

HEALTH OFFICER DECISION

**Application Type: Building Site Application -
Residential**

Memo #: 74374
Tax ID #: 282302-4-049-2000
RP ACCT ID: 2636991
Expiration: 06/04/2023

Property Information

ORCHARD AVE SE
Olalla WA 98359

Contractor of Record

Contractor Name: A+ ONSITE
Contractor Phone #: (360) 830-4765

Applicant

KING HOMES INC
PO Box 547
Olalla WA 98359

Health Officer Decision for Onsite Sewage System

Approved
(See Conditions Below)

Name of Inspector:
Sam Ader

Date:
06/04/2020

Health Officer Decision for Water Supply

Approved
(See Conditions Below)

Name of Inspector:
Sam Ader

Date:
06/04/2020

1. The depression around the wellhead must be filled in with positive drainage away from the wellhead prior to the permit inspection by the Health District.
2. Iron and manganese exceeds the secondary maximum contaminant level (SMCL). Without water treatment, objectionable taste, staining, and/or odor will most likely occur.

Final Decision: Approved



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KITSAP PUBLIC
HEALTH DISTRICT

345 6th Street, Suite 300
Bremerton, WA 98337
360-728-2235

BUILDING SITE APPLICATION

FOR WATER SUPPLY & ONSITE SEWAGE SYSTEM

Submittal Date	Memo Number	Review Fee	S.S.I.
MAY - 5 2020	74374	\$1070	me

BUILDING SITE INFORMATION

Building Site Address-Street, City, Zip Code:

XXXX Orchard Ave SE, Olalla, WA, 98359

Assessor Tax Account Number:

282302-4-049-2000

Property Size:

223,418 SqFt

Lot Number:

APPLICANT INFORMATION

First & Last Name

King Homes, Inc

Phone Number:

253.225.3694

E-Mail:

kipperberg@gmail.com

Mailing Address- Street, City, State, Zip Code:

P.O. Box 547, Olalla, WA 98359

APPLICATION GENERAL PROPOSAL

Application Type:

☒ New

☐ Repair (no building permit needed)

☐ Modification (building permit needed)

☐ Building Clearance with Compliance

☐ This is a Redesign (describe what is being changed) OR a Building Clearance with Compliance (describe proposal)

Application Use Type:

☒ Residential

☐ Multi-Family

☐ Community

☐ Commercial

Application Water Type:

☐ Public Water

☒ Private Water (residential only)

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FOR SEWAGE AND WATER ONLY

APPLICANT/AGENT & DESIGNER ACKNOWLEDGEMENT

I certify that (1) the information contained in this application is true and accurate to the best of my knowledge; (2) the application represents my intended use of this property; and (3) any related building permits for which I apply for will be consistent with the plans and specifications contained in this application.

I acknowledge and understand that I, along with my contractors, are responsible for adhering to the conditions of approval of this application and are responsible for conforming to applicable Kitsap County Board of Health ordinances and Washington State Department of Health regulations for onsite sewage systems and water supply.

I acknowledge and understand that the design, location, and construction of my onsite sewage system and/or well is/are critical and of a sensitive nature, and I agree to protect these areas as required by the regulations.

I understand that once this application is submitted and/or approved, any changes to, or variations from, the information or conditions related to this plan may require a revised application submittal and/or could result in the revocation, denial, or suspension of this application or a related building permit and that this application will fully expire within 3 (three) years and 30 (thirty) days from the original date of application submittal.

I understand that I have the right to appeal the Health Officer's decision concerning this application pursuant to the regulations, and that approval of this application does not guarantee that a building permit will be issued.

Designer/Engineer Stamp



Designer/Engineer Contact Phone Number:

360.830.4765

Designer/Engineer Email Address:

aplusonsite@live.com

Applicant/Agent Signature

Franklin J. Clark

Date

Franklin J. Clark (Agent) 03May2020

Intake Notes - Health District Use Only

Permit Number: 20-03414

DRINKING WATER & ONSITE SEWAGE SYSTEM SPECIFICATION SHEET

Assessor Tax Account Number:
282302-4-049-2000

A. DRINKING WATER SUPPLY INFORMATION

<input type="checkbox"/> Proposed <input checked="" type="checkbox"/> Existing	<input type="checkbox"/> Public	System Name	System ID
	<input checked="" type="checkbox"/> Private <input type="checkbox"/> Individual <input checked="" type="checkbox"/> 2-Party	ASSESSOR TAX ACCOUNT NUMBERS FOR PROPERTIES SERVED BY WELL Water Connection 1 (Parcel with Well) Water Connection 2 (Parcel connected to Well) 282302-4-048-2001 282302-4-049-2000	

B. SOIL EVALUATION PROFILES

Soil Evaluation Date 09 April 2020	SOIL LOG NUMBERS MUST CORRELATE WITH SITE PLAN - INDICATE TOTAL EXCAVATED DEPTH, SOIL TYPES, WATER TABLE LEVEL & DEPTH OF RESTRICTIVE LAYER		
SOIL LOG #1	SOIL LOG #2	SOIL LOG #3	SOIL LOG #4
Downslope Side Measurements 0" - 6" Dark Brown Fine Sandy Loams (FSL) 6" - 27" Medium Brown (FSL) 27" - 51" Tan Sands N/A" Restrictive Layer 30" Roots - Soil Type: 4 - Load Rate: .6	Downslope Side Measurements 0" - 6" Dark Brown Fine Sandy Loams (FSL) 6" - 23" Medium Brown (FSL) 23" - 41" Tan Sands N/A" Restrictive Layer 28" Roots - Soil Type: 4 - Load Rate: .6	Downslope Side Measurements 0" - 9" Dark Brown Fine Sandy Loams (FSL) 9" - 19" Medium Brown (FSL) 19" - 41" Tan Sands N/A" Restrictive Layer 27" Roots <i>not at 36"</i> - Soil Type: 4 - Load Rate: .6	APPROVED FOR SEWAGE AND WATER ONLY

C. DAILY FLOW - TANKAGE - TREATMENT

DESIGNED MAX SEWAGE FLOW	TRASH/SEPTIC/PUMP TANKS	ADVANCED TREATMENT INFORMATION															
360 Gallons Per Day PROPOSED RESIDENTIAL BEDROOMS 3 Maximum Bedrooms PROPOSED TREATMENT LEVEL TL E	<table border="1"> <thead> <tr> <th>Type</th> <th>Size (gal)</th> <th>QTY</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> Trash Tank</td> <td></td> <td></td> </tr> <tr> <td><input checked="" type="checkbox"/> Septic Tank</td> <td>1000</td> <td>1</td> </tr> <tr> <td><input checked="" type="checkbox"/> Pump Tank</td> <td>1000</td> <td>1</td> </tr> <tr> <td><input type="checkbox"/> Other</td> <td></td> <td></td> </tr> </tbody> </table>	Type	Size (gal)	QTY	<input type="checkbox"/> Trash Tank			<input checked="" type="checkbox"/> Septic Tank	1000	1	<input checked="" type="checkbox"/> Pump Tank	1000	1	<input type="checkbox"/> Other			<input type="checkbox"/> Proprietary Advanced Treatment Manufacturer: _____ Model: _____ <input type="checkbox"/> Non-Proprietary Advanced Treatment Device Type: _____
Type	Size (gal)	QTY															
<input type="checkbox"/> Trash Tank																	
<input checked="" type="checkbox"/> Septic Tank	1000	1															
<input checked="" type="checkbox"/> Pump Tank	1000	1															
<input type="checkbox"/> Other																	

D. DISPERSAL COMPONENT CONSTRUCTION

DISPERSAL COMPONENT SIZING	<p>A. Slope in Primary: 1 - 2 %</p> <p>E. Additional Cover Required: 8 inches</p> <p>D. Trench Width: 36 inches</p> <p>B. Maximum Trench depth: 17 inches</p> <p>C. Vertical Separation: 24 inches</p> <p>Native Soil</p> <p>Restrictive Layer OR Highest Seasonal Water Table</p>	TRENCH CONSTRUCTION PROFILE
Hydraulic Loading Rate of Dispersal Area: .6 Minimum Dispersal Area (Sq. Ft.) In Primary: 600 Minimum Linear Feet or Dimensions: 200 DISTRIBUTION METHOD <input type="checkbox"/> Gravity Distribution <input checked="" type="checkbox"/> Pressure Distribution <input type="checkbox"/> Drip Irrigation <input type="checkbox"/> Other: _____		A. Percent Slope in Primary: 1 - 2 % B. Maximum Trench Depth: 17 inches (Downslope Side Measurements) C. Vertical Separation: 24 inches D. Trench Width: 36 inches E. Additional Cover Required: 8 inches

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HEALTH DISTRICT

Permit Number: 20-03414

Area Map

SE Mullinex Rd

Orchard Ave SE

XXXX Orchard Ave SE

HWY 16



Figure 1: Site Plan Requirements Checklist	
All site plans shall be clearly and accurately drawn to 1"=20', 30', 40' or 50' scale on paper no larger than 11" x 17" and must indicate all of the following information. For each item below, mark either "Shown" or "N/A" as appropriate for your project. This checklist must be completed and included on all site plans. A site plan without this checklist will be rejected and returned to the applicant for correction.	
Shown	Parcel
N/A	Number 282302-4-049-2000
A General Property Information:	
<input checked="" type="checkbox"/>	Tax ID Number and Property Address
<input checked="" type="checkbox"/>	Property lines and dimensions
<input checked="" type="checkbox"/>	Elevations of property and the direction of natural drainage
<input type="checkbox"/>	Slopes that exceed 15%, including any cut banks greater than 4' in height
<input checked="" type="checkbox"/>	North arrow and site plan scale
<input type="checkbox"/>	Marine waters, lakes and ponds and their associated high water lines
<input type="checkbox"/>	Streams, creeks & wetlands and their associated buffer areas
B Existing Property Improvements:	
<input type="checkbox"/>	Location of all existing structures, including the locations of existing structures on adjacent waterfront properties
<input type="checkbox"/>	Location of all existing wells and their well radii, including those wells on adjacent properties within 100' of property lines
<input type="checkbox"/>	Location of all existing drainfields, including the 10' "No Build Zone" as well as the locations of existing drainfields on adjacent properties within 100' of any well
<input type="checkbox"/>	Location of existing drainage facilities, including all sub-surface infiltration systems
<input checked="" type="checkbox"/>	Location of all existing and abutting roadways, driveways, easements, buffers and required open spaces
<input type="checkbox"/>	Location of all existing water, sewer and utility lines.
C Proposed Property Improvements:	
<input checked="" type="checkbox"/>	Location and dimensions of all proposed structures or building envelopes in relation to property lines, other structures, etc.
<input type="checkbox"/>	Location of all proposed wells, including their 100' well radius and all water lines
<input checked="" type="checkbox"/>	Location of all proposed septic tanks, pump tanks, pre-treatment units, and drainfields, including the 10' "no build" zone
<input checked="" type="checkbox"/>	Location and dimensions of all proposed drainage and infiltration systems (I-Pits)
<input checked="" type="checkbox"/>	Location, dimensions, surfacing materials, and clearing limits of all proposed parking areas, driveways, sidewalks, & road app'r's.
<input checked="" type="checkbox"/>	Location of all proposed water, sewer and utility lines.

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HEALTH DISTRICT

Designer's Stamp



A + Onsite, LLC

Commercial & Residential Septic Design

P.O. BOX 1954, SILVERDALE
WA 98383
TEL. 360.830.4765
aplusonsite@live.com

SITE PLAN

Owner Name: King Homes, Inc
Original Submission Date: 25 April 2020

ADDRESS: XXXX Orchard Ave SE
Olalla, WA, 98359

TAX I.D.: 282302-4-049-2000

REV: Submission Date:

****This Is Not A Survey****

County Review

SCALE: 0 50 100

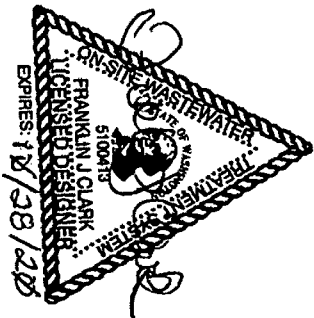


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WA 98383

TEL: 360.830.4765

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SITE PLAN

Owner Name: King Homes, Inc

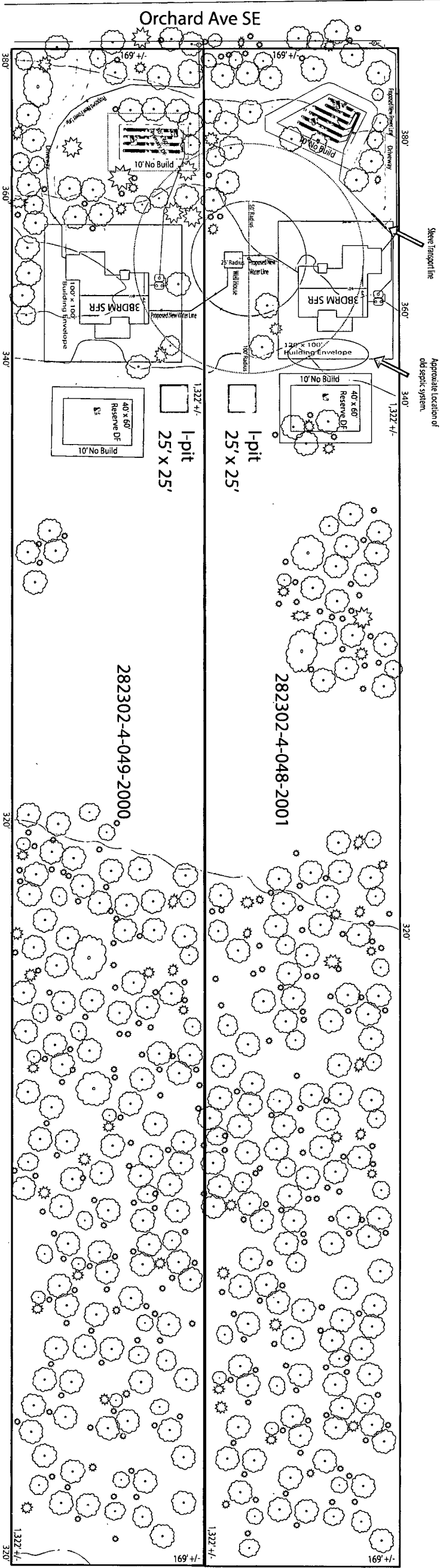
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ADDRESS: XXXX Orchard Ave SE

Olla, WA, 98359

TAX I.D.: 282302-4-049-2000

REV: Submission Date:



SYMBOLS LEGEND

- CLEAN OUT
- 1150 - GAL SEPTIC TANK
- FOUND PROPERTY CORNER
- TREE EVERGREEN
- SOIL TEST PIT LOCATION
- WATER SUPPLY WELL
- WATER METER
- ELECTRICAL TRANSFORMER
- ELECTRICAL JUNCTION BOX
- UTILITY POLE
- WWS PORT LOCATION
- EXISTING TREE (GENERIC)
- WATER LINE
- DRINKING WATER SUPPLY LINE
- POWER LINE
- PROPERTY LINE
- FENCE LINE (EXISTING)
- TREE OR BRUSH LINE
- SPLASH BLOCK

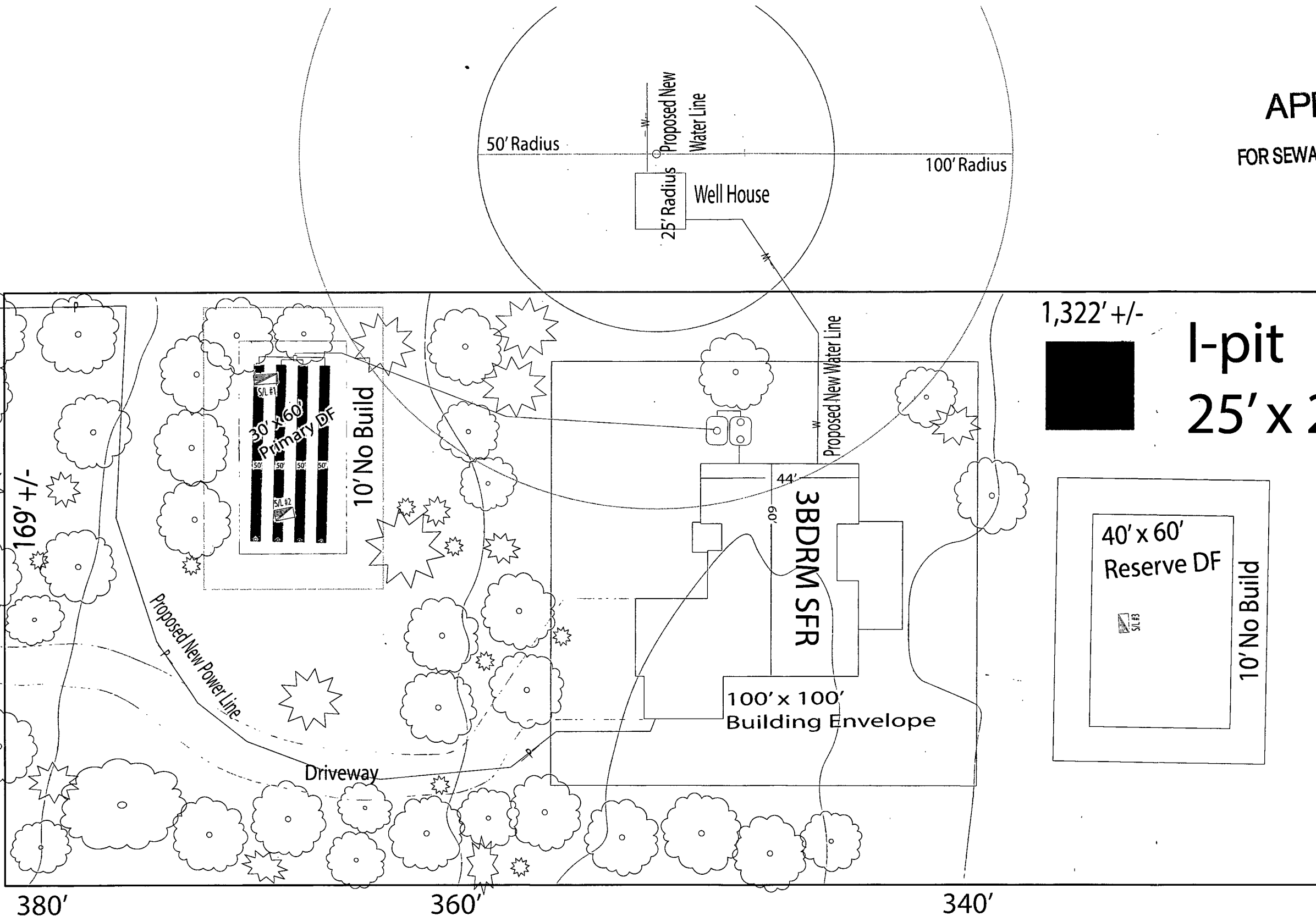
ATTENTION PROPERTY OWNER -
Carefully review ALL aspects of this septic design. ANY costs incurred due to changes to this design after submission to the local Health Juristiction and to the Department of Community Development are the sole responsibility of the property owner.

NOTE - PRESCRIPTIVE FLOW CONTROL MEASURES
ARE TO BE DESIGNED BY LICENSED INDIVIDUALS
IAW APPLICABLE STATE AND LOCAL CODES.
THE DEPICTION OF THE I-PIT ON THIS SEPTIC DESIGN
IS FOR ILLUSTRATIVE AND PLANNING PURPOSES ONLY
AND SHALL NOT BE CONSTRUED AS A FINAL SOLUTION
TO STROM WATER MANAGEMENT.

Approval is for 282302-4-049-2000 only
Other lot shown for overview and well
purposes only.



Orchard Ave SE



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SCALE: 0 15 30

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TEL. 360.830.4765
aplusonsite@live.com

SITE PLAN

Owner Name: King Homes, Inc
Original Submission Date: 25 April 2020

ADDRESS: XXXX Orchard Ave SE
Olalla, WA, 98359

TAX I.D.: 282302-4-049-2000

REV: Submission Date:

Permit Number: 20-03414

General Construction Notes

General

- 1. All workmanship and materials used for the installation of this Septic System must meet Washington State Department of Health and Local Health Jurisdiction code.
- 2. A Pre-Construction meeting shall be held with the Designer, prior to the start of the system installation.
- 3. A final system inspection is required to be performed by the designer, prior to system cover. The installation company shall provide a "Red Line" drawing to the designer for this inspection.
- 4. A "Small/Critical Lot" Inspection and Letter of Approval are required for lots smaller than 12,500 SqFt in size or any lot where restrictive site conditions dictate. The "Small/Critical Lot" inspection will be required at the time of foundation staking or construction.
- 5. A + Onsite, LLC shall be notified prior to the Drain field installation between the months of October and April for wet weather installation approval.
- 6. The designer shall be notified a minimum of (5) days in advance of any required inspections of the system. Please contact A + Onsite, LLC at 360.830.4765 or Email: aplusonsite@live.com to schedule all meetings and inspections.
- 7. Locations of existing utilities shown on the site plan are as accurate as possible. However, the installer shall verify all utility locations prior to system installation by calling the underground locate line "811" or visiting <http://www.call811.com> for more information.
- 8. Erosion control measures shall be taken by the installer during construction to prevent infiltration of existing and proposed stormwater drainage facilities and roadways.
- 9. Any changes to this septic design shall be reviewed and approved by A + Onsite, LLC and Local Health Jurisdiction.
- 10. It is the responsibility of the installer to have an approved copy of the septic design on site during construction of the system.
- 11. The Per Cover Inspection of the system shall not relieve the installer of the responsibility to correct any deficiencies and/or system failures as determined by subsequent testing and inspections. It shall be the installer's responsibility to notify A + Onsite, LLC and the Local Health Jurisdiction when all corrections are complete.
- 12. If the installer encounters any discrepancies between the Design, Calculations, Specifications, and/or Existing Conditions, the installer shall notify A + Onsite, LLC prior to continuing with the installation by calling 360.830.4765.
- 13. The Septic Design/Site Plan is "NOT A SURVEY", it is recommended that the Owner/Contractor has the subject property surveyed. This design is intended to be used as an aid in identifying the Topographic features of the subject property for the purposes of the septic system design only.

- 14. Installer shall locate all water features and the all wells location prior to commencing the septic system installation. To ensure minimum setbacks are met.
- 15. It is the responsibility of the Owner/Contractor to locate and stake the house corners and well location, prior to the installation of the septic system.
- 16. Type 4 - 6 soils must be installed in dry weather conditions.

Sewer lines

- 1. Use only PVC 3034 sewer pipe.
- 2. Sleeve all road, water, and stormwater crossing, where sewer/transport lines cross and/or a water line comes within 10 feet of a sewer line.
- 3. Use PVC primer and PVC Glue on all connections.
- 4. Install on native soil or well compacted soil to avoid settling.

Septic Tank(s)

- 1. Use Concrete Septic Tank or Polyurethane Septic Tank on State Approved List only.
- 2. Tanks must be water tight, with Access Risers brought to surface, buried a minimum 6" below grade with a minimum of 6" of tank top cover and a maximum 36" depth below grade to the top of the tank.
- 3. Bed Septic tanks with gravel as needed, ensuring that each tank is level when installed.

Drain field

- 1. Protect primary and reserve drain field areas from any vehicle traffic.
- 2. No foundation spoils or spoils of any kind or burning in the drain field area is permitted.
- 3. Direct all downspout/surface water away from drain field areas.
- 4. If drain field laterals are depicted, they are approximate and may vary provided they remain in the delineated drain field area.
- 5. Maintain a minimum 30' setback downslope and a 50' upslope of I-pits, and other flow control measures/components.
- 6. Seed and mulch shall be applied immediately upon completion of final drain field cover.
- 7. Installer must provide a soil log/soil profile hole on upper & lower end of drain field.
- 8. Lateral Leg trenches MUST BE RAKED prior to the installation of gravel less chambers.
- 9. No smearing of drain field trench to occur during installation.
- 10. Inspection ports should be installed such that they are not loose.
- 11. Cuts greater than 4' Feet in height are not allowed within 50' down slope of any drain field.

- 12. Use caution to not remove soils when clearing the drain field.
- 13. Depending on the final house elevation, a pump tank may be required.
- 14. Due to unseen water table a curtain drain may be required.
- 15. Depending on the type of ATU used a trash tank may be required.
- 16. Laterals legs are to be installed pre the approved design and may be installed no closer than 5' on center unless otherwise indicated and approved.
- 17. I-pits and other stormwater flow control measures are shown on this design only as a reference and have not been designed by a licensed individual.
- 18. Prescriptive flow control measures are to be designed by licensed individuals IAW State and Local County Code.
- 19. The use of these plans and specifications is restricted to the original site for which they were prepared and publication is expressly limited to such use. Re-use, Reproduction, or Publication by any method is prohibited. Title to the plans and specifications remains with them constitutes Prima Facie Evidence of the acceptance of these restrictions.
- 20. The system must be installed as designed. Any substitutions or changes must have prior approval of the Designer.

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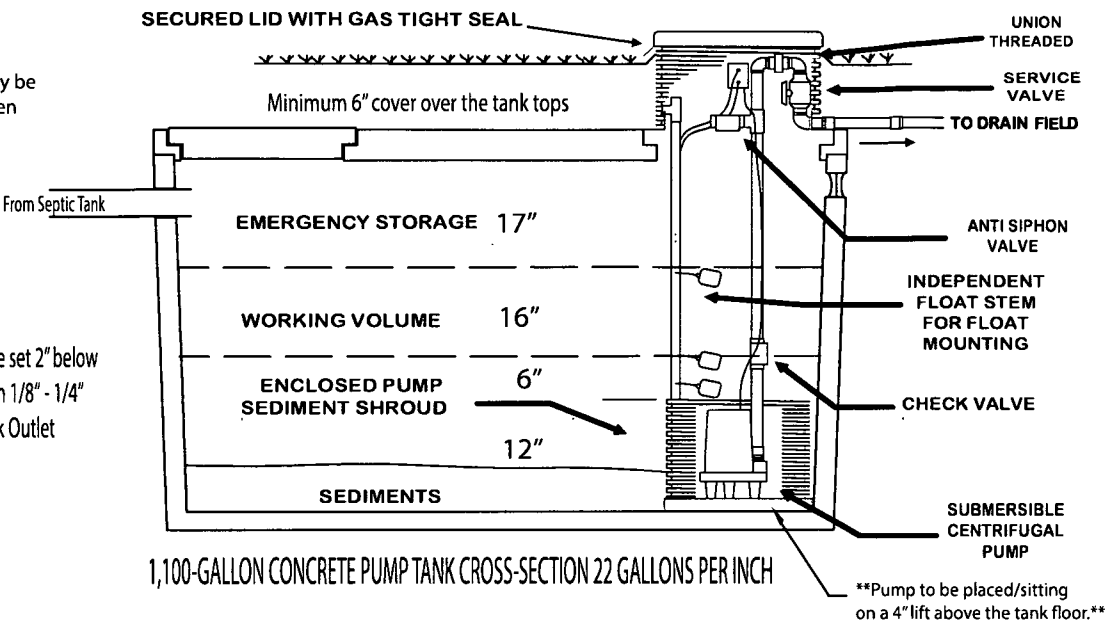
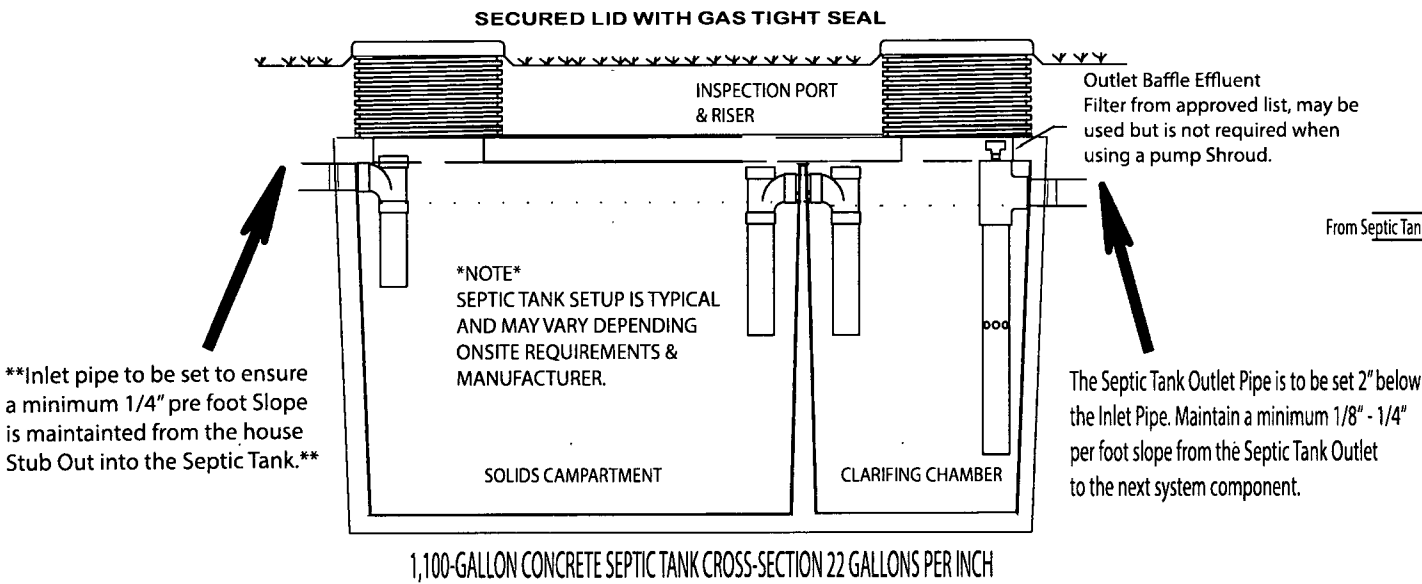
Commerical & Residential Septic Design

P.O. BOX 1954, SILVERDALE
WA 98383
TEL. 360.830.4765
aplusonsite@live.com

SITE PLAN

Owner Name: King Homes, Inc
Original Submission Date: 25 April 2020
ADDRESS: XXXX Orchard Ave SE
Olalla, WA, 98359
TAX I.D.: 282302-4-049-2000
REV: Submission Date:

****Components on this page are not to scale and are shown as representation only. Like and Equivalent Products listed on the DOH 337-024 "List of Registered On-site Treatment and Distribution Products" list may be substituted with the prior approval of the On-site Wastewater Treatment System Licensed Designer of Record.****

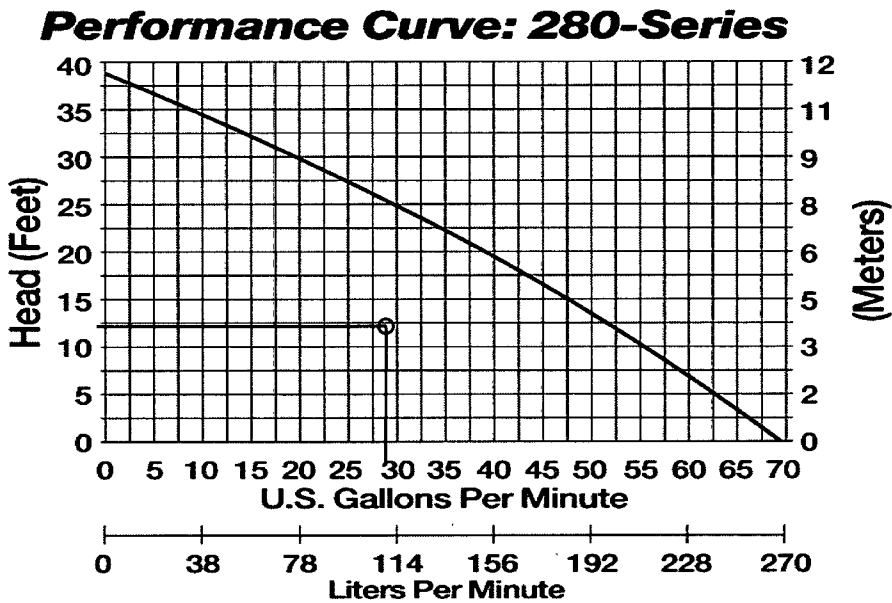


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Lateral, Manifold & Transport Information

Lateral Pipe Length - Total.....	200'
Ratchet Valve.....	N/A
Lateral Pipe Length - Pre Side.....	N/A
Lateral Maximum Length	40'
Lateral Line Diameter.....	1"
Lateral Spacing.....	5 O.C.
Lateral Line Pipe (Schedule-Class).....	40
Manifold Line Pipe Type (Schedule-Class) - (if applicable).....	40
Manifold Length - (if applicable).....	10'
Manifold Line Diameter - (if applicable).....	2"
Transport Line Pipe Type (Schedule-Class).....	SCH 40
Transport Line Length.....	100' +/-
Transport Line Diameter.....	2"

Dosing Information:

Orifice Spacing (inches)	48"
Total Orifices.....	52
Orifice Diameter.....	1/8
Total Dose Volume (gallons).....	360
Number of Doses Per Day.....	12
Size of Pump Tank (gallons)	1100

Pump Information:

Residual Lateral Head (Squirt Height)	5
Pump Capacity (GPM).....	22.7 GPM
Total Dynamic Head (TDH).....	12.4' TDH
Effluent Pump: Orenco Systems Liberty 280, 1/2HP	

Pump Capacity = (orifice discharge rate) x (number of orifices) 0.434 GPM x 52 orifices ≈ 22.7 GPM

Friction Loss = Discharge + Transport Pipe + Distribution Vlv + Manifold Assy Elevation difference + Laterals + Flow Mtr +
Max Elevation + Residual Head at Last Orifice = (TDH) 1.0' + 1.0' + 0.0' + 0.0' + 0.4' + 0.0' + 5.0' + 5.0' ≈ 12.4'

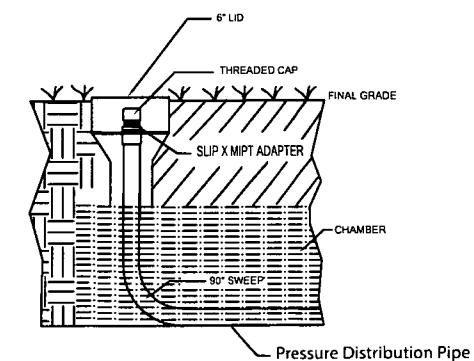
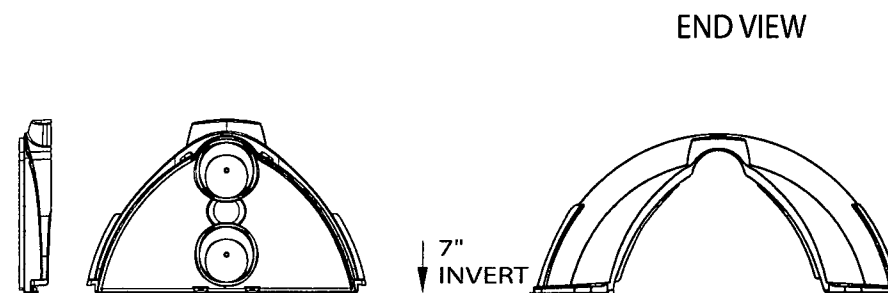
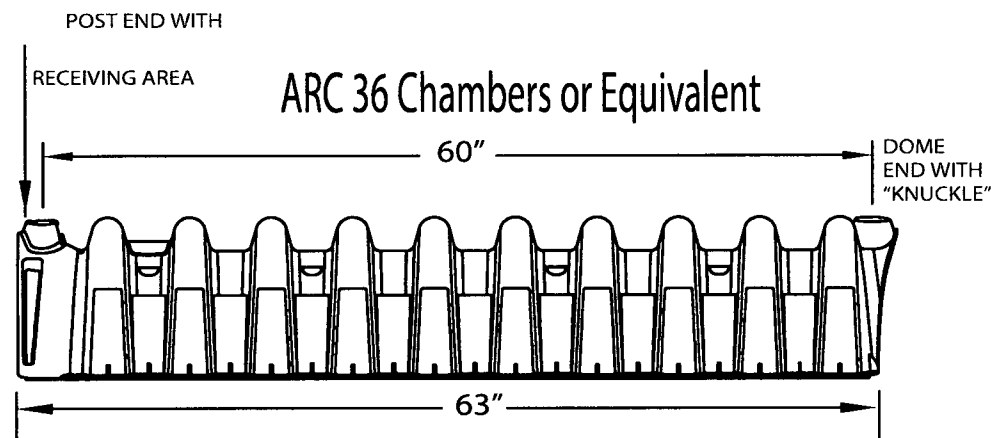
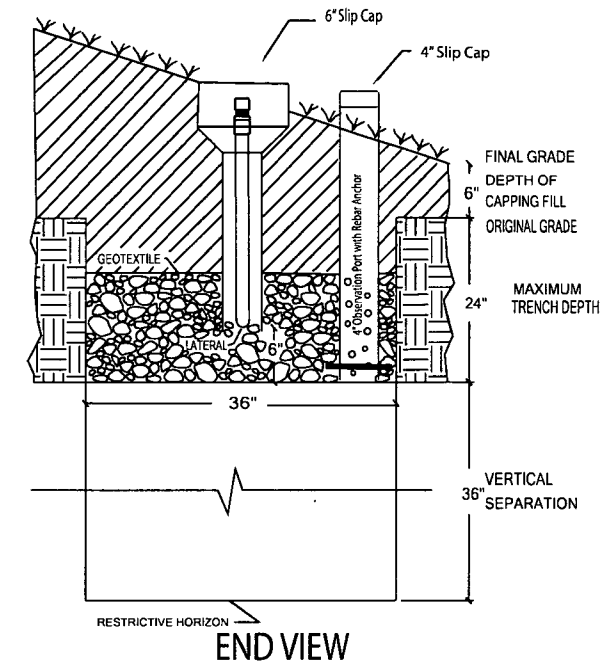
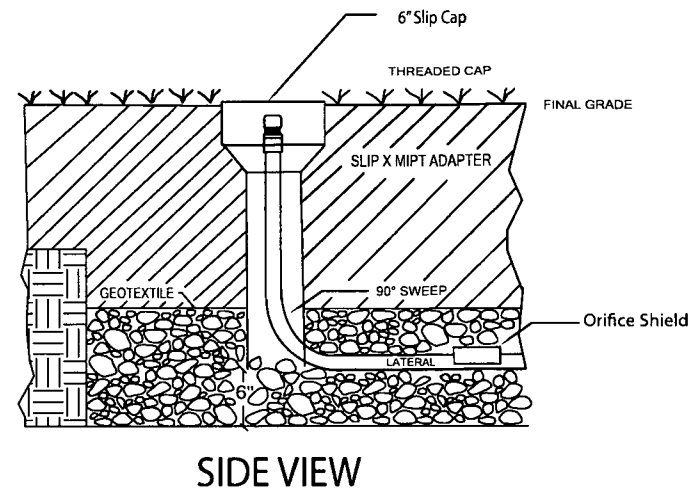
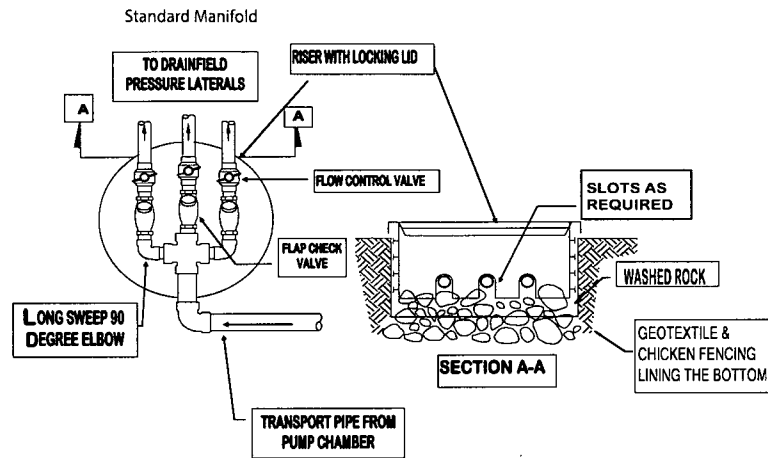
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ADDRESS: XXXX Orchard Ave SE
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TAX I.D.: 282302-4-049-2000
REV: Submission Date:

PRIVATE WATER SUPPLY DESIGN

System Designed for King Homes, Inc located at (property address or legal description) 282302-4-048-2001 / 282302-4-049-2000 10631 Orchard Ave SE

This design is for (check one) ☐ Single Family Residence OR ☒ Two-Party Private Well

Source Pump: Pump rate 1 gpm.

If less than the required daily production of 400 gallons per day (gpd) for a single-family residence or 800 gpd for a two-party private supply, the booster pump and storage section must be completed.

Required Pump head:

Well head

(S.W.L. + Drawdown) 77.7

System elevation -

Headloss -

Residual (30psi) 70

Total: pumps to storage res

Pump Selected: Attach pump curve/table

Type, e.g., Goulds Goulds

Horsepower 1/2

Model Number 10cs05

Depth of pump setting 80

Booster Pump: *If the capacity of the water supply is less than the required daily production of 400 gpd for a single-family residence, or 800 gpd for a two-party private supply, complete this section as well as the storage reservoir section.* 2x400 gal. tanks to fit through doorways.

Booster pump rate 14 gpm

Required pump head 5

Headloss 8

Residual (30 psi) 70

Total: 83

Pump selected: Attach pump curve/table

Type, e.g., Goulds Flowise

Horsepower 3/4 hp

Model Number -

Storage Reservoir: *Must be completed if a booster pump is required.*

Single family residence: **400 gallons** unless otherwise documented.

Attach manufacturer's specifications.

Two-party private: **800 gallons** unless otherwise documented.

Attach manufacturer's specifications.

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CITY OF TULSA
HEALTH DEPARTMENT

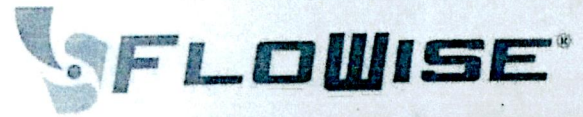
Pressure Tank: Selected tank size 119 gallons.

One gallon of working storage per one gpm pump capacity, e.g., a 5 gpm pump will require 5 gallons of working or usable storage which computes to a 19-gallon (total volume) pressure tank. When a booster pump is required, size the pressure tank according to the booster pump, not the well pump.

Distribution System:

Service	Pipe Type	Pipe diameter	Pipe length	Peak flow	Headloss per 100 ft.	Headloss in feet
1	poly	1	300	7 gpm	2.6	8
2	poly	1	300	7 gpm	2.6	8

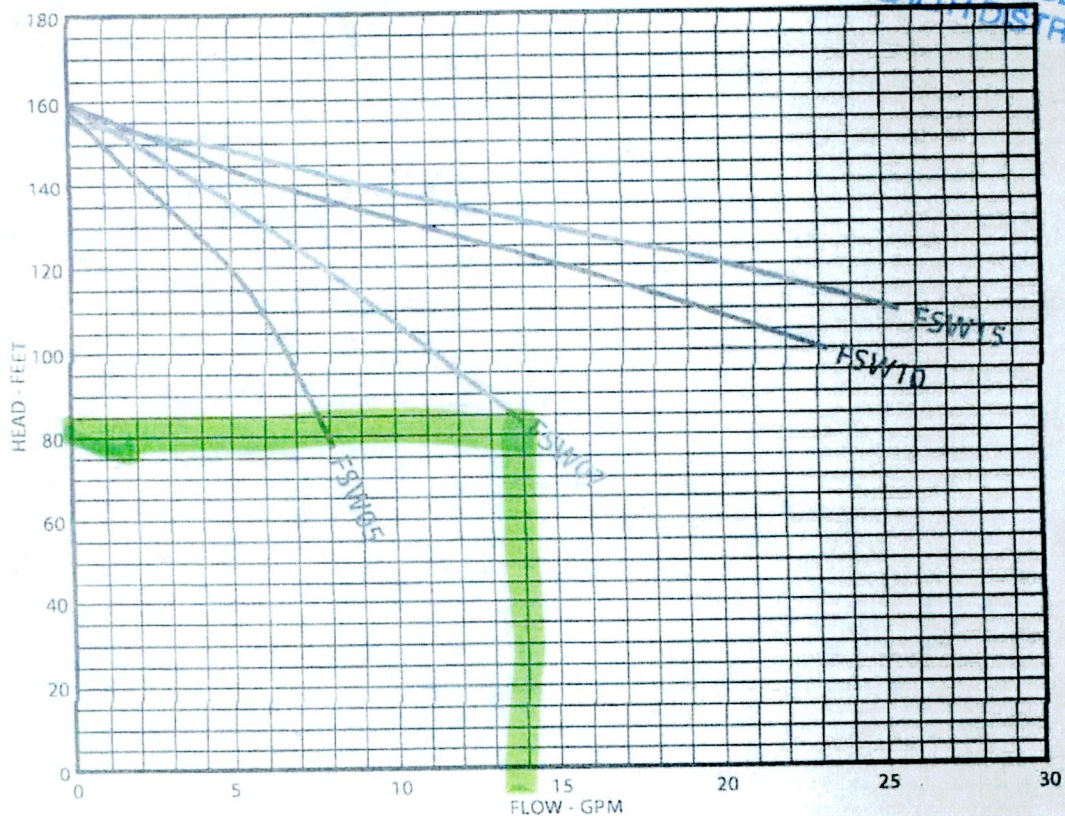
Completed by: Jarey Davis Date: 5/28/2020



Pump Performance (Gallons per Minute)											
Model Number	HP	Motor Voltage	Pressure Switch Setting	Discharge Pressure (PSI)	Suction Lift					Shut-Off Pressure (PSI)	Shipping Weight
					5'	10'	15'	20'	25'		
FSW05	1/2	115/230V	30/50 Square D	30	9.7	8.3	7.4	5.9	4.3	70	44
				40	7.9	7.2	6.4	5.6	4.1		
				50	4.5	3.8	3.1	2.7	1.8		
FSW07	3/4			30	15.0	13.0	11.6	8.7	6.9		47
				40	12.5	11.4	10.1	8.2	6.8		
				50	8.0	6.8	6.1	4.8	3.5		
FSW10	1			30	21.4	19.1	16.5	13.3	9.5	67	66
				40	20.8	18.7	15.8	13.2	9.3		
				50	13.5	11.6	10.1	7.4	2.4		
FSW15	1 1/2			30	28.5	25.0	21.4	17.4	12.6		69
				40	28.3	24.4	21.0	17.2	12.3		
				50	21.5	18.3	10.9	3.1	1.6		

PERFORMANCE CURVES

FSW05 (.5 HP) - FSW07 (.75 HP) - FSW10 (1 HP) - FSW15 (1.5 HP)



Davis Drilling, Inc.

***340 NE Davis Farm Rd
Belfair, WA 98528
275-5367***

Test pump for:

King Homes

Project: 10631 Orchard Ave SE

May 15, 2020

****Discharge line fitted with 1 gpm flow restrictor****

Pump: 1/2 hp
Static Level: 60.2'

Draw Down

Time	Water Level	Flow	GPM
0 min	60.2'		0
5 min	77.5'		4
1hr	77.7'		1
2hr	77.9'		1
3hr	77.7'		1
1 hr	77.7'		1
2 hr	77.8'		1
3 hr	77.7'		1
4 hr	77.7'		1
5hr	77.8		1
6hr	77.7		1
7 hr	77.8		1
8 hr	77.7		1
9 hr	77.7		1
10 hr	77.7		1
11hr	77.7		1
12 hr	77.7		1
13 hr	77.7		1
15 hr	77.7		1

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Davis Drilling, Inc.

340 NE Davis Farm Rd

Belfair, WA 98528

275-5367

Recovery

Time	Water Level
0 min	77.7
1 min	75.4'
2 min	73.4'
3 min	72.2'
4 min	71.9'
5 min	71.5'
10 min	66'
30 min	60.2'

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SPECTRA Laboratories - Kitsap

...Where experience matters

1786 SE Mile Hill Dr.
Port Orchard, WA 98366
(360) 443-7845

Kitsap 5

System ID No:	System Group Type: Private
Sample Number: 225-13001	System Name: 10631 Orchard Ave SW
Sample Location: Source	County: Kitsap
	Sampler: Lacey
Source Number(s): S01	Sampler Phone No:
Sample Purpose: Other	Date Collected: 4/10/2020
Sample Composition: Single Source	Date Received: 4/10/2020
Sample Type: DW: Untreated	Date Reported: 4/24/2020
Send Report to: Davis Drilling 340 NE Davis Farm Road Belfair, WA 98528	Bill to: Davis Drilling 340 NE Davis Farm Road Belfair, WA 98528

DOH #	Analyte	Results	Qual.	Units	SDRL	PQL	Trigger	MCL	Exceeds MCL	Method	Analyst	Analysis Date
0020	Nitrate-N	1.5	---	mg/L	0.5	0.5	5	10.0		S.Easy(1-Reagent)	SK	4/10/2020
0008	Iron	3.7	---	mg/L	0.1	0.1	---	0.3'	YES	EPA 200.7	118	4/16/2020
0010	Manganese	0.11	---	mg/L	0.01	0.001	---	0.05'	YES	EPA 200.7	118	4/16/2020
0021	Chloride	ND	---	mg/L	20	1.0	---	250'		EPA 300.0	010	4/4/2020
0016	Conductivity	120	---	µmhos/cm	70	70	---	700		SM 2510 B	010	4/17/2020

NOTES:

Sample Number: 113130-01

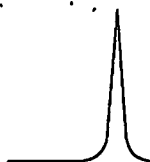
***Confirmation** Include the original lab number, sample number, and collection date of original sample in either lab or sampler comments section.
SDRL: (State Detection Reporting Limit) The minimum reportable detection of an analyte as established by the department.
Trigger Level: DOH drinking water response level. Systems with compounds detected at concentrations in excess of this level may be required to take additional samples or monitor more frequently. Please contact your DOH drinking water regional office for further information.
MCL: (Maximum Contaminant Level) If the contaminant amount exceeds the MCL, please contact your regional DOH office to determine follow-up actions.
NA: (Not Analyzed) In the results column, indicates this compound was not included in the current analysis.
ND: (Not Detected) In the results column, indicates this compound was analyzed and not detected at a level greater than or equal to the SDRL.
< (0.00x): The compound was not detected in the sample at or above the concentration indicated (usually the lab method reporting limit):
mg/L: milligrams per liter or parts per million.
NTU: nephelometric turbidity units (a measure of water clarity).
µmhos/cm: Micro ohms per centimeter (a measure of the ability of the water to conduct electricity). One micro ohm per centimeter is equivalent to one micro siemen per centimeter (uS/cm).
--- No existing trigger or MCL value.
1: Secondary MCL (Established for aesthetic purposes, not health based).

Lab Qualifiers Comments:

010: Analysis performed by Spectra Laboratories-Kitsap, LLC Lab-Sample#: 010-09601

118: Analysis performed by Spectra Laboratories, LLC Lab-Sample#: 118-39275

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Port Orchard, WA 98366
(360) 443-7845

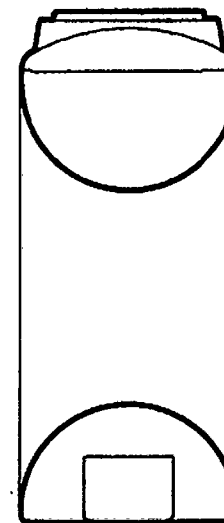
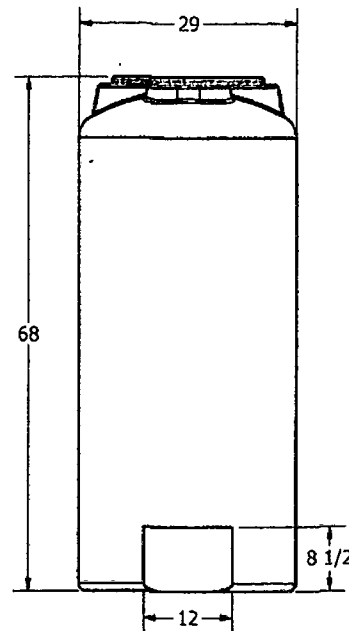
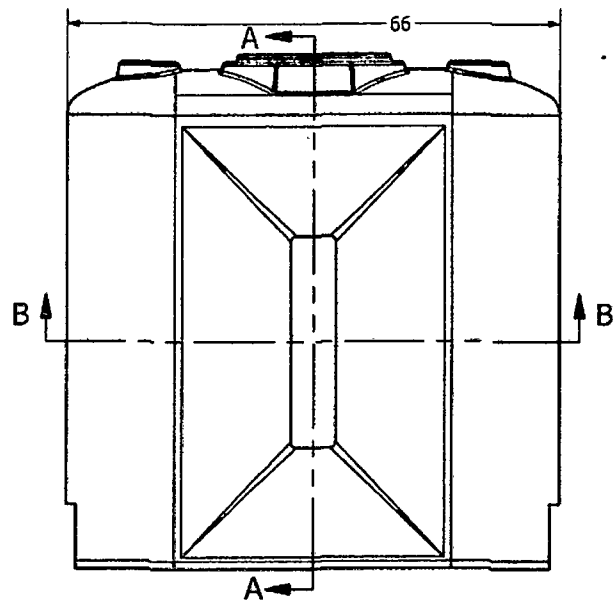
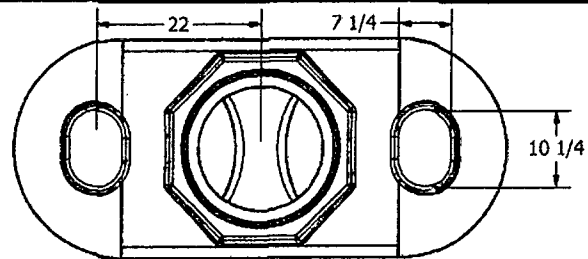
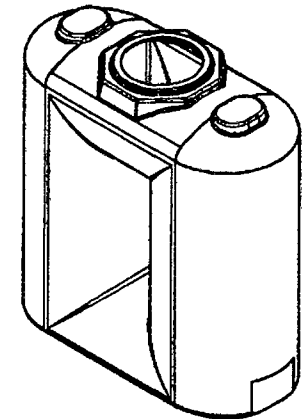
Kitsap 5

System ID No:		System Group Type:	Private
Sample Number:	225-13001	System Name:	10631 Orchard Ave SW
Sample Location:	Source	County:	Kitsap
		Sampler:	Lacey
Source Number(s):	S01	Sampler Phone No:	
Sample Purpose:	Other	Date Collected:	4/10/2020
Sample Composition:	Single Source	Date Received:	4/10/2020
Sample Type:	DW: Untreated	Date Reported:	4/24/2020
Send Report to: Davis Drilling 340 NE Davis Farm Road Belfair, WA 98528		Bill to: Davis Drilling 340 NE Davis Farm Road Belfair, WA 98528	

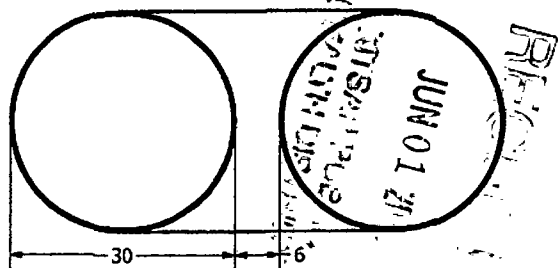
Approved By

Jessica Donaldson
Laboratory Manager

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SECTION A-A
SCALE 1/16



SECTION B-B
SCALE 1/16

DRAWN Jerry Paulson	4/14/2011	NORWESCO	
CHECKED		NORWESCO, INC., ST. BONIFACIUS, MN	
QA		TITLE	
MFG		400 GALLON FREE STANDING WATER TANK	
APPROVED		SIZE B	DWG NO
		SCALE: 1/16	REV
		SHEET 1 OF 1	

Spectra Laboratories - Kitsap, LLC received samples from Davis Drilling on Friday, May 29, 2020 at 11:58 am. Unless otherwise noted, all samples were received in good condition and were tested in accordance with the laboratory's quality control procedures. A summary of the samples received are outlined below.

Sample No.	Description	Location	Sampled
113910-01	Josiah - Orchard	Source	05/28/2020 18:00

This report package contains laboratory sample results and any attachments listed below. If you have any questions please call (360) 443-7845 or email us at JessicaD@spectra-lab.com.

Attachments

01) Bacteria

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JUN 01 2020
KITSAP PUBLIC
HEALTH DISTRICT

COLIFORM BACTERIA ANALYSIS FORM

Date Sample Collected 5/28/20 Month Day Year	Time Sample Collected 6:00 <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	County MASON
Type of Water System (check only one box) <input type="checkbox"/> Group A <input type="checkbox"/> Group B <input checked="" type="checkbox"/> Other		
Group A and Group B Systems - Provide from Water Facilities Inventory (WFI): ID# _____		
System Name: Josiah - Orchard		
Contact Person: _____		
Day Phone: _____	Cell Phone: 360-801-6117	
Email: jdavis@nrc.com	Eve. Phone: _____	
Send results to: (Print full name, address and zip code or e-mail) Davis drilling		

SAMPLE INFORMATION	
Sample collected by (name): Lacy	
Specific location where sample collected: Source	Special instructions or comments:

Type of Sample (check only one box)	
1. <input checked="" type="checkbox"/> Routine Distribution Sample Chlorinated: Yes <input type="checkbox"/> No <input type="checkbox"/> Chlorine Residual: Total _____ Free _____	2. Repeat Sample (after unsat. routine) <input type="checkbox"/> Distribution System Unsatisfactory routine lab number: _____ Unsatisfactory routine collect date: _____ Chlorinated: Yes <input type="checkbox"/> No <input type="checkbox"/> Chlorine Residual: Total _____ Free _____
3. Source Ground Water Rule Sample S <input type="checkbox"/> Triggered <input type="checkbox"/> Assessment	

4. Enumeration Source Water Sample <input type="checkbox"/> E.coli <input type="checkbox"/> Fecal - Surface, GWN, Springs: Filtered Yes <input type="checkbox"/> No <input type="checkbox"/> S

5. <input checked="" type="checkbox"/> Sample Collected for Information Only:

LAB USE ONLY - DRINKING WATER RESULTS	LAB USE ONLY
---------------------------------------	--------------

<input checked="" type="checkbox"/> Unsatisfactory Total Coliform Present and <input type="checkbox"/> E.coli present <input type="checkbox"/> E.coli absent	<input checked="" type="checkbox"/> Satisfactory
---	--

Replacement Sample Required: <input type="checkbox"/> Sample too old (>30 hours) <input type="checkbox"/> TNTC <input type="checkbox"/>
--

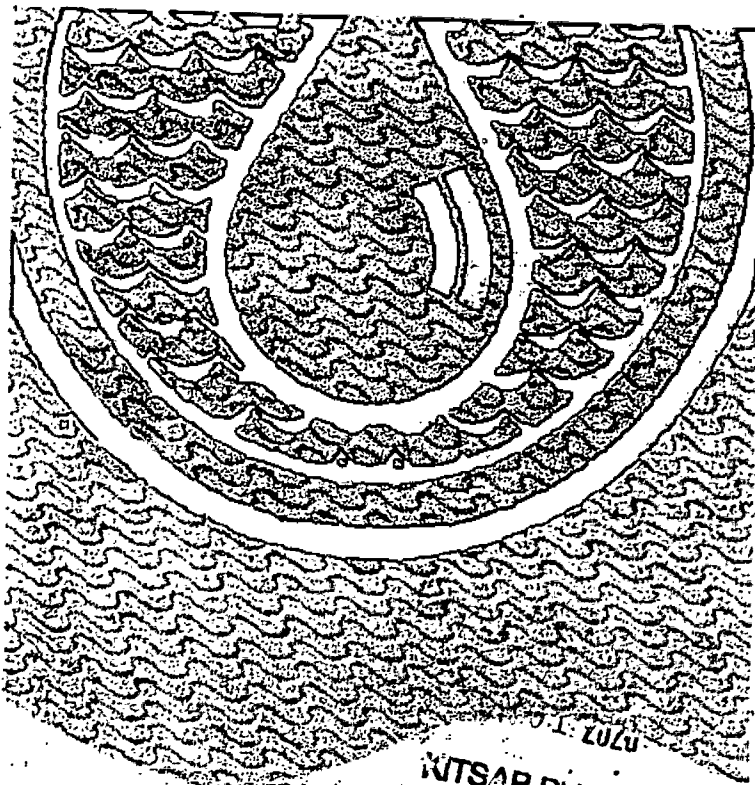
Bacterial Density Results: Total Coliform _____ /100ml E.coli _____ /100ml Fecal Coliform _____ /100ml HPC _____ /1-ml

Lab ID Number: 11391001	Date and Time Received: MAY 29 2020 11:58
--------------------------------	--

Method Code: SM-9223-B	Date and Time Analyzed: MAY 29 2020
-------------------------------	--

Date Analyzed: 5/30/20	Date Reported: 6/1/20
-------------------------------	------------------------------

DOH Lab Sample: 225 91001	Lab Use Only:
----------------------------------	---------------



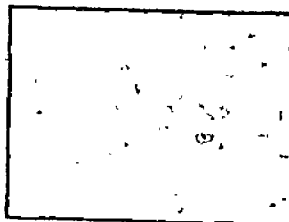
Coliform Distribution System Sampling Procedure

Step One

Avoid poor sample sites such as swivel faucets, hot and cold mixing faucets (with a single lever), leaky or spraying faucets, drinking fountains, janitorial sinks, frost-free hose bibs, and faucets below or near ground level.

Step Two

Remove any attachments from the faucet, including aerators, screens, washers, hoses and water filters. If you choose to disinfect the sample site prior to sample collection, be sure to flush thoroughly to remove all disinfectant.



Step Three

Turn on the cold water only and let it run with a steady stream for at least five minutes. Before collecting the sample, turn the water down to a thin stream and let the water run for one minute. If the system is chlorinated, measure the free chlorine and note the measurement on the lab slip.

Step Four

There may be some liquid or powder in the sample bottle to remove chlorine. Do not rinse it out.

Step Five

To avoid contamination while taking the sample, hold the bottle near the bottom with one hand and hold the top of the cap with the other. Now unscrew the cap.

DONOT set the cap down, touch any part of the cap that touches the bottle or let anything touch the rim of the bottle or inside the cap.

Step Six

Hold the bottle under the stream of water, be careful not to let the bottle touch the sample tap. Fill the bottle to the indicated fill line, do not allow it to overflow. Remove the bottle from the water flow and secure the cap.

Step Seven

Complete the lab slip. Note anything unusual about the sample collection.

Step Eight

Secure the lab slip to the bottle with rubber band. Deliver the sample to Centric Analytical Labs as soon as possible.

Return To:
Davis Drilling
340 NE Davis Farm Rd
Belfair, Wa 98528

W0014416

**Declaration of Water Use Agreement
Orchard Avenue SE Water System
Private 2 Party**

ABBREVIATED LEGAL DESCRIPTIONS AND PARCEL NUMBERS OF TRACTS BEING SERVED:

The well and water system being situated on

Parcel # 282302-4-049-2000

Section 28 Township 23N Range 2E SE $\frac{1}{4}$ NW $\frac{1}{4}$ - $\frac{1}{4}$

Orchard Avenue SE Olalla, Wa 98359

has been designated to serve a source of water to the following parcels situated in Kitsap County, State of Washington; herein described:

Parcel # 282302-4-049-2000

Section 28 Township 23N Range 2E SE $\frac{1}{4}$ NW $\frac{1}{4}$ - $\frac{1}{4}$

Orchard Avenue SE Olalla, Wa 98359

&

Parcel # 282302-4-048-2001

Section 28 Township 23N Range 2E SE $\frac{1}{4}$ NW $\frac{1}{4}$ - $\frac{1}{4}$

10631 Orchard Avenue SE Olalla, Wa 98359

Grantor: Josiah Kipperberg, on behalf of King Homes Inc.

Grantee: Josiah Kipperberg, on behalf of King Homes Inc.

OWNERSHIP OF WELL AND WATERWORKS

It is agreed by the parties that each of said parties shall be and is hereby granted an undivided one-half interest in and to the use of the well and water system. Each Party shall be entitled to receive a supply of water for one residential dwelling and shall be furnished a reasonable supply of potable and healthful water for domestic purposes.

COST OF MAINTENANCE OF WATER SYSTEM

Each party hereto covenants and agrees that they shall equally share the maintenance and operational costs of the well and water system herein described. An annual utility fee shall be paid by the owner(s) of

Parcel # 282302-4-048-2001

Section 28 Township 23N Range 2E SE $\frac{1}{4}$ NW $\frac{1}{4}$ - $\frac{1}{4}$

10631 Orchard Avenue SE Olalla, Wa 98359

to the owner(s) of

Parcel # 282302-4-049-2000

Section 28 Township 23N Range 2E SE $\frac{1}{4}$ NW $\frac{1}{4}$ - $\frac{1}{4}$

Orchard Avenue SE Olalla, Wa 98359

of \$100 to cover all electrical utility and maintenance costs. This fee shall be determined annually and be revisited and agreed upon by both parties at the beginning of each year. The expense of water quality sampling as required by the State of Washington and Mason County shall be shared equally by both parties. The parties shall establish and maintain a reserve account at a mutually agreed upon banking institution. Each party shall be entitled to receive an annual statement from said banking institution regarding the status of the reserve account. The monetary funds in the reserve account shall be utilized for the sole purpose of submitting water samples for quality analysis and maintaining, repairing or replacing the well and components to complete and maintain a properly functioning water system and appurtenance thereto.

NOTICE TO FUTURE PROPERTY OWNERS

The water system is designed to provide for two services. Additional planning and design approvals must be obtained from the local health jurisdiction prior to expanding beyond this number of services. Design flow standards account for domestic use and watering of a typical lawn and/or garden space only. The design assumes that all residences will be equipped with ultra low flow plumbing fixtures and that all users will keep conservation in mind whenever the system is used. Additionally, a water right, obtained from the Department of Ecology, is required if the water system exceeds exemption standards. This system has not applied for or been granted any waivers from specific provisions of the regulations.

EASEMENT OF WELL SITE AND PUMPHOUSE

There shall be an easement for the purpose of installing, maintaining and repairing the well, distribution and water system components to complete and maintain a properly functioning water system and appurtenance thereto, within 100 feet of the well site in any direction. Said easement shall allow the installation of a well/pump house, pumps, water storage reservoirs, pressure tanks, waterline and anything necessary to the operation of the water system.

MAINTENANCE AND REPAIR OF DISTRIBUTION LINES

All pipelines in the water system shall be maintained so that there will be no leakage of seepage, or other defects which may cause contamination of the water, or injury, or damage to persons or property. Cost of repairing or maintaining common distribution pipelines shall be borne equally by both parties. Each party in this agreement shall be responsible for the installation, maintenance, repair, and replacement of pipe supplying water from the common water distribution piping to their own particular dwelling and property. Water pipelines shall not be installed within 10 feet of a septic tank or within 10 feet of sewage disposal drainfield lines.

PROHIBITED PRACTICES

The parties herein, their heirs, successors and/or assigns, will not construct, maintain or suffer to be constructed or maintained upon the said land and within 100 feet of the well herein described, so long as the same is operated to furnish water for public consumption, any of the following: septic tanks and drainfields, sewer lines, underground storage tanks, county or state roads, railroad tracks, vehicles, structures, barns, feeding stations, grazing animals, enclosures for maintaining fowl or animal manure, liquid or dry chemical storage, herbicides, insecticides, hazardous waste or garbage of any kind.

The parties herein, their heirs, successors and/or assigns are required to keep the water supplied from said well free from impurities which might be injurious to the public health. It is the purpose of these grants and covenants to prevent certain practices hereinafter enumerated in the use of said grantor(s) land which might contaminate said water supply.

Exhibit A NOW, THEREFORE, the grantor(s) agree(s) and covenant(s) that said grantor(s), his (her) (their) heirs, successors and assigns will not construct, maintain, or suffer to be constructed or maintained upon the said land of the grantor(s) and within fifty (50) feet of the well herein described, so long as the same is operated to furnish water for public consumption, ANY POTENTIAL SOURCE OF CONTAMINATION INCLUDING BUT NOT

LIMITED TO: cesspools, sewers, privies, septic tanks, drainfields, manure piles, fenced pasture, garbage of any kind or description, any enclosure or structures for the keeping or storage of non biodegradable fertilizers, liquid or dry chemicals, herbicides or insecticides as well as any enclosures or structures for the keeping or maintenance of fowl or animals such as barns, chicken houses, rabbit hutches, pigpens, livestock sheds, and further agree(s) not to use, apply, dispose or suffer to be used, applied or disposed, non biodegradable fertilizers, any liquid or dry chemicals, herbicides or insecticides within the above described protective radius. These covenants shall run with the land and shall be binding on all parties having or acquiring any right, title, or interest in the land described herein or any part thereof, and shall inure to the benefit of each owner thereof.

WATER SYSTEM MANAGER

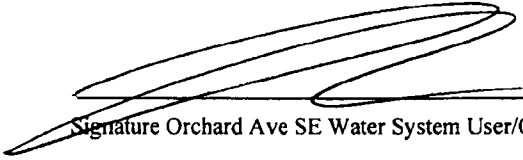
The owner of Parcel # 282302-4-049-2000 Section 28 Township 23N Range 2E SE¼ NW¼ - ¼ Orchard Avenue SE Olalla, Wa 98359 is the designated "Manager" of the system. The manager shall be responsible for arranging submission of all necessary water samples as required in the Washington Administrative Code, and Kitsap County Rules and Regulations and handling emergencies such as system shutdown and repair. The Manager shall provide his/her name, address and telephone number to the Health Officer and shall serve as a contact person to the Health Officer. The manager shall organize and maintain the water system records and notify the Health Officer and all parties, service connections and lots that are included in this agreement, of the water quality tests that are required by WAC 246-291 and Kitsap County Rules and Regulation. Water system records shall be available for review and inspection by all parties in this agreement and the Health Officer.

HEIRS, SUCCESSORS AND ASSIGNS

These covenants and agreements shall run with the land and shall be binding on all parties having or acquiring any right, title, or interest in this land described herein or any part hereof, and it shall pass to and be for the benefit of each owner thereof.

ENFORCEMENT OF AGREEMENT ON NON-CONFORMING PARTIES AND PROPERTIES

The parties herein agree to establish the right to make reasonable regulations for the operation of the system, such as termination of services if bills are not paid within 45 days of the due date, additional charges for disconnection, reconnection, etc. Parties not conforming with the provisions of this agreement shall be subject to interest charges of 18% per annum together with all collection fees.



Signature Orchard Ave SE Water System User/Owner

5-15-20


Date

State of Washington,

County of Kittitas

I, the undersigned, a Notary Public in and for the named above County and State, do hereby certify that on this 15 day of May, 2020, personally appeared before me Jarish Koppa to me known to be the individual described on and who executed the within instrument, and acknowledge that he (she) (they) signed and sealed the same as free and voluntary act and deed, for the users and purposes herein mentioned.

GIVEN under my hand and official seal the day and year last above written.



Notary Public in and for the State of Washington,
residing at Port Orchard
My commission expires: 9/21/2022

LYNDA G FOSSE
NOTARY PUBLIC
STATE OF WASHINGTON
License Number 69133
My Commission Expires September 21, 2022

ORCHARD AVE SE Olalla

CHRONOLOGICAL CONTROL SHEET Building Site Application - Residential

Parcel Notes

*Parcel Alert owner recorded covenants for Large Lot. Copy on auditor database. (parent or grandparent parcel) Dec 20 2018 10:35AM

Applicant: KING HOMES INC

Tax ID: 282302-4-049-2000

Contractor: A+ ONSITE

Memo: 74374

BP: N/A

DCD-LU: N/A

RECEIVED ON	INITIALS	ACTION TAKEN/COMMENTS	ROUTE TO	DATE
05/05/2020	MC	Received online.	SA	05/05/2020
5/28/20	SA	Pressure on Existing 2-Party Well Lot = 225,418 ft ² 360/0.16/3 = 200 ft ✓ Trench = 17", depth 24", Need 1/4"		
		100 ft cement in WUA		
		- Soils match Design		
		- Wellhead in good condition		
		Must fill in depression around well & create perimeter bump		
		- Removed well info w/ KS		
		- Approved, ready to process	BA	6/4/20
6/4/2020	SP (P)			