey Clay	23	45	
Lt Brown Gritty Clay	45	60	
Blue Grey " "	60	70	
Grey Brown " "	70	80	18

RECEIVED
MAR 11980
WATER RESOURCES DEPT
SALEM, OREGON

Work started 13 Feb 1980 Completed 15 Feb 1980
Date well drilling machine moved off of well 15 Feb 1980

Drilling Machine Operator's Certification:
This well was constructed under my direct supervision. Materials used and information reported above are true to my best knowledge and belief.
[Signed] Stanley Gaunt (Drilling Machine Operator) Date 18 Feb, 19
Drilling Machine Operator's License No. 216

Water Well Contractor's Certification:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
Name A J GAUNT & SON (Person, firm or corporation) (Type or print)
Address Aloha Ore
[Signed] Stanley Gaunt (Water Well Contractor)
Contractor's License No. 602 Date 18 Feb, 1980

(USE ADDITIONAL SHEETS IF NECESSARY)

SP*45656-119

16

STATE OF OREGON
WATER WELL REPORT
(as required by ORS 537.765)

Yam B 2757

RECEIVED
MAR - 8 1993
WATER RESOURCES DEPT.
SALEM, OREGON

3S/2W/19

(START CARD) # 44144

(1) OWNER:
Well Number 796
Name NSP Development/Brenneke
Address 2214 SW Hoffman
City Portland State OR Zip 97201

(2) TYPE OF WORK:
☒ New Well ☐ Deepen ☐ Recondition ☐ Abandon

(3) DRILL METHOD:
☒ Rotary Air ☐ Rotary Mud ☐ Cable
☐ Other

(4) PROPOSED USE:
☐ Domestic ☒ Community ☐ Industrial ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other

(5) BORE HOLE CONSTRUCTION:
Special Construction approval ☐ Yes ☒ No Depth of Completed Well 240 ft.
Explosives used ☐ Yes ☒ No Type Amount

HOLE Diameter	From	To	SEAL Material	From	To	Amount sacks or pounds
12¼"	0'	30	Cement	0'	35'	42 Sacks
10"	30	40				
8"	40	240				

How was seal placed: Method ☐ A ☐ B ☒ C ☐ D ☐ E
☐ Other
Backfill placed from ft. to ft. Material
Gravel placed from ft. to ft. Size of gravel

(6) CASING/LINER:

	Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
Casing:	8"	+ 2	38'	.25	☒	☐	☒	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
Liner:					☐	☐	☐	☐
					☐	☐	☐	☐

Final location of shoe(s)

(7) PERFORATIONS/SCREENS:
☐ Perforations Method
☐ Screens Type Material

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
						☐	☐
						☐	☐
						☐	☐
						☐	☐
						☐	☐

(8) WELL TESTS: Minimum testing time is 1 hour
☐ Pump ☐ Bailer ☒ Air ☐ Flowing Artesian

Yield gal/min	Drawdown	Drill stem at	Time
100 GPM		240'	1 hr.

Temperature of Water 57° Depth Artesian Flow Found
Was a water analysis done? ☐ Yes By whom
Did any strata contain water not suitable for intended use? ☐ Too little
☐ Salty ☐ Muddy ☐ Odor ☐ Colored ☐ Other
Depth of strata:

(9) LOCATION OF WELL by legal description:
County Yamhill Latitude Longitude
Township 3-S N or S. Range 2-W E or W. WM.
Section 19/30 ¼ ¼
Tax Lot Lot Block Subdivision
Street Address of Well (or nearest address) Dayton Av, Newberg, Or 97132

(10) STATIC WATER LEVEL:
80' ft. below land surface. Date 3/1/93
Artesian pressure lb. per square inch. Date

(11) WATER BEARING ZONES:
Depth at which water was first found 190'

From	To	Estimated Flow Rate	SWL
190	220'	60 GPM	n/a

(12) WELL LOG:
Ground elevation

Material	From	To	SWL
Top Soil	0	3	
Brown Clay	3	25	
H. Brown Basalt	25	35	
H. Gray Basalt	35	55	
M.H. Brown Basalt	55	85	
H. Gray Basalt	85	105	
H. Gray Fractured Basalt	105	155	
H. Gray Frac./Broken Basalt	155	165	
Hard Gray Basalt	165	175	
Hard Brown Basalt	175	190	
Hard Severe Fractured Gray Bas	190	200	
H. Gray/Brown Porous Basalt	200	215	
Hard Gray Basalt	215	235	
Soft White Clay	235	240	

Date started 2/23/93 Completed 3/1/93

(unbonded) Water Well Constructor Certification:
I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon well construction standards. Materials used and information reported above are true to my best knowledge and belief.

WWC Number
Signed Date

(bonded) Water Well Constructor Certification:
I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon well construction standards. This report is true to the best of my knowledge and belief.

WWC Number 645
Signed Date 3/4/93

ORIGINAL & FIRST COPY - WATER RESOURCES DEPARTMENT SECOND COPY - CONSTRUCTOR THIRD COPY - CUSTOMER 9809C 10/91

16

STATE OF OREGON
WATER WELL REPORT
(as required by ORS 537.765)

YAMH 2837

RECEIVED
JUL 13 1993
WATER RESOURCES DEPT.
SALEM, OREGON

3S/2W/19C6

(START CARD) # 50236

(1) OWNER: Well Number 93-336

Name Tim & Robin Vachter

Address 24285 Zard Ln.

City Newberg State OR Zip 97132

(2) TYPE OF WORK:

xx New Well ☐ Deepen ☐ Recondition ☐ Abandon

(3) DRILL METHOD:

☐ Rotary Air ☐ Rotary Mud ☒ Cable

☐ Other

(4) PROPOSED USE:

☒ Domestic ☐ Community ☐ Industrial ☐ Irrigation

☐ Thermal ☐ Injection ☐ Other

(5) BORE HOLE CONSTRUCTION:

Special Construction approval ☐ Yes ☒ No Depth of Completed Well 200 ft.

Explosives used ☐ Yes ☒ No Type Amount

HOLE Diameter	From	To	SEAL Material	From	To	Amount sacks or pounds
10	0	39	Cement	0	39	68 sk
6	39	200				

How was seal placed: Method ☐ A ☐ B ☒ C ☐ D ☐ E

☐ Other

Backfill placed from ft. to ft. Material

Gravel placed from ft. to ft. Size of gravel

(6) CASING/LINER:

	Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
Casing:	6	+1	84	250	☒	☐	☒	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
Liner:	4	40	200	160	☐	☒	☒	☐
					☐	☐	☐	☐

Final location of shoe(s) 84.5

(7) PERFORATIONS/SCREENS:

☒ Perforations Method skil saw

☐ Screens Type Material

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
160	200	6"	30	1/8"		☐	☒
						☐	☐
						☐	☐
						☐	☐
						☐	☐

(8) WELL TESTS: Minimum testing time is 1 hour

☒ Pump ☒ Bailer ☐ Air ☐ Flowing Artesian

Yield gal/min	Drawdown	Drill stem at	Time
bailer 20	100		1 hr.
pump 20	50		1 hr

Temperature of Water 51 Depth Artesian Flow Found

Was a water analysis done? ☒ Yes By whom WFR

Did any strata contain water not suitable for intended use? ☐ Too little

☐ Salty ☐ Muddy ☐ Odor ☐ Colored ☐ Other

Depth of strata:

(9) LOCATION OF WELL by legal description:

County YAMHILL Latitude Longitude

Township 3s N or S. Range 2w E or W. WM.

Section 19 nw ¼ sw ¼

Tax Lot Lot Block Subdivision

Street Address of Well (or nearest address) SAME

(10) STATIC WATER LEVEL:

69 ft. below land surface. Date 6/23/93

Artesian pressure lb. per square inch. Date

(11) WATER BEARING ZONES:

Depth at which water was first found 132'

From	To	Estimated Flow Rate	SWL
132	199	20	69

(12) WELL LOG:

Ground elevation 200

Material	From	To	SWL
Topsoil	0	2	
Clay Brwn	2	31	
clay & decomposed rockGR	31	34	
Clay Gray	34	63	
Rock decomposed w/clay brwn	63	74	
Rock decomposed	74	111	
Rock fractured/decomposed	111	140	69
Rock fractured	140	200	

Date started 6/4/93 Completed 6/24/93

(unbonded) Water Well Constructor Certification:

I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon well construction standards. Materials used and information reported above are true to my best knowledge and belief.

WWC Number

Signed Date

(bonded) Water Well Constructor Certification:

I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon well construction standards. This report is true to the best of my knowledge and belief.

WWC Number 203

Signed Tom Bryant Date 6/24/93

ORIGINAL & FIRST COPY - WATER RESOURCES DEPARTMENT SECOND COPY - CONSTRUCTOR THIRD COPY - CUSTOMER 9809C 10/91

PRELIMINARY STORMWATER MANAGEMENT PLAN

S Garfield St 8-Lot Subdivision (SUB322-0001)

Submitted:	January 2023
Owner:	Scott Holden Scottholden2007@outlook.com (503) 502-8006
Engineer:	Firwood Design Group Contact: Kelli Grover kg@firwooddesign.com 359 E. Historic Columbia River Highway Troutdale, OR 97060 (503) 668 - 3788
Site Location:	100 S Garfield St Newberg, OR 97132

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Appendices

SITE INFORMATION

The project is located at 100 S Garfield St in Newberg, OR. The property is a split tax lot that totals 1.5 acres. The larger portion of the tax lot is at the north end of the Garfield St ROW and is encumbered by over 20,000 sf of un-developable area that contains wetlands and the City's Stream Corridor Overlay district. The smaller portion of the tax lot is to the south and is 11,400 sf. There is an existing duplex on the lot that will remain. The vicinity map in Figure 1 illustrates the location of the subject site.

The site is generally flat with grades of ~5% that slope down to the northwest to the existing stream. There is no existing stormwater infrastructure on S Garfield St in the vicinity of the project.

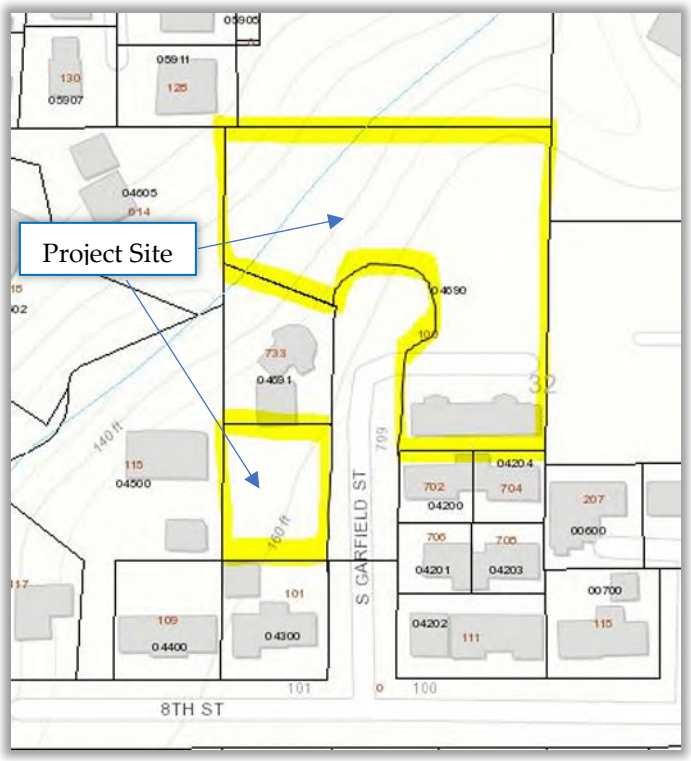


Figure 1 – Vicinity Map

The project proposes to subdivide the property into 8 lots ranging from 3,785 sf to 7,071 sf in size. Lots 1-7 will be for future residential development, and Lot 8 will retain the existing residential structures. Two tracts will be created in the subdivision; Tract A (1,847 sf) will be dedicated for

stormwater management while tract B (23,865 sf) will contain the wetlands and Stream Corridor Overlay area on site and is to be un-developed and remain as an environmental tract. Additionally, the project proposes to extend S Garfield St to the East with full street improvements. Public utilities will be extended into the shared private driveway to service the future residential developments.

Proposed stormwater improvements as a part of this project will treat and detain areas from both newly created public improvements and private roofs and driveways. New impervious areas associated with these areas are shown in Table 1 below. Due to the proposed grading plan and existing site constraints, Lot 7 impervious area will drain to the south, away from the proposed stormwater improvements, to be collected in the existing catch basins at the intersection of 8th St and S Garfield St. Therefore, Lot 7 area is not accounted for in this design.

Table 1 – Proposed Impervious Areas

	Description	**Impervious Area Created**
S Garfield St	32' wide AC, 5' wide sidewalk (both sides), 12' wide driveway approaches	14,860 sf
Lots 1-7 (Lot 8 Existing)	Impervious area assumption of 50% of lot coverage	13,198 sf
	TOTAL	**28,058 sf**

A geotechnical study and infiltration test was done for the site on August 31st, 2022 by Rapid Soil Solutions (See Appendix B). Infiltration testing was performed at three locations and found the field infiltration rates to be 0.5, 1.0, & 2.0 in/hr. The study did not encounter groundwater at the infiltration test pit locations. The tested area #2 that produced a infiltration rate of 2.0 in/hr will be the locations for the proposed vegetated infiltration facilities. The 36" underground detention facility will be located in Tract A. Infiltration is not proposed in this area. As mentioned previously, the site contains wetlands and the City's Stream Corridor Overlay boundary. The proposed stormwater management facilities will be located outside of both restricted areas. However, the outfall for the detention facility will be located within the Stream Corridor Overlay and will be mitigated for and re-planted in accordance with City standards.

STORMWATER MANAGEMENT STRATEGY

Publicly owned

This project will utilize a combination of infiltration and detention to treat and detain all net new impervious area created, in accordance with the design flow chart in section 4.6 of the City's Stormwater Design Manual. All stormwater from impervious areas within the right-of-way (i.e. roads, sidewalks, and driveways) will be directed to three publicly owned vegetated roadside planters or rain garden #1 for treatment. Overflow from the three public roadside planters will also be directed to the public 18" detention facility and associated flow-control manhole within the right-of-way. The only exception to this is the small area (Basin 7) draining to the proposed catch basin at the curb return due to grading issues. However, this small area will receive residual treatment via natural vegetated filtration as it passes through existing vegetation after the outfall.

Privately owned

Lots 1-4 will have private stormwater laterals from the proposed private stormwater main for connection of roof drains of the residential developments. This stormwater main will convey stormwater to a private underground 36" detention facility for detention of stormwater for the applicable design storms. A concrete channel will collect runoff from the proposed shared driveway for Lots 1-4 and direct it to rain garden #2. The overflow from rain garden #2 will be directed to the private 36" detention facility.

Peak flows from the post-developed site will match peak flows from the existing site for the design storms for both public and private systems.

DSEIGN METHODOLOGY

The Santa Barbara Urban Hydrograph Method (calculated with HydroCAD with SCS Type 1A rainfall distribution) was used to create the hydrographs and to estimate the peak flows for the design storms. A curve number (CN) value of 98 was assigned to all impervious areas (road, driveway, sidewalk and roofs). A curve number value of 84 was assigned to the existing pervious basin area corresponding to grass cover in fair condition with HSG D soils.

The assumed void space in the growing medium and drain rock of the planters and rain gardens was assumed at 25% and 40%, respectively. The assumed exfiltration from the top of the growing medium through the facility was assumed at 1.0 in/hr, which accounts for a safety factor of 2 applied to the field infiltration rate of 2.0 in/hr.

Drainage conditions for impervious areas, when calculated, are generally less than the acceptable minimum 6-minute time of concentration. Therefore, the 6-minute minimum is applied.

Precipitation depths used for the design correlate to City of Newberg design storms and can be seen in Table 2 below.

Table 2 – Design Storm Volumes

Recurrence Interval (yr.)	***Total Precipitation Depth (In)***
2	*2.50*
Half - 2	*1.25*
10	*3.50*
25	*4.00*

FACILITY SELECTION & DESIGN RESULTS

The post-developed site is divided into seven smaller sub-basins for stormwater management and are delineated in Table 3. Please reference the preliminary utility and grading plan submitted in this land use application for more detail.

Table 3 – Sub-Basin Areas. See Basin Plan in Appendix.

	Area Description	**Facility**	**Impervious Area (sf)**	**Outflow**
Basin 1	Public road and sidewalk, east	Planter 1, 18.5 LF	2,178 sf	To 18" Detention Facility
Basin 2	Public road and sidewalk and Lots 5 & 6, west	Planter 2, 18.5 LF	5,524 sf	To 18" Detention Facility
Basin 3	Public road and sidewalk, southeast	Planter 3, 25.5 LF	1,774 sf	To 18" Detention Facility

Basin 4	Lots 1-4 Roof drains	36″ Detention Pipe, 75 LF	9.394 sf	To 36" Detention Facility
Basin 5	Public road eyebrow and sidewalk	Rain garden #1, 250 SF	6,214 sf	Outfall at Stream
Basin 6	Shared Driveway	Rain garden #2, 84 SF	2,584 sf	To 36" Detention Facility
Basin 7	Curb Return	NA	1,476 sf	To 18" Detention Facility

Planters 1-3 will be constructed with a 1.5′ gravel layer, 1.5′ soil medium, and 0.5′ ponding depth and will all have an open bottom to allow for exfiltration. Planters 1-3 will have beehive overflow structures set at the design ponding depth. Outflows from Planters 1-3 will be conveyed into the 18″ detention pipe.

Rain Gardens 1 & 2 will be constructed with a 1.5′ gravel layer, 1.5′ soil medium, and 0.5′ ponding depth and will all have an open bottom to allow for exfiltration. Rain Gardens 1 will have a beehive overflow structure set at the design ponding depth to direct overflow to a stream outfall. Rain Gardens 2 will have a beehive overflow structure set at the design ponding depth to direct overflow to the 36″ detention pipe.

The 18″ diameter underground detention pipe will be constructed with a flow control manhole with a 2.0″ flow control orifice at the invert, a 2.0″ upper orifice located 2.2′ above the invert, and a 12″ overflow orifice located 2.8′ above the invert.

The 36″ diameter underground detention pipe will be constructed with a flow control manhole with a 0.7″ flow control orifice at the invert and a 1.8″ upper orifice located 1.5′ above the invert.

Collectively, all facilities will detain stormwater such that peak flows exiting the site in the post-development condition or less than or equal to peak flows in the existing condition for the 2-, 5-, 10-, and 25-year design storms. Table 4 below shows the results of the design.

Table 4 – Site Peak Flows

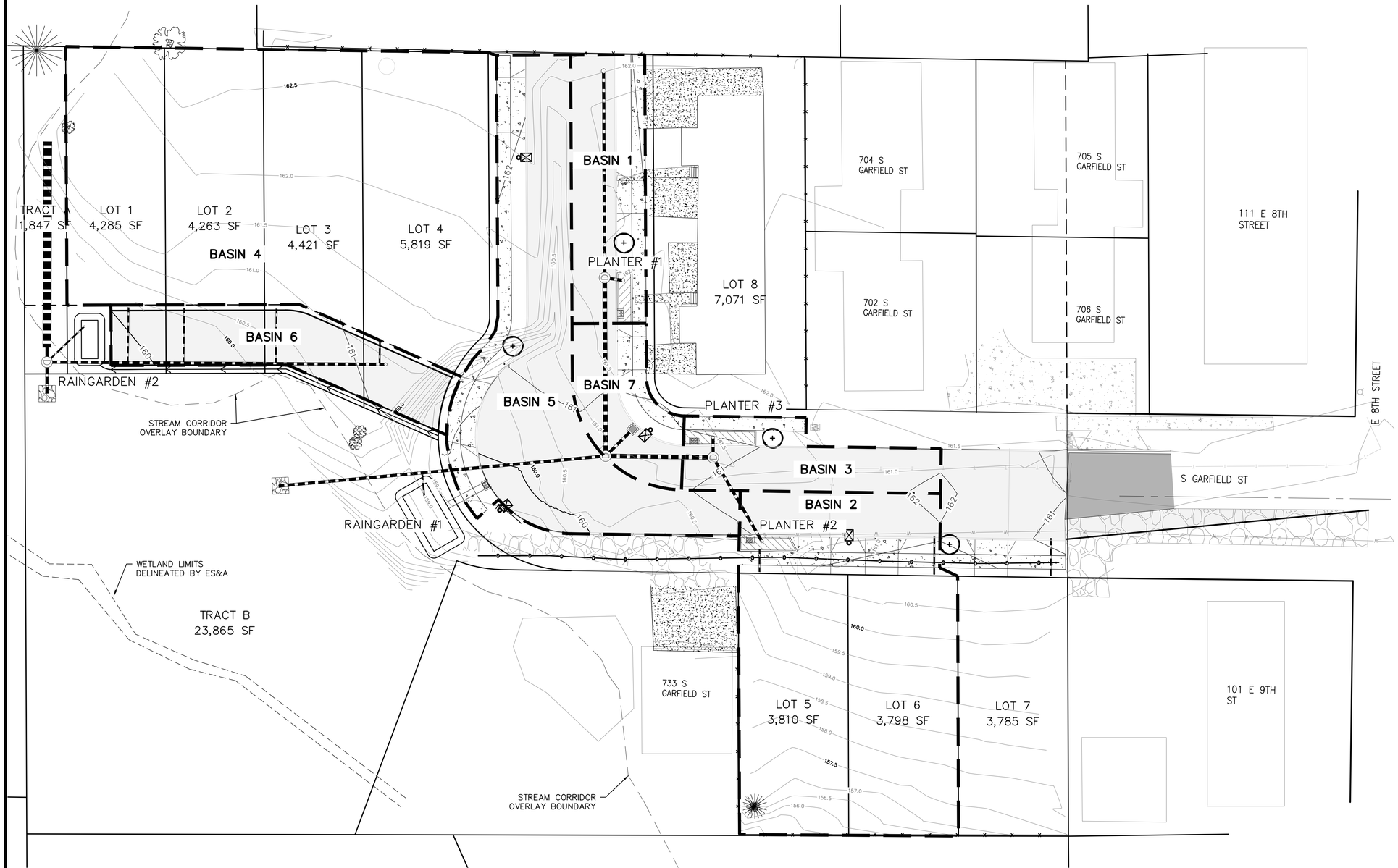
	Pre-Existing Peak Flows (cfs)	**Post-Development Peak Flows (cfs)**
2-Year	0.17	0.15
½ 2-Year	0.26	0.20
10-Year	0.31	0.30
25-Year	0.39	0.38

To meet water quality and treatment standards, the three planters are designed to retain and infiltrate stormwater from surface impervious areas during the 1-inch water quality storm. The method of treatment is filtration through the vegetation and engineered soil medium.

See Appendix A for the Basin Plan and Appendix B for the HydroCAD report for more detail on the stormwater design.

CONVEYANCE

All on-site stormwater mains will be minimum 12" diameter HDPE at a minimum slope of 0.5%. The capacity of this pipe when flowing full is 2.93 cfs, per Manning's equation. As demonstrated above, the peak flows exiting the site during the 25-year design storm is 0.38 cfs. Therefore, all proposed stormwater pipe is of adequate capacity for the proposed design. Additionally, all roadside planters will be constructed with grated overflow inlets to allow for the safe conveyance of stormwater if the facilities were to be inundated, and to prevent negative impacts to public roads and downstream neighboring properties.



BASIN AREAS

	Area Description	Facility	Impervious Area (sf)	Outflow
Basin 1	Public road and sidewalk, east	Planter 1, 18.5 LF	2,178 sf	To 18" Detention Facility
Basin 2	Public road and sidewalk and Lots 5 & 6, west	Planter 2, 18.5 LF	5,524 sf	To 18" Detention Facility
Basin 3	Public road and sidewalk, southeast	Planter 3, 25.5 LF	1,774 sf	To 18" Detention Facility
Basin 4	Lots 1-4 Roof drains	36" Detention Pipe, 75 LF	9.394 sf	To 36" Detention Facility
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Basin 6	Shared Driveway	Rain garden #2, 84 SF	2,584 sf	To 36" Detention Facility
Basin 7	Curb Return	NA	1,476 sf	To 18" Detention Facility

BASIN BOUNDARY

NORTH

0 20 40

SCALE IN FEET

REGISTERED PROFESSIONAL ENGINEER
67149PE
OREGON
JAN. 14, 2015
KELLI A. GROVER

PRELIMINARY

EXPIRES: 06/30/23
SIGNATURE DATE: 01/31/23

DATE:	NO.	REVISION

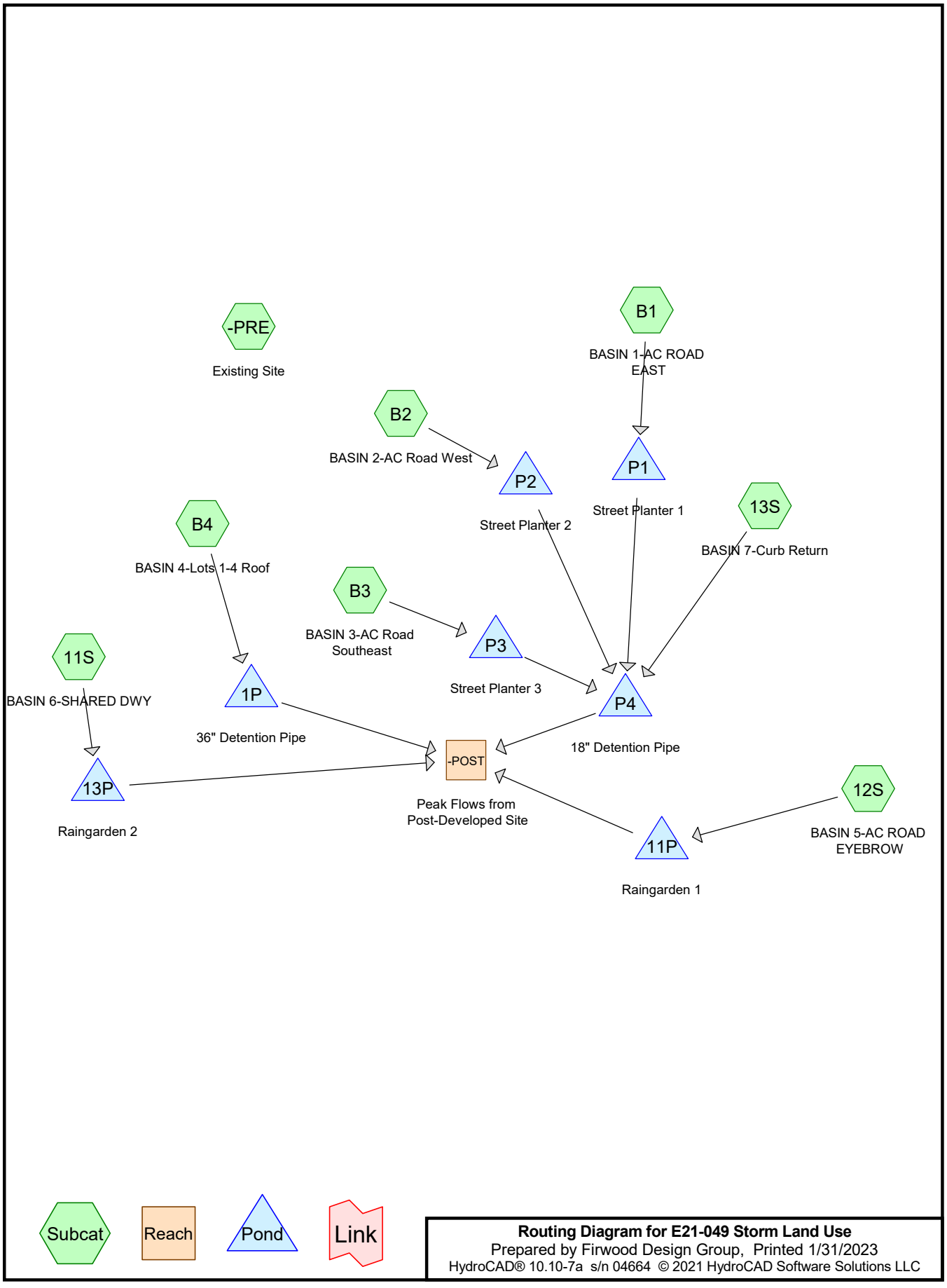
DRAWN: | DESIGNED: | CHECKED:
SCALE: AS SHOWN | DATE: JANUARY 2023
PROJECT NO. E21-049

FIRWOOD DESIGN GROUP
359 EAST HISTORIC COLUMBIA RIVER HIGHWAY
TROUTDALE, OREGON 97060
BUS: (503) 668-3737 ✦ FAX: (503) 668-3788

SCOTT HOLDEN
100 S GARFIELD ST
NEWBERG, OR 97132

BASIN PLAN
8-LOT SUBDIVISION

1/1



Routing Diagram for E21-049 Storm Land Use
Prepared by Firwood Design Group, Printed 1/31/2023

Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	2-YR	Type IA 24-hr		Default	24.00	1	2.50	2
2	10-YR	Type IA 24-hr		Default	24.00	1	3.50	2
3	25-YR	Type IA 24-hr		Default	24.00	1	4.00	2
4	Half 2yr	Type IA 24-hr		Default	24.00	1	1.25	2
5	WQ	Type IA 24-hr		Default	24.00	1	1.00	2

Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
29,153	84	50-75% Grass cover, Fair, HSG D (-PRE)
6,227	98	AC (12S, B1)
2,584	98	Paved parking, HSG D (11S)
3,650	98	Paved roads w/curbs & sewers, HSG D (12S, 13S)
7,298	98	Public Impervious (B2, B3)
9,394	98	Roof Area (B4)
58,306	**91**	**TOTAL AREA**

Soil Listing (all nodes)

Area (sq-ft)	Soil Group	Subcatchment Numbers
0	HSG A	
0	HSG B	
0	HSG C	
35,387	HSG D	-PRE, 11S, 12S, 13S
22,919	Other	12S, B1, B2, B3, B4
58,306		**TOTAL AREA**

Ground Covers (all nodes)

HSG-A (sq-ft)	HSG-B (sq-ft)	HSG-C (sq-ft)	HSG-D (sq-ft)	Other (sq-ft)	Total (sq-ft)	Ground Cover
0	0	0	29,153	0	29,153	50-75% Grass cover, Fair
0	0	0	0	6,227	6,227	AC
0	0	0	2,584	0	2,584	Paved parking
0	0	0	3,650	0	3,650	Paved roads w/curbs & sewers
0	0	0	0	7,298	7,298	Public Impervious
0	0	0	0	9,394	9,394	Roof Area
0	**0**	**0**	**35,387**	**22,919**	**58,306**	**TOTAL AREA**

Time span=0.00-36.00 hrs, dt=0.01 hrs, 3601 points
Runoff by SBUH method, Split Pervious/Imperv.
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment -PRE: Existing Site Runoff Area=29,153 sf 0.00% Impervious Runoff Depth=1.12"
Tc=6.0 min CN=84/0 Runoff=0.17 cfs 2,711 cf

Subcatchment 11S: BASIN 6-SHARED DWY Runoff Area=2,584 sf 100.00% Impervious Runoff Depth=2.27"
Tc=6.0 min CN=0/98 Runoff=0.03 cfs 489 cf

Subcatchment 12S: BASIN 5-AC ROAD Runoff Area=6,214 sf 100.00% Impervious Runoff Depth=2.27"
Tc=6.0 min CN=0/98 Runoff=0.08 cfs 1,176 cf

Subcatchment 13S: BASIN 7-Curb Return Runoff Area=1,476 sf 100.00% Impervious Runoff Depth=2.27"
Tc=6.0 min CN=0/98 Runoff=0.02 cfs 279 cf

Subcatchment B1: BASIN 1-AC ROAD Runoff Area=2,187 sf 100.00% Impervious Runoff Depth=2.27"
Tc=6.0 min CN=0/98 Runoff=0.03 cfs 414 cf

Subcatchment B2: BASIN 2-AC Road West Runoff Area=5,524 sf 100.00% Impervious Runoff Depth=2.27"
Tc=6.0 min CN=0/98 Runoff=0.07 cfs 1,045 cf

Subcatchment B3: BASIN 3-AC Road Runoff Area=1,774 sf 100.00% Impervious Runoff Depth=2.27"
Tc=6.0 min CN=0/98 Runoff=0.02 cfs 336 cf

Subcatchment B4: BASIN 4-Lots 1-4 Roof Runoff Area=9,394 sf 100.00% Impervious Runoff Depth=2.27"
Tc=6.0 min CN=0/98 Runoff=0.12 cfs 1,778 cf

Reach -POST: Peak Flows from Post-Developed Site Inflow=0.15 cfs 2,580 cf
Outflow=0.15 cfs 2,580 cf

Pond 1P: 36" Detention Pipe Peak Elev=1.94' Storage=363 cf Inflow=0.12 cfs 1,778 cf
Outflow=0.07 cfs 1,778 cf

Pond 11P: Raingarden 1 Peak Elev=3.44' Storage=354 cf Inflow=0.08 cfs 1,176 cf
Discarded=0.02 cfs 1,176 cf Primary=0.00 cfs 0 cf Outflow=0.02 cfs 1,176 cf

Pond 13P: Raingarden 2 Peak Elev=3.56' Storage=129 cf Inflow=0.03 cfs 489 cf
Discarded=0.01 cfs 447 cf Primary=0.01 cfs 42 cf Outflow=0.02 cfs 489 cf

Pond P1: Street Planter 1 Peak Elev=3.45' Storage=125 cf Inflow=0.03 cfs 414 cf
Discarded=0.01 cfs 414 cf Primary=0.00 cfs 0 cf Outflow=0.01 cfs 414 cf

Pond P2: Street Planter 2 Peak Elev=3.55' Storage=131 cf Inflow=0.07 cfs 1,045 cf
Discarded=0.01 cfs 565 cf Primary=0.07 cfs 481 cf Outflow=0.07 cfs 1,045 cf

Pond P3: Street Planter 3 Peak Elev=1.86' Storage=84 cf Inflow=0.02 cfs 336 cf
Discarded=0.01 cfs 336 cf Primary=0.00 cfs 0 cf Outflow=0.01 cfs 336 cf

Pond P4: 18" Detention Pipe Peak Elev=0.44' Storage=43 cf Inflow=0.09 cfs 760 cf
Outflow=0.07 cfs 760 cf

Total Runoff Area = 58,306 sf Runoff Volume = 8,228 cf Average Runoff Depth = 1.69"
50.00% Pervious = 29,153 sf 50.00% Impervious = 29,153 sf

Summary for Subcatchment -PRE: Existing Site

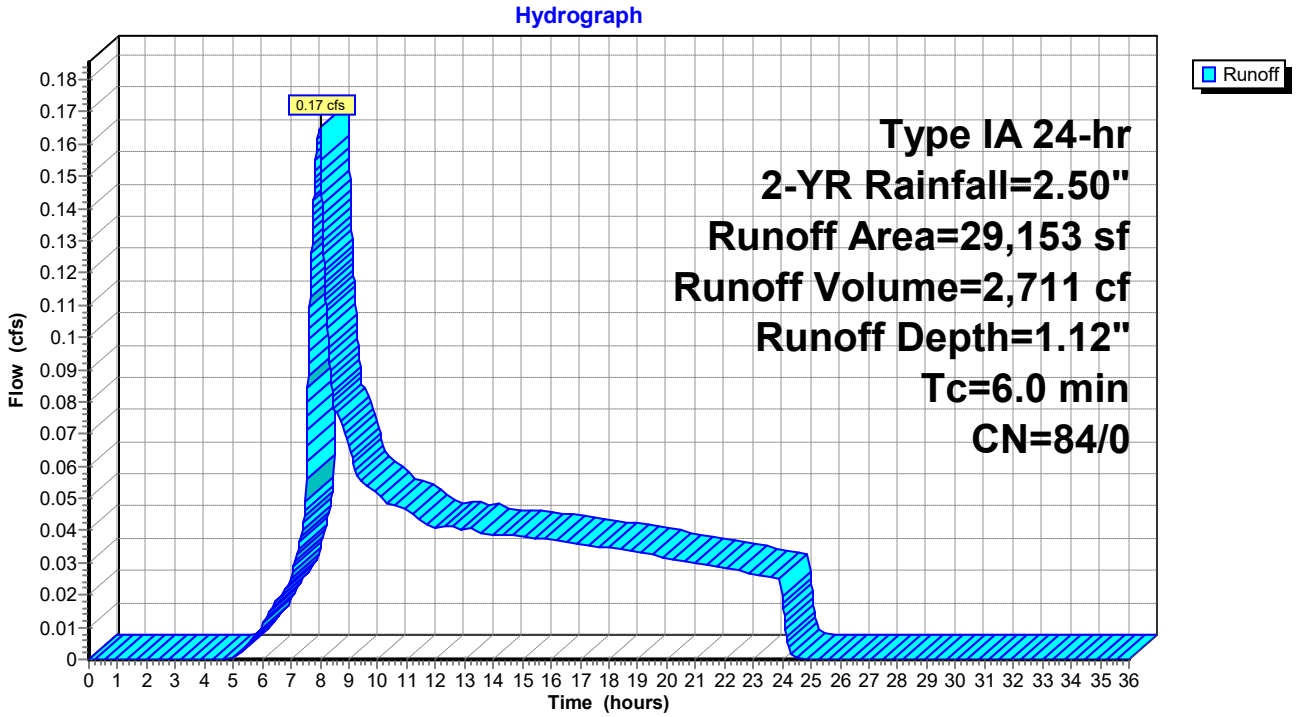
Runoff = 0.17 cfs @ 8.00 hrs, Volume= 2,711 cf, Depth= 1.12"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 2-YR Rainfall=2.50"

Area (sf)	CN	Description
29,153	84	50-75% Grass cover, Fair, HSG D
29,153	84	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment -PRE: Existing Site



Summary for Subcatchment 11S: BASIN 6-SHARED DWY

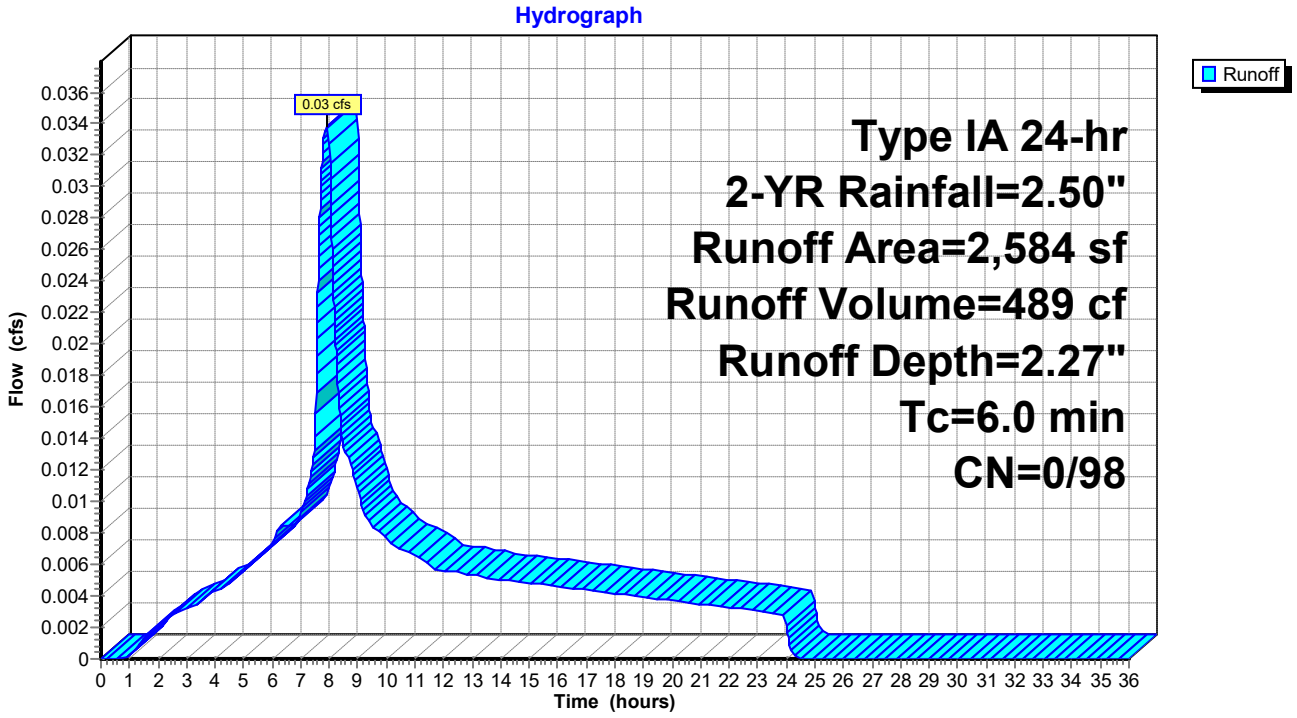
Runoff = 0.03 cfs @ 7.90 hrs, Volume= 489 cf, Depth= 2.27"
Routed to Pond 13P : Raingarden 2

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 2-YR Rainfall=2.50"

Area (sf)	CN	Description
2,584	98	Paved parking, HSG D
2,584	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 11S: BASIN 6-SHARED DWY



Summary for Subcatchment 12S: BASIN 5-AC ROAD EYEBROW

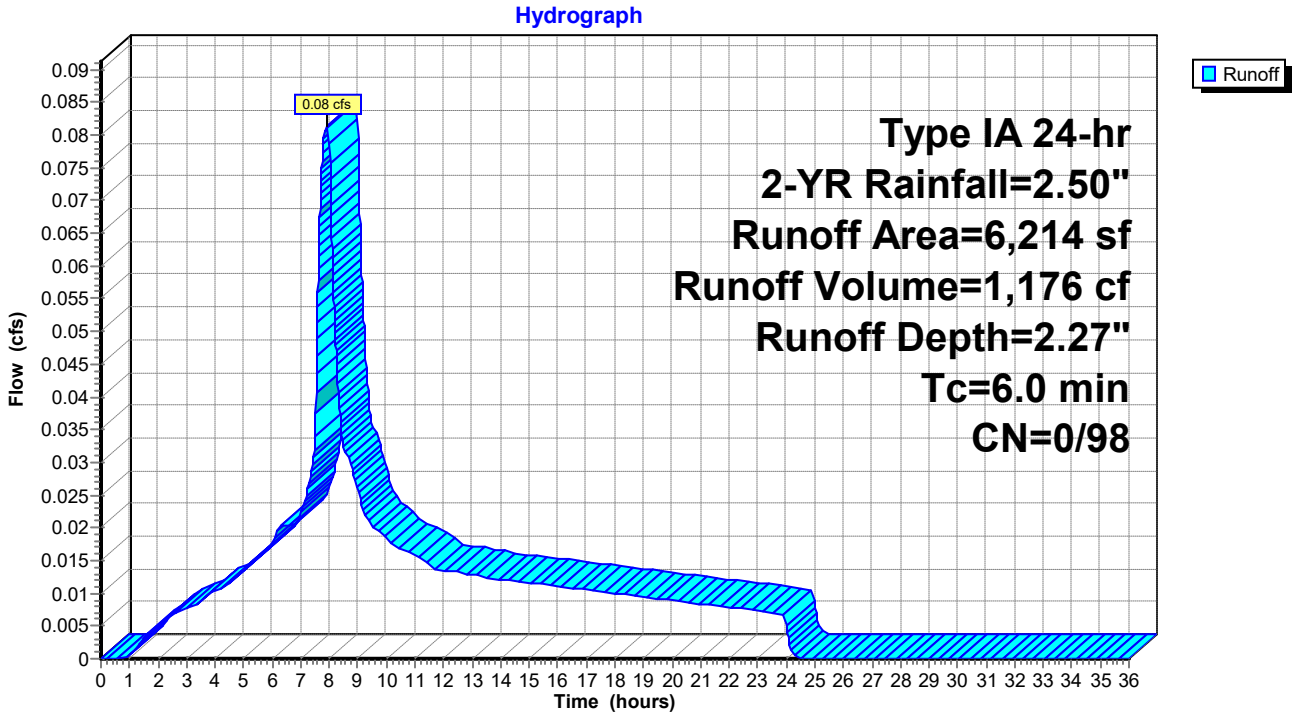
Runoff = 0.08 cfs @ 7.90 hrs, Volume= 1,176 cf, Depth= 2.27"
Routed to Pond 11P : Raingarden 1

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 2-YR Rainfall=2.50"

	Area (sf)	CN	Description
*	4,040	98	AC
	2,174	98	Paved roads w/curbs & sewers, HSG D
	6,214	98	Weighted Average
	6,214	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment 12S: BASIN 5-AC ROAD EYEBROW



Summary for Subcatchment 13S: BASIN 7-Curb Return

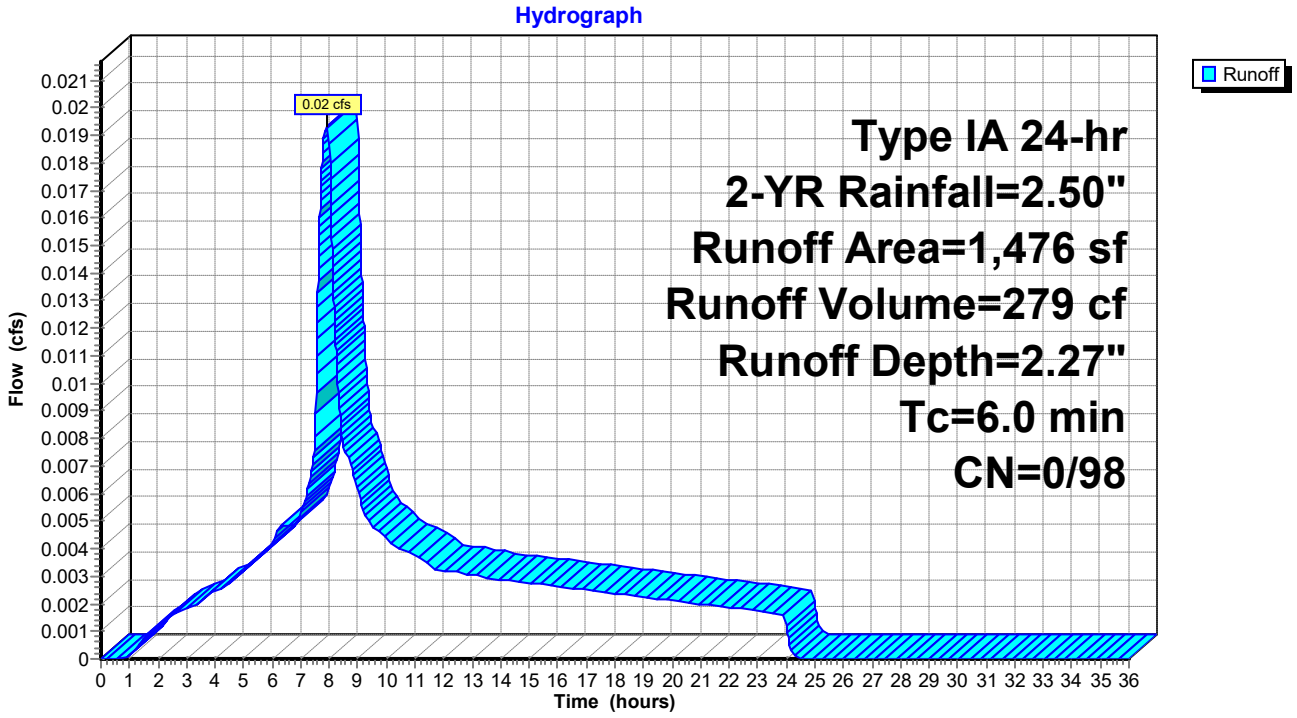
Runoff = 0.02 cfs @ 7.90 hrs, Volume= 279 cf, Depth= 2.27"
Routed to Pond P4 : 18" Detention Pipe

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 2-YR Rainfall=2.50"

Area (sf)	CN	Description
1,476	98	Paved roads w/curbs & sewers, HSG D
1,476	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 13S: BASIN 7-Curb Return



Summary for Subcatchment B1: BASIN 1-AC ROAD EAST

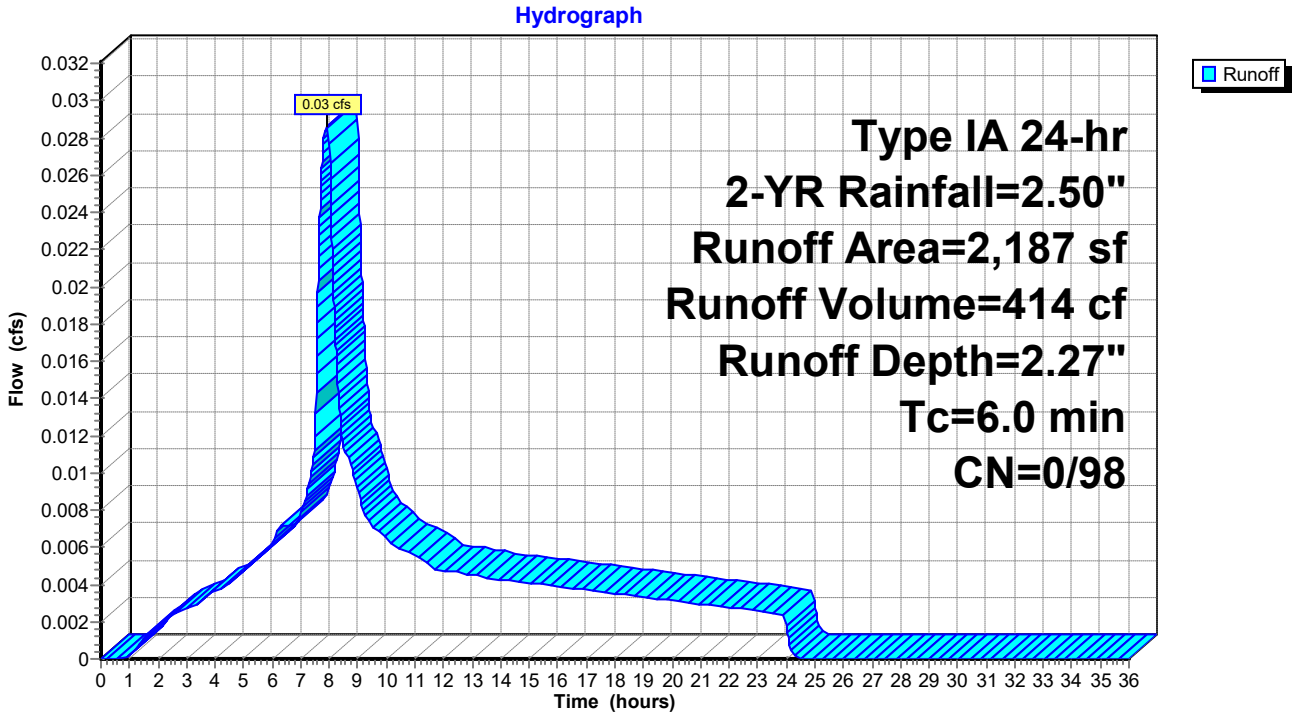
Runoff = 0.03 cfs @ 7.90 hrs, Volume= 414 cf, Depth= 2.27"
Routed to Pond P1 : Street Planter 1

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 2-YR Rainfall=2.50"

	Area (sf)	CN	Description
*	2,187	98	AC
	2,187	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment B1: BASIN 1-AC ROAD EAST



Summary for Subcatchment B2: BASIN 2-AC Road West

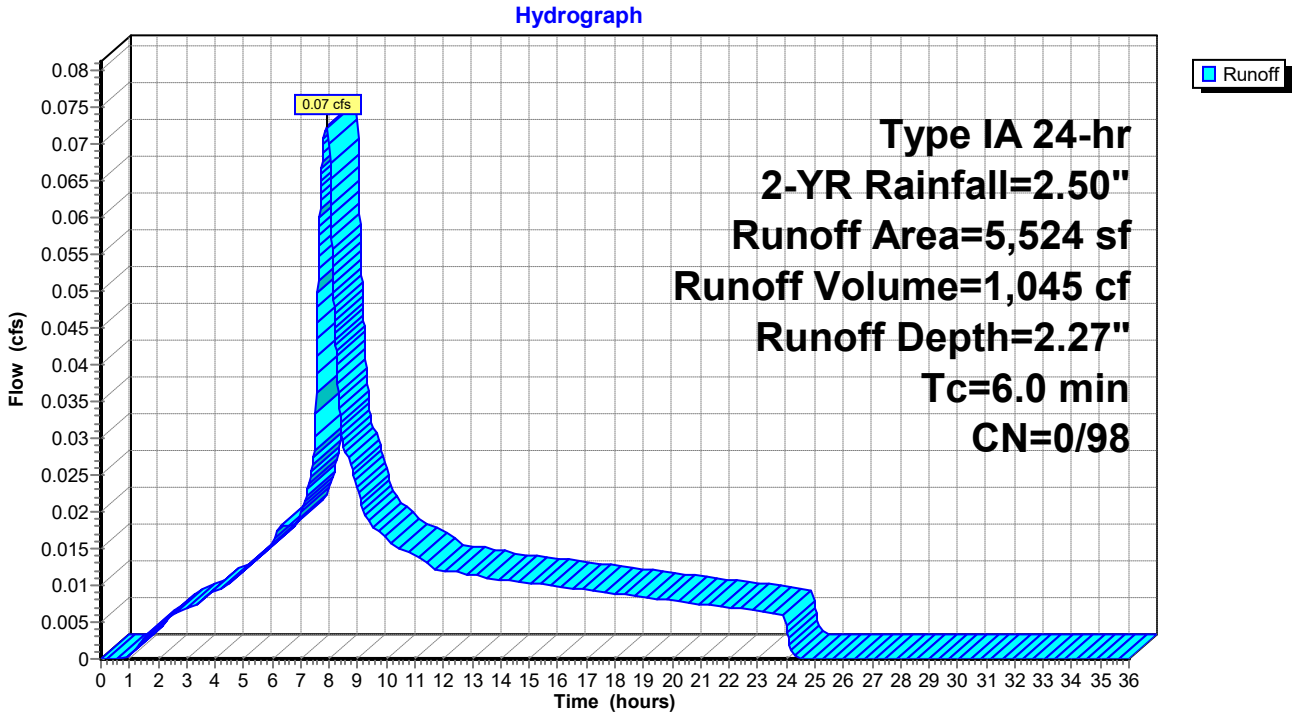
Runoff = 0.07 cfs @ 7.90 hrs, Volume= 1,045 cf, Depth= 2.27"
Routed to Pond P2 : Street Planter 2

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 2-YR Rainfall=2.50"

	Area (sf)	CN	Description
*	5,524	98	Public Impervious
	5,524	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment B2: BASIN 2-AC Road West



Summary for Subcatchment B3: BASIN 3-AC Road Southeast

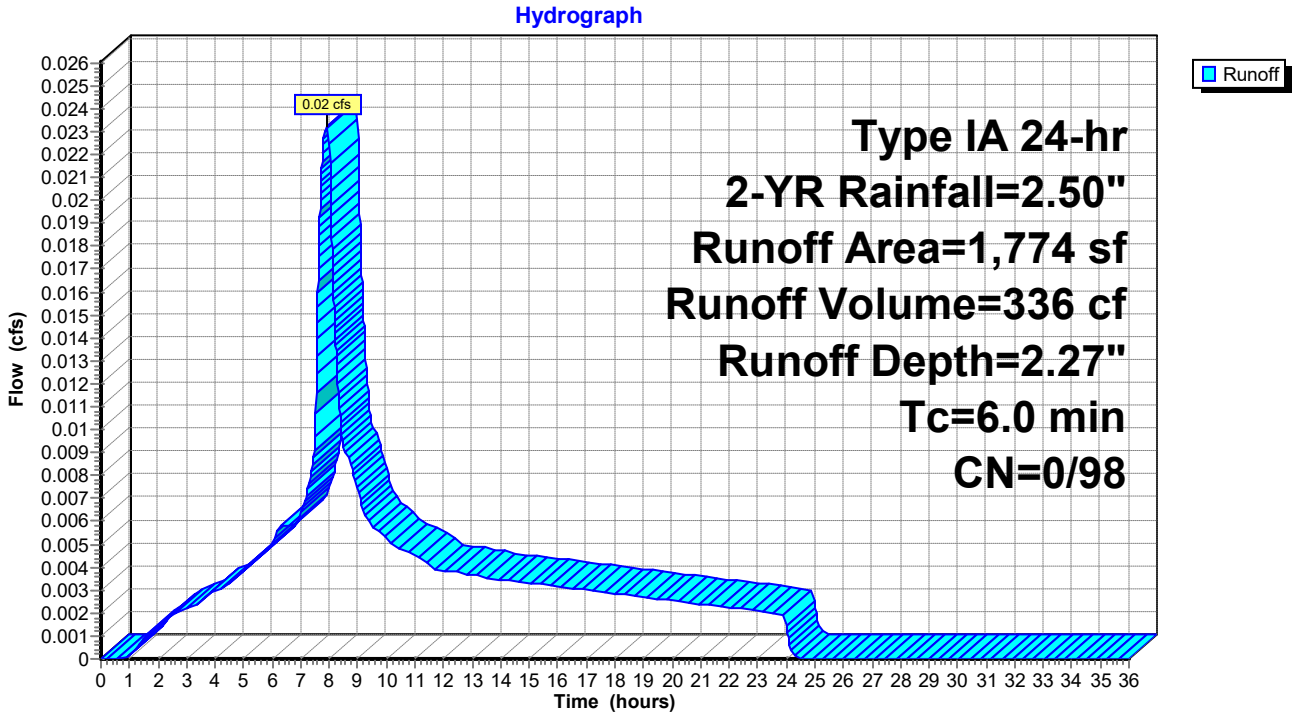
Runoff = 0.02 cfs @ 7.90 hrs, Volume= 336 cf, Depth= 2.27"
Routed to Pond P3 : Street Planter 3

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 2-YR Rainfall=2.50"

	Area (sf)	CN	Description
*	1,774	98	Public Impervious
	1,774	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment B3: BASIN 3-AC Road Southeast



Summary for Subcatchment B4: BASIN 4-Lots 1-4 Roof

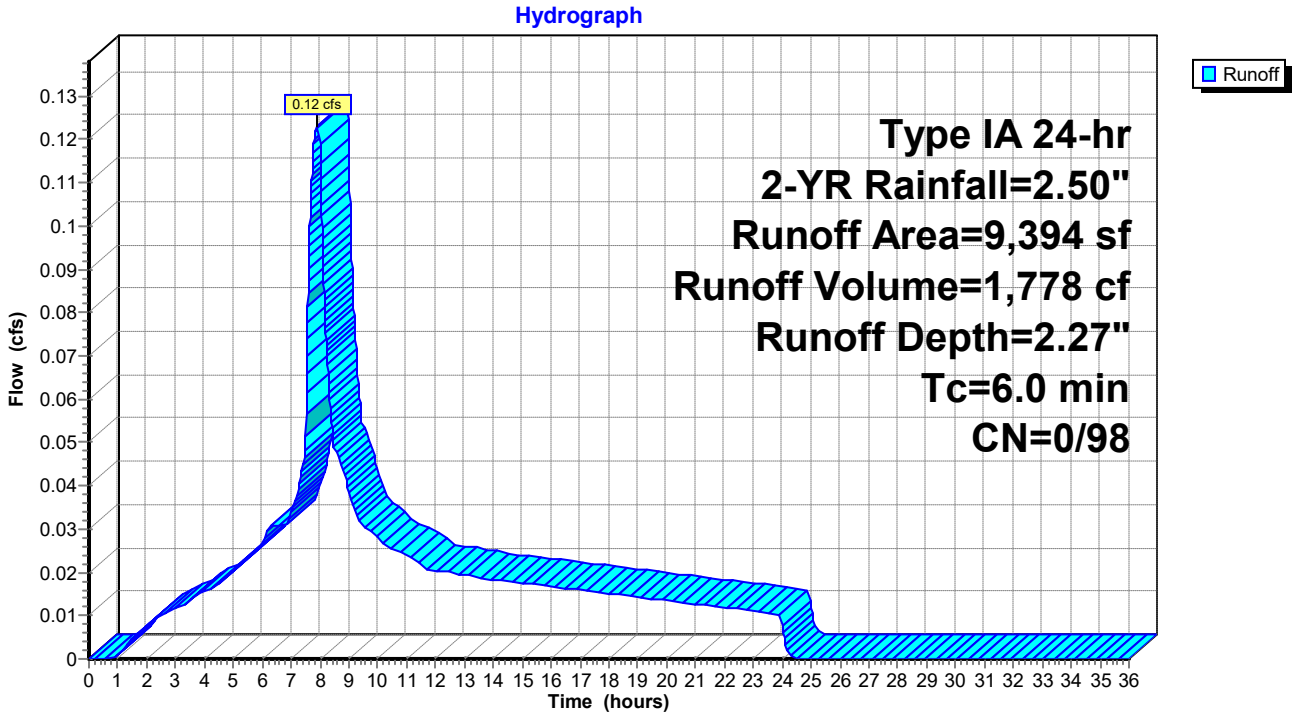
Runoff = 0.12 cfs @ 7.90 hrs, Volume= 1,778 cf, Depth= 2.27"
Routed to Pond 1P : 36" Detention Pipe

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 2-YR Rainfall=2.50"

	Area (sf)	CN	Description
*	9,394	98	Roof Area
	9,394	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment B4: BASIN 4-Lots 1-4 Roof



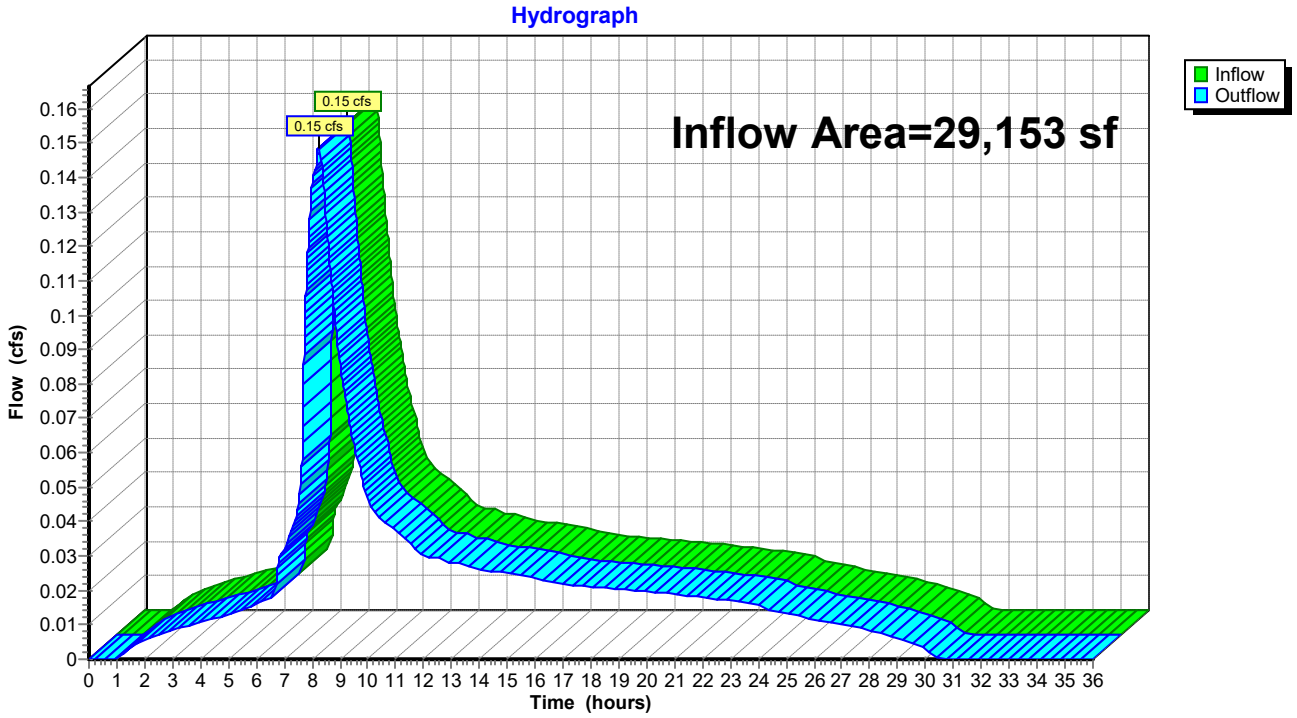
Summary for Reach -POST: Peak Flows from Post-Developed Site

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 29,153 sf,100.00% Impervious, Inflow Depth = 1.06" for 2-YR event
Inflow = 0.15 cfs @ 8.24 hrs, Volume= 2,580 cf
Outflow = 0.15 cfs @ 8.24 hrs, Volume= 2,580 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Reach -POST: Peak Flows from Post-Developed Site



Summary for Pond 1P: 36" Detention Pipe

Inflow Area = 9,394 sf,100.00% Impervious, Inflow Depth = 2.27" for 2-YR event
Inflow = 0.12 cfs @ 7.90 hrs, Volume= 1,778 cf
Outflow = 0.07 cfs @ 8.20 hrs, Volume= 1,778 cf, Atten= 40%, Lag= 18.3 min
Primary = 0.07 cfs @ 8.20 hrs, Volume= 1,778 cf
Routed to Reach -POST : Peak Flows from Post-Developed Site

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 1.94' @ 8.20 hrs Surf.Area= 215 sf Storage= 363 cf

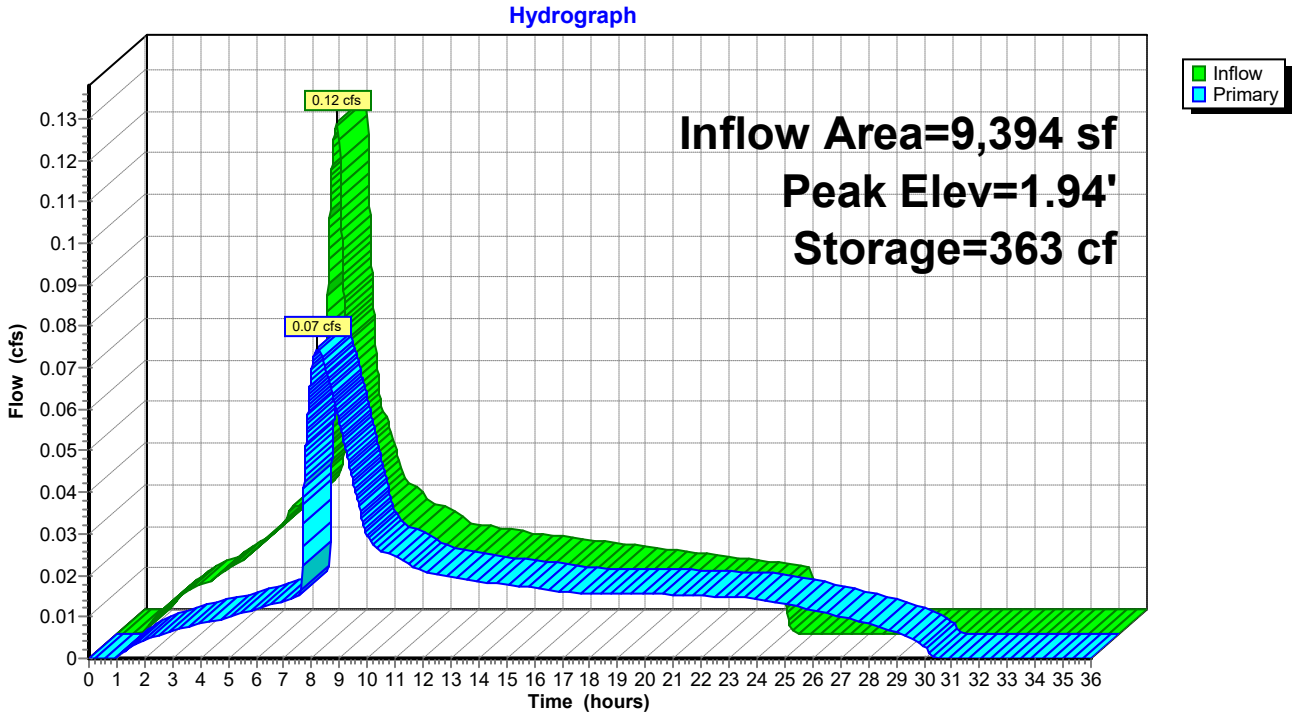
Plug-Flow detention time= 181.4 min calculated for 1,777 cf (100% of inflow)
Center-of-Mass det. time= 181.5 min (855.1 - 673.6)

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	530 cf	**36.0" Round Pipe Storage** L= 75.0'

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	**0.7" Horiz. Control Orifice** C= 0.600 Limited to weir flow at low heads
#2	Primary	1.50'	**1.8" Horiz. Upper Orifice** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.07 cfs @ 8.20 hrs HW=1.94' (Free Discharge)
└**1=Control Orifice** (Orifice Controls 0.02 cfs @ 6.71 fps)
└**2=Upper Orifice** (Orifice Controls 0.06 cfs @ 3.20 fps)

Pond 1P: 36" Detention Pipe



Summary for Pond 11P: Raingarden 1

Inflow Area = 6,214 sf,100.00% Impervious, Inflow Depth = 2.27" for 2-YR event
Inflow = 0.08 cfs @ 7.90 hrs, Volume= 1,176 cf
Outflow = 0.02 cfs @ 7.92 hrs, Volume= 1,176 cf, Atten= 79%, Lag= 1.2 min
Discarded = 0.02 cfs @ 7.92 hrs, Volume= 1,176 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Routed to Reach -POST : Peak Flows from Post-Developed Site

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 3.44' @ 10.23 hrs Surf.Area= 750 sf Storage= 354 cf

Plug-Flow detention time= 272.8 min calculated for 1,176 cf (100% of inflow)
Center-of-Mass det. time= 272.8 min (946.4 - 673.6)

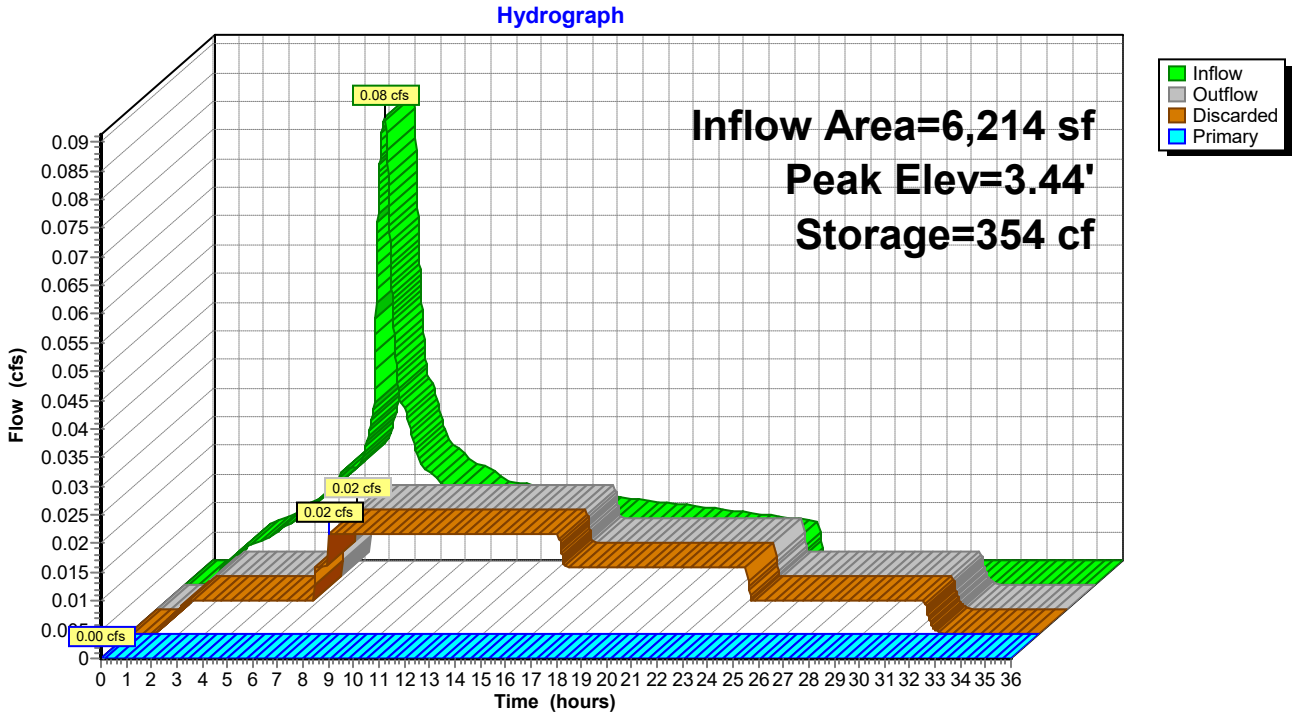
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	150 cf	**10.00'W x 25.00'L x 1.50'H Rock** 375 cf Overall x 40.0% Voids
#2	1.50'	94 cf	**10.00'W x 25.00'L x 1.50'H Growing Medium** 375 cf Overall x 25.0% Voids
#3	3.00'	250 cf	**10.00'W x 25.00'L x 1.00'H Ponding**
		494 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**1.000 in/hr Exfiltration over Horizontal area**
#2	Primary	3.50'	**6.0" Vert. Overflow Orifice** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.02 cfs @ 7.92 hrs HW=3.01' (Free Discharge)
↑—**1=Exfiltration** (Exfiltration Controls 0.02 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=0.00' (Free Discharge)
↑—**2=Overflow Orifice** (Controls 0.00 cfs)

Pond 11P: Raingarden 1



Summary for Pond 13P: Raingarden 2

Inflow Area = 2,584 sf,100.00% Impervious, Inflow Depth = 2.27" for 2-YR event
Inflow = 0.03 cfs @ 7.90 hrs, Volume= 489 cf
Outflow = 0.02 cfs @ 8.33 hrs, Volume= 489 cf, Atten= 51%, Lag= 26.1 min
Discarded = 0.01 cfs @ 7.68 hrs, Volume= 447 cf
Primary = 0.01 cfs @ 8.33 hrs, Volume= 42 cf
Routed to Reach -POST : Peak Flows from Post-Developed Site

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 3.56' @ 8.33 hrs Surf.Area= 252 sf Storage= 129 cf

Plug-Flow detention time= 267.1 min calculated for 489 cf (100% of inflow)
Center-of-Mass det. time= 267.1 min (940.7 - 673.6)

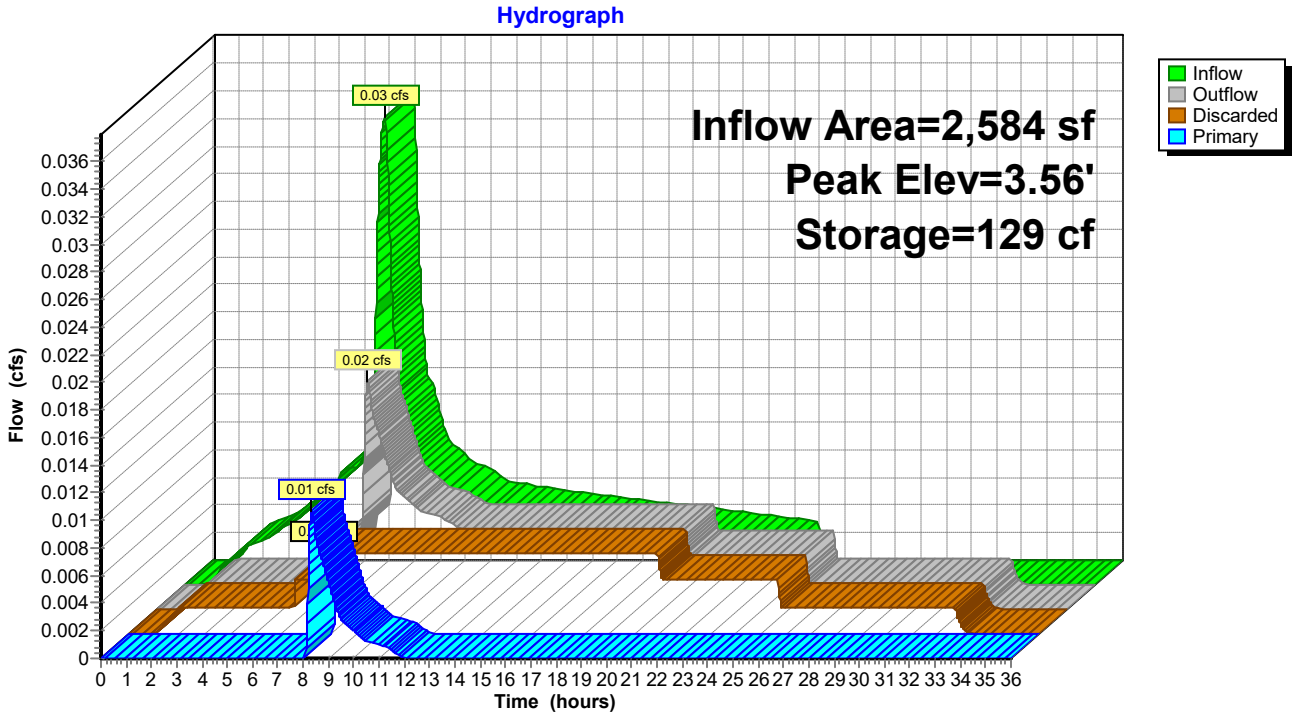
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	50 cf	**6.00'W x 14.00'L x 1.50'H Rock** 126 cf Overall x 40.0% Voids
#2	1.50'	32 cf	**6.00'W x 14.00'L x 1.50'H Growing Medium** 126 cf Overall x 25.0% Voids
#3	3.00'	84 cf	**6.00'W x 14.00'L x 1.00'H Ponding**
		166 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**1.000 in/hr Exfiltration over Horizontal area**
#2	Primary	3.50'	**6.0" Vert. Overflow Orifice** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.01 cfs @ 7.68 hrs HW=3.00' (Free Discharge)
↑—**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.01 cfs @ 8.33 hrs HW=3.56' (Free Discharge)
↑—**2=Overflow Orifice** (Orifice Controls 0.01 cfs @ 0.82 fps)

Pond 13P: Raingarden 2



Summary for Pond P1: Street Planter 1

Inflow Area = 2,187 sf,100.00% Impervious, Inflow Depth = 2.27" for 2-YR event
Inflow = 0.03 cfs @ 7.90 hrs, Volume= 414 cf
Outflow = 0.01 cfs @ 7.91 hrs, Volume= 414 cf, Atten= 79%, Lag= 0.6 min
Discarded = 0.01 cfs @ 7.91 hrs, Volume= 414 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Routed to Pond P4 : 18" Detention Pipe

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 3.45' @ 10.26 hrs Surf.Area= 263 sf Storage= 125 cf

Plug-Flow detention time= 274.0 min calculated for 414 cf (100% of inflow)
Center-of-Mass det. time= 274.0 min (947.6 - 673.6)

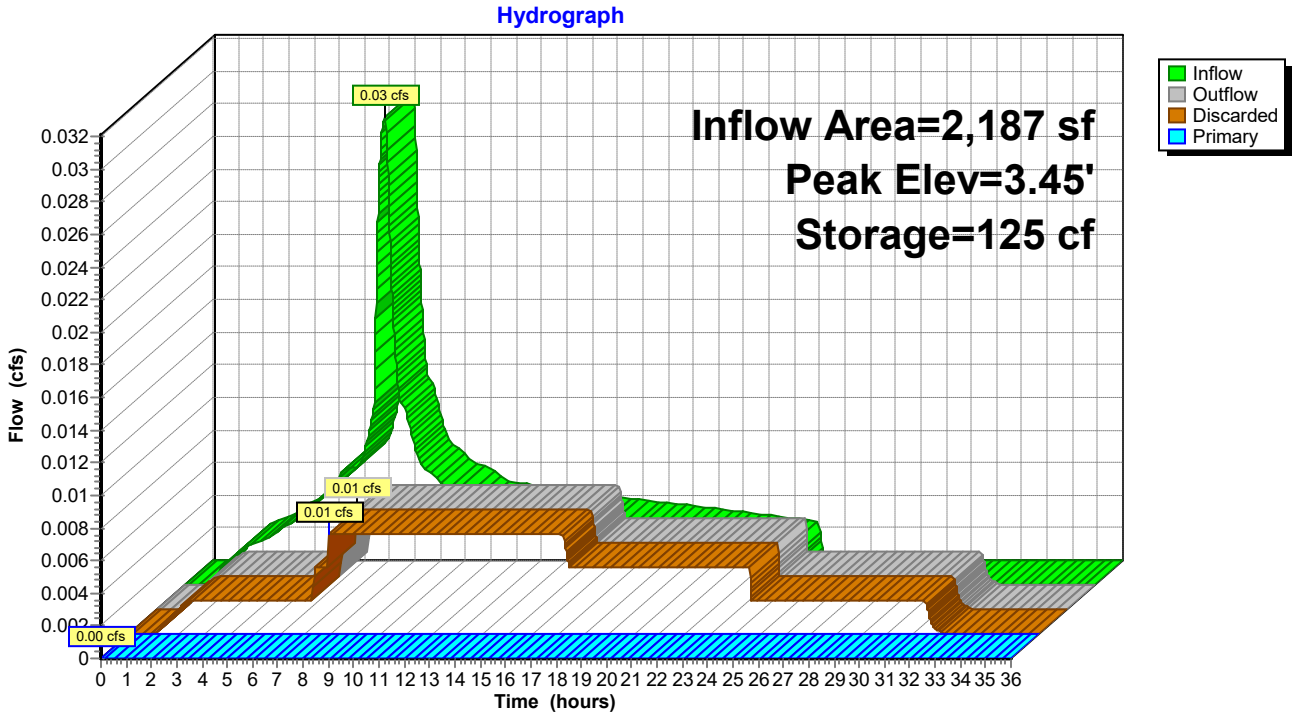
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	53 cf	**5.00'W x 17.50'L x 1.50'H Rock** 131 cf Overall x 40.0% Voids
#2	1.50'	33 cf	**5.00'W x 17.50'L x 1.50'H Growing Medium** 131 cf Overall x 25.0% Voids
#3	3.00'	88 cf	**5.00'W x 17.50'L x 1.00'H Ponding**
		173 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**1.000 in/hr Exfiltration over Horizontal area**
#2	Primary	3.50'	**6.0" Vert. Overflow Orifice** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.01 cfs @ 7.91 hrs HW=3.00' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=0.00' (Free Discharge)
↑**2=Overflow Orifice** (Controls 0.00 cfs)

Pond P1: Street Planter 1



Summary for Pond P2: Street Planter 2

Inflow Area = 5,524 sf,100.00% Impervious, Inflow Depth = 2.27" for 2-YR event
Inflow = 0.07 cfs @ 7.90 hrs, Volume= 1,045 cf
Outflow = 0.07 cfs @ 7.92 hrs, Volume= 1,045 cf, Atten= 0%, Lag= 0.9 min
Discarded = 0.01 cfs @ 5.55 hrs, Volume= 565 cf
Primary = 0.07 cfs @ 7.92 hrs, Volume= 481 cf
Routed to Pond P4 : 18" Detention Pipe

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 3.55' @ 7.92 hrs Surf.Area= 258 sf Storage= 131 cf

Plug-Flow detention time= 173.4 min calculated for 1,045 cf (100% of inflow)
Center-of-Mass det. time= 173.5 min (847.1 - 673.6)

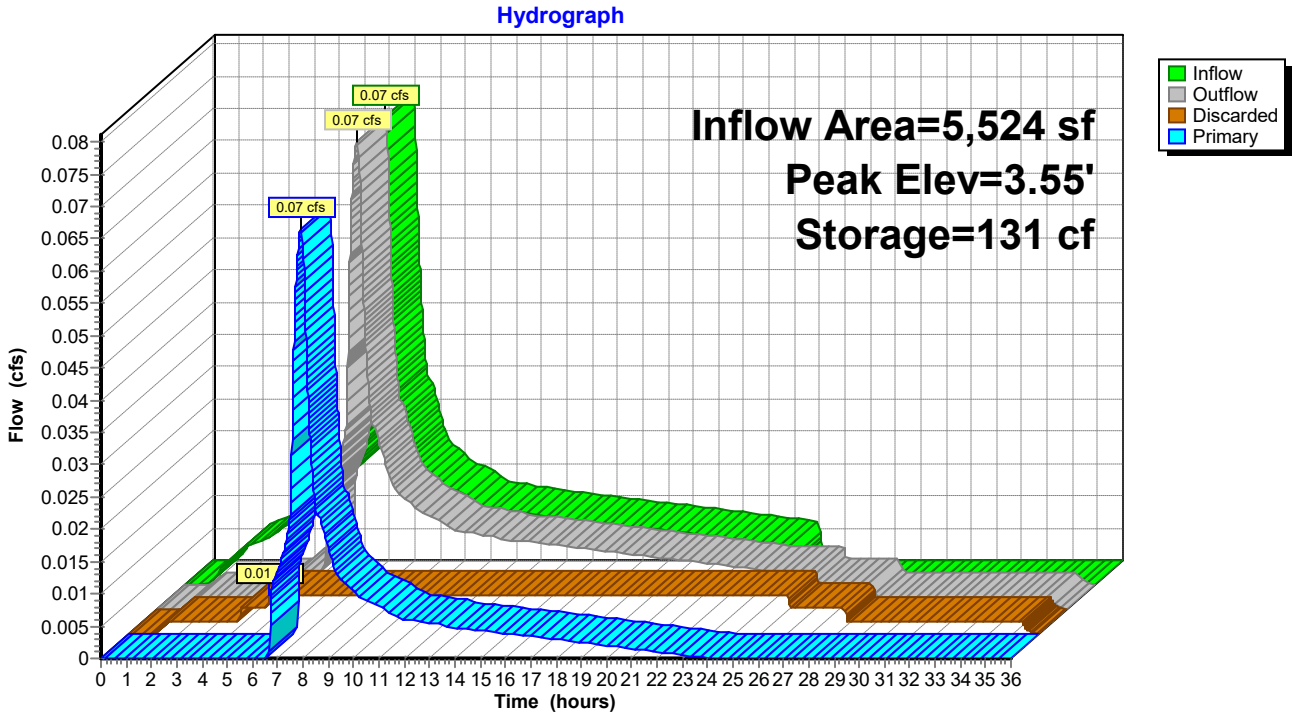
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	52 cf	**5.00'W x 17.20'L x 1.50'H Rock** 129 cf Overall x 40.0% Voids
#2	1.50'	32 cf	**5.00'W x 17.20'L x 1.50'H Growing Medium** 129 cf Overall x 25.0% Voids
#3	3.00'	86 cf	**5.00'W x 17.20'L x 1.00'H Ponding**
		170 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**1.000 in/hr Exfiltration over Horizontal area**
#2	Primary	3.50'	**6.0" Horiz. Overflow Orifice** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.01 cfs @ 5.55 hrs HW=3.00' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.06 cfs @ 7.92 hrs HW=3.55' (Free Discharge)
↑**2=Overflow Orifice** (Weir Controls 0.06 cfs @ 0.76 fps)

Pond P2: Street Planter 2



Summary for Pond P3: Street Planter 3

Inflow Area = 1,774 sf,100.00% Impervious, Inflow Depth = 2.27" for 2-YR event
Inflow = 0.02 cfs @ 7.90 hrs, Volume= 336 cf
Outflow = 0.01 cfs @ 8.26 hrs, Volume= 336 cf, Atten= 76%, Lag= 21.6 min
Discarded = 0.01 cfs @ 8.26 hrs, Volume= 336 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Routed to Pond P4 : 18" Detention Pipe

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 1.86' @ 9.71 hrs Surf.Area= 242 sf Storage= 84 cf

Plug-Flow detention time= 254.9 min calculated for 336 cf (100% of inflow)
Center-of-Mass det. time= 254.9 min (928.5 - 673.6)

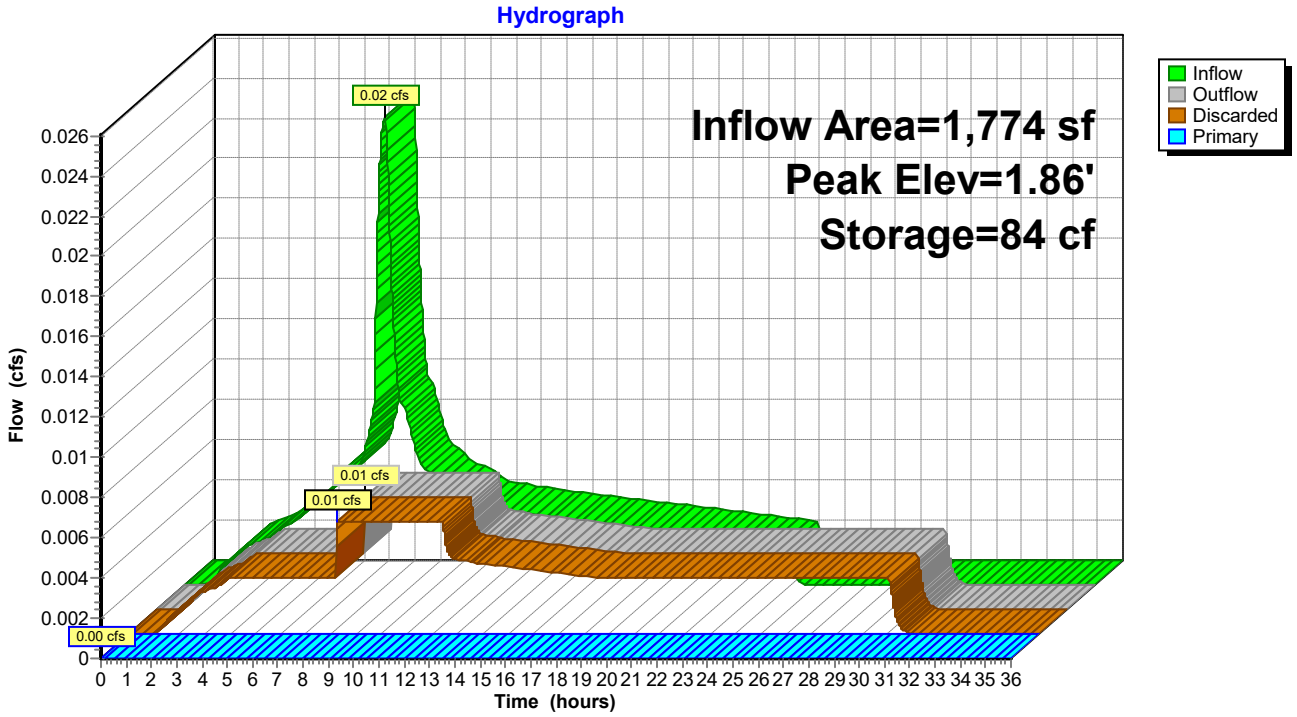
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	73 cf	**5.00'W x 24.20'L x 1.50'H Rock** 182 cf Overall x 40.0% Voids
#2	1.50'	45 cf	**5.00'W x 24.20'L x 1.50'H Growing Medium** 182 cf Overall x 25.0% Voids
#3	3.00'	121 cf	**5.00'W x 24.20'L x 1.00'H Ponding**
		239 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**1.000 in/hr Exfiltration over Horizontal area**
#2	Primary	3.50'	**6.0" Horiz. Overflow Orifice** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.01 cfs @ 8.26 hrs HW=1.50' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=0.00' (Free Discharge)
↑**2=Overflow Orifice** (Controls 0.00 cfs)

Pond P3: Street Planter 3



Summary for Pond P4: 18" Detention Pipe

[92] Warning: Device #2 is above defined storage
[92] Warning: Device #3 is above defined storage

Inflow Area = 10,961 sf,100.00% Impervious, Inflow Depth = 0.83" for 2-YR event
Inflow = 0.09 cfs @ 7.91 hrs, Volume= 760 cf
Outflow = 0.07 cfs @ 8.08 hrs, Volume= 760 cf, Atten= 19%, Lag= 9.9 min
Primary = 0.07 cfs @ 8.08 hrs, Volume= 760 cf
Routed to Reach -POST : Peak Flows from Post-Developed Site

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 0.44' @ 8.08 hrs Surf.Area= 136 sf Storage= 43 cf

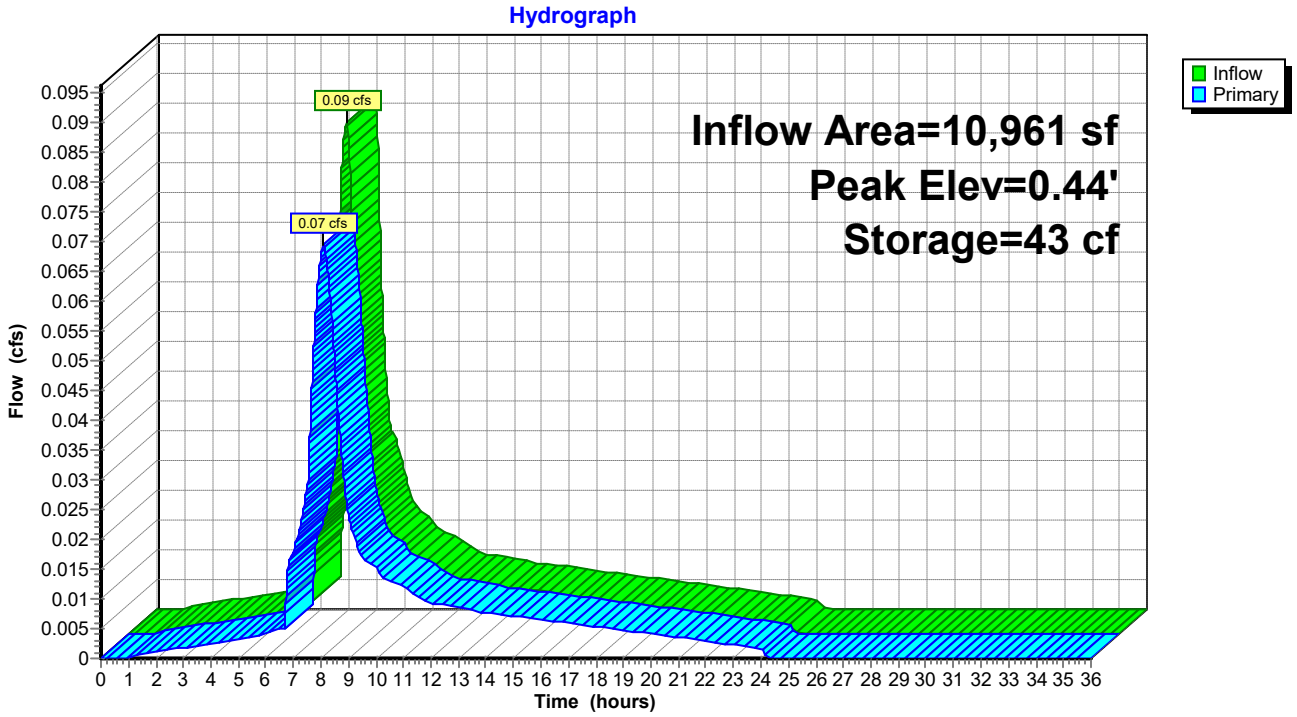
Plug-Flow detention time= 3.5 min calculated for 760 cf (100% of inflow)
Center-of-Mass det. time= 3.5 min (653.1 - 649.7)

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	177 cf	**18.0" Round Pipe Storage** L= 100.0'

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	**2.0" Horiz. Control Orifice** C= 0.600 Limited to weir flow at low heads
#2	Primary	2.20'	**2.0" Horiz. Upper Orifice** C= 0.600 Limited to weir flow at low heads
#3	Primary	2.80'	**12.0" Vert. Overflow** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.07 cfs @ 8.08 hrs HW=0.44' (Free Discharge)
└**1=Control Orifice** (Orifice Controls 0.07 cfs @ 3.18 fps)
└**2=Upper Orifice** (Controls 0.00 cfs)
└**3=Overflow** (Controls 0.00 cfs)

Pond P4: 18" Detention Pipe



Time span=0.00-36.00 hrs, dt=0.01 hrs, 3601 points
Runoff by SBUH method, Split Pervious/Imperv.
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment -PRE: Existing Site Runoff Area=29,153 sf 0.00% Impervious Runoff Depth=1.94"
Tc=6.0 min CN=84/0 Runoff=0.31 cfs 4,704 cf

Subcatchment 11S: BASIN 6-SHARED DWY Runoff Area=2,584 sf 100.00% Impervious Runoff Depth=3.27"
Tc=6.0 min CN=0/98 Runoff=0.05 cfs 703 cf

Subcatchment 12S: BASIN 5-AC ROAD Runoff Area=6,214 sf 100.00% Impervious Runoff Depth=3.27"
Tc=6.0 min CN=0/98 Runoff=0.12 cfs 1,691 cf

Subcatchment 13S: BASIN 7-Curb Return Runoff Area=1,476 sf 100.00% Impervious Runoff Depth=3.27"
Tc=6.0 min CN=0/98 Runoff=0.03 cfs 402 cf

Subcatchment B1: BASIN 1-AC ROAD Runoff Area=2,187 sf 100.00% Impervious Runoff Depth=3.27"
Tc=6.0 min CN=0/98 Runoff=0.04 cfs 595 cf

Subcatchment B2: BASIN 2-AC Road West Runoff Area=5,524 sf 100.00% Impervious Runoff Depth=3.27"
Tc=6.0 min CN=0/98 Runoff=0.10 cfs 1,504 cf

Subcatchment B3: BASIN 3-AC Road Runoff Area=1,774 sf 100.00% Impervious Runoff Depth=3.27"
Tc=6.0 min CN=0/98 Runoff=0.03 cfs 483 cf

Subcatchment B4: BASIN 4-Lots 1-4 Roof Runoff Area=9,394 sf 100.00% Impervious Runoff Depth=3.27"
Tc=6.0 min CN=0/98 Runoff=0.18 cfs 2,557 cf

Reach -POST: Peak Flows from Post-Developed Site Inflow=0.30 cfs 4,415 cf
Outflow=0.30 cfs 4,415 cf

Pond 1P: 36" Detention Pipe Peak Elev=2.46' Storage=465 cf Inflow=0.18 cfs 2,557 cf
Outflow=0.10 cfs 2,557 cf

Pond 11P: Raingarden 1 Peak Elev=3.66' Storage=408 cf Inflow=0.12 cfs 1,691 cf
Discarded=0.02 cfs 1,430 cf Primary=0.07 cfs 261 cf Outflow=0.09 cfs 1,691 cf

Pond 13P: Raingarden 2 Peak Elev=3.62' Storage=134 cf Inflow=0.05 cfs 703 cf
Discarded=0.01 cfs 520 cf Primary=0.04 cfs 183 cf Outflow=0.05 cfs 703 cf

Pond P1: Street Planter 1 Peak Elev=3.60' Storage=138 cf Inflow=0.04 cfs 595 cf
Discarded=0.01 cfs 501 cf Primary=0.03 cfs 94 cf Outflow=0.04 cfs 595 cf

Pond P2: Street Planter 2 Peak Elev=3.57' Storage=133 cf Inflow=0.10 cfs 1,504 cf
Discarded=0.01 cfs 585 cf Primary=0.10 cfs 918 cf Outflow=0.10 cfs 1,504 cf

Pond P3: Street Planter 3 Peak Elev=3.14' Storage=135 cf Inflow=0.03 cfs 483 cf
Discarded=0.01 cfs 483 cf Primary=0.00 cfs 0 cf Outflow=0.01 cfs 483 cf

Pond P4: 18" Detention Pipe Peak Elev=0.87' Storage=106 cf Inflow=0.15 cfs 1,414 cf
Outflow=0.10 cfs 1,414 cf

Total Runoff Area = 58,306 sf Runoff Volume = 12,640 cf Average Runoff Depth = 2.60"
50.00% Pervious = 29,153 sf 50.00% Impervious = 29,153 sf

Summary for Subcatchment -PRE: Existing Site

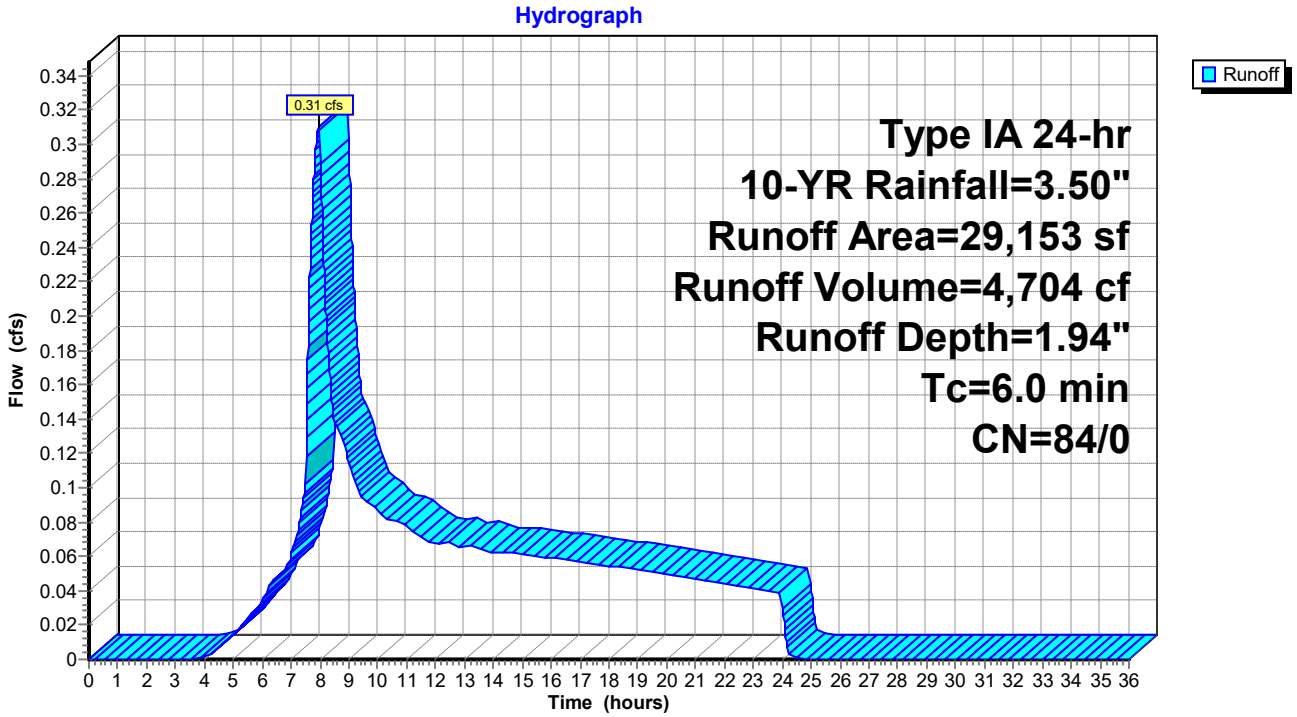
Runoff = 0.31 cfs @ 7.97 hrs, Volume= 4,704 cf, Depth= 1.94"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 10-YR Rainfall=3.50"

Area (sf)	CN	Description
29,153	84	50-75% Grass cover, Fair, HSG D
29,153	84	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment -PRE: Existing Site



Summary for Subcatchment 11S: BASIN 6-SHARED DWY

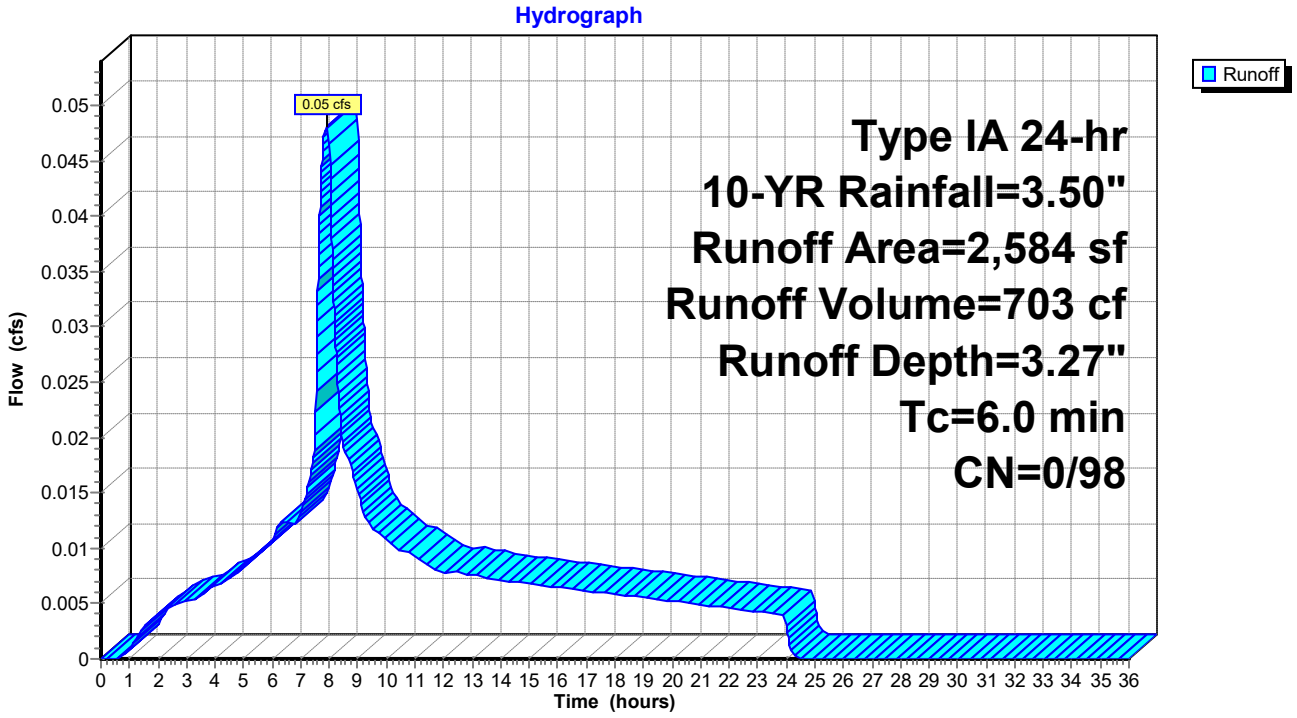
Runoff = 0.05 cfs @ 7.90 hrs, Volume= 703 cf, Depth= 3.27"
Routed to Pond 13P : Raingarden 2

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 10-YR Rainfall=3.50"

Area (sf)	CN	Description
2,584	98	Paved parking, HSG D
2,584	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 11S: BASIN 6-SHARED DWY



Summary for Subcatchment 12S: BASIN 5-AC ROAD EYEBROW

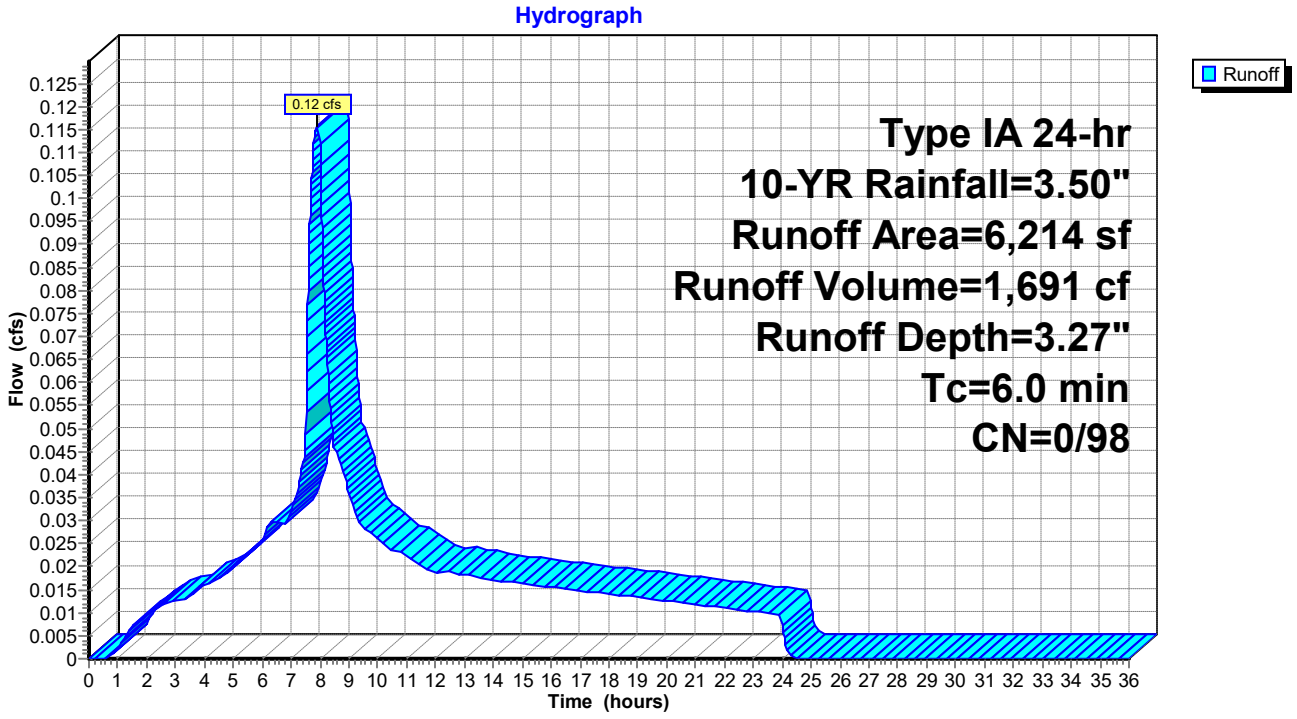
Runoff = 0.12 cfs @ 7.90 hrs, Volume= 1,691 cf, Depth= 3.27"
Routed to Pond 11P : Raingarden 1

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 10-YR Rainfall=3.50"

	Area (sf)	CN	Description
*	4,040	98	AC
	2,174	98	Paved roads w/curbs & sewers, HSG D
	6,214	98	Weighted Average
	6,214	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment 12S: BASIN 5-AC ROAD EYEBROW



Summary for Subcatchment 13S: BASIN 7-Curb Return

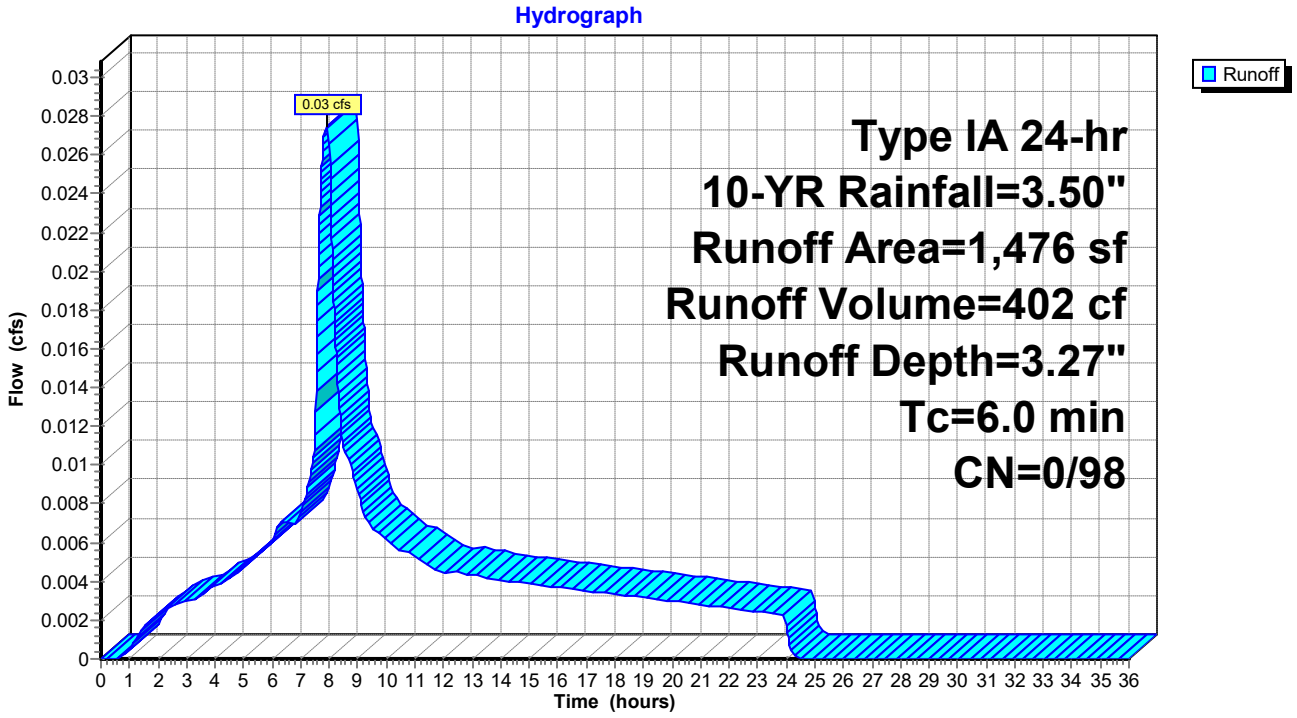
Runoff = 0.03 cfs @ 7.90 hrs, Volume= 402 cf, Depth= 3.27"
Routed to Pond P4 : 18" Detention Pipe

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 10-YR Rainfall=3.50"

Area (sf)	CN	Description
1,476	98	Paved roads w/curbs & sewers, HSG D
1,476	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 13S: BASIN 7-Curb Return



Summary for Subcatchment B1: BASIN 1-AC ROAD EAST

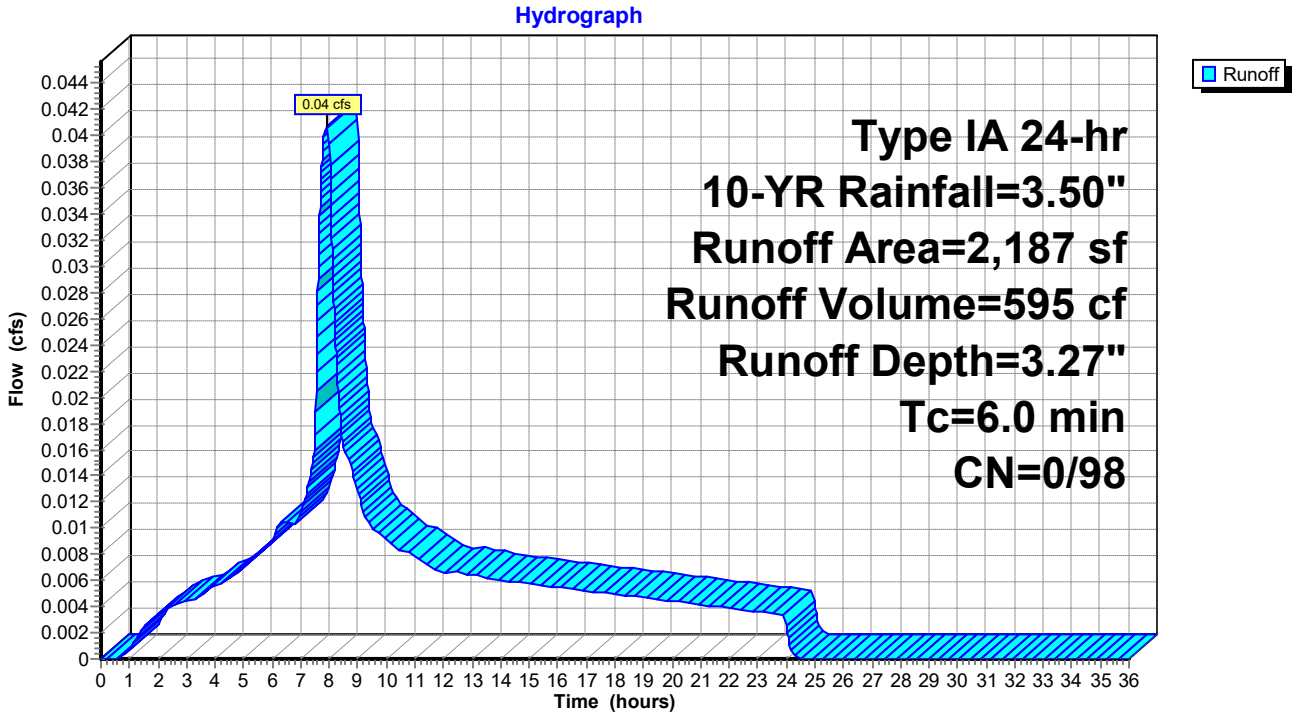
Runoff = 0.04 cfs @ 7.90 hrs, Volume= 595 cf, Depth= 3.27"
Routed to Pond P1 : Street Planter 1

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 10-YR Rainfall=3.50"

	Area (sf)	CN	Description
*	2,187	98	AC
	2,187	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment B1: BASIN 1-AC ROAD EAST



Summary for Subcatchment B2: BASIN 2-AC Road West

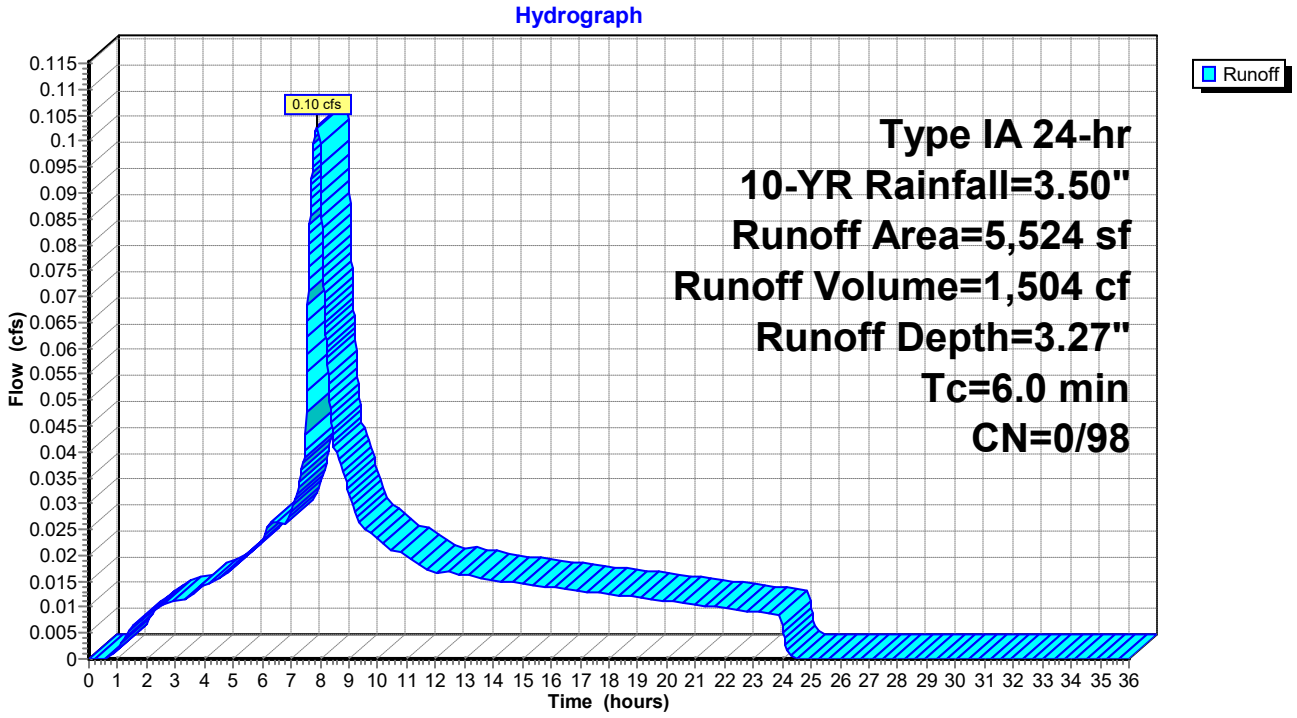
Runoff = 0.10 cfs @ 7.90 hrs, Volume= 1,504 cf, Depth= 3.27"
Routed to Pond P2 : Street Planter 2

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 10-YR Rainfall=3.50"

	Area (sf)	CN	Description
*	5,524	98	Public Impervious
	5,524	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment B2: BASIN 2-AC Road West



Summary for Subcatchment B3: BASIN 3-AC Road Southeast

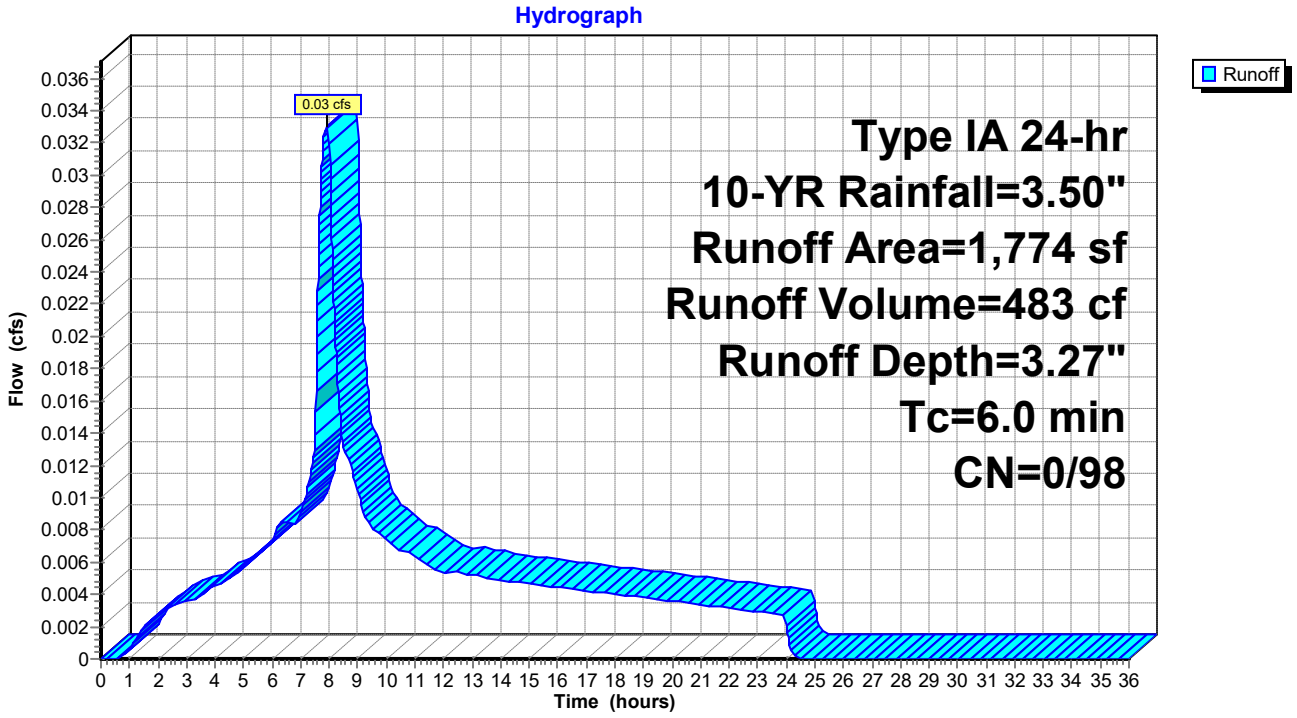
Runoff = 0.03 cfs @ 7.90 hrs, Volume= 483 cf, Depth= 3.27"
Routed to Pond P3 : Street Planter 3

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 10-YR Rainfall=3.50"

	Area (sf)	CN	Description
*	1,774	98	Public Impervious
	1,774	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment B3: BASIN 3-AC Road Southeast



Summary for Subcatchment B4: BASIN 4-Lots 1-4 Roof

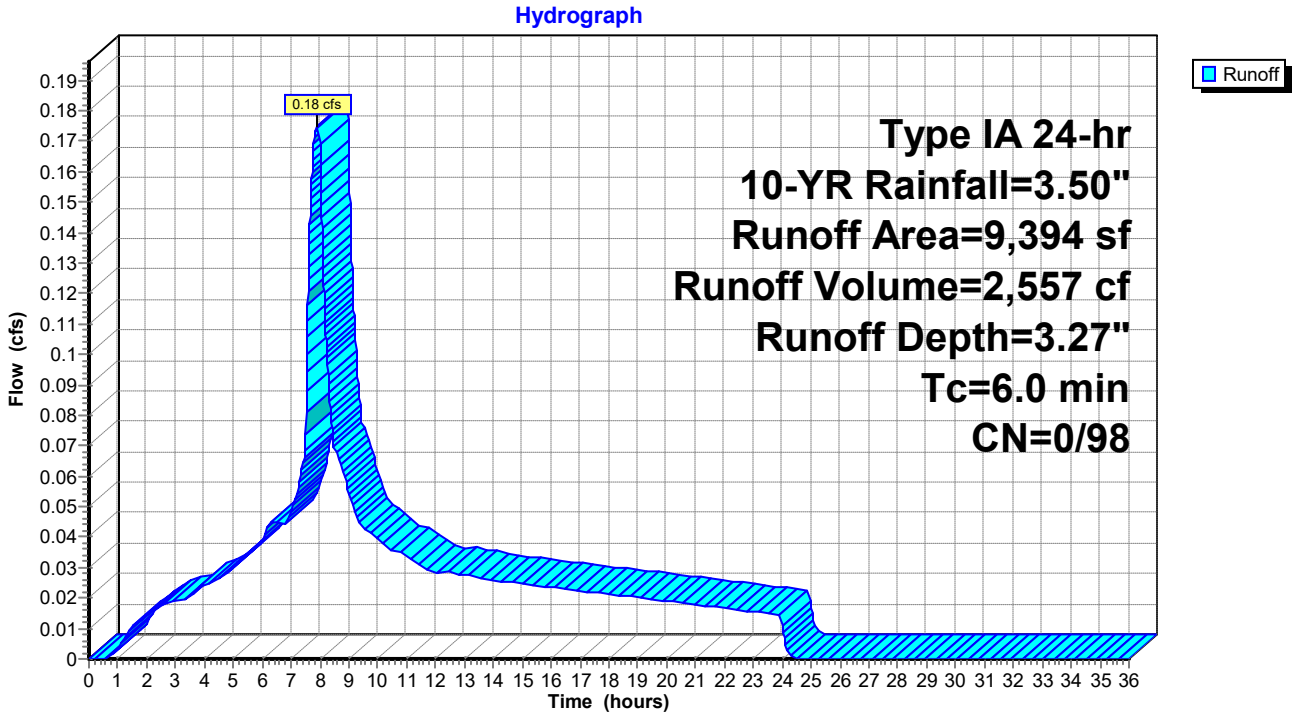
Runoff = 0.18 cfs @ 7.90 hrs, Volume= 2,557 cf, Depth= 3.27"
Routed to Pond 1P : 36" Detention Pipe

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 10-YR Rainfall=3.50"

	Area (sf)	CN	Description
*	9,394	98	Roof Area
	9,394	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment B4: BASIN 4-Lots 1-4 Roof



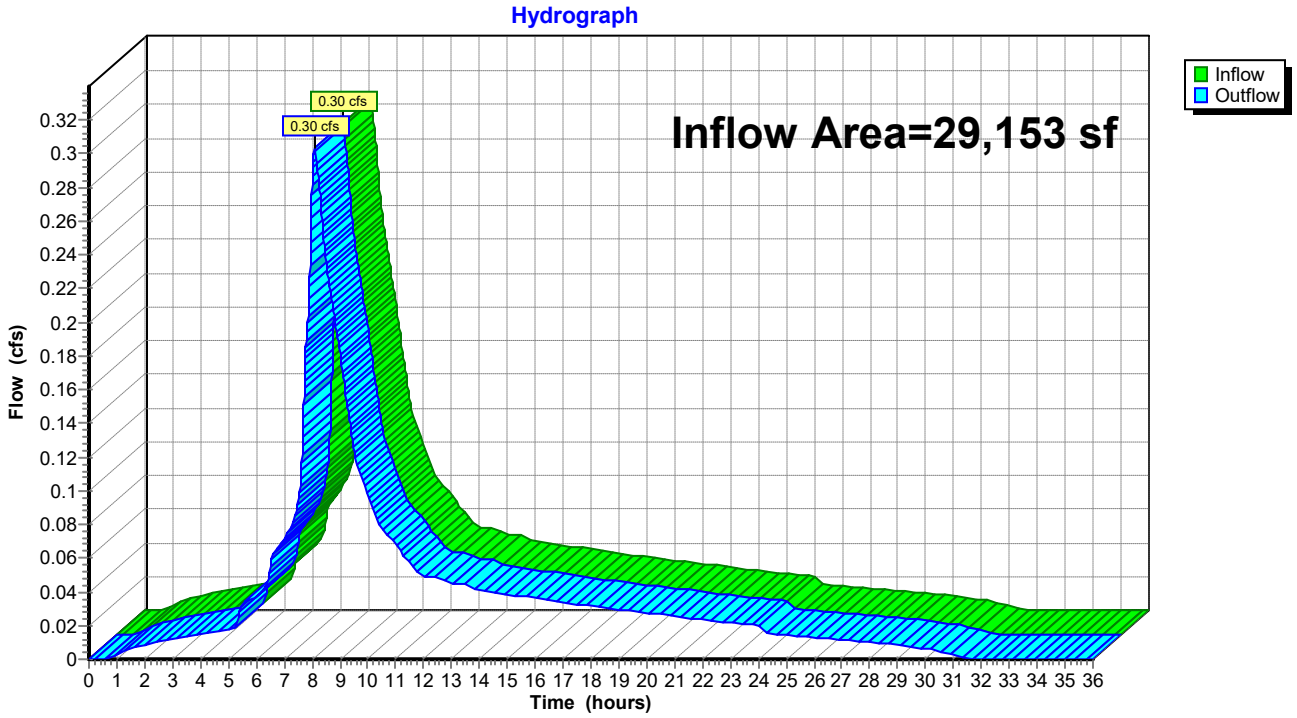
Summary for Reach -POST: Peak Flows from Post-Developed Site

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 29,153 sf,100.00% Impervious, Inflow Depth = 1.82" for 10-YR event
Inflow = 0.30 cfs @ 8.08 hrs, Volume= 4,415 cf
Outflow = 0.30 cfs @ 8.08 hrs, Volume= 4,415 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Reach -POST: Peak Flows from Post-Developed Site



Summary for Pond 1P: 36" Detention Pipe

Inflow Area = 9,394 sf,100.00% Impervious, Inflow Depth = 3.27" for 10-YR event
Inflow = 0.18 cfs @ 7.90 hrs, Volume= 2,557 cf
Outflow = 0.10 cfs @ 8.21 hrs, Volume= 2,557 cf, Atten= 41%, Lag= 19.1 min
Primary = 0.10 cfs @ 8.21 hrs, Volume= 2,557 cf
Routed to Reach -POST : Peak Flows from Post-Developed Site

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 2.46' @ 8.21 hrs Surf.Area= 173 sf Storage= 465 cf

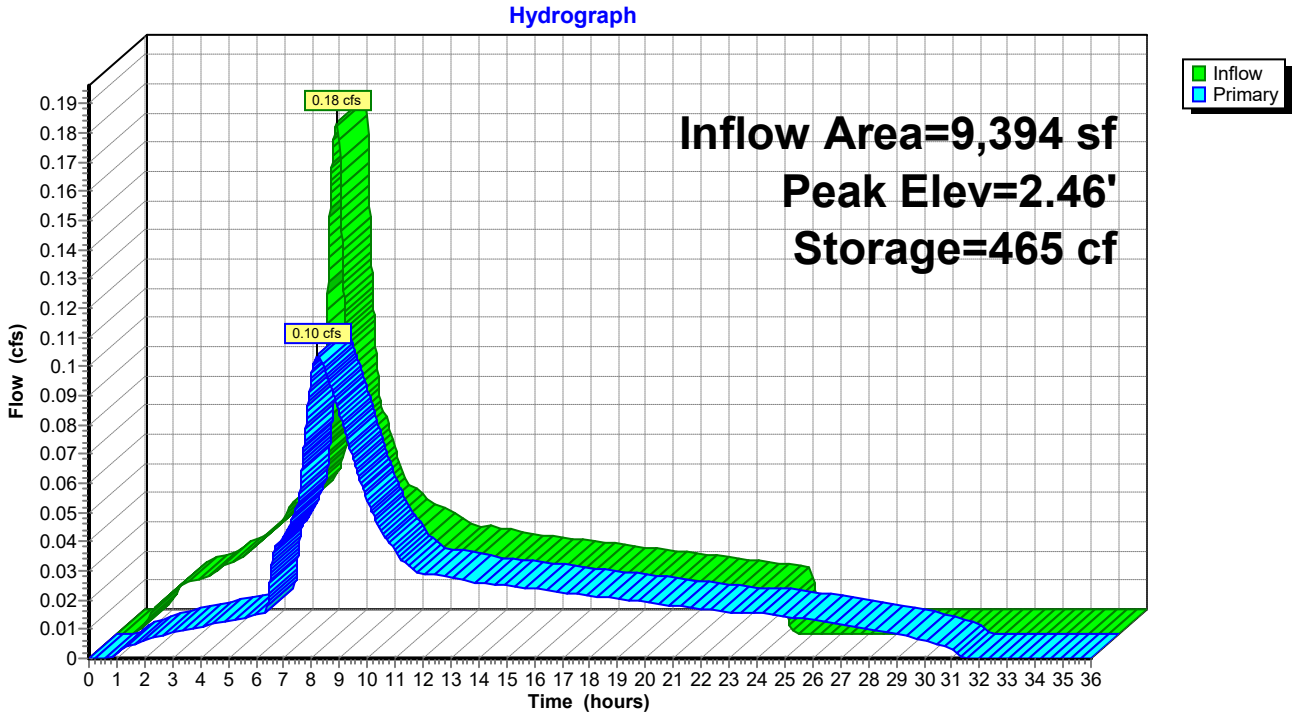
Plug-Flow detention time= 149.5 min calculated for 2,556 cf (100% of inflow)
Center-of-Mass det. time= 149.6 min (813.4 - 663.8)

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	530 cf	**36.0" Round Pipe Storage** L= 75.0'

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	**0.7" Horiz. Control Orifice** C= 0.600 Limited to weir flow at low heads
#2	Primary	1.50'	**1.8" Horiz. Upper Orifice** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.10 cfs @ 8.21 hrs HW=2.46' (Free Discharge)
└**1=Control Orifice** (Orifice Controls 0.02 cfs @ 7.55 fps)
└**2=Upper Orifice** (Orifice Controls 0.08 cfs @ 4.72 fps)

Pond 1P: 36" Detention Pipe



Summary for Pond 11P: Raingarden 1

Inflow Area = 6,214 sf,100.00% Impervious, Inflow Depth = 3.27" for 10-YR event
Inflow = 0.12 cfs @ 7.90 hrs, Volume= 1,691 cf
Outflow = 0.09 cfs @ 8.09 hrs, Volume= 1,691 cf, Atten= 24%, Lag= 11.7 min
Discarded = 0.02 cfs @ 7.28 hrs, Volume= 1,430 cf
Primary = 0.07 cfs @ 8.09 hrs, Volume= 261 cf
Routed to Reach -POST : Peak Flows from Post-Developed Site

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 3.66' @ 8.09 hrs Surf.Area= 750 sf Storage= 408 cf

Plug-Flow detention time= 255.3 min calculated for 1,691 cf (100% of inflow)
Center-of-Mass det. time= 255.3 min (919.2 - 663.8)

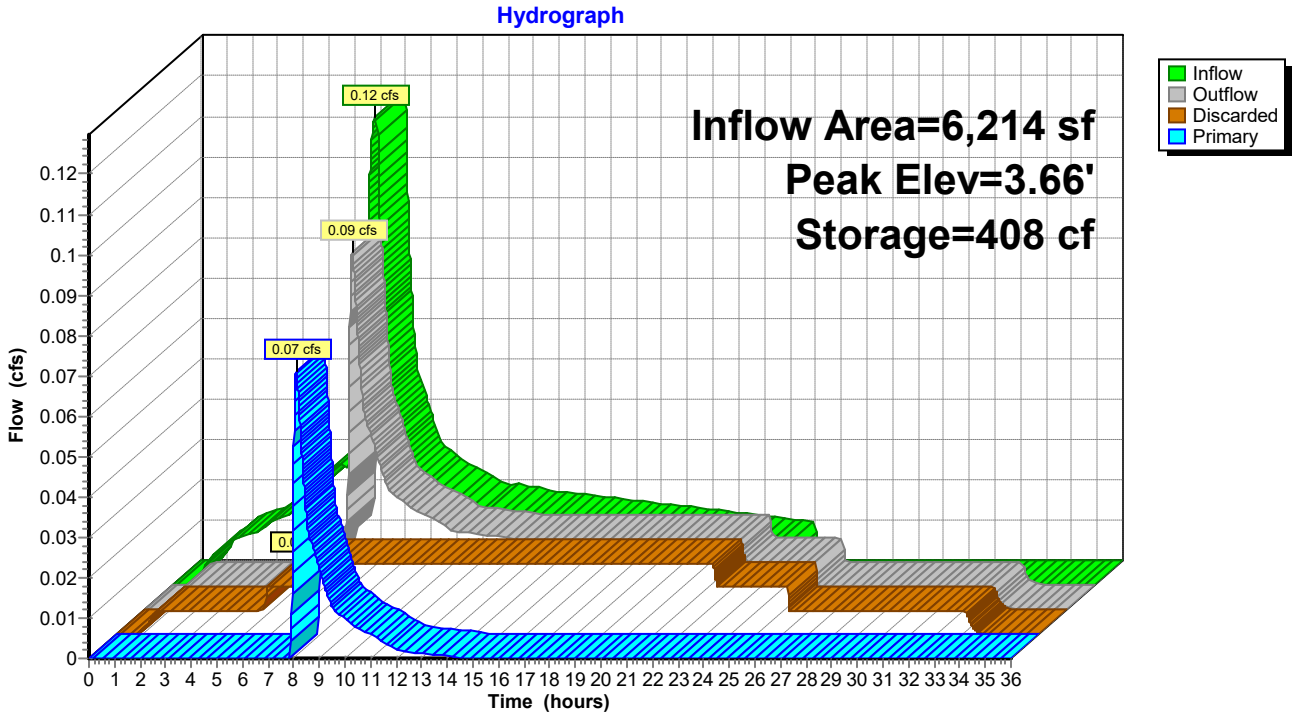
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	150 cf	**10.00'W x 25.00'L x 1.50'H Rock** 375 cf Overall x 40.0% Voids
#2	1.50'	94 cf	**10.00'W x 25.00'L x 1.50'H Growing Medium** 375 cf Overall x 25.0% Voids
#3	3.00'	250 cf	**10.00'W x 25.00'L x 1.00'H Ponding**
		494 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**1.000 in/hr Exfiltration over Horizontal area**
#2	Primary	3.50'	**6.0" Vert. Overflow Orifice** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.02 cfs @ 7.28 hrs HW=3.00' (Free Discharge)
↑—**1=Exfiltration** (Exfiltration Controls 0.02 cfs)

Primary OutFlow Max=0.07 cfs @ 8.09 hrs HW=3.66' (Free Discharge)
↑—**2=Overflow Orifice** (Orifice Controls 0.07 cfs @ 1.34 fps)

Pond 11P: Raingarden 1



Summary for Pond 13P: Raingarden 2

Inflow Area = 2,584 sf,100.00% Impervious, Inflow Depth = 3.27" for 10-YR event
Inflow = 0.05 cfs @ 7.90 hrs, Volume= 703 cf
Outflow = 0.05 cfs @ 7.93 hrs, Volume= 703 cf, Atten= 0%, Lag= 2.3 min
Discarded = 0.01 cfs @ 6.47 hrs, Volume= 520 cf
Primary = 0.04 cfs @ 7.93 hrs, Volume= 183 cf
Routed to Reach -POST : Peak Flows from Post-Developed Site

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 3.62' @ 7.93 hrs Surf.Area= 252 sf Storage= 134 cf

Plug-Flow detention time= 232.2 min calculated for 703 cf (100% of inflow)
Center-of-Mass det. time= 232.2 min (896.0 - 663.8)

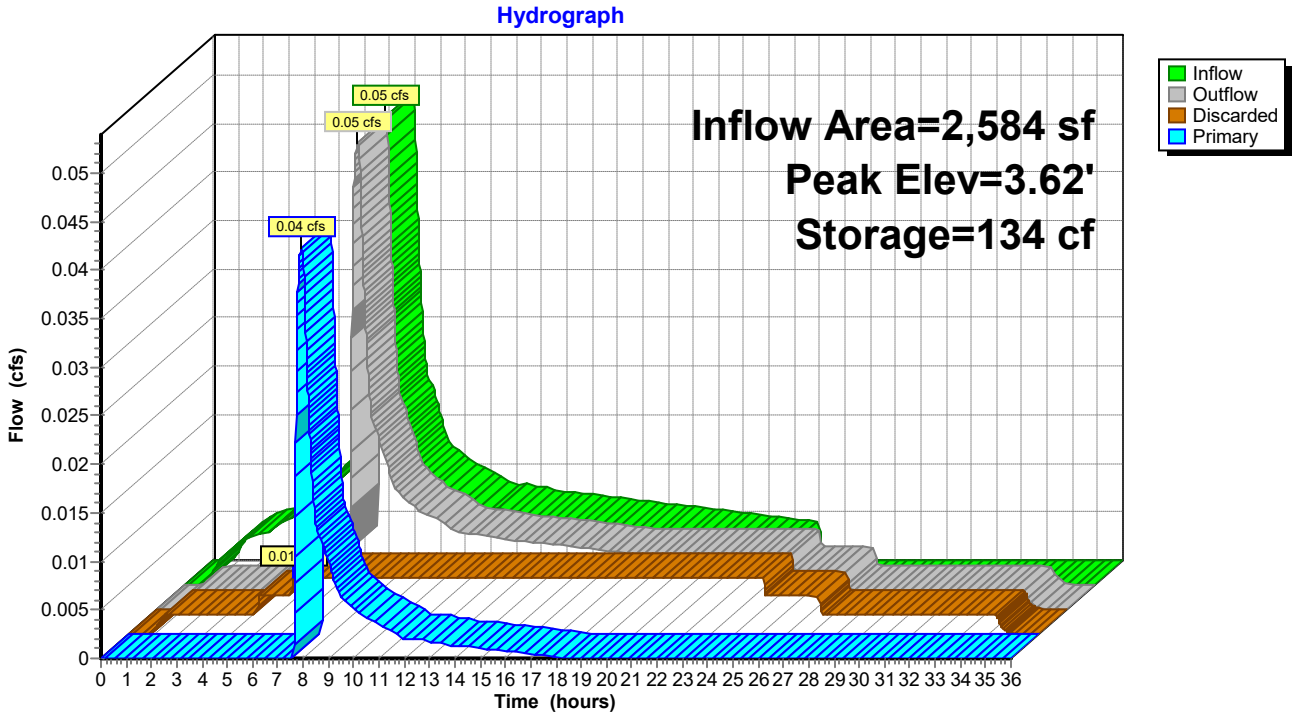
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	50 cf	**6.00'W x 14.00'L x 1.50'H Rock** 126 cf Overall x 40.0% Voids
#2	1.50'	32 cf	**6.00'W x 14.00'L x 1.50'H Growing Medium** 126 cf Overall x 25.0% Voids
#3	3.00'	84 cf	**6.00'W x 14.00'L x 1.00'H Ponding**
		166 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**1.000 in/hr Exfiltration over Horizontal area**
#2	Primary	3.50'	**6.0" Vert. Overflow Orifice** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.01 cfs @ 6.47 hrs HW=3.00' (Free Discharge)
↑—**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.04 cfs @ 7.93 hrs HW=3.62' (Free Discharge)
↑—**2=Overflow Orifice** (Orifice Controls 0.04 cfs @ 1.17 fps)

Pond 13P: Raingarden 2



Summary for Pond P1: Street Planter 1

Inflow Area = 2,187 sf,100.00% Impervious, Inflow Depth = 3.27" for 10-YR event
Inflow = 0.04 cfs @ 7.90 hrs, Volume= 595 cf
Outflow = 0.04 cfs @ 8.03 hrs, Volume= 595 cf, Atten= 10%, Lag= 8.0 min
Discarded = 0.01 cfs @ 7.26 hrs, Volume= 501 cf
Primary = 0.03 cfs @ 8.03 hrs, Volume= 94 cf
Routed to Pond P4 : 18" Detention Pipe

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 3.60' @ 8.03 hrs Surf.Area= 263 sf Storage= 138 cf

Plug-Flow detention time= 252.9 min calculated for 595 cf (100% of inflow)
Center-of-Mass det. time= 253.0 min (916.8 - 663.8)

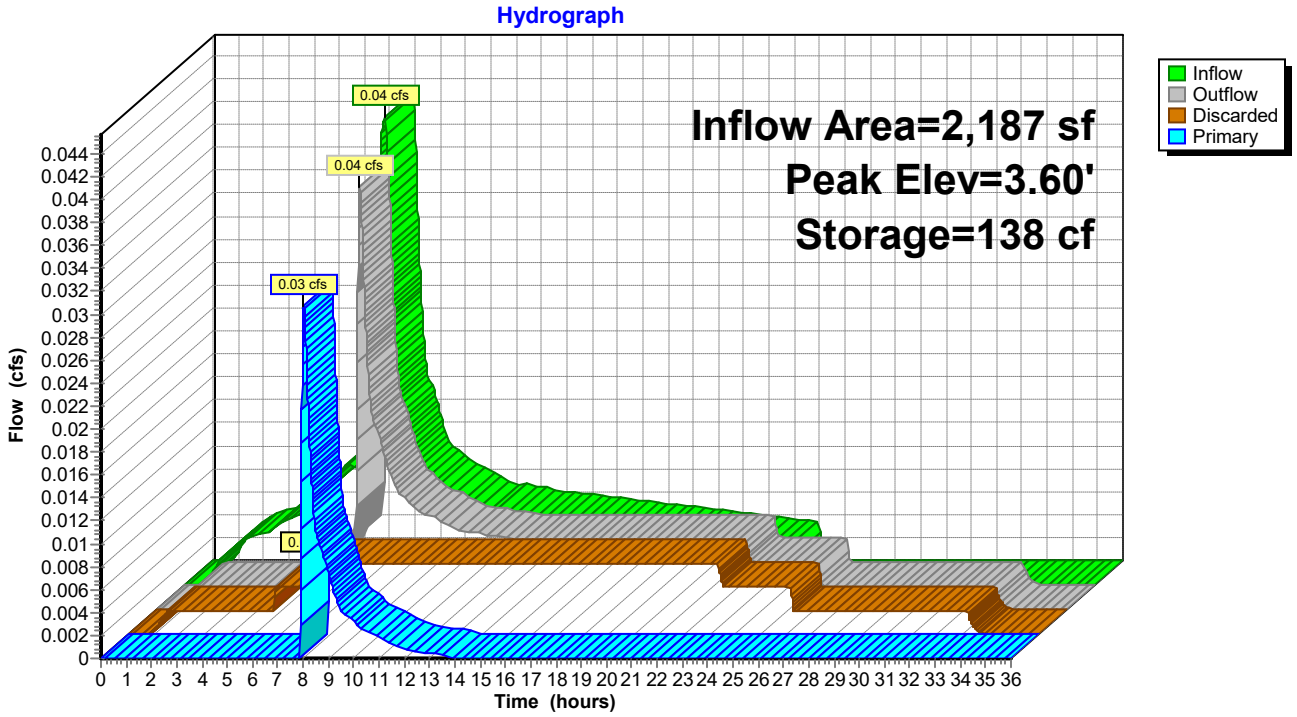
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	53 cf	**5.00'W x 17.50'L x 1.50'H Rock** 131 cf Overall x 40.0% Voids
#2	1.50'	33 cf	**5.00'W x 17.50'L x 1.50'H Growing Medium** 131 cf Overall x 25.0% Voids
#3	3.00'	88 cf	**5.00'W x 17.50'L x 1.00'H Ponding**
		173 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**1.000 in/hr Exfiltration over Horizontal area**
#2	Primary	3.50'	**6.0" Vert. Overflow Orifice** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.01 cfs @ 7.26 hrs HW=3.00' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.03 cfs @ 8.03 hrs HW=3.60' (Free Discharge)
↑**2=Overflow Orifice** (Orifice Controls 0.03 cfs @ 1.08 fps)

Pond P1: Street Planter 1



Summary for Pond P2: Street Planter 2

Inflow Area = 5,524 sf,100.00% Impervious, Inflow Depth = 3.27" for 10-YR event
Inflow = 0.10 cfs @ 7.90 hrs, Volume= 1,504 cf
Outflow = 0.10 cfs @ 7.91 hrs, Volume= 1,504 cf, Atten= 0%, Lag= 0.7 min
Discarded = 0.01 cfs @ 4.23 hrs, Volume= 585 cf
Primary = 0.10 cfs @ 7.91 hrs, Volume= 918 cf
Routed to Pond P4 : 18" Detention Pipe

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 3.57' @ 7.91 hrs Surf.Area= 258 sf Storage= 133 cf

Plug-Flow detention time= 127.0 min calculated for 1,504 cf (100% of inflow)
Center-of-Mass det. time= 127.0 min (790.8 - 663.8)

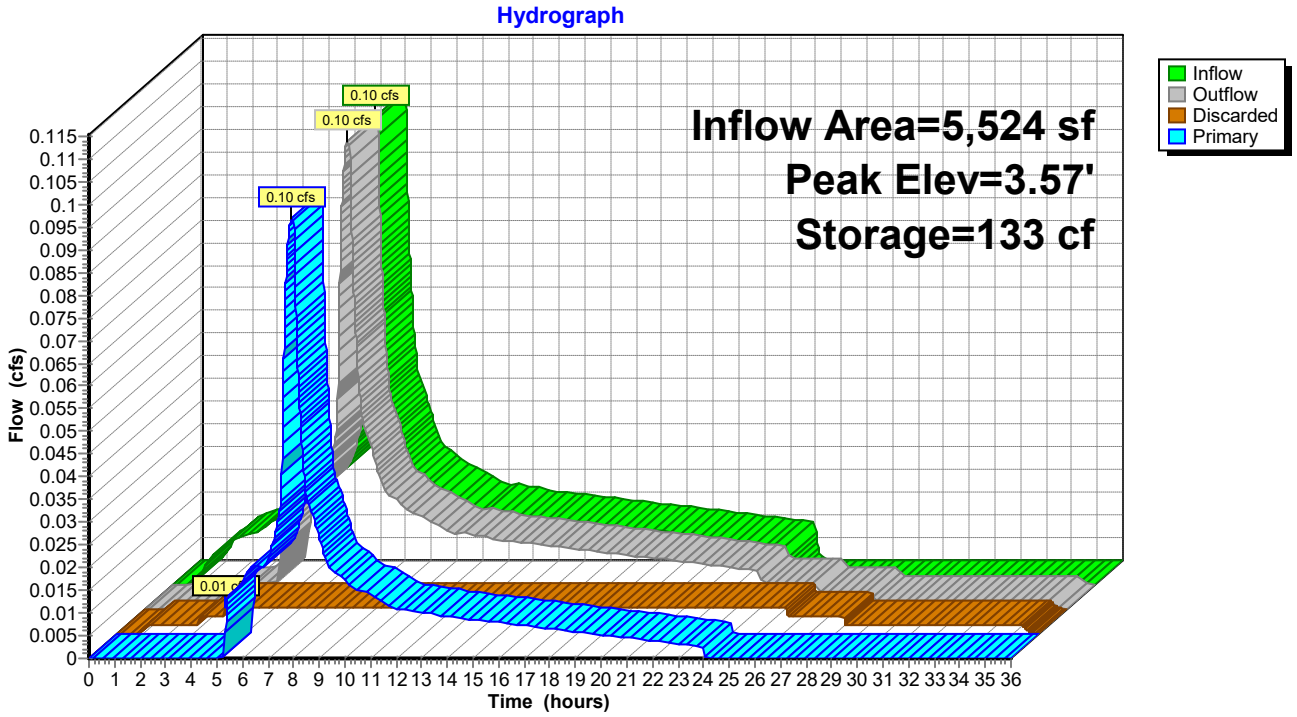
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	52 cf	**5.00'W x 17.20'L x 1.50'H Rock** 129 cf Overall x 40.0% Voids
#2	1.50'	32 cf	**5.00'W x 17.20'L x 1.50'H Growing Medium** 129 cf Overall x 25.0% Voids
#3	3.00'	86 cf	**5.00'W x 17.20'L x 1.00'H Ponding**
		170 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**1.000 in/hr Exfiltration over Horizontal area**
#2	Primary	3.50'	**6.0" Horiz. Overflow Orifice** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.01 cfs @ 4.23 hrs HW=3.00' (Free Discharge)
↑—**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.09 cfs @ 7.91 hrs HW=3.57' (Free Discharge)
↑—**2=Overflow Orifice** (Weir Controls 0.09 cfs @ 0.86 fps)

Pond P2: Street Planter 2



Summary for Pond P3: Street Planter 3

Inflow Area = 1,774 sf,100.00% Impervious, Inflow Depth = 3.27" for 10-YR event
Inflow = 0.03 cfs @ 7.90 hrs, Volume= 483 cf
Outflow = 0.01 cfs @ 8.17 hrs, Volume= 483 cf, Atten= 75%, Lag= 16.4 min
Discarded = 0.01 cfs @ 8.17 hrs, Volume= 483 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Routed to Pond P4 : 18" Detention Pipe

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 3.14' @ 9.38 hrs Surf.Area= 363 sf Storage= 135 cf

Plug-Flow detention time= 256.8 min calculated for 483 cf (100% of inflow)
Center-of-Mass det. time= 256.8 min (920.7 - 663.8)

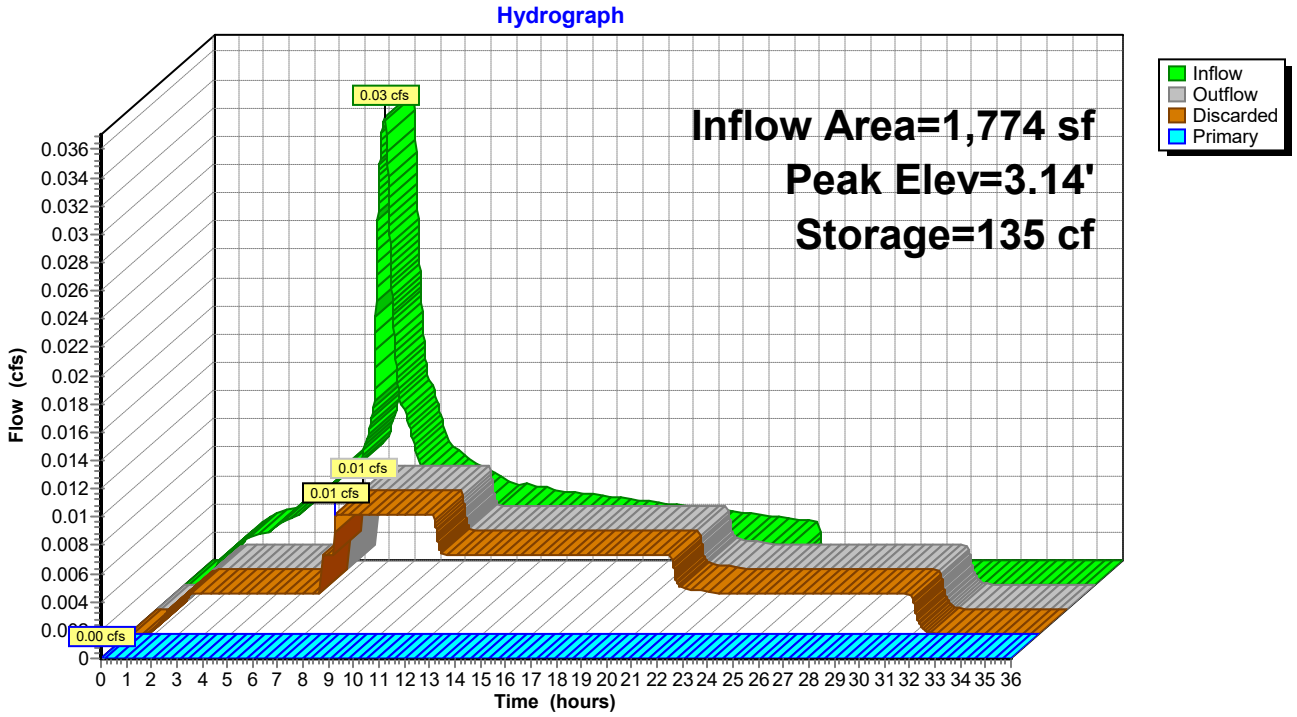
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	73 cf	**5.00'W x 24.20'L x 1.50'H Rock** 182 cf Overall x 40.0% Voids
#2	1.50'	45 cf	**5.00'W x 24.20'L x 1.50'H Growing Medium** 182 cf Overall x 25.0% Voids
#3	3.00'	121 cf	**5.00'W x 24.20'L x 1.00'H Ponding**
		239 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**1.000 in/hr Exfiltration over Horizontal area**
#2	Primary	3.50'	**6.0" Horiz. Overflow Orifice** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.01 cfs @ 8.17 hrs HW=3.00' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=0.00' (Free Discharge)
↑**2=Overflow Orifice** (Controls 0.00 cfs)

Pond P3: Street Planter 3



Summary for Pond P4: 18" Detention Pipe

[92] Warning: Device #2 is above defined storage
[92] Warning: Device #3 is above defined storage

Inflow Area = 10,961 sf,100.00% Impervious, Inflow Depth = 1.55" for 10-YR event
Inflow = 0.15 cfs @ 8.00 hrs, Volume= 1,414 cf
Outflow = 0.10 cfs @ 8.20 hrs, Volume= 1,414 cf, Atten= 35%, Lag= 11.8 min
Primary = 0.10 cfs @ 8.20 hrs, Volume= 1,414 cf
Routed to Reach -POST : Peak Flows from Post-Developed Site

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 0.87' @ 8.20 hrs Surf.Area= 148 sf Storage= 106 cf

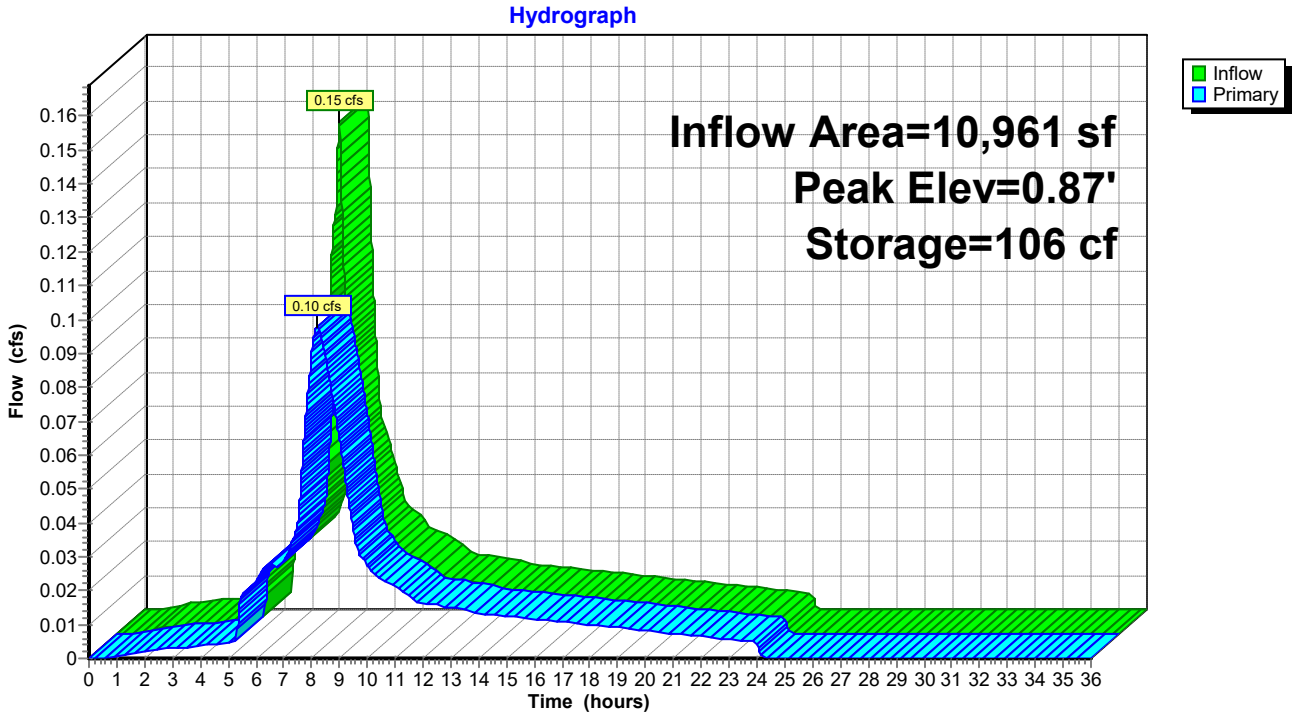
Plug-Flow detention time= 5.7 min calculated for 1,414 cf (100% of inflow)
Center-of-Mass det. time= 5.7 min (656.8 - 651.0)

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	177 cf	**18.0" Round Pipe Storage** L= 100.0'

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	**2.0" Horiz. Control Orifice** C= 0.600 Limited to weir flow at low heads
#2	Primary	2.20'	**2.0" Horiz. Upper Orifice** C= 0.600 Limited to weir flow at low heads
#3	Primary	2.80'	**12.0" Vert. Overflow** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.10 cfs @ 8.20 hrs HW=0.87' (Free Discharge)
└**1=Control Orifice** (Orifice Controls 0.10 cfs @ 4.49 fps)
└**2=Upper Orifice** (Controls 0.00 cfs)
└**3=Overflow** (Controls 0.00 cfs)

Pond P4: 18" Detention Pipe



Time span=0.00-36.00 hrs, dt=0.01 hrs, 3601 points
Runoff by SBUH method, Split Pervious/Imperv.
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment -PRE: Existing Site Runoff Area=29,153 sf 0.00% Impervious Runoff Depth=2.37"
Tc=6.0 min CN=84/0 Runoff=0.39 cfs 5,760 cf

Subcatchment 11S: BASIN 6-SHARED DWY Runoff Area=2,584 sf 100.00% Impervious Runoff Depth=3.77"
Tc=6.0 min CN=0/98 Runoff=0.06 cfs 811 cf

Subcatchment 12S: BASIN 5-AC ROAD Runoff Area=6,214 sf 100.00% Impervious Runoff Depth=3.77"
Tc=6.0 min CN=0/98 Runoff=0.13 cfs 1,950 cf

Subcatchment 13S: BASIN 7-Curb Return Runoff Area=1,476 sf 100.00% Impervious Runoff Depth=3.77"
Tc=6.0 min CN=0/98 Runoff=0.03 cfs 463 cf

Subcatchment B1: BASIN 1-AC ROAD Runoff Area=2,187 sf 100.00% Impervious Runoff Depth=3.77"
Tc=6.0 min CN=0/98 Runoff=0.05 cfs 686 cf

Subcatchment B2: BASIN 2-AC Road West Runoff Area=5,524 sf 100.00% Impervious Runoff Depth=3.77"
Tc=6.0 min CN=0/98 Runoff=0.12 cfs 1,733 cf

Subcatchment B3: BASIN 3-AC Road Runoff Area=1,774 sf 100.00% Impervious Runoff Depth=3.77"
Tc=6.0 min CN=0/98 Runoff=0.04 cfs 557 cf

Subcatchment B4: BASIN 4-Lots 1-4 Roof Runoff Area=9,394 sf 100.00% Impervious Runoff Depth=3.77"
Tc=6.0 min CN=0/98 Runoff=0.20 cfs 2,947 cf

Reach -POST: Peak Flows from Post-Developed Site Inflow=0.38 cfs 5,408 cf
Outflow=0.38 cfs 5,408 cf

Pond 1P: 36" Detention Pipe Peak Elev=2.77' Storage=511 cf Inflow=0.20 cfs 2,947 cf
Outflow=0.12 cfs 2,947 cf

Pond 11P: Raingarden 1 Peak Elev=3.70' Storage=418 cf Inflow=0.13 cfs 1,950 cf
Discarded=0.02 cfs 1,517 cf Primary=0.11 cfs 432 cf Outflow=0.13 cfs 1,950 cf

Pond 13P: Raingarden 2 Peak Elev=3.63' Storage=135 cf Inflow=0.06 cfs 811 cf
Discarded=0.01 cfs 541 cf Primary=0.05 cfs 270 cf Outflow=0.06 cfs 811 cf

Pond P1: Street Planter 1 Peak Elev=3.62' Storage=139 cf Inflow=0.05 cfs 686 cf
Discarded=0.01 cfs 532 cf Primary=0.04 cfs 155 cf Outflow=0.05 cfs 686 cf

Pond P2: Street Planter 2 Peak Elev=3.58' Storage=133 cf Inflow=0.12 cfs 1,733 cf
Discarded=0.01 cfs 592 cf Primary=0.11 cfs 1,141 cf Outflow=0.12 cfs 1,733 cf

Pond P3: Street Planter 3 Peak Elev=3.41' Storage=167 cf Inflow=0.04 cfs 557 cf
Discarded=0.01 cfs 557 cf Primary=0.00 cfs 0 cf Outflow=0.01 cfs 557 cf

Pond P4: 18" Detention Pipe Peak Elev=1.19' Storage=151 cf Inflow=0.18 cfs 1,758 cf
Outflow=0.11 cfs 1,758 cf

Total Runoff Area = 58,306 sf Runoff Volume = 14,907 cf Average Runoff Depth = 3.07"
50.00% Pervious = 29,153 sf 50.00% Impervious = 29,153 sf

Summary for Subcatchment -PRE: Existing Site

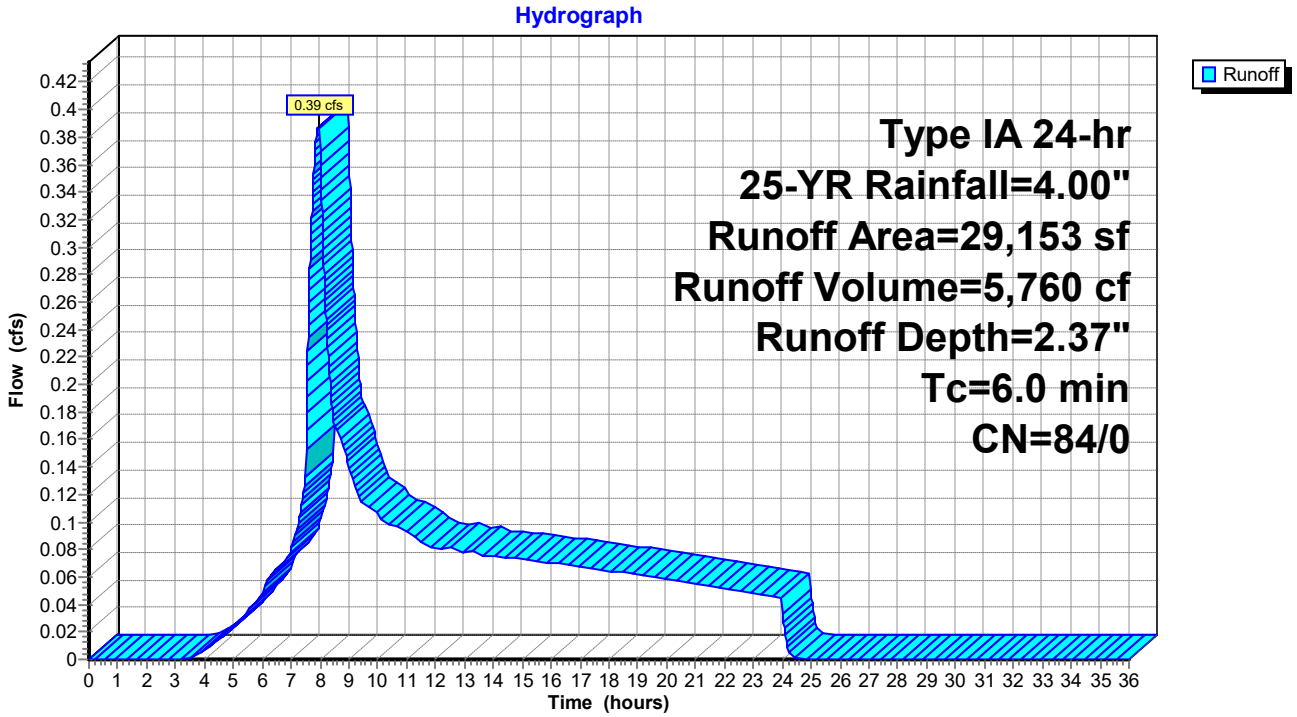
Runoff = 0.39 cfs @ 7.96 hrs, Volume= 5,760 cf, Depth= 2.37"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 25-YR Rainfall=4.00"

Area (sf)	CN	Description
29,153	84	50-75% Grass cover, Fair, HSG D
29,153	84	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment -PRE: Existing Site



Summary for Subcatchment 11S: BASIN 6-SHARED DWY

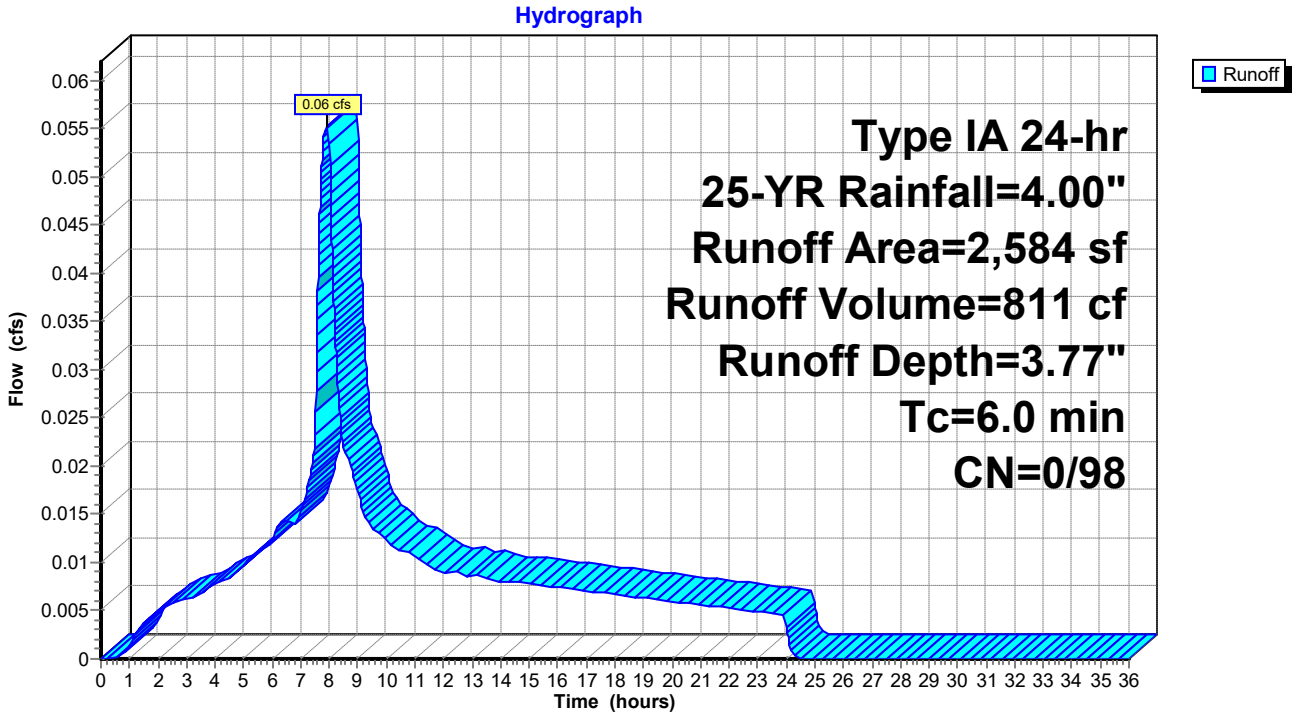
Runoff = 0.06 cfs @ 7.90 hrs, Volume= 811 cf, Depth= 3.77"
Routed to Pond 13P : Raingarden 2

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 25-YR Rainfall=4.00"

Area (sf)	CN	Description
2,584	98	Paved parking, HSG D
2,584	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 11S: BASIN 6-SHARED DWY



Summary for Subcatchment 12S: BASIN 5-AC ROAD EYEBROW

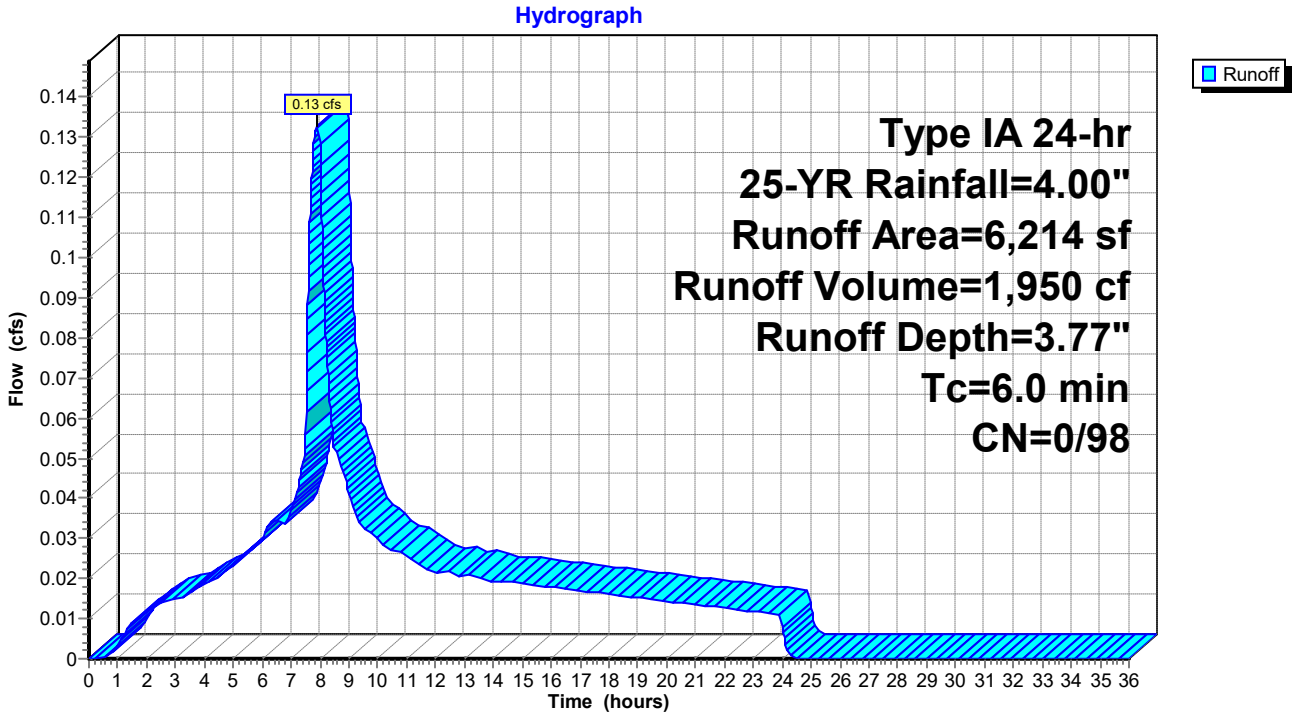
Runoff = 0.13 cfs @ 7.90 hrs, Volume= 1,950 cf, Depth= 3.77"
Routed to Pond 11P : Raingarden 1

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 25-YR Rainfall=4.00"

	Area (sf)	CN	Description
*	4,040	98	AC
	2,174	98	Paved roads w/curbs & sewers, HSG D
	6,214	98	Weighted Average
	6,214	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment 12S: BASIN 5-AC ROAD EYEBROW



Summary for Subcatchment 13S: BASIN 7-Curb Return

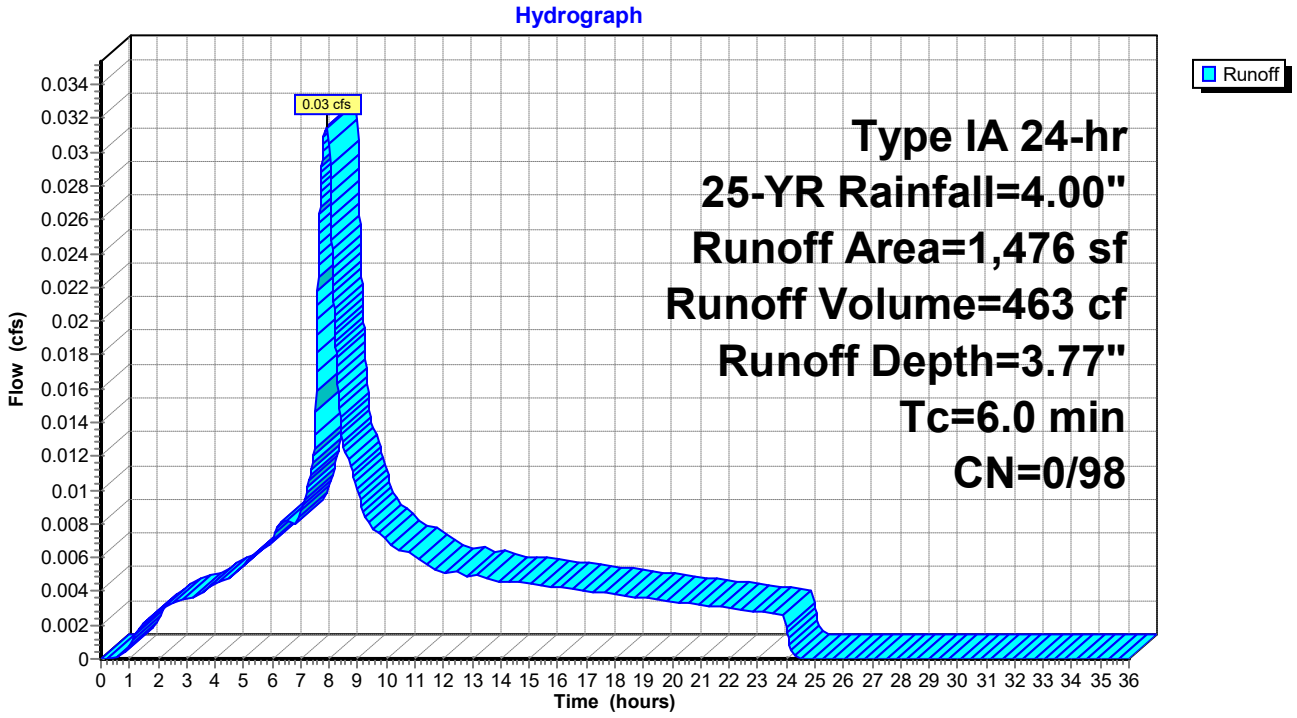
Runoff = 0.03 cfs @ 7.90 hrs, Volume= 463 cf, Depth= 3.77"
Routed to Pond P4 : 18" Detention Pipe

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 25-YR Rainfall=4.00"

Area (sf)	CN	Description
1,476	98	Paved roads w/curbs & sewers, HSG D
1,476	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 13S: BASIN 7-Curb Return



Summary for Subcatchment B1: BASIN 1-AC ROAD EAST

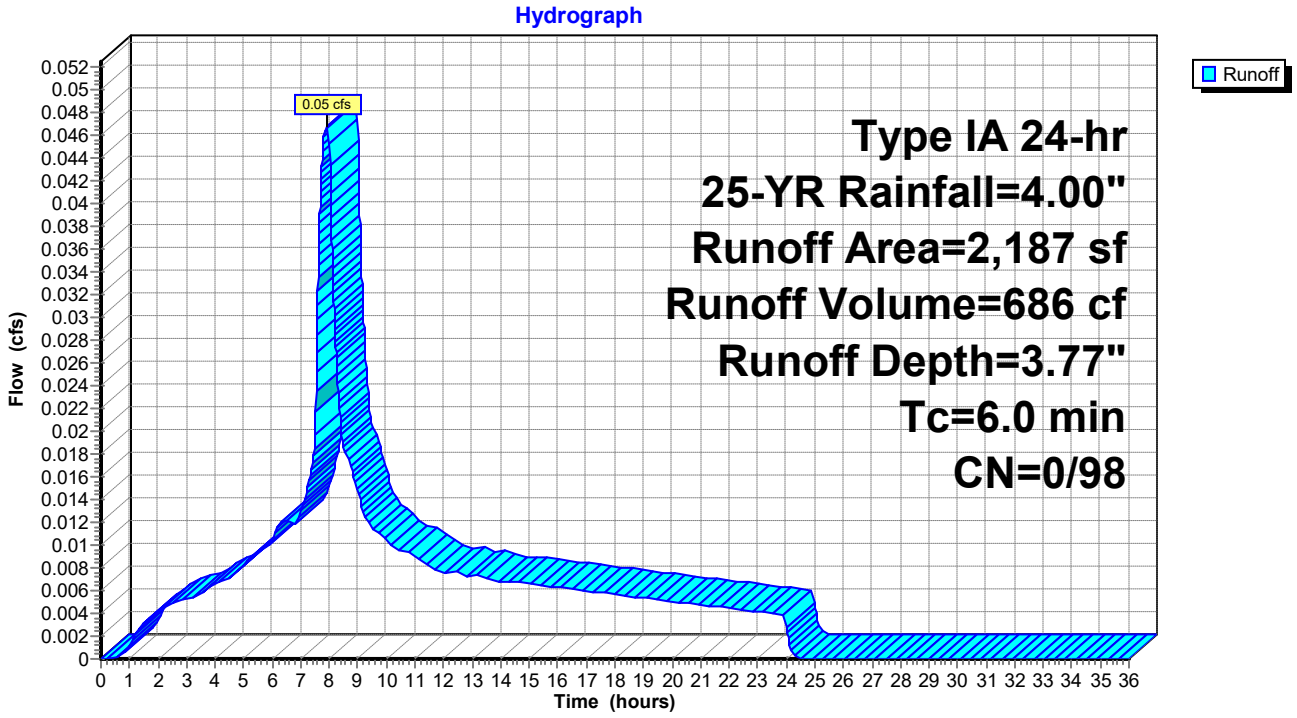
Runoff = 0.05 cfs @ 7.90 hrs, Volume= 686 cf, Depth= 3.77"
Routed to Pond P1 : Street Planter 1

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 25-YR Rainfall=4.00"

	Area (sf)	CN	Description
*	2,187	98	AC
	2,187	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment B1: BASIN 1-AC ROAD EAST



Summary for Subcatchment B2: BASIN 2-AC Road West

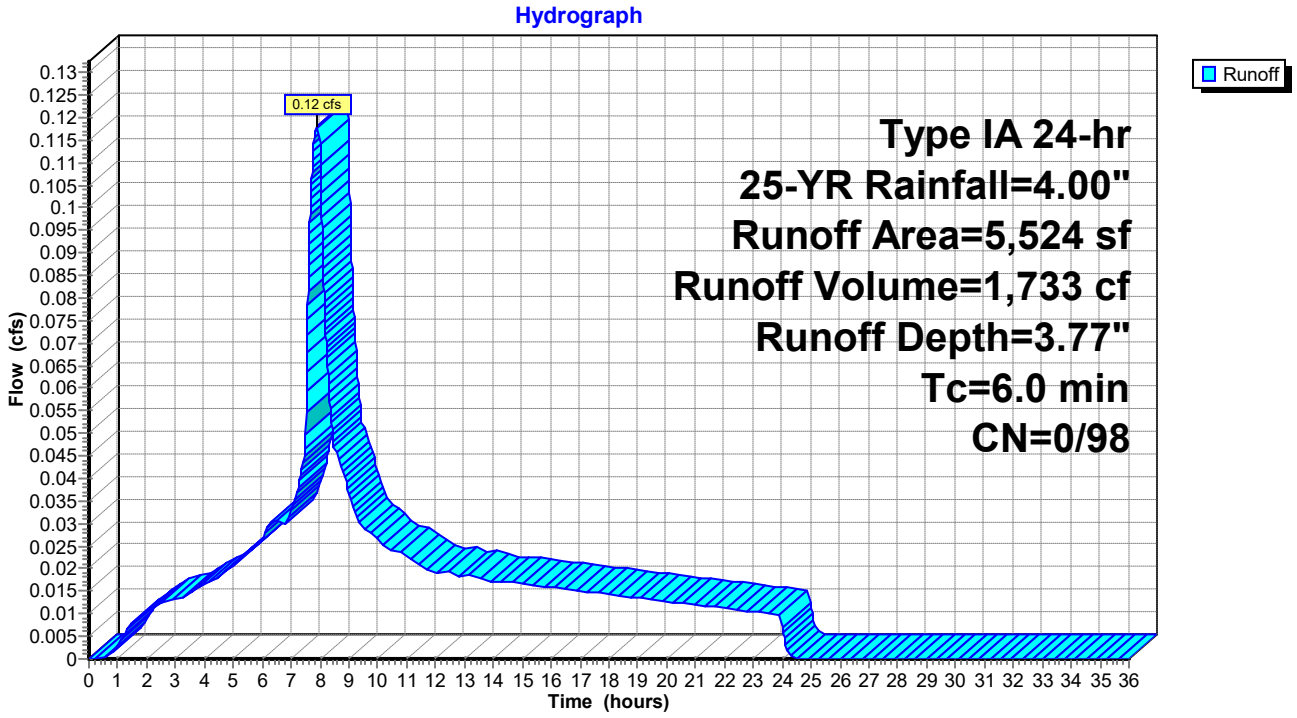
Runoff = 0.12 cfs @ 7.90 hrs, Volume= 1,733 cf, Depth= 3.77"
Routed to Pond P2 : Street Planter 2

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 25-YR Rainfall=4.00"

	Area (sf)	CN	Description
*	5,524	98	Public Impervious
	5,524	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment B2: BASIN 2-AC Road West



Summary for Subcatchment B3: BASIN 3-AC Road Southeast

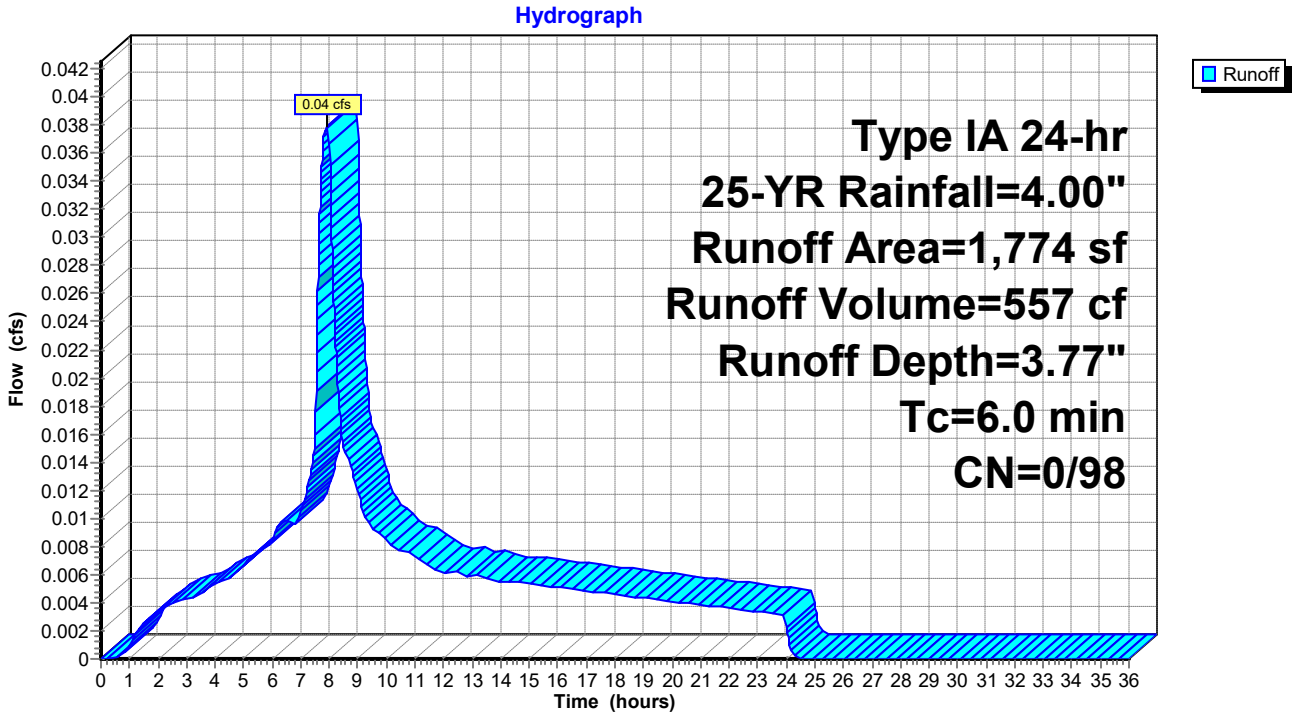
Runoff = 0.04 cfs @ 7.90 hrs, Volume= 557 cf, Depth= 3.77"
Routed to Pond P3 : Street Planter 3

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 25-YR Rainfall=4.00"

	Area (sf)	CN	Description
*	1,774	98	Public Impervious
	1,774	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment B3: BASIN 3-AC Road Southeast



Summary for Subcatchment B4: BASIN 4-Lots 1-4 Roof

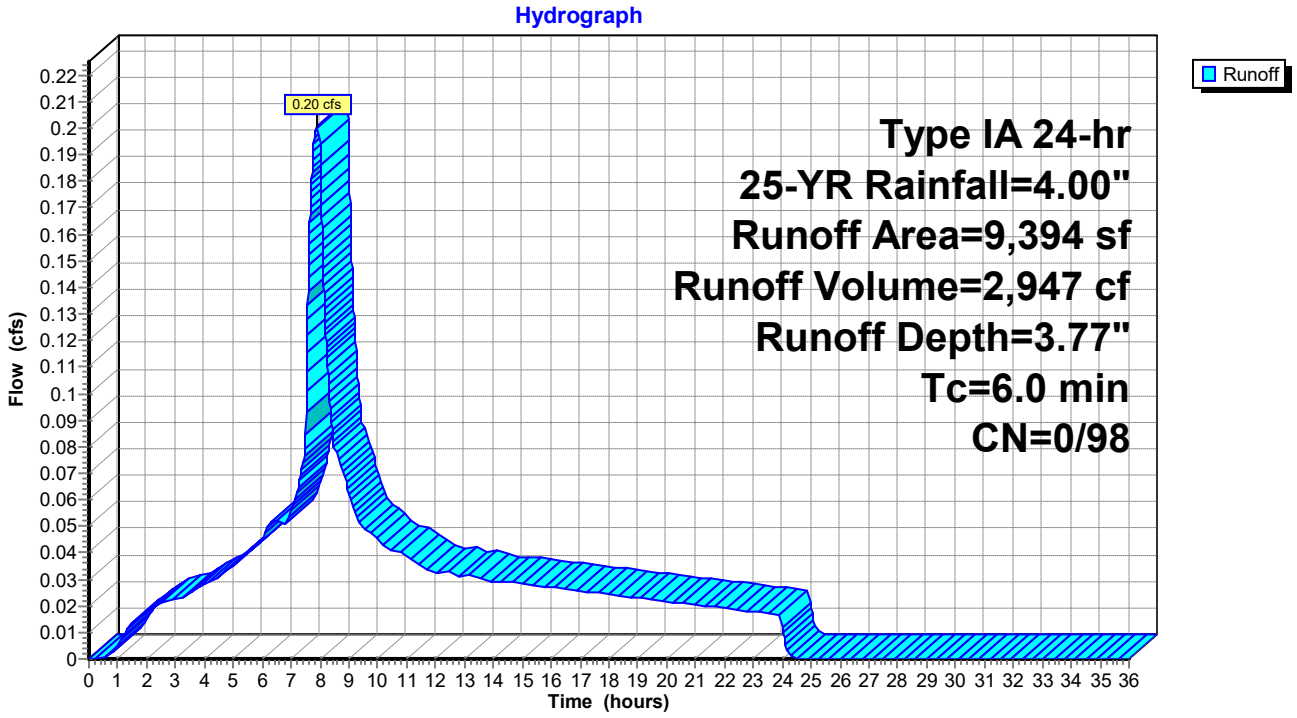
Runoff = 0.20 cfs @ 7.90 hrs, Volume= 2,947 cf, Depth= 3.77"
Routed to Pond 1P : 36" Detention Pipe

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 25-YR Rainfall=4.00"

	Area (sf)	CN	Description
*	9,394	98	Roof Area
	9,394	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment B4: BASIN 4-Lots 1-4 Roof



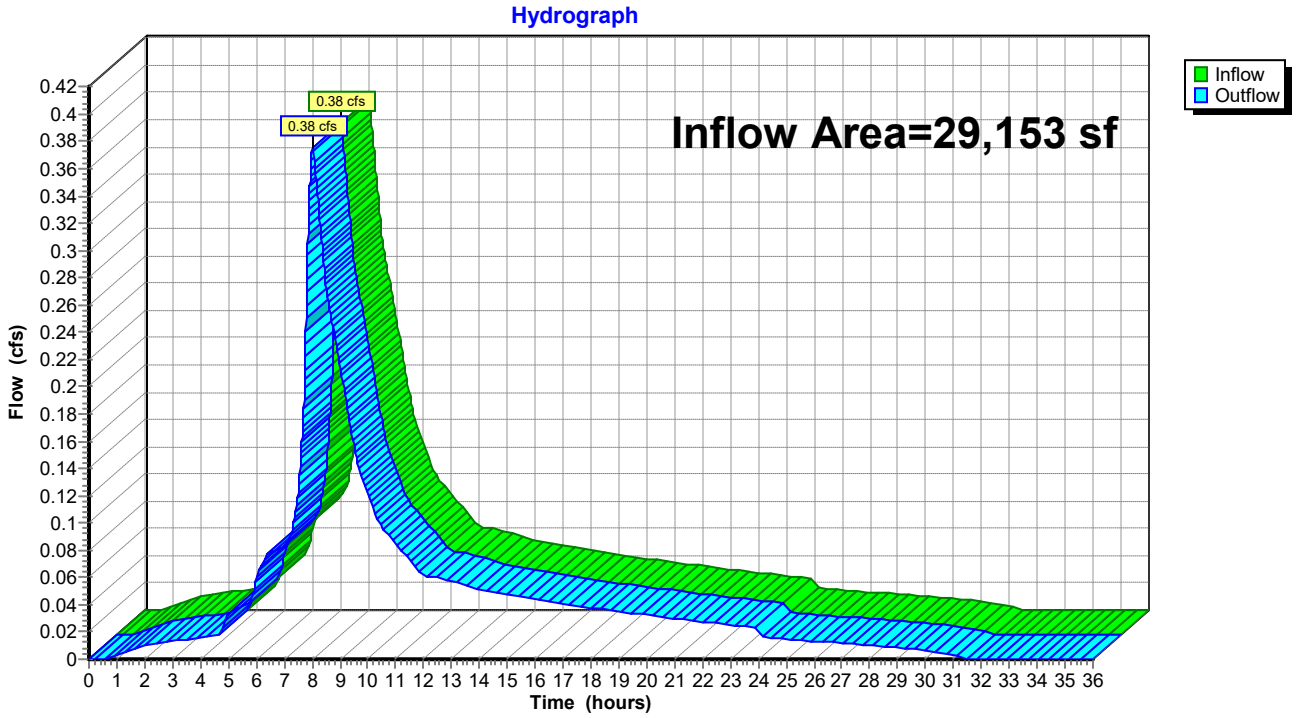
Summary for Reach -POST: Peak Flows from Post-Developed Site

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 29,153 sf,100.00% Impervious, Inflow Depth = 2.23" for 25-YR event
Inflow = 0.38 cfs @ 8.03 hrs, Volume= 5,408 cf
Outflow = 0.38 cfs @ 8.03 hrs, Volume= 5,408 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Reach -POST: Peak Flows from Post-Developed Site



Summary for Pond 1P: 36" Detention Pipe

Inflow Area = 9,394 sf,100.00% Impervious, Inflow Depth = 3.77" for 25-YR event
Inflow = 0.20 cfs @ 7.90 hrs, Volume= 2,947 cf
Outflow = 0.12 cfs @ 8.22 hrs, Volume= 2,947 cf, Atten= 42%, Lag= 19.6 min
Primary = 0.12 cfs @ 8.22 hrs, Volume= 2,947 cf
Routed to Reach -POST : Peak Flows from Post-Developed Site

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 2.77' @ 8.22 hrs Surf.Area= 120 sf Storage= 511 cf

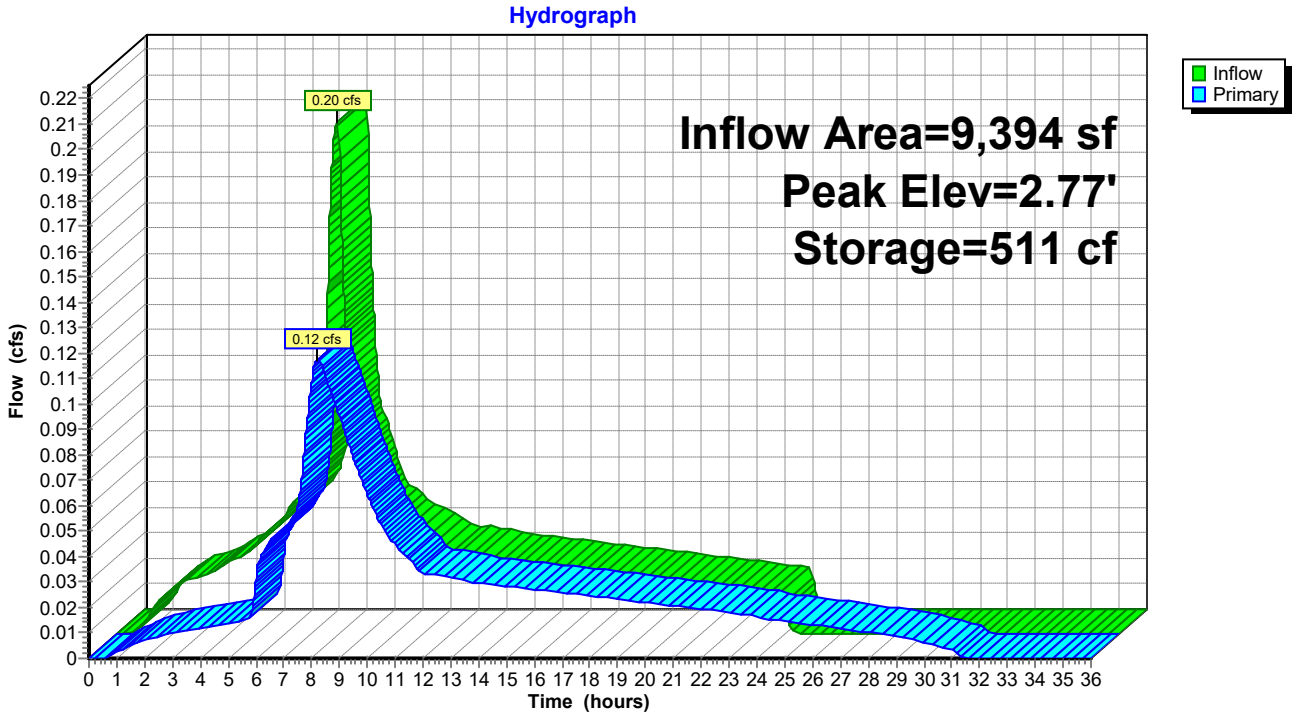
Plug-Flow detention time= 136.1 min calculated for 2,947 cf (100% of inflow)
Center-of-Mass det. time= 136.2 min (796.7 - 660.5)

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	530 cf	**36.0" Round Pipe Storage** L= 75.0'

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	**0.7" Horiz. Control Orifice** C= 0.600 Limited to weir flow at low heads
#2	Primary	1.50'	**1.8" Horiz. Upper Orifice** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.12 cfs @ 8.22 hrs HW=2.77' (Free Discharge)
└**1=Control Orifice** (Orifice Controls 0.02 cfs @ 8.01 fps)
└**2=Upper Orifice** (Orifice Controls 0.10 cfs @ 5.42 fps)

Pond 1P: 36" Detention Pipe



Summary for Pond 11P: Raingarden 1

Inflow Area = 6,214 sf,100.00% Impervious, Inflow Depth = 3.77" for 25-YR event
Inflow = 0.13 cfs @ 7.90 hrs, Volume= 1,950 cf
Outflow = 0.13 cfs @ 8.01 hrs, Volume= 1,950 cf, Atten= 5%, Lag= 6.9 min
Discarded = 0.02 cfs @ 6.66 hrs, Volume= 1,517 cf
Primary = 0.11 cfs @ 8.01 hrs, Volume= 432 cf
Routed to Reach -POST : Peak Flows from Post-Developed Site

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 3.70' @ 8.01 hrs Surf.Area= 750 sf Storage= 418 cf

Plug-Flow detention time= 242.5 min calculated for 1,949 cf (100% of inflow)
Center-of-Mass det. time= 242.6 min (903.2 - 660.5)

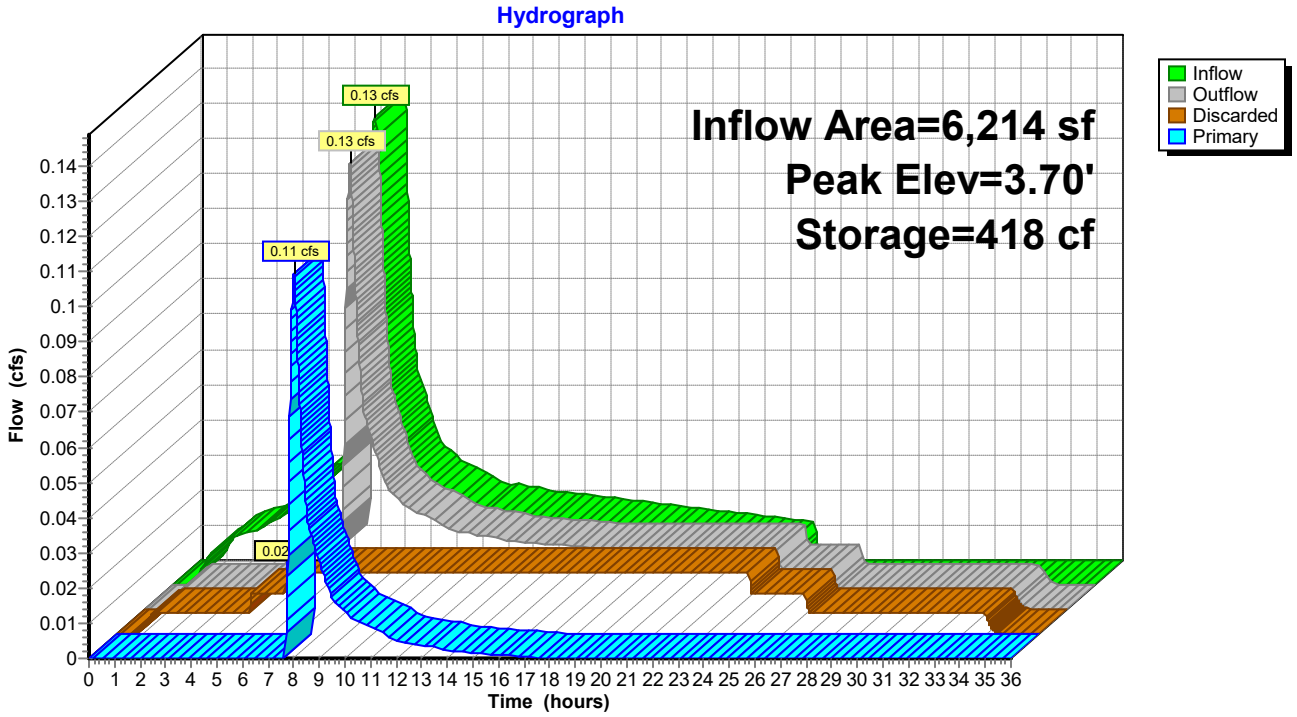
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	150 cf	**10.00'W x 25.00'L x 1.50'H Rock** 375 cf Overall x 40.0% Voids
#2	1.50'	94 cf	**10.00'W x 25.00'L x 1.50'H Growing Medium** 375 cf Overall x 25.0% Voids
#3	3.00'	250 cf	**10.00'W x 25.00'L x 1.00'H Ponding**
		494 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**1.000 in/hr Exfiltration over Horizontal area**
#2	Primary	3.50'	**6.0" Vert. Overflow Orifice** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.02 cfs @ 6.66 hrs HW=3.00' (Free Discharge)
↑—**1=Exfiltration** (Exfiltration Controls 0.02 cfs)

Primary OutFlow Max=0.11 cfs @ 8.01 hrs HW=3.70' (Free Discharge)
↑—**2=Overflow Orifice** (Orifice Controls 0.11 cfs @ 1.51 fps)

Pond 11P: Raingarden 1



Summary for Pond 13P: Raingarden 2

Inflow Area = 2,584 sf,100.00% Impervious, Inflow Depth = 3.77" for 25-YR event
Inflow = 0.06 cfs @ 7.90 hrs, Volume= 811 cf
Outflow = 0.06 cfs @ 7.93 hrs, Volume= 811 cf, Atten= 0%, Lag= 2.1 min
Discarded = 0.01 cfs @ 5.93 hrs, Volume= 541 cf
Primary = 0.05 cfs @ 7.93 hrs, Volume= 270 cf
Routed to Reach -POST : Peak Flows from Post-Developed Site

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 3.63' @ 7.93 hrs Surf.Area= 252 sf Storage= 135 cf

Plug-Flow detention time= 213.6 min calculated for 811 cf (100% of inflow)
Center-of-Mass det. time= 213.6 min (874.2 - 660.5)

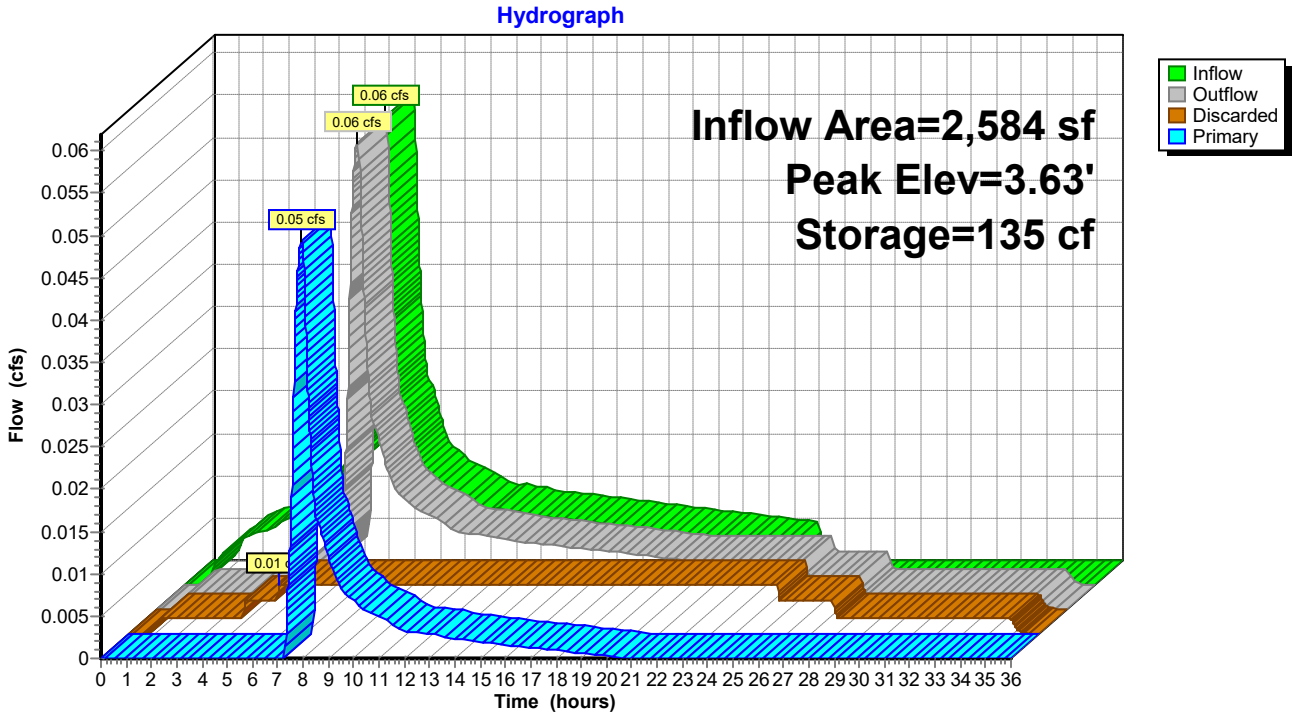
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	50 cf	**6.00'W x 14.00'L x 1.50'H Rock** 126 cf Overall x 40.0% Voids
#2	1.50'	32 cf	**6.00'W x 14.00'L x 1.50'H Growing Medium** 126 cf Overall x 25.0% Voids
#3	3.00'	84 cf	**6.00'W x 14.00'L x 1.00'H Ponding**
		166 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**1.000 in/hr Exfiltration over Horizontal area**
#2	Primary	3.50'	**6.0" Vert. Overflow Orifice** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.01 cfs @ 5.93 hrs HW=3.00' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.05 cfs @ 7.93 hrs HW=3.63' (Free Discharge)
↑**2=Overflow Orifice** (Orifice Controls 0.05 cfs @ 1.22 fps)

Pond 13P: Raingarden 2



Summary for Pond P1: Street Planter 1

Inflow Area = 2,187 sf,100.00% Impervious, Inflow Depth = 3.77" for 25-YR event
Inflow = 0.05 cfs @ 7.90 hrs, Volume= 686 cf
Outflow = 0.05 cfs @ 7.95 hrs, Volume= 686 cf, Atten= 1%, Lag= 3.2 min
Discarded = 0.01 cfs @ 6.64 hrs, Volume= 532 cf
Primary = 0.04 cfs @ 7.95 hrs, Volume= 155 cf
Routed to Pond P4 : 18" Detention Pipe

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 3.62' @ 7.95 hrs Surf.Area= 263 sf Storage= 139 cf

Plug-Flow detention time= 240.0 min calculated for 686 cf (100% of inflow)
Center-of-Mass det. time= 240.0 min (900.5 - 660.5)

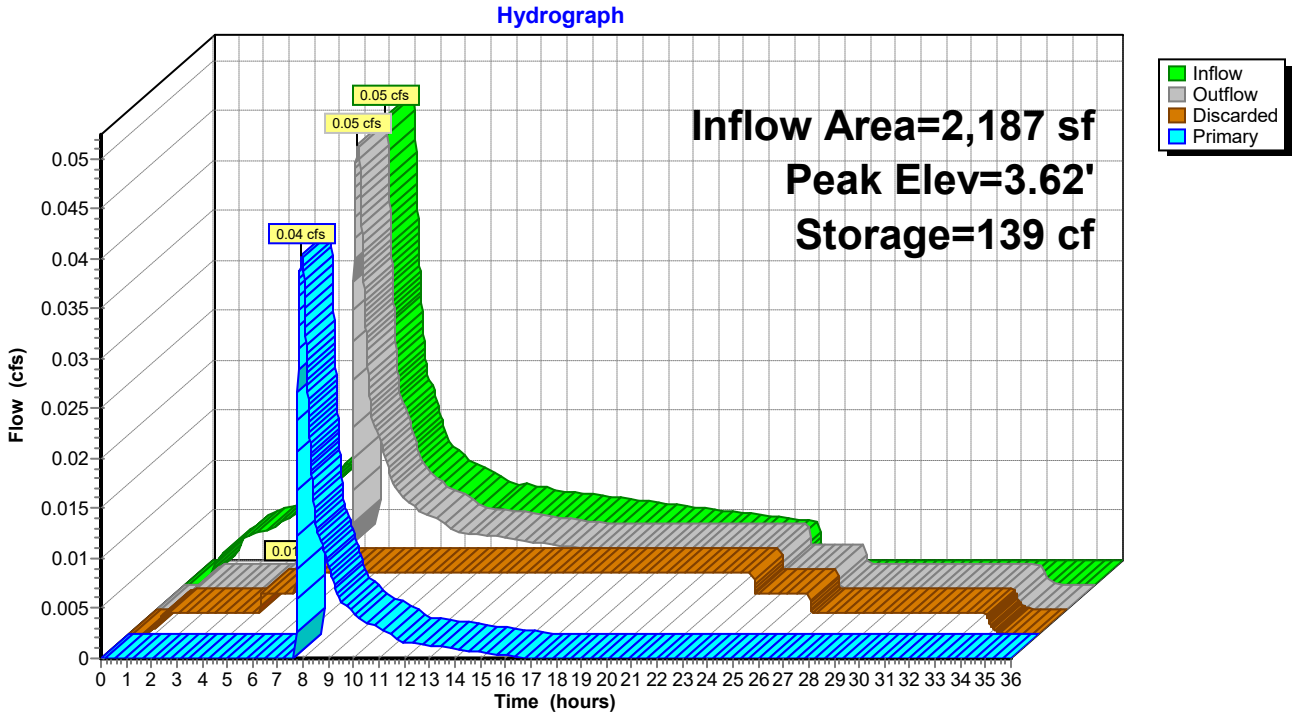
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	53 cf	**5.00'W x 17.50'L x 1.50'H Rock** 131 cf Overall x 40.0% Voids
#2	1.50'	33 cf	**5.00'W x 17.50'L x 1.50'H Growing Medium** 131 cf Overall x 25.0% Voids
#3	3.00'	88 cf	**5.00'W x 17.50'L x 1.00'H Ponding**
		173 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**1.000 in/hr Exfiltration over Horizontal area**
#2	Primary	3.50'	**6.0" Vert. Overflow Orifice** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.01 cfs @ 6.64 hrs HW=3.00' (Free Discharge)
↑—**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.04 cfs @ 7.95 hrs HW=3.62' (Free Discharge)
↑—**2=Overflow Orifice** (Orifice Controls 0.04 cfs @ 1.16 fps)

Pond P1: Street Planter 1



Summary for Pond P2: Street Planter 2

Inflow Area = 5,524 sf,100.00% Impervious, Inflow Depth = 3.77" for 25-YR event
Inflow = 0.12 cfs @ 7.90 hrs, Volume= 1,733 cf
Outflow = 0.12 cfs @ 7.91 hrs, Volume= 1,733 cf, Atten= 0%, Lag= 0.7 min
Discarded = 0.01 cfs @ 3.76 hrs, Volume= 592 cf
Primary = 0.11 cfs @ 7.91 hrs, Volume= 1,141 cf
Routed to Pond P4 : 18" Detention Pipe

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 3.58' @ 7.91 hrs Surf.Area= 258 sf Storage= 133 cf

Plug-Flow detention time= 112.1 min calculated for 1,733 cf (100% of inflow)
Center-of-Mass det. time= 112.1 min (772.7 - 660.5)

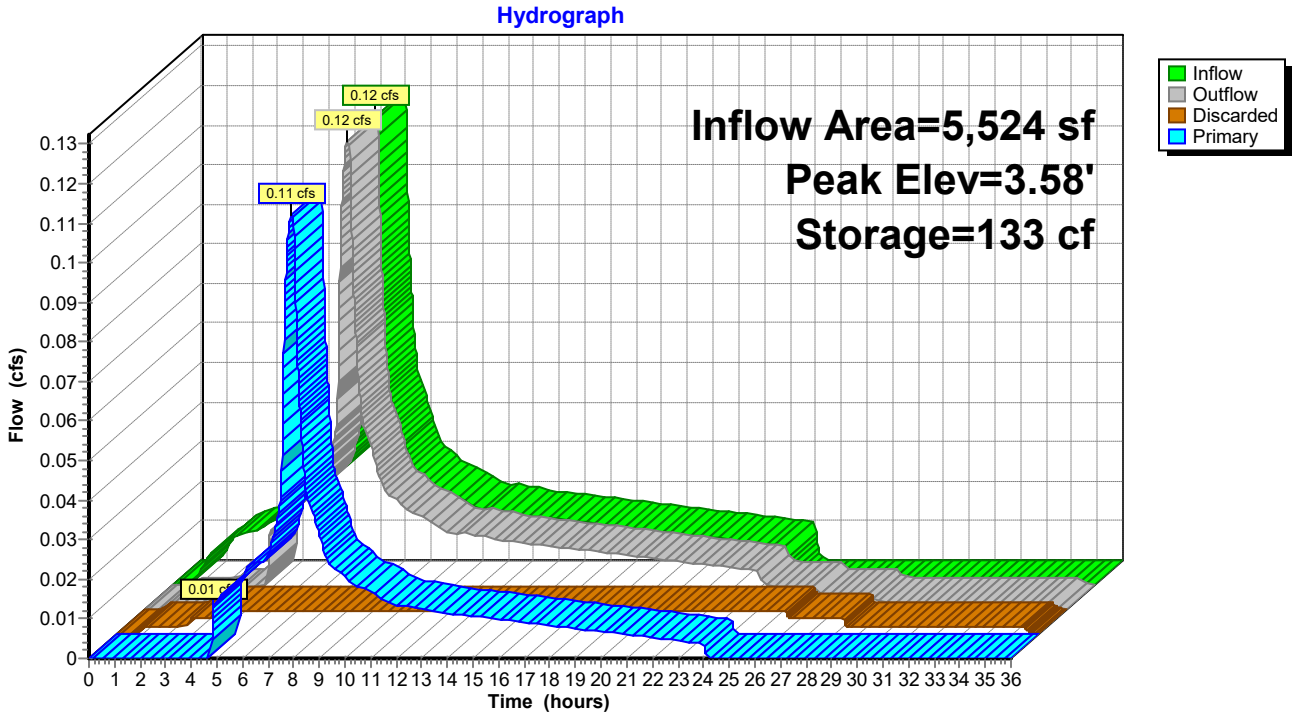
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	52 cf	**5.00'W x 17.20'L x 1.50'H Rock** 129 cf Overall x 40.0% Voids
#2	1.50'	32 cf	**5.00'W x 17.20'L x 1.50'H Growing Medium** 129 cf Overall x 25.0% Voids
#3	3.00'	86 cf	**5.00'W x 17.20'L x 1.00'H Ponding**
		170 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**1.000 in/hr Exfiltration over Horizontal area**
#2	Primary	3.50'	**6.0" Horiz. Overflow Orifice** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.01 cfs @ 3.76 hrs HW=3.00' (Free Discharge)
↑—**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.11 cfs @ 7.91 hrs HW=3.58' (Free Discharge)
↑—**2=Overflow Orifice** (Weir Controls 0.11 cfs @ 0.91 fps)

Pond P2: Street Planter 2



Summary for Pond P3: Street Planter 3

Inflow Area = 1,774 sf,100.00% Impervious, Inflow Depth = 3.77" for 25-YR event
Inflow = 0.04 cfs @ 7.90 hrs, Volume= 557 cf
Outflow = 0.01 cfs @ 7.91 hrs, Volume= 557 cf, Atten= 78%, Lag= 0.9 min
Discarded = 0.01 cfs @ 7.91 hrs, Volume= 557 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Routed to Pond P4 : 18" Detention Pipe

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 3.41' @ 10.04 hrs Surf.Area= 363 sf Storage= 167 cf

Plug-Flow detention time= 268.0 min calculated for 556 cf (100% of inflow)
Center-of-Mass det. time= 268.0 min (928.6 - 660.5)

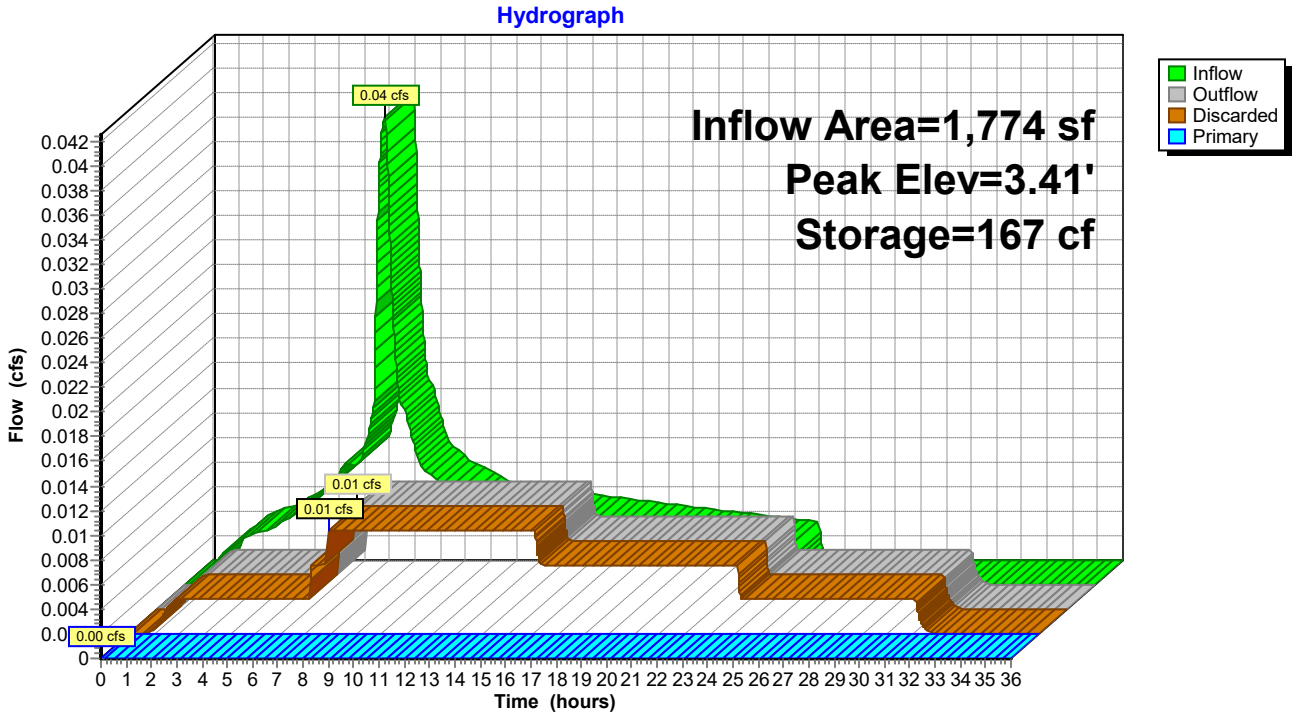
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	73 cf	**5.00'W x 24.20'L x 1.50'H Rock** 182 cf Overall x 40.0% Voids
#2	1.50'	45 cf	**5.00'W x 24.20'L x 1.50'H Growing Medium** 182 cf Overall x 25.0% Voids
#3	3.00'	121 cf	**5.00'W x 24.20'L x 1.00'H Ponding**
		239 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**1.000 in/hr Exfiltration over Horizontal area**
#2	Primary	3.50'	**6.0" Horiz. Overflow Orifice** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.01 cfs @ 7.91 hrs HW=3.00' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=0.00' (Free Discharge)
↑**2=Overflow Orifice** (Controls 0.00 cfs)

Pond P3: Street Planter 3



Summary for Pond P4: 18" Detention Pipe

[92] Warning: Device #2 is above defined storage
[92] Warning: Device #3 is above defined storage

Inflow Area = 10,961 sf,100.00% Impervious, Inflow Depth = 1.92" for 25-YR event
Inflow = 0.18 cfs @ 7.92 hrs, Volume= 1,758 cf
Outflow = 0.11 cfs @ 8.19 hrs, Volume= 1,758 cf, Atten= 38%, Lag= 16.2 min
Primary = 0.11 cfs @ 8.19 hrs, Volume= 1,758 cf
Routed to Reach -POST : Peak Flows from Post-Developed Site

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 1.19' @ 8.19 hrs Surf.Area= 121 sf Storage= 151 cf

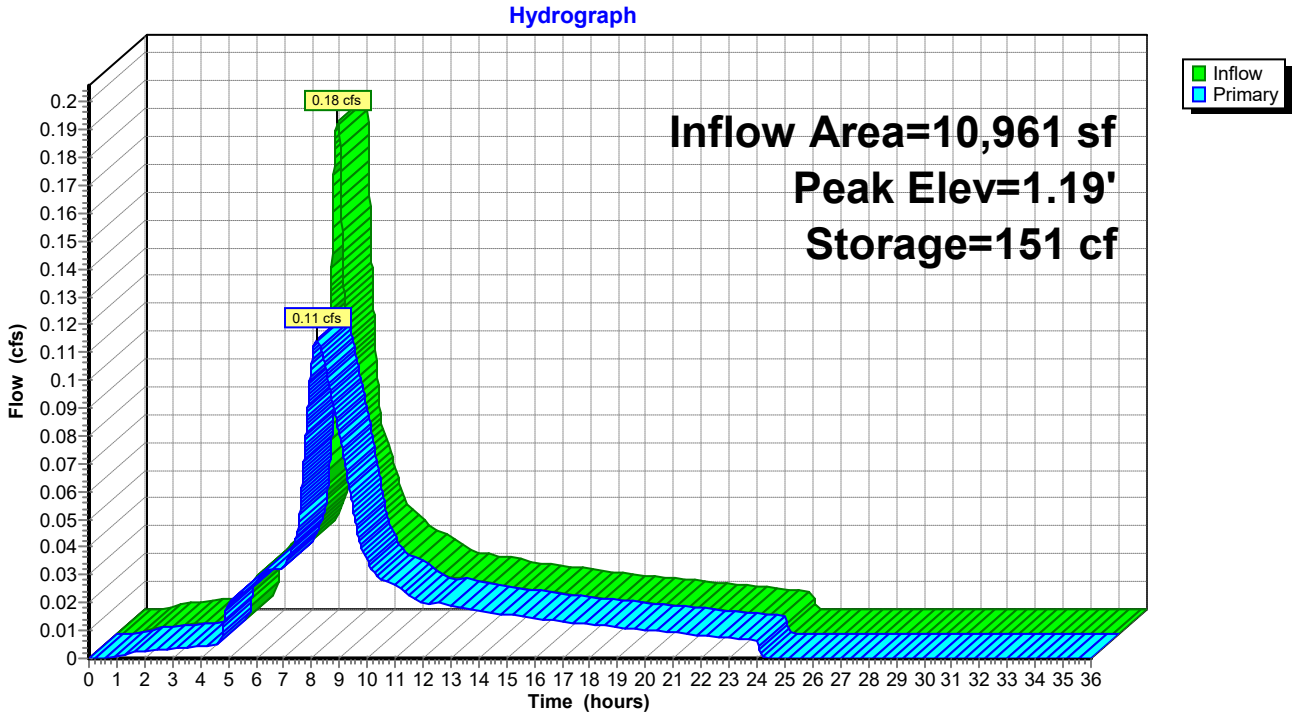
Plug-Flow detention time= 7.0 min calculated for 1,758 cf (100% of inflow)
Center-of-Mass det. time= 7.0 min (657.0 - 650.0)

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	177 cf	**18.0" Round Pipe Storage** L= 100.0'

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	**2.0" Horiz. Control Orifice** C= 0.600 Limited to weir flow at low heads
#2	Primary	2.20'	**2.0" Horiz. Upper Orifice** C= 0.600 Limited to weir flow at low heads
#3	Primary	2.80'	**12.0" Vert. Overflow** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.11 cfs @ 8.19 hrs HW=1.19' (Free Discharge)
└**1=Control Orifice** (Orifice Controls 0.11 cfs @ 5.26 fps)
└**2=Upper Orifice** (Controls 0.00 cfs)
└**3=Overflow** (Controls 0.00 cfs)

Pond P4: 18" Detention Pipe



Time span=0.00-36.00 hrs, dt=0.01 hrs, 3601 points
Runoff by SBUH method, Split Pervious/Imperv.
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment -PRE: Existing Site Runoff Area=29,153 sf 0.00% Impervious Runoff Depth=0.27"
Tc=6.0 min CN=84/0 Runoff=0.02 cfs 661 cf

Subcatchment 11S: BASIN 6-SHARED DWY Runoff Area=2,584 sf 100.00% Impervious Runoff Depth=1.03"
Tc=6.0 min CN=0/98 Runoff=0.02 cfs 223 cf

Subcatchment 12S: BASIN 5-AC ROAD Runoff Area=6,214 sf 100.00% Impervious Runoff Depth=1.03"
Tc=6.0 min CN=0/98 Runoff=0.04 cfs 536 cf

Subcatchment 13S: BASIN 7-Curb Return Runoff Area=1,476 sf 100.00% Impervious Runoff Depth=1.03"
Tc=6.0 min CN=0/98 Runoff=0.01 cfs 127 cf

Subcatchment B1: BASIN 1-AC ROAD Runoff Area=2,187 sf 100.00% Impervious Runoff Depth=1.03"
Tc=6.0 min CN=0/98 Runoff=0.01 cfs 189 cf

Subcatchment B2: BASIN 2-AC Road West Runoff Area=5,524 sf 100.00% Impervious Runoff Depth=1.03"
Tc=6.0 min CN=0/98 Runoff=0.03 cfs 476 cf

Subcatchment B3: BASIN 3-AC Road Runoff Area=1,774 sf 100.00% Impervious Runoff Depth=1.03"
Tc=6.0 min CN=0/98 Runoff=0.01 cfs 153 cf

Subcatchment B4: BASIN 4-Lots 1-4 Roof Runoff Area=9,394 sf 100.00% Impervious Runoff Depth=1.03"
Tc=6.0 min CN=0/98 Runoff=0.06 cfs 810 cf

Reach -POST: Peak Flows from Post-Developed Site Inflow=0.02 cfs 964 cf
Outflow=0.02 cfs 964 cf

Pond 1P: 36" Detention Pipe Peak Elev=1.15' Storage=187 cf Inflow=0.06 cfs 810 cf
Outflow=0.01 cfs 810 cf

Pond 11P: Raingarden 1 Peak Elev=1.48' Storage=148 cf Inflow=0.04 cfs 536 cf
Discarded=0.01 cfs 536 cf Primary=0.00 cfs 0 cf Outflow=0.01 cfs 536 cf

Pond 13P: Raingarden 2 Peak Elev=1.68' Storage=54 cf Inflow=0.02 cfs 223 cf
Discarded=0.00 cfs 223 cf Primary=0.00 cfs 0 cf Outflow=0.00 cfs 223 cf

Pond P1: Street Planter 1 Peak Elev=1.48' Storage=52 cf Inflow=0.01 cfs 189 cf
Discarded=0.00 cfs 189 cf Primary=0.00 cfs 0 cf Outflow=0.00 cfs 189 cf

Pond P2: Street Planter 2 Peak Elev=3.51' Storage=128 cf Inflow=0.03 cfs 476 cf
Discarded=0.01 cfs 449 cf Primary=0.01 cfs 27 cf Outflow=0.01 cfs 476 cf

Pond P3: Street Planter 3 Peak Elev=0.49' Storage=24 cf Inflow=0.01 cfs 153 cf
Discarded=0.00 cfs 153 cf Primary=0.00 cfs 0 cf Outflow=0.00 cfs 153 cf

Pond P4: 18" Detention Pipe Peak Elev=0.03' Storage=1 cf Inflow=0.01 cfs 154 cf
Outflow=0.01 cfs 154 cf

Total Runoff Area = 58,306 sf Runoff Volume = 3,175 cf Average Runoff Depth = 0.65"
50.00% Pervious = 29,153 sf 50.00% Impervious = 29,153 sf

Summary for Subcatchment -PRE: Existing Site

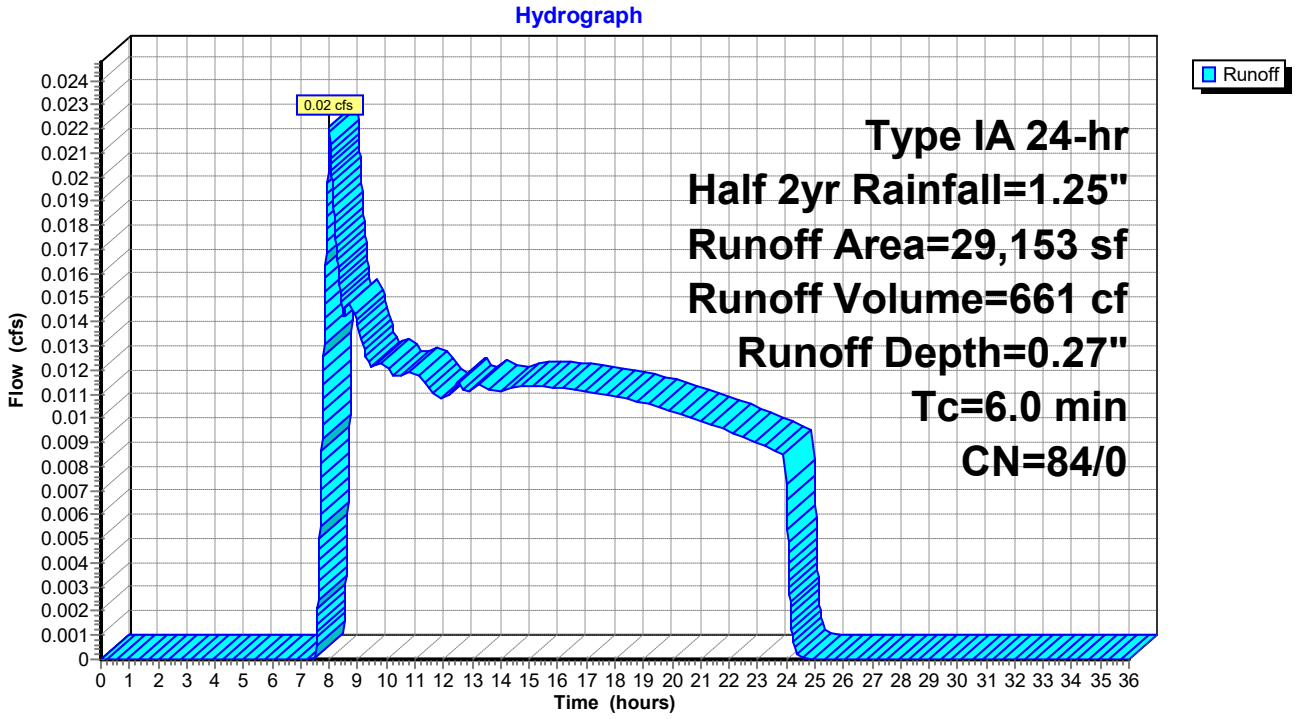
Runoff = 0.02 cfs @ 8.00 hrs, Volume= 661 cf, Depth= 0.27"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr Half 2yr Rainfall=1.25"

Area (sf)	CN	Description
29,153	84	50-75% Grass cover, Fair, HSG D
29,153	84	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment -PRE: Existing Site



Summary for Subcatchment 11S: BASIN 6-SHARED DWY

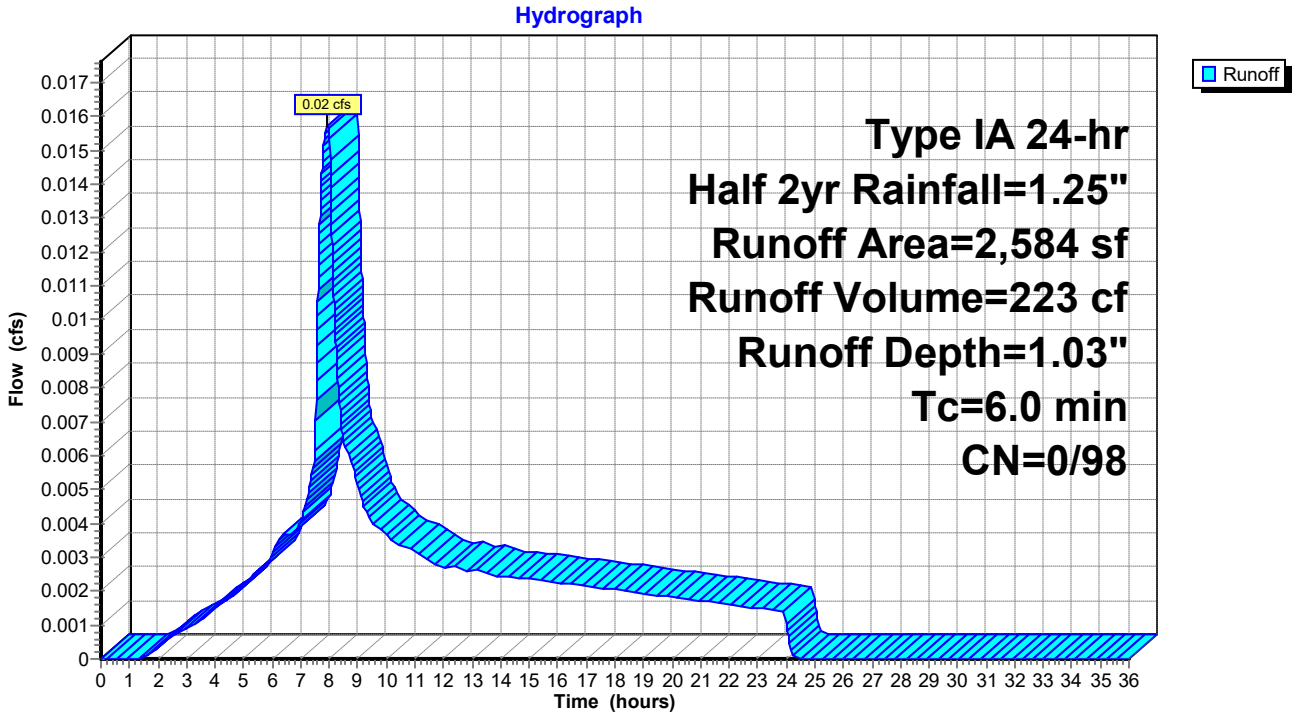
Runoff = 0.02 cfs @ 7.91 hrs, Volume= 223 cf, Depth= 1.03"
Routed to Pond 13P : Raingarden 2

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr Half 2yr Rainfall=1.25"

Area (sf)	CN	Description
2,584	98	Paved parking, HSG D
2,584	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 11S: BASIN 6-SHARED DWY



Summary for Subcatchment 12S: BASIN 5-AC ROAD EYEBROW

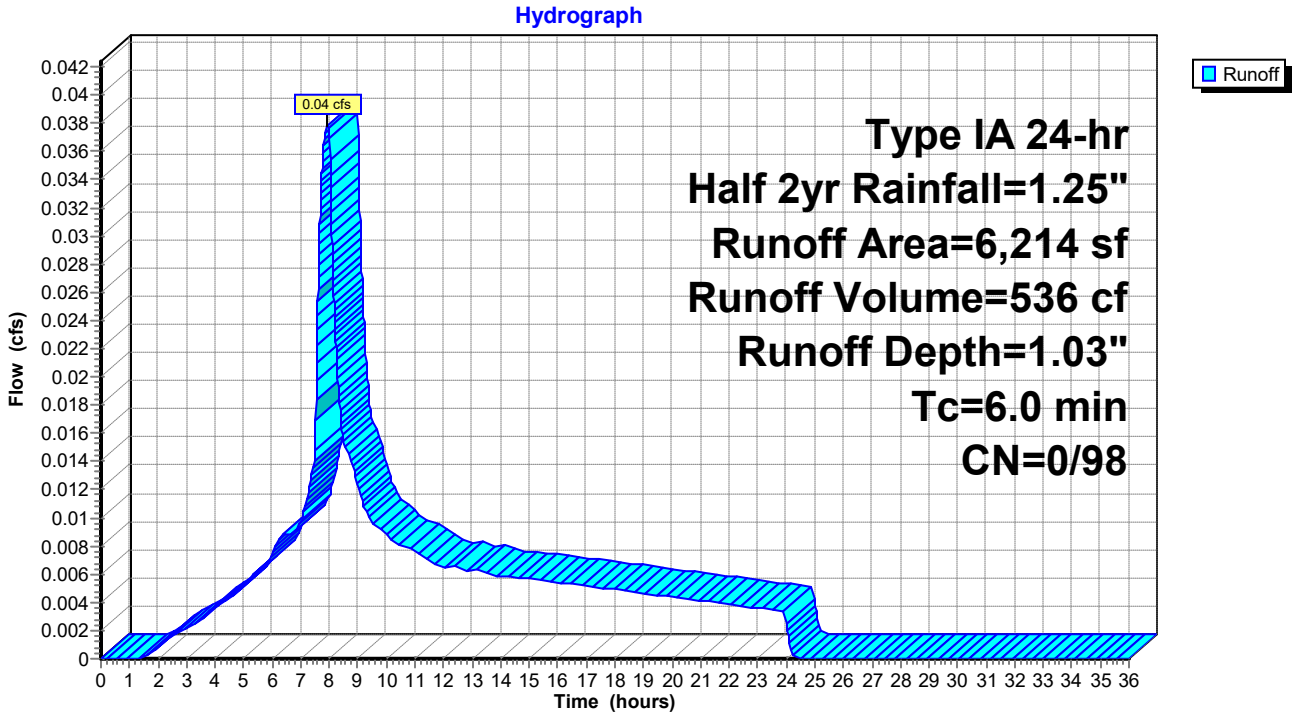
Runoff = 0.04 cfs @ 7.91 hrs, Volume= 536 cf, Depth= 1.03"
Routed to Pond 11P : Raingarden 1

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr Half 2yr Rainfall=1.25"

	Area (sf)	CN	Description
*	4,040	98	AC
	2,174	98	Paved roads w/curbs & sewers, HSG D
	6,214	98	Weighted Average
	6,214	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment 12S: BASIN 5-AC ROAD EYEBROW



Summary for Subcatchment 13S: BASIN 7-Curb Return

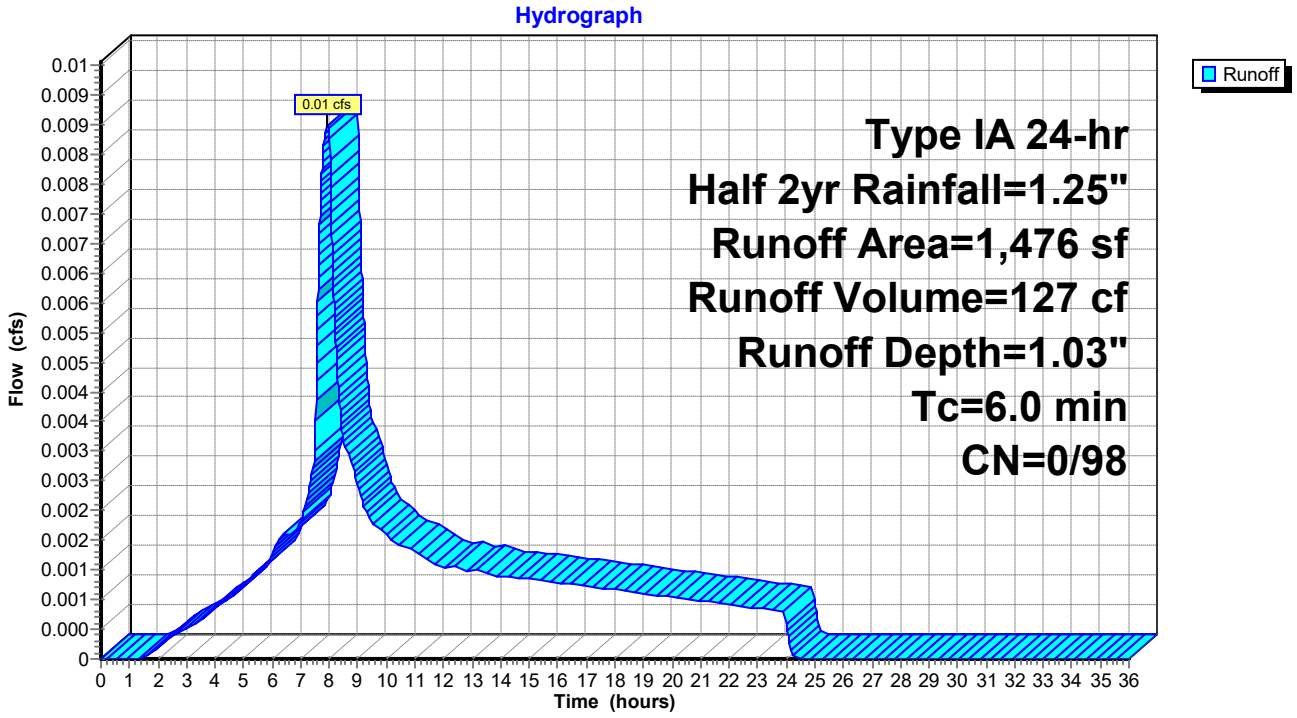
Runoff = 0.01 cfs @ 7.91 hrs, Volume= 127 cf, Depth= 1.03"
Routed to Pond P4 : 18" Detention Pipe

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr Half 2yr Rainfall=1.25"

Area (sf)	CN	Description
1,476	98	Paved roads w/curbs & sewers, HSG D
1,476	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 13S: BASIN 7-Curb Return



Summary for Subcatchment B1: BASIN 1-AC ROAD EAST

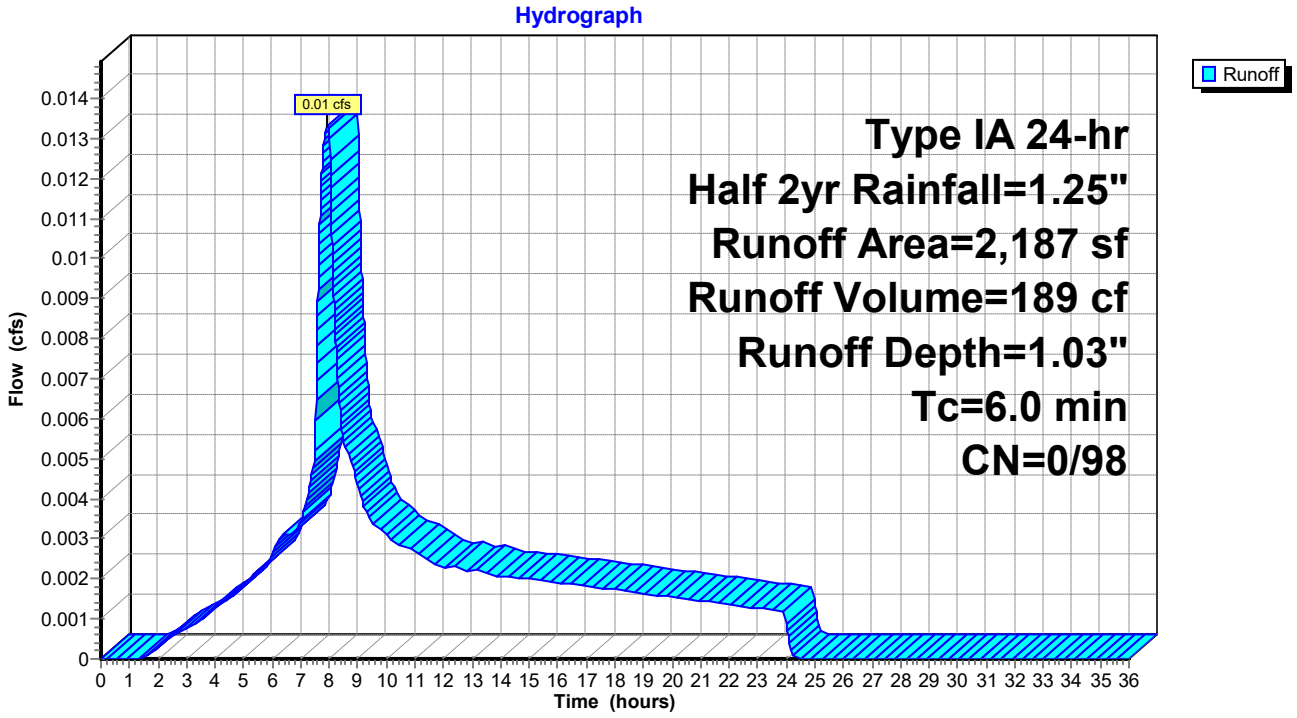
Runoff = 0.01 cfs @ 7.91 hrs, Volume= 189 cf, Depth= 1.03"
Routed to Pond P1 : Street Planter 1

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr Half 2yr Rainfall=1.25"

	Area (sf)	CN	Description
*	2,187	98	AC
	2,187	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment B1: BASIN 1-AC ROAD EAST



Summary for Subcatchment B2: BASIN 2-AC Road West

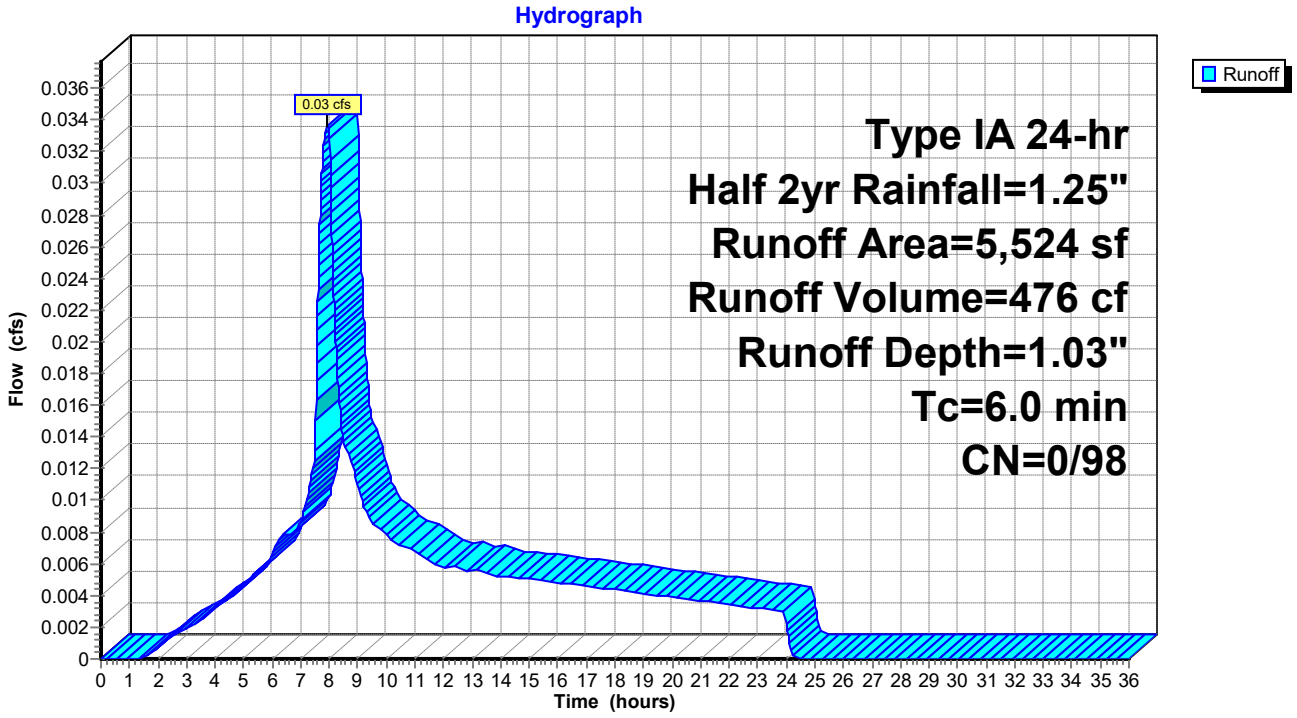
Runoff = 0.03 cfs @ 7.91 hrs, Volume= 476 cf, Depth= 1.03"
Routed to Pond P2 : Street Planter 2

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr Half 2yr Rainfall=1.25"

	Area (sf)	CN	Description
*	5,524	98	Public Impervious
	5,524	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment B2: BASIN 2-AC Road West



Summary for Subcatchment B3: BASIN 3-AC Road Southeast

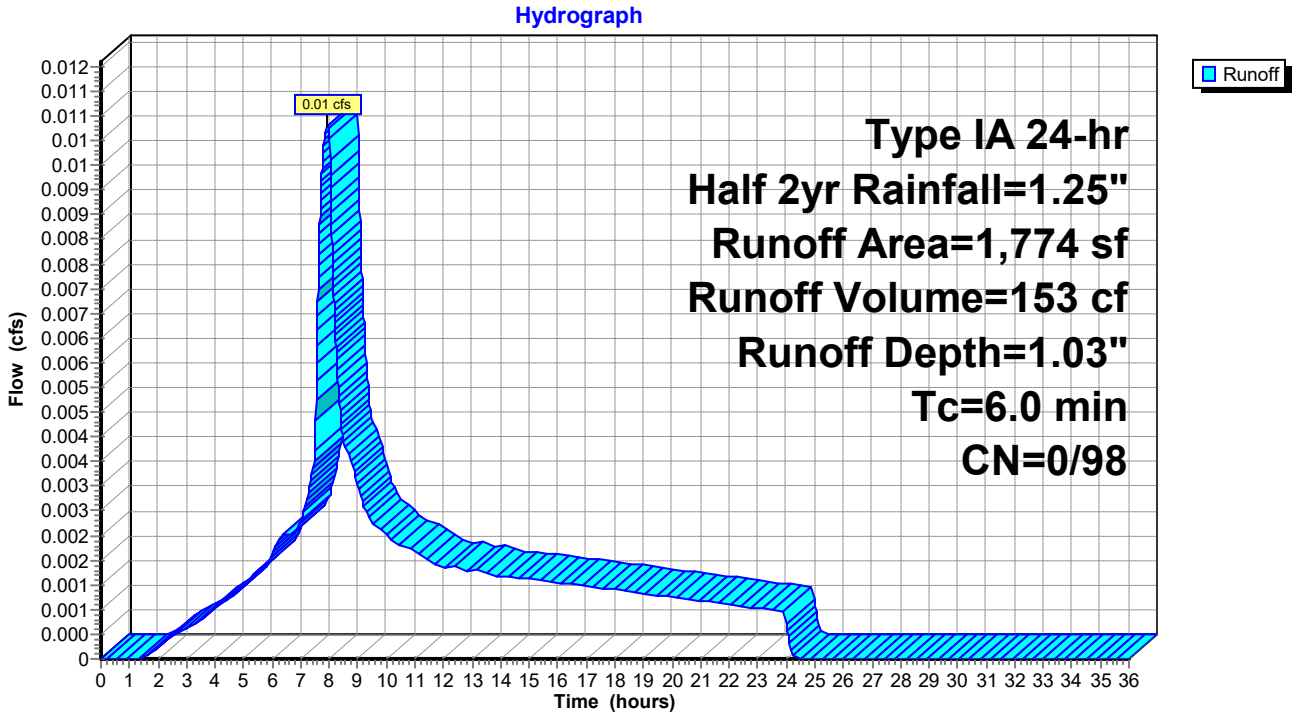
Runoff = 0.01 cfs @ 7.91 hrs, Volume= 153 cf, Depth= 1.03"
Routed to Pond P3 : Street Planter 3

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr Half 2yr Rainfall=1.25"

	Area (sf)	CN	Description
*	1,774	98	Public Impervious
	1,774	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment B3: BASIN 3-AC Road Southeast



Summary for Subcatchment B4: BASIN 4-Lots 1-4 Roof

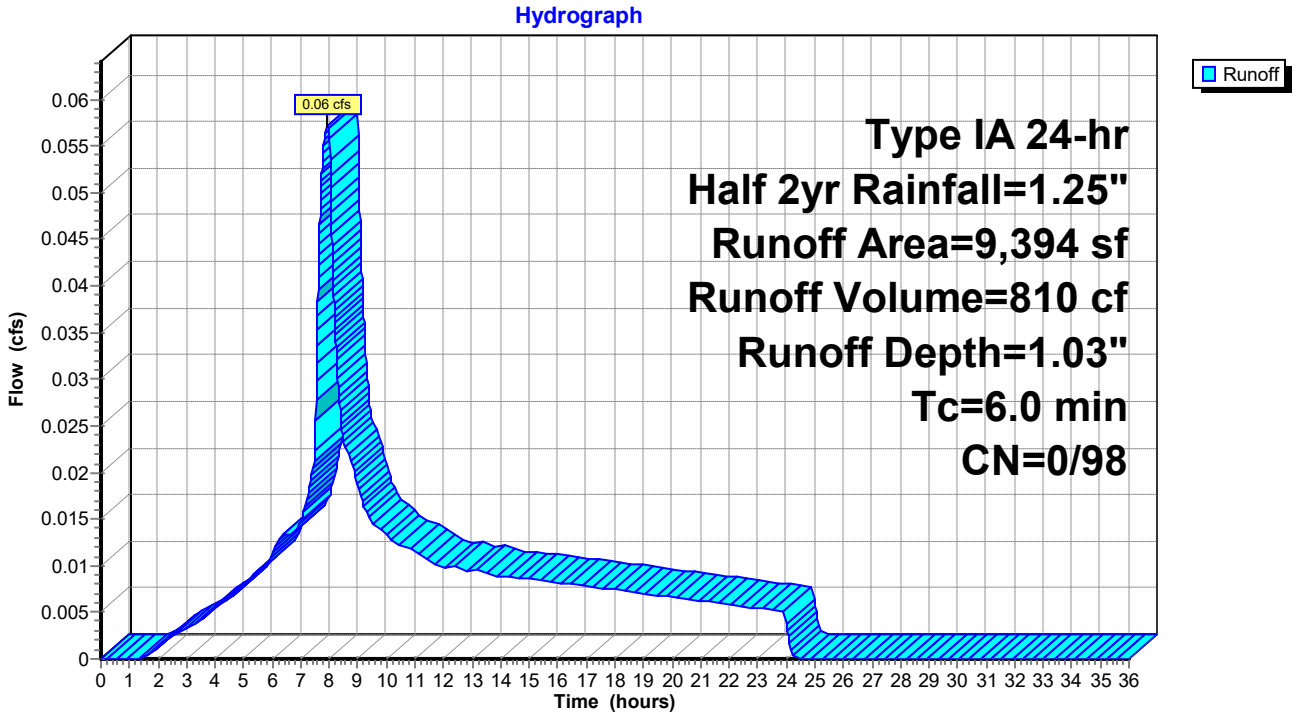
Runoff = 0.06 cfs @ 7.91 hrs, Volume= 810 cf, Depth= 1.03"
Routed to Pond 1P : 36" Detention Pipe

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr Half 2yr Rainfall=1.25"

	Area (sf)	CN	Description
*	9,394	98	Roof Area
	9,394	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment B4: BASIN 4-Lots 1-4 Roof



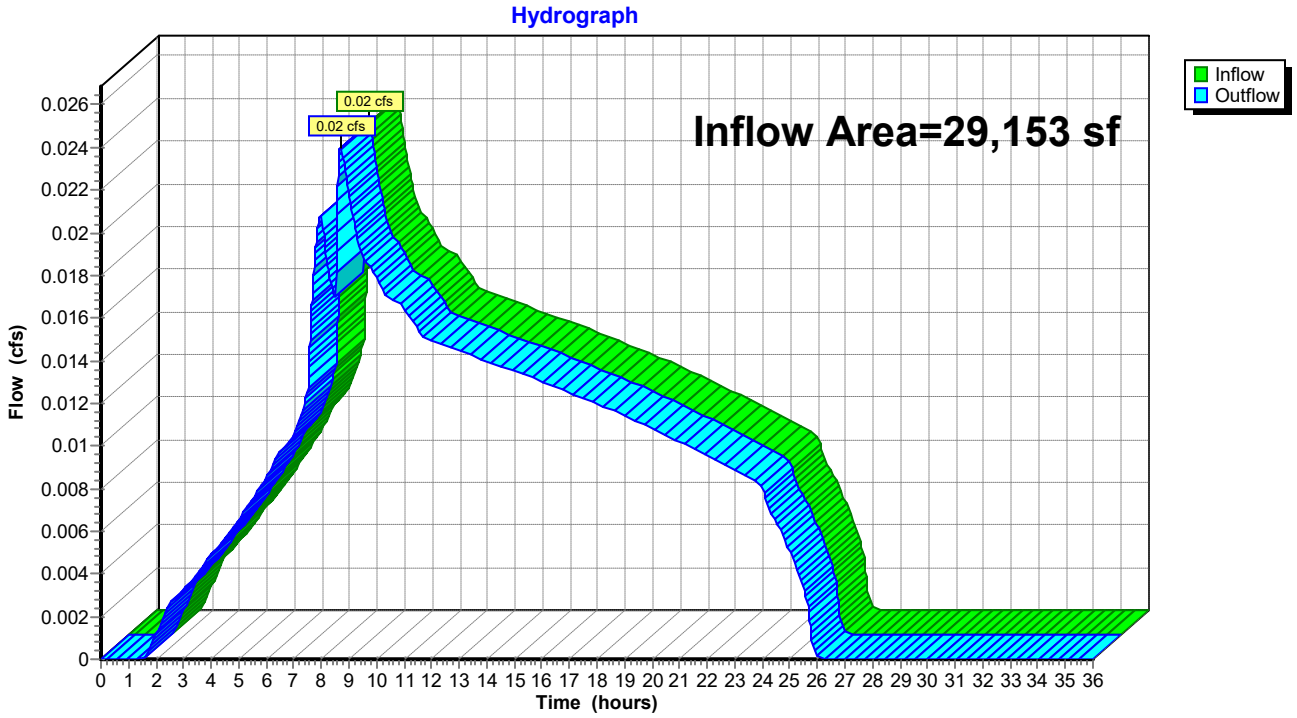
Summary for Reach -POST: Peak Flows from Post-Developed Site

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 29,153 sf,100.00% Impervious, Inflow Depth = 0.40" for Half 2yr event
Inflow = 0.02 cfs @ 8.70 hrs, Volume= 964 cf
Outflow = 0.02 cfs @ 8.70 hrs, Volume= 964 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Reach -POST: Peak Flows from Post-Developed Site



Summary for Pond 1P: 36" Detention Pipe

Inflow Area = 9,394 sf,100.00% Impervious, Inflow Depth = 1.03" for Half 2yr event
Inflow = 0.06 cfs @ 7.91 hrs, Volume= 810 cf
Outflow = 0.01 cfs @ 9.87 hrs, Volume= 810 cf, Atten= 76%, Lag= 117.7 min
Primary = 0.01 cfs @ 9.87 hrs, Volume= 810 cf
Routed to Reach -POST : Peak Flows from Post-Developed Site

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 1.15' @ 9.87 hrs Surf.Area= 219 sf Storage= 187 cf

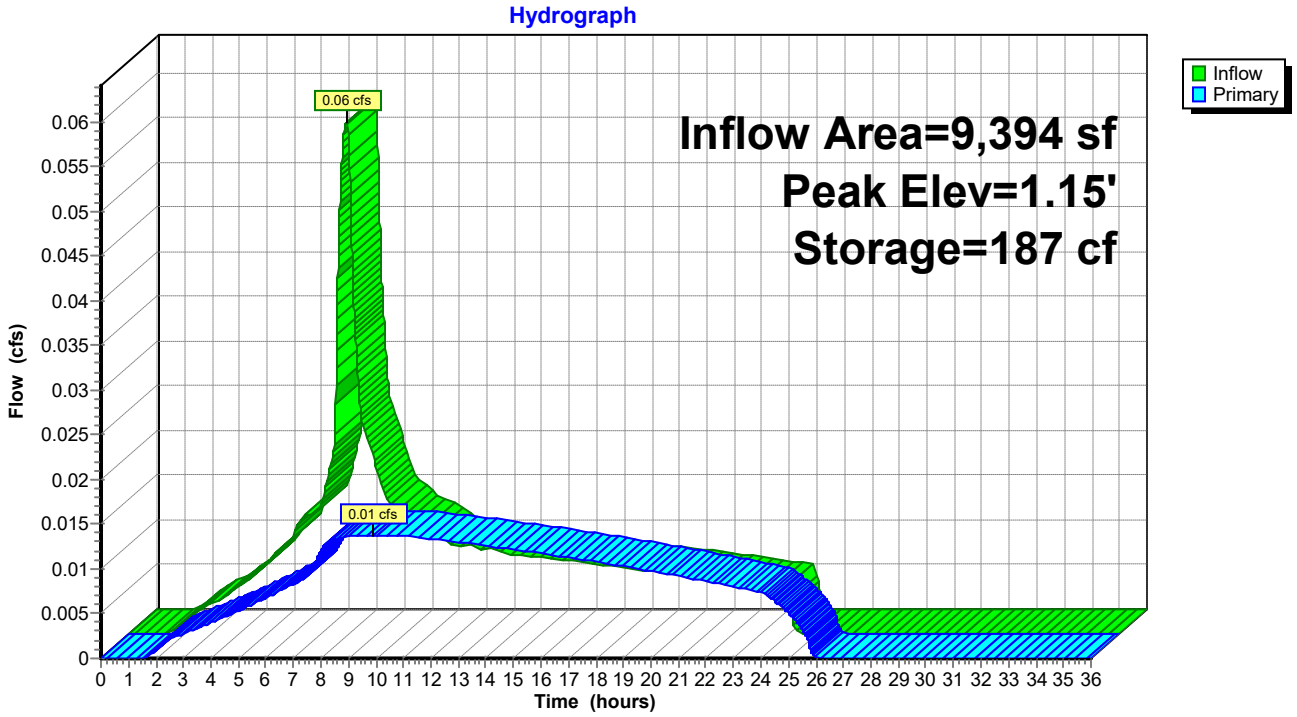
Plug-Flow detention time= 151.2 min calculated for 810 cf (100% of inflow)
Center-of-Mass det. time= 151.1 min (853.0 - 701.8)

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	530 cf	**36.0" Round Pipe Storage** L= 75.0'

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	**0.7" Horiz. Control Orifice** C= 0.600 Limited to weir flow at low heads
#2	Primary	1.50'	**1.8" Horiz. Upper Orifice** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.01 cfs @ 9.87 hrs HW=1.15' (Free Discharge)
└**1=Control Orifice** (Orifice Controls 0.01 cfs @ 5.16 fps)
└**2=Upper Orifice** (Controls 0.00 cfs)

Pond 1P: 36" Detention Pipe



Summary for Pond 11P: Raingarden 1

Inflow Area = 6,214 sf,100.00% Impervious, Inflow Depth = 1.03" for Half 2yr event
Inflow = 0.04 cfs @ 7.91 hrs, Volume= 536 cf
Outflow = 0.01 cfs @ 12.53 hrs, Volume= 536 cf, Atten= 83%, Lag= 277.2 min
Discarded = 0.01 cfs @ 12.53 hrs, Volume= 536 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Routed to Reach -POST : Peak Flows from Post-Developed Site

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 1.48' @ 12.53 hrs Surf.Area= 250 sf Storage= 148 cf

Plug-Flow detention time= 280.0 min calculated for 536 cf (100% of inflow)
Center-of-Mass det. time= 280.0 min (981.8 - 701.8)

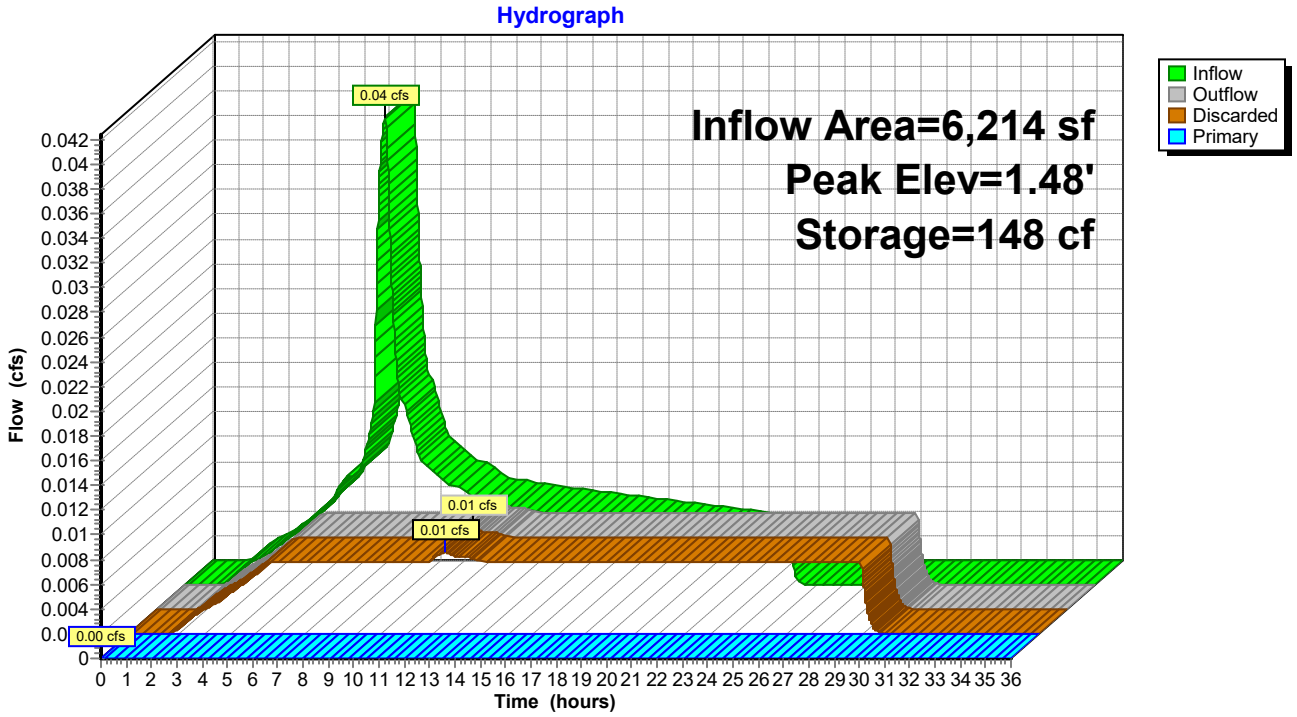
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	150 cf	**10.00'W x 25.00'L x 1.50'H Rock** 375 cf Overall x 40.0% Voids
#2	1.50'	94 cf	**10.00'W x 25.00'L x 1.50'H Growing Medium** 375 cf Overall x 25.0% Voids
#3	3.00'	250 cf	**10.00'W x 25.00'L x 1.00'H Ponding**
		494 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**1.000 in/hr Exfiltration over Horizontal area**
#2	Primary	3.50'	**6.0" Vert. Overflow Orifice** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.01 cfs @ 12.53 hrs HW=1.48' (Free Discharge)
↑—**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=0.00' (Free Discharge)
↑—**2=Overflow Orifice** (Controls 0.00 cfs)

Pond 11P: Raingarden 1



Summary for Pond 13P: Raingarden 2

Inflow Area = 2,584 sf,100.00% Impervious, Inflow Depth = 1.03" for Half 2yr event
Inflow = 0.02 cfs @ 7.91 hrs, Volume= 223 cf
Outflow = 0.00 cfs @ 8.59 hrs, Volume= 223 cf, Atten= 75%, Lag= 40.7 min
Discarded = 0.00 cfs @ 8.59 hrs, Volume= 223 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Routed to Reach -POST : Peak Flows from Post-Developed Site

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 1.68' @ 9.75 hrs Surf.Area= 168 sf Storage= 54 cf

Plug-Flow detention time= 261.3 min calculated for 223 cf (100% of inflow)
Center-of-Mass det. time= 261.3 min (963.1 - 701.8)

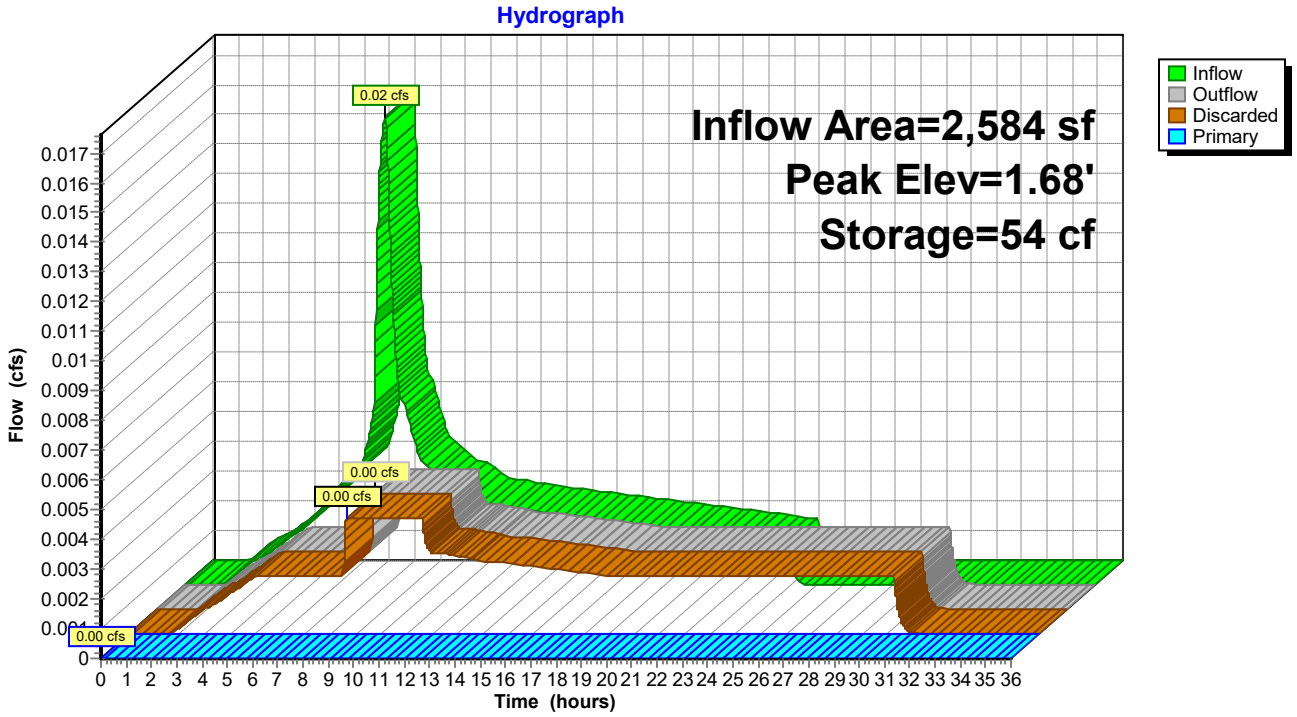
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	50 cf	**6.00'W x 14.00'L x 1.50'H Rock** 126 cf Overall x 40.0% Voids
#2	1.50'	32 cf	**6.00'W x 14.00'L x 1.50'H Growing Medium** 126 cf Overall x 25.0% Voids
#3	3.00'	84 cf	**6.00'W x 14.00'L x 1.00'H Ponding**
		166 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**1.000 in/hr Exfiltration over Horizontal area**
#2	Primary	3.50'	**6.0" Vert. Overflow Orifice** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.00 cfs @ 8.59 hrs HW=1.50' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=0.00' (Free Discharge)
↑**2=Overflow Orifice** (Controls 0.00 cfs)

Pond 13P: Raingarden 2



Summary for Pond P1: Street Planter 1

Inflow Area = 2,187 sf,100.00% Impervious, Inflow Depth = 1.03" for Half 2yr event
Inflow = 0.01 cfs @ 7.91 hrs, Volume= 189 cf
Outflow = 0.00 cfs @ 11.70 hrs, Volume= 189 cf, Atten= 82%, Lag= 227.4 min
Discarded = 0.00 cfs @ 11.70 hrs, Volume= 189 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Routed to Pond P4 : 18" Detention Pipe

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 1.48' @ 11.70 hrs Surf.Area= 88 sf Storage= 52 cf

Plug-Flow detention time= 280.0 min calculated for 189 cf (100% of inflow)
Center-of-Mass det. time= 280.0 min (981.9 - 701.8)

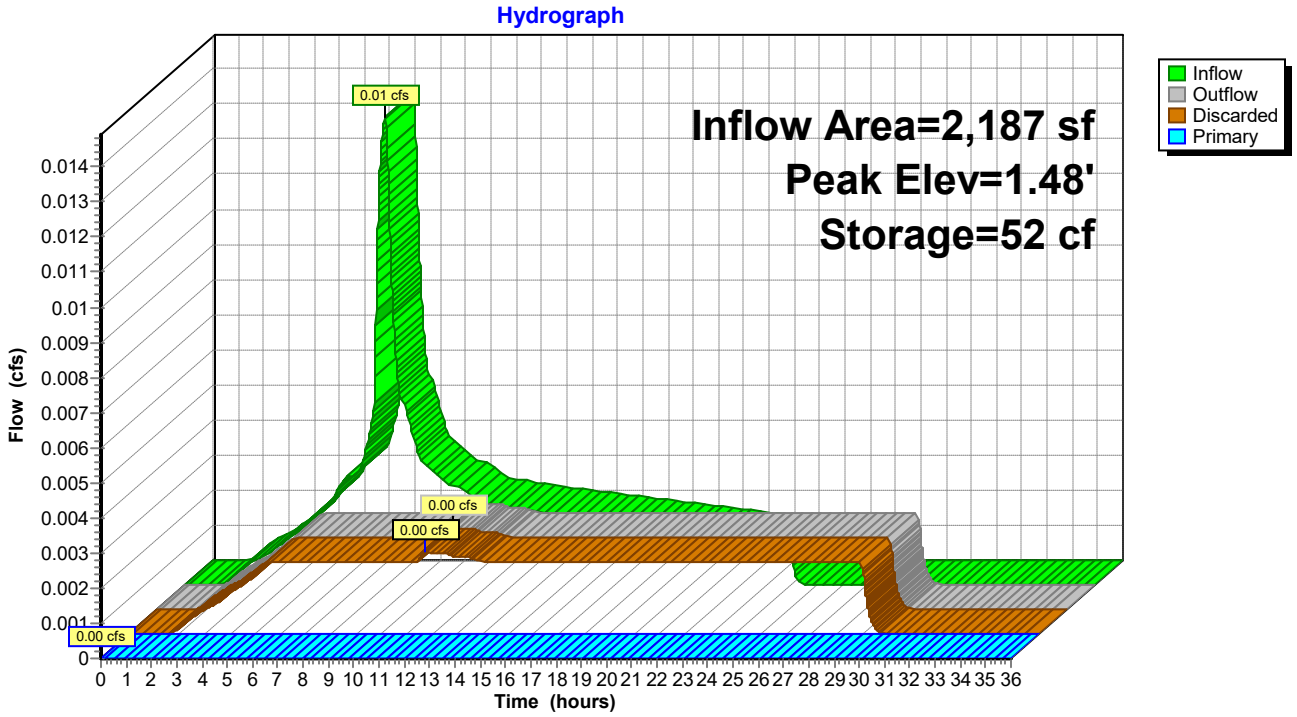
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	53 cf	**5.00'W x 17.50'L x 1.50'H Rock** 131 cf Overall x 40.0% Voids
#2	1.50'	33 cf	**5.00'W x 17.50'L x 1.50'H Growing Medium** 131 cf Overall x 25.0% Voids
#3	3.00'	88 cf	**5.00'W x 17.50'L x 1.00'H Ponding**
		173 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**1.000 in/hr Exfiltration over Horizontal area**
#2	Primary	3.50'	**6.0" Vert. Overflow Orifice** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.00 cfs @ 11.70 hrs HW=1.48' (Free Discharge)
↑—**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=0.00' (Free Discharge)
↑—**2=Overflow Orifice** (Controls 0.00 cfs)

Pond P1: Street Planter 1



Summary for Pond P2: Street Planter 2

Inflow Area = 5,524 sf,100.00% Impervious, Inflow Depth = 1.03" for Half 2yr event
Inflow = 0.03 cfs @ 7.91 hrs, Volume= 476 cf
Outflow = 0.01 cfs @ 8.66 hrs, Volume= 476 cf, Atten= 61%, Lag= 44.9 min
Discarded = 0.01 cfs @ 7.84 hrs, Volume= 449 cf
Primary = 0.01 cfs @ 8.66 hrs, Volume= 27 cf
Routed to Pond P4 : 18" Detention Pipe

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 3.51' @ 8.66 hrs Surf.Area= 258 sf Storage= 128 cf

Plug-Flow detention time= 274.1 min calculated for 476 cf (100% of inflow)
Center-of-Mass det. time= 274.1 min (976.0 - 701.8)

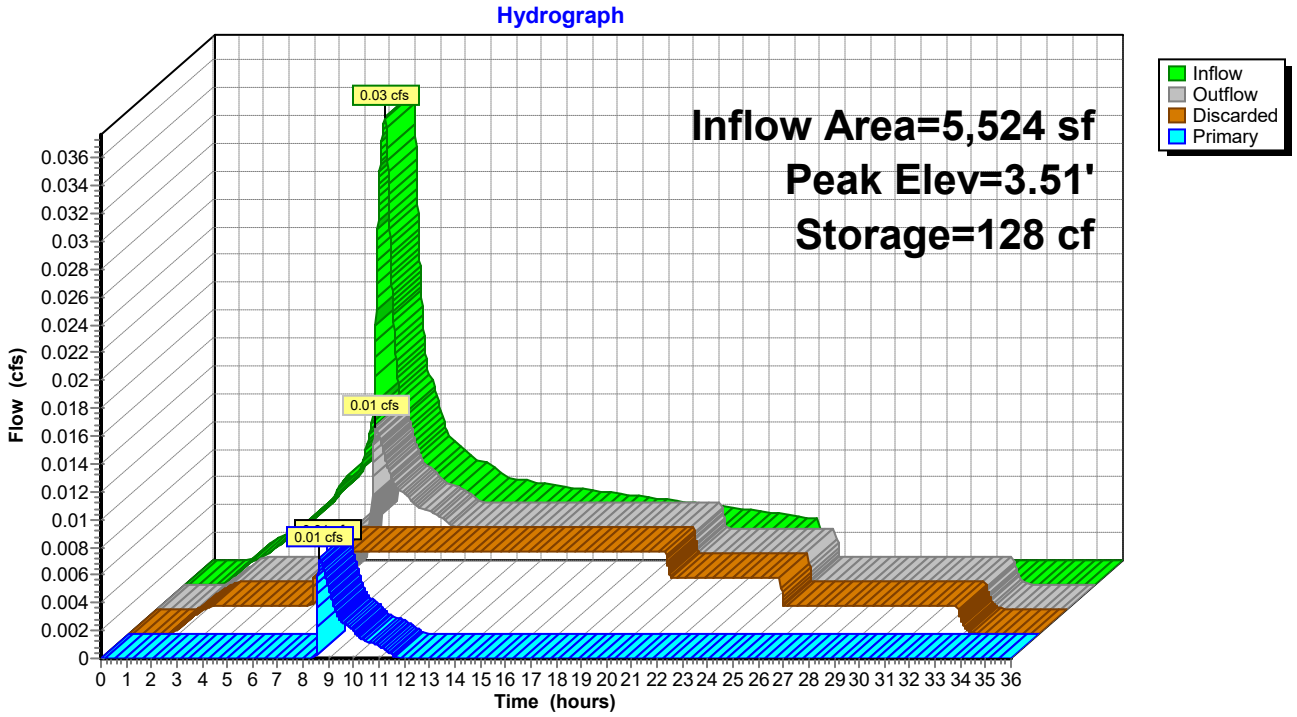
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	52 cf	**5.00'W x 17.20'L x 1.50'H Rock** 129 cf Overall x 40.0% Voids
#2	1.50'	32 cf	**5.00'W x 17.20'L x 1.50'H Growing Medium** 129 cf Overall x 25.0% Voids
#3	3.00'	86 cf	**5.00'W x 17.20'L x 1.00'H Ponding**
		170 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**1.000 in/hr Exfiltration over Horizontal area**
#2	Primary	3.50'	**6.0" Horiz. Overflow Orifice** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.01 cfs @ 7.84 hrs HW=3.01' (Free Discharge)
↑—**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 8.66 hrs HW=3.51' (Free Discharge)
↑—**2=Overflow Orifice** (Weir Controls 0.00 cfs @ 0.32 fps)

Pond P2: Street Planter 2



Summary for Pond P3: Street Planter 3

Inflow Area = 1,774 sf,100.00% Impervious, Inflow Depth = 1.03" for Half 2yr event
Inflow = 0.01 cfs @ 7.91 hrs, Volume= 153 cf
Outflow = 0.00 cfs @ 7.16 hrs, Volume= 153 cf, Atten= 74%, Lag= 0.0 min
Discarded = 0.00 cfs @ 7.16 hrs, Volume= 153 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Routed to Pond P4 : 18" Detention Pipe

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 0.49' @ 9.43 hrs Surf.Area= 121 sf Storage= 24 cf

Plug-Flow detention time= 58.6 min calculated for 153 cf (100% of inflow)
Center-of-Mass det. time= 58.6 min (760.4 - 701.8)

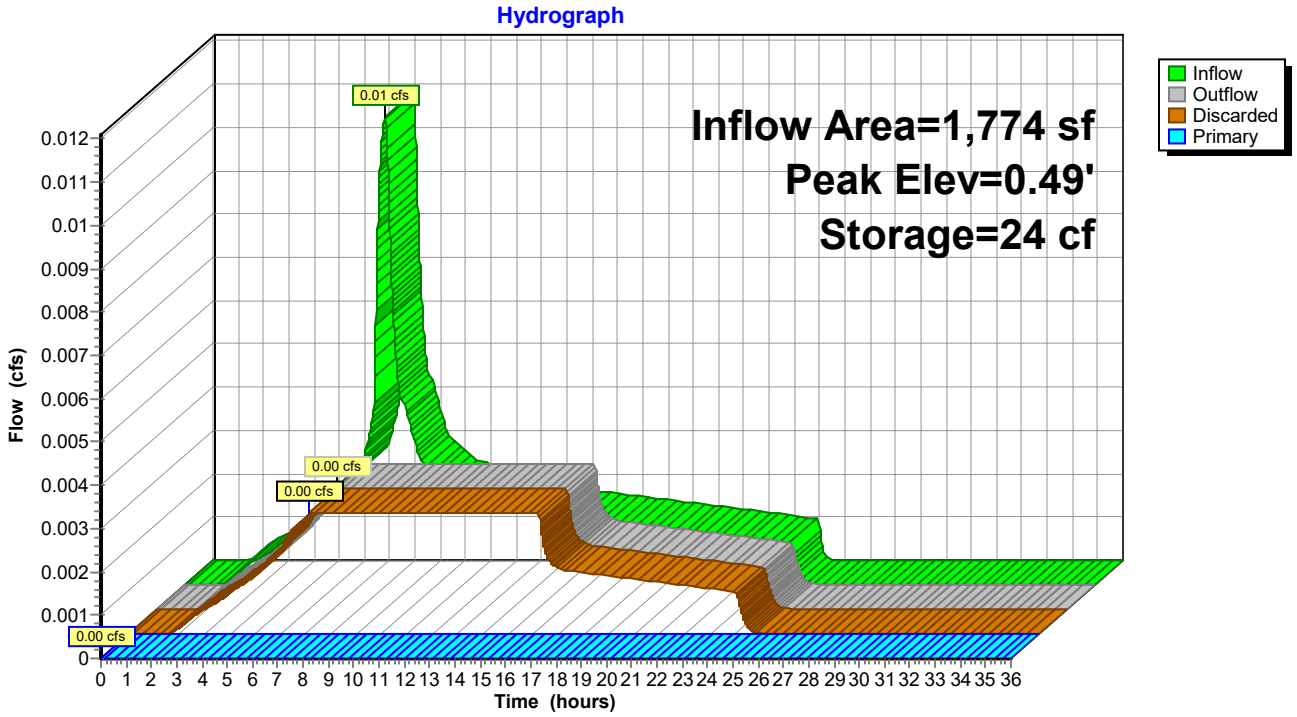
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	73 cf	**5.00'W x 24.20'L x 1.50'H Rock** 182 cf Overall x 40.0% Voids
#2	1.50'	45 cf	**5.00'W x 24.20'L x 1.50'H Growing Medium** 182 cf Overall x 25.0% Voids
#3	3.00'	121 cf	**5.00'W x 24.20'L x 1.00'H Ponding**
		239 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**1.000 in/hr Exfiltration over Horizontal area**
#2	Primary	3.50'	**6.0" Horiz. Overflow Orifice** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.00 cfs @ 7.16 hrs HW=0.04' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=0.00' (Free Discharge)
↑**2=Overflow Orifice** (Controls 0.00 cfs)

Pond P3: Street Planter 3



Summary for Pond P4: 18" Detention Pipe

[92] Warning: Device #2 is above defined storage
[92] Warning: Device #3 is above defined storage

Inflow Area = 10,961 sf,100.00% Impervious, Inflow Depth = 0.17" for Half 2yr event
Inflow = 0.01 cfs @ 8.65 hrs, Volume= 154 cf
Outflow = 0.01 cfs @ 8.69 hrs, Volume= 154 cf, Atten= 1%, Lag= 2.3 min
Primary = 0.01 cfs @ 8.69 hrs, Volume= 154 cf
Routed to Reach -POST : Peak Flows from Post-Developed Site

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 0.03' @ 8.69 hrs Surf.Area= 43 sf Storage= 1 cf

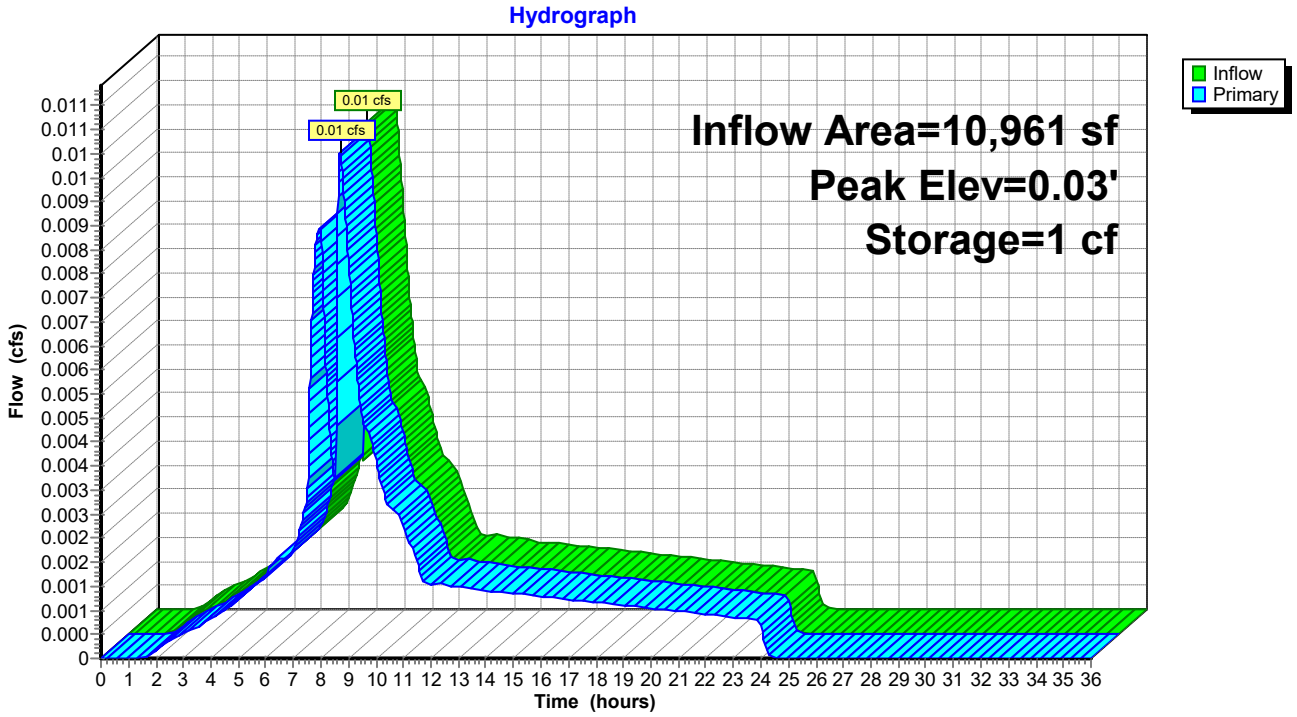
Plug-Flow detention time= 1.6 min calculated for 154 cf (100% of inflow)
Center-of-Mass det. time= 1.6 min (679.5 - 677.9)

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	177 cf	**18.0" Round Pipe Storage** L= 100.0'

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	**2.0" Horiz. Control Orifice** C= 0.600 Limited to weir flow at low heads
#2	Primary	2.20'	**2.0" Horiz. Upper Orifice** C= 0.600 Limited to weir flow at low heads
#3	Primary	2.80'	**12.0" Vert. Overflow** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.01 cfs @ 8.69 hrs HW=0.03' (Free Discharge)
└**1=Control Orifice** (Weir Controls 0.01 cfs @ 0.58 fps)
└**2=Upper Orifice** (Controls 0.00 cfs)
└**3=Overflow** (Controls 0.00 cfs)

Pond P4: 18" Detention Pipe



Time span=0.00-36.00 hrs, dt=0.01 hrs, 3601 points
Runoff by SBUH method, Split Pervious/Imperv.
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment -PRE: Existing Site Runoff Area=29,153 sf 0.00% Impervious Runoff Depth=0.15"
Tc=6.0 min CN=84/0 Runoff=0.01 cfs 369 cf

Subcatchment 11S: BASIN 6-SHARED DWY Runoff Area=2,584 sf 100.00% Impervious Runoff Depth=0.79"
Tc=6.0 min CN=0/98 Runoff=0.01 cfs 170 cf

Subcatchment 12S: BASIN 5-AC ROAD Runoff Area=6,214 sf 100.00% Impervious Runoff Depth=0.79"
Tc=6.0 min CN=0/98 Runoff=0.03 cfs 410 cf

Subcatchment 13S: BASIN 7-Curb Return Runoff Area=1,476 sf 100.00% Impervious Runoff Depth=0.79"
Tc=6.0 min CN=0/98 Runoff=0.01 cfs 97 cf

Subcatchment B1: BASIN 1-AC ROAD Runoff Area=2,187 sf 100.00% Impervious Runoff Depth=0.79"
Tc=6.0 min CN=0/98 Runoff=0.01 cfs 144 cf

Subcatchment B2: BASIN 2-AC Road West Runoff Area=5,524 sf 100.00% Impervious Runoff Depth=0.79"
Tc=6.0 min CN=0/98 Runoff=0.03 cfs 364 cf

Subcatchment B3: BASIN 3-AC Road Runoff Area=1,774 sf 100.00% Impervious Runoff Depth=0.79"
Tc=6.0 min CN=0/98 Runoff=0.01 cfs 117 cf

Subcatchment B4: BASIN 4-Lots 1-4 Roof Runoff Area=9,394 sf 100.00% Impervious Runoff Depth=0.79"
Tc=6.0 min CN=0/98 Runoff=0.04 cfs 619 cf

Reach -POST: Peak Flows from Post-Developed Site Inflow=0.02 cfs 716 cf
Outflow=0.02 cfs 716 cf

Pond 1P: 36" Detention Pipe Peak Elev=0.85' Storage=124 cf Inflow=0.04 cfs 619 cf
Outflow=0.01 cfs 619 cf

Pond 11P: Raingarden 1 Peak Elev=0.85' Storage=85 cf Inflow=0.03 cfs 410 cf
Discarded=0.01 cfs 410 cf Primary=0.00 cfs 0 cf Outflow=0.01 cfs 410 cf

Pond 13P: Raingarden 2 Peak Elev=1.35' Storage=45 cf Inflow=0.01 cfs 170 cf
Discarded=0.00 cfs 170 cf Primary=0.00 cfs 0 cf Outflow=0.00 cfs 170 cf

Pond P1: Street Planter 1 Peak Elev=0.86' Storage=30 cf Inflow=0.01 cfs 144 cf
Discarded=0.00 cfs 144 cf Primary=0.00 cfs 0 cf Outflow=0.00 cfs 144 cf

Pond P2: Street Planter 2 Peak Elev=3.17' Storage=98 cf Inflow=0.03 cfs 364 cf
Discarded=0.01 cfs 364 cf Primary=0.00 cfs 0 cf Outflow=0.01 cfs 364 cf

Pond P3: Street Planter 3 Peak Elev=0.29' Storage=14 cf Inflow=0.01 cfs 117 cf
Discarded=0.00 cfs 117 cf Primary=0.00 cfs 0 cf Outflow=0.00 cfs 117 cf

Pond P4: 18" Detention Pipe Peak Elev=0.02' Storage=0 cf Inflow=0.01 cfs 97 cf
Outflow=0.01 cfs 97 cf

Total Runoff Area = 58,306 sf Runoff Volume = 2,290 cf Average Runoff Depth = 0.47"
50.00% Pervious = 29,153 sf 50.00% Impervious = 29,153 sf

Summary for Subcatchment -PRE: Existing Site

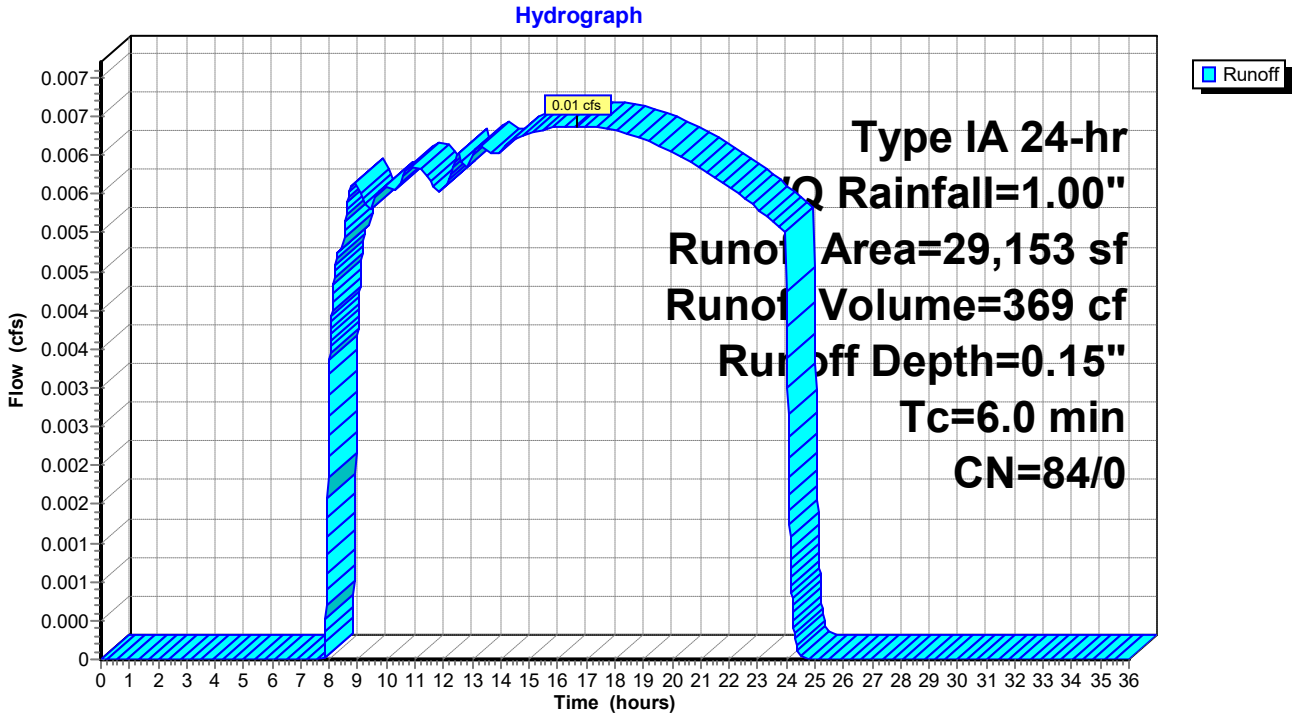
Runoff = 0.01 cfs @ 16.64 hrs, Volume= 369 cf, Depth= 0.15"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr WQ Rainfall=1.00"

Area (sf)	CN	Description
29,153	84	50-75% Grass cover, Fair, HSG D
29,153	84	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment -PRE: Existing Site



Summary for Subcatchment 11S: BASIN 6-SHARED DWY

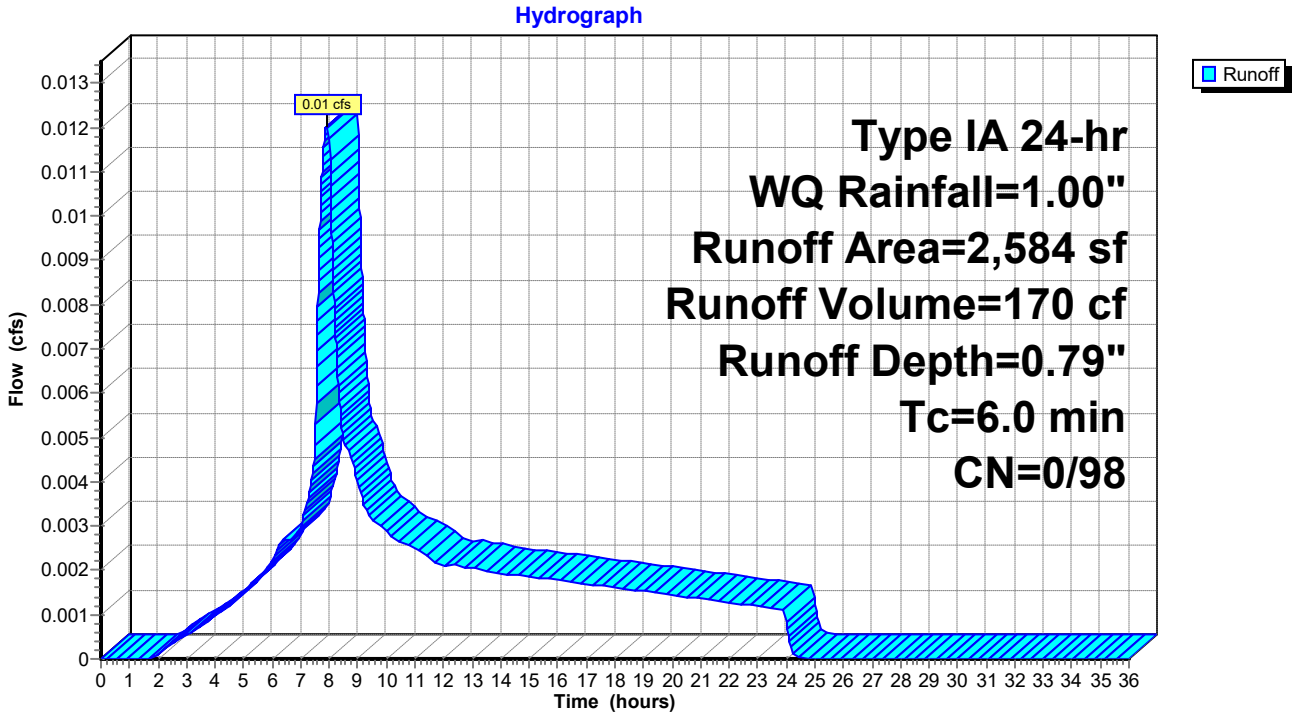
Runoff = 0.01 cfs @ 7.92 hrs, Volume= 170 cf, Depth= 0.79"
Routed to Pond 13P : Raingarden 2

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr WQ Rainfall=1.00"

Area (sf)	CN	Description
2,584	98	Paved parking, HSG D
2,584	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 11S: BASIN 6-SHARED DWY



Summary for Subcatchment 12S: BASIN 5-AC ROAD EYEBROW

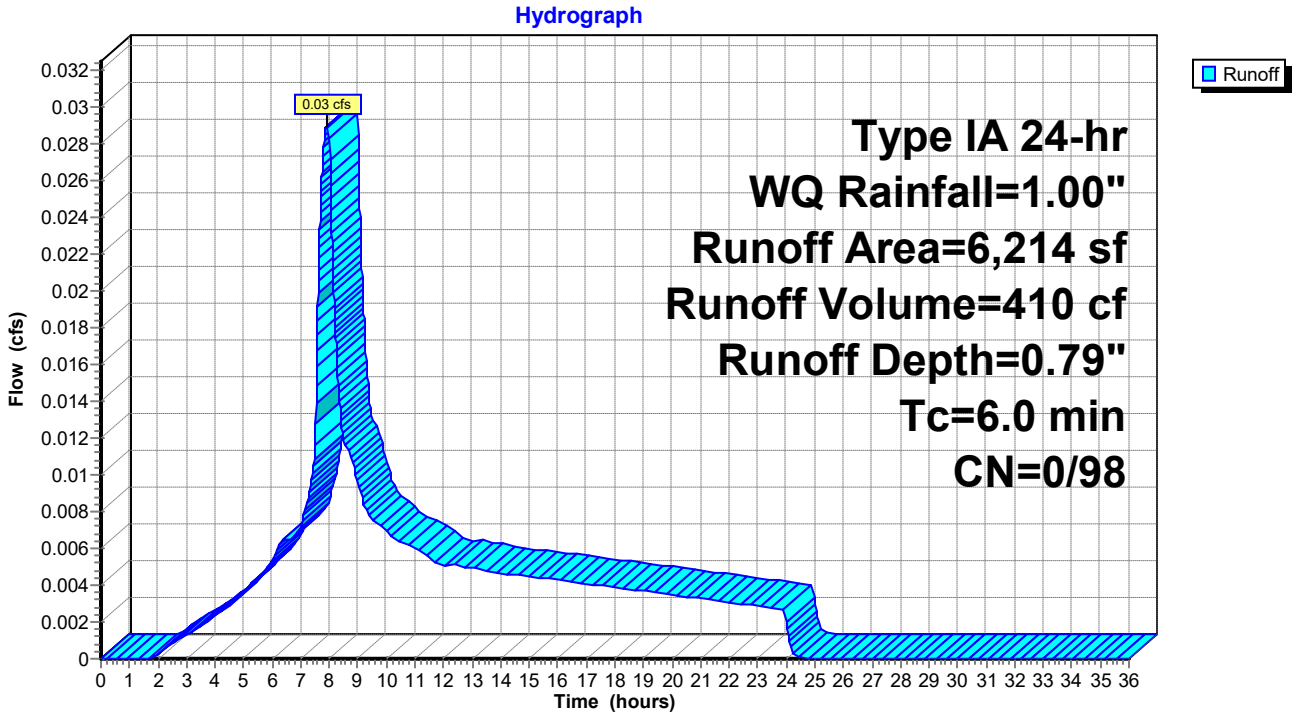
Runoff = 0.03 cfs @ 7.92 hrs, Volume= 410 cf, Depth= 0.79"
Routed to Pond 11P : Raingarden 1

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr WQ Rainfall=1.00"

	Area (sf)	CN	Description
*	4,040	98	AC
	2,174	98	Paved roads w/curbs & sewers, HSG D
	6,214	98	Weighted Average
	6,214	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment 12S: BASIN 5-AC ROAD EYEBROW



Summary for Subcatchment 13S: BASIN 7-Curb Return

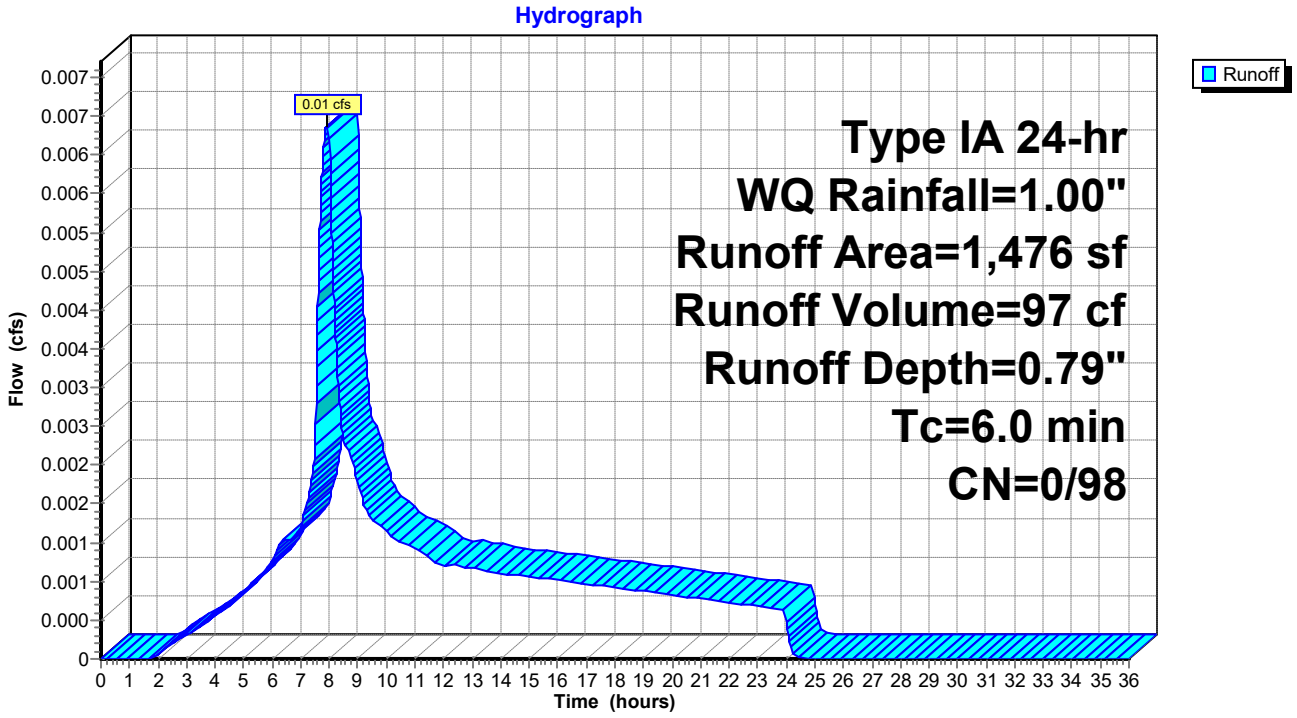
Runoff = 0.01 cfs @ 7.92 hrs, Volume= 97 cf, Depth= 0.79"
Routed to Pond P4 : 18" Detention Pipe

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr WQ Rainfall=1.00"

Area (sf)	CN	Description
1,476	98	Paved roads w/curbs & sewers, HSG D
1,476	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 13S: BASIN 7-Curb Return



Summary for Subcatchment B1: BASIN 1-AC ROAD EAST

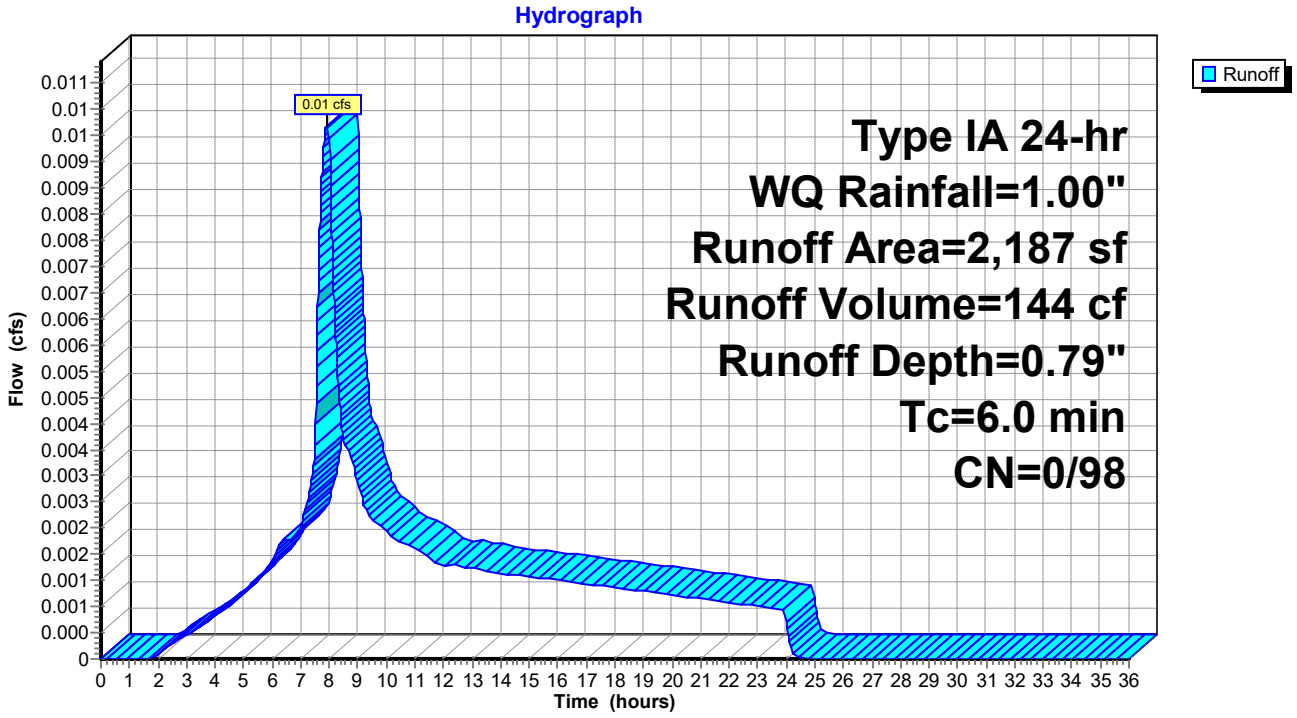
Runoff = 0.01 cfs @ 7.92 hrs, Volume= 144 cf, Depth= 0.79"
Routed to Pond P1 : Street Planter 1

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr WQ Rainfall=1.00"

	Area (sf)	CN	Description
*	2,187	98	AC
	2,187	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment B1: BASIN 1-AC ROAD EAST



Summary for Subcatchment B2: BASIN 2-AC Road West

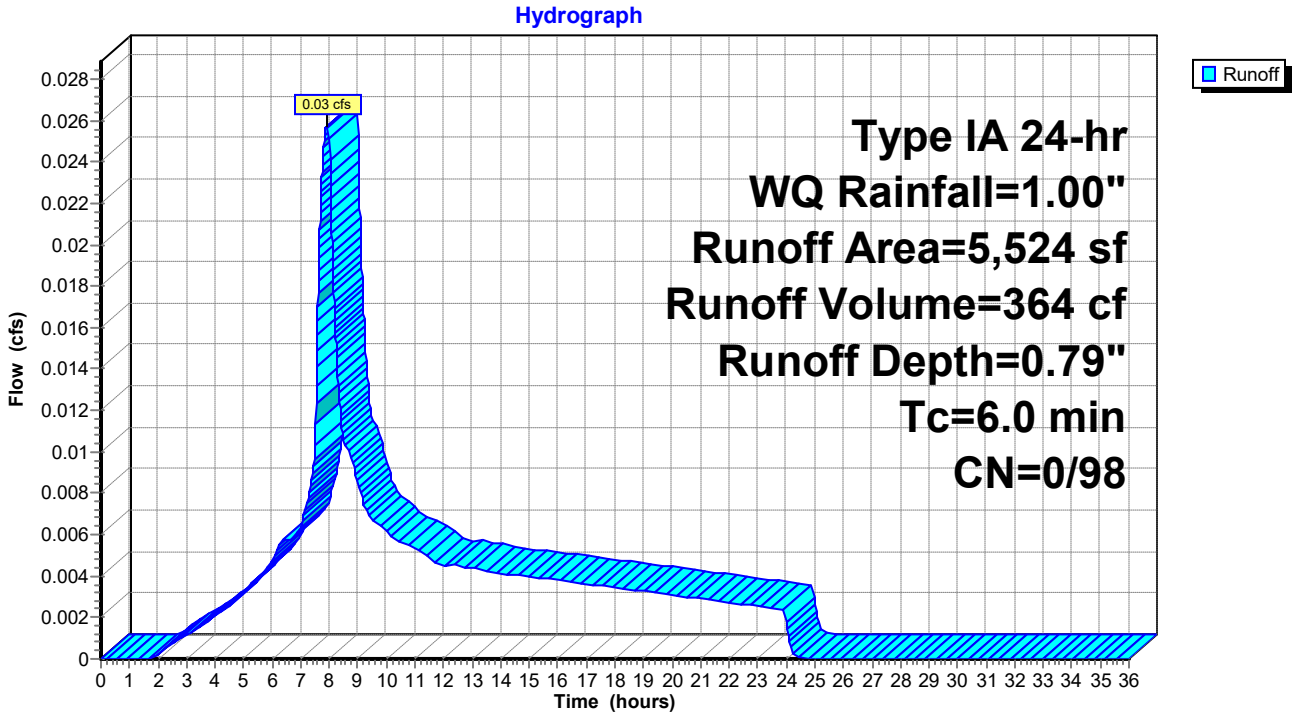
Runoff = 0.03 cfs @ 7.92 hrs, Volume= 364 cf, Depth= 0.79"
Routed to Pond P2 : Street Planter 2

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr WQ Rainfall=1.00"

	Area (sf)	CN	Description
*	5,524	98	Public Impervious
	5,524	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment B2: BASIN 2-AC Road West



Summary for Subcatchment B3: BASIN 3-AC Road Southeast

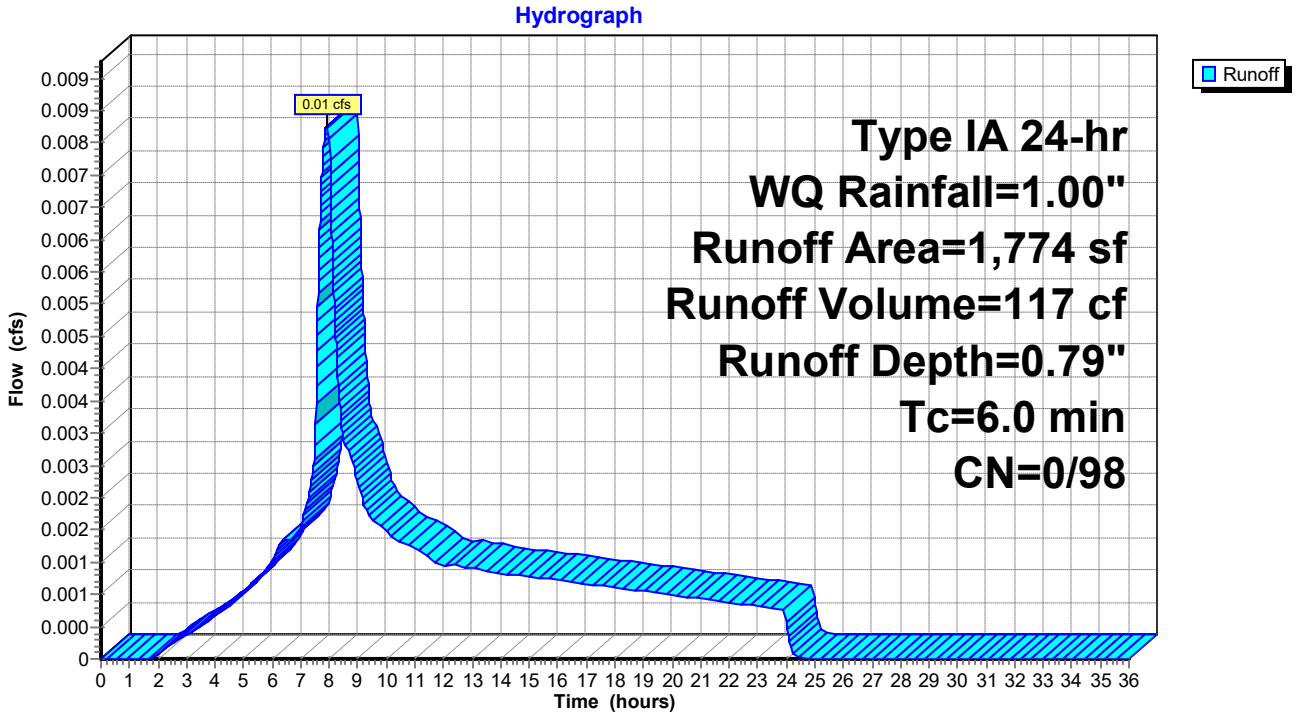
Runoff = 0.01 cfs @ 7.92 hrs, Volume= 117 cf, Depth= 0.79"
Routed to Pond P3 : Street Planter 3

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr WQ Rainfall=1.00"

	Area (sf)	CN	Description
*	1,774	98	Public Impervious
	1,774	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment B3: BASIN 3-AC Road Southeast



Summary for Subcatchment B4: BASIN 4-Lots 1-4 Roof

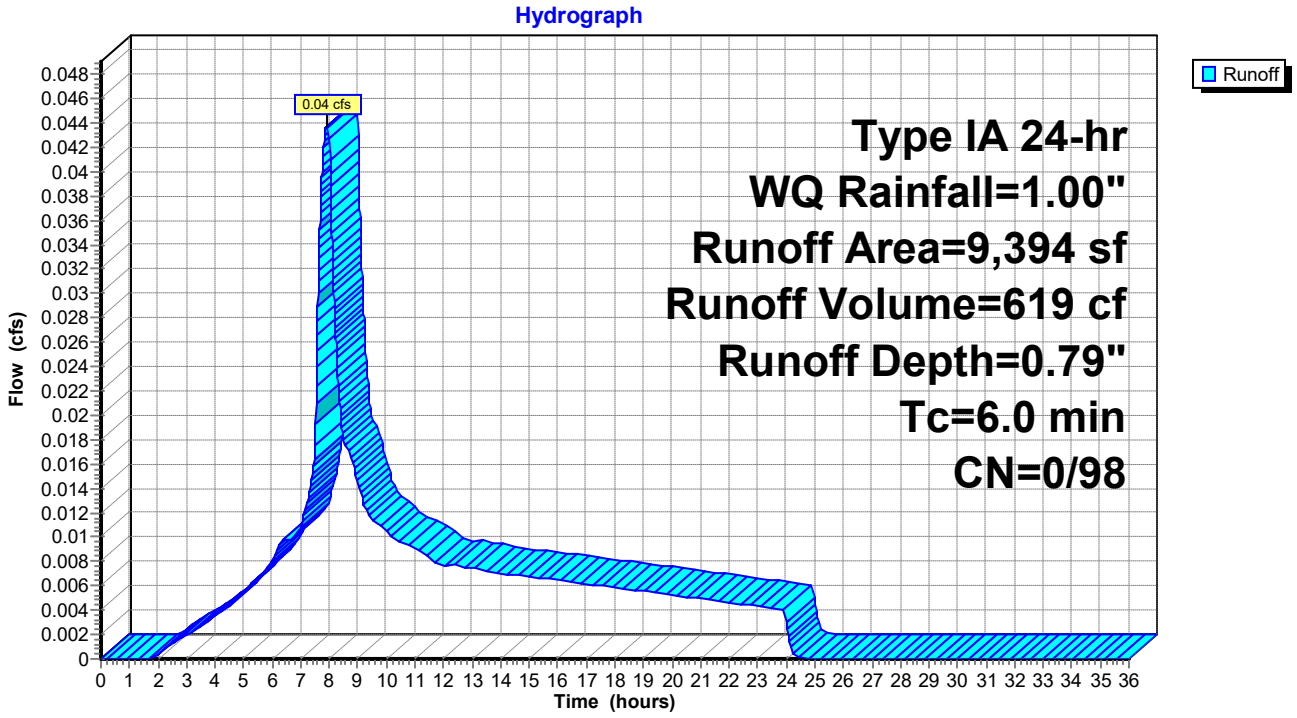
Runoff = 0.04 cfs @ 7.92 hrs, Volume= 619 cf, Depth= 0.79"
Routed to Pond 1P : 36" Detention Pipe

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr WQ Rainfall=1.00"

	Area (sf)	CN	Description
*	9,394	98	Roof Area
	9,394	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment B4: BASIN 4-Lots 1-4 Roof



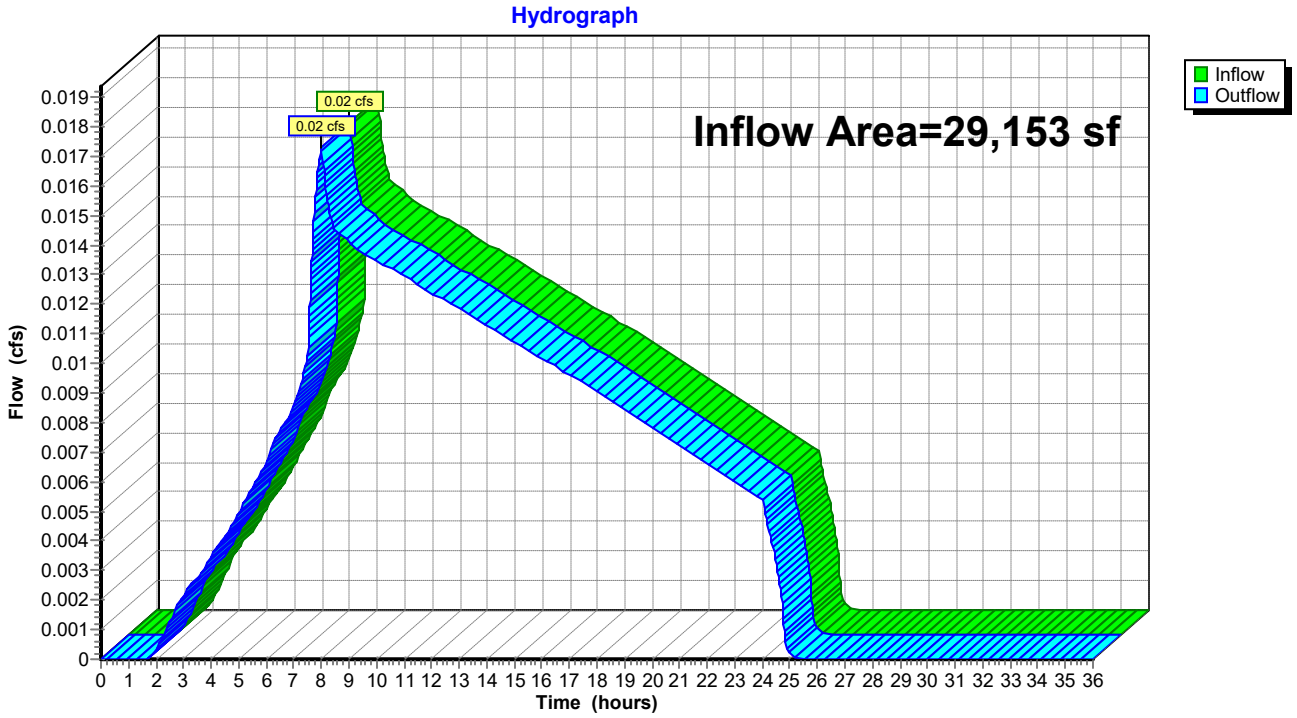
Summary for Reach -POST: Peak Flows from Post-Developed Site

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 29,153 sf,100.00% Impervious, Inflow Depth = 0.29" for WQ event
Inflow = 0.02 cfs @ 8.01 hrs, Volume= 716 cf
Outflow = 0.02 cfs @ 8.01 hrs, Volume= 716 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Reach -POST: Peak Flows from Post-Developed Site



Summary for Pond 1P: 36" Detention Pipe

Inflow Area = 9,394 sf,100.00% Impervious, Inflow Depth = 0.79" for WQ event
Inflow = 0.04 cfs @ 7.92 hrs, Volume= 619 cf
Outflow = 0.01 cfs @ 9.35 hrs, Volume= 619 cf, Atten= 73%, Lag= 86.0 min
Primary = 0.01 cfs @ 9.35 hrs, Volume= 619 cf
Routed to Reach -POST : Peak Flows from Post-Developed Site

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 0.85' @ 9.35 hrs Surf.Area= 203 sf Storage= 124 cf

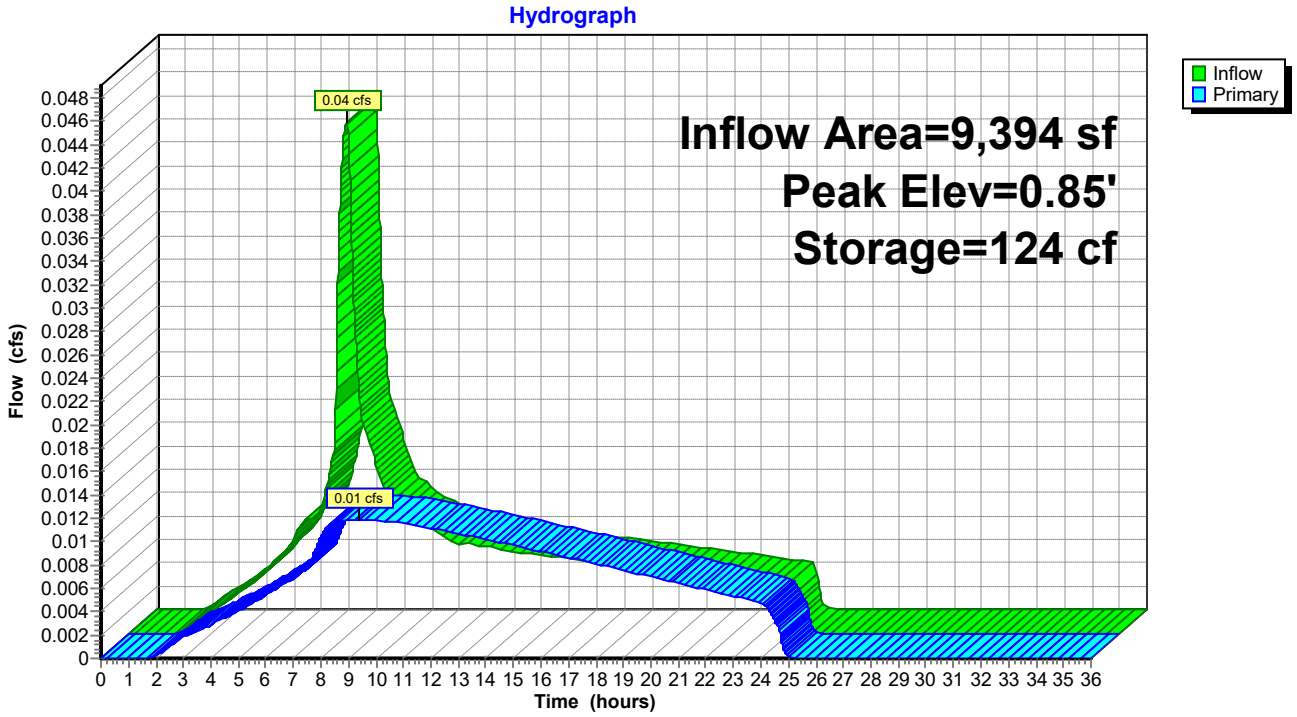
Plug-Flow detention time= 107.1 min calculated for 619 cf (100% of inflow)
Center-of-Mass det. time= 107.1 min (820.7 - 713.6)

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	530 cf	**36.0" Round Pipe Storage** L= 75.0'

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	**0.7" Horiz. Control Orifice** C= 0.600 Limited to weir flow at low heads
#2	Primary	1.50'	**1.8" Horiz. Upper Orifice** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.01 cfs @ 9.35 hrs HW=0.85' (Free Discharge)
└**1=Control Orifice** (Orifice Controls 0.01 cfs @ 4.45 fps)
└**2=Upper Orifice** (Controls 0.00 cfs)

Pond 1P: 36" Detention Pipe



Summary for Pond 11P: Raingarden 1

Inflow Area = 6,214 sf,100.00% Impervious, Inflow Depth = 0.79" for WQ event
Inflow = 0.03 cfs @ 7.92 hrs, Volume= 410 cf
Outflow = 0.01 cfs @ 6.31 hrs, Volume= 410 cf, Atten= 80%, Lag= 0.0 min
Discarded = 0.01 cfs @ 6.31 hrs, Volume= 410 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Routed to Reach -POST : Peak Flows from Post-Developed Site

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 0.85' @ 11.22 hrs Surf.Area= 250 sf Storage= 85 cf

Plug-Flow detention time= 140.4 min calculated for 410 cf (100% of inflow)
Center-of-Mass det. time= 140.4 min (854.1 - 713.6)

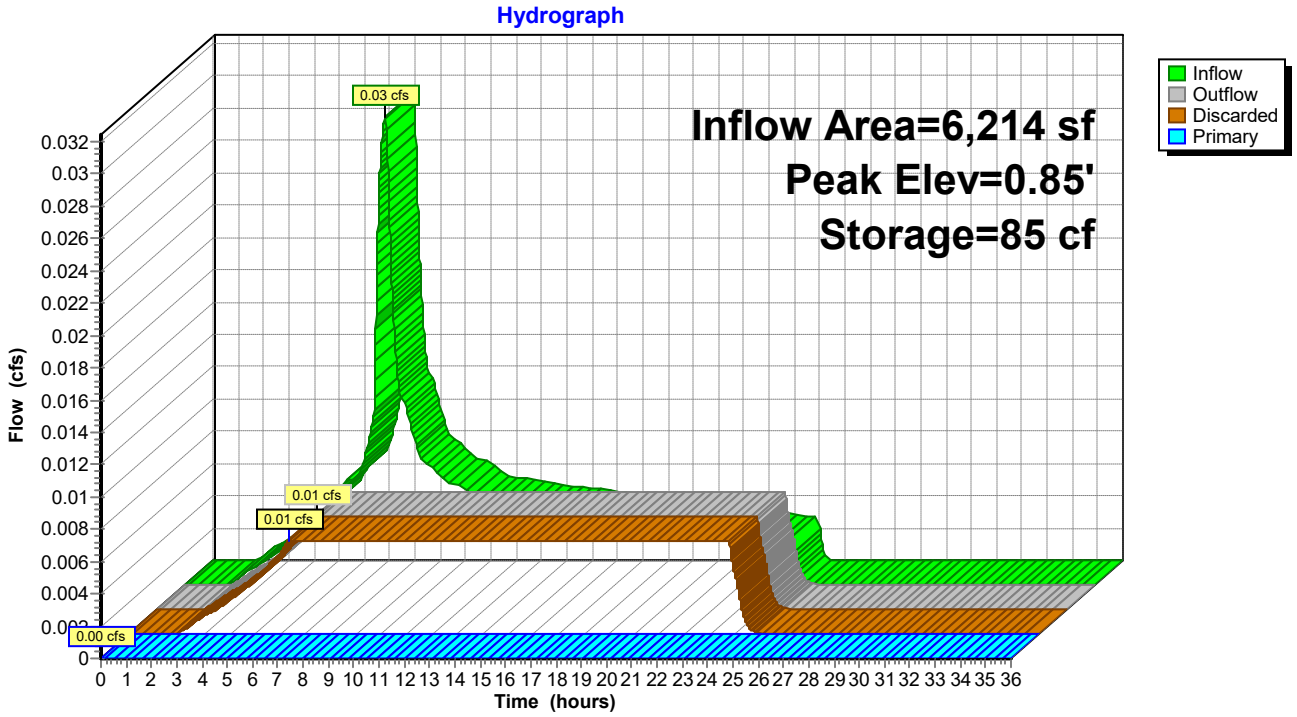
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	150 cf	**10.00'W x 25.00'L x 1.50'H Rock** 375 cf Overall x 40.0% Voids
#2	1.50'	94 cf	**10.00'W x 25.00'L x 1.50'H Growing Medium** 375 cf Overall x 25.0% Voids
#3	3.00'	250 cf	**10.00'W x 25.00'L x 1.00'H Ponding**
		494 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**1.000 in/hr Exfiltration over Horizontal area**
#2	Primary	3.50'	**6.0" Vert. Overflow Orifice** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.01 cfs @ 6.31 hrs HW=0.04' (Free Discharge)
↑—**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=0.00' (Free Discharge)
↑—**2=Overflow Orifice** (Controls 0.00 cfs)

Pond 11P: Raingarden 1



Summary for Pond 13P: Raingarden 2

Inflow Area = 2,584 sf,100.00% Impervious, Inflow Depth = 0.79" for WQ event
Inflow = 0.01 cfs @ 7.92 hrs, Volume= 170 cf
Outflow = 0.00 cfs @ 5.85 hrs, Volume= 170 cf, Atten= 84%, Lag= 0.0 min
Discarded = 0.00 cfs @ 5.85 hrs, Volume= 170 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Routed to Reach -POST : Peak Flows from Post-Developed Site

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 1.35' @ 13.71 hrs Surf.Area= 84 sf Storage= 45 cf

Plug-Flow detention time= 257.9 min calculated for 170 cf (100% of inflow)
Center-of-Mass det. time= 257.9 min (971.6 - 713.6)

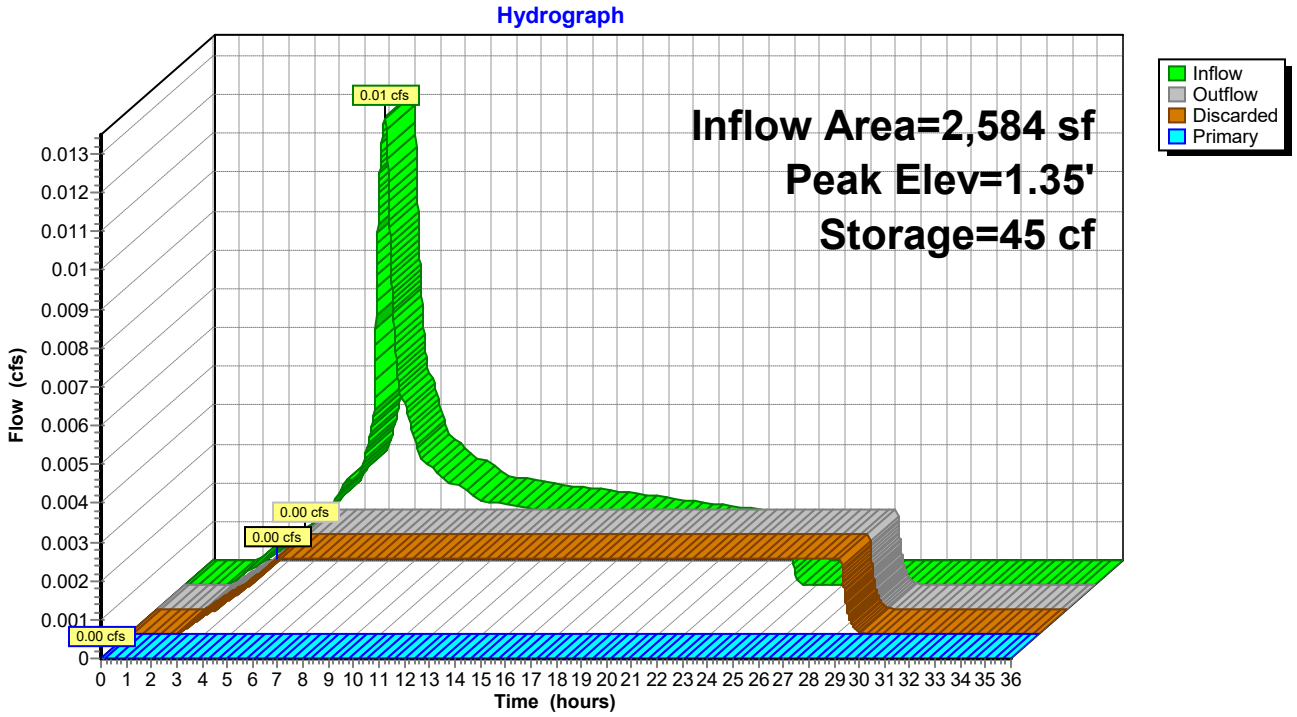
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	50 cf	**6.00'W x 14.00'L x 1.50'H Rock** 126 cf Overall x 40.0% Voids
#2	1.50'	32 cf	**6.00'W x 14.00'L x 1.50'H Growing Medium** 126 cf Overall x 25.0% Voids
#3	3.00'	84 cf	**6.00'W x 14.00'L x 1.00'H Ponding**
		166 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**1.000 in/hr Exfiltration over Horizontal area**
#2	Primary	3.50'	**6.0" Vert. Overflow Orifice** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.00 cfs @ 5.85 hrs HW=0.04' (Free Discharge)
↑—**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=0.00' (Free Discharge)
↑—**2=Overflow Orifice** (Controls 0.00 cfs)

Pond 13P: Raingarden 2



Summary for Pond P1: Street Planter 1

Inflow Area = 2,187 sf,100.00% Impervious, Inflow Depth = 0.79" for WQ event
Inflow = 0.01 cfs @ 7.92 hrs, Volume= 144 cf
Outflow = 0.00 cfs @ 6.29 hrs, Volume= 144 cf, Atten= 80%, Lag= 0.0 min
Discarded = 0.00 cfs @ 6.29 hrs, Volume= 144 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Routed to Pond P4 : 18" Detention Pipe

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 0.86' @ 11.25 hrs Surf.Area= 88 sf Storage= 30 cf

Plug-Flow detention time= 143.1 min calculated for 144 cf (100% of inflow)
Center-of-Mass det. time= 143.1 min (856.7 - 713.6)

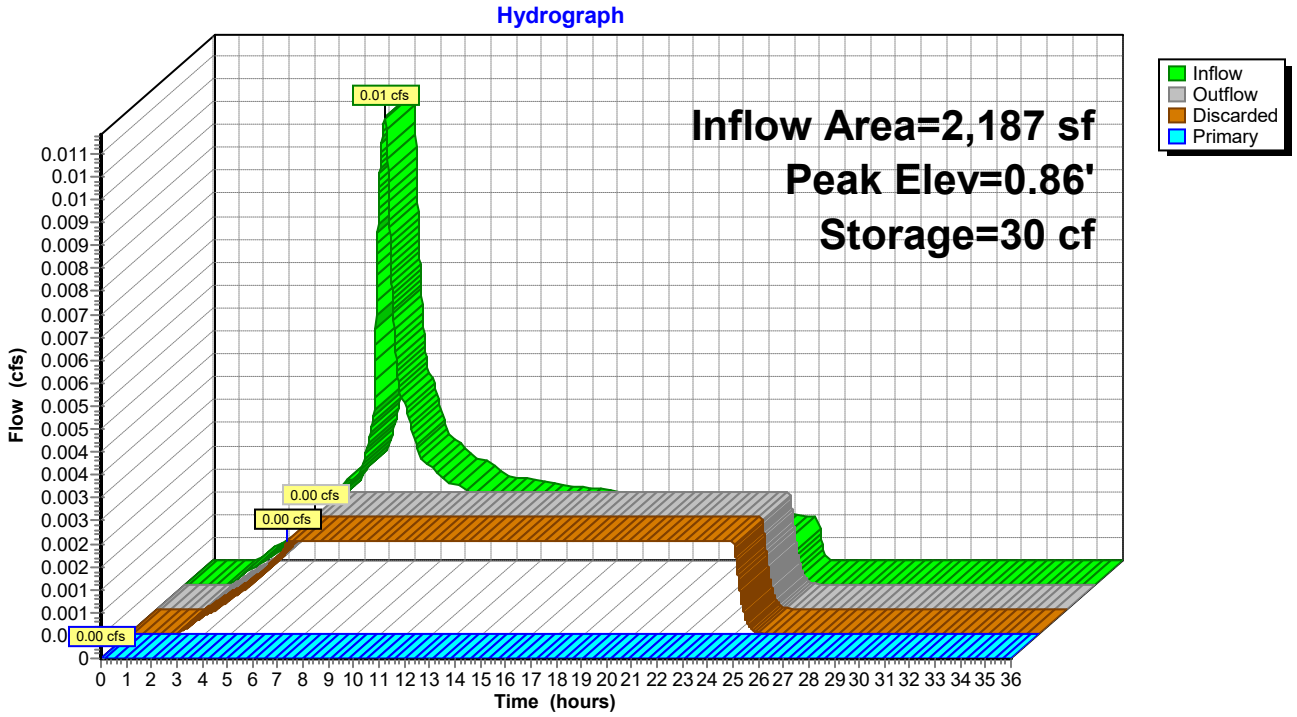
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	53 cf	**5.00'W x 17.50'L x 1.50'H Rock** 131 cf Overall x 40.0% Voids
#2	1.50'	33 cf	**5.00'W x 17.50'L x 1.50'H Growing Medium** 131 cf Overall x 25.0% Voids
#3	3.00'	88 cf	**5.00'W x 17.50'L x 1.00'H Ponding**
		173 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**1.000 in/hr Exfiltration over Horizontal area**
#2	Primary	3.50'	**6.0" Vert. Overflow Orifice** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.00 cfs @ 6.29 hrs HW=0.04' (Free Discharge)
↑—**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=0.00' (Free Discharge)
↑—**2=Overflow Orifice** (Controls 0.00 cfs)

Pond P1: Street Planter 1



Summary for Pond P2: Street Planter 2

Inflow Area = 5,524 sf,100.00% Impervious, Inflow Depth = 0.79" for WQ event
Inflow = 0.03 cfs @ 7.92 hrs, Volume= 364 cf
Outflow = 0.01 cfs @ 8.31 hrs, Volume= 364 cf, Atten= 77%, Lag= 23.5 min
Discarded = 0.01 cfs @ 8.31 hrs, Volume= 364 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Routed to Pond P4 : 18" Detention Pipe

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 3.17' @ 10.11 hrs Surf.Area= 258 sf Storage= 98 cf

Plug-Flow detention time= 259.8 min calculated for 364 cf (100% of inflow)
Center-of-Mass det. time= 259.8 min (973.5 - 713.6)

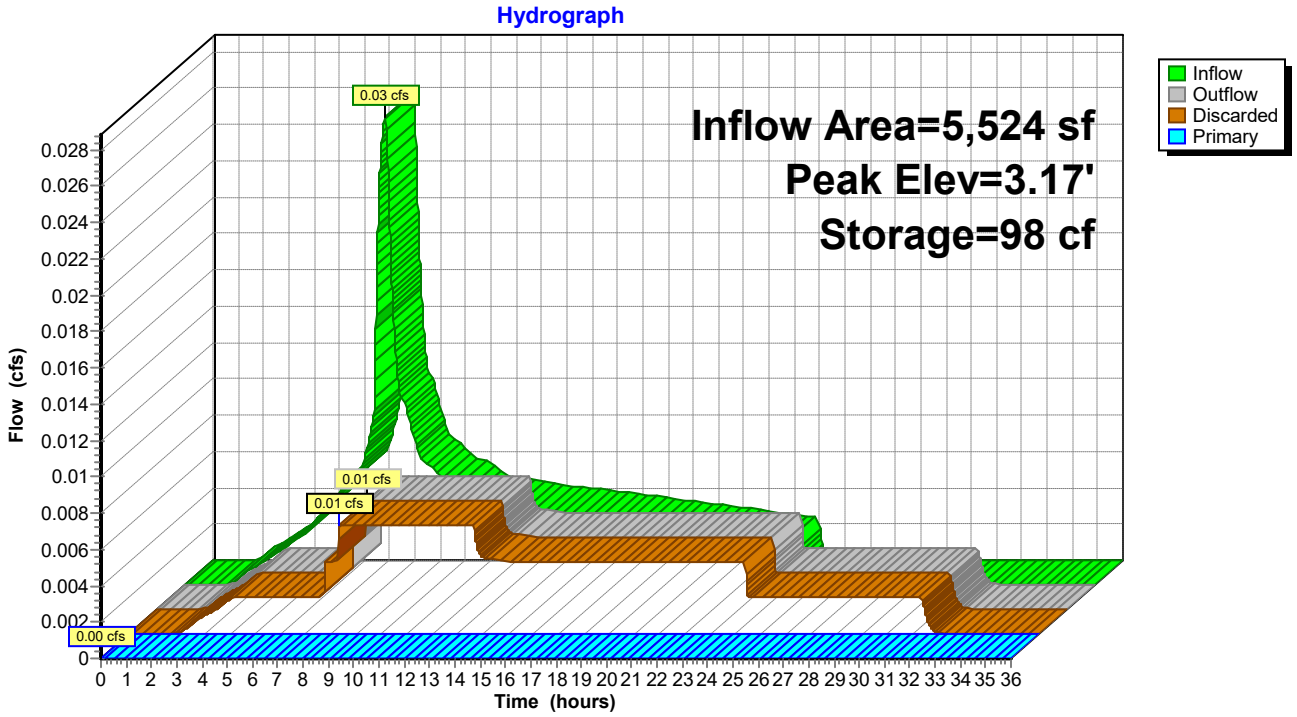
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	52 cf	**5.00'W x 17.20'L x 1.50'H Rock** 129 cf Overall x 40.0% Voids
#2	1.50'	32 cf	**5.00'W x 17.20'L x 1.50'H Growing Medium** 129 cf Overall x 25.0% Voids
#3	3.00'	86 cf	**5.00'W x 17.20'L x 1.00'H Ponding**
		170 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**1.000 in/hr Exfiltration over Horizontal area**
#2	Primary	3.50'	**6.0" Horiz. Overflow Orifice** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.01 cfs @ 8.31 hrs HW=3.00' (Free Discharge)
↑—**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=0.00' (Free Discharge)
↑—**2=Overflow Orifice** (Controls 0.00 cfs)

Pond P2: Street Planter 2



Summary for Pond P3: Street Planter 3

Inflow Area = 1,774 sf,100.00% Impervious, Inflow Depth = 0.79" for WQ event
Inflow = 0.01 cfs @ 7.92 hrs, Volume= 117 cf
Outflow = 0.00 cfs @ 7.54 hrs, Volume= 117 cf, Atten= 66%, Lag= 0.0 min
Discarded = 0.00 cfs @ 7.54 hrs, Volume= 117 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Routed to Pond P4 : 18" Detention Pipe

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 0.29' @ 8.95 hrs Surf.Area= 121 sf Storage= 14 cf

Plug-Flow detention time= 30.3 min calculated for 117 cf (100% of inflow)
Center-of-Mass det. time= 30.3 min (743.9 - 713.6)

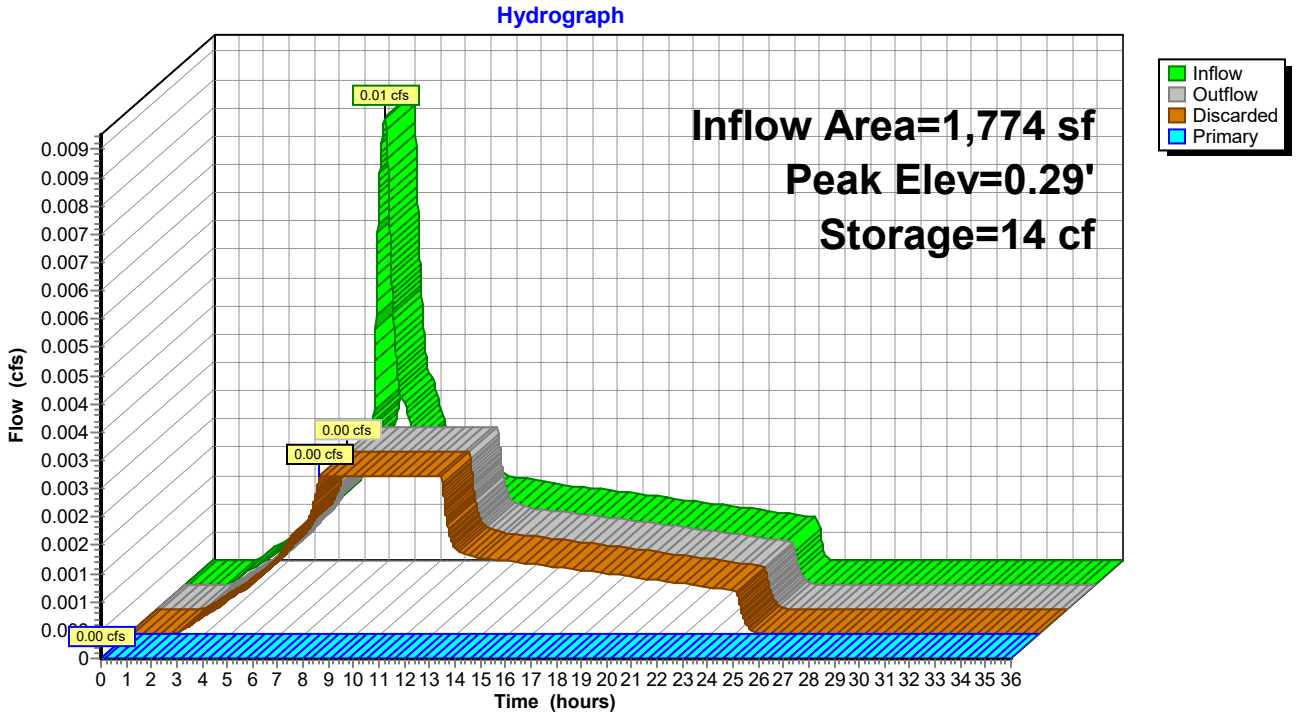
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	73 cf	**5.00'W x 24.20'L x 1.50'H Rock** 182 cf Overall x 40.0% Voids
#2	1.50'	45 cf	**5.00'W x 24.20'L x 1.50'H Growing Medium** 182 cf Overall x 25.0% Voids
#3	3.00'	121 cf	**5.00'W x 24.20'L x 1.00'H Ponding**
		239 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**1.000 in/hr Exfiltration over Horizontal area**
#2	Primary	3.50'	**6.0" Horiz. Overflow Orifice** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.00 cfs @ 7.54 hrs HW=0.04' (Free Discharge)
↑—**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=0.00' (Free Discharge)
↑—**2=Overflow Orifice** (Controls 0.00 cfs)

Pond P3: Street Planter 3



Summary for Pond P4: 18" Detention Pipe

[92] Warning: Device #2 is above defined storage
[92] Warning: Device #3 is above defined storage

Inflow Area = 10,961 sf,100.00% Impervious, Inflow Depth = 0.11" for WQ event
Inflow = 0.01 cfs @ 7.92 hrs, Volume= 97 cf
Outflow = 0.01 cfs @ 7.95 hrs, Volume= 97 cf, Atten= 0%, Lag= 1.6 min
Primary = 0.01 cfs @ 7.95 hrs, Volume= 97 cf
Routed to Reach -POST : Peak Flows from Post-Developed Site

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 0.02' @ 7.95 hrs Surf.Area= 35 sf Storage= 0 cf

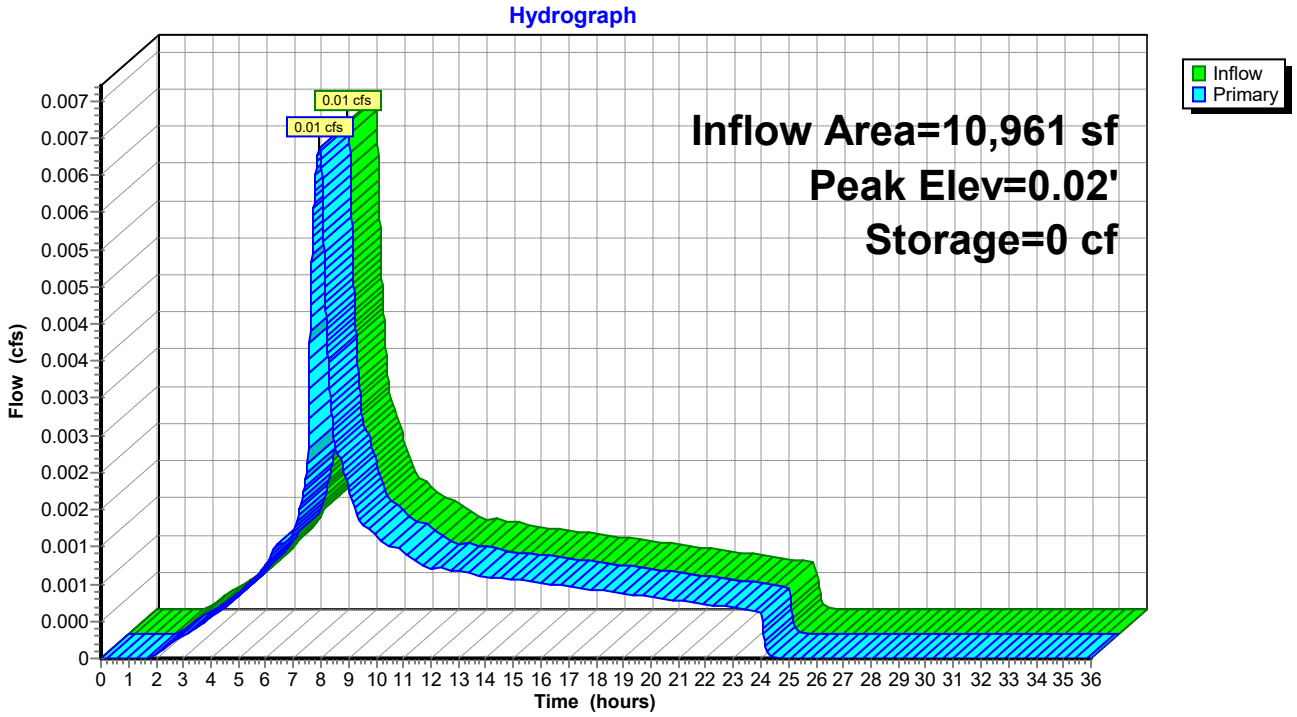
Plug-Flow detention time= 1.6 min calculated for 97 cf (100% of inflow)
Center-of-Mass det. time= 1.6 min (715.2 - 713.6)

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	177 cf	**18.0" Round Pipe Storage** L= 100.0'

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	**2.0" Horiz. Control Orifice** C= 0.600 Limited to weir flow at low heads
#2	Primary	2.20'	**2.0" Horiz. Upper Orifice** C= 0.600 Limited to weir flow at low heads
#3	Primary	2.80'	**12.0" Vert. Overflow** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.01 cfs @ 7.95 hrs HW=0.02' (Free Discharge)
└**1=Control Orifice** (Weir Controls 0.01 cfs @ 0.47 fps)
└**2=Upper Orifice** (Controls 0.00 cfs)
└**3=Overflow** (Controls 0.00 cfs)

Pond P4: 18" Detention Pipe



Scott Holden
503-502-8006
scottholden2007@outlook.com

31 August 2022

Re: Infiltration testing for 100 S Garfield Street, Newberg, OR

Dear Mr. Holden,

Field Investigation:
Rapid Soil Solutions (RSS) has attempted to performed one (1) infiltration tests. Figure 1 below shows the project site location. Soils found on site match those in by DOGMI. RSS found stiff fine grained flood deposits.

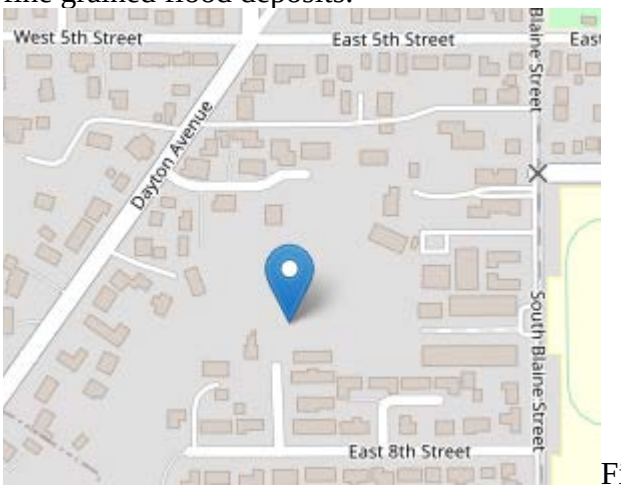


Figure 1

Infiltration Testing:
RSS perform an infiltration test per the Clean Water Services for Washington County. RSS excavated a 6ft deep holes into and started a pre-soak for four (4) hours then testing took place for three hours. The below table summarized the rates and depths. For soil details and locations please see the following infiltration testing sheets.

Location	rate (in/hr.)	Depth (ft)
HA#1	0.5	6
HA#2	2.0	6
HA#3	1.0	6

Groundwater
Based upon the three (3) well logs at are the closest to the site and of similar elevation ground water is 180-200 below the sites elevations.

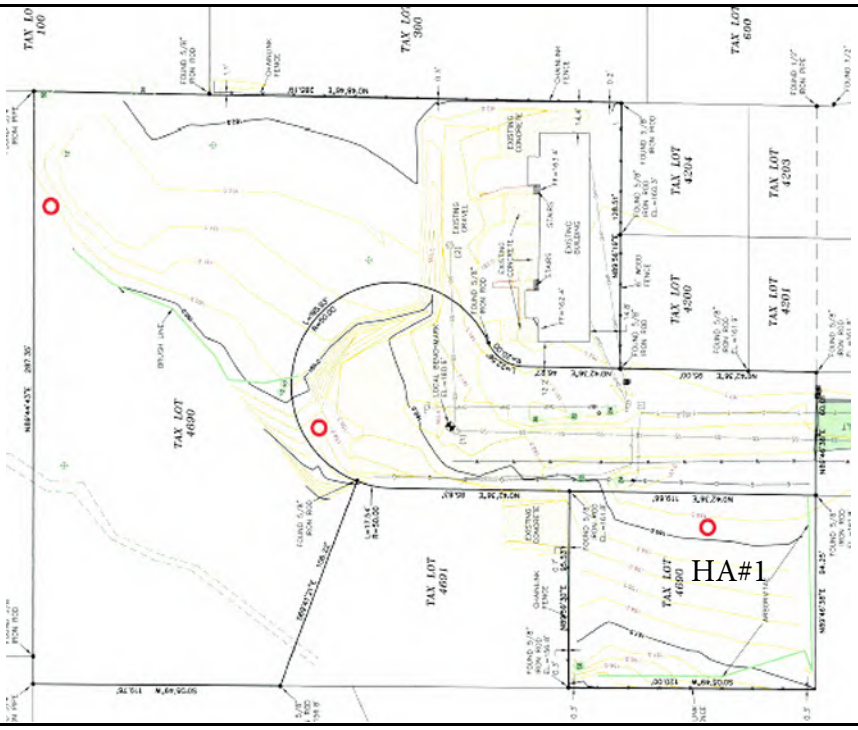
The analysis, conclusions and recommendations contained in this report are based on site conditions as they existed at the time of explorations. Any questions regarding this report please contact me at the below number or email.

Sincerely,

Mia Mahedy, PE GE.

Rapid Soil Solutions INC 503-816-3689 mia@rapidsoilsolutions.com

Rapid Soil Solutions Infiltration Test Results

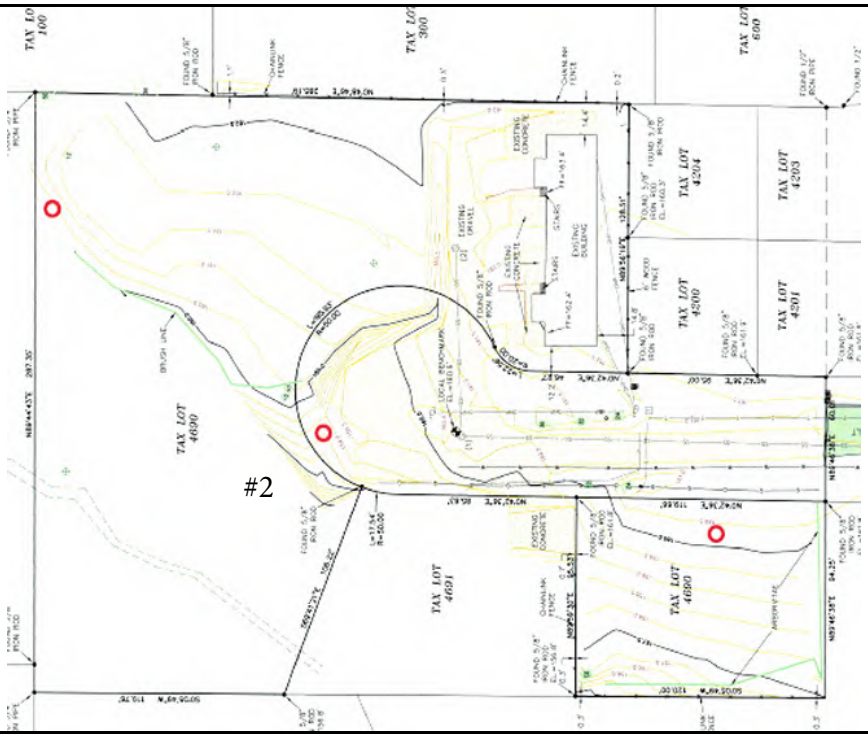


Preliminary Information			
Location:	100 S Garfield St, Newberg OR.	**Performed By: (Supervised by Mia Mahedy, PE, GE)**	Rick Sands
Date & Time:	8-29-22, 8:45	**Instrument Used:**	3 inch hand auger
Weather:	Sunny, 65	**Depth:**	6 ft

HA #1	
Soil	2-4ft damp light brown silty clay , medium stiffness , 4-6ft, damp, brown , medium stiffness
Presoak	9:00, 16.25, 10:00, 15, fill 18.75, 11:00, 18, fill 19:50, 12:00, 19, fill 21.75, 1:00, 21, fill 23,

Time	Measurement (inches)	Level Refilled To (inches)	Rate (inches/hour)
1:20	22.50		
1:40	22.50		
2:00	22.25	23.25	
2:20	24		
2:40	23.75		
3:00	23.50	25	
3:20	24.75		
3:40	24.75		
4:00	24.50		
Site Infiltration Rate (inches/hour)			**0.50in/hr**

Rapid Soil Solutions Infiltration Test Results

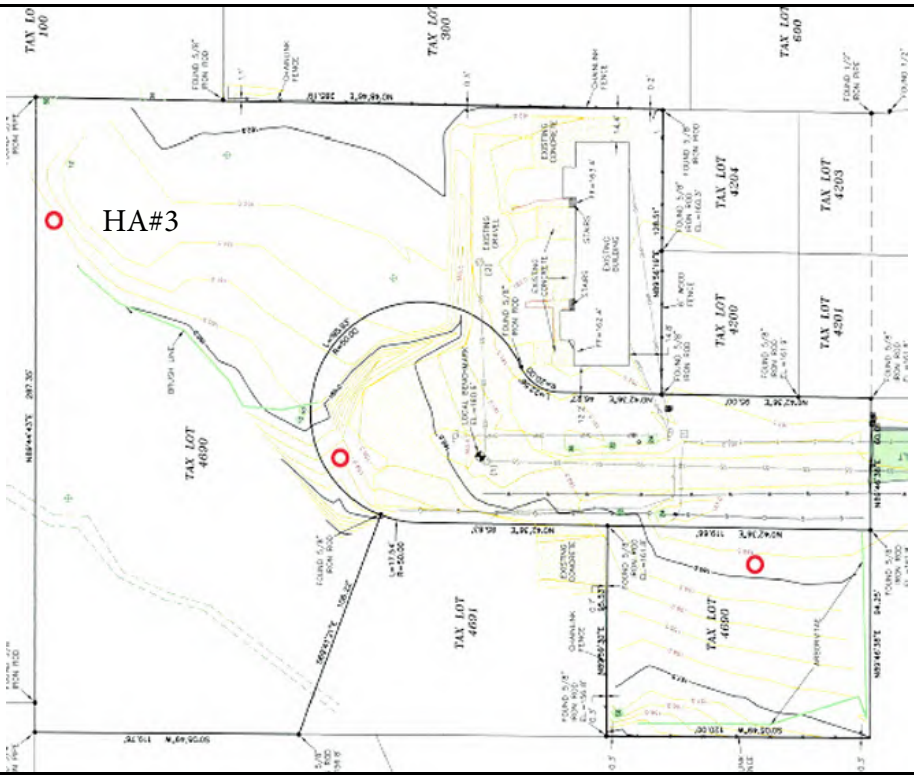


Preliminary Information			
Location:	100 S Garfield St, Newberg OR.	**Performed By: (Supervised by Mia Mahedy, PE, GE)**	Rick Sands
Date & Time:	8-29-22, 8:45 am	**Instrument Used:**	3-inch hand auger
Weather:	Sunny, 65	**Depth:**	6 ft

HA # 2			
Soil	2-4 ft, medium stiffness damp silty clay, brown , 4-6 ft, medium stiffness damp silty clay , brown		
Presoak	9:00, 15.25, 10:00, 12:25, fill 18.25, 11:00, 17, fill 18.50, 12:00, 16.50, fill 19, 1:00, 17, fill 19		
Time	**Measurement (inches)**	**Level Refilled To (inches)**	**Rate (inches/hour)**
1:20	18.25		
1:40	17.75		
2:00	17.25	19	
2:20	18.25		
2:40	17.25		
3:00	17	19.50	
3:20	18.50		
3:40	18		
4:00	17.50		
Site Infiltration Rate (inches/hour)			**2in/hr.**

Rapid Soil Solutions INC | 503-816-3689 | mia@rapidsoilsolutions.com

Rapid Soil Solutions Infiltration Test Results



Preliminary Information			
Location:	100 S Garfield St, Newberg OR.	**Performed By: (Supervised by Mia Mahedy, PE, GE)**	Rick Sands
Date & Time:	8-29-22, 8:45 am	**Instrument Used:**	3 inch hand auger
Weather:	Sunny, 65	**Depth:**	6 ft

HA # 3			
Soil	2-4 ft light brown silty clay medium stiffness damp, 4-6 ft, damp, brown , medium stiffness, silty clay		
Presoak	9:00, 19.50, 10:00, 18.25, fill 20, 11:00, 18.50, fill 20.75, 12:00, 20.25, fill 22, 1:00, 20.50, fill 22.25		
Time	**Measurement (inches)**	**Level Refilled To (inches)**	**Rate (inches/hour)**
1:20	22		
1:40	21.25		
2:00	21.25	23.75	
2:20	23.25		
2:40	23		
3:00	22.75	24.25	
3:20	24		
3:40	23.50		
4:00	23.25’		
Site Infiltration Rate (inches/hour)			**1in/hr.**

NOTICE TO WATER WELL CONTRACTOR
The original and first copy of this report are to be filed with the

WATER RESOURCES DEPARTMENT,
SALEM, OREGON 97310
within 30 days from the date of well completion.

WATER WELL REPORT
STATE OF OREGON
(Please type or print)
(Do not write above this line)

Yamhill 302

State Well No. 3S/2W-19

State Permit No.

(1) OWNER:
Name Millard Ward
Address Rt 1 Box 333A
Newberg Ore

(2) TYPE OF WORK (check):
New Well ☑ Deepening ☐ Reconditioning ☐ Abandon ☐
If abandonment, describe material and procedure in Item 12.

(3) TYPE OF WELL:
Rotary ☐ Driven ☐
Cable ☑ Jetted ☐
[illegible] ☐ Bored ☐

(4) PROPOSED USE (check):
Domestic ☑ Industrial ☐ Municipal ☐
Irrigation ☐ Test Well ☐ Other ☐

(5) CASING INSTALLED:
Threaded ☐ Welded ☑
6 " Diam. from +14" ft. to 49 ft. Gage 1/4 wall
" Diam. from ft. to ft. Gage
4 " Diam. from 40 ft. to 80 ft. Gage SDR 26

(6) PERFORATIONS:
Perforated? ☑ Yes ☐ No
Type of perforator used Drill
Size of perforations 3/8 in. DIA by in.
perforations from ft. to ft.
100 perforations from 50 ft. to 80 ft.
perforations from ft. to ft.

(7) SCREENS:
Well screen installed? ☐ Yes ☑ No
Manufacturer's Name
Type Model No.
Diam. Slot size Set from ft. to ft.
Diam. Slot size Set from ft. to ft.

(8) WELL TESTS:
Drawdown is amount water level is lowered below static level
Was a pump test made? ☐ Yes ☑ No If yes, by whom?
[illegible]: gal./min. with ft. drawdown after hrs.
" " " "
" " " "
Bailer test 2 gal./min. with TOTAL ft. drawdown after 1 hrs.
Artesian flow — g.p.m.
Temperature of water NORMAL Depth artesian flow encountered — ft.

(9) CONSTRUCTION:
Well seal—Material used Cement
Well sealed from land surface to 29 ft.
Diameter of well bore to bottom of seal 9 1/2 in.
Diameter of well bore below seal 6 in.
Number of sacks of cement used in well seal 12 sacks
How was cement grout placed? pressure Control
Was a drive shoe used? ☐ Yes ☑ No Plugs — Size: location — ft.
Did any strata contain unusable water? ☐ Yes ☑ No
Type of water? — depth of strata —
Method of sealing strata off —
Was well gravel packed? ☐ Yes ☑ No Size of gravel: —
Gravel placed from — ft. to — ft.

(10) LOCATION OF WELL:
County Yamhill Driller's well number
¼ ¼ Section 19 T. 3S R. 2W W.M.
Bearing and distance from section or subdivision corner

(11) WATER LEVEL: Completed well.
Depth at which water was first found 50 ft.
Static level 18 ft. below land surface. Date 15 Feb
Artesian pressure — lbs. per square inch. Date —

(12) WELL LOG:
Diameter of well below casing
Depth drilled 80 ft. Depth of completed well 79 ft.

Formation: Describe color, texture, grain size and structure of materials; and show thickness and nature of each stratum and aquifer penetrated, with at least one entry for each change of formation. Report each change in position of Static Water Level and indicate principal water-bearing strata.

MATERIAL	From	To	SWL
Brown Sandy Clay	0	23	
Grey Clay	23	45	
Lt Brown Gritty Clay	45	60	
Blue Grey " "	60	70	
Grey Brown " "	70	80	18

RECEIVED
MAR 11980
WATER RESOURCES DEPT
SALEM, OREGON

Work started 13 Feb 1980 Completed 15 Feb 1980
Date well drilling machine moved off of well 15 Feb 1980

Drilling Machine Operator's Certification:
This well was constructed under my direct supervision. Materials used and information reported above are true to my best knowledge and belief.
[Signed] Stanley Gaunt (Drilling Machine Operator) Date 18 Feb, 19
Drilling Machine Operator's License No. 216

Water Well Contractor's Certification:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
Name A J GAUNT & SON (Person, firm or corporation) (Type or print)
Address Aloha Ore
[Signed] Stanley Gaunt (Water Well Contractor)
Contractor's License No. 602 Date 18 Feb, 1980

(USE ADDITIONAL SHEETS IF NECESSARY)

SP*45656-119

16

STATE OF OREGON
WATER WELL REPORT
(as required by ORS 537.765)

Yam B 2757

RECEIVED
MAR - 8 1993
WATER RESOURCES DEPT.
SALEM, OREGON

3S/2W/19

(START CARD) # 44144

(1) OWNER:
Well Number 796
Name NSP Development/Brenneke
Address 2214 SW Hoffman
City Portland State OR Zip 97201

(2) TYPE OF WORK:
☒ New Well ☐ Deepen ☐ Recondition ☐ Abandon

(3) DRILL METHOD:
☒ Rotary Air ☐ Rotary Mud ☐ Cable
☐ Other

(4) PROPOSED USE:
☐ Domestic ☒ Community ☐ Industrial ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other

(5) BORE HOLE CONSTRUCTION:
Special Construction approval ☐ Yes ☒ No Depth of Completed Well 240 ft.
Explosives used ☐ Yes ☒ No Type Amount

HOLE Diameter	From	To	SEAL Material	From	To	Amount sacks or pounds
12¼"	0'	30	Cement	0'	35'	42 Sacks
10"	30	40				
8"	40	240				

How was seal placed: Method ☐ A ☐ B ☒ C ☐ D ☐ E
☐ Other
Backfill placed from ft. to ft. Material
Gravel placed from ft. to ft. Size of gravel

(6) CASING/LINER:

	Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
Casing:	8"	+ 2	38'	.25	☒	☐	☒	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
Liner:					☐	☐	☐	☐
					☐	☐	☐	☐

Final location of shoe(s)

(7) PERFORATIONS/SCREENS:
☐ Perforations Method
☐ Screens Type Material

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
						☐	☐
						☐	☐
						☐	☐
						☐	☐
						☐	☐

(8) WELL TESTS: Minimum testing time is 1 hour
☐ Pump ☐ Bailer ☒ Air ☐ Flowing Artesian

Yield gal/min	Drawdown	Drill stem at	Time
100 GPM		240'	1 hr.

Temperature of Water 57° Depth Artesian Flow Found
Was a water analysis done? ☐ Yes By whom
Did any strata contain water not suitable for intended use? ☐ Too little
☐ Salty ☐ Muddy ☐ Odor ☐ Colored ☐ Other
Depth of strata:

(9) LOCATION OF WELL by legal description:
County Yamhill Latitude Longitude
Township 3-S N or S. Range 2-W E or W. WM.
Section 19/30 ¼ ¼
Tax Lot Lot Block Subdivision
Street Address of Well (or nearest address) Dayton Av, Newberg, Or 97132

(10) STATIC WATER LEVEL:
80' ft. below land surface. Date 3/1/93
Artesian pressure lb. per square inch. Date

(11) WATER BEARING ZONES:
Depth at which water was first found 190'

From	To	Estimated Flow Rate	SWL
190	220'	60 GPM	n/a

(12) WELL LOG:
Ground elevation

Material	From	To	SWL
Top Soil	0	3	
Brown Clay	3	25	
H. Brown Basalt	25	35	
H. Gray Basalt	35	55	
M.H. Brown Basalt	55	85	
H. Gray Basalt	85	105	
H. Gray Fractured Basalt	105	155	
H. Gray Frac./Broken Basalt	155	165	
Hard Gray Basalt	165	175	
Hard Brown Basalt	175	190	
Hard Severe Fractured Gray Bas	190	200	
H. Gray/Brown Porous Basalt	200	215	
Hard Gray Basalt	215	235	
Soft White Clay	235	240	

Date started 2/23/93 Completed 3/1/93

(unbonded) Water Well Constructor Certification:
I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon well construction standards. Materials used and information reported above are true to my best knowledge and belief.

WWC Number
Signed Date

(bonded) Water Well Constructor Certification:
I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon well construction standards. This report is true to the best of my knowledge and belief.

WWC Number 645
Signed Date 3/4/93

ORIGINAL & FIRST COPY - WATER RESOURCES DEPARTMENT SECOND COPY - CONSTRUCTOR THIRD COPY - CUSTOMER 9809C 10/91

16

STATE OF OREGON
WATER WELL REPORT
(as required by ORS 537.765)

YAMH 2837

RECEIVED
JUL 13 1993
WATER RESOURCES DEPT.
SALEM, OREGON

3S/2W/19C6

(START CARD) # 50236

(1) OWNER: Well Number 93-336

Name Tim & Robin Vachter

Address 24285 Zard Ln.

City Newberg State OR Zip 97132

(2) TYPE OF WORK:

xx New Well ☐ Deepen ☐ Recondition ☐ Abandon

(3) DRILL METHOD:

☐ Rotary Air ☐ Rotary Mud ☒ Cable

☐ Other

(4) PROPOSED USE:

☒ Domestic ☐ Community ☐ Industrial ☐ Irrigation

☐ Thermal ☐ Injection ☐ Other

(5) BORE HOLE CONSTRUCTION:

Special Construction approval ☐ Yes ☒ No Depth of Completed Well 200 ft.

Explosives used ☐ Yes ☒ No Type Amount

HOLE Diameter	From	To	SEAL Material	From	To	Amount sacks or pounds
10	0	39	Cement	0	39	68 sk
6	39	200				

How was seal placed: Method ☐ A ☐ B ☒ C ☐ D ☐ E

☐ Other

Backfill placed from ft. to ft. Material

Gravel placed from ft. to ft. Size of gravel

(6) CASING/LINER:

	Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
Casing:	6	+1	84	250	☒	☐	☒	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
Liner:	4	40	200	160	☐	☒	☒	☐
					☐	☐	☐	☐

Final location of shoe(s) 84.5

(7) PERFORATIONS/SCREENS:

☒ Perforations Method skil saw

☐ Screens Type Material

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
160	200	6"	30	1/8"		☐	☒
						☐	☐
						☐	☐
						☐	☐
						☐	☐

(8) WELL TESTS: Minimum testing time is 1 hour

☒ Pump ☒ Bailer ☐ Air ☐ Flowing Artesian

Yield gal/min	Drawdown	Drill stem at	Time
bailer 20	100		1 hr.
pump 20	50		1 hr

Temperature of Water 51 Depth Artesian Flow Found

Was a water analysis done? ☒ Yes By whom WFR

Did any strata contain water not suitable for intended use? ☐ Too little

☐ Salty ☐ Muddy ☐ Odor ☐ Colored ☐ Other

Depth of strata:

(9) LOCATION OF WELL by legal description:

County YAMHILL Latitude Longitude

Township 3s N or S. Range 2w E or W. WM.

Section 19 nw ¼ sw ¼

Tax Lot Lot Block Subdivision

Street Address of Well (or nearest address) SAME

(10) STATIC WATER LEVEL:

69 ft. below land surface. Date 6/23/93

Artesian pressure lb. per square inch. Date

(11) WATER BEARING ZONES:

Depth at which water was first found 132'

From	To	Estimated Flow Rate	SWL
132	199	20	69

(12) WELL LOG:

Ground elevation 200

Material	From	To	SWL
Topsoil	0	2	
Clay Brwn	2	31	
clay & decomposed rockGR	31	34	
Clay Gray	34	63	
Rock decomposed w/clay brwn	63	74	
Rock decomposed	74	111	
Rock fractured/decomposed	111	140	69
Rock fractured	140	200	

Date started 6/4/93 Completed 6/24/93

(unbonded) Water Well Constructor Certification:

I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon well construction standards. Materials used and information reported above are true to my best knowledge and belief.

WWC Number

Signed Date

(bonded) Water Well Constructor Certification:

I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon well construction standards. This report is true to the best of my knowledge and belief.

WWC Number 203

Signed Tom Bryant Date 6/24/93

ORIGINAL & FIRST COPY - WATER RESOURCES DEPARTMENT SECOND COPY - CONSTRUCTOR THIRD COPY - CUSTOMER 9809C 10/91

Attachment 2:
Agency Comments

COMMUNITY DEVELOPMENT
LAND USE APPLICATION REFERRAL

Brooks Bateman

The enclosed material has been referred to you for your information and comment. Any comments you wish to make should be returned to the Community Development Department prior to: Feb 23, 2023
Please refer questions and comments to: Ashley Smith

NOTE: Full size plans are available at the Community Development Department Office.

APPLICANT:	Scott Holden
REQUEST:	Revised 12 Lot Subdivision Submittal
SITE ADDRESS:	100 S Garfield St
LOCATION:	N/A
TAX LOT:	R3219DB 04690
FILE NO:	SUB322-0001
ZONE:	R-2 (Medium Density Residential)
HEARING DATE:	3/9/2023

Project Information can be found via the link below:
https://www.newbergoregon.gov/planning/page/sub322-0001-garfield-street-12-lot-subdivision

- [x] Reviewed, no conflict.
- [ ] Reviewed; recommend denial for the following reasons:
- [ ] Require additional information to review. (Please list information required)
- [ ] Meeting requested.
- [ ] Comments. (Attach additional pages as needed)

BROOKS BATEMAN
Reviewed By:

2-10-23
Date:

BUILDING DIVISION
Organization:

COMMUNITY DEVELOPMENT
LAND USE APPLICATION REFERRAL

Doug Rux

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FILE NO:	SUB322-0001
ZONE:	R-2 (Medium Density Residential)
HEARING DATE:	3/9/2023

RECEIVED
FEB 09 REC'D
By

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- [ ] Meeting requested.
- [ ] Comments. (Attach additional pages as needed)

Doug Rux — Reviewed By:

2/9/23 — Date:

City of Newberg — Organization:

COMMUNITY DEVELOPMENT
LAND USE APPLICATION REFERRAL

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☐ Meeting requested.

☐ Comments. (Attach additional pages as needed)

2/9/23

Reviewed By: Will Worthey CM

Date:

Organization:

COMMUNITY DEVELOPMENT
LAND USE APPLICATION REFERRAL

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FILE NO:	SUB322-0001
ZONE:	R-2 (Medium Density Residential)
HEARING DATE:	3/9/2023

RECEIVED
2/14/2023

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https://www.newbergoregon.gov/planning/page/sub322-0001-garfield-street-12-lot-subdivision

- [x] Reviewed, no conflict.
- [ ] Reviewed; recommend denial for the following reasons:
- [ ] Require additional information to review. (Please list information required)
- [ ] Meeting requested.
- [ ] Comments. (Attach additional pages as needed)

Reviewed By: _____ Date: 2/14/23

Organization: Kenaure

COMMUNITY DEVELOPMENT
LAND USE APPLICATION REFERRAL

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REQUEST:	Revised 12 Lot Subdivision Submittal
SITE ADDRESS:	100 S Garfield St
LOCATION:	N/A
TAX LOT:	R3219DB 04690
FILE NO:	SUB322-0001
ZONE:	R-2 (Medium Density Residential)
HEARING DATE:	3/9/2023

RECEIVED
2/9/2023
batesf

Project Information can be found via the link below:
https://www.newbergoregon.gov/planning/page/sub322-0001-garfield-street-12-lot-subdivision

☐ Reviewed, no conflict.

☐ Reviewed; recommend denial for the following reasons:

☐ Require additional information to review. (Please list information required)

☐ Meeting requested.

☑ Comments. (Attach additional pages as needed)

Jeff Kosmicki
Digitally signed by Jeff Kosmicki
DN: O=Chief of Police, CN=Jeff Kosmicki, E=jeff.kosmicki@newbergoregon.gov
Reason: I am the author of this document
Location:
Date: 2023.02.09 11:55:05-08'00'
Foxit PDF Editor Version: 12.0.0

Reviewed By:

2/9/23

Date:

Newberg-Dundee Police Department

Organization:

Newberg-Dundee Police Department
P.O. Box 970
401 E. Third Street
Newberg, OR 97132

503-538-8321

Jeff Kosmicki
Chief of Police

To: Whom this may concern

From: Chief Jeff Kosmicki

RE: **REQUEST:** Revised 12 Lot Subdivision Submittal
SITE ADDRESS: 100 S Garfield St
TAX LOT: R3219DB 04690
FILE NO: SUB322-0001

Date: 02092023

As I look at this project, I am concerned about the parking issues that will come up with this development. The lots are extremely small, and there is a shared driveway for lots 1,2,3,4,7,8,9 with no on street parking.

Although it's not covered in this application, I have the same concerns with Tract B as well if it will be developed in the same fashion.

COMMUNITY DEVELOPMENT
LAND USE APPLICATION REFERRAL

The enclosed material has been referred to you for your information and comment. Any comments you wish to make should be returned to the Community Development Department prior to: Feb 23, 2023
Please refer questions and comments to: Ashley Smith

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APPLICANT:	Scott Holden
REQUEST:	Revised 12 Lot Subdivision Submittal
SITE ADDRESS:	100 S Garfield St
LOCATION:	N/A
TAX LOT:	R3219DB 04690
FILE NO:	SUB322-0001
ZONE:	R-2 (Medium Density Residential)
HEARING DATE:	3/9/2023

RECEIVED
2/9/2023
batesf

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https://www.newbergoregon.gov/planning/page/sub322-0001-garfield-street-12-lot-subdivision

- [✔] Reviewed, no conflict.
- [ ] Reviewed; recommend denial for the following reasons:
- [ ] Require additional information to review. (Please list information required)
- [ ] Meeting requested.
- [ ] Comments. (Attach additional pages as needed)

Reviewed By: _____ Date: 2/8/23

Maintenance Superintendent
Organization:

COMMUNITY DEVELOPMENT
LAND USE APPLICATION REFERRAL

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RECEIVED
2/9/2023
batesf

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☑ Reviewed, no conflict.

☐ Reviewed; recommend denial for the following reasons:

☐ Require additional information to review. (Please list information required)

☐ Meeting requested.

☐ Comments. (Attach additional pages as needed)

Daniel L Wilson — 2/9/23

Reviewed By: Date:

City of Newberg Operations

Organization:

COMMUNITY DEVELOPMENT
LAND USE APPLICATION REFERRAL

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RECEIVED
2/9/2023
batesf

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☑ Reviewed, no conflict.

☐ Reviewed; recommend denial for the following reasons:

☐ Require additional information to review. (Please list information required)

☐ Meeting requested.

☐ Comments. (Attach additional pages as needed)

Reviewed By: 2/9/23

Date:

City of Newberg

Organization:

COMMUNITY DEVELOPMENT
LAND USE APPLICATION REFERRAL

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Please refer questions and comments to: Ashley Smith

NOTE: Full size plans are available at the Community Development Department Office.

APPLICANT:	Scott Holden
REQUEST:	Revised 12 Lot Subdivision Submittal
SITE ADDRESS:	100 S Garfield St
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TAX LOT:	R3219DB 04690
FILE NO:	SUB322-0001
ZONE:	R-2 (Medium Density Residential)
HEARING DATE:	3/9/2023

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https://www.newbergoregon.gov/planning/page/sub322-0001-garfield-street-12-lot-subdivision

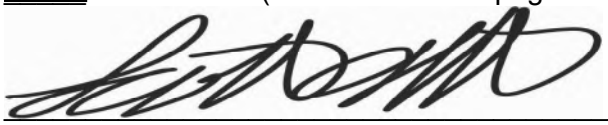
☑ Reviewed, no conflict.

☐ Reviewed; recommend denial for the following reasons:

☐ Require additional information to review. (Please list information required)

☐ Meeting requested.

☐ Comments. (Attach additional pages as needed)



2/13/23

Reviewed By: Date:

Scott Albert - Ziply Fiber Network Engineer

Organization: 503-526-3544 scott.albert@ziply.com

FIRE CODE / LAND USE / BUILDING REVIEW APPLICATION

Tualatin Valley Fire & Rescue

North Operating Center
11945 SW 70th Avenue
Tigard, OR 97223
Phone: 503-649-8577

South Operating Center
8445 SW Elligsen Rd
Wilsonville, OR 97070
Phone: 503-649-8577

REV 6-30-20

Project Information

Applicant Name: Scott Holden

Address:

Phone: 503-502-8006

Email: scottholden2007@outlook.com

Site Address: 100 S. Garfield St.

City: Newberg, 97132

Map & Tax Lot #: R3219DB 04690

Business Name:

Land Use/Building Jurisdiction: Newberg

Land Use/ Building Permit # N/A

Choose from: Beaverton, Tigard, Newberg, Tualatin, North Plains, West Linn, Wilsonville, Sherwood, Rivergrove, Durham, King City, Washington County, Clackamas County, Multnomah County, Yamhill County

Project Description

Construct improvements in support of a New 8 lot subdivision with new single family and/or duplex's on each lot.

Please note the turnaround overlay within the 90 degree turn in the road.

Permit/Review Type (check one):

X Land Use / Building Review - Service Provider Permit

☐ Emergency Radio Responder Coverage Install/Test

☐ LPG Tank (Greater than 2,000 gallons)

☐ Flammable or Combustible Liquid Tank Installation (Greater than 1,000 gallons)

* Exception: Underground Storage Tanks (UST) are deferred to DEQ for regulation.

☐ Explosives Blasting (Blasting plan is required)

☐ Exterior Toxic, Pyrophoric or Corrosive Gas Installation (in excess of 810 cu.ft.)

☐ Tents or Temporary Membrane Structures (in excess of 10,000 square feet)

☐ Temporary Haunted House or similar

☐ OLCC Cannabis Extraction License Review

☐ Ceremonial Fire or Bonfire
(For gathering, ceremony or other assembly)

For Fire Marshal's Office Use Only

TVFR Permit # 2023-0009

Permit Type: SPP - Newberg

Submittal Date: 1-20-23

Assigned To: OFM Arn

Due Date: NA

Fees Due: Ø

Fees Paid: Ø

Approval/Inspection Conditions
(For Fire Marshal's Office Use Only)

This section is for application approval only

0430 1/24/23
Fire Marshal or Designee Date

Conditions: See approved plan,

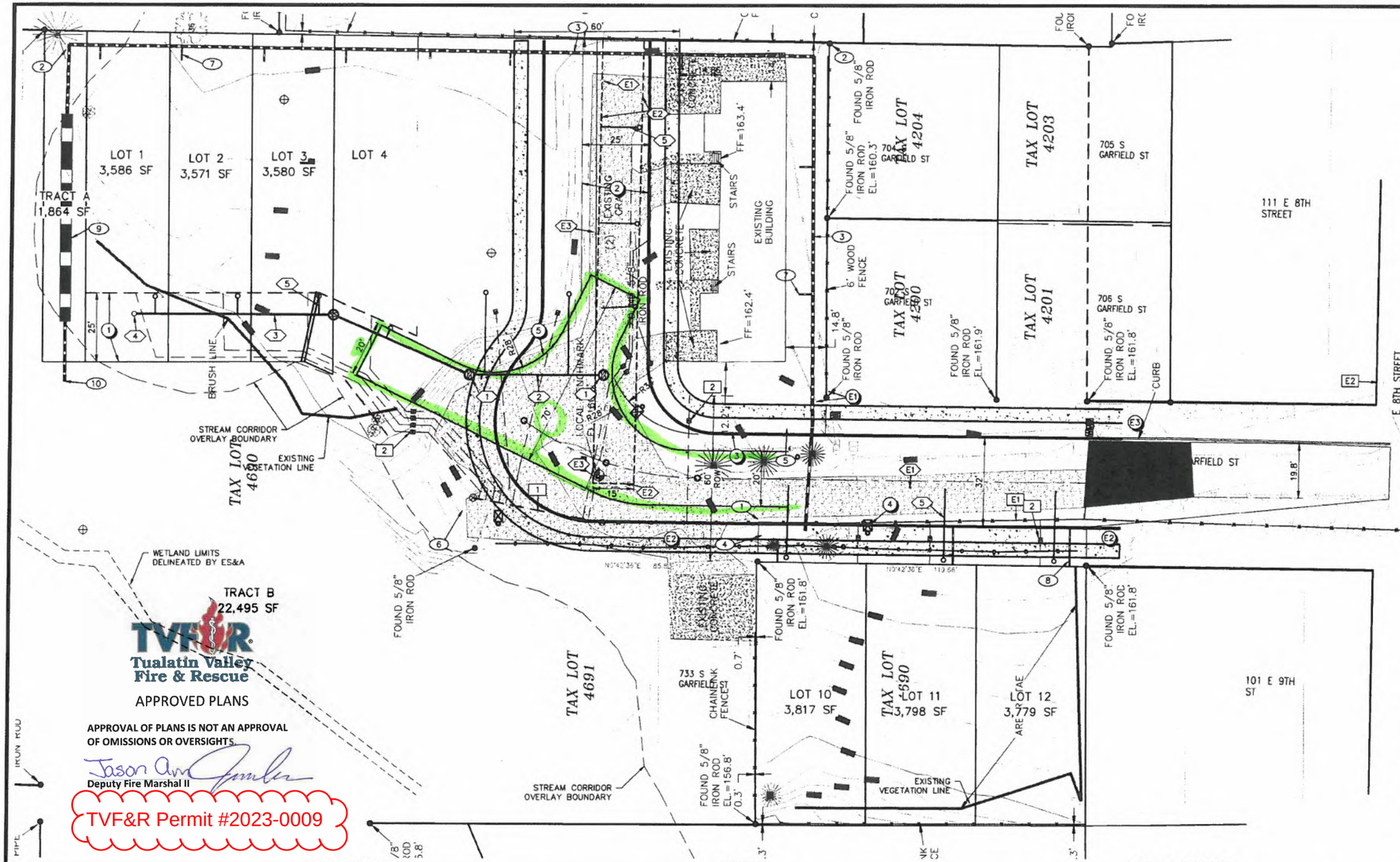
See Attached Conditions: ☐ Yes ☒ No

Site Inspection Required: ☐ Yes ☒ No

This section used when site inspection is required

Inspection Comments:

Final TVFR Approval Signature & Emp ID Date



SITE NOTES:

- (E1) EXISTING OVERHEAD TO BE UNDERGROUNDED (BY OTHERS).
- (E2) EXISTING GRAVEL TO REMAIN
- (E3) EXISTING CONCRETE APPROACH TO REMAIN
- (1) NEW 25' UTILITY AND ACCESS EASEMENT FOR LOTS 1-4
- (2) NEW 25' UTILITY AND ACCESS EASEMENT FOR LOTS 7-9
- (3) NEW STREET TREE (TYP).
- (4) NEW STREET LIGHT (TYP), SEE NOTE 3 THIS SHEET.
- (5) FIRE TRUCK TURNAROUND

WATER NOTES:

- [E1] EXISTING PUBLIC 4" DUCTILE IRON WATER MAIN. SEE NOTE 8 THIS SHEET.
- [1] EXTEND PUBLIC 4" WATER MAIN AND CONSTRUCT BLOWOFF ASSEMBLY AT TERMINUS.
- [2] NEW 3/4" WATER SERVICE & METER (TYP, ALL LOTS). WATER METER TO BE PLACED IN PLANTER STRIP.
- [E2] EXISTING FIRE HYDRANT.

STORM NOTES:

- (1) NEW CURB INLET (TYP, 4 TOTAL)
- (2) NEW PRIVATE STORM DRAIN MANHOLE (TYP, 2 TOTAL)
- (3) NEW PRIVATE 12" HDPE STORM MAIN
- (4) NEW PUBLIC 20' LONG VEGETATED STORM PLANTER, CONSTRUCTED WITH BEEHIVE GRATE WITH OVERFLOW TO PRIVATE STORM MAIN.
- (5) NEW PUBLIC 25' LONG VEGETATED STORM PLANTER, CONSTRUCTED WITH BEEHIVE GRATE WITH OVERFLOW TO PRIVATE STORM MAIN.
- (6) NEW PUBLIC 45' LONG VEGETATED STORM PLANTER, CONSTRUCTED WITH OVERFLOW NOTCH TO SHEET FLOW TO THE NORTH INTO STREAM CORRIDOR.
- (7) NEW 4" STORM DRAIN LATERAL FOR LOTS 1-9 ROOF DRAINS (TYP)
- (8) LOTS 10-12 TO BE CONSTRUCTED WITH WEEP HOLE IN CURB FOR ROOF DRAINS.
- (9) NEW PRIVATE 60" DIAMETER, 70 LF CMP FOR UNDERGROUND DETENTION, CONSTRUCT WITH FLOW CONTROL MANHOLE.
- (10) NEW 12" OUTFALL INTO STREAM CORRIDOR WITH RIP-RAP EROSION CONTROL PROTECTION. 12" IE = 593.8'. DISTURBED AREA TO BE MITIGATED PER MITIGATION PLAN (BY OTHERS)

SANITARY NOTES:

- (E1) EXISTING PUBLIC 8" SANITARY MAIN
- (E2) EXISTING 15' SANITARY EASEMENT
- (E3) EXISTING SANITARY MANHOLE
- (1) NEW SANITARY SEWER MANHOLE (TYP, 3 TOTAL)
- (2) NEW PUBLIC 6" PVC SANITARY MAIN
- (3) NEW PRIVATE 6" PVC SANITARY MAIN CONTAINED WITHIN EASEMENT
- (4) NEW PRIVATE MAINLINE CLEANOUT
- (5) NEW 4" SANITARY SEWER SERVICE AND CLEANOUT (TYP, ALL LOTS)

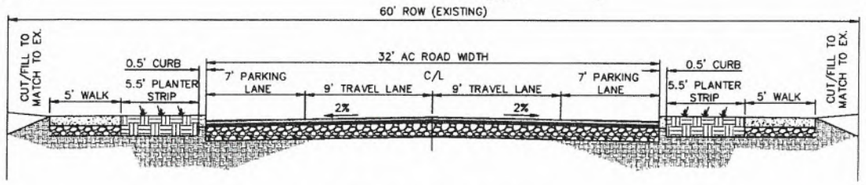
TVF&R
Tualatin Valley Fire & Rescue

APPROVED PLANS

APPROVAL OF PLANS IS NOT AN APPROVAL OF OMISSIONS OR OVERSIGHTS.

Jason Arn Jamba
Deputy Fire Marshal II

TVF&R Permit #2023-0009



S GARFIELD ST TYPICAL SECTION
SCALE: N.T.S.

NOTES:

1. DEVELOPER / CONTRACTOR RESPONSIBLE FOR COORDINATION OF INSTALLATION OF OTHER UTILITIES NOT SHOWN ON THESE PLANS, INCLUDING GAS, ELECTRICITY, AND COMMUNICATIONS.
2. ALL STORMWATER MANAGEMENT FACILITIES AS A PART OF THIS PROJECT ARE PROPOSED TO MANAGE BOTH NEWLY CREATED PUBLIC IMPERVIOUS AREA AND STORMWATER FROM FUTURE IMPERVIOUS AREA ON EACH OF THE LOTS. SEE SUBMITTED STORMWATER REPORT FOR MORE INFORMATION. NEWLY CREATED TRACT A WILL BE DEDICATED TO STORMWATER MANAGEMENT FOR LOTS 1-9 AND PUBLIC OVERFLOW STORMWATER.
3. STREET LIGHTING TO BE INSTALLED ALONG NEW STREET AS NECESSARY TO COMPLY WITH NEWBERG PUBLIC WORKS DESIGN AND CONSTRUCTION STANDARDS. STREET LIGHTS SHOWN CONCEPTUALLY ON THIS PLAN. FINAL STREET LIGHTING & PHOTOMETRIC PLAN TO BE PROVIDED WITH CONSTRUCTION PLAN SET.
4. 12' WIDE STANDARD DRIVEWAYS SHOWN CONCEPTUALLY FOR EACH LOT PER CITY OF NEWBERG STANDARD DETAIL 508.

NOTES (CONT.):

5. NEW S GARFIELD ST FULL ROAD SECTION TO BE CENTERED ON THE EXISTING ROW. NO ROW DEDICATION IS PROPOSED. SEE TYPICAL ROAD SECTION THIS SHEET. NO FRONTAGE IMPROVEMENTS WILL BE CONSTRUCTED ALONG NEIGHBORING LOTS (SIDEWALK & PLANTER STRIP)
6. A REDUCED RADIUS CUL-DE-SAC (36') IS PROPOSED DUE TO THE EXISTING ROW WIDTH. AS A RESULT, THE BUILDINGS ON LOTS 1-9 WILL ALL BE SPRINKLERED, IN ACCORDANCE WITH FIRE ACCESS STANDARDS
7. PUE = PUBLIC UTILITY EASEMENT WITH THE CITY OF NEWBERG
   10' PUE TO BE CREATED ON ALL PROPERTY FRONTAGES
8. THE EXISTING 4" WATER MAIN IN S GARFIELD ST IS UNDERSIZED PER CITY STANDARDS. HOWEVER, A WATER SYSTEM ANALYSIS WAS PERFORMED BY WESTERN STATES FIRE PROTECTION TO VERIFY THE MAIN IS OF ADEQUATE SIZE TO SERVICE THE NEW SUBDIVISION. A COPY OF THIS ANALYSIS REPORT IS SUBMITTED WITH THE LAND USE APPLICATION TO THE CITY.

NORTH
0 20 40
SCALE IN FEET

REGISTERED PROFESSIONAL ENGINEER
67149PE
PRELIMINARY
OREGON
Jan. 14, 2023
KELLI A. GROVER

EXPIRES: 06/30/23
SIGNATURE DATE: _____

DATE	NO.	REVISION

DRAWN: | DESIGNED: | CHECKED:
SCALE: AS SHOWN | DATE: SEPTEMBER 2022
PROJECT NO. E21-049

FIRWOOD DESIGN GROUP
350 EAST HISTORIC COLUMBIA RIVER HIGHWAY
TROUTDALE, OREGON 97060
BUS. (503) 668-3737 ✦ FAX (503) 668-3788

SCOTT HOLDEN
100 S GARFIELD ST
NEWBERG, OR 97132

PRELIMINARY SITE & UTILITY PLAN
12-LOT SUBDIVISION

Oregon
Kate Brown, Governor

Department of State Lands
775 Summer Street NE, Suite 100
Salem, OR 97301-1279
(503) 986-5200
FAX (503) 378-4844
www.oregon.gov/dsl

State Land Board

Kate Brown
Governor

Shemia Fagan
Secretary of State

Tobias Read
State Treasurer

December 8, 2022

Newburg QOZB LLC
Attn: Scott Holden
5652 NW Crady Lane
Portland, OR 97229

Re: WD # 2022-0367 **Approved**
Wetland Delineation Report for 100 S Garfield St
Yamhill County; T3S R2W S19DB TL4690 (Portion)
T3S R2W S19AC TL5912 (Portion)

Dear Scott Holden:

The Department of State Lands has reviewed the wetland delineation report prepared by Environmental Science & Assessment LLC for the site referenced above. Please note that the study area includes only a portion of the tax lots described above (see the attached map). Based upon the information presented in the report, and additional information submitted upon request, we concur with the wetland and waterway boundaries as mapped in Figure 6 of the report. Please replace all copies of the preliminary wetland map with this final Department-approved map.

Within the study area, one wetland (PEM-RFT, totaling approximately 0.006 acres) and 3 waterways (Stream 1, 2 and 3) were identified. They are subject to the permit requirements of the state Removal-Fill Law. Under current regulations, a state permit is required for cumulative fill or annual excavation of 50 cubic yards or more in wetlands or below the ordinary high-water line (OHWL) of the waterway (or the 2-year recurrence interval flood elevation if OHWL cannot be determined).

This concurrence is for purposes of the state Removal-Fill Law only. We recommend that you attach a copy of this concurrence letter to any subsequent state permit application to speed application review. Federal, other state agencies or local permit requirements may apply as well. The U.S. Army Corps of Engineers will determine jurisdiction under the Clean Water Act, which may require submittal of a complete Wetland Delineation Report.

Please be advised that state law establishes a preference for avoidance of wetland impacts. Because measures to avoid and minimize wetland impacts may include reconfiguring parcel layout and size or development design, we recommend that you work with Department staff on appropriate site design before completing the city or county land use approval process.

This concurrence is based on information provided to the agency. The jurisdictional determination is valid for five years from the date of this letter unless new information necessitates a revision. Circumstances under which the Department may change a determination are found in OAR 141-090-0045 (available on our web site or upon request). In addition, laws enacted by the legislature and/or rules adopted by the Department may result in a change in jurisdiction; individuals and applicants are subject to the regulations that are in effect at the time of the removal-fill activity or complete permit application. The applicant, landowner, or agent may submit a request for reconsideration of this determination in writing within six months of the date of this letter.

Thank you for having the site evaluated. If you have any questions, please contact the Jurisdiction Coordinator for Yamhill County, Daniel Evans, PWS, at (503) 986-5271.

Sincerely,

Peter Ryan, SPWS
Aquatic Resource Specialist

Enclosures

ec: Alex Sherman, Environmental Science & Assessment LLC
Newberg Planning Department
Rafael Orozco, Corps of Engineers
Jackson Morgan, DSL

WETLAND DELINEATION / DETERMINATION REPORT COVER FORM

A complete report and signed report cover form, along with applicable review fee, are required before a report review timeline can be initiated by the Department of State Lands. All applicants will receive an emailed confirmation that includes the report's unique file number and other information.

Ways to submit report:

- **Under 50MB** - A single unlocked PDF can be emailed to: wetland.delineation@dsl.oregon.gov.
- **50MB or larger** - A single unlocked PDF can be uploaded to DSL's Box.com website. After upload notify DSL by email at: wetland.delineation@dsl.oregon.gov.
- OR a hard copy of the unbound report and signed cover form can be mailed to: Oregon Department of State Lands, 775 Summer Street NE, Suite 100, Salem, OR 97301-1279.

Ways to pay review fee:

- By credit card on DSL's epayment portal after receiving the unique file number from DSL's emailed confirmation.
- By check payable to the Oregon Department of State Lands attached to the unbound mailed hardcopy OR attached to the complete signed cover form if report submitted electronically.

Contact and Authorization Information

☐ Applicant ☒ Owner Name, Firm and Address:
Scott Holden
Newburg QOZB LLC
5652 NW Crady Lane
Portland, OR 97229

Business phone # (503) 502-8006
Mobile phone # (optional)
E-mail: ScottHolden2007@outlook.com

☒ Authorized Legal Agent, Name and Address (if different):
Alex Sherman
Environmental Science & Assessment
4831 NE Fremont Street, Suite 2B
Portland, OR 97213

Business phone # (360) 979-8903
Mobile phone # (optional)
E-mail: alex@esapdx.com

I either own the property described below or I have legal authority to allow access to the property. I authorize the Department to access the property for the purpose of confirming the information in the report, after prior notification to the primary contact.

Typed/Printed Name: Alex Sherman **Signature:** Alex Sherman

Date: 06/30/2022 Special instructions regarding site access: _____

Project and Site Information

Project Name: 100 S Garfield St

Latitude: 45.294456 Longitude: -122.978643
decimal degree - centroid of site or start & end points of linear project

Proposed Use:
Subdivide parcel into 8 lots for duplex and tripelx residential development

Tax Map # 3219DB
Tax Lot(s) 04690 partial

Tax Map # 3219AC
Tax Lot(s) 05912 partial

Project Street Address (or other descriptive location):
100 S Garfield St

Township 3S Range 2W Section 19 QQ

Use separate sheet for additional tax and location information

City: Newburg County: Yamhill

Waterway: River Mile:

Wetland Delineation Information

Wetland Consultant Name, Firm and Address:
Alex Sherman
Environmental Science & Assessment LLC
4831 NE Fremont St, Ste. 2B
Portland, OR 97213

Phone # (360) 979-8903
Mobile phone # (if applicable)
E-mail: alex@esapdx.com

The information and conclusions on this form and in the attached report are true and correct to the best of my knowledge.

Consultant Signature: Alex Sherman Date: 06/30/2022

Primary Contact for report review and site access is ☒ Consultant ☐ Applicant/Owner ☐ Authorized Agent

Wetland/Waters Present? ☒ Yes ☐ No Study Area size: 1.95 Total Wetland Acreage: 0.0062

Check Applicable Boxes Below

☐ R-F permit application submitted
☐ Fee payment submitted $ _____
☐ Mitigation bank site
☐ Resubmittal of rejected report ($100)
☐ EFSC/ODOE Proj. Mgr: _____
☐ Request for Reissuance. See eligibility criteria. (no fee)
DSL # _____ Expiration date _____
☐ Wetland restoration/enhancement project (not mitigation)
☐ Previous delineation/application on parcel
If known, previous DSL # _____
☐ LWI shows wetlands or waters on parcel
Wetland ID code _____

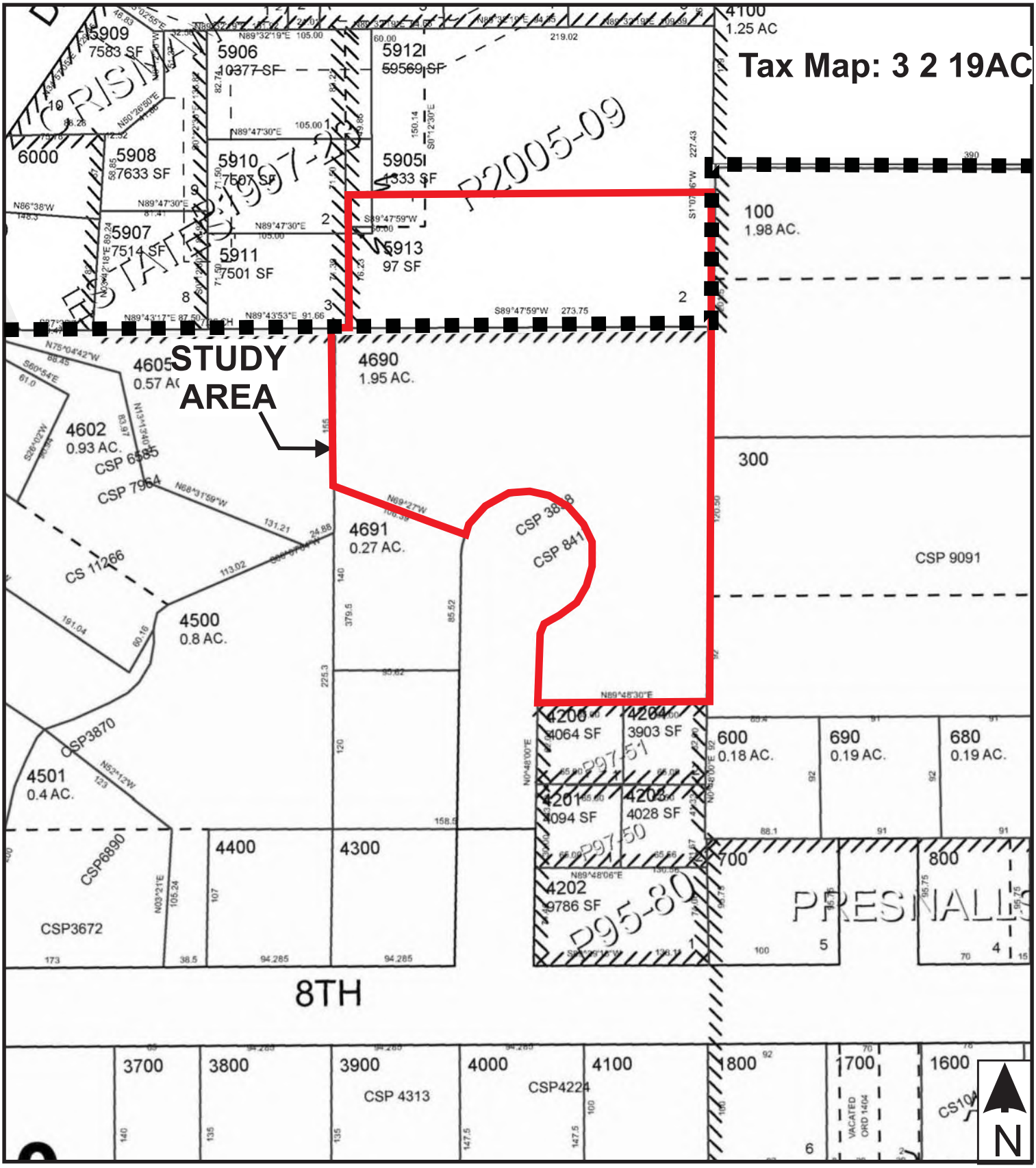
For Office Use Only

DSL Reviewer: _____ Fee Paid Date: ___/___/___ DSL WD # _____

Date Delineation Received: ___/___/___ DSL App.# _____

Source: Metro Data Resource Center. http://gis.oregonmetro.gov/metromap/

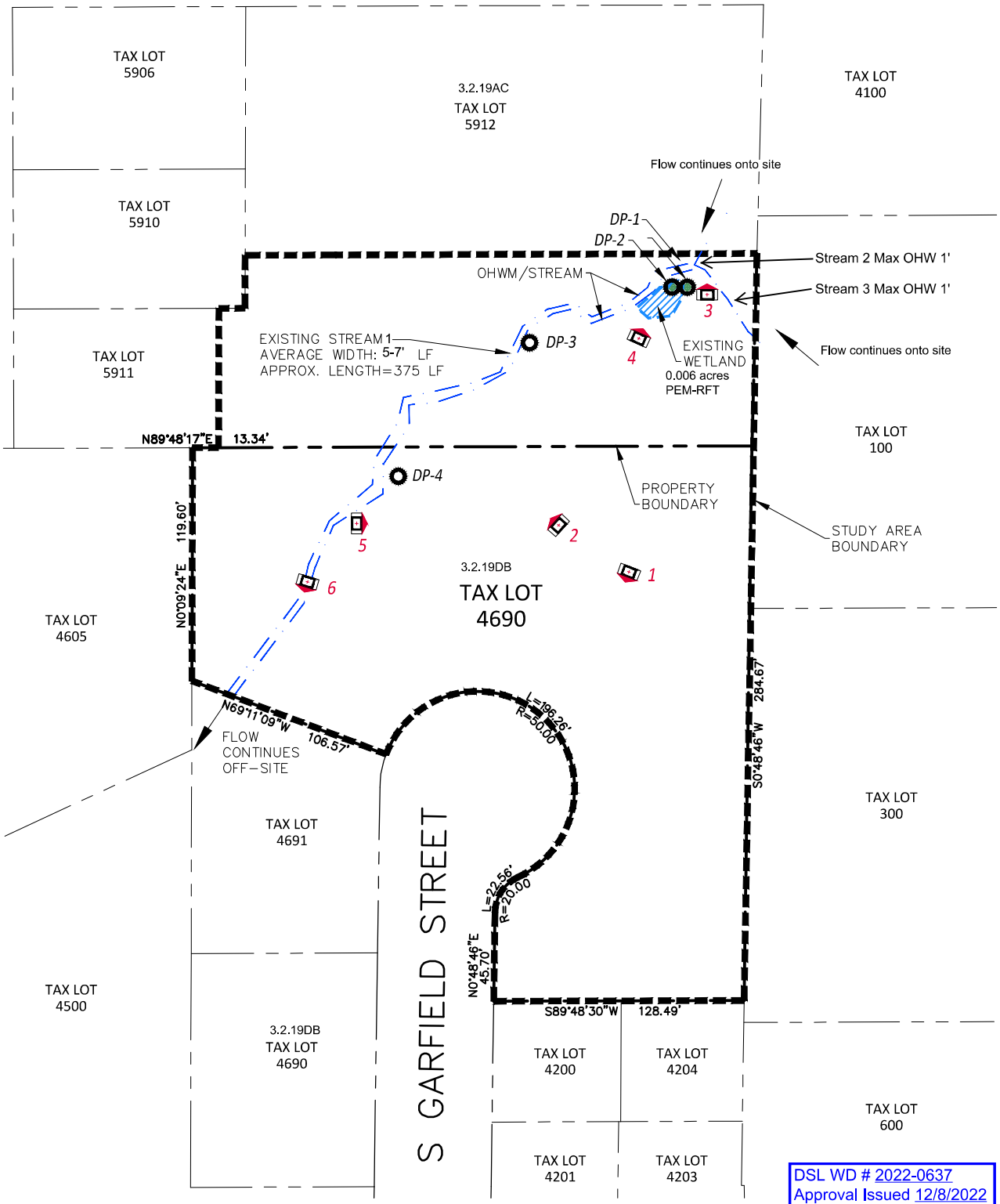
Environmental Science & Assessment, LLC e s a	Vicinity Map 100 S Garfield Street Newburg, Oregon	Figure 1 0 .625 1.25 mi



Source: www.ormap.net

Tax Map: 3 2 19DB

Environmental Science & Assessment, LLC	Tax Lot Map 100 S Garfield Street Newburg, Oregon	Figure 2 0 50 100 ft



DSL WD # 2022-0637
Approval Issued 12/8/2022
Approval Expires 2/8/2027

STUDY AREA = 82,080 SF/1.884 AC
WETLAND AREA = 272 SF/0.006 AC

LEGEND

- EXISTING WETLAND LINE
- EXISTING OHML/STREAM
- DP-1 DATA POINT
- 1 PHOTO POINT

Data plot locations, wetland boundary flags, and stream features were mapped utilizing a Trimble Catalyst GPS Receiver (Model: DA2), a piece of GPS hardware that connects to Trimble software on a cell phone via app called TeraFlex. Geographic features are mapped with an accuracy of 10 cm (0.1 m). Study area boundaries are for this project are based on the surveyed lot lines of Tax Lot 4690.

FIGURE 6

Rev:	12/2/22
Job:	22015
Date:	11/9/22
Mod. By:	PD
Base Map Source:	CMT Surveying

N
1"=50'
0 25 50

WETLAND DETERMINATION

100 S. Garfield Street
City of Newberg,
Yamhill County, Oregon

es&a
Environmental Science & Assessment, LLC

4831 NE Fremont St.,
Suite 2B
Portland, OR 97213
Phone: 503.478.0424
www.esapdx.com

Attachment 3:
Public Comments

City of Newberg
Community Development Department
PO Box 970
Newberg, OR 97132

November 28, 2022

Written Comments: File No SUB322-0001, Garfield St, Newberg Partition

1. What type of duplexes are planned? Due to the lot sizes, they will have to be 2-story or 3-story. This will cut down on the natural lighting on the back side of the existing residences to the south, as well as infringe on our privacy.

   A. Are the duplexes going to be rental units, or for sale?

   B. There is also concern about the quality of the development and how it will affect the property values of the existing residences.

2. South Garfield Street is a small street with no other outlet. It is currently accessed by 5 residences (not including the duplex which will be removed). This subdivision is proposing 12 lots, or 24 new residences, which will mean up to 48 additional vehicles. This equates to approximately 58 to 116 trips per day, minimum, on this street.

   A. Who will be responsible for the maintenance of the street due to the increased wear and tear?

3. The subdivision plan states there will be 2 parking spots per residence, 1 in the garage and 1 in the driveway. However, most people with a single-car garage, use it for storage and/or work area, not parking. This leaves 1 off-street parking spot per residence. Unless there is also enough on-street parking planned, within the subdivision, to accommodate the 24 new residences (averaging 2 vehicles per residence), there will be an overflow onto the limited remainder of Garfield Street and onto 8th Street.

4. Regarding the small grassy area across from proposed lots 10 through 12, and the gravel area to the south of these lots, the plans do not show any frontage improvement to these areas. Will these areas be improved to connect to the sidewalk improvements included for the subdivision?

   A. Is the subdivision homeowners' association going to be responsible for the maintenance and upkeep to these areas? (The grassy area has only been mowed (and not trimmed) maybe twice since the property sold in August of 2021.)

Written Comments: File No SUB322-0001, Garfield St, Newberg Partition (continued)

5. Up to this point in time, this area has been a quiet neighborhood. The subdivision as planned is going to substantially increase the noise level.

6. What is the projected time period for construction of this subdivision, start to finish? This is also going to substantially increase the noise level in this neighborhood, as well as create inconvenience to the existing residents, during this period.
   Note: My residence, which is directly south and next to the proposed subdivision, includes a young, special needs autistic child who has a hard time with loud noises. She currently gets anxious and upset from lawn mowers, etc in the area. The increased noise during the construction period, as well as in the future from the proposed subdivision is going to create an excess of anxiety for her.

7. If this subdivision is approved, I want a row of trees between my back fence and the duplexes directly behind me. These trees should be tall enough to act as a noise buffer as well as to retain our privacy from the windows of the new duplexes. Also, I want an extension of my fence, along my property line, between the frontage improvement and my driveway area.

I would appreciate receiving a response to these issues, as well as updates on this project, as it directly affects me. Email is acceptable at renroberts@hotmail.com.

Sincerely,

Deborah Roberts

Deborah Roberts
702 S Garfield St
Newberg, OR 97132

Ashley Smith

From: Deby Roberts <renroberts@hotmail.com>
Sent: Thursday, December 8, 2022 7:22 AM
To: Ashley Smith
Subject: Re: Upcoming Newberg Planning Commission Meeting: December 8th 2022

Importance: High

Ashley,

Thank you for getting back to me and for the additional information. In looking through this information I noticed something that was not in the original information that I am very concerned about. Could you please include this when you address my questions?

The information states that the street name will be changed, and existing residences will be renumbered. This change is going to create a burden on the existing homeowners/residents and require us to change ALL our personal accounts (bank, utilities, insurance, mortgages/deeds, wills, passports, etc, etc), not to mention the time and possible expense involved. Why do our address numbers have to be changed since we are not part of the subdivision? And can't they just change the name from S Garfield St to S Garfield Ct?

Thank you for your help. I really appreciate it!

Deby Roberts

From: Ashley Smith <Ashley.Smith@newbergoregon.gov>
Sent: Wednesday, December 7, 2022 2:45 PM
To: 'renroberts@hotmail.com' <renroberts@hotmail.com>
Subject: FW: Upcoming Newberg Planning Commission Meeting: December 8th 2022

Hello, Ms. Roberts.

I wanted to let you know that your written comments regarding the proposed preliminary plat for the 12-lot subdivision on S Garfield Street were received by the Community Development Department Planning Division. They were forwarded on to the Planning Commission as supplemental information for the hearing this Thursday.

At the hearing I will address your questions, and the Planning Commission will also have an opportunity to discuss. If you do attend (either in person or virtually), you will have the opportunity to speak if you would like to during the public comment testimony period. This will take place after my presentation.

Below is the agenda and Zoom information for the upcoming Planning Commission meeting.

You can review the final staff report that was prepared for the Planning Commission's review through the agenda links or on the webpage: SUB322-0001 - Garfield Street - 12 Lot Subdivision | Newberg Oregon

You are not required to attend the Planning Commission meeting. You will receive a copy of the final decision either way.

Please let me know if you have any questions about the upcoming meeting.

Thank you for your participation in this process.

Ashley Smith
Assistant Planner
City of Newberg
Direct: 503.554.7768
Cell: 971.281.9911
Email: ashley.smith@newbergoregon.gov
Pronouns: she/her/hers

From: Fe Bates <Fe.Bates@newbergoregon.gov>
Sent: Wednesday, November 30, 2022 5:16 PM
Cc: Fe Bates <Fe.Bates@newbergoregon.gov>
Subject: Upcoming Newberg Planning Commission Meeting: December 8th 2022
Importance: High

Planning Commission Meeting

Thursday December 8, 2022 at 7pm

This meeting will be held in person at the Newberg Public Safety Building: 401 E Third St

Click Here to View the Agenda
Agenda & Packet

The public will be able to also view and attend the meeting by Zoom. The Zoom Webinar Info:

https://us06web.zoom.us/j/85897917682

Or One tap mobile :

US: +13462487799,,85897917682# or +16694449171,,85897917682#

Or Telephone:

Dial(for higher quality, dial a number based on your current location):

US: +1 346 248 7799 or +1 669 444 9171 or +1 669 900 6833 or +1 719 359 4580 or +1 253 205 0468 or +1 253 215 8782 or +1 507 473 4847 or +1 564 217 2000 or +1 646 931 3860 or +1 689 278 1000 or +1 929 205 6099 or +1 301 715 8592 or +1 305 224 1968 or +1 309 205 3325 or +1 312 626 6799 or +1 360 209 5623 or +1 386 347 5053

Webinar ID: 858 9791 7682

All information can also be found on:
Newberg Web Page

Please reach out if you have any questions or need assistance.

Fé Bates
Office Assistant II
City of Newberg
City Hall: 503-537-1240
Direct: 503-554-7788

Ashley Smith

From: Debby Thomas <dthomas@georgefox.edu>
Sent: Sunday, February 5, 2023 9:10 PM
To: PLANNING
Cc: David Thomas; Amber JHP; arttownsend@comcast.net
Subject: Witten concerns about File No.SUB322-0001 Garfield Street Partition
Attachments: Garfield Development Concern Letter.docx

Planning Commission,

I am submitting my written concerns about *File No.SUB322-0001 Garfield Street Partition* today, February 5th, 2023 ahead of the February 9th meeting.

Although I have been told verbally that the Feb. 9th meeting has been postponed, I have not received documentation to confirm it. For that reason I am submitting my written concerns that I will share verbally at the meeting on the 9th.

Please confirm the receipt of this official letter attached.

Debby Thomas, Ph.D.
Dean, College of Business
George Fox University
414 N. Meridian Street #6252
Newberg, Oregon 97132
(503) 554-2809
www.georgefox.edu/business

Debby Thomas
733 S. Garfield Street
Newberg, OR 97132
503-899-5903
dthomas@georgefox.edu
5 February 2023

File No.SUB322-0001
Garfield Street Partition
City of Newberg
Community Development, Attn: Ashley Smith
PO Box 970
Newberg, OR 97132

To Whom It May Concern at City of Newberg,

I am the owner of 733 S. Garfield St. the property that is flanked on both sides by this new partition. I have some concerns about the development of these two plots that I will share with you here. I request that the application not be approved until these concerns are properly addressed.

First, in the document

PLANNING COMMISSION STAFF REPORT
100 S GARFIELD STREET SUBDIVISION – PRELIMINARY PLAT – SUB322-0001

I see this comment from the superintendent,

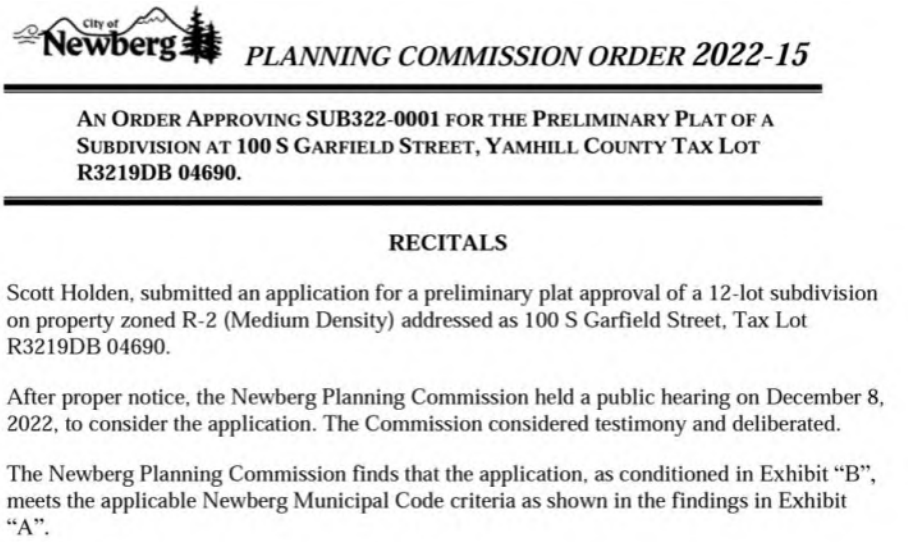
Public Works, Maintenance Superintendent:

1. No water or wastewater connection shall be allowed to under a stormwater facility.
2. All of the stormwater facilities being installed here will be private and the responsibility of the maintenance will fall upon HOA or adjacent homeowner.
3. Location of stormwater pipe is in a poor location and the city will never accept ownership of the this pipe in the future at its current proposed location and will be unable to assist in case of backups.
4. There needs to be a 6" clean out installed at back of ROW for the shared wastewater lateral.
5. No matter what the water study concluded the new city standard is 8" ductile iron pipe and that is what should be installed.

I am especially concerned about #2. It seems to me that we could be held responsible for all the maintenance of the stormwater system built by the developer if he chooses not to institute an HOA, or that we will be equally held responsible with the HOA. This verbiage is repeated many times throughout the application. I do not want to take responsibility for the stormwater system of 24 units. My property could be affected if the stormwater system that the developer builds malfunctions in any way, and I could be held financially responsible for the system as well. It seems undue responsibility is being put on me as a single homeowner for the property and systems of 24 units built by a developer. I would like the developer or the owners of the new development to take full responsibility for the stormwater system that is put in place by the developer. I will not take responsibility for any part of this stormwater system.

Also, #3 the fact that the city will never take responsibility for the stormwater pipe makes me believe that the developer should change the location of the pipe to the location the city desires.

Second, In the city document as shown here



City of Newberg

PLANNING COMMISSION ORDER 2022-15

AN ORDER APPROVING SUB322-0001 FOR THE PRELIMINARY PLAT OF A SUBDIVISION AT 100 S GARFIELD STREET, YAMHILL COUNTY TAX LOT R3219DB 04690.

RECITALS

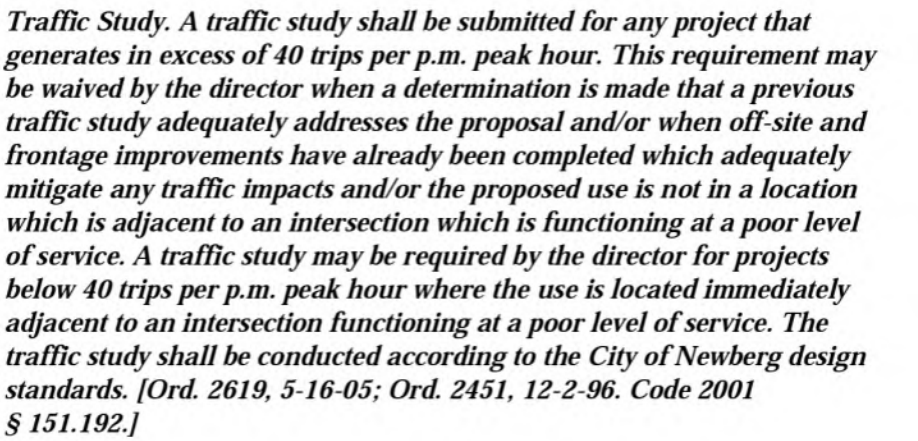
1. Scott Holden, submitted an application for a preliminary plat approval of a 12-lot subdivision on property zoned R-2 (Medium Density) addressed as 100 S Garfield Street, Tax Lot R3219DB 04690.

2. After proper notice, the Newberg Planning Commission held a public hearing on December 8, 2022, to consider the application. The Commission considered testimony and deliberated.

3. The Newberg Planning Commission finds that the application, as conditioned in Exhibit "B", meets the applicable Newberg Municipal Code criteria as shown in the findings in Exhibit "A".

It states that the commission considered testimony and deliberated, which they did not. The hearing was canceled by the developer, and the Newberg citizens who were present were told they could not speak because the meeting had been canceled.

Third, I believe a traffic and parking study is in order. The city document states
.



14. Traffic Study. A traffic study shall be submitted for any project that generates in excess of 40 trips per p.m. peak hour. This requirement may be waived by the director when a determination is made that a previous traffic study adequately addresses the proposal and/or when off-site and frontage improvements have already been completed which adequately mitigate any traffic impacts and/or the proposed use is not in a location which is adjacent to an intersection which is functioning at a poor level of service. A traffic study may be required by the director for projects below 40 trips per p.m. peak hour where the use is located immediately adjacent to an intersection functioning at a poor level of service. The traffic study shall be conducted according to the City of Newberg design standards. [Ord. 2619, 5-16-05; Ord. 2451, 12-2-96. Code 2001 § 151.192.]

No traffic study has been done, and because there are estimated to be only 24 trips per day from these dwellings the traffic study was deemed unnecessary. However, Garfield is a dead end, off of 8th street which is also a dead end. It is already a highly congested area with cars parked on both sides of the street only allowing one lane of traffic on some parts of the street. The developer is wanting to develop 12 duplexes, 24 units in this already highly congested area. That means 48 - 72 more cars. There is no street parking planned in this development, only garages and driveways. I have noticed that in other similar new developments in Newberg where there are SINGLE HOMES on a 3,000 Sq. Ft. lots there are parking issues. In this case it's a ¾ road, not a full road, with NO STREET PARKING anywhere near and

DUPLEXES in the 3,000 sq. ft. lots. Additionally it's a dead end on a dead end causing congestion beyond what is seen in the neighborhoods with through streets. This does not allow for a livable situation for the new tenants nor the current neighborhood. Both parking congestion and traffic congestion are real concerns with this proposed development.

The section of the report referring to parking states that the developer has not yet met the criteria, I do not support this development going forward until the parking coverage has been fully addressed.

15.405.040 Lot coverage and parking coverage requirements.

Finding: This section of NMC will be reviewed, if applicable, during the building permit review process. This section is not applicable at this stage of the subdivision review process because it is more appropriately reviewed during the building permit review process. The applicant's narrative states that future structures will comply with lot coverage requirements.

Furthermore, This is in the application

Chapter 15.440 OFF STREET PARKING, BICYCLE PARKING, AND PRIVATE WALKWAYS

15.440.010 Required off-street parking.

A. Off-street parking shall be provided on the development site for all R-1, C-1, M-1, M-2, and M-3 zones. In all other zones, the required parking shall be on the development site or within 400 feet of the development site which parking is required to serve. All required parking must be under the same ownership as the development site served except through special covenant agreements as approved by the city attorney, which bind the parking to the development site.

Finding: The applicant states that each dwelling will provide a one car garage and one car driveway for a total of two parking places. Final review of off-street parking requirements will be reviewed at time of building permit review process.

We all see that SINGLE family homes that have been recently built in this same way have more than one vehicle in the garage and one in the driveway, they are parked all over the streets. These are DUPLEX dwellings doubling the density and therefore the number of vehicles. There is no where to park the vehicles, this part of the application needs to be reviewed more carefully before being approved.

Fourth, I do not believe that the criteria of 18 single-families or less on a cul-de-sac has been met. The developers state that there are 24 single family dwellings in the new subdivision and 5 existing, so that is 29 single family dwellings on the cul-de-sac. I don't see why they say the criteria are met when they are not.

3. Cul-de-sacs shall not serve more than 18 single-family dwellings.

Finding: The cul-de-sac is planned to serve 12 lots with duplex dwellings. This approximately equates to 24 single family dwellings. There are also five existing lots with single family dwelling served by this street terminating in a cul-de-sac. Because the equivalent of more than 18 single family dwellings are proposed, including the five existing dwellings, final plans indicating a maximum of 18 single family dwellings shall be submitted with permit applications.

This criterion is met.

I support the development of new homes in Newberg. I also support Newberg providing livable communities. This proposed development introduces a density that is not well supported. The stormwater system, parking and traffic are concerns that I believe need to be addressed before approving this proposal. I suggest that these become SINGLE family dwellings and not duplexes, and that additional parking is provided, and a traffic study done. I also ask that I not be held responsible for the stormwater system that the developer puts into place for the new development.

Sincerely,

Debby Thomas