



CITY OF KIRKLAND
Department of Public Works
123 Fifth Avenue, Kirkland, WA 98033
425.587.3800 www.kirklandwa.gov

To: Kurt Triplett, City Manager

From: Dave Snider, PE, Capital Projects Manager
Pam Bissonnette, Interim Public Works Director

Date: September 19, 2013

Subject: Slurry Seal Petition Response and Project Updates

RECOMMENDATION:

It is recommended that City Council receives a staff report and project update in response to a recent petition (Attachment A) regarding the 2013 Slurry Seal Project.

BACKGROUND DISCUSSION:

A slurry seal is one of many effective tools used in the City's Annual Street Preservation Program and is typically applied to residential streets that are in fair to good condition. A slurry seal is a cost-effective preventative maintenance treatment that prolongs pavement life by applying a cold liquid mixture of emulsified asphalt and fine rock to the existing pavement surface. The slurry seal will protect the underlying pavement surface from wear and damage while maintaining the street's pavement condition rating. Depending on weather conditions, a slurry seal application generally requires about six hours to thoroughly cure (dry). Thus, parking and vehicular access to and from streets is restricted on the date of application. Slurry seals typically extend the life of the pavement surface by 5-10 years. Slurry seals are less expensive than typical asphalt overlays and are an effective tool at keeping fair to good streets in good condition. Slurry seals have been applied in every Kirkland neighborhood. Yet applications of slurry seals often generate initial concerns and questions by residents on streets that receive the treatments.

On August 13, 2013, residents of a Juanita Neighborhood near 97th Place NE and 128th Ave submitted a petition to have the City of Kirkland reconsider the slurry seal approach for resurfacing streets. As submitted, the Petition's *Summary* and the stated *Action* included the following:

Summary

"The City of Kirkland is planning on Slurry Sealing our streets in the next couple of days. The City did this surface treatment last year on 94th Avenue NE between NE 124th Street and NE 132nd Street. Slurry Seal is a messy sand and tar mixture that is a low cost Band-Aid solution for extending the life of our streets. The crossing lines and other markings that are applied on top of this surface do not hold up well."

Action

“To have the City of Kirkland reconsider this approach to resurfacing our streets and treat us more like they do to more central parts of Kirkland. Resurface our streets with new asphalt.”

Staff was in contact with the petition’s originator prior to and after the petition was filed. The resident received information about the 2013 Program (Attachment B), the history of the program (Attachment C) and photos of the Slurry Seal process and results (Attachment D).

For 2013, staff handled a higher than normal volume of calls and email mostly attributable to the doubling in size of the current Program from previous years due to the additional funding provided by the 2012 Street Preservation Levy. The questions and concerns in 2013 were similar in nature, when compared with previous years – just with a higher volume of calls together with a first-ever petition.

On August 13, staff sent City Council the Petition, along with the following list of all concerns heard from residents living on or near 2013 Slurry Seal Project streets:

Low to Moderate Concerns

1. *Specific road closure schedule information and guidance on options for off-site parking.*

Response: Worked with maps and coordinated with individual callers.

2. *Specific coordination with elderly or special needs.*

Response: Provided specific information and made adjustments in schedule where necessary.

Moderate to High Concerns

3. Slurry seal technique or application and aesthetics:

- a. *Inconsistent slurry seal thickness/coverage over streets.*

Response: This is typical of the slurry seal technique and not a construction flaw. Inspectors carefully walked every street with a punch list to identify areas that did not meet standards and required patching where necessary to sustain the integrity of the seal.

- b. *Seams down the road where two squeegee passes come together.*

Response: This is a characteristic of a slurry seal as streets are at least two truck/squeegee widths and overlap each other.

- c. *Speed cushions having excess deposits of slurry seal product left between slotted humps.*

Response: This happens during the application where the excess mix fills in the slotted area between the cushions as the squeegee passes over the “hump”. After the slurry cures and cars and trucks start to pass over the speed hump, the material compacts down and evens out.

- d. *Slurry seal surface is rough.*

Response: Slurry seal streets have a rougher surface than asphalt overlays but do get smoother over time, with sweeping, traffic and weather.

- e. *Tire tracks are left in the surface by cars driving illegally over the newly sealed street before it is open for traffic.*

Response: Unfortunately this happens periodically and cannot be completely eliminated. The contractor will re-address those areas where possible.

- f. *Inconvenience in having to park off-site for a day and walk to and from their homes.*

Response: In some cases there were no sidewalks so it was difficult for some; however, there is no other option and all possible accommodations are made on each situation presented.

- g. *Fears of pollutants washing away from slurry seal into storm drains.*

- h. Response: Industry testing and our field observations do not substantiate this concern. The contractor is required to perform Best Management Practices by covering catch basins, sweeping up excess slurry mix and not applying the product in or under the threat of rain. Once dry, the slurry material has no greater or less environmental effect than any other asphalt or concrete product used in typical street construction.

- i. *Confusion why the application was used on streets in fairly good to very good condition.*

Response: The nature of the technique is to improve streets before more costly repairs are needed. The application of slurry seal adds 5 to 10 years of additional life expectancy to the street it was applied to, which is a significant consideration when evaluating the City's overall streets network and improving the City's average Pavement Condition Index (PCI).

- j. *Feeling that slurry seal was used in "lower income" areas.*

Response: The City's goal is to slurry seal all residential streets, where a slurry seal will be beneficial, at least once in the next twenty years. This year's program was very concentrated in the Finn Hill Neighborhood, together with other streets in Juanita, Evergreen Hill and Highlands. Past year's projects included Market, Norkirk, Evergreen Hill, Lakeview, North Rose Hill and South Rose Hill/Bridle Trails neighborhoods.

j. *Visually not as attractive as an overlay street*

Response: The cost savings from slurry sealing neighborhood streets early versus waiting until an overlay is needed is significant. Also, the City Pavement Management Program prioritizes overlays for Arterial and Collectors. The cost of slurry seal streets allows the City to preserve more streets and is a fiscally responsible way to manage and leverage tax dollars.

2013 Slurry Seal Program and Public Outreach:

Slurry Seal construction began on Wednesday, August 14, and continued through Tuesday, August 27, 2013. A total of 32 lane miles of neighborhood streets affecting approximately 3,000 homes received a slurry seal application with the majority of streets located in the Finn Hill Neighborhood, together with a smaller area in the Highlands Neighborhood and another in Evergreen Hill (Attachment E). The petition was signed by 29 residents with a few more individual emails and complaints, totaling about 40 in all.

Outreach efforts for the 2013 Slurry Seal Program included:

In person:

- Kirkland Alliance of Neighborhoods announcement, May 2013
- Wednesday and Friday Markets maps and information, June 2013
- Finn Hill Neighborhood Alliance meeting announcement and map, June 2013
- Juanita Neighborhood Association meeting announcement, May 2013
- Construction Hotline updated daily during construction
- One on one meeting with property owners as requested
- Phone calls and emails from residents with questions or concerns

Online information:

- Street Preservation Program [web page](#)
- Slurry Seal [Informational Brochure](#)
- Neighborhood [Hot Sheet](#)
- Capital Improvement Program [Interactive Map](#)

Mailings and door hangers to residents:

- Postcard with map and schedule (Attachment B), August 2013
- Door hangers with information 24-48 hours in advance, August 2013
- "No parking" signs posted 24-48 hours in advance, August 2013

There continues to be people who are opposed to slurry seal and would prefer the City wait until a street declines before using this method of street preservation. As a result, on August 29, approximately forty residents received a letter from the Interim Public Works Director, Pam Bissonnette, with additional information about the City's reasons behind using the product and how it saves tax payer money (Attachment F). The letter informs the recipients that preventative maintenance is more desirable than waiting until the streets fail and more costly repairs are needed. Residents were also directed to learn more about the City's street preservation program by watching the City's video *The Life Cycle of a Street found*

at: http://kirkland.granicus.com/MediaPlayer.php?view_id=13&clip_id=2263

Lessons Learned

Staff does not anticipate being able to convince everyone that slurry seal is the best method of maintaining Kirkland's neighborhood access streets in residential areas. However, the larger program and the recent experience with increased calls will lead to improved communications with those residents who will be included in the 2014 Program. While it seemed that focusing the 2013 Program mostly in a single neighborhood would be beneficial, the lesson learned is that it was too much for one neighborhood, especially one that was unfamiliar with the City's past Slurry Seal Programs. In the future, staff will strive to spread out the coverage areas in order to give more options for ingress and egress through individual neighborhoods.

Also, instead of waiting to know the precise construction dates and sequencing for the 2014 Slurry Seal Program, staff will send a pre-Program informational flyer/brochure much earlier with detailed explanations on why the City uses slurry seal on neighborhood access streets and how it saves taxpayer money. A second notice will follow with more exact construction sequencing and specifics on what to expect during and after the construction phase. Staff will also arrange for an additional door hanger after each street is slurry sealed detailing what to expect with the new surfacing material. This additional outreach may more than double mailing and printing costs; however, it should save staff time by minimizing the repetitive nature of the common responses to the calls and emails received.

Conclusion

The City has a viable Slurry Seal Program that dates back to 2002 and for the last 4-years every Kirkland Neighborhood, with the exception of Totem Lake, has received a slurry seal treatment on selected neighborhood streets. The slurry seal product provides an effective low-cost street preservation treatment that comes as a result of decades of research and development, with vast improvements to emulsifiers and applications process occurring in recent years. The process is used extensively throughout the United States and the industry is continually researching ways to improve the overall product.

Kirkland Public Works Capital Improvement Projects (CIP) group staff are also members of the Northwest Pavement Management Association, which is a Washington and Oregon public agency-based coalition first created in 2000 to keep its members up-to-date on the latest in pavement management products and processes. By maintaining membership, and serving as past and present Board Members, CIP staff will continue to be well informed on the latest innovations and industry standards for providing cost effective street preservation.

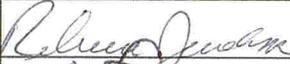
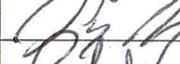
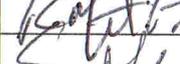
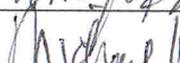
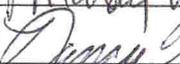
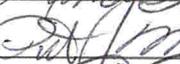
Attachment A

Petition Summary	The City of Kirkland is planning on Slurry Sealing our streets in the next couple of days. The City did this surface treatment last year on 94 th NE between NE 124 th and NE 132 nd . Slurry Seal is a messy sand and tar mixture that is a low cost Band-Aid solution for extending the life of our streets. The crossing lines and other markings that are applied on top of this surface do not hold up well.
Action Petitioned For	To have the City of Kirkland reconsider this approach to resurfacing our streets and treat us more like they do the more central parts of Kirkland. Resurface our streets with new asphalt.

Printed Name	Signature	Address	Comment	Date
MIKE OSBORNE		9726 128 th AVE		8/11/13
ERIC BUSALTE		9808 NE 128 th ST		8/12/13
RANDY D. GUST		9814 NE 128 th ST		8/12/13
JANE GEIST		9814 NE 128 th ST		8/12/13
LISA SIEGFRIED		12019 98 th PL NE ST		8/12/13
JAMES JAMSEK		12815 98 th PL NE ST		8/12/13
DON NEBRES		12820 98 th PL NE		8/12/13
MARK HEYDEN		9834 NE 128		8/12/13
PEO SIMSARA		9831 NE 128 th ST		8/12/13
SANTOS MONTAÑA		12758 98 th PL NE		8/12/13
PW HANSKAMP		12754 98 th PL NE		8/12/13
STEPHAN ORSE		12753 98 th PL NE		8/12/13
NIELS MIKEN		12706 98 th AVE NE		8/12/13
PEYAM PARANG		12709 98 th AVE NE		8/12/13
MATT SHYNE		12705 98 th AVE NE		08/12/13
Connie Shyne		12705 98 th AVE NE		8-12-13

Attachment A

Petition Summary	The City of Kirkland is planning on Slurry Sealing our streets in the next couple of days. The City did this surface treatment last year on 94 th NE between NE 124 th and NE 132 nd . Slurry Seal is a messy sand and tar mixture that is a low cost Band-Aid solution for extending the life of our streets. The crossing lines and other markings that are applied on top of this surface do hold up well.
Action Petitioned For	To have the City of Kirkland reconsider this approach to resurfacing our streets and treat us more like they do the more central parts of Kirkland. Resurface our streets with new asphalt.

Printed Name	Signature	Address	Comment	Date
Rebecca Jacobson		12700 98 th ave NE		8/12/13
KEVIN ROBINSON		12620 98 th AVE NE		
Ken Mohr		12614 98 th Ave NE		8/12/13
Guy Wish		12608 98 th Ave NE		8/12/13
ROBERT PRICE		12602 98 th AVE NE		8/12/13
Sandy VIK		12602 98 th Ave NE		8/12/13
Michael Gibbons		12518 98 th Ave NE		8/12/13
Blair Bolapue		12506 98 th AVE NE		8/12/13
WAFU KUO		12436 98 th AVE NE		8/12/13
MIKE WERDAL		12430 98 th AVE NE		8/12/13
Nancy Werdal		12430 98 th Ave NE		8/12/13
Pat Miralda		12404 98 th Ave NE		8/12/13
DENNIS DOOLEY		12305 97 th PL NE		8/12/13



YOUR ROAD WILL BE CLOSED

- Resurfacing streets in your neighborhood

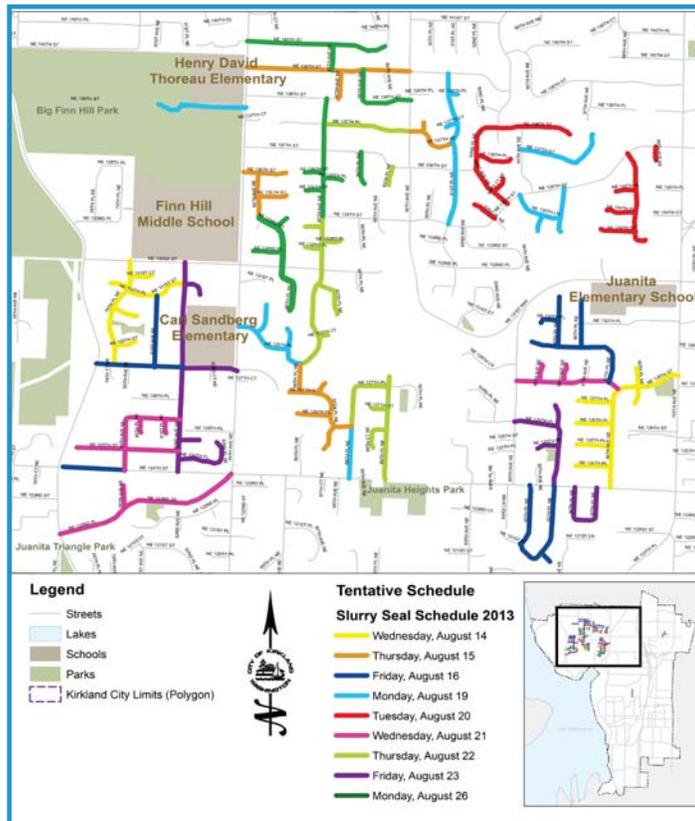


City of Kirkland
 Street Preservation, CIP
 123 Fifth Avenue
 Kirkland, WA 98033-6189

PSRST STD
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 Kirkland, WA
 Permit #268

THE BASICS

- ◆ Typical work hours are 7 a.m. to 6 p.m., Monday through Friday.
- ◆ Door-hangers and “No Parking” signs will notify you at least 24 hours before work begins.
- ◆ The Slurry Seal process requires one-day road closures. Driving on the closed road will permanently damage the new street surface.
- ◆ The contractor will sweep loose sand from the streets approximately one and three weeks after the slurry seal application.
- ◆ The 2012 Street Levy enables Kirkland to double the number of neighborhood streets to be slurry sealed each year.



Your road will be closed for up to six hours - beginning at 8 a.m.

Please park on a side street if you need to leave after 8 a.m.

Assuming dry weather, resurfacing in your area will likely begin August 14 and continue for two weeks.

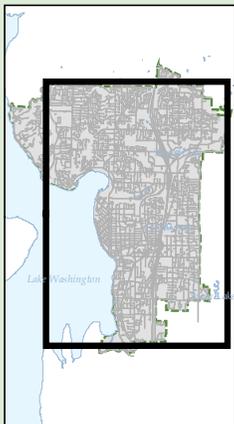
For more information and schedule updates call (425) 587-3838 or visit www.kirklandwa.gov (search street preservation).



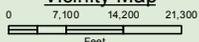
Persons with disabilities may request materials in alternative formats. Persons with hearing impairments may access the Washington State Telecommunications Relay Service at 711. It is the City of Kirkland's policy to ensure full compliance with Title VI of the Civil Rights Act of 1964 by prohibiting discrimination against any person on the basis of race, color, national origin or sex in the provision of benefits and services resulting from programs and activities. Any person who believes his/her Title VI protection has been violated, may file a complaint with the City of Kirkland. For questions or to file a complaint with the City of Kirkland contract - Kari Page, Neighborhood Outreach Coordinator at 425-587-3011 or KPage@kirklandwa.gov.



City of Kirkland Slurry Seal History



Vicinity Map

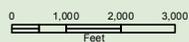
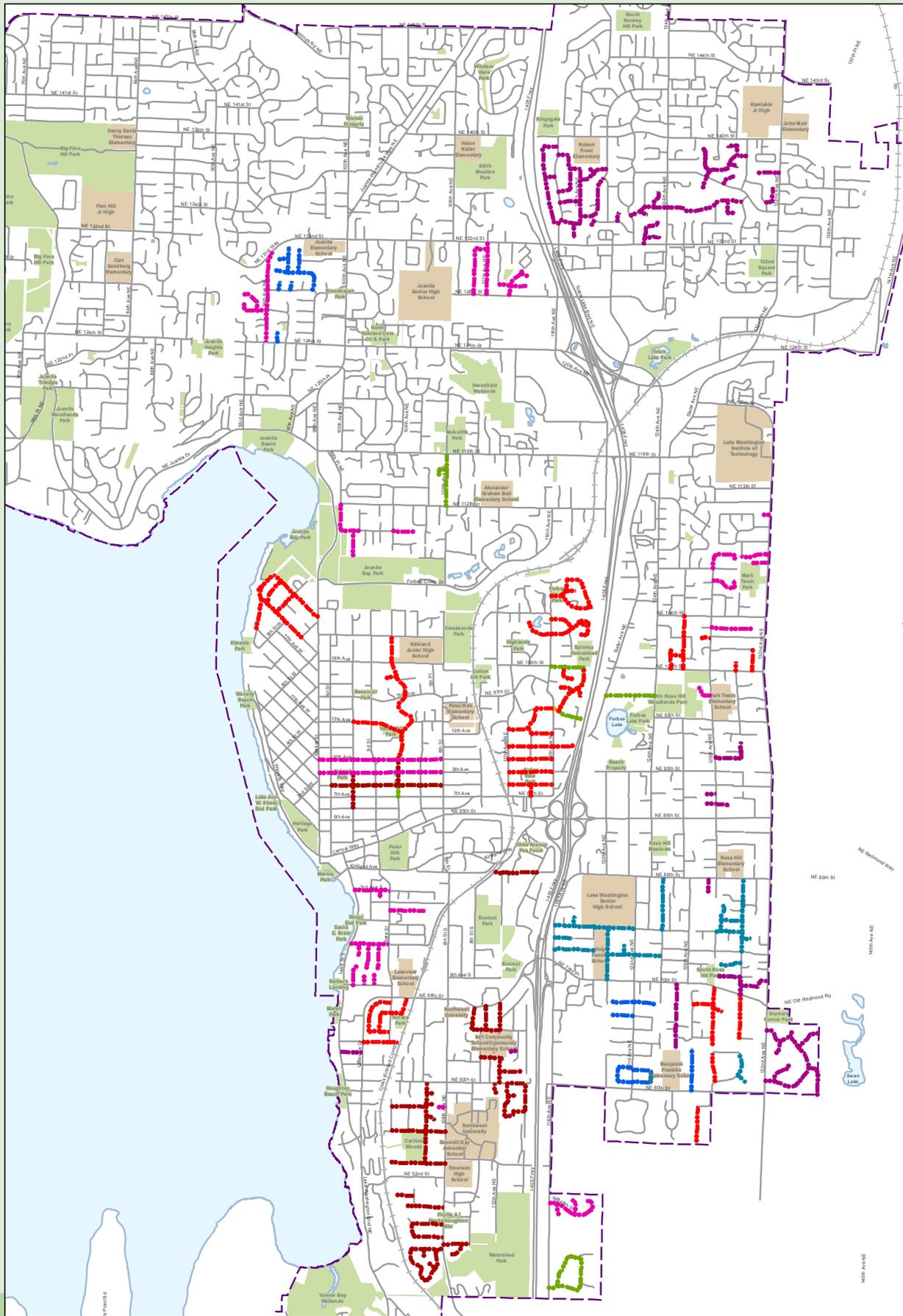


Map Legend

TREATMENT

- 2012 SLURRY SEAL
- 2011 SLURRY SEAL
- 2010 SLURRY SEAL
- 2009 SLURRY SEAL
- 2005 SLURRY SEAL
- 2004 SLURRY SEAL
- 2003 CHP SEALAND SLURRY SEAL
- 2002 CHP SEALAND SLURRY SEAL
- 2002 SLURRY SEAL

City of Kirkland Boundary
 Railroad Centerline
 Lake
 Street Centerline
 Park
 School



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 fitness or merchantability, accompany this product.

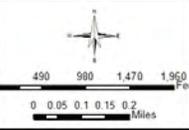
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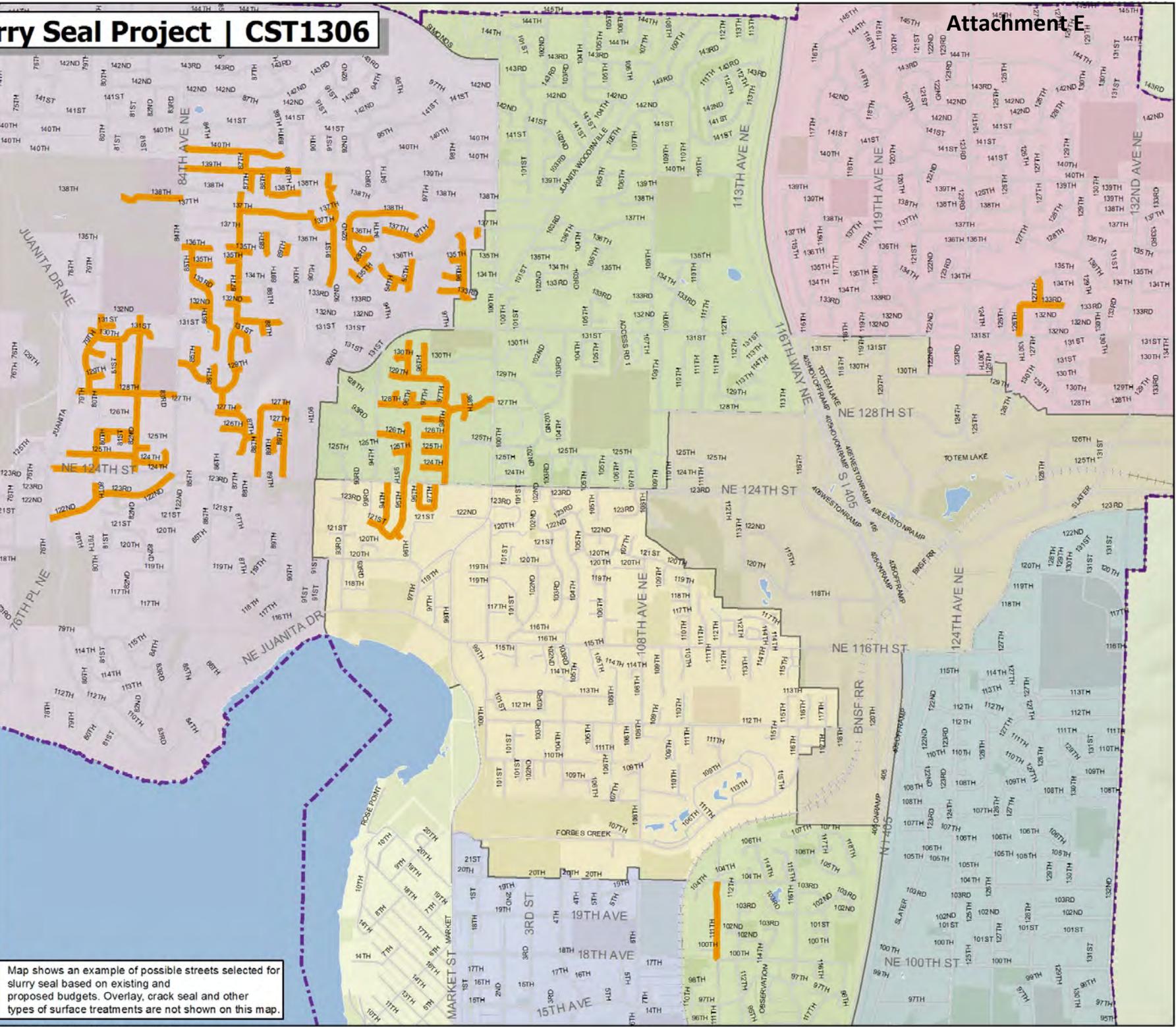
2013 Slurry Seal Project | CST1306

-  2013 Slurry Seal Streets
-  Streets
-  TRN_Street
-  Right of Way
-  Parks
-  Schools
-  Cross Kirkland Corridor
-  Major Streets
-  City Limits
-  Lakes



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Author
 Name: CST1306 - Slurry Seal List
 Date Saved: 3/20/2013 11:45:02 AM



Map shows an example of possible streets selected for slurry seal based on existing and proposed budgets. Overlay, crack seal and other types of surface treatments are not shown on this map.



August 29, 2013

kirkland WA 98033

Dear Mike,

I am writing to respond to your correspondence of August 12, 2013 regarding the City of Kirkland's recent resurfacing of your street. The City has had a long standing program of protecting residential streets from deterioration through preventive maintenance by resurfacing these streets before they reach failure. By doing so, the City is making your tax dollars go farther. Preventive resurfacing costs about 5% of what it costs to completely overlay a failing street. In 2012 the citizens of Kirkland voted to double this program in order to preserve our streets before they become extremely costly to repair and to reach more neighborhoods. It is the goal of the current program to resurface all residential streets within the next 20 years.

With added levy funds, Kirkland was able to double the resurfacing program in 2013, primarily focusing on the Finn Hill, Juanita, Evergreen Hill and Highlands neighborhoods. Past annual program resurfacing projects with slurry seal have included the Market, Norkirk, Lakeview, Houghton, North Rose Hill and South Rose Hill/Bridle Trails neighborhoods.

Although inconvenient, all street resurfacing techniques require street closure for some period during the application. Fortunately, the slurry seal resurfacing required closure for only a single day. Throughout the project, we worked with the contractor to limit the inconvenience and to make accommodations wherever we could. One of the requests we received was for more notice before resurfacing takes place. In the future we will provide information about the resurfacing process and potential road closures earlier in the process.

We also received comments about the look of the street after the slurry seal. Slurry seal "cures" over time. The street looks and feels different over the subsequent weeks and months, until the street surface returns to more of a pre-resurfacing appearance; the City's inspector is inspecting the new street surfaces and providing a punch list to the contractor where re-work is necessary.

Slurry seal extends the life of the existing roadways by up to 10 years and prevents more costly repairs in the future and the Program's priority is to maintain the structural integrity of the street. For more information on the program I encourage you to view *The Lifecycle of a Street* at http://kirkland.granicus.com/MediaPlayer.php?view_id=13&clip_id=2263.

I hope this information on the City Street Preservation Program is helpful and answers your questions.

Sincerely,

A handwritten signature in black ink that reads "Pam Bissonnette".

Pam Bissonnette, Interim Public Works Director