

# AMBLESIDE NATURAL AREA

Analysis of Alternative Management Scenarios

June 2014



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# INTRODUCTION

## Project Site

Ambleside is a 26 acre natural area along Johnson Creek in Gresham, Oregon. The property includes several parcels purchased by Metro to improve riparian function and maximize ecological potential along Johnson Creek. The City of Gresham also owns a 1/3 interest in one parcel. The property is bordered by the Springwater Corridor Trail on the north and rural farms and homes on the south and west.

Metro's long term goal is to improve and protect water quality in Johnson Creek by stabilizing stream function, restoring floodplain function, and improving wildlife habitat. Floodplain restoration and riparian function is limited and complicated by leased homes, an access drive, and bridge. One of the homes is in the floodplain, and one is directly adjacent to the stream. A small water control structure impacts natural water flow and several stream bank sections are armored.

The desired future condition for the site is a mature riparian forest complex with natural and resilient stream functions. Metro's 2013 levy work plan recommended an analysis of management options for reducing and/or eliminating the conflicts between the lease properties and Metro's ability to manage for the natural area's desired future conditions.

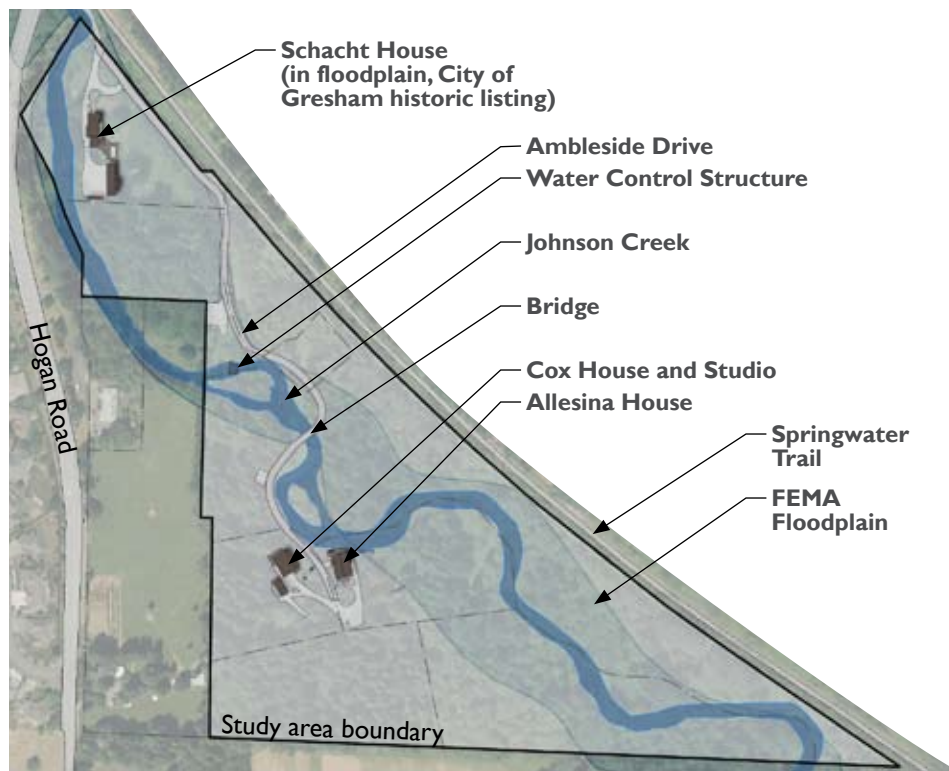


Figure 1: Aerial photo: Ambleside study area

**Purpose of Study**

The purpose of this study is to document existing site conditions, develop general management options for the site, and identify costs and benefits of each management option. This study is not intended as a recommendation of a particular management direction. It is intended to document the cost, benefit and necessary steps of each management scenario.

A range of management scenarios were considered. They include removing unnecessary impervious area and structures, moving or deconstructing all structures, and providing alternative access to allow the existing bridge and significant part of the road to be removed.

The analysis addresses the following questions:

- What are the barriers to removing existing structures and homes (such as historical status, cultural significance or construction access)?
- What are the long term strategies for reducing conflicts between lease use and natural resources management objectives?
- What are the options for keeping or removing homes?
- What short term actions can be implemented to reduce impacts to the natural area from the leased properties?
- For each scenario:
  - » What are the associated costs?
  - » What are the necessary permits?
  - » What are the restoration benefits?

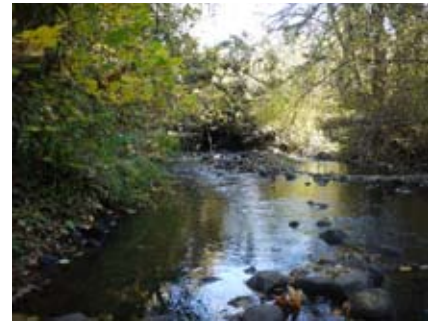


Figure 2: Johnson creek at southeast corner of site looking upstream



Figure 3: Johnson Creek bank armoring.



Figure 4: Ambleside Road with alee of European birch trees

# I. Site Analysis

## 1. Location

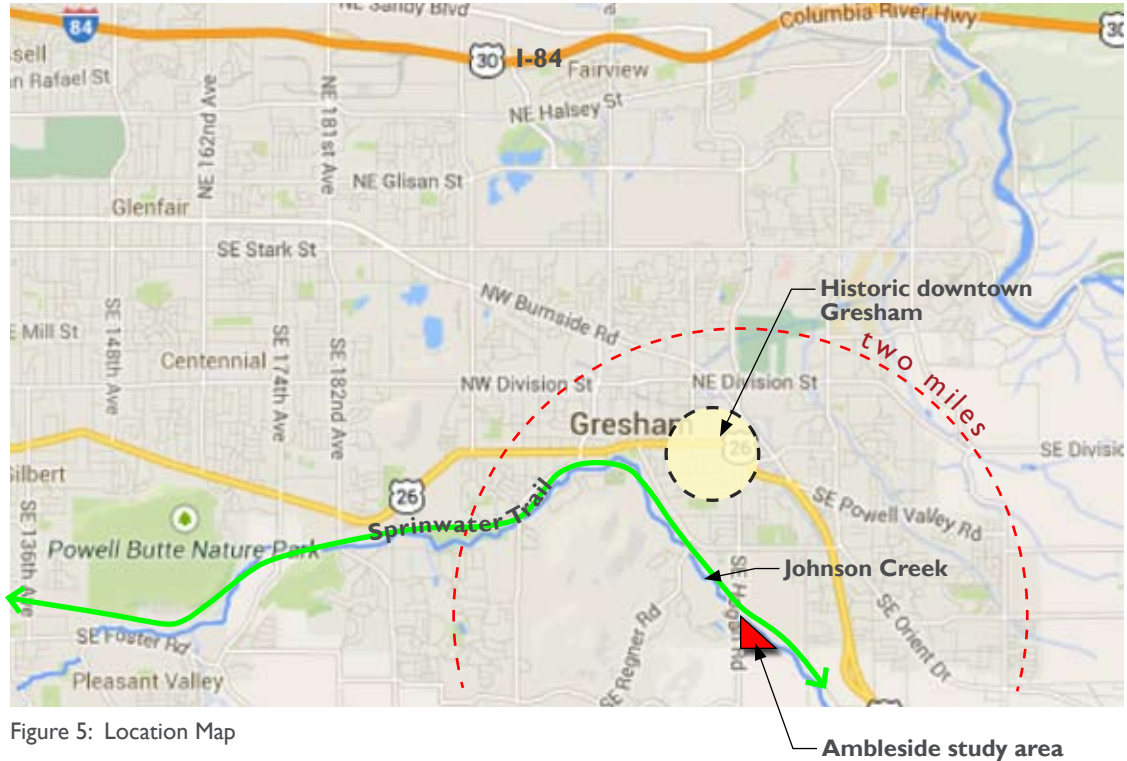


Figure 5: Location Map

The site is located in the City of Gresham approximately two miles south of Gresham’s historic downtown. The study area is between Hogan Road and the Springwater Trail. Johnson Creek flows through the site.

### Surrounding Land Uses and zoning

The property is zoned Low Density Residential (5 dwelling units / acre). It is surrounded by the Springwater Corridor trail to the north with an industrial parcel, Mutual Materials brick manufacturing, beyond it. Low density residential suburban developments exist beyond Mutual Materials to the east, and beyond Hogan Road to the west. Rural residential properties exist immediately south and west of the property. The land south of the Ambleside study area is identified on Gresham planning maps as the Springwater Future Annexation Area. It is likely that area will be developed for housing in the future due to its proximity to the City of Gresham.

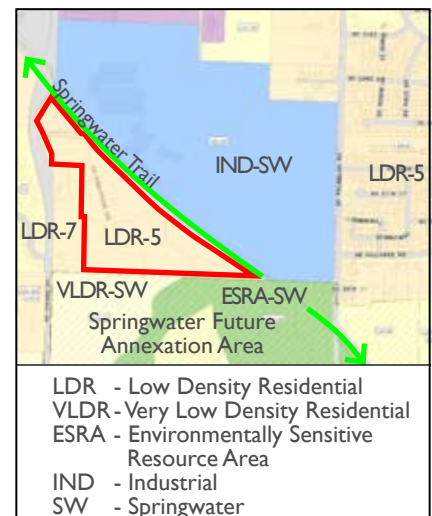


Figure 6: City of Gresham Zoning.

## Planning Designations

The area has the following City of Gresham planning designations (City of Gresham Development Code; Article 5 /appendix 14):

**Historic/ Cultural Significance (Article 5.03):** The Ambleside (Schacht) House is listed on the City of Gresham register of historic places as a Class I Landmark. Under the City of Gresham code, the owner can request removal of landmark designation through a type I procedure but proposed alterations or demolition are subject to a type III procedure. (Article 5.0327-5.0328) The State of Oregon maintains the database of historic resources in the state. The Ambleside house, and the Cox and Allesina cluster of houses are in the database, with eligibility evaluations listed as “undetermined” and “eligible/contributing”, respectively. According to the State’s website, neither site is federally listed, therefore the state does not have regulatory jurisdiction.

**Floodplain (Article 5.01):** Construction within the floodplain will need to meet federal and local standards.

**Hillside Physical Constraint (Article 5.02):** Development on these slopes is subject to review and hillside physical constraints overlay standards must be addressed. The designation primarily addresses housing density.

**Significant Trees (Appendix 14):** The City of Gresham designates the Hogan Cedar and Japanese Maple groves as significant. As shown in figure 7, the planning overlay applies to all properties in the study area except one. A type III procedure is required to remove designated significant trees.

**Habitat Conservation / Water Quality Resource areas (Article 5.04)**  
The purpose of this overlay is to comply with Metro’s Urban Growth Management Plan.

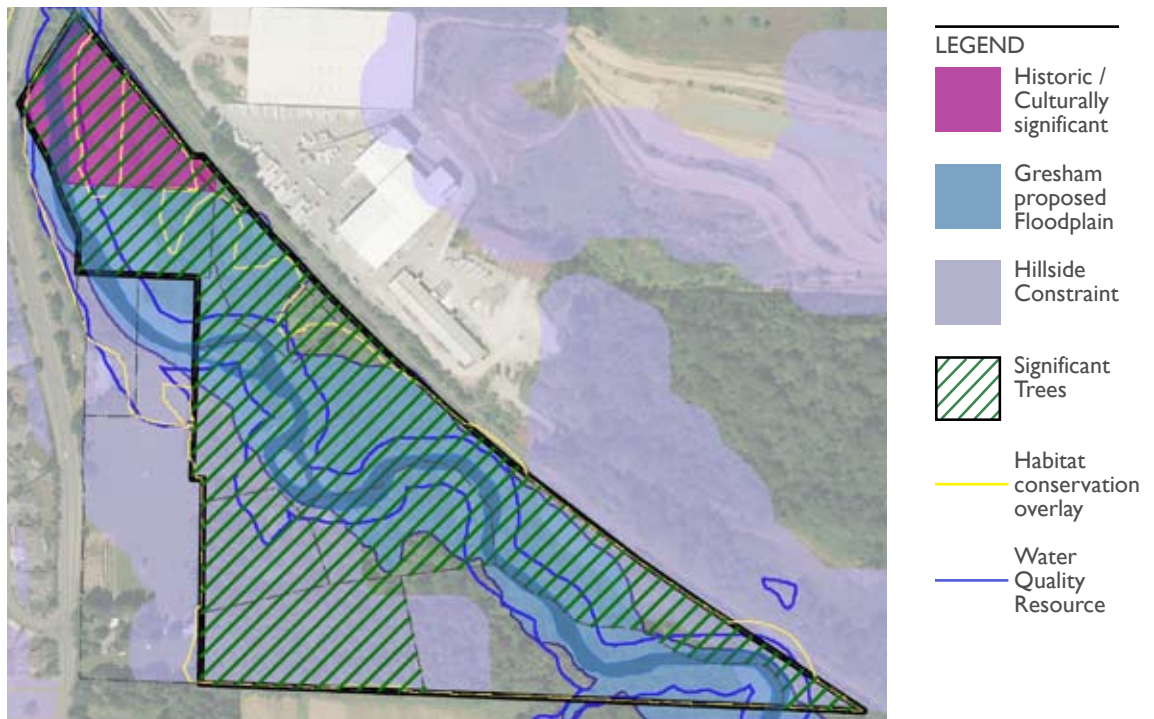


Figure 7: City of Gresham planning overlays

## 2. Natural Resources

The site is dominated by Johnson Creek which meanders through the study area. The Johnson Creek floodplain occupies approximately the north-eastern two thirds of the site. The rest of the site is a northeast facing hillside with slopes averaging about 10% to 20%, and up to 40% in some areas. The site is primarily forested, with areas of open lawn and meadow near many of the home sites.

### Johnson Creek

Johnson Creek originates in the foothills of Mount Hood and flows generally westward for approximately 25 miles before entering the Willamette River. Johnson Creek is a unique feature in the Portland metro area important to fish, wildlife and people. Despite its urban development, it is one of the few remaining streams in the Portland area that still supports salmon and steelhead. The stream's floodplain and forests act as an important wildlife corridor that provides connectivity to several other natural areas. The Springwater Corridor regional trail follows Johnson Creek between Gresham and the Willamette River, providing scenic resources and public access to the stream.

In the Ambleside study area, the natural flow of the stream and floodplain have been restricted by armored stream banks, bridge abutments, water control structures and ditches that drain wet areas. Since acquiring the property, Metro has removed a small dam and bridge from a side channel of Johnson Creek. A second dam and bank armoring remain. Near the Allesina property, a concrete weir retains water from a spring, creating a small pond.

### Watershed Health Value

The site is a valuable link in the Johnson Creek watershed. Improving habitat quality on site and connectivity along the stream corridor can help conserve rare and at-risk species and maintain the abundance of common native species throughout the watershed. The Johnson Creek Watershed Action Plan and the Johnson Creek Inter-jurisdictional Committee have identified the following priorities for restoration in the Ambleside and Upper Johnson Creek reaches: “address lack of habitat diversity and in particular the lack of large wood in the stream, remove hardened stream banks, restore off-channel areas, and increase shade to 80 percent along stream banks”.



Figure 8: Johnson Creek



Figure 9: Armored bank



Figure 10: Water control structure

**Floodplain**

Johnson Creek’s floodplain occupies the northeastern area of the site. The floodplain has been inventoried by FEMA as well as the City of Gresham. The City of Gresham’s boundary shown in Figure 11 is based on a more recent and finer grained analysis than the FEMA designation.

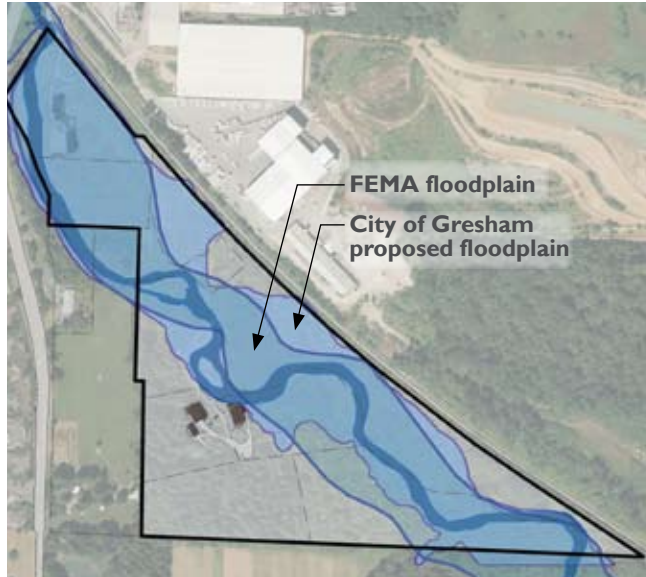


Figure 11: Floodplain designation. The FEMA floodplain and The City of Gresham’s proposed floodplain are shown.

**Topography**

The study area’s topography varies from relatively flat floodplain areas adjacent to Johnson creek to slopes that range between 10 and 40 percent. These slopes are classified as having hillside physical constraint by the City of Gresham.

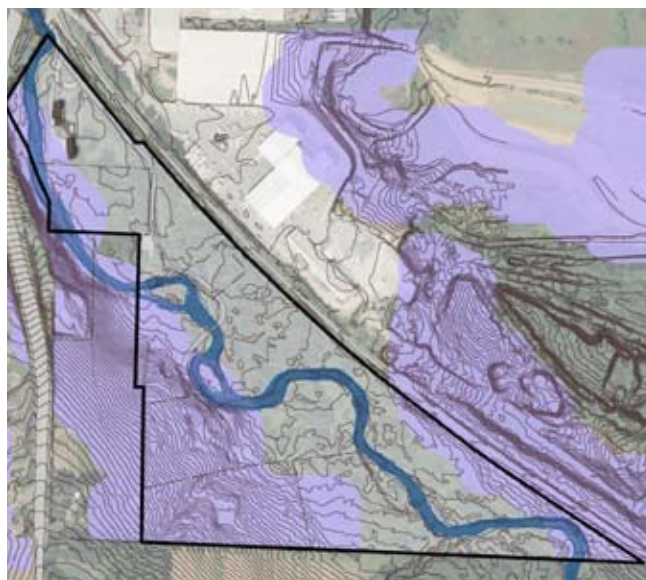


Figure 12: The City of Gresham hillside constraint designates areas with over a 15% slope. These areas (shown in purple) are subject to a special planning review.



**Vegetation**

Vegetation on the property includes a variety of native and non native species. Ornamental species have been planted at the home sites, and the vegetation around the current and past homes is more degraded with non-native and invasive plants. European birch line both sides of Ambleside Drive. A number of large Japanese maples grow adjacent to the creek. The grove of Hogan cedars are considered by some to be a natural genetic variety of Western red cedar. The City of Gresham significant tree designation applies to the Hogan cedar grove and the Japanese maple grove. Some Hogan Cedars have been recently planted by Metro.

The southern part of the site, on the northeast side of Johnson Creek, has relatively healthy forest and native understory vegetation. Since acquiring the property, Metro has been working to remove invasives and re-establish native plant communities on the site.



Figure 15: Native vegetation on the north side of Johnson Creek includes: Hogan Cedar, bigleaf maple, vine maple, hazelnut, sword fern, lady fern, salmonberry, Indian plum, dogwood, oxalis, piggy-back plant, and red huckleberry.



Figure 13: Japanese Maples (City of Gresham significant trees)



Figure 14: Hogan Cedars (City of Gresham significant trees)



Figure 16: European birch trees lining Ambleside Drive



Figure 17: Hogan Cedars (City of Gresham significant trees)

### 3. Site History

#### Before European Settlement

An archeological assessment of the site was completed in 2010 by Archeological Investigations Northwest, Inc. (AINW). The study included a review of records and a preliminary reconnaissance survey. The AINW study recommends a formal cultural resource survey on the low terraces to identify archaeological sites and identify areas with a high probability of buried resources. In addition, the study recommends an inventory of historic structures and resources (The AINW study is included in the appendix).

#### European Settlers

According to the city of Gresham inventory of historic properties, the site was logged around 1900. The Ambleside (Schacht) House, which has a city of Gresham historic designation, was the first home constructed on the property. Initially, three Portland families built homes on the property and used them as summer homes. Over the years, a number of other homes, roads, yards, and utilities were constructed.

The dams and walls were also recommended by AINW for historical evaluation.



Figure 18: Springboard notches in Cedar Stumps

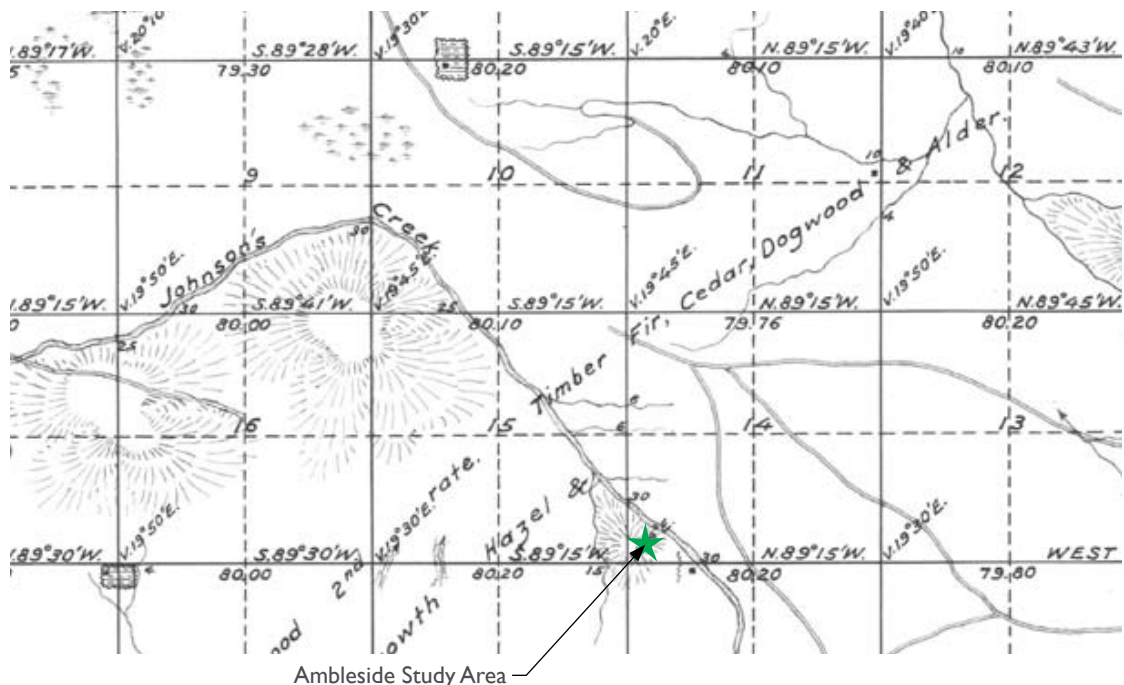


Figure 19: General Land Ordinance Map 1855

**Current Management**

Metro purchased the properties through the 1995 open space bond measure and the 2006 Natural Areas bond measure. Since acquiring the land, Metro has removed all but four of the homes. The remaining structures are commonly called the Schacht House, the Allesina house and the Cox house and studio, referring to their prior owners. The Schacht House is also referred to as the Ambleside House.

Metro rents the remaining four homes.

☒ House has been removed or deconstructed / removed



Figure 20: Recent management

## 4. Site Development and Infrastructure

**Access** Ambleside Drive provides access to the properties. The road is generally 12' wide and paved in asphalt. It is signed as a private road to private property. In many areas, trees are growing close to the edge of the road. The road contributes approximately 30,000 sf of impervious area to the site.



Figure 21: Ambleside Drive

**Bridge** The bridge was constructed in 1981. Since that time it has undergone some structural improvements. The load limit on the bridge is inadequate for City of Gresham emergency vehicles. The bridge also serves as a support for the water and natural gas supply pipes for the homes on the south side of the creek. Several studies have been done to analyze the structural integrity of the bridge. They are listed in Appendix I.



Figure 22: Ambleside Bridge

**Utilities**

The homes are not connected to municipal sewer or water systems. One septic tank is in the floodplain, and a septic tank and septic field are on the hillside above the floodplain. Water is supplied from an on site well and pumped to the homes. The homes have septic systems to accommodate sanitary waste.



Figure 23: existing well house on "White" property.

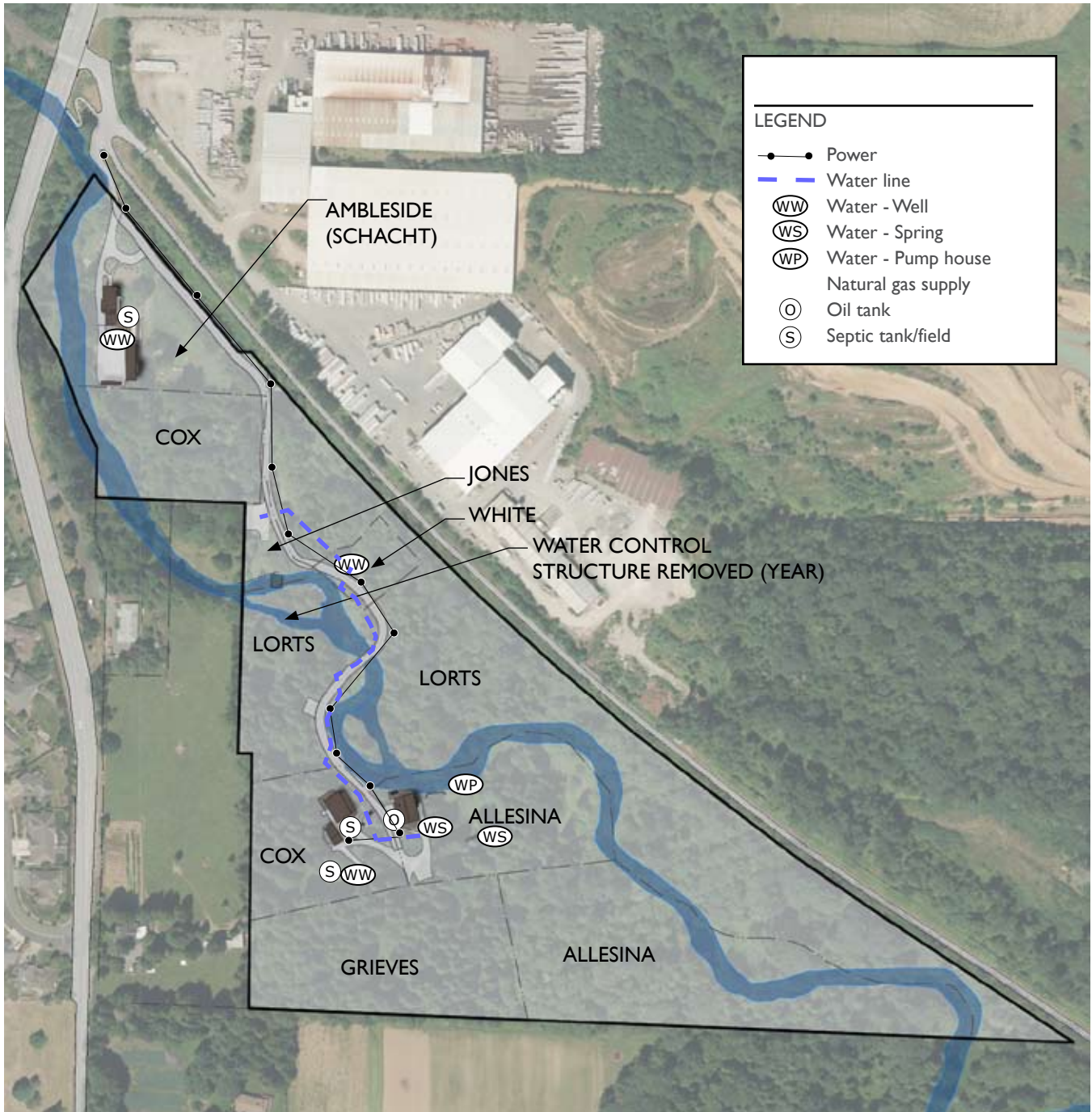


Figure 24: Approximate utility locations in Ambleside study area

**Water Control Structure and Bridge**

Downstream of the bridge where Ambleside Drive crosses Johnson Creek is a small island. A dam and bridge were recently removed from the south channel, where some bank armoring and abutments remain. In the north channel, there is a concrete water control structure and flume. The north bank are heavily armored with concrete walls. Removing the dam and walls in the north channel would enable floodplain restoration north of the structures. This report refers to this area as the Jones floodplain. Informal conversations have taken place between Metro and the neighboring property owner to the west who has concerns about bank stability if the water control structure is removed. Feasibility studies have indicated that floodplain restoration in this area would likely alleviate flooding of the downstream properties. During informal conversations between Metro and the City of Gresham, the City has indicated that they will not allow the water control structure and bank armoring to be removed as long as the bridge is in place. Prior to removal of the structure an analysis of the potential impacts of structures should be completed.

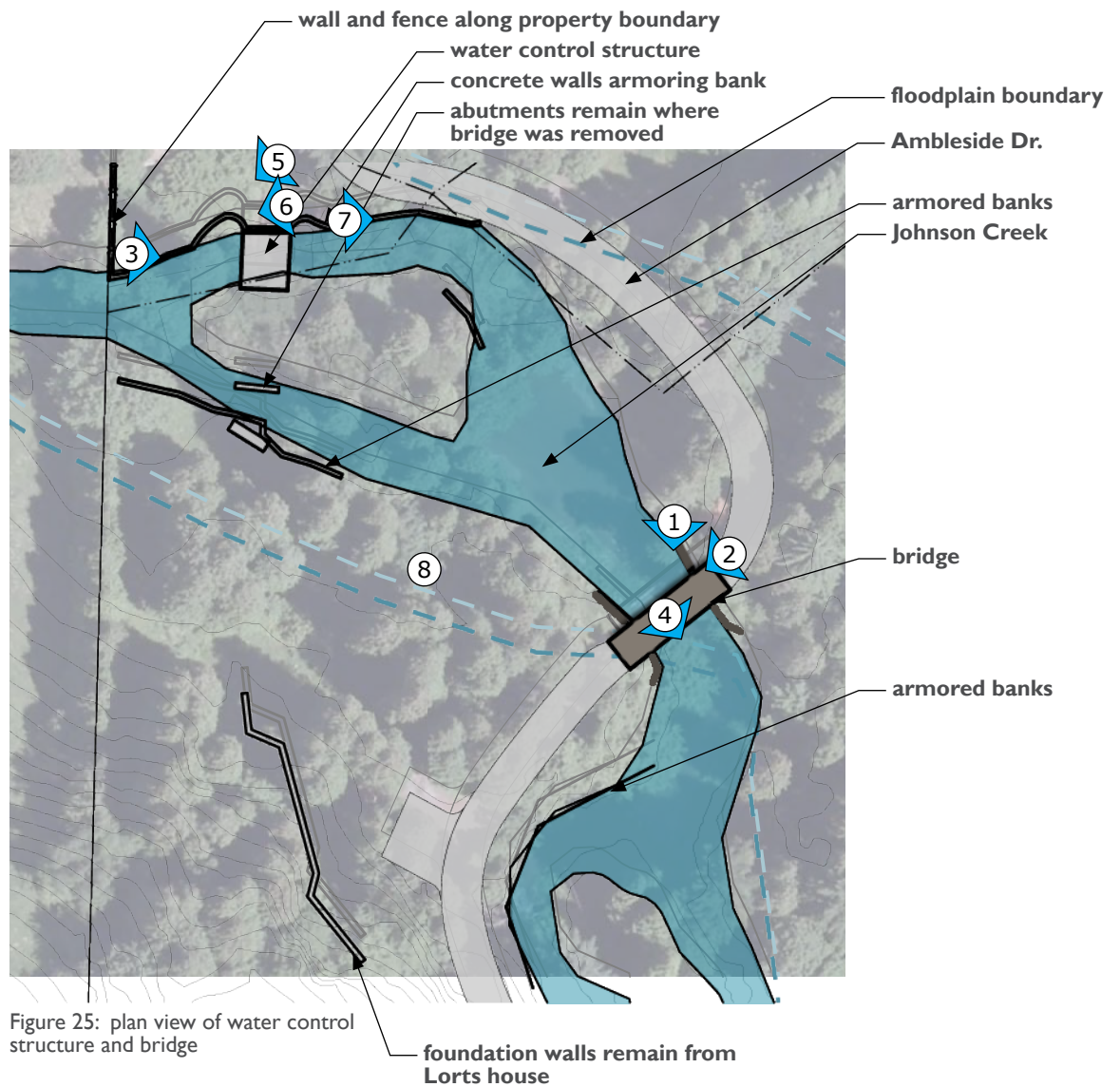


Figure 25: plan view of water control structure and bridge



Figure 26: (left):  
Side view of bridge

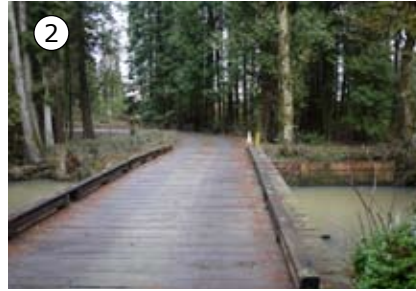


Figure 27: (right):  
Bridge deck



Figure 28: (left):  
Water control  
structure



Figure 29: (right):  
View looking  
upstream  
from  
bridge



Figure 30 - 31:  
Stream bank  
armoring



Figure 32: (left):  
Cedar growing on  
stream bank



Figure 33: (right):  
South side of  
south channel

**Ambleside  
(Schacht)  
House**

The Ambleside (Schacht) House is listed as a Class I Landmark by the City of Gresham. The property includes a large gravel area, and several outbuildings at the south end. The house is in the floodplain and the seasonally wet field east of the house has occasional standing water. Since acquiring the property, Metro constructed a berm between the gravel area and Johnson Creek to protect the house from flooding. The area around the house is landscaped with ornamental trees and shrubs including rhododendrons and Japanese maples. Mature Douglas-fir trees and Hogan Cedars grow between the driveway and Johnson Creek. Ambleside drive is flanked by mature European birch trees that are in decline.

Square Feet	1784 sf
Stories	2
# Bedrooms	3
# Baths	2
Heating / Cooling	Forced air
Sewer	Septic
Water	Well
Gas	yes
Roof	Asphalt Shingles
Year built	1902
Year acquired	2001

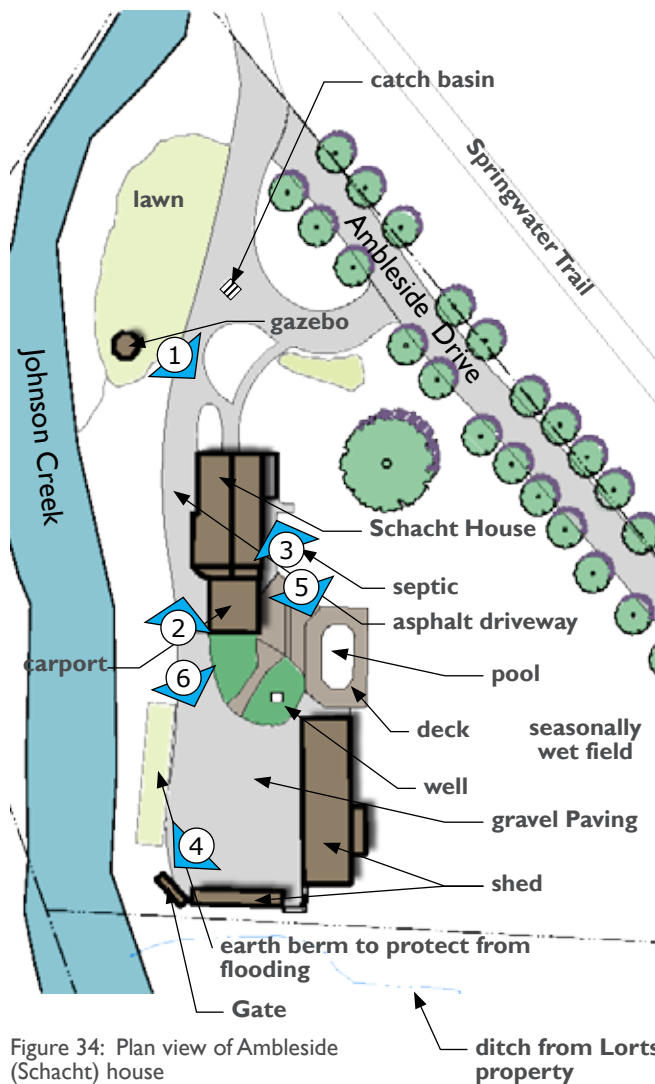






figure 35: Front (north side) of the Schacht House



Figure 36: (left): View of west side of the Schacht House looking north.



Figure 37: (right): View of east side of the Schacht House looking north.



Figure 38: (left): Gate



Figure 39: (right): Deck and pool



Figure 40: Gravel paving and sheds south of Schacht House

**Cox House and Studio**

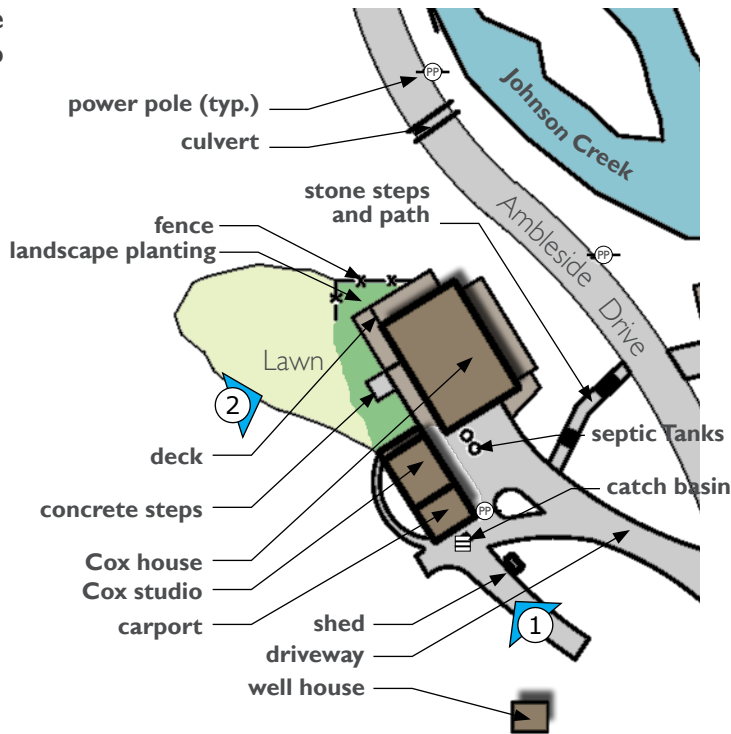


Figure 41: Plan view of Cox house

	Cox House	Cox Studio
Square Feet	1600	1525
Stories	1	2
# Baths	1	1
# Bedrooms	2	1
Heating / Cooling	Forced air, Fireplace	Forced air
Sewer	Septic	Septic
Water	Well	Well
Gas	yes	yes
Roof	Asphalt Shingles	Asphalt Shingles
Year built	1927 or earlier	1927 or earlier
Year acquired	1999	1999

The Cox house and studio are perched on the hillside above Ambleside Drive. The Cox house and studio were built by Charles H Martin (governor of Oregon from 1935-1939) in the 1920's as a hunting lodge. The Cox Studio is now primarily a storage space on the first floor with living space on the second floor. The Cox property uses its own well, although water to these homes could be supplied from a well on the White property. It is located along Ambleside Drive on north of side of Johnson Creek, and conveyed through a pipe attached to the bottom of the bridge deck. Sewage is pumped from the two tanks adjacent to the homes to a septic field in a clearing on the hillside. The property is listed in the State Historic Preservation Office's database of historic resources (resource ID 657461).



Figure 42: Cox studio looking at carport/ shed at south side of house.



Figure 43: View looking east, across back yard. Cox house is on the left and the studio is on the right.

**Allesina House**

The Allesina house is directly adjacent to Johnson Creek. It includes decks that hang over the bank, and stairs down to the water's edge. Several springs and wells are located on the property. A large concrete weir catches water creating a man-made pond, which provides habitat for amphibians. Remaining structures on the Allesina property include an irrigation pump house, a footbridge, well, spring house, and a greenhouse.

Square Feet	3124
Stories	2
# Bedrooms	4
# Baths	2
Heating / Cooling	Forced air - oil (2 underground tanks)
Sewer	Septic
Water	Well
Gas	no
Roof	Asphalt Shingles
Year built	1920's
Year acquired	2007

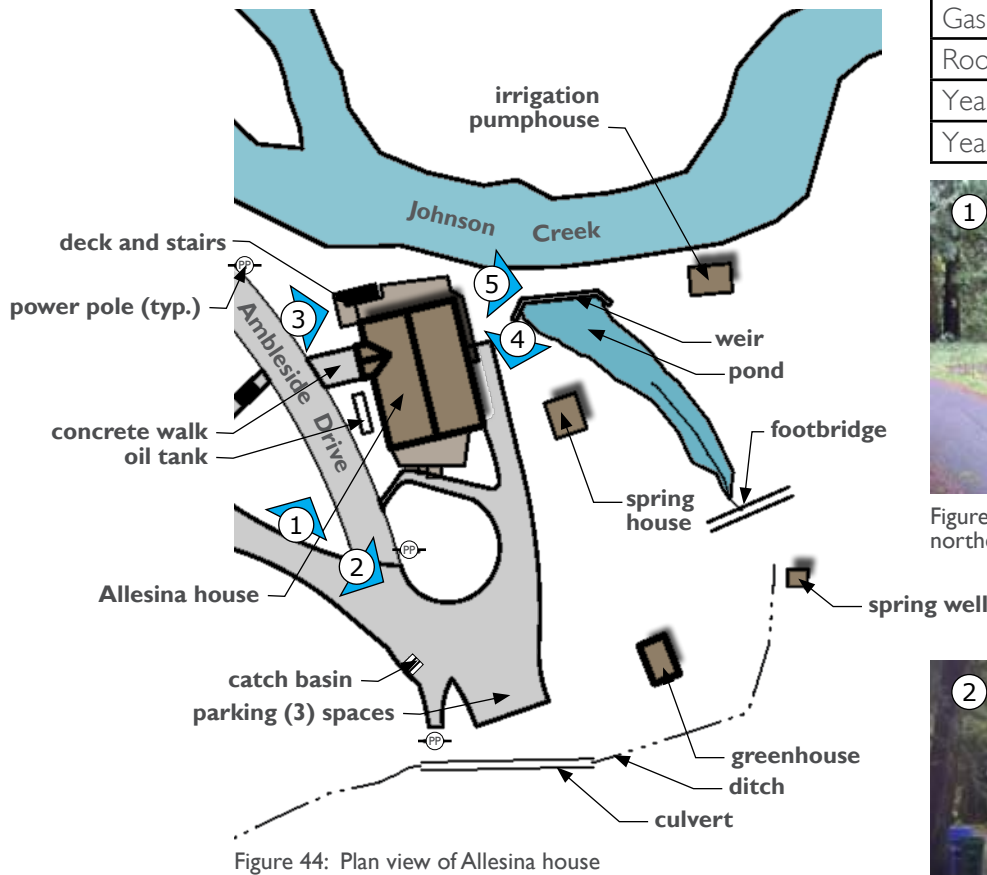


Figure 44: Plan view of Allesina house



Figure 47: Allesina House looking northeast



Figure 48: Parking spaces and green house



Figure 45: Deck and stairs looking east



Figure 46: East side of Allesina house, looking south



Figure 49: Concrete weir and pond

## 5. Summary of Issues, Opportunities and Constraints

A number of factors influence the ability to maximize the site's natural resource benefit. The site's location, existing improvements and setting affect all resource management.

### Existing Access

The existing road and bridge do not meet the minimum standards for emergency and construction access. Upgrading the road and bridge would be expensive, require permitting and engineering, and could impact existing trees and other vegetation, including some that are listed as significant trees by the City of Gresham.

**Code Requirements** Fire code requires that access roads for three or more dwelling units and accessory buildings be 20' wide, with 40' of horizontal clearance and a vertical clearance of 13' 6". For fewer than three dwelling units, the requirement is a 12' road with 20' of total clearance. If the homes were extensively remodeled, the Gresham Fire Marshall could require the bridge and road to conform to code.

**Emergency Access:** The existing bridge and roads were not designed to accommodate typical emergency response vehicles. The road does not meet the minimum standard for width, and the weight limit on the bridge is insufficient. There is a risk associated with current site management. The bridge is the only access to the three homes on the south side of Johnson Creek. In 2001 one of the homes on the site was destroyed by fire.

**Deconstruction & Restoration Access:** The weight and width restrictions on the bridge limit access for removing or moving the existing homes or doing other restoration work on the south side of Johnson Creek. The levy upstream from the Allesina house could be removed to improve floodplain function if the site could be accessed with heavy construction equipment.

**Maintenance Access:** Maintenance of the homes, road, and utilities is more difficult due to the limited access. For example, the heating oil for the Allesina house must be delivered by a small truck rather than the standard delivery vehicle.



Figure 50: Ambleside Drive



Figure 51: Ambleside Drive



Figure 52: Ambleside Bridge

**Ongoing Maintenance:** In some areas, the road is close to the stream bank. In one of these locations, on the south side of the bridge, a large fir tree's root system has been compromised by the erosion of the stream bank. This tree may fall at any time and, because of its proximity to the road, it is likely that the road would not be passable for vehicles. If this were to happen, construction to fix the road would be difficult and expensive, likely requiring access from the south for heavy equipment, and residents would not have vehicular access to their homes.



Figure 53: Tree adjacent to road on eroding bank

**Alternative access**

Providing access from the south and eliminating the need to cross Johnson Creek is an alternative to upgrading the existing road and bridge. A permanent route from the south and west would allow removal of Ambleside Road and bridge. It is also an option for temporary construction access to accommodate removal of homes and floodplain restoration on the south side of the study area. The following are important to consider:

**Topography** The south side of the property has slopes generally in the range of 12 % to 18 %, with slopes in a few places as high as 40%. A permanent access road would be designed to include a maximum grade of 10% and a vehicle turnaround to emergency vehicle standards. Development of a temporary road for moving homes would need to clear approximately 20'. Either route would require engineering and permitting.



Figure 54: Potential permanent or temporary alternative access

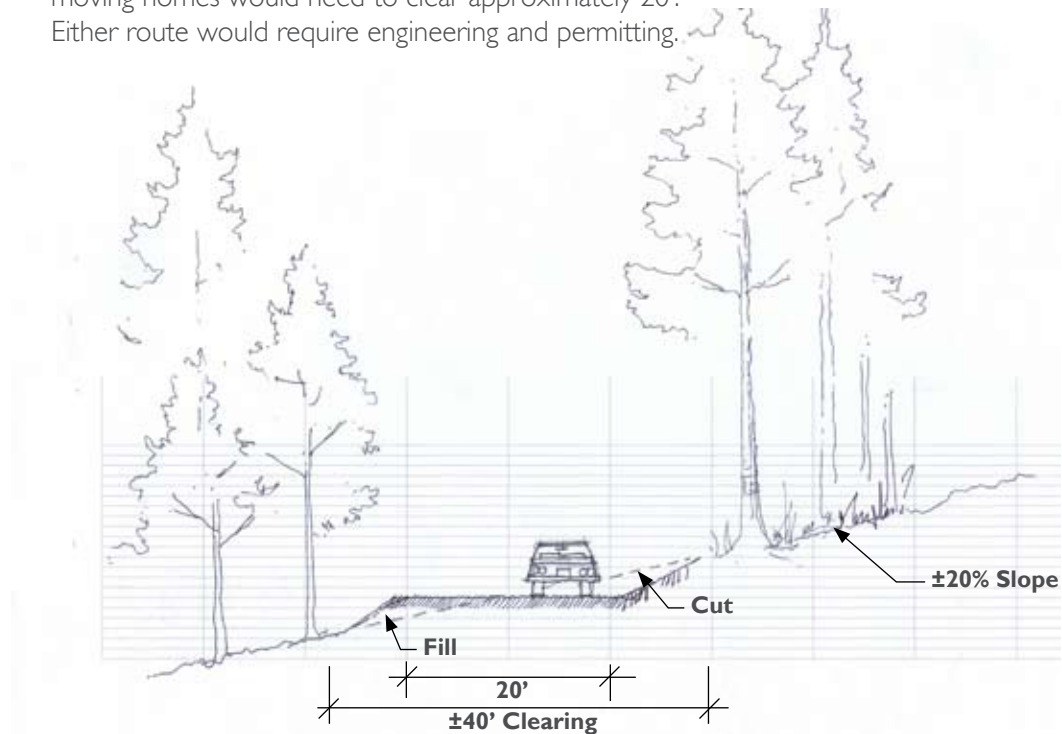


Figure 54: Sketch showing required cut fill on hillside with 20% cross slope

**Trees:** The south part of the site is forested and construction of alternative access would likely require removing a significant number of trees.

**Right-of-Way Acquisition:** Any alternative route from Hogan Road would require dedication of new right-of-way from parcels which are now privately owned. The area to the south of the site has been identified as a future annexation area by the City of Gresham, and it is likely that it will develop sometime in the future. At that time, a permanent access route to the site could be completed.

**Property  
Maintenance  
Considerations**

The Cox and Allesina homes are situated on forested hillsides. In order to protect them, Metro has had to cut down trees that they would otherwise preserve, which is inconsistent with their mission for the site.

**Public Access  
Considerations**

**Accessibility:** Existing homes were constructed long before the Americans with Disabilities Act (ADA). This limits the homes' usefulness for public facilities. Extensive renovation would be required to meet ADA and safety standards required for a public facility.

**Security** The site is somewhat hidden and difficult to monitor. It is an inviting creek with unique qualities for the urban area. Existing and potential development on all sides, and proximity to the Springwater Corridor increase the likelihood of indiscriminate use for casual recreation or camping which could impact resources. Unless gated, the road provides unmonitored auto, bike and pedestrian access into the site.

**Floodplain  
and Riparian  
Area**

This site provides an opportunity to improve floodplain function. Removing armoring along the banks and water control structures, and allowing Johnson Creek to inundate the floodplain during high water events can help alleviate peak flows and flooding downstream. There are several factors that limit the ability to allow unrestricted flow in the floodplain.

**The Ambleside (Schacht) House is in the floodplain,** and has been affected by flooding in the past. Unless it is moved or removed, Metro will need to continue restricting water flow to protect the property from flooding. Relocation of the house to an upland site may be the best way to ensure the long term preservation of the house, and its historic value to the community.

**Spillway and armored banks:** The bridge abutments, and water control structures restrict riparian and floodplain function along Johnson Creek. In several places, the edges of Johnson Creek have been armored with concrete, stone, and wood, which also impacts riparian habitat.

**Trees:** Removal of stream bank armoring and significant grade change associated with floodplain restoration will require removal of Hogan Cedars and Japanese maples that are listed as significant trees.

## Utilities

**Septic systems** Three septic systems remain on the site. Although they are periodically tested, during high water, effluent could potentially seep into Johnson Creek. A sanitary line is located along the Springwater corridor but because of the depth of the line, access would be prohibitive. Removal of the septic systems reduces potential for E. coli contamination.

**Access:** Currently, natural gas and water are supplied to the homes on the south side of the stream via pipes attached to the bridge structure. Overhead power lines supply power along Ambleside road. If the road and bridge are removed, Utility supply lines would need to be relocated.

## Allesina Pond

Near the Allesina house, a concrete weir ponds water from a small drainage ditch. There is evidence that the pond is providing habitat for frogs and salamanders. A decision will need to be made whether to remove the infrastructure related to the pond.



Figure 55: Tree growing from bank armoring



Figure 56: Ambleside Road on right with Springwater Trail on left



Figure 57: Allesina Pond

## 6. Permitting

A number of management actions will trigger federal, state, and local land use and building permits. Most construction and deconstruction activities will trigger some type of permit. These will vary in complexity, preparation time, and cost to obtain. Cost to produce and process these permits are general and will need to be adjusted depending on the specific plans. Below is a list of permits that may be required:

	Triggered	Time	Permit Cost (approximate)	Preparation Cost
<b>State of Oregon</b>				
DEQ 1200 CN. (May be administered by Gresham)	Area disturbed is between 1 and 5 acres.	30 days	\$ 826	\$ 2,000
Division of State Lands / Corps joint fill removal permit	Site is considered essential salmon habitat. Any fill or removal activity on the banks will require a permit. Any fill / removal in excess of 50 CY will require a permit	4 months (min)	\$ 450	\$ 2,500
<b>City of Gresham</b>				
Land use permit Type I	Demolition of structures	120 days	\$ 891	\$ 1,000
Land use permit Type II	Change of use. Alteration of historic structure	120 days	\$ 2,838	\$ 5,000
Land Use Permit (Type III)	Change of use. Alteration of historic structure	120 days	\$ 6,203	\$ 5,500
Erosion control	Construction / demolition	30 Days	\$ 250	\$ 2,000
Grading	Any earthwork above 50/CY	30 Days	\$ 1,200	\$ 1,500
Demolition	Removal of structure	30 Days	\$ 44	\$ 2,000
Tree removal	Removal of any tree on significant tree list	30 Days	varies	
Move Structures	Moving of a structure	30 Days	\$ 44	
Historic Review	Alteration of historic structure	120 days	\$ 3,546	\$ 2,000
Septic cap fee	Removal of septic	Over the counter		
Building permits	Moving homes to new sites for plumbing, electrical and foundations etc.	Over the counter	Varies	
Land division	Acquisition of row or easement for road access	30 days	\$ 1,200	\$ 3,000



## II. Management Scenarios

Six management scenarios are shown on the following pages. They are intended to show the range of management from a modest reduction in impermeable surface and developed features to complete site restoration. These are not intended to show specific prescriptions for management but rather to begin a discussion of general costs and benefits of each management scenario. These are not exclusive alternatives and within each scenario there are options for implementation. Costs and necessary permitting are included with each option.

Following the management scenarios, on page 39 is a table that outlines the cost and restoration benefit of each potential action shown in the following scenarios.

# Management Scenario 1

Scenario 1 would continue current management including invasives removal and native planting, leasing of remaining homes, and maintaining all existing site improvements.

## Actions

	Cost
<b>Landscape Management</b>	
• Remove invasive species (existing upland and floodplain areas)	\$1,500
• Restore and plant native species (existing upland and floodplain areas)	\$1,500
<b>Rental Property Management</b>	
• Routine maintenance of existing rental structures, utilities and bridge	\$400- \$1,000 / year
• Emergency maintenance / repairs	unknown

## Permits

*None required, however in the future permitting may be required for construction related to bridge maintenance or emergency access.*

## Advantages

- No cost for demolition
- Restoration of native vegetation

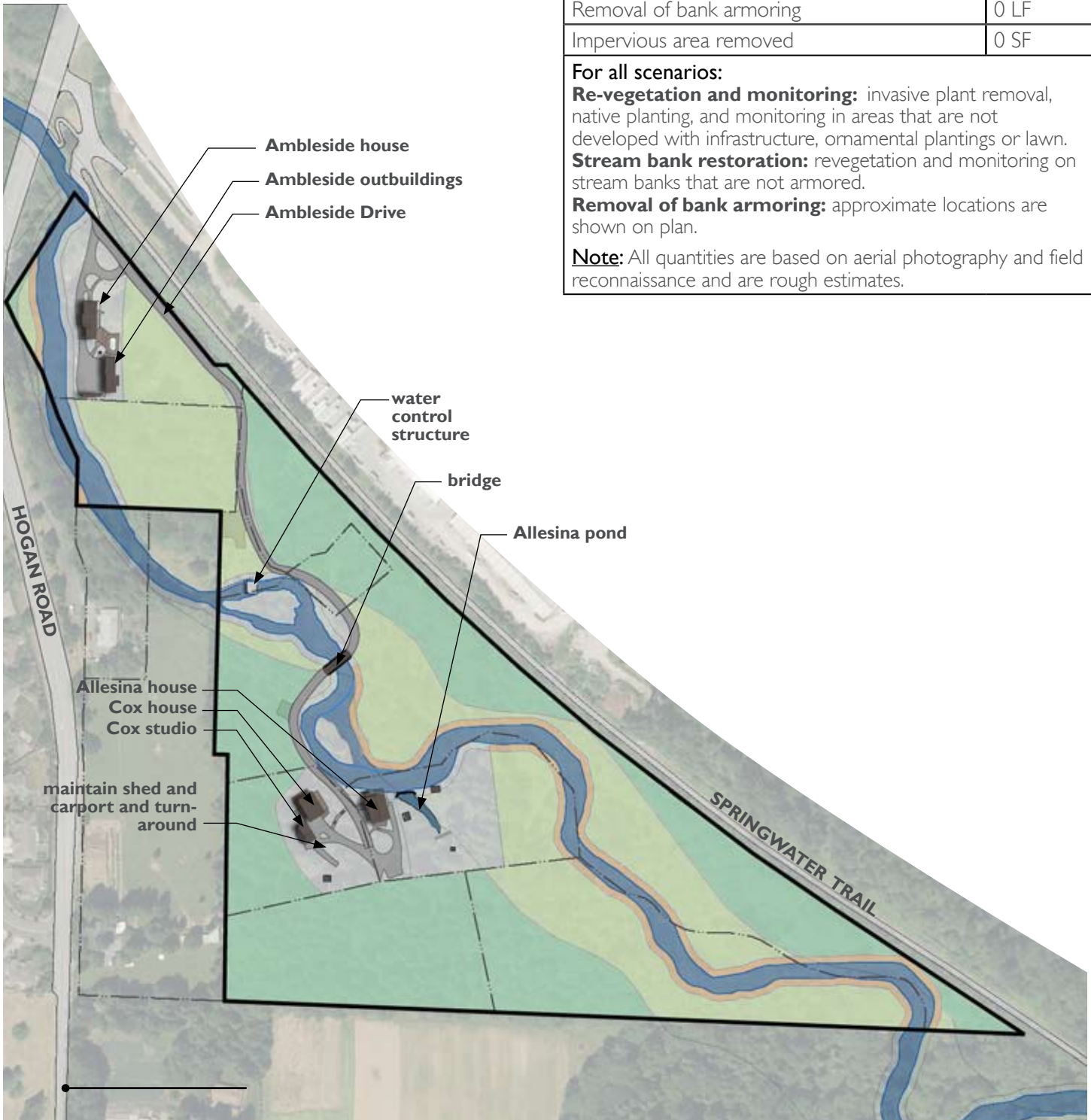
## Disadvantages / Challenges

- Management and maintenance of rental properties.
- Road maintenance (May need to remove Douglas-fir before it impacts the road).
- Poor emergency vehicle access to homes on south side of Johnson Creek could be a liability for Metro.

**\* Estimated permit cost includes permit and preparation cost. See Appendix A for itemized costs and permit fees.**

Management Scenario 1	Quantity
Upland re-vegetation and monitoring	10.4 AC
Floodplain re-vegetation	7.8 AC
Stream bank restoration	3620 LF
Floodplain/ Stream function restoration	1.8 AC
Removal of bank armoring	0 LF
Impervious area removed	0 SF

**For all scenarios:**  
**Re-vegetation and monitoring:** invasive plant removal, native planting, and monitoring in areas that are not developed with infrastructure, ornamental plantings or lawn.  
**Stream bank restoration:** revegetation and monitoring on stream banks that are not armored.  
**Removal of bank armoring:** approximate locations are shown on plan.  
**Note:** All quantities are based on aerial photography and field reconnaissance and are rough estimates.



## Management Scenario 2

Scenario 2 would reduce the footprint of existing homes by removing surplus structures and paving, and restoring ornamental landscape areas with native plants. It would continue management of natural areas and add almost an acre of restoration area around the homes. A site plan concept is shown for each developed area in Appendix B.

### Actions

	Cost
<b>Management</b>	
• Landscape management	\$3,000
• Rental property management	\$400- \$1,000 / year
• Emergency maintenance / repairs	unknown
<b>Demolition or Deconstruction</b>	
• Remove outbuildings, Ambleside pools, fencing, unnecessary paving and non native plantings	\$20,153
<b>Restoration</b>	
• Restoration Planting	\$3,229

### Advantages

- No cost for demolition of homes
- Reduction of impervious area and Increased habitat area

### Permits

*Erosion control  
Demolition  
1200-CN  
Grading*

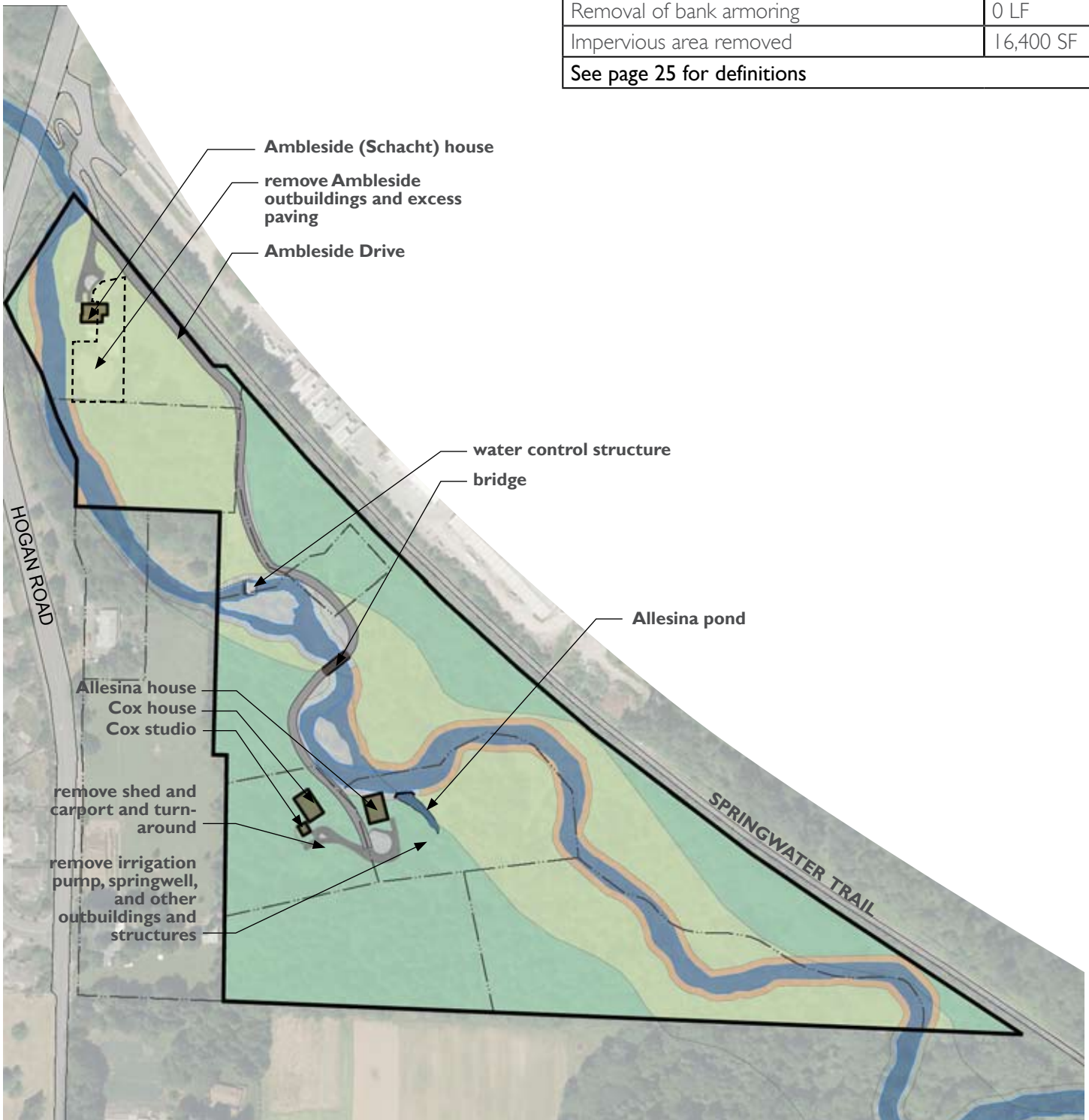
**Estimated Cost \$1,874**

**\* Estimated permit cost includes permit and preparation cost. See Appendix A for itemized costs and permit fees.**

### Disadvantages / Challenges

- Management and maintenance of rental properties
- Road maintenance (May need to remove Douglas-fir before it impacts the road).
- Poor emergency vehicle access to homes on south side of Johnson Creek could be a liability for Metro.

<b>Management Scenario 2</b>	<b>Quantity</b>
Upland re-vegetation and monitoring	11.4 AC
Floodplain re-vegetation	9.1 AC
Stream bank restoration	4140 LF
Floodplain function restoration	1.8 AC
Removal of bank armoring	0 LF
Impervious area removed	16,400 SF
See page 25 for definitions	



## Management Scenario 3

Scenario 3 would provide alternative access to the Cox and Allesina houses on the south side of Johnson Creek. This would enable removal of the bridge, stream bank armoring and most of Ambleside Drive. Alternative access details are shown in Appendix B. Surplus structures and paving would also be removed.

### Actions

	Cost
<b>Management</b>	
• Landscape management	\$3,000
• Rental property management	\$400- \$1,000 / year
<b>Demolition / Deconstruction</b>	
• Remove outbuildings, Ambleside pools, fencing, unnecessary paving and non native plantings	\$20,153
• Remove Ambleside Drive	\$25,700
• Remove Ambleside bridge	\$36,250
<b>Construction</b>	
• Construct alternative access road from Hogan Road	\$207,000
<b>Restoration</b>	
• Restoration Planting	\$5,200
<b>Stream bank and Floodplain Restoration</b>	
• Creek armoring & bridge abutments in south channel	\$35,800
• Remove dam	\$23,000
• Creek armoring in north channel	\$30,300
• Floodplain restoration (Jones and Allesina)	\$33,500
• Remove armoring at Ambleside Drive	\$32,800

### Advantages

- Alternative access road would be out of the floodplain.
- Enables removal of bridge, dam and bank armoring. Enables the restoration of Jones floodplain which reduces flooding potential on inholding.
- Provides access for restoration of Allesina floodplain.
- Improved access for maintenance, construction and emergencies

### Permits

*Erosion control;  
Demolition  
I200-CN  
Grading  
DSL  
Land division  
Gresham SDCs  
Plan Review*

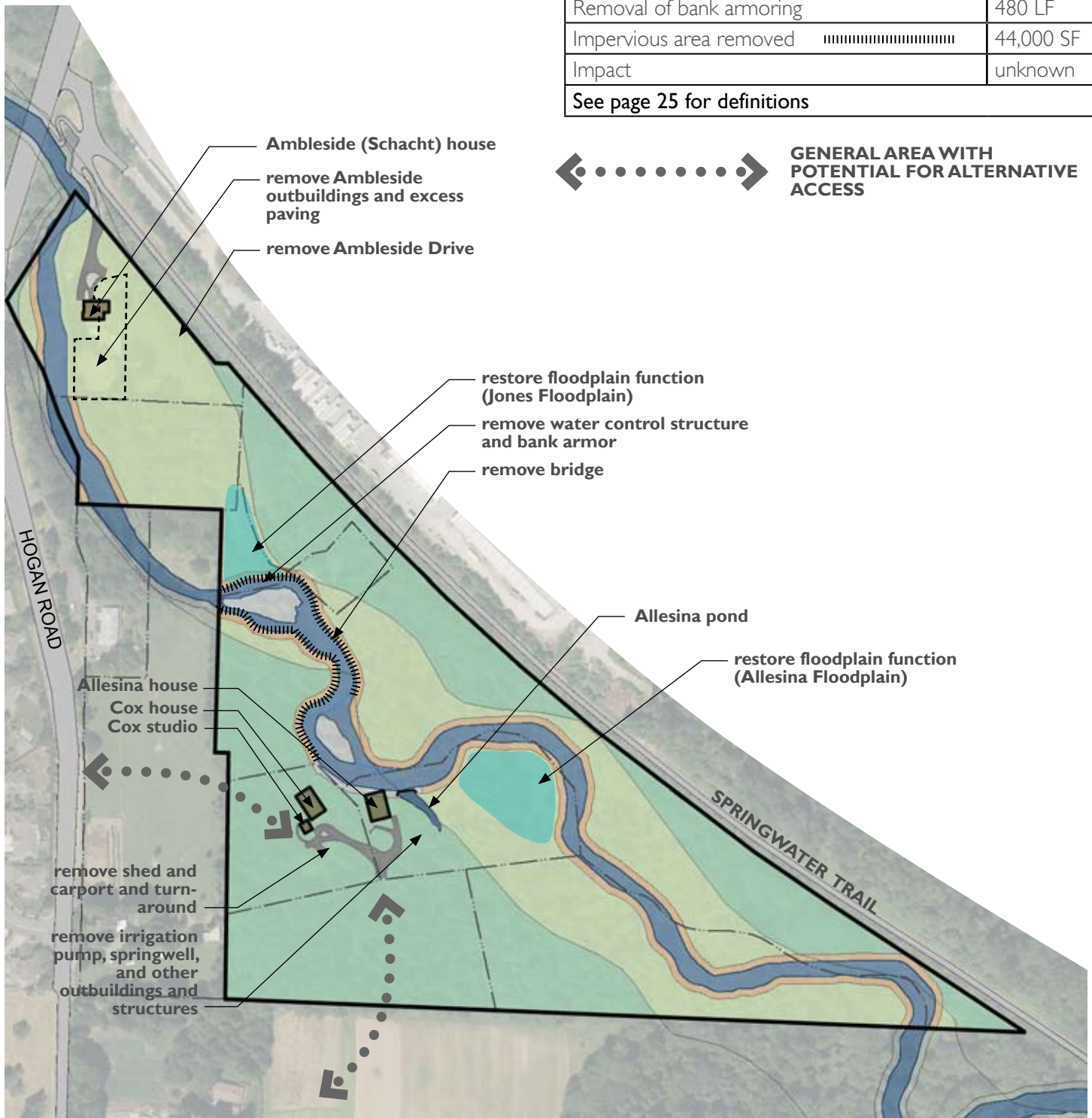
**Estimated Cost \$22,721**

**\* Estimated permit cost includes permit and preparation cost. See Appendix A for itemized costs and permit fees.**

### Disadvantages / Challenges

- Construction of alternative access road through forested hillside that would likely have a wider disturbance area than the existing road.
- An alternative alignment would require purchase of new right-of-way
- Continued rental property management
- Floodplain restoration is likely to impact to significant trees

<b>Management Scenario 3</b>		<b>Quantity</b>
Upland re-vegetation and monitoring		11.4 AC
Floodplain re-vegetation		9.1 AC
Stream bank restoration		5390 LF
Floodplain/ stream function restoration		2.4 AC
Removal of bank armoring		480 LF
Impervious area removed		44,000 SF
Impact		unknown
See page 25 for definitions		



## Management Scenario 4

Scenario 4 would move or remove the Ambleside (Schacht) house and provide alternative access to the Cox and Allesina homes.

### Actions

	Cost
<b>Management</b>	
• Landscape management	\$3,000
• Rental property management	\$400- \$1,000 / year
<b>Demolition / Deconstruction</b>	
• Remove outbuildings, pool, fencing, unnecessary paving, non native plantings, & Ambleside driveway	\$23,687
• Remove Ambleside Drive	\$25,700
• Remove Ambleside bridge	\$36,250
• Move/remove Ambleside (Schacht) house *	\$50,000- \$171,553
<b>Construction</b>	
• Construct alternative access road from Hogan Road	\$207,000
<b>Restoration</b>	
• Restoration Planting	\$5,795
<b>Stream bank and Floodplain Restoration</b>	
• Creek armoring & bridge abutments in south channel	\$35,800
• Remove dam	\$23,000
• Creek armoring in north channel	\$30,300
• Floodplain restoration (Ambleside, Jones & Allesina)	\$33,500
• Remove armoring at Ambleside Drive	\$32,800
* Costs range from demolition at low cost, and moving the structure at the high cost. The home could also be sold with the purchaser responsible for moving costs.	

### Pros

- Alternative access road would be out of the floodplain.
- Enables removal of bridge, dam and bank armoring. Enables the restoration of Jones floodplain which reduces flooding potential on inholding.
- Enables restoration of Ambleside floodplain.
- Provides access for restoration of Allesina floodplain.
- Improved access for maintenance, construction and emergencies

### Cons

- Construction of alternative access road through forested hillside that would likely have a wider disturbance area than the existing road.
- An alternative alignment would require purchase of new right-of-way
- Continued rental property management, moving demolition or deconstruction of historic structure
- Floodplain restoration is likely to impact significant trees

### Permits

*Historic Landmarks*  
*Erosion control*  
*Special Review type II (or III)*  
*Building Moving*  
*1200-CN*  
*Grading*  
*Plan Review*  
*Building Permit*  
*Gresham SDCs*  
*Wastewater*  
*Water*  
*Transportation*  
*Parks*  
*Stormwater*  
*DSL*

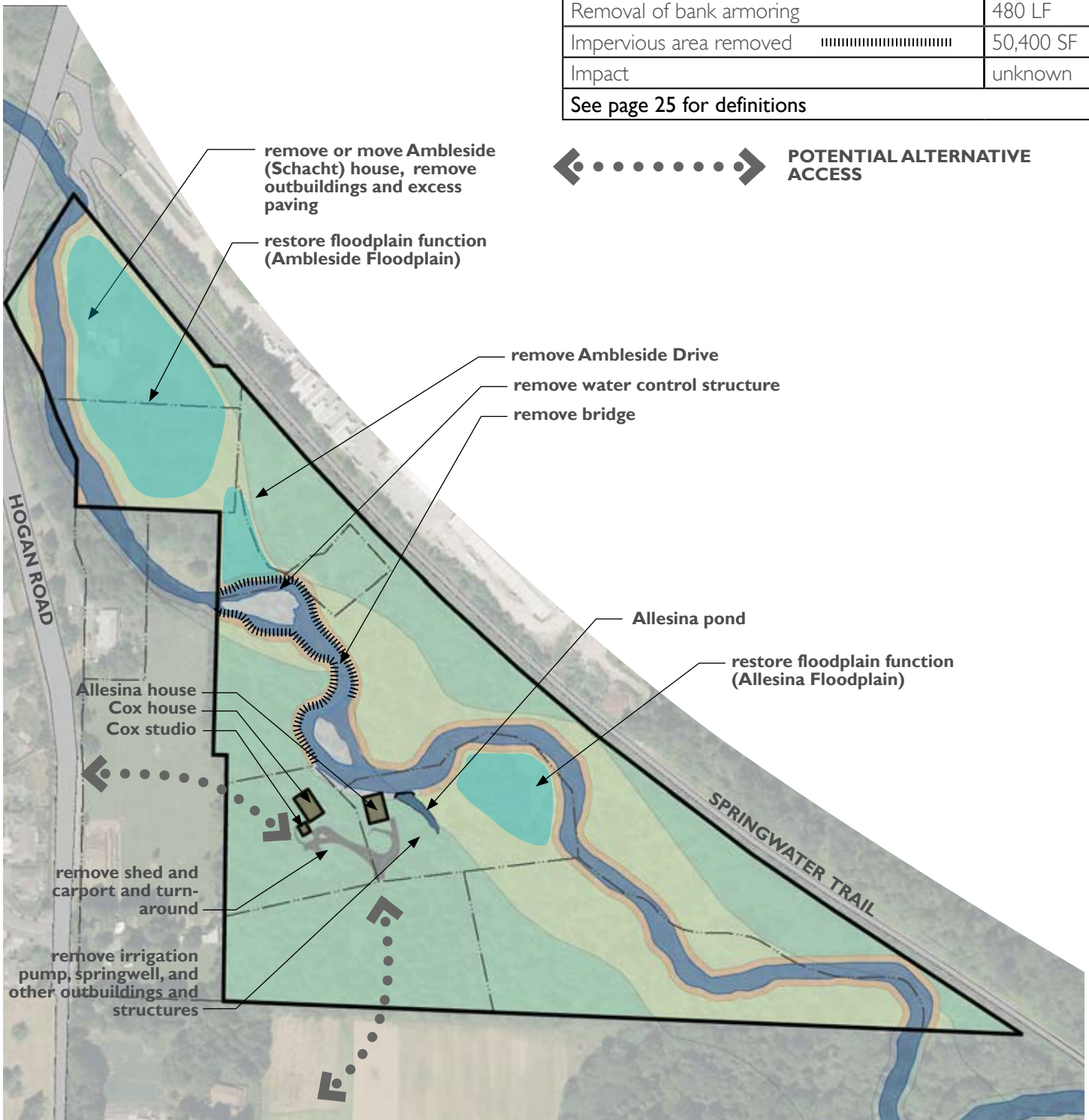
**Estimated Cost \$27,390**

**\* Estimated permit cost includes permit and preparation cost. See Appendix A for itemized costs and permit fees.**



<b>Management Scenario 4</b>		<b>Quantity</b>
Upland re-vegetation and monitoring		11.4 AC
Floodplain re-vegetation		9.1 AC
Stream bank restoration		5810 LF
Floodplain/ stream function restoration		5.5 AC
Removal of bank armoring		480 LF
Impervious area removed		50,400 SF
Impact		unknown
See page 25 for definitions		

◀ ● ● ● ● ● ● ● ▶ **POTENTIAL ALTERNATIVE ACCESS**



## Management Scenario 5

Scenario 5 would move or remove the Cox and Allesina Homes with the option to renovate the Ambleside House for public use. This would enable removal of Ambleside Drive.

### Actions

	Cost
<b>Management</b>	
• Landscape management	\$3,000
• Typical Rental Property management	\$400- \$1,000 / year
<b>Demolition / Deconstruction</b>	
• Remove outbuildings, pool, fencing, unnecessary paving, non native plantings, and all Cox and Allesina paving	\$24,653
• Remove Ambleside Drive	\$25,700
• Remove Ambleside bridge	\$36,250
• Remove Allesina and Cox houses and studio	\$76,000
<b>Construction</b>	
• (optional) Construct temporary alternative access road from Hogan Road	\$25,000
• (optional) Renovate Ambleside House for public use.	unknown
<b>Restoration</b>	
• Restoration Planting	\$1,377
<b>Stream bank and Floodplain Restoration</b>	
• Creek armoring & bridge abutments in south channel	\$35,800
• Remove dam	\$23,000
• Creek armoring in north channel	\$30,300
• Floodplain restoration (Jones & Allesina)	\$33,500
• Remove armoring at Ambleside Drive	\$32,800

- Pros**
- Alternative access road would be out of the floodplain.
  - Maintaining Ambleside (Schacht) House may help to reduce indiscriminate use of the site.
  - Enables removal of bridge, dam and bank armoring. Enables the restoration of Jones floodplain which reduces flooding potential on inholding.
  - Eliminate need for access to south side of creek except potentially for construction/deconstruction.
- Cons**
- Continued property management / costly upgrade to historic structure to enable public use
  - Temporary construction access may be needed for restoring Allesina floodplain and de-constructing homes efficiently.
  - Floodplain restoration is likely to impact to significant trees.
  - Restoration access to south side of site will be difficult

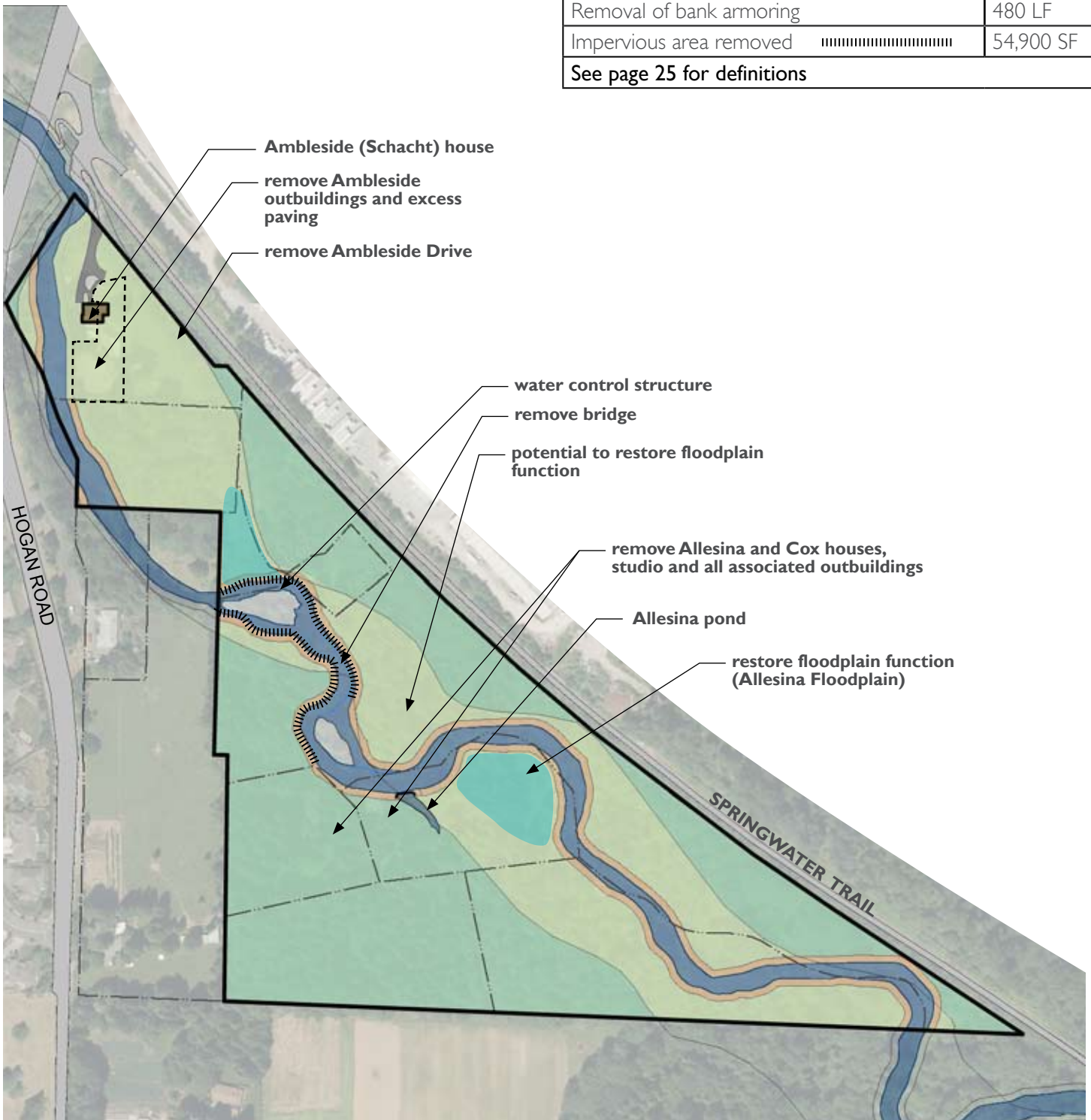
### Permits

Erosion control  
Demolition  
1200-CN  
Grading  
DSL  
Type III Tree Removal

**Estimated Cost \$22,721**

**\* Estimated permit cost includes permit and preparation cost. See Appendix A for itemized costs and permit fees.**

Management Scenario 5	Quantity
Upland re-vegetation and monitoring	11.4 AC
Floodplain re-vegetation	9.1 AC
Stream bank restoration	5630 LF
Floodplain/ stream function restoration	2.7 AC
Removal of bank armoring	480 LF
Impervious area removed	54,900 SF
See page 25 for definitions	



## Management Scenario 6

Scenario 6 would remove all the homes, Ambleside Drive, the dam, bridge and bank armoring and restore floodplain function throughout the site.

### Actions

	Cost
<b>Management</b>	
• Landscape management	\$3,000
• Rental property management	\$0 / year
<b>Demolition / Deconstruction</b>	
• Remove outbuildings, pool, fencing, non native plantings, and all paving.	\$28,178
• Remove Ambleside Drive	\$25,700
• Remove Ambleside bridge	\$36,250
• Remove Allesina and Cox houses and studio	\$76,000
• Move/remove Ambleside (Schacht) House *	\$50,000 - \$171,553
<b>Construction</b>	
• (optional) Construct temporary alternative access road from Hogan Road	\$25,000
<b>Restoration</b>	
• Restoration Planting	\$5,955
<b>Stream bank and Floodplain Restoration</b>	
• Creek armoring & bridge abutments in south channel	\$35,800
• Remove dam	\$23,000
• Creek armoring in north channel	\$30,300
• Floodplain restoration (Ambleside, Jones & Allesina)	\$33,500
• Remove armoring at Ambleside Drive	\$32,800

\* Costs range from demolition at low cost, and moving the structure at the high cost. The home could also be sold with the purchaser responsible for moving costs.

- Pros**
- Enables removal of bridge, dam and bank armoring. Enables the restoration of Jones floodplain which reduces flooding potential on inholding.
  - Enables restoration of Ambleside floodplain.
  - Enables removal of bridge, dam and bank armoring and the restoration of Jones floodplain which reduces flooding potential on inholding.
  - Eliminate need for access to south side of creek except potentially for construction/deconstruction.
- Cons**
- Future restoration access to south side of site will be difficult
  - Eliminates on-site monitoring of indiscriminate use
  - Temporary construction access may be needed for restoring Allesina floodplain and de-constructing homes efficiently.
  - Floodplain restoration is likely to impact significant trees.

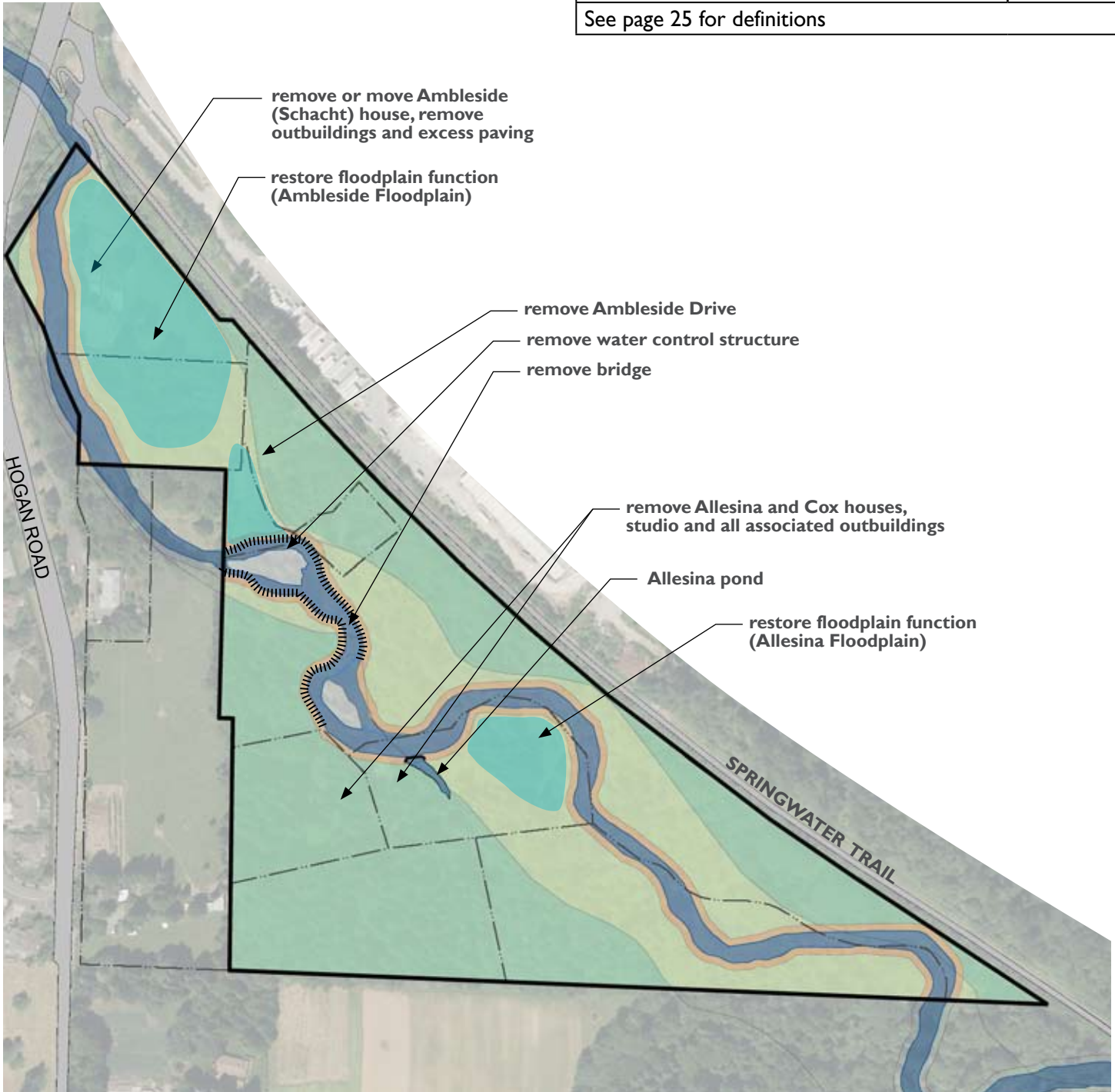
### Permits

*Historic Landmarks*  
*Erosion control*  
*Special Review type II (or III)*  
*Building Moving*  
*1200-CN*  
*Grading*  
*Demolition*  
*Plan Review*  
*Building Permit*  
*Gresham SDCs*  
*Wastewater*  
*Water*  
*Transportation*  
*Parks*  
*Stormwater*  
*DSL*  
*Tree removal type III*

**Estimated Cost \$38,666\***

\* Estimated permit cost includes permit and preparation cost. See Appendix A for itemized costs and permit fees.

<b>Management Scenario 6</b>		<b>Quantity</b>
Upland re-vegetation and monitoring		11.4 AC
Floodplain re-vegetation		9.1 AC
Stream bank restoration		6050 LF
Floodplain/ stream function restoration		5.8 AC
Removal of bank armoring		480 LF
Impervious area removed		61,300 SF
See page 25 for definitions		





<b>Structures</b> Each item includes paving around structure	<b>Footprint (SF)</b>	<b>Annual Rental Income</b>	<b>Annual Cost to Maintain</b>	<b>Cost to Remove</b>	<b>Advantage</b>	<b>Restoration quantities</b>	<b>Challenges</b>
Remove Ambleside Outbuildings	10,700 SF	na	na	\$20,400	<ul style="list-style-type: none"> <li>Reduces footprint of developed area, impervious surface, and fragmentation</li> </ul>	10,700 SF - remove impervious surface and revegetate (floodplain)	
Remove Cox and Allesina Outbuildings	(Cox) 650 SF (Allesina) 2200 SF	na	na	\$7,000	<ul style="list-style-type: none"> <li>Reduces footprint of developed area, impervious surface, and fragmentation</li> <li>Removing unneeded structures, wells and wellhouses reduces Metro's liability</li> </ul>	2,850 SF - remove impervious surface and revegetate (upland)	<ul style="list-style-type: none"> <li>Must be completed with small construction equipment because of bridge and road limitations.</li> </ul>
Remove Cox Studio	900 SF	na	medium	na	<ul style="list-style-type: none"> <li>Reduces # of dwelling units to 2. Code requires a 12 ft wide access road for two dwelling units, and a 20 ft f road or three or more dwelling units.</li> </ul>	900 SF - remove impervious surface and revegetate (upland)	<ul style="list-style-type: none"> <li>Must be completed with small construction equipment because of bridge and road limitations.</li> </ul>
Remove Ambleside House	6375 SF	\$14,400	medium	Move: \$168,553	<ul style="list-style-type: none"> <li>Removes historic structure from floodplain, reducing risk to structure and people</li> <li>Enables restoration of Ambleside floodplain</li> <li>Reduces fragmentation</li> </ul>	Ambleside floodplain - 135,000 SF (3.1 acres) Remove impervious surface - 6,300 SF Restore 400 LF of streambank	<ul style="list-style-type: none"> <li>Ambleside is listed as historic, and demolition may be difficult. Moving the house to a new location would be significantly more expensive.</li> </ul>
Remove Cox House and studio	5700 SF	\$12,000	medium	Deconstruct/ Demo \$37,500	<ul style="list-style-type: none"> <li>If all 3 homes are removed it is possible to remove the road, bridge, dam and bank armoring; and restore Jones floodplain.</li> </ul>	13,800 SF- remove impervious surface and revegetate (upland) Jones floodplain - 11,500 SF (0.3 acres)	<ul style="list-style-type: none"> <li>Access - deconstruction may be easier with temporary construction access</li> </ul>
Remove Allesina house	5200 SF	\$13,200	medium	Deconstruct/ Demo \$32,500	<ul style="list-style-type: none"> <li>Reduce risk of difficult access to rental properties</li> <li>Reduces fragmentation</li> <li>eliminate road maintenance and potential need to upgrade road</li> </ul>	Remove dam, spillway and armoring Restore 480 LF of streambank	<ul style="list-style-type: none"> <li>Allesina house is adjacent to Johnson Creek and demo/deconstruction needs to be sensitive to riparian area</li> </ul>
<b>Infrastructure</b>	<b>Footprint (SF)</b>	<b>Cost</b>		<b>Advantage</b>		<b>Restoration quantities</b>	<b>Challenges</b>
Maintain existing road and bridge	(28400 SF)	Annual maintenance cost varies		<ul style="list-style-type: none"> <li>Maintains existing footprint</li> </ul>		na	<ul style="list-style-type: none"> <li>There is no access to homes south of Johnson Creek for standard emergency response vehicles, construction equipment or maintenance equipment.</li> <li>Cannot remove dam, spillway, and bank armoring</li> <li>Road is very close to eroded stream banks just south of the bridge. A leaning mature fir tree could fall and damage the road.</li> </ul>
Upgrade existing road and bridge	+30,000 SF (potentially)	Not Estimated		<ul style="list-style-type: none"> <li>Provides emergency vehicle access to Cox/Allesina homes, and access for large maintenance and construction equipment if alternative access is not provided</li> </ul>		na	<ul style="list-style-type: none"> <li>Widening road likely requires removing trees listed as significant by the City of Gresham, and increases footprint</li> <li>In stream work for bridge will trigger permitting</li> </ul>
Remove road and bridge	28400 SF	\$55,700		<ul style="list-style-type: none"> <li>Enables restoration of Jones floodplain, and mitigates some flooding on inholding.</li> <li>Enables removal of dam, spillway and bank armoring</li> <li>Reduces fragmentation</li> </ul>		Restore 480 LF of streambank Jones floodplain - 11,500 SF	<ul style="list-style-type: none"> <li>Either need alternate access to Cox/Allesina houses or need to remove them</li> <li>Restoration of Jones floodplain will require removing listed Japanese Maples and Hogan Cedars</li> </ul>
Provide new road for alternate access	+25,000 to 40,000 SF	\$278,000		<ul style="list-style-type: none"> <li>Potential to use route previously used for Greives house removal</li> </ul>		Restore 480 LF of streambank Jones floodplain - 11,500 SF Potential impact to existing hillside forest	<ul style="list-style-type: none"> <li>Topography</li> <li>Existing forest, introduces new fragmentation</li> <li>Need to acquire right-of-way/ easement through private property</li> </ul>
Provide temporary construction access	temporary	\$25,000		<ul style="list-style-type: none"> <li>Potential to use route previously used for Greives house removal</li> </ul>			<ul style="list-style-type: none"> <li>Would need to acquire temporary right-of-way</li> </ul>





# Appendix A - Cost Opinions

Costs shown are for construction items only. Depending on the project, additional costs can be expected for engineering, permitting, management, contingency, and contractor fees. In general these can increase project cost by 40%.

## Scenario 1: Reduce Footprint of Homes

Item of Work	Quantity	Unit	Unit Price	Total Amount	Category Total
<b>LANDSCAPE MANAGEMENT</b>					<b>\$3,000</b>
Remove invasives (existing natural areas)	1	LS	\$1,500	\$1,500	
Restoration planting (existing natural areas)	1	LS	\$1,500	\$1,500	
<b>Subtotal</b>					<b>\$3,000</b>

## Scenario 2: Reduce Footprint of Homes

Item of Work	Quantity	Unit	Quantity	Unit	Unit Price	Total Amount	Category Total
<b>LANDSCAPE MANAGEMENT</b>							<b>\$3,000</b>
Remove invasives (existing natural areas)			1	AC	\$1,500	\$1,500	
Restoration planting (existing natural areas)			1	AC	\$1,500	\$1,500	
<b>DEMOLITION</b>							
<b>Ambelside House. (Remove outbuildings fences, pool etc)</b>							<b>\$13,450</b>
Remove sheds & carport	2450	SF	1	LS	\$4,000	\$4,000	
Remove surplus pavement	8900	SF	8900	SF	\$0.75	\$6,675	
Remove pool	1830	SF	1	LS	\$1,500	\$1,500	
Remove non-native plantings	8500	SF	8500	SF	\$0.15	\$1,275	
TOTAL AREA	21680	SF					
<b>Cox House (Remove shed and carport)</b>							<b>\$2,753</b>
Remove shed & carport	370	SF	1	LS	\$1,500	\$1,500	
Remove surplus pavement	600	SF	600	SF	\$0.75	\$450	
Remove non-native plantings	4600	SF	4600	SF	\$0.15	\$690	
Remove fencing (cox)			50	LF	\$2.25	\$113	
TOTAL AREA	5570	SF					
<b>Allesina House (Remove misc buildings, surplus pavement)</b>							<b>\$3,950</b>
Remove sheds/ springhouses / greenhouse	350	SF	1	LS	\$2,000	\$2,000	
Remove surplus pavement	1900	SF	1900	SF	\$0.75	\$1,425	
Remove non-native plantings	3500	SF	3500	SF	\$0.15	\$525	
TOTAL AREA	5401	SF					
<b>RESTORATION</b>							
<b>Restoration planting</b>							<b>\$3,229</b>
Restoration planting (where structures and paving have been removed)			19152	SF	\$0.10	\$1,915	
Restoration planting (where non-natives have been removed)			26280	SF	\$0.05	\$1,314	
<b>Subtotal</b>							<b>\$26,382</b>

### Scenario 3: Provide Alternative Access

Item of Work	Quantity	Unit	Quantity	Unit	Unit Price	Total Amount	Category Total
<b>LANDSCAPE MANAGEMENT</b>							<b>\$3,000</b>
Remove invasives (existing natural areas)			1	LS	\$1,500	\$1,500	
Restoration planting (existing natural areas)			1	LS	\$1,500	\$1,500	
<b>DEMOLITION</b>							
<b>Ambelside House. (Remove outbuildings fences, pool etc)</b>							<b>\$13,450</b>
Remove sheds & carport	2450	SF	1	LS	\$4,000	\$4,000	
Remove surplus pavement	8900	SF	8900	SF	\$0.75	\$6,675	
Remove pool	1830	SF	1	LS	\$1,500	\$1,500	
Remove non-native plantings	8500	SF	8500	SF	\$0.15	\$1,275	
TOTAL AREA	21680	SF					
<b>Cox House (Remove shed and carport)</b>							<b>\$2,753</b>
Remove shed & carport	370	SF	1	LS	\$1,500	\$1,500	
Remove surplus pavement	600	SF	600	SF	\$0.75	\$450	
Remove non-native plantings	4600	SF	4600	SF	\$0.15	\$690	
Remove fencing (Cox)			50	LF	\$2.25	\$113	
TOTAL AREA	5570	SF					
<b>Allesina House (Remove misc buildings, surplus pvt.)</b>							<b>\$3,950</b>
Remove sheds/ springhouses / greenhouse	350	SF	1	LS	\$2,000	\$2,000	
Remove surplus pavement	1900	SF	1900	SF	\$0.75	\$1,425	
Remove non-native plantings	3500	SF	3500	SF	\$0.15	\$525	
TOTAL AREA	5401	SF					
<b>Remove Ambelside Drive</b>							<b>\$25,700</b>
Remove asphalt and base rock	27600		27600	SF	\$0.75	\$20,700	
Haul and recycle			500	CY	\$10	\$5,000	
TOTAL SF	27600	SF					
<b>Remove Bridge and bridge abutments</b>							<b>\$36,250</b>
Removal of bridge			1	SF	\$20,000	\$20,000	
Removal of abutments			1	LS	\$10,000	\$10,000	
Removal of fill			250	CY	\$15	\$3,750	
Restoration of bank			2500	SF	\$1	\$2,500	
<b>CONSTRUCTION</b>							
<b>Alternative Access road for Allesina and Cox</b>							<b>\$207,000</b>
Purchase easement/ property			1	LS	\$75,000	\$75,000	
Erosion control			1	LS	\$2,000	\$2,000	
Clearing			1	LS	\$4,000	\$4,000	
Grading			56000	SF	\$0.25	\$14,000	
Asphalt and base rock			28000	SF	\$3.00	\$84,000	
Storm drainage			2800	LF	\$5	\$14,000	
Construction restoration			56000	SF	\$0.25	\$14,000	
<b>RESTORATION</b>							
<b>Restoration planting</b>							<b>\$5,200</b>
Restoration planting (where structures and paving have been removed)			44000	SF	\$0.10	\$4,400	
Restoration planting (where non-natives have been removed)			16000	SF	\$0.05	\$800	
TOTAL SF			60000	SF			

<b>FLOODPLAIN / STREAMBANK RESTORATION</b>						
<b>Remove creek armament and bridge abutments in south channel</b>						
						<b>\$35,800</b>
Creek protection / isolate work area	160	LF	160	LF	\$20	\$3,200
Remove walls	160	LF	1600	SF	\$10	\$16,000
Remove fill			550	CY	\$20	\$11,000
Bio engineer and plant creek bank	140	LF	1400	SF	\$4.00	\$5,600
<b>Remove dam</b>						
						<b>\$23,000</b>
Creek protection / isolate work area			75	LF	\$40	\$3,000
Remove dam			1	LS	\$15,000	\$15,000
Instream restoration			1000	SF	\$5	\$5,000
<b>Remove creek armament in north channel</b>						
						<b>\$30,300</b>
Creek protection / isolate work area	180	LF	180	LF	\$20	\$3,600
Remove walls	180	LF	1800	SF	\$5	\$9,000
Remove fill			525	CY	\$20	\$10,500
Bio engineer and plant creek bank	180	LF	1800	SF	\$4	\$7,200
<b>Remove levy and restore floodplain</b>						
						<b>\$33,500</b>
Levy removal and floodplain restoration (Allesina)			33500	SF	\$1.00	\$33,500
<b>Remove armament adjacent to Ambelside Creek</b>						
						<b>\$32,800</b>
Creek protection / isolate work area	140	LF	140	LF	\$20	\$2,800
Remove walls	140	LF	1400	SF	\$10	\$14,000
Remove fill			520	CY	\$20	\$10,400
Bio engineer and plant creek bank	140	LF	1400	SF	\$4	\$5,600
<b>Subtotal</b>						<b>\$452,703</b>

### Scenario 4: Provide Alternative Access/Move Ambelside house

Item of Work	Quantity	Unit	Quantity	Unit	Unit Price	Total Amount	Category Total
<b>LANDSCAPE MANAGEMENT</b>							<b>\$3,000</b>
Remove invasives (existing natural areas)			1	LS	\$1,500	\$1,500	
Restoration planting (existing natural areas)			1	LS	\$1,500	\$1,500	
<b>DEMOLITION</b>							
<b>Ambelside House. (Remove outbuildings fences, pool etc)</b>							<b>\$16,975</b>
Remove sheds & carport	2450	SF	1	LS	\$4,000	\$4,000	
Remove surplus pavement	8900	SF	8900	SF	\$0.75	\$6,675	
Remove remaing asphalt driveway	4700	SF	4700	SF	\$0.75	\$3,525	
Remove pool	1830	SF	1	LS	\$1,500	\$1,500	
Remove non-native plantings	8500	SF	8500	SF	\$0.15	\$1,275	
TOTAL AREA	26380	SF					
<b>Cox House (Remove shed and carport)</b>							<b>\$2,753</b>
Remove shed & carport	370	SF	1	LS	\$1,500	\$1,500	
Remove surplus pavement	600	SF	600	SF	\$0.75	\$450	
Remove non-native plantings	4600	SF	4600	SF	\$0.15	\$690	
Remove fencing (Cox)			50	LF	\$2.25	\$113	
TOTAL AREA	5570	SF					
<b>Allesina House (Remove misc buildings, surplus pvt.)</b>							<b>\$3,950</b>
Remove sheds/ springhouses / greenhouse	350	SF	1	LS	\$2,000	\$2,000	
Remove surplus pavement	1900	SF	1900	SF	\$0.75	\$1,425	
Remove non-native plantings	3500	SF	3500	SF	\$0.15	\$525	
TOTAL AREA	5401	SF					
<b>Remove Ambelside Drive</b>							<b>\$25,700</b>
Remove asphalt and base rock	27600		27600	SF	\$0.75	\$20,700	
Haul and recycle			500	CY	\$10	\$5,000	
TOTAL SF	27600	SF					
<b>Remove Bridge and bridge abutments</b>							<b>\$36,250</b>
Removal of bridge			1	SF	\$20,000	\$20,000	
Removal of abutments			1	LS	\$10,000	\$10,000	
Removal of fill			250	CY	\$15	\$3,750	
Restoration of bank			2500	SF	\$1	\$2,500	
<b>Move Ambelside house</b>							<b>\$171,553</b>
Acquire property			1	LS	\$75,000	\$75,000	
Move Ambelside house			1	LS	\$50,000	\$50,000	
New foundation			160	LF	\$125	\$20,000	
Driveway			800	LS	\$4	\$2,800	
Water Meter			1	LS	\$4,153	\$4,153	
Water Line			100	LF	\$15	\$1,500	
Electric service			1	LS	\$2,500	\$2,500	
Property restoraton (new property)			1	LS	\$5,000	\$5,000	
Demo foundation			160	LF	\$10	\$1,600	
Decommission Septic tank			1	LS	\$1,500	\$1,500	
Decommission Oil tank			1	LS	\$7,500	\$7,500	

<b>CONSTRUCTION</b>						
<b>Alternative Access road for Allesina and Cox</b>						<b>\$207,000</b>
Purchase easement/ property	1	LS		\$75,000	\$75,000	
Erosion control	1	LS		\$2,000	\$2,000	
Clearing	1	SF		\$4,000	\$4,000	
Grading	56000	SF		\$0.25	\$14,000	
Asphalt and base rock	28000	SF		\$3.00	\$84,000	
Storm drainage	2800	LF		\$5.00	\$14,000	
Construction restoration	56000	SF		\$0.25	\$14,000	
<b>RESTORATION</b>						
<b>Restoration planting</b>						<b>\$5,795</b>
Restoration planting (where structures and paving have been removed)	49950	SF		\$0.10	\$4,995	
Restoration planting (where non-natives have been removed)	16000	SF		\$0.05	\$800	
<b>FLOODPLAIN / STREAMBANK RESTORATION</b>						
<b>Remove creek armament and bridge abutments in south channel</b>						<b>\$35,800</b>
Creek protection / isolate work area	160	LF	160	LF	\$20	\$3,200
Remove walls	160	LF	1600	SF	\$10	\$16,000
Remove fill			550	CY	\$20	\$11,000
Bio engineer and plant creek bank	140	LF	1400	SF	\$4	\$5,600
<b>Remove dam</b>						<b>\$23,000</b>
Creek protection / isolate work area			75	LF	\$40	\$3,000
Remove dam			1	LS	\$15,000	\$15,000
Instream restoration			1000	SF	\$5	\$5,000
<b>Remove creek armament in north channel</b>						<b>\$30,300</b>
Creek protection / isolate work area	180	LF	180	LF	\$20	\$3,600
Remove walls	180	LF	1800	SF	\$5	\$9,000
Remove fill			525	CY	\$20	\$10,500
Bio engineer and plant creek bank	180	LF	1800	SF	\$4	\$7,200
<b>Remove levy and restore floodplain</b>						<b>\$33,500</b>
Levy removal and floodplain restoration (Allesina)			33500	SF	\$1.00	\$33,500
<b>Remove armament adjacent to Ambelside Creek</b>						<b>\$32,800</b>
Creek protection / isolate work area	140	LF	140	LF	\$20	\$2,800
Remove walls	140	LF	1400	SF	\$10	\$14,000
Remove fill			520	CY	\$20	\$10,400
Bio engineer and plant creek bank	140	LF	1400	SF	\$4.00	\$5,600
<b>Subtotal</b>						<b>\$628,376</b>

<b>Scenario 5: Remove Cox and Allesina homes, minimize footprint of Ambelside home</b>							
Item of Work	Quantity	Unit	Quantity	Unit	Unit Price	Total Amount	Category Total
<b>LANDSCAPE MANAGEMENT</b>							<b>\$3,000</b>
Remove invasives (existing natural areas)			1	LS	\$1,500	\$1,500	
Restoration planting (existing natural areas)			1	LS	\$1,500	\$1,500	
<b>DEMOLITION</b>							
<b>Ambelside House. (Remove outbuildings fences, pool etc)</b>							<b>\$13,450</b>
Remove sheds & carport	2450	SF	1	LS	\$4,000	\$4,000	
Remove surplus pavement	8900	SF	8900	SF	\$0.75	\$6,675	
Remove pool	1830	SF	1	LS	\$1,500	\$1,500	
Remove non-native plantings	8500	SF	8500	SF	\$0.15	\$1,275	
TOTAL AREA	21680	SF					
<b>Cox House (Remove shed and carport)</b>							<b>\$5,003</b>
Remove shed & carport	370	SF	1	LS	\$1,500	\$1,500	
Remove surplus pavement	600	SF	600	SF	\$0.75	\$450	
Remove all remaining pavement	3000	SF	3000	SF	\$0.75	\$2,250	
Remove non-native plantings	4600	SF	4600	SF	\$0.15	\$690	
Remove fencing (Cox)			50	LF	\$2.25	\$113	
TOTAL AREA	8570	SF					
<b>Allesina House (Remove misc buildings, surplus pavement)</b>							<b>\$6,200</b>
Remove sheds/ springhouses / greenhouse	350	SF	1	LS	\$2,000	\$2,000	
Remove surplus pavement	1900	SF	1900	SF	\$0.75	\$1,425	
Remove all remaining pavement	3000	SF	3000	SF	\$0.75	\$2,250	
Remove non-native plantings	3500	SF	3500	SF	\$0.15	\$525	
TOTAL AREA	8401	SF					
<b>Remove Ambelside Drive</b>							<b>\$25,700</b>
Remove asphalt and base rock	27600		27600	SF	\$0.75	\$20,700	
Haul and recycle			500	CY	\$10	\$5,000	
TOTAL SF	27600	SF					
<b>Deconstruct Allesina House</b>							<b>\$35,500</b>
Deconstruct Allesina house			1	LS	\$25,000	\$25,000	
Remove foundation and misc site improvements			1	LS	\$1,500	\$1,500	
Decommission oil tank			1	LS	\$7,500	\$7,500	
Decommission septic tank			1	LS	\$1,500	\$1,500	
TOTAL SF	2200	SF					
<b>Deconstruct Cox House and Studio</b>							<b>\$40,500</b>
Deconstruct Cox house			1	LS	\$30,000	\$30,000	
Remove site improvements			1	LS	\$1,500	\$1,500	
Decommission septic tank			1	LS	\$1,500	\$1,500	
Decommission oil tank			1	LS	\$7,500	\$7,500	
TOTAL SF	2700	SF					
<b>Remove Bridge and bridge abutments</b>							<b>\$36,250</b>
Removal of bridge			1	SF	\$20,000	\$20,000	
Removal of abutments			1	LS	\$10,000	\$10,000	
Removal of fill			250	CY	\$15	\$3,750	
Restoration of bank			2500	SF	\$1	\$2,500	

<b>RESTORATION</b>						
<b>Restoration planting</b>						<b>\$1,377</b>
Restoration planting (where structures and paving have been removed)	5770	SF		\$0.10	\$577	
Restoration planting (where non-natives have been removed)	16000	SF		\$0.05	\$800	
<hr/>						
<b>FLOODPLAIN / STREAMBANK RESTORATION</b>						
<b>Remove creek armament and bridge abutments in south channel</b>						<b>\$35,800</b>
Creek protection / isolate work area	160	LF	160	LF	\$20	\$3,200
Remove walls	160	LF	1600	SF	\$10	\$16,000
Remove fill			550	CY	\$20	\$11,000
Bio engineer and plant creek bank	140	LF	1400	SF	\$4	\$5,600
<b>Remove dam</b>						<b>\$23,000</b>
Creek protection / isolate work area			75	LF	\$40	\$3,000
Remove dam			1	LS	\$15,000	\$15,000
Instream restoration			1000	SF	\$5	\$5,000
<b>Remove creek armament in north channel</b>						<b>\$30,300</b>
Creek protection / isolate work area	180	LF	180	LF	\$20	\$3,600
Remove walls	180	LF	1800	SF	\$5	\$9,000
Remove fill			525	CY	\$20	\$10,500
Bio engineer and plant creek bank	180	LF	1800	SF	\$4	\$7,200
<b>Remove levy and restore floodplain</b>						<b>\$33,500</b>
Levy removal and floodplain restoration (Allesina)			33500	SF	\$1	\$33,500
<b>Remove armament adjacent to Ambelside Drive</b>						<b>\$32,800</b>
Creek protection / isolate work area	140	LF	140	LF	\$20	\$2,800
Remove walls	140	LF	1400	SF	\$10	\$14,000
Remove fill			520	CY	\$20	\$10,400
Bio engineer and plant creek bank	140	LF	1400	SF	\$4	\$5,600
<hr/>						
<b>Subtotal</b>						<b>\$322,380</b>



## Scenario 6: Remove homes, road and bridge

Item of Work	Quantity	Unit	Quantity	Unit	Unit Price	Total Amount	Category Total
<b>LANDSCAPE MANAGEMENT</b>							<b>\$3,000</b>
Remove invasives (existing natural areas)			1	LS	\$1,500	\$1,500	
Restoration planting (existing natural areas)			1	LS	\$1,500	\$1,500	
<b>DEMOLITION</b>							
<b>Ambelside House. (Remove outbuildings fences, pool etc)</b>							<b>\$16,975</b>
Remove sheds & carport	2450	SF	1	LS	\$4,000	\$4,000	
Remove surplus pavement	8900	SF	8900	SF	\$0.75	\$6,675	
Remove remaing asphalt driveway	4700	SF	4700	SF	\$0.75	\$3,525	
Remove pool	1830	SF	1	LS	\$1,500	\$1,500	
Remove non-native plantings	8500	SF	8500	SF	\$0.15	\$1,275	
TOTAL AREA	26380	SF					
<b>Cox House (Remove shed and carport)</b>							<b>\$5,003</b>
Remove shed & carport	370	SF	1	LS	\$1,500	\$1,500	
Remove surplus pavement	600	SF	600	SF	\$0.75	\$450	
Remove all remaining pavement	3000	SF	3000	SF	\$0.75	\$2,250	
Remove non-native plantings	4600	SF	4600	SF	\$0.15	\$690	
Remove fencing (Cox)			50	LF	\$2.25	\$113	
TOTAL AREA	8570	SF					
<b>Allesina House (Remove misc buildings, surplus pvt.)</b>							<b>\$6,200</b>
Remove sheds/ springhouses / greenhouse	350	SF	1	LS	\$2,000	\$2,000	
Remove surplus pavement	1900	SF	1900	SF	\$0.75	\$1,425	
Remove all remaining pavement	3000	SF	3000	SF	\$0.75	\$2,250	
Remove non-native plantings	3500	SF	3500	SF	\$0.15	\$525	
TOTAL AREA	8401	SF					
<b>Deconstruct Allesina House</b>							<b>\$35,500</b>
Deconstruct Allesina house			1	LS	\$25,000	\$25,000	
Remove foundation and misc site improvements			1	LS	\$1,500	\$1,500	
Decommission oil tank			1	LS	\$7,500	\$7,500	
Decommission septic tank			1	LS	\$1,500	\$1,500	
TOTAL SF	2200	SF					
<b>Deconstruct Cox House and Studio</b>							<b>\$40,500</b>
Deconstruct Cox house			1	LS	\$30,000	\$30,000	
Remove site improvments			1	LS	\$1,500	\$1,500	
Decommission septic tank			1	LS	\$1,500	\$1,500	
Decommission oil tank			1	LS	\$7,500	\$7,500	
TOTAL SF	2700	SF					
<b>Remove Ambelside Drive</b>							<b>\$25,700</b>
Remove asphalt and base rock	27600		27600	SF	\$0.75	\$20,700	
Haul and recycle			500	CY	\$10	\$5,000	
TOTAL SF	27600	SF					

<b>Remove Bridge and bridge abutments</b>						<b>\$36,250</b>
Removal of bridge	1	SF		\$20,000	\$20,000	
Removal of abutments	1	LS		\$10,000	\$10,000	
Removal of fill	250	CY		\$15	\$3,750	
Restoration of bank	2500	SF		\$1	\$2,500	
<b>MOVE AMBELSIDE HOUSE</b>						
<b>Move Ambelside house</b>						<b>\$171,553</b>
Acquire property	1	LS		\$75,000	\$75,000	
Move Ambelside house	1	LS		\$50,000	\$50,000	
New foundation	160	LF		\$125	\$20,000	
Driveway	800	LS		\$4	\$2,800	
Water Meter	1	LS		\$4,153	\$4,153	
Water Line	100	LF		\$15	\$1,500	
Electric service	1	LS		\$2,500	\$2,500	
Property restoraton (new property)	1	LS		\$5,000	\$5,000	
Demo foundation	160	LF		\$10	\$1,600	
Decommission Septic tank	1	LS		\$1,500	\$1,500	
Decommission Oil tank	1	LS		\$7,500	\$7,500	
<b>RESTORATION</b>						
<b>Restoration planting</b>						<b>\$5,955</b>
Restoration planting (where structures and paving have been removed)	58750	SF		\$0	\$5,875	
Restoration planting (where non-natives have been removed)	1600	SF		\$0.05	\$80	
<b>FLOODPLAIN / STREAMBANK RESTORATION</b>						
<b>Remove creek armament and bridge abutments in south channel</b>						<b>\$35,800</b>
Creek protection / isolate work area	160	LF	160	LF	\$20	\$3,200
Remove walls	160	LF	1600	SF	\$10	\$16,000
Remove fill			550	CY	\$20	\$11,000
Bio engineer and plant creek bank	140	LF	1400	SF	\$4	\$5,600
<b>Remove dam</b>						<b>\$23,000</b>
Creek protection / isolate work area			75	LF	\$40	\$3,000
Remove dam			1	LS	\$15,000	\$15,000
Instream restoration			1000	SF	\$5	\$5,000
<b>Remove creek armament in north channel</b>						<b>\$30,300</b>
Creek protection / isolate work area	180	LF	180	LF	\$20	\$3,600
Remove walls	180	LF	1800	SF	\$5	\$9,000
Remove fill			525	CY	\$20	\$10,500
Bio engineer and plant creek bank	180	LF	1800	SF	\$4	\$7,200
<b>Remove levy and restore floodplain</b>						<b>\$33,500</b>
Levy removal and floodplain restoration (Allesina)			33500	SF	\$1	\$33,500
<b>Remove armament adjacent to Ambelside Drive</b>						<b>\$32,800</b>
Creek protection / isolate work area	140	LF	140	LF	\$20	\$2,800
Remove walls	140	LF	1400	SF	\$10	\$14,000
Remove fill			520	CY	\$20	\$10,400
Bio engineer and plant creek bank	140	LF	1400	SF	\$4	\$5,600
<b>Subtotal</b>						<b>\$502,036</b>

<b>Estimated Cost of Permits</b>			
<b>Scenario 1</b>			
<b>None Necessary</b>			
			<b>\$0</b>
<b>Scenario 2</b>			
<b><i>Removal of structures and pavement at Homes</i></b>			
	<b>Permit cost</b>	<b>Preparation Cost</b>	<b>Total Cost</b>
Erosion control	\$250	\$1,000	\$1,250
Demolition	\$44	\$200	\$244
1200-CN permit*	\$0	\$5	\$5
<b><i>Permits Total</i></b>	<b>\$294</b>		
<b><i>Permits and Preparation Sub -Total</i></b>			<b>\$1,499</b>
<b><i>Contingency @ 25%</i></b>			<b>\$375</b>
<b>Total</b>			<b>\$1,874</b>

<b>Scenario 3</b>			
<i>Removal of structures / pavement at ambleside house provide alternate access, remove road and bridge</i>			
	<b>Permit cost</b>	<b>Preparation Cost</b>	<b>Total Cost</b>
<b>Remove structures / Pavement at Ambleside</b>			
Erosion control	\$250	\$2,000	\$2,250
Demolition	\$44	\$2,000	\$2,044
1200-CN permit	\$850	\$2,000	\$2,850
Grading	\$50	\$1,500	\$1,550
<b>Remove Road / Bridge</b>			
DSL Permit	\$450	\$2,500	\$2,950
1200cn	\$850	\$2,000	\$2,850
Erosion control	\$250	\$2,000	\$2,250
Grading	\$50	\$1,500	\$1,550
<b>New road permitting</b>			
Erosion control	\$1	\$5	\$6
1200-CN permit	\$1	\$5	\$6
Grading	\$1	\$5	\$6
Land division**	\$1,200	\$3,000	\$4,200
Plan Review fee (40% of total	\$1	\$5	\$6
SDC's for water meters***	\$4,153	\$200	\$4,353
<b>Permits Total</b>	<b>\$8,151</b>		
<b>Permits and Preparation Sub -Total</b>			<b>\$26,871</b>
<b>Contingency @ 25%</b>			<b>\$6,718</b>
<b>Total</b>			<b>\$33,589</b>

<b>Scenario 4</b>			
<b><i>Move Ambleside House. Provide new access, Remove road and bridge</i></b>			
	<b>Permit cost</b>	<b>Preparation Cost</b>	<b>Total Cost</b>
<b>Move House</b>			
Historic Landmarks	\$3,546	\$2,000	\$5,546
Erosion control	\$250	\$2,000	\$2,250
Special Review type II (may be type III)	\$2,838	\$5,000	\$7,838
Building Moving	\$44	\$1,000	\$1,044
1200-CN permit	\$826	\$2,000	\$2,826
Grading	\$50	\$1,500	\$1,550
Plan Review fee ( 40% of Plan Fee)	\$0	\$5	\$5
Building permit	\$0	\$5	\$5
Gresham SDC's			
Wastewater	\$5,056	\$200	\$5,256
Water	\$4,153	\$200	\$4,353
Transportation	\$2,795	\$200	\$2,995
Parks	\$3,837	\$200	\$4,037
Stormwater	\$824	\$200	\$1,024
<b>Remove Road / Bridge</b>			
DSL Permit	\$450	\$2,000	\$2,450
1200cn	\$850	\$2,000	\$2,850
Erosion control	\$50	\$1,500	\$1,550
Grading	\$1,200	\$3,000	\$4,200
<b>New road permitting</b>			
Erosion control	\$250	\$2,000	\$2,250
1200-CN permit	\$850	\$2,000	\$2,850
Grading	\$50	\$1,500	\$1,550
Land division	\$1,200	\$3,000	\$4,200
Plan Review fee (40% final permit cost)	\$1	\$5	\$6
SDC's for meters ?	\$1	\$5	\$6
<b><i>Permits Total</i></b>	<b>\$16,511</b>		
<b><i>Permits and Preparation Sub -Total</i></b>			<b>\$60,641</b>
<b><i>Contingency @ 25%</i></b>			<b>\$15,160</b>
<b>Total</b>			<b>\$75,801</b>

<b>Scenario 5</b>			
<b>Remove Cox and Allesina homes . Remove road and bridge. Minimize footprint of Ambelside home</b>			
	<b>Permit cost</b>	<b>Preparation Cost</b>	<b>Total Cost</b>
<b>Remove Road / Bridge</b>			
DSL Permit	\$450	\$2,500	\$2,950
1200cn	\$850	\$2,000	\$2,850
Erosion control	\$250	\$2,000	\$2,250
Grading	\$50	\$1,500	\$1,550
Demolition permit	\$44	\$200	\$244
<b>Remove Ambelside footprint</b>			
Erosion control	\$250	\$2,000	\$2,250
Demolition	\$44	\$200	\$244
1200-CN permit	\$850	\$2,000	\$2,850
<b>Permits Total</b>	<b>\$2,788</b>		
<b>Permits and Preparation Sub -Total</b>			<b>\$15,188</b>
<b>Contingency @ 25%</b>			<b>\$3,797</b>
<b>Total</b>			<b>\$18,985</b>

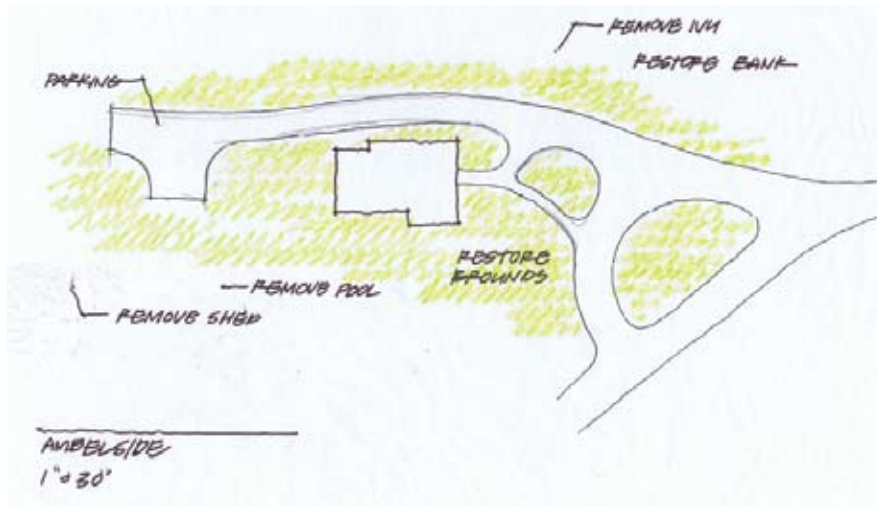
<b>Scenario 6</b>			
<b>Remove all homes road and bridge</b>			
	<b>Permit cost</b>	<b>Preparation Cost</b>	<b>Total Cost</b>
<b>Remove Road / Bridge</b>			
DSL Permit	\$450	\$2,500	\$2,950
1200cn	\$850	\$2,000	\$2,850
Erosion control	\$250	\$2,000	\$2,250
Grading	\$50	\$1,500	\$1,550
Demolition permit	\$44	\$200	\$244
<b>Move House</b>			
Historic Landmarks	\$3,546	\$2,000	\$5,546
Erosion control	\$250	\$2,000	\$2,250
Special Review type II (may be type III)	\$2,838	\$5,000	\$7,838
Building Moving	\$44	\$1,000	\$1,044
1200-C permit	\$826	\$2,000	\$2,826
Grading	\$50	\$1,500	\$1,550
Plan Review fee	\$0	\$5	\$5
Building permit	\$0	\$5	\$5
SDC's			
Wastewater	\$5,056	\$200	\$5,256
Water	\$4,153	\$200	\$4,353
Transportation	\$2,795	\$200	\$2,995
Parks	\$3,837	\$200	\$4,037
Stormwater	\$824	\$200	\$1,024
<b>Permits Total</b>	<b>\$24,263</b>		
<b>Permits and Preparation Sub -Total</b>			<b>\$48,573</b>
<b>Contingency @ 25%</b>			<b>\$12,143</b>
<b>Total</b>			<b>\$60,716</b>
Type III land use permit is fee is \$6,203			
* Erosion control plan will need an engeneers drawing			
** Survey and recording of easement / property division will be necessary			
*** Assume water meter will be supplied via Hogan Road.			
<b>Permit costs are approximate and will be terminated by final magnitude of the development and by plan reviews.</b>			



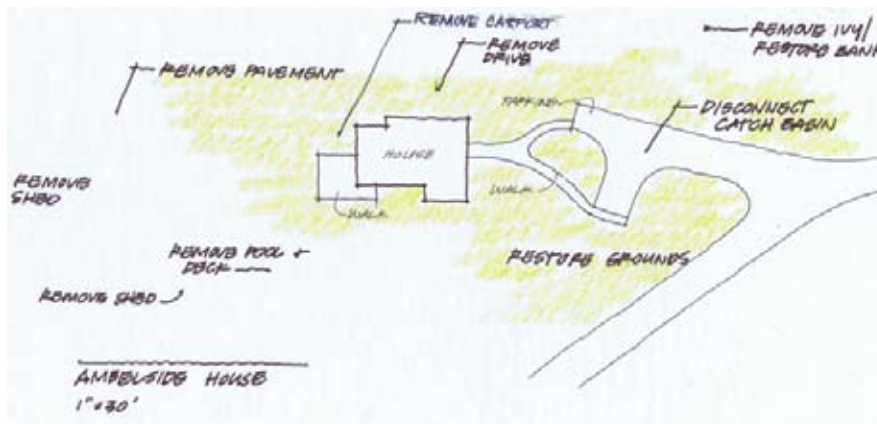


# Appendix B - Reduced Footprints

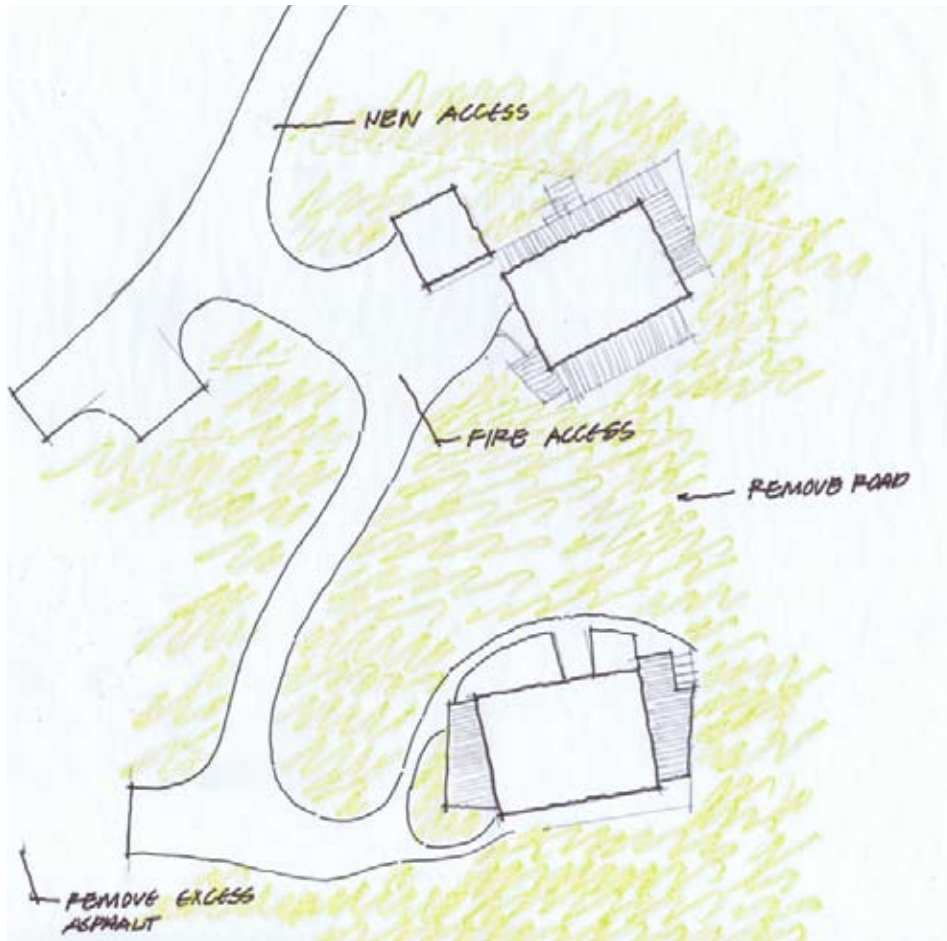
Ambleside  
(Schacht)  
House: reduced  
Footprint  
Idea 1



Ambleside  
(Schacht)  
House: reduced  
Footprint  
Idea 2



Example of  
Alternative  
Access to  
Cox and  
Allesina



# Appendix C - State Historic Record

## Oregon Historic Site Record

LOCATION AND PROPERTY NAME			
address:	2415 SE Ambleside Dr Gresham, Multnomah County	historic name:	Ambleside
assoc addresses:		current/other names:	
location descr:		block/lot/tax lot:	
		twshp/rng/sect/qtr sect:	1S 3E 14
PROPERTY CHARACTERISTICS			
resource type:	Building	height (stories):	1.5
elig evaluation:	undetermined	total elig resources:	
prim constr date:	c.1900	NR Status:	
		date indiv listed:	
primary orig use:	Sanitarium	orig use comments:	
second orig use:		prim style comments:	
primary style:	Colonial Revival	sec style comments:	
secondary style:		siding comments:	
primary siding:	Shingle	architect:	
secondary siding:	Wood:Other/Undefined	builder:	
plan type:			
comments/notes:			
GROUPINGS / ASSOCIATIONS			
Not associated with any surveys or groupings.			
SHPO INFORMATION FOR THIS PROPERTY			
NR date listed:	N/A	106 Project(s):	None
ILS survey date:		Special Assess Project(s):	None
RLS survey date:		Federal Tax Project(s):	None
ARCHITECTURAL / PROPERTY DESCRIPTION			
<i>(Includes expanded description of the building/property, setting, significant landscape features, outbuildings and alterations)</i>			
Refer to scanned documents links.			
HISTORY			
<i>(Chronological, descriptive history of the property from its construction through at least the historic period - preferably to the present)</i>			
Refer to scanned documents links.			
RESEARCH INFORMATION			
Title Records	Census Records	Property Tax Records	Local Histories
Sanborn Maps	Biographical Sources	SHPO Files	Interviews
Obituaries	Newspapers	State Archives	Historic Photographs
City Directories	Building Permits	State Library	
Local Library:		University Library:	
Historical Society:		Other Respository:	
Bibliography:			

CITY OF GRESHAM  
OREGON INVENTORY OF HISTORIC PROPERTIES  
HISTORIC RESOURCE SURVEY FORM

HIST. NAME: Ambleside DATE OF CONSTRUCTION:  
COMMON NAME: Ambleside ORIGINAL USE: Residential  
ADDRESS: 2415 S.E. Ambleside Drive  
OWNER: PRESENT USE: Residential  
T/R/S: T1S, R3E, Section 14 ARCH/BLDR: N/A  
STYLE: N/A  
MAP NO: 3655 TAX LOT BLDG. STRUC. (DIST) SITE OBJ. (circle)  
ADDITION: THEME: Recreation  
BLOCK: LOT: QUAD: Damascus, OR 7.5' Series  
ASSESSOR ACCT: #

PLAN TYPE/SHAPE: NO. OF STORIES:  
FOUNDATION MATERIAL: BASEMENT (Y/N):  
ROOF FORM & MATERIALS:  
WALL CONSTRUCTION: STRUCTURAL FRAME:  
PRIMARY WINDOW TYPE:  
EXTERIOR SURFACING MATERIALS:  
DECORATIVE FEATURES:  
OTHER:

CONDITION: (EXCELLENT) GOOD FAIR DETERIORATED MOVED (DATE)

EXTERIOR ALTERATIONS/ADDITIONS (DATED): N/A

NOTEWORTHY LANDSCAPE FEATURES: Birch lined drive along Ambleside Drive, Hogan cedars, Johnson Creek runs through the center of the area.

ASSOCIATED STRUCTURES: N/A

KNOWN ARCHAEOLOGICAL FEATURES: N/A

SETTING: The Ambleside area is located south off Hogan Drive, near the brick factory, on the edge of the railroad tracks. The property is lush with overgrown bushes and trees.

STATEMENT OF SIGNIFICANCE (Historical and/or architectural importance, dates, events, persons, contexts). USE ADDITIONAL SHEETS IF NECESSARY

Ambleside is significant as a residential community that has remained intact architecturally and in terms of landscape since its development in the early 1900's. The area has potential for historical district status. One of the oldest remaining residences in the area is at 2415 Ambleside, (shown in photo Roll 15, #28) (See continuation attached.)

SOURCES: Jean & Clarice Alisino, interview, May 1987 (SP)

NEGATIVE NO.: Roll 15, #28, 29, 30 31 RECORDED BY:

SLIDE NO.:

DATE:

SHPO INVENTORY NO.:

STATEMENT OF SIGNIFICANCE CONT.

Page 2

About 1900 the present area known as Ambleside was logged off and most of the cedar trees that grew on the property were shipped to Portland and used in the construction of the original Forestry Exhibition Center located in Northwest Portland.

The first house built in the area was constructed sometime between 1902 and 1904 for Mr. Max Stout's parents. It is the yellow Victorian home located outside Ambleside, currently used as Four Season's Photograph Studio. Originally, the property was owned by Mr. Stout and his friend, Mr. Black. They found a spring on the upper portion of the existing Ambleside property and had the water flumed down to the existing house. Mrs. Alisino thinks that Mr. Black eventually bought the property from Mr. Stout.

The first house on the left as you enter Ambleside belonged to the original caretaker for Ambleside, Inc. It was built at the same time as the other homes but has been completely changed and remodeled throughout the years, with the last major remodeling taking place about 30 years ago. The house was originally a cottage. The first known tenant was Mr. Fred Powell, who did the first remodeling.

The original home owners in the area were Mrs. Russell, whose husband was affiliated with Tidewater Barge Line. The other owners were a Mrs. Rogers and a Dr. C. Smith, President of the Spokane Federal Land Bank. The area was originally developed as summer homes for these three families. It is rumored that these families rode the railroad from Portland to the Hogan Station near Gresham. These property owners were responsible for hiring a landscape architect or artist who created all the marvelous landscaped areas throughout Ambleside which also includes ponds, waterfalls, rockeries, and footpaths. It all was developed in harmony with Johnson Creek which meanders throughout the properties.

During, or after the financial crash in 1929, Portland Trust and Savings Bank, along with Harsh Investment acquired the property. It was managed by Harsh Investment during the depression.

Mrs. White (Clarence) currently owns the caretaker's home - the first house on the left.

The Alisinos have lived in the area the longest. They first rented their home in 1939 and lived in it until 1941 when Mr. Alisino went into the military. Between 1944-1949, the property was vacant. Jean returned to the home to live in 1944. Clarice returned in 1945 and lived in their home until 1951 when he was recalled into the military for the Korean War. Between 1951 and 1953, Jean lived alone in the house with her children. Between 1953 and 1965, the property was used as a rental. The Alisinos purchased their home from the Martin estate. Former Oregon Governor Martin purchased this house for his son, Sam Martin, from the original owner, Dr. Smith. Thus the property passed from Dr. Smith, to Governor Martin, to Clarice Alisino.

STATEMENT OF SIGNIFICANCE CONT.

Page 2

Mrs. Russell's home was purchased by Jess Twieman sometime before 1939. When Mr. Twieman's wife, Carolyn, died, he sold the property to a Mr. Lortz and moved into Gresham. Mr. Lortz tore down almost all of the Twieman's home and built a new house. It is said that the only thing he left standing was the fireplace which he built his new house around.

At the present time, the Alisinos own 2.4 acres, Mr. Lortz owns 11.8 acres, and if you continue up the road, past the Alisino's, there are an additional 7.5 acres owned by a Mr. Greve, although technically, this is outside of the Ambleside area.

A botanist that has visited the area believes the Hogan Cedars located within Ambleside, belong to the Red Cedar family. They are unique to the area. The seeds from the trees do not germinate every year. Rumor has it that a Chinese man who lived across Towle Road, near the railroad track, planted all of the Hogan Cedars. During the Columbus Day storm, most of the firs and other trees in the area fell down or were heavily damaged, but due to the root structure, the Cedars remained undamaged. There is no recollection of where the name Hogan derived from.

Mrs. Alisino was Dr. Botkin's daughter. She was 4 years old in 1917 when she came to the Gresham area. When they first lived in Ambleside, you could see Mt. Hood from the windows of their home, but the trees have grown up to block the view. The Alisino's home and Mrs. Grauer's home were the original 2 bedroom homes. Mrs. Grauer's home has a guest house on the property. Her home was originally one story, but has been remodeled. Mrs. Grauer's home was the original home of Mrs. Rogers. Ownership of that house goes from Harsh Investment to Mrs. Rogers, then the Stepinger family, the Cliff Fish family, and to Mrs. Grauer.

Much of the existing property is quite overgrown with bushes, trees, etc. The Alisinos have cleared their property so it is beautifully groomed. In the clearing process, they found lovely lily ponds, rockeries, waterfalls, etc., all of which are irrigated. The setting is very park-like and very unusual. They are taking excellent care of this unique piece of property in Oregon.

OREGON INVENTORY OF HISTORIC PROPERTIES  
HISTORIC RESOURCE SURVEY FORM - TWO

PROPERTY NAME: Ambleside  
ADDRESS:  
ASSESSOR ACCT #:

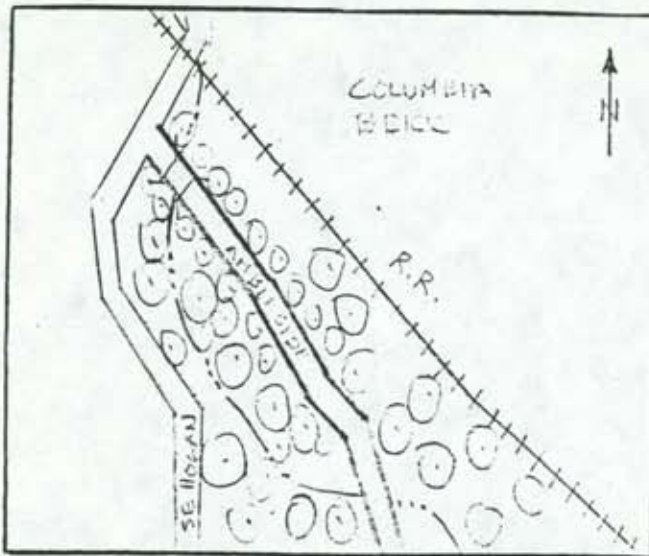
T/R/S; T 15, R3E, Sec. 14  
MAP NO: TAX LOT:  
QUADRANGLE: Damascus, OR 7.5' Series



NEGATIVE NO.:

Roll 15  
# 29, 30, 31

SLIDE.:



GRAPHIC & PHOTO SOURCES:

Northwest Heritage Property °Asso.

SHPO INVENTORY NO:

OREGON INVENTORY OF HISTORIC PROPERTIES  
HISTORIC RESOURCE SURVEY FORM - TWO

PROPERTY  
NAME: Ambleside  
ADDRESS:  
ASSESSOR ACCT #:

T/R/S; 1S 3E SEC. 14  
MAP NO: TAX LOT:  
QUADRANGLE: Damascus, OR 7.5' Series



NEGATIVE NO. #

SLIDE.:



GRAPHIC & PHOTO SOURCES:

SHPO INVENTORY NO:



OREGON INVENTORY OF HISTORIC PROPERTIES  
HISTORIC RESOURCE SURVEY FORM - TWO

PROPERTY

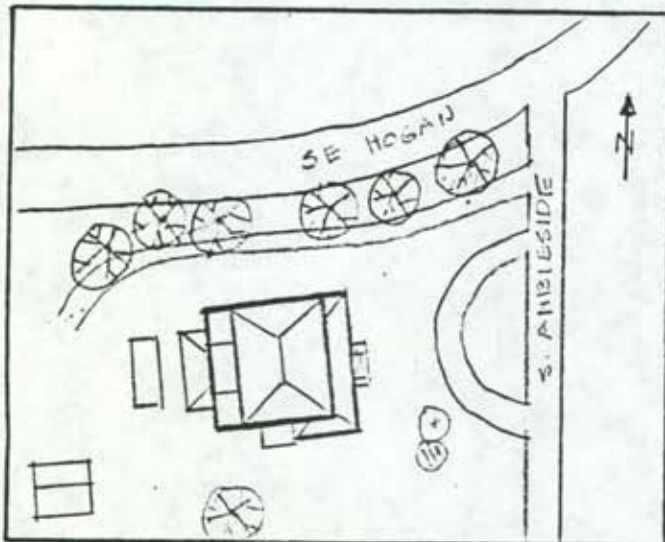
NAME:  
ADDRESS: 2415 SE Ambleside  
ASSESSOR ACCT #:

T/R/S; TIS, R3E, Sec. 14  
MAP NO: TAX LOT:  
QUADRANGLE: Damascus, OR 7.5' Series



NEGATIVE NO.: Roll 15 # 28

SLIDE.:



GRAPHIC & PHOTO SOURCES:

Northwest Heritage Property Associates

SHPO INVENTORY NO:

5074



# Oregon Historic Site Record

LOCATION AND PROPERTY NAME				
<b>address:</b>	2805-2830 SE Ambleside Dr Gresham, Multnomah County	<b>historic name:</b>	Ambleside Property	
<b>assoc addresses:</b>		<b>current/other names:</b>		
<b>location descr:</b>		<b>block/lot/tax lot:</b>		
		<b>twshp/rng/sect/qtr sect:</b>	1S 3E 14	
PROPERTY CHARACTERISTICS				
<b>resource type:</b>	Building	<b>height (stories):</b>	1.5	<b>total elig resources:</b> 3 <b>total inelig resources:</b> 0
<b>elig evaluation:</b>	eligible/contributing			<b>NR Status:</b>
<b>prim constr date:</b>	c.1922	<b>second date:</b>		<b>date indiv listed:</b>
<b>primary orig use:</b>	Single Dwelling	<b>orig use comments:</b>		
<b>second orig use:</b>		<b>prim style comments:</b>		
<b>primary style:</b>		<b>sec style comments:</b>		
<b>secondary style:</b>		<b>siding comments:</b>		
<b>primary siding:</b>	Stone:Other/Undefined	<b>architect:</b>		
<b>secondary siding:</b>	Shingle	<b>builder:</b>		
<b>plan type:</b>				
<b>comments/notes:</b>				
3 bldgs: 2805, 2825, 2830 SE Ambleside Dr. built between 1922-27; Constructed by Charles H. Martin (Gov. from 1935-1939)				
GROUPINGS / ASSOCIATIONS				
Not associated with any surveys or groupings.				
SHPO INFORMATION FOR THIS PROPERTY				
<b>NR date listed:</b>	N/A	<b>106 Project(s):</b>	None	
<b>ILS survey date:</b>		<b>Special Assess Project(s):</b>	None	
<b>RLS survey date:</b>		<b>Federal Tax Project(s):</b>	None	
ARCHITECTURAL / PROPERTY DESCRIPTION				
<i>(Includes expanded description of the building/property, setting, significant landscape features, outbuildings and alterations)</i>				
Refer to scanned documents links.				
HISTORY				
<i>(Chronological, descriptive history of the property from its construction through at least the historic period - preferably to the present)</i>				
Refer to scanned documents links.				
RESEARCH INFORMATION				
Title Records	Census Records	Property Tax Records	Local Histories	
Sanborn Maps	Biographical Sources	SHPO Files	Interviews	
Obituaries	Newspapers	State Archives	Historic Photographs	
City Directories	Building Permits	State Library		
<b>Local Library:</b>		<b>University Library:</b>		
<b>Historical Society:</b>		<b>Other Respository:</b>		
<b>Bibliography:</b>				

Nomination for National Register of Historic Places  
Historic Narrative for Ambleside Properties

2830 SE Ambleside Drive, Gresham, Oregon, 97080  
2825 SE Ambleside Drive, Gresham, Oregon, 97080  
2805 SE Ambleside Drive, Gresham, Oregon 97080

Charles H. Martins was the governor of Oregon from January 1935 to January 1939. Prior to his taking office, the Governor built several houses along Johnson Creek in the community of Hogan. Between 1922 and 1927, Martin build the main house (2825 SE Ambleside Drive) and the studio house (2805 SE Ambleside Drive). The main house (also known as the Cox house) was a hunting lodge for the Martins and his comrades while the accompanying house was built for the caretaker. The house opposite the main house was built for Martin's son and was build around the same time. The "white house", which has since been demolished was the original caregiver house. The person that lived there took care of the Cox houses. At that time, the primary route to the house was via train.

Clarence Allesina rented 2830 SE Ambleside Drive starting in 1939 for \$10/month from Martin. He purchased the house in the early 1940's. During the late 1990's, Clarence conducted several interviews with Metro Regional Government staff that revealed the history of the property. He stated that when he rented the house that Johnson Creek was "thick with salmon" and there were so many fish that you could "walk across their backs".

## **Ambleside dell reverts to more natural state**

Published: Thursday, October 30, 2008, 4:00 AM      Updated: Thursday, October 30, 2008, 4:10 AM

**Fran Genovese, The Oregonian**



"In order for a creek to function naturally, it needs to connect with its flood plain," Morgan says.

So far, Metro has removed two of the original houses; a third burned down in 2001, killing an occupant. Metro has removed the part of a dam that kept steelhead, coho and cutthroat from moving upstream; shaped the bed to give fish easy access; and seeded areas with native plants.

Things are changing, Schacht says. Two autumns ago, he was working outdoors when his assistant yelled, "Look at this!"

For the first time since he moved there, he saw a salmon fighting upstream. Last fall, it happened again.

Some of the old homeowners had mixed feelings about Metro's plans, Anslow says. The group enjoyed the tight-knit community, where people pitched in to maintain the bridge and road, and helped each other.

Some aren't sure Metro's plans ultimately will help a polluted creek. Work in the creek ultimately undermined a tree that fell on Anslow's land. And while Metro sends in work crews to fight weeds, nettles and thistles in the area are spreading, she says. She worries that planners will revoke her license to cross Metro land to maintain part of her own creekside property.

"I hope Metro is going to be a good neighbor," she says. "Time will tell."

Metro continues to rent out the remaining houses, in part to make sure vandals or vagrants don't do any damage. But the hope is to remove most of the houses, Morgan says.

"Now we have an opportunity to make it accessible ... which is what we want."

--Catherine Trevison;  
**ctrevison@news.oregonian.com**



2805 SE Ambleside  
rear view



front view



2825 SE  
~~ambleside~~  
Ambleside  
exterior  
front



exterior  
front



2825 SE  
Ambleside  
Original cedar  
paneling



Fireplace



# Appendix D - Prior Studies

Archaeological Investigations Northwest, Inc. (prepared for City of Gresham) *Johnson Creek from SE Ambleside Drive to SE Regner road Initial Reconnaissance Survey AINW Report No. 2467.* (February 2010)

Metro. *Site Conservation Plan: Johnson Creek Natural Area - Ambleside and Upper Johnson Creek.* (March 2014).

Metro (prepared by Henderson). *Technical Design Memorandum: Johnson Creek Habitat Assessment and Stream Stabilization Project.* (February 2013).

Bridge Engineering Studies