Item #8D:

Village Trustee Wachs

Financing Options For Roadway Maintenance & Improvements

06/20/13

David Lothspeich

From: Charlie Wachs [cwachs@wachsws.com]
Sent: Thursday, June 06, 2013 11:46 AM
To: george.yaeger@gmail.com; David Lothspeich
Subject: updated infrastructure worksheets
Attachments: Long Grove Infrastructure Maintenance Plan to reflect Non thoroughfare roads going Private with 10% Inflation Factor and GF contribution of $400K.pdf; Long Grove Infrastructure Maintenance Plan thru 2024 for all Public Roads with 10% inflation factor and Additional Revenue from GF.pdf

The email I sent out a few minutes ago had the excel spreadsheets attached but I sent myself a copy and I could not open the spreadsheets so I have saved them as pdf's and I can open them so that is what I have attached them here. My comments from the first email refer to these numbers.

Attached are two spreadsheets one for all public roads and one for remaining public roads after non thoroughfare roads are transferred to the appropriate subdivision HOA. Both anticipate road paving inflation at 10% per year as well as an ongoing $600,000 annual expenditure in computing the gap. The key numbers are the gap which reflects how short we will fall in spending to perform recommended maintenance of all infrastructure and how much would this cost the average household if we could put in a tax to cover it. The numbers reflected on these spread sheets are as follows:

All current public roads:
- Length -148,321 lineal feet
- Gap - $1,938,448
- Annual cost per avg. household - $777

Public roads less non thoroughfare roads;
- Length – 94,646 lineal feet
- Gap - $1,390,493
- Annual cost per avg. household - $557

All roads public and private:
- Length – 358,930 lineal feet
- Gap - $6,476,658
- Annual cost per avg. household - $2,598

Charlie Wachs

Director
Wachs Water Services
Email: cwachs@wachsws.com
Cell: (847) 220-1307

Long Grove Infrastructure 10 Year Maintenance Planning thur 2024

W/O Non Thoroughfare Roads

March 20, 2013

	A	B	C	D	E	I	J	K	L	M	N	O	P	Q	R
1	PUBLIC STREET 10 YEAR PROGRAM ESTIMATE														
2		Existing Public	Life Expectency	Annual Objective	Avg. Cost/year 2015-2024	2015 Cost	2016 Cost	2017 Cost	2018 Cost	2019 Cost	2020 Cost	2021 Cost	2022 Cost	2023 Cost	2024 Cost
3	Expense														
4	**Road Rejuvination Lineal Feet (cost/LF)**	94,646	10	9,465	$131.52	$82.52	$90.77	$99.85	$109.84	$120.82	$132.90	$146.19	$160.81	$176.89	$194.58
5	Strip and repave				$1,244,773	$781,038	$859,141	$945,056	$1,039,561	$1,143,517	$1,257,869	$1,383,656	$1,522,022	$1,674,224	$1,841,646
6	Eng. Design				$62,239	$39,052	$42,957	$47,253	$51,978	$57,176	$62,893	$69,183	$76,101	$83,711	$92,082
7	Eng Proj mgmnt				$99,582	$62,483	$68,731	$75,604	$83,165	$91,481	$100,630	$110,692	$121,762	$133,938	$147,332
8	Eng. Studies Rating				$5,000	$2,500	$2,500	$15,000	$2,500	$2,500	$2,500	$2,500	$15,000	$2,500	$2,500
9	**Total Paving w/Engineering**				$1,411,593	**$885,073**	**$973,330**	**$1,082,913**	**$1,177,204**	**$1,294,675**	**$1,423,892**	**$1,566,031**	**$1,734,884**	**$1,894,373**	**$2,083,560**
10															
11	**Road Drainage Rejuvination (cost/LF)**	94,646	30	3,155	$18.79	$16.39	$16.88	$17.39	$17.91	$18.45	$19.00	$19.57	$20.16	$20.76	$21.39
12	Ditch re-establishment and culvert replacement				**$59,281**	**$51,711**	**$53,262**	**$54,860**	**$56,506**	**$58,201**	**$59,947**	**$61,746**	**$63,598**	**$65,506**	**$67,471**
13	**Road Patching & Repair (cost/LF)**	94,646	0	946		$82.52	$90.77	$99.85	$109.84	$120.82	$132.90	$146.19	$160.81	$176.89	$194.58
14	**Total Road Patching**				**$124,477**	**$78,104**	**$85,914**	**$94,506**	**$103,956**	**$114,352**	**$125,787**	**$138,366**	**$152,202**	**$167,422**	**$184,165**
15	**Street Sign Maintenance**				$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500
16	**Total Road & Drainage Maintenance Exp**				**$1,597,852**	**$1,017,388**	**$1,115,006**	**$1,234,779**	**$1,340,166**	**$1,469,728**	**$1,612,126**	**$1,768,643**	**$1,953,185**	**$2,129,801**	**$2,337,696**
17	**Per Lineal Foot**				$168.82	**$107.49**	**$117.81**	**$130.46**	**$141.60**	**$155.29**	**$170.33**	**$186.87**	**$206.37**	**$225.03**	**$246.99**
18															
19	**Parking Lot Rejuvination SQ.FT**	244,000	20	12,200	23.33	14.64	16.11	17.72	19.49	21.44	23.58	25.94	28.53	31.38	34.52
20	Strip & Repave				284,675	$178,620	$196,482	$216,130	$237,743	$261,518	$287,670	$316,437	$348,080	$382,888	$421,177
21	Eng Design				14,234	$8,931	$9,824	$10,807	$11,887	$13,076	$14,383	$15,822	$17,404	$19,144	$21,059
22	Eng proj mgmnt				22,774	$14,290	$15,719	$17,290	$19,019	$20,921	$23,014	$25,315	$27,846	$30,631	$33,694
23	**Total Parking Lot Maintenance**				**$321,682**	**$201,841**	**$222,025**	**$244,227**	**$268,650**	**$295,515**	**$325,067**	**$357,573**	**$393,331**	**$432,664**	**$475,930**
24	**Bridge Maintenance 1/10th /year**			67,079	**$67,079**	$67,079	$67,079	$67,079	$67,079	$67,079	$67,079	$67,079	$67,079	$67,079	$67,079
25	**Snowplowing and salting**		217,600	2.30	**$280,763**	$244,911	$252,258	$259,826	$267,621	$275,649	$283,919	$292,436	$301,209	$310,246	$319,553
26	**Total Public Infrastructure Repair & Maintenance**				**$2,267,375**	**$1,531,218**	**$1,656,368**	**$1,805,911**	**$1,943,516**	**$2,107,971**	**$2,288,190**	**$2,485,731**	**$2,714,803**	**$2,939,789**	**$3,200,258**
27	Revenue														
28	**General Fund**					424,360	437,091	450,204	463,710	477,621	491,950	506,708	521,909	537,567	553,694
29	**Motor Fuel Tax Revenue**				$250,538	$218,545	$225,102	$231,855	$238,810	$245,975	$253,354	$260,955	$268,783	$276,847	$285,152
30	**Infrastructure Tax Revenue**				$626,345	$546,364	$562,754	$579,637	$597,026	$614,937	$633,385	$652,387	$671,958	$692,117	$712,880
31	**Total Funding**				**$1,363,364**	**$1,189,269**	**$1,224,947**	**$1,261,695**	**$1,299,546**	**$1,338,533**	**$1,378,689**	**$1,420,049**	**$1,462,651**	**$1,506,530**	**$1,551,726**
32															
33	**Infrastructure Maintenance Exp Funding Gap**				**$1,390,493**	**$766,309**	**$868,512**	**$994,419**	**$1,107,679**	**$1,247,059**	**$1,401,451**	**$1,572,390**	**$1,774,062**	**$1,970,825**	**$2,202,225**
34	**Average per Family**	2,741			**$507**	**$280**	**$317**	**$363**	**$404**	**$455**	**$511**	**$574**	**$647**	**$719**	**$803**
35	Average Property Tax				**557**										

Long Grove Infrastructure 10 Year Maintenance Planning thur 2024

W/O Non Thoroughfare Roads

March 20, 2013

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2		Existing Public	Life Expectency	Annual Objective	Avg. Cost/year 2015-2024	2015 Cost	2016 Cost	2017 Cost	2018 Cost	2019 Cost	2020 Cost	2021 Cost	2022 Cost	2023 Cost	2024 Cost
3	**Expense**														
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5	Strip and repave				$1,244,773	$781,038	$859,141	$945,056	$1,039,561	$1,143,517	$1,257,869	$1,383,656	$1,522,022	$1,674,224	$1,841,646
6	Eng. Design				$62,239	$39,052	$42,957	$47,253	$51,978	$57,176	$62,893	$69,183	$76,101	$83,711	$92,082
7	Eng Proj mgmnt				$99,582	$62,483	$68,731	$75,604	$83,165	$91,481	$100,630	$110,692	$121,762	$133,938	$147,332
8	Eng. Studies Rating				$5,000	$2,500	$2,500	$15,000	$2,500	$2,500	$2,500	$2,500	$15,000	$2,500	$2,500
9	**Total Paving w/Engineering**				$1,411,593	**$885,073**	**$973,330**	**$1,082,913**	**$1,177,204**	**$1,294,675**	**$1,423,892**	**$1,566,031**	**$1,734,884**	**$1,894,373**	**$2,083,560**
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12	Ditch re-establishment and culvert replacement				**$59,281**	**$51,711**	**$53,262**	**$54,860**	**$56,506**	**$58,201**	**$59,947**	**$61,746**	**$63,598**	**$65,506**	**$67,471**
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15	**Street Sign Maintenance**				$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500
16	**Total Road & Drainage Maintenance Exp**				**$1,597,852**	**$1,017,388**	**$1,115,006**	**$1,234,779**	**$1,340,166**	**$1,469,728**	**$1,612,126**	**$1,768,643**	**$1,953,185**	**$2,129,801**	**$2,337,696**
17	**Per Lineal Foot**				$168.82	**$107.49**	**$117.81**	**$130.46**	**$141.60**	**$155.29**	**$170.33**	**$186.87**	**$206.37**	**$225.03**	**$246.99**
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35	Average Property Tax				**557**										