



**Public Works Committee Meeting
Monday, September 12, 2016
1:00 PM**

Agenda

- 1. Call to Order**
- 2. Committee Business**
 - A. Street Improvements Planning
 1. Prioritization of Street Improvement Needs
 - B. Short Term Street Repair Needs
 1. 15th Street Repairs
 2. 30th St. Bridge/Culvert Replacement/Repair.
 3. Pennington Avenue Erosion Issue
 - C. WSB Construction Inspection Proposal
- 5. Adjournment**

City of Afton
3033 St. Croix Trl, P.O. Box 219
Afton, MN 55001

Meeting Date Sept. 12, 2016

Personnel Committee

To: Public Works Committee Members
From: Ron Moorese, City Administrator
Date: September 8, 2016
Re: Street Improvements Planning

Prioritization of Street Improvement Needs

The Council is meeting in a joint work session with the Public Works Committee on September 14 to review and discuss the Public Works Committee's recommendations regarding priority street improvement needs as part of a process to develop a plan for the prioritization of street improvement needs and the timing of meeting those needs.

The following materials are attached to assist the Public Works Committee in prioritizing street improvement needs.

- Spreadsheet from the PASER study with information on street lengths and condition
- Current Five-Year Street Improvement CIP prepared by Diane Hankee, City Engineer
- Road Cost Spreadsheet
- Road Dimensions Spreadsheet

DRAFT
Capital Improvement Plan 2007-2012

ROAD PROJECTS BY LOCATION AND TYPE																	
Location or Type	Year	Street	From	To	Rating ⁽¹⁾	Width (ft)	Length (ft)	Area (sq)	Recommended Maintenance	Estimated Maintenance Cost ^{(2) (3)}				Street Total	Comments		
										Crack Sealing Cost	Sealcoating Cost	Reclamation and Pave Cost ⁽⁴⁾	Other				
AH	2008	Afton Hills Court	Afton Hills Drive	east	2	12	875	1169.7	R	\$	-	\$	-	\$	38,325.00	bad transverse cracking; potholes; alligator cracking the length of street	
AH	2008	Afton Hills Lane	Afton Hills Court	Afton Hills Drive, tee	2	21	4704	10976.0	R	\$	-	\$	-	\$	360,561.60	transverse cracking; potholes; alligator cracking the length of the street	
AH	2008	Afton Hills Drive	Afton Hills Drive, tee	Afton Hills Court	3	20	1020	2266.7	R	\$	-	\$	-	\$	74,460.00	bad raveling @ tee, transverse/longitudinal cracking; alligator cracking; patches in poor condition	
DT	2009	37th Street	St. Croix Trail	west end	2	14	600	933.3	R	\$	-	\$	-	\$	30,660.00	1st half of the street is gravel with ~300' of bituminous pavement west of that, 2 rating for 1st half of bituminous section and is in very poor condition; 2.5 other half is rutted with potholes	
DT	2009	31st Street	Pike Avenue	St. Croix Trail	2.5	24	610	1626.7	R	\$	-	\$	-	\$	53,436.00	several potholes breaking up; patches looking poor, some rutting; transverse cracking	
DT	2009	31st Street	St. Croix Trail	Perrot Avenue	2.5	20	350	777.8	R	\$	-	\$	-	\$	25,550.00	D-412 curb on north side; poor patches breaking up; rutting; edge raveling; alligator cracking; potholes	
DT	2009	36th Street	St. Croix Trail	west end	2.5	14	660	1026.7	R	\$	-	\$	-	\$	33,726.00	poor patching; edge broken up; potholes; alligator cracking; rutting	
DT	2009	Perrot Avenue	31st Street	Afton Boulevard	2.5	18	400	800.0	R	\$	-	\$	-	\$	26,280.00	poor patches; alligator cracking; rutting	
DT	2009	Pike Avenue	East end of Parking Lot	31st Street	2.5	16	350	622.2	R	\$	-	\$	-	\$	20,440.00	poor patches; potholes; transverse cracking; block cracking; alligator cracking	
DT	2009	Upper 34th Street	St. Croix Trail	west end	3	15	305	508.3	R	\$	-	\$	-	\$	16,698.75	alligator cracking; transverse cracking; edge cracking; some potholes	
DT	2009	Pennington Avenue	Afton Boulevard	Cul-De-Sac	3.5	15	1800	3000.0	R	\$	-	\$	-	\$	98,550.00	transverse/longitudinal cracking; patching (fair-poor condition); block cracking; rutting	
DT	2009	35th Street	St. Croix Trail	Perrot Avenue	3.5	16	275	488.9	R	\$	-	\$	-	\$	16,060.00	poor patching; edge cracking; alligator cracking	
DT	2009	Perrot Avenue	Afton Boulevard	32nd Street	3.5	16	345	613.3	R	\$	-	\$	-	\$	20,148.00	transverse cracking; block cracking; some rutting; block cracking	
DT	2009	31st Street	Afton Marina Entrance	Pike Avenue	4	20	220	488.9	R	\$	-	\$	-	\$	16,060.00	transverse cracking; block cracking; patches breaking up (intersection @ Pike Ave. looks good)	
DT	2009	Upper 34th Street	Pennington Avenue	west end	4	19	200	422.2	R	\$	-	\$	-	\$	13,870.00	transverse cracks; longitudinal cracks; patching (fair-poor condition); Length of city street to be verified	
DT	2009	32nd Street	Perrot Avenue	St. Croix Trail	4.5	18	405	810.0	R	\$	-	\$	-	\$	26,608.50	patches; block cracking	
DT	2009	33rd Street	St. Croix Trail	west end	4.5	14	340	528.9	R	\$	-	\$	-	\$	17,374.00	transverse cracking; longitudinal cracks; block cracking; edge cracking/raveling; alligator cracking	
DT	2009	34th Street	St. Croix Trail	west end	4.5	14	310	482.2	R	\$	-	\$	-	\$	15,841.00	2 edges broken up; 7 north 10' of road is good shape	
L	2010	42nd Street	Trading Post Trail	190' west	2	22	190	464.4	R	\$	-	\$	-	\$	15,257.00	severe alligator cracking; some block cracking; road in poor condition	
L	2010	Patday Bridge Avenue	45th Street	Cul-De-Sac	3.5	24	825	2200.0	R	\$	-	\$	-	\$	72,270.00	transverse cracks; bad alligator cracking; block cracking; road still looks to be fairly stable	
L	2010	Paradox End Avenue	42nd Street	Cul-De-Sac	4	24	1490	3973.3	R	\$	-	\$	-	\$	130,524.00	transverse cracking with secondary cracks; lots of alligator cracking	
L	2010	50th Street	Gravel section	St. Croix Trail	4	20	770	1711.1	R	\$	-	\$	-	\$	56,210.00	alligator cracking with some breaking up; patches; transverse cracks with secondary cracking; some block cracking	
L	2010	45th Street	St. Croix Trail	Pasture Ridge Road	4.5	28	330	1026.7	R	\$	-	\$	-	\$	33,726.00	transverse cracks; block cracking; surface wearing; alligator cracking @ intersection	
L	2008	River Road	St. Croix Trail	50th Street	<5	15	5430	9050.0	R	\$	-	\$	-	\$	297,300.00	6.5 transverse cracks; minor potholes; alligator cracks; some transverse cracking (~530'); 5 west side of road has rutting/raveling (~530'); 5.5 rutting with patches that are fair-poor (~2400'); 6 transverse cracks; slight alligator cracking; some block cracking; 2007 likely < 5.0 has not been officially related.	
U	2010	15th Street	Neal Avenue	350' west	3	23	350	894.4	R	\$	-	\$	-	\$	29,382.50	bad alligator cracking; transverse cracks with secondary cracking; edge cracking; patches in poor condition	
U	2010	Oakgreen Avenue	15th Street	Gravel Section south	3	17	780	1473.3	R	\$	-	\$	-	\$	48,399.00	transverse cracking; some severe alligator cracking; patching in poor condition	
U	2010	32nd Street	Trading Post Trail	Cul-De-Sac	3.5	25	2310	6416.7	R	\$	-	\$	-	\$	210,787.50	transverse cracking with secondary cracks; some alligator cracking; block cracking; 5 west end; 2 east end (severe alligator cracking)	
O	2007	Sand Hill Road	Stagecoach Trail	East to end	NA	16	900	1600.0	New Construction	\$	-	\$	-	\$	186,622.00	rough estimate; unpaved street; erosion issues; Option II- \$88,786- Shape N Pave plus Drainage Improvements	
O	2009	Stormwater Drainage	Downtown	Downtown	NA	NA	NA	NA	Stormwater Drainage	\$	-	\$	-	\$	2,000,000.00	Rough Estimate	
C	2007	10th Street	Neal Avenue	120' west	7	25	120	333.3	C	\$	116.67	\$	-	\$	116.67	transverse cracks	
C	2007	10th Street	Neal Avenue	180' east	7	25	180	500.0	C	\$	175.00	\$	-	\$	175.00	large patch @ Quest driveway entrance (looks ok)	
C	2007	33rd Street	St. Croix Trail	east end	7	24	270	720.0	C	\$	252.00	\$	-	\$	252.00	parking lot for Afton Inn/Press; few transverse cracks	
C	2007	4th Street	Minar Avenue	Morgan Avenue	7	20	1100	2444.4	C	\$	855.56	\$	-	\$	855.56	transverse cracks 1/4"	
C	2007	55th Street	Osgood Avenue	Trading Post Trail	7	24	1020	2720.0	C	\$	952.00	\$	-	\$	952.00	few transverse cracks	
C	2007	57th Street	Trading Post Trail	Osgood Avenue	7	24	1210	3228.7	C	\$	1,129.33	\$	-	\$	1,129.33	few transverse cracks; good shape	
C	2007	Afton Boulevard Court	Afton Boulevard	Cul-De-Sac	7	25	720	2000.0	C	\$	700.00	\$	-	\$	700.00	small edge crack; large patch near Afton Boulevard (looks ok)	
C	2007	Minar Avenue	3rd Street	4th Street	7	20	555	1233.3	C	\$	431.66	\$	-	\$	431.67	transverse cracks 1/4"-1/2"; road in good condition	
C	2007	Osgood Avenue	55th Street	Cul-De-Sac	7	24	980	2613.3	C	\$	914.67	\$	-	\$	914.67	few transverse cracks; good shape	
C	2007	Osgood Avenue	57th Street	55th Street	7	24	1050	2800.0	C	\$	980.00	\$	-	\$	980.00	few transverse cracks; good shape	
C	2007	Osgood Avenue	Cul-De-Sac	57th Street	7	24	1220	3253.3	C	\$	1,138.67	\$	-	\$	1,138.67	few transverse cracks; good shape	
C	2007	Parsons Court	45th Street	Cul-De-Sac	7	24	990	2640.0	C	\$	924.00	\$	-	\$	924.00	transverse cracks (fairly tight)	
C	2007	Pike Avenue	31st Street	Afton Boulevard	7	13	265	362.8	C	\$	133.97	\$	-	\$	133.97	few transverse cracks	
C	2007	Valley Creek Trail	Neal Avenue	Trading Post Trail	7	24	9205	24546.7	C	\$	8,591.33	\$	-	\$	8,591.33	transverse cracks; edge cracking (50'); few cracks in wheel path (20'); patch (looks ok)	
C	2007	Valley Creek Trail	Trading Post Trail	Stagecoach Trail	7	24	2080	5646.7	C	\$	1,941.33	\$	-	\$	1,941.33	transverse cracking	
C	2007	Pheasant Court	50th Street	Cul-De-Sac	7	24	850	1760.0	C	\$	616.00	\$	-	\$	616.00	few transverse cracks; surface has some wear	
C	2007	30th Street	Neal Avenue	150' west	7.5	23	150	383.3	C	\$	134.17	\$	-	\$	134.17	transverse crack	
C	2007	50th Street	Neal Avenue	150' west	7.5	24	150	400.0	C	\$	140.00	\$	-	\$	140.00	some surface wearing	
C	2007	50th Street	Norcrest Avenue	Neal Avenue	7.5	24	1970	5253.3	C	\$	1,838.67	\$	-	\$	1,838.67	few transverse cracks	
C	2007	50th Street	Odell Avenue	Norcrest Avenue	7.5	24	4915	13106.7	C	\$	4,587.33	\$	-	\$	4,587.33	few transverse cracks	
C	2007	Fahlstrom Place	Indian Trail	Cul-De-Sac	7.5	24	1255	3346.7	C	\$	1,171.33	\$	-	\$	1,171.33	few transverse cracks; B-618 curb and gutter along south side of the east 1/2 of this road	
S	2008	59th Street	Trading Post Trail	Cul-De-Sac	5	24	1080	2880.0	C,S	Done in 2006	\$	3,628.80	\$	-	\$	3,628.80	transverse/longitudinal cracking; some alligator cracking
S	2008	Afton Hills Drive	Stagecoach Trail	Afton Hills Court, tee	5	21	4125	9625.0	C,S	Done in 2006	\$	12,127.50	\$	-	\$	12,127.50	bad patches @ Stagecoach Trail intersection; transverse cracking with some secondary cracks; block cracking; 4.5 parts of east 1/2 of street
S	2008	Odell Avenue	50th Street	Trading Post Trail	5	23	4285	10950.6	C,S	Done in 2006	\$	13,797.70	\$	-	\$	13,797.70	transverse cracking with secondary cracks; block cracking; some small alligator cracking; small patches raveling; minor rutting
S	2008	15th Street	Manning Avenue	800' east	5.5	22	800	1955.6	C,S	Done in 2006	\$	2,464.00	\$	-	\$	2,464.00	transverse cracking with secondary cracks; surface wear; some alligator cracking
S	2008	33rd Street	Norsted Avenue	west end	5.5	25	480	1333.3	C,S	Done in 2006	\$	1,680.00	\$	-	\$	1,680.00	6 transverse cracking with some secondary cracking; 5 alligator cracking along west end
S	2008	42nd Street	Cul-De-Sac	Pasture Ridge Road	5.5	24	1240	3306.7	C,S	Done in 2006	\$	4,166.40	\$	-	\$	4,166.40	transverse cracking with secondary cracks; some block cracking
S	2008	42nd Street	Paradox End Avenue	Trading Post Trail	5.5	24	4580	12213.3	C,S	Done in 2006	\$	15,388.80	\$	-	\$	15,388.80	6 B-618 curb & gutter on both sides; transverse cracks; block cracking; settlement @ storm sewer crossing (~950'); 5 no curb & gutter; transverse cracking with secondary cracks; block cracks; edge cracking; some alligator cracking (~1690'); 6 transverse c
S	2008	Norsted Avenue	south end	33rd Street	5.5	25	1970	5472.2	C,S	Done in 2005	\$	6,895.00	\$	-	\$	6,895.00	6 transverse cracking; block cracking; 5 some alligator cracking (~750' mid block)
S	2008	Pasture Ridge Road	45th Street	42nd Street	5.5	24	2325	6200.0	C,S	Done in 2006	\$	7,812.00	\$	-	\$	7,812.00	transverse cracking with secondary cracking; some block cracking; some edge cracking
S	2008	22nd Street	Neal Avenue	130' west	6	27	130	390.0	C,S	Done in 2006	\$	491.40	\$	-	\$	491.40	7 transverse cracks; slight alligator cracking @ Neal Avenue 5
S	2008	32nd Street	St. Croix Trail	City Trail	6	25	585	1625.0	C,S	Done in 2006	\$	2,047.50	\$	-	\$	2,047.50	slight edge cracking; settled pothole; transverse cracking with some secondary cracks; surface wear. Length of city street to be verified
S	2008	41st Street	Trading Post Trail	Cul-De-Sac	6	24	825	2200.0	C,S	Done in 2006	\$	2,772.00	\$	-	\$	2,772.00	transverse cracking with some secondary cracks; some block cracking
S	2008	42nd Street	Pasture Ridge Road	Paradox End Avenue	6	28	635	1975.6	C,S	Done in 2006	\$	2,489.20	\$	-	\$	2,489.20	B-618 curb & gutter on both sides; transverse cracking with some secondary cracks; block cracking
S	2008	City Hall Parking Lot	St. Croix Trail	East end of Parking Lot	6	80	460	3066.7	C,S	Done in 2006	\$	3,864.00	\$	-	\$	3,864.00	transverse cracking; block cracking
S	2008	Indian Trail	Break Line	Omaha Avenue	6	24	3250	8666.7	C,S	Done in 2006	\$	10,920.00	\$	-	\$	10,920.00	transverse cracks; some secondary cracking; some block cracking; some alligator cracking; few patches
S	2008	Indian Trail	Hudson Road	Tomahawk Drive	6	23	1245	3181.7	C,S	Done in 2006	\$	4,008.90	\$	-	\$	4,008.90	transverse cracks; block cracking; some alligator cracking; some edge cracking
S	2008	Indian Trail	Omaha Avenue	Stagecoach Trail	6	25	3575	9930.6	C,S	Done in 2006	\$	12,512.50	\$	-	\$	12,512.50	transverse cracks; some secondary cracking; block cracking; some edge cracking
S	2008	Indian Trail	Tomahawk Drive	Fahlstrom Place	6	24	675	1800.0	C,S	Done in 2006	\$	2,268.00	\$	-	\$	2,268.00	transverse cracks 1/4"-1/2"; some secondary cracking; some block cracking
S	2008	Nybeck Avenue	30th Street	34th Street	6	24	2050	5466.7	C,S	Done in 2006	\$	6,888.00	\$	-	\$	6,888.00	transverse cracking with secondary cracking; some block cracking

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Capital Improvement Plan 2007-2012

ROAD PROJECTS BY LOCATION AND TYPE															
Location or Type	Year	Street	From	To	Rating ⁽¹⁾	Width (ft)	Length (ft)	Area (sq)	Recommended Maintenance	Estimated Maintenance Cost ^{(2) (3)}				Street Total	Comments
										Crack Sealing Cost	Sealcoating Cost	Reclamation and Pave Cost ⁽⁴⁾	Other		
S	2008	Nybeck Avenue	34th Street	Oakgreen Circle	6	24	995	2653.3	C,S	Done in 2006	\$ 3,343.20	\$ -	\$ -	\$ 3,343.20	transverse cracking with some secondary cracks; some block cracking
S	2008	Pasture Ridge Road	42nd Street	Cul-De-Sac	6	24	1315	3506.7	C,S	Done in 2006	\$ 4,418.40	\$ -	\$ -	\$ 4,418.40	transverse cracking with some secondary cracks; block cracking; some edge alligator cracking
S	2008	Tomahawk Drive	Indian Trail	Tomahawk Lane	6	20	2525	5611.1	C,S	Done in 2006	\$ 7,070.00	\$ -	\$ -	\$ 7,070.00	transverse cracks (some<10', some 1/2'+); some block cracking; some edge cracking
S	2008	Tomahawk Lane	Tomahawk Drive	Tomahawk Drive	6	20	2145	4786.7	C,S	Done in 2006	\$ 6,006.00	\$ -	\$ -	\$ 6,006.00	transverse cracks (some<10'); block cracking; some edge cracking
S	2008	Trading Post Trail	40th Street	42nd Street	6	23	1125	2875.0	C,S	Done in 2005	\$ 3,622.50	\$ -	\$ -	\$ 3,622.50	transverse cracking; some block cracking
S	2008	Trading Post Trail	Valley Creek Trail	140' south	6	24	140	373.3	C,S	Done in 2006	\$ 470.40	\$ -	\$ -	\$ 470.40	transverse cracking with some secondary cracks; lots of surface wear
S	2008	8th Court	8th Street	Cul-De-Sac	6.5	24	925	2466.7	C,S	Done in 2006	\$ 3,108.00	\$ -	\$ -	\$ 3,108.00	transverse cracking 1/2'+
S	2008	8th Street	8th Court	10th Street	6.5	24	1215	3240.0	C,S	Done in 2006	\$ 4,082.40	\$ -	\$ -	\$ 4,082.40	transverse cracking 1/2'+
S	2008	8th Street	Manning Avenue	8th Court	6.5	24	1740	4840.0	C,S	Done in 2006	\$ 5,846.40	\$ -	\$ -	\$ 5,846.40	transverse cracking 1/2'+
S	2008	Indian Trail	Fallstrom Place	Break Line	6.5	24	3555	9480.0	C,S	Done in 2006	\$ 11,944.80	\$ -	\$ -	\$ 11,944.80	transverse cracks; some secondary cracking along transverse lines
S	2008	Morgan Avenue	4th Street	3rd Street	6.5	20	475	1055.6	C,S	Done in 2005	\$ 1,330.00	\$ -	\$ -	\$ 1,694.44	transverse cracks 1/4"-1/2"; block cracking starting
Completed- C	NA	Division Street	Stagecoach Trail	Croixview Avenue	7	25	3375	9375.0	C	Done in 2005	\$ -	\$ -	\$ -	\$ -	few transverse cracks; good shape
Completed- C, S	NA	50th Street	St. Croix Trail	Trading Post Trail	5	27	2630	7890.0	C,S	Done in 2005	Done in 2006	\$ -	\$ -	\$ -	transverse cracking with secondary cracking; longitudinal cracking; block cracks; some alligator areas (poor)
Completed- C,S	NA	15th Street	Oakgreen Avenue	Neal Avenue	6	23	5375	13736.1	C,S	Done in 2005	Done in 2006	\$ -	\$ -	\$ -	transverse cracking; some secondary cracks; some edge cracking; some block cracking
Completed- C,S	NA	30th Street	Trading Post Trail	Nybeck Avenue	6	24	3040	8106.7	C,S	Done in 2005	Done in 2006	\$ -	\$ -	\$ -	transverse cracking with secondary cracks; some block cracking; just east of Nybeck @ low point is gravel section
Completed- C,S	NA	34th Street	Nybeck Avenue	Norsted Avenue	6	24	1335	3560.0	C,S	Done in 2005	Done in 2006	\$ -	\$ -	\$ -	transverse cracking with secondary cracking; some block cracking
Completed- C,S	NA	Oakgreen Avenue	Oakgreen Circle	40th Street	6	24	1550	4133.3	C,S	Done in 2005	Done in 2006	\$ -	\$ -	\$ -	transverse cracking with some secondary cracks; some edge cracking; some block cracking
Completed- C,S	NA	Oakgreen Circle East			6	24	3180	8480.0	C,S	Done in 2005	Done in 2006	\$ -	\$ -	\$ -	transverse cracking with secondary cracks; block cracking; some edge cracking
Completed- C,S	NA	Oakgreen Circle West			6	24	2520	6720.0	C,S	Done in 2005	Done in 2006	\$ -	\$ -	\$ -	transverse cracking; some block cracking; some edge cracking; some alligator cracking
Completed- C,S	NA	Strawberry Hill Road	15th Street	Cul-De-Sac	6	24	965	2573.3	C,S	Done in 2005	Done in 2006	\$ -	\$ -	\$ -	transverse cracking with some secondary cracks; lots of surface wear; some block cracking
Completed- C,S	NA	15th Street	Oelvig Avenue	Oakgreen Avenue	6.5	22	1520	3715.6	C,S	Done in 2005	Done in 2006	\$ -	\$ -	\$ -	transverse cracking; some secondary cracks; some block cracking; 5 - longitudinal cracking; pavement settling(-100' east of Oakgreen Avenue along north side of road)
Completed- C,S	NA	15th Street	Stagecoach Trail	Oelvig Avenue	6.5	22	4090	9997.8	C,S	Done in 2005	Done in 2006	\$ -	\$ -	\$ -	transverse cracking 1/2'; some secondary cracking; 150' long stretch of poor alligator cracking (mid-street)
Completed- C,S	NA	30th Street	Nybeck Avenue	Neal Avenue	6.5	24	4720	12586.7	C,S	Done in 2005	Done in 2006	\$ -	\$ -	\$ -	transverse cracking; some block cracking starting
Completed- C,S	NA	3rd Street	Neal Avenue	Morgan Avenue	6.5	22	406	990.0	C,S	Done in 2005	Done in 2006	\$ -	\$ -	\$ -	transverse cracking 1/4"-1/2"; block cracking; some edge cracking
Completed- C,S	NA	50th Street	Trading Post Trail	Odell Avenue	6.5	24	1280	3413.3	C,S	Done in 2005	Done in 2006	\$ -	\$ -	\$ -	transverse cracking; some edge cracking
Completed- C,S	NA	Croixview Avenue	Division Street	Cul-De-Sac south	6.5	21	2360	5506.7	C,S	Done in 2005	Done in 2006	\$ -	\$ -	\$ -	transverse cracks; block cracking; some edge cracking
Completed- C,S	NA	Trading Post Trail	42nd Street	50th Street	6.5	23	4005	10235.0	C,S	Done in 2005	Done in 2006	\$ -	\$ -	\$ -	transverse cracking; block cracking; some slight settlement @ most
Completed- C,S	NA	Trading Post Trail	50th Street	55th Street	6.5	25	2365	6569.4	C,S	Done in 2005	Done in 2006	\$ -	\$ -	\$ -	transverse joints; transverse cracking; block cracking
Completed- C,S	NA	Trading Post Trail	55th Street	57th Street	6.5	25	1065	2958.3	C,S	Done in 2005	Done in 2006	\$ -	\$ -	\$ -	transverse cracking (some <10' between individual cracks, 1/4"-1/2" wide); bituminous curb
Completed- C,S	NA	Trading Post Trail	57th Street	Odell Avenue	6.5	23	785	2006.1	C,S	Done in 2005	Done in 2006	\$ -	\$ -	\$ -	transverse cracking (some <10' between individual cracks, 1/4"-1/2" wide); bituminous curb
Completed- C,S	NA	3rd Street	Morgan Avenue	Minar Avenue	7	21	935	2181.7	C	Done in 2005	Done in 2006	\$ -	\$ -	\$ -	transverse cracks
Completed- C,S	NA	Trading Post Trail	Odell Avenue	59th Street	7	23	830	2121.1	C	Done in 2005	Done in 2006	\$ -	\$ -	\$ -	some transverse cracks; road in good shape
NA	NA	Oelvig Avenue	15th Street	Cul-De-Sac	8	24	960	2560.0			\$ -	\$ -	\$ -	\$ -	one transverse crack (~200' south of 15th Street); very good condition
Maintenance Estimate Totals										\$ 27,723.69	\$ 167,463.80	\$ 1,985,126.85	\$ 2,000,000.00	\$ 4,180,950.96	

Notes:
⁽¹⁾ Streets were rated in 2005. Ratings are based on PASER rating system for asphalt roads as developed by the Transportation Information Center, University of Wisconsin - Madison.
⁽²⁾ The costs in this table reflect the assumption that streets needing sealcoat also need crack sealing (at the time of initial rating).
⁽³⁾ Estimated costs are based on 2005 construction dollars with a 5% inflation factor applied for 2007, including soft costs.
⁽⁴⁾ Reclamation and Pave Cost estimate is based on the cost of similar projects constructed in 2006 which required only minor drainage improvements. For project years where more complex drainage improvements are anticipated, the City may wish to include a

KEY	
AH	Afton Hills Area
DT	Downtown/Old Village
U	Upper Misc Roads- North of Afton Blvd.
L	Lower Misc Roads- South of Afton Blvd.
O	Other
C	Crack Sealing
S	Seal Coating
Completed- C	Crack Sealing Completed
Completed- C,S	Crack Sealing and Seal Coating Completed
NA	Not Applicable

RECLAMATION/NEW CONSTRUCTION/ STORMWATER DRAINAGE (2008-2010)	
\$ 473,346.60	AH
\$ 288,569.00	U
\$ 605,287.00	L
\$ 431,302.25	DT
\$ 186,622.00	New Construction
\$ 2,000,000.00	Stormwater Drainage DT
\$ 3,985,126.85	TOTAL

CRACK SEALING (2007)	
\$ 27,723.69	

SEAL COATING (2008)	
\$ 167,463.80	

Bonding		
Group	Description	Amount
Section 1	2.0-2.9 and AH and Sand Hill Road	865,317.60
Section 2	3.0-3.9	512,295.75
Section 3	4.0-4.9	607,513.50
		1,985,126.85
Stormwater		2,000,000.00
Total		3,985,126.85

CITY OF AFTON CAPITAL IMPROVEMENT PLAN

Street	Improvement Type	From	To	Width (ft)	Length (ft)	Length (mi.)	Estimated Project Cost
2016 Streets							
15th Street	Reclamation	Neal Ave	Stagecoach Trl	23	10985	2.08	\$1,100,000
Oakgreen/Nybeck	Mill & Overlay	30th St	40th St	24	14080	2.67	\$775,000
2015 Street Improvements Subtotal							\$1,875,000
2017 Streets							
30th Street	Reclamation	Trading Post Trl	300' West of Nybeck	24	3040	0.60	\$320,000
Valley Creek	Bridge Replacement Design & local share - % Construction funded by State						\$125,000
Odell Ave/59th St	Mill & Overlay	50th St	Trading Post	23	5365	1.02	\$295,000
2016 Street Improvements Subtotal							\$740,000
2018 Streets							
Trading Post Trl	Reclamation	Afton Blvd	60th St	24	9500	1.80	\$950,000
42nd/Pasture Rid	Mill & Overlay	Trading Post Trl	45th St	24	12050	2.28	\$660,000
2017 Street Improvements Subtotal							\$1,610,000
2019 streets							
Indian Trl	Reclamation	Husdon Rd	Stagecoach Trl	24	12100	2.30	\$1,200,000
Tomahawk/Afton Hills	Mill & Overlay			24	8795	1.67	\$485,000
2018 Street Improvements Subtotal							\$1,685,000
2020 streets							
Valley Creek	Mill & Overlay	Neal Ave	Stagecoach Trl	24	9205	1.74	\$560,000
River Road	Reclamation	St. Croix Trail	50th Street	15	5430	1.02	\$550,000
2019 Street Improvements Subtotal							\$550,000

Total **\$6,460,000**

Designed By: Stan Ross
07.17.16 Rev C

Today's Costs (per mile):

Reclamation = \$450,000
Mill & Overlay = \$240,000
Micro Coat = \$120,000
Seal / Skim Coating = \$35,000
Crack Sealing = \$6,000

Variables

Budget Increase = 5.0%
Inflation Rate = 5.0%
PFA Grant Extra Dollars = \$0

PROJECT DEFINITION

Reclamation	Mill & Overlay	Micro Surfacing	Code	Project Description
0.00	0.00		A	
0.00	0.00		B	
0.00	0.00		C	
0.00	0.00		D	
0.00	0.00		E	
0.00	0.00		F	
0.00	0.00		G	
0.00	0.00		H	
0.00	0.00		I	
0.00	0.00		J	
0.00	0.00		K	All Projects
0.00	0.00	3.00	L	2004 Road(s) Service

SUMMARY						Project Code	Reclamation (25 year life)		Mill & Overlay (10 - 15 year life)		Micro Surfacing / Thin Overlay (Extends life by 25 years)			Skim Patch / Seal Coating		Crack Seal	
Year	Year Number	Yearly Allocation (includes Budget Increases)	Periodic Adjustment Notes	Annual Projected Cost	Balance After Expense		Distance (Miles)	Cost	Distance (miles)	Cost	Project Code	Distance (miles)	Cost	Distance (miles)	Cost	Distance (miles)	Cost
2016	1	\$145,000		\$0	\$145,000	0	\$0	0	\$0			\$0	0.00	\$0	0.0	\$0	
2017	2	\$125,000	\$25,000	\$0	\$270,000	0	\$0	0	\$0			\$0	0.00	\$0	0.0	\$0	
2018	3	\$281,250	\$150,000	\$0	\$551,250	0	\$0	0	\$0			\$0	0.00	\$0	0.0	\$0	
2019	4	\$295,313		\$0	\$846,563	0	\$0	0	\$0			\$0	0.00	\$0	0.0	\$0	
2020	5	\$310,078		\$0	\$1,156,641	0	\$0	0	\$0			\$0	0.00	\$0	0.0	\$0	
2021	6	\$325,582		\$0	\$1,482,223	0	\$0	0	\$0			\$0	0.00	\$0	0.0	\$0	
2022	7	\$436,861	\$95,000	\$0	\$1,919,084	0	\$0	0	\$0			\$0	0.00	\$0	0.0	\$0	
2023	8	\$458,704		\$0	\$2,377,788	0	\$0	0	\$0			\$0	0.00	\$0	0.0	\$0	
2024	9	\$481,639		\$0	\$2,859,427	0	\$0	0	\$0			\$0	0.00	\$0	0.0	\$0	
2025	10	\$505,721		\$0	\$3,365,149	0	\$0	0	\$0			\$0	0.00	\$0	0.0	\$0	
2026	11	\$531,007		\$586,402	\$3,309,754	0	\$0	0	\$0	L	3.00	\$586,402	0.00	\$0	0.0	\$0	
2027	12	\$817,558	\$260,000	\$615,722	\$3,511,590	0	\$0	0	\$0	L	3.00	\$615,722	0.00	\$0	0.0	\$0	
2028	13	\$858,436		\$646,508	\$3,723,517	0	\$0	0	\$0	L	3.00	\$646,508	0.00	\$0	0.0	\$0	
2029	14	\$901,357		\$678,834	\$3,946,041	0	\$0	0	\$0	L	3.00	\$678,834	0.00	\$0	0.0	\$0	
2030	15	\$946,425		\$712,775	\$4,179,691	0	\$0	0	\$0	L	3.00	\$712,775	0.00	\$0	0.0	\$0	
2031	16	\$993,747		\$748,414	\$4,425,023	0	\$0	0	\$0	L	3.00	\$748,414	0.00	\$0	0.0	\$0	
2032	17	\$1,043,434		\$785,835	\$4,682,623	0	\$0	0	\$0	L	3.00	\$785,835	0.00	\$0	0.0	\$0	
2033	18	\$1,095,606		\$825,127	\$4,953,102	0	\$0	0	\$0	L	3.00	\$825,127	0.00	\$0	0.0	\$0	
2034	19	\$1,150,386		\$866,383	\$5,237,105	0	\$0	0	\$0	L	3.00	\$866,383	0.00	\$0	0.0	\$0	
2035	20	\$1,207,905		\$909,702	\$5,535,308	0	\$0	0	\$0	L	3.00	\$909,702	0.00	\$0	0.0	\$0	

ROAD LIST FROM 2016 GIS MAP								
	Last Update: 9.08.16							
	Created By: Stan Ross		Total Road Length (miles) = 69.73					
			Normalized width (feet) = 24					
			Project Codes = R = Reclamation, M = Mill & Overlay					
			Project Priority Codes = A - J					
			Project Example: AR = (Priority 1, Reclamation) , BM = (priority 2, Mill and C					
Item	Street Name	From	To	Segment Width	Segment Length	Total real Length	Normalized Length (miles)	Ranking / Group / Code
1	10th Street	Neal Ave.	Cul-De-Sac	25	2632		0.52	
2	10th Street	Neal Ave.	Manning	25	5139		1.01	
3					10th Street Length =	7771		
4	11th Street	Stagecoach Trail	east end	22	609		0.11	
5					11th Street Length =	609		
6	15th Street South	St. Croix Beach	Cul-De-Sac West	24	3978		0.75	
7	15th Street Circle South	15th	Cul-De-Sac North	23	1386		0.25	
8	15th Ct. South	15th	Cul-De-Sac North	23	605		0.11	
9	15th Street	Manning Avenue	Neal Avenue	22	5143		0.89	
10	15th Street	Neal Ave.	Stagecoach Trail	22	11027		1.91	
11					15th Street Length =	22139		
12	22nd Street	Neal Ave.	Manning	27	5135		1.09	
13					22nd Street Length =	5135		
14	2nd Street South	Neal Ave.	West	16	1576		0.20	
15					2nd Street Length =	1576		
16	30th Street	Trading Post Road	Neal Avenue	23	7833		1.42	
17	30th Street	Neal Avenue	Manning	23	5084		0.92	
18					30th Street Length =	12917		
19	32nd Street	Neal	Moyer Ave.	22	587		0.10	
20	32nd Street	Trading Post Road	East Cul-De-Sac	26	1798		0.37	
21					32nd Street Length =	2385		
22	3rd Street	Neal Ave.	Morgan Ave.	22	1001		0.17	
23	3rd Street	Morgan Ave.	Minar Ave	24	883		0.17	
24					3rd Street Length =	1884		
25	33rd Street	Norsted Avenue	west end	25	524		0.10	
26					33rd Street Length =	524		
27	34th (Upper) Street	Pennington Avenue	west end	19	203		0.03	
28	34th Street	Nybec Ave.	Norsted Ave.	24	1467		0.28	
29					34th Street Length =	1670		
30	41st Street	Trading Post Road	Cul-De-Sac	24	588		0.11	
31					41st Street Length =	588		
32	4th Street	Minar Ave.	Morgan Ave.	20	858		0.14	
33					4th Street Length =	858		
34	44th Street	Odell Avenue	Cul-De-Sac	22	1896		0.33	
35					44th Street Length =	1896		
36	42nd Street	Trading Post Road	Odell	22	1183		0.21	
37	42nd Street	Paradox Ave.	Trading Post Trail	24	4557		0.86	
38	42nd Street	Cul-De-Sac	Pasture Ridge Road	24	1205		0.23	
39	42nd Street	Pasture Ridge Road	Paradox Ave.	28	796		0.18	
40					42nd Street Length =	7741		
41	45th Street	St. Croix Trail	Oxbow	28	2267		0.50	
42	45th Street	St. Croix Trail	Cu-De-Sac	28	3734		0.83	
42					45th Street Length =	6001		

43	50th Street	Manning	St. Croix trail	24	16026		3.04	
44	50th Street	St. Croix Trail	River Road	27	6665		1.42	
45					50th Street Length =	22691		
44	53rd Street South	Quadrant	Swede Hill	24	1722		0.33	
45					53rd Street Length =	1722		
46	55th Street	Osgood Ave	Trading Post Trail	24	808		0.15	
47					55th Street Length =	808		
48	57th Street	Trading Post Road	Osgood Ave.	24	1340		0.25	
49					57th Street Length =	1340		
50	59th Street	Trading Post Road	Cul-De-Sac	24	1089		0.21	
51					59th Street Length =	1089		
52	8th Street	Manning Ave.	8th Court	24	1937		0.37	
53	8th Street	8th Court	10th Street	24	1101		0.21	
54	8th Court	8th Street	Cul-De-Sac	24	953		0.18	
55					8th Street Length =	3991		
56	Afton Blvd. Court	Afton Blvd.	Cul-De-Sac	25	730		0.14	
57					Afton Blvd. Court Street Length =	730		
58	Afton Hills Court	Afton Hills Drive	Afton Hills Court	16	822		0.10	
59	Afton Hills Drive South Circle	Tee	Tee	21	5776		0.96	
60	Afton Hills Drive	Stagecoach Trail	Tee	21	3963		0.66	
61					Afton Hills Street Length =	10561		
62	Division Street	Stagecoach Trail	Croixview Ave.	25	3305		0.65	
63					Division Street Length =	3305		
62	Coulee Ridge Road	Pennington Avenue	West End	21	103		0.02	
63					Coulee Ridge Road Length =	103		
64	Croixview Ave.	Division Street	Cul-De-Sac South	21	2388		0.40	
65					Croixview Street Length =	2388		
66	Fahlstrom Place	Indian Trail Road	Cul-De-Sac	24	1272		0.24	
67					Fahlstrom Street Length =	1272		
68	Indian Blvd. South	Indian Trail South	west	18	466		0.07	
69	Indian Trail Road	Hudson Road	Stagecoach Trail	23	12392		2.25	
70	Indian Trail Path South	Indian Trail Road	north	22	1074		0.19	
71					Indian Trail Length =	13932		
72	Lake Edith Lane			24	776		0.15	
73					Lake Edith Lake Lane =	776		
74	Meadow Bluff Trail	22nd	Cul-De-Sac	24	2794		0.53	
75					Meadow Bluff Trail =	2794		
76	Meadow Pass	Meadow Bluff Trail	Cul-De-Sac	24	1506		0.29	
77					Meadow Pass =	1506		
78	Meadow Point Path	Meadow Pass	Cul-De-Sac	24	437		0.08	
79					Meadow Point Pass =	437		
80	Meadow Vista Way	Meadow Pass	Cul-De-Sac	24	466		0.09	
81					Meadow Vista Way =	466		
78	Morgan Ave	4th Street	3rd Street	20	309		0.05	
79					Morgan Ave. Street Length =	309		
80	Moyer Ave.	30th Street	SW Cul-De-Sac	24	1484		0.28	
81					Moyer Ave. Street Length =	1484		
82	Majestic Pines Trl	15th Street	Cul-De-Sac	24	1412		0.27	
83					Majestic Pines Trail Street Length =	1412		
84	Minar Ave.	3rd Street	4th Street	20	501		0.08	
85					Minar Street Length =	501		
86	Oakgreen Avenue	15th Street	South Cul-De-Sac	17	4029		0.54	
87	Oakgreen Avenue	Oakgreen Circle	40th Street	24	1630		0.31	
88	Oakgreen Circle East			24	3178		0.60	
89	Oakgreen Circle West			24	2488		0.47	
90					Oakgreen Street Length =	11325		
91	Odell Avenue	42nd Street	44th Street	23	594		0.11	

92	Odell Avenue	50th Street	Trading Post Trail	23	4422		0.80	
93						Odell Street Length =	5016	
94	Oelvig Ave	15th Street	Cul-De-Sac	24	1261		0.24	
95						Oelvig Street Length =	1261	
96	Osgood Ave	Hudson Road	South	24	2904		0.55	
97	Osgood Ave South	55th Street	Cul-De_Sac	24	1233		0.23	
98	Osgood Ave	57th Street	55th Street	24	1166		0.22	
99	Osgood Ave Court So.	Cul-De-Sac	57th Street	24	1518		0.29	
100						Osgood Street Length =	6821	
101	Oxbow Circle	45th	north	22	883		0.15	
102						Oxbow Circle Length =	883	
103	Ozark Ave	45th	south	22	958		0.17	
104						Ozark Ave. Length =	958	
105	Norsted Ave.	South End	33rd Street	25	2034		0.40	
106						Nosted Street Length =	2034	
107	Norcrest Ave. South	50th Street	Cul-De-Sac	25	1390		0.27	
108						Norcrest Ave Length =	1390	
109	Nybeck Ave.	30th Street	Oakgreen Circle	24	4530		0.86	
110						Nybec Street Length =	4530	
111	Paradox Avenue	42nd Street	Cul-De-Sac	24	1408		0.27	
112						Paradox Street Length =	1408	
113	Parsons Court	45th Street	Cul-De-Sac	24	1060		0.20	
114						Parsons Street Length =	1060	
115	Pasture Ridge Road	45th Street	42nd Street	24	2422		0.46	
116	Pasture Ridge Road	42nd Street	Cul-De-Sac	24	1316		0.25	
117						Pasture Ridge Rd Street Length =	3738	
116	Patley Bridge Avenue	45th Street	Cul-De-Sac	24	486		0.09	
117						Patley Bridge Street Length =	486	
118	Partridge Circle South	45th Street	Cul-De-Sac	24	685		0.13	
119						Patley Bridge Street Length =	685	
118	Pennington Avenue	Afton Boulevard	32nd Street	15	1604		0.19	
119						Pennington Street Length =	1604	
118	Penfield Avenue South	45th Street	Cul-De-Sac	15	3016		0.36	
119						Penfield Ave. Length =	3016	
120	Penfield Court South	Penfield Ave	Cul-De-Sac	15	323		0.04	
121						Penfield Ave. Length =	323	
122	Pheasant Court	50th Street	Cul-De-Sac	24	946		0.18	
123						Pheasant Court Street Length =	946	
124	Putnam	Quant	Road Closed	21	4455		0.74	
125						Putnam Street Length =	4455	
124	Quadrant Ave. South	50th Street	53rd	12	1365		0.13	
125						Quadrant Ave. So. Length =	1365	
126	Quant Ave.	15th Street	Putnam	12	3117		0.30	
127						Quant Ave. Street Length =	3117	
128	River Road	St. Croix Trail	50th Street	15	7615		0.90	
129						River Road Street Length =	7615	
130	Sandhill Road	Stagecoach Trail	east end	22	947		0.16	
131						Sandhill Road Street Length =	947	
130	Strawberry Hill Road	15th Street	North & South	24	1532		0.29	
131						Strawberry Hill Street Length =	1532	
132	Swede Hill Drive	53rd	Cul-De-Sac	24	2160		0.41	
133						Strawberry Hill Street Length =	2160	
134	Tomahawk Drive	Indian Trail Road	Tomahawk Lane	20	2848		0.45	
135	Tomahawk Lane	Tomahawk Drive	Tomahawk Drive	20	2076		0.33	
136						Tomahawk Street Length =	4924	
137	Trading Post Trail	Valley Creek Trail	40th Street	22	10344		1.80	
138	Trading Post Trail	40th Street	60th Street	23	11007		2.00	

City of Afton
3033 St. Croix Trl, P.O. Box 219
Afton, MN 55001

Meeting Date Sept. 12, 2016

Personnel Committee

To: Public Works Committee Members
From: Ron Moorese, City Administrator
Date: September 8, 2016
Re: Street Repair Needs

There are three short term street repair needs about which staff would like to provide updated information and obtain feedback from the Public Works Committee. These are the repair/replacement of the 30th Street bridge/culvert, the repair of the erosion issue at the corner of Pennington and Afton Hills Drive and interim repairs to 15th Street. Ken Johnson and Diane Hankee will address these items at the Committee meeting.

City of Afton
3033 St. Croix Trl, P.O. Box 219
Afton, MN 55001

Meeting Date Sept. 12, 2016

Personnel Committee

To: Public Works Committee Members
From: Ron Moorese, City Administrator
Date: September 8, 2016
Re: WSB Proposal for Construction Administration and Inspection Services for the
Downtown Village Improvement Project

At the August 16, 2016 Council meeting, WSB's proposal for construction administration and inspection services for the Downtown Village Improvements Project was presented and approved. Because Council member Richter was not present at the meeting, he has requested the opportunity to review the proposal with WSB. The proposal is attached.

WSB & Associates Inc.

ESTIMATE OF COST - City of Afton for 2016 (WSB Full Contract Administration/County Material Sampling & Testing by others)

S.A.P. 082-618-021, S.A.P. 082-621-031

Curb & Gutter, Storm Sewer, Sidewalk, Sanitary Sewer, Retaining walls, Bituminous Paving, and Appurtenant Work

City of Afton, Minnesota



S.A.P. 082-618-021, S.A.P. 082-621-031		Project Manager / Project Engineer / Design Engineer	Project Supervisor / Lead Inspector / Eng. Specialist	Inspector	Inspector / Material Tester	State Aid Labor Compliance	Senior Survey Technician	Two Person Survey Crew	Environmental Compliance	Environmental Oversite/Remediation	Clerical	Total Hours	Cost
Task	Description												
A	PROJECT MANAGEMENT												
	Project Management	30										30	\$4,350.00
	Public Involvement & Coordination	20	20								8	40	\$5,320.00
	Grant Administration	20	8									36	\$4,388.00
B	CONTRACT ADMINISTRATION												
	Pre-Construction Conference	4	3								2	9	\$1,073.00
	Weekly Meeting (Assume 13 meetings)	39	26								17	82	\$9,906.00
	Labor Compliance	4	4	4		48					4	64	\$6,040.00
	Documentation Review	12	18								4	34	\$4,178.00
	Contract Administration	12	12			4						28	\$3,552.00
	Monthly Pay Estimates (4 months)	8	16	4							5	33	\$3,817.00
	Materials Certification	8	12	2								22	\$2,810.00
	Materials Certification Summary	8	12									20	\$2,612.00
	Final 2016 Documentation	20	30	8							4	62	\$7,582.00
C	CONSTRUCTION INSPECTION SERVICES												
	Pre-Project Inspection / Removal Measurements	4	12	4								20	\$2,428.00
	Full Time Construction Inspection (13 Weeks)	18	400	550	200							1168	\$122,460.00
	Traffic Control Inspection / Haul Roads		12	12								24	\$2,640.00
	Construction Staking & Coordination		12									12	\$1,452.00
	Punchlist / Final 2016 Inspection	10	12	12								34	\$4,090.00
	As-builts	4	12	8							2	26	\$2,954.00
	Weekly Erosion Inspection		6						52			58	\$4,886.00
	Rain Event Erosion Inspection		6						14			20	\$1,846.00
	Response Action Plan Implementation (RAP)	2	8							70	2	82	\$8,248.00
D	SURVEY												
	Construction staking		12					180				192	\$30,972.00
	Survey coordination/computations						12	4				16	\$2,180.00
	Survey as-builts							12				12	\$1,968.00
E	MATERIALS												
	Testing Documentation	8	8									16	\$2,128.00
	Concrete Field Testing Coordination / Review		8									8	\$968.00
	Grading & Base Field Testing Coordination / Review		8									8	\$968.00
	Bituminous Field Testing Coordination / Review		8									8	\$968.00
<p>Assume September 6th through November 30th 2016, 13 weeks construction, 5 days per week, 50 hours per week, including 2 weeks of 2016 winter closeout documentation County to perform material sampling and testing on construction of county road and utilities, WSB to perform Contract Administration.</p>													
Total Hours		231	685	604	200	52	12	196	66	70	48	2164	

Hourly Costs	145.00	121.00	99.00	85.00	90.00	127.00	164.00	80.00	98.00	65.00		
WSB SALARY COSTS	\$33,495.00	\$82,885.00	\$59,796.00	\$17,000.00	\$4,680.00	\$1,524.00	\$32,144.00	\$5,280.00	\$6,860.00	\$3,120.00		\$246,784.00

TOTAL MATERIAL SAMPLING AND TESTING COST - CITY PORTION ONLY (See attached spreadsheet for cost breakdown)												\$20,000.00
TOTAL 2016 PROJECT COST												\$266,784.00

WSB & Associates Inc.

ESTIMATE OF COST - City of Afton for 2017 (WSB Full Contract Administration/County Inspection and Material Sampling & Testing by others)

S.A.P. 082-618-021, S.A.P. 082-621-031

Curb & Gutter, Storm Sewer, Sidewalk, Sanitary Sewer, Retaining walls, Bituminous Paving, and Appurtenant Work

City of Afton, Minnesota



S.A.P. 082-618-021, S.A.P. 082-621-031		Project Manager / Project Engineer / Design Engineer	Project Supervisor / Lead Inspector / Eng. Specialist	Inspector	Inspector / Material Tester	State Aid Labor Compliance	Senior Survey Technician	Two Person Survey Crew	Environmental Compliance	Environmental Oversite/Remediation	Clerical	Total Hours	Cost
Task	Description												
A	PROJECT MANAGEMENT												
	Project Management	50										50	\$7,400.00
	Public Involvement & Coordination	80	80	8							12	168	\$22,576.00
	Grant Administration	60	8									80	\$10,688.00
B	CONTRACT ADMINISTRATION												
	Pre-Construction Conference	4	3								2	9	\$1,100.00
	Weekly Meeting (Assume 34 meetings)	68	34	12							34	148	\$17,816.00
	Labor Compliance	8	4	4		96					4	116	\$11,288.00
	Documentation Review	40	80	8							8	136	\$17,200.00
	Contract Administration	40	80	12		12						144	\$18,180.00
	Monthly Pay Estimates (9 months)	9	54	9							9	81	\$9,558.00
	Materials Certification	4	27	8								39	\$4,756.00
	Materials Certification Summary	8	12	2								22	\$2,876.00
	Final Pay Voucher	12	24	8								44	\$5,568.00
	Final 2017 Documentation	60	120								4	184	\$24,032.00
C	CONSTRUCTION INSPECTION SERVICES												
	Pre-Project Inspection / Removal Measurements		20	10								30	\$3,500.00
	Full Time Construction Inspection (35 Weeks)		1000	1500	750							3250	\$343,000.00
	Traffic Control Inspection / Haul Roads		12	34								46	\$4,956.00
	Construction Staking & coordination		20	4								24	\$2,888.00
	Punchlist / Final 2017 Inspection	10	60	40								110	\$13,000.00
	As-builts	4	40	15							2	61	\$7,218.00
	Weekly Erosion Inspection		12					136				148	\$12,912.00
	Rain event erosion Inspection		12					34				46	\$4,344.00
	Response Action Plan Implementation (RAP)		8						10		2	20	\$2,138.00
D	SURVEY												
	Construction staking		12					500				512	\$86,488.00
	Survey coordination/computations						24	4				28	\$3,800.00
	Survey as-builts							12				12	\$2,040.00
E	MATERIALS												
	Testing Documentation	10	12	2								24	\$3,172.00
	Concrete Field Testing Coordination / Review		12	2								14	\$1,692.00
	Grading & Base Field Testing Coordination / Review		12	2								14	\$1,692.00
	Bituminous Field Testing Coordination / Review		12	2								14	\$1,692.00
<p>Assume April 3rd through November 30th 2017, 35 weeks construction, 5 days per week, 50 hours per week, including 3 weeks of 2017 winter closeout documentation County to perform survey, inspection, quantity documentation and material sampling and testing on construction of county road and utilities, WSB to perform Contract Administration.</p>													
Total Hours		467	1770	1682	750	108	24	516	170	10	77	5574	

Hourly Costs	148.00	124.00	102.00	88.00	93.00	130.00	170.00	84.00	101.00	68.00		
WSB SALARY COSTS	\$69,116.00	\$219,480.00	\$171,564.00	\$66,000.00	\$10,044.00	\$3,120.00	\$87,720.00	\$14,280.00	\$1,010.00	\$5,236.00		\$647,570.00

TOTAL MATERIAL SAMPLING AND TESTING COST - CITY PORTION ONLY (See attached spreadsheet for cost breakdown)	\$60,000.00
TOTAL 2017 PROJECT COST	\$707,570.00

WSB & Associates Inc.

ESTIMATE OF COST - City of Afton for 2018 (WSB Full Contract Administration/County Inspection and Material Sampling & Testing by others)

S.A.P. 082-618-021, S.A.P. 082-621-031

Curb & Gutter, Storm Sewer, Sidewalk, Sanitary Sewer, Retaining walls, Bituminous Paving, and Appurtenant Work

City of Afton, Minnesota



S.A.P. 082-618-021, S.A.P. 082-621-031		Project Manager / Project Engineer / Design Engineer	Project Supervisor / Lead Inspector / Eng. Specialist	Inspector	Inspector / Material Tester	State Aid Labor Compliance Scott Ramlo	Senior Survey Technician Pete Helder	Two Person Survey Crew	Environmental Compliance	Environmental Oversite/Remediation	Clerical	Total Hours	Cost
Task	Description												
A	PROJECT MANAGEMENT												
	Project Management	50										50	\$7,600.00
	Public Involvement & Coordination	60	80									140	\$19,360.00
	Grant Administration	50	8								12	70	\$9,488.00
B	CONTRACT ADMINISTRATION												
	Pre-Construction Conference	4	3								2	9	\$1,136.00
	Weekly Meeting (Assume 34 meetings)	68	34								34	136	\$17,136.00
	Labor Compliance	8	4	4		96					4	116	\$11,756.00
	Documentation Review	30	80								8	118	\$15,376.00
	Contract Administration	30	80	12		12						134	\$17,248.00
	Monthly Pay Estimates (9 months)	9	54	9							9	81	\$9,891.00
	Materials Certification	4	27	8								39	\$4,920.00
	Materials Certification Summary	8	12	2								22	\$2,966.00
	Final Pay Voucher	12	32	8								52	\$6,776.00
	Final 2018 Documentation	40	160								4	204	\$26,848.00
C	CONSTRUCTION INSPECTION SERVICES												
	Pre-Project Inspection / Removal Measurements		20	10								30	\$3,630.00
	Full Time Construction Inspection (35 Weeks)		950	1400	450							2800	\$312,800.00
	Traffic Control Inspection / Haul Roads		12	34								46	\$5,174.00
	Construction Staking & coordination		20	4								24	\$2,988.00
	Punchlist / Final 2018 Inspection	10	60	40								110	\$13,480.00
	As-builts	4	40	15							2	61	\$7,477.00
	Weekly Erosion Inspection		12						136			148	\$13,504.00
	Rain event erosion Inspection		12						34			46	\$4,528.00
	Response Action Plan Implementation (RAP)		8								2	10	\$1,168.00
D	SURVEY												
	Construction staking		12					320				332	\$58,176.00
	Survey coordination/computations						12	4				16	\$2,316.00
	Survey as-builts							12				12	\$2,124.00
E	MATERIALS												
	Testing Documentation	10	12									22	\$3,056.00
	Concrete Field Testing Coordination / Review		12									12	\$1,536.00
	Grading & Base Field Testing Coordination / Review		12									12	\$1,536.00
	Bituminous Field Testing Coordination / Review		12									12	\$1,536.00
<p>Assume April 2nd through November 30th 2018, 34 weeks construction, 5 days per week, 50 hours per week, including 3 weeks of 2018 winter closeout documentation County to perform survey, inspection, quantity documentation and material sampling and testing on construction of county road and utilities, WSB to perform Contract Administration.</p>													
Total Hours		397	1768	1546	450	108	12	336	170		77	4864	

Hourly Costs	152.00	128.00	107.00	92.00	97.00	134.00	177.00	88.00	104.00	72.00		
WSB SALARY COSTS	\$60,344.00	\$226,304.00	\$165,422.00	\$41,400.00	\$10,476.00	\$1,608.00	\$59,472.00	\$14,960.00		\$5,544.00		\$585,530.00

TOTAL MATERIAL SAMPLING AND TESTING COST - CITY PORTION ONLY (See attached spreadsheet for cost breakdown)	\$36,653.00
TOTAL 2018 PROJECT COST	\$622,183.00
TOTAL ESTIMATED PROJECT COST	\$1,596,537.00