Mud Creek	PBMP-M2p		28.7	6,168	5,585		5,585	9.5%	0	22.21	20.86		20.86	6.1%	0.00
Mud Creek	PBMP-M2p1		1.5	815	719		719	11.8%	0	1.83	1.66		1.66	9.0%	0.00
Mud Creek	PBMP-M2q1	FVTC Student Housing (MA)	2.5	384	384	86.9%	50	86.9%	334	1.32	1.32	65.7%	0.45	65.7%	0.86
Mud Creek	PBMP-M2r		6.6	2,708	2,527		2,527	6.7%	0	5.94	5.64		5.64	5.0%	0.00
Mud Creek	PBMP-M3e		3.9	1,609	221		221	86.3%	0	5.55	1.34		1.34	75.8%	0.00
Mud Creek	PBMP-M3f1		19.5	8,497	7,631		7,631	10.2%	0	13.90	12.73		12.73	8.4%	0.00
Mud Creek	PBMP-M3f3	Hand & Shoulder Surgery (MA)	5.1	1,372	1,372	81.9%	249	81.9%	1,123	3.55	3.55	66.1%	1.20	66.1%	2.35
Mud Creek	PBMP-M3g2		2.9	1,009	1,009		1,009	0.0%	0	2.41	2.41		2.41	0.0%	0.00
Mud Creek	PBMP-M3i1a		2.1	1,227	1,023		1,023	16.6%	0	2.38	2.07		2.07	13.3%	0.00
Mud Creek	PBMP-M3i2a		4.6	1,622	1,622		1,622	0.0%	0	3.54	3.54		3.54	0.0%	0.00
Mud Creek	PBMP-M3i2b		11.7	4,740	4,518		4,518	4.7%	0	9.97	9.63		9.63	3.5%	0.00
Mud Creek	PBMP-M3i2c		10.0	3,483	3,265		3,265	6.3%	0	8.36	8.02		8.02	4.1%	0.00
Mud Creek	PBMP-M3m2		17.6	1,079	1,079		1,079	0.0%	0	5.67	5.67		5.67	0.0%	0.00
Mud Creek	PBMP-M3n		116.6	21,042	6,982		6,982	66.8%	0	78.85	29.34		29.34	62.8%	0.00
Mud Creek	PBMP-M4b2		2.5	1,093	1,093		1,093	0.0%	0	1.63	1.63		1.63	0.0%	0.00
Mud Creek	PBMP-M4f1b		3.3	504	474		474	6.0%	0	2.13	2.06		2.06	3.3%	0.00
Mud Creek	PBMP-M4f2b		1.4	485	429		429	11.5%	0	1.61	1.48		1.48	8.0%	0.00
Mud Creek	PBMP-M4g3	Butterfly Fields Pond (MA)	102.4	20,958	19,401	76.8%	4,866	76.8%	14,534	57.03	54.37	61.9%	21.73	61.9%	32.63
Mud Creek	PBMP-M4h2		9.6	1,382	301		301	78.2%	0	4.87	1.28		1.28	73.7%	0.00
Mud Creek	PBMP-M4i		45.7	7,526	1,329		1,329	82.3%	0	29.83	6.86		6.86	77.0%	0.00
Mud Creek	PBMP-M4k2a		5.4	1,393	1,246		1,246	10.6%	0	4.75	4.41		4.41	7.1%	0.00
Mud Creek	PBMP-M4l2		27.8	7,041	6,022		6,022	14.5%	0	25.27	22.44		22.44	11.2%	0.00
Mud Creek	PBMP-M4m1a		5.3	1,686	1,502		1,502	10.9%	0	5.75	5.32		5.32	7.4%	0.00
Mud Creek	PBMP-M4m4	Whitney Pond	52.0	11,896	10,865	76.6%	2,790	76.6%	8,075	40.65	38.31	57.4%	17.31	57.4%	20.99
Mud Creek	PBMP-M4o2a	Twin Willows Pond with Alum	36.3	7,515	6,839	90.0%	752	90.0%	6,087	26.16	24.60	85.0%	3.92	85.0%	20.68
Mud Creek	PBMP-M4o2b		10.6	2,518	2,241		2,241	11.0%	0	8.15	7.51		7.51	7.8%	0.00
Mud Creek	PBMP-M4q1		13.6	2,498	2,417		2,417	3.3%	0	8.16	7.97		7.97	2.3%	0.00
Mud Creek	PBMP-M4q2		4.3	954	867		867	9.1%	0	3.25	3.05		3.05	6.2%	0.00
Mud Creek	PBMP-M4s1a		7.7	1,646	1,488		1,488	9.6%	0	5.87	5.51		5.51	6.2%	0.00
Mud Creek	PBMP-M4u		42.1	11,841	11,134		11,134	6.0%	0	30.39	29.12		29.12	4.2%	0.00
Mud Creek	PBMP-M4v1		3.9	1,653	1,538		1,538	7.0%	0	3.51	3.33		3.33	5.1%	0.00
Mud Creek	PBMP-M5f3	Westhill Pond	29.2	9,475	9,248	66.3%	3,198	66.3%	6,050	22.17	21.76	49.7%	11.15	49.7%	10.60
Mud Creek	PBMP-M5h1	Fox Cities Stadium Pond	28.4	6,507	6,507	83.8%	1,053	83.8%	5,453	17.74	17.74	62.9%	6.59	62.9%	11.15
Mud Creek	PBMP-M5i1a	Mark Winter (MA)	2.7	718	718	95.9%	29	95.9%	688	1.58	1.58	81.9%	0.29	81.9%	1.29
Mud Creek	PBMP-M5i1b		12.7	5,867	5,390		5,390	8.1%	0	12.20	11.48	62.4%	4.59	62.4%	6.89
Mud Creek	PBMP-M5j1	Furniture ROW North Pond (MA)	26.3	3,756	3,064	86.0%	525	86.0%	2,539	11.62	7.53	65.9%	3.97	65.9%	3.57
Mud Creek	PBMP-M5j3	Furniture ROW South Pond (MA)	6.3	1,604	853	90.8%	147	90.8%	706	4.40	2.51	77.8%	0.98	77.8%	1.53
Mud Creek	PBMP-M5m	Fox River Mall Pond with Alum	9.0	3,100	3,100	90.0%	310	90.0%	2,790	7.37	7.37	85.0%	1.11	85.0%	6.27
Mud Creek	PBMP-M5m-Fmall	Fox River Mall Pond with Alum	90.0	30,284	30,284	90.0%	3,028	90.0%	27,256	65.74	65.74	85.0%	9.86	85.0%	55.88
Mud Creek	PBMP-M6b2a		5.2	1,779	1,779		1,779	0.0%	0	4.30	4.30		4.30	0.0%	0.00
Mud Creek	PBMP-M6b2b		2.8	975	973		973	0.2%	0	2.37	2.36		2.36	0.2%	0.00
Mud Creek	PBMP-M6e2	KAE Estates Pond	18.7	4,478	4,054	77.8%	995	77.8%	3,059	16.23	15.25	58.3%	6.76	58.3%	8.49
Mud Creek	PBMP-M6g1	Schroth Lane Pond (MA)	5.7	1,530	1,312	86.4%	209	86.4%	1,103	4.68	4.28	67.1%	1.54	67.1%	2.74
Mud Creek	PBMP-M6h3		44.4	9,290	7,072		7,072	23.9%	0	26.46	20.72		20.72	21.7%	0.00
Mud Creek	PBMP-M6j1	Federated Drive Pond with Alum	41.3	13,038	12,198	90.0%	1,304	90.0%	10,894	31.95	30.54	85.0%	4.79	85.0%	25.75
Mud Creek	PBMP-M6j2		6.2	2,595	2,451		2,451	5.6%	0	5.65	5.42		5.42	4.0%	0.00
Mud Creek	PBMP-M6l1		7.0	1,807	1,807		1,807	0.0%	0	4.71	4.71		4.71	0.0%	0.00
Mud Creek	PBMP-M6n	Michaels Pond (Fox River Square)	17.1	2,412	2,412	71.3%	693	71.3%	1,719	8.84	8.84	53.5%	4.11	53.5%	4.72
Mud Creek	PBMP-M6o	Michaels Pond	18.7	8,165	7,170	71.3%	2,347	71.3%	4,823	17.40	15.74	53.5%	8.10	53.5%	7.64
Mud Creek	PBMP-M6p2	Wal Mart East with Alum Treatment	15.7	5,330	5,330	90.0%	533	90.0%	4,797	11.92	11.92	85.0%	1.79	85.0%	10.13
Mud Creek	PBMP-M6q1	Michaels Pond	33.1	9,050	8,678	71.3%	2,601	71.3%	6,077	23.63	23.05	53.5%	11.00	53.5%	12.05
Mud Creek	PBMP-M6q2		11.1	6,669	5,786		5,786	13.2%	0	13.24	11.86		11.86	10.4%	0.00
Mud Creek	PBMP-M6q3	Michaels Pond	10.6	3,874	3,874	71.3%	1,113	71.3%	2,761	8.37	8.37	53.5%	3.90	53.5%	4.48
Mud Creek	PBMP-M6s2	Mall Pond	10.1	3,473	3,473	62.4%	1,304	62.4%	2,168	8.44	8.44	46.8%	4.49	46.8%	3.95
Mud Creek	PBMP-M6s3	Mall Pond	41.1	17,686	16,283	62.4%	6,643	62.4%	9,641	39.03	36.85	46.8%	20.75	46.8%	16.09
Mud Creek	PBMP-M6t1	Metro Pond	33.8	15,677	14,477	55.0%	7,055	55.0%	7,423	33.93	32.06	40.0%	20.36	40.0%	11.70
Mud Creek	PBMP-M7c2		0.3	231	231		231	0.0%	0	0.53	0.53		0.53	0.0%	0.00
Mud Creek	PBMP-M7d1		5.5	1,212	1,097		1,097	9.5%	0	4.37	4.11		4.11	6.0%	0.00
Mud Creek	PBMP-M7d2		64.2	14,205	12,988		12,988	8.6%	0	53.31	50.50		50.50	5.3%	0.00
Mud Creek	PBMP-M7e		61.6	13,889	12,596		12,596	9.3%	0	47.80	44.83		44.83	6.2%	0.00
Mud Creek	PBMP-M7f1		10.6	3,272	3,192		3,192	2.4%	0	7.55	7.42		7.42	1.6%	0.00
Mud Creek	PBMP-M7f2		19.7	4,580	4,348		4,348	5.1%	0	14.70	14.21		14.21	3.4%	0.00
Mud Creek	PBMP-M7h1		10.7	4,135	4,000		4,000	3.2%	0	9.59	9.38		9.38	2.2%	0.00
Mud Creek	PBMP-M7i1	Spencer St. & Highland Ponds w/Alum	2.3	761	700	90.0%	76	90.0%	624	2.01	1.92	85.0%	0.30	85.0%	1.62
Mud Creek	PBMP-M7j3	Spencer St. & Highland Ponds w/Alum	5.7	2,826	1,125	90.0%	283	90.0%	843	5.30	2.30	85.0%	0.80	85.0%	1.51
Mud Creek	PBMP-M7k1		4.5	2,540	1,191		1,191	53.1%	0	4.70	2.43		2.43	48.4%	0.00
Mud Creek	PBMP-M7l4		11.4	4,095	3,601		3,601	12.1%	0	9.81	8.71		8.71	11.3%	0.00
Mud Creek	PBMP-M7m2		27.0	8,514	7,342		7,342	13.8%	0	21.65	18.70		18.70	13.6%	0.00
Mud Creek	PBMP-M7n2		22.5	7,927	6,254		6,254	21.1%	0	15.56	12.66		12.66	18.6%	0.00
Mud Creek	PBMP-M7q3	Spencer St. & Highland Ponds w/Alum	13.5	4,455	4,333	90.0%	446	90.0%	3,887	10.52	10.17	85.0%	1.58	85.0%	8.60
Mud Creek	PBMP-M7q5		10.3	1,543	1,543		1,543	0.0%	0	6.64	6.64		6.64	0.0%	0.00
Mud Creek	PBMP-M7r2		21.6	8,313	7,902		7,902	4.9%	0	18.69	18.05		18.05	3.4%	0.00
Mud Creek	PBMP-M7r2a		2.5	1,069	995		995	6.9%	0	2.31	2.19		2.19	5.0%	0.00
Mud Creek	PBMP-M7r3		1.8	1,129	976		976	13.6%	0	2.20	1.97		1.97	10.8%	0.00
Mud Creek	PBMP-M7s3	Marcus Theatre Pond with Alum	11.6	3,926	3,926	90.0%	393	90.0%	3,534	8.63	8.63	85.0%	1.29	85.0%	7.34
Mud Creek	PBMP-M8b		1.5	587	587		587	0.0%	0	0.80	0.80		0.80	0.0%	0.00
Mud Creek	PBMP-M8c1		20.4	4,629	4,509		4,509	2.6%	0	13.42	13.14		13.14	2.1%	0.00
Mud Creek	PBMP-M8c2		3.9	807	778		778	3.6%	0	2.36	2.31		2.31	2.1%	0.00
Mud Creek	PBMP-M8d5		4.1	1,001	901		901	10.0%	0	3.60	3.37		3.37	6.4%	0.00
Mud Creek	PBMP-M8f1		34.3	8,200	2,867		2,867	65.0%	0	28.45	11.90		11.90	58.2%	0.00
Mud Creek	PBMP-M8j1		50.1	8,790	4,877		4,877	44.5%	0	35.96	22.77		22.77	36.7%	0.00
		Totals:	**4,907.8**	**1,253,472**	**927,489**		**571,035**	**54.4%**	**356,454**	**3,674.77**	**2,746.90**		**1,963.40**	**46.6%**	**783.50**

*Excludes Riparian Areas, MS4"A" to "B" Areas, Other MS4 Jurisdictions, Quarries, Agricultural Areas & Waters of the State

Alternative 3 Capital Cost =	**$ 3,479,295**

A. Percent Reduction Method

Pollutant Analysis Summary - Urban Study Area

		TSS							
Sub-Watershed	Area (acres)	Before Drain System (lbs/yr)	After Outfall Control (lbs/yr)	Total Load Reduct (lbs)	Total Load Reduct (%)	TMDL Load Redct Req'd (lbs)	*TMDL Load Redct Req'd (%)	Addt'l Load Redct Req'd (lbs)	TMDL TSS Redct Satsified (y/n)
Apple Creek	186.8	40,302	16,439	23,863	59.2%	20,957	52.0%	-2,906.2	yes
Bear Creek	248.2	53,323	21,785	31,538	59.1%	N/A	N/A	N/A	N/A
Fox River	1,064.1	246,722	132,911	113,811	46.1%	178,035	72.2%	64,223.4	no
Mud Creek	3,408.7	913,125	399,900	513,225	56.2%	390,817	42.8%	-122,407.5	yes
Totals:	**4,907.8**	**1,253,472**	**571,035**	**682,437**	**54.4%**	**589,809**	**49.1%**	**-61,090**	yes

*Per DNR Guidance # 3800-2014-04 - TMDL Guidance for MS4 Permits:

Required %TSS Reduction from No Controls = 20 + [0.80 x (% TSS control in Lower Fox TMDL Report)

		TP							
Sub-Watershed	Area (acres)	Before Drain System (lbs/yr)	After Outfall Control (lbs/yr)	Total Load Reduct (lbs)	Total Load Reduct (%)	TMDL Load Redct Req'd (lbs)	TMDL Load Redct Req'd (%)	Addt'l Load Redct Req'd (lbs)	TMDL TP Redct Satsified (y/n)
Apple Creek	186.8	147.2	66.4	81	54.9%	59.6	40.5%	-21.2	yes
Bear Creek	248.2	186.2	88.3	98	52.6%	N/A	N/A	N/A	N/A
Fox River	1,064.1	784.2	488.4	296	37.7%	317.6	40.5%	21.8	no
Mud Creek	3,408.7	2,557.2	1,320.4	1,237	48.4%	1,231.3	48.2%	-5.6	yes
Totals:	**4,907.8**	**3,674.8**	**1,963.4**	**1,711.4**	**46.6%**	**1,608.5**	**46.1%**	**-5.0**	yes

*Per DNR Guidance # 3800-2014-04 - TMDL Guidance for MS4 Permits:

Required %TP Reduction from No Controls = 15 + [0.85 x (% TP control in Lower Fox TMDL Report)

APPENDIX C

BMP Conceptual Drawings

Town of Grand Chute
Stormwater Quality Management Plan
McM No. G0003-9-14-00271
November 2016

McMAHON ENGINEERS ARCHITECTS

TOWN OF GRAND CHUTE
PROPOSED STRUCTURAL BMPS
WATER QUALITY RESULTS & COST ANALYSIS

BMP Catchment ID	BMP Name	Catchment ID's treated by BMP	Area (acres)	Total Suspended Solids (TSS): Before Drainage System (lbs)	TSS: After Existing Drainage System & Outfall Controls (lbs)	TSS: BMP TSS Removal %	TSS: After Proposed Outfall Controls (lbs)	TSS: Total Load Reduction (lbs)	TSS: Net Gain* (lbs)	Total Phosphorus (TP): Before Drainage System (lbs)	TP: After Existing Drainage System & Outfall Controls (lbs)	TP: BMP TP Removal %	TP: After Proposed Outfall Controls (lbs)	TP: Total Load Reduction (lbs)	TP: Net Gain* (lbs)
A3i	Holland Pond [2,3]	A3c1, A3e, A3g, A3f2, A3i	101.2	20,159.5	6,330.6	79.0%	4,234	15,926	2,097	74.1	27.3	56.0%	32.6	41.5	-5.3
A3e	Ballard Pond [2,3]	A3c1, A3e	71.1	15,390.2	4,982.8	79.0%	3,232	12,158	1,751	56.6	21.4	55.0%	25.5	31.2	-4.1
A4a	French Pond South [2,4]	A4a	1.0	160.0	49.0	86.4%	22	138	27	1.3	0.4	72.5%	0.3	0.9	0.1
B4a2	Bentwood Pond	B4a2	22.4	4,717.7	3,755.3	76.4%	1,115	3,603	2,640	18.0	15.7	57.3%	7.7	10.3	8.1
F8j	Memorial Park Pond [2,3]	EBMP-F8c1, F8j	115.2	27,335.2	20,269.6	76.0%	6,560	20,775	13,709	87.3	67.2	58.0%	36.6	50.6	30.6
F3c2	Costco [2]	F3c2	32.6	7,380.5	6,913.2	84.4%	1,148	6,232	5,765	18.8	18.0	72.8%	5.1	13.7	12.9
F8m	NE Memorial Park Pond [2,3]	F8m	30.5	6,749.7	4,739.7	77.0%	1,552	5,197	3,187	23.5	18.1	57.0%	10.1	13.4	8.0
F3h3	West Lawrence Street [2]	F3h2a, F3h2b	6.8	2,897.4	2,335.6	60.6%	1,143	1,754	1,193	6.5	5.6	49.3%	3.3	3.2	2.3
F1b2	Southwest Business Park	F1b2	32.7	10,506.8	9,123.3	75.4%	2,586	7,921	6,537	25.2	23.4	56.5%	10.9	14.2	12.4
F3r1	Nicolet Road	EMBP-F3r1a, F3r1	20.2	7,756.6	6,728.9	77.0%	1,786	5,970	4,942	17.5	16.3	57.7%	7.4	10.1	8.9
F9d2	Outagamie County Site West Pond [2]	F9d2	11.0	1,841.2	534.0	75.0%	460	1,381	74	7.9	2.7	55.0%	3.5	4.3	-0.8
F3f6	Maple Hill Pond	F3h2a, F3c2, F3c5, F3h	171.8	44,781.0	37,695.5	69.9%	13,497	31,284	24,198	117.7	104.1	52.4%	56.0	61.7	48.0
F3r6	Nicolet Pond	EBMP-F3r1a, F3r1, F3r6	35.9	13,358.7	11,209.6	77.5%	3,000	10,359	8,210	31.9	28.3	58.2%	13.3	18.5	15.0
F3c5	McCarthy Pond	F3c2, F3c5	143.5	40,033.9	34,118.3	79.9%	8,042	31,992	26,076	100.3	90.6	59.9%	40.2	60.1	50.4
F3s1	Sunrise Pond	F3s1	96.4	20,150.5	14,684.6	80.0%	4,030	16,120	10,654	77.0	62.7	60.0%	30.8	46.2	31.9
F2f	Aster Pond	F2f	55.0	4,550.4	4,299.8	83.2%	763	3,788	3,537	25.7	25.1	62.4%	9.6	16.0	15.4
F4b2	Van Dyke Pond	F4b2	19.6	3,828.1	3,299.3	85.0%	574	3,254	2,725	14.2	13.0	63.8%	5.2	9.1	7.8
F1d2	Consolidated Court	F1d2	4.5	1,336.0	1,006.7	80.0%	267	1,069	740	4.1	3.8	60.0%	1.7	2.5	2.1
F8n2	Florida Pond	F8n2	46.1	10,587.8	6,142.8	61.5%	4,072	6,516	2,071	38.3	24.5	46.2%	20.6	17.7	3.8
F3f5	Maple Hill Pond - Alternative 2	F3h2a, F3h	28.3	4,747.1	3,577.2	80.2%	939	3,808	2,638	17.3	13.5	60.2%	6.9	10.4	6.6
F3l3	Misty Pond	F3l3	70.0	13,602.7	3,957.4	81.4%	2,531	11,072	1,427	51.4	16.8	61.0%	20.0	31.4	-3.2
F2e	Arrowhead Park	F2e	5.3	466.5	466.5	80.0%	93	373	373	2.5	2.5	60.0%	1.0	1.5	1.5
M5m	Fox River Mall [2]	M5m	99.0	33,384.0	33,384.0	78.5%	7,191	26,193	26,193	73.1	73.1	66.6%	24.4	48.7	48.7
M4g3	Butterfly Fields [2]	M4g3	102.4	20,957.8	17,672.1	76.8%	4,866	16,091	12,806	57.0	51.4	61.9%	21.7	35.3	29.6
M2e6	Appleton Alliance Church East [2]	M2e6	42.2	9,847.8	8,565.9	89.3%	1,057	8,791	7,509	30.6	27.8	70.5%	9.0	21.6	18.8
M6j1	Federated Drive (Settle Inn) [2]	M6j1	41.3	13,038.2	11,373.3	70.5%	3,848	9,191	7,526	31.9	29.1	58.6%	13.2	18.7	15.9
M2f3	Appleton Alliance Church West [2]	M2f3	25.1	5,374.2	4,665.7	87.7%	661	4,713	4,005	16.7	15.1	67.0%	5.5	11.2	9.6
M6p2	Wal Mart East [2]	M6p2	15.7	5,330.5	5,330.5	61.9%	2,030	3,300	3,300	11.9	11.9	52.2%	5.7	6.2	6.2
M7s3	Marcus Theatre [2]	M7s3	11.6	3,926.5	3,926.5	70.2%	1,171	2,755	2,755	8.6	8.6	59.3%	3.5	5.1	5.1
M6n	Fox River Square [2]	M6n	17.1	2,411.6	2,411.6	66.0%	819	1,592	1,592	8.8	8.8	56.9%	3.8	5.0	5.0
M5j1	Furniture ROW North [2]	M5j1	26.3	3,756.5	3,063.8	86.0%	525	3,232	2,539	11.6	7.5	65.9%	4.0	7.7	3.6
M3f3	Hand & Shoulder Surgery [2]	M3f3	5.1	1,372.0	1,372.0	81.9%	249	1,123	1,123	3.6	3.6	66.1%	1.2	2.3	2.3
M6g1	Schroth Lane [2]	M6g1	5.7	1,529.6	1,096.8	86.4%	209	1,321	888	4.7	3.9	67.1%	1.5	3.1	2.3
M5j3	Furniture ROW South [2]	M5j3	6.3	1,604.0	853.3	90.8%	147	1,457	706	4.4	2.5	77.8%	1.0	3.4	1.5
M5i1a	Mark Winter [2]	M5i1a	2.7	717.8	717.8	95.9%	29	688	688	1.6	1.6	81.9%	0.3	1.3	1.3
M2q1	FVTC Student Housing [2]	M2q1	2.5	384.0	384.0	86.9%	50	334	334	1.3	1.3	65.7%	0.5	0.9	0.9
M7i2b	Hickory Farms South Pond [1]	EBMP-M7i2b, PBMP-M7i1	18.6	8,039.0	6,769.2	42.4%	4,630	3,409	2,139	17.7	15.6	35.2%	11.5	6.2	4.1
M1h	US Paper Converters [2]	M1h	7.4	3,156.7	1,517.0	80.0%	631	2,525	886	4.7	2.4	60.0%	1.9	2.8	0.5
M6s	Mall Pond	EBMP-M6s1, PBMP-M6s2, M6s3	54.0	21,719.3	18,660.0	62.4%	8,158	13,561	10,502	49.3	44.0	46.8%	26.2	23.1	17.8
M6t1	Metro Pond	M6t1	33.8	15,676.8	13,400.1	55.0%	7,055	8,622	6,346	33.9	30.4	40.0%	20.4	13.6	10.0
M6e2	KAE Estates	M6e2	18.7	4,478.4	3,501.4	77.8%	995	3,483	2,506	16.2	14.0	58.3%	6.8	9.5	7.2
M6o	Michaels Pond	M6q1, M6q3, M6n, M6o	79.4	23,500.3	21,189.5	71.3%	6,753	16,747	14,437	58.2	54.5	53.4%	27.1	31.1	27.4
M4m4	Whitney Pond	M4m4	52.0	11,896.1	9,514.9	76.6%	2,789	9,107	6,725	40.7	35.2	57.4%	17.3	23.3	17.9
M5f3	Westhill Pond	M5f3	29.2	9,474.6	9,130.7	66.3%	3,198	6,277	5,933	22.2	21.6	49.7%	11.2	11.0	10.4
M4o2	Twin Willows Pond	M4o2a	36.3	7,515.1	5,951.4	82.1%	1,345	6,170	4,607	26.2	22.6	61.6%	10.1	16.1	12.5
M5h1	Fox Cities Stadium	M5h1	28.4	6,506.9	6,506.9	83.8%	1,053	5,453	5,453	17.7	17.7	62.9%	6.6	11.2	11.2
M6q1	Menards	M6q1	33.1	9,049.6	8,354.6	71.5%	2,579	6,471	5,776	23.6	22.5	53.6%	11.0	12.7	11.6
M2i2	Chappell Pond	M2i2, M2g1	43.6	7,593.0	6,455.3	83.1%	1,285	6,308	5,170	27.7	25.2	62.3%	10.4	17.3	14.7
M7f2	Applegate East Pond	M7d2, M7f2	84.0	18,785.1	15,498.9	61.1%	7,305	11,480	8,194	68.0	60.5	45.8%	36.8	31.2	23.7
M6s2	Steinhafels	M6s2	10.1	3,473.0	3,472.6	72.7%	947	2,526	2,525	8.4	8.4	54.5%	3.8	4.6	4.6
M2j	Teardrop Pond	M2i2, M2g1, M2j	62.7	11,104.3	9,321.1	77.5%	2,498	8,606	6,823	40.3	36.3	58.1%	16.9	23.4	19.4
M2h2	Roselawn Pond	M2h2	36.3	7,026.0	5,220.4	84.4%	1,093	5,933	4,128	25.7	21.1	63.3%	9.4	16.3	11.6
M7q3-2	Spencer Street Pond-Rev and Highview Pond	EBMP-M7q2, M7p3, PBMP-M7q3, M7i1, M7j3	234.6	82,783.5	63,144.6	45.0%	45,531	37,253	17,614	186.1	148.7	35.0%	121.0	65.1	27.7
M7f1	Copps Pond	M7f1	10.6	3,272.3	3,125.3	69.0%	1,014	2,258	2,111	7.5	7.3	51.8%	3.6	3.9	3.7
M4l2	Capitol Pond	M4l2	27.8	7,041.2	5,187.2	85.0%	1,056	5,985	4,131	25.3	20.5	63.8%	9.2	16.1	11.4
M7e	Applegate Pond	EBMP-M7c1, PBMP-M7c2, M7d1, M7d2, M7e	157.5	41,625.2	25,754.6	50.0%	20,813	20,813	4,942	127.3	98.6	37.5%	79.5	47.7	19.1
M2e2	Town Hall East	M2e2	11.7	2,297.6	2,297.6	80.0%	460	1,838	1,838	7.5	7.5	60.0%	3.0	4.5	4.5
M7d	Applegate West Pond	M7e	61.6	13,888.9	10,912.7	77.6%	3,105	10,784	7,808	47.8	40.9	58.2%	20.0	27.8	21.0
M8c	Spencer Village Pond	M8c1	20.4	4,629.1	4,351.1	82.0%	833	3,796	3,518	13.4	12.8	61.5%	5.2	8.3	7.6
M7m2	Westhill Motel Pond	M7m2	27.0	8,514.1	7,066.4	68.5%	2,685	5,829	4,381	21.7	18.3	51.3%	10.5	11.1	7.7
M7j3	Highview Pond	EBMP-M7p3, PBMP-M7i1, M7j3	117.0	42,467.6	30,551.4	64.3%	15,142	27,325	15,409	89.9	68.1	48.3%	46.5	43.4	21.6
M6q3	Wal Mart Northwest	M6q3	10.6	3,873.9	3,873.9	80.0%	775	3,099	3,099	8.4	8.4	60.0%	3.3	5.0	5.0
M3i2	Victory Pond	M3i2a, M3i2c	14.6	5,104.9	4,696.7	72.5%	1,404	3,701	3,293	11.9	11.3	54.4%	5.4	6.5	5.8
M7s1	Woodman's Pond	M7s1	9.6	3,403.6	3,403.6	80.0%	681	2,723	2,723	7.4	7.4	60.0%	3.0	4.4	4.4
M5i1	Parkway Pond	M5i1a, M5i1b	15.4	6,584.6	5,623.9	83.2%	1,106	5,478	4,518	13.8	12.3	62.4%	5.2	8.6	7.1
M7r2	College Ramp Pond	M7r2	21.6	8,312.6	7,489.6	74.2%	2,144	6,169	5,346	18.7	17.4	55.7%	8.3	10.4	9.1
M2d6	Town Hall West	M2d6	4.4	1,230.5	1,230.5	80.0%	246	984	984	3.3	3.3	60.0%	1.3	2.0	2.0
M4u	Tri-park Pond	M4u	42.1	11,841.4	10,348.7	85.0%	1,776	10,065	8,572	30.4	27.7	63.8%	11.0	19.4	16.7
M4q1	Pheasant Run Pond	M4q1	13.6	2,498.3	2,324.8	85.0%	375	2,124	1,950	8.2	7.8	63.8%	3.0	5.2	4.8
M8j1	Butte Des Morts Pond	EBMP-M8i1, M8i2, M8i3, PBMP-M8j1	51.5	9,106.4	4,632.1	83.8%	1,471	7,635	3,161	37.1	23.0	62.9%	13.8	23.4	9.2
M6l1	Old Sams Club (Home Goods)	M6l1	7.0	1,806.9	1,806.9	75.0%	452	1,355	1,355	4.7	4.7	56.3%	2.1	2.6	2.6
M3g2	Kwik Trip (Casaloma)	M3g2	2.9	1,008.8	1,008.8	80.0%	202	807	807	2.4	2.4	60.0%	1.0	1.4	1.4
M2p	Glenpark Pond	M2p	28.7	6,168.0	4,819.9	76.3%	1,465	4,703	3,355	22.2	19.1	57.2%	9.5	12.7	9.6
M7n2	Legion Pond	M7n2	22.5	7,926.8	6,100.1	73.3%	2,114	5,813	3,986	15.6	12.4	55.0%	7.0	8.6	5.4
M4b2	Consolidated Construction	M4b2	2.5	1,093.0	1,093.0	80.0%	219	874	874	1.6	1.6	60.0%	0.7	1.0	1.0
M7q5	Ridge Pond	M7q5	10.3	1,543.4	1,543.4	85.0%	232	1,312	1,312	6.6	6.6	63.8%	2.4	4.2	4.2
M6h3	Associated Pond	M6h3	44.4	9,289.8	6,775.8	66.8%	3,086	6,204	3,690	26.5	20.2	50.1%	13.2	13.3	7.0
M7q3-1	Spencer Street Pond-Rev	EBMP-M7q2, M7p3, PBMP-M7q3	226.6	79,196.5	61,381.1	25.3%	59,144	20,053	2,237	178.8	144.6	19.8%	143.5	35.3	1.1
M3m2	Prairie Hill Park Pond	M3m2	17.6	1,079.2	1,079.2	80.0%	216	863	863	5.7	5.7	60.0%	2.3	3.4	3.4
M4f1b	Starview Heights West	M4f1b	3.3	504.1	434.5	80.0%	101	403	334	2.1	2.0	60.0%	0.9	1.3	1.1
M3f1	Pacon [2]	EBMP-M3d2, PBMP-M3f1, M3e	80.4	27,942.7	9,316.3	51.6%	13,519	14,424	-4,202	55.4	26.8	38.0%	34.4	21.0	-7.6
M4h2	Gillett Street Apartments [2]	M4h2	9.6	1,382.3	301.4	70.0%	415	968	-113	4.9	1.3	50.0%	2.4	2.4	-1.2
M3n	First Pond	M3n	116.6	21,042.0	6,362.5	55.0%	9,469	11,573	-3,106	78.8	27.9	40.0%	47.3	31.5	-19.4
M7q2	Spencer Street Pond [1]	EBMP-M7q2, M7p3	213.1	74,741.4	57,068.4	25.3%	55,817	18,925	1,252	168.3	134.4	19.8%	135.0	33.3	-0.6
M4i	Gillett Street Pond	EBMP-M4f1a, M4h1, PBMP-M4f1b, M4i	73.8	11,690.1	2,592.7	85.0%	1,754	9,937	839	47.2	15.6	63.8%	17.1	30.1	-1.5
M8f1	Stonehedge Pond	M8f1	34.3	8,200.2	2,866.7	75.4%	2,015	6,185	852	28.5	11.9	56.6%	12.4	16.1	-0.5
M7i2a	Hickory Farms North Pond [1]	EBMP-M7i2a	2.2	1,040.1	355.5	74.0%	271	769	85	2.2	0.8	63.5%	0.8	1.4	0.0

BMP Catchment ID	Sand Filter or Bioretention Capital / O&M Costs: Planting Bed Area (sf)	Sand Filter: Estimated Capital Costs	Sand Filter: Average Annual O&M Costs For 2015	Sand Filter: Total Average Annual O&M Costs Over 20 Years	Sand Filter: Capital & Total Average Annual O&M Costs Over 20 Years	Wet Detention Pond Capital / O&M Costs: Water Surface Area (acres)	Wet Pond: Estimated Capital Costs	Wet Pond: Average Annual O&M Costs For 2015	Wet Pond: Total Average Annual O&M Costs Over 20 Years	Wet Pond: Capital & Total Average Annual O&M Costs Over 20 Years	Alum Treatment Capital / O&M Costs: Total Watershed Runoff Volume (cf)	Alum: Estimated Capital Costs	Alum: Average Annual O&M Costs For 2015	Alum: Total Average Annual O&M Costs Over 20 Years	Alum: Capital & Total Average Annual O&M Costs Over 20 Years	Total Estimated Capital Cost	Total Capital & Average Annual O&M Costs Over 20 Years	TSS Cost Analysis & Ranking: Average Annual TSS Net Gain Over 20 Years For Utility (lbs)	TSS: Average Annual Total Cost For Utility ($/lbs)	TSS: Sub-Watershed TSS Ranking	TP Cost Analysis & Ranking: Average Annual TP Net Gain Over 20 Years For Utility (lbs)	TP: Average Annual Total Cost For Utility ($/lbs)	TP: Sub-Watershed TP Ranking
A3i						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	41,942	$0.12	12	-105.6	-$47	78
A3e						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	35,017	$0.14	13	-82.7	-$60	79
A4a						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	544	$9.19	71	1.2	$4,200	69
B4a2						0.16	$236,490	$2,330	$69,376	$305,866			$0	$0	$0	$236,490	$305,866	52,804	$5.79	65	161.3	$1,896	39
F8j						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	274,183	$0.02	2	611.8	$8	2
F3c2						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	115,296	$0.04	6	258.6	$19	6
F8m						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	63,745	$0.08	9	159.8	$31	8
F3h3						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	23,852	$0.21	15	46.5	$107	15
F1b2						0.60	$201,971	$5,069	$150,934	$352,905			$0	$0	$0	$201,971	$352,905	130,740	$2.70	28	248.3	$1,421	32
F3r1						0.40	$161,757	$4,252	$126,629	$288,385			$0	$0	$0	$161,757	$288,385	98,850	$2.92	31	178.5	$1,616	34
F9d2						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	1,473	$3.39	38	-16.8	-$297	81
F3f6						3.30	$1,168,927	$16,666	$496,290	$1,665,217			$0	$0	$0	$1,168,927	$1,665,217	483,969	$3.44	40	960.8	$1,733	37
F3r6						0.70	$416,118	$5,477	$163,087	$579,205			$0	$0	$0	$416,118	$579,205	164,195	$3.53	42	299.5	$1,934	41
F3c5						3.06	$1,445,239	$15,625	$465,291	$1,910,529			$0	$0	$0	$1,445,239	$1,910,529	521,522	$3.66	43	1,007.5	$1,896	40
F3s1						0.80	$714,190	$5,885	$175,239	$889,430			$0	$0	$0	$714,190	$889,430	213,089	$4.17	49	638.2	$1,394	31
F2f						0.66	$225,102	$5,313	$158,226	$383,327			$0	$0	$0	$225,102	$383,327	70,746	$5.42	60	308.9	$1,241	27
F4b2						0.21	$310,970	$3,058	$91,056	$402,026			$0	$0	$0	$310,970	$402,026	54,502	$7.38	68	157.0	$2,561	55
F1d2						0.17	$79,817	$2,475	$73,712	$153,529			$0	$0	$0	$79,817	$153,529	14,791	$10.38	74	42.1	$3,643	67
F8n2						0.36	$443,731	$4,089	$121,768	$565,499			$0	$0	$0	$443,731	$565,499	41,412	$13.66	76	77.0	$7,344	76
F3f5						2.79	$367,425	$14,455	$430,451	$797,876			$0	$0	$0	$367,425	$797,876	52,764	$15.12	77	131.5	$6,066	73
F3l3						0.73	$413,874	$5,599	$166,732	$580,607			$0	$0	$0	$413,874	$580,607	28,533	$20.35	78	-65.0	-$8,939	84
F2e						0.40	$86,117	$4,252	$126,629	$212,745			$0	$0	$0	$86,117	$212,745	7,465	$28.50	82	29.6	$7,181	75
M5m						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	523,862	$0.01	1	974.0	$5	1
M4g3						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	256,114	$0.02	3	593.0	$8	3
M2e6						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	150,184	$0.03	5	375.1	$13	4
M6j1						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	150,514	$0.03	4	317.9	$16	5
M2f3						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	80,094	$0.06	7	191.6	$26	7
M6p2						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	66,002	$0.08	8	124.5	$40	9
M7s3						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	55,104	$0.09	10	102.3	$49	10
M6n						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	31,848	$0.16	14	100.5	$50	11
M5j1						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	50,781	$0.10	11	71.3	$70	12
M3f3						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	22,460	$0.22	16	47.0	$106	13
M6g1						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	17,760	$0.28	17	46.9	$107	14
M5j3						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	14,118	$0.35	19	30.7	$163	16
M5i1a						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	13,768	$0.36	20	25.9	$193	17
M2q1						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	6,673	$0.75	22	17.3	$289	18
M7i2b						0.07	$0	$1,019	$30,352	$30,352			$0	$0	$0	$0	$30,352	42,774	$0.71	21	82.4	$369	19
M1h						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	17,714	$0.28	18	10.8	$462	20
M6s						0.48	$188,216	$4,579	$136,351	$324,567			$0	$0	$0	$188,216	$324,567	210,040	$1.55	23	356.1	$912	21
M6t1						0.16	$129,497	$2,330	$69,376	$198,873			$0	$0	$0	$129,497	$198,873	126,910	$1.57	24	200.5	$992	22
M6e2						0.14	$93,667	$2,039	$60,704	$154,371			$0	$0	$0	$93,667	$154,371	50,125	$3.08	34	144.3	$1,070	23
M6o						1.45	$362,937	$8,650	$257,594	$620,531			$0	$0	$0	$362,937	$620,531	288,731	$2.15	26	548.3	$1,132	24
M4m4						0.40	$283,158	$4,252	$126,629	$409,787			$0	$0	$0	$283,158	$409,787	134,510	$3.05	33	358.4	$1,143	25
M5f3						0.38	$122,890	$4,171	$124,198	$247,088			$0	$0	$0	$122,890	$247,088	118,661	$2.08	25	208.4	$1,186	26
M4o2						0.33	$194,560	$3,967	$118,122	$312,682			$0	$0	$0	$194,560	$312,682	92,131	$3.39	37	250.1	$1,250	28
M5h1						0.67	$128,223	$5,354	$159,441	$287,664			$0	$0	$0	$128,223	$287,664	109,068	$2.64	27	223.0	$1,290	29
M6q1						0.62	$164,960	$5,150	$153,365	$318,324			$0	$0	$0	$164,960	$318,324	115,521	$2.76	30	231.8	$1,373	30
M2i2						0.45	$325,054	$4,456	$132,705	$457,759			$0	$0	$0	$325,054	$457,759	103,407	$4.43	50	294.9	$1,552	33
M7f2						0.30	$678,929	$3,844	$114,476	$793,405			$0	$0	$0	$678,929	$793,405	163,871	$4.84	55	473.4	$1,676	35
M6s2						0.20	$71,287	$2,912	$86,720	$158,007			$0	$0	$0	$71,287	$158,007	50,509	$3.13	35	92.1	$1,716	36
M2j						0.59	$530,993	$5,028	$149,719	$680,712			$0	$0	$0	$530,993	$680,712	136,453	$4.99	56	388.9	$1,750	38
M2h2						0.33	$335,000	$3,967	$118,122	$453,122			$0	$0	$0	$335,000	$453,122	82,550	$5.49	61	232.6	$1,948	42
M7q3-2						1.41	$866,722	$8,477	$252,434	$1,119,156			$0	$0	$0	$866,722	$1,119,156	352,273	$3.18	36	554.5	$2,018	43
M7f1						0.15	$83,522	$2,184	$65,040	$148,562			$0	$0	$0	$83,522	$148,562	42,218	$3.52	41	73.5	$2,020	44
M4l2						0.40	$338,010	$4,252	$126,629	$464,639			$0	$0	$0	$338,010	$464,639	82,619	$5.62	62	227.1	$2,046	45
M7e						0.74	$614,510	$5,640	$167,948	$782,457			$0	$0	$0	$614,510	$782,457	98,841	$7.92	69	381.1	$2,053	46
M2e2						0.29	$73,012	$3,803	$113,261	$186,273			$0	$0	$0	$73,012	$186,273	36,762	$5.07	57	89.6	$2,078	47
M7d						0.50	$750,014	$4,661	$138,781	$888,795			$0	$0	$0	$750,014	$888,795	156,163	$5.69	64	419.6	$2,118	48
M8c						0.31	$208,412	$3,885	$115,691	$324,103			$0	$0	$0	$208,412	$324,103	70,358	$4.61	53	152.3	$2,129	49
M7m2						0.37	$230,382	$4,130	$122,983	$353,365			$0	$0	$0	$230,382	$353,365	87,624	$4.03	45	154.5	$2,287	50
M7j3						1.24	$819,323	$7,741	$230,504	$1,049,827			$0	$0	$0	$819,323	$1,049,827	308,182	$3.41	39	431.6	$2,432	51
M6q3						0.44	$119,356	$4,416	$131,490	$250,846			$0	$0	$0	$119,356	$250,846	61,982	$4.05	46	100.5	$2,496	52
M3i2						0.29	$178,552	$3,803	$113,261	$291,813			$0	$0	$0	$178,552	$291,813	65,857	$4.43	51	116.7	$2,501	53
M7s1						0.43	$95,358	$4,375	$130,275	$225,632			$0	$0	$0	$95,358	$225,632	54,458	$4.14	48	88.8	$2,541	54
M5i1						0.38	$244,789	$4,171	$124,198	$368,987			$0	$0	$0	$244,789	$368,987	90,353	$4.08	47	142.7	$2,585	56
M7r2						0.40	$348,113	$4,252	$126,629	$474,741			$0	$0	$0	$348,113	$474,741	106,917	$4.44	52	182.4	$2,602	57
M2d6						0.12	$53,016	$1,747	$52,032	$105,048			$0	$0	$0	$53,016	$105,048	19,687	$5.34	59	40.1	$2,620	58
M4u						0.94	$722,206	$6,456	$192,253	$914,459			$0	$0	$0	$722,206	$914,459	171,449	$5.33	58	333.9	$2,738	59
M4q1						0.21	$185,381	$3,058	$91,056	$276,437			$0	$0	$0	$185,381	$276,437	39,002	$7.09	67	96.0	$2,878	60
M8j1						0.48	$421,705	$4,579	$136,351	$558,056			$0	$0	$0	$421,705	$558,056	63,222	$8.83	70	184.9	$3,018	61
M6l1						0.16	$90,856	$2,330	$69,376	$160,232			$0	$0	$0	$90,856	$160,232	27,104	$5.91	66	53.0	$3,025	62
M3g2						0.08	$57,153	$1,165	$34,688	$91,841			$0	$0	$0	$57,153	$91,841	16,140	$5.69	63	29.0	$3,171	63
M2p						0.23	$525,395	$3,349	$99,728	$625,122			$0	$0	$0	$525,395	$625,122	67,099	$9.32	72	191.9	$3,258	64
M7n2						0.36	$258,111	$4,089	$121,768	$379,879			$0	$0	$0	$258,111	$379,879	79,726	$4.76	54	108.4	$3,503	65
M4b2						0.06	$44,383	$874	$26,016	$70,399			$0	$0	$0	$44,383	$70,399	17,488	$4.03	44	19.6	$3,593	66
M7q5						0.22	$223,867	$3,203	$95,392	$319,259			$0	$0	$0	$223,867	$319,259	26,238	$12.17	75	84.7	$3,770	68
M6h3						1.31	$493,696	$8,044	$239,534	$733,230			$0	$0	$0	$493,696	$733,230	73,794	$9.94	73	139.3	$5,265	70
M7q3-1						0.17	$47,400	$2,475	$73,712	$121,111			$0	$0	$0	$47,400	$121,111	44,743	$2.71	29	21.7	$5,576	71
M3m2						2.40	$31,118	$12,766	$380,142	$411,260			$0	$0	$0	$31,118	$411,260	17,268	$23.82	80	68.0	$6,050	72
M4f1b						0.16	$70,089	$2,330	$69,376	$139,465			$0	$0	$0	$70,089	$139,465	6,674	$20.90	79	22.3	$6,246	74
M3f1						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	-84,048	-$0.06	85	-151.4	-$33	77
M4h2						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	-2,267	-$2.21	86	-23.1	-$217	80
M3n						0.35	$370,243	$4,048	$120,552	$490,795			$0	$0	$0	$370,243	$490,795	-62,128	-$7.90	87	-387.9	-$1,265	82
M7q2						0.17	$0	$2,475	$73,712	$73,712			$0	$0	$0	$0	$73,712	25,032	$2.94	32	-12.0	-$6,164	83
M4i						0.90	$427,262	$6,293	$187,392	$614,654			$0	$0	$0	$427,262	$614,654	16,784	$36.62	84	-30.2	-$20,367	85
M8f1						0.43	$449,810	$4,375	$130,275	$580,085			$0	$0	$0	$449,810	$580,085	17,036	$34.05	83	-9.1	-$63,821	86
M7i2a						0.11	$0	$1,602	$47,696	$47,696			$0	$0	$0	$0	$47,696	1,696	$28.12	81	-0.1	-$681,221	87

*Based on Existing BMP's performance (if applicable) and proposed street sweeping program

[1]BMP is already constructed but no plan set or stormwater management plan provided; Assumed % TSS and TP reductions are provided until additonal information.

[2]BMP is already constructed but maintenance authority needs to be confirmed; TSS & TP reductions are based on plan set / stormwater management plan

[3]Cty of Appleton BMP already constructed but maintenance agreement is needed; TSS & TP reductions are based on the City of Appleton stormwater management plan

[4]Village of Little Chute BMP already constructed but maintenance agreement is needed; TSS & TP reductions are based on the pond's stormwater management plan

Assumptions:

Estimated capital costs include land acquisition, engineering and construction

Average annual O&M costs assume 4% inflation

McMAHON ENGINEERS ARCHITECTS

TOWN OF GRAND CHUTE
PROPOSED STRUCTURAL BMPS (with Alum Treatment Alternatives)
WATER QUALITY RESULTS & COST ANALYSIS

				Total Suspended Solids (TSS)						Total Phosphorus (TP)						Sand Filter or Bioretention Capital / O&M Costs					Wet Detention Pond Capital / O&M Costs					Alum Treatment Capital / O&M Costs							TSS Cost Analysis & Ranking			TP Cost Analysis & Ranking		
BMP Catchement ID	BMP Name	Catchment ID's treated by BMP	Area (acres)	Before Drainage System (lbs)	After Existing Drainage System & Outfall Controls (lbs)	BMP TSS Removal %	After Proposed Outfall Controls (lbs)	Total Load Reduction (lbs)	Net Gain* (lbs)	Before Drainage System (lbs)	After Existing Drainage System & Outfall Controls (lbs)	BMP TP Removal %	After Proposed Outfall Controls (lbs)	Total Load Reduction (lbs)	Net Gain* (lbs)	Planting Bed Area (sf)	Estimated Capital Costs	Average Annual O&M Costs For 2015	Total Average Annual O&M Costs Over 20 Years	Capital & Total Average Annual O&M Costs Over 20 Years	Water Surface Area (acres)	Estimated Capital Costs	Average Annual O&M Costs For 2015	Total Average Annual O&M Costs Over 20 Years	Capital & Total Average Annual O&M Costs Over 20 Years	Total Watershed Runoff Volume (cf)	Estimated Capital Costs	Average Annual O&M Costs For 2015	Total Average Annual O&M Costs Over 20 Years	Capital & Total Average Annual O&M Costs Over 20 Years	Total Estimated Capital Cost	Total Capital & Average Annual O&M Costs Over 20 Years	Average Annual TSS Net Gain Over 20 Years For Utility (lbs)	Average Annual Total Cost For Utility ($/lbs)	Sub-Watershed TSS Ranking	Average Annual TP Net Gain Over 20 Years For Utility (lbs)	Average Annual Total Cost For Utility ($/lbs)	Sub-Watershed TP Ranking
A3i	Holland Pond [2,3]	A3c1, A3e, A3g, A3f2, A3i	101.2	20,159.5	6,330.6	79.0%	4,234	15,926	2,097	74.1	27.3	56.0%	32.6	41.5	-5.3						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	41,942	$0.12	12	-105.6	-$47	129
A3e	Ballard Pond [2,3]	A3c1, A3e	71.1	15,390.2	4,982.8	79.0%	3,232	12,158	1,751	56.6	21.4	55.0%	25.5	31.2	-4.1						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	35,017	$0.14	13	-82.7	-$60	130
A4a	French Pond South [2,4]	A4a	1.0	160.0	49.0	86.4%	22	138	27	1.3	0.4	72.5%	0.3	0.9	0.1						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	544	$9.19	114	1.2	$4,200	114
B4a2	Bentwood Pond	B4a2	22.4	4,717.7	3,755.3	76.4%	1,115	3,603	2,640	18.0	15.7	57.3%	7.7	10.3	8.1						0.16	$236,490	$2,330	$69,376	$305,866			$0	$0	$0	$236,490	$305,866	52,804	$5.79	95	161.3	$1,896	66
F8j	Memorial Park Pond [2,3]	EBMP-F8c1, F8j	115.2	27,335.2	20,269.6	76.0%	6,560	20,775	13,709	87.3	67.2	58.0%	36.6	50.6	30.6						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	274,183	$0.02	2	611.8	$8	2
F3c2	Costco [2]	F3c2	32.6	7,380.5	6,913.2	84.4%	1,148	6,232	5,765	18.8	18.0	72.8%	5.1	13.7	12.9						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	115,296	$0.04	6	258.6	$19	6
F8m	NE Memorial Park Pond [2,3]	F8m	30.5	6,749.7	4,739.7	77.0%	1,552	5,197	3,187	23.5	18.1	57.0%	10.1	13.4	8.0						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	63,745	$0.08	9	159.8	$31	8
F3h3	West Lawrence Street [2]	F3h2a, F3h2b	6.8	2,897.4	2,335.6	60.6%	1,143	1,754	1,193	6.5	5.6	49.3%	3.3	3.2	2.3						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	23,852	$0.21	15	46.5	$107	15
F1b2	Southwest Business Park	F1b2	32.7	10,506.8	9,123.3	75.4%	2,586	7,921	6,537	25.2	23.4	56.5%	10.9	14.2	12.4						0.60	$201,971	$5,069	$150,934	$352,905			$0	$0	$0	$201,971	$352,905	130,740	$2.70	35	248.3	$1,421	45
F3r1	Nicolet Road	EMBP-F3r1a, F3r1	20.2	7,756.6	6,728.9	77.0%	1,786	5,970	4,942	17.5	16.3	57.7%	7.4	10.1	8.9						0.40	$161,757	$4,252	$126,629	$288,385			$0	$0	$0	$161,757	$288,385	98,850	$2.92	39	178.5	$1,616	53
F9d2	Outagamie County Site West Pond [2]	F9d2	11.0	1,841.2	534.0	75.0%	460	1,381	74	7.9	2.7	55.0%	3.5	4.3	-0.8						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	1,473	$3.39	48	-16.8	-$297	132
F3f6	Maple Hill Pond	F3h2a, F3c2, F3c5, F3h	171.8	44,781.0	37,695.5	69.9%	13,497	31,284	24,198	117.7	104.1	52.4%	56.0	61.7	48.0						3.30	$1,168,927	$16,666	$496,290	$1,665,217			$0	$0	$0	$1,168,927	$1,665,217	483,969	$3.44	50	960.8	$1,733	56
F3r6	Nicolet Pond	EBMP-F3r1a, F3r1, F3r6	35.9	13,358.7	11,209.6	77.5%	3,000	10,359	8,210	31.9	28.3	58.2%	13.3	18.5	15.0						0.70	$416,118	$5,477	$163,087	$579,205			$0	$0	$0	$416,118	$579,205	164,195	$3.53	53	299.5	$1,934	70
F3c5	McCarthy Pond	F3c2, F3c5	143.5	40,033.9	34,118.3	79.9%	8,042	31,992	26,076	100.3	90.6	59.9%	40.2	60.1	50.4						3.06	$1,445,239	$15,625	$465,291	$1,910,529			$0	$0	$0	$1,445,239	$1,910,529	521,522	$3.66	54	1,007.5	$1,896	67
F3s1	Sunrise Pond	F3s1	96.4	20,150.5	14,684.6	80.0%	4,030	16,120	10,654	77.0	62.7	60.0%	30.8	46.2	31.9						0.80	$714,190	$5,885	$175,239	$889,430			$0	$0	$0	$714,190	$889,430	213,089	$4.17	60	638.2	$1,394	44
F3r1	Nicolet Road with Alum Treatment	EMBP-F3r1a, F3r1	20.2	7,756.6	6,728.9	90.0%	776	6,981	5,953	17.5	16.3	85.0%	2.6	14.9	13.7						0.40	$161,757	$4,252	$126,629	$288,385	815,443	$61,241	$5,243	$156,121	$217,362	$222,997	$505,748	119,064	$4.25	62	274.1	$1,845	64
F3c2	Costco with Alum Treatment	F3c2	32.6	7,380.5	6,913.2	90.0%	738	6,642	6,175	18.8	18.0	85.0%	2.8	15.9	15.2						0.00	$5,000	$0	$0	$5,000	1,528,956	$102,281	$14,909	$443,960	$546,241	$107,281	$551,241	123,503	$4.46	68	304.3	$1,812	61
F3f6	Maple Hill Pond with Alum Treatment	F3h2a, F3c2, F3c5, F3h	171.8	44,781.0	37,695.5	90.0%	4,478	40,303	33,217	117.7	104.1	85.0%	17.7	100.0	86.4						3.30	$1,168,927	$16,666	$496,290	$1,665,217	9,829,750	$202,113	$43,523	$1,296,029	$1,498,142	$1,371,040	$3,163,359	664,347	$4.76	72	1,728.2	$1,830	63
F1b2	Southwest Business Park with Alum Treatment	F1b2	32.7	10,506.8	9,123.3	90.0%	1,051	9,456	8,073	25.2	23.4	85.0%	3.8	21.4	19.6						0.60	$201,971	$5,069	$150,934	$352,905	1,369,962	$90,599	$13,221	$393,682	$484,281	$292,570	$837,185	161,453	$5.19	82	391.7	$2,137	83
F3c5	McCarthy Pond with Alum Treatment	F3c2, F3c5	143.5	40,033.9	34,118.3	90.0%	4,003	36,030	30,115	100.3	90.6	85.0%	15.1	85.3	75.5						3.06	$1,445,239	$15,625	$465,291	$1,910,529	5,805,677	$172,315	$35,426	$1,054,910	$1,227,225	$1,617,554	$3,137,755	602,299	$5.21	83	1,510.6	$2,077	79
F2f	Aster Pond	F2f	55.0	4,550.4	4,299.8	83.2%	763	3,788	3,537	25.7	25.1	62.4%	9.6	16.0	15.4						0.66	$225,102	$5,313	$158,226	$383,327			$0	$0	$0	$225,102	$383,327	70,746	$5.42	86	308.9	$1,241	34
F3r6	Nicolet Pond with Alum Treatment	EBMP-F3r1a, F3r1, F3r6	35.9	13,358.7	11,209.6	90.0%	1,336	12,023	9,874	31.9	28.3	85.0%	4.8	27.1	23.5						0.70	$416,118	$5,477	$163,087	$579,205	1,426,590	$92,891	$13,843	$412,228	$505,120	$509,010	$1,084,325	197,474	$5.49	89	470.7	$2,304	86
F3s1	Sunrise Pond with Alum Treatment	F3s1	96.4	20,150.5	14,684.6	90.0%	2,015	18,135	12,670	77.0	62.7	85.0%	11.6	65.5	51.2						0.80	$714,190	$5,885	$175,239	$889,430	1,860,012	$107,904	$17,923	$533,707	$641,610	$822,094	$1,531,040	253,390	$6.04	99	1,023.3	$1,496	48
F2f	Aster Pond with Alum Treatment	F2f	55.0	4,550.4	4,299.8	90.0%	455	4,095	3,845	25.7	25.1	85.0%	3.8	21.8	21.2						0.66	$225,102	$5,313	$158,226	$383,327	727,888	$54,813	$3,496	$104,111	$158,925	$279,915	$542,252	76,896	$7.05	104	424.7	$1,277	38
F4b2	Van Dyke Pond	F4b2	19.6	3,828.1	3,299.3	85.0%	574	3,254	2,725	14.2	13.0	63.8%	5.2	9.1	7.8						0.21	$310,970	$3,058	$91,056	$402,026			$0	$0	$0	$310,970	$402,026	54,502	$7.38	109	157.0	$2,561	96
F1d2	Consolidated Court	F1d2	4.5	1,336.0	1,006.7	80.0%	267	1,069	740	4.1	3.8	60.0%	1.7	2.5	2.1						0.17	$79,817	$2,475	$73,712	$153,529			$0	$0	$0	$79,817	$153,529	14,791	$10.38	117	42.1	$3,643	112
F8n2	Florida Pond with Alum Treatment	F8n2	46.1	10,587.8	6,142.8	90.0%	1,059	9,529	5,084	38.3	24.5	85.0%	5.8	32.6	18.7						0.36	$443,731	$4,089	$121,768	$565,499	1,941,905	$110,342	$18,585	$553,436	$663,778	$554,073	$1,229,277	101,681	$12.09	119	374.8	$3,279	108
F8n2	Florida Pond	F8n2	46.1	10,587.8	6,142.8	61.5%	4,072	6,516	2,071	38.3	24.5	46.2%	20.6	17.7	3.8						0.36	$443,731	$4,089	$121,768	$565,499			$0	$0	$0	$443,731	$565,499	41,412	$13.66	121	77.0	$7,344	125
F3f5	Maple Hill Pond - Alternative 2	F3h2a, F3h	28.3	4,747.1	3,577.2	80.2%	939	3,808	2,638	17.3	13.5	60.2%	6.9	10.4	6.6						2.79	$367,425	$14,455	$430,451	$797,876			$0	$0	$0	$367,425	$797,876	52,764	$15.12	122	131.5	$6,066	121
F3l3	Misty Pond with Alum Treatment	F3l3	70.0	13,602.7	3,957.4	90.0%	1,360	12,242	2,597	51.4	16.8	85.0%	7.7	43.7	9.1						0.73	$413,874	$5,599	$166,732	$580,607	1,206,176	$83,394	$11,263	$335,379	$418,772	$497,268	$999,379	51,942	$19.24	124	181.5	$5,506	116
F3l3	Misty Pond	F3l3	70.0	13,602.7	3,957.4	81.4%	2,531	11,072	1,427	51.4	16.8	61.0%	20.0	31.4	-3.2						0.73	$413,874	$5,599	$166,732	$580,607			$0	$0	$0	$413,874	$580,607	28,533	$20.35	125	-65.0	-$8,939	135
F2e	Arrowhead Park	F2e	5.3	466.5	466.5	80.0%	93	373	373	2.5	2.5	60.0%	1.0	1.5	1.5						0.40	$86,117	$4,252	$126,629	$212,745			$0	$0	$0	$86,117	$212,745	7,465	$28.50	130	29.6	$7,181	124
F3f5	Maple Hill Pond - Alternative 2 with Alum Treatment	F3h2a, F3h	28.3	4,747.1	3,577.2	90.0%	475	4,272	3,102	17.3	13.5	85.0%	2.6	14.7	10.9						2.79	$367,425	$14,455	$430,451	$797,876	4,618,110	$159,365	$31,907	$950,120	$1,109,485	$526,790	$1,907,361	62,049	$30.74	131	217.6	$8,765	126
M5m	Fox River Mall [2]	M5m	99.0	33,384.0	33,384.0	78.5%	7,191	26,193	26,193	73.1	73.1	66.6%	24.4	48.7	48.7						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	523,862	$0.01	1	974.0	$5	1
M4g3	Butterfly Fields [2]	M4g3	102.4	20,957.8	17,672.1	76.8%	4,866	16,091	12,806	57.0	51.4	61.9%	21.7	35.3	29.6						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	256,114	$0.02	3	593.0	$8	3
M2e6	Appleton Alliance Church East [2]	M2e6	42.2	9,847.8	8,565.9	89.3%	1,057	8,791	7,509	30.6	27.8	70.5%	9.0	21.6	18.8						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	150,184	$0.03	5	375.1	$13	4
M6j1	Federated Drive (Settle Inn) [2]	M6j1	41.3	13,038.2	11,373.3	70.5%	3,848	9,191	7,526	31.9	29.1	58.6%	13.2	18.7	15.9						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	150,514	$0.03	4	317.9	$16	5
M2f3	Appleton Alliance Church West [2]	M2f3	25.1	5,374.2	4,665.7	87.7%	661	4,713	4,005	16.7	15.1	67.0%	5.5	11.2	9.6						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	80,094	$0.06	7	191.6	$26	7
M6p2	Wal Mart East [2]	M6p2	15.7	5,330.5	5,330.5	61.9%	2,030	3,300	3,300	11.9	11.9	52.2%	5.7	6.2	6.2						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	66,002	$0.08	8	124.5	$40	9
M7s3	Marcus Theatre [2]	M7s3	11.6	3,926.5	3,926.5	70.2%	1,171	2,755	2,755	8.6	8.6	59.3%	3.5	5.1	5.1						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	55,104	$0.09	10	102.3	$49	10
M6n	Fox River Square [2]	M6n	17.1	2,411.6	2,411.6	66.03%	819	1,592	1,592	8.8	8.8	56.86%	3.8	5.0	5.0						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	31,848	$0.16	14	100.5	$50	11
M5j1	Furniture ROW North [2]	M5j1	26.3	3,756.5	3,063.8	86.0%	525	3,232	2,539	11.6	7.5	65.9%	4.0	7.7	3.6						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	50,781	$0.10	11	71.3	$70	12
M3f3	Hand & Shoulder Surgery [2]	M3f3	5.1	1,372.0	1,372.0	81.9%	249	1,123	1,123	3.6	3.6	66.1%	1.2	2.3	2.3						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	22,460	$0.22	16	47.0	$106	13
M6g1	Schroth Lane [2]	M6g1	5.7	1,529.6	1,096.8	86.4%	209	1,321	888	4.7	3.9	67.1%	1.5	3.1	2.3						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	17,760	$0.28	17	46.9	$107	14
M5j3	Furniture ROW South [2]	M5j3	6.3	1,604.0	853.3	90.8%	147	1,457	706	4.4	2.5	77.8%	1.0	3.4	1.5						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	14,118	$0.35	19	30.7	$163	16
M5i1a	Mark Winter [2]	M5i1a	2.7	717.8	717.8	95.9%	29	688	688	1.6	1.6	81.9%	0.3	1.3	1.3						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	13,768	$0.36	20	25.9	$193	17
M2q1	FVTC Student Housing [2]	M2q1	2.5	384.0	384.0	86.9%	50	334	334	1.3	1.3	65.7%	0.5	0.9	0.9						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	6,673	$0.75	22	17.3	$289	18
M7i2b	Hickory Farms South Pond [1]	EBMP-M7i2b, PBMP-M7i1	18.6	8,039.0	6,769.2	42.4%	4,630	3,409	2,139	17.7	15.6	35.2%	11.5	6.2	4.1						0.07	$0	$1,019	$30,352	$30,352			$0	$0	$0	$0	$30,352	42,774	$0.71	21	82.4	$369	19
M1h	US Paper Converters [2]	M1h	7.4	3,156.7	1,517.0	80.0%	631	2,525	886	4.7	2.4	60.0%	1.9	2.8	0.5						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	17,714	$0.28	18	10.8	$462	20
M7q3-1	Spencer Street Pond-Rev with Alum Treatment	EBMP-M7q2, M7p3, PBMP-M7q3	226.6	79,196.5	61,381.1	90.0%	7,920	71,277	53,461	178.8	144.6	85.0%	26.8	152.0	117.7						0.17	$47,400	$2,475	$73,712	$121,111	13,862,970	$221,568	$48,810	$1,453,457	$1,675,026	$268,968	$1,796,137	1,069,228	$1.68	25	2,354.9	$763	21
M7q2	Spencer Street Pond with Alum Treatment	EBMP-M7q2, M7p3	213.1	74,741.4	57,068.4	90.0%	7,474	67,267	49,594	168.3	134.4	85.0%	25.2	143.0	109.2						0.17	$0	$2,475	$73,712	$73,712	13,274,218	$237,640	$48,142	$1,433,586	$1,671,225	$237,640	$1,744,937	991,886	$1.76	26	2,183.9	$799	22
M6p2	Wal Mart East with Alum Treatment	M6p2	15.7	5,330.5	5,330.5	90.0%	533	4,797	4,797	11.9	11.9	85.0%	1.8	10.1	10.1						0.00	$5,000	$0	$0	$5,000	736,164	$56,506	$3,670	$109,288	$165,794	$61,506	$170,794	95,948	$1.78	27	202.7	$843	23
M2e6	Appleton Alliance Church East with Alum Treatment	M2e6	42.2	9,847.8	8,565.9	90.0%	985	8,863	7,581	30.6	27.8	85.0%	4.6	26.0	23.2						0.00	$5,000	$0	$0	$5,000	1,149,113	$84,394	$10,517	$313,187	$397,581	$89,394	$402,581	151,622	$2.66	34	463.8	$868	24
M6s	Mall Pond	EBMP-M6s1, PBMP-M6s2, M6s3	54.0	21,719.3	18,660.0	62.44%	8,158	13,561	10,502	49.3	44.0	46.83%	26.2	23.1	17.8						0.48	$188,216	$4,579	$136,351	$324,567			$0	$0	$0	$188,216	$324,567	210,040	$1.55	23	356.1	$912	25
M5m	Fox River Mall with Alum Treatment	M5m	99.0	33,384.0	33,384.0	90.0%	3,338	30,046	30,046	73.1	73.1	85.0%	11.0	62.1	62.1						0.00	$5,000	$0	$0	$5,000	4,690,541	$172,487	$32,146	$957,246	$1,129,733	$177,487	$1,134,733	600,912	$1.89	28	1,242.9	$913	26
M7s3	Marcus Theatre with Alum Treatment	M7s3	11.6	3,926.5	3,926.5	90.0%	393	3,534	3,534	8.6	8.6	85.0%	1.3	7.3	7.3						0.00	$5,000	$0	$0	$5,000	544,936	$50,000	$3,000	$89,334	$139,334	$55,000	$144,334	70,676	$2.04	29	146.8	$983	27
M6t1	Metro Pond	M6t1	33.8	15,676.8	13,400.1	55.00%	7,055	8,622	6,346	33.9	30.4	40.00%	20.4	13.6	10.0						0.16	$129,497	$2,330	$69,376	$198,873			$0	$0	$0	$129,497	$198,873	126,910	$1.57	24	200.5	$992	28
M6e2	KAE Estates	M6e2	18.7	4,478.4	3,501.4	77.78%	995	3,483	2,506	16.2	14.0	58.33%	6.8	9.5	7.2						0.14	$93,667	$2,039	$60,704	$154,371			$0	$0	$0	$93,667	$154,371	50,125	$3.08	43	144.3	$1,070	29
M6o	Michaels Pond	M6q1, M6q3, M6n, M6o	79.4	23,500.3	21,189.5	71.26%	6,753	16,747	14,437	58.2	54.5	53.45%	27.1	31.1	27.4						1.45	$362,937	$8,650	$257,594	$620,531			$0	$0	$0	$362,937	$620,531	288,731	$2.15	31	548.3	$1,132	30
M4m4	Whitney Pond	M4m4	52.0	11,896.1	9,514.9	76.55%	2,789	9,107	6,725	40.7	35.2	57.41%	17.3	23.3	17.9						0.40	$283,158	$4,252	$126,629	$409,787			$0	$0	$0	$283,158	$409,787	134,510	$3.05	42	358.4	$1,143	31
M7q3-2	Spencer Street Pond-Rev and Highview Pond with Alum Treatment	EBMP-M7q2, M7p3, PBMP-M7q3, M7i1, M7j3	234.6	82,783.5	63,144.6	90.00%	8,278	74,505	54,866	186.1	148.7	85.00%	27.9	158.2	120.8						1.41	$866,722	$8,477	$252,434	$1,119,156	14,437,091	$223,865	$49,434	$1,472,039	$1,695,903	$1,090,587	$2,815,059	1,097,325	$2.57	32	2,415.8	$1,165	32
M5f3	Westhill Pond	M5f3	29.2	9,474.6	9,130.7	66.25%	3,198	6,277	5,933	22.2	21.6	49.69%	11.2	11.0	10.4						0.38	$122,890	$4,171	$124,198	$247,088			$0	$0	$0	$122,890	$247,088	118,661	$2.08	30	208.4	$1,186	33
M4o2	Twin Willows Pond	M4o2a	36.3	7,515.1	5,951.4	82.11%	1,345	6,170	4,607	26.2	22.6	61.58%	10.1	16.1	12.5						0.33	$194,560	$3,967	$118,122	$312,682			$0	$0	$0	$194,560	$312,682	92,131	$3.39	47	250.1	$1,250	35
M7i2b	Hickory Farms South Pond with Alum Treatment	EBMP-M7i2b, PBMP-M7i1	18.6	8,039.0	6,769.2	90.00%	804	7,235	5,965	17.7	15.6	85.00%	2.7	15.1	13.0						0.07	0.00	$1,019	$30,352	$30,352	947,838.26	$69,755	$7,556	$225,013	$294,768	$69,755	$325,120	119,305	$2.73	37	259.2	$1,254	36
M6j1	Federated Drive (Settle Inn) with Alum Treatment	M6j1	41.3	13,038.2	11,373.3	90.00%	1,304	11,734	10,069	31.9	29.1	85.00%	4.8	27.2	24.3						0.00	$5,000	$0	$0	$5,000	1,721,056	$109,694	$16,729	$498,153	$607,847	$114,694	$612,847	201,389	$3.04	41	487.0	$1,259	37
M4o2	Twin Willows Pond with Alum Treatment	M4o2a	36.3	7,515.1	5,951.4	90.00%	752	6,764	5,200	26.2	22.6	85.00%	3.9	22.2	18.6						0.33	$194,560	$3,967	$118,122	$312,682	740,084	$55,754	$3,752	$111,720	$167,474	$250,313	$480,155	103,997	$4.62	71	372.7	$1,288	39
M5h1	Fox Cities Stadium	M5h1	28.4	6,506.9	6,506.9	83.81%	1,053	5,453	5,453	17.7	17.7	62.86%	6.6	11.2	11.2						0.67	$128,223	$5,354	$159,441	$287,664			$0	$0	$0	$128,223	$287,664	109,068	$2.64	33	223.0	$1,290	40
M7e	Applegate Pond with Alum Treatment	EBMP-M7c1, PBMP-M7c2, M7d1, M7d2, M7e	157.5	41,625.2	25,754.6	90.00%	4,163	37,463	21,592	127.3	98.6	85.00%	19.1	108.2	79.5						0.74	$614,510	$5,640	$167,948	$782,457	6,523,981	$178,916	$37,219	$1,108,323	$1,287,239	$793,426	$2,069,697	431,842	$4.79	74	1,590.2	$1,302	41
M4m4	Whitney Pond with Alum Treatment	M4m4	52.0	11,896.1	9,514.9	90.00%	1,190	10,706	8,325	40.7	35.2	85.0%	6.1	34.6	29.1						0.40	$283,158	$4,252	$126,629	$409,787	1,137,352	$80,069	$10,359	$308,476	$388,545	$363,227	$798,332	166,506	$4.79	75	582.7	$1,370	42
M6q1	Menards	M6q1	33.1	9,049.6	8,354.6	71.51%	2,579	6,471	5,776	23.6	22.5	53.6%	11.0	12.7	11.6						0.62	$164,960	$5,150	$153,365	$318,324			$0	$0	$0	$164,960	$318,324	115,521	$2.76	38	231.8	$1,373	43
M7f2	Applegate East Pond with Alum Treatment	M7d2, M7f2	84.0	18,785.1	15,498.9	90.0%	1,879	16,907	13,620	68.0	60.5	85.0%	10.2	57.8	50.3						0.30	$678,929	$3,844	$114,476	$793,405	2,054,725	$113,538	$19,454	$579,295	$692,832	$792,466	$1,486,237	272,407	$5.46	87	1,006.1	$1,477	46
M6n	Fox River Square with Alum Treatment	M6n	17.1	2,411.6	2,411.6	90.0%	241	2,170	2,170	8.8	8.8	85.0%	1.3	7.5	7.5						0.00	$5,000	$0	$0	$5,000	814,572	$62,844	$5,226	$155,632	$218,477	$67,844	$223,477	43,409	$5.15	80	150.2	$1,488	47
M4g3	Butterfly Fields with Alum Treatment	M4g3	102.4	20,957.8	17,672.1	90.0%	2,096	18,862	15,576	57.0	51.4	85.0%	8.6	48.5	42.8						0.00	$5,000	$0	$0	$5,000	6,468,660	$192,618	$37,088	$1,104,424	$1,297,042	$197,618	$1,302,042	311,526	$4.18	61	856.5	$1,520	49
M6t1	Metro Pond with Alum Treatment	M6t1	33.8	15,676.8	13,400.1	90.0%	1,568	14,109	11,832	33.9	30.4	85.0%	5.1	28.8	25.3						0.16	$129,497	$2,330	$69,376	$198,873	1,634,371	$100,585	$15,934	$474,489	$575,075	$230,083	$773,948	236,648	$3.27	46	505.8	$1,530	50
M2i2	Chappell Pond	M2i2, M2g1	43.6	7,593.0	6,455.3	83.1%	1,285	6,308	5,170	27.7	25.2	62.3%	10.4	17.3	14.7						0.45	$325,054	$4,456	$132,705	$457,759			$0	$0	$0	$325,054	$457,759	103,407	$4.43	65	294.9	$1,552	51
M6s	Mall Pond with Alum Treatment	EBMP-M6s1, PBMP-M6s2, M6s3	54.0	21,719.3	18,660.0	90.0%	2,172	19,547	16,488	49.3	44.0	85.0%	7.4	41.9	36.6						0.48	$188,216	$4,579	$136,351	$324,567	2,662,387	$128,198	$23,438	$697,927	$826,126	$316,415	$1,150,693	329,761	$3.49	51	732.2	$1,572	52
M7f2	Applegate East Pond	M7d2, M7f2	84.0	18,785.1	15,498.9	61.1%	7,305	11,480	8,194	68.0	60.5	45.8%	36.8	31.2	23.7						0.30	$678,929	$3,844	$114,476	$793,405			$0	$0	$0	$678,929	$793,405	163,871	$4.84	76	473.4	$1,676	54
M6s2	Steinhafels	M6s2	10.1	3,473.0	3,472.6	72.7%	947	2,526	2,525	8.4	8.4	54.5%	3.8	4.6	4.6						0.20	$71,287	$2,912	$86,720	$158,007			$0	$0	$0	$71,287	$158,007	50,509	$3.13	44	92.1	$1,716	55
M2i2	Chappell Pond with Alum Treatment	M2i2, M2g1	43.6	7,593.0	6,455.3	90.0%	759	6,834	5,696	27.7	25.2	85.0%	4.2	23.6	21.0						0.45	$325,054	$4,456	$132,705	$457,759	916,502	$67,852	$7,039	$209,619	$277,471	$392,906	$735,230	113,920	$6.45	101	420.7	$1,748	57
M2j	Teardrop Pond	M2i2, M2g1, M2j	62.7	11,104.3	9,321.1	77.5%	2,498	8,606	6,823	40.3	36.3	58.1%	16.9	23.4	19.4						0.59	$530,993	$5,028	$149,719	$680,712			$0	$0	$0	$530,993	$680,712	136,453	$4.99	78	388.9	$1,750	58
M6o	Michaels Pond with Alum Treatment	M6q1, M6q3, M6n, M6o	79.4	23,500.3	21,189.5	90.0%	2,350	21,150	18,839	58.2	54.5	85.0%	8.7	49.5	45.8						1.45	$362,937	$8,650	$257,594	$620,531	3,789,284	$148,171	$28,865	$859,544	$1,007,715	$511,109	$1,628,246	376,789	$4.32	64	915.8	$1,778	59
M4l2	Capitol Pond with Alum Treatment	M4l2	27.8	7,041.2	5,187.2	90.0%	704	6,337	4,483	25.3	20.5	85.0%	3.8	21.5	16.7						0.40	$338,010	$4,252	$126,629	$464,639	687,812	$51,609	$3,000	$89,334	$140,943	$389,619	$605,582	89,661	$6.75	102	334.5	$1,810	60
M2f3	Appleton Alliance Church West with Alum Treatment	M2f3	25.1	5,374.2	4,665.7	90.0%	537	4,837	4,128	16.7	15.1	85.0%	2.5	14.2	12.6						0.00	$5,000	$0	$0	$5,000	1,282,842	$91,289	$12,210	$363,596	$454,885	$96,289	$459,885	82,566	$5.57	90	251.8	$1,827	62
M2h2	Roselawn Pond with Alum Treatment	M2h2	36.3	7,026.0	5,220.4	90.0%	703	6,323	4,518	25.7	21.1	85.0%	3.9	21.8	17.2						0.33	$335,000	$3,967	$118,122	$453,122	768,834	$57,910	$4,338	$129,171	$187,082	$392,910	$640,203	90,357	$7.09	105	344.0	$1,861	65
M2j	Teardrop Pond with Alum Treatment	M2i2, M2g1, M2j	62.7	11,104.3	9,321.1	90.0%	1,110	9,994	8,211	40.3	36.3	85.0%	6.1	34.3	30.3						0.59	$530,993	$5,028	$149,719	$680,712	1,345,568	$89,582	$12,944	$385,455	$475,037	$620,575	$1,155,749	164,214	$7.04	103	605.7	$1,908	68
M5h1	Fox Cities Stadium with Alum Treatment	M5h1	28.4	6,506.9	6,506.9	90.0%	651	5,856	5,856	17.7	17.7	85.0%	2.7	15.1	15.1						0.67	$128,223	$5,354	$159,441	$287,664	941,332	$69,365	$7,450	$221,859	$291,224	$197,588	$578,888	117,124	$4.94	77	301.6	$1,920	69
M2h2	Roselawn Pond	M2h2	36.3	7,026.0	5,220.4	84.4%	1,093	5,933	4,128	25.7	21.1	63.3%	9.4	16.3	11.6						0.33	$335,000	$3,967	$118,122	$453,122			$0	$0	$0	$335,000	$453,122	82,550	$5.49	88	232.6	$1,948	71
M7q3-2	Spencer Street Pond-Rev and Highview Pond	EBMP-M7q2, M7p3, PBMP-M7q3, M7i1, M7j3	234.6	82,783.5	63,144.6	45.0%	45,531	37,253	17,614	186.1	148.7	35.0%	121.0	65.1	27.7						1.41	$866,722	$8,477	$252,434	$1,119,156			$0	$0	$0	$866,722	$1,119,156	352,273	$3.18	45	554.5	$2,018	72
M7f1	Copps Pond	M7f1	10.6	3,272.3	3,125.3	69.0%	1,014	2,258	2,111	7.5	7.3	51.8%	3.6	3.9	3.7						0.15	$83,522	$2,184	$65,040	$148,562			$0	$0	$0	$83,522	$148,562	42,218	$3.52	52	73.5	$2,020	73
M5f3	Westhill Pond with Alum Treatment	M5f3	29.2	9,474.6	9,130.7	90.0%	947	8,527	8,183	22.2	21.6	85.0%	3.3	18.8	18.2						0.38	$122,890	$4,171	$124,198	$247,088	1,396,534	$91,686	$13,516	$402,478	$494,164	$214,576	$741,253	163,665	$4.53	69	365.0	$2,031	74

M7d	Applegate West Pond with Alum Treatment	M7e	61.6	13,888.9	10,912.7	90.0%	1,389	12,500	9,524	47.8	40.9	85.0%	7.2	40.6	33.8						0.50	$750,014	$4,661	$138,781	$888,795	1,388,693	$91,368	$13,429	$399,900	$491,268	$841,381	$1,380,063	190,477	$7.25	107	675.5	$2,043	75
M4l2	Capitol Pond	M4l2	27.8	7,041.2	5,187.2	85.0%	1,056	5,985	4,131	25.3	20.5	63.8%	9.2	16.1	11.4						0.40	$338,010	$4,252	$126,629	$464,639			$0	$0	$0	$338,010	$464,639	82,619	$5.62	92	227.1	$2,046	76
M7e	Applegate Pond	EBMP-M7c1, PBMP-M7c2, M7d1, M7d2, M7e	157.5	41,625.2	25,754.6	50.0%	20,813	20,813	4,942	127.3	98.6	37.5%	79.5	47.7	19.1						0.74	$614,510	$5,640	$167,948	$782,457			$0	$0	$0	$614,510	$782,457	98,841	$7.92	110	381.1	$2,053	77
M7j3	Highview Pond with Alum Treatment	EBMP-M7p3, PBMP-M7i1, M7j3	117.0	42,467.6	30,551.4	90.0%	4,247	38,221	26,305	89.9	68.1	85.0%	13.5	76.4	54.6						1.24	$819,323	$7,741	$230,504	$1,049,827	5,462,424	$168,866	$34,489	$1,027,004	$1,195,871	$988,189	$2,245,698	526,093	$4.27	63	1,092.0	$2,056	78
M2e2	Town Hall East	M2e2	11.7	2,297.6	2,297.6	80.0%	460	1,838	1,838	7.5	7.5	60.0%	3.0	4.5	4.5						0.29	$73,012	$3,803	$113,261	$186,273			$0	$0	$0	$73,012	$186,273	36,762	$5.07	79	89.6	$2,078	80
M7d	Applegate West Pond	M7e	61.6	13,888.9	10,912.7	77.6%	3,105	10,784	7,808	47.8	40.9	58.2%	20.0	27.8	21.0						0.50	$750,014	$4,661	$138,781	$888,795			$0	$0	$0	$750,014	$888,795	156,163	$5.69	94	419.6	$2,118	81
M8c	Spencer Village Pond	M8c1	20.4	4,629.1	4,351.1	82.0%	833	3,796	3,518	13.4	12.8	61.5%	5.2	8.3	7.6						0.31	$208,412	$3,885	$115,691	$324,103			$0	$0	$0	$208,412	$324,103	70,358	$4.61	70	152.3	$2,129	82
M7m2	Westhill Motel Pond	M7m2	27.0	8,514.1	7,066.4	68.5%	2,685	5,829	4,381	21.7	18.3	51.3%	10.5	11.1	7.7						0.37	$230,382	$4,130	$122,983	$353,365			$0	$0	$0	$230,382	$353,365	87,624	$4.03	56	154.5	$2,287	84
M3i2	Victory Pond with Alum Treatment	M3i2a, M3i2c	14.6	5,104.9	4,696.7	90.0%	510	4,594	4,186	11.9	11.3	85.0%	1.8	10.1	9.5						0.29	$178,552	$3,803	$113,261	$291,813	703,058	$52,849	$3,000	$89,334	$142,183	$231,402	$433,997	83,724	$5.18	81	189.6	$2,289	85
M6q1	Menards with Alum Treatment	M6q1	33.1	9,049.6	8,354.6	90.0%	905	8,145	7,450	23.6	22.5	85.0%	3.5	20.1	19.0						0.62	$164,960	$5,150	$153,365	$318,324	1,578,614	$98,621	$15,400	$458,595	$557,217	$263,581	$875,541	148,992	$5.88	96	380.0	$2,304	87
M8j1	Butte Des Morts Pond with Alum Treatment	EBMP-M8i1, M8i2, M8i3, PBMP-M8j1	51.5	9,106.4	4,632.1	90.0%	911	8,196	3,721	37.1	23.0	85.0%	5.6	31.6	17.5						0.48	$421,705	$4,579	$136,351	$558,056	872,942	$65,097	$6,291	$187,322	$252,418	$486,802	$810,474	74,430	$10.89	118	349.2	$2,321	88
M2p	Glenpark Pond with Alum Treatment	M2p	28.7	6,168.0	4,819.9	90.0%	617	5,551	4,203	22.2	19.1	85.0%	3.3	18.9	15.8						0.23	$525,395	$3,349	$99,728	$625,122	682,585	$51,177	$3,000	$89,334	$140,511	$576,572	$765,634	84,061	$9.11	113	315.4	$2,428	89
M7j3	Highview Pond	EBMP-M7p3, PBMP-M7i1, M7j3	117.0	42,467.6	30,551.4	64.3%	15,142	27,325	15,409	89.9	68.1	48.3%	46.5	43.4	21.6						1.24	$819,323	$7,741	$230,504	$1,049,827			$0	$0	$0	$819,323	$1,049,827	308,182	$3.41	49	431.6	$2,432	90
M6q3	Wal Mart Northwest	M6q3	10.6	3,873.9	3,873.9	80.0%	775	3,099	3,099	8.4	8.4	60.0%	3.3	5.0	5.0						0.44	$119,356	$4,416	$131,490	$250,846			$0	$0	$0	$119,356	$250,846	61,982	$4.05	57	100.5	$2,496	91
M3i2	Victory Pond	M3i2a, M3i2c	14.6	5,104.9	4,696.7	72.5%	1,404	3,701	3,293	11.9	11.3	54.4%	5.4	6.5	5.8						0.29	$178,552	$3,803	$113,261	$291,813			$0	$0	$0	$178,552	$291,813	65,857	$4.43	66	116.7	$2,501	92
M7s1	Woodman's Pond	M7s1	9.6	3,403.6	3,403.6	80.0%	681	2,723	2,723	7.4	7.4	60.0%	3.0	4.4	4.4						0.43	$95,358	$4,375	$130,275	$225,632			$0	$0	$0	$95,358	$225,632	54,458	$4.14	59	88.8	$2,541	93
M7m2	Westhill Motel Pond with Alum Treatment	M7m2	27.0	8,514.1	7,066.4	90.0%	851	7,663	6,215	21.7	18.3	85.0%	3.2	18.4	15.0						0.37	$230,382	$4,130	$122,983	$353,365	1,194,851	$82,860	$11,118	$331,059	$413,919	$313,242	$767,284	124,300	$6.17	100	300.3	$2,555	94
M7r2	College Ramp Pond with Alum Treatment	M7r2	21.6	8,312.6	7,489.6	90.0%	831	7,481	6,658	18.7	17.4	85.0%	2.8	15.9	14.6						0.40	$348,113	$4,252	$126,629	$474,741	909,097	$67,393	$6,915	$205,904	$273,297	$415,506	$748,039	133,168	$5.62	91	292.2	$2,560	95
M5i1	Parkway Pond	M5i1a, M5i1b	15.4	6,584.6	5,623.9	83.2%	1,106	5,478	4,518	13.8	12.3	62.4%	5.2	8.6	7.1						0.38	$244,789	$4,171	$124,198	$368,987			$0	$0	$0	$244,789	$368,987	90,353	$4.08	58	142.7	$2,585	97
M7r2	College Ramp Pond	M7r2	21.6	8,312.6	7,489.6	74.2%	2,144	6,169	5,346	18.7	17.4	55.7%	8.3	10.4	9.1						0.40	$348,113	$4,252	$126,629	$474,741			$0	$0	$0	$348,113	$474,741	106,917	$4.44	67	182.4	$2,602	98
M2d6	Town Hall West	M2d6	4.4	1,230.5	1,230.5	80.0%	246	984	984	3.3	3.3	60.0%	1.3	2.0	2.0						0.12	$53,016	$1,747	$52,032	$105,048			$0	$0	$0	$53,016	$105,048	19,687	$5.34	85	40.1	$2,620	99
M4u	Tri-park Pond	M4u	42.1	11,841.4	10,348.7	85.0%	1,776	10,065	8,572	30.4	27.7	63.8%	11.0	19.4	16.7						0.94	$722,206	$6,456	$192,253	$914,459			$0	$0	$0	$722,206	$914,459	171,449	$5.33	84	333.9	$2,738	100
M4q1	Pheasant Run Pond	M4q1	13.6	2,498.3	2,324.8	85.0%	375	2,124	1,950	8.2	7.8	63.8%	3.0	5.2	4.8						0.21	$185,381	$3,058	$91,056	$276,437			$0	$0	$0	$185,381	$276,437	39,002	$7.09	106	96.0	$2,878	101
M8j1	Butte Des Morts Pond	EBMP-M8i1, M8i2, M8i3, PBMP-M8j1	51.5	9,106.4	4,632.1	83.8%	1,471	7,635	3,161	37.1	23.0	62.9%	13.8	23.4	9.2						0.48	$421,705	$4,579	$136,351	$558,056			$0	$0	$0	$421,705	$558,056	63,222	$8.83	112	184.9	$3,018	102
M6l1	Old Sams Club (Home Goods)	M6l1	7.0	1,806.9	1,806.9	75.0%	452	1,355	1,355	4.7	4.7	56.3%	2.1	2.6	2.6						0.16	$90,856	$2,330	$69,376	$160,232			$0	$0	$0	$90,856	$160,232	27,104	$5.91	98	53.0	$3,025	103
M7n2	Legion Pond with Alum Treatment	M7n2	22.5	7,926.8	6,100.1	90.0%	793	7,134	5,307	15.6	12.4	85.0%	2.3	13.2	10.1						0.36	$258,111	$4,089	$121,768	$379,879	860,746	$64,300	$6,074	$180,879	$245,179	$322,412	$625,058	106,149	$5.89	97	201.8	$3,098	104
M3g2	Kwik Trip (Casaloma)	M3g2	2.9	1,008.8	1,008.8	80.0%	202	807	807	2.4	2.4	60.0%	1.0	1.4	1.4						0.08	$57,153	$1,165	$34,688	$91,841			$0	$0	$0	$57,153	$91,841	16,140	$5.69	93	29.0	$3,171	105
M4u	Tri-park Pond with Alum Treatment	M4u	42.1	11,841.4	10,348.7	90.0%	1,184	10,657	9,165	30.4	27.7	85.0%	4.6	25.8	23.2						0.94	$722,206	$6,456	$192,253	$914,459	1,617,383	$99,994	$15,774	$469,705	$569,699	$822,200	$1,484,158	183,291	$8.10	111	463.1	$3,205	106
M2p	Glenpark Pond	M2p	28.7	6,168.0	4,819.9	76.3%	1,465	4,703	3,355	22.2	19.1	57.2%	9.5	12.7	9.6						0.23	$525,395	$3,349	$99,728	$625,122			$0	$0	$0	$525,395	$625,122	67,099	$9.32	115	191.9	$3,258	107
M5j1	Furniture ROW North with Alum Treatment	M5j1	26.3	3,756.5	3,063.8	90.0%	376	3,381	2,688	11.6	7.5	85.0%	1.7	9.9	5.8						0.00	$5,000	$0	$0	$5,000	1,126,897	$83,172	$10,217	$304,248	$387,419	$88,172	$392,419	53,763	$7.30	108	115.8	$3,389	109
M7n2	Legion Pond	M7n2	22.5	7,926.8	6,100.1	73.3%	2,114	5,813	3,986	15.6	12.4	55.0%	7.0	8.6	5.4						0.36	$258,111	$4,089	$121,768	$379,879			$0	$0	$0	$258,111	$379,879	79,726	$4.76	73	108.4	$3,503	110
M4b2	Consolidated Construction	M4b2	2.5	1,093.0	1,093.0	80.0%	219	874	874	1.6	1.6	60.0%	0.7	1.0	1.0						0.06	$44,383	$874	$26,016	$70,399			$0	$0	$0	$44,383	$70,399	17,488	$4.03	55	19.6	$3,593	111
M7q5	Ridge Pond	M7q5	10.3	1,543.4	1,543.4	85.0%	232	1,312	1,312	6.6	6.6	63.8%	2.4	4.2	4.2						0.22	$223,867	$3,203	$95,392	$319,259			$0	$0	$0	$223,867	$319,259	26,238	$12.17	120	84.7	$3,770	113
M6h3	Associated Pond	M6h3	44.4	9,289.8	6,775.8	66.8%	3,086	6,204	3,690	26.5	20.2	50.1%	13.2	13.3	7.0						1.31	$493,696	$8,044	$239,534	$733,230			$0	$0	$0	$493,696	$733,230	73,794	$9.94	116	139.3	$5,265	115
M7q3-1	Spencer Street Pond-Rev	EBMP-M7q2, M7p3, PBMP-M7q3	226.6	79,196.5	61,381.1	25.3%	59,144	20,053	2,237	178.8	144.6	19.8%	143.5	35.3	1.1						0.17	$47,400	$2,475	$73,712	$121,111			$0	$0	$0	$47,400	$121,111	44,743	$2.71	36	21.7	$5,576	117
M6h3	Associated Pond with Alum Treatment	M6h3	44.4	9,289.8	6,775.8	90.0%	929	8,361	5,847	26.5	20.2	85.0%	4.0	22.5	16.2						1.31	$493,696	$8,044	$239,534	$733,230	4,826,884	$161,867	$32,587	$970,366	$1,132,233	$655,563	$1,865,464	116,936	$15.95	123	324.1	$5,756	118
M4i	Gillett Street Pond with Alum Treatment	EBMP-M4f1a, M4h1, PBMP-M4f1b, M4i	73.8	11,690.1	2,592.7	90.0%	1,169	10,521	1,424	47.2	15.6	85.0%	7.1	40.1	8.5						0.90	$427,262	$6,293	$187,392	$614,654	1,147,806	$80,587	$10,500	$312,666	$393,253	$507,849	$1,007,906	28,474	$35.40	133	170.3	$5,918	119
M3m2	Prairie Hill Park Pond	M3m2	17.6	1,079.2	1,079.2	80.0%	216	863	863	5.7	5.7	60.0%	2.3	3.4	3.4						2.40	$31,118	$12,766	$380,142	$411,260			$0	$0	$0	$31,118	$411,260	17,268	$23.82	127	68.0	$6,050	120
M4f1b	Starview Heights West	M4f1b	3.3	504.1	434.5	80.0%	101	403	334	2.1	2.0	60.0%	0.9	1.3	1.1						0.16	$70,089	$2,330	$69,376	$139,465			$0	$0	$0	$70,089	$139,465	6,674	$20.90	126	22.3	$6,246	122
M8f1	Stonehedge Pond with Alum Treatment	M8f1	34.3	8,200.2	2,866.7	90.0%	820	7,380	2,047	28.5	11.9	85.0%	4.3	24.2	7.6						0.43	$449,810	$4,375	$130,275	$580,085	1,286,762	$87,054	$12,257	$364,993	$452,046	$536,864	$1,032,131	40,933	$25.21	128	152.7	$6,760	123
M7i2a	Hickory Farms North Pond with Alum Treatment	EBMP-M7i2a	2.2	1,040.1	355.5	90.0%	104	936	252	2.2	0.8	85.0%	0.3	1.9	0.5						0.11	$678,929	$1,602	$47,696	$726,625	2,054,725	$120,792	$19,454	$579,295	$700,087	$799,721	$1,426,711	5,031	$283.61	135	9.5	$149,522	127
M3f1	Pacon [2]	EBMP-M3d2, PBMP-M3f1, M3e	80.4	27,942.7	9,316.3	51.6%	13,519	14,424	-4,202	55.4	26.8	38.0%	34.4	21.0	-7.6						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	-84,048	-$0.06	136	-151.4	-$33	128
M4h2	Gillett Street Apartments [2]	M4h2	9.6	1,382.3	301.4	70.0%	415	968	-113	4.9	1.3	50.0%	2.4	2.4	-1.2						0.00	$5,000	$0	$0	$5,000			$0	$0	$0	$5,000	$5,000	-2,267	-$2.21	137	-23.1	-$217	131
M3n	First Pond	M3n	116.6	21,042.0	6,362.5	55.0%	9,469	11,573	-3,106	78.8	27.9	40.0%	47.3	31.5	-19.4						0.35	$370,243	$4,048	$120,552	$490,795			$0	$0	$0	$370,243	$490,795	-62,128	-$7.90	138	-387.9	-$1,265	133
M7q2	Spencer Street Pond [1]	EBMP-M7q2, M7p3	213.1	74,741.4	57,068.4	25.3%	55,817	18,925	1,252	168.3	134.4	19.8%	135.0	33.3	-0.6						0.17	$0	$2,475	$73,712	$73,712			$0	$0	$0	$0	$73,712	25,032	$2.94	40	-12.0	-$6,164	134
M4i	Gillett Street Pond	EBMP-M4f1a, M4h1, PBMP-M4f1b, M4i	73.8	11,690.1	2,592.7	85.0%	1,754	9,937	839	47.2	15.6	63.8%	17.1	30.1	-1.5						0.90	$427,262	$6,293	$187,392	$614,654			$0	$0	$0	$427,262	$614,654	16,784	$36.62	134	-30.2	-$20,367	136
M8f1	Stonehedge Pond	M8f1	34.3	8,200.2	2,866.7	75.4%	2,015	6,185	852	28.5	11.9	56.6%	12.4	16.1	-0.5						0.43	$449,810	$4,375	$130,275	$580,085			$0	$0	$0	$449,810	$580,085	17,036	$34.05	132	-9.1	-$63,821	137
M7i2a	Hickory Farms North Pond [1]	EBMP-M7i2a	2.2	1,040.1	355.5	74.0%	271	769	85	2.2	0.8	63.5%	0.8	1.4	0.0						0.11	$0	$1,602	$47,696	$47,696			$0	$0	$0	$0	$47,696	1,696	$28.12	129	-0.1	-$681,221	138

*Based on Existing BMP's performance (if applicable) and proposed street sweeping program

[1] BMP is already constructed but no plan set or stormwater management plan provided; Assumed % TSS and TP reductions are provided until additonal information.

[2] BMP is already constructed but maintenance authority needs to be confirmed; TSS & TP reductions are based on plan set / stormwater management plan

[3] City of Appleton BMP already constructed but maintenance agreement is needed; TSS & TP reductions are based on the City of Appleton stormwater management plan

[4] Village of Little Chute BMP already constructed but maintenance agreement is needed; TSS & TP reductions are based on the pond's stormwater management plan

Assumptions:

Estimated capital costs include land acquisition, engineering and construction

Average annual O&M costs assume 4% inflation

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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-B4a2

McM PROJECT NO: G0003-9-14-00271

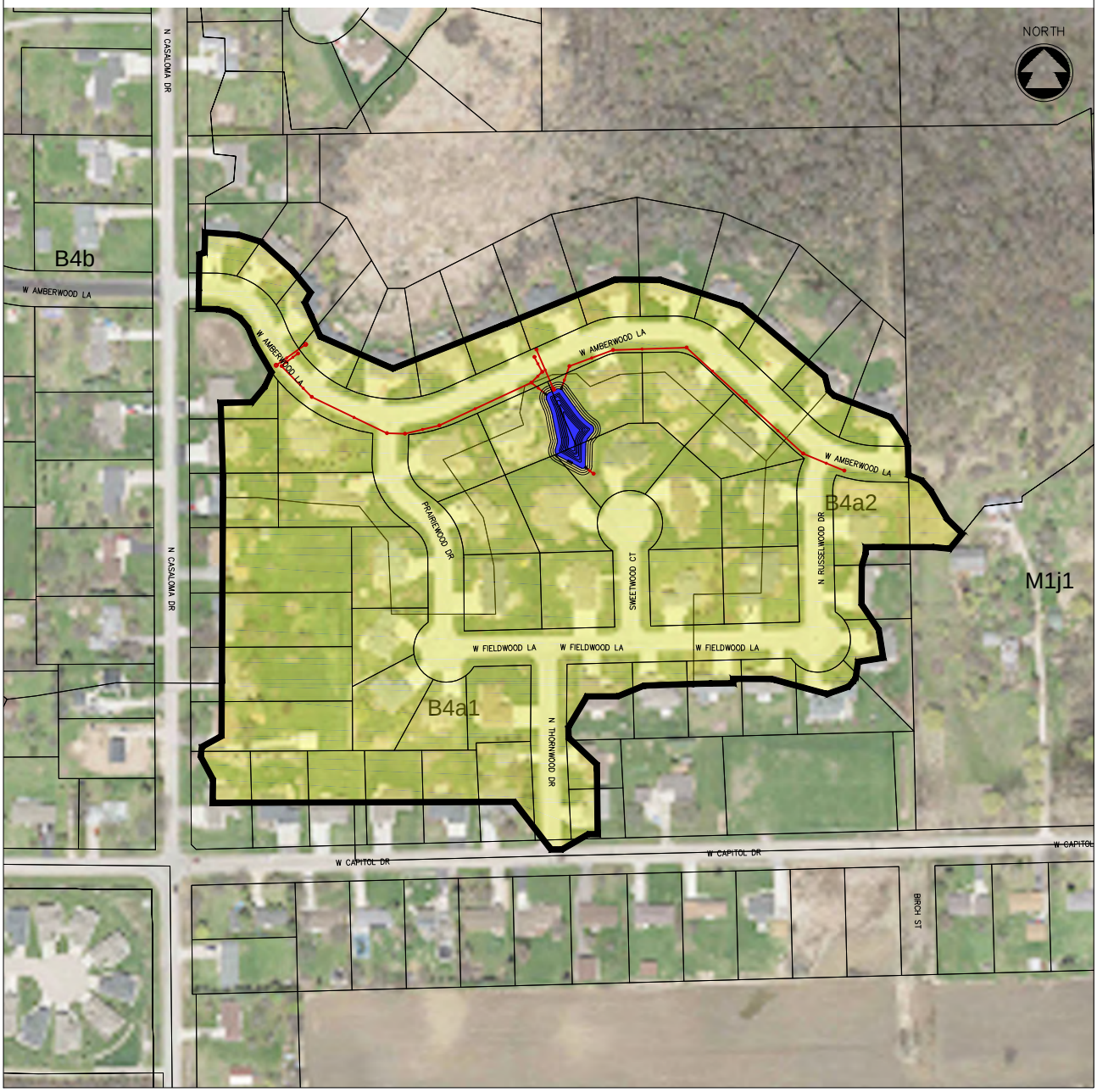
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: BENTWOOD POND	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: BEAR CREEK	Tributary Drainage Area IDs: B4a2	Total Drainage Area: 22.4 acres
Imperviousness (Future): 34.5 %	Runoff Curve Number (Future): 82	Water Quality Volume (Future): 1.01 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	> - 6ft	Remediation:	☐ Yes ☒ No	Wetland:	☒ Potential ☐ Yes ☐ No
Bedrock Depth (in):	> 78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Hortonville Silt Loam	100-Year Floodplain:	☐ Yes ☒ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
OUTLET PIPE TO DISCHARGE ON THE NORTH SIDE OF AMBERWOOD LANE.

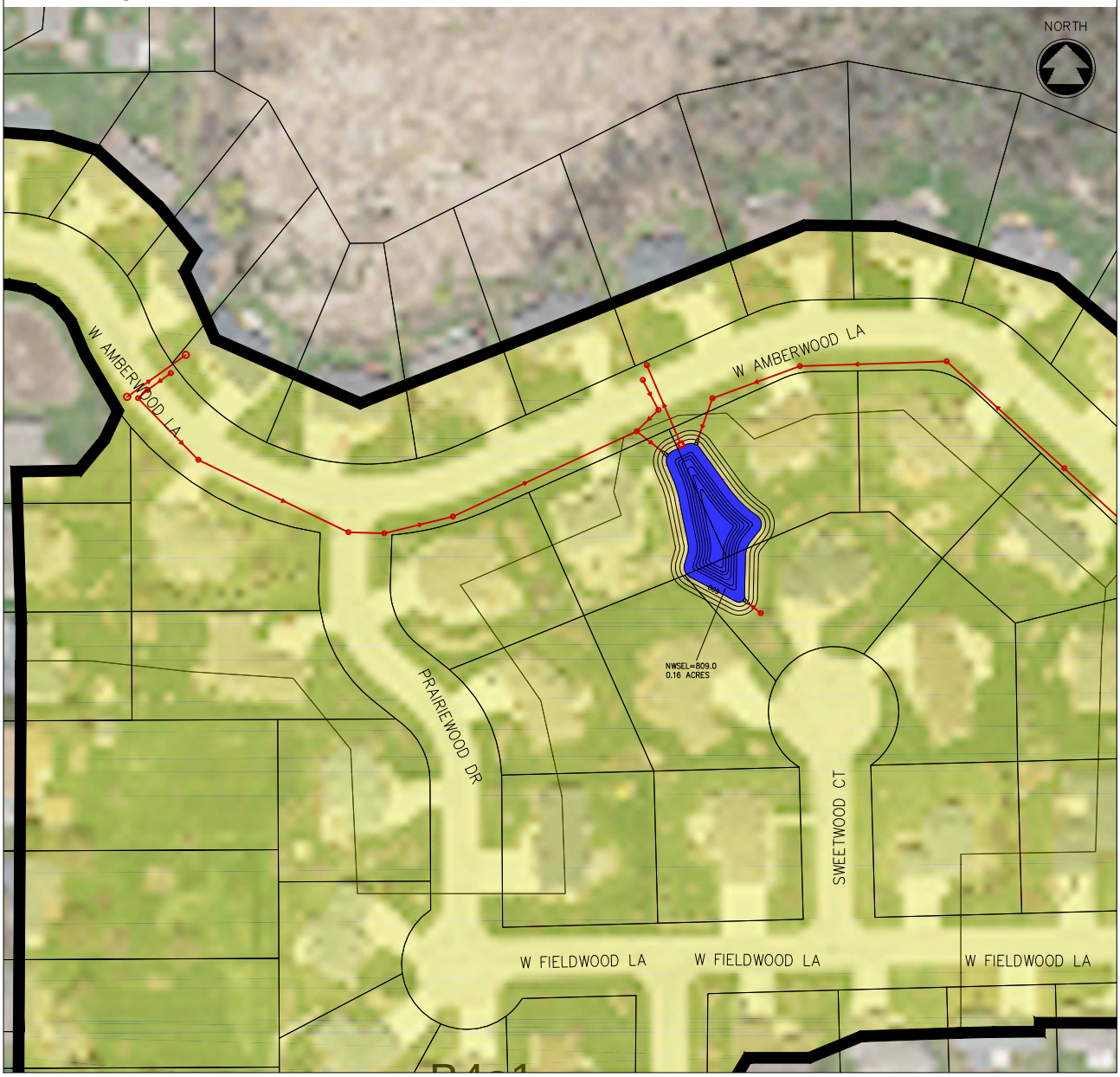
Infrastructure modifications or flow diversions required for retrofit:
DIVERT STORM SEWER FROM THE EAST AND WEST OF AMBERWOOD LANE INTO THE POND.

Site access for future BMP maintenance:
ACCESS FROM AMBERWOOD LANE.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
WETLAND POTENTIAL

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.16 acre permanent pool	0.44 acres	$237,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-F1b2

McM PROJECT NO: G0003-9-14-00271

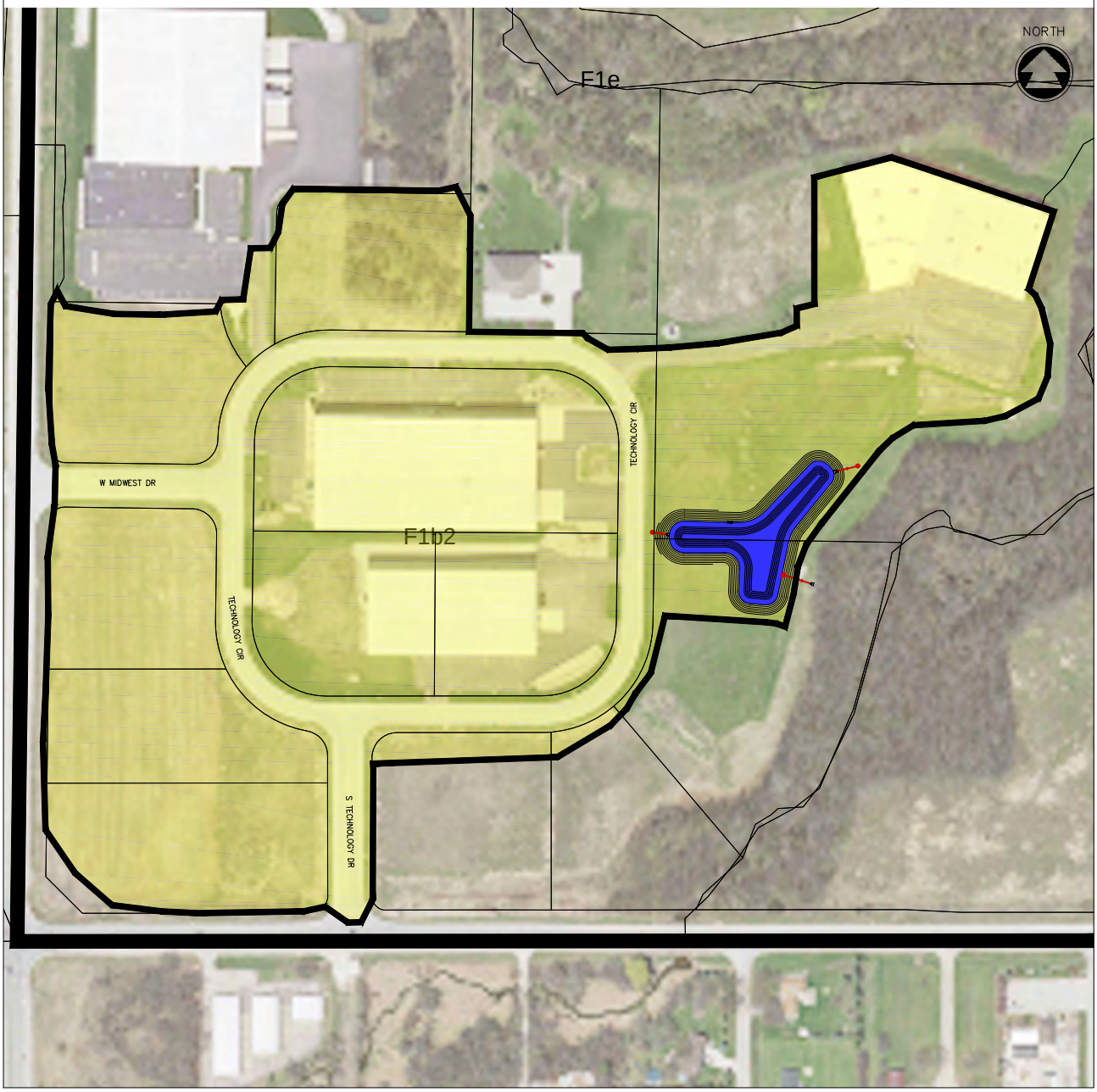
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: SOUTHWEST BUSINESS PARK REDESIGN	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: BEAR CREEK	Tributary Drainage Area IDs: F1b2	Total Drainage Area: 32.8 acres
Imperviousness (Future): 79.6 %	Runoff Curve Number (Future): 94	Water Quality Volume (Future): 3.2 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	3.3 ft, 0 ft	Remediation:	☐ Yes ☒ No	Wetland:	☒ Potential ☐ Yes ☐ No
Bedrock Depth (in):	>78 in, >78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Hebron loam, Shiocton silt loam clayey substratum	100-Year Floodplain:	☐ Yes ☒ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
STORM SEWER OUTFALL TO THE EAST DRAINAGE DITCH.

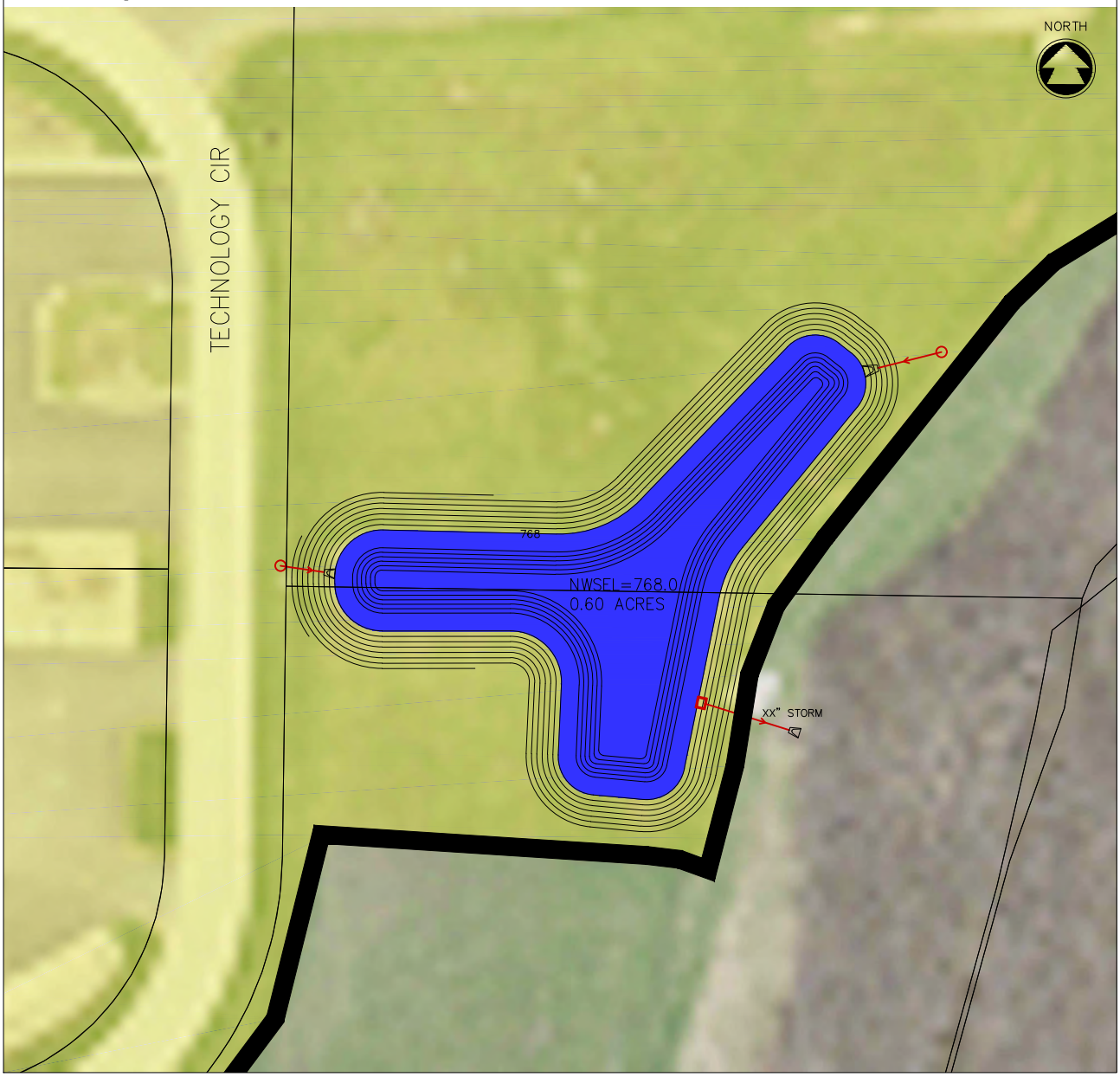
Infrastructure modifications or flow diversions required for retrofit:
DIVERT STORM SEWER FROM TECHNOLOGY CIR. AND YARD DRAINS ON-SITE INTO THE POND.

Site access for future BMP maintenance:
ACCESS FROM TECHNOLOGY CIR.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
WETLAND POTENTIAL, HIGH GROUNDWATER.

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.60 acre permanent pool	1.28 acres	$202,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-F1d2

McM PROJECT NO: G0003-9-14-00271

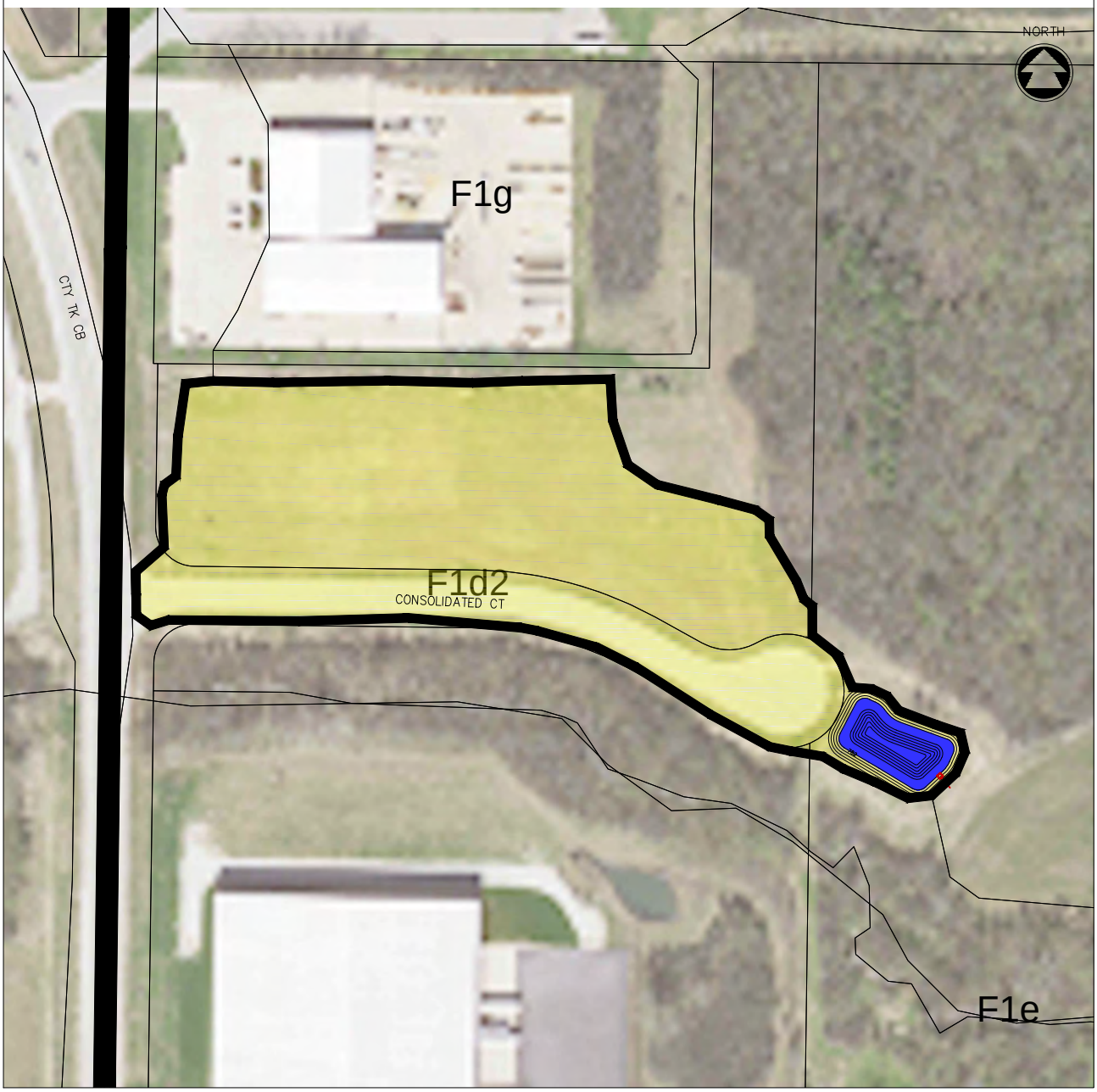
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: CONSOLIDATED COURT	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: FOX RIVER	Tributary Drainage Area IDs: F1d2	Total Drainage Area: 4.9 acres
Imperviousness (Future): 74.2 %	Runoff Curve Number (Future): 92	Water Quality Volume (Future): 0.44 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	1 ft	Remediation:	☐ Yes ☒ No	Wetland:	☐ Potential ☒ Yes ☐ No
Bedrock Depth (in):	>78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Manawa silty clay loam	100-Year Floodplain:	☐ Yes ☒ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
STORM SEWER OUTFALL TO THE EAST.

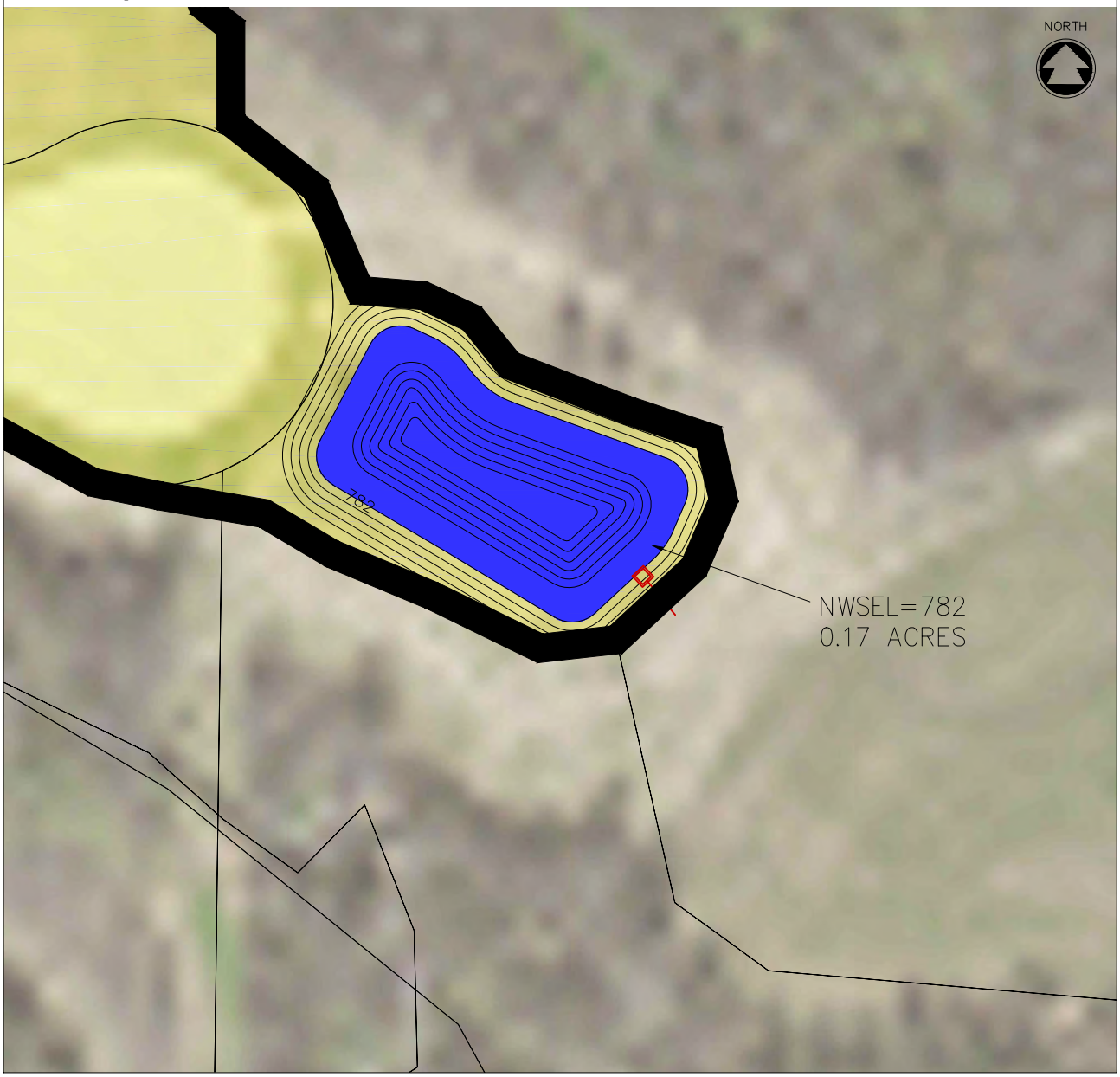
Infrastructure modifications or flow diversions required for retrofit:
DIVERT STORM SEWER FROM CONSOLIDATED CT INTO THE POND.

Site access for future BMP maintenance:
ACCESS FROM CONSOLIDATED CT.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
WETLAND POTENTIAL, HIGH GROUNDWATER

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.17 acre permanent pool	0.52 acres	$80,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

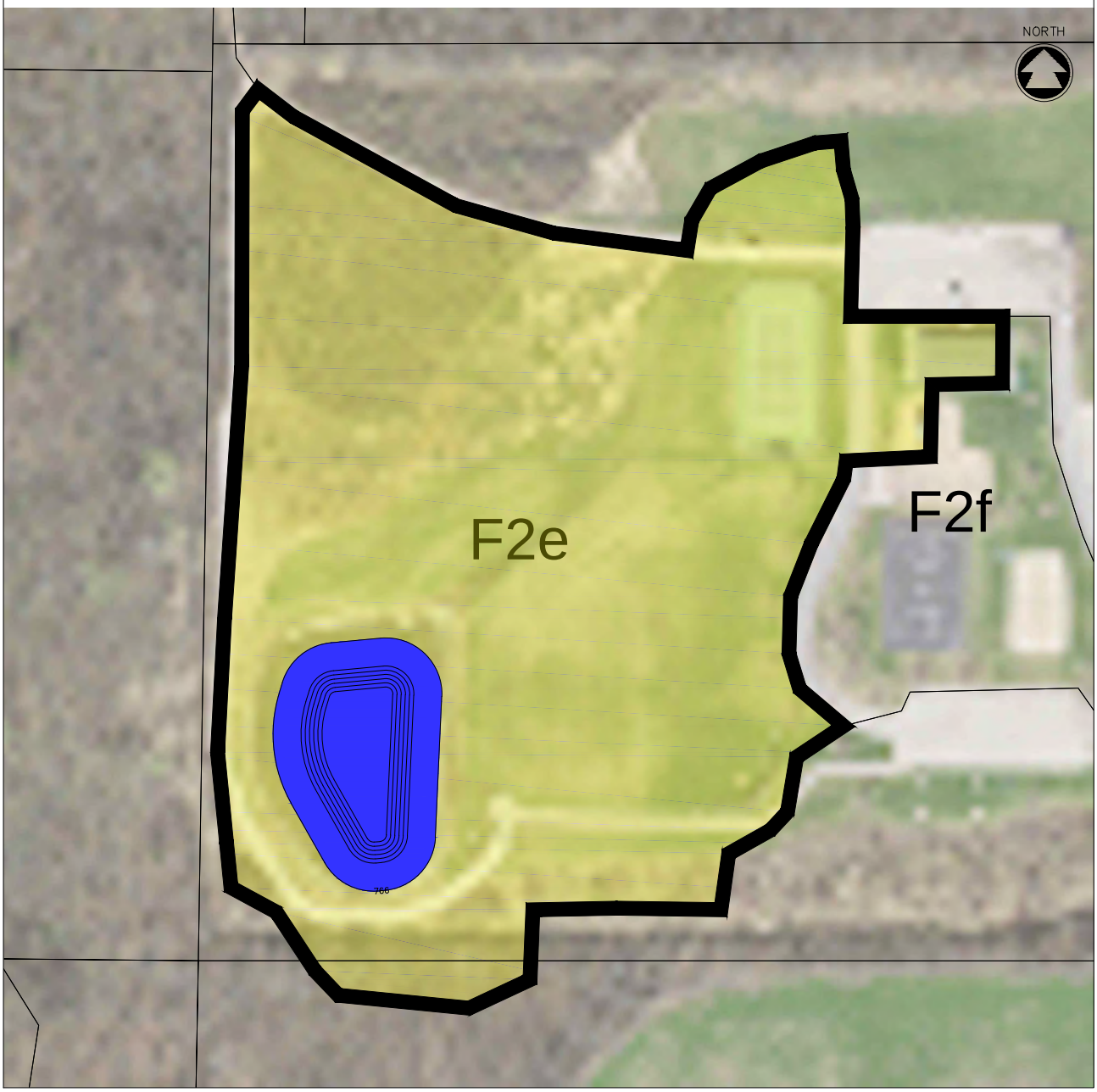
BMP CATCHMENT ID: BMP-F2e

McM PROJECT NO: G0003-9-14-00271

SITE INFORMATION:	
Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: ARROWHEAD PARK	Initials: AWS

DRAINAGE AREA:		
Sub-watershed ID: FOX RIVER	Tributary Drainage Area IDs: F2e	Total Drainage Area: 5.4 acres
Imperviousness (Future): 13.8%	Runoff Curve Number (Future): 82	Water Quality Volume (Future): 0.12 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	5 ft	Remediation:	☐ Yes ☒ No	Wetland:	☐ Potential ☐ Yes ☒ No
Bedrock Depth (in):	>78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Winneconne silty clay loam	100-Year Floodplain:	☐ Yes ☒ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
EXISTING POND IN PLACE.

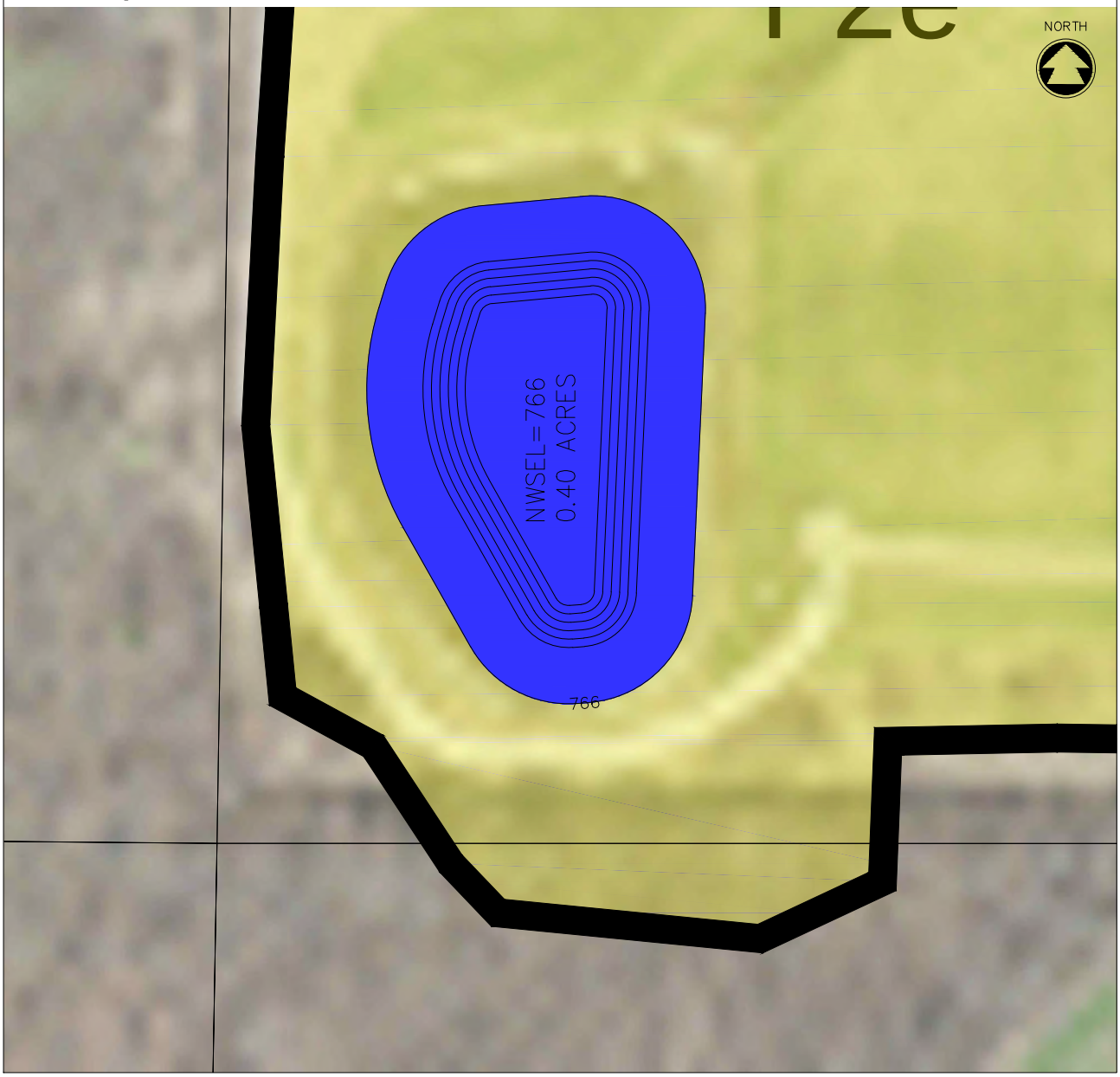
Infrastructure modifications or flow diversions required for retrofit:
CAPTURE RUNOFF FROM ARROWHEAD PARK AND DIVERT INTO THE POND.

Site access for future BMP maintenance:
ACCESS FROM ARROWHEAD PARK.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
NO KNOWN CONSTRAINTS.

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.40 acre permanent pool	0 acres	$86,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-F2f

McM PROJECT NO: G0003-9-14-00271

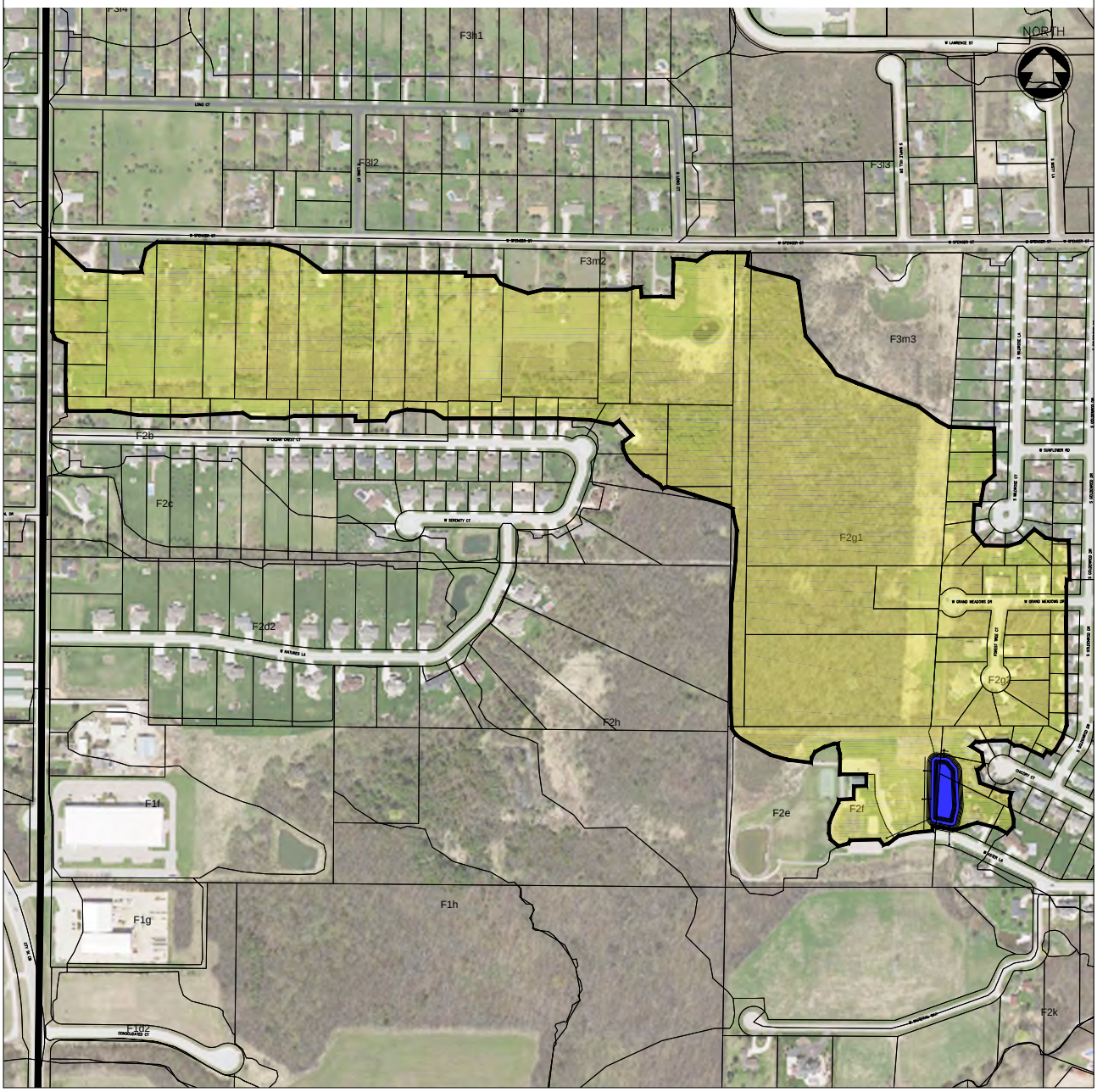
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: ASTER POND	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: FOX RIVER	Tributary Drainage Area IDs: F2f	Total Drainage Area: 89.7 acres
Imperviousness (Future): 11 %	Runoff Curve Number (Future): 79	Water Quality Volume (Future): 1.67 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	5 ft, 0 ft	Remediation:	☐ Yes ☒ No	Wetland:	☒ Potential ☐ Yes ☐ No
Bedrock Depth (in):	>78 in, >78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Winneconne silty clay loam, Poygan silt loam	100-Year Floodplain:	☐ Yes ☒ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
OUTFALL PIPE TO DISCHARGE ON THE SOUTH SIDE OF W ASTER LANE.

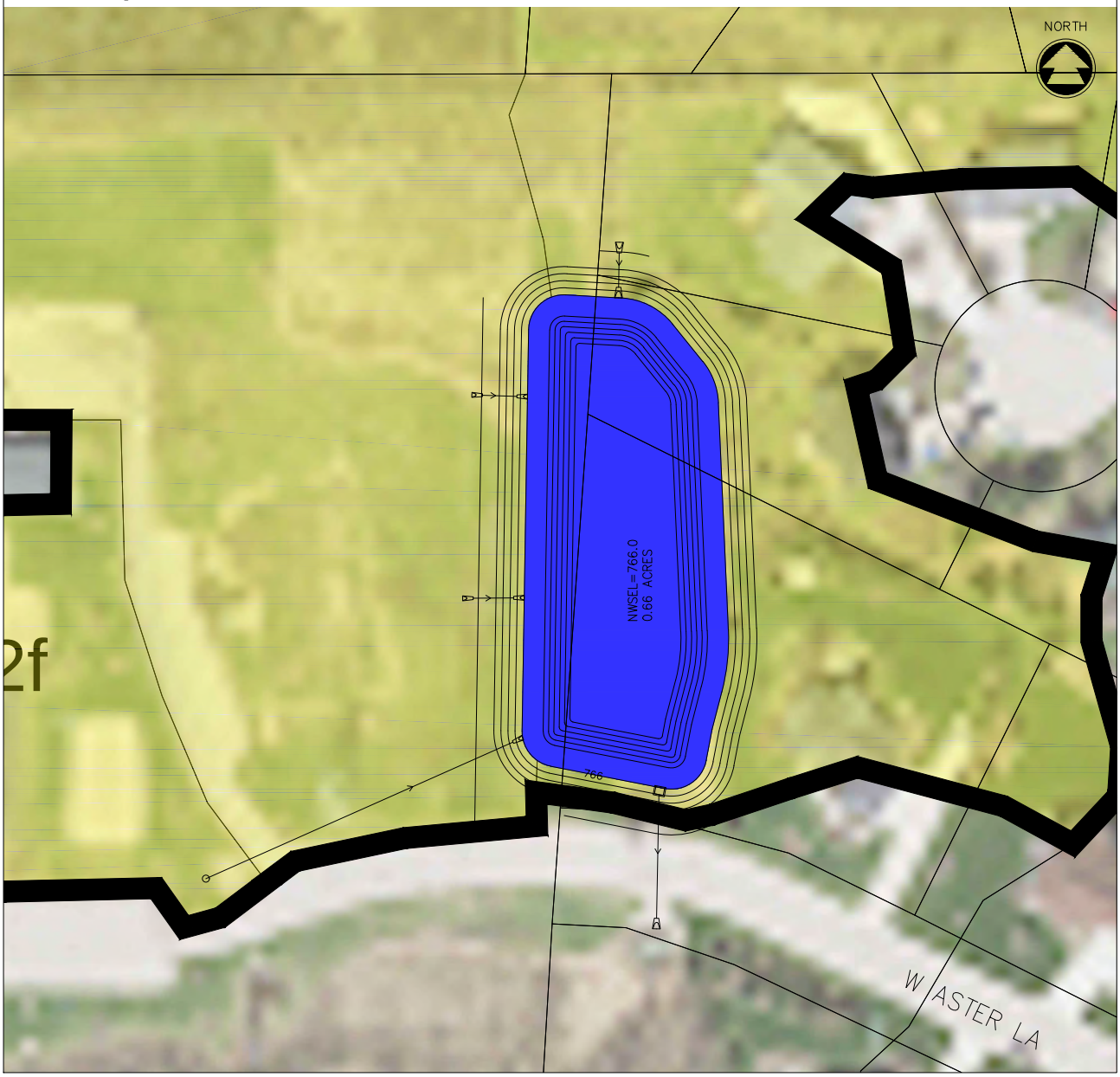
Infrastructure modifications or flow diversions required for retrofit:
DIVERT FLOW FROM THE WEST ON W ASTER LANE AND FROM THE NORTH INTO THE POND.

Site access for future BMP maintenance:
ACCESS FROM W ASTER LANE.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
WETLAND POTENTIAL AND POSSIBLE HIGH GROUNDWATER

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.66 acre permanent pool	0.65 acres	$225,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-F3c5

McM PROJECT NO: G0003-9-14-00271

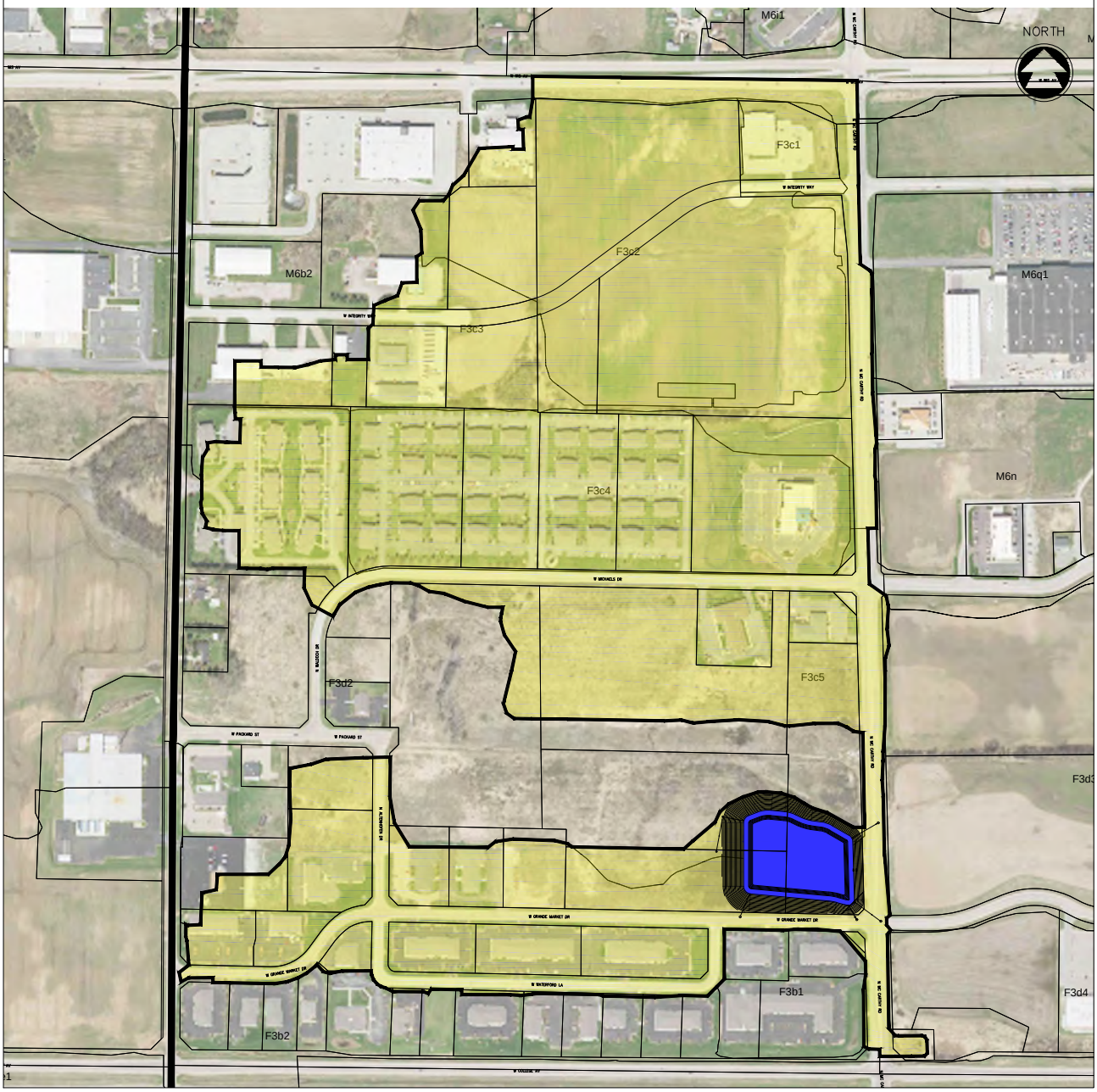
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: MCCARTHY POND	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: FOX RIVER	Tributary Drainage Area IDs: F3c5	Total Drainage Area: 148.7 acres
Imperviousness (Future): 74.1 %	Runoff Curve Number (Future): 91	Water Quality Volume (Future): 13.33 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	3.3 ft	Remediation:	☐ Yes ☒ No	Wetland:	☐ Potential ☐ Yes ☒ No
Bedrock Depth (in):	>78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Hebrom loam	100-Year Floodplain:	☐ Yes ☒ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
OUTFALL TO STORM SEWER IN N MCCARTHY RD, HEADING SOUTH.

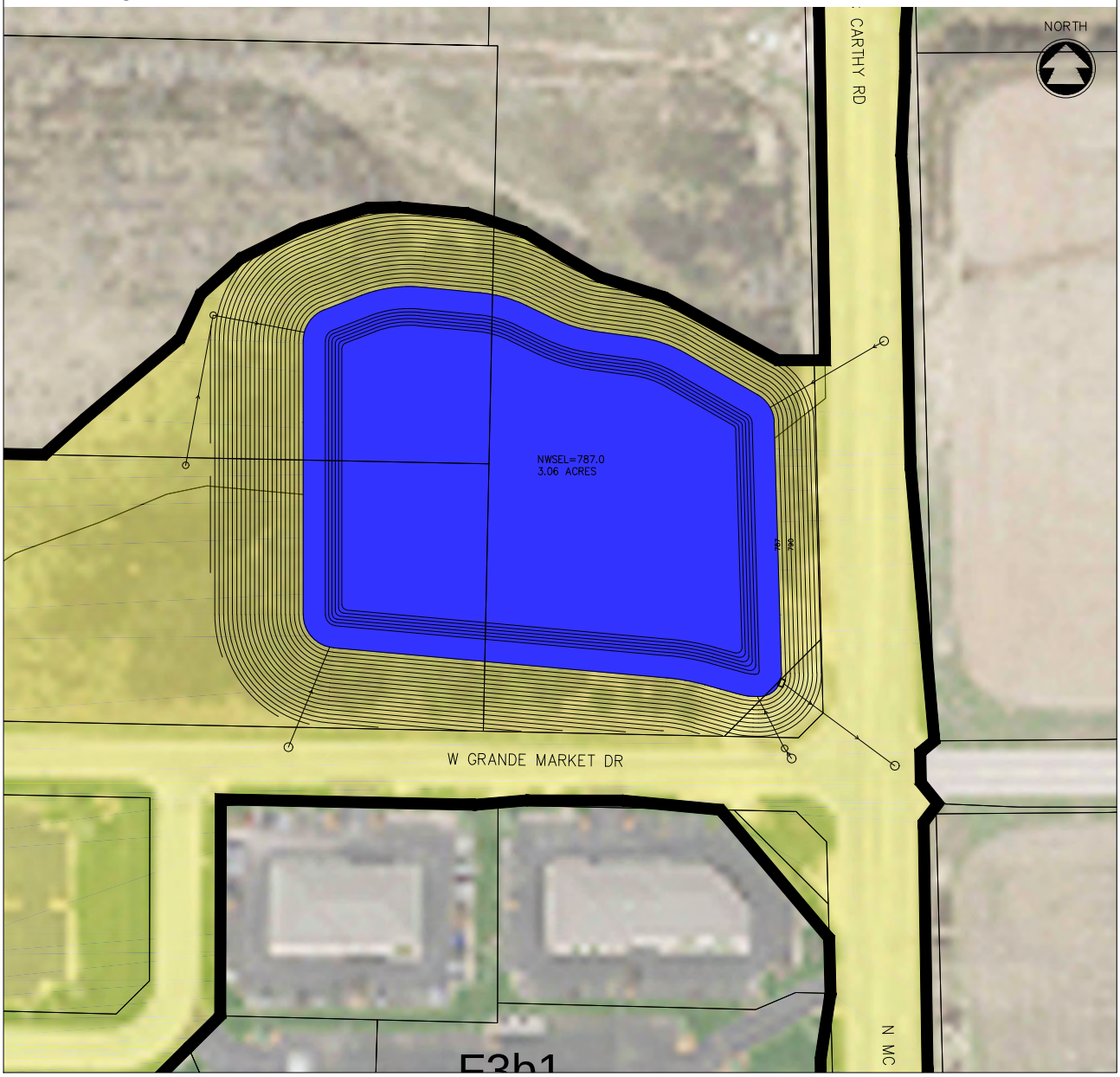
Infrastructure modifications or flow diversions required for retrofit:
DIVERT STORM SEWER FROM W GRANDE MARKET DR AND N MCCARTHY RD INTO THE POND.

Site access for future BMP maintenance:
ACCESS FROM W GRANDE MARKET DR AND N MCCARTHY RD.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
POSSIBLE HIGH GROUNDWATER

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
3.06 acre permanent pool	5.63 acres	$1,445,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-F3f5

McM PROJECT NO: G0003-9-14-00271

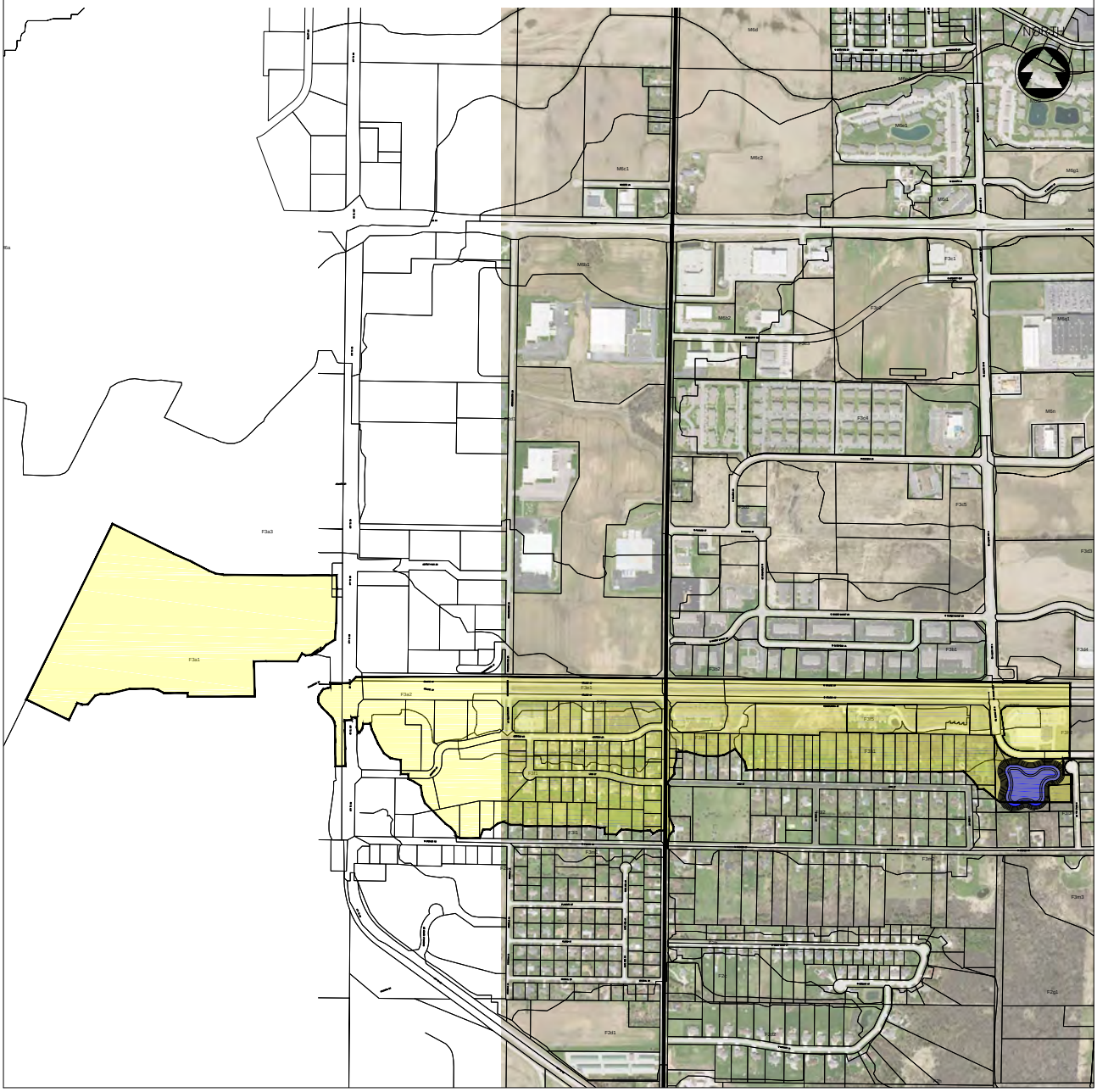
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: MAPLE HILL POND - Alternative 2	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: FOX RIVER	Tributary Drainage Area IDs: F3h2a, F3h	Total Drainage Area: 191 acres
Imperviousness (Future): 48.6%	Runoff Curve Number (Future): 80	Water Quality Volume (Future): 10.6 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	3.3 ft, >6 ft	Remediation:	☐ Yes ☒ No	Wetland:	☒ Potential ☐ Yes ☐ No
Bedrock Depth (in):	>78 in, 27 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Hebron loam, Kolberg silt loam	100-Year Floodplain:	☐ Yes ☒ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
OUTFALL TO STORM SEWER IN W LAWRENCE ST, HEADING EAST.

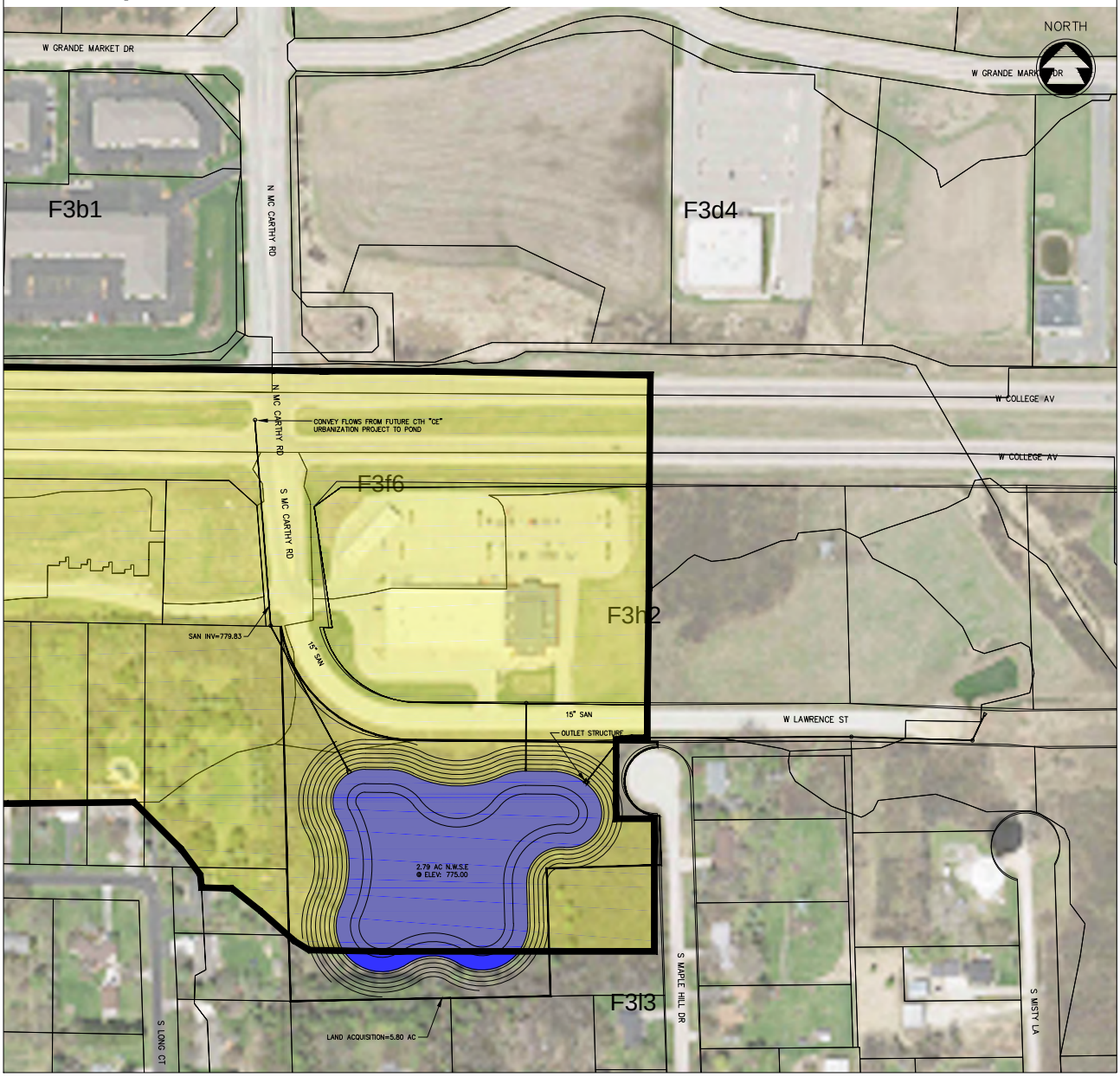
Infrastructure modifications or flow diversions required for retrofit:
CONVEY FLOWS FROM FUTURE CTH CE URBANIZATION PROJECT INTO THE POND.

Site access for future BMP maintenance:
ACCESS FROM W LAWRENCE ST.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
WETLAND POTENTIAL, HIGH GROUNDWATER

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
2.79 acre permanent pool	5.80 acres	$367,422

Sketch of Proposed BMP Retrofit: *Grand Chute's share based on watershed area (cost share with County & Greenville).



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-F3f6

McM PROJECT NO: G0003-9-14-00271

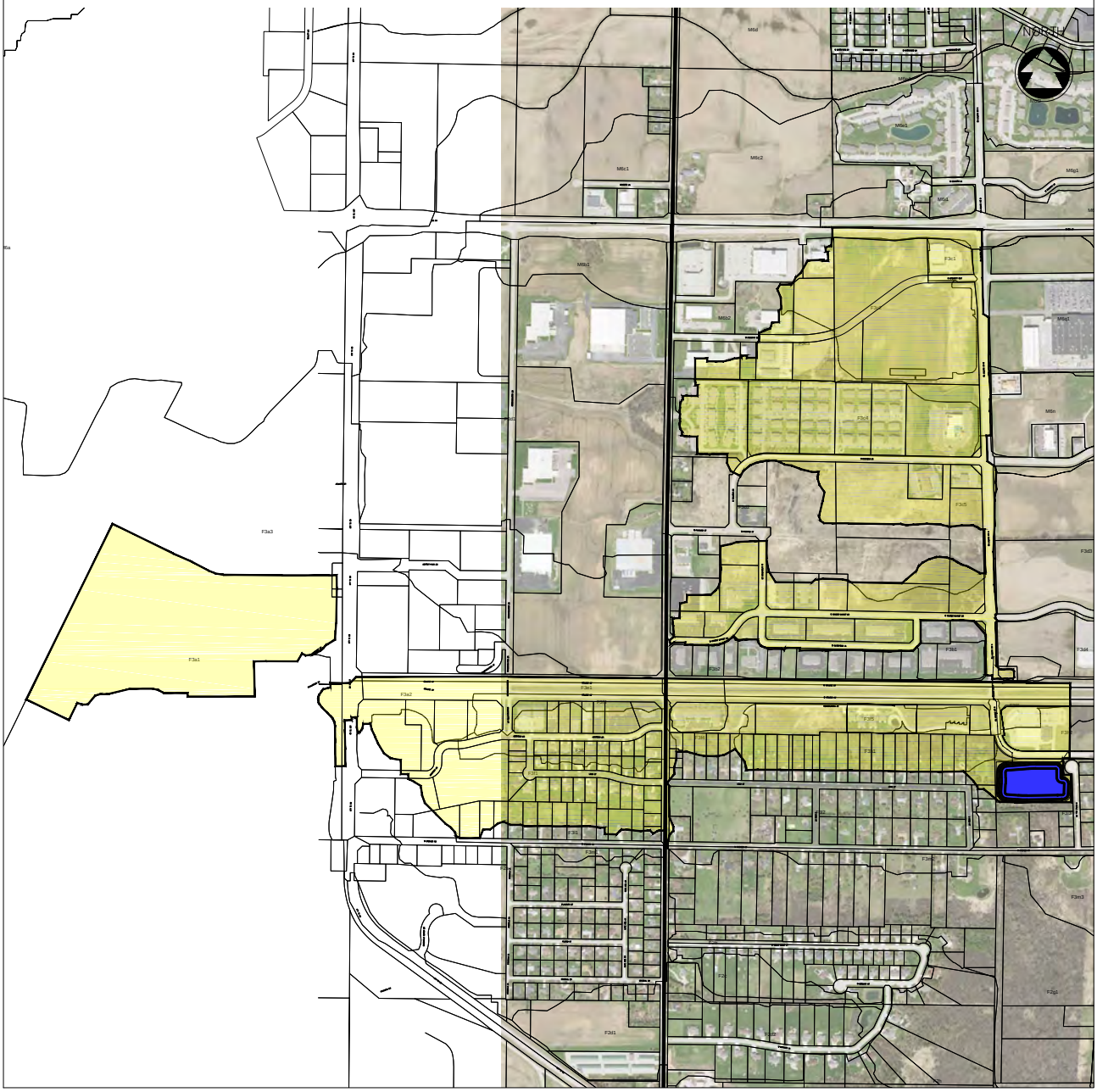
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: MAPLE HILL POND	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: FOX RIVER	Tributary Drainage Area IDs: F3f6	Total Drainage Area: 283.3 acres
Imperviousness (Future): 65.3%	Runoff Curve Number (Future): 89	Water Quality Volume (Future): 22.57 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	3.3 ft, >6 ft	Remediation:	☐ Yes ☒ No	Wetland:	☒ Potential ☐ Yes ☐ No
Bedrock Depth (in):	>78 in, 27 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Hebron loam, Kolberg silt loam	100-Year Floodplain:	☐ Yes ☒ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
OUTFALL TO STORM SEWER IN W LAWERENCE ST, HEADING EAST.

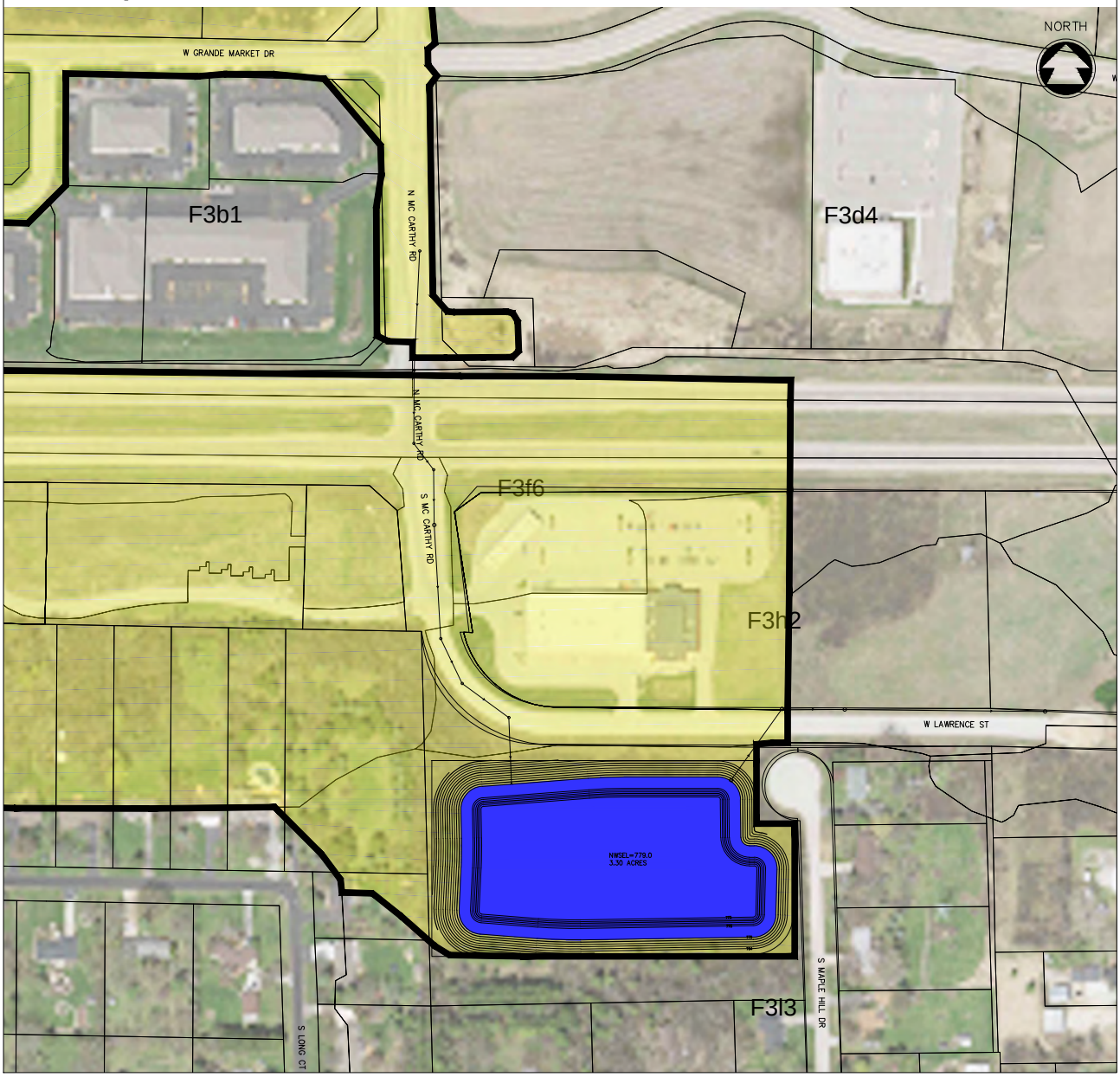
Infrastructure modifications or flow diversions required for retrofit:
DIVERT STORM SEWER IN W LAWRENCE ST INTO THE POND.

Site access for future BMP maintenance:
ACCESS FROM W LAWERENCE ST.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
WETLAND POTENTIAL, HIGH GROUNDWATER.

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
3.30 acre permanent pool	4.82 acres	$1,169,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-F3l3

McM PROJECT NO: G0003-9-14-00271

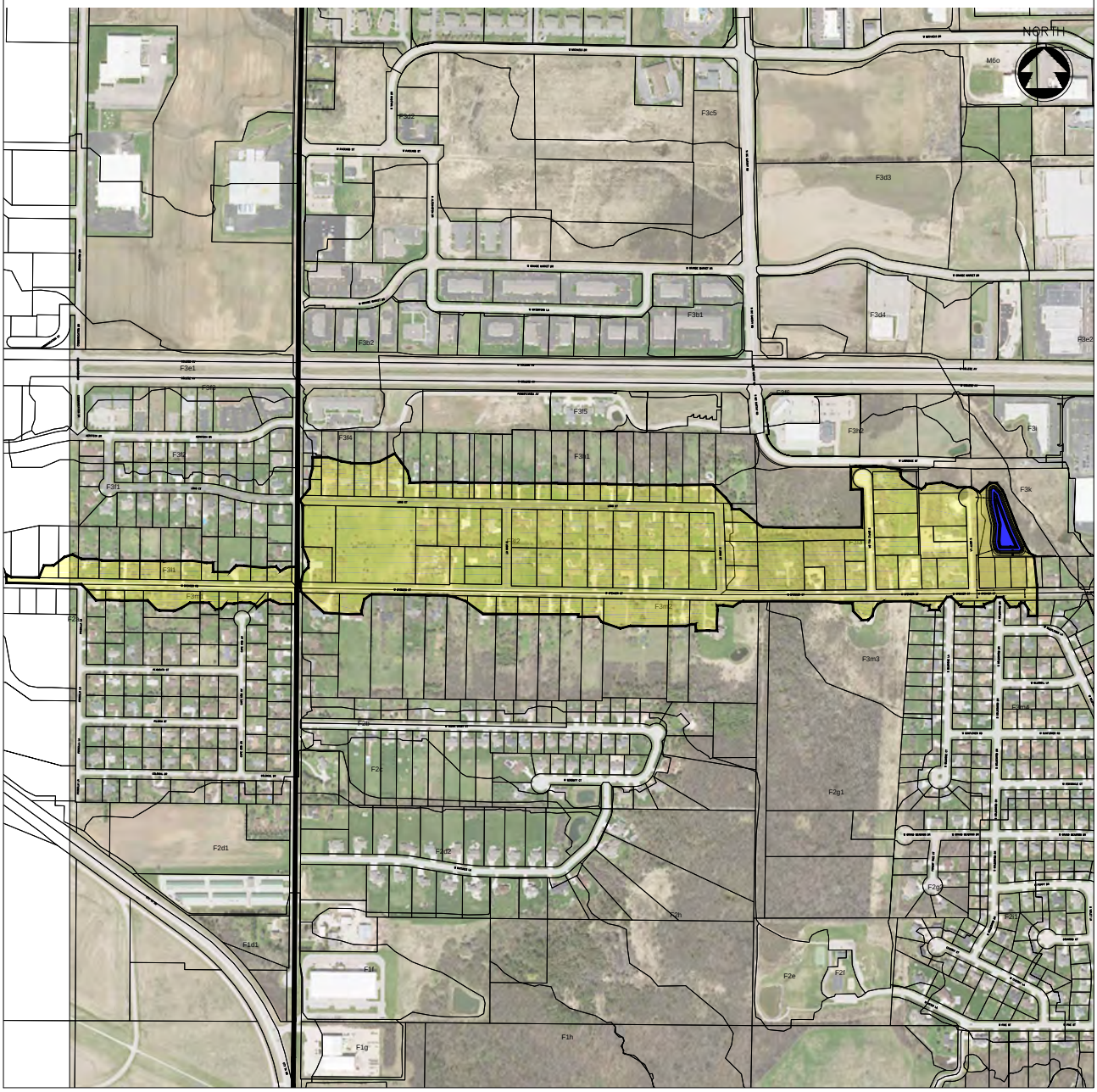
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: MISTY POND	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: FOX RIVER	Tributary Drainage Area IDs: F3l3	Total Drainage Area: 82.7 acres
Imperviousness (Future): 24.2%	Runoff Curve Number (Future): 80	Water Quality Volume (Future): 2.77acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	5.8 ft	Remediation:	☐ Yes ☒ No	Wetland:	☐ Potential ☐ Yes ☒ No
Bedrock Depth (in):	>78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Winneconne silty clay loam	100-Year Floodplain:	☐ Yes ☒ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
STORM SEWER OUTFALL WILL DISCHARGE TO THE STREAM TO THE EAST.

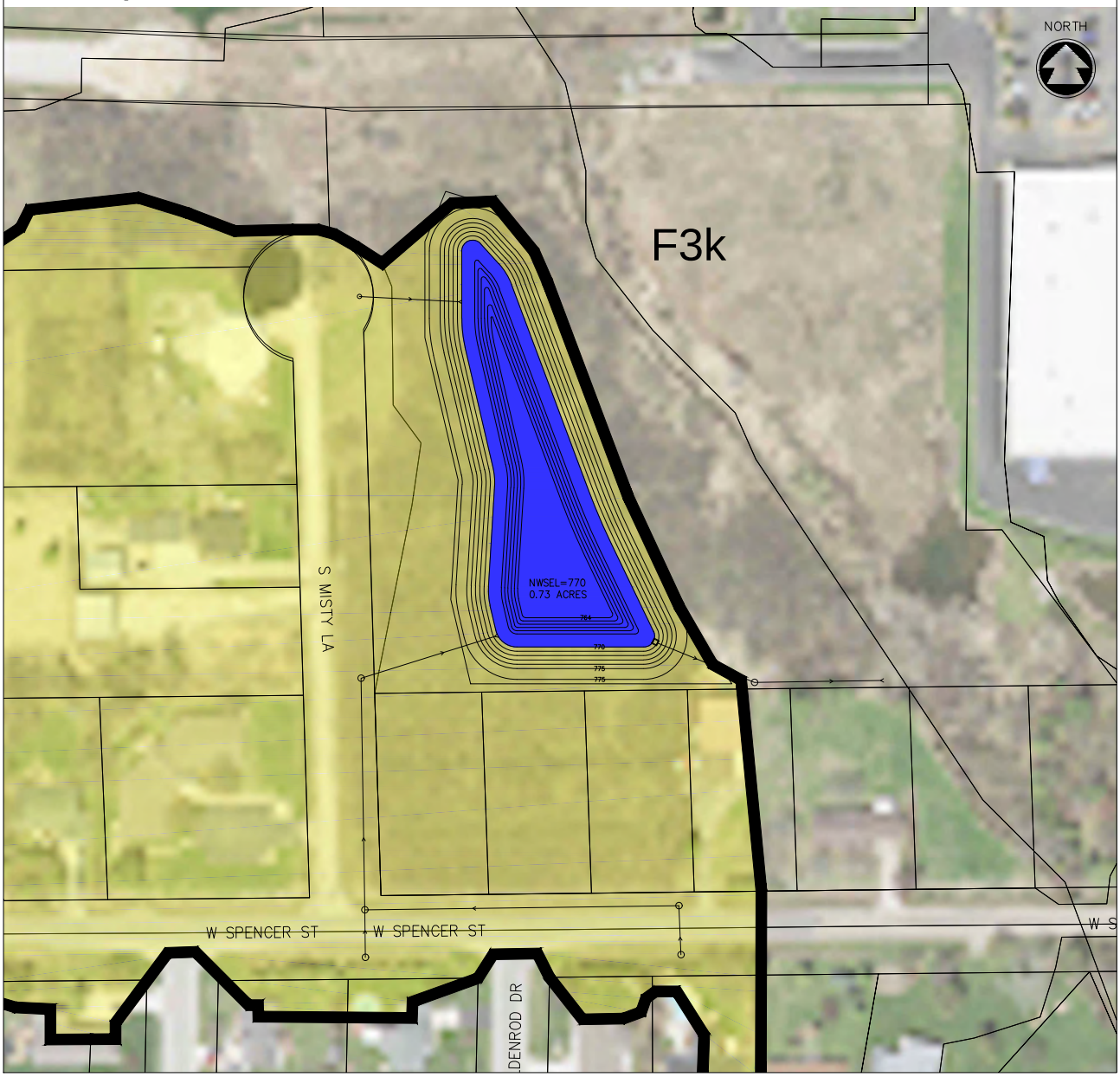
Infrastructure modifications or flow diversions required for retrofit:
DIVERT STORM SEWER FROM W SPENCER ST AND S MISTY LN INTO THE POND.

Site access for future BMP maintenance:
ACCESS FROM S MISTY LN.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
NOT APPLICABLE

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.73 acre permanent pool	2.77 acres	$414,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-F3r1

McM PROJECT NO: G0003-9-14-00271

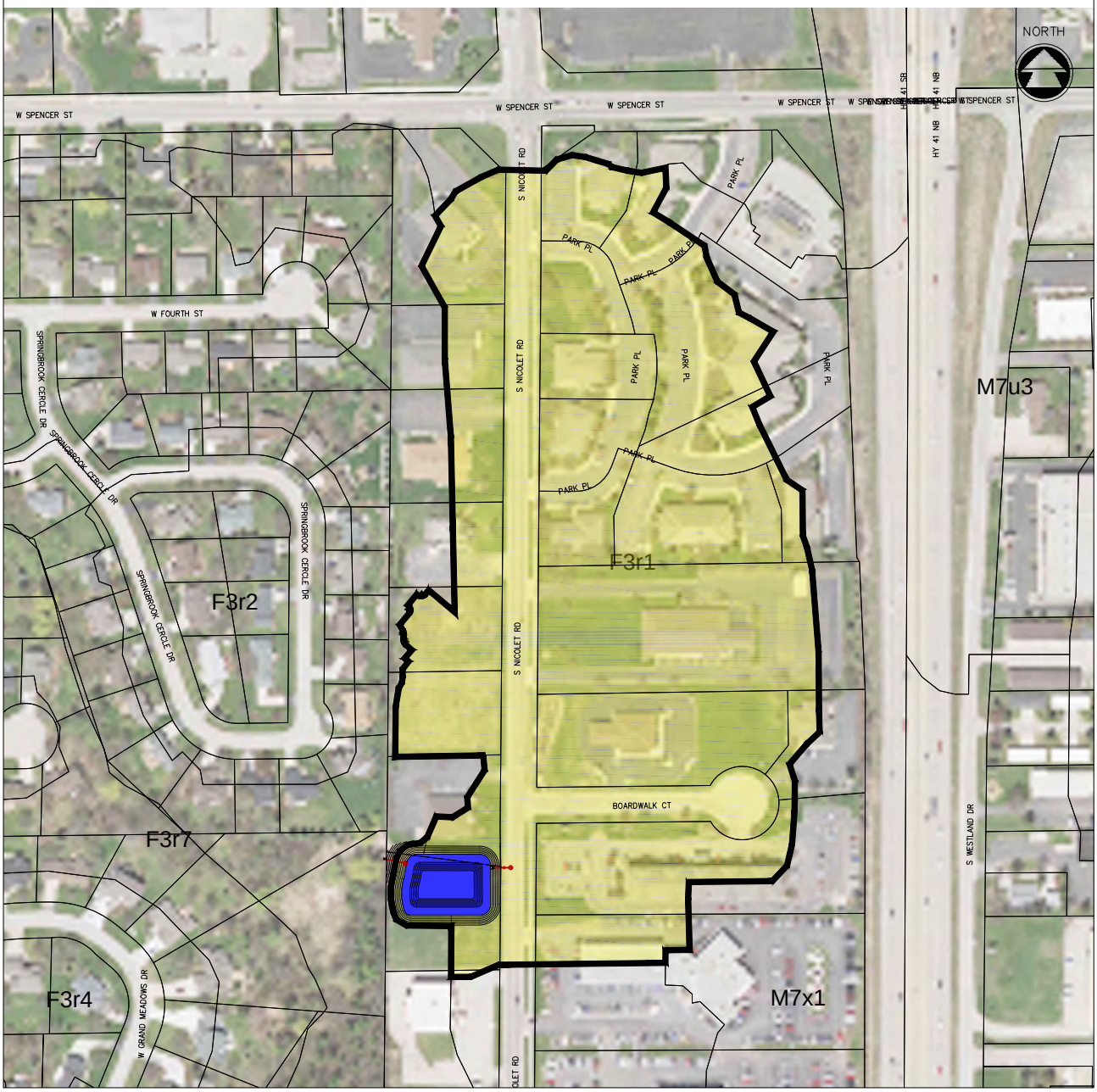
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: NICOLET ROAD POND	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: FOX RIVER	Tributary Drainage Area IDs: F3r1	Total Drainage Area: 20.4 acres
Imperviousness (Future): 76 %	Runoff Curve Number (Future): 94	Water Quality Volume (Future): 1.87 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	5.8 ft, 5.8 ft	Remediation:	☐ Yes ☒ No	Wetland:	☐ Potential ☐ Yes ☒ No
Bedrock Depth (in):	>78 in, >78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Kewaunee, Winneconne silty clay loam	100-Year Floodplain:	☐ Yes ☒ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
STORM SEWER OUTFALL TO THE WEST.

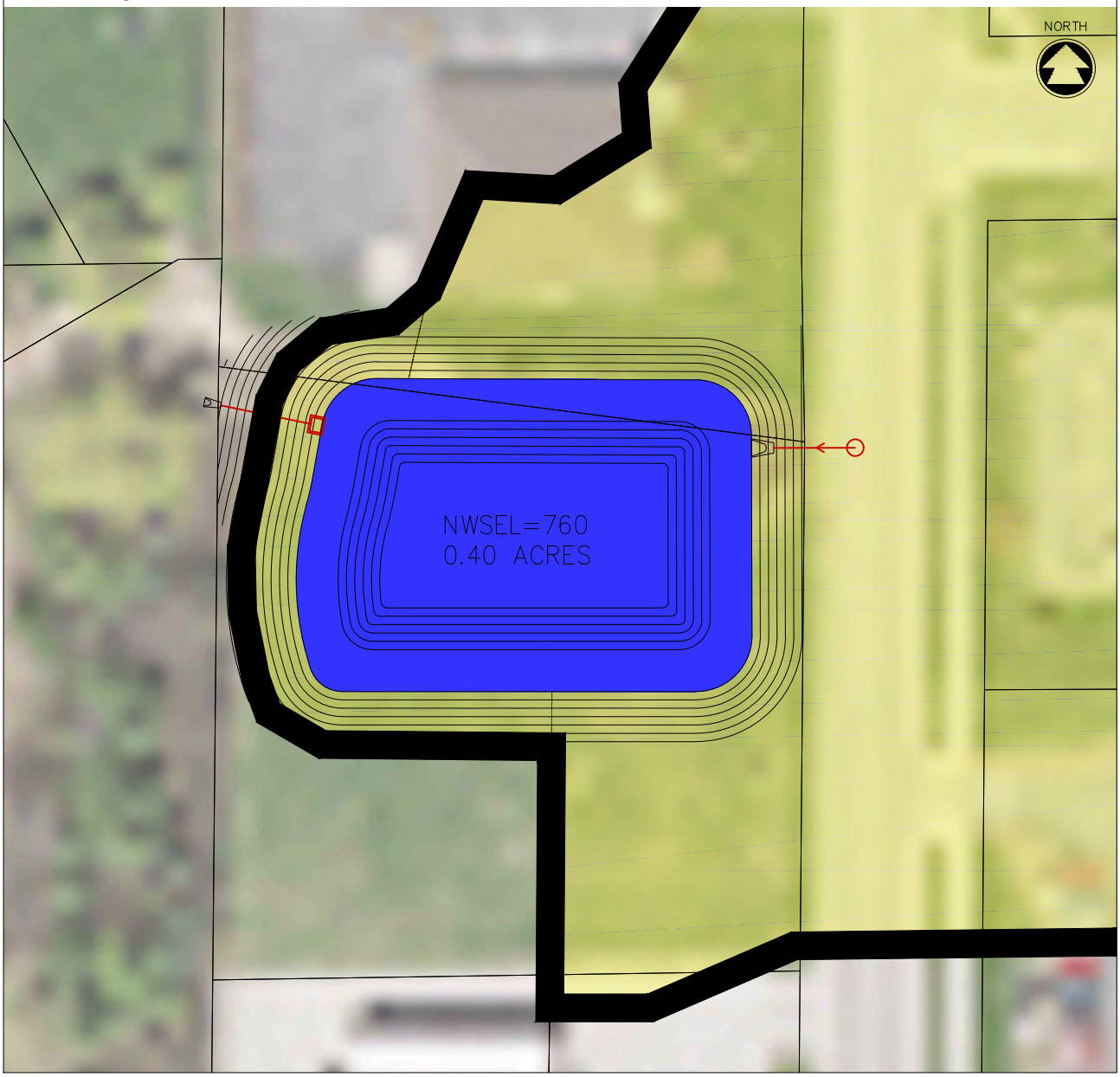
Infrastructure modifications or flow diversions required for retrofit:
DIVERT STORM SEWER FROM S NICOLET RD INTO THE POND.

Site access for future BMP maintenance:
ACCESS FROM S NICOLET RD.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
NOT APPLICABLE

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.4 acre permanent pool	0.76 acres	$162,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-F3r6

McM PROJECT NO: G0003-9-14-00271

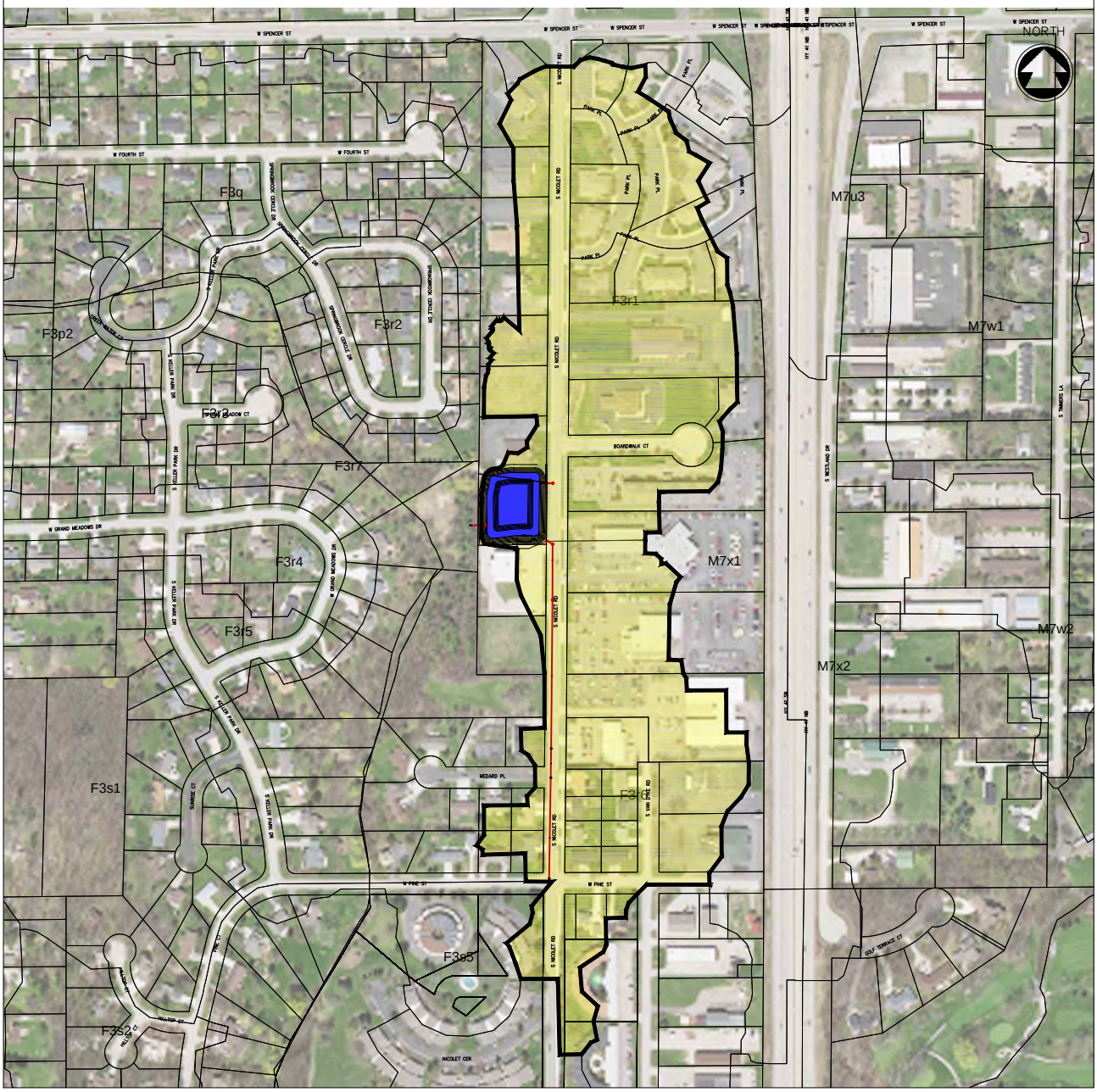
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: NICOLET POND	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: FOX RIVER	Tributary Drainage Area IDs: F3r6	Total Drainage Area: 36.3 acres
Imperviousness (Future): 74.6 %	Runoff Curve Number (Future): 93	Water Quality Volume (Future): 3.28 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	5.8 ft, 5.8 ft	Remediation:	☐ Yes ☒ No	Wetland:	☐ Potential ☐ Yes ☒ No
Bedrock Depth (in):	>78 in, >78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Kewaunee, Winneconne silty clay loam	100-Year Floodplain:	☐ Yes ☒ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
STORM SEWER OUTFALL TO THE STREAM ON THE WEST.

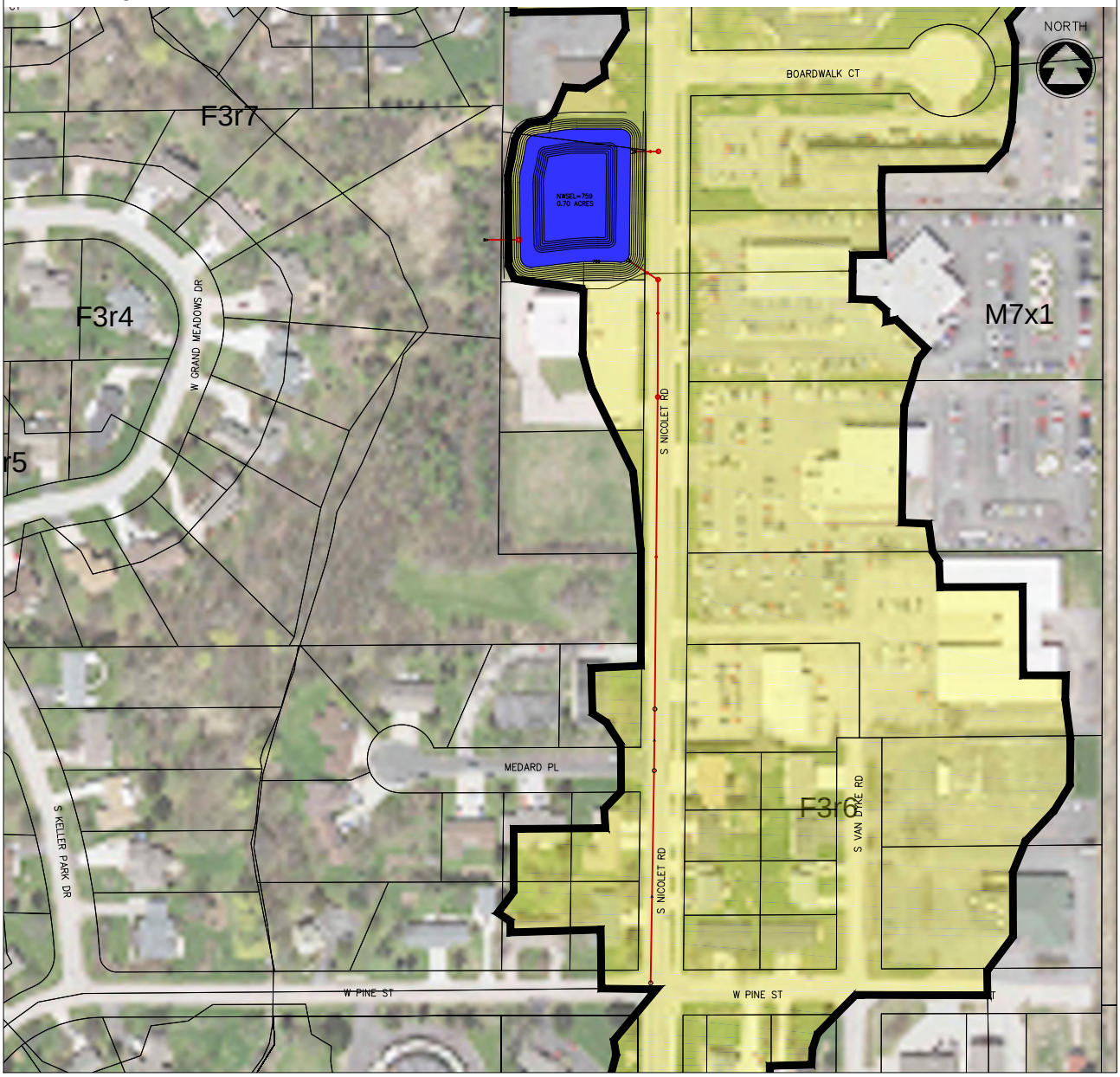
Infrastructure modifications or flow diversions required for retrofit:
DIVERT STORM SEWER FROM THE NORTH AND SOUTH ON S NICOLET RD INTO THE POND.

Site access for future BMP maintenance:
ACCESS FROM S NICOLET RD.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
NO KNOWN CONSTRAINTS.

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.70 acre permanent pool	1.18 acres	$416,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-F3s1

McM PROJECT NO: G0003-9-14-00271

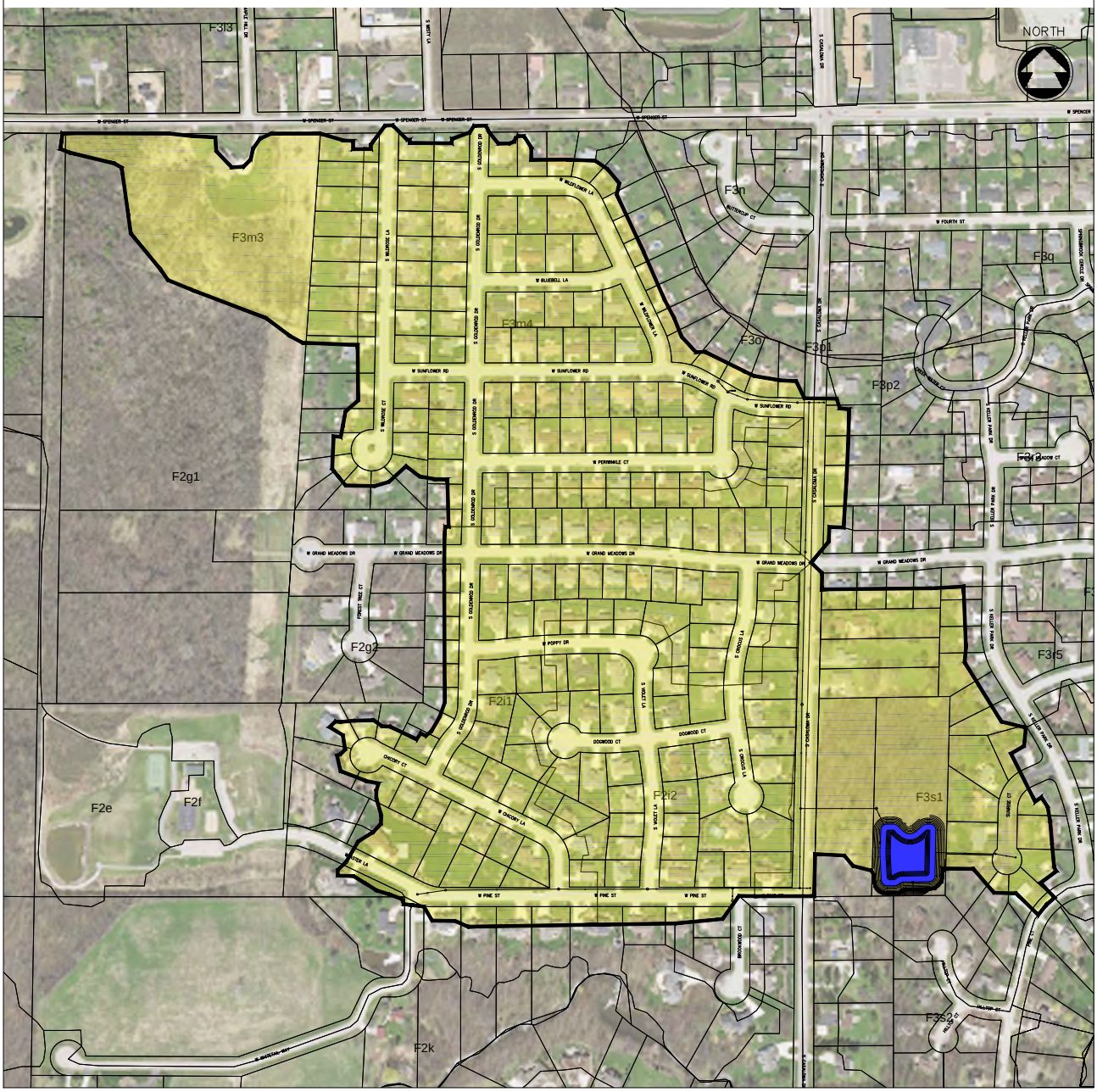
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: SUNRISE POND	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: FOX RIVER	Tributary Drainage Area IDs: F3s1	Total Drainage Area: 103.9 acres
Imperviousness (Future): 31.0 %	Runoff Curve Number (Future): 86	Water Quality Volume (Future): 4.27 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	5.8 ft	Remediation:	☐ Yes ☒ No	Wetland:	☐ Potential ☐ Yes ☒ No
Bedrock Depth (in):	>78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Winneconne silty clay loam	100-Year Floodplain:	☐ Yes ☒ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
STORM SEWER OUTFALL TO THE SOUTH OF THE POND.

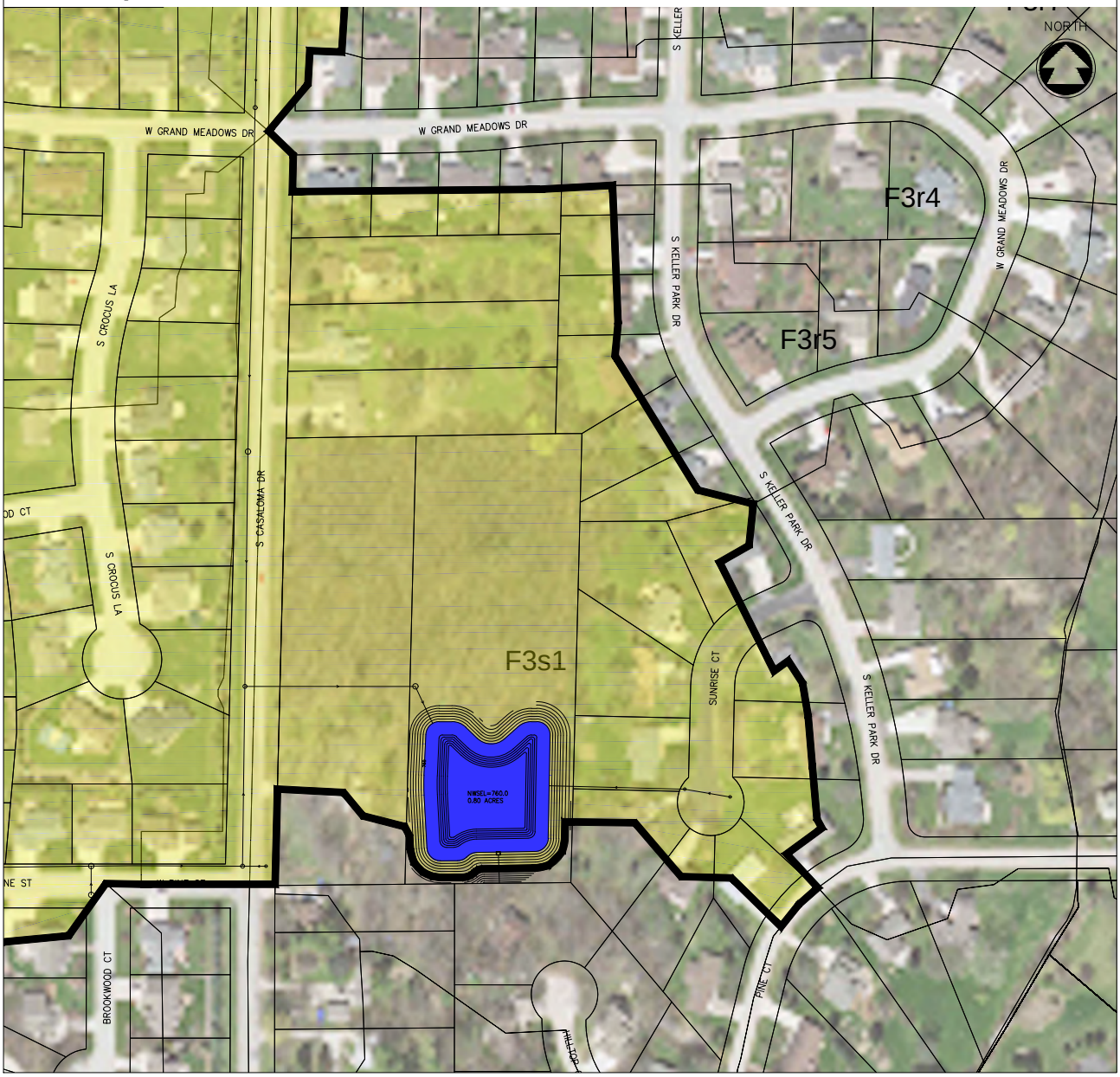
Infrastructure modifications or flow diversions required for retrofit:
DIVERT STORM SEWER FROM SUNRISE CT AND S CASALOMA DR TO THE POND.

Site access for future BMP maintenance:
ACCESS FROM S CASALOMA DR OR FROM SUNRISE CT THROUGH AN EASEMENT.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
NO KNOWN CONSTRAINTS.

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.80 acre permanent pool	1.58 acres	$714,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-F4b2

McM PROJECT NO: G0003-9-14-00271

SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: VAN DYKE POND	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: FOX RIVER	Tributary Drainage Area IDs: F4b2	Total Drainage Area: 20.1 acres
Imperviousness (Future): 46.6%	Runoff Curve Number (Future): 88	Water Quality Volume (Future): 1.18 acre-feet

Drainage Area / Site Location Map:

PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	5.8 ft, 5.8 ft	Remediation:	☐ Yes ☒ No	Wetland:	☐ Potential ☐ Yes ☒ No
Bedrock Depth (in):	>78 in, >78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Kewaunee, Winneconne silty clay loam	100-Year Floodplain:	☐ Yes ☒ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
STORM SEWER OUTFALL TO THE STREAM ON THE WEST.

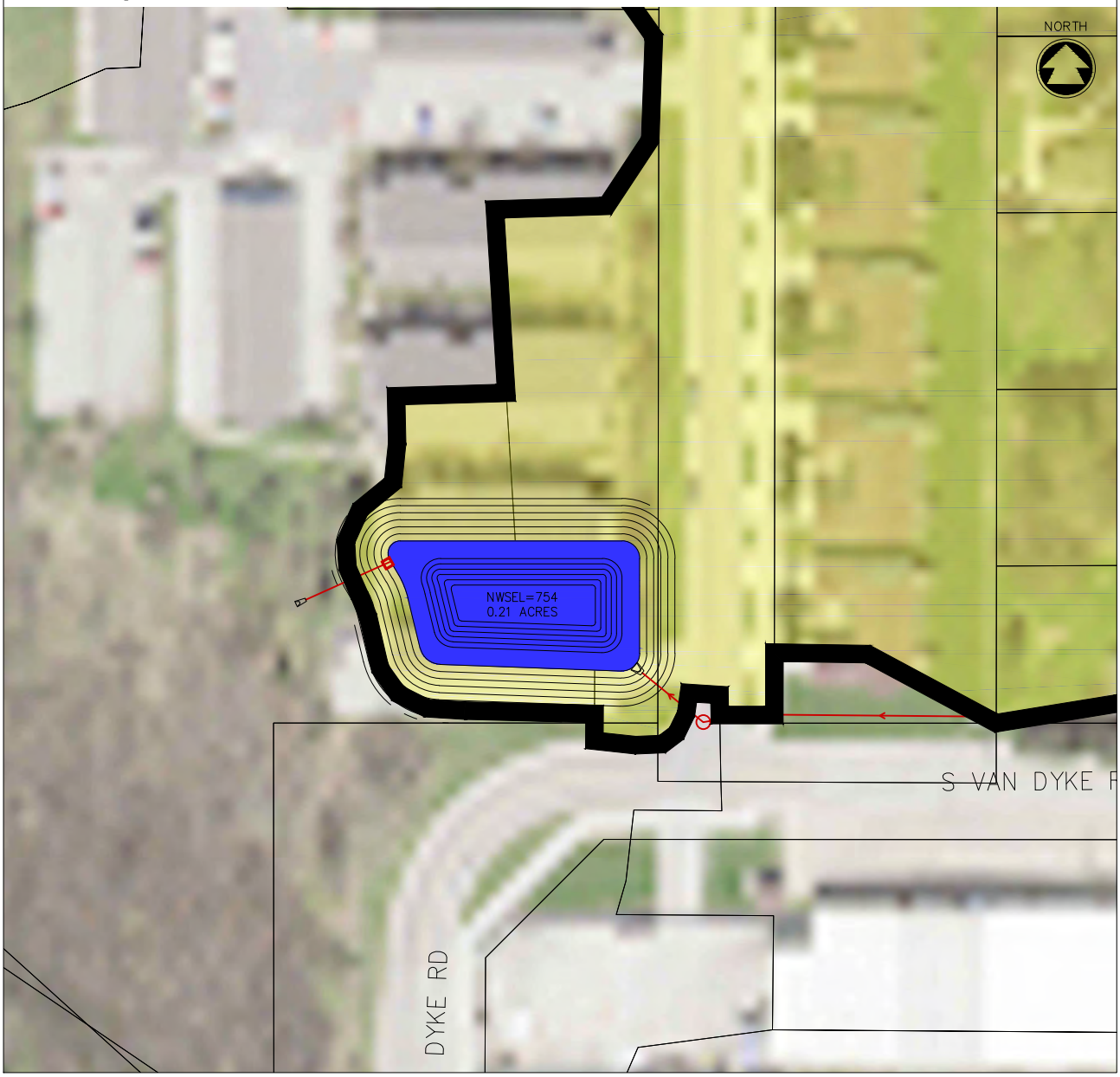
Infrastructure modifications or flow diversions required for retrofit:
DIVERT STORM SEWER FROM S VAN DYKE RD AND S NICOLET RD INTO THE POND.

Site access for future BMP maintenance:
ACCESS FROM VAN DYKE RD AND S NICOLET RD.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
NO KNOWN CONSTRAINTS.

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.21 acre permanent pool	0 acres	$311,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-F8n2

McM PROJECT NO: G0003-9-14-00271

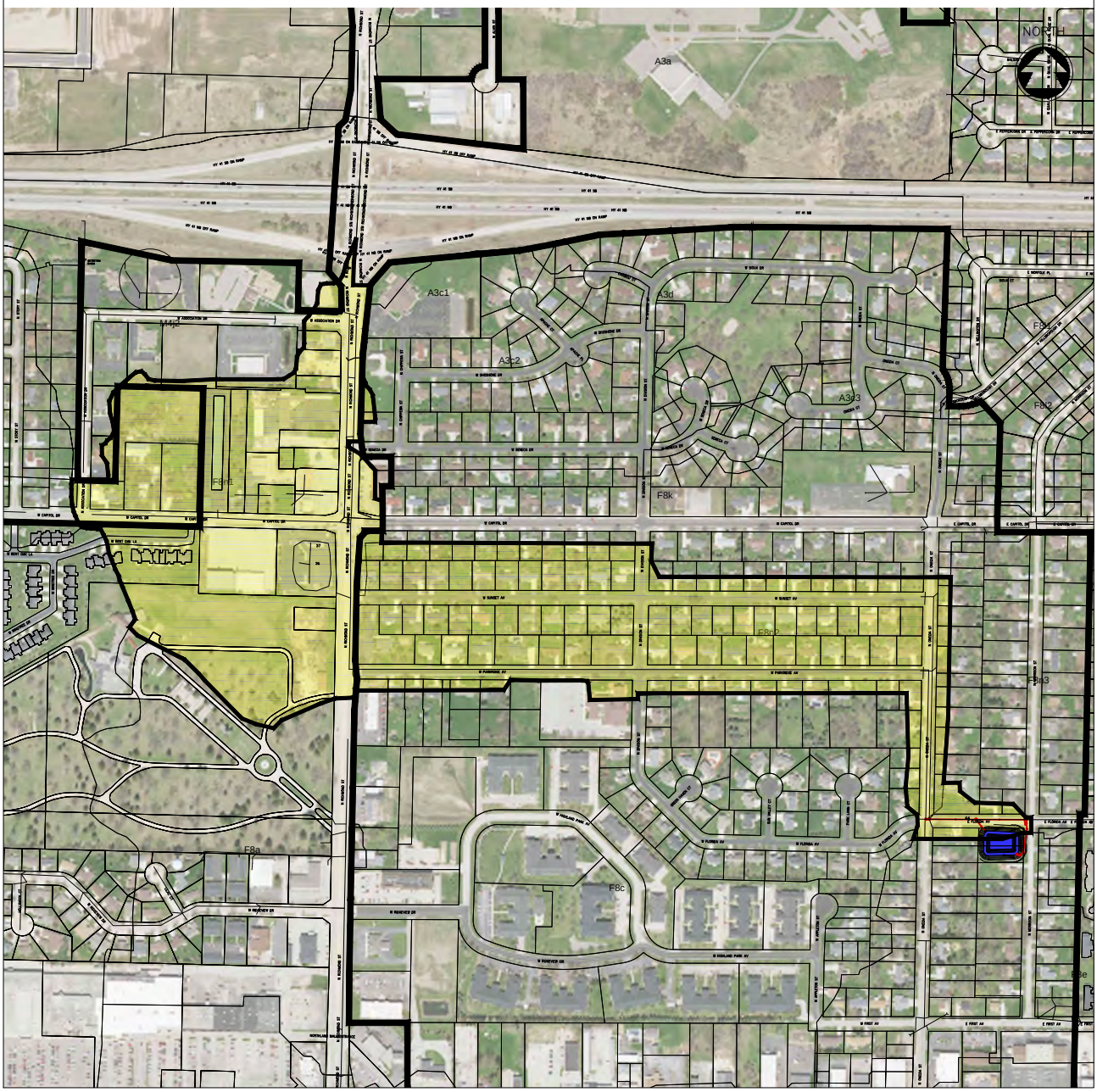
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: FLORIDA POND	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: FOX RIVER	Tributary Drainage Area IDs: F8n2	Total Drainage Area: 77.8acres
Imperviousness (Future): 45.4 %	Runoff Curve Number (Future): 87	Water Quality Volume (Future): 4.46 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	1 ft, 3 ft	Remediation:	☐ Yes ☒ No	Wetland:	☒ Potential ☐ Yes ☐ No
Bedrock Depth (in):	35 in, >78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Manawa silty clay loam, Briggsville silt loam	100-Year Floodplain:	☐ Yes ☒ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
OUTFALL TO STORM SEWER ON E FLORIDA AVE.

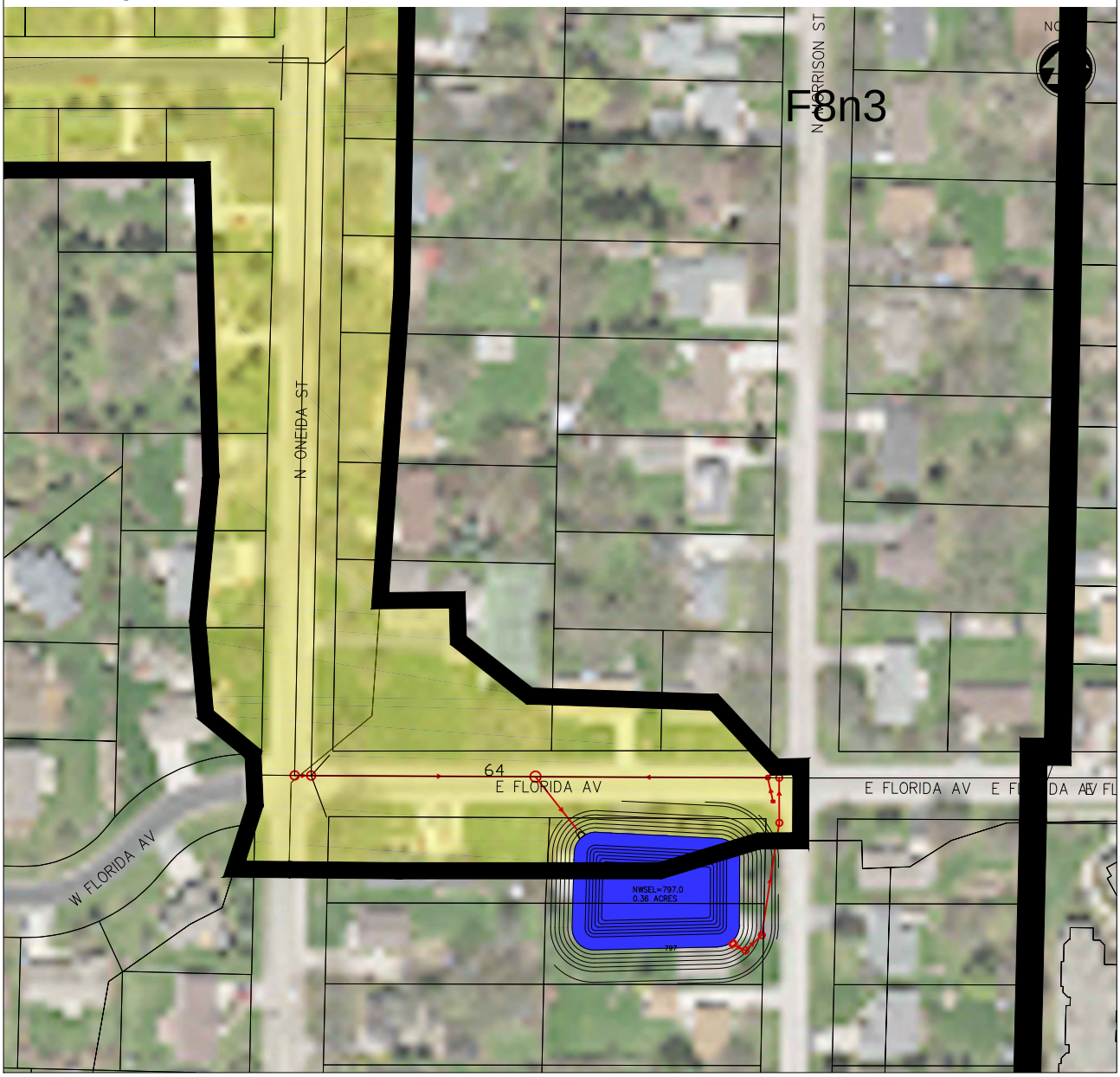
Infrastructure modifications or flow diversions required for retrofit:
DIVERT STORM SEWER FROM E FLORIDA AVE. INTO THE POND.

Site access for future BMP maintenance:
ACCESS FROM N MORRISON ST OR E FLORIDA AVE.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
HIGH GROUNDWATER, WETLAND POTENTIAL

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
XXX acre permanent pool	0 acres	$444,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-M2d6

McM PROJECT NO: G0003-9-14-00271

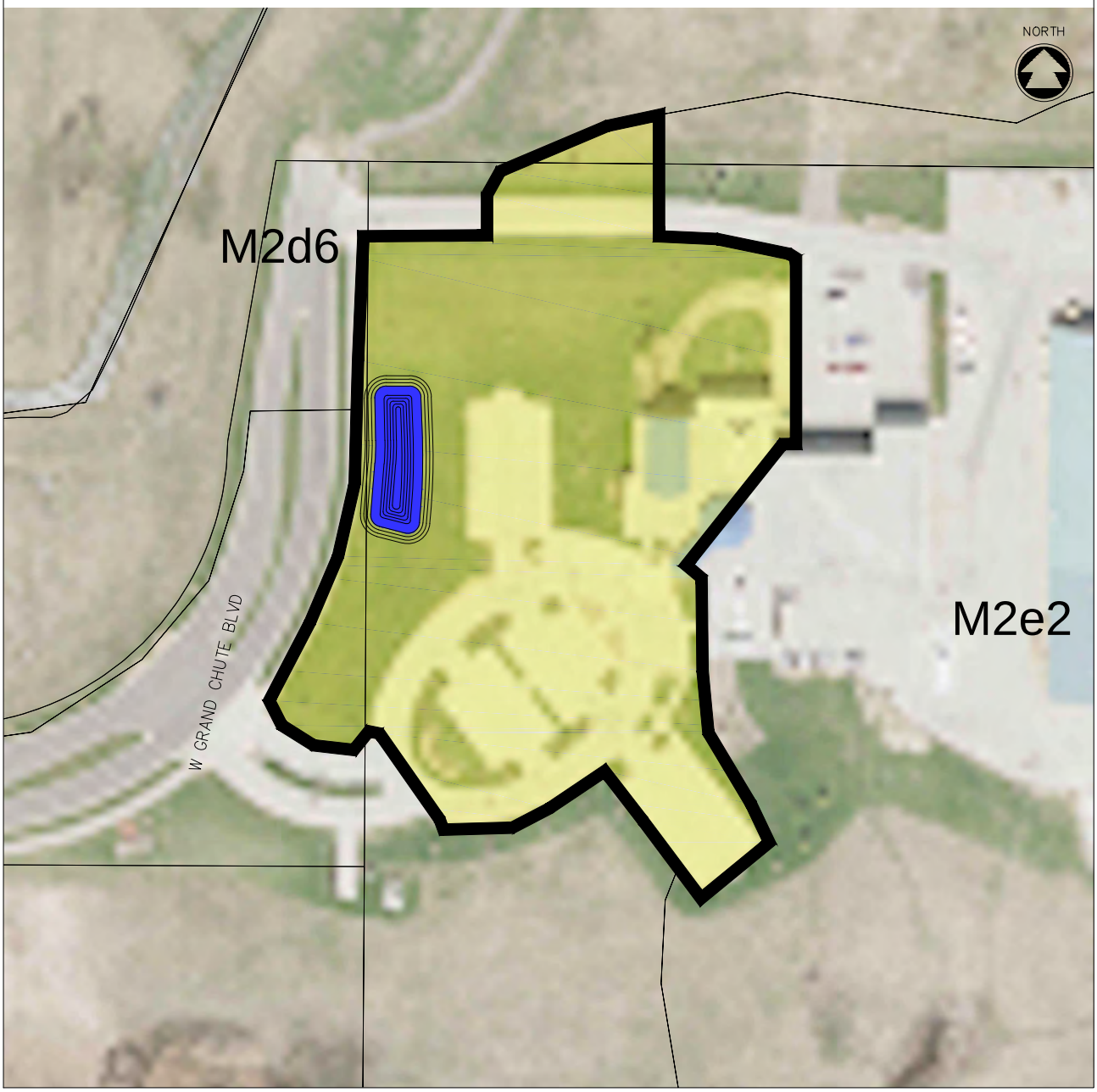
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: TOWN HALL NORTH POND	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: MUD CREEK	Tributary Drainage Area IDs: M2d6	Total Drainage Area: 4.4 acres
Imperviousness (Future): 63.5 %	Runoff Curve Number (Future): 91	Water Quality Volume (Future): 0.34 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	0 ft	Remediation:	☐ Yes ☒ No	Wetland:	☒ Potential ☐ Yes ☐ No
Bedrock Depth (in):	> 78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Shiocton silt loam	100-Year Floodplain:	☐ Yes ☒ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):

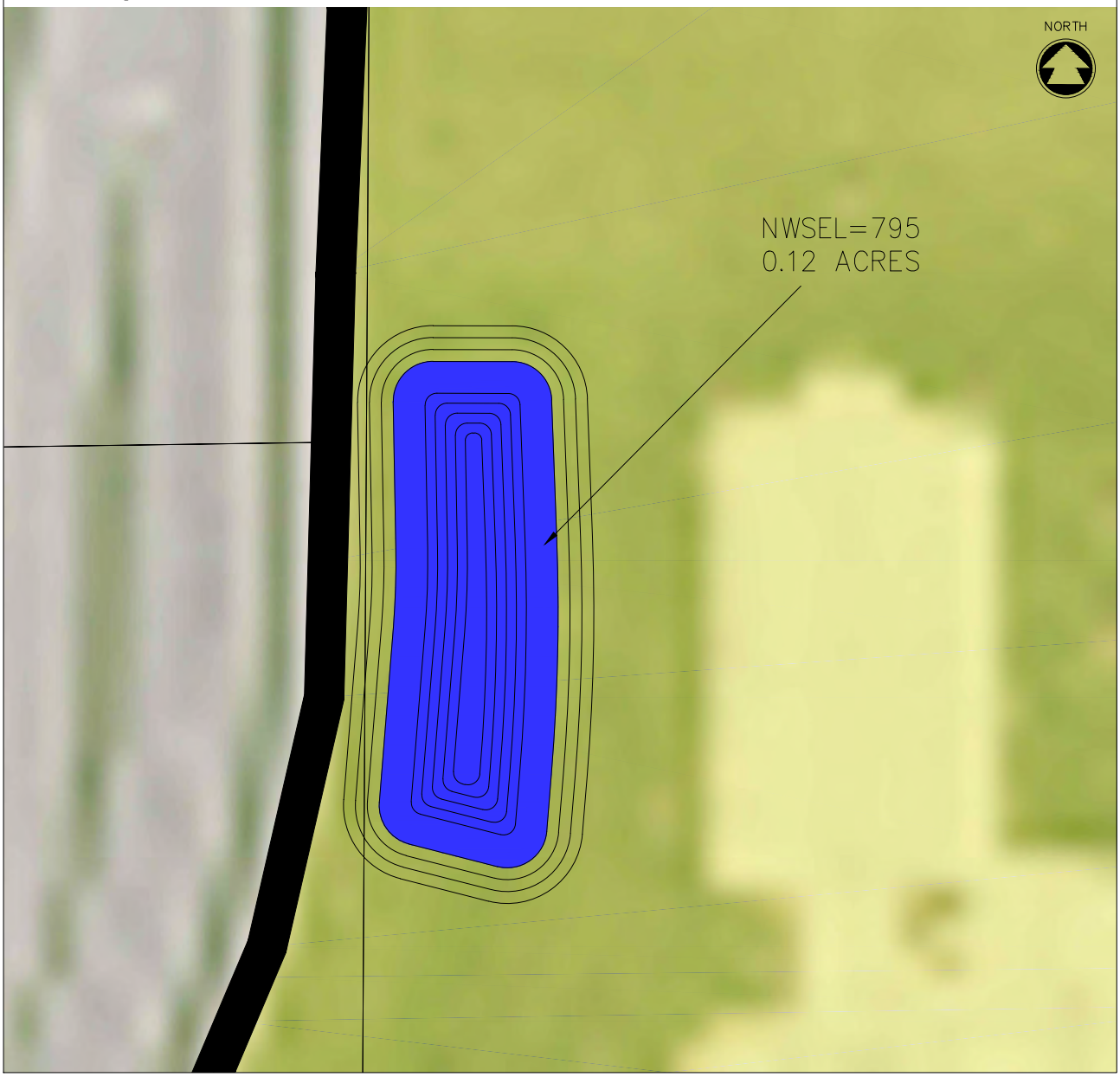
Infrastructure modifications or flow diversions required for retrofit:
DIVERT STORM SEWER FROM GRAND CHUTE BLVD INTO THE POND.

Site access for future BMP maintenance:
ACCESS FROM GRAND CHUTE BLVD.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
HIGH GROUNDWATER, WETLAND POTENTIAL

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.12 acre permanent pool	0 acres	$53,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-M2e2

McM PROJECT NO: G0003-9-14-00271

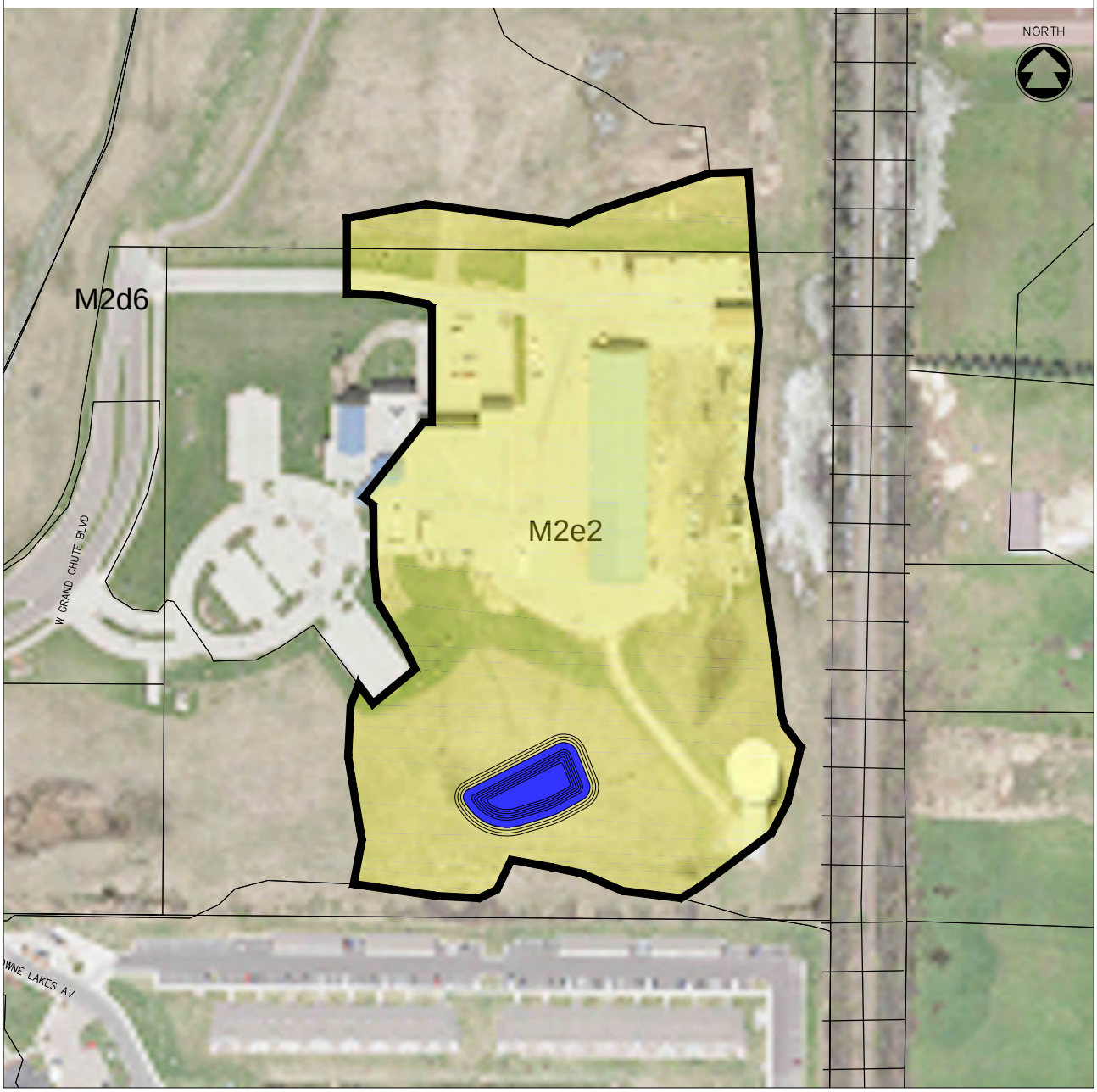
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: TOWN HALL SOUTH POND	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: MUD CREEK	Tributary Drainage Area IDs: M2e2	Total Drainage Area: 11.7 acres
Imperviousness (Future): 52.5 %	Runoff Curve Number (Future): 89	Water Quality Volume (Future): 0.76 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	0 ft	Remediation:	☐ Yes ☒ No	Wetland:	☒ Potential ☐ Yes ☐ No
Bedrock Depth (in):	>78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Shiocton silt loam	100-Year Floodplain:	☐ Yes ☒ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):

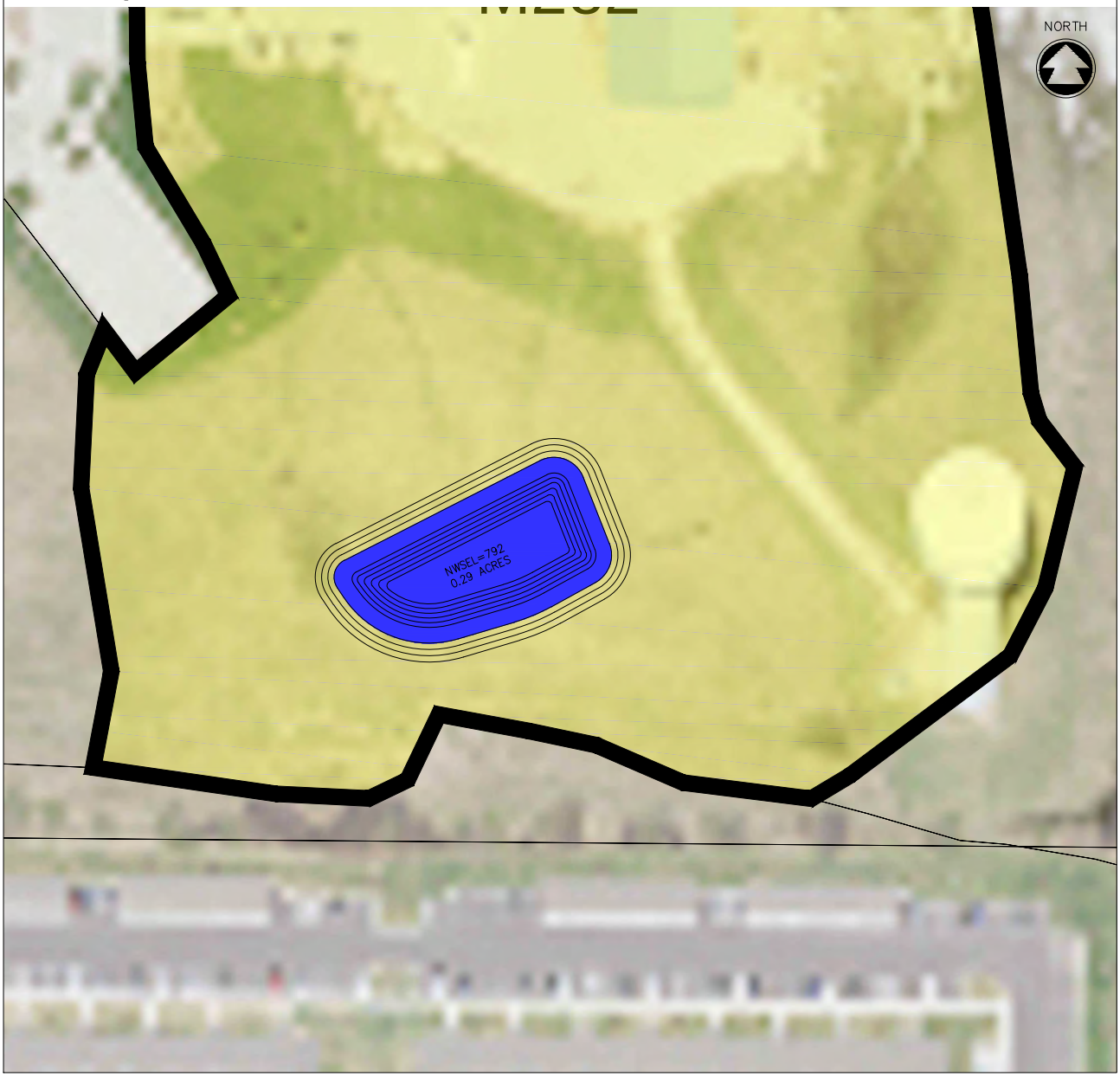
Infrastructure modifications or flow diversions required for retrofit:

Site access for future BMP maintenance:
ACCESS FROM TOWNE LAKES CIRCLE.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
HIGH GROUNDWATER, WETLAND POTENTIAL.

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.29 acre permanent pool	0 acres	$73,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-M2h2

McM PROJECT NO: G0003-9-14-00271

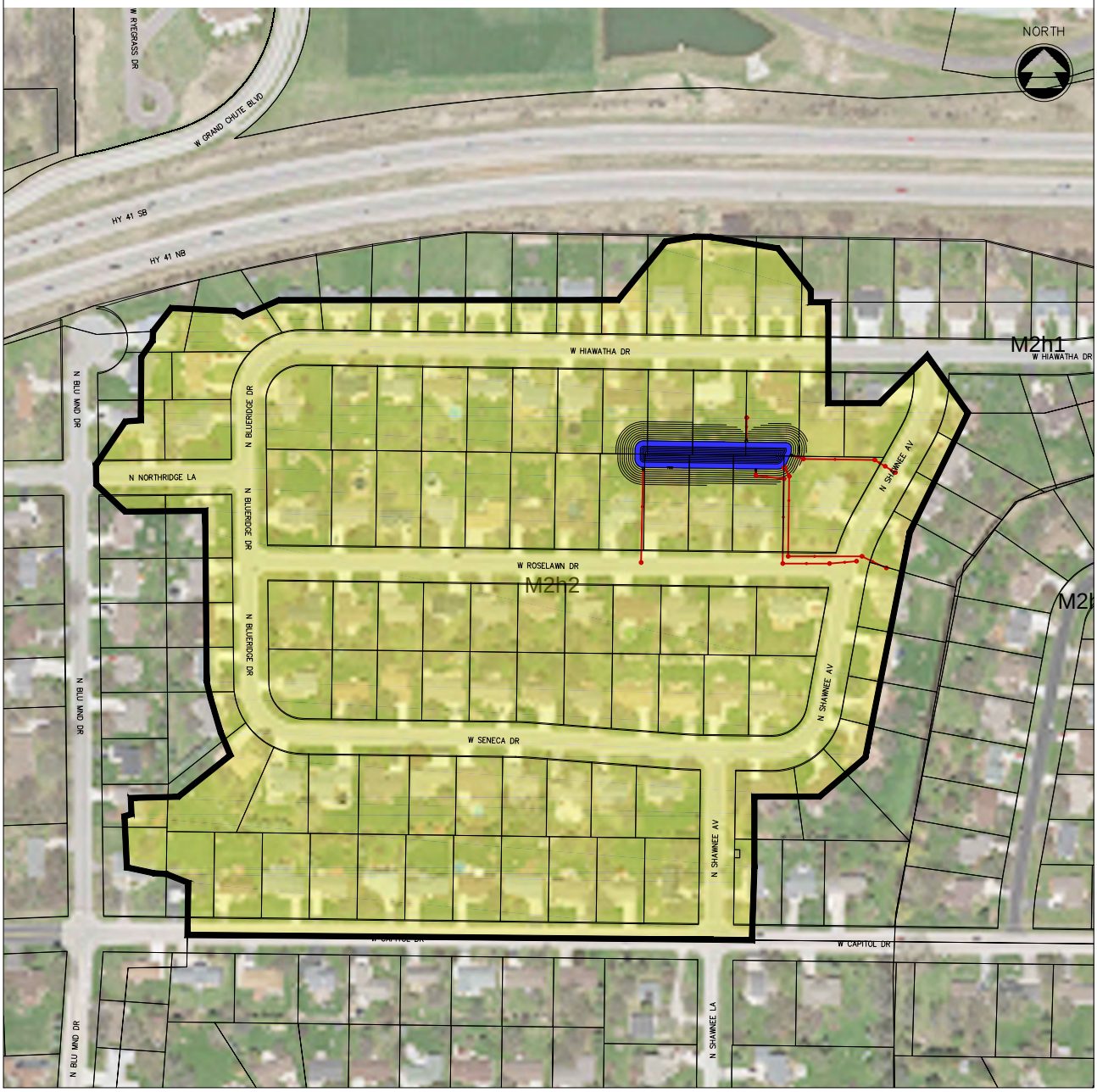
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: ROSELAWN POND	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: MUD CREEK	Tributary Drainage Area IDs: M2h2	Total Drainage Area: 36.3 acres
Imperviousness (Future): 37.6 %	Runoff Curve Number (Future): 75	Water Quality Volume (Future): 1.77 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	3.3 ft	Remediation:	☐ Yes ☒ No	Wetland:	☐ Potential ☐ Yes ☒ No
Bedrock Depth (in):	>78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Grays silt loam	100-Year Floodplain:	☐ Yes ☒ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
STORM SEWER OUTFALL TO ROSELAWN DR.

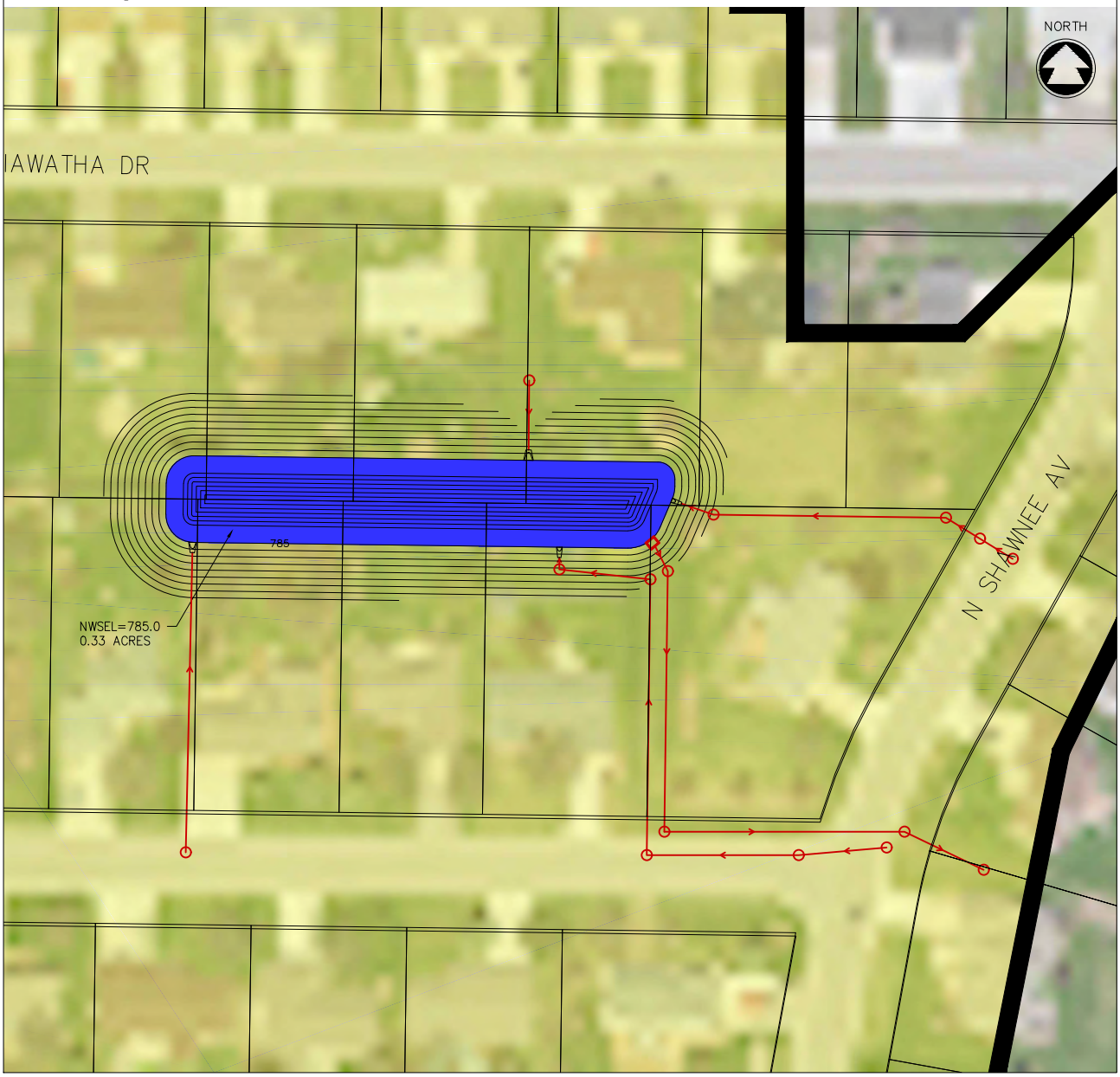
Infrastructure modifications or flow diversions required for retrofit:
DIVERT STORM SEWER FROM ROSELAWN DR, SHAWNEE AVE, AND HIAWATHA DR INTO THE POND.

Site access for future BMP maintenance:
ACCESS FROM N SHAWNEE AVE THROUGH AN EASEMENT.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
HIGH GROUNDWATER

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
XXX acre permanent pool	0.97 acres	$335,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-M2i2

McM PROJECT NO: G0003-9-14-00271

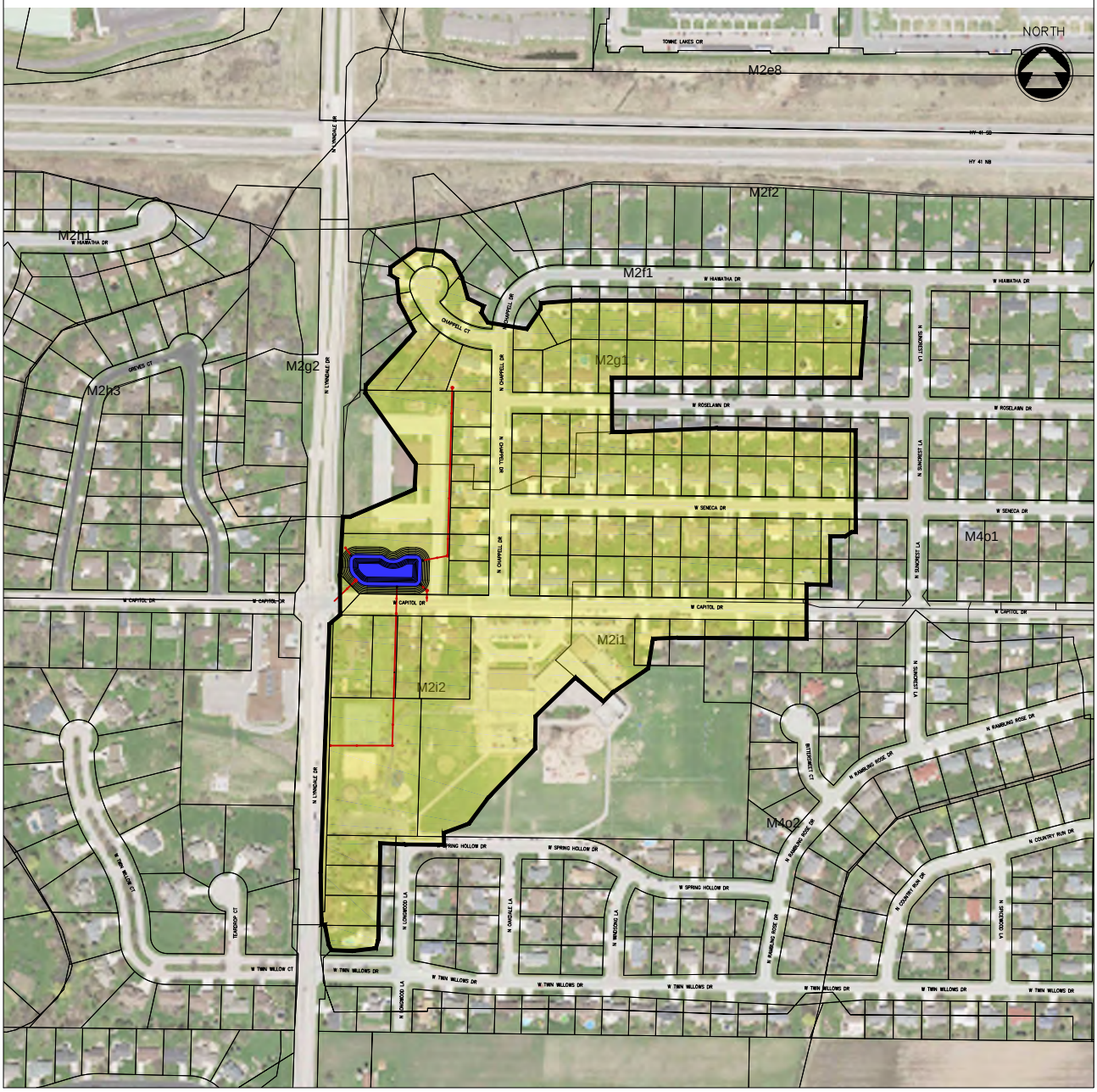
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: CHAPPELL POND	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: MUD CREEK	Tributary Drainage Area IDs: M2i2	Total Drainage Area: 43.9 acres
Imperviousness (Future): 37.1 %	Runoff Curve Number (Future): 75	Water Quality Volume (Future): 2.10 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	3.3 ft, 5.8 ft	Remediation:	☐ Yes ☒ No	Wetland:	☐ Potential ☐ Yes ☒ No
Bedrock Depth (in):	>78 in, >78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Grays silt loam Nichols very fine sandy loam	100-Year Floodplain:	☐ Yes ☒ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
STORM SEWER OUTFALL TO CAPITOL DR.

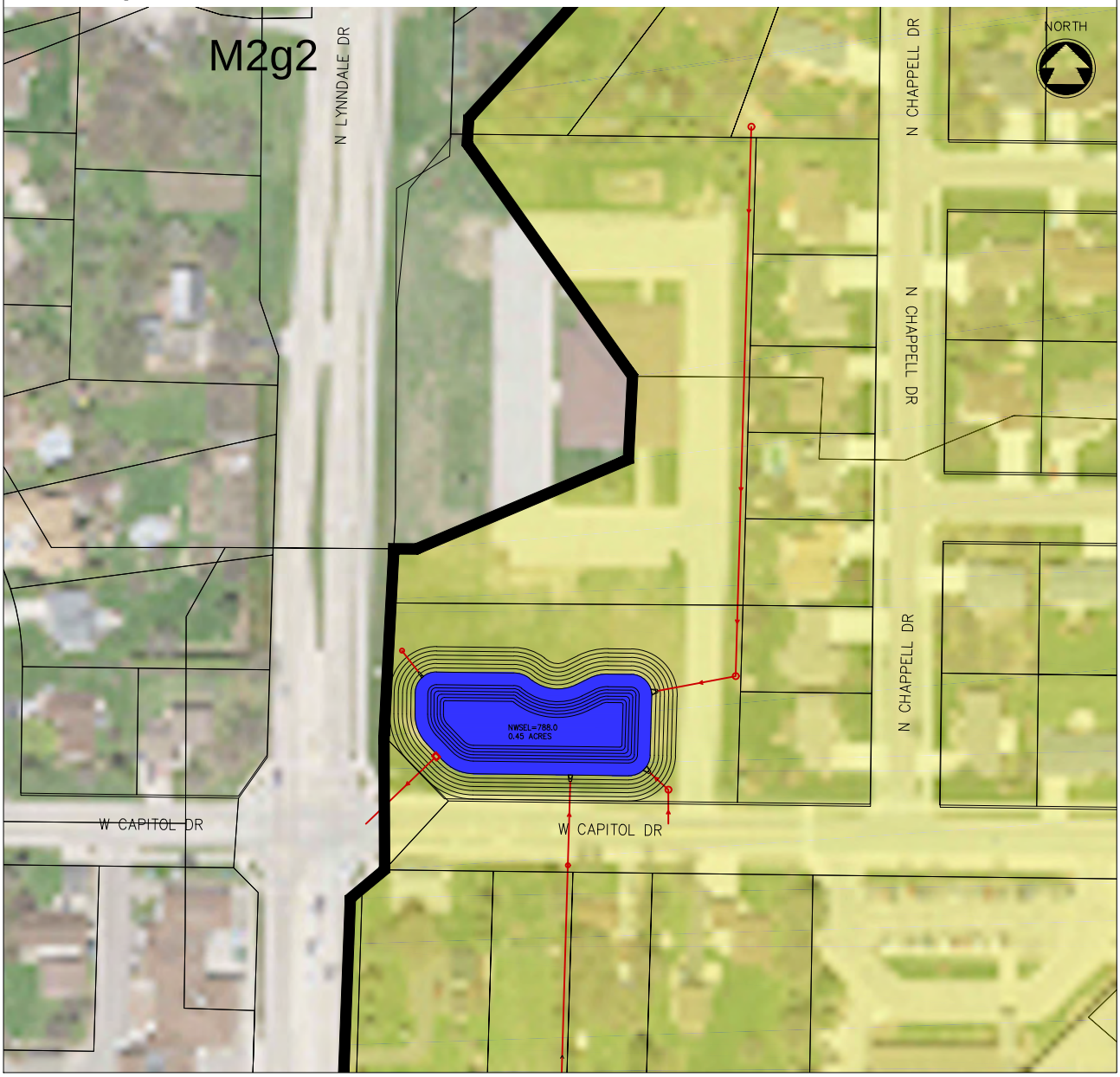
Infrastructure modifications or flow diversions required for retrofit:
DIVERT STORM SEWER FROM CAPITOL DR INTO THE POND.

Site access for future BMP maintenance:
ACCESS FROM CAPITOL DR.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
HIGH GROUNDWATER, PRIVATE PROPERTY.

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.45 acre permanent pool	0.91 acres	$325,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-M2j

McM PROJECT NO: G0003-9-14-00271

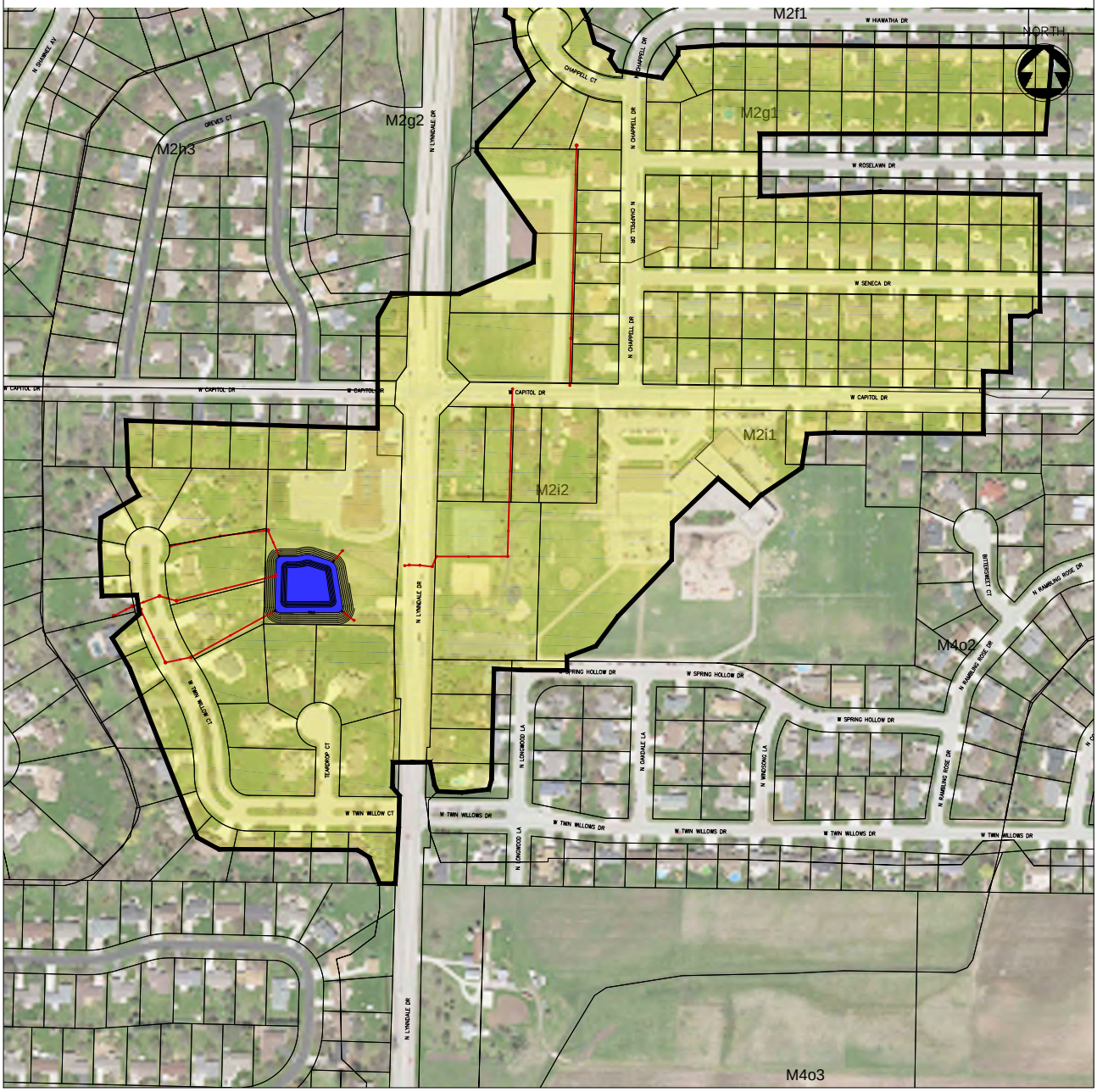
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: TEARDROP POND	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: MUD CREEK	Tributary Drainage Area IDs: M2j	Total Drainage Area: 65.6 acres
Imperviousness (Future): 36.3 %	Runoff Curve Number (Future): 75	Water Quality Volume (Future): 3.09 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	3.3 ft	Remediation:	☐ Yes ☒ No	Wetland:	☐ Potential ☐ Yes ☒ No
Bedrock Depth (in):	>78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Grays silt loam	100-Year Floodplain:	☐ Yes ☒ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
STORM SEWER OUTFALL TO THE STREAM WEST OF TWIN WILLOW CT.

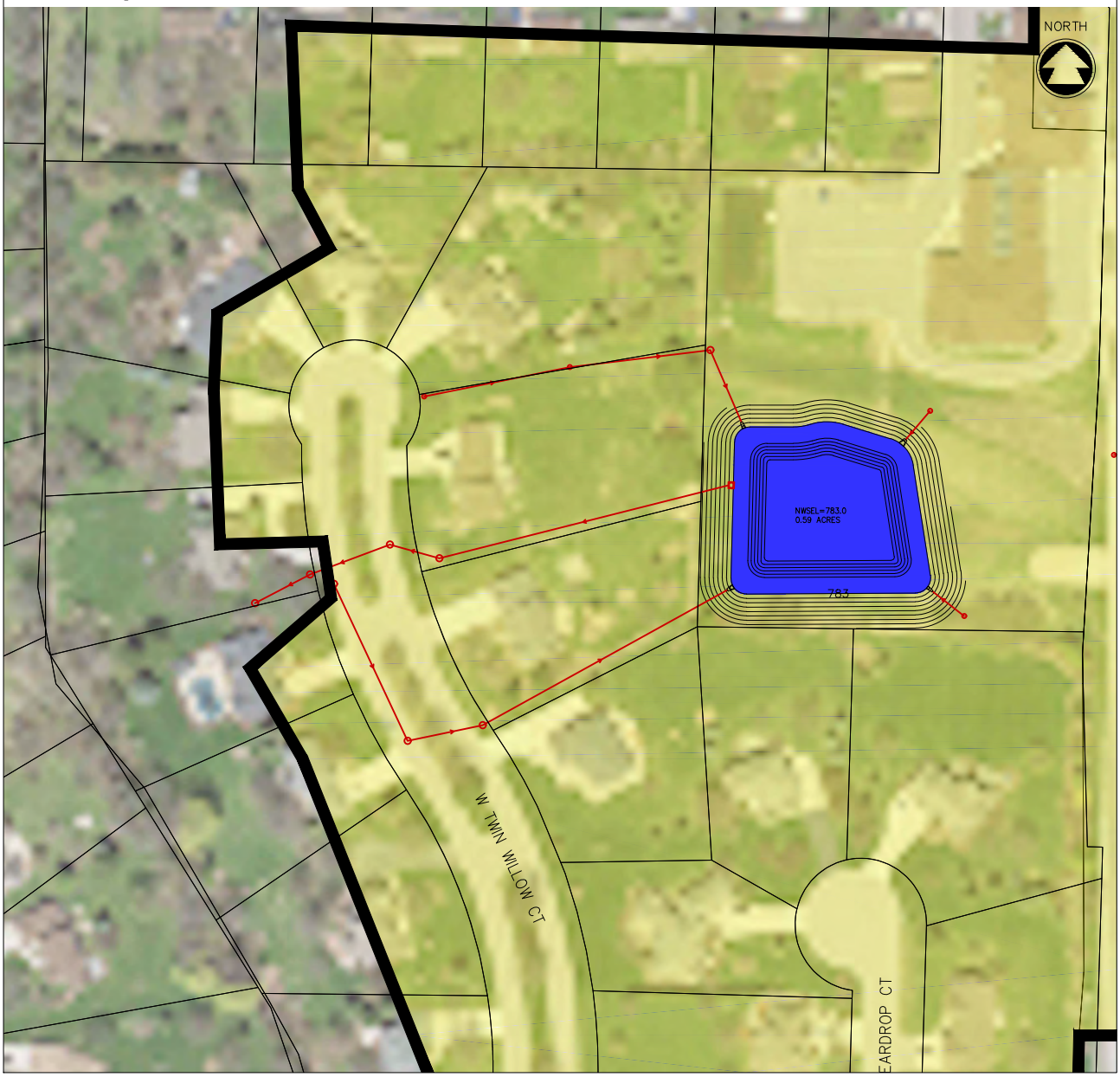
Infrastructure modifications or flow diversions required for retrofit:
DIVERT STORM SEWER FROM TWIN WILLOW CT INTO THE POND.

Site access for future BMP maintenance:
ACCESS FROM STORM SEWER EASEMENT.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
HIGH GROUNDWATER, PRIVATE PROPERTY.

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.59 acre permanent pool	1.15 acres	$531,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-M2p

McM PROJECT NO: G0003-9-14-00271

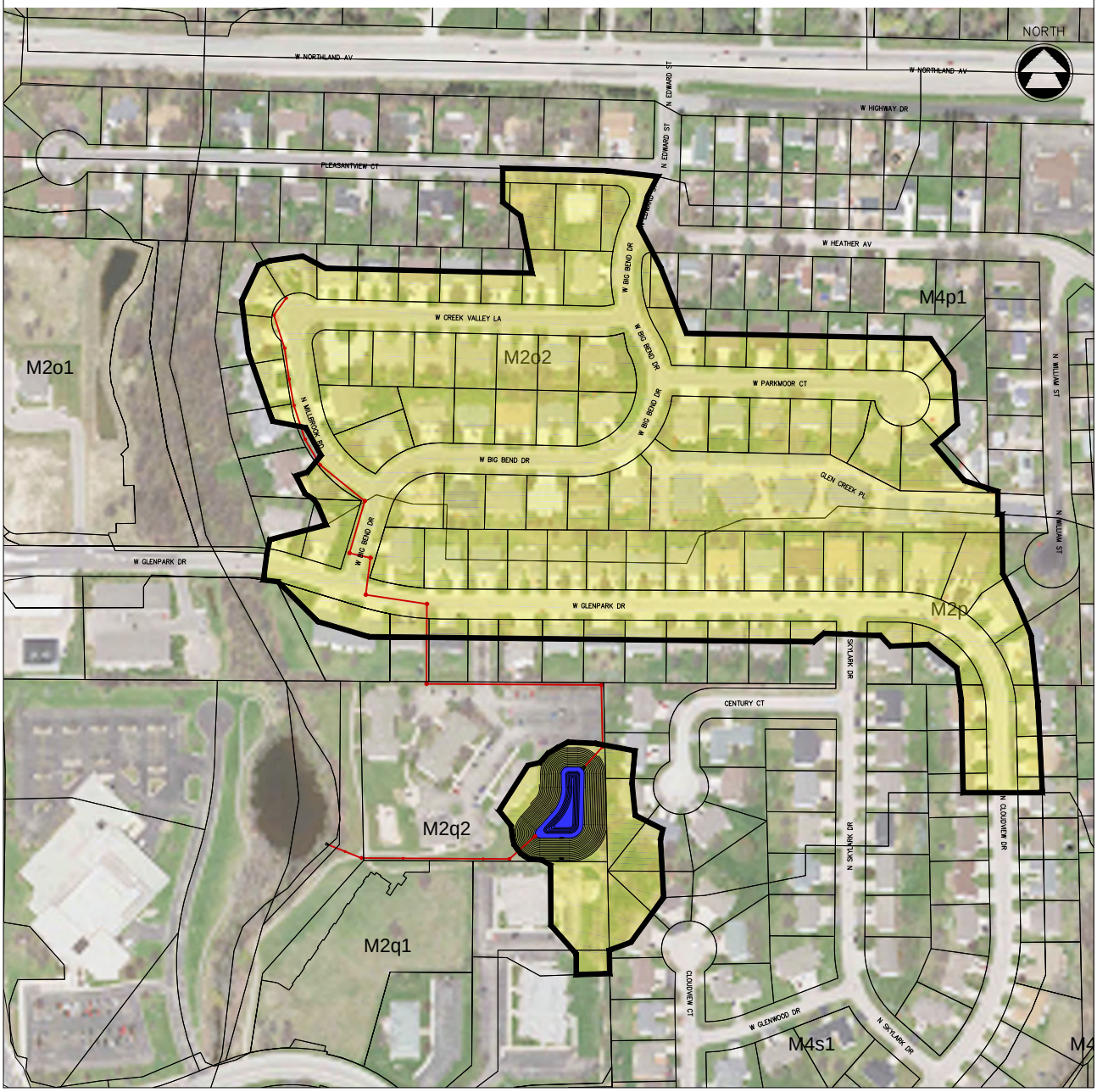
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: GLENPARK POND	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: MUD CREEK	Tributary Drainage Area IDs: M2p	Total Drainage Area: 31.3 acres
Imperviousness (Future): 39.0 %	Runoff Curve Number (Future): 77	Water Quality Volume (Future): 1.57 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	5.8 ft	Remediation:	☐ Yes ☒ No	Wetland:	☒ Potential ☐ Yes ☐ No
Bedrock Depth (in):	>78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Nichols very fine sandy loam	100-Year Floodplain:	☐ Yes ☒ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
STORM SEWER OUTFALL TO THE POND WEST OF GLEN PARK APARTMENTS.

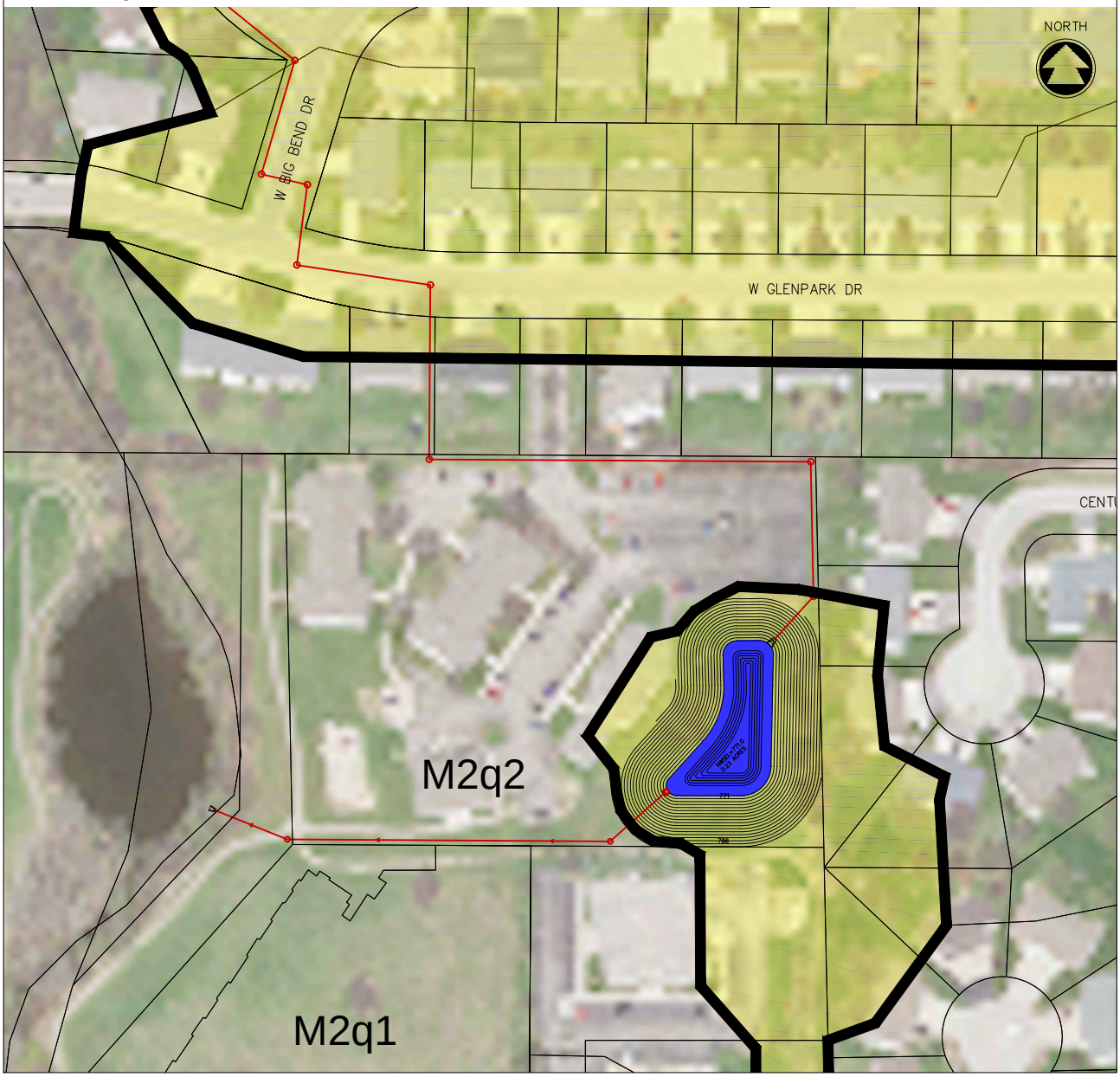
Infrastructure modifications or flow diversions required for retrofit:
DIVERT STORM SEWER FROM GLENPARK DR THROUGH THE POND.

Site access for future BMP maintenance:
ACCESS FROM STORM WATER EASEMENT.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
WETLAND POTENTIAL, PRIVATE PROPERTY.

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.23 acre permanent pool	1.06 acres	$525,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

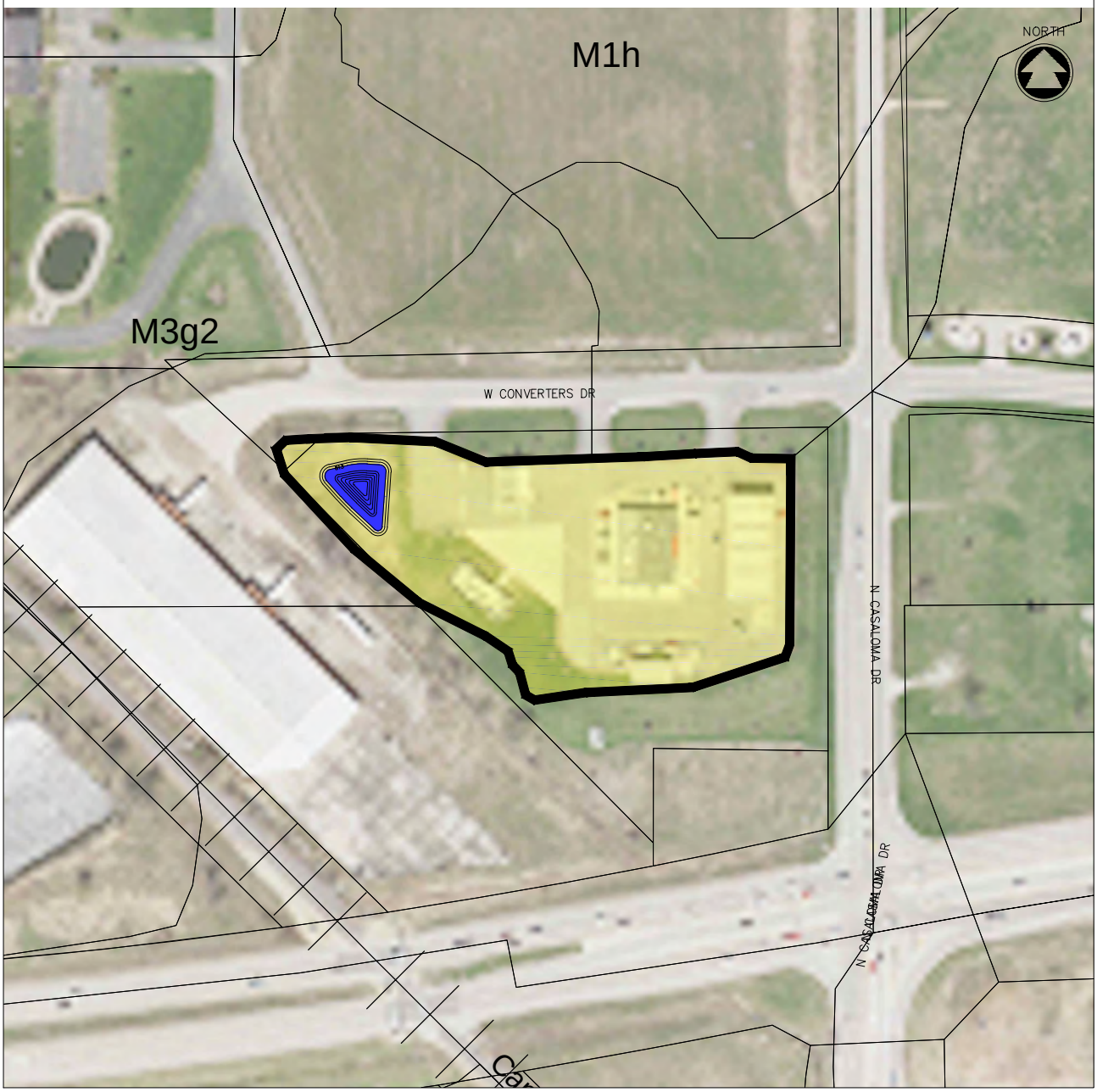
BMP CATCHMENT ID: BMP-M3g2

McM PROJECT NO: G0003-9-14-00271

SITE INFORMATION:	
Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: KWIK TRIP (CASALOMA)	Initials: AWS

DRAINAGE AREA:		
Sub-watershed ID: MUD CREEK	Tributary Drainage Area IDs: M3g2	Total Drainage Area: 2.9 acres
Imperviousness (Future): 92 %	Runoff Curve Number (Future): 95	Water Quality Volume (Future): 0.32 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	1 ft, 0 ft	Remediation:	☐ Yes ☒ No	Wetland:	☒ Potential ☐ Yes ☐ No
Bedrock Depth (in):	35 in, >78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Manawa silty loam, Poygan silty clay loam	100-Year Floodplain:	☐ Yes ☒ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):

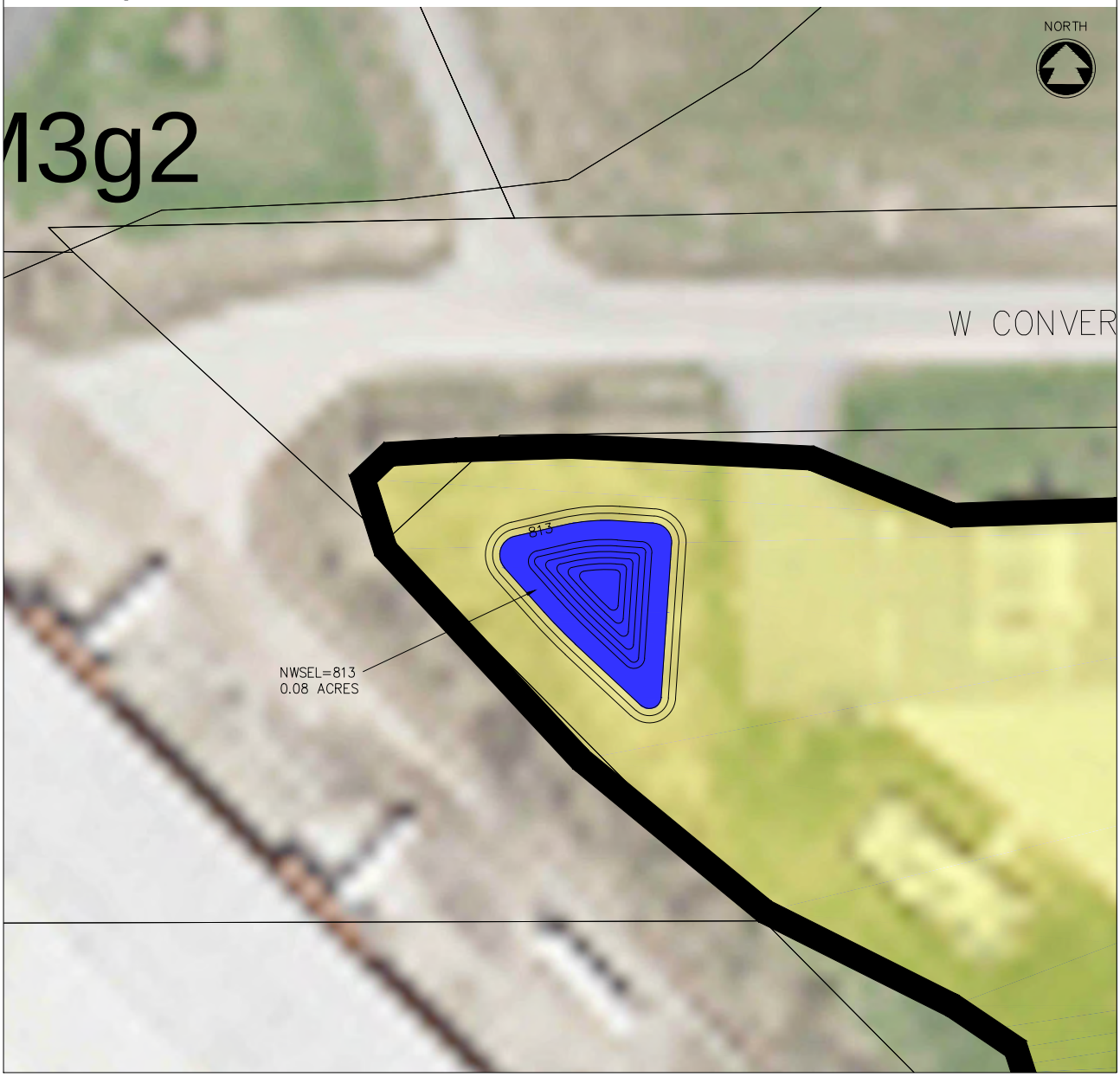
Infrastructure modifications or flow diversions required for retrofit:

Site access for future BMP maintenance:
ACCESS FROM CONVERTERS DR.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
HIGH GROUNDWATER, WETLAND POTENTIAL, PRIVATE PROPERTY.

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
XXX acre permanent pool	0.35 acres	$57,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-M3i2

McM PROJECT NO: G0003-9-14-00271

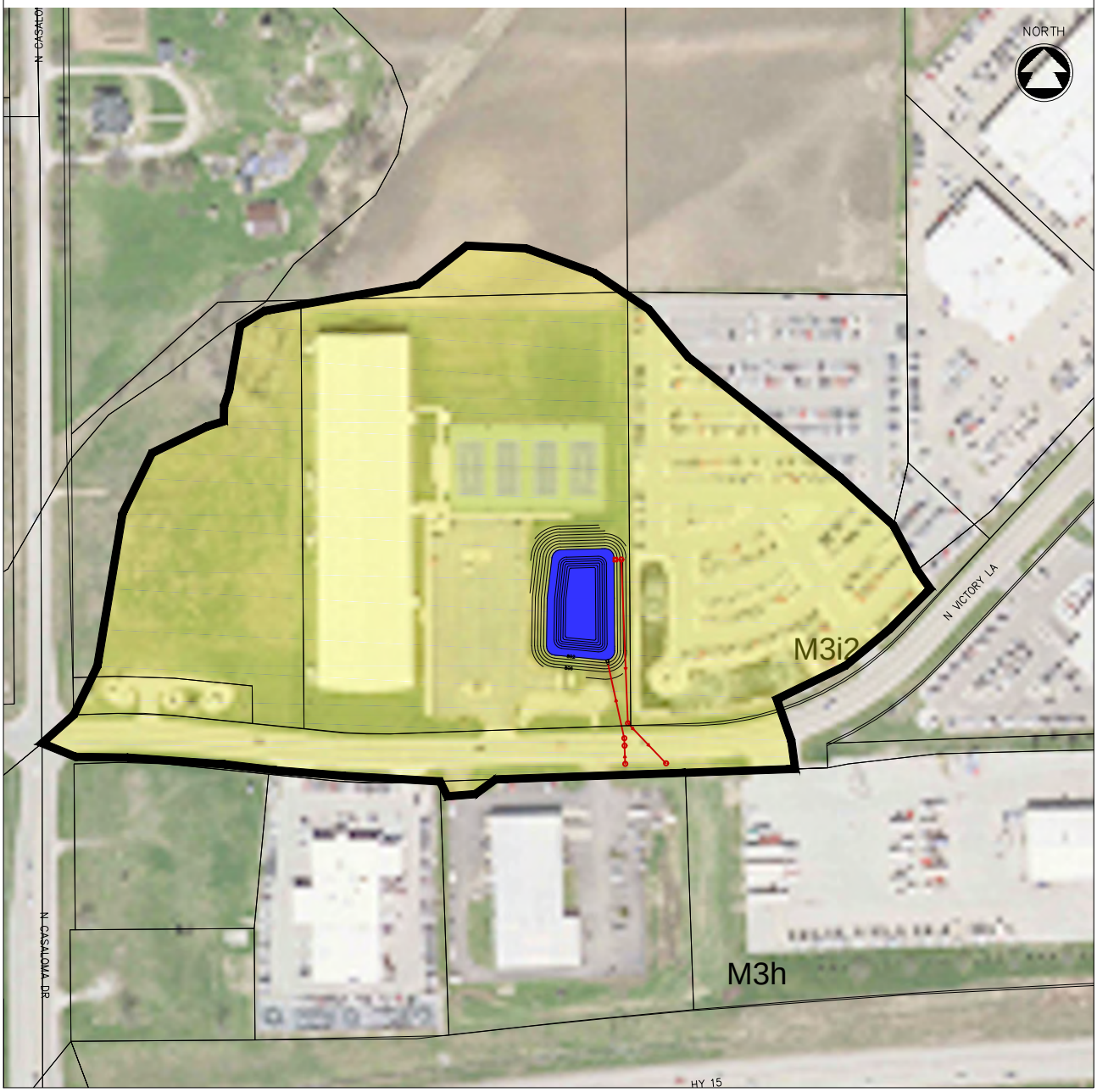
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: VICTORY POND	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: MUD CREEK	Tributary Drainage Area IDs: M3i2	Total Drainage Area: 14.9 acres
Imperviousness (Future): 90.8 %	Runoff Curve Number (Future): 96	Water Quality Volume (Future): 1.61 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	1 ft	Remediation:	☐ Yes ☒ No	Wetland:	☒ Potential ☐ Yes ☐ No
Bedrock Depth (in):	35 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Manawa silty clay loam	100-Year Floodplain:	☐ Yes ☒ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
STORM SEWER OUTFALL TO VICTORY LN.

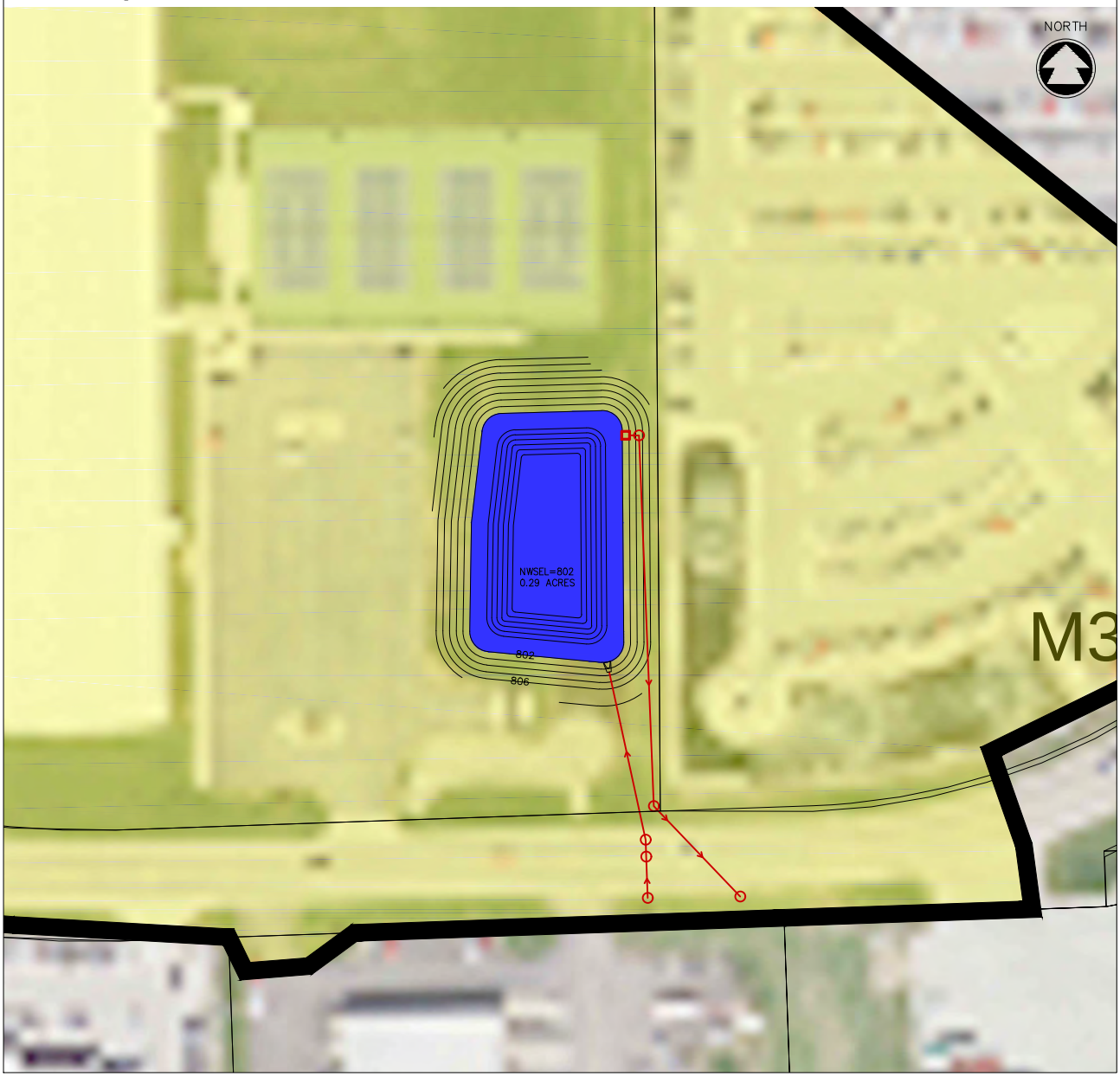
Infrastructure modifications or flow diversions required for retrofit:
DIVERT STORM SEWER FROM VICTORY LN INTO THE POND.

Site access for future BMP maintenance:
ACCESS FROM VICTORY LN.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
HIGH GROUNDWATER, WETLAND POTENTIAL, PRIVATE PROPERTY.

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.29 acre permanent pool	0.65 acres	$179,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-M3m2

McM PROJECT NO: G0003-9-14-00271

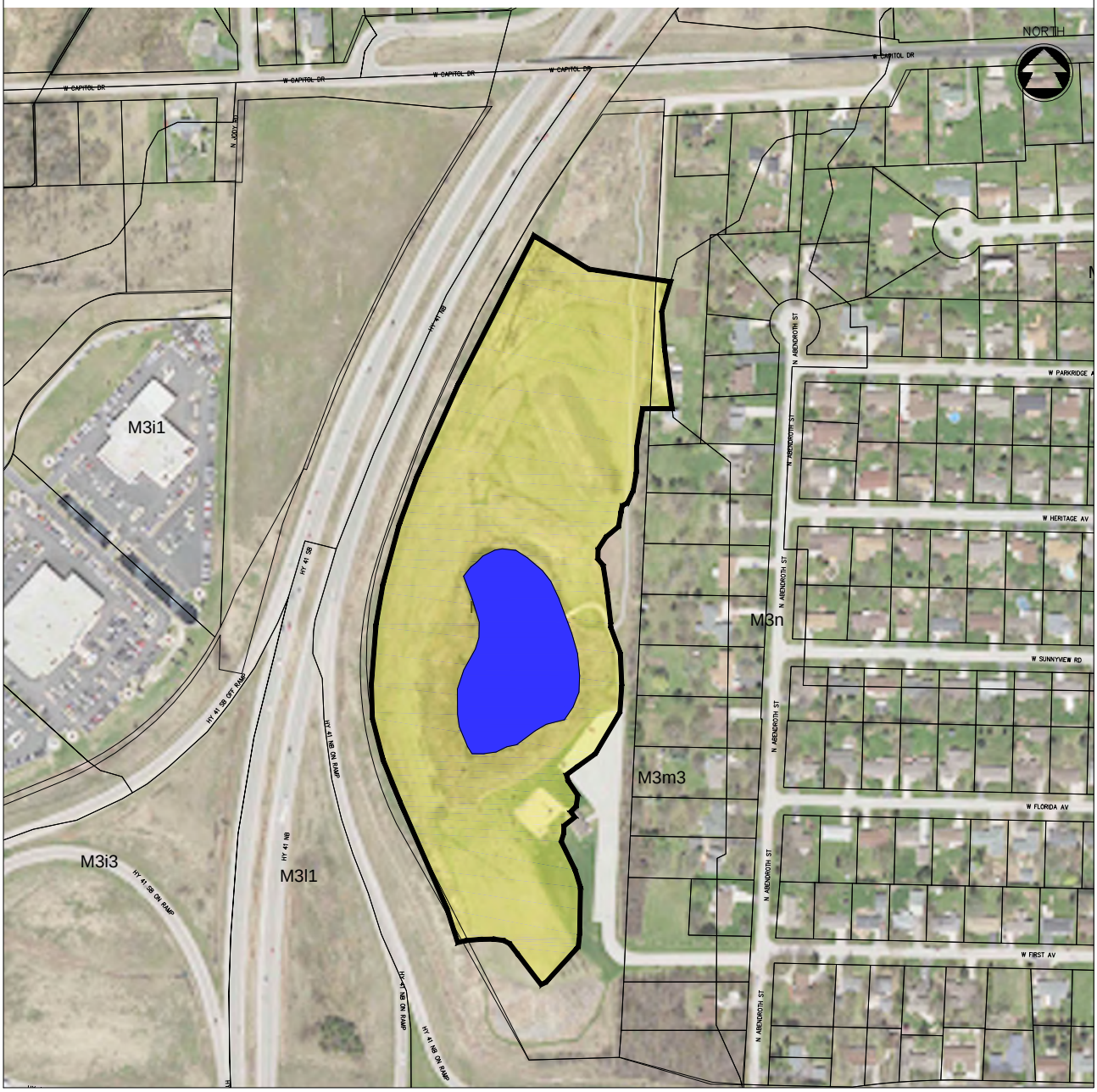
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: PRAIRIE HILL PARK POND	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: MUD CREEK	Tributary Drainage Area IDs: M3m2	Total Drainage Area: 17.8 acres
Imperviousness (Future): 25.2 %	Runoff Curve Number (Future): 72	Water Quality Volume (Future): 0.62 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	>6 ft	Remediation:	☐ Yes ☒ No	Wetland:	☐ Potential ☐ Yes ☒ No
Bedrock Depth (in):	17 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Casco loam	100-Year Floodplain:	☐ Yes ☒ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):

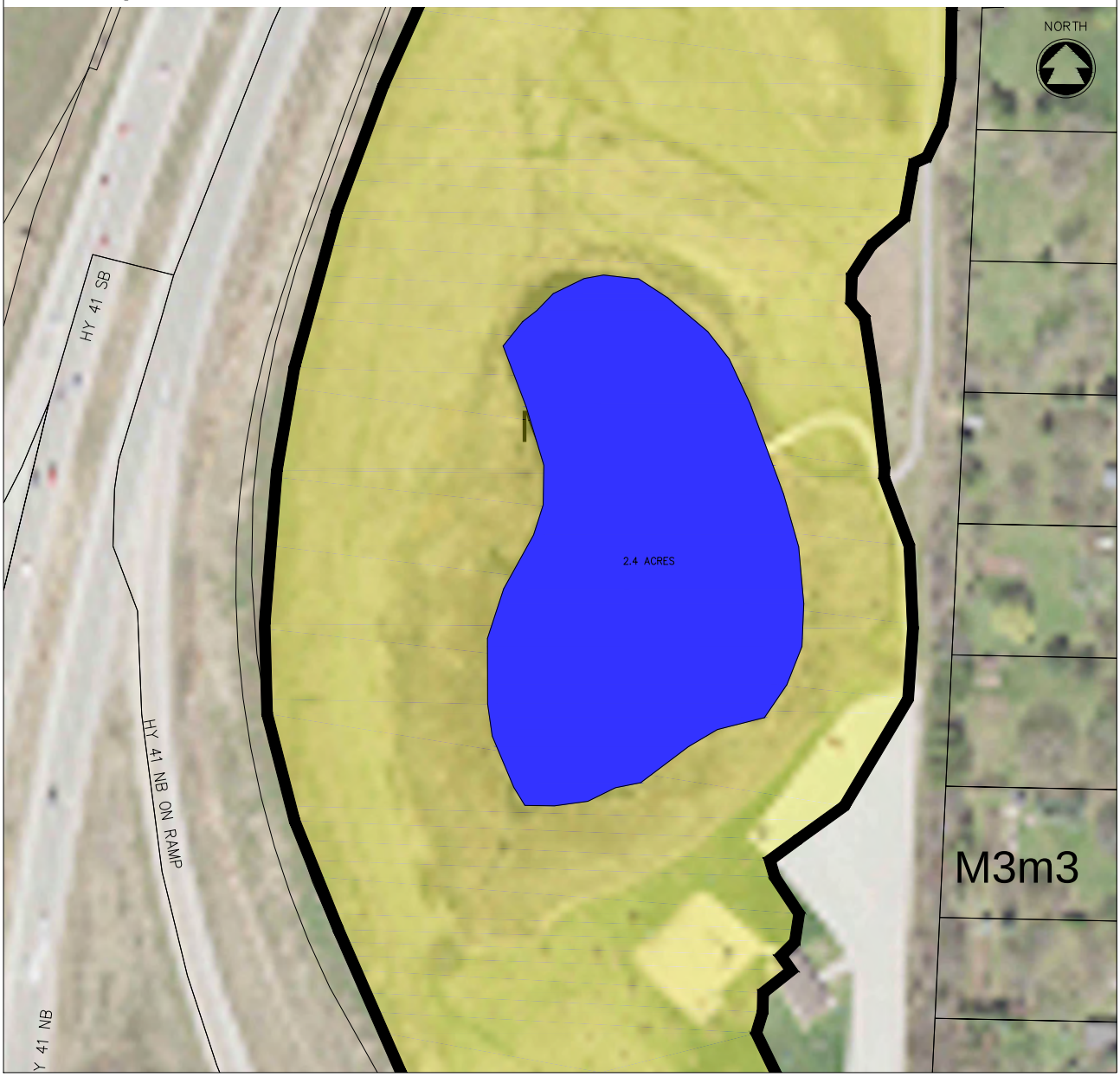
Infrastructure modifications or flow diversions required for retrofit:

Site access for future BMP maintenance:
STORM SEWER EASEMENT

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
HIGH BEDROCK

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
2.4 acre permanent pool	0 acres	$31,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-M3n

McM PROJECT NO: G0003-9-14-00271

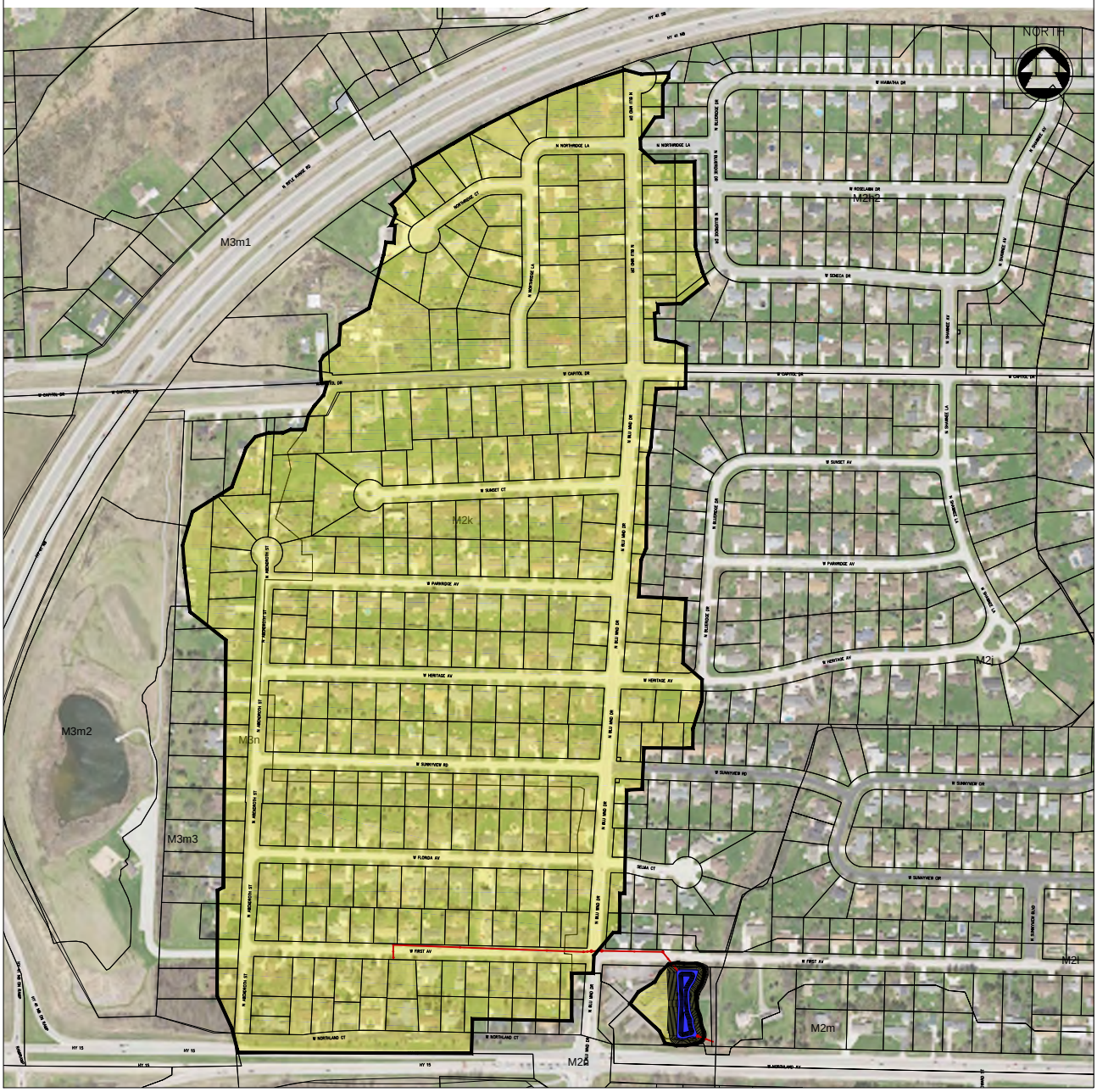
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: FIRST POND	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: MUD CREEK	Tributary Drainage Area IDs: M3n	Total Drainage Area: 119.5 acres
Imperviousness (Future): 35.7 %	Runoff Curve Number (Future): 75	Water Quality Volume (Future): 5.55 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	3.3 ft, 3.3 ft	Remediation:	☐ Yes ☒ No	Wetland:	☐ Potential ☐ Yes ☒ No
Bedrock Depth (in):	>78 in, >78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Grays silt loam, Briggsville silt loam	100-Year Floodplain:	☒ Yes ☐ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
STORM SEWER OUTFALL TO THE EAST STREAM.

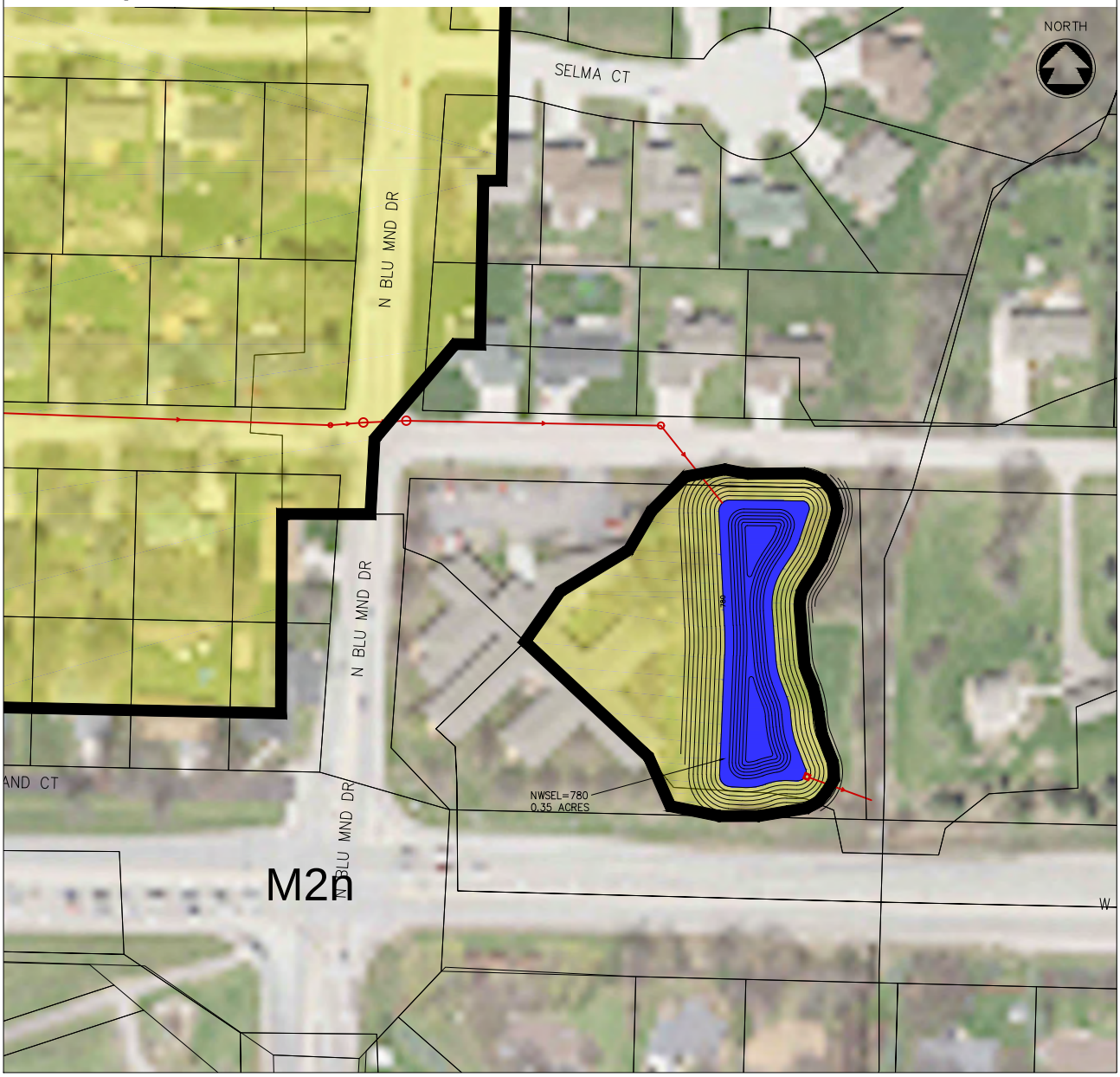
Infrastructure modifications or flow diversions required for retrofit:
DIVERT STORM SEWER FROM 1ST AVE INTO THE POND.

Site access for future BMP maintenance:
ACCESS FROM 1ST AVE.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
HIGH GROUNDWATER, FLOODPLAIN, PRIVATE PROPERTY.

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.35 acre permanent pool	1.13acres	$370,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-M4b2

McM PROJECT NO: G0003-9-14-00271

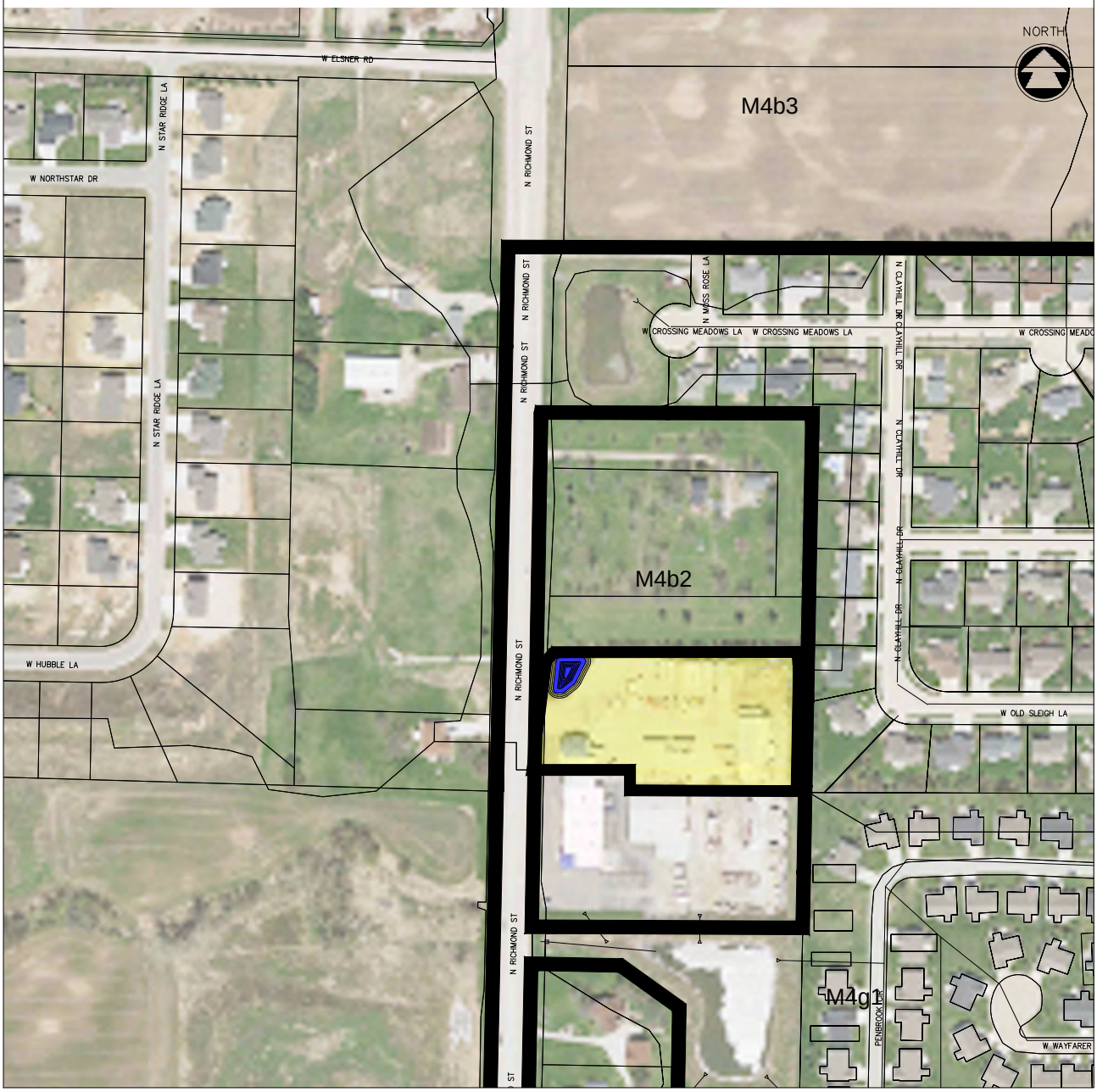
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: CONSOLIDATED CONSTRUCTION	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: MUD CREEK	Tributary Drainage Area IDs: M4b2	Total Drainage Area: 2.6 acres
Imperviousness (Future): 79.0 %	Runoff Curve Number (Future): 94	Water Quality Volume (Future): 0.25 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	5.4 ft	Remediation:	☐ Yes ☒ No	Wetland:	☐ Potential ☐ Yes ☒ No
Bedrock Depth (in):	29 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Kewaunee silt loam	100-Year Floodplain:	☐ Yes ☒ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
STORM SEWER OUTFALL TO RICHMOND ST DITCH.

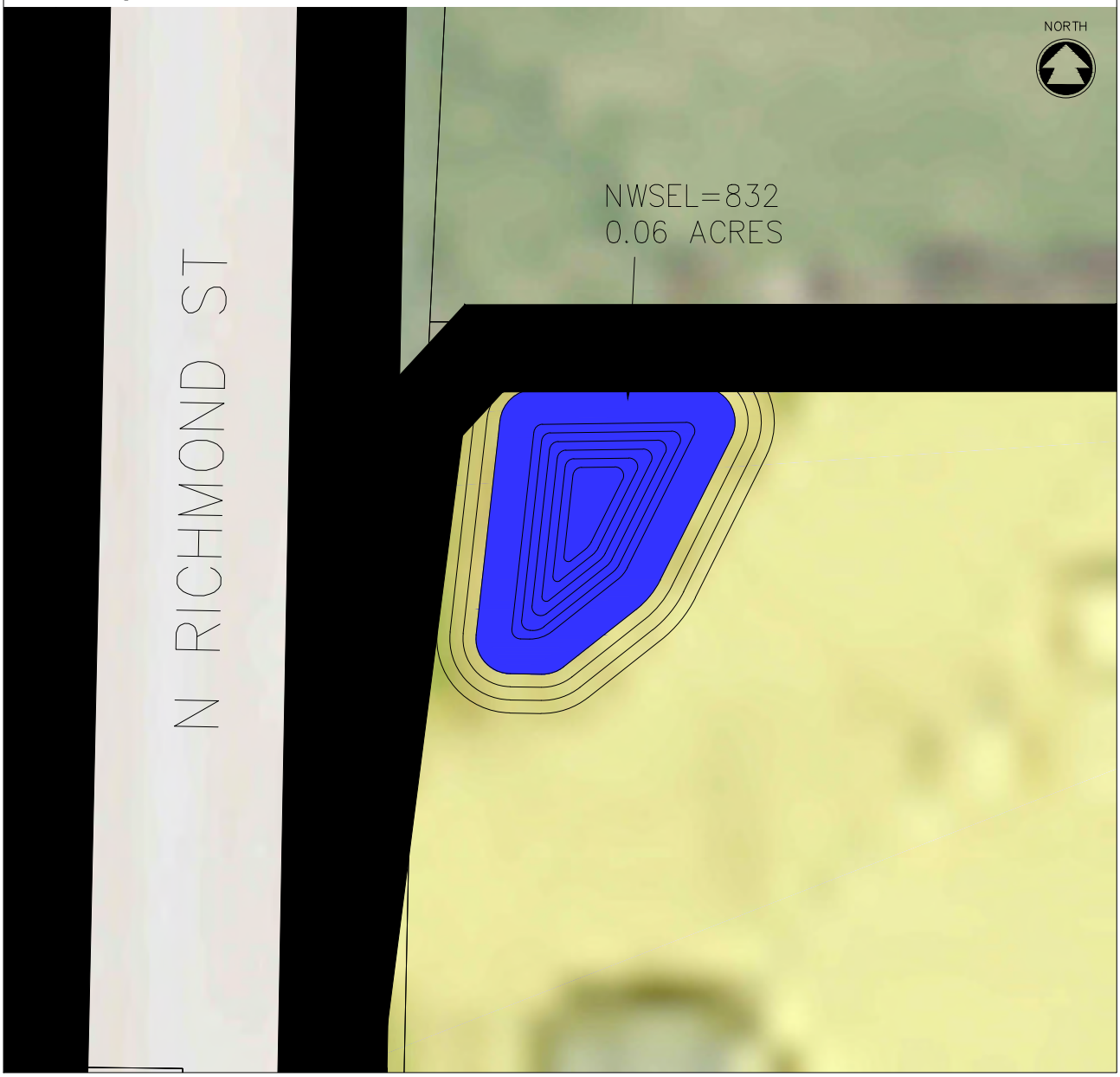
Infrastructure modifications or flow diversions required for retrofit:

Site access for future BMP maintenance:
ACCESS FROM RICHMOND ST.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
HIGH GROUNDWATER, HIGH BEDROCK, PRIVATE PROPERTY.

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.06 acre permanent pool	0.15 acres	$44,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-M4f1-1

McM PROJECT NO: G0003-9-14-00271

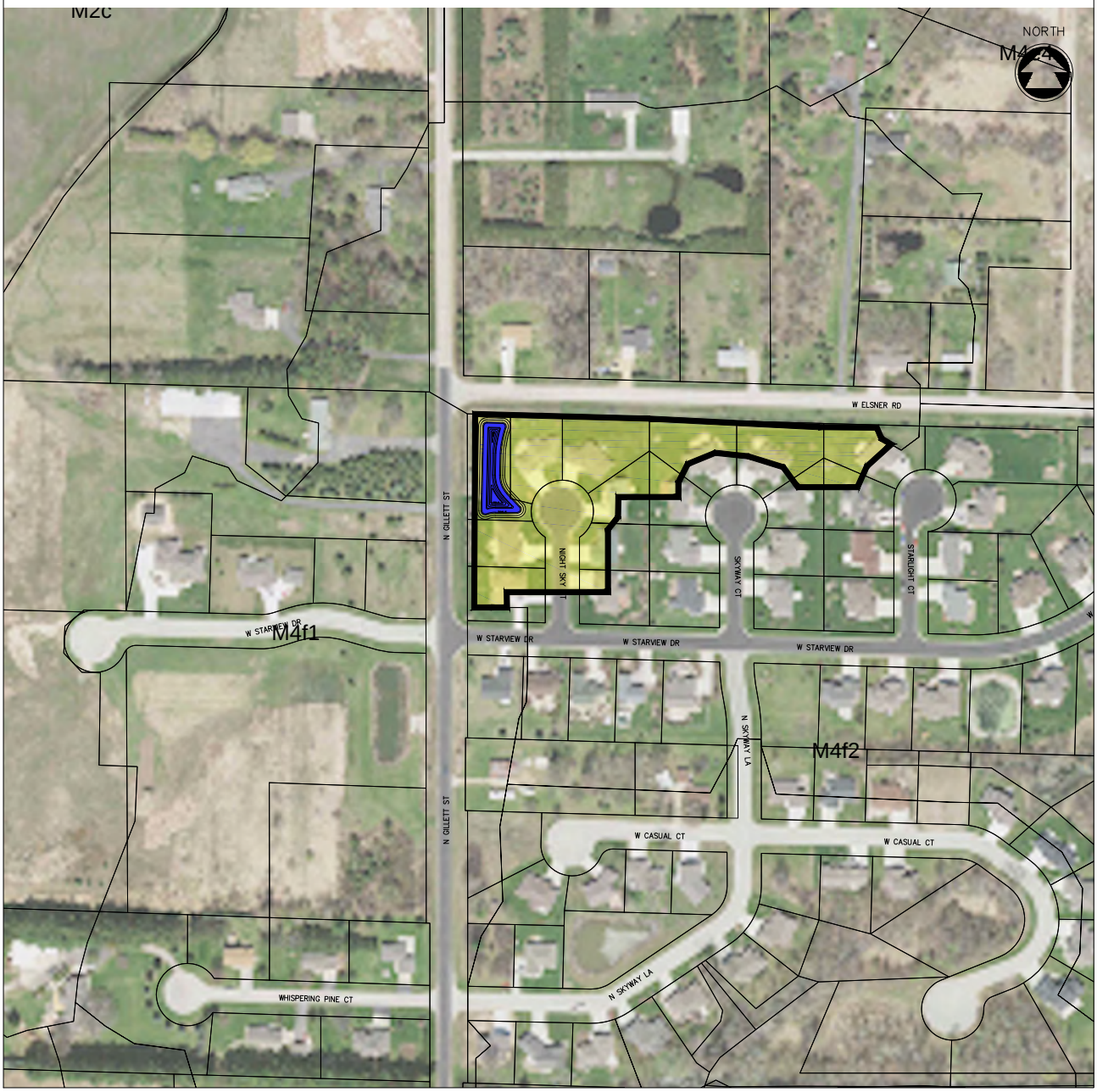
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: STARVIEW HEIGHTS WEST	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: MUD CREEK	Tributary Drainage Area IDs: M4f1-1	Total Drainage Area: 3.3 acres
Imperviousness (Future): 37.7 %	Runoff Curve Number (Future): 84	Water Quality Volume (Future): 0.16 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	0 ft	Remediation:	☐ Yes ☒ No	Wetland:	☐ Potential ☐ Yes ☒ No
Bedrock Depth (in):	>78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Shioctin silt loam	100-Year Floodplain:	☐ Yes ☒ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):

Infrastructure modifications or flow diversions required for retrofit:
DIVERT STORM SEWER FROM NIGHT SKY CT INTO THE POND.

Site access for future BMP maintenance:
ACCESS FROM GILLETT ST.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
HIGH GROUNDWATER, PRIVATE PROPERTY.

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.16 acre permanent pool	0.42 acres	$70,000

Sketch of Proposed BMP Retrofit:

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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-M4i

McM PROJECT NO: G0003-9-14-00271

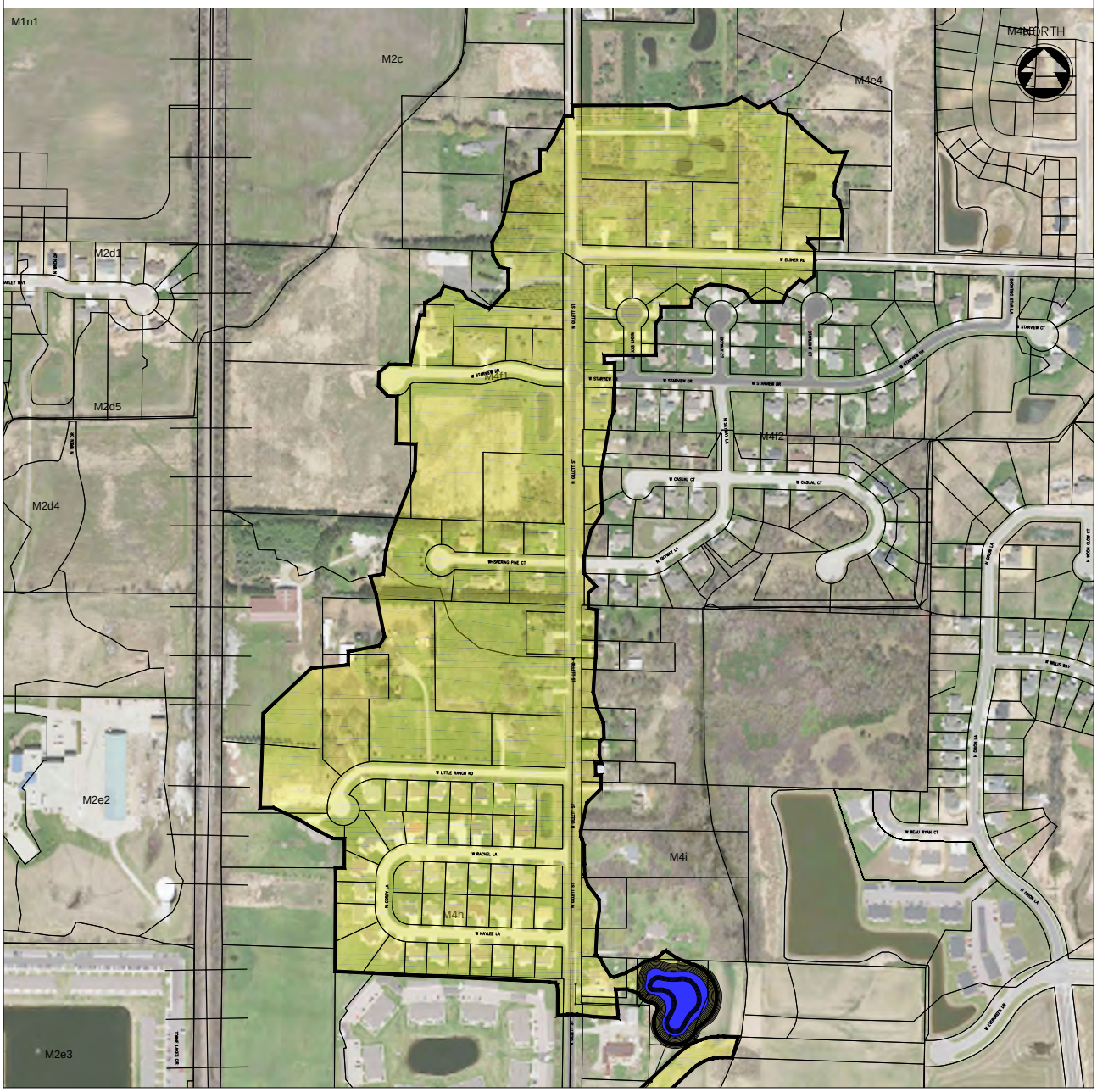
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: GILLETT STREET POND	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: Mud Creek	Tributary Drainage Area IDs: M4i	Total Drainage Area: 78.0 acres
Imperviousness (Future): 24.5 %	Runoff Curve Number (Future): 77	Water Quality Volume (Future): 2.64 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	1.6 ft	Remediation:	☐ Yes ☒ No	Wetland:	☒ Potential ☐ Yes ☐ No
Bedrock Depth (in):	>78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Mundelein silt loam	100-Year Floodplain:	☒ Yes ☐ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
Storm sewer from the pond west into future urbanization storm sewer.

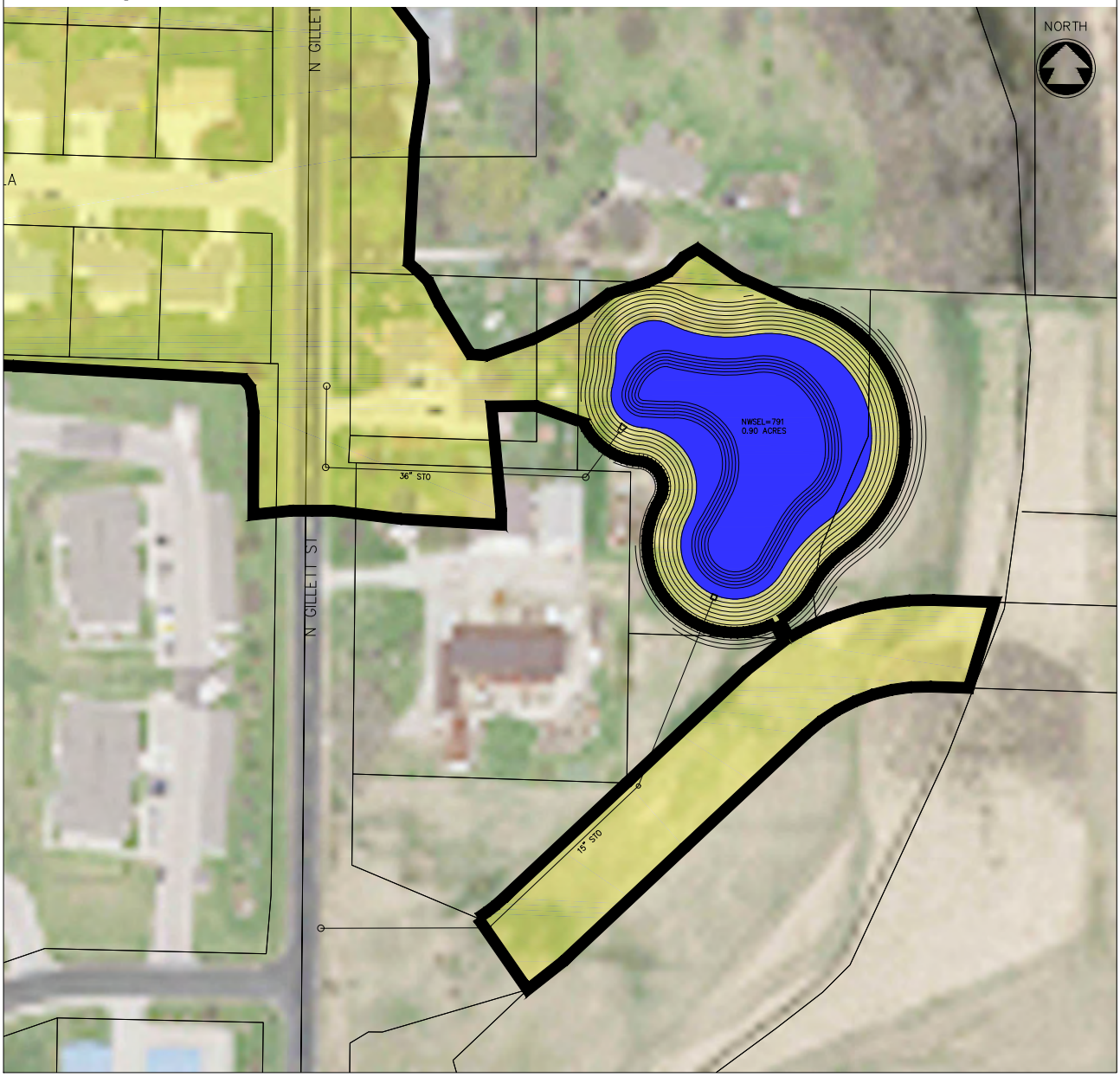
Infrastructure modifications or flow diversions required for retrofit:
Storm sewer from future ubanization storm sewer from Gillett Street to the proposed pond>

Site access for future BMP maintenance:
ACCESS FROM GILLETT ST.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
HIGH GROUNDWATER, WETLAND POTENTIAL, FLOODPLAIN, PRIVATE PROPERTY.

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.90 acre permanent pool	2.43 acres	$427,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-M4l2

McM PROJECT NO: G0003-9-14-00271

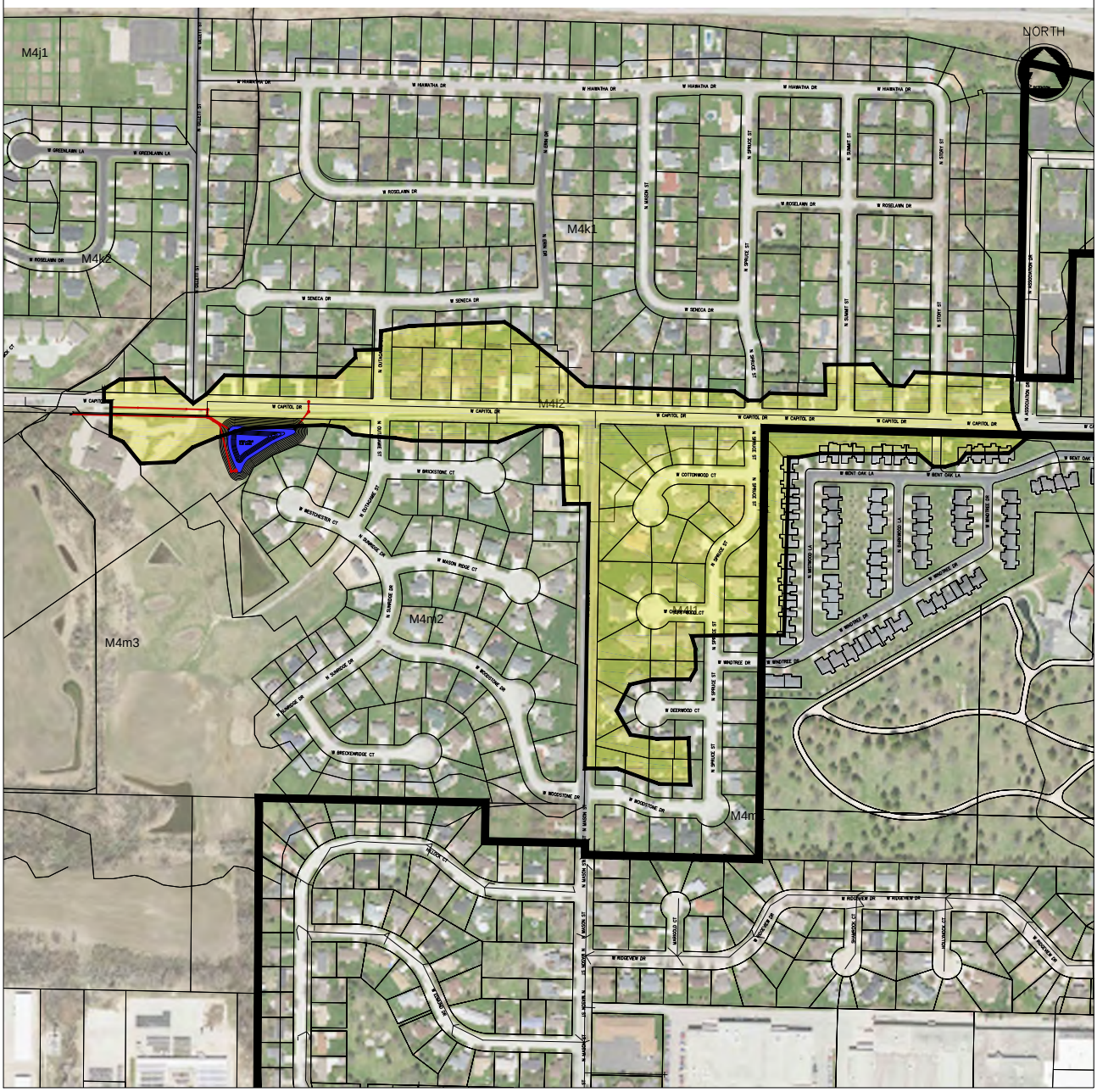
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: CAPITOL POND	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: MUD CREEK	Tributary Drainage Area IDs: M4l2	Total Drainage Area: 30.5 acres
Imperviousness (Future): 40.5 %	Runoff Curve Number (Future): 86	Water Quality Volume (Future): 1.58 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	0 ft, 5.8 ft	Remediation:	☐ Yes ☒ No	Wetland:	☒ Potential ☐ Yes ☐ No
Bedrock Depth (in):	>78 in, >78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Shiocton silt loam, Nichols very fine sandy loam	100-Year Floodplain:	☐ Yes ☒ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
STORM SEWER OUTFALL TO THE NORTHWEST STREAM.

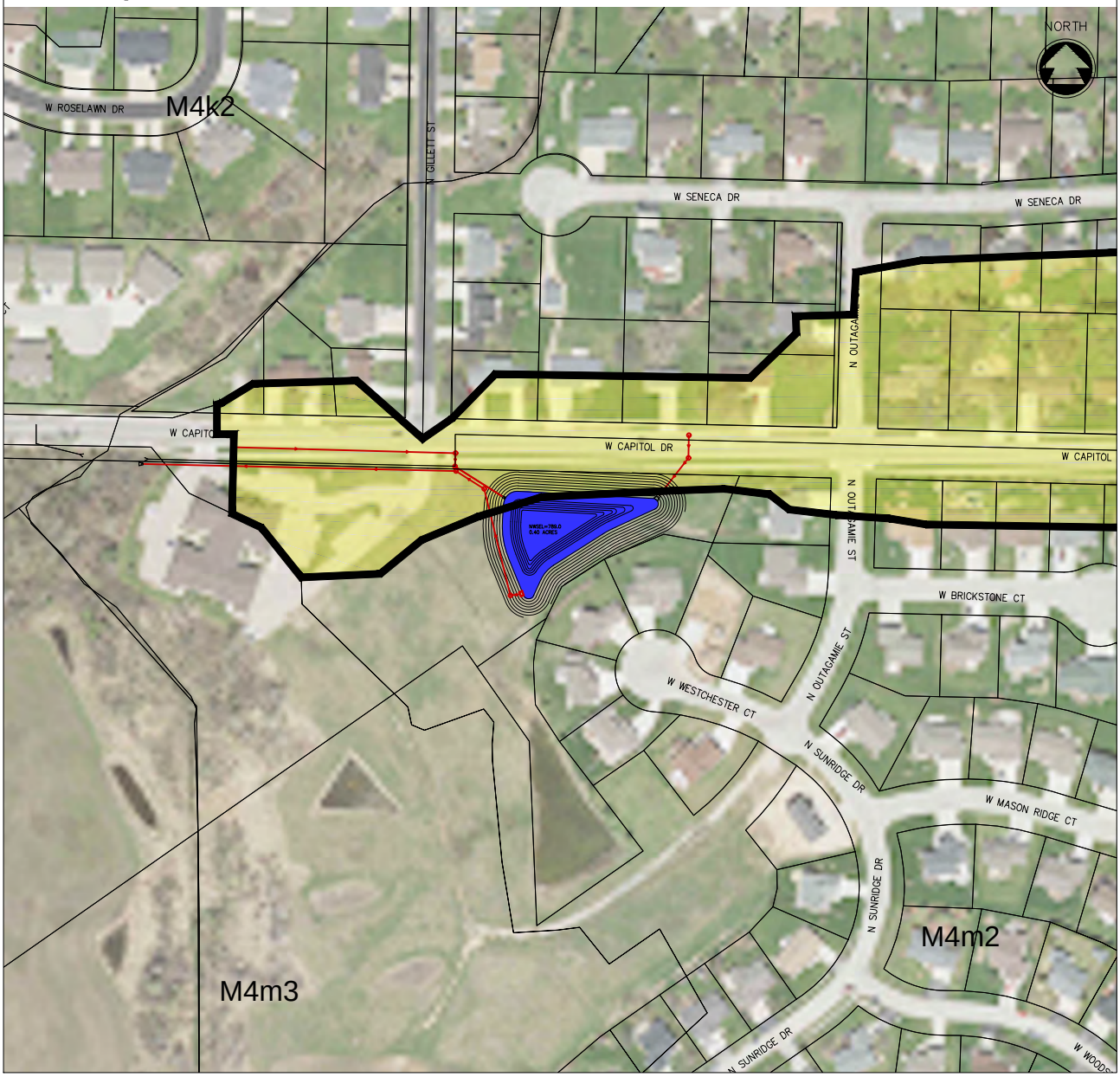
Infrastructure modifications or flow diversions required for retrofit:
DIVERT STORM SEWER FROM CAPITOL DR INTO THE POND.

Site access for future BMP maintenance:
ACCESS FROM CAPITOL DR.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
HIGH GROUNDWATER, WETLAND POTENTIAL, PRIVATE PROPERTY.

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.40 acre permanent pool	1.15 acres	$338,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-M4m4

McM PROJECT NO: G0003-9-14-00271

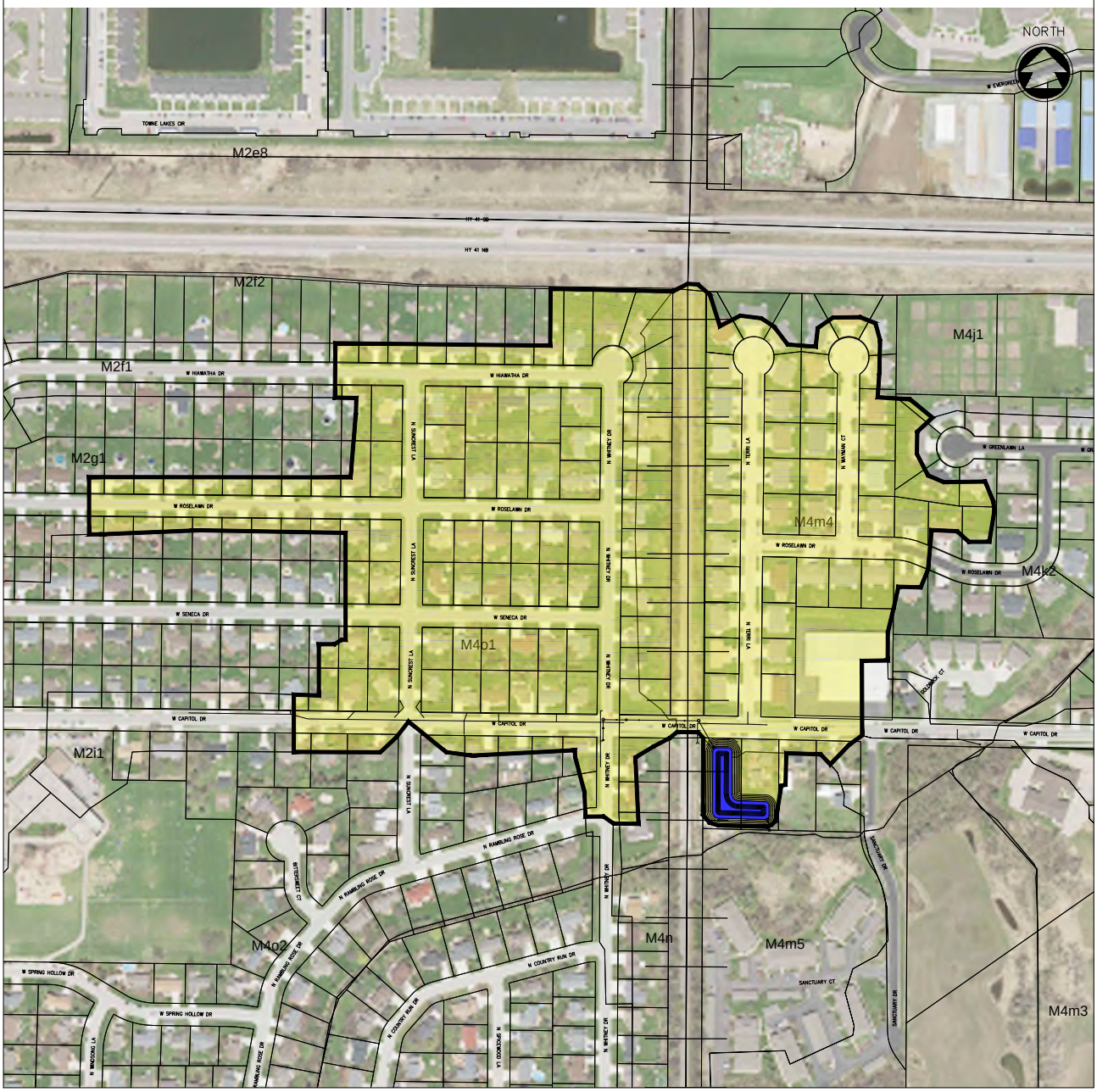
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: WHITNEY POND	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: MUD CREEK	Tributary Drainage Area IDs: M4m4	Total Drainage Area: 53.2 acres
Imperviousness (Future): 38.1 %	Runoff Curve Number (Future): 77	Water Quality Volume (Future): 2.61 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	0 ft, 0 ft	Remediation:	☐ Yes ☒ No	Wetland:	☒ Potential ☐ Yes ☐ No
Bedrock Depth (in):	>78 in, >78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Shiocton silt loam, Keowns silt loam	100-Year Floodplain:	☒ Yes ☐ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
STORM SEWER OUTFALL TO THE SOUTH STREAM.

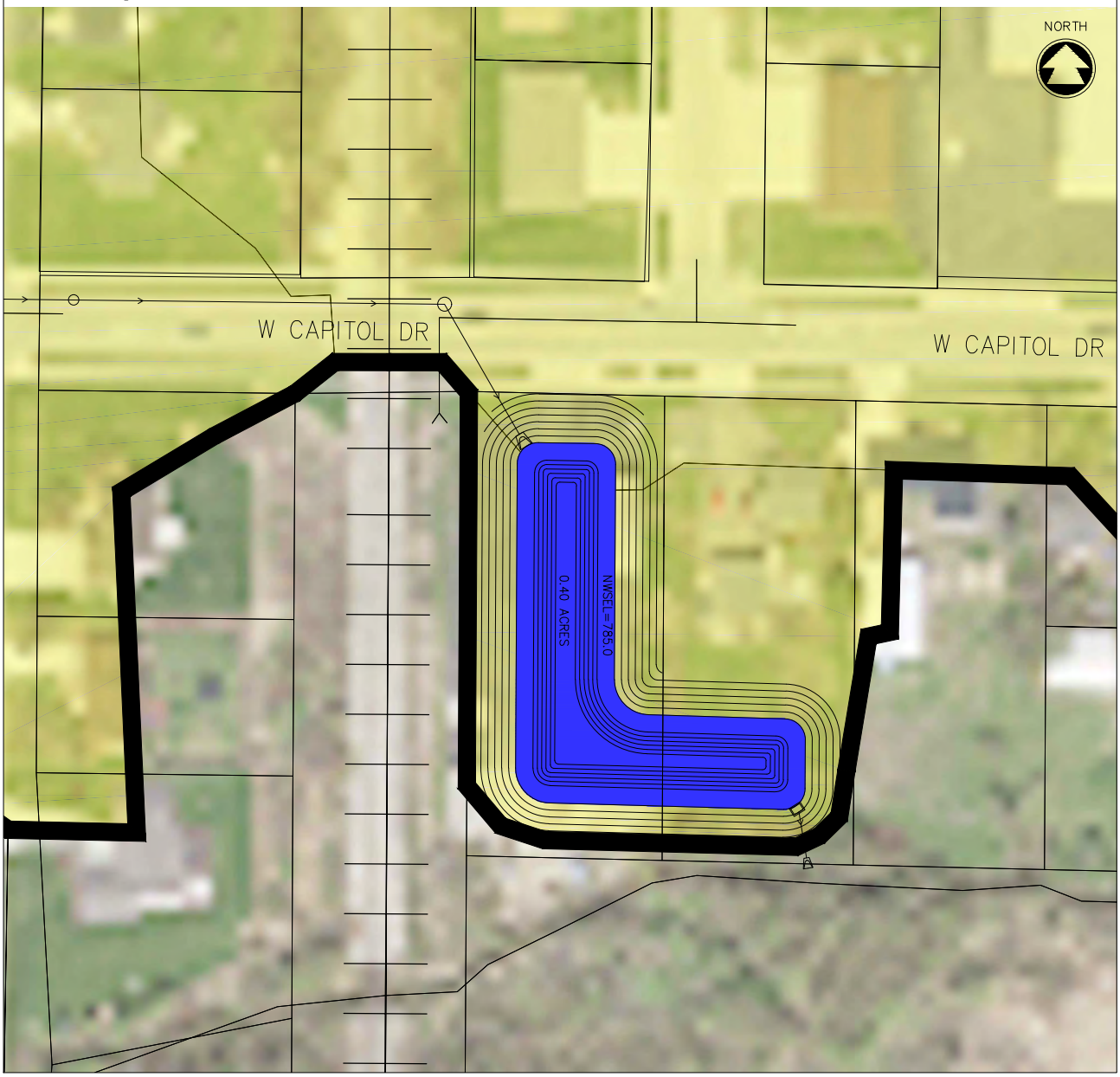
Infrastructure modifications or flow diversions required for retrofit:
DIVERT STORM SEWER FROM CAPITOL DRIVE INTO THE POND.

Site access for future BMP maintenance:
ACCESS FROM CAPITOL DRIVE.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
HIGH GROUNDWATER, FLOODPLAIN, PRIVATE PROPERTY, WETLAND POTENTIAL.

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.40 acre permanent pool	0.96 acres	$283,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-M4o2

McM PROJECT NO: G0003-9-14-00271

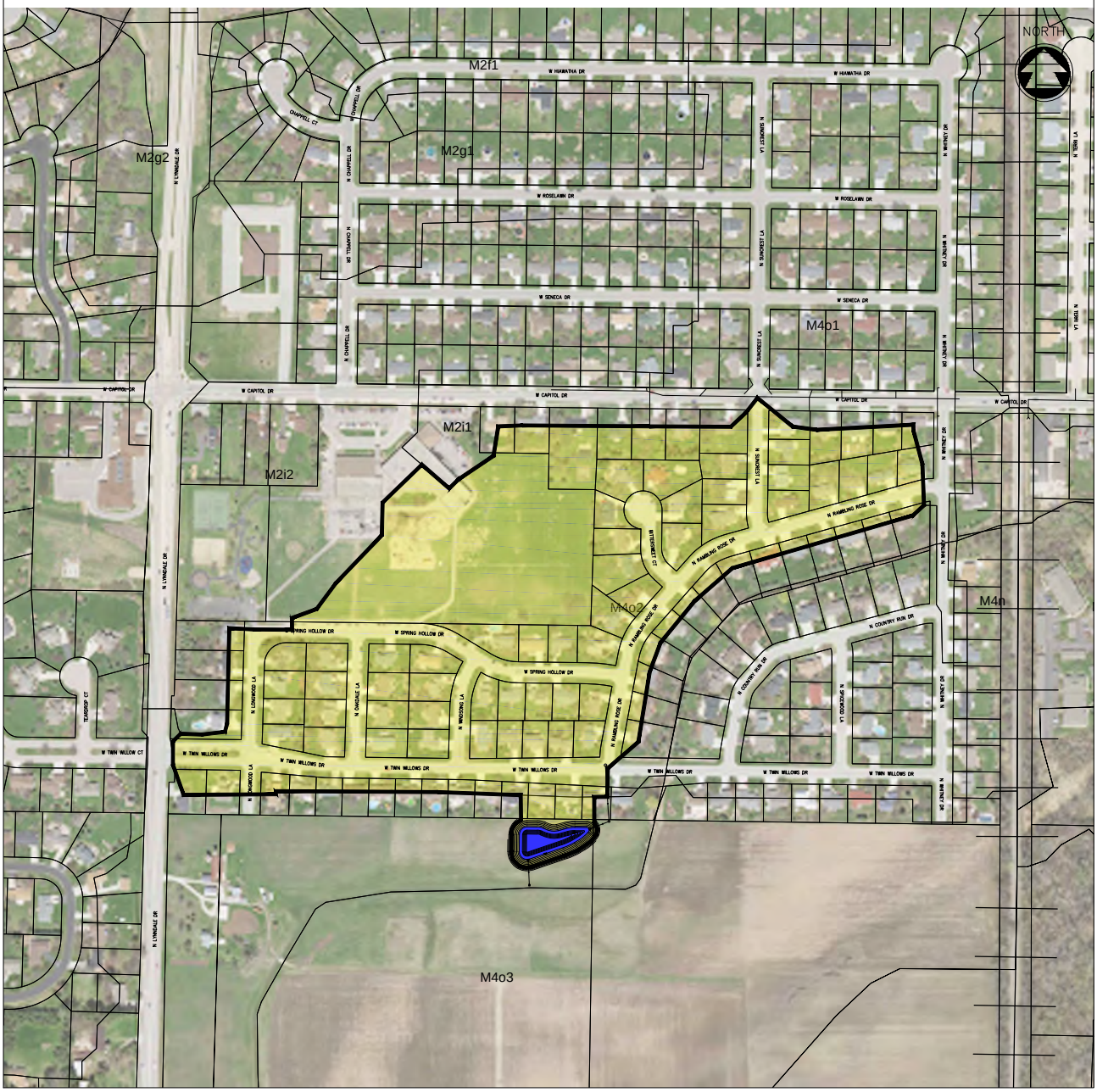
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: TWIN WILLOWS POND	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: MUD CREEK	Tributary Drainage Area IDs: M4o2	Total Drainage Area: 37.4 acres
Imperviousness (Future): 34.8 %	Runoff Curve Number (Future): 71	Water Quality Volume (Future): 1.70 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	5.8 ft	Remediation:	☐ Yes ☒ No	Wetland:	☐ Potential ☐ Yes ☒ No
Bedrock Depth (in):	>78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Rosseau loamy fine sand	100-Year Floodplain:	☒ Yes ☐ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
STORM SEWER OUTFALL TO THE SOUTH STREAM.

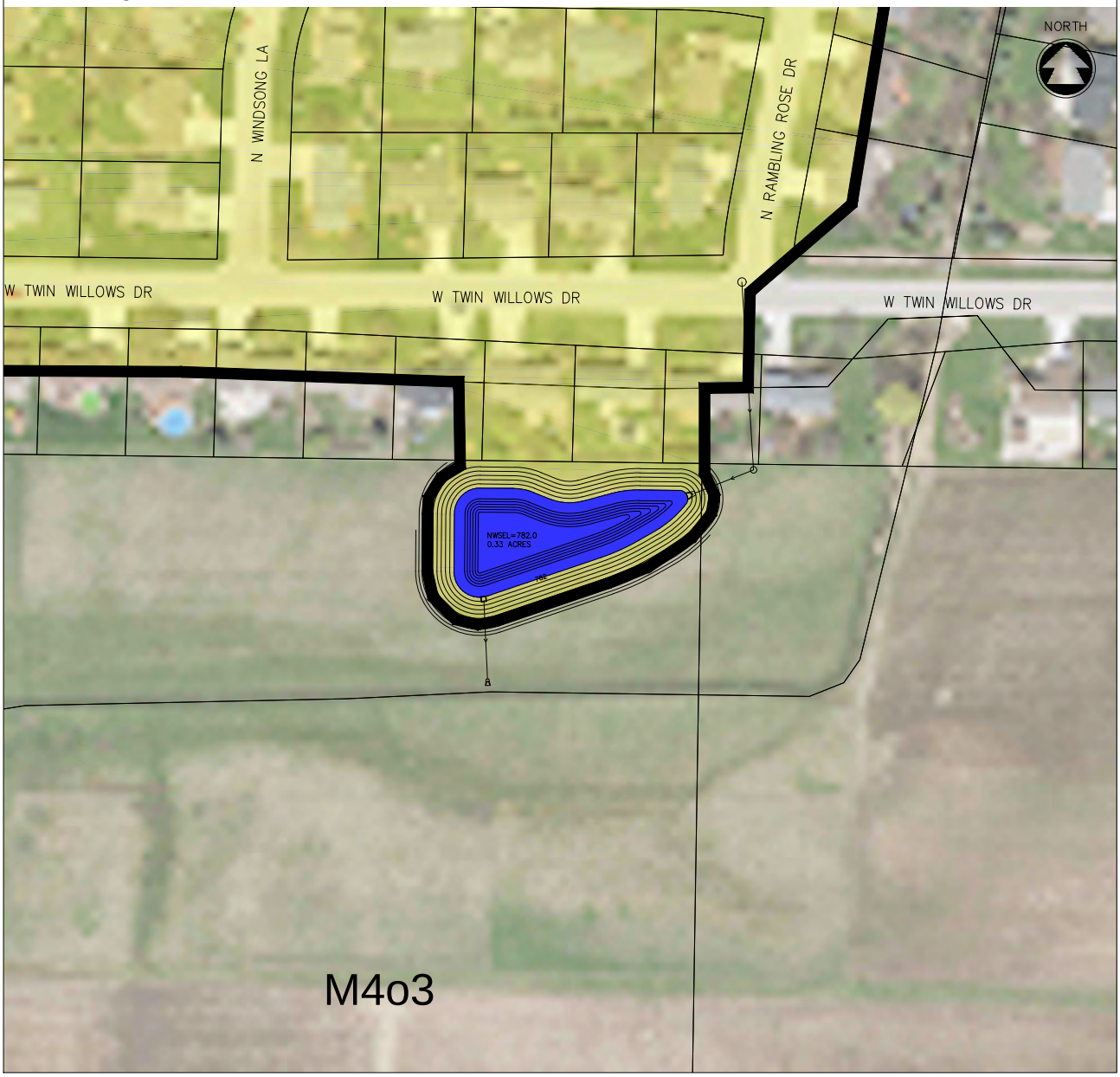
Infrastructure modifications or flow diversions required for retrofit:
DIVERT STORM SEWER FROM TWIN WILLOWS DR INTO THE POND.

Site access for future BMP maintenance:
ACCESS THROUGH STORM WATER EASEMENT.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
FLOODPLAIN, PRIVATE PROPERTY.

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.33 acre permanent pool	1.21 acres	$195,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-M4q1

McM PROJECT NO: G0003-9-14-00271

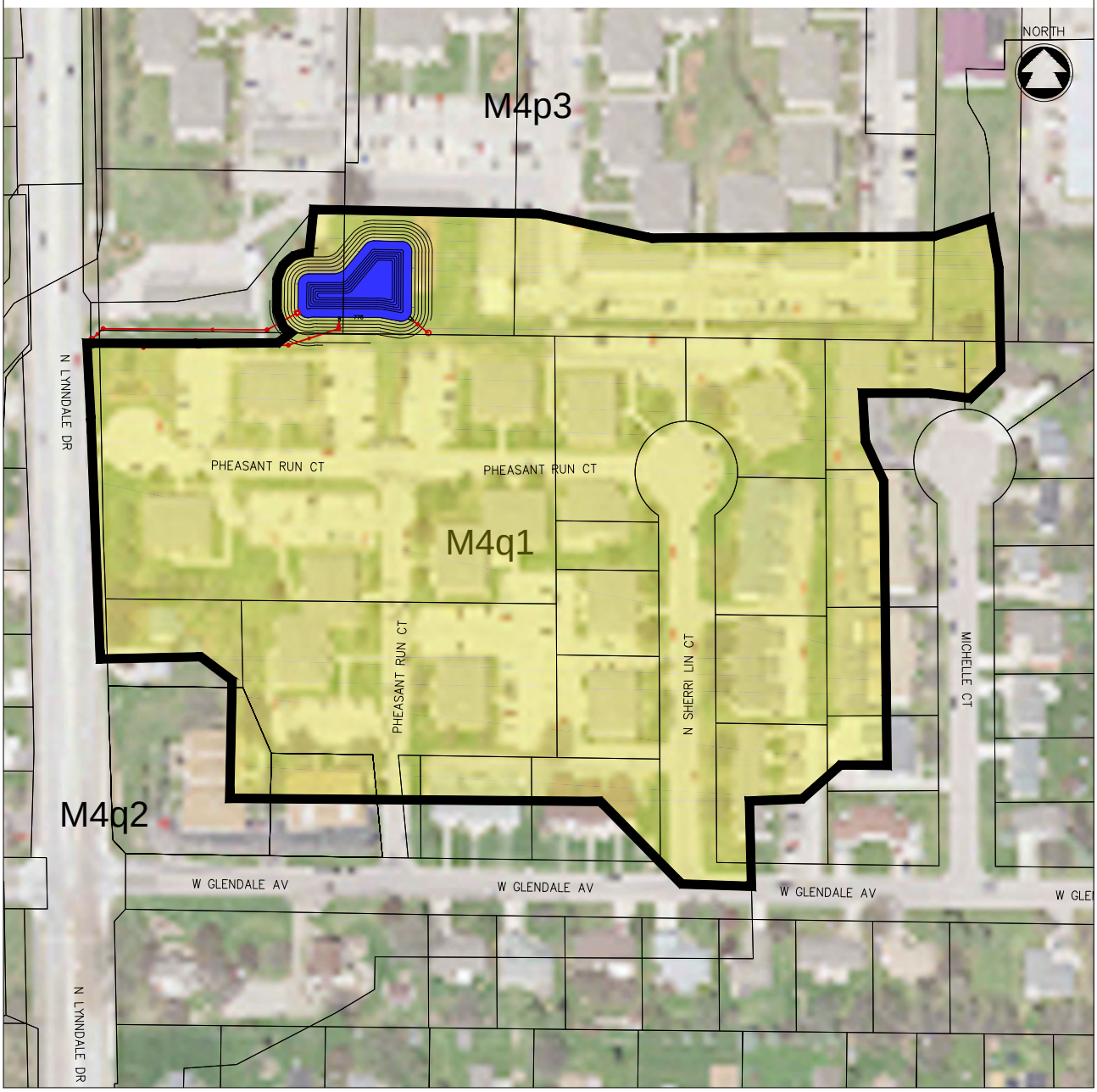
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: PHEASANT RUN POND	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: MUD CREEK	Tributary Drainage Area IDs: M4q1	Total Drainage Area: 13.7 acres
Imperviousness (Future): 54.3 %	Runoff Curve Number (Future): 81	Water Quality Volume (Future): 0.92 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	3.3 ft	Remediation:	☐ Yes ☒ No	Wetland:	☐ Potential ☐ Yes ☒ No
Bedrock Depth (in):	>78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Grays silt loam	100-Year Floodplain:	☒ Yes ☐ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
STORM SEWER OUTFALL TO LYNNDALE DRIVE.

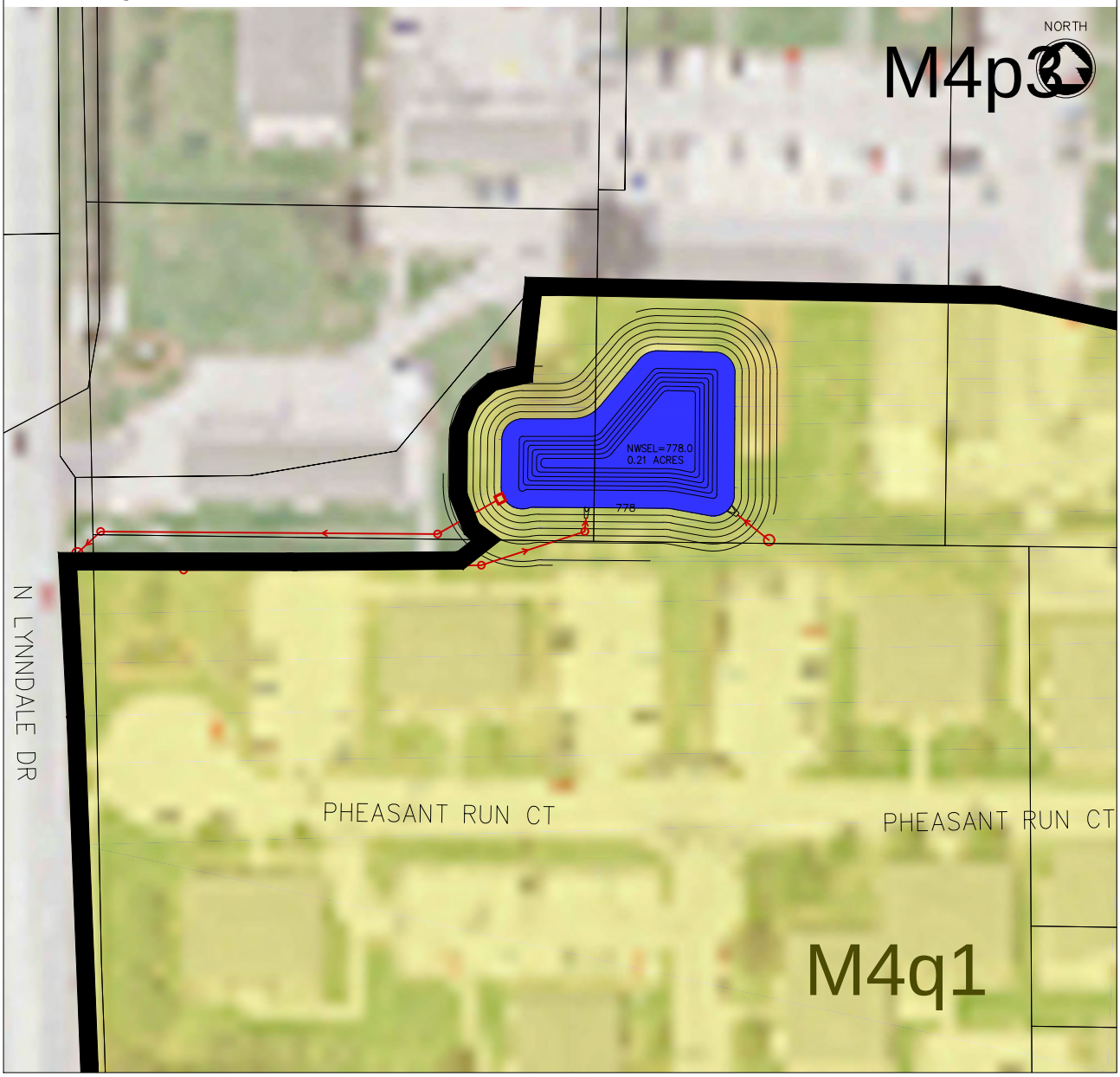
Infrastructure modifications or flow diversions required for retrofit:
DIVERT STORM SEWER FROM PHEASANT RUN CT REAR LOT LINE INTO THE POND.

Site access for future BMP maintenance:
ACESS FROM STORM SEWER EASEMENT.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
FLOODPLAIN, PRIVATE PROPERTY, HIGH GROUNDWATER.

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.21 acre permanent pool	0.54 acres	$185,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-M4u

McM PROJECT NO: G0003-9-14-00271

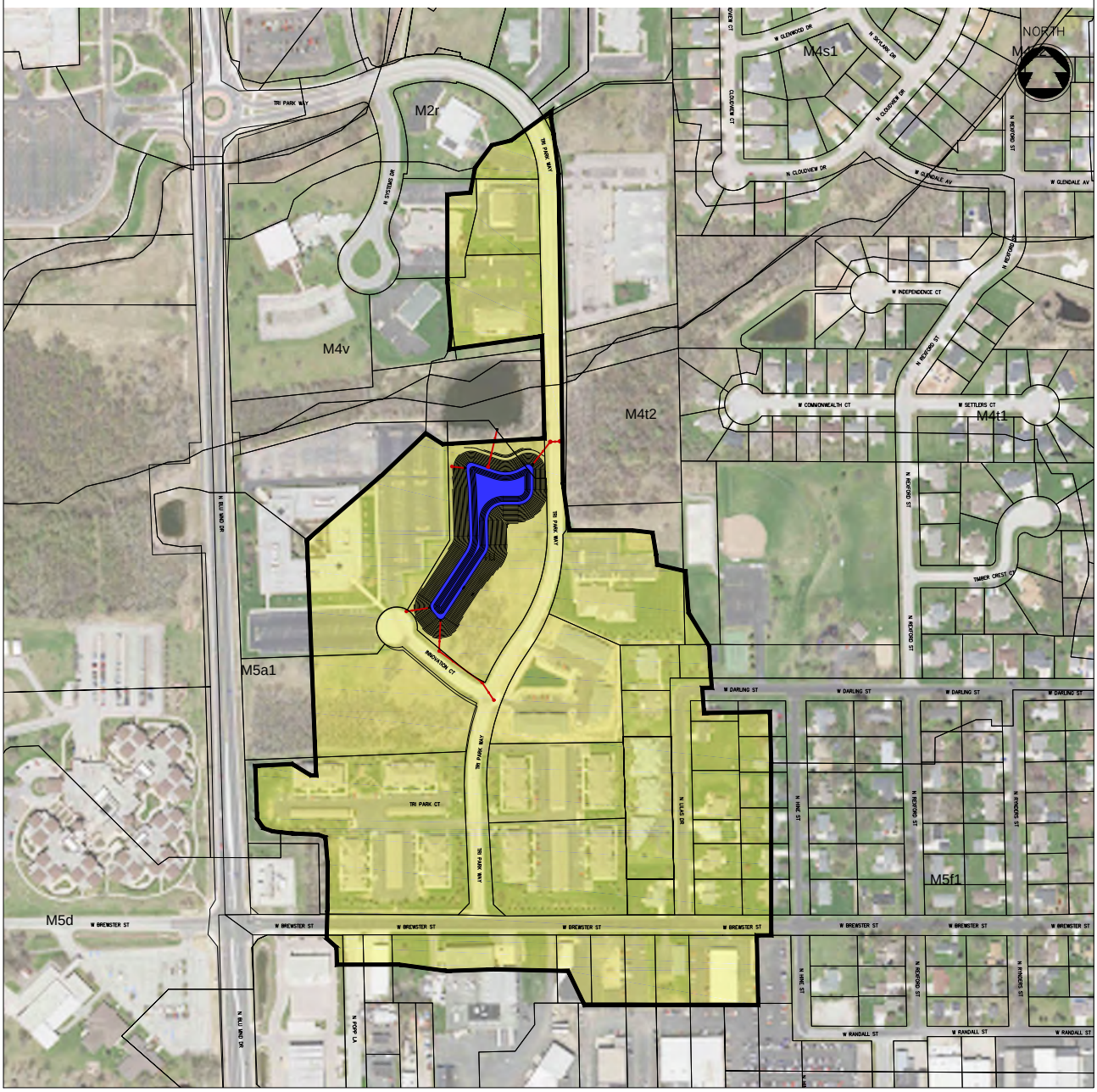
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: TRI-PARK POND	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: MUD CREEK	Tributary Drainage Area IDs: M4u	Total Drainage Area: 46.6 acres
Imperviousness (Future): 65.3 %	Runoff Curve Number (Future): 85	Water Quality Volume (Future): 3.71acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	3.3 ft, 5.8 ft	Remediation:	☐ Yes ☒ No	Wetland:	☐ Potential ☐ Yes ☒ No
Bedrock Depth (in):	>78 in, >78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Grays silt loam, Nichols very fine sandy loam	100-Year Floodplain:	☐ Yes ☒ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
STORM SEWER OUTFALL TO THE NORTH STREAM.

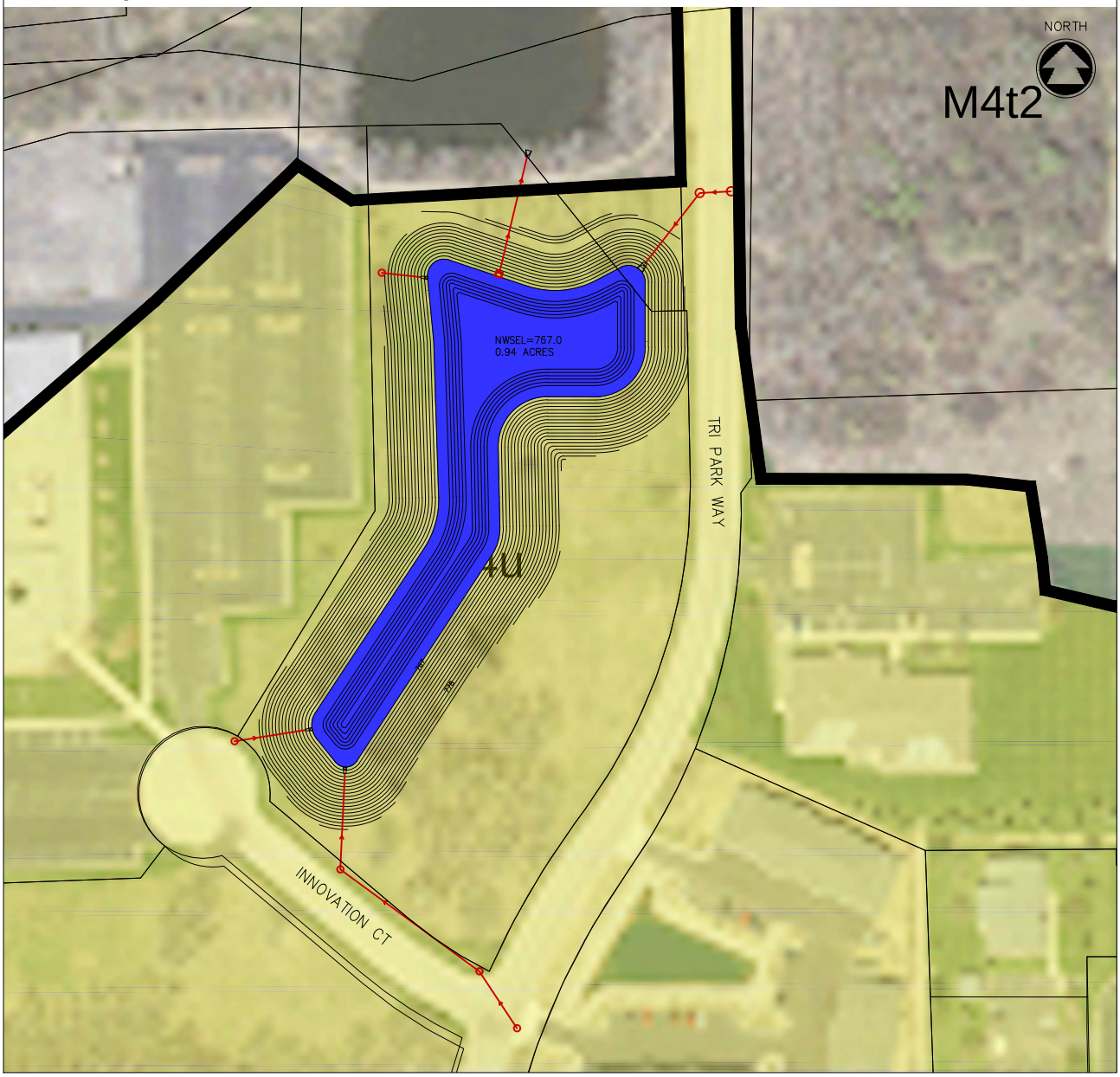
Infrastructure modifications or flow diversions required for retrofit:
DIVERT STORM SEWER FROM TRI PARK WAY AND INNOVATION CT INTO THE POND.

Site access for future BMP maintenance:
ACCESS FROM TRI PARK WAY OR INNOVATION CT.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
HIGH GROUNDWATER, PRIVATE PROPERTY.

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.94 acre permanent pool	3.0 acres	$722,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-M5f3

McM PROJECT NO: G0003-9-14-00271

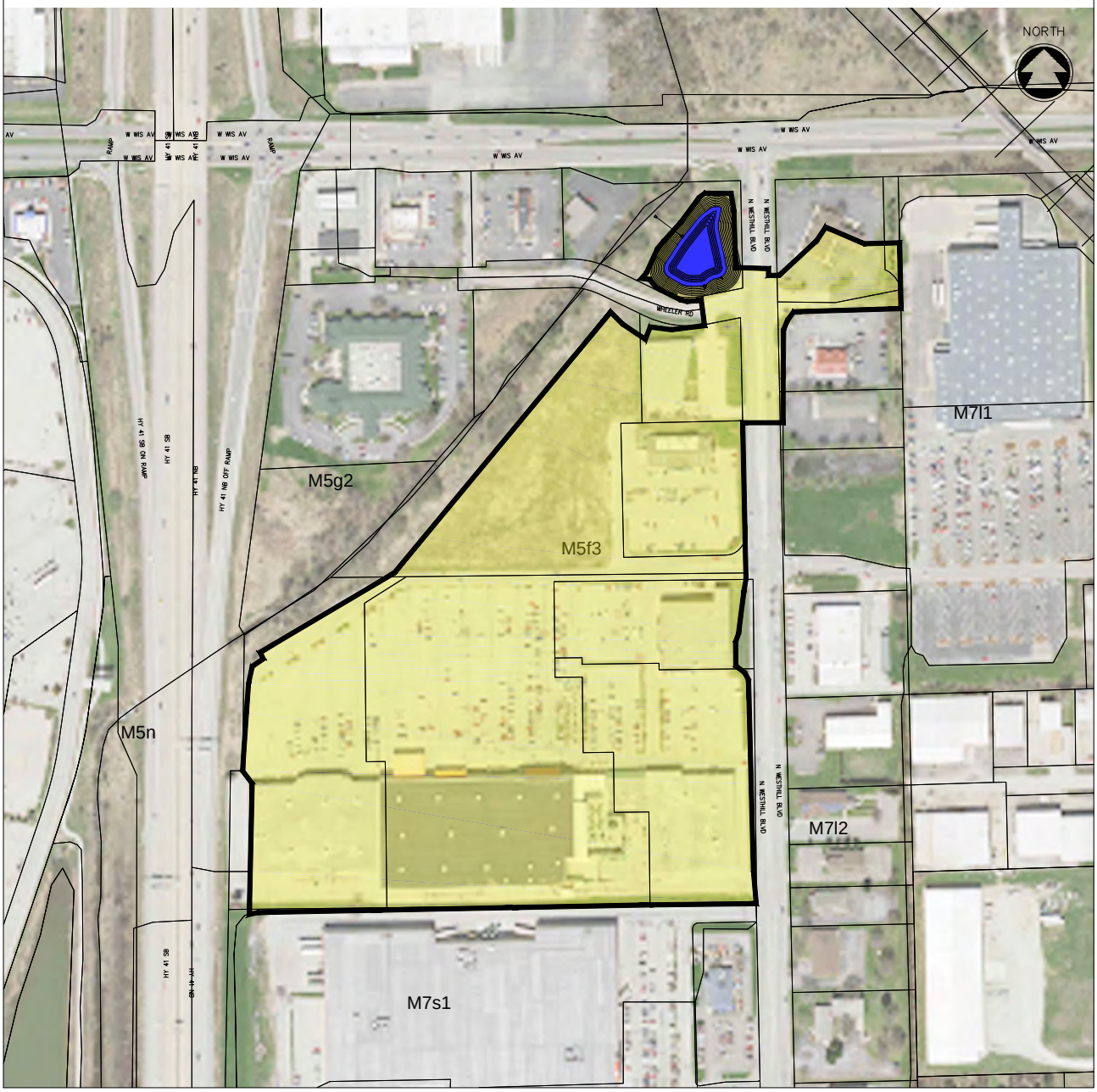
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: WESTHILL POND	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: Mud Creek	Tributary Drainage Area IDs: M5f3	Total Drainage Area: 30.1 acres
Imperviousness (Future): 89.2 %	Runoff Curve Number (Future): 95	Water Quality Volume (Future): 3.21 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	0 ft, 5.8 ft	Remediation:	☐ Yes ☒ No	Wetland:	☒ Potential ☐ Yes ☐ No
Bedrock Depth (in):	>78 in, >78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Fluvaquents, Kewaunee	100-Year Floodplain:	☐ Yes ☒ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
STORM SEWER OUTFALL TO THE WEST STREAM.

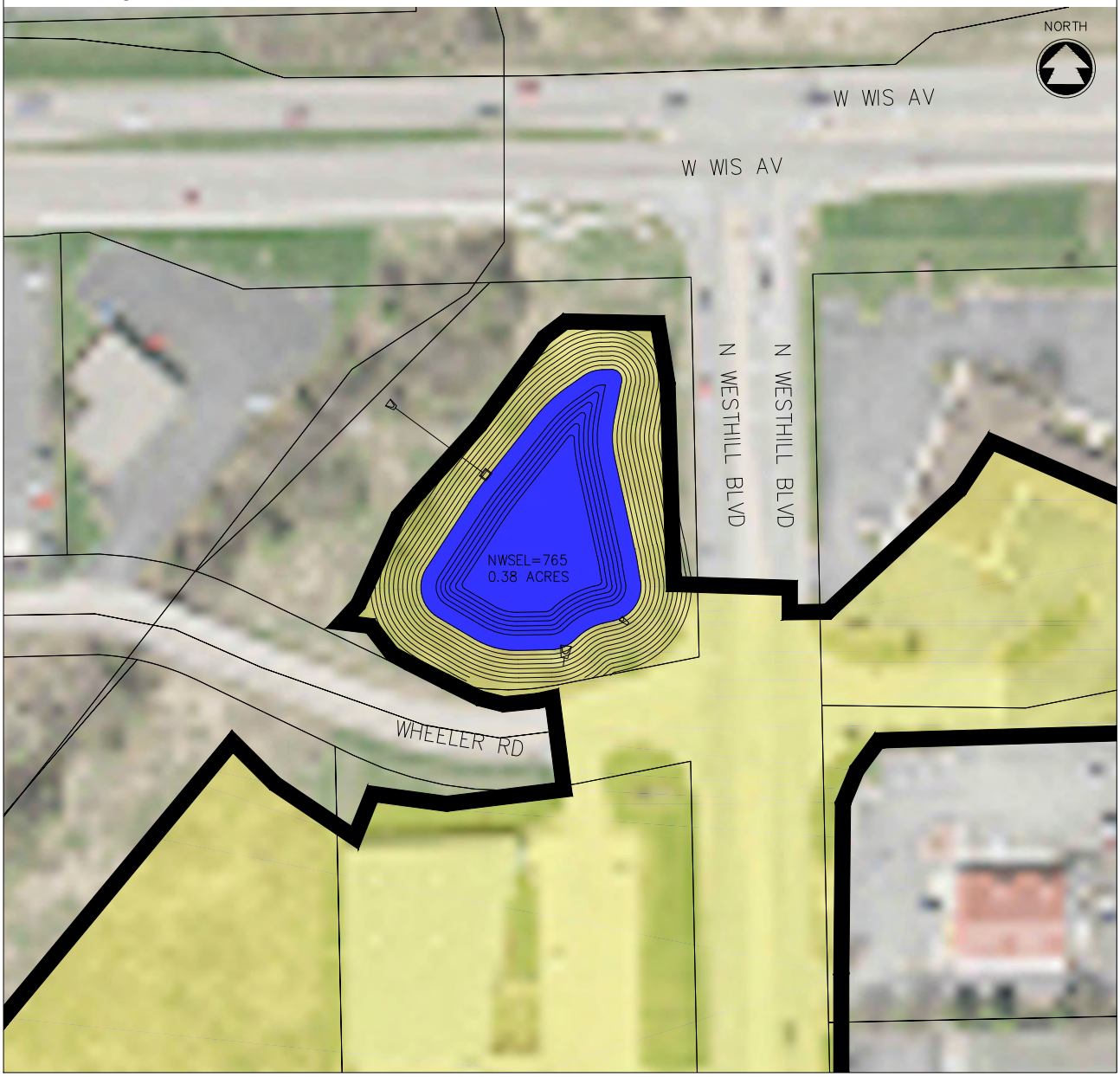
Infrastructure modifications or flow diversions required for retrofit:
DIVERT STORM SEWER FROM WESTHILL BLVD INTO THE POND.

Site access for future BMP maintenance:
ACCESS FROM WESTHILL BLVD OR WHEELER RD.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
HIGH GROUNDWATER, WETLAND POTENTIAL, PRIVATE PROPERTY.

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.38 acre permanent pool	1.41 acres	$123,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-M5h1

McM PROJECT NO: G0003-9-14-00271

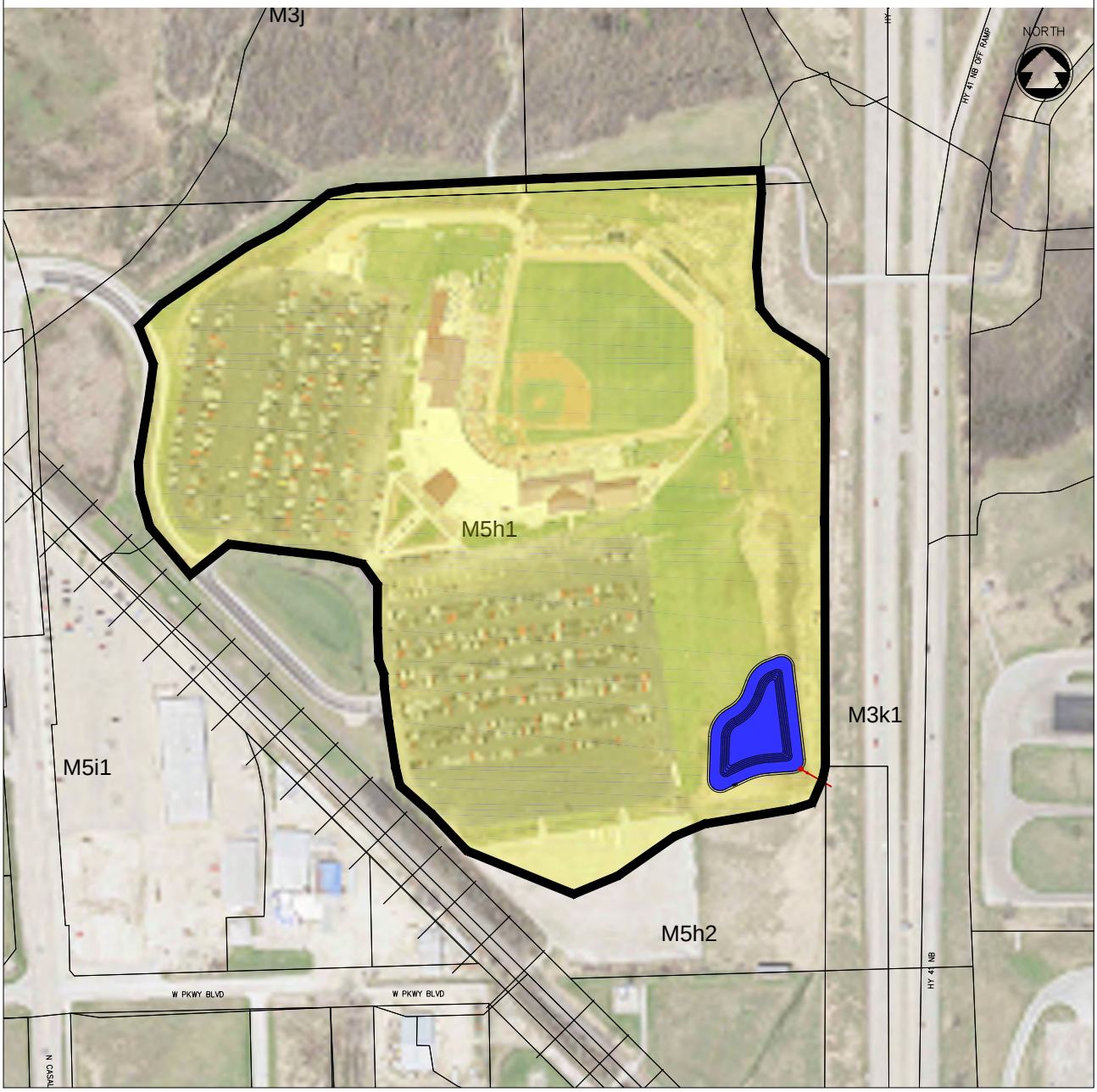
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: FOX CITIES STADIUM	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: MUD CREEK	Tributary Drainage Area IDs: M5h1	Total Drainage Area: 28.4 acres
Imperviousness (Future): 62.0 %	Runoff Curve Number (Future): 82	Water Quality Volume (Future): 2.16 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	3.3 ft	Remediation:	☐ Yes ☒ No	Wetland:	☐ Potential ☐ Yes ☒ No
Bedrock Depth (in):	>78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Briggsville silt loam	100-Year Floodplain:	☐ Yes ☒ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
STORM SEWER OUTFALL TO THE HWY 41 DITCH.

Infrastructure modifications or flow diversions required for retrofit:

Site access for future BMP maintenance:
STORM SEWER EASEMENT.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
HIGH GROUNDWATER, PRIVATE PROPERTY.

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.67 acre permanent pool	1.28 acres	$128,000

Sketch of Proposed BMP Retrofit:

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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-M5i1

McM PROJECT NO: G0003-9-14-00271

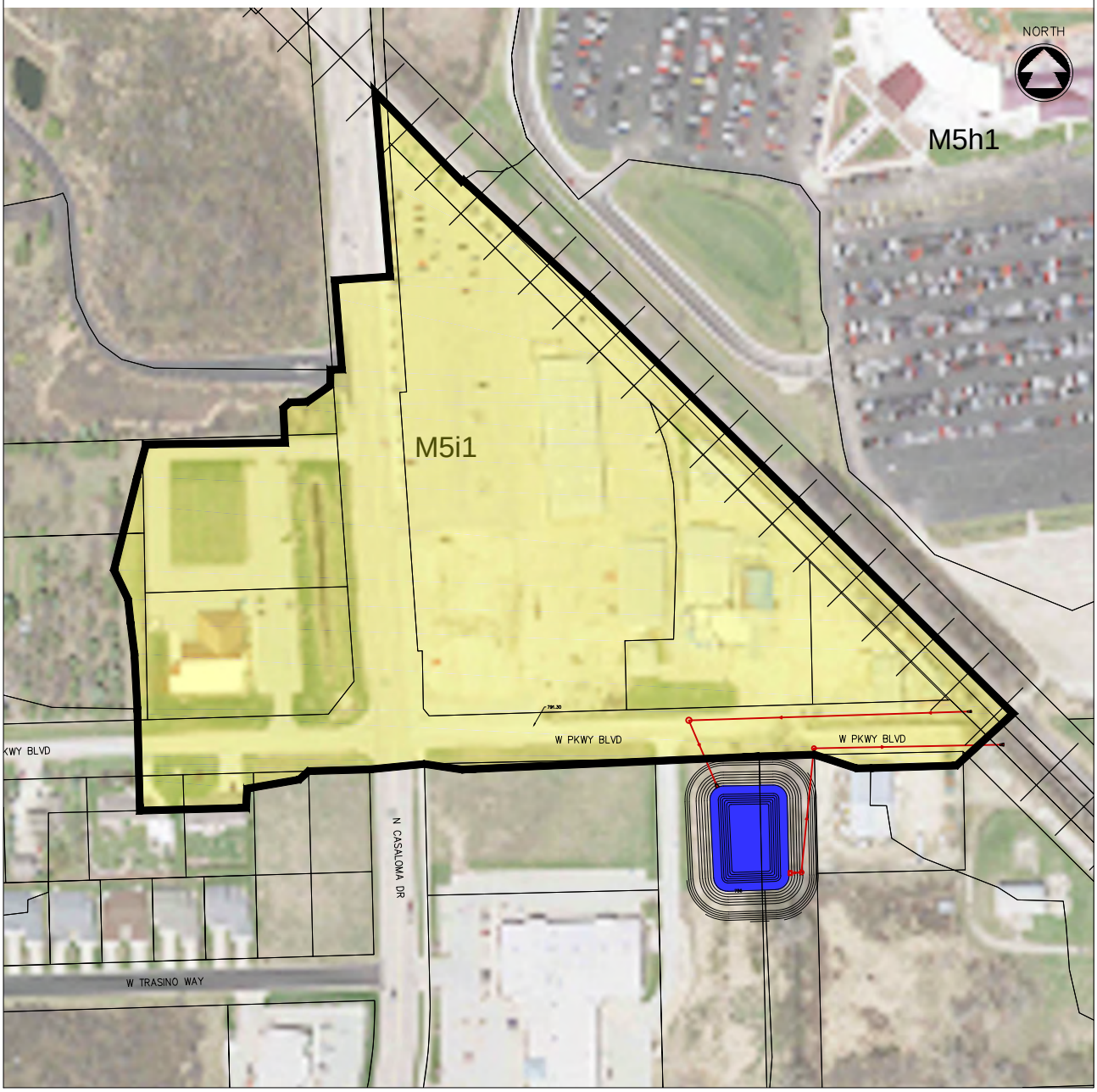
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: PARKWAY POND	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: MUD CREEK	Tributary Drainage Area IDs: M5i1	Total Drainage Area: 15.4 acres
Imperviousness (Future): 75.2 %	Runoff Curve Number (Future): 85	Water Quality Volume (Future): 1.40 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	3.3 ft	Remediation:	☐ Yes ☒ No	Wetland:	☐ Potential ☐ Yes ☒ No
Bedrock Depth (in):	>78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Briggsville silt loam	100-Year Floodplain:	☐ Yes ☒ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
STORM SEWER OUTFALL TO NORTHEAST STREAM.

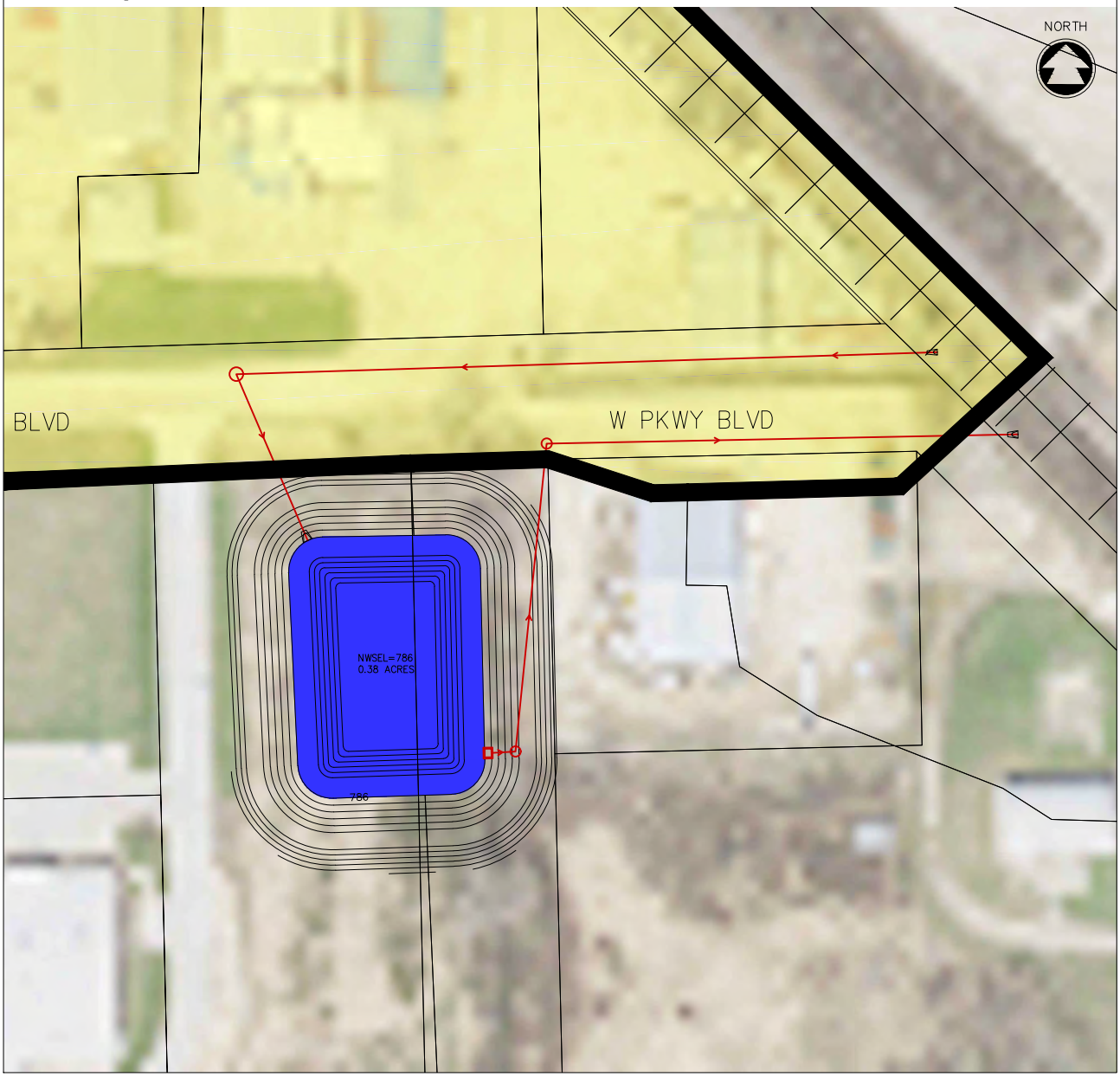
Infrastructure modifications or flow diversions required for retrofit:
DIVERT STORM SEWER FROM W PARKWAY BLVD INTO THE POND.

Site access for future BMP maintenance:
ACCESS FROM W PARKWAY BLVD.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
HIGH GROUNDWATER, PRIVATE PROPERTY.

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.38 acre permanent pool	1.05 acres	$245,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-M6e2

McM PROJECT NO: G0003-9-14-00271

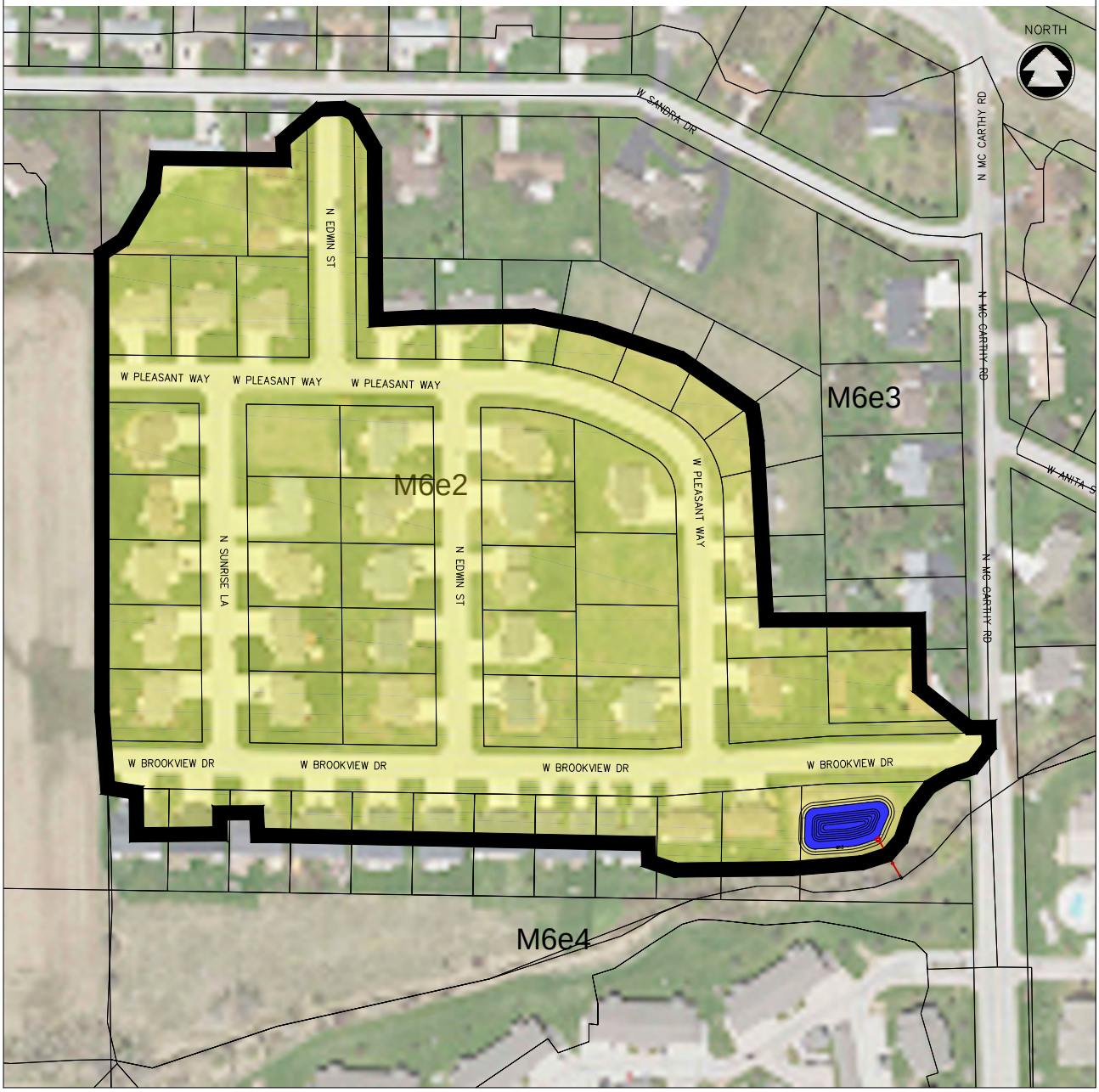
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: KAE ESTATES	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: MUD CREEK, FOX RIVER	Tributary Drainage Area IDs: M6e2	Total Drainage Area: 18.7 acres
Imperviousness (Future): 37.6 %	Runoff Curve Number (Future): 83	Water Quality Volume (Future): 0.91 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	1.7 ft	Remediation:	☐ Yes ☒ No	Wetland:	☒ Potential ☐ Yes ☐ No
Bedrock Depth (in):	>78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Mosel silt loam	100-Year Floodplain:	☒ Yes ☐ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
STORM SEWER OUTFALL TO THE SOUTH STREAM.

Infrastructure modifications or flow diversions required for retrofit:
DIVERT STORM SEWER FROM W BROOKVIEW DR INTO THE POND.

Site access for future BMP maintenance:
ACCESS FROM W BROOKVIEW DR.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
HIGH GROUNDWATER, FLOODPLAIN, WETLAND POTENTIAL.

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.14 acre permanent pool	XXX acres	$XXX

Sketch of Proposed BMP Retrofit:

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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-M6h3

McM PROJECT NO: G0003-9-14-00271

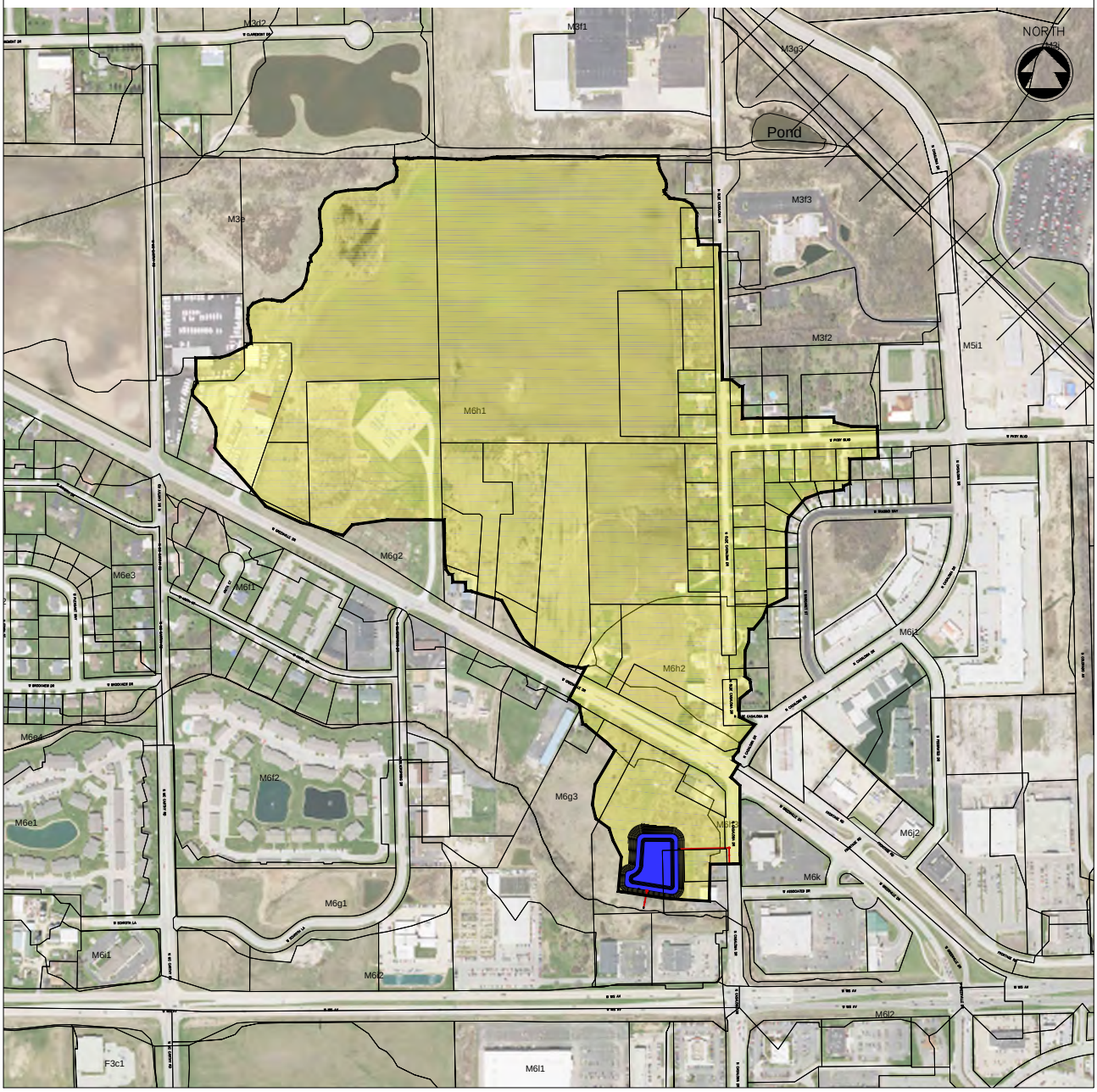
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: ASSOCIATED POND	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: MUD CREEK	Tributary Drainage Area IDs: M6h3	Total Drainage Area: 124.0 acres
Imperviousness (Future): 73.9 %	Runoff Curve Number (Future): 90	Water Quality Volume (Future): 11.08 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	X-X ft	Remediation:	☒ Yes ☐ No	Wetland:	☐ Potential ☐ Yes ☒ No
Bedrock Depth (in):	XX in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Winneconne silty clay loam	100-Year Floodplain:	☐ Yes ☒ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
STORM SEWER OUTFALL TO THE SOUTH STREAM.

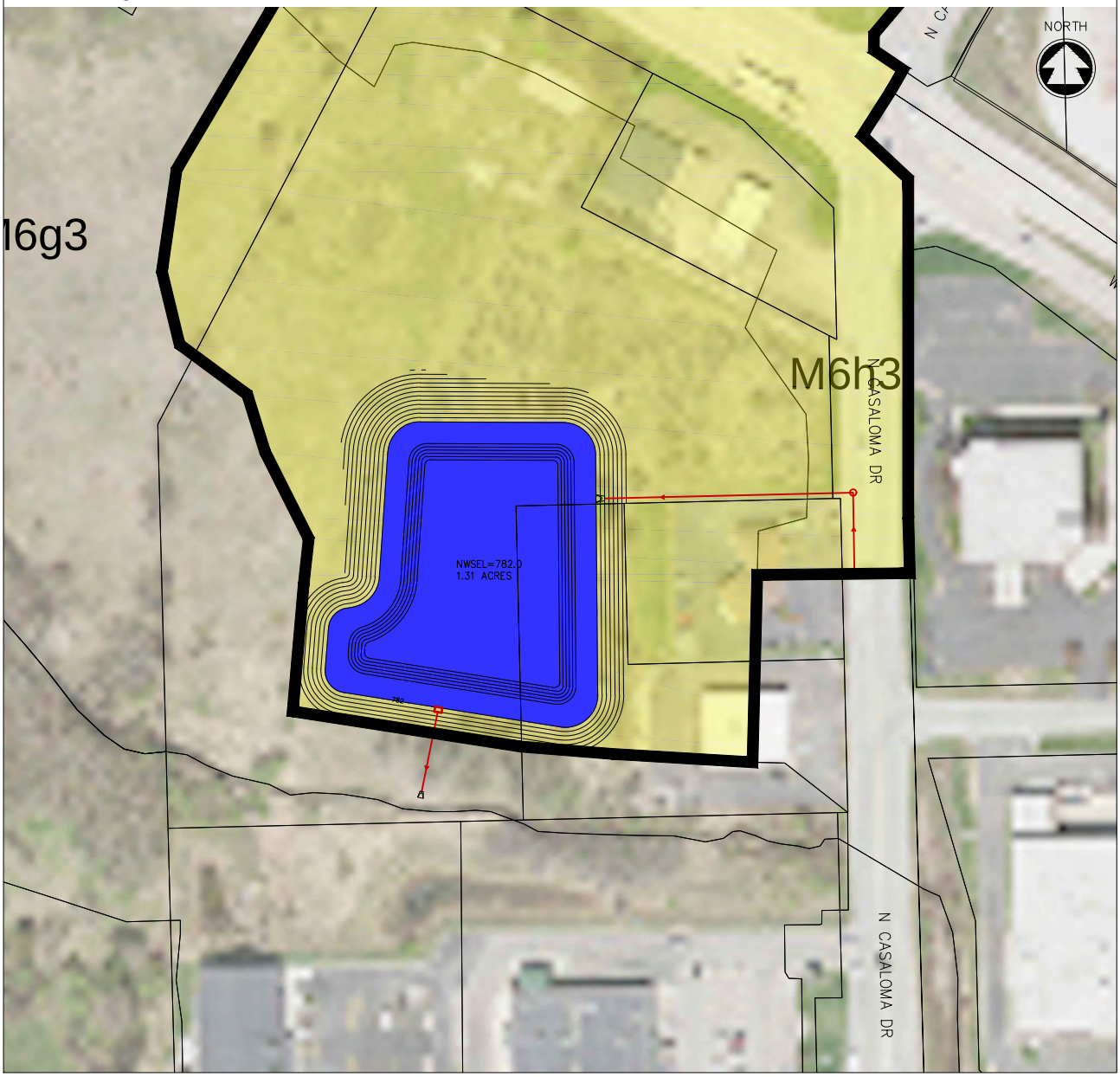
Infrastructure modifications or flow diversions required for retrofit:
DIVERT STORM SEWER FROM N CASALOMA DR INTO THE POND.

Site access for future BMP maintenance:
STORM SEWER EASEMENT FROM CASALOMA DR.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
PRIVATE PROPERTY.

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
1.31 acre permanent pool	2.80 acres	$494,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-M6l1

McM PROJECT NO: G0003-9-14-00271

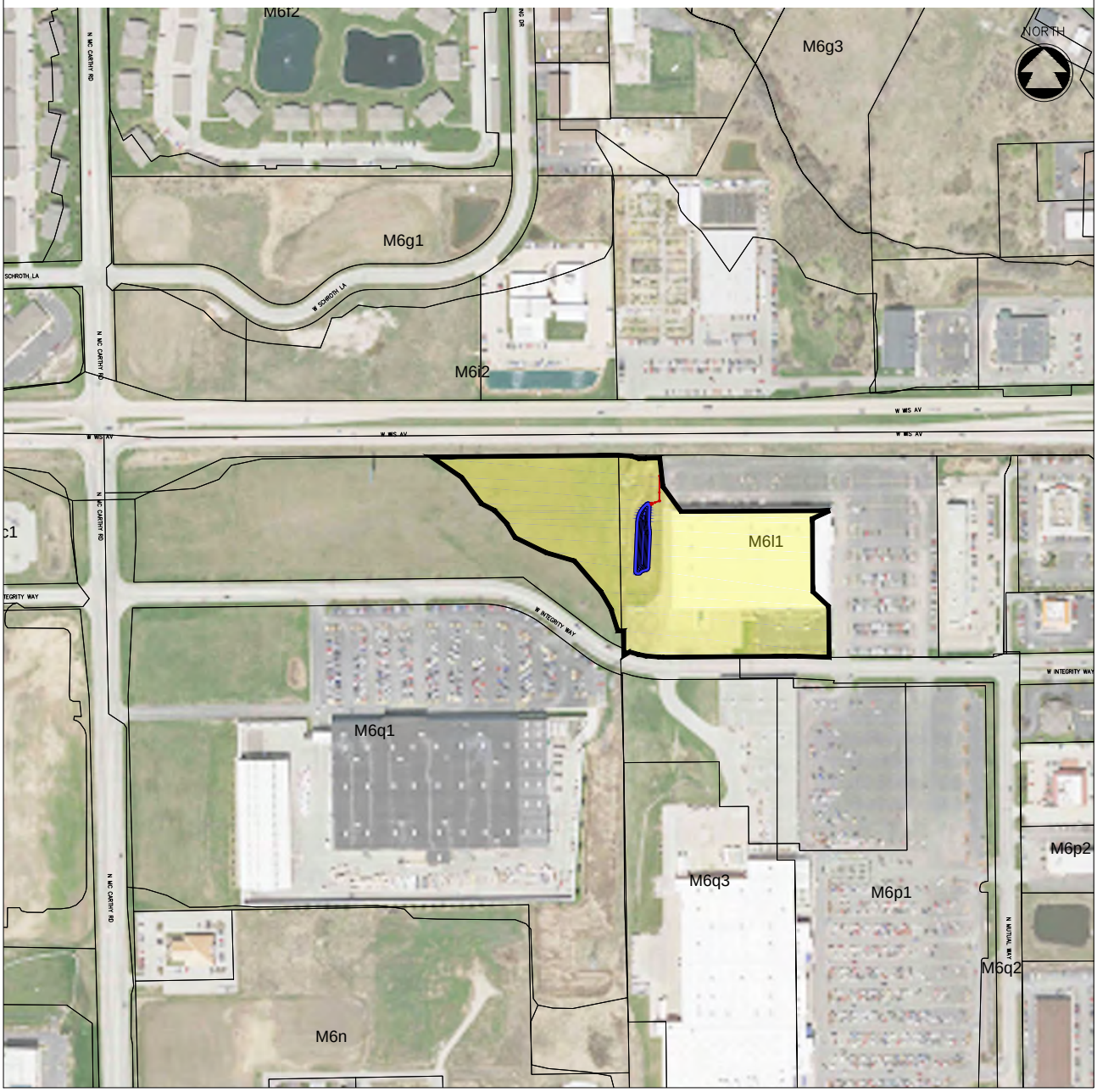
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: OLD SAMS CLUB (HOME GOODS)	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: MUD CREEK	Tributary Drainage Area IDs: M6l1	Total Drainage Area: 7.0 acres
Imperviousness (Future): 91.7 %	Runoff Curve Number (Future): 96	Water Quality Volume (Future): 0.76 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	1.7 ft	Remediation:	☐ Yes ☒ No	Wetland:	☒ Potential ☐ Yes ☐ No
Bedrock Depth (in):	>78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Mosel silt loam	100-Year Floodplain:	☐ Yes ☒ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
STORM SEWER OUTFALL TO THE SOUTH DITCH OF WISCONSIN AVE.

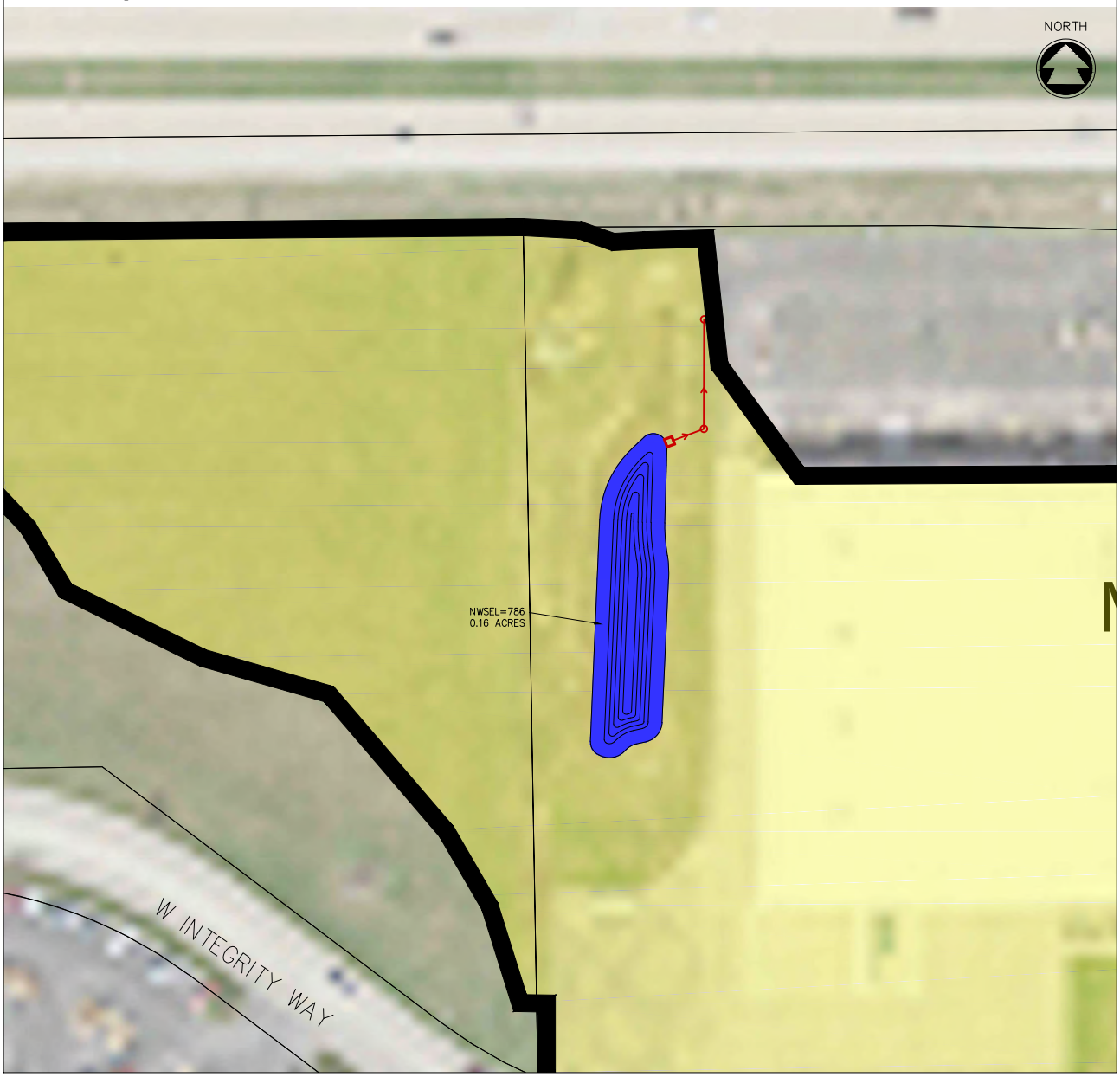
Infrastructure modifications or flow diversions required for retrofit:

Site access for future BMP maintenance:
STORM SEWER EASEMENT FROM INTEGRITY WAY OR TJ MAXX.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
HIGH GROUNDWATER, WETLAND POTENTIAL, PRIVATE PROPERTY.

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.16 acre permanent pool	0.77 acres	$91,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-M6o

McM PROJECT NO: G0003-9-14-00271

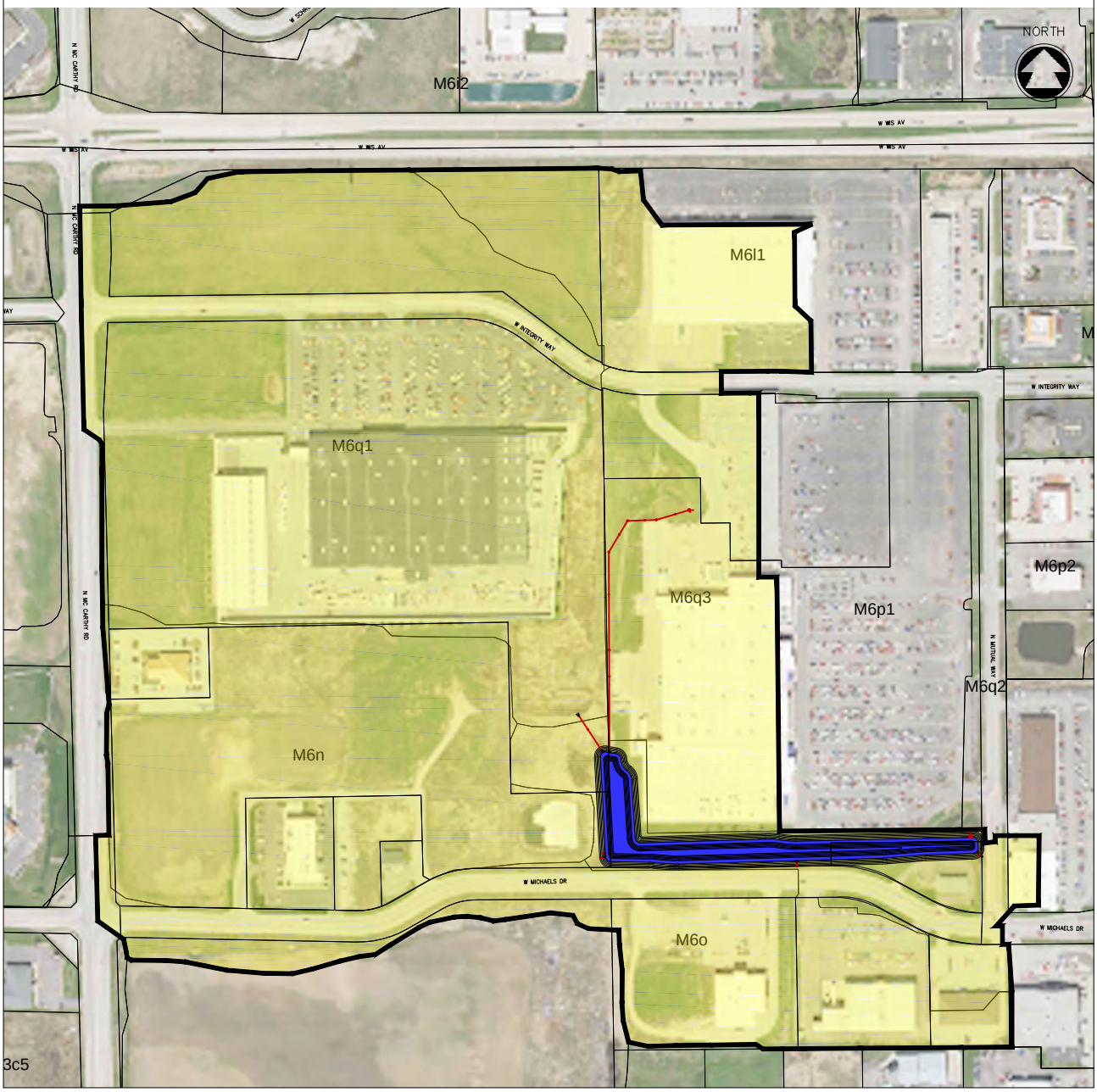
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: MICHAELS POND	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: MUD CREEK	Tributary Drainage Area IDs: M6o	Total Drainage Area: 79.5 acres
Imperviousness (Future): 91.8 %	Runoff Curve Number (Future): 96	Water Quality Volume (Future): 8.70 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	0 ft	Remediation:	☐ Yes ☒ No	Wetland:	☒ Potential ☐ Yes ☐ No
Bedrock Depth (in):	>78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Poygan silty clay loam	100-Year Floodplain:	☐ Yes ☒ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
STORM SEWER OUTFALL TO THE WETLAND TO THE NORTHWEST.

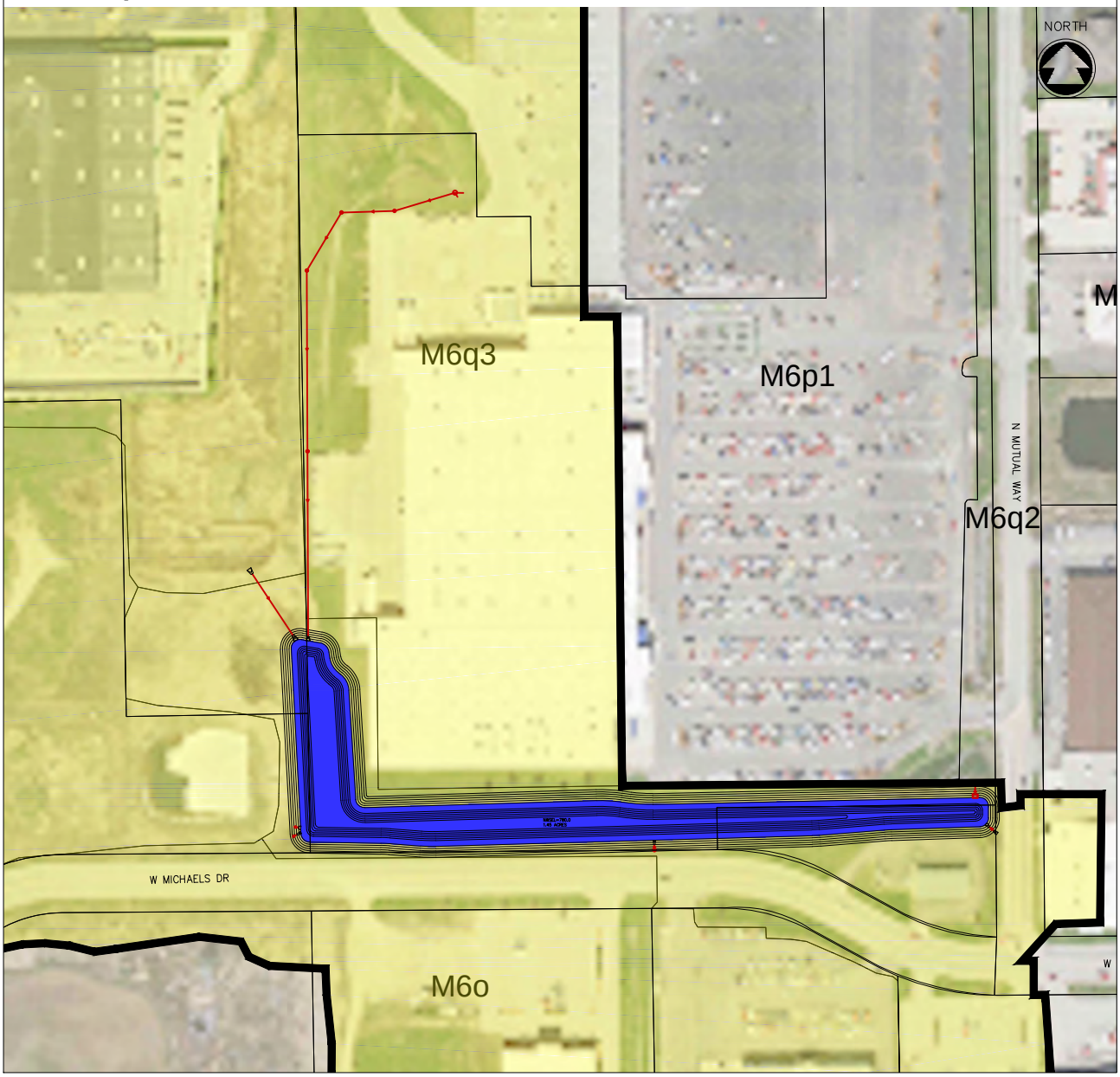
Infrastructure modifications or flow diversions required for retrofit:
DIVERT STORM SEWER FROM W MICHAELS DR INTO THE POND.

Site access for future BMP maintenance:
ACCESS FROM W MICHAELS DR.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
HIGH GROUNDWATER, WETLAND POTENTIAL

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
1.45 acre permanent pool	2.68 acres	$363,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

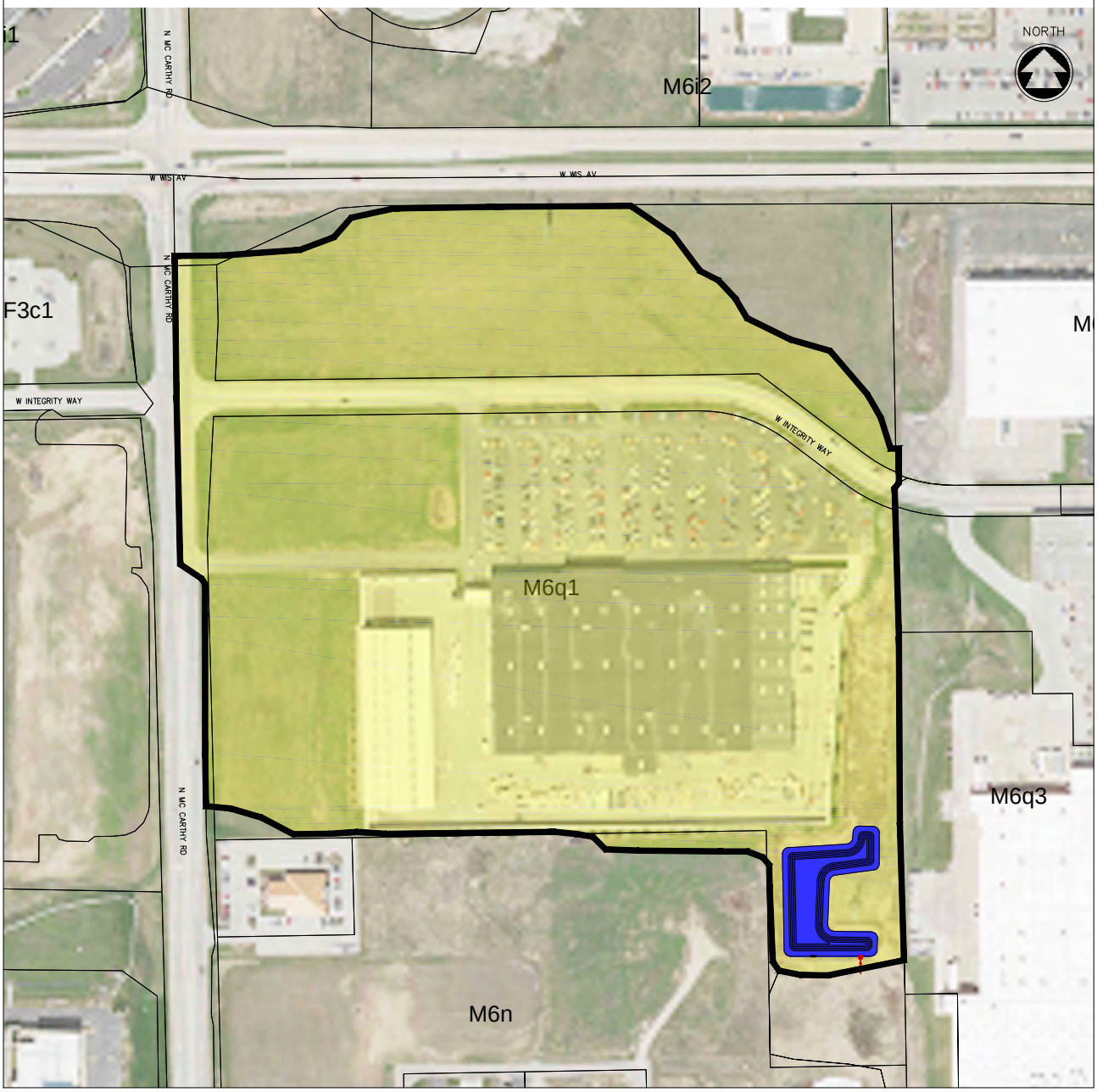
BMP CATCHMENT ID: BMP-M6q1

McM PROJECT NO: G0003-9-14-00271

SITE INFORMATION:	
Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: MENARDS POND	Initials: AWS

DRAINAGE AREA:		
Sub-watershed ID: MUD CREEK	Tributary Drainage Area IDs: M6q1	Total Drainage Area: 33.1 acres
Imperviousness (Future): 91.7 %	Runoff Curve Number (Future): 96	Water Quality Volume (Future): 3.62 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	0 ft	Remediation:	☐ Yes ☒ No	Wetland:	☒ Potential ☐ Yes ☐ No
Bedrock Depth (in):	>78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Poygan silty clay loam	100-Year Floodplain:	☐ Yes ☒ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
STORM SEWER OUTFALL TO THE SOUTH.

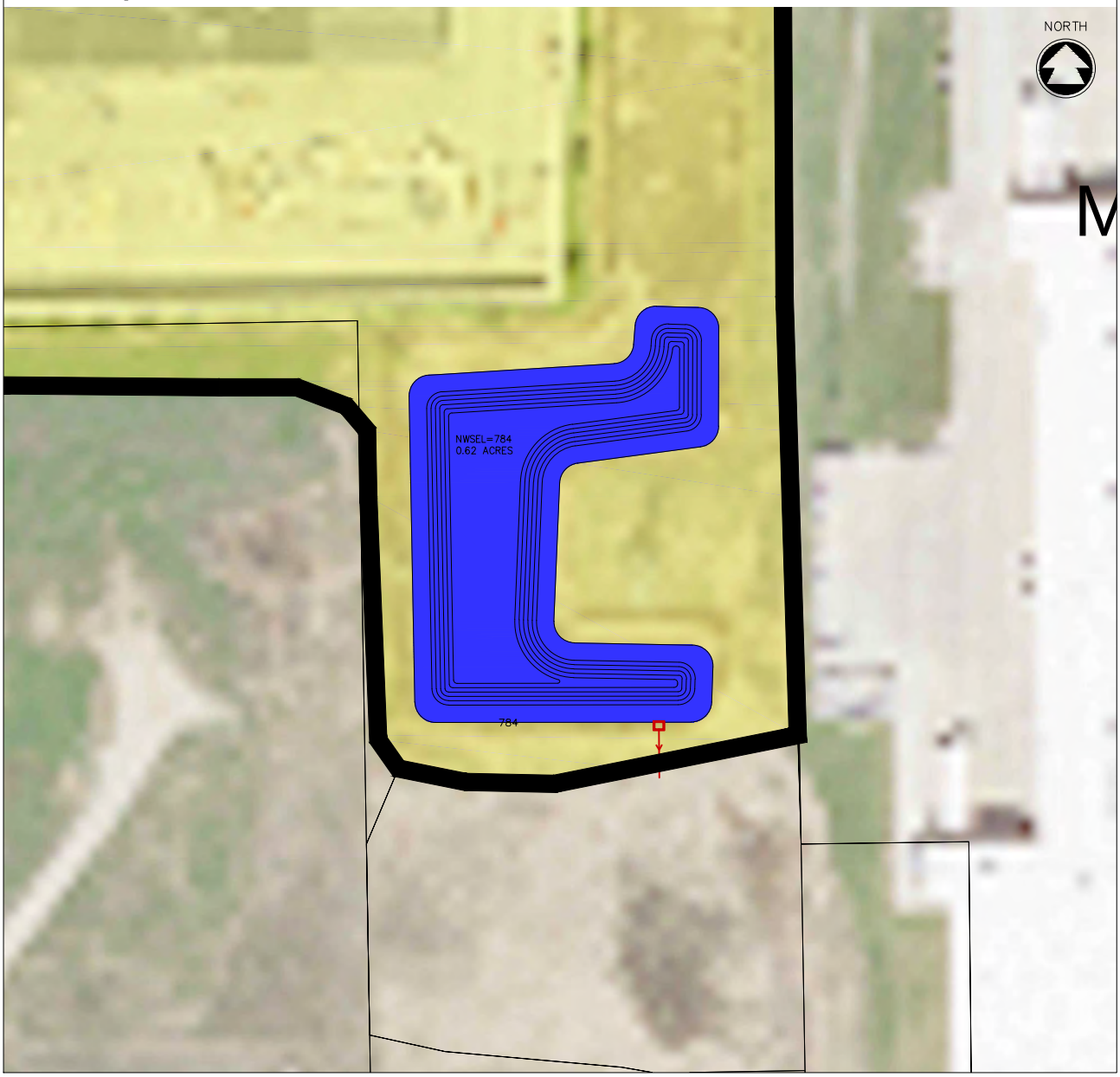
Infrastructure modifications or flow diversions required for retrofit:
N/A

Site access for future BMP maintenance:
SITE ACCESS FROM STORM SEWER EASEMENT, POSSIBLY FROM MENARDS OR WALMART.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
HIGH GROUNDWATER, WETLAND POTENTIAL, PRIVATELY OWNED.

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.62 acre permanent pool	2.86 acres	$165,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-M6q3

McM PROJECT NO: G0003-9-14-00271

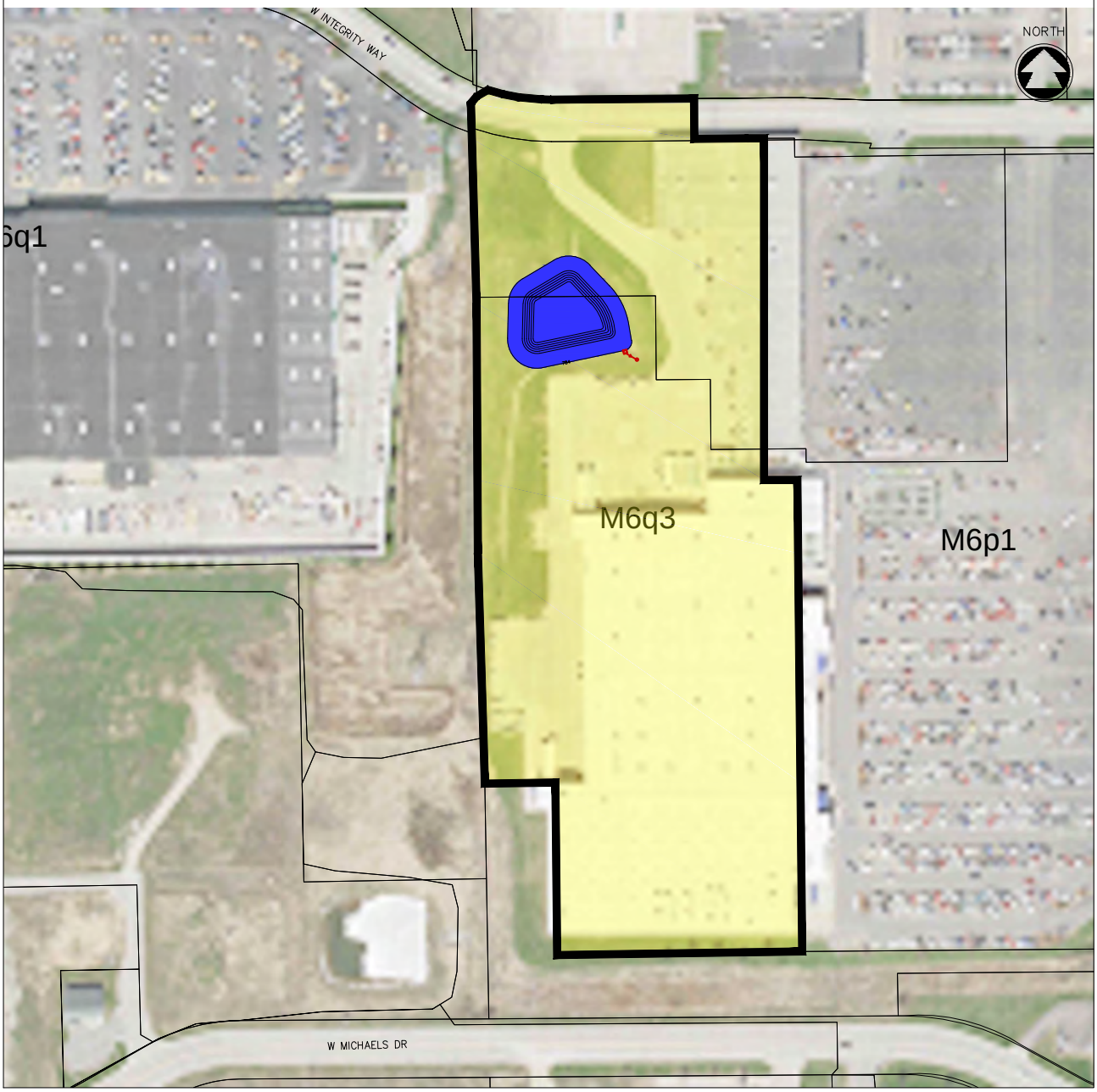
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: WAL MART NORTHWEST POND	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: MUD CREEK	Tributary Drainage Area IDs: M6q3	Total Drainage Area: 10.6 acres
Imperviousness (Future): 91.7 %	Runoff Curve Number (Future): 96	Water Quality Volume (Future): 1.16 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	1.7 ft	Remediation:	☐ Yes ☒ No	Wetland:	☒ Potential ☐ Yes ☐ No
Bedrock Depth (in):	>78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Mosel silt loam	100-Year Floodplain:	☐ Yes ☒ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
STORM SEWER OUTFALL TO THE CHANNEL TO THE SOUTHEAST.

Infrastructure modifications or flow diversions required for retrofit:
DIVERT STORM SEWER FROM INTEGRITY WAY INTO THE POND.

Site access for future BMP maintenance:
STORM SEWER EASEMENT FROM INTEGRITY WAY.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
HIGH GROUNDWATER, WETLAND POTENTIAL, PRIVATE PROPERTY.

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.44 acre permanent pool	1.65 acres	$119,000

Sketch of Proposed BMP Retrofit:

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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-M6s

McM PROJECT NO: G0003-9-14-00271

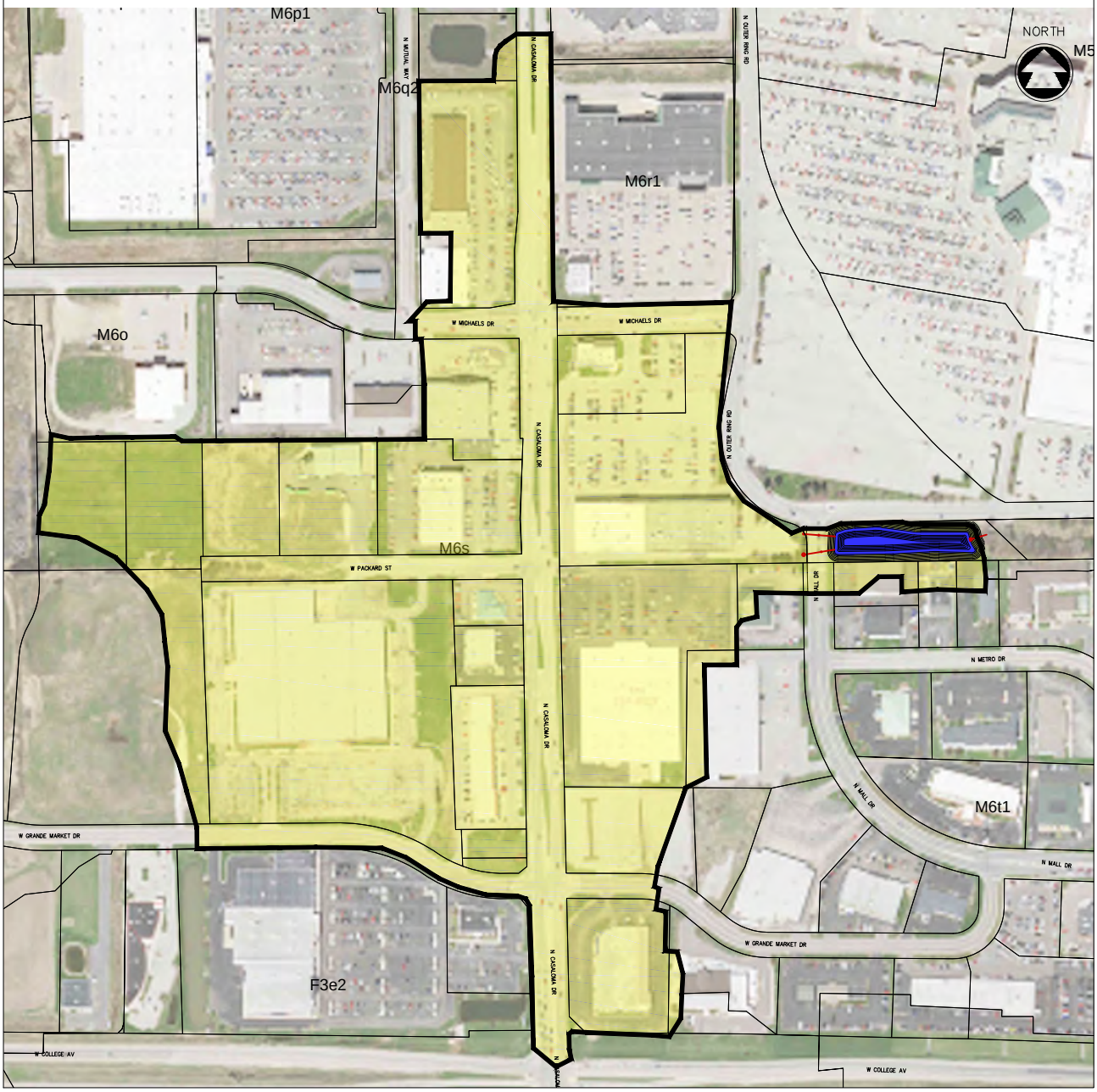
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: MALL POND	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: MUD CREEK	Tributary Drainage Area IDs: M6s	Total Drainage Area: 55.7 acres
Imperviousness (Future): 92.0 %	Runoff Curve Number (Future): 96	Water Quality Volume (Future): 6.11 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	3.3 ft	Remediation:	☐ Yes ☒ No	Wetland:	☐ Potential ☐ Yes ☒ No
Bedrock Depth (in):	>78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Briggsville silt loam	100-Year Floodplain:	☐ Yes ☒ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
STORM SEWER OUTFALL TO THE EAST DITCH SOUTH OF MALL DR.

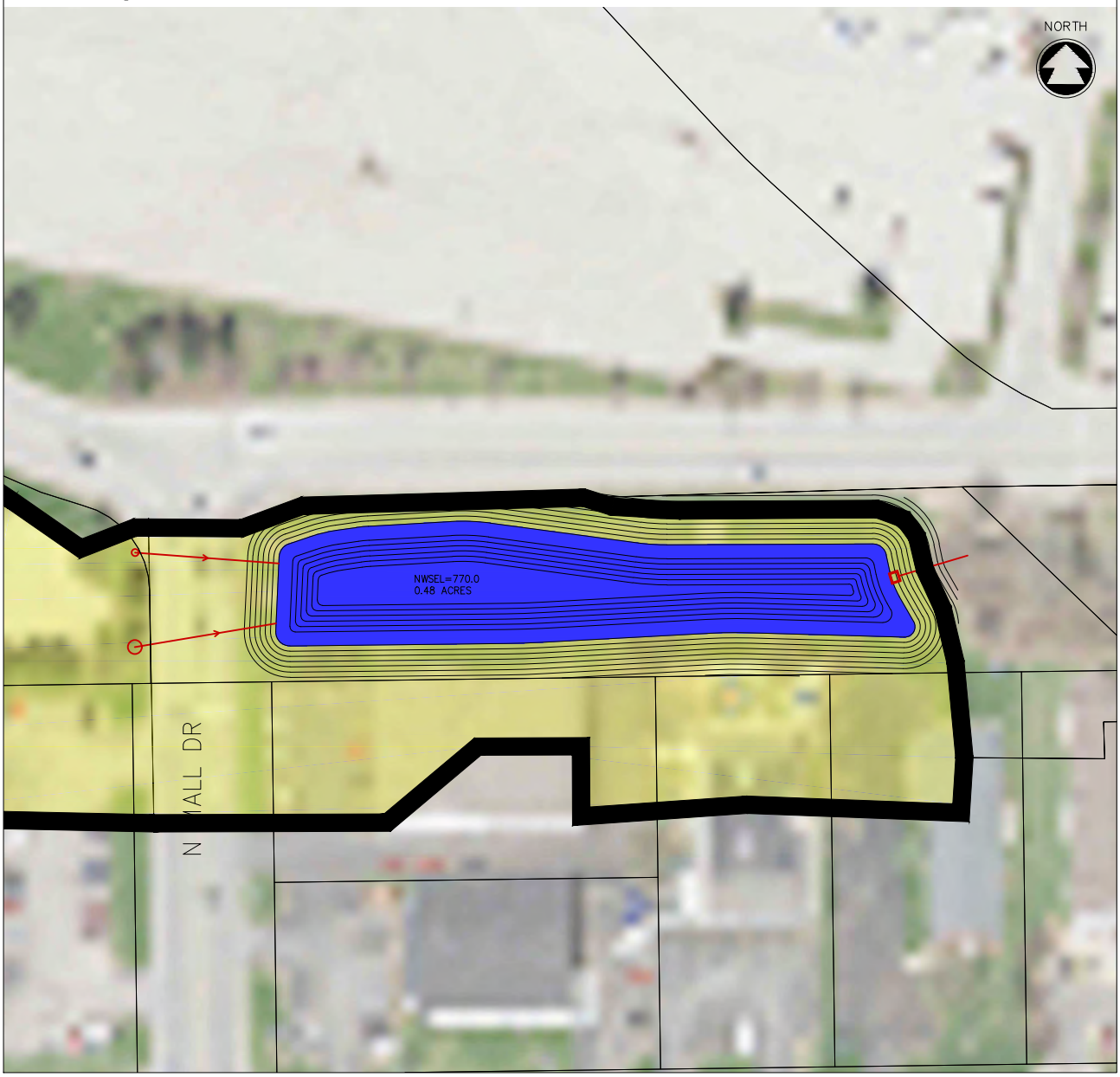
Infrastructure modifications or flow diversions required for retrofit:
DIVERT STORM SEWER FROM MALL DR INTO THE POND.

Site access for future BMP maintenance:
ACCESS FROM MALL DR.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
HIGH GROUNDWATER, PRIVATE PROPERTY.

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.48 acre permanent pool	0.97 acres	$188,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-M6s2

McM PROJECT NO: G0003-9-14-00271

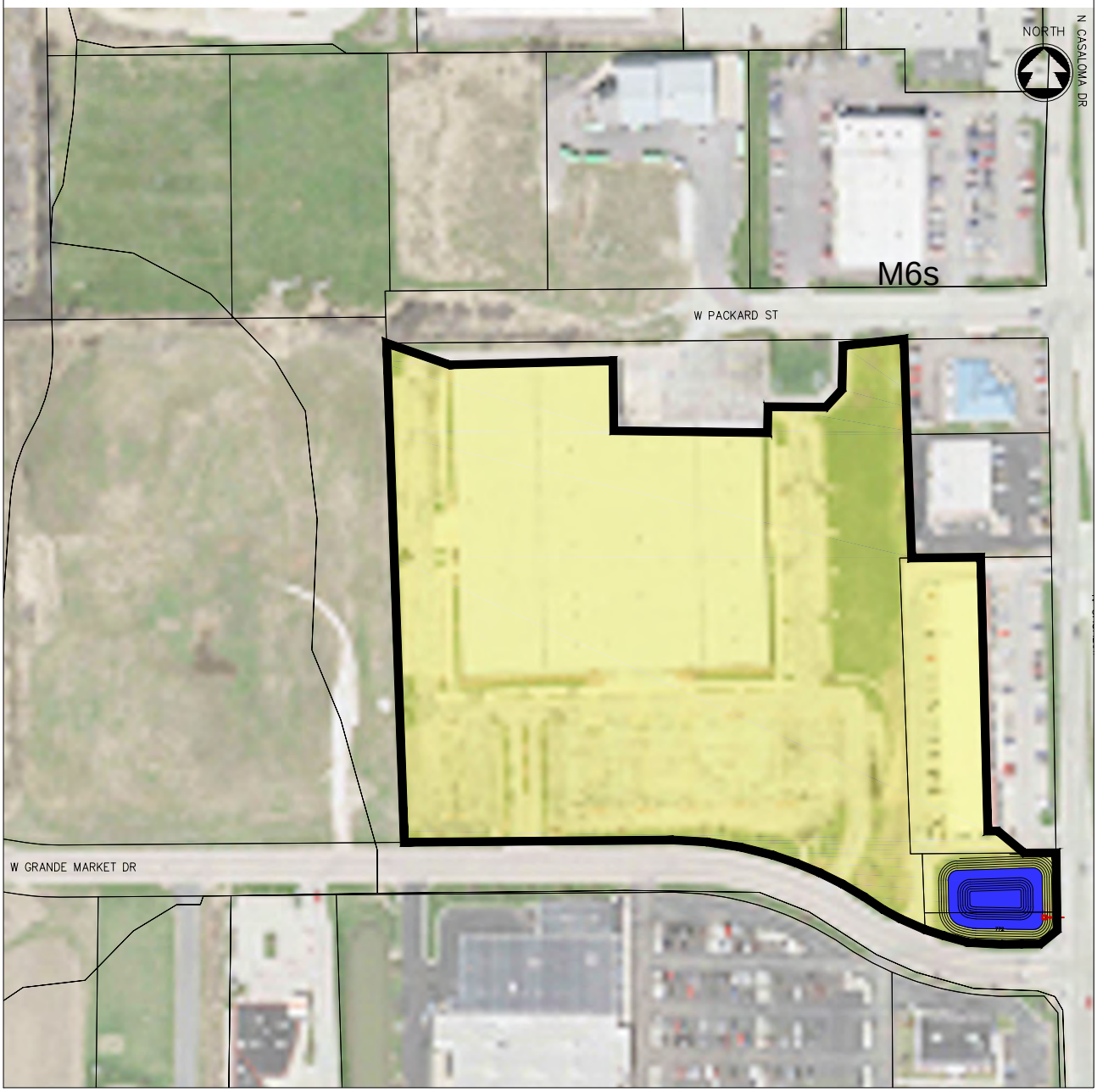
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: STEINHAFELS POND	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: MUD CREEK	Tributary Drainage Area IDs: M6s	Total Drainage Area: 10.1 acres
Imperviousness (Future): 92.1 %	Runoff Curve Number (Future): 96	Water Quality Volume (Future): 1.11 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	3.3 ft	Remediation:	☐ Yes ☒ No	Wetland:	☐ Potential ☐ Yes ☒ No
Bedrock Depth (in):	>78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Briggssville silt loam	100-Year Floodplain:	☐ Yes ☒ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
STORM SEWER OUTFALL TO CASALOMA DR.

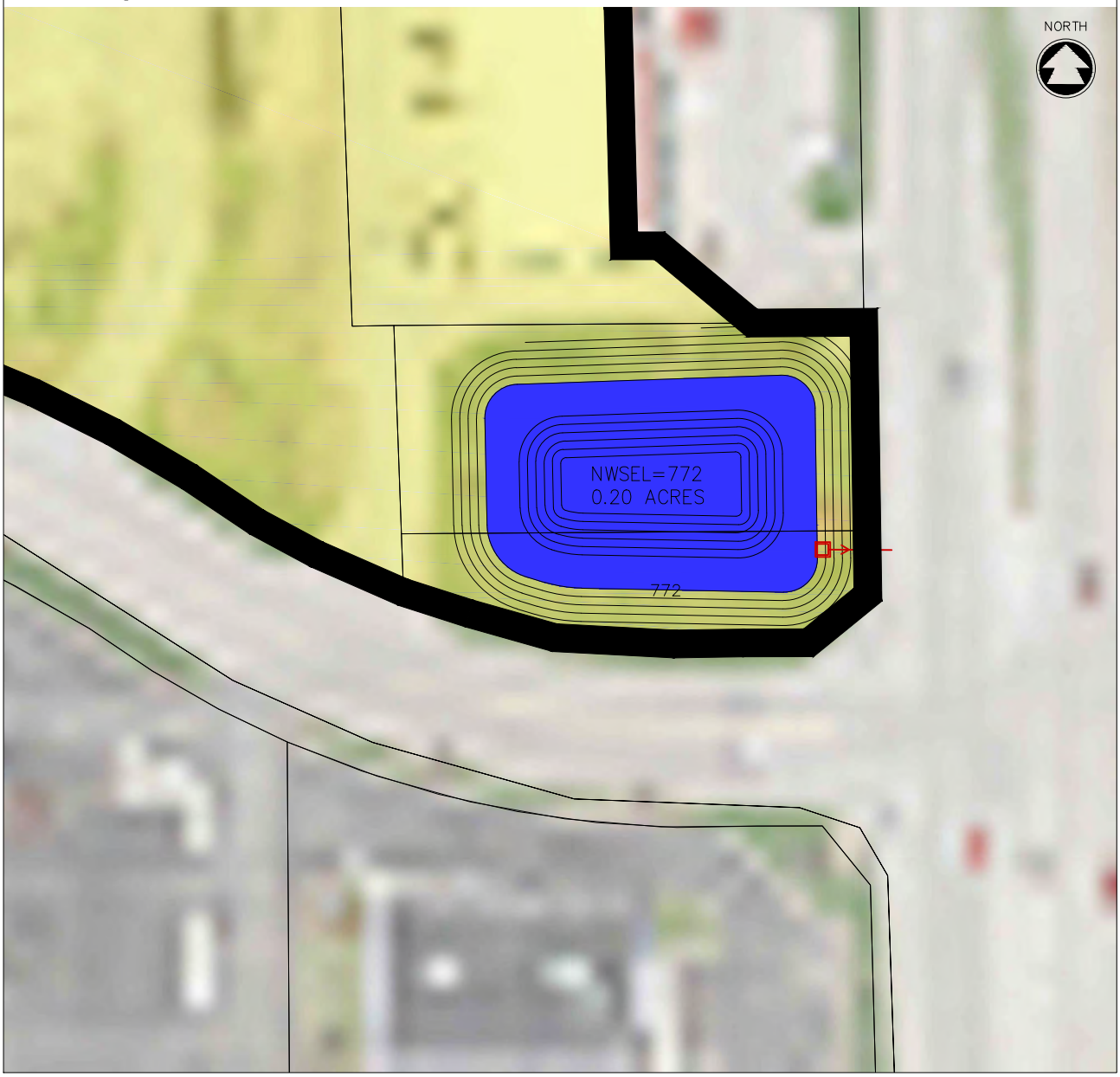
Infrastructure modifications or flow diversions required for retrofit:

Site access for future BMP maintenance:
ACCESS FROM GRANDE MARKET DR OR CASALOMA DR.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
HIGH GROUNDWATER, PRIVATE PROPERTY.

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.20 acre permanent pool	0.45 acres	$71,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-M6t1

McM PROJECT NO: G0003-9-14-00271

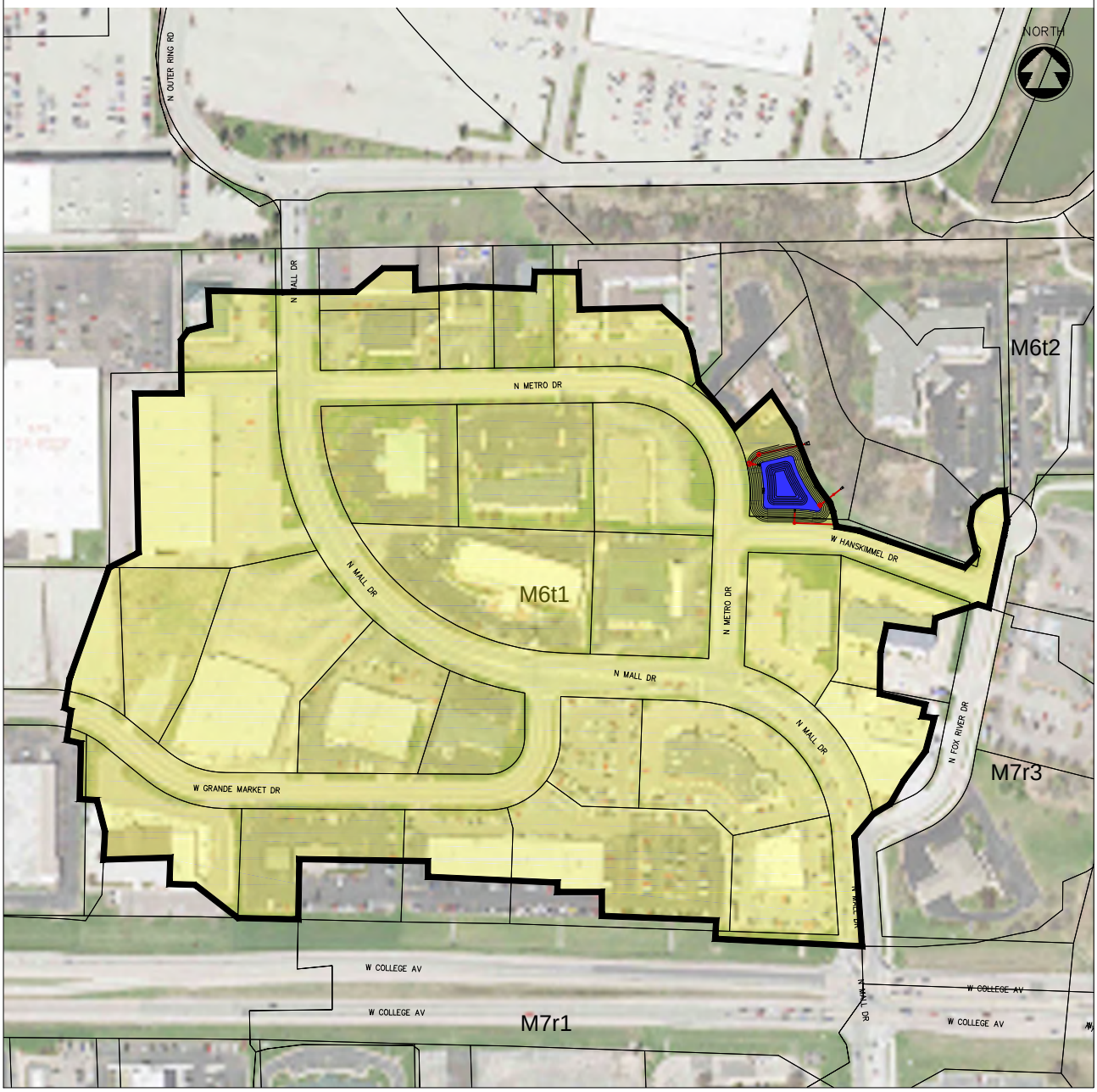
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: METRO POND	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: MUD CREEK	Tributary Drainage Area IDs: M6t1	Total Drainage Area: 34.3 acres
Imperviousness (Future): 91.6 %	Runoff Curve Number (Future): 96	Water Quality Volume (Future): 3.75 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	3.3 ft, 5.8 ft	Remediation:	☐ Yes ☒ No	Wetland:	☐ Potential ☐ Yes ☒ No
Bedrock Depth (in):	>78 in, >78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Briggsville silt loam, Udorthents	100-Year Floodplain:	☒ Yes ☐ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
STORM SEWER OUTFALL TO THE NORTHEAST DITCH.

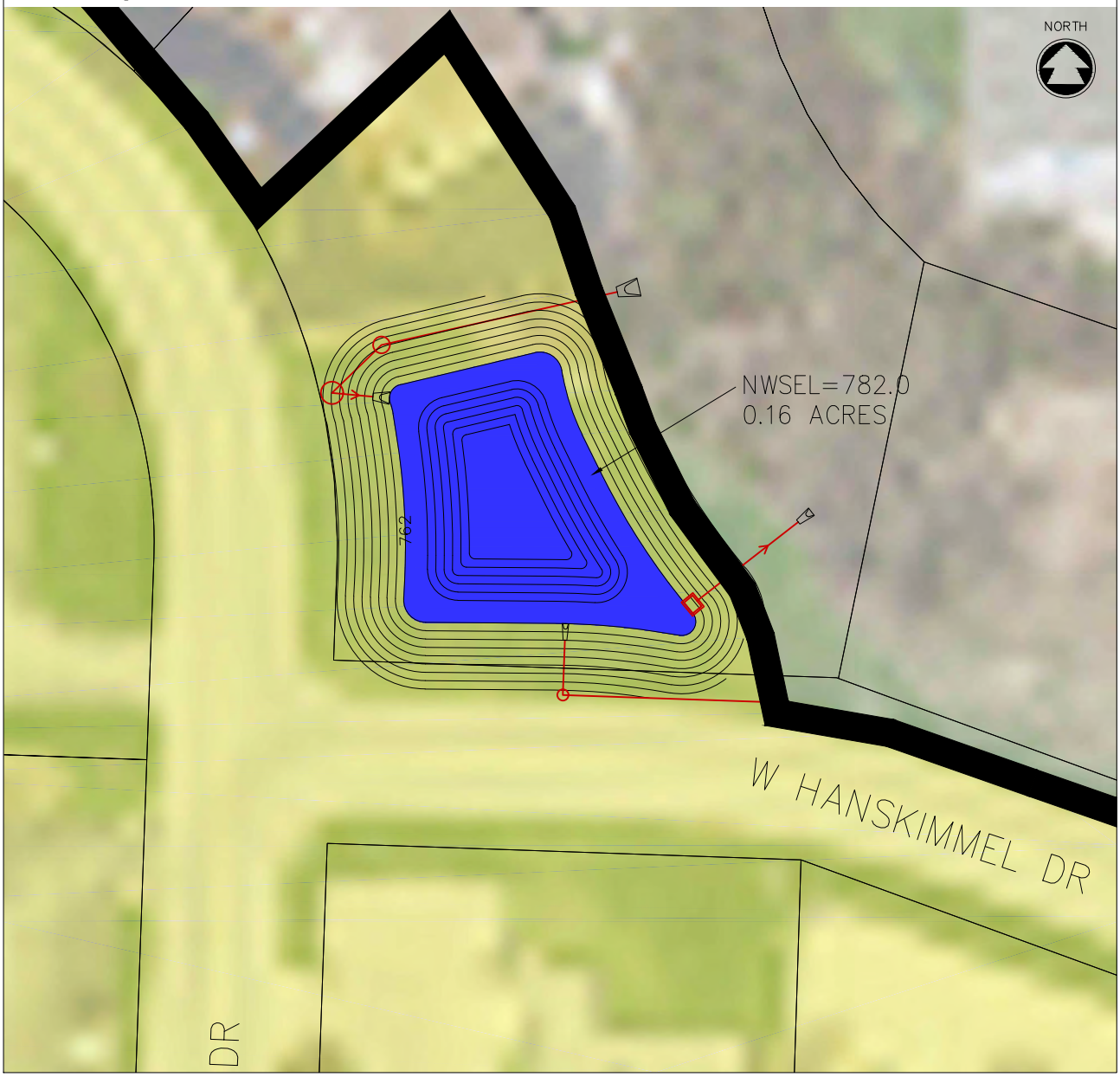
Infrastructure modifications or flow diversions required for retrofit:
DIVERT STORM SEWER FROM HANSKIMMEL DR AND METRO DR INTO THE POND.

Site access for future BMP maintenance:
ACCESS FROM HANSKIMMEL DR OR METRO DR.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
HIGH GROUNDWATER, FLOODPLAIN.

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.16 acre permanent pool	0.58 acres	$130,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-M7d

McM PROJECT NO: G0003-9-14-00271

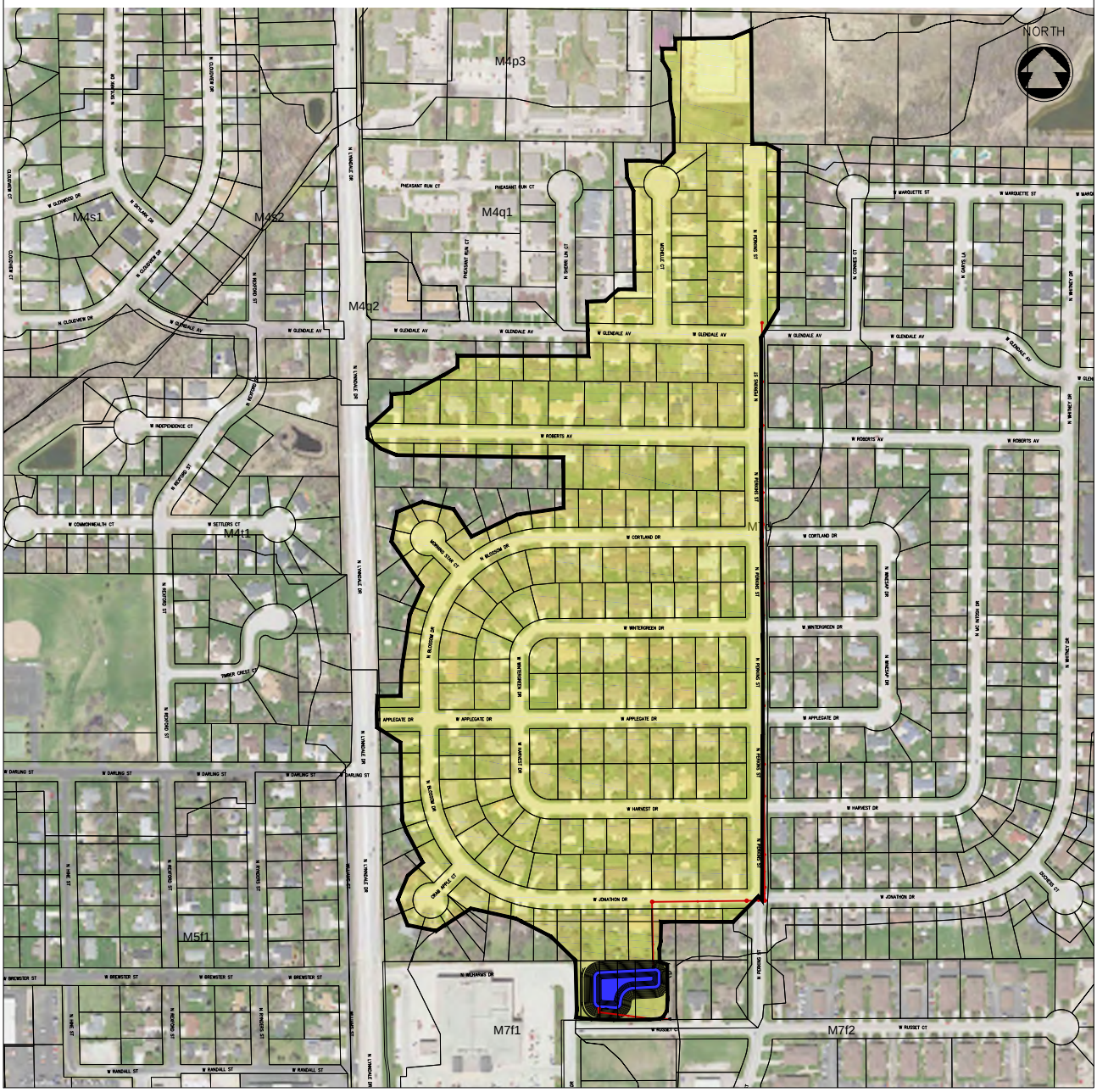
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: APPLEGATE WEST POND	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: MUD CREEK	Tributary Drainage Area IDs: M7d	Total Drainage Area: 64.0 acres
Imperviousness (Future): 38.7 %	Runoff Curve Number (Future): 76	Water Quality Volume (Future): 3.19 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	3.3 ft, 1 ft	Remediation:	☐ Yes ☒ No	Wetland:	☒ Potential ☐ Yes ☐ No
Bedrock Depth (in):	>78 in, 35 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Grays silt loam, Manawa silty loam	100-Year Floodplain:	☒ Yes ☐ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
STORM SEWER OUTFALL TO THE EASE INTO THE STREAM.

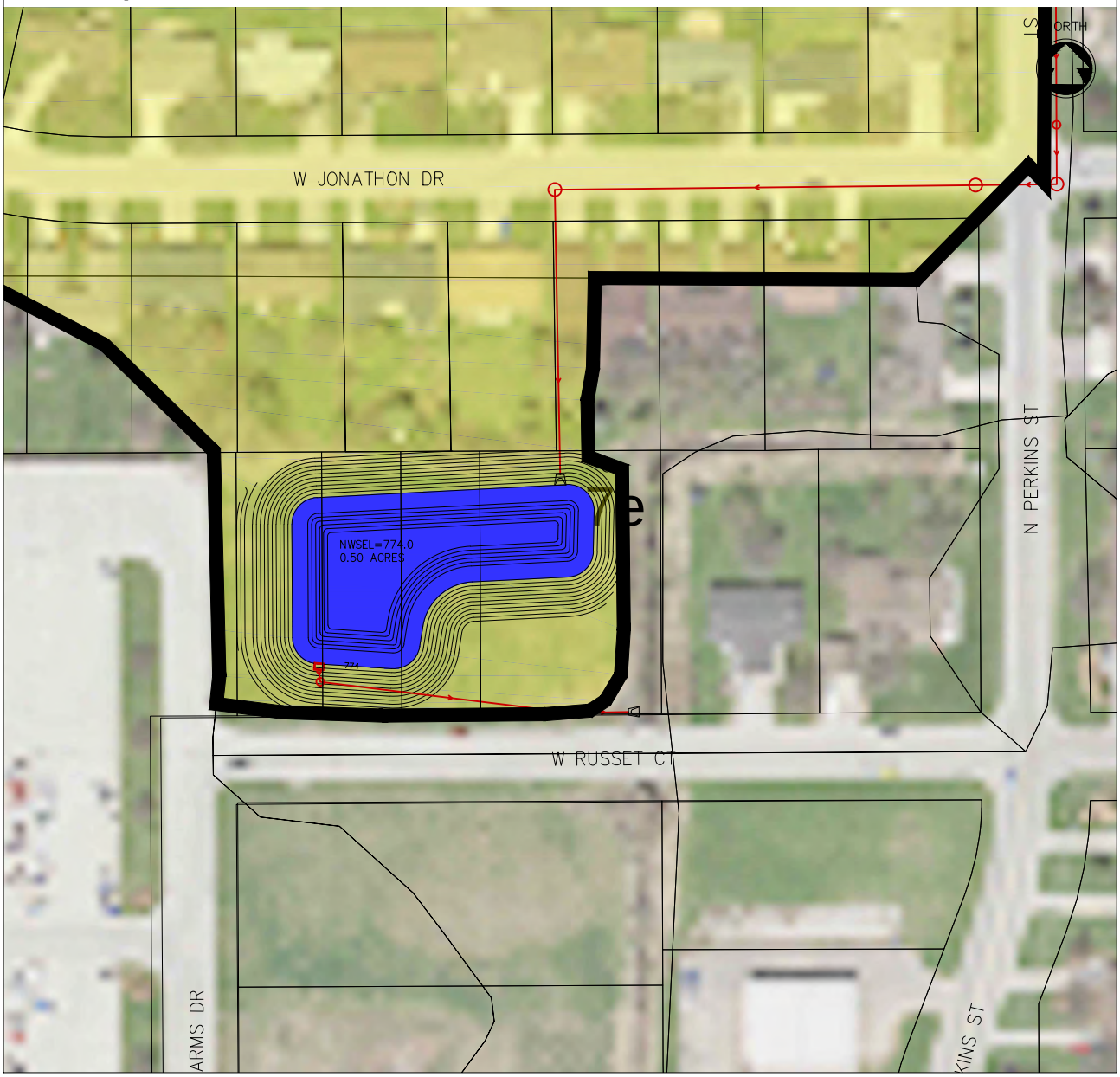
Infrastructure modifications or flow diversions required for retrofit:
DIVERT STORM SEWER FROM JONATHON DR INTO THE POND.

Site access for future BMP maintenance:
ACCESS FROM W RUSSET CT.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
HIGH GROUNDWATER, WETLAND POTENTIAL, FLOODPLAIN

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.50 acre permanent pool	1.23 acres	$750,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-M7e

McM PROJECT NO: G0003-9-14-00271

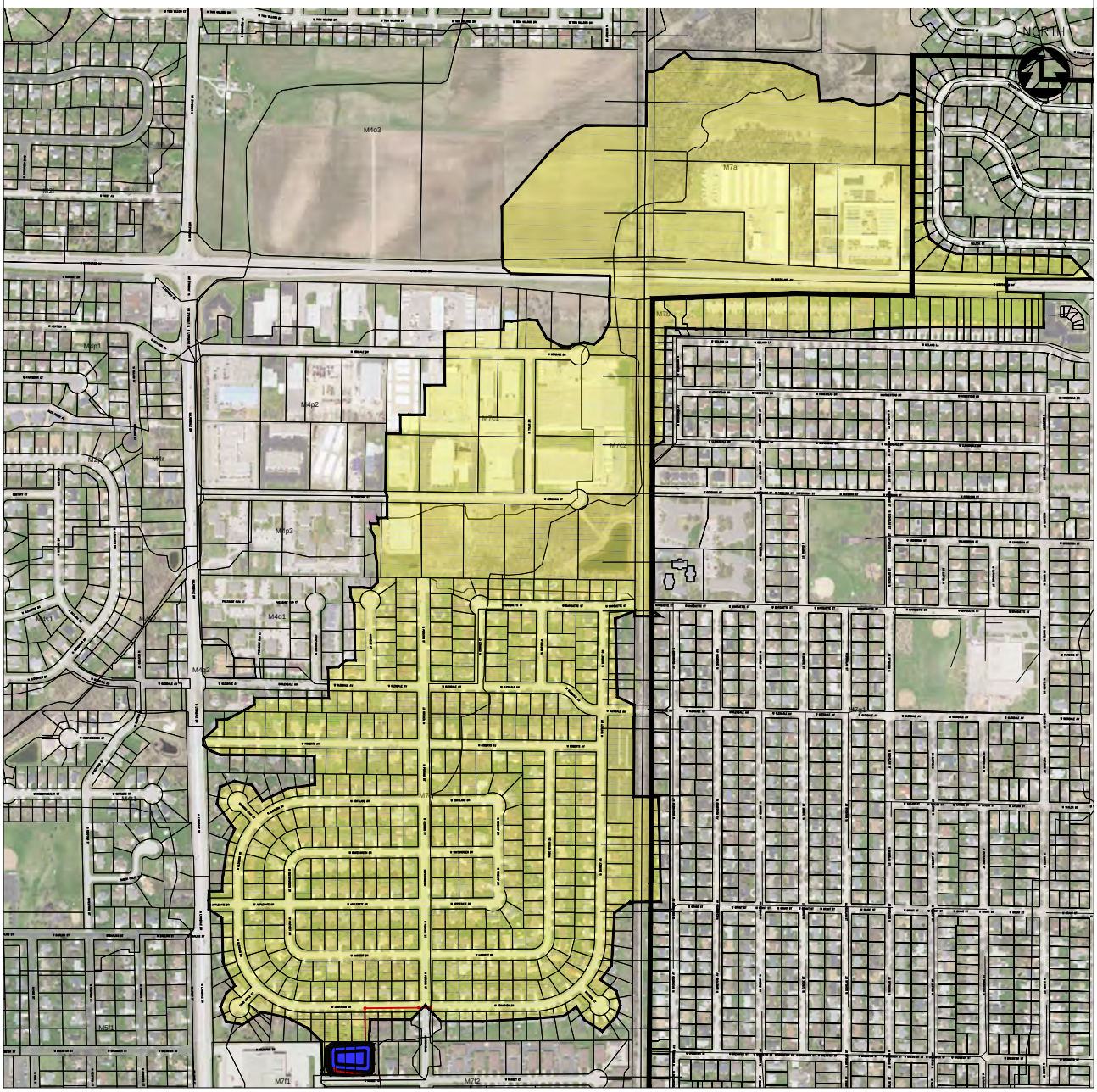
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: APPLEGATE POND	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: MUD CREEK	Tributary Drainage Area IDs: M7e	Total Drainage Area: 267.8 acres
Imperviousness (Future): 44.2 %	Runoff Curve Number (Future): 83	Water Quality Volume (Future): 14.98 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	3.3 ft, 1 ft	Remediation:	☐ Yes ☒ No	Wetland:	☒ Potential ☐ Yes ☐ No
Bedrock Depth (in):	>78 in, 35 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Grays silt loam, Manawa silty clay loam	100-Year Floodplain:	☒ Yes ☐ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
STORM SEWER OUTFALL TO THE SOUTHEAST INTO THE STREAM.

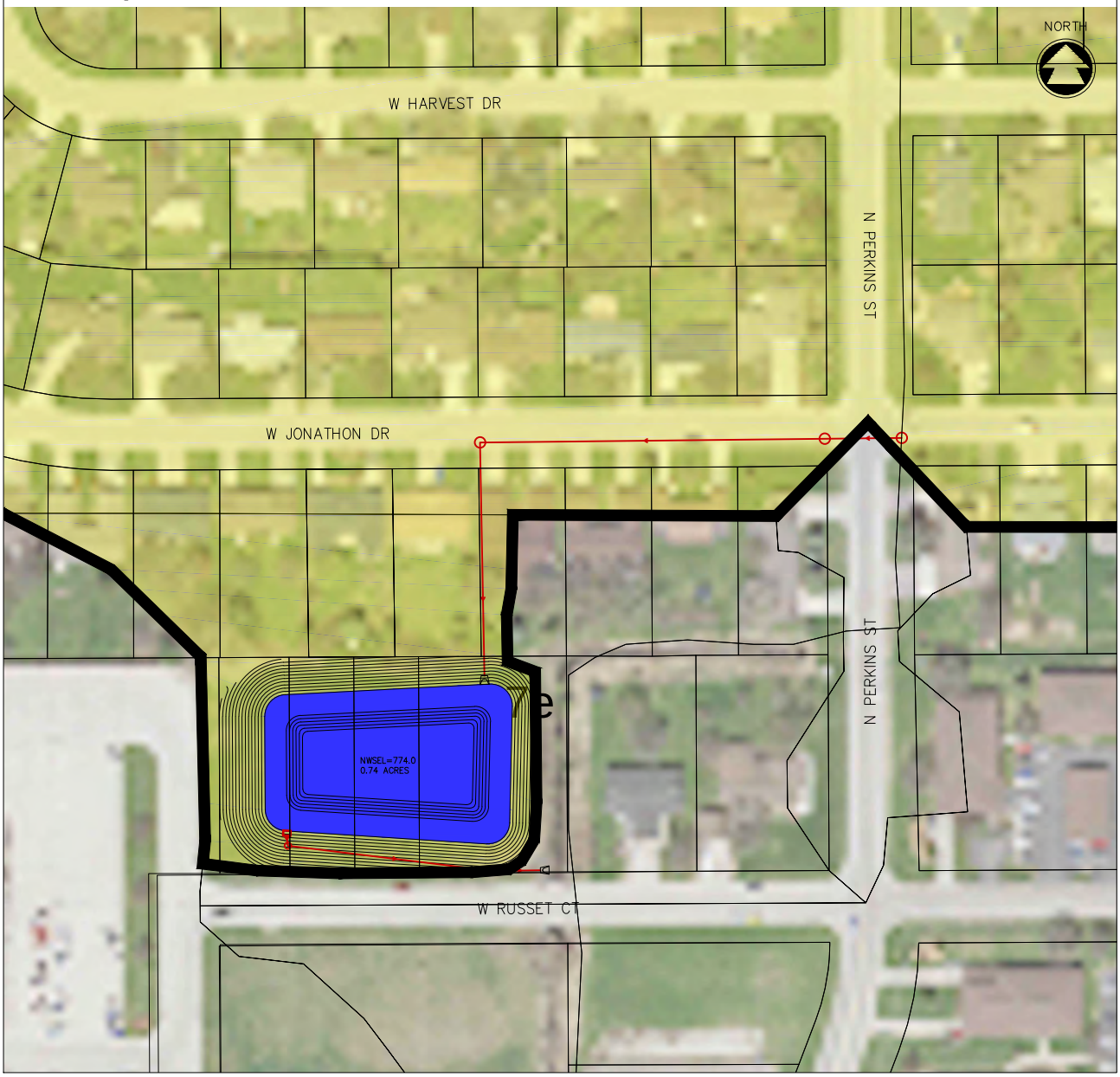
Infrastructure modifications or flow diversions required for retrofit:
DIVERT STORM SEWER FROM JONATHAN DR INTO THE POND.

Site access for future BMP maintenance:
ACCESS FROM W RUSSET CT.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
HIGH GROUNDWATER, WETLAND POTENTIAL, FLOODPLAIN

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.74 acre permanent pool	1.50 acres	$615,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

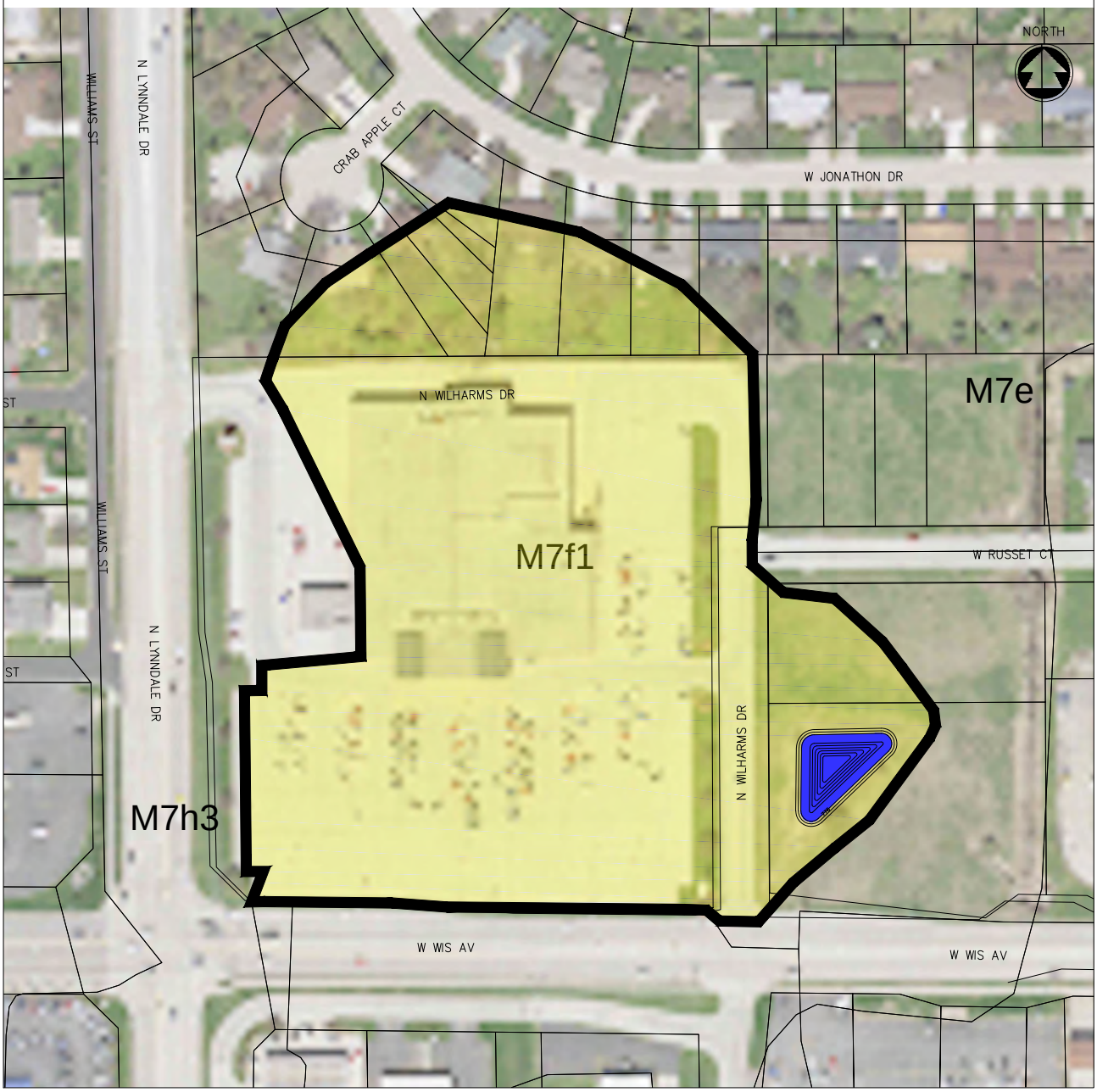
BMP CATCHMENT ID: BMP-M7f1

McM PROJECT NO: G0003-9-14-00271

SITE INFORMATION:	
Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: COPPS POND	Initials: AWS

DRAINAGE AREA:		
Sub-watershed ID: MUD CREEK, FOX RIVER	Tributary Drainage Area IDs: M7f1	Total Drainage Area: 10.6 acres
Imperviousness (Future): 81.5 %	Runoff Curve Number (Future): 91	Water Quality Volume (Future): 1.04 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	3.3 ft	Remediation:	☒ Yes ☐ No	Wetland:	☐ Potential ☐ Yes ☒ No
Bedrock Depth (in):	>78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Grays silt loam	100-Year Floodplain:	☒ Yes ☐ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
STORM SEWER OUTFALL TO EAST IN THE DRAINAGE DITCH.

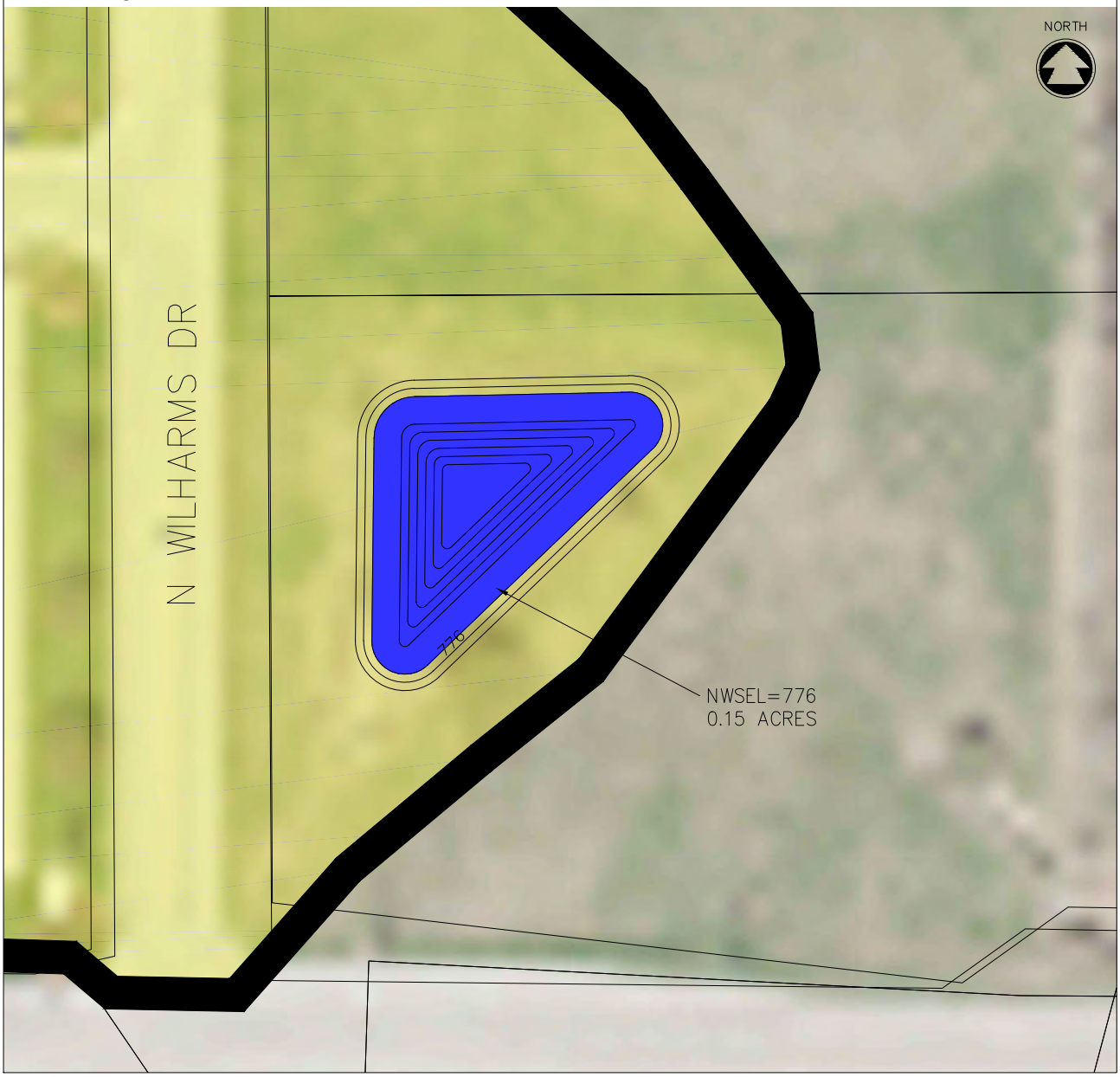
Infrastructure modifications or flow diversions required for retrofit:
DIVERT STORM SEWER FROM WILHARMS DR. INTO THE POND.

Site access for future BMP maintenance:
ACESS FROM WILHARMS DR.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
HIGH GROUNDWATER, FLOODPLAIN

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.15 acre permanent pool	0.60 acres	$84,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-M7f2

McM PROJECT NO: G0003-9-14-00271

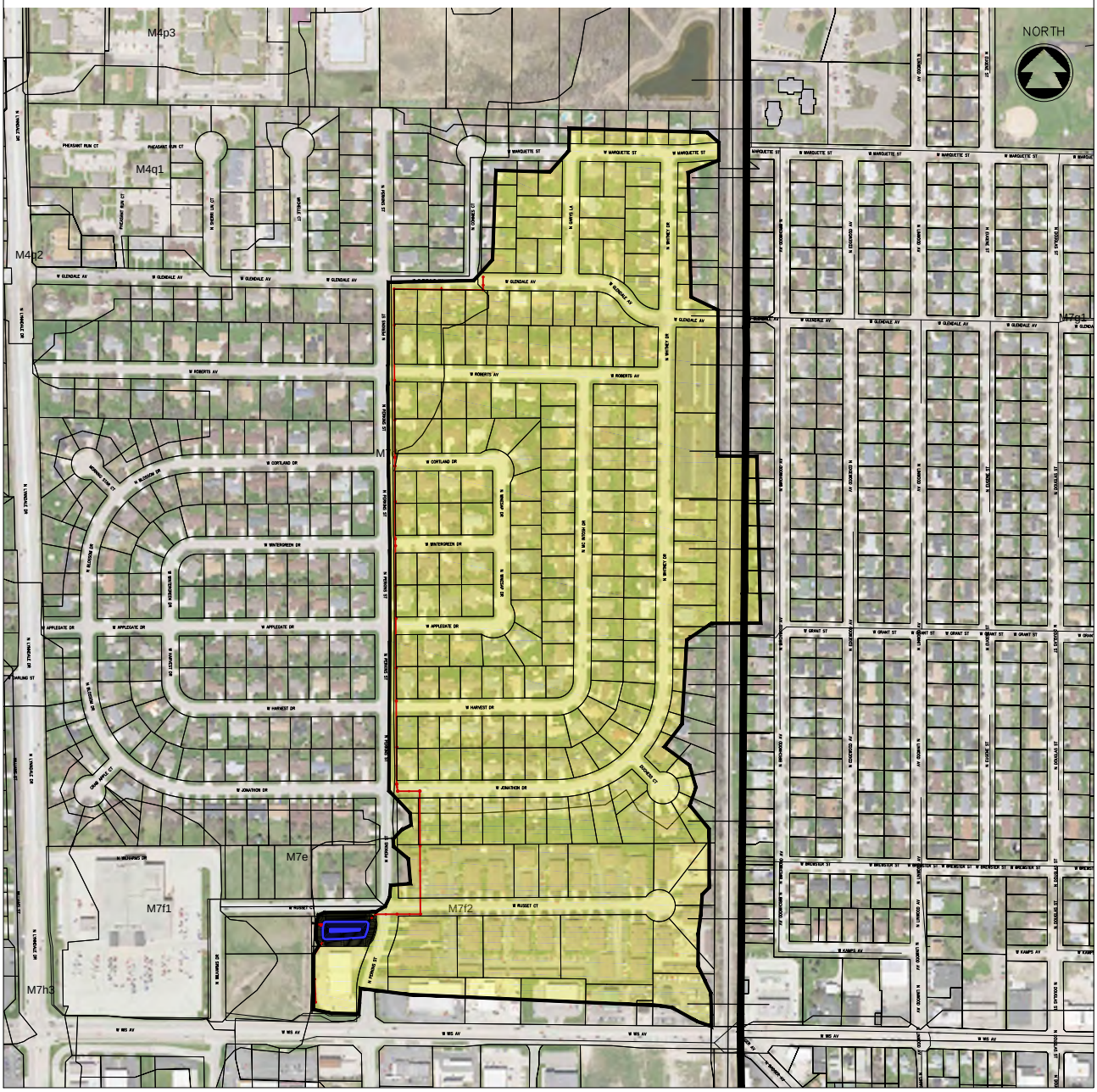
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: APPLEGATE EAST POND	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: MUD CREEK	Tributary Drainage Area IDs: M7f2	Total Drainage Area: 86.2 acres
Imperviousness (Future): 43.1 %	Runoff Curve Number (Future): 87	Water Quality Volume (Future): 4.72 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	5.8 ft, 1 ft	Remediation:	☐ Yes ☒ No	Wetland:	☒ Potential ☐ Yes ☐ No
Bedrock Depth (in):	>78 in, 35 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Winneconne silty clay loam, Manawa silty clay loam	100-Year Floodplain:	☒ Yes ☐ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
STORM SEWER OUTFALL TO THE WEST INTO THE STREAM.

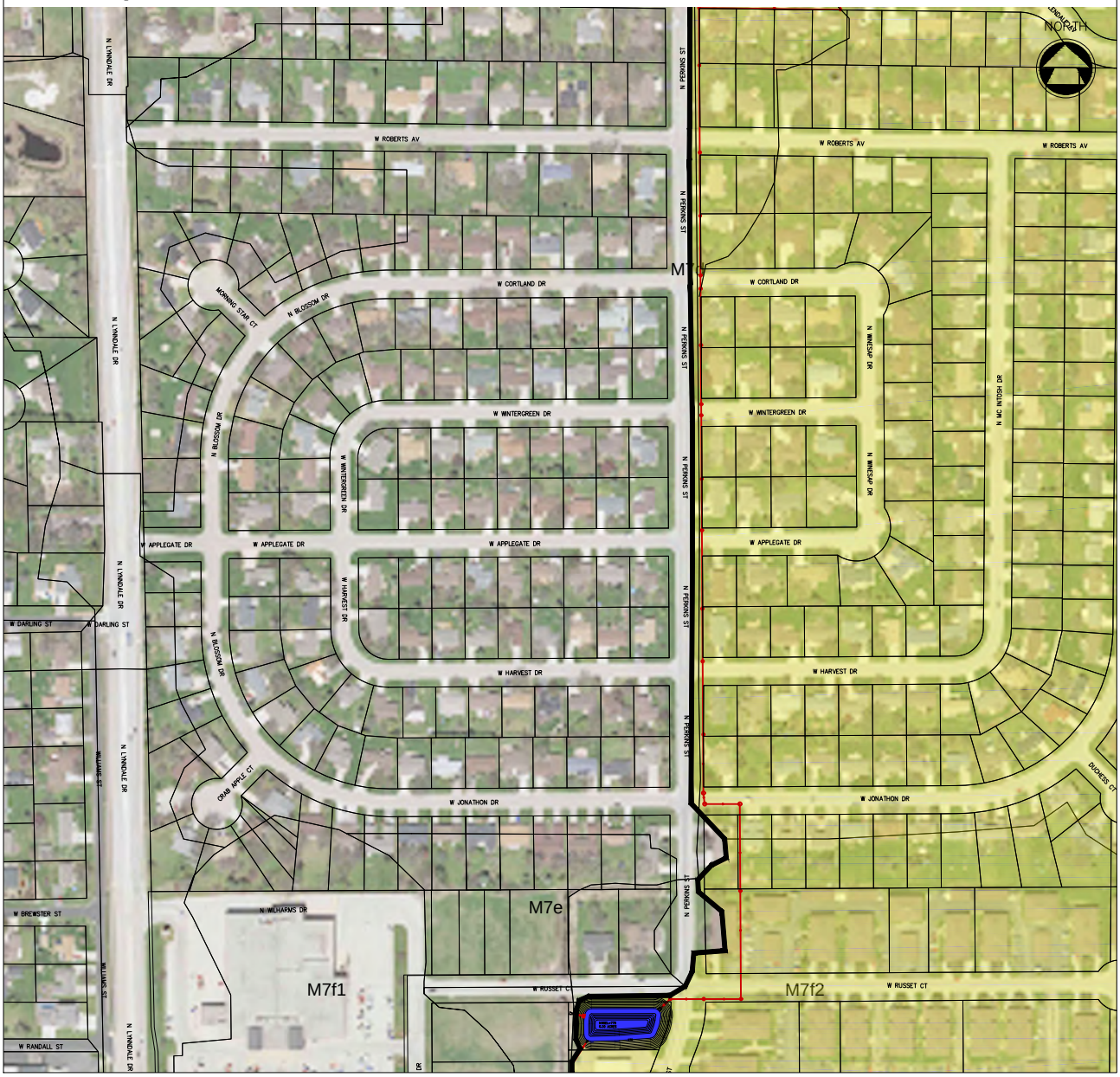
Infrastructure modifications or flow diversions required for retrofit:
DIVER STORM SEWER FROM JONATHON DR THROUGH THE POND.

Site access for future BMP maintenance:
ACCESS FROM RUSSET CT OR PERKINS ST.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
WETLAND POTENTIAL, FLOODPLAIN

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.30 acre permanent pool	0.61 acres	$679,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-M7j3

McM PROJECT NO: G0003-9-14-00271

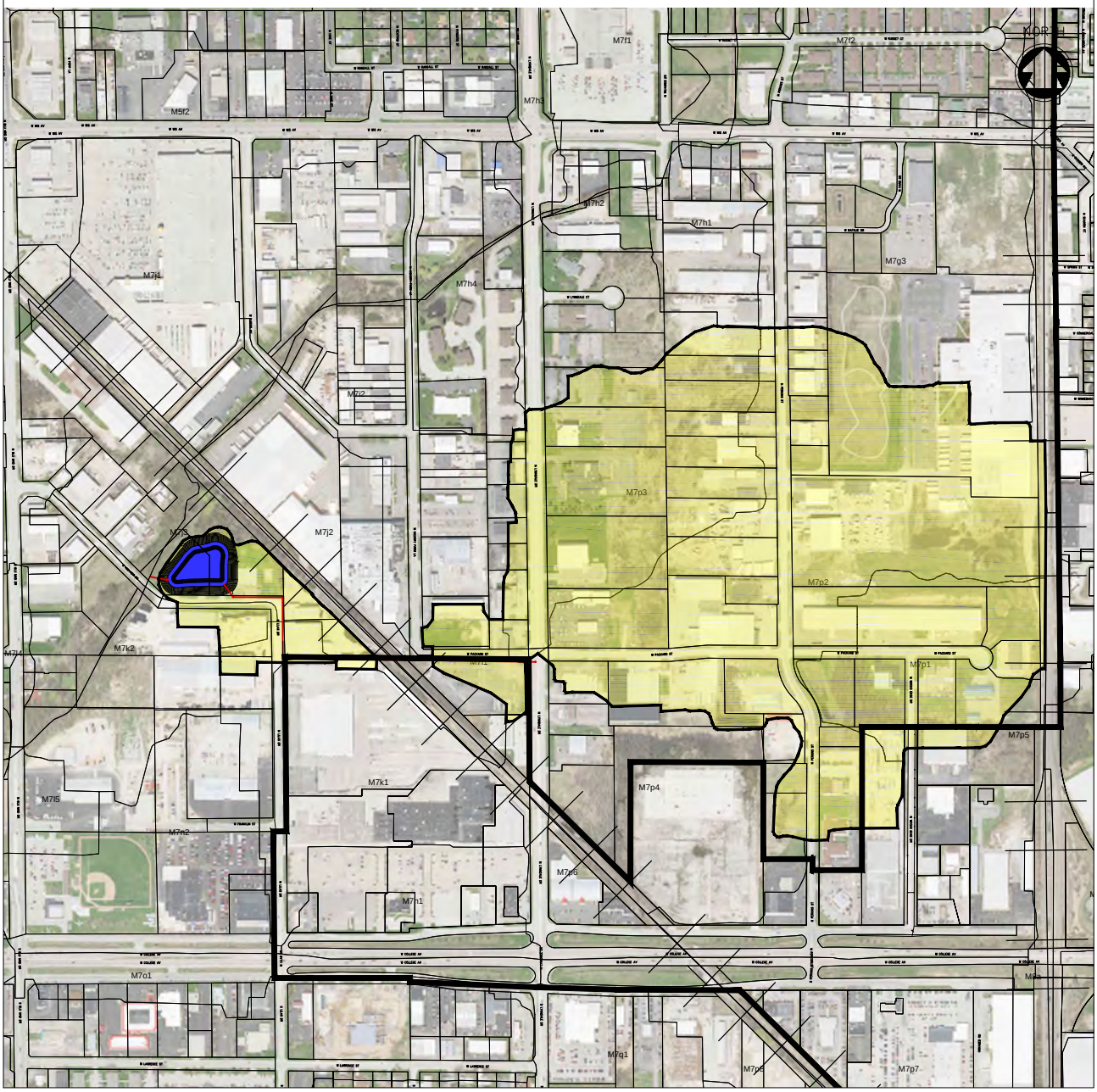
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: HIGHVIEW POND	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: MUD CREEK	Tributary Drainage Area IDs: M7j3	Total Drainage Area: 129.5 acres
Imperviousness (Future): 80.5 %	Runoff Curve Number (Future): 94	Water Quality Volume (Future): 12.53 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	0 ft, 5.8 ft	Remediation:	☐ Yes ☒ No	Wetland:	☒ Potential ☐ Yes ☐ No
Bedrock Depth (in):	>78 in, >78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Poygan silty clay loam, Winneconne silty clay loam	100-Year Floodplain:	☒ Yes ☐ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
STORM SEWER OUTFALL TO THE NORTHWEST INTO THE STREAM.

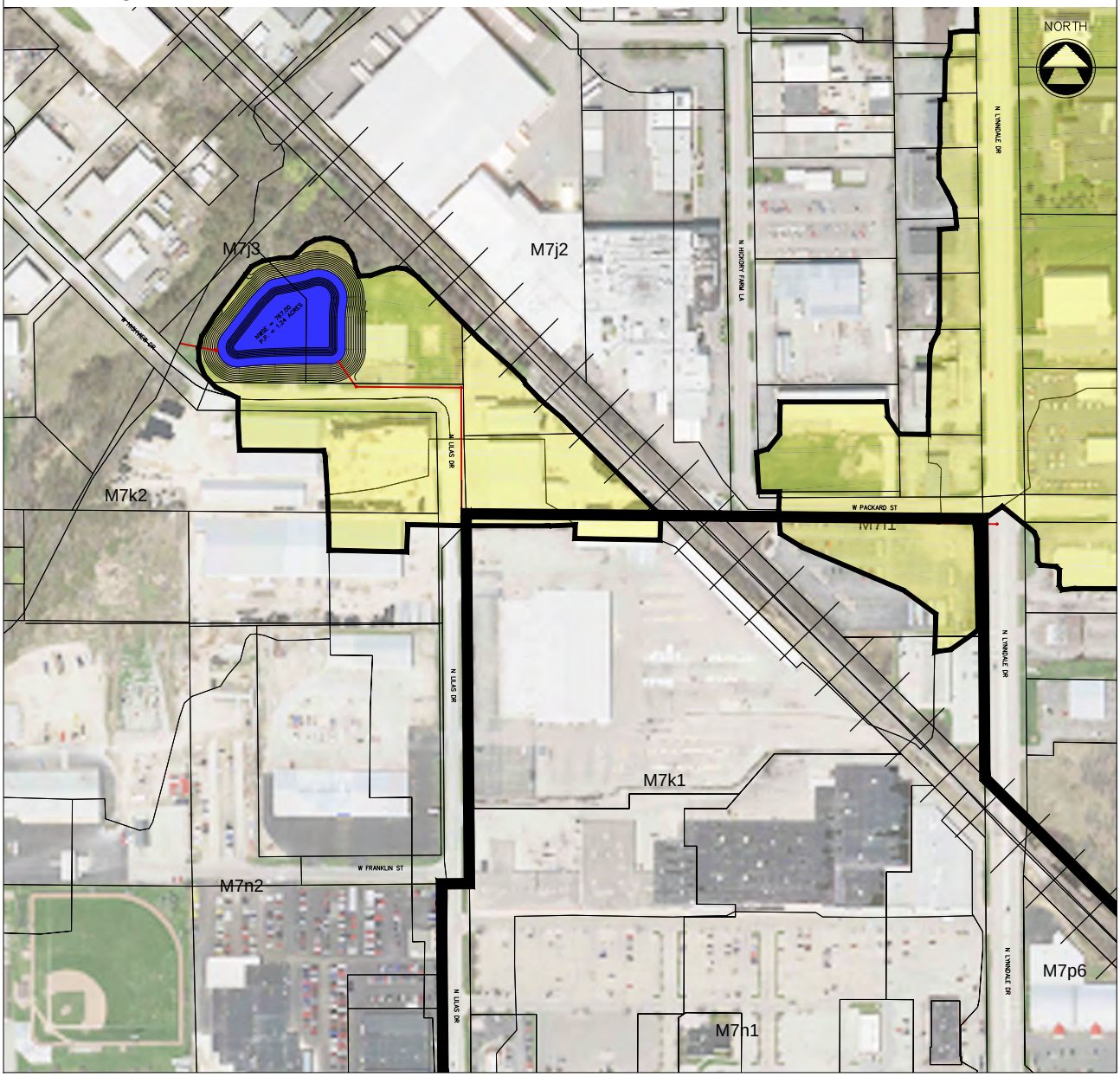
Infrastructure modifications or flow diversions required for retrofit:
DIVERT STORM SEWER FROM LILAS DR INTO THE POND.

Site access for future BMP maintenance:
ACCESS FROM LILAS DR OR HIGHVIEW DR.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
HIGH GROUNDWATER, WETLAND POTENTIAL, FLOODPLAIN

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
1.24 acre permanent pool	3.70 acres	$819,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-M7m2

McM PROJECT NO: G0003-9-14-00271

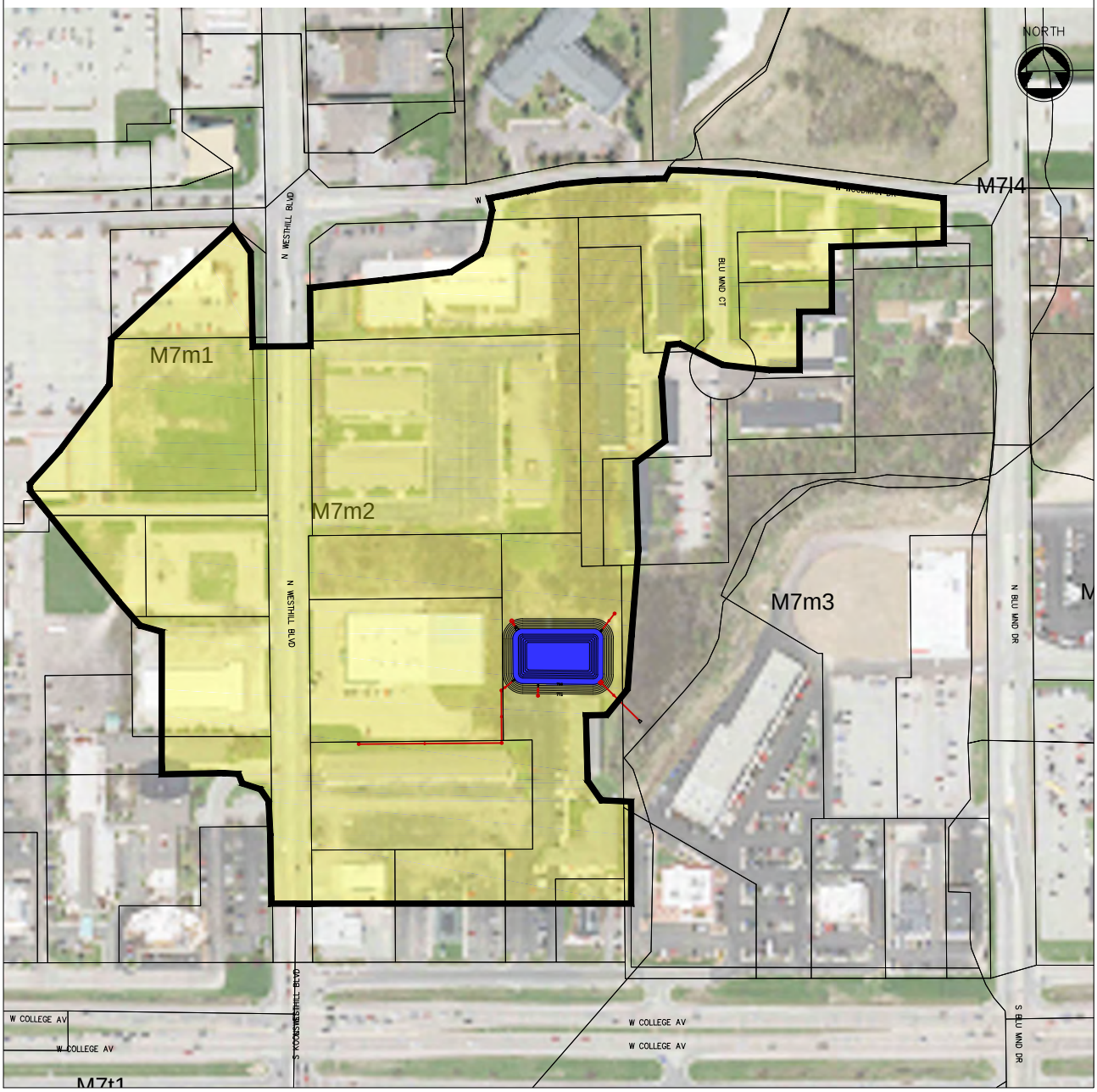
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: WESTHILL MOTEL POND	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: MUD CREEK	Tributary Drainage Area IDs: M7m2	Total Drainage Area: 27.0 acres
Imperviousness (Future): 84.9 %	Runoff Curve Number (Future): 94	Water Quality Volume (Future): 2.74 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	3.3 ft, 0 ft	Remediation:	☐ Yes ☒ No	Wetland:	☒ Potential ☐ Yes ☐ No
Bedrock Depth (in):	>78 in, >78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Briggsville silt loam, Fluvaquents	100-Year Floodplain:	☒ Yes ☐ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
STORM SEWER OUTFALL TO THE SOUTHEAST INTO THE STREAM.

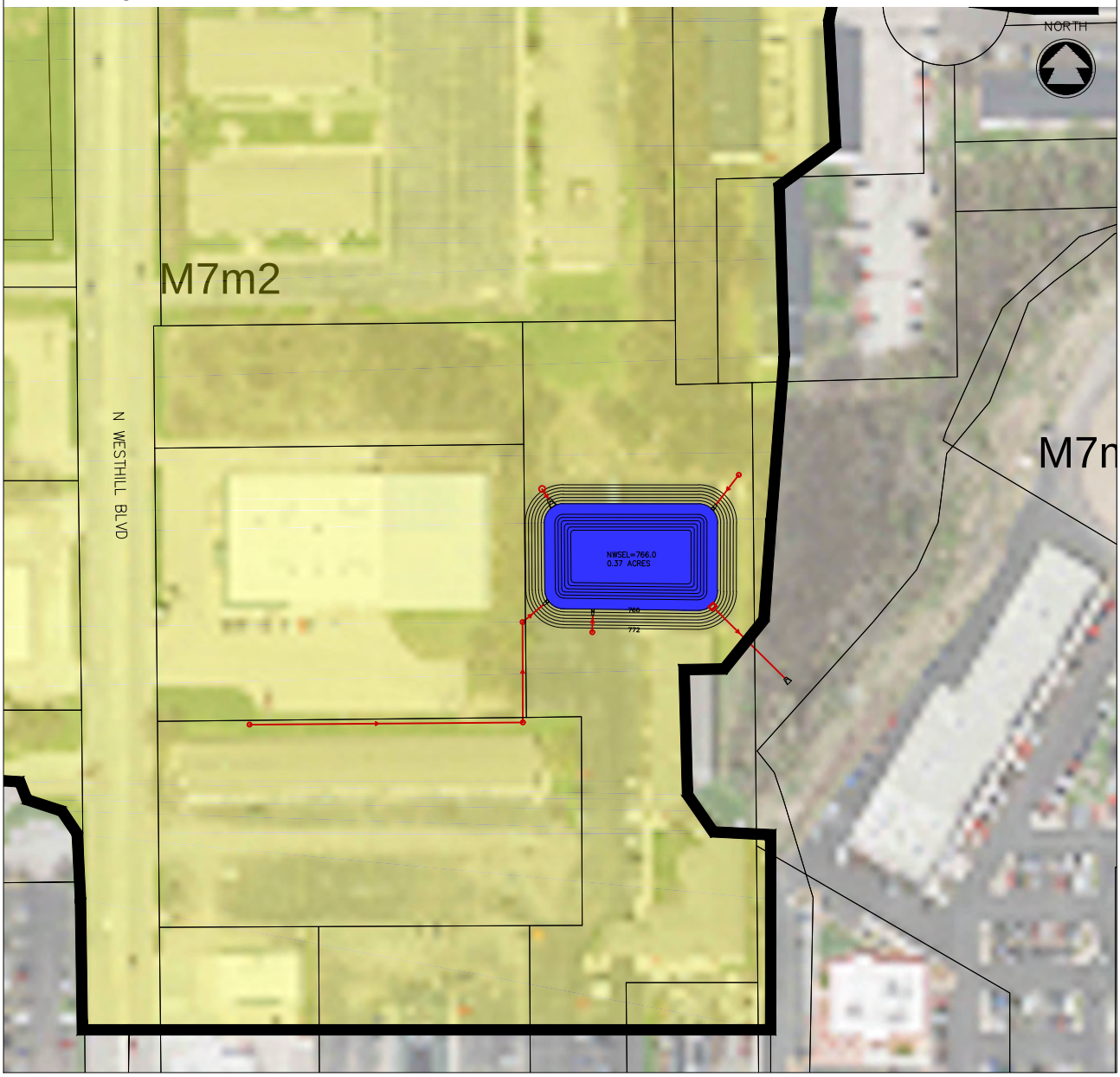
Infrastructure modifications or flow diversions required for retrofit:
YARD DRAINS FROM ADJACENT PROPERTIES TO CONNECT INTO THE POND.

Site access for future BMP maintenance:
ACCESS FROM WESTHILL BLVD THROUGH AN EASEMENT.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
HIGH GROUNDWATER, WETLAND POTENTIAL, FLOODPLAIN

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.37 acre permanent pool	0.76 acres	$230,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-M7n2

McM PROJECT NO: G0003-9-14-00271

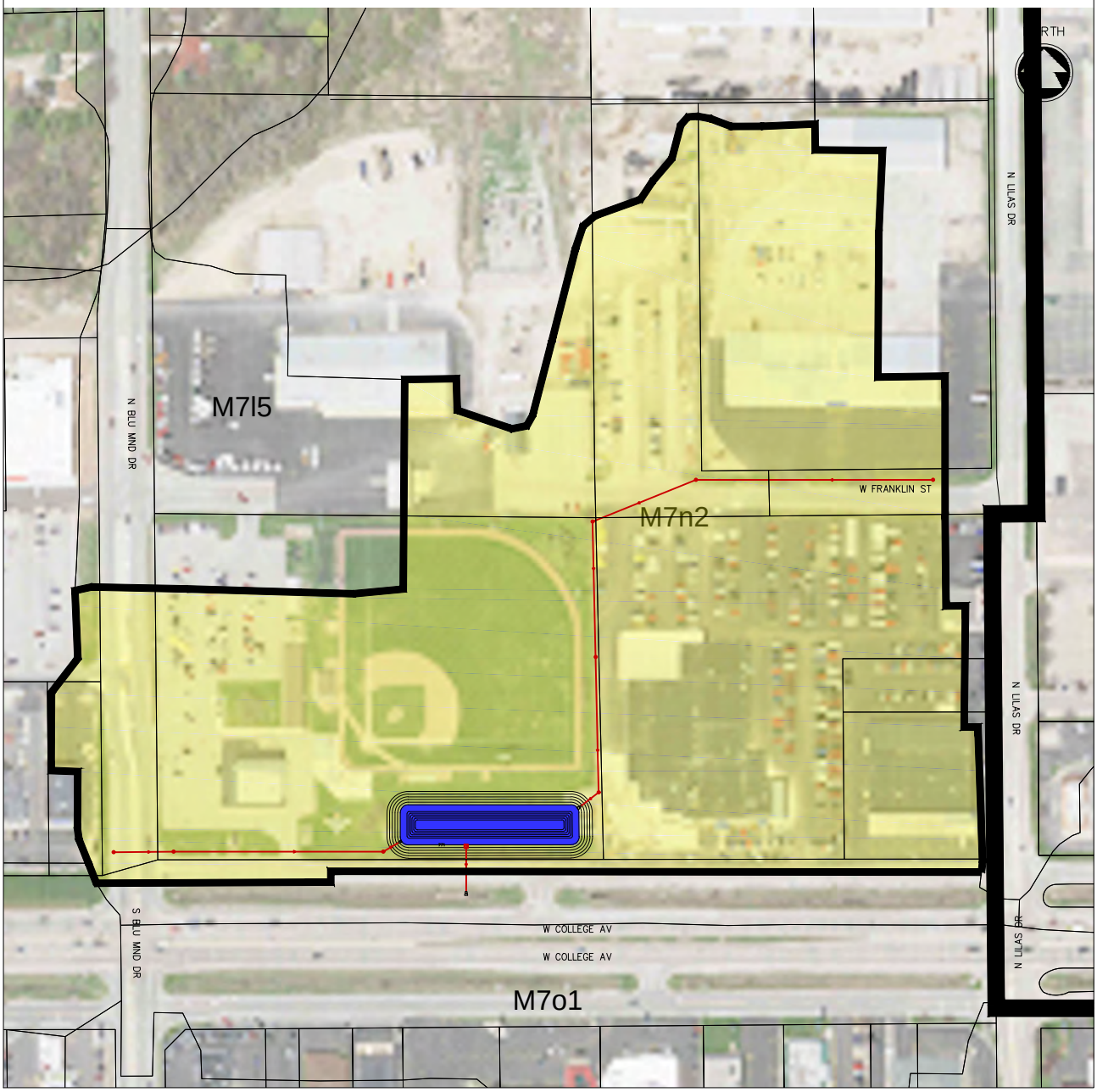
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: LEGION POND	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: MUD CREEK	Tributary Drainage Area IDs: M7n2	Total Drainage Area: 22.5 acres
Imperviousness (Future): 72.5 %	Runoff Curve Number (Future): 85	Water Quality Volume (Future): 1.98 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft): 5.8 ft	Remediation:	☒ Yes ☐ No	Wetland:	☐ Potential	☐ Yes ☒ No
Bedrock Depth (in): >78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:		☐ Yes ☒ No
USDA Soil Texture: Udorthents	100-Year Floodplain:	☒ Yes ☐ No	Private Well < 100 ft:		☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
STORM SEWER OUTFALL TO THE SOUTH INTO THE COLLEGE AVE DITCH.

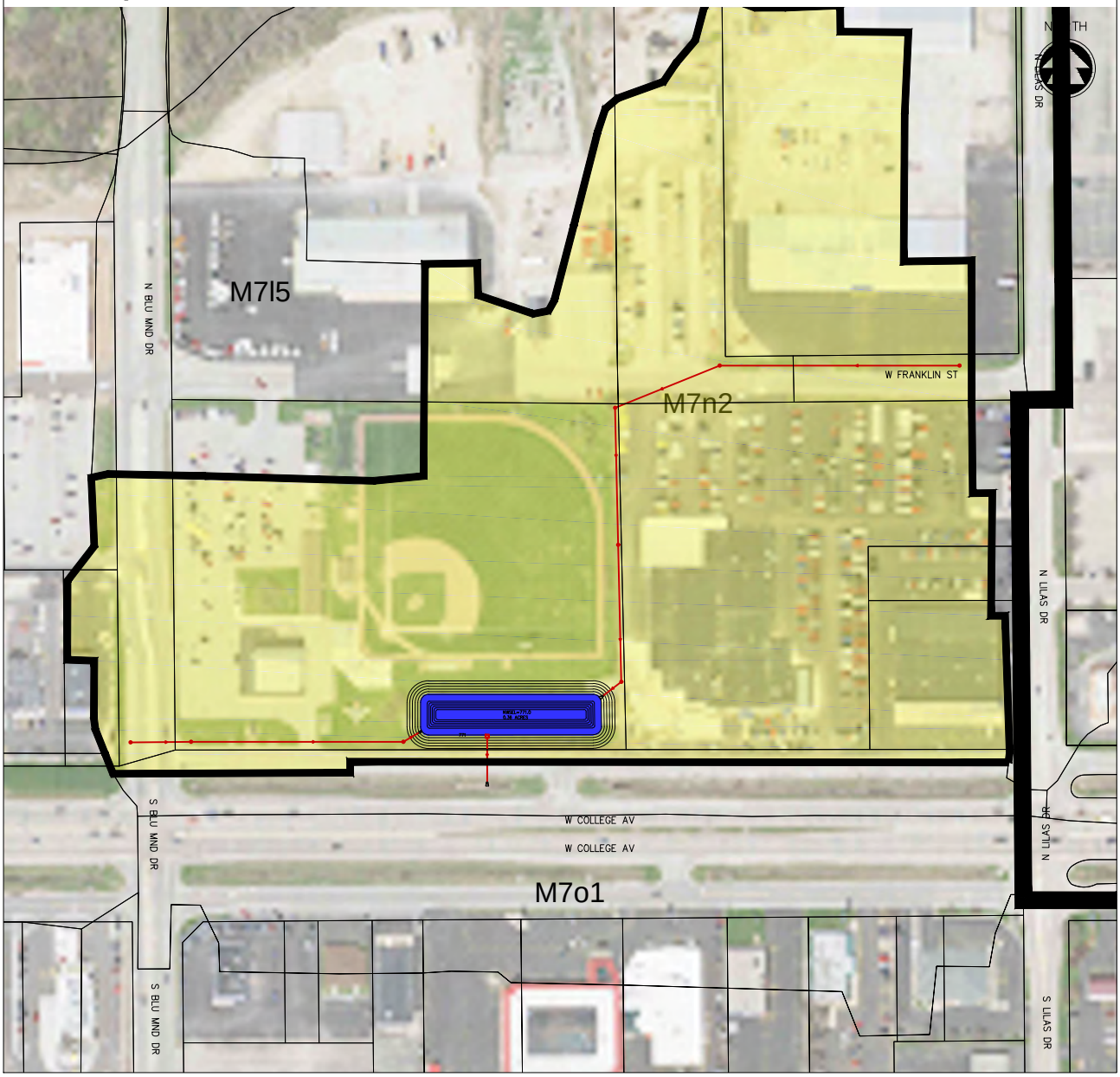
Infrastructure modifications or flow diversions required for retrofit:
DIVERT STORM SEWER FROM BLUEMOUND DR AND FRANKLIN ST INTO THE POND.

Site access for future BMP maintenance:
ACCESS FROM W COLLEGE SERVICE RD.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
FLOODPLAIN

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.36 acre permanent pool	0.77 acres	$258,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-M7q3-1

McM PROJECT NO: G0003-9-14-00271

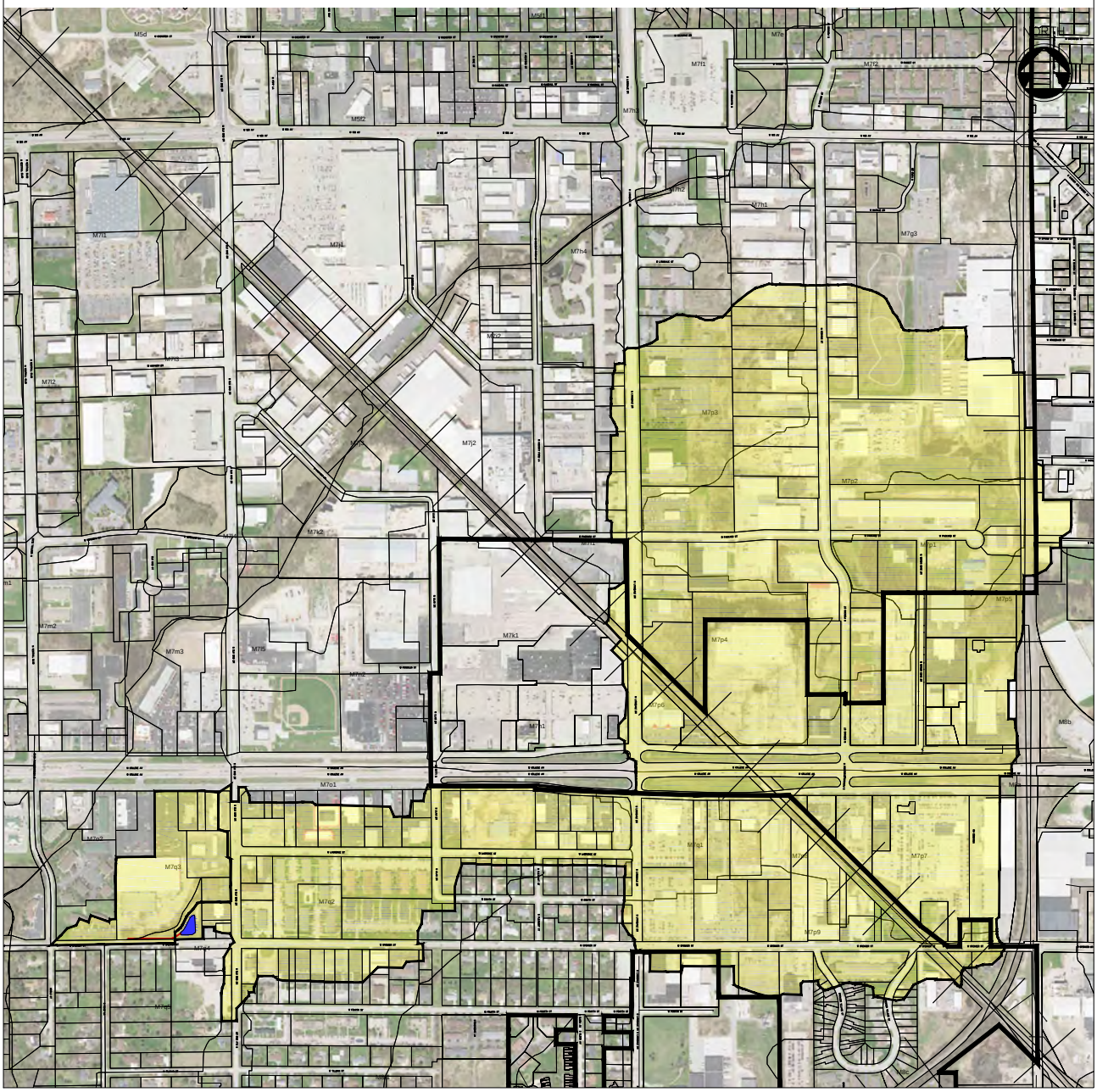
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: SPENCER STREET POND-REVISED WATERSHED	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: MUD CREEK	Tributary Drainage Area IDs: M7q3-1	Total Drainage Area: 327.6 acres
Imperviousness (Future): 80.8 %	Runoff Curve Number (Future): 93	Water Quality Volume (Future): 31.83 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	5.8 ft, 0 ft	Remediation:	☐ Yes ☒ No	Wetland:	☐ Potential ☐ Yes ☒ No
Bedrock Depth (in):	>78 in, >78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Udorthents, Fluvaquents	100-Year Floodplain:	☐ Yes ☒ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
STORM SEWER OUTFALL TO THE NORTHWEST INTO THE DRAINAGE DITCH.

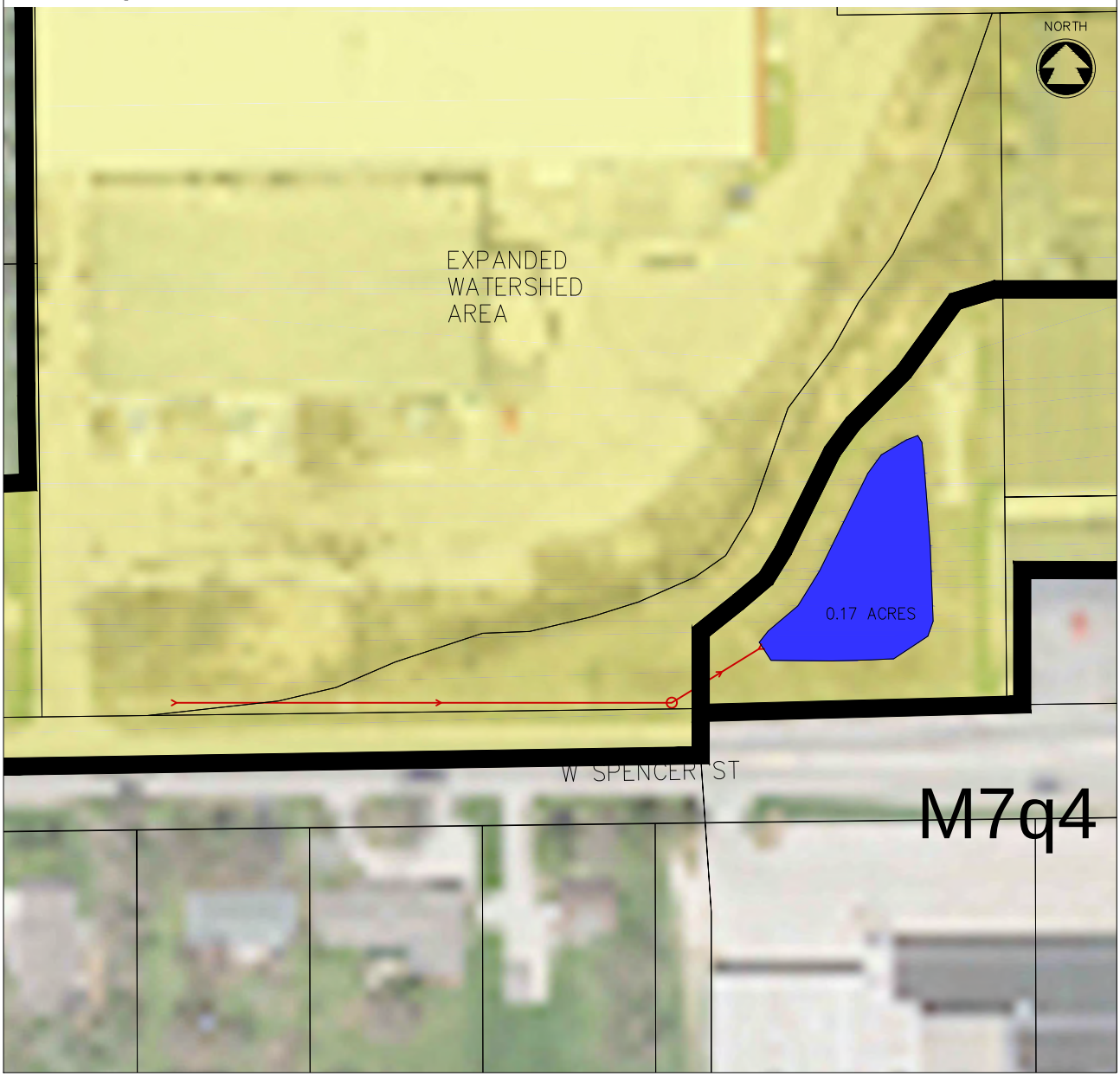
Infrastructure modifications or flow diversions required for retrofit:
DIVERT RUNOFF FROM SPENCER ST INTO THE POND

Site access for future BMP maintenance:
ACCESS FROM SPENCER ST.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
HIGH GROUNDWATER

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.17 acre permanent pool	0.08 acres	$47,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-M7q3-2

McM PROJECT NO: G0003-9-14-00271

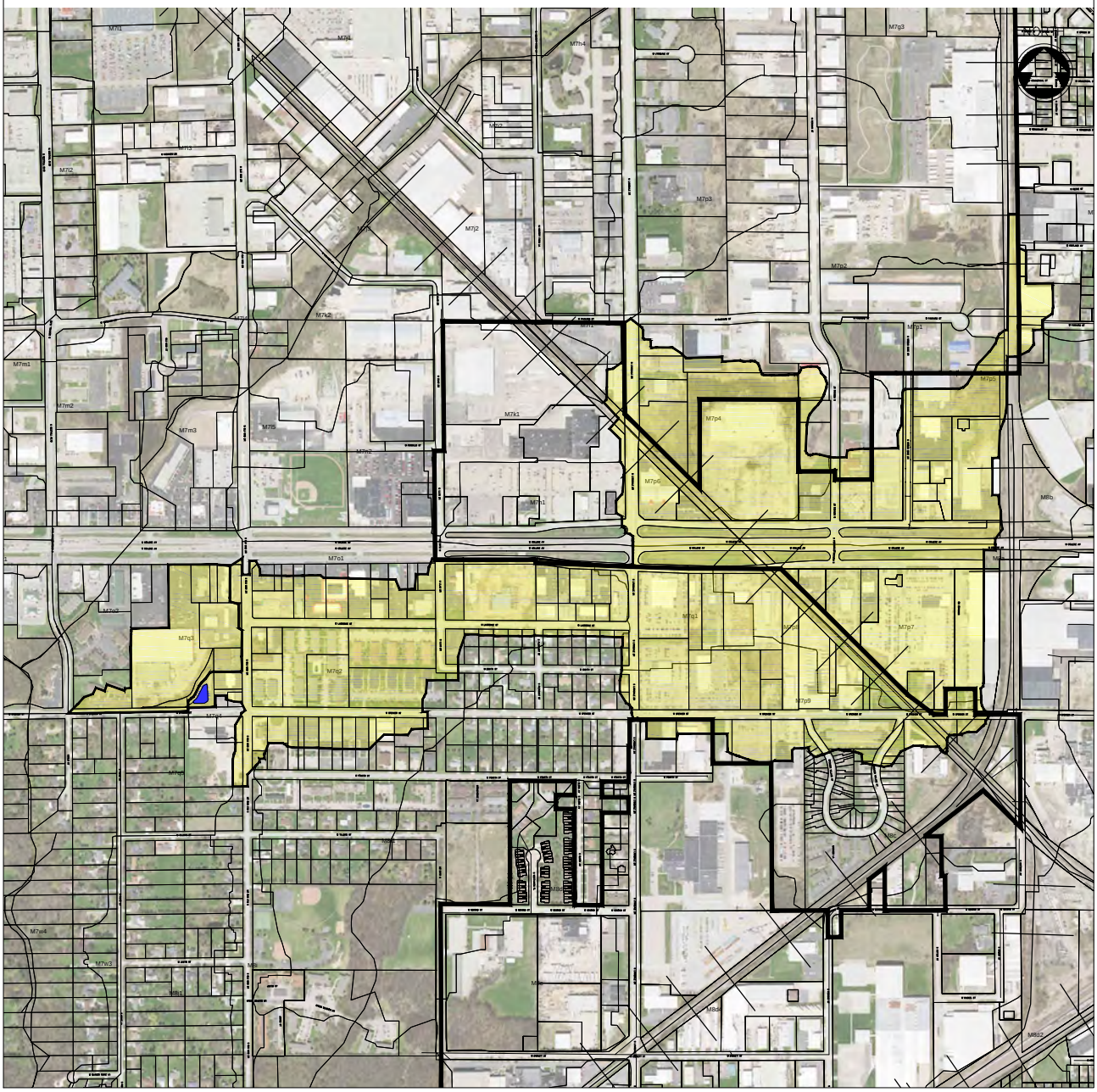
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: SPENCER STREET POND-REVISED WATERSHED (WITH HIGHVIEW POND)	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: MUD CREEK	Tributary Drainage Area IDs: M7q3-2	Total Drainage Area: 341.9 acres
Imperviousness (Future): 80.6 %	Runoff Curve Number (Future): 93	Water Quality Volume (Future): 33.14 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	5.8 ft, 0 ft	Remediation:	☐Yes ☒No	Wetland:	☐Potential ☐Yes ☒No
Bedrock Depth (in):	>78 in, >78 in	Historical:	☐Yes ☒No	Public Well < 400 ft:	☐Yes ☒No
USDA Soil Texture:	Udorthents, Fluvaquents	100-Year Floodplain:	☐Yes ☒No	Private Well < 100 ft:	☐Yes ☒No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
STORM SEWER OUTFALL TO THE NORTHWEST INTO THE DRAINAGE DITCH.

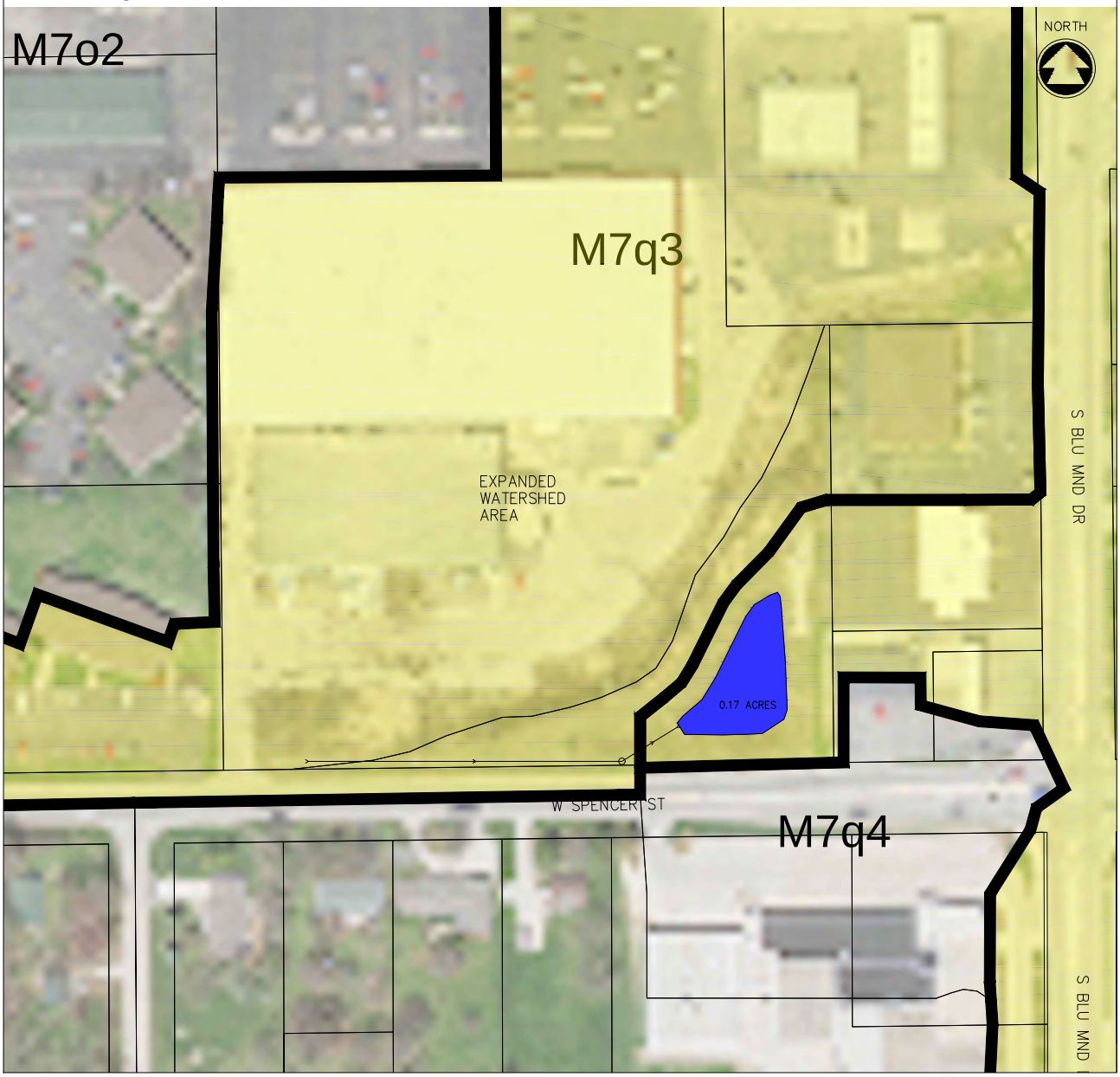
Infrastructure modifications or flow diversions required for retrofit:
DIVERT RUNOFF FROM SPENCER ST INTO THE POND.

Site access for future BMP maintenance:
ACCESS FROM SPENCER ST.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
HIGH GROUNDWATER

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.17 acre permanent pool	0.08 acres	$867,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-M7q5

McM PROJECT NO: G0003-9-14-00271

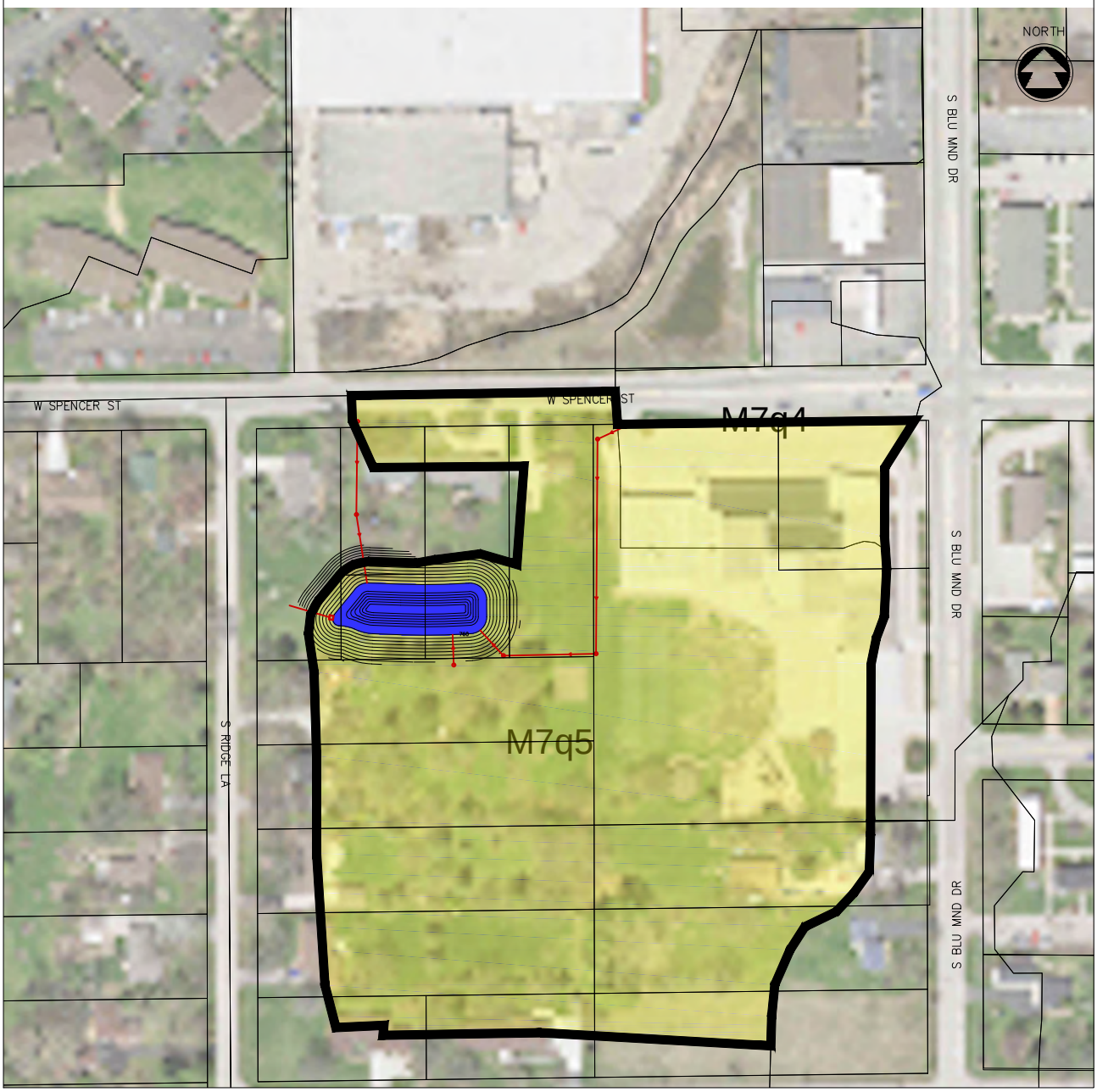
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: RIDGE POND	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: MUD CREEK	Tributary Drainage Area IDs: M7q5	Total Drainage Area: 10.3 acres
Imperviousness (Future): 34.6 %	Runoff Curve Number (Future): 85	Water Quality Volume (Future): 0.46 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	5 ft	Remediation:	☐ Yes ☒ No	Wetland:	☐ Potential ☐ Yes ☒ No
Bedrock Depth (in):	>78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Winneconne silty clay loam	100-Year Floodplain:	☐ Yes ☒ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
STORM SEWER OUTFALL TO THE WEST DRAINAGE DITCH.

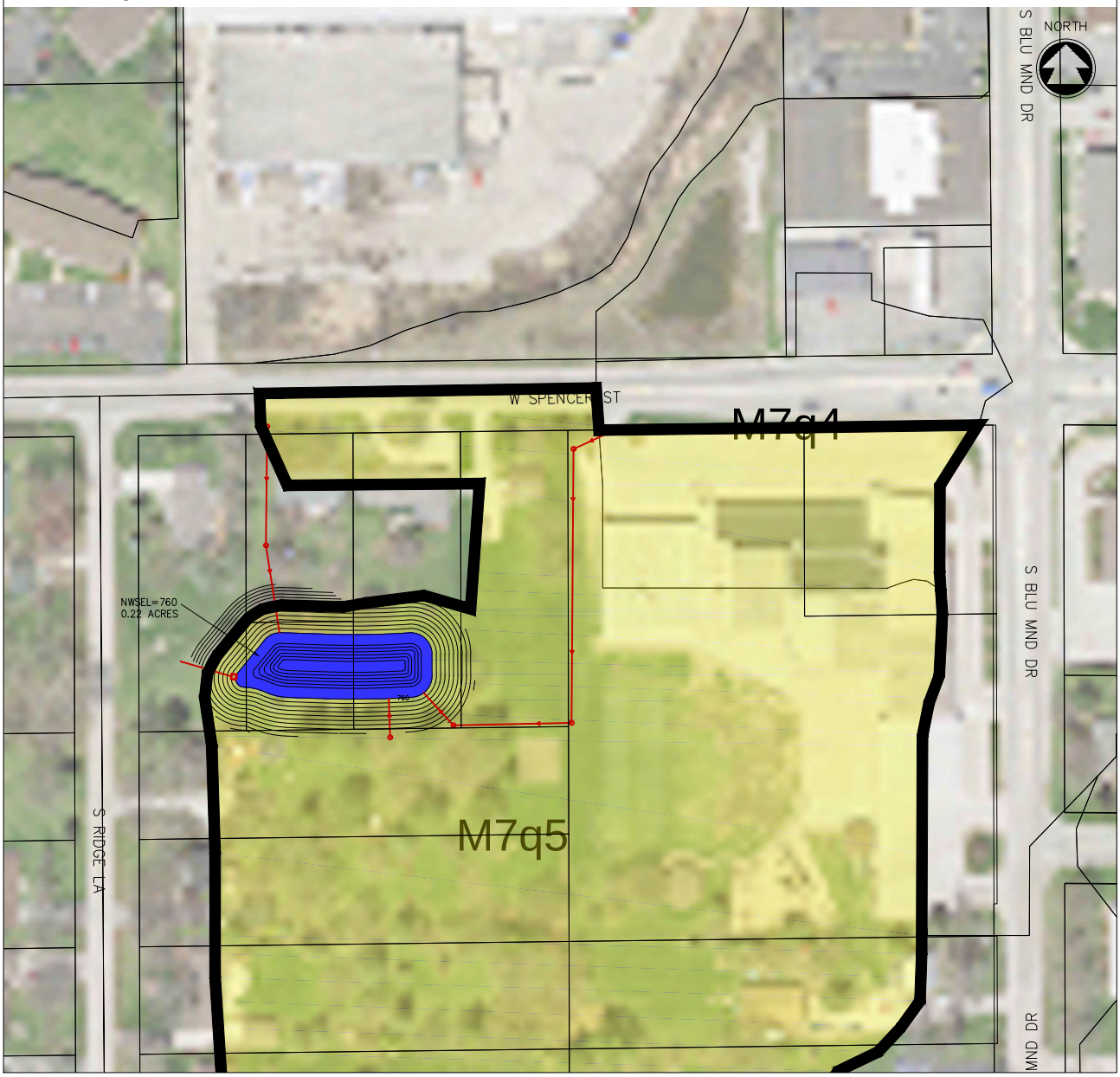
Infrastructure modifications or flow diversions required for retrofit:
DIVERT STORM RUNOFF FROM SPENCER ST INTO THE POND.

Site access for future BMP maintenance:
ACCESS FROM S RIDGE LN.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
HIGH GROUNDWATER

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.22 acre permanent pool	0.83 acres	$224,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-M7r2

McM PROJECT NO: G0003-9-14-00271

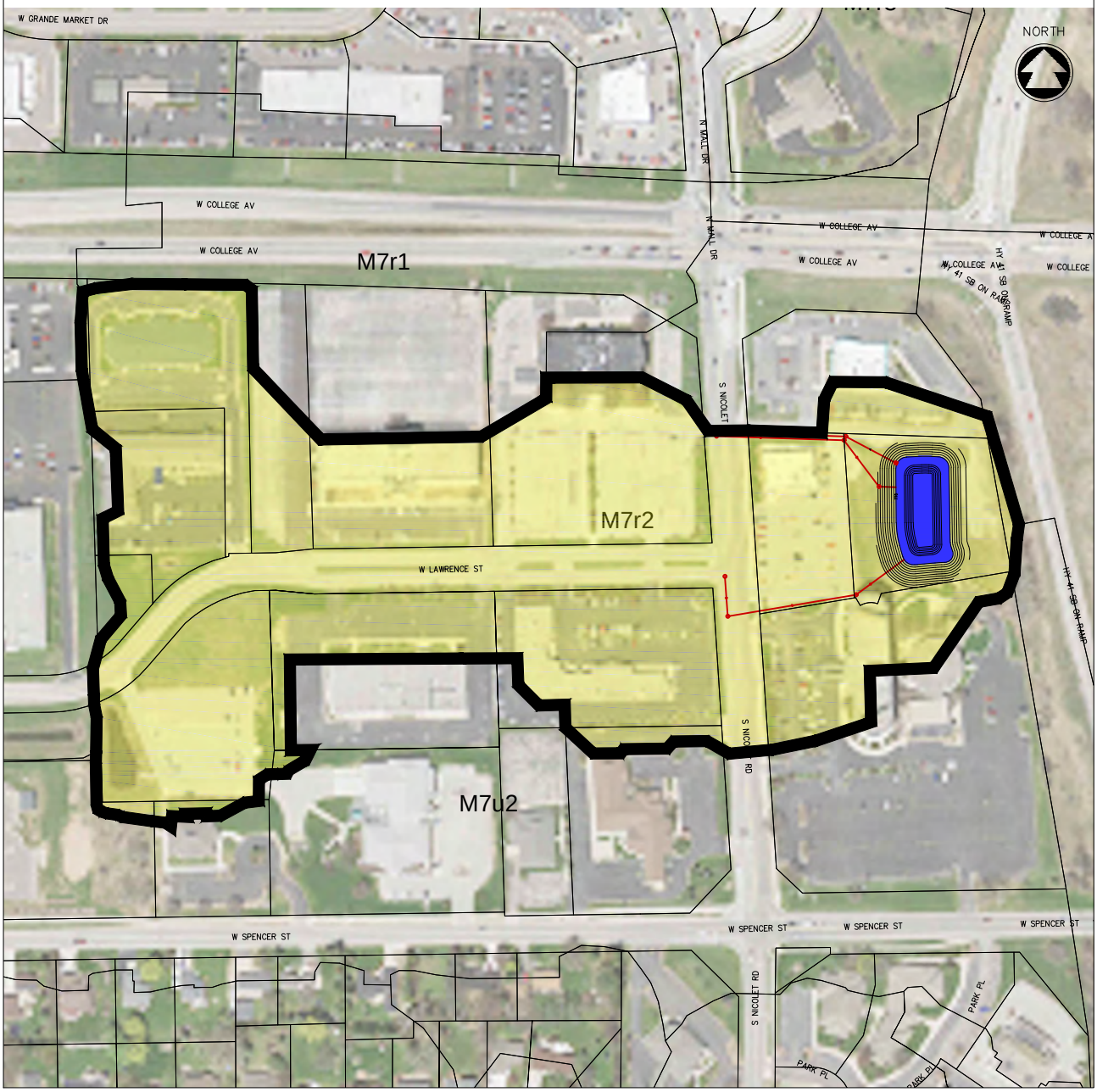
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: COLLEGE RAMP POND	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: MUD CREEK	Tributary Drainage Area IDs: M7r2	Total Drainage Area: 21.7 acres
Imperviousness (Future): 79.9 %	Runoff Curve Number (Future): 92	Water Quality Volume (Future): 2.09 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	5.8 ft	Remediation:	☐ Yes ☒ No	Wetland:	☐ Potential ☐ Yes ☒ No
Bedrock Depth (in):	>78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Manistee fine sandy loam	100-Year Floodplain:	☐ Yes ☒ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
STORM SEWER OUTFALL TO NICOLET DR.

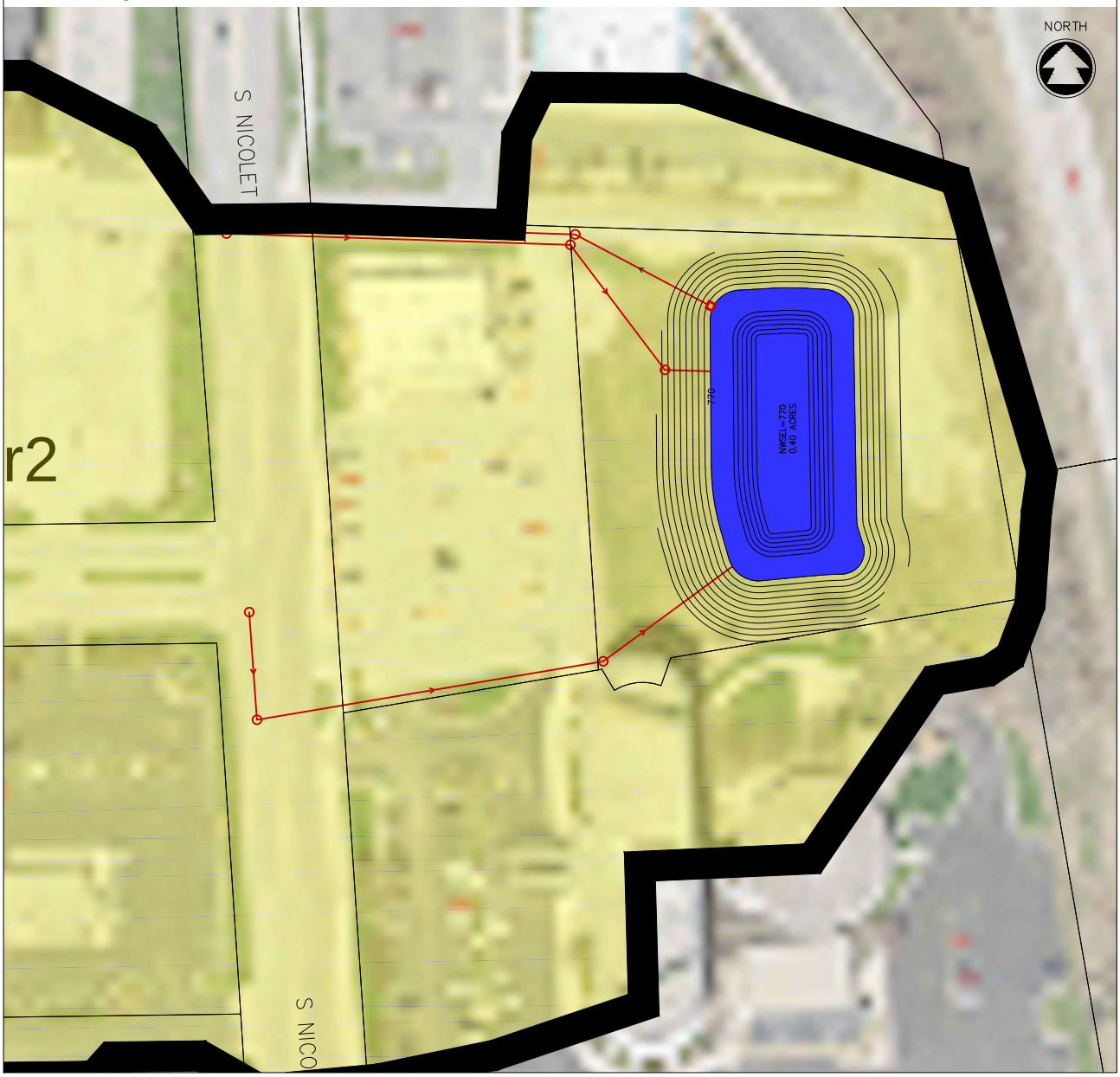
Infrastructure modifications or flow diversions required for retrofit:
DIVERT STORM SEWER FROM NICOLET DR. INTO THE POND.

Site access for future BMP maintenance:
ACCESS FROM S NICOLET DR THROUGH AN EASEMENT.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
NO KNOWN CONSTRAINTS

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.40 acre permanent pool	1.64 acres	$348,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-M7s1

McM PROJECT NO: G0003-9-14-00271

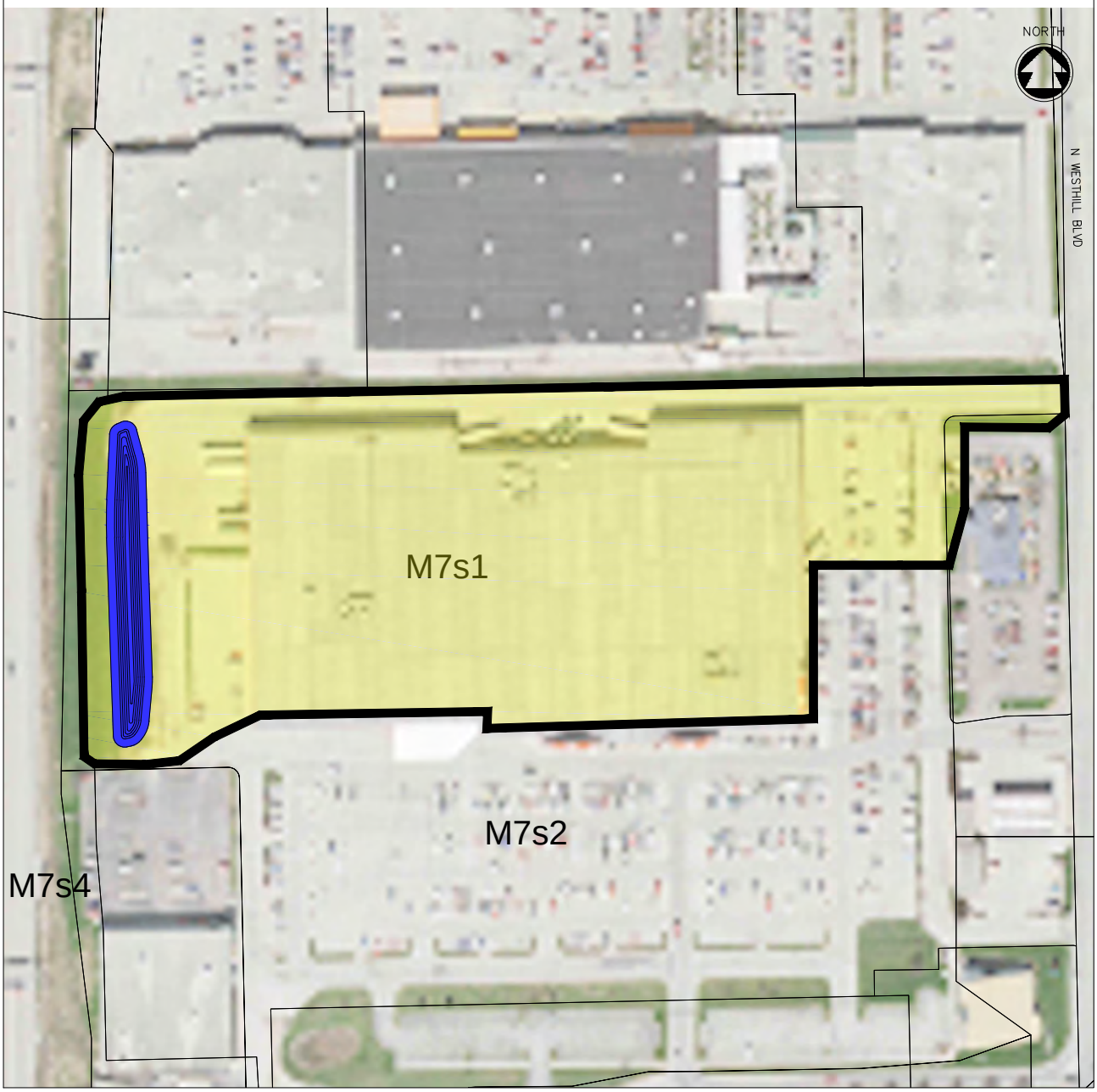
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: WOODMAN'S POND	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: Mud Creek	Tributary Drainage Area IDs: M7s1	Total Drainage Area: 9.62 acres
Imperviousness (Future): 91.7 %	Runoff Curve Number (Future): 95	Water Quality Volume (Future): 1.05 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	5.8 ft	Remediation:	☐ Yes ☒ No	Wetland:	☐ Potential ☐ Yes ☒ No
Bedrock Depth (in):	>78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Manistee, fine sandy loam	100-Year Floodplain:	☐ Yes ☒ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
STORM SEWER OUTFALL TO HWY 41 DITCH.

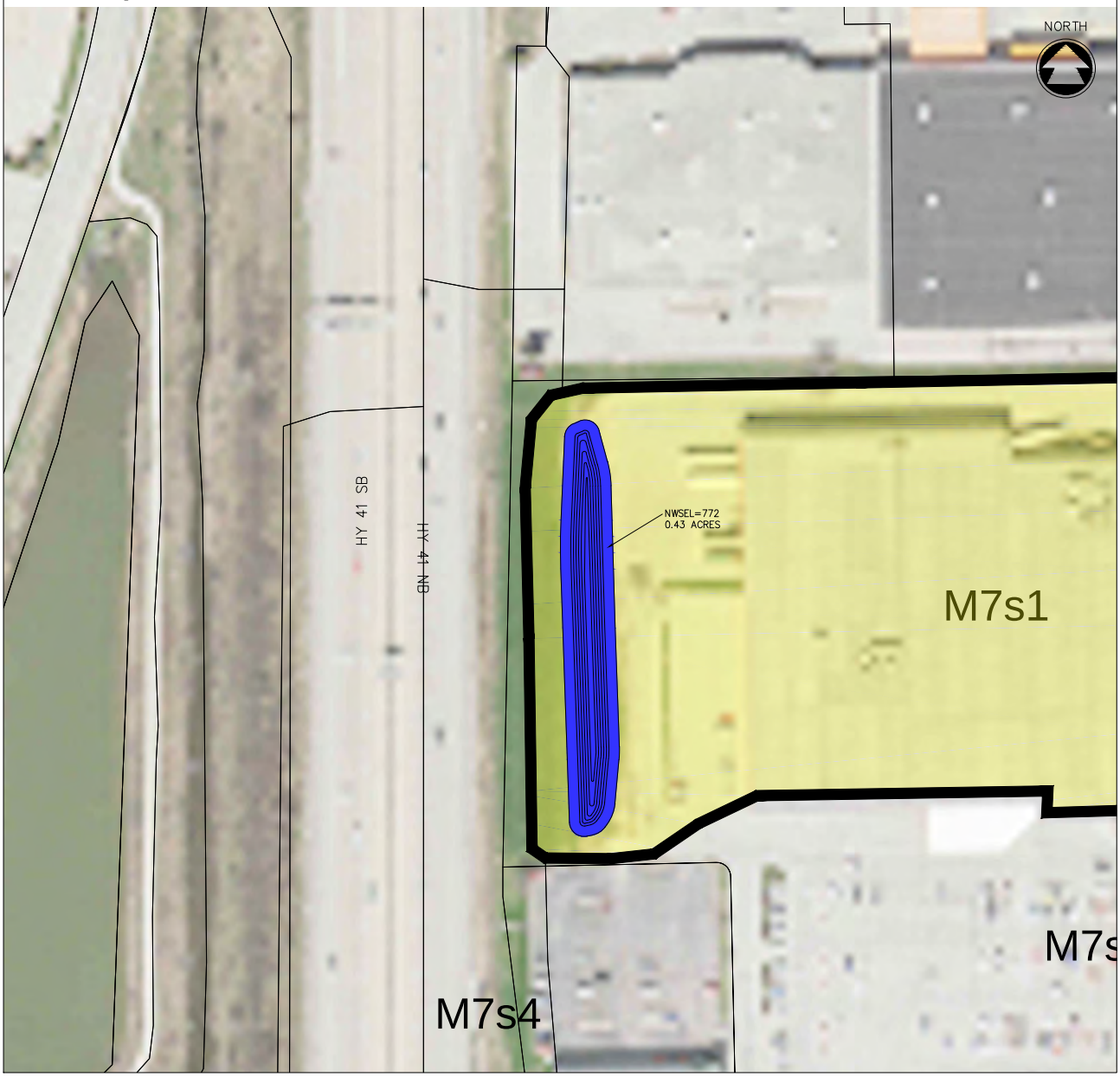
Infrastructure modifications or flow diversions required for retrofit:
DIVERT STORM WATER FROM COMMERCIAL DISTRICT INTO THE POND.

Site access for future BMP maintenance:
ACCESS FROM COMMERCIAL PROPERTY OR FRONTAGE ROAD.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
NO KNOWN CONSTRAINTS

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.43 acre permanent pool	1.15 acres	$95,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-M8c

McM PROJECT NO: G0003-9-14-00271

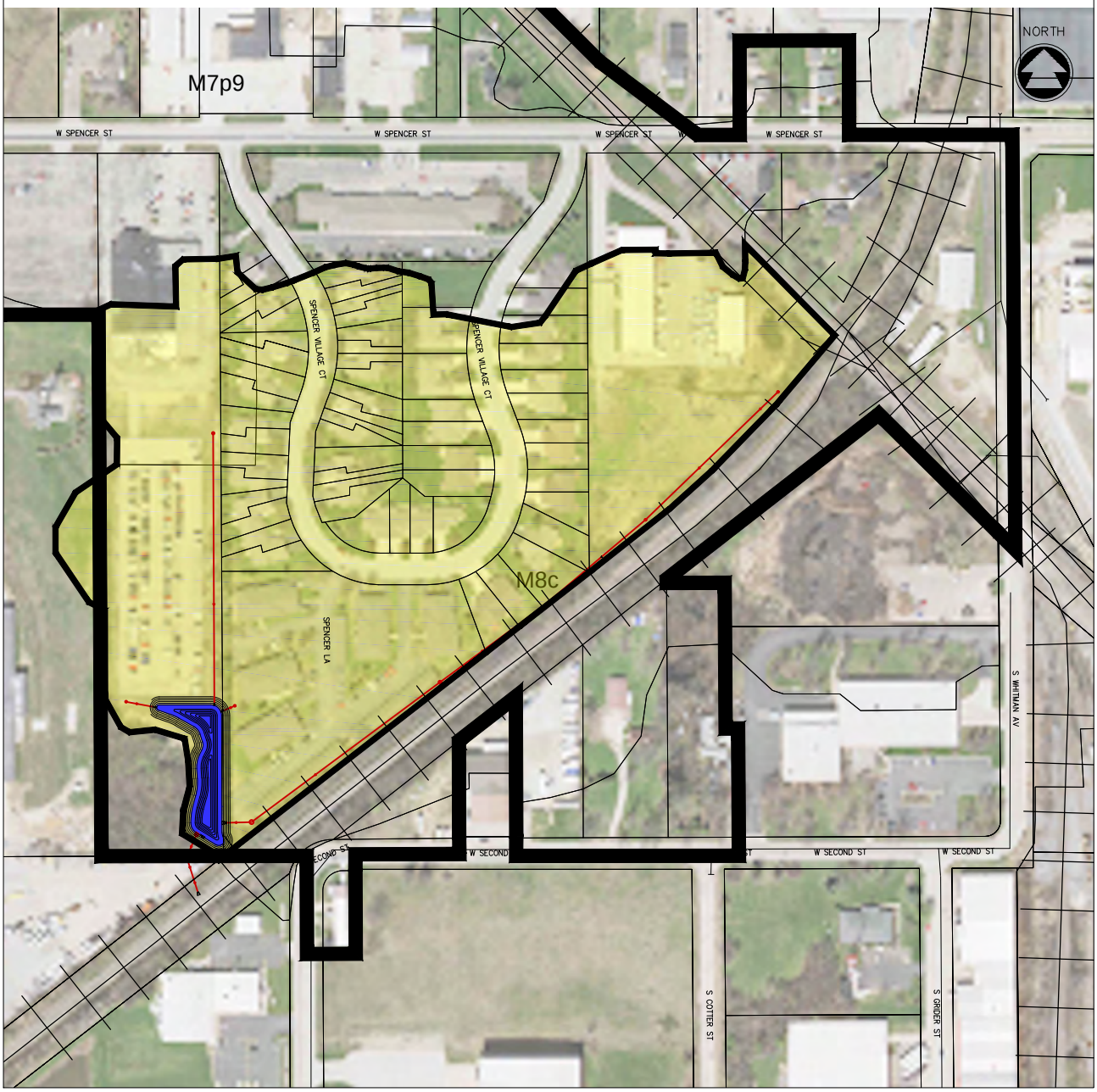
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: SPENCER VILLAGE POND	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: MUD CREEK	Tributary Drainage Area IDs: M8c	Total Drainage Area: 20.7 acres
Imperviousness (Future): 57.3 %	Runoff Curve Number (Future): 89	Water Quality Volume (Future): 1.47 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	3.3 ft	Remediation:	☐ Yes ☒ No	Wetland:	☐ Potential ☐ Yes ☒ No
Bedrock Depth (in):	>78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Briggsville silt loam	100-Year Floodplain:	☐ Yes ☒ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
STORM SEWER OUTFALL TO THE SOUTH INTO THE RAILROAD DITCH.

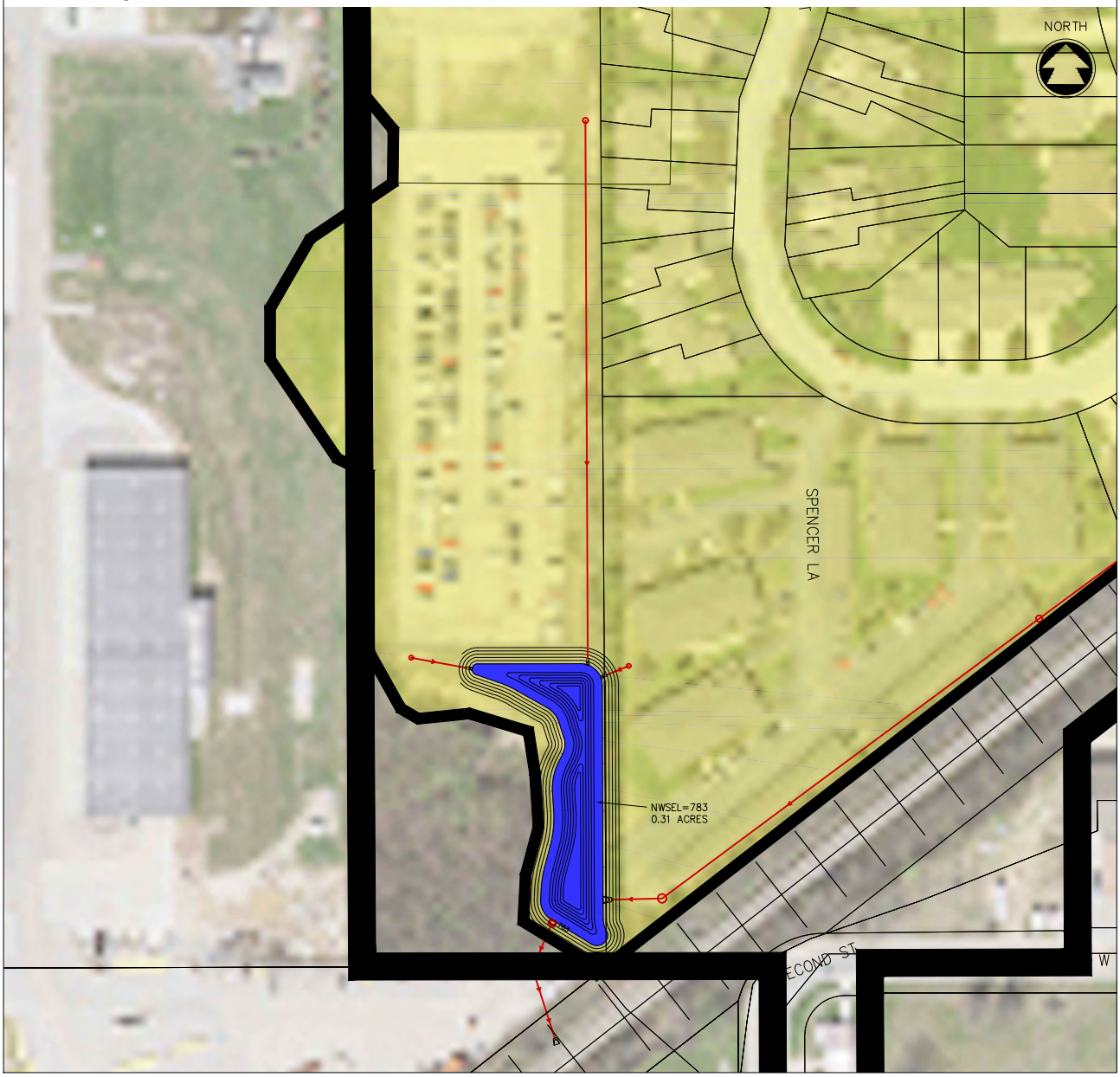
Infrastructure modifications or flow diversions required for retrofit:
DIVERT FLOW FROM REAR YARD SWALE AND YARD DRAINS INTO THE POND.

Site access for future BMP maintenance:
ACCESS FROM SPENCER LN THROUGH AN EASEMENT.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
HIGH GROUNDWATER

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.31 acre permanent pool	0.75 acres	$208,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-M8f1

McM PROJECT NO: G0003-9-14-00271

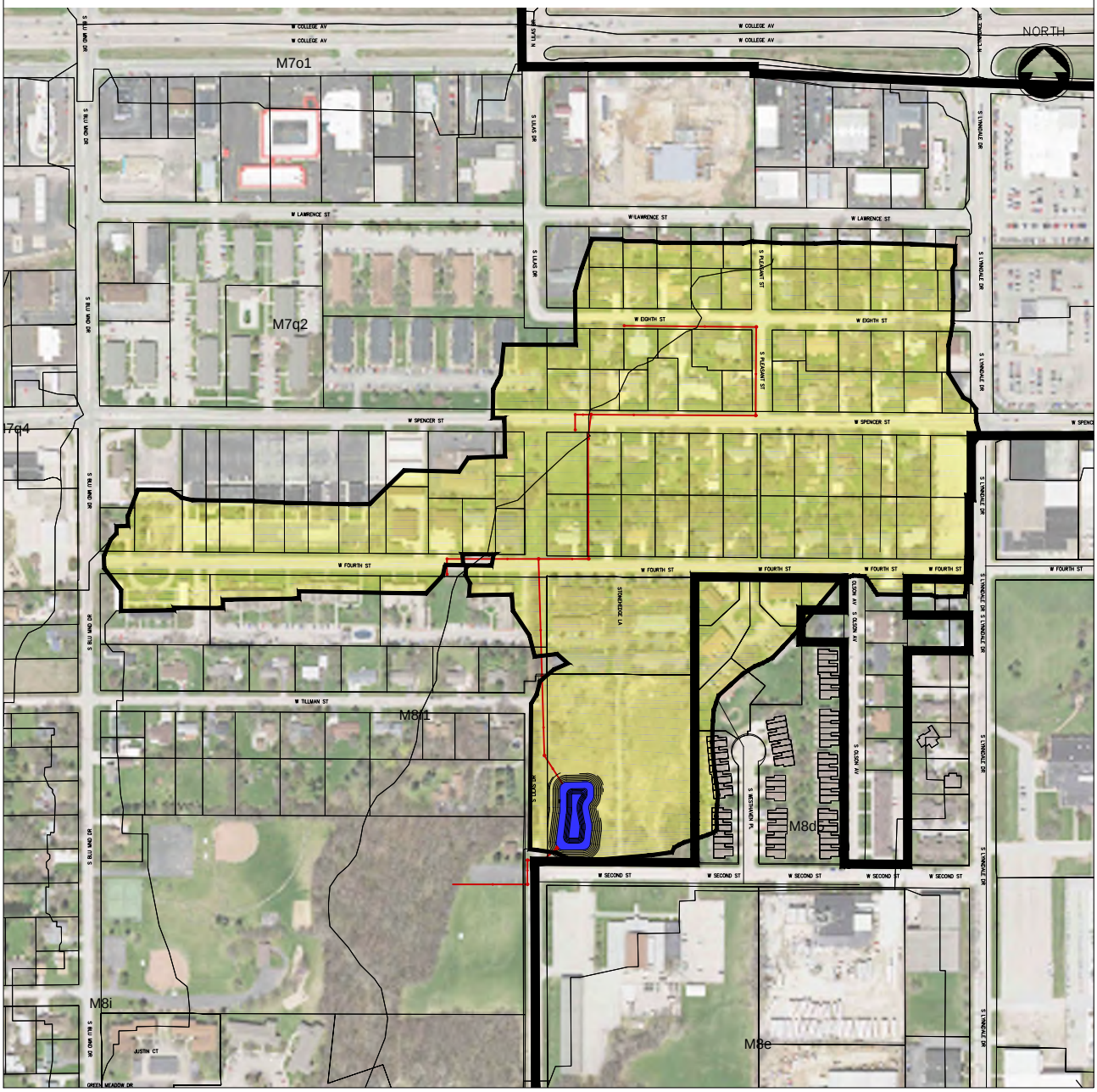
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: STONEHEDGE POND	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: MUD CREEK	Tributary Drainage Area IDs: M8f1	Total Drainage Area: 49.3 acres
Imperviousness (Future): 47.7 %	Runoff Curve Number (Future): 87	Water Quality Volume (Future): 2.95 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	3.3 ft	Remediation:	☐ Yes ☒ No	Wetland:	☐ Potential ☐ Yes ☒ No
Bedrock Depth (in):	>78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Briggsville silt loam	100-Year Floodplain:	☐ Yes ☒ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
STORM SEWER OUTFALL TO SECOND ST.

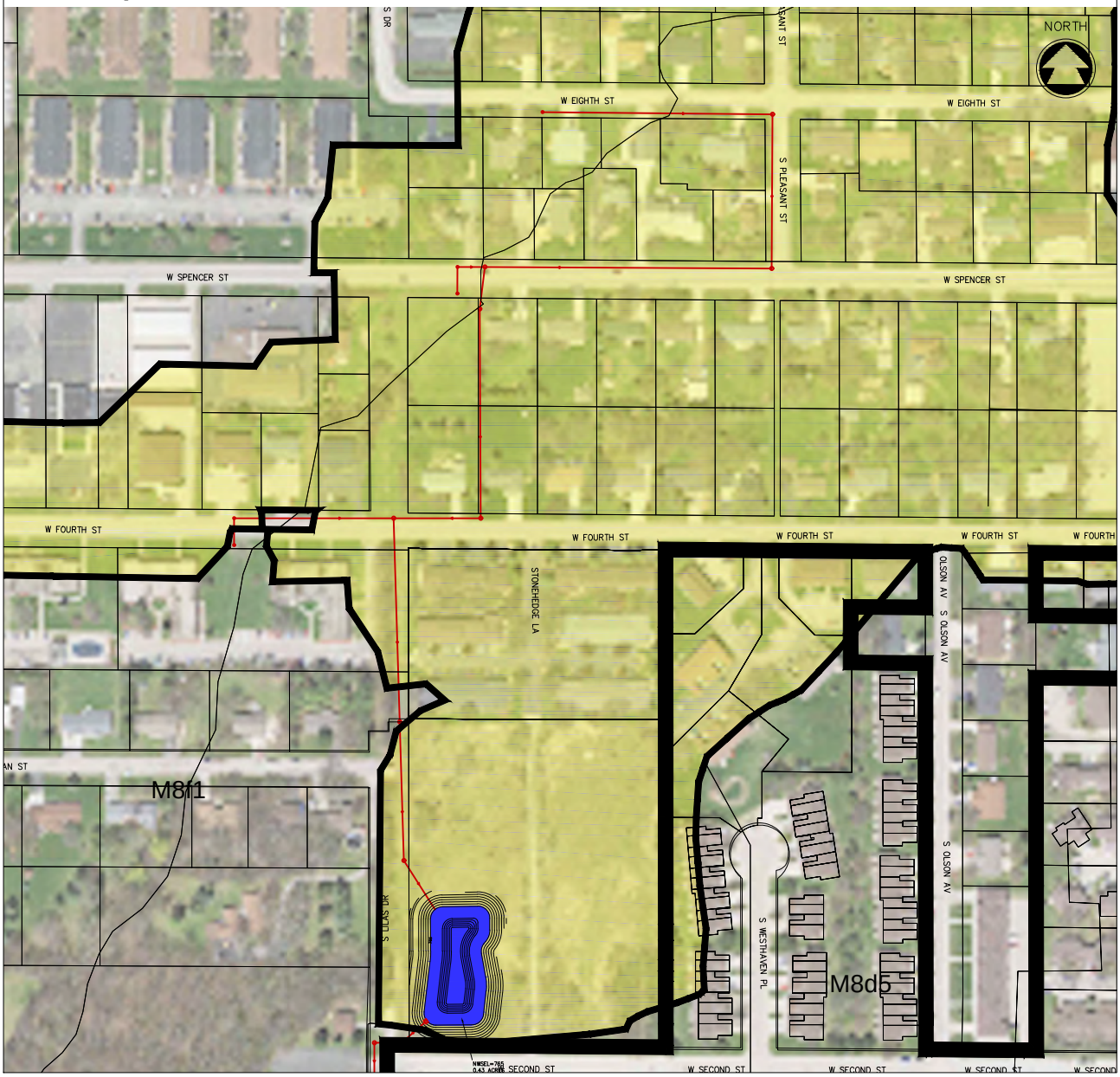
Infrastructure modifications or flow diversions required for retrofit:
DIVERT RUNOFF FROM 4TH ST INTO THE POND.

Site access for future BMP maintenance:
ACCESS FROM SECOND ST.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
HIGH GROUNDWATER

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.43 acre permanent pool	1.02 acres	$450,000

Sketch of Proposed BMP Retrofit:



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POTENTIAL STORMWATER BMP RETROFIT

BMP CATCHMENT ID: BMP-M8j1

McM PROJECT NO: G0003-9-14-00271

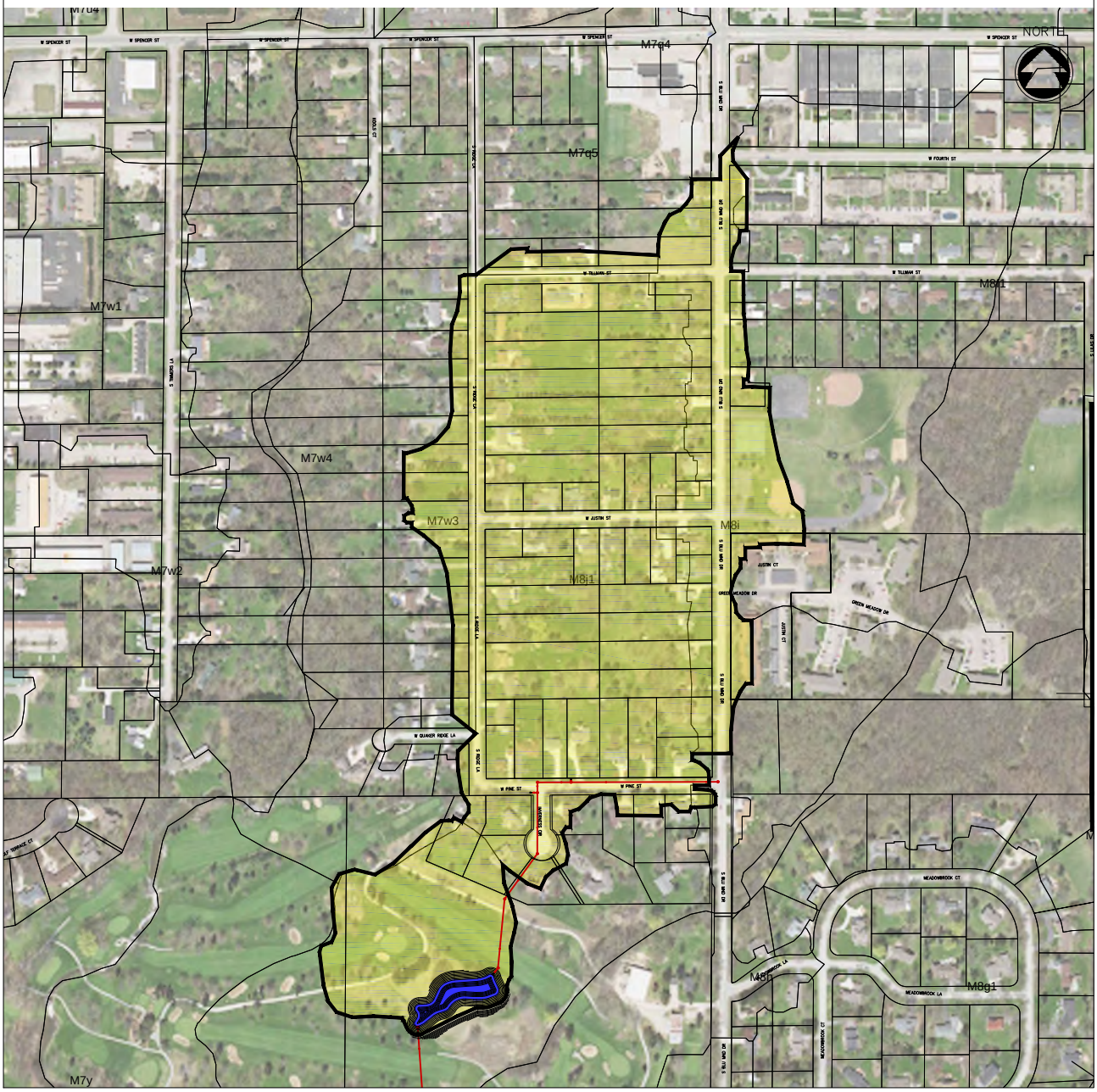
SITE INFORMATION:

Municipality: TOWN OF GRAND CHUTE	Date: SEPTEMBER, 2016
Proposed BMP Name: BUTTE DES MORTS POND	Initials: AWS

DRAINAGE AREA:

Sub-watershed ID: MUD CREEK	Tributary Drainage Area IDs: M8j1	Total Drainage Area: 59.5 acres
Imperviousness (Future): 24.4 %	Runoff Curve Number (Future): 84	Water Quality Volume (Future): 2.00 acre-feet

Drainage Area / Site Location Map:



PROPOSED BMP RETROFIT:

Type of proposed BMP retrofit (e.g. wet pond, bioretention, proprietary device, etc.):
Wet Detention Pond

Initial BMP Screening

Groundwater Depth (ft):	5.8 ft	Remediation:	☐ Yes ☒ No	Wetland:	☐ Potential ☐ Yes ☒ No
Bedrock Depth (in):	>78 in	Historical:	☐ Yes ☒ No	Public Well < 400 ft:	☐ Yes ☒ No
USDA Soil Texture:	Winneconne silty clay loam	100-Year Floodplain:	☐ Yes ☒ No	Private Well < 100 ft:	☐ Yes ☒ No

BMP Outfall (storm sewer, stream, wetland, groundwater, etc.):
STORM SEWER OUTFALL TO THE SOUTHEAST INTO THE STREAM.

Infrastructure modifications or flow diversions required for retrofit:
DIVERT STORM SEWER FROM INVERNESS CIR. INTO THE POND.

Site access for future BMP maintenance:
ACCESS FROM INVERNESS CIR. THROUGH AN EASEMENT.

Site constraints that require further investigation (e.g. utility conflicts, wetlands, groundwater, etc.):
NO KNOWN CONSTRAINTS

Approx. Size of BMP Retrofit:	Approx. Land Required (ac):	Estimated Cost:
0.48 acre permanent pool	2.0 acres	$422,000

Sketch of Proposed BMP Retrofit: