

RIIA ROAD COMMITTEE



Raft Island

Gig Harbor, Washington

Road Summary

Date: March 20, 2016

Prepared for: **RIIA Board**

Prepared by: **Scott Wood**, Road Committee Chair

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1. Overview Summary

Sign placement

- An 8" street sign was placed at the island entrance on top of the existing stop sign. "Raft Island Road NW "
- The shoulder of both sides of the entry road has been run over spreading gravel over the roadway. This has seriously eroded the shoulder as well as provided an unsafe roadway for cycles and vehicles sliding on the gravel. To denote shoulders, flexible markers for the entry road shoulders were proposed 2015.09. Suggest RIIA approve purchase and installation (See Jim Cushing's comment Sept Board meeting).

Complaint of water through property

- 242 Hemlock Drive sent a letter of complaint to the island manager of water coming from the roadway onto their lot (See **2.0 242 Hemlock Drive Water Runoff**)

Speed bump relocation by lot 27 Raft Island Drive

- Notice provided by RIIA to lot owners to relocate the existing speed bump up hill of their new driveway and replaced like with like.
- Speed bump moved downhill and has yet to be painted. Recommend that RIIA provide notice to lot owner to paint the speed bump or foot the bill for RIIA to paint the speed bump.

2. 242 Hemlock Drive Water Runoff

2.1. Complaint was made from lot 242 owners of water draining off the roadway and onto their property. (See below)

Victoria and Scott ~~Noble~~
 242 Raft Island Drive (~~Hemlock~~)
 Gig Harbor, WA 98335
 March 14, 2016

Raft Island RIA
 HOA ~~Community Solutions~~

My husband Scott and I are the owners of the above property on Raft Island.

I am requesting attention to the matter of drain water flowing onto our property from the street. Our driveway and property sit on the corner of Fir and Hemlock, which is at the end of the hill on Fir.

Since we moved into the property in 2008, we have experienced rainwater flowing/rushing into our yard from the street. We have asked RIA before to correct the problem with no response.

Water runs down the hill from the street and into our front yard, creating disturbances with the septic and drainage.

We have needed to call out repair for the septic system twice in the past 60 days.

Because of the heavy water flow from the street, the septic takes on ground water and responds with exhaustion and alarms. Recently we have been issued a failed septic report from the county, ~~which~~ I think can be remedied. However, the cause of the issue remains the heavy flow of water from the common areas of the island onto our property.

We have asked RIA in the past to remedy the situation, with no response.

The situation has now reached a critical moment in time and must be changed. We are asking RIA to both fix the water from flowing down the street into our yard, and for reimbursement of recent expenses toward septic repair and continuous gurgling. The 2 visits from ~~Floja~~ in February total nearly \$800. That is just this year so far, in the 2 1/2 months of 2016. There have been similar costs in the past from the same circumstances. The cost for the next set of repairs now needed is still in estimate.

I will send separately the receipts from ~~Floja~~ in February 2016, via fax.

As you may know, we do not currently occupy this property and it is rented by a lovely family.

The continual maintenance of this property, especially when not occupied is very stressful.

It is difficult to keep up with the dues alone, ~~given~~ adding the cost for the above situation is overwhelming. We have done our best to try and keep up with everything on our own, but nothing is going to improve unless the street water stops flowing onto our property.

Please respond either by email or by phone. US Mail is not the best way.

vialandgirls@comcast.net
 425-830-1847
 Thank you.

Scott and Vicki ~~Noble~~

Figure 2.1, Letter received by HOA Community Solutions.

Based on observations, water is running off the roadway and down the driveway of the property. The property is located in a possible wet land area as per Pierce County (see **figure 2.2**). Corrective measures could be to add a small asphalt diverting hump across the driveway top keeping the water on the roadway and a ditch or pipe to capture the diverted water, directing it into the current ditch at the lower corner of the property. (see **figure 2.3**)

Suggest the RIA provide a response, possibly including language that RIA is not responsible for runoff, though is providing maintenance of the existing roadside drainage. A simple fix could be, ...to build an asphalt berm at the top of your driveway.

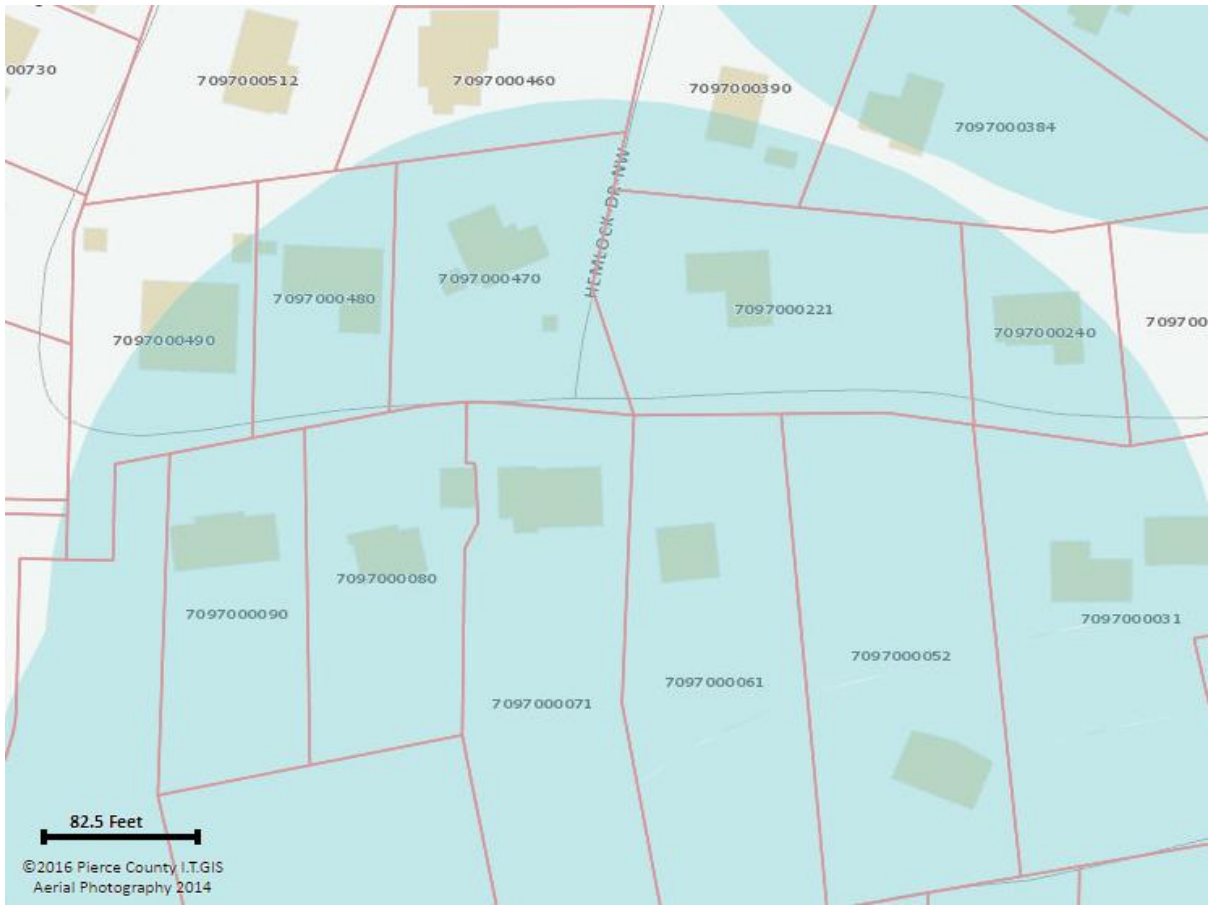


Figure 2.2, Pierce County Washington public map showing blue shading as possible wet lands.



Figure 2.3-2.4, contour map showing drainage route through 242 Hemlock Drive and overview. Red box area denotes driveway entrance onto Hemlock Drive.

3. Road Maintenance

3.1. Road Maintenance

2009.04.25	Road Patch	Asphalt Patch Systems	\$765.10
2009.06.29	Road Patch	Asphalt Patch Systems	\$13,385.97
2011.06.02	Road Patch	Asphalt Patch Systems	\$3,825.50
2012.05.04	Road Patch	TS	\$45.48
2012.08.09	Paint	TS	12.98
2012.10.18	Road Patch	Asphalt Patch Systems	\$4,832.59
2013.01.31	Patch Materials	TS	\$84.90
2013.05.09	Ditch Cleaning	Speedy Excavation	\$1,747.98
2013.05.10	Speed bump Paint	TS	\$206.91
2013.10.03	Road Patch	Asphalt Patch Systems	\$7,105.53
2014.03.26	Road Patching	TS	\$36.62
2014.06.30	Catch Basin	Kevin Miller Group	\$1,294.80
2014.07	Vegetation trimming	Speedy Excavation	\$2,697.50
2014.09.10	Ditching	Ditch Maintenance Services	\$3,640.00
2014.09.17	Road Materials	TS	\$201.10
2014.11.12	Road Patching	Asphalt Patch Systems	\$7,382.86
2014.12.31	Road Patching	TS	\$48.83
2015.01	Drainage pipe	Hemleys	\$1,025.05
2015.01	Catch basin cleaning	Speedy Excavation	\$2,039.31
2016.02.16	Road Patching	Asphalt Patch Systems	\$4,615.59

4. History Summary

2016.03.14	Complaint letter sent to HOA Community Solutions regarding rainwater flowing from the street into 242 Hemlock Drive property.
2016.02.22	Dumpster in roadway at lot 4, Raft Island Drive. Removed from road and pushed onto roadside.
2016.01	Sliding embankment at lot 149 along Alder Lane. Lot owner cleaned the mud and shored up the landscaping.
2015.11	Trees fall on road way, cleaned up by island residents.
2015.11.06:	Wes Anderson of 180 Raft Island Drive installed driveway, leaving lower section for the addition of through drainage. Rip-rap that was installed over the drainage was removed allowing for proper drainage.
2015.11.04:	Complaint from Michelle O'Neil for lot 19 that flooding is occurring on property. Juanita emailed response providing history; wet lands, ponds landscaped, through driveway drain not positioned and/or too small to support runoff.
2015.10.11:	Contacted by Gill (#229) Saturday in regard to runoff from 180 Raft Island Drive. Spoke with Wes Anderson owner/contractor building the home. Roadside drainage filled in, drain pipe filled. Area to be prelandscaped this week.
2015.08.20	Drainpipe crossings north Raft Island Drive at Alder photo showing pipe is crushed.
2015.07.05	Stop sign and bushes at island entrance run over.
2015.06.29	Speedy – roadside trimming completed Complaint: Lot 124 blocked area from trimming, lot 48 stopped the trimming of the roadside trees. The cedar trees at this lot need trimming, resident refused

- 2015.01.30:** Speedy clearing pipe ends at lot 174 (Cross road drain), lot 180 (Cross road drain), lot 224 (Cross road drain). Madrona Dr. lot 154 (Uphill section cross road drain)
- 2015.01.16:** Hemleys 4 pipe cleanings. Crossing Park at Raft Island, Crossing Madrona at Raft Island, Crossing Alder at Raft Island
- 2014.12.11:** Tom gets a proposal from Hemleys \$650.00 4 pipe cleanings. Park & Raft Island, Madrona, Alder and Raft Island
- 2014.12.09:** Issue still active regarding additional trees on lot 93 (plot 4995000691) that could fall into roadway. Owner contacted by island manager in November. They were to look into getting an arborist to look at it. Island manager to follow-up with that conversation.
- 2014.12.08:** Speedy Excavating updated proposal for cleaning and creating 4 catch basins \$2039.31 (\$240 for hauling off debris)
- 2014.11.29:** Tom digs out end of pipe on Madrona and digs out the side of road for runoff.
- 2014.11.06:** Raft Island Drive Roadway blocked by falling tree from lot 93 (plot 4995000691)
- 2014.11.28:** Drain at plot 7097000112 plugged and washing gravel into the road.
- 2014.10.29:** Invoice received for road patching by Asphalt Patch Systems. \$7,382.86
- 2014.09.02:** Two day ditching invoice \$3,640.00
- 2014.08.26:** Washington water paving their trench at north-East Raft Island Road. Two day ditching being performed on island
- 2014.07.7-9:** Speedy – roadside trimming \$2,697.50 completed
Complaint regarding roadside trimming: lot 124 (plot 4995100261). Spoke with property owners. Bid: spring trimming, no bid yet. Suggested to be completed before roadway ditch cleaning.
- 2014.07.07:** Meet with owners regarding complaints on brush cutting.
- 2014.07.07:** Brush cutting for three days on the island.
- 2014.06.22:** Meet with Sharree and Nelson Hager new to lot 241 (plot 4995000420). Large tree on adjacent island property. They would like it removed as it leans toward their residence, cost \$5,000. They will look at getting additional inspections to see if the tree is an issue. Western Tree Solutions wreesolutions@yahoo.com
- 2014.07.18:** Work began on the Carman's drain.
- 2014.06.30:** Invoice for Lot 12 (plot 4995100202) area drain RIIA paid \$1294.00 of \$8,200.00 from the Kevin Miller Group, LLC.
- 2014.04.24:** spoke with Speedy regarding vegetation trimming.
- 2014.04.22-23:** Alder ditch clearing completed by Speedy Excavation \$4,723.00 +tax.
- 2014.04.20:** Met with lot 12 (plot 4995100202) and lot 14 (4995100191), lot 154 (4995100670) regarding runoff through plots.
- 2014.04.16:** A bucket was found on the West side of the through road pipe when a heavy rain opened that end of the pipe up flooding lot 12 (plot 4995100202 and lot 14 (plot 4995100191).
- 2014.04.03:** Emailed, Glenn Stewart
- 2014.04.03:** Tom Straub investigated Lot 123 (Plot 4995000791): drain field not maintained, lots of trees and overgrowth. Park not underwater, some drainage from hill above.
- 2014.04.03:** Lot 123 (Plot 4995000791)
Maure Gunderson's son, Glenn contacted Juanita.
Drain field is saturated from water coming off the hillside. Claims North Beach also underwater. Suggests water is coming from lot 125 (Plot 4995000800).
- 2014.03.19:** Speedy – ditch
Bid: about 4 days max. Maybe about 4 or 5 ends to "clean", will bid on it dumping an issue, will have to charge if not dumped onsite. Bid \$1,780.35 clearing pipe ends at lot 174 (plot 70097000061) (Cross road drain), lot 180 (Cross road drain), lot 224 (plot 7097000191) (Cross road drain). Lot 154 (Plot 4995100670) (Uphill section cross road drain)
Bid: spring trimming, no bid yet. Suggested to be completed before roadway ditch cleaning.
- 2014.03.04:** Juanita email – Joan Scrim lot 179 (plot 4995000990) Called, property is being marked (locator markings). She called Washington water 877-408-4060. Mike is construction Foreman out until

- the 12th. Assistant Zira has no information. She Left message.
Spoke to Joan – white markings on side of right of way. Not sure what for.
- 2014.02.14:** Drain pipe cleaning Contact Arny Davis GAD INVESTMENTS INC. (DBA DITCH MAINTENANCE SERVICES), 192 Dieckman Road, Chehalis, WA 98532. Email arnydvs@gmail.com 360-219-7072
HemleySeptic@hotmail.com
DrainPro
- 2014.02.10:** NW FlowHawks Dave Rink. Contacted by Steve 253-606-1115 for proposal meet 2/18
Image of drain area full of water, not draining. This means that their newly landscaped yard is about to get a stream of water it's no longer prepared to receive.
- 2013.12.21:** 12 Rhododendron on Madrona Drive East side of cross road drain dug up. Lot 14 being flooded, Ponds used to exist. Landscaping done years ago, eliminate the ponds, draining them along Rhododendron. Landscaping and tree removal lot 154 increased drainage into drain.
- 2013.12.17:** Septic easement for lot 31. The neighbors on the other side of the street next to lot 28 have said they are ok with granting an easement but nothing in writing. There is a recorded easement for a septic on lot 28 for lot 31.
- 2013.12.09:** #250 Raft Island Dr. Gravel in roadway from driveway. First notice 2013.11.25 given by James Cushing. Gravel removed 2013.12
- 2013.08.29:** 118 Raft Island Drive. There is a dead tree in the front of my property that I am worried will fall soon. I am certain it is on Raft Island property. Years ago, when they built the A frame next door, we learned that the Island easement came quit a distance into what we thought was our property.
Fiona Johnson [<mailto:fionamj1@gmail.com>]
- 2013.02.16:** Just before the corner of Park and Fir, on the uphill side of Park, across from our home #112, the culvert needs ditching to keep the water in the ditch, and not flooding over the road, down into our drive/ yard and into the crawl space and basement. Marilyn [<mailto:Marilynparks@comcast.net>] 253-691-8111 #112
- 2013.07.08** Speedy Excavating road side vegetation trimming
- 2013.04.22-23** Speedy Excavating – dug out and repair hill side drainage along Alder [RIIA \$4,723.00]
- 2004** Roadside ditching performed
- 2002.03.01** Craig and Peck Associates Road improvement proposal by Chuck Snyder [RIIA \$4000]
- 1998** Raft Island Road Embankment Stabilization report by Matthew A. Miller of David Evens and Associates, Inc. completed (slope failure at top of lot 243, south boat ramp)
- 1996** Bridge replacement voted to go ahead
- 1995** Earthquake Preparedness Guide completed
- 1992.10.30** Road and Drainage study completed by Justus Fisher Engineers, Inc.
- 1991.11** A berm curb was placed along the edge of Raft Island Drive lot 243 adjacent to the slide to direct water for the downhill slope.
- 1991** Advice on slide above lot 243 asked for from, Grover Way, Geo. Tech. Eng. and Ron Parker, Geo. Eng.
- 1991.01** Landslide at top of lot 243 affecting Raft Island Drive East.
- ?** Camp Road paved, lot owners paid for ballast and grading, RIIA paid for paving. 50/50 split
- ?** Alder Road paved, lot owners and RIIA split the costs 50/50
- ?** Maple Lane paved up to lot 139, all but lots 123 & 139 split costs with RIIA 50/50

- 1986.07** Cedar Lane paved, lot owners pay 60% and RIIA 40%. Coordinated by Ross Buffington
- 1984-1985** Gas line installed on Fir Lane
- 1970's** "ring road" currently Raft Island Drive completed
- 1960's mid** RIIA authorizes and implement coating all existing roads with an oil mat.
- 1964.10.13** Date filed, Surveyor J. J. Sleauiw (sp?). Eastern side of plot N divided into blocks 1, 2, 3. Volume 28, pages 5,6,7 Auditors #2074680. © 1991 Drunkard's Dream Public Co.
- 1960.12.20** date filed, Surveyed by J. J. Sifauin (sp?). Blocks 1, 2, 3, 4 included into plot N. Volume 21, page 3 Auditors # 1909780, [Covenants #1thru 11] 10 ft. walkways included in plan © 1991 Drunkard's Dream Public Co.
Note: Several of the larger parcels, (including tract "L" where Cedar lane is located) were sub-divided into individual lots, served by Cedar, Maple, and Alder lanes, those roads were not and are not part of the Raft Island roads. The C.C.&R.s, "Recitals" refer to the three plats, and Article II refers to the "common areas" owned by R.I.I.A., including the roads, again specifically referring to the plats. The Statutory Warranty Deed referred to was when the then Island association bought the bridge and ring road from McDonald and Parrish, the developers who then owned the remaining unsold parts of the island.
- 1960.12** McDonald and Parish founded the RIIA
- 1959.03.20** Island sold to Graham and Blodwyn McDonald and Merrill and Alta Parish for \$348,000
- 1958.08.1** First bridge completed
- 1956.03** Robert L. Healy sold the bridge and properties to Archie L. Matthew
- 1956** Robert L. Healy applied for a permit to build a bridge
- 1950's** Norman and Eva Anderson purchase one lot, the Catholic Youth Organization purchased 17 lots (current camp property).
Robert L. Healy and associates purchased the remaining lots.
- 1949** Roadways roughed in by Pod Perish as dirt and gravel surface
- 1946.04.26** Surveyor, Leo C. Willey, exterior waterfront plots (1-39, open A, B, C, D, E, F, G, H, I, J, K, L, M). Center island plot N. [Covenants "1946 Plat" #'s 1-8], © 1991 Drunkard's Dream Public Co.
First layout of the "ring road" now Raft Island Drive.
- 1946** Jess Kuhns purchased the island for \$30,000 and created the first island restrictions. Island renamed Kuhns' Raft Island
- 1928** George O. Noble a wealthy engineer from Pasadena purchased the island, builds a home at the current camp property. His vision for the island was to establish a hunting sanctuary, importing exotic animals for the hunt.
- 1915** Island divided into 14 plots, used for apples and strawberries.
- 1900** The 205 acres of the Island trees clear-cut
- 1889** The Steven brother claim island. F. Steven – 27 acres on the western side, Jacob Steven – 133 acres of the remaining acreage.
- 1842** During the United States Exploring Expedition (1838-1842) on the U.S.S. Vincennes Lieutenant, Charles Wilks left Hawaii April 5 with the Vinvennes and Porpoise, arriving at Cape Flattery on April 29th. His crew explored Puget Sound, naming places such as Gig Harbor, Fox and McNeil Islands, leaving for California on July 17th. Allshouse Island, at the head of Carr Inlet was named by Allshouse probably in honor of Joseph Allshouse a member of one of Wilks crews. Allshouse was renamed Raft Island on maps because people thought the island resembled a raft.

1792

Lieutenant Peter Puget of the Vancouver Expedition may have stayed on Cutts or Raft Island

5. Road Way Maps



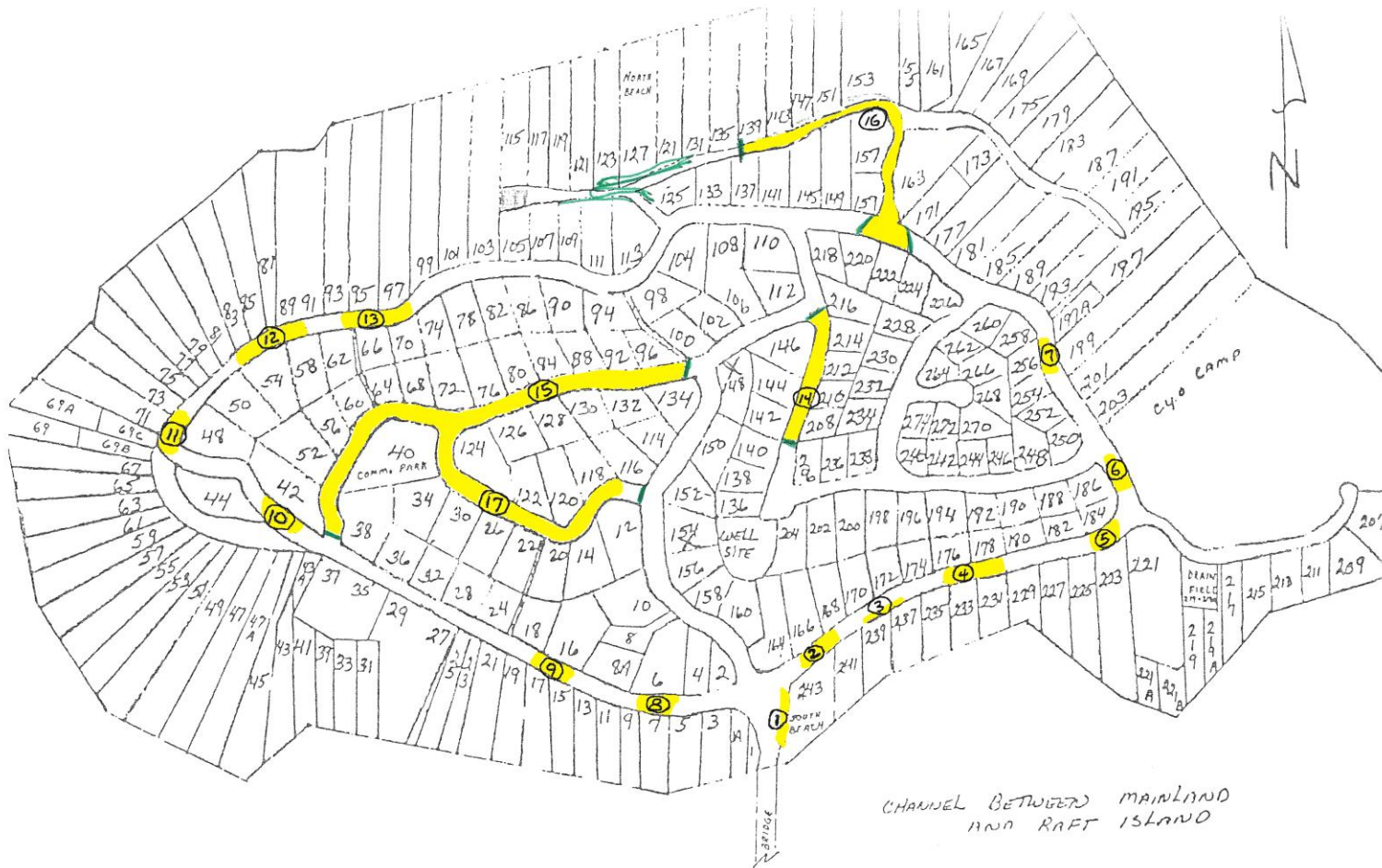
5.1. Plot Map of Raft Island. <http://matterhorn3.co.pierce.wa.us/publicgis/?ext=1102161.56627,735444.055355,1103161.56627,736444.055355>



5.2. Contour Map showing drainage of Raft Island. Red areas denote issues/problems.



5.3. Road easement Map of Raft Island (from Pierce County).



5.4. 1998 Paving map.

6. Alder Drive and Raft Island Drive**7. Raft Island Drive****7.1. South East**

Figure 1. Raft Island Drive South East overview

South East Raft Island Drive road conditions are poor. Road side drainage has not been well maintained. Much of the roadway has deteriorated, with much of the pavement showing severe fatigue cracking. Ditching in August helped open the roadside runoff, though additional roadside drainage clearing is needed.



Figure 2. North side of road at 168 Raft Island Drive (plot 7097000131) water running down the driveway into the road. Note fatigue cracking on roadway.



Figure 3. Raft Island Drive. Note fatigue cracking on roadway.



Figure 4. Raft Island Drive. Drainage near the areas shown above.



Figure 5. Raft Island Drive. Note fatigue cracking on roadway and lack of roadside drainage on north side. (plot 7097000052)



Figure 6. North side of road at 182 Raft Island Drive (plot 7097000191) gravel driveway blocking the drainage. Figure on the right shows through road drain entry and gravel driveway in the background. Note fatigue cracking on roadway.



Figure 7. North side of road at 180 Raft Island Drive (plot 7097000191) Drain cleared by ditching 2015.01. Note French drain running parallel to the roadway (installed decades? before 2015). This was filled by current property owner 2015.10.



Figure 8. Lot 180 culvert covered with gravel. Owner to remove and clear drainage pipe. 2015.11



Figure 9. Lot 180 culvert covered with gravel. Owner to remove and clear drainage pipe 2015.11.01.



Figure 10. Drainage pipe separating and need replacing (plot 4995000360).



Figure 11. North side of road at 184 Raft Island Drive (plot 7097000111) ditching visible on right. Note fatigue cracking on roadway.



Figure 12. West side of road at 184 Raft Island Drive (plot 7097000111) under road drainage. Image on right shows post pipe end clearing. Runoff from drive way directed into the roadway. Note fatigue cracking on roadway. Water should be directed into the roadside ditch.



Figure 13. East side of road across from 184 Raft Island Drive (plot 7097000111) under road drainage exit.



Figure 14. East side of road across from 184 Raft Island Drive (plot 7097000111) drain exit. Right image of post pipe end cleared.

7.2. Raft Island Drive East



Figure 15. Raft Island Drive East overview.

East Raft Island Drive road conditions are poor. Road side drainage has not been well maintained. Much of the roadway has deteriorated, with much of the pavement showing severe fatigue cracking. Ditching in August helped open some roadside runoff, though additional roadside drainage clearing is needed.



Figure 16. Raft Island Drive South East (drainage into plot 4995000220). Drain pipe broken, washing embankment away.



Figure 17. Raft Island Drive South East (drainage into plot 4995000220). Drain pipe broken, washing embankment away.



Figure 18. Raft Island Drive South East (drainage into plot 4995000220 from plot 7007000301). Drain pipe end concealed, filling with debris.

7.3. Raft Island Drive North East



Figure 19. Raft Island North East overview



Figure 20. Raft Island Drive across from Maple Lane. Community mailbox maybe a good option.



Figure 21. South side of Raft Island Drive across from Maple Lane, drainage at shoulder filled. (plot 4995001180).



Figure 22. Raft Island Drive North East. Drain crossing Raft Island road at Fir Drive is not visible. Run off from Fir Drive draining over road.

7.4. Raft Island Drive North near Alder



Figure 23. Raft Island Drive North near Alder overview



Figure 24. South side of Raft Island Drive drainage needs opening. (plots 499100630, 499500190, 4995001170). North side well maintained.

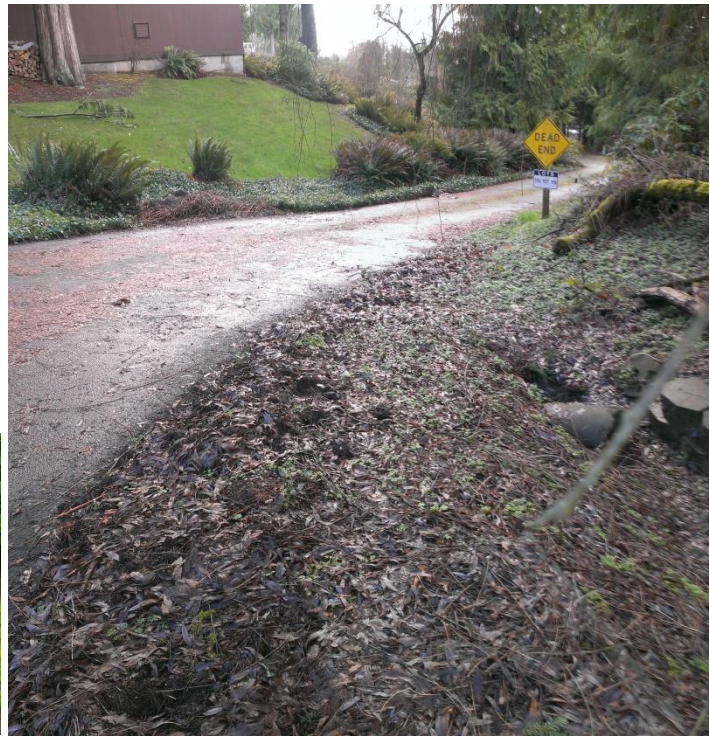


Figure 25. 2013.05.13 Plugged drain crossing Adler at Raft Island before clearing. Cleared 2015.01



Figure 26. Crushed drain crossing Raft Island Drive at Adler (Plot 4995100630 to 499500820). Replacement needed.



Figure 27. Drain plugged at driveway Raft Island Drive (Plot 4995000740).



Figure 28. Poor drainage on south side of Raft Island Drive (Plot 4995100600).

7.5. Raft Island Drive North



Figure 29. Raft Island Drive north overview.



Figure 30. Drainage off the roadway south side of Raft Island Drive (Plot 4995100573).



Figure 31. Landscaping has filled in the shoulder of the north side of roadway Raft Island Drive (Plot 4995000703).



Figure 32. Landscaping has filled in the shoulder of the north side of roadway Raft Island Drive (Plot 4995000703).

7.6. Raft Island Drive North West



Figure 33. Raft Island Drive North West



Figure 34. Drain needs catch basin and clearing on east side of Raft Island Drive. A possible community mail box (Plot 4995100490).



Figure 35. Drain exposed on west side of Raft Island Drive during water main replacement (Plot 4995001160).



Figure 36. Shoulder on east side of Raft Island Drive and catch basic needed at Park and Raft Island Drive (Plot 4995100480).

7.7. Raft Island Drive South West



Figure 37. Raft Island Drive South West



Figure 38. Shoulder on east side of Raft Island Drive filling through driveway drain with silt Raft Island Drive (Plot 4995100120).



Figure 39. No shoulder drainage on East side of Raft Island Drive (Plot 4995100061).

8. Alder Drive

Runoff and hillside sloughing along the south side of Alder had filled in the drainage. (See figure 1) In April 22-23, 2013 Speedy Excavation dug out the drainage, adding rip rap (\$4,723.00 plus tax) to keep the runoff from flowing onto the road. (See Figures 2-5)



Figure 40. Over view of Alder Drive.



Figure 41. Alder Drive on 2012.08.19, just before excavation 2013.01.24 and just after 2013.05.12



Figure 42. Alder Drive on 2014.12.13. Some sloughing of the hill, mostly overgrowth of vegetation.

Alder Drive's pavement was patched in October 2014 by Asphalt Patch Systems. Lot 115 Alder paid \$336.41 and lot #9 paid \$366.86, both for ½ of the Alder portion of the patching. (See Figure 6)



Figure 43. Alder Drive road patching. 115 Alder \$307.50 + 340.00 ½ paid by RIIA.

9. Maple Lane

Runoff and hillside sloughing along the south side of Maple Lane filling in the drainage and causing the road to slip.



Figure 44. Over view of Maple Lane.

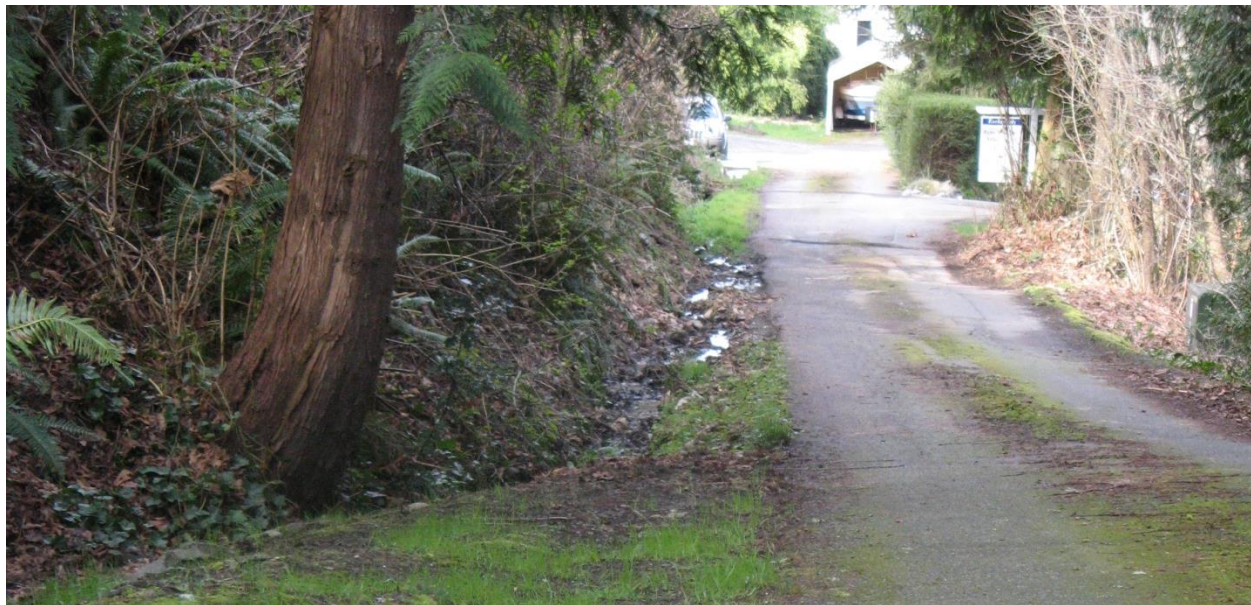


Figure 45. Poor drainage on South side of Maple Lane. (Plot 4995000841)



Figure 46. Poor drainage on South side of Maple Lane. (Plot 4995000841)



Figure 47. Poor drainage and landscaping stability on South side of Maple Lane. (Plot 4995000800)

10. Madrona Drive



Figure 48. Madrona Drive overview and the direction of the water flow.

10.1. North Madrona Drive



Figure 49. Poor drainage along Madrona Drive. (Plot 4995100310 and 495100700)



Figure 50. Poor drainage along West side of Madrona Drive. (Plot 495100690)



Figure 51. Poor drainage along Madrona Lane. (Plots 4995100680 and 4995100220)

10.2. Central Madrona Drive



Figure 52. Madrona Drive east side of the road needs clearing for proper drainage. (Plot 4995100670)



Figure 53. Madrona Drive east side of the road drain showing bucket after digging the end up. (Plot 4995100670)

On April 16, 2014 another bucket was found on the East side of the pipe when heavy rains opened that end of the pipe, flooding the lots 12 and 14 of Rhododendron Drive. A drain under the driveway of lot 14 had plugged with leaves. Once the driveway drain was opened the water drained into the holding ponds.



Figure 54. Flood through lot 12 and into lot 14 Rhododendron Drive. (Plot 4995100202 and 4995100181)



Figure 55. Far Eastern drainage pond at the front of lot 14 Rhododendron Drive. (Plot 4995100181)



Figure 56. Eastern drainage pond and west end of the under driveway drain of lot 14 Rhododendron Drive. (Plot 4995100181)

Multiple estimates were provided to the owners of lot 12 and 14, with the Kevin Miller Group, LLC as the awarded contractor. Work was started on July 18, 2014 and finished shortly thereafter.



Figure 57. West side of the through road drain across Madrona Drive, entering lot 12 Rhododendron Drive following completion of the drainage repair project. (Plot 4995100202)

2015.10 complaints from plot 4995100191 received that the property was flooding during recent heavy rains. Response provided by Island Management, suggesting creating a larger drain system through property.

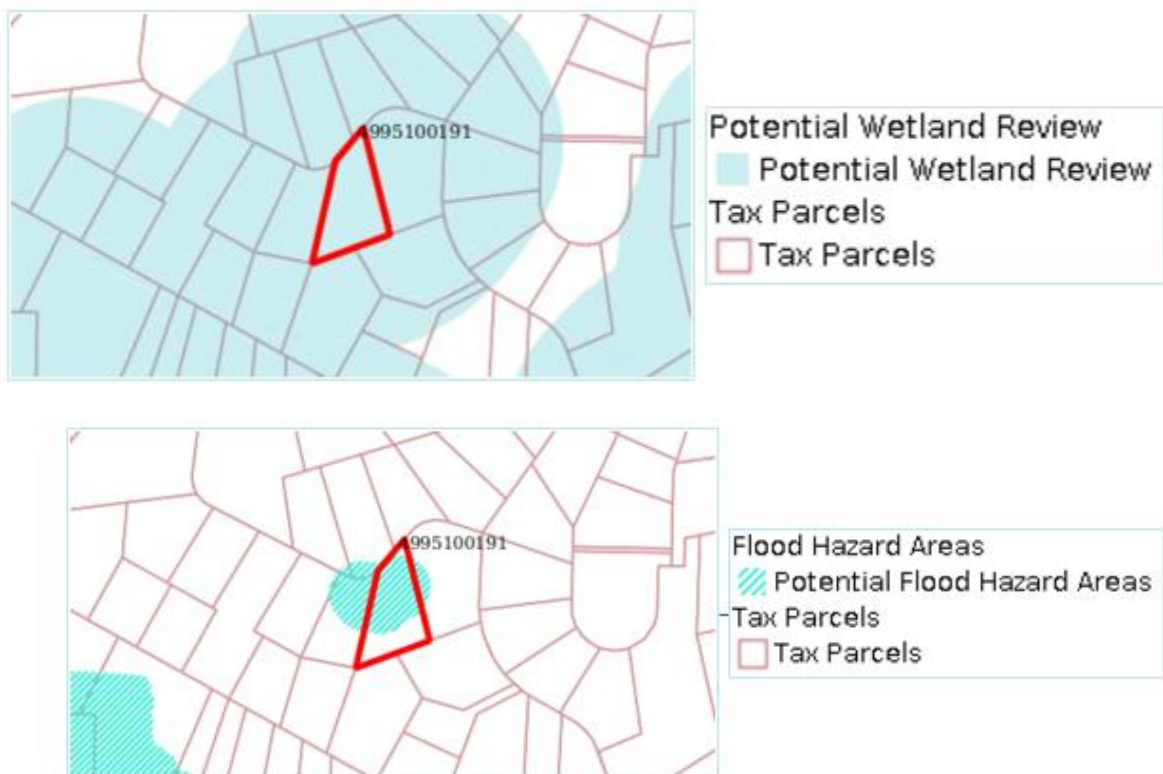


Figure 58. Maps provided by Pierce County showing “Potential Wetlands” and “Flood Hazard” areas.

10.3. South Madrona Drive



Figure 59. Drain at the East side of Madrona near Raft Island. Pipe end has been replaced and its full length cleared, 2015.01. Image on the right is before clearing showing runoff washing the shoulder's gravel. (Plot 7097000112)

11. Rhododendron Drive



Figure 60. Rhododendron Drive overview and the direction of the water flow.



Figure 61. Drainage needs more slope on East side of Rhododendron Drive, near the intersection of Park Avenue. (Plot 4995100261)



Figure 62. Roadside drainage filled on north-east side of Rhododendron Drive. (Plot 4995100240 and 4995100230)

12. Park Avenue West



Figure 63. Over view of Park Avenue East.

12.1. West Park Avenue



Figure 64. Poor drainage on North side of Park Avenue. (Plot 4995100452)



Figure 65. Roadside drainage filled on South side of Park Avenue. (Plot 4995100290)

12.2. East Park Avenue



Figure 66. Roadside drainage adequate though drain is filled on South side of Park Avenue. (Plot 4995100700 and 4995100710)



13. Fir Drive



Figure 67. Over view of Fir Drive.



Figure 68. Gravel along West side of Fir Drive blocking good drainage and eroding the roadway. (Plot 4995100710)



Figure 69. Drain on North side of Fir Drive needs clearing and catch basin. (Plot 7097000221)