

Private Residential Driveway Replacement Program

This program allows homeowners to replace their concrete or blacktop driveway using the City's street reconstruction contractor. In most cases, the City's contractor is able to replace the driveway at a lower cost than a private driveway contractor.

You can choose to have the work done by your own contractor or the Phase 12 contractor. Let us know by completing the private residential driveway replacement section of the enclosed questionnaire. **This does not commit you to the additional costs of making this repair.**

If you choose to participate in the program, the cost of the work can be added to your assessment. The cost could be spread over 15 years as part of your property tax at an interest rate to be determined during fall of 2012.

Rain Gardens

Rain gardens are being **considered** by the City as a better way of managing storm water runoff. A thorough description of rain gardens and some frequently asked questions are available in the Storm Water Runoff Management and the Use of Rain Gardens flyer included with this newsletter.

Please indicate in the rain garden section of the questionnaire if you are interested in having a rain garden in your boulevard.

Neighborhood Local Drainage Problems

Does your property happen to be at a low area that periodically floods in the back yard? Is your property adjoining a drainage way which causes erosion, flooding, or related consequences? As part of the storm sewer and drain tile design process, we would like to know if these or similar situations are occurring in your part of the neighborhood. If so, please indicate so on the neighborhood local drainage problems and other comments section of the questionnaire by describing the problem. We will then review them in the field for possible corrective action should the project proceed.

Estimated Project Timeline

The Feasibility Report will be complete in September 2011. Therefore, it is important for us to receive your completed questionnaire by **July 22, 2011**. The following is a preliminary schedule for the improvement process for your area.

| Item | Date |
|--|----------------------|
| Property Owner Questionnaire Forms Due | July 22, 2011 |
| DRAFT Feasibility Report complete | Early September 2011 |
| Report to City Council | Mid-September 2011 |

| Item | Date |
|--|--------------------|
| Neighborhood Open House to review report | Early October 2011 |
| Public improvement hearing and the City Council might order preparation of bidding documents | Mid-October 2011 |
| Begin preparing bid documents | Late October 2011 |
| Neighborhood Open House to review final design contained in bid documents | Mid-January 2012 |
| Complete final project design | Late January 2012 |
| Bidding | March 2012 |
| Assessment hearing | April 2012 |
| Construction start-up | Early May 2012 |
| Install 1 st layer of asphalt | Summer/Fall 2012 |
| Install 2 nd layer of asphalt | June 2013 |



2012 – Phase 12 Forest North Local Street Reconstruction

A Joint Publication of the City of Crystal and SEH Inc.

June 30, 2011

Project Background and Update

In 2007, Short Elliott Hendrickson Inc. (SEH), a consulting engineering firm, was retained by the City to update the City's 2003 Street Reconstruction Study. The update showed that the majority of the local streets north of 42nd Avenue had deteriorated to the point where routine maintenance and repairs are no longer cost-effective. The Update recommended that street reconstruction be divided into 8 separate phases defined by their local neighborhood park. These 8 phases and their estimated year of reconstruction are shown in the location map on page 3 of this newsletter. In particular, please notice the location of Phase 12.

The Council in June 2008 and May 2010 initiated the reconstruction of Phases 10 and 11 respectively. The Phase 10 project area is complete. The Phase 11 project area is currently under reconstruction with completion expected in July 2012. On June 21, 2011, the Council continued the local street reconstruction improvement process by directing City staff to prepare a **Feasibility Report** for the Phase 12 Forest North neighborhood.

Local street reconstruction will include the installation of new concrete curb and gutter in most areas, new storm sewer and drain tile systems, sanitary sewer service repair/replacement, and blacktopping of streets. Black dirt and sod is then restored on the boulevards.

Inside

Phase 12 Has Begun

Estimated Assessment Costs

Sanitary Sewer Service Repair/Replacement Being Offered Residents Can Connect Sump Pumps to Storm Sewer 2

Location Map 3

Private Driveway Replacement

Rain Gardens Local Drainage Problems

Estimated Project Time Line

Who to Call 4

The sanitary sewer service repair is accomplished at an additional cost to the homeowner. In Phases 1 – 11, up to 20% of the homeowners repaired/replaced their sanitary sewer services as part of the street rehabilitation program.

We recommend that you drive through the Phase 10 Welcome Park project area shown in the Location map on page 3, or any of the City's streets south of 42nd Avenue, and see firsthand the transformation that has taken place throughout these neighborhoods.

We Need Your Help!

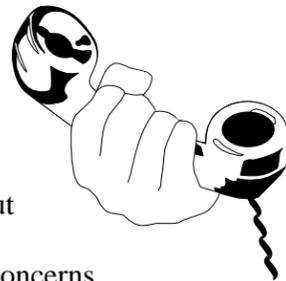
We need your help and input to accomplish the **Feasibility Report's** preliminary design. In particular, we need your input regarding the possible locations of sanitary sewer service repair/replacement, sump pumps or footing drains, private underground utilities, and neighborhood local drainage problems. Your input will also help the City measure the interest of Phase 12 homeowners to implement possible boulevard rain gardens and continue the private driveway replacement and sanitary sewer repair/replacement programs. The following pages detail the information requested. Please fill out the enclosed, postage paid questionnaire and return it by **July 22, 2011**, even if you are not interested in any of these programs at this time.

Phase 12 Has Begun

When the Feasibility Report is complete, the Council will review it and decide whether or not to order the preparation of bidding documents for local street reconstruction in Forest North in 2012. Before making a final decision, the Council will consider your input offered at both a Neighborhood Meeting and a separate Public Improvement Hearing that will occur during fall of 2011.

The Feasibility Report will contain detailed recommendations on how the streets, storm sewer and drain tile systems, and curb and gutter should be reconstructed and paid for.

Who To Call With Questions?



If you have questions about any information in this newsletter, or have other concerns, you can call or send an e-mail to staff listed below at either the City of Crystal or Short Elliott Hendrickson.

City of Crystal

Mick Cyert
Project Manager
763.531.1161
mick.cyert@ci.crystal.mn.us

Dave Fritzke
GIS Technician
763.531.1163
dave.fritzke@ci.crystal.mn.us

Tom Mathisen
City Engineer
763.531.1160
tom.mathisen@ci.crystal.mn.us

Short Elliott Hendrickson

Aaron Ditzler
Project Engineer
952.912.2624
aditzler@sehinc.com

Chris McKenzie
Project Field Representative
952.912.2607
cmckenzie@sehinc.com

During the preparation of the Feasibility Report, the City will consider wherever or not to replace or add sidewalk to one side of the following local municipal state aid streets:

- 47th Avenue between Louisiana and Douglas Drive,
- 49th Avenue,
- Fairview Avenue, and
- Louisiana Avenue between 47th and Fairview Avenues.

Because portions of 49th, Louisiana and Nevada Avenues are the border between the Cities of Crystal and New Hope, this reconstruction will be coordinated with the City of New Hope.

Estimated Assessment Costs

If the Project goes forward, the actual cost of Phase 12 will not be known until the spring of 2012 when construction bids are received. The assessment rate for a single family/duplex property in the Phase 11 project was \$4,917 per lot. The assessment rate for commercial, non-profit, industrial and multiple family, etc. properties was \$88.19 per front foot. The Phase 11 assessment rate for new concrete curb and gutter was \$18.88 per front foot for all property classifications that previously had no curb or for those with non-standard (sloped) curb. Standard (barrier) curb will be reincorporated into the Phase 12 project. These reincorporation costs necessary for repair or replacement will be assessed to residents with standard curb in front of their homes. The Phase 11 assessment rate for standard curb reincorporation was \$4.97 per front foot. Due to the volatility of oil and construction material prices, we will not have estimated Phase 12 assessment rates.

Residents will have the option to pay the entire assessment amount up front and avoid interest expense or have the cost spread out over 15 years as part of their property tax at an interest rate to be determined next spring.

Sanitary Sewer Service Repair/Replacement Program from the Sewer Main to Your Property Line

Have you had problems in the past with your sanitary sewer line? This program will be your opportunity to make repairs most economically.

According to City ordinance, you are responsible for the sewer service pipe from inside your home to the sewer main in the center of the street. When problems arise, you are responsible for repair or replacement of that pipe including any costs for street or boulevard repair that may be required because of the sewer work. You can avoid the street and boulevard repair costs by coordinating your sewer repair/replacement with the street reconstruction work. You can choose to have the work done by your own contractor or the Phase 12 contractor.

Your sanitary sewer may need repair if:

- You've experienced slow water flow or occasional backups at the basement floor drain such as when the dishwasher or clothes washer discharges water.
- A sewer cleaning service company has found evidence of roots, sand or other foreign debris during pipe cleaning. This condition means that there are broken joints and/or open cracks in the pipe. Cleaning is only a temporary solution. The situation will deteriorate over time and you may end up with a collapsed pipe permanently blocking all water flow.

Assess the situation:

- Review past maintenance activities or consult with a licensed plumber. The previous homeowners may also be of assistance.

If you are interested in repair/replacement from the sewer main to your property line:

- ◆ Let us know by completing the private sanitary sewer service repair/replacement section of the enclosed questionnaire. **This does not commit you to the additional costs of making the repairs.**

Knowing now how many property owners are interested in having this work done will result in a more competitive price from the City's bidding process. Everyone who indicates an interest in sanitary sewer repairs from the sewer main to your property line will be contacted prior to construction with price information and other details.

You have until then to decide if you want to do the work and if you want it done by the Phase 12 contractor.

- ◆ You may wish to get a bid from a licensed plumber in the meantime. When we contact you with price information nearer to construction time, you can compare the costs between the Phase 12 contractor and the bid received from your plumber. The plumber you contact needs to be informed that they will need to coordinate sanitary repair with the Phase 12 contractor's schedule.
- ◆ Paying the bill – should you decide to have the sewer work done **and** choose to use the Phase 12 contractor, the cost can be added to your assessment. This could spread the cost over 15 years as part of your property tax at an interest rate to be determined during fall of 2012.

Sump Pump Discharge Service Line

Do you use a sump pump or have you considered installing one? Do you currently have a footing drain? The street design will include a drain tile system in many streets to collect not only groundwater and surface runoff (rainfall and snow melt) but also discharges from private sump pumps.

This will be part of the storm sewer system and will be included in the street assessment cost spread out over all the parcels in the project area.

If you have a sump pump or footing drain, an underground service line pipe can possibly be installed from the street to your front property line. At the property line, approximately 15 feet behind the curb, an 18-inch deep inlet box is installed with the top flush with the ground surface. From that point to your house, you would be responsible for installing an underground pipe and any plumbing modifications needed to connect it to your sump pump.

Using the service line eliminates these problems:

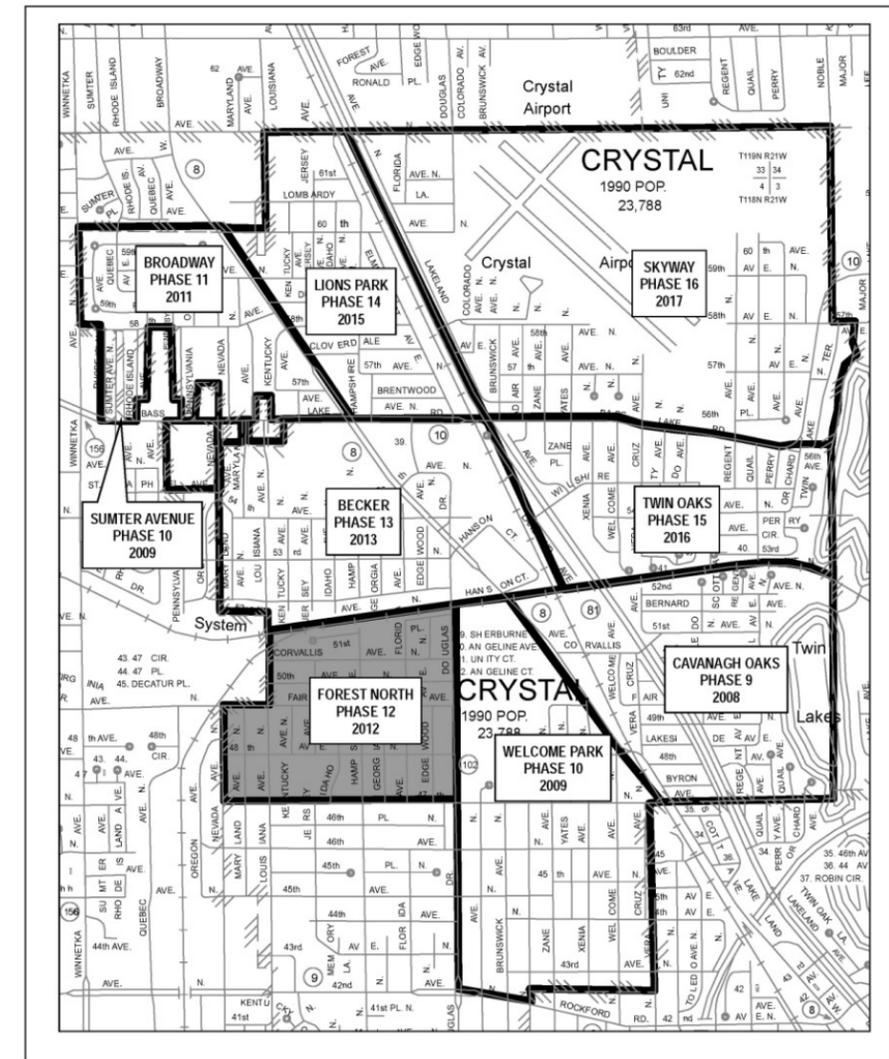
- Water reentering your basement when discharged onto the yard. This water can also cause problems for adjacent yards and basements.
- Discharging into the street causes erosion of the street surface and icing in cold weather.

Furthermore, discharging this water into the sanitary sewer system is prohibited by City ordinance and you are subject to a fine. These discharges increase the fees the City is charged to treat Crystal's sewage and the higher cost is reflected back to you in your sewage bill.

If you currently have a sump pump or footing drain or are considering adding a sump pump someday, please complete the sump pump discharge service line section of the enclosed questionnaire.

It is important that you indicate this now so it can be planned with the project. There is not a separate added cost for this feature.

A drain tile system may not be available on all streets depending on final street design and topographic features.



Crystal Study Area
Neighborhood Phase Map

Street Reconstruction Property Owner Questionnaire

Please complete and return this questionnaire by July 22, 2011. **Indicating an interest in any of the items below does *not* commit you.** By completing this questionnaire, you will be put on the list(s) of property owners needing price and other information prior to street construction. At that time, you may make a final decision on whether or not you wish to have the work done.

Day Phone _____ Evening Phone _____

I. Sump Pump Discharge Service Line:

The sump pump service line pipe is offered to property owners with a footing drain tile and/or a sump pump or those considering installing a sump pump. (This option may not be available on all streets depending on final street design. Selecting this work does not add to your cost on an individual basis.)

A. Does your home have a drain tile/footing drain? Yes No Unknown

B. Does your home have a sump pump? Yes No

II. Private Sanitary Sewer Service Repair/Replacement from the Sewer Main to Your Property Line

You could save money by coordinating sanitary sewer service repair/replacement work with the upcoming street reconstruction. (Selecting this work to be done will add to your cost and result in an additional assessment.)

A. Are you interested in repairing or replacing your sanitary sewer pipe from the sewer main to your property line? Yes No

III. Private Underground Utilities

A. Do you have an underground lawn irrigation system? Yes No

B. Do you have an underground electric pet containment system? Yes No

IV. Private Residential Driveway Replacement

In order to express your interest in continuing the driveway replacement program into Phase 12, please complete this section of the questionnaire. (Selecting this work to be done will add to your cost and result in an additional assessment.)

A. Are you interested in having your driveway replaced? Yes No

B. What type of driveway do you have?

Blacktop driveway

Concrete driveway

Combination blacktop/concrete

Other _____

C. If you replace your driveway, would you:

Widen it (within City Codes)

Keep it the current width

V. Rain Garden

Stop: Please read the enclosed flyer titled Storm Water Runoff Management and the Use of Rain Gardens **before** completing this section.

Are you interested in having a rainwater garden placed in the boulevard in front of your home?

Yes No

VI. Neighborhood Local Drainage Problems and Other Comments:

Thank you for your cooperation. Please fold questionnaire so the return address is on the outside and mail it. It is postage paid for your convenience.

Please complete all questions and return to us by July 22, 2011 even if your answers are “No.”

ATTN: KAREN ANDERSON
SHORT ELLIOTT HENDRICKSON INC
10901 RED CIRCLE DRIVE SUITE 300
MINNETONKA MN 55343-9301

Storm Water Runoff (Runoff) Management and the Use of Rain Gardens:

As part of possible local street reconstruction in the Forest North neighborhood, City of Crystal (City) staff will present rain gardens for consideration by both the neighborhood's residents and the City Council. This flyer explains both runoff management and rain gardens as a list of frequently asked questions and their answers.

What is runoff management?

The process of managing runoff as a resource rather than a waste product. Runoff has historically been managed by "draining it away" as soon as possible (ASAP). Management by "draining it away" ASAP results in adverse down stream impacts such as, but not limited to, flooding, erosion, and poor water quality in nearby lakes and streams. Crystal is required to submit a permit to the Minnesota Pollution Control Agency (MPCA) outlining their plan to better manage its runoff. Part of Crystal's plan is that new subdivisions feature ponds that both regulate and treat runoff. However, pond construction in established neighborhoods like Forest North is difficult. Crystal must consider other tools to show the MPCA it is better managing its runoff in its established neighborhoods.

If the subgrade soils are right, rain gardens are a tool that the City can apply in established neighborhoods to better manage runoff. We will not know if the subgrade soils are right until soil samples in Forest North are analyzed during the summer of 2011.

What is a rain garden?

A rain garden is a landscaped area located in the City-owned boulevard. As the photo to the right shows, the area is slightly depressed to soak up **some** of the runoff before it can enter the storm sewer pipe network (network). This decreases the amount of runoff carried by the network to nearby lakes and streams. When plants in the rain garden mature, the rain garden should be disguised as an aesthetic addition to the neighborhood.



The plants can also help runoff reach into deeper subgrade soils and recharge nearby groundwater aquifers. The plants also aerate the garden's soil to maintain its infiltration characteristics. Rain garden plants can handle extended periods of wet conditions. Potential standing water in the rain garden will be designed to dissipate quickly.

Why are rain gardens needed?

Because of the many impervious surfaces such as streets, driveways and rooftops, it is important to have rain gardens within our cities. Storm water carries pollutants such as fertilizers, pesticides, yard and animal waste, oil and grease, etc. The contaminated water flows from storm drains into local streams, lakes, rivers, and watersheds, and often leads to costly municipal improvements like stormwater treatment structures. Upper and Lower Twin Lakes, where the majority of Crystal's storm water ends its travels, is listed as "Impaired" by the Minnesota Pollution Control Agency. While an individual rain garden may seem like a small thing, collectively they produce substantial environmental benefits.

Who should consider adding a rain garden in the City-owned boulevard in front of their home?

Rain gardens work best in relatively flat boulevards with sandy, well-draining subgrade soils beneath them. Some boulevards cannot accommodate rain gardens due to poor subgrade soils, steep slopes, or not enough space between the edge of the street's pavement and the right-of-way line. The more rain gardens installed means less runoff carried by the network to nearby lakes and streams. Property owners of corner lots may wish to consider more than one rain garden in the City-owned boulevard.

Who maintains these rain gardens in the City-owned boulevard?

Rain garden plantings will be selected for low maintenance, which is **not** to say that they are maintenance free. Yearly maintenance for weeding, mulching, and plant replacement will be conducted by the City for a period of two years after the initial rain garden installation/planting. Individual homeowners will be responsible for weeding, mulching, and plant replacement after the two year City maintenance period, as necessary. Furthermore, individual homeowners will be responsible for watering immediately following the initial rain garden installation/planting.

If I choose to have a rain garden, will my assessment be more than those without rain gardens?

No. Selecting this work does not add to your individual assessment. The cost of any rain gardens that could be built as part of this project will be passed along to the **entire** neighborhood because the **entire** neighborhood will benefit from the rain gardens.

What if I just do not want to have a rain garden?

If you do not want a rain garden, do not like gardening, or do not wish to add to the landscaping of the City-owned boulevard in front of your home, maybe a rain garden is not for you.

Keep in mind: whether you have a rain garden or not, drainage could still be directed to flatter areas located in the City-owned boulevard area next to the street. As with the rain garden, water will pool for short periods of time in these areas until it is able to soak into the ground. Such existing low areas will still function well; however it will not have the same infiltration capabilities as a rain garden can have. During heavy rain events, rainwater in most cases will overflow these areas and spill into the street.

How do I notify the City of my interest in having a rain garden or not?

Please express your interest by completing the rain garden section of the Property Owner Questionnaire insert and mail it back to Karen Anderson with Short Elliott Hendrickson no later than July 22, 2011.

How can I find out more information about rain gardens?

The City's website contains a thorough listing of articles regarding rain gardens in street reconstruction projects. If you want more information, we encourage you to type it into your favorite internet browser and review the rain garden articles it contains.

http://www.ci.crystal.mn.us/city_departments/rain_gardens.html

For more information on rain gardens in general, please contact:

- Hennepin County Environmental Services, 612-348-3777
- Minnesota Pollution Control Agency, 651-296-6300
- University of Minnesota Yard and Garden Line, 612-624-4771

We suggest that you visit the Phase 9 Cavanagh Oaks and Phase 10 Welcome Park project areas shown in the location map on page 3 of the newsletter to see examples of the rain gardens. If you have questions about rain gardens after reading this flyer, and maybe the information at Crystal's website, please contact one of the people listed on page 4 of the newsletter that came with this flyer.