

CITY COUNCIL AGENDA MEMORANDUM

SUBJECT

Resolution No. 8253, certifying the Emergency Declaration of the City Manager for construction of emergency public works to address a sewer main break at 10418 NE 29th Street (The Regents Condominiums).

FISCAL IMPACT

The emergency replacement of the collapsed sewer main is estimated to cost \$110,000. This work will be paid for from CIP Plan No. S-24, Sewer System Pipeline Rehabilitation and CIP Plan No. D-64, Storm Infrastructure Rehabilitation Program. The purpose of CIP Plan Nos. S-24 and D-64 are to provide for the repair and replacement of defective sewers and storm drains. The vitrified clay sewer main was installed in 1968, and collapsed recently when hillside erosion due to a corroded storm drain pipe undermined the sewer pipe. There is adequate money in the CIP Plan Nos. S-24 and D-64 to fund the replacements.

Sewer System Pipeline Rehabilitation	CIP Plan No. S-24	\$90,000
Storm Infrastructure Rehabilitation Program	CIP Plan No. D-64	<u>\$20,000</u>
	TOTAL	\$110,000

STAFF CONTACT

Nav Otal, Interim Director, 452-2041
Wes Jorgenson, Assistant Director, 452-4887
Utilities Department

POLICY CONSIDERATION

It is the policy of the City, in order to protect lives, property, and environment, and in cooperation with other elements of the community, to carry out preparedness, and coordinate the recovery efforts for such events.

BACKGROUND

City staff discovered a broken sewer main discharging untreated sewage into a tributary of Yarrow Creek on May 11, 2011. A contractor was hired immediately to perform temporary repairs to the sanitary sewer system to prevent further sewage discharge, and the temporary repairs were completed May 12, 2011.

Upon further examination of the site, a nearby corrugated metal storm drainage pipe that had completely rusted through on the bottom was discovered. Storm runoff was draining out of the storm pipe, eroding

the steep hillside and undermining the vitrified clay sewer pipe. The sewer pipe then collapsed into the deepening gully, discharging untreated sewage into a tributary of Yarrow Creek.

The City Manager signed a declaration of emergency on May 23, 2011 so that the City could move forward to abate the public health and environmental hazard created by the collapsed sewer main. The leaking storm pipe expected to continue to erode the steep hillside, jeopardizing the stability of the sanitary sewer system; therefore permanent repairs to both the sanitary sewer system and storm drain system must be undertaken immediately to prevent additional breaks in the sanitary sewer line, which will result in additional untreated sewage and significant amounts of sediment being washed into Yarrow Creek and Yarrow Bay.

EFFECTIVE DATE

If adopted, this Resolution will become effective immediately.

OPTIONS

1. Adopt Resolution No. 8253 certifying the Emergency Declaration of the City Manager for construction of emergency public works to address the collapsed sewer main and hillside erosion at 10418 NE 29th Street (The Regents Condominiums).
2. Do not adopt the Resolution and provide alternative direction to staff.

RECOMMENDATION

Adopt Resolution No. 8253, certifying the Emergency Declaration of the City Manager for construction of emergency public works to address the collapsed sewer main and hillside erosion at 10418 NE 29th Street (The Regents Condominiums).

MOTION

Move to adopt Resolution No. 8253, certifying the Emergency Declaration of the City Manager for construction of emergency public works to address the collapsed sewer main and hillside erosion at 10418 NE 29th Street (The Regents Condominiums).

ATTACHMENTS

Vicinity Map
Emergency Declaration
CIP Project Description
Proposed Resolution No. 8253

AVAILABLE IN COUNCIL OFFICE

Location Map

Sewer Main Break @ 10418 NE 29th St



**SEWER
BREAK**

This page intentionally blank.

DECLARATION OF EMERGENCY
NE 29th Street (10418) Sanitary Sewer Repair
Contracting and Environmental Procedures

On May 11, 2011 the City of Bellevue identified the following emergency:

A public health and environmental hazard exists at 10418 NE 29th Street, Bellevue.

Staff discovered a broken sewer line discharging untreated sewage to a tributary of Yarrow Creek on May 11, 2011. It appears that storm water runoff from a corroded pipeline has eroded the steep hillside and undermined the sanitary sewer causing the sewer pipe to collapse into the deepening gully. A contractor was immediately hired to make temporary repairs to sanitary sewer system so that raw sewage would no longer be discharged to stream. Temporary repairs were completed on May 12, 2011

Further examination of the site revealed that the bottom of the storm drain pipe is completely rusted through and that more storm water flows under and around the pipe than through it. Given its current state of disrepair, the leaking storm pipe will continue to result in erosion of the steep hillside and jeopardize the stability of the sanitary sewer system. The sewer pipe is in imminent danger of collapsing again due to the ongoing erosion problem. Permanent repairs to both the sanitary sewer system and the storm drain system must be undertaken in order to protect the sanitary sewer from being undermined and prevent the accidental discharge of untreated sewage to the adjacent stream.

Washington State Department of Ecology was notified of the sewage discharge. Staff took water quality samples along Yarrow Creek and in Yarrow Bay at points where the public might come in contact with water. As expected, coliform counts exceeded State water quality standards. Subsequent testing has shown a marked improvement once the sewage discharged was stopped. Staff will continue take samples as requested by the Department of Ecology.

Delays in repairing the pipelines and the eroded hillside could result in collapse of the sanitary sewer system and significant amounts of sediment being washed into Yarrow Creek, posing both environmental and health hazards. In order to minimize environmental impacts, the work needs to take place promptly before additional rainfall results in more erosion and potential damage to the sanitary sewer system. In a site meeting on May 12, 2011, staff from the Washington Department of Fish and Wildlife concurred that the situation needed immediate repair and stabilization. It is critical to proceed with emergency repairs as quickly as possible.

The continued instability of the sanitary sewer system and its resulting potential for a sewage discharge presents an imminent threat of environmental degradation to

Yarrow Creek and Lake Washington. Unchecked hillside erosion presents an imminent danger to public infrastructure and private property.

Therefore, in accordance with RCW 35.22.620, RCW 39.04.280, WAC 197-11-880, BCC 4.28.090, and 22.02.050 the undersigned has determined that an emergency situation exists requiring the waiver of normal procedures related to public works and procurements, as well as State Environmental Procedures Act (SEPA) regulations. The director or his/her authorized designee of each City department is authorized to execute contracts for the procurement of materials, equipment, supplies, services and work, including public works, necessary to repair the sanitary sewer and storm drain systems as well as stabilize the steep eroded hillside. Any contract required to be presented to the City Council executed under the authority provided herein shall be presented to the City Council at its next Regular Meeting following such execution.

Executed this 23rd day of May, 2011.

Brad Miyake
[signature]

Brad Miyake
[print name] ✓
City Manager or authorized signatory- Deputy

Approved as to form:

Assistant City Attorney

By: Lacey L. Madche
34876
[signature]

LACEY L. MADCHE
[print name]

FY 2011 - FY 2017 Capital Investment Program

S-24 Sewer System Pipeline Rehabilitation

Category: Sewer
Department: Utilities

Status: Ongoing
Location: Various locations throughout Sewer Utility's service area

Programmed Funding

Programmed Funding	Appropriated To Date	FY 2011 Budget	FY 2012 Budget	FY 2013 Budget	FY 2014 Budget	FY 2015 Budget	FY 2016 Budget	FY 2017 Budget
23,122,293	12,278,000	1,086,800	1,130,272	1,175,521	1,754,850	1,825,050	1,897,950	1,973,850

Description and Scope

This program funds repair of localized defects and occasional relining or replacement of defective sewer pipes. Most defects are identified from the Utility's infrastructure condition assessment (video) program. Pipes are selected for replacement based on risk of failure (likelihood and consequence), failure history, and to coordinate with other construction, such as planned street overlays (which reduce restoration costs).

PROJECT NEED: System Renewal and Replacement

Rationale

Bellevue's 650+ miles of sewer mains and 'stubs' that carry wastewater from homes and businesses to the mains are rapidly deteriorating. Most are 35-60 years old, and more than half way through their expected functional life. As pipes age, cracks become wider and joints between pipes loosen, increasing the likelihood of blockages that cause sewer backups. Pipe rehabilitation reduces pipeline failures, reduces the risk of blockages or collapse that could result in property damage, and reduces the amount of ground water entering the sewer system which in turn reduces the risk of exceeding the system capacity.

In most cases, localized 'spot' repairs are the most cost effective choice and assure maximum total pipe life. Video observations and condition data indicates Bellevue will need to begin full pipe replacement or relining in the next few years, which will require significantly higher investment.

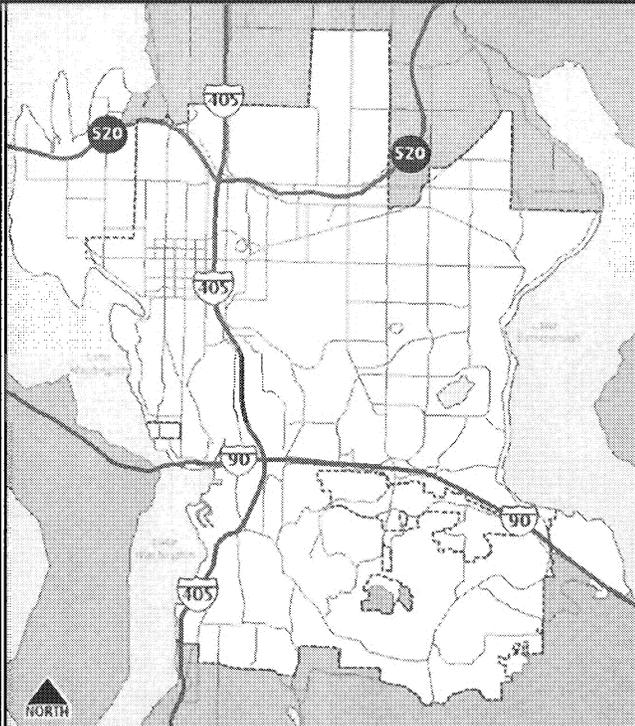
Environmental Impacts

The environmental impacts and the State Environmental Protection Act (SEPA) requirements will be determined for each replacement segment, but they are generally SEPA exempt.

Operating Budget Impacts

This project will have no impact on operating revenues (and/or) expenditures, since it replaces or repairs existing facilities.

Project Map



Schedule of Activities

Project Activities	From - To	Amount
Project Costs	1990 - Ongoing	23,122,293
Total Budgetary Cost Estimate:		23,122,293

Means of Financing

Funding Source	Amount	
Charges for Services	6,000	
Judgements/Settlements	84,000	
Miscellaneous Revenue	806,000	
Private Contributions	67,000	
Utility Rates/Fees	22,159,293	
Total Programmed Funding:		23,122,293
Future Funding Requirements:		0

This project will be located throughout the service area.

D-64 Storm Water System Conveyance Infrastructure Rehabilitation

Category: Storm Drainage
 Department: Utilities

Status: Ongoing
 Location: Various locations throughout the City

Programmed Funding

Programmed Funding	Appropriated To Date	FY 2011 Budget	FY 2012 Budget	FY 2013 Budget	FY 2014 Budget	FY 2015 Budget	FY 2016 Budget	FY 2017 Budget
13,984,296	7,840,000	777,920	809,037	841,425	875,085	910,092	946,444	984,293

Description and Scope

This ongoing program rehabilitates or replaces defective storm drainage pipelines and ditches identified in the Utility's condition assessment program or other means. Projects are prioritized based on the severity of deterioration, the risk and consequence of failure, and coordination with planned street improvement projects. As the system ages, costs are expected to increase. The Utilities' Asset Management Program is evaluating when system replacement will require significant increases to the budget.

PROJECT NEED: System Renewal & Replacement

Rationale

Much of the storm pipe network was built before pipe material and construction standards were in place, so there is only limited information about when pipes were installed, their size and composition. Bellevue owns almost 400 miles of stormwater conveyance pipe, with limited information available to predict how long it will last. Of particular concern is corrugated metal pipe, which can completely corrode away in as little as 20 years, or if properly maintained last longer than 50 years. Pipe collapse or blockage can result in washed-out roads, flooded homes, environmental damage, and traffic disruption. This program provides for repair or replacement of defective stormwater conveyance pipes, culverts and ditches, to prevent such consequences. It proactively repairs pipes under arterials in advance of street resurfacing, saving costs and minimizing disruption. It also focuses on critical pipes where the consequences of failure would be significant.

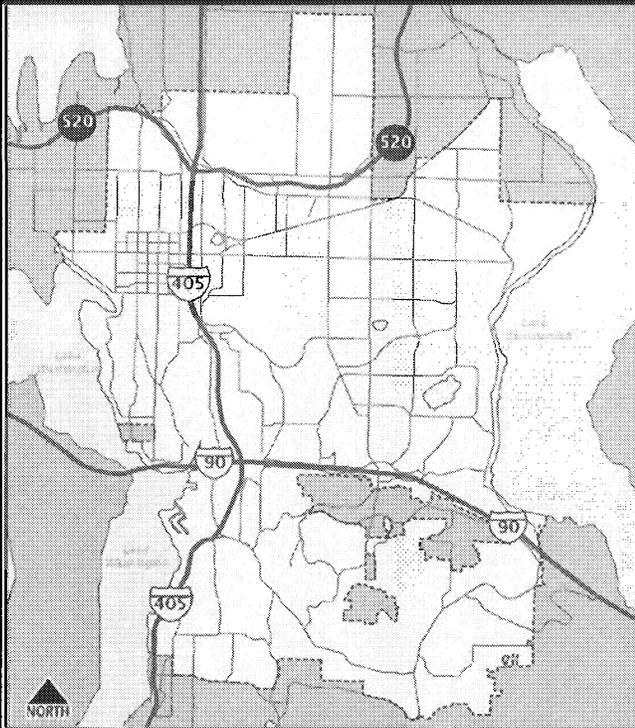
Environmental Impacts

The environmental impacts will be determined for each specific project.

Operating Budget Impacts

This project will have no impact on operating revenues (and/or) expenditures, since it replaces or repairs existing facilities.

Project Map



Schedule of Activities

Project Activities	From - To	Amount
Project Costs	1995 - Ongoing	13,984,296
Total Budgetary Cost Estimate:		13,984,296

Means of Financing

Funding Source	Amount	
Charges for Services	5,000	
Judgements/Settlements	33,000	
Miscellaneous Revenue	696,036	
Utility Rates/Fees	13,250,260	
Total Programmed Funding:		13,984,296
Future Funding Requirements:		0

This project will be located throughout the city.

CITY OF BELLEVUE, WASHINGTON

RESOLUTION NO. 8253

A RESOLUTION certifying the Emergency Declaration of the City Manager for construction of emergency public works to address a sewer main break at 10418 NE 29th (The Regents Condominiums).

THE CITY COUNCIL OF THE CITY OF BELLEVUE, WASHINGTON, DOES RESOLVE AS FOLLOWS:

Section 1. City Council hereby certifies the Emergency Declaration signed by the City Manager on May 23, 2011, for construction of emergency public works to address a sewer main break at 10418 NE 29th (The Regents Condominiums), a copy of which Declaration has been given Clerk's Receiving No. _____.

Passed by the City Council this _____ day of _____, 2011, and signed in authentication of its passage this _____ day of _____, 2011.

(SEAL)

Don Davidson, DDS
Mayor

Attest:

Myrna L. Basich, City Clerk