

AGENDA

CITY OF MONONA PUBLIC WORKS COMMITTEE

CITY HALL

Wednesday, October 5, 2016

6:30 P.M.

1. Call To Order.
2. Roll Call.
3. Approval of Minutes from September 7, 2016.
4. Appearances.
 - A. Tim Bolhuis – Pellitteri Waste Systems
5. Unfinished Business.
6. New Business.
 - A. Review of Solid Waste and Recycle RFP price proposals, and consideration of a recommendation to sign a new contract with Advanced Disposal.
 - B. Discussion of intersection safety at Panther Trail and Midmoor Road.
7. Public Works & Utility Operations Report.
8. Next Scheduled Meeting: Wednesday, November 2, 2016
9. Adjournment.

NOTE: Upon reasonable notice, the City of Monona will accommodate the needs of disabled individuals through auxiliary aids or services. For additional information or to request this service, contact Joan Andrusz at (608) 222-2525 (not a TDD telephone number), FAX (608) 222-9225, or through the City Police Department TDD telephone number 222-2535. The public is notified that any final action taken at a previous meeting may be reconsidered pursuant to the City of Monona ordinances. A suspension of the rules may allow for final action to be taken on an item of New Business. It is possible that members of and a possible quorum of members of other governmental bodies of the municipality may be in attendance at the above stated meeting to gather information or speak about a subject, over which they have decision-making responsibility. No action will be taken by any governmental body at the above stated meeting other than the governmental body specifically referred to above in this notice.

PUBLIC WORKS COMMITTEE

Draft Minutes – September 7, 2016

The regular monthly meeting of the Public Works Committee for the City of Monona was called to order at 6:33 pm by Alderman Holmquist.

Present: Alderman Holmquist, Alderman Speight, Ms. Busse, Mr. Franklin, Mr. Stolper, Mr. Besch, Mr. Podell

Excused: Mr. McConnell, Mr. Turino

Also Present: DPW Director Dan Stephany

APPROVAL OF MINUTES

A motion was made by Ms. Busse, and seconded by Mr. Podell to approve the Public Works Committee minutes of August 3, 2016, was carried.

APPEARANCES –

UNFINISHED BUSINESS –

- 5A: Review and consideration of the Industrial Drive sanitary sewer maintenance draft agreement with the City of Madison:
Director Stephany explained the draft agreement that was included in the packet. The sewer main was installed in the late 1950's, and the City has no records for this main. The City of Madison connected to the main in 1987, and it became a joint sewer main discharging to the MMSD. Because the City has no records, the main did not receive any preventive maintenance since it was installed. The main has deteriorated over the years and now has significant infiltration and partial blockages. The draft agreement with the City of Madison calls for Madison to take the lead with replacing the main, and the City reimbursing Madison in 2017. Monona's cost share would be \$227,500, and Madison's share would be \$97,500. Once the repairs have been made, MMSD would take over future responsibility of the main. Monona contributes about 70% of the flow to this main.

A motion was made by Mr. Stolper, and seconded by Ms. Busse to recommend approval of the draft agreement as presented was carried.

NEW BUSINESS

- 6A: Consideration of the proposed 2017 Operating Budget for the public works department:
Director Stephany presented the 2017 draft operating budget for public works and utilities. The director discussed budget highlights for each budget. Significant changes include \$30,000 for participation in the Adaptive Management Program with other area municipalities, \$10,000 for the creation of a televising program for storm sewer main, \$22,000 reduction in the Sewer Mains Outside Services account, and an \$87,800 increase for sanitary sewer treatment charges for MMSD. Director Stephany explained that MMSD will be passing on a tentative increase of 8%. The 8% increase is based on 2016 expenditures, which have been about \$20,000 higher per quarter than budgeted due to CBOD results that are higher than normal, and standards that were outside of established control limits. The district will continue to investigate the higher results.

A motion was made by Mr. Besch, and seconded by Ms. Busse to recommend approval of the 2017 Operating Budget as presented was carried.

- 6B: Discussion on purchasing through the State of Wisconsin program:
Director Stephany provided a template for purchasing a vehicle through the State of Wisconsin purchasing contract. The example was from the Light Duty bid item from 2012. Director Stephany explained that the State releases a bid request for all items on the contract list, and awards contracts based on the bids received. The State documents include the bid request, award, vendor contact information, life cycle costs for the vehicles awarded, bid abstract for each vehicle, and the required specifications the bidders had to meet.

The Director will obtain local pricing in 2017 to see how prices compare with the awards on the State contract.

NEXT SCHEDULED MEETING: Wednesday, October 5, 2016, Monona City Hall, at 6:30pm.

ADJOURNMENT

A motion was made by Mr. Podell and seconded by Mr. Stolper to adjourn was carried (8:02 pm).

Daniel Stephany
Director of Public Works

DRAFT

ADVANCED DISPOSAL - 5 YEAR

	Monthly	Tipping	Monthly	Processing	Monthly	Collection
	Cost/Stop	Fee	Cost/Stop	Fee	Cost/Stop	Fee
	Trash	Per Ton	Recycle	Per Ton	Recycle	Per Ton
2017	4.00	45.92	2.00	50.00	1.90	n/a
2018	4.08	46.84	2.04	51.00	1.95	"
2019	4.16	47.78	2.08	52.00	2.00	"
2020	4.24	48.73	2.12	53.00	2.05	"
2021	4.33	49.71	2.16	54.00	2.10	"

ADVANCED DISPOSAL - 7 YEAR

	Monthly	Tipping	Monthly	Processing	Monthly	Collection
	Cost/Stop	Fee	Cost/Stop	Fee	Cost/Stop	Fee
	Trash	Per Ton	Recycle	Per Ton	Recycle	Per Ton
2017	4.00	45.92	2.00	50.00	1.90	n/a
2018	4.05	46.84	2.04	51.00	1.95	"
2019	4.10	47.78	2.07	52.00	2.00	"
2020	4.15	48.73	2.10	53.00	2.05	"
2021	4.25	49.71	2.13	54.00	2.10	"
2022	4.32	50.70	2.16	55.00	2.15	"
2023	4.40	51.71	2.19	56.00	2.20	"

ADVANCED DISPOSAL - 10 YEAR

	Monthly	Tipping	Monthly	Processing	Monthly	Collection
	Cost/Stop	Fee	Cost/Stop	Fee	Cost/Stop	Fee
	Trash	Per Ton	Recycle	Per Ton	Recycle	Per Ton
2017	4.00	45.92	2.00	50.00	1.90	n/a
2018	4.05	46.84	2.03	51.00	1.95	"
2019	4.10	47.78	2.06	52.00	2.00	"
2020	4.15	48.73	2.09	53.00	2.05	"
2021	4.20	49.71	2.12	54.00	2.10	"
2022	4.25	50.70	2.15	55.00	2.15	"
2023	4.30	51.71	2.18	56.00	2.15	"
2024	4.35	52.75	2.21	57.00	2.18	"
2025	4.40	53.80	2.24	58.00	2.21	"
2026	4.45	54.88	2.27	59.00	2.24	"

PELLITTERI - 5 YEAR

	Monthly	Tipping	Monthly	Processing	Monthly	Collection
	Cost/Stop	Fee	Cost/Stop	Fee	Cost/Stop	Fee
	Trash	Per Ton	Recycle	Per Ton	Recycle	Per Ton
2017	4.00	44.00	2.25	85.00	2.75	n/a
2018	4.15	44.88	2.35	87.13	2.85	"
2019	4.30	45.77	2.45	89.30	2.95	"
2020	4.45	46.69	2.55	91.54	3.05	"
2021	4.60	47.62	2.65	93.82	3.15	"

PELLITTERI - 7 YEAR

	Monthly	Tipping	Monthly	Processing	Monthly	Collection
	Cost/Stop	Fee	Cost/Stop	Fee	Cost/Stop	Fee
	Trash	Per Ton	Recycle	Per Ton	Recycle	Per Ton
2017	3.95	44.00	2.25	85.00	2.75	n/a
2018	4.05	44.00	2.35	87.13	2.85	"
2019	4.15	44.88	2.45	89.30	2.95	"
2020	4.25	45.77	2.55	91.54	3.05	"
2021	4.35	46.69	2.65	93.82	3.15	"
2022	4.45	47.62	2.75	96.17	3.25	"
2023	4.55	48.57	2.85	98.57	3.35	"

PELLITTERI - 10 YEAR

	Monthly	Tipping	Monthly	Processing	Monthly	Collection
	Cost/Stop	Fee	Cost/Stop	Fee	Cost/Stop	Fee
	Trash	Per Ton	Recycle	Per Ton	Recycle	Per Ton
2017	3.95	44.00	2.25	85.00	2.75	n/a
2018	4.05	44.00	2.32	87.13	2.82	"
2019	4.15	44.88	2.39	89.30	2.89	"
2020	4.25	45.77	2.46	91.54	2.96	"
2021	4.35	46.69	2.53	93.82	3.03	"
2022	4.45	47.62	2.60	96.17	3.10	"
2023	4.55	48.57	2.67	98.57	3.17	"
2024	4.65	49.54	2.74	101.03	3.24	"
2025	4.75	50.53	2.81	103.56	3.31	"
2026	4.85	51.54	2.88	106.15	3.38	"

WASTE MANAGEMENT - 5 YEAR

	Monthly	Tipping	Monthly	Processing	Monthly	Collection
	Cost/Stop	Fee	Cost/Stop	Fee	Cost/Stop	Fee
	Trash	Per Ton	Recycle	Per Ton	Recycle	Per Ton
2017	4.11	50.00	2.90	56.00	2.16	n/a
2018	4.23	51.50	2.99	57.68	2.23	"
2019	4.36	53.04	3.08	59.41	2.30	"
2020	4.49	54.63	3.18	61.19	2.37	"
2021	4.62	56.27	3.28	63.03	2.44	"

WASTE MANAGEMENT - 7 YEAR

	Monthly	Tipping	Monthly	Processing	Monthly	Collection
	Cost/Stop	Fee	Cost/Stop	Fee	Cost/Stop	Fee
	Trash	Per Ton	Recycle	Per Ton	Recycle	Per Ton
2017	4.11	50.00	2.90	56.00	2.16	n/a
2018	4.19	51.00	2.96	57.12	2.20	"
2019	4.32	52.53	3.05	58.83	2.27	"
2020	4.45	54.11	3.15	60.59	2.34	"
2021	4.58	55.73	3.25	62.41	2.41	"
2022	4.72	57.40	3.35	64.28	2.48	"
2023	4.86	59.12	3.46	66.21	2.55	"

WASTE MANAGEMENT - 10 YEAR

	Monthly	Tipping	Monthly	Processing	Monthly	Collection
	Cost/Stop	Fee	Cost/Stop	Fee	Cost/Stop	Fee
	Trash	Per Ton	Recycle	Per Ton	Recycle	Per Ton
2017	4.11	50.00	2.90	56.00	2.16	n/a
2018	4.15	50.50	2.93	56.56	2.18	"
2019	4.19	51.51	2.99	57.69	2.22	"
2020	4.32	53.06	3.08	59.42	2.29	"
2021	4.45	54.65	3.18	61.20	2.36	"
2022	4.58	56.29	3.28	63.04	2.43	"
2023	4.72	57.98	3.38	64.93	2.50	"
2024	4.86	59.72	3.49	66.88	2.58	"
2025	5.01	61.51	3.60	68.89	2.66	"
2026	5.16	63.36	3.71	70.96	2.74	"

	Advanced Disposal			Pellitteri			Waste Management		
	Year 1	Year 2	Year 3	Year 1	Year 2	Year 3	Year 1	Year 2	Year 3
Appliance without Freon	35.00	35.00	37.00	31.00	32.00	33.00	65.00	67.00	69.00
Appliance with Freon	35.00	35.00	37.00	46.00	47.00	48.00	50.00	52.50	55.00
Electronics, price each	30.00	30.00	32.00	36.00	37.00	38.00	50.00	52.50	55.00
Tires on rim, each	20.00	20.00	25.00	21.00	22.00	23.00	20.00	21.00	22.00
Tires off rim, each	10.00	10.00	12.00	16.00	17.00	18.00	15.00	16.00	17.00
Automobile batteries each	25.00	25.00	30.00	0.00	0.00	0.00	20.00	21.00	22.00
General refuse, per cubic yard	20.00	20.00	23.00	23.00	24.00	25.00	35.00	36.00	37.00

Collection Days of the Week	Tuesday and Wednesday	Tuesday, Wednesday, Thursday	Tuesday and Wednesday
Fuel Policy	No fuel surcharge life of contract	Starts at \$2.51/gallon	Included

	5 Year Average
Units	2708
Trash Tonnage (before residue)	1824
Recycle Residue Tonnage (dirty recycle)	26
Total Trash Tonnage (plus residue)	1850
Recycle Tonnage (minus residue)	836
Paper, Tons	410
Cardboard, Tons	101
Aluminum, Tons	12
Tin, Tons	22
Glass, Tons	198
Plastic, Tons	68
Scrap Metal, Tons	26
Bulk Item, Tons	18
Rebate Value,	\$60,000

ADVANCED DISPOSAL - 7 YEAR																			
	TRASH					RECYCLE OPTION A - Includes Rebate Program							RECYCLE OPTION B - No Rebate Program				Option A & B Est. Difference		
	Monthly Cost/Stop Trash	Units 2708	Collection Cost - Refuse Annual	Tipping Fee Per Ton	Tipping Fee Total Est. 1850	Monthly Cost/Stop Recycle	Units 2708	Collection Cost - Recycle Annual	Processing Fee Per Ton	Processing Fee Total Est. 836	Est. Annual Expense Before Rebate Deduction	Rebate Value Ave.	Est. Annual Expense Refuse & Recycle After Rebate Deduction	Monthly Cost/Stop Recycle	Units 2708	Collection Cost - Recycle Annual		Collection Fee Per Ton	Est. Annual Expense Refuse & Recycle
2017	\$ 4.00	\$ 10,832	\$ 129,984	\$ 45.92	\$ 84,952	\$ 2.00	\$ 5,416	\$ 64,992	\$ 50.00	\$ 41,800	\$ 321,728	\$ 60,000	\$ 261,728	\$ 1.90	\$ 5,145	\$ 61,742	n/a	\$ 276,678	\$14,950
2018	\$ 4.05	\$ 10,967	\$ 131,609	\$ 46.84	\$ 86,654	\$ 2.04	\$ 5,524	\$ 66,292	\$ 51.00	\$ 42,636	\$ 327,191	\$ 60,000	\$ 267,191	\$ 1.95	\$ 5,281	\$ 63,367	"	\$ 281,630	\$ 14,439
2019	\$ 4.10	\$ 11,103	\$ 133,234	\$ 47.78	\$ 88,393	\$ 2.07	\$ 5,606	\$ 67,267	\$ 52.00	\$ 43,472	\$ 332,365	\$ 60,000	\$ 272,365	\$ 2.00	\$ 5,416	\$ 64,992	"	\$ 286,619	\$ 14,254
2020	\$ 4.15	\$ 11,238	\$ 134,858	\$ 48.73	\$ 90,151	\$ 2.10	\$ 5,687	\$ 68,242	\$ 53.00	\$ 44,308	\$ 337,559	\$ 60,000	\$ 277,559	\$ 2.05	\$ 5,551	\$ 66,617	"	\$ 291,626	\$ 14,067
2021	\$ 4.25	\$ 11,509	\$ 138,108	\$ 49.71	\$ 91,964	\$ 2.13	\$ 5,768	\$ 69,216	\$ 54.00	\$ 45,144	\$ 344,432	\$ 60,000	\$ 284,432	\$ 2.10	\$ 5,687	\$ 68,242	"	\$ 298,313	\$ 13,881
2022	\$ 4.32	\$ 11,699	\$ 140,383	\$ 50.70	\$ 93,795	\$ 2.16	\$ 5,849	\$ 70,191	\$ 55.00	\$ 45,980	\$ 350,349	\$ 60,000	\$ 290,349	\$ 2.15	\$ 5,822	\$ 69,866	"	\$ 304,044	\$ 13,695
2023	\$ 4.40	\$ 11,915	\$ 142,982	\$ 51.71	\$ 95,664	\$ 2.19	\$ 5,931	\$ 71,166	\$ 56.00	\$ 46,816	\$ 356,628	\$ 60,000	\$ 296,628	\$ 2.20	\$ 5,958	\$ 71,491	"	\$ 310,137	\$ 13,509
				\$ 631,572					\$ 310,156	\$ 2,370,252		\$ 1,950,252					\$ 2,049,047		\$ 98,795

PELLITTERI - 7 YEAR																			
	TRASH					RECYCLE OPTION A - Includes Rebate Program							RECYCLE OPTION B - No Rebate Program				Option A & B Est. Difference		
	Monthly Cost/Stop Trash	Units 2708	Collection Cost - Refuse Annual	Tipping Fee Per Ton	Tipping Fee Total Est. 1850	Monthly Cost/Stop Recycle	Units 2708	Collection Cost - Recycle Annual	Processing Fee Per Ton	Processing Fee Total Est. 836	Est. Annual Expense Before Rebate Deduction	Rebate Value Ave.	Est. Annual Expense Refuse & Recycle After Rebate Deduction	Monthly Cost/Stop Recycle	Units 2708	Collection Cost - Recycle Annual		Collection Fee Per Ton	Est. Annual Expense Refuse & Recycle
2017	\$ 3.95	\$ 10,697	\$ 128,359	\$ 44.00	\$ 81,400	\$ 2.25	\$ 6,093	\$ 73,116	\$ 85.00	\$ 71,060	\$ 353,935	\$ 60,000	\$ 293,935	\$ 2.75	\$ 7,447	\$ 89,364	n/a	\$ 299,123	
2018	\$ 4.05	\$ 10,967	\$ 131,609	\$ 44.00	\$ 81,400	\$ 2.35	\$ 6,364	\$ 76,366	\$ 87.13	\$ 72,841	\$ 362,215	\$ 60,000	\$ 302,215	\$ 2.85	\$ 7,718	\$ 92,614	"	\$ 305,622	
2019	\$ 4.15	\$ 11,238	\$ 134,858	\$ 44.88	\$ 83,028	\$ 2.45	\$ 6,635	\$ 79,615	\$ 89.30	\$ 74,655	\$ 372,156	\$ 60,000	\$ 312,156	\$ 2.95	\$ 7,989	\$ 95,863	"	\$ 313,750	
2020	\$ 4.25	\$ 11,509	\$ 138,108	\$ 45.77	\$ 84,675	\$ 2.55	\$ 6,905	\$ 82,865	\$ 91.54	\$ 76,527	\$ 382,175	\$ 60,000	\$ 322,175	\$ 3.05	\$ 8,259	\$ 99,113	"	\$ 321,895	
2021	\$ 4.35	\$ 11,780	\$ 141,358	\$ 46.69	\$ 86,377	\$ 2.65	\$ 7,176	\$ 86,114	\$ 93.82	\$ 78,434	\$ 392,282	\$ 60,000	\$ 332,282	\$ 3.15	\$ 8,530	\$ 102,362	"	\$ 330,097	
2022	\$ 4.45	\$ 12,051	\$ 144,607	\$ 47.62	\$ 88,097	\$ 2.75	\$ 7,447	\$ 89,364	\$ 96.17	\$ 80,398	\$ 402,466	\$ 60,000	\$ 342,466	\$ 3.25	\$ 8,801	\$ 105,612	"	\$ 338,316	
2023	\$ 4.55	\$ 12,321	\$ 147,857	\$ 48.57	\$ 89,855	\$ 2.85	\$ 7,718	\$ 92,614	\$ 98.57	\$ 82,405	\$ 412,729	\$ 60,000	\$ 352,729	\$ 3.35	\$ 9,072	\$ 108,862	"	\$ 346,573	
				\$ 594,831					\$ 536,319	\$ 2,677,959		\$ 2,257,959					\$ 2,255,376		

ADVANCED DISPOSAL - 10 YEAR																			
	TRASH					RECYCLE OPTION A - Includes Rebate Program							RECYCLE OPTION B - No Rebate Program				Option A & B Est. Difference		
	Monthly Cost/Stop Trash	Units 2708	Collection Cost - Refuse Annual	Tipping Fee Per Ton	Tipping Fee Total Est. 1850	Monthly Cost/Stop Recycle	Units 2708	Collection Cost - Recycle Annual	Processing Fee Per Ton	Processing Fee Total Est. 836	Est. Annual Expense Before Rebate Deduction	Rebate Value Ave.	Est. Annual Expense Refuse & Recycle After Rebate Deduction	Monthly Cost/Stop Recycle	Units 2708	Collection Cost - Recycle Annual		Collection Fee Per Ton	Est. Annual Expense Refuse & Recycle
2017	\$ 4.00	\$ 10,832	\$ 129,984	\$ 45.92	\$ 84,952	\$ 2.00	\$ 5,416	\$ 64,992	\$ 50.00	\$ 41,800	\$ 321,728	\$ 60,000	\$ 261,728	\$ 1.90	\$ 5,145	\$ 61,742	n/a	\$ 276,678	\$ 14,950
2018	\$ 4.05	\$ 10,967	\$ 131,609	\$ 46.84	\$ 86,654	\$ 2.03	\$ 5,497	\$ 65,967	\$ 51.00	\$ 42,636	\$ 326,866	\$ 60,000	\$ 266,866	\$ 1.95	\$ 5,281	\$ 63,367	"	\$ 281,630	\$ 14,764
2019	\$ 4.10	\$ 11,103	\$ 133,234	\$ 47.78	\$ 88,393	\$ 2.06	\$ 5,578	\$ 66,942	\$ 52.00	\$ 43,472	\$ 332,040	\$ 60,000	\$ 272,040	\$ 2.00	\$ 5,416	\$ 64,992	"	\$ 286,619	\$ 14,579
2020	\$ 4.15	\$ 11,238	\$ 134,858	\$ 48.73	\$ 90,151	\$ 2.09	\$ 5,660	\$ 67,917	\$ 53.00	\$ 44,308	\$ 337,234	\$ 60,000	\$ 277,234	\$ 2.05	\$ 5,551	\$ 66,617	"	\$ 291,626	\$ 14,392
2021	\$ 4.20	\$ 11,374	\$ 136,483	\$ 49.71	\$ 91,964	\$ 2.12	\$ 5,741	\$ 68,892	\$ 54.00	\$ 45,144	\$ 342,482	\$ 60,000	\$ 282,482	\$ 2.10	\$ 5,687	\$ 68,242	"	\$ 296,688	\$ 14,206
2022	\$ 4.25	\$ 11,509	\$ 138,108	\$ 50.70	\$ 93,795	\$ 2.15	\$ 5,822	\$ 69,866	\$ 55.00	\$ 45,980	\$ 347,749	\$ 60,000	\$ 287,749	\$ 2.15	\$ 5,822	\$ 69,866	"	\$ 301,769	\$ 14,020
2023	\$ 4.30	\$ 11,644	\$ 139,733	\$ 51.71	\$ 95,664	\$ 2.18	\$ 5,903	\$ 70,841	\$ 56.00	\$ 46,816	\$ 353,054	\$ 60,000	\$ 293,054	\$ 2.15	\$ 5,822	\$ 69,866	"	\$ 305,263	\$ 12,209
2024	\$ 4.35	\$ 11,780	\$ 141,358	\$ 52.75	\$ 97,588	\$ 2.21	\$ 5,985	\$ 71,816	\$ 57.00	\$ 47,652	\$ 358,413	\$ 60,000	\$ 298,413	\$ 2.18	\$ 5,903	\$ 70,841	"	\$ 309,786	\$ 11,373
2025	\$ 4.40	\$ 11,915	\$ 142,982	\$ 53.80	\$ 99,530	\$ 2.24	\$ 6,066	\$ 72,791	\$ 58.00	\$ 48,488	\$ 363,791	\$ 60,000	\$ 303,791	\$ 2.21	\$ 5,985	\$ 71,816	"	\$ 314,329	\$ 10,538
2026	\$ 4.45	\$ 12,051	\$ 144,607	\$ 54.88	\$ 101,528	\$ 2.27	\$ 6,147	\$ 73,766	\$ 59.00	\$ 49,324	\$ 369,225	\$ 60,000	\$ 309,225	\$ 2.24	\$ 6,066	\$ 72,791	"	\$ 318,926	\$ 9,701
					\$ 930,217					\$ 455,620	\$ 3,452,583		\$ 2,852,583					\$ 2,983,314	\$ 130,731

PELLITTERI - 10 YEAR																			
	TRASH					RECYCLE OPTION A - Includes Rebate Program							RECYCLE OPTION B - No Rebate Program				Option A & B Est. Difference		
	Monthly Cost/Stop Trash	Units 2708	Collection Cost - Refuse Annual	Tipping Fee Per Ton	Tipping Fee Total Est. 1850	Monthly Cost/Stop Recycle	Units 2708	Collection Cost - Recycle Annual	Processing Fee Per Ton	Processing Fee Total Est. 836	Est. Annual Expense Before Rebate Deduction	Rebate Value Ave.	Est. Annual Expense Refuse & Recycle After Rebate Deduction	Monthly Cost/Stop Recycle	Units 2708	Collection Cost - Recycle Annual		Collection Fee Per Ton	Est. Annual Expense Refuse & Recycle
2017	\$ 3.95	\$ 10,697	\$ 128,359	\$ 44.00	\$ 81,400	\$ 2.25	\$ 6,093	\$ 73,116	\$ 85.00	\$ 71,060	\$ 353,935	\$ 60,000	\$ 293,935	\$ 2.75	\$ 7,447	\$ 89,364	n/a	\$ 299,123	
2018	\$ 4.05	\$ 10,967	\$ 131,609	\$ 44.00	\$ 81,400	\$ 2.32	\$ 6,283	\$ 75,391	\$ 87.13	\$ 72,841	\$ 361,240	\$ 60,000	\$ 301,240	\$ 2.82	\$ 7,637	\$ 91,639	"	\$ 304,648	
2019	\$ 4.15	\$ 11,238	\$ 134,858	\$ 44.88	\$ 83,028	\$ 2.39	\$ 6,472	\$ 77,665	\$ 89.30	\$ 74,655	\$ 370,207	\$ 60,000	\$ 310,207	\$ 2.89	\$ 7,826	\$ 93,913	"	\$ 311,800	
2020	\$ 4.25	\$ 11,509	\$ 138,108	\$ 45.77	\$ 84,675	\$ 2.46	\$ 6,662	\$ 79,940	\$ 91.54	\$ 76,527	\$ 379,250	\$ 60,000	\$ 319,250	\$ 2.96	\$ 8,016	\$ 96,188	"	\$ 318,971	
2021	\$ 4.35	\$ 11,780	\$ 141,358	\$ 46.69	\$ 86,377	\$ 2.53	\$ 6,851	\$ 82,215	\$ 93.82	\$ 78,434	\$ 388,383	\$ 60,000	\$ 328,383	\$ 3.03	\$ 8,205	\$ 98,463	"	\$ 326,197	
2022	\$ 4.45	\$ 12,051	\$ 144,607	\$ 47.62	\$ 88,097	\$ 2.60	\$ 7,041	\$ 84,490	\$ 96.17	\$ 80,398	\$ 397,592	\$ 60,000	\$ 337,592	\$ 3.10	\$ 8,395	\$ 100,738	"	\$ 333,442	
2023	\$ 4.55	\$ 12,321	\$ 147,857	\$ 48.57	\$ 89,855	\$ 2.67	\$ 7,230	\$ 86,764	\$ 98.57	\$ 82,405	\$ 406,880	\$ 60,000	\$ 346,880	\$ 3.17	\$ 8,584	\$ 103,012	"	\$ 340,724	
2024	\$ 4.65	\$ 12,592	\$ 151,106	\$ 49.54	\$ 91,649	\$ 2.74	\$ 7,420	\$ 89,039	\$ 101.03	\$ 84,461	\$ 416,256	\$ 60,000	\$ 356,256	\$ 3.24	\$ 8,774	\$ 105,287	"	\$ 348,042	
2025	\$ 4.75	\$ 12,863	\$ 154,356	\$ 50.53	\$ 93,481	\$ 2.81	\$ 7,609	\$ 91,314	\$ 103.56	\$ 86,576	\$ 425,726	\$ 60,000	\$ 365,726	\$ 3.31	\$ 8,963	\$ 107,562	"	\$ 355,398	
2026	\$ 4.85	\$ 13,134	\$ 157,606	\$ 51.54	\$ 95,349	\$ 2.88	\$ 7,799	\$ 93,588	\$ 106.15	\$ 88,741	\$ 435,284	\$ 60,000	\$ 375,284	\$ 3.38	\$ 9,153	\$ 109,836	"	\$ 362,791	
					\$ 875,309					\$ 796,098	\$ 3,934,753		\$ 3,334,753					\$ 3,301,135	

ADVANCED DISPOSAL - 10 YEAR																		
TRASH					RECYCLE OPTION A - Includes Rebate Program									RECYCLE OPTION B - No Rebate Program				
Monthly Cost/Stop Trash	Units 2708	Collection Cost - Refuse 12 months	Tipping Fee Per Ton	Tipping Fee Total Annual Est. 1850	Monthly Cost/Stop Recycle	Units 2708	Collection Cost - Recycle 12 months	Processing Fee Per Ton	Processing Fee Total Annual Est. 836	Est. Annual Expense Before Rebate Deduction	Rebate Value Ave.	Est. Annual Expense Refuse & Recycle After Rebate Deduction	Monthly Cost/Stop Recycle	Units 2708	Collection Cost - Recycle 12 months	Collection Fee Per Ton	Est. Annual Expense Refuse & Recycle	
2017	\$ 4.00	\$ 10,832	\$ 45.92	\$ 129,984	\$ 2.00	\$ 5,416	\$ 64,992	\$ 50.00	\$ 41,800	\$ 321,728	\$ 60,000	\$ 261,728	\$ 1.90	\$ 5,145	\$ 61,742	n/a	\$ 276,678	
2018	\$ 4.05	\$ 10,967	\$ 46.84	\$ 131,609	\$ 2.03	\$ 5,497	\$ 65,967	\$ 51.00	\$ 42,636	\$ 326,866	\$ 60,000	\$ 266,866	\$ 1.95	\$ 5,281	\$ 63,367	"	\$ 281,630	
2019	\$ 4.10	\$ 11,103	\$ 47.78	\$ 133,234	\$ 2.06	\$ 5,578	\$ 66,942	\$ 52.00	\$ 43,472	\$ 332,040	\$ 60,000	\$ 272,040	\$ 2.00	\$ 5,416	\$ 64,992	"	\$ 286,619	
2020	\$ 4.15	\$ 11,238	\$ 48.73	\$ 134,858	\$ 2.09	\$ 5,660	\$ 67,917	\$ 53.00	\$ 44,308	\$ 337,234	\$ 60,000	\$ 277,234	\$ 2.05	\$ 5,551	\$ 66,617	"	\$ 291,626	
2021	\$ 4.20	\$ 11,374	\$ 49.71	\$ 136,483	\$ 2.12	\$ 5,741	\$ 68,892	\$ 54.00	\$ 45,144	\$ 342,482	\$ 60,000	\$ 282,482	\$ 2.10	\$ 5,687	\$ 68,242	"	\$ 296,688	
2022	\$ 4.25	\$ 11,509	\$ 50.70	\$ 138,108	\$ 2.15	\$ 5,822	\$ 69,866	\$ 55.00	\$ 45,980	\$ 347,749	\$ 60,000	\$ 287,749	\$ 2.15	\$ 5,822	\$ 69,866	"	\$ 301,769	
2023	\$ 4.30	\$ 11,644	\$ 51.71	\$ 139,733	\$ 2.18	\$ 5,903	\$ 70,841	\$ 56.00	\$ 46,816	\$ 353,054	\$ 60,000	\$ 293,054	\$ 2.15	\$ 5,822	\$ 69,866	"	\$ 305,263	
2024	\$ 4.35	\$ 11,780	\$ 52.75	\$ 141,358	\$ 2.21	\$ 5,985	\$ 71,816	\$ 57.00	\$ 47,652	\$ 358,413	\$ 60,000	\$ 298,413	\$ 2.18	\$ 5,903	\$ 70,841	"	\$ 309,786	
2025	\$ 4.40	\$ 11,915	\$ 53.80	\$ 142,982	\$ 2.24	\$ 6,066	\$ 72,791	\$ 58.00	\$ 48,488	\$ 363,791	\$ 60,000	\$ 303,791	\$ 2.21	\$ 5,985	\$ 71,816	"	\$ 314,329	
2026	\$ 4.45	\$ 12,051	\$ 54.88	\$ 144,607	\$ 2.27	\$ 6,147	\$ 73,766	\$ 59.00	\$ 49,324	\$ 369,225	\$ 60,000	\$ 309,225	\$ 2.24	\$ 6,066	\$ 72,791	"	\$ 318,926	
												\$ 2,852,583					\$ 2,983,314	

PELLITTERI - 10 YEAR																		
TRASH					RECYCLE OPTION A - Includes Rebate Program									RECYCLE OPTION B - No Rebate Program				
Monthly Cost/Stop Trash	Units 2708	Collection Cost - Refuse 12 months	Tipping Fee Per Ton	Tipping Fee Total Annual Est. 1850	Monthly Cost/Stop Recycle	Units 2708	Collection Cost - Recycle 12 months	Processing Fee Per Ton	Processing Fee Total Annual Est. 836	Est. Annual Expense Before Rebate Deduction	Rebate Value Ave.	Est. Annual Expense Refuse & Recycle After Rebate Deduction	Monthly Cost/Stop Recycle	Units 2708	Collection Cost - Recycle 12 months	Collection Fee Per Ton	Est. Annual Expense Refuse & Recycle	
2017	\$ 3.95	\$ 10,697	\$ 44.00	\$ 128,359	\$ 2.25	\$ 6,093	\$ 73,116	\$ 85.00	\$ 71,060	\$ 353,935	\$ 60,000	\$ 293,935	\$ 2.75	\$ 7,447	\$ 89,364	n/a	\$ 299,123	
2018	\$ 4.05	\$ 10,967	\$ 44.00	\$ 131,609	\$ 2.32	\$ 6,283	\$ 75,391	\$ 87.13	\$ 72,841	\$ 361,240	\$ 60,000	\$ 301,240	\$ 2.82	\$ 7,637	\$ 91,639	"	\$ 304,648	
2019	\$ 4.15	\$ 11,238	\$ 44.88	\$ 134,858	\$ 2.39	\$ 6,472	\$ 77,665	\$ 89.30	\$ 74,655	\$ 370,207	\$ 60,000	\$ 310,207	\$ 2.89	\$ 7,826	\$ 93,913	"	\$ 311,800	
2020	\$ 4.25	\$ 11,509	\$ 45.77	\$ 138,108	\$ 2.46	\$ 6,662	\$ 79,940	\$ 91.54	\$ 76,527	\$ 379,250	\$ 60,000	\$ 319,250	\$ 2.96	\$ 8,016	\$ 96,188	"	\$ 318,971	
2021	\$ 4.35	\$ 11,780	\$ 46.69	\$ 141,358	\$ 2.53	\$ 6,851	\$ 82,215	\$ 93.82	\$ 78,434	\$ 388,383	\$ 60,000	\$ 328,383	\$ 3.03	\$ 8,205	\$ 98,463	"	\$ 326,197	
2022	\$ 4.45	\$ 12,051	\$ 47.62	\$ 144,607	\$ 2.60	\$ 7,041	\$ 84,490	\$ 96.17	\$ 80,398	\$ 397,592	\$ 60,000	\$ 337,592	\$ 3.10	\$ 8,395	\$ 100,738	"	\$ 333,442	
2023	\$ 4.55	\$ 12,321	\$ 48.57	\$ 147,857	\$ 2.67	\$ 7,230	\$ 86,764	\$ 98.57	\$ 82,405	\$ 406,880	\$ 60,000	\$ 346,880	\$ 3.17	\$ 8,584	\$ 103,012	"	\$ 340,724	
2024	\$ 4.65	\$ 12,592	\$ 49.54	\$ 151,106	\$ 2.74	\$ 7,420	\$ 89,039	\$ 101.03	\$ 84,461	\$ 416,256	\$ 60,000	\$ 356,256	\$ 3.24	\$ 8,774	\$ 105,287	"	\$ 348,042	
2025	\$ 4.75	\$ 12,863	\$ 50.53	\$ 154,356	\$ 2.81	\$ 7,609	\$ 91,314	\$ 103.56	\$ 86,576	\$ 425,726	\$ 60,000	\$ 365,726	\$ 3.31	\$ 8,963	\$ 107,562	"	\$ 355,398	
2026	\$ 4.85	\$ 13,134	\$ 51.54	\$ 157,606	\$ 2.88	\$ 7,799	\$ 93,588	\$ 106.15	\$ 88,741	\$ 435,284	\$ 60,000	\$ 375,284	\$ 3.38	\$ 9,153	\$ 109,836	"	\$ 362,791	
												\$ 3,334,753					\$ 3,301,135	

ADVANCED DISPOSAL - 7 YEAR																		
TRASH					RECYCLE OPTION A - Includes Rebate Program									RECYCLE OPTION B - No Rebate Program				
Monthly Cost/Stop Trash	Units 2708	Collection Cost - Refuse 12 months	Tipping Fee Per Ton	Tipping Fee Total Annual Est. 1850	Monthly Cost/Stop Recycle	Units 2708	Collection Cost - Recycle 12 months	Processing Fee Per Ton	Processing Fee Total Annual Est. 836	Est. Annual Expense Before Rebate Deduction	Rebate Value Ave.	Est. Annual Expense Refuse & Recycle After Rebate Deduction	Monthly Cost/Stop Recycle	Units 2708	Collection Cost - Recycle 12 months	Collection Fee Per Ton	Est. Annual Expense Refuse & Recycle	
2017	\$ 4.00	\$ 10,832	\$ 45.92	\$ 129,984	\$ 2.00	\$ 5,416	\$ 64,992	\$ 50.00	\$ 41,800	\$ 321,728	\$ 60,000	\$ 261,728	\$ 1.90	\$ 5,145	\$ 61,742	n/a	\$ 276,678.40	
2018	\$ 4.05	\$ 10,967	\$ 46.84	\$ 131,609	\$ 2.04	\$ 5,524	\$ 66,292	\$ 51.00	\$ 42,636	\$ 327,191	\$ 60,000	\$ 267,191	\$ 1.95	\$ 5,281	\$ 63,367	"	\$ 281,630.00	
2019	\$ 4.10	\$ 11,103	\$ 47.78	\$ 133,234	\$ 2.07	\$ 5,606	\$ 67,267	\$ 52.00	\$ 43,472	\$ 332,365	\$ 60,000	\$ 272,365	\$ 2.00	\$ 5,416	\$ 64,992	"	\$ 286,618.60	
2020	\$ 4.15	\$ 11,238	\$ 48.73	\$ 134,858	\$ 2.10	\$ 5,687	\$ 68,242	\$ 53.00	\$ 44,308	\$ 337,559	\$ 60,000	\$ 277,559	\$ 2.05	\$ 5,551	\$ 66,617	"	\$ 291,625.70	
2021	\$ 4.25	\$ 11,509	\$ 49.71	\$ 138,108	\$ 2.13	\$ 5,768	\$ 69,216	\$ 54.00	\$ 45,144	\$ 344,432	\$ 60,000	\$ 284,432	\$ 2.10	\$ 5,687	\$ 68,242	"	\$ 298,313.10	
2022	\$ 4.32	\$ 11,699	\$ 50.70	\$ 140,383	\$ 2.16	\$ 5,849	\$ 70,191	\$ 55.00	\$ 45,980	\$ 350,349	\$ 60,000	\$ 290,349	\$ 2.15	\$ 5,822	\$ 69,866	"	\$ 304,044.12	
2023	\$ 4.40	\$ 11,915	\$ 51.71	\$ 142,982	\$ 2.19	\$ 5,931	\$ 71,166	\$ 56.00	\$ 46,816	\$ 356,628	\$ 60,000	\$ 296,628	\$ 2.20	\$ 5,958	\$ 71,491	"	\$ 310,137.10	
												\$ 1,950,252					\$ 2,049,047	

PELLITTERI - 7 YEAR																		
TRASH					RECYCLE OPTION A - Includes Rebate Program									RECYCLE OPTION B - No Rebate Program				
Monthly Cost/Stop Trash	Units 2708	Collection Cost - Refuse 12 months	Tipping Fee Per Ton	Tipping Fee Total Annual Est. 1850	Monthly Cost/Stop Recycle	Units 2708	Collection Cost - Recycle 12 months	Processing Fee Per Ton	Processing Fee Total Annual Est. 836	Est. Annual Expense Before Rebate Deduction	Rebate Value Ave.	Est. Annual Expense Refuse & Recycle After Rebate Deduction	Monthly Cost/Stop Recycle	Units 2708	Collection Cost - Recycle 12 months	Collection Fee Per Ton	Est. Annual Expense Refuse & Recycle	
2017	\$ 3.95	\$ 10,697	\$ 44.00	\$ 128,359	\$ 2.25	\$ 6,093	\$ 73,116	\$ 85.00	\$ 71,060	\$ 353,935	\$ 60,000	\$ 293,935	\$ 2.75	\$ 7,447	\$ 89,364	n/a	\$ 299,123	
2018	\$ 4.05	\$ 10,967	\$ 44.00	\$ 131,609	\$ 2.35	\$ 6,364	\$ 76,366	\$ 87.13	\$ 72,841	\$ 362,215	\$ 60,000	\$ 302,215	\$ 2.85	\$ 7,718	\$ 92,614	"	\$ 305,622	
2019	\$ 4.15	\$ 11,238	\$ 44.88	\$ 134,858	\$ 2.45	\$ 6,635	\$ 79,615	\$ 89.30	\$ 74,655	\$ 372,156	\$ 60,000	\$ 312,156	\$ 2.95	\$ 7,989	\$ 95,863	"	\$ 313,750	
2020	\$ 4.25	\$ 11,509	\$ 45.77	\$ 138,108	\$ 2.55	\$ 6,905	\$ 82,865	\$ 91.54	\$ 76,527	\$ 382,175	\$ 60,000	\$ 322,175	\$ 3.05	\$ 8,259	\$ 99,113	"	\$ 321,895	
2021	\$ 4.35	\$ 11,780	\$ 46.69	\$ 141,358	\$ 2.65	\$ 7,176	\$ 86,114	\$ 93.82	\$ 78,434	\$ 392,282	\$ 60,000	\$ 332,282	\$ 3.15	\$ 8,530	\$ 102,362	"	\$ 330,097	
2022	\$ 4.45	\$ 12,051	\$ 47.62	\$ 144,607	\$ 2.75	\$ 7,447	\$ 89,364	\$ 96.17	\$ 80,398	\$ 402,466	\$ 60,000	\$ 342,466	\$ 3.25	\$ 8,801	\$ 105,612	"	\$ 338,316	
2023	\$ 4.55	\$ 12,321	\$ 48.57	\$ 147,857	\$ 2.85	\$ 7,718	\$ 92,614	\$ 98.57	\$ 82,405	\$ 412,729	\$ 60,000	\$ 352,729	\$ 3.35	\$ 9,072	\$ 108,862	"	\$ 346,573	
												\$ 2,257,959					\$ 2,255,376	

ADVANCED DISPOSAL - 5 YEAR																		
TRASH					RECYCLE OPTION A - Includes Rebate Program									RECYCLE OPTION B - No Rebate Program				
Monthly Cost/Stop Trash	Units 2708	Collection Cost - Refuse 12 months	Tipping Fee Per Ton	Tipping Fee Total Annual Est. 1850	Monthly Cost/Stop Recycle	Units 2708	Collection Cost - Recycle 12 months	Processing Fee Per Ton	Processing Fee Total Annual Est. 836	Est. Annual Expense Before Rebate Deduction	Rebate Value Ave.	Est. Annual Expense Refuse & Recycle After Rebate Deduction	Monthly Cost/Stop Recycle	Units 2708	Collection Cost - Recycle 12 months	Collection Fee Per Ton	Est. Annual Expense Refuse & Recycle	
2017	\$ 4.00	\$ 10,832	\$ 45.92	\$ 129,984	\$ 2.00	\$ 5,416	\$ 64,992	\$ 50.00	\$ 41,800	\$ 321,728	\$ 60,000	\$ 261,728	\$ 1.90	\$ 5,145	\$ 61,742	n/a	\$ 276,678	
2018	\$ 4.08	\$ 11,049	\$ 46.84	\$ 132,584	\$ 2.04	\$ 5,524	\$ 66,292	\$ 51.00	\$ 42,636	\$ 328,166	\$ 60,000	\$ 268,166	\$ 1.95	\$ 5,281	\$ 63,367	"	\$ 282,605	
2019	\$ 4.16	\$ 11,265	\$ 47.78	\$ 135,183	\$ 2.08	\$ 5,633	\$ 67,592	\$ 52.00	\$ 43,472	\$ 334,640	\$ 60,000	\$ 274,640	\$ 2.00	\$ 5,416	\$ 64,992	"	\$ 288,568	
2020	\$ 4.24	\$ 11,482	\$ 48.73	\$ 137,783	\$ 2.12	\$ 5,741	\$ 68,892	\$ 53.00	\$ 44,308	\$ 341,133	\$ 60,000	\$ 281,133	\$ 2.05	\$ 5,551	\$ 66,617	"	\$ 294,550	
2021	\$ 4.33	\$ 11,726	\$ 49.71	\$ 140,708	\$ 2.16	\$ 5,849	\$ 70,191	\$ 54.00	\$ 45,144	\$ 348,007	\$ 60,000	\$ 288,007	\$ 2.10	\$ 5,687	\$ 68,242	"	\$ 300,913	
												\$ 1,373,673					\$ 1,443,315	

PELLITTERI - 5 YEAR																		
TRASH					RECYCLE OPTION A - Includes Rebate Program									RECYCLE OPTION B - No Rebate Program				
Monthly Cost/Stop Trash	Units 2708	Collection Cost - Refuse 12 months	Tipping Fee Per Ton	Tipping Fee Total Annual Est. 1850	Monthly Cost/Stop Recycle	Units 2708	Collection Cost - Recycle 12 months	Processing Fee Per Ton	Processing Fee Total Annual Est. 836	Est. Annual Expense Before Rebate Deduction	Rebate Value Ave.	Est. Annual Expense Refuse & Recycle After Rebate Deduction	Monthly Cost/Stop Recycle	Units 2708	Collection Cost - Recycle 12 months	Collection Fee Per Ton	Est. Annual Expense Refuse & Recycle	
2017	\$ 4.00	\$ 10,832	\$ 44.00	\$ 129,984	\$ 2.25	\$ 6,093	\$ 73,116	\$ 85.00	\$ 71,060	\$ 355,560	\$ 60,000	\$ 295,560	\$ 2.75	\$ 7,447	\$ 89,364	n/a	\$ 300,748	
2018	\$ 4.15	\$ 11,238	\$ 44.88	\$ 134,858	\$ 2.35	\$ 6,364	\$ 76,366	\$ 87.13	\$ 72,841	\$ 367,093	\$ 60,000	\$ 307,093	\$ 2.85	\$ 7,718	\$ 92,614	"	\$ 310,500	
2019	\$ 4.30	\$ 11,644	\$ 45.77	\$ 139,733	\$ 2.45	\$ 6,635	\$ 79,615	\$ 89.30	\$ 74,655	\$ 378,677	\$ 60,000	\$ 318,677	\$ 2.95	\$ 7,989	\$ 95,863	"	\$ 320,271	
2020	\$ 4.45	\$ 12,051	\$ 46.69	\$ 144,607	\$ 2.55	\$ 6,905	\$ 82,865	\$ 91.54	\$ 76,527	\$ 390,376	\$ 60,000	\$ 330,376	\$ 3.05	\$ 8,259	\$ 99,113	"	\$ 330,097	
2021	\$ 4.60	\$ 12,457	\$ 47.62	\$ 149,482	\$ 2.65	\$ 7,176	\$ 86,114	\$ 93.82	\$ 78,434	\$ 402,127	\$ 60,000	\$ 342,127	\$ 3.15	\$ 8,530	\$ 102,362	"	\$ 339,941	
												\$ 1,593,832					\$ 1,601,556	

From: [Straka, Josh](#)
To: [Daniel Stephany](#)
Subject: FW: Re: Intersection of Panther and Midmoor
Date: Tuesday, September 06, 2016 3:09:03 PM
Attachments: [image001.png](#)
[image005.png](#)

Hi Dan,

I discussed this with Kyle and he looked into the MUTCD standards regarding a four-way stop. See his response below.

My opinion is the sight distance on the eastbound approach does appear inadequate. Either trees could be removed or a four-way stop added.

Josh

From: Henderson, Kyle R.
Sent: Tuesday, September 06, 2016 3:04 PM
To: Straka, Josh <Josh.Straka@strand.com>
Subject: Re: Intersection of Panther and Midmoor

Josh

I will provide a few opinions below.

First, most of the issues he is describing are a product of having a large offset on the north and south legs of the intersection, compounded by the skew that the south leg has. I have no doubt that northbound and southbound traffic hug the western side coming through the intersection due to these factors. Overall the grades at the intersection are good. I agree that traffic going eastbound and stopped at the stop bar likely does not have adequate sight distance due to the geometry of the intersection and vegetation on both sides of the road. There also is some evidence of scraping along the curb in the northwest quadrant indicating vehicles making contact with the curb, although any changes to that curb would first need the utility poles relocated.

Regarding a 4-way stop:

MUTCD Section 2B.04 provides guidelines on determining right-of-way control (YIELD or STOP signs). It lists number and angle of approaches, and sight distance as part of the five important factors to consider. Please see the following paragraph dealing with sight distance

- 04 In addition, the use of YIELD or STOP signs should be considered at the intersection of two minor streets or local roads where the intersection has more than three approaches and where one or more of the following conditions exist:*
- A. The combined vehicular, bicycle, and pedestrian volume entering the intersection from all approaches averages more than 2,000 units per day;*
 - B. The ability to see conflicting traffic on an approach is not sufficient to allow a road user to stop or yield in compliance with the normal right-of-way rule if such stopping or yielding is necessary; and/or*
 - C. Crash records indicate that five or more crashes that involve the failure to yield the right-of-way at the intersection under the normal right-of-way rule have been reported within a 3-year period, or that three or more such crashes have been reported within a 2-year period.*

Part B could be applicable to this location.

MUTCD Section 2B.07 provides guidance on multi-way stop warrants. We have not done any traffic counts at this

location, but I am fairly certain that the volume thresholds listed for all-way stop would not be met. However, there are other criterion listed in the option when discussing multi-way stops. Part C and D could be applicable to this location.

Option:

- 5 Other criteria that may be considered in an engineering study include:
- A. The need to control left-turn conflicts;
 - B. The need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes;
 - C. Locations where a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless conflicting cross traffic is also required to stop; and
 - D. An intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics where multi-way stop control would improve traffic operational characteristics of the intersection.

If you have any questions please let me know

Thanks
Kyle

-----Original Message-----

From: Daniel Stephany [<mailto:dstephany@ci.monona.wi.us>]
Sent: Thursday, September 01, 2016 7:51 AM
To: Straka, Josh <Josh.Straka@strand.com>
Subject: FW: Intersection of panther and midmoor

Good morning Josh. I received the email below from the public works committee chairperson. I would like to have one of your traffic engineers provide an opinion on this. Your thoughts?

Thanks.

Dan

Daniel Stephany
Director of Public Works & Utilities
City of Monona
5211 Schluter Road
Monona, WI 53716
608-222-2525

-----Original Message-----

From: Brian Holmquist [REDACTED]
Sent: Thursday, September 01, 2016 7:43 AM
To: Scott Sullivan; April Little; Andrew Kitslaar; Walter Ostrenga; [REDACTED] Daniel Stephany;
Bob Miller

Subject: Intersection of panther and midmoor

Hi all

I have been concerned about this odd intersection for some time...I have somewhat avoided the conversation not wanting to have it seem as if it's an issue because I live nearby. It is clear to me this intersection needs to be assessed for a 4-way stop. Traffic on midmoor hug the corner going both northbound and southbound. Traffic going straight on panther eastbound can not adequately see both directions on midmoor. In addition, individuals turning on Panther westbound from midmoor (southbound) "clip" the corner - these aspects among others pose a significant concern.

Dan and others, please take a look at this intersection and let me know if we can address at the department level or if it needs to go to committee.

Thanks
Brian

Sent from my iPhone



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kyle.henderson@strand.com | www.strand.com

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MONTHLY DEPARTMENT HEAD REPORT TO COUNCIL

DEPARTMENT: Public Works & Utilities

MONTH OF: September 2016

Accomplishments:

- The crew installed new holiday light brackets on Monona Drive light poles.
- The crew completed all needed mowing on Monona Drive and Broadway.
- The crew completed sidewalk repairs at various locations throughout the City.
- The crew assisted the planning department with delicate excavations at Stone Bridge Park.
- The crew completed digital speed sign repairs on Monona Drive at the high school.
- The crew completed pot hole patching for the month.
- New street trees were received for fall planting.
- Crews completed tree trimming at various locations throughout the City.
- Crews completed another round of stump grinding throughout the City.

Major Projects / Issues:

- Johnson Tree Care will be completing the gypsy moth colony count, and turning the needed paper work into Dane County later this fall. We should find out in November if we qualify for spraying in 2017.
- The Schluter Park project is nearing completion. Major items that remain include: park grading and landscaping, minor electrical finishes to the structure, final paving of utility connection patch, shoreline grading, and relocation of the park play equipment. The project's substantial completion date is October 9th.
- Strand Associates continues work on design for the 2017 road reconstruction project.
- All road work has been completed for the year.
- The solid waste and recycling collection contract expires at the end of the year. RFP's were sent to four companies, with three proposals returned. The low cost proposal was provided by Advanced Disposal.

In Progress / Routine Duties:

- Completed meter changes and meter reading for the month.
- Completed daily rounds at the wells and lift stations, collected required water samples, and complete diggers hotline locates for the month.
- Clean floor drains at the shop, complete inventory of shop items, and complete shop maintenance for the month.
- Coordinate City projects with our engineers.
- Continuing with research and review of specifications for vehicles scheduled to be replaced in 2017.

Upcoming Objectives / Events:

- The 2017 Operating Budget and Capital Budget have been presented to the public works committee. Both budgets have been submitted to the finance director for presentation to Council.
- The annual streets classification report is due to the Wisconsin DOT by October 10th.

2017 Road Reconstruction Project Update/Schedule:

Bridge Rd; Broadway to Winnequah, 1,003' (tentative for 2017)

Tonyawatha; Winnequah to Progressive, 2,376'
Schultz; Tonyawatha to Winnequah, 381'
Dean, Winnequah to Tonyawatha, 634'
Progressive, Tonyawatha to Winnequah, 264'
McKenna, Dean to Greenway, 1,267'
Total Length; 4,922'

- 50% design completed

9/27/16

MONTHLY DEPARTMENT HEAD REPORT TO COUNCIL

- Public Information Meeting 1 – July 19, 2016
- Public Information Meeting 2 – July 21, 2016
- 90% design – early October
- Assessment meetings – October and November 2016
- Public Information Meeting 3 – November 10, 2016
- Final plans and specifications – end of November
- Bid advertisement – early December
- Bid award meetings – January 2017
- Construction begins – April 2017
- Construction ends – September 2017

Personnel:

- All staff positions are filled.