

GREEN STREETS INITIATIVE STILLWATER AND BAYPORT

THIRD PROGRESS REPORT FOR THE SAINT CROIX RIVER ASSOCIATION
GRANT AGREEMENT NUMBER: 201003



Prepared by:

MIDDLE ST. CROIX WMO
January 22, 2013

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INTRODUCTION

The purpose of this project is to incorporate enhanced stormwater treatment facilities in the developed portions of two communities directly adjacent to Lake St. Croix, Stillwater and Bayport. Because the Cities of Stillwater and Bayport are completely developed in areas directly adjacent to Lake St. Croix, stormwater treatment facilities must be carefully retrofit into small spaces in order to provide necessary treatment to runoff prior to its discharge to Lake St. Croix.

PROJECT TIMELINE:

2010 – Initiate Project

2011 – Final site selection, final design; and project installation in Bayport and Stillwater

2012 – Final site selection, final design; and project installation in Bayport and Stillwater

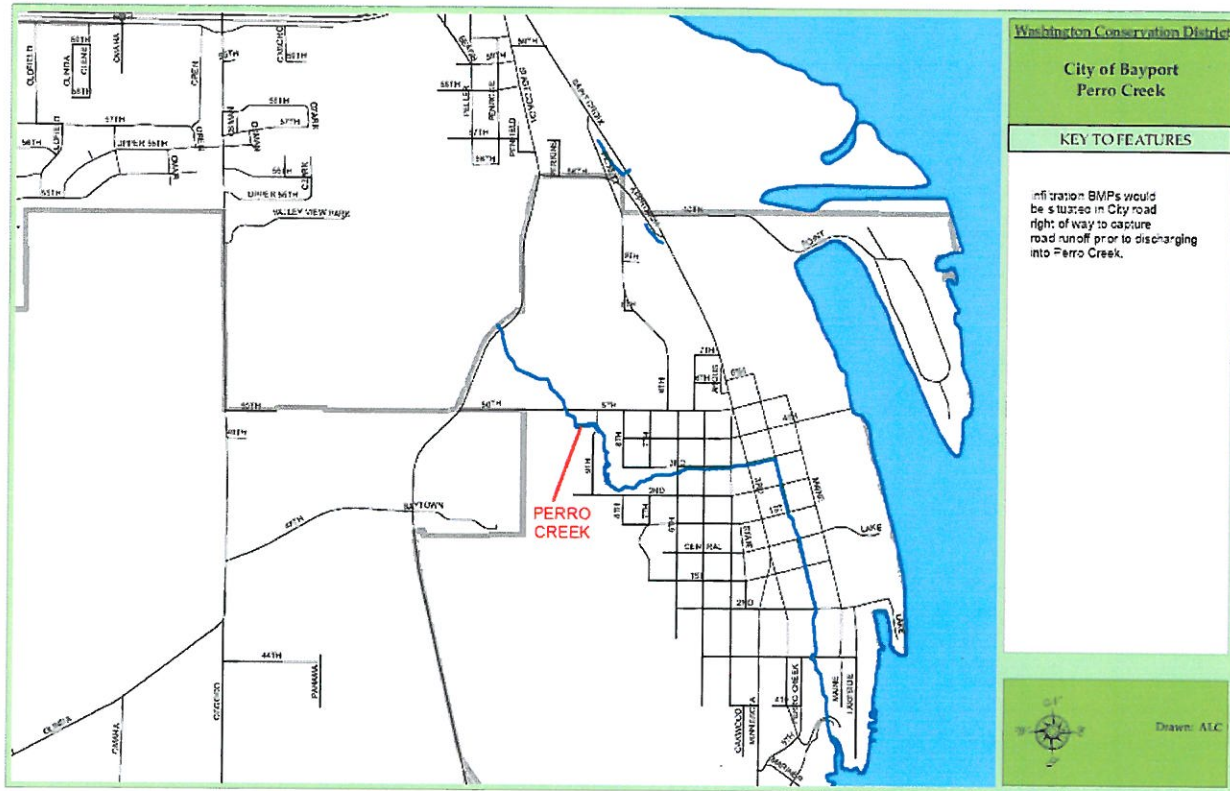
2013 – Complete grant requirements, submit final report

PROJECT GOALS:

1. Bayport: retrofit stormwater treatment facilities to capture runoff prior to entering Perro Creek (ultimately the St. Croix River).
2. Bayport: work closely with City staff (Administration and Public Works) and the Council to complete design and installation work. Education of City staff regarding water quality improvement and MSCWMO performances standards will be a major goal of this project.
3. Stillwater: work closely with City staff (engineering) and council to increase volume control on 2011 and 2012 street reconstruction projects from $> \frac{1}{2}$ " to 1.0" for reconstructed surfaces. Projects will provide stormwater treatment in areas where treatment does not currently exist (runoff currently drains to the St. Croix River).
4. Bayport and Stillwater: Total phosphorus reduction of 26-30 pounds per year through the completion of the proposed projects.
5. Bayport and Stillwater: Promote the project through newsletters, articles, etc. to educate local residents on water quality improvement projects.

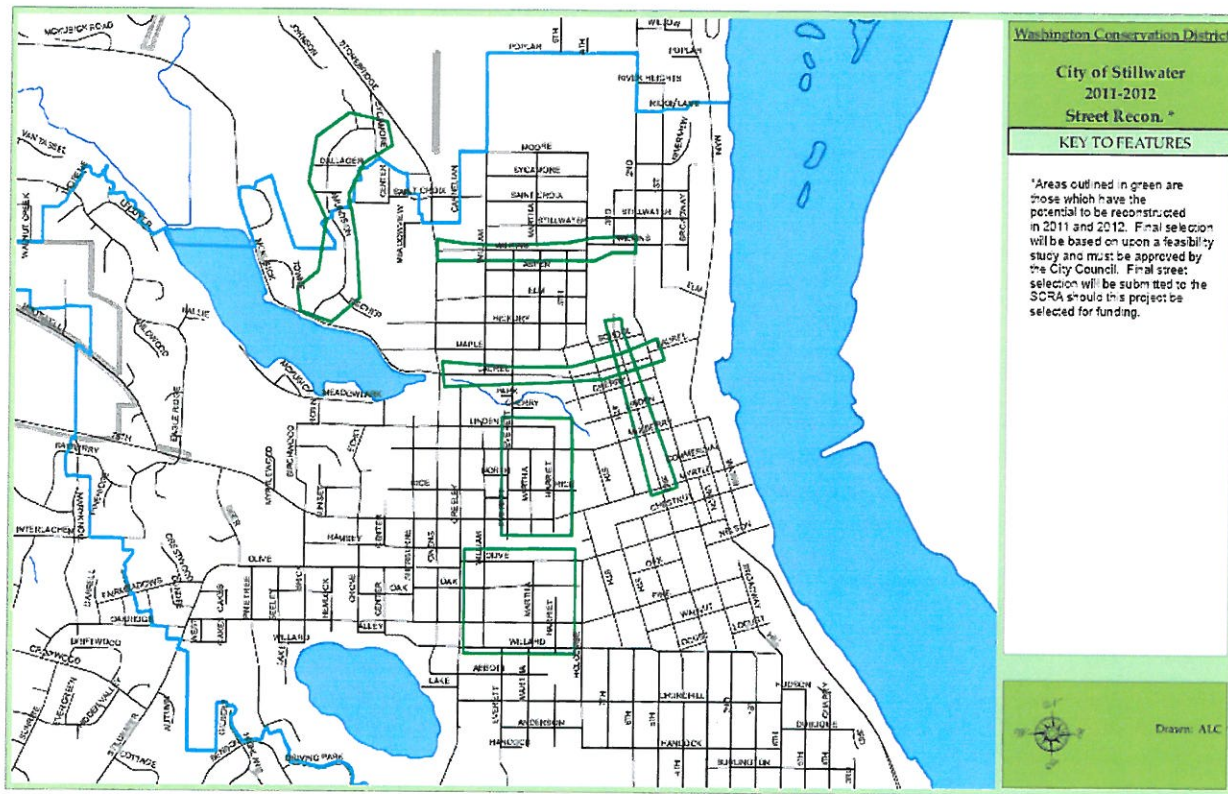
PROPOSED PROJECT LOCATION MAPS

CITY OF BAYPORT – PERRO CREEK



In the City of Bayport the project is focused on installing stormwater management facilities within the City right-of-way to capture runoff before it enters Perro Creek. Perro Creek is a direct tributary to Lake St. Croix. It is approximately 1.8 miles long and flows through the City of Bayport. The Middle St. Croix Watershed Management Organization (MSCWMO) monitors the water quality of Perro Creek. In 2009, Perro Creek discharged 242 pounds of phosphorus into Lake St. Croix.

CITY OF STILLWATER – DRAINS TO ST. CROIX



In the City of Stillwater, the project is working to enhance stormwater treatment features so they go above and beyond MSCWMO (performance standards) and City requirements (such as MS4 and ORVW) when they are installed as part of City street reconstruction projects in 2011 and 2012. Currently, the City of Stillwater is required to provide a minimum of 1/2" volume control for all reconstructed street surfaces (per MSCWMO performances standards). The MSCWMO is working with the City of Stillwater to increase volume control standards to >1/2" up to 1" for street reconstruction projects in 2011 and 2012.

The City of Stillwater is proposing to reconstruct 1.5 miles of residential streets directly tributary to Lake St. Croix in 2011 and 2012. Specific streets are selected following a feasibility study and council approval, but a map of priority areas is provided. Prior to the start of the project, the runoff from the majority of these streets (in the priority areas) enters the St. Croix River without or with minimal treatment. Because these streets are located in the portions of Stillwater that are highly developed, small innovative infiltration type BMPs or infiltration benches are being installed to meet the >1/2" – 1.0" volume control for redeveloped streets in the project area.

It was estimated that by enhancing the volume control standard for the 2011 and 2012 street reconstruction projects in Stillwater, a 20-pound per year phosphorus reduction could be achieved by the completion of the projects in 2012 (10 pound reduction per year).

PROJECT UPDATE – JANUARY 2013

CITY OF BAYPORT:

Final work on the raingarden features initially installed in 2011 was completed in 2012. The follow-up work included the installation of a concrete level spreader in the raingarden located on 2nd Avenue adjacent to the People's Church in Bayport. The "church raingarden" takes large amounts of runoff from 2nd Avenue and Highway 95. The force at which the runoff enters the garden required the installation of a level spreader to prevent erosion and damage to the raingardens functionality.

CITY OF STILLWATER

In 2012, The City of Stillwater completed street reconstruction and rehabilitation work on the following roadways that drain to the St. Croix River which previously had minimal stormwater treatment in place: Everett Street, Martha Street, Harriet Street, Rice Street, Linden Street, Laurel Street and 3rd Street. The City of Stillwater's engineering department completed the design for the drainage patterns, stormsewer, curb cuts, pond benches, raingarden (cross sections and quantities) for each street included in this project. A portion of the City's engineering hours are being used as match for this project as well as a portion of the funds spent on materials for the implementation of this project. The Middle St. Croix WMO will complete final planting plans for the three raingardens designed as part of this project. Final installation and planting of these gardens will occur in the spring of 2013 as soon as the ground is thawed and ready for planting.

A total of three raingardens have been designed and partially implemented as part of this project. The raingardens are located at the intersection of Linden and Harriet St. in Stillwater, 208 Harriet Street, and at the end of Rice Street.

In addition to raingardens, an existing stormpond, which accepts stormwater runoff from 67 acres of residential property in the City of Stillwater has been retrofit to create an infiltration bench to provide volume control as well as water quality improvements before the pond outlets to the St. Croix River. In addition to the pond retrofit, a new section of stormsewer was installed at the end of North 3rd Street to convey stormwater runoff down a very steep slope to the existing (retrofit) pond in a controlled manner in an effort to prevent steep slope erosion and the contribution of Total Suspended Solids to the St. Croix.

Bioretention Projects:

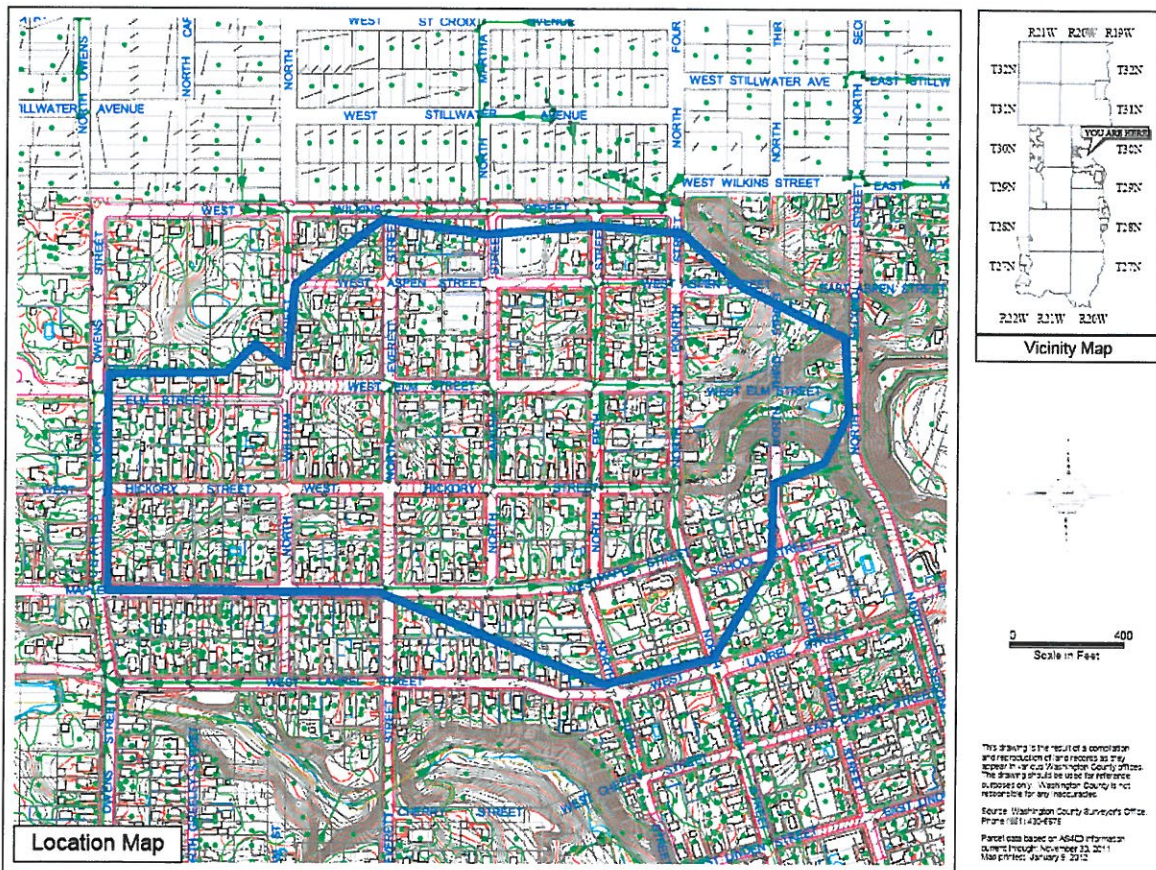
Intersection of Linden and Harriet Street: This raingarden captures runoff from 26,000 square feet of residential roadway and residential properties in the City of Stillwater. The estimated load reductions are as follows: *TP: 0.31 lbs/year.*

208 Harriet Street: This raingarden captures runoff from 56,628 square feet of residential roadway and residential properties in the City of Stillwater. The estimated load reductions are as follows: *TP: 0.67 lbs/year*

End of Rice Street: Rice Street dead-ends at the top of the Bluff overlooking the St. Croix River. Problems related to erosion and stormwater runoff in this area have been an issue for the City for several years. To address the issue, a raingarden is being installed to capture runoff from 13,968 square feet of residential roadways and residential properties. The estimated load reductions are as follows: *TP: 0.15 lbs/year.*

4th Street Ravine Improvements:

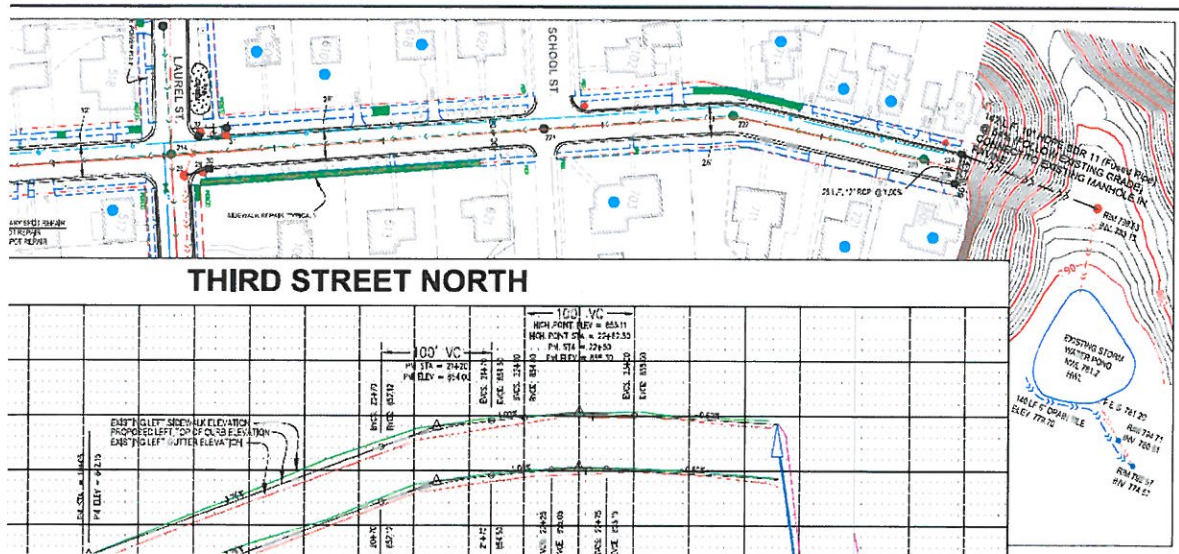
The 4th street ravine in Stillwater captures runoff from a 67 acre drainage area dominated by residential development. At the outlet of the 4th street ravine, the City constructed a storm pond (P1089) to help settle out sediments and pollutants prior to its discharge to the St. Croix River (pond overflow is piped to the river) at MS4 outfall D1390. In an effort to improve the quality of the water discharging to the St. Croix, the City took steps as part of this street reconstruction project to make improvements to the existing ravine and storm pond. The drainage area of the 4th Street Ravine is shown in the figure below (67 acres total).



North Third St. 3rd Street: Prior to the completion of this project, North 3rd Street in Stillwater dead-ended at the 4th street ravine. Runoff generated from North 3rd Street sheet flowed off of the dead-end and into the ravine. The lack of an armored controlled inlet for the stormwater flowing into the ravine, Pond-1089 and eventually the St. Croix caused issues related to unstable slopes and erosion, which was contributing excess sediment and phosphorous to downstream water bodies. To address the end of 3rd street issue, the City implemented ravine stabilization techniques and installed 142 linear feet of 10” HDPE (fused pipe) to control the entrance of runoff into the ravine and stabilize the slopes adjacent to the dead-end of North 3rd Street. The estimated load reductions are as follows: *TSS: 22.1 tons/year, TP: 22lbs/year.*

Modifications to Existing Stormpond (Pond-1089): In an effort to increase volume control and dissolved phosphorous removal from runoff circulating through the 4th Street Ravine and Pond-1089 prior to its discharge into the St. Croix at MS4 outfall D1390, the City completed pond modifications. The side-slopes of Pond-1089 were regraded to create an infiltration bench. 140 linear feet of 6” drain tile were installed below granular fill on the subtle bench above the ponds normal water level. During rain events, the storm pond bounces. When the bounce occurs, pond runoff that would normally exit the pond through the normal outlet must first flow through the infiltration bench. A percentage of the runoff is infiltrated on the bench rather than exiting the pond and moving towards the MS4 outfall at the river. Adding infiltration benches to existing stormponds around the City has helped Stillwater maximize stormwater treatment. The estimated load reductions are as follows: *TP removal: 34.42 pounds/year.*

The figure below shows the plan view for the pond bench and the newly installed 10” pipe off of Third Street North.



Total Estimated Project Load Reductions for 2012 Stillwater Street Improvement Projects:

Phosphorous: 57.55 pounds/year

Total Suspended Solids: >22.1 tons/year (TSS not calculated for bioretention features, so total amount is likely greater than reported).

APPENDIX A – INVOICE FOR REIMBURSEMENT

Middle St. Croix Watershed Management Organization
 1380 West Frontage Rd, Highway 36, Stillwater, MN 55082
Green Streets Initiative - Stillwater and Bayport

Total Grant Amount \$ 70,000.00
 Grant Amount Available to Date \$ 29,279.49
 Grant Amount Available After Current Invoice \$ 7,601.09
 Total Reimbursement Requested \$ 21,678.40
 Invoicing Period 07/19/2012 - 01/24/2013
 Invoice Number TBD
 Invoice Date 01/24/13
 Project Contact Amy L. Carolan, Acarolan@mnwcd.org, 651-275-1136 x. 22

PROJECT EXPENSES

Description	Qty	Unit	Unit Cost	Amount	Grant/In-Kind/Cash
CITY OF BAYPORT					
MATCH					
Project Management and Oversight by MSCWMO	2	HRS	\$ 63.00	\$ 126.00	In-Kind
				126.00	subtotal
GRANT FUNDS					
Level Spreader with splash pad (installed)	1	LS	\$1,360.00	\$ 1,360.00	Grant Funds
Installation of 3 yards of mulch	1	LS	\$1,250.00	\$ 1,250.00	Grant Funds
Add second level of level spreader	1	LS	\$350.00	\$ 350.00	Grant Funds
				2,960.00	subtotal
CITY OF STILLWATER					
MATCH					
Project Engineering by City of Stillwater for Stillwater Projects**	1	LS	\$15,169.55	\$15,169.55	In-Kind
Project Management and Oversight by MSCWMO	11	HRS	\$63.00	\$693.00	In-Kind
				\$15,862.55	subtotal
GRANT FUNDS					
Installation of stand-pipes to correct drainage issues	1	LS	\$475.00	\$ 475.00	Grant Funds
Stormwater Treatment Implementation (per 2012 street project plans)	1	LS	\$18,243.40	\$ 18,243.40	Grant Funds
				\$18,718.40	subtotal

** Stillwater assumes that 5% of total project engineering costs were spent on BMP design

APPENDIX B – SUPPORTING DOCUMENTS

Stillwater



All-Weather Services 4535 Osgood Ave. N. Stillwater, MN 55082

Invoice 2012-8-20

Amundson garden repair

Install 2 tees with stand pipes, retaining wall with drainage rock \$475.00

INVOICE TOTAL \$475.00

Bayport



All-Weather Services 4535 Osgood Ave. N. Stillwater, MN 55082

Invoice 2012-7-19

BAYPORT GARDENS (CHURCH)

Installation of level spreader with splash pad.	\$1360.00
Install 3 yards of mulch pull weeds	\$125.00

INVOICE TOTAL \$1485.00

Bayport



All-Weather Services 4535 Osgood Ave. N. Stillwater, MN 55082

Invoice 2012-8-20

BAYPORT GARDENS (CHURCH)

Increase height of level spreader	\$350.00
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INVOICE TOTAL \$350.00

Costs as of 12/18/2012

Item No.	Item	Unit	Contract Quantity	To Date Quantity	Unit Price	Amount
31	Common Excavation Rain Garden (EV)	CY	250		\$ 12.80	\$ -
33	Select Granular Borrow(CV) (pond bench)	CY	20	42.00	\$ 10.70	\$ 449.40
37	Granular / Compost Backfill Rain Garden (LV)	CY	150	18.00	\$ 17.10	\$ 307.80
40	Rip Rap Class I (rain garden entrance flumes)	CY	5		\$ 64.20	\$ -
41	Geotextile Fabirc	SY	20		\$ 4.30	\$ -
63	Connect to Existing Manhole or Catch Basin	EA	6	2.00	\$ 1,120.00	\$ 2,240.00
77	10" HDPE SDR 11, Storm Sewer Fused Pipe	LF	150	175.00	\$ 85.60	\$ 14,980.00
78	12" RC Pipe Sewer Design 3006 Cl. V	LF	250	28.00	\$ 36.90	\$ 1,033.20
79	6" Sleeved Perf. Drain Tile (rain gardens, ponds)	LF	300	140.00	\$ 8.55	\$ 1,197.00
80	Construct 2x3 Catch Basin (0-5' Depth)	EA	26	2.00	\$ 1,420.00	\$ 2,840.00
96	MnDOT Seed Mixture 270 (120#/Acre)	LB	550	524.25	\$ 2.35	\$ 1,231.99
97	Category 1 Erosion Control Blanket	SY	2000		\$ 1.05	\$ -
98	Fertilizer, Type 3 (350#/Acre)	LB	1500		\$ 0.59	\$ -
99	Seeding	SY	22000		\$ 0.75	\$ -
100	Hydraulic Soil Stabilizer, Type 5 (2500#/Acre)	LB	12000		\$ 0.96	\$ -
101	Commercial grade landscape edging	LF	350		\$ 3.50	\$ -
102	Hardwood Mulch (3") Rain Garden	SY	160		\$ 6.25	\$ -
						\$ 18,243.40

Engineering Fees (5% of Total)

\$ 15,169.55

Total to date**\$ 33,412.95**

Final raingarden work to be completed by Spring of 2013. To be billed upon project completion.

Stillwater

PROJECT NAME
Contract Quantities
Project NUMBER

Item No.	Item	Unit	Contract Quantity	To Date Quantity	Unit Price	Amount
1	Mobilization (5% max)	LS	1	1.00	\$ 18,000.00	\$ 18,000.00
2	MPCA, SWPPP Permit Fee	LS	1	1.00	\$ 428.00	\$ 428.00
3	Traffic Control	LS	1	1.00	\$ 6,960.00	\$ 6,960.00
4	Remove Existing Concrete Curb & Gutter	LF	10000	10000	\$ 1.95	\$ 19,500.00
5	Remove Existing Stone Curb	LF	4500	8340	\$ 1.60	\$ 13,344.00
6	Remove Existing Bituminous Curb	LF	5500	7560	\$ 0.27	\$ 2,041.20
7	Remove Concrete Sidewalk	SF	20500	20500	\$ 0.43	\$ 8,815.00
8	Remove Bituminous pavement	SF	500	8888	\$ 1.05	\$ 9,332.40
9	Remove Storm Structure and Casting	EA	31	30.00	\$ 214.00	\$ 6,420.00
10	Remove manhole or catch basin casting only	EA	11	18.00	\$ 161.00	\$ 2,898.00
11	Remove Sign (and post) and salvage to City	EA	40	9.00	\$ 21.40	\$ 192.60
12	Remove tree (8" diameter or less) and stump	EA	1		\$ 803.00	\$ -
13	Remove tree (36" to 48" diameter) and stump	EA	1		\$ 2,250.00	\$ -
14	Remove Storm Sewer Pipe (12" or less)	LF	100	140.00	\$ 8.55	\$ 1,197.00
15	Remove Existing Gate Valve	EA	3	4.00	\$ 268.00	\$ 1,072.00
16	Remove Hydrant	EA	2	2	\$ 268.00	\$ 536.00
17	Remove Existing Tree	EA	1	1.00	\$ 1,070.00	\$ 1,070.00
18	Furnish and Install Sign (includes post)	EA	40	9.00	\$ 105.00	\$ 945.00
19	Sawing Concrete Pavemant	LF	300	580	\$ 3.20	\$ 1,856.00
20	Sawing Bituminous Pavemant	LF	1000	1510	\$ 1.95	\$ 2,944.50
21	Common Laborer	HR	40	12.75	\$ 64.20	\$ 818.55
22	1 C.Y. Backhoe	HR	40		\$ 96.30	\$ -
23	10 C.Y. Truck	HR	40	1.25	\$ 85.60	\$ 107.00
24	3 C.Y. Front End Loader	HR	40	11.75	\$ 102.00	\$ 1,198.50
25	Street Sweeper w/ Pickup Broom	HR	10	5.00	\$ 124.00	\$ 620.00
26	Water for Dust Control	Mgal	15	280.00	\$ 28.20	\$ 7,896.00
27	Rehabilitate top 2 feet of brick manhole	EA	8	8.00	\$ 963.00	\$ 7,704.00
28	Seal manhole/catch basin external	EA	105	97.00	\$ 155.00	\$ 15,035.00
29	Seal manhole/catch basin internal	EA	46	42.00	\$ 482.00	\$ 20,244.00
30	Profile rings (prior to internal seal)	EA	20	12.00	\$ 161.00	\$ 1,932.00
31	Common Excavation Rain Garden (EV)	CY	250		\$ 12.80	\$ -
32	Subgrade Excavation (EV)	CY	1000	8174.00	\$ 7.50	\$ 61,305.00
33	Select Granular Borrow(CV) (pond bench) - 2nd street	CY	20	42.00	\$ 10.70	\$ 449.40
34	Select Topsoil Borrow(LV)	CY	2000	1480.00	\$ 17.10	\$ 25,308.00
35	Remove Existing Subgrade (6" depth)	SY	32400	32400	\$ 1.70	\$ 55,080.00
36	Tolerance Class V Aggregate	RS	97	97.0	\$ 187.00	\$ 18,139.00
37	Granular / Compost Backfill Rain Garden (LV)	CY	150	18.00	\$ 17.10	\$ 307.80
38	Subgrade Backfill (CV)	CY	1000		\$ 8.05	\$ -
39	Class 5 Aggregate Base Course	TN	4000	12908.32	\$ 8.55	\$ 110,366.14
40	Rip Rap Class I (rain garden entrance flumes)	CY	5		\$ 64.20	\$ -
41	Geotextile Fabirc	SY	20		\$ 4.30	\$ -
42	Bituminous Patching Mixture	TN	300	65.74	\$ 81.90	\$ 5,384.11
43	1.5-inch mill (includes disposal)	SY	21600	21600.00	\$ 1.15	\$ 24,840.00
44	Reclaim Bituminous full depth Mill	SY	32400	32400	\$ 0.85	\$ 27,540.00
45	Wear Course Mixture LVWE35030B (Driveways) (2-inch)	SY	1000	620.60	\$ 11.60	\$ 7,198.96
46	Bituminous Materail for Tack Coat	Gal	2700	1750.00	\$ 2.30	\$ 4,025.00
47	Wear Course Mixture SPWEB340B	TN	5400	2523.54	\$ 58.10	\$ 146,617.67
48	Base Course Mixture SPNWB330B	TN	4800	4764.25	\$ 54.30	\$ 258,698.78
49	Adjust Gate Valve (manual or ring adjustment)	EA	7	15	\$ 107.00	\$ 1,605.00
50	Salvage, Reset, and Adjust Gate Valve Top Section	EA	27	27.00	\$ 268.00	\$ 7,236.00
51	Replace gate valve top section and lid	EA	11	16.00	\$ 161.00	\$ 2,576.00
52	Manhole frame adjustment (Neenah R1979 or equal)	EA	46	16.00	\$ 161.00	\$ 2,576.00
53	Manhole casting (R1733 or equal) (includes adjust)	EA	10	18.00	\$ 963.00	\$ 17,334.00
54	Salvage, reset, and Adjust Casting (storm & sanitary)	EA	45	38.00	\$ 696.00	\$ 26,448.00
55	8-inch PVC SDR 35 Sanitary Sewer	LF	225	225.00	\$ 33.20	\$ 7,470.00
56	Cured In Place Pipe 8" sanitary sewer (8' or less)	EA	2	2.00	\$ 2,870.00	\$ 5,740.00
56a	Cured In Place Pipe 6" sanitary sewer (8' or less)	EA	6	7.04	\$ 2,870.00	\$ 20,204.80
56b	Cured In Place Pipe 12" sanitary sewer (8' or less)	EA	7	7.00	\$ 3,040.00	\$ 21,280.00
57	Cut protruding service tap	EA	9	8.00	\$ 1,280.00	\$ 10,240.00
58	8" x 4" PVC Wye	EA	2	1.00	\$ 139.00	\$ 139.00
59	4-inch PVC SDR 26 Sanitary Sewer Lateral	LF	60	56.00	\$ 23.30	\$ 1,304.80

Stillwater

PROJECT NAME
Contract Quantities
Project NUMBER

60	Connect 6" Service to 12" VCP	EA	1	1.00	\$ 1,120.00	\$ 1,120.00
61	6-inch PVC SDR 26 Sanitary Sewer Lateral	LF	60	75.00	\$ 35.30	\$ 2,647.50
62	48-inch dia. Sanitary sewer manhole	EA	3	3.00	\$ 2,940.00	\$ 8,820.00
63	Connect to Existing Manhole or Catch Basin	EA	6	9.00	\$ 1,120.00	\$ 10,080.00
64	3/4" Curb Stop and box with rod	EA	60	60.00	\$ 289.00	\$ 17,340.00
65	Shutoff Existing service at Corp. stop	EA	4	11.00	\$ 642.00	\$ 7,062.00
66	Replace lead goose neck with copper service pipe	EA	4	18	\$ 642.00	\$ 11,556.00
67	Connect to Existing Galvanized Water Service	EA	60	59.00	\$ 289.00	\$ 17,051.00
68	Connect to Existing Corp	EA	60	80.80	\$ 289.00	\$ 23,351.20
69	Remove Galvanized Water Service	LF	2000	1424.00	\$ 0.54	\$ 768.96
70	6" DIP Watermain Cl. 52	LF	1100	1097.00	\$ 38.50	\$ 42,234.50
71	6" Wet pressure tap	EA	8	11.50	\$ 3,050.00	\$ 35,075.00
72	6" Gate Valve	EA	10	11.00	\$ 1,200.00	\$ 13,200.00
73	8" Gate Valve (on existing main on 3rd St.)	EA	3	3.89	\$ 3,420.00	\$ 13,303.80
74	F&I Hydrant (Waterous WB-67)	EA	4	4.00	\$ 4,170.00	\$ 16,680.00
75	3/4" Type K Copper Water Service	LF	2000	1900.00	\$ 13.40	\$ 25,460.00
76	2" Type K Copper Water Service	LF	30	104.00	\$ 45.00	\$ 4,680.00
77	10" HDPE SDR 11, Storm Sewer Fused Pipe	LF	150	175.00	\$ 85.60	\$ 14,980.00
78	12" RC Pipe Sewer Design 3006 Cl. V <i>2 feet</i>	LF	250	349.00	\$ 36.90	\$ 12,878.10
79	6" Sleeved Perf. Drain Tile (rain gardens, ponds)	LF	300	140.00	\$ 8.55	\$ 1,197.00
80	Construct 2x3 Catch Basin (0-5' Depth) <i>2</i>	EA	26	28.00	\$ 1,420.00	\$ 39,760.00
81	Construct 48" Catch Basin (0-7' Depth)	EA	4	3.00	\$ 1,770.00	\$ 5,310.00
82	F&I 18" RCP FES (& connect to existing HDPE)	EA	1	1.00	\$ 1,570.00	\$ 1,570.00
83	Relocate Existing CB and reset casting	EA	3	3.00	\$ 2,140.00	\$ 6,420.00
84	Grout inverts of existing structure	EA	5		\$ 321.00	\$ -
85	5" Concrete Sidewalk Design 3Y32 Type A (Granite)	SY	2500	4224.30	\$ 33.50	\$ 141,514.05
86	Concrete Curb and Gutter B618 Machine Install <i>3OLF</i>	LF	13000	13065.90	\$ 9.20	\$ 120,206.28
87	Concrete Curb and Gutter B418 Machine Install	LF	6000	5902.00	\$ 8.80	\$ 51,937.60
88	Concrete valley gutter 30-inch wide	LF	640	87.00	\$ 13.40	\$ 1,165.80
89	5" Concrete Driveway Design 3Y32 Type A (Granite)	SY	1200	1038.20	\$ 29.80	\$ 30,938.36
90	Saw and seal existing concrete curb	EA	50	68	\$ 14.70	\$ 999.60
91	Concrete Curb and Gutter (various types) Hand Install	LF	100	846.10	\$ 15.00	\$ 12,691.50
92	Truncated Dome Ped Ramp Panels	SF	1100	916.00	\$ 32.10	\$ 29,403.60
93	Catch Basin Casting (Neeah R3067 or equal) (includes adjust)	EA	36	41.30	\$ 589.00	\$ 24,325.70
94	Connect to existing steps from residence (3 to 5 foot width)	EA	4	2.00	\$ 107.00	\$ 214.00
95	Curb Inlet Protection	EA	40	39.00	\$ 69.60	\$ 2,714.40
96	MnDOT Seed Mixture 270 (120#/Acre)	LB	550	524.25	\$ 2.35	\$ 1,231.99
97	Category 1 Erosion Control Blanket	SY	2000		\$ 1.05	\$ -
98	Fertilizer, Type 3 (350#/Acre)	LB	1500	300.00	\$ 0.59	\$ 177.00
99	Seeding	SY	22000	9404.00	\$ 0.75	\$ 7,053.00
100	Hydraulic Soil Stabilizer, Type 5 (2500#/Acre)	LB	12000	4150.00	\$ 0.96	\$ 3,984.00
101	Commercial grade landscape edging	LF	350		\$ 3.50	\$ -
102	Hardwood Mulch (3") Rain Garden	SY	160		\$ 6.25	\$ -
						\$ 1,783,622.14

MUNICIPALITY: STILLWATER, MINNESOTA

PROJECT NO.: 2012-02

L.I. NO. 393

ACCOUNT NUMBER

EXPENDITURES:

2012 Street Improvement Project

PROJECT NAME

	Actual Costs to August 15, 2012	Estimated Completion Costs	Total Costs
Construction Costs	\$932,634.00	\$859,687.50	\$1,936,410.90
Engineering Department	\$253,391.00	\$50,000.00	\$303,391.00
(Excluding Assessment Roll Preparation)			
Preliminary Studies			
Feasibility			
Plans & Specifications			
Contract Administration			
Field Administration			
Consulting Engineer	\$2,750.00	\$2,000.00	\$4,750.00
Fiscal Agents and Bonding Costs			
Legal			
City Attorney			
Bond Attorney			
Private Property Easements and Land Acquisition			
Administrative Costs			
Other Costs			
Postage	\$391.50	\$391.50	\$783.00
Printing & Publishing	\$240.00	\$120.00	\$360.00
Other Professionals			
Misc.			
Water Board Costs			
Assessment Roll Preparation			
Engineering Department		\$500.00	\$500.00
County		\$8,310.00	\$8,310.00
Assessment Notice Publication			
Interest on Capital @			\$9,193.05
Roll Adopted			
Contingency		\$20,000.00	\$20,000.00
Grand Total			\$2,283,697.95

Amount to be Received from Special Assessments
 Amount to be Received from Stormwater grant
 Amount to be Received from Water Board
 Amount to be Received from Capital Projects Funds

\$1,169,998.31
\$31,000.00
\$45,796.16
\$1,036,903.48