Appendix 9.8

Detailed Cost Estimate – Ultimate (Without PRI) Recommended Capital Improvements

West Prairie Lee
Watershed
Required Parallel Pipes
Ultimate Flows Without PRI

ID	From Manhole	To Manhole	Additional Capacity Required (cfs)	Parallel Pipe Diameter (in)	Parallel Pipe Diameter (in)	Unit Cost ($/LF)	Pipe Cost	Admin/Inspection (8%)	Design (12%)	Land Acquisition (5%)	Total Cost
24-326_24-127	24-326	24-127	0.689	8.3	10	$130	$39,417	$3,153	$4,730	$1,971	$49,000
31-005_31-006	31-005	31-006	0.345	7.0	8	$125	$16,511	$1,321	$1,981	$826	$21,000
31-087_32-458	31-087	32-458	2.684	8.9	10	$130	$16,081	$1,286	$1,930	$804	$20,000
31-091_31-090	31-091	31-090	1.077	9.0	10	$130	$17,584	$1,407	$2,110	$879	$22,000
31-114_31-396	31-114	31-396	3.407	13.0	15	$140	$35,393	$2,831	$4,247	$1,770	$44,000
31-137_31-088	31-137	31-088	1.824	11.4	12	$135	$54,297	$4,344	$6,516	$2,715	$68,000
31-166_31-137	31-166	31-137	0.772	7.1	8	$125	$51,266	$4,101	$6,152	$2,563	$64,000
31-066_31-081	31-066	31-081	0.240	6.1	8	$125	$20,531	$1,643	$2,464	$1,027	$26,000
31-081_31-082	31-081	31-082	0.187	5.1	8	$125	$34,333	$2,747	$4,120	$1,717	$43,000
31-112_31-113	31-112	31-113	0.422	7.5	8	$125	$19,924	$1,594	$2,391	$996	$25,000
31-214_31-213	31-214	31-213	2.205	57.9	60	$480	$47,582	$3,807	$5,710	$2,379	$59,000
31-379_31-117	31-379	31-117	1.348	13.2	15	$140	$42,322	$3,386	$5,079	$2,116	$53,000
31-205_31-167	31-205	31-167	0.569	6.2	8	$125	$9,375	$750	$1,125	$469	$12,000
31-278_31-279	31-278	31-279	0.648	36.6	42	$280	$15,448	$1,236	$1,854	$772	$19,000
Total											$4,051,000

Mouse Creek
Watershed
Required Parallel Pipes
Ultimate Flows Without PRI

ID	From Manhole	To Manhole	Additional Capacity Required (cfs)	Parallel Pipe Diameter (in)	Parallel Pipe Diameter (in)	Unit Cost ($/LF)	Pipe Cost	Admin/Inspection (8%)	Design (12%)	Land Acquisition (5%)	Total Cost
35-002_35-118	35-002	35-118	0.365	6.2	8	$125	$23,635	$1,891	$2,836	$1,182	$30,000
35-118_35-001	35-118	35-001	1.018	9.7	10	$130	$40,294	$3,223	$4,835	$2,015	$50,000
42-002_42-005	42-002	42-005	2.216	15.9	18	$155	$54,157	$4,333	$6,499	$2,708	$68,000
42-003_42-002	42-003	42-002	1.074	9.3	10	$130	$24,882	$1,991	$2,986	$1,244	$31,000
42-005_42-006	42-005	42-006	2.407	14.4	15	$140	$33,432	$2,675	$4,012	$1,672	$42,000
42-006_42-007	42-006	42-007	2.638	14.9	15	$140	$23,562	$1,885	$2,827	$1,178	$29,000
42-007_42-008	42-007	42-008	2.872	15.4	18	$155	$54,312	$4,345	$6,517	$2,716	$68,000
42-008_42-009	42-008	42-009	3.084	15.8	18	$155	$23,684	$1,895	$2,842	$1,184	$30,000
42-009_42-010	42-009	42-010	3.328	16.3	18	$155	$46,733	$3,739	$5,608	$2,337	$58,000
42-010_42-011	42-010	42-011	3.036	13.8	15	$140	$43,106	$3,448	$5,173	$2,155	$54,000
42-011_42-012BS	42-011	42-012BS	3.802	17.1	18	$155	$33,341	$2,667	$4,001	$1,667	$42,000
42-016_42-015	42-016	42-015	1.338	11.6	12	$135	$44,146	$3,532	$5,298	$2,207	$55,000
42-017_42-016	42-017	42-016	1.074	10.6	12	$135	$53,753	$4,300	$6,450	$2,688	$67,000
42-018_42-017	42-018	42-017	0.797	9.5	10	$130	$34,529	$2,762	$4,144	$1,726	$43,000
42-019_42-018	42-019	42-018	0.532	8.2	10	$130	$37,584	$3,007	$4,510	$1,879	$47,000
49-006_49-005	49-006	49-005	17.391	30.2	36	$255	$59,729	$4,778	$7,167	$2,986	$75,000
49-007_49-006	49-007	49-006	17.191	30.1	36	$255	$79,853	$6,388	$9,582	$3,993	$100,000
49-008_49-007	49-008	49-007	10.906	23.5	24	$180	$57,326	$4,586	$6,879	$2,866	$72,000
49-009_49-008	49-009	49-008	13.563	27.5	36	$255	$87,320	$6,986	$10,478	$4,366	$109,000
49-010_49-009	49-010	49-009	23.253	38.4	48	$305	$116,217	$9,297	$13,946	$5,811	$145,000
49-011_49-010	49-011	49-010	13.961	27.8	36	$255	$72,440	$5,795	$8,693	$3,622	$91,000
49-013_49-012	49-013	49-012	27.853	36.1	42	$280	$122,102	$9,768	$14,652	$6,105	$153,000
50-001_49-013	50-001	49-013	6.819	17.3	18	$155	$72,850	$5,828	$8,742	$3,643	$91,000
50-002_50-001	50-002	50-001	11.402	21.7	24	$180	$60,311	$4,825	$7,237	$3,016	$75,000
50-003_50-002	50-003	50-002	24.405	34.3	42	$280	$62,300	$4,984	$7,476	$3,115	$78,000
50-004_50-003	50-004	50-003	19.908	29.5	36	$255	$123,043	$9,843	$14,765	$6,152	$154,000
50-005_50-004	50-005	50-004	15.932	27.1	36	$255	$69,375	$5,550	$8,325	$3,469	$87,000
50-111_50-094	50-111	50-094	1.476	10.5	12	$135	$28,123	$2,250	$3,375	$1,406	$35,000
50-006_50-005	50-006	50-005	4.410	15.9	18	$155	$48,004	$3,840	$5,760	$2,400	$60,000
50-007_50-006	50-007	50-006	13.746	27.7	36	$255	$119,070	$9,526	$14,288	$5,953	$149,000
50-015_50-005	50-015	50-005	8.558	18.9	21	$170	$37,553	$3,004	$4,506	$1,878	$47,000
50-041_50-015	50-041	50-015	7.182	17.2	18	$155	$51,065	$4,085	$6,128	$2,553	$64,000
50-042_50-041	50-042	50-041	6.461	15.4	18	$155	$18,640	$1,491	$2,237	$932	$23,000
50-069_50-042	50-069	50-042	3.987	10.5	12	$135	$29,816	$2,385	$3,578	$1,491	$37,000
50-112_50-069	50-112	50-069	2.264	7.7	8	$125	$18,463	$1,477	$2,216	$923	$23,000
50-117_50-112	50-117	50-112	6.373	15.6	18	$155	$57,003	$4,560	$6,840	$2,850	$71,000
50-118_50-117	50-118	50-117	5.991	15.0	15	$140	$27,336	$2,187	$3,280	$1,367	$34,000
50-119_50-118	50-119	50-118	6.184	15.8	18	$155	$19,071	$1,526	$2,289	$954	$24,000
50-120_50-119	50-120	50-119	5.358	13.9	15	$140	$49,909	$3,993	$5,989	$2,495	$62,000

Mouse Creek
Watershed
Required Parallel Pipes
Ultimate Flows Without PRI

ID	From Manhole	To Manhole	Additional Capacity Required (cfs)	Parallel Pipe Diameter (in)	Parallel Pipe Diameter (in)	Unit Cost ($/LF)	Pipe Cost	Admin/Inspection (8%)	Design (12%)	Land Acquisition (5%)	Total Cost
50-013_50-012	50-013	50-012	5.920	20.2	21	$170	$83,829	$6,706	$10,059	$4,191	$105,000
50-014_50-013	50-014	50-013	5.811	16.9	18	$155	$68,119	$5,450	$8,174	$3,406	$85,000
55-041_55-006	55-041	55-006	0.343	5.2	8	$125	$11,764	$941	$1,412	$588	$15,000
Total											$2,778,000

Little Cedar
Watershed
Required Parallel Pipes
Ultimate Flows Without PRI

ID	From Manhole	To Manhole	Additional Capacity Required (cfs)	Parallel Pipe Diameter (in)	Parallel Pipe Diameter (in)	Unit Cost ($/LF)	Pipe Cost	Admin/Inspection (8%)	Design (12%)	Land Acquisition (5%)	Total Cost
00-004_00-005	00-004	00-005	11.589	21.9	24	$180	$70,524	$5,642	$8,463	$3,526	$88,000
00-005_00-006	00-005	00-006	22.419	26.3	30	$200	$100,174	$8,014	$12,021	$5,009	$125,000
00-006_00-007	00-006	00-007	18.762	23.5	24	$180	$66,389	$5,311	$7,967	$3,319	$83,000
00-007_00-008	00-007	00-008	30.414	32.7	36	$255	$58,683	$4,695	$7,042	$2,934	$73,000
00-008_00-009	00-008	00-009	29.323	31.0	36	$255	$42,713	$3,417	$5,126	$2,136	$53,000
00-009_00-010	00-009	00-010	33.812	36.0	36	$255	$28,101	$2,248	$3,372	$1,405	$35,000
00-010_00-011	00-010	00-011	14.846	20.7	21	$170	$10,979	$878	$1,317	$549	$14,000
00-011_00-012	00-011	00-012	20.711	24.9	30	$200	$14,204	$1,136	$1,704	$710	$18,000
00-012_00-013	00-012	00-013	20.875	25.0	30	$200	$54,682	$4,375	$6,562	$2,734	$68,000
00-013_00-014	00-013	00-014	10.130	17.1	18	$155	$51,486	$4,119	$6,178	$2,574	$64,000
00-015_00-016	00-015	00-016	18.185	22.7	24	$180	$51,140	$4,091	$6,137	$2,557	$64,000
00-016_00-017	00-016	00-017	17.892	22.6	24	$180	$72,254	$5,780	$8,670	$3,613	$90,000
00-018_00-019	00-018	00-019	28.633	30.7	36	$255	$62,580	$5,006	$7,510	$3,129	$78,000
00-019_00-020	00-019	00-020	28.967	30.8	36	$255	$58,803	$4,704	$7,056	$2,940	$74,000
00-022_00-023	00-022	00-023	9.266	16.4	18	$155	$48,066	$3,845	$5,768	$2,403	$60,000
00-023_00-024	00-023	00-024	19.365	23.3	24	$180	$52,267	$4,181	$6,272	$2,613	$65,000
00-024_00-025	00-024	00-025	19.528	23.3	24	$180	$89,955	$7,196	$10,795	$4,498	$112,000
00-025_00-026	00-025	00-026	19.582	23.4	24	$180	$44,894	$3,592	$5,387	$2,245	$56,000
00-026_00-027	00-026	00-027	19.124	23.2	24	$180	$39,982	$3,199	$4,798	$1,999	$50,000
00-027_00-028	00-027	00-028	14.846	24.0	24	$180	$50,263	$4,021	$6,032	$2,513	$63,000
00-028_00-030	00-028	00-030	19.535	27.7	30	$200	$75,150	$6,012	$9,018	$3,758	$94,000
00-030_00-031	00-030	00-031	18.561	27.2	30	$200	$91,548	$7,324	$10,986	$4,577	$114,000
00-034_00-035	00-034	00-035	16.693	26.1	30	$200	$100,694	$8,056	$12,083	$5,035	$126,000
00-035_00-036	00-035	00-036	16.328	25.9	30	$200	$71,642	$5,731	$8,597	$3,582	$90,000
00-036_00-037	00-036	00-037	17.287	26.5	30	$200	$28,032	$2,243	$3,364	$1,402	$35,000
00-037_00-038	00-037	00-038	15.624	29.0	30	$200	$97,698	$7,816	$11,724	$4,885	$122,000
00-038_00-039	00-038	00-039	14.157	28.0	30	$200	$100,000	$8,000	$12,000	$5,000	$125,000
00-039_00-040	00-039	00-040	16.289	29.5	30	$200	$100,000	$8,000	$12,000	$5,000	$125,000
00-040_00-041	00-040	00-041	14.334	28.1	30	$200	$100,000	$8,000	$12,000	$5,000	$125,000
00-041_00-042	00-041	00-042	16.464	29.6	30	$200	$100,000	$8,000	$12,000	$5,000	$125,000
00-042_00-043	00-042	00-043	17.614	30.4	36	$255	$127,500	$10,200	$15,300	$6,375	$159,000
00-043_00-044	00-043	00-044	17.700	30.4	36	$255	$127,500	$10,200	$15,300	$6,375	$159,000
00-044_00-045	00-044	00-045	41.136	173.6	42	$280	$162,400	$12,992	$19,488	$8,120	$203,000
00-045_00-046	00-045	00-046	29.507	42.0	42	$280	$70,000	$5,600	$8,400	$3,500	$88,000
16-009_16-008	16-009	16-008	0.993	7.6	8	$125	$47,745	$3,820	$5,729	$2,387	$60,000
16-021_16-011	16-021	16-011	1.895	12.2	15	$140	$6,644	$532	$797	$332	$8,000
16-022_16-021	16-022	16-021	1.273	10.0	10	$130	$13,425	$1,074	$1,611	$671	$17,000
16-023_16-022	16-023	16-022	1.423	11.0	12	$135	$26,164	$2,093	$3,140	$1,308	$33,000

Little Cedar
Watershed
Required Parallel Pipes
Ultimate Flows Without PRI

ID	From Manhole	To Manhole	Additional Capacity Required (cfs)	Parallel Pipe Diameter (in)	Parallel Pipe Diameter (in)	Unit Cost ($/LF)	Pipe Cost	Admin/Inspection (8%)	Design (12%)	Land Acquisition (5%)	Total Cost
00-001_00-002	00-001	00-002	6.480	18.3	21	$170	$85,066	$6,805	$10,208	$4,253	$106,000
22-038_00-001	22-038	00-001	14.216	28.0	30	$200	$99,284	$7,943	$11,914	$4,964	$124,000
22-043_22-042	22-043	22-042	11.484	24.0	24	$180	$89,154	$7,132	$10,698	$4,458	$111,000
23-046_23-045	23-046	23-045	0.846	8.5	10	$130	$52,046	$4,164	$6,245	$2,602	$65,000
23-047_23-046	23-047	23-046	1.060	9.8	10	$130	$52,035	$4,163	$6,244	$2,602	$65,000
23-118_23-117	23-118	23-117	11.626	21.2	24	$180	$22,145	$1,772	$2,657	$1,107	$28,000
23-125_23-124	23-125	23-124	1.829	10.6	12	$135	$14,772	$1,182	$1,773	$739	$18,000
23-126_23-125	23-126	23-125	1.694	10.3	12	$135	$47,937	$3,835	$5,752	$2,397	$60,000
23-127_23-126	23-127	23-126	0.803	7.1	8	$125	$15,668	$1,253	$1,880	$783	$20,000
23-128_23-127	23-128	23-127	0.648	6.5	8	$125	$17,086	$1,367	$2,050	$854	$21,000
23-129_23-128	23-129	23-128	0.679	6.8	8	$125	$38,494	$3,080	$4,619	$1,925	$48,000
23-015_23-014	23-015	23-014	7.122	13.9	15	$140	$53,931	$4,314	$6,472	$2,697	$67,000
23-017_23-016	23-017	23-016	8.694	15.4	18	$155	$20,643	$1,651	$2,477	$1,032	$26,000
Total											$3,900,000

Boggs Hollow
Watershed
Required Parallel Pipes
Ultimate Flows Without PRI

ID	From Manhole	To Manhole	Additional Capacity Required (cfs)	Parallel Pipe Diameter (in)	Parallel Pipe Diameter (in)	Unit Cost ($/LF)	Pipe Cost	Admin/Inspection (8%)	Design (12%)	Land Acquisition (5%)	Total Cost
21-086_21-085	21-086	21-085	2.910	14.3	15	$140	$6,100	$488	$732	$305	$8,000
21-087_21-086	21-087	21-086	2.324	12.5	15	$140	$54,058	$4,325	$6,487	$2,703	$68,000
21-088_21-087	21-088	21-087	2.127	10.0	10	$130	$15,222	$1,218	$1,827	$761	$19,000
21-089_21-088	21-089	21-088	1.956	9.9	10	$130	$38,475	$3,078	$4,617	$1,924	$48,000
21-090_21-089	21-090	21-089	2.217	9.2	10	$130	$47,445	$3,796	$5,693	$2,372	$59,000
21-091_21-090	21-091	21-090	1.781	8.3	10	$130	$47,692	$3,815	$5,723	$2,385	$60,000
21-092_21-091	21-092	21-091	1.685	8.3	10	$130	$51,076	$4,086	$6,129	$2,554	$64,000
22-001_21-092	22-001	21-092	1.201	7.1	8	$125	$40,966	$3,277	$4,916	$2,048	$51,000
22-048_22-047	22-048	22-047	0.953	8.3	10	$130	$28,795	$2,304	$3,455	$1,440	$36,000
Total											$413,000

Cedar Creek
Watershed
Required Parallel Pipes
Ultimate Flows Without PRI

ID	From Manhole	To Manhole	Additional Capacity Required (cfs)	Parallel Pipe Diameter (in)	Parallel Pipe Diameter (in)	Unit Cost ($/LF)	Pipe Cost	Admin/Inspection (8%)	Design (12%)	Land Acquisition (5%)	Total Cost
20-002_20-001	20-002	82	20.691	36.7	42	$280	$114,752	$9,180	$13,770	$5,738	$143,000
20-003_20-002	20-003	20-002	20.479	36.6	42	$280	$104,412	$8,353	$12,529	$5,221	$131,000
20-005_20-004	20-005	20-004	20.380	36.5	42	$280	$104,280	$8,342	$12,514	$5,214	$130,000
20-006_20-001BS	20-006	20-001BS	37.423	40.3	48	$305	$99,766	$7,981	$11,972	$4,988	$125,000
20-007_20-006	20-007	20-006	45.283	180.0	36	$255	$89,480	$7,158	$10,738	$4,474	$112,000
20-008_20-007	20-008	20-007	30.375	32.7	36	$255	$127,653	$10,212	$15,318	$6,383	$160,000
20-009_20-008	20-009	20-008	14.366	22.2	24	$180	$86,166	$6,893	$10,340	$4,308	$108,000
20-010_20-009	20-010	20-009	27.958	33.5	42	$280	$141,014	$11,281	$16,922	$7,051	$176,000
20-011_20-010	20-011	20-010	27.750	33.4	42	$280	$138,692	$11,095	$16,643	$6,935	$173,000
20-012_20-011	20-012	20-011	27.832	33.4	42	$280	$140,308	$11,225	$16,837	$7,015	$175,000
20-013_20-012	20-013	20-012	32.832	43.7	54	$380	$186,960	$14,957	$22,435	$9,348	$234,000
20-015_20-008	20-015	20-008	6.053	14.5	15	$140	$24,024	$1,922	$2,883	$1,201	$30,000
20-016_20-015	20-016	20-015	7.800	25.5	30	$200	$77,226	$6,178	$9,267	$3,861	$97,000
20-017_20-016	20-017	20-016	6.308	12.9	15	$140	$44,219	$3,538	$5,306	$2,211	$55,000
20-018_20-017	20-018	20-017	5.900	12.1	15	$140	$31,248	$2,500	$3,750	$1,562	$39,000
20-019_20-018	20-019	20-018	6.915	15.8	18	$155	$35,177	$2,814	$4,221	$1,759	$44,000
20-020_20-019	20-020	20-019	4.601	10.7	12	$135	$43,744	$3,500	$5,249	$2,187	$55,000
20-021_20-020	20-021	20-020	4.790	11.4	12	$135	$53,933	$4,315	$6,472	$2,697	$67,000
20-022_20-021	20-022	20-021	4.725	11.4	12	$135	$41,513	$3,321	$4,982	$2,076	$52,000
20-025_20-024	20-025	20-024	1.123	8.2	10	$130	$12,119	$969	$1,454	$606	$15,000
20-030_20-025	20-030	20-025	0.945	8.3	10	$130	$39,852	$3,188	$4,782	$1,993	$50,000
20-031_20-030	20-031	20-030	0.891	8.1	10	$130	$18,126	$1,450	$2,175	$906	$23,000
20-032_20-031	20-032	20-031	0.795	7.7	8	$125	$28,188	$2,255	$3,383	$1,409	$35,000
20-034_20-032	20-034	20-032	0.919	9.3	10	$130	$19,757	$1,581	$2,371	$988	$25,000
20-035_20-034	20-035	20-034	0.494	6.3	8	$125	$19,606	$1,569	$2,353	$980	$25,000
20-036_20-035	20-036	20-035	0.509	6.8	8	$125	$30,858	$2,469	$3,703	$1,543	$39,000
20-037_20-036	20-037	20-036	0.339	5.5	8	$125	$40,838	$3,267	$4,901	$2,042	$51,000
21-001_20-022	21-001	20-022	3.945	9.4	10	$130	$34,943	$2,795	$4,193	$1,747	$44,000
21-002_21-001	21-002	21-001	4.250	10.3	12	$135	$43,430	$3,474	$5,212	$2,171	$54,000
21-020_21-019	21-020	21-019	0.603	6.3	8	$125	$34,688	$2,775	$4,163	$1,734	$43,000
21-040_21-002	21-040	21-002	0.786	4.7	8	$125	$17,931	$1,435	$2,152	$897	$22,000
21-041_21-040	21-041	21-040	2.177	8.7	10	$130	$17,914	$1,433	$2,150	$896	$22,000
21-042_21-041	21-042	21-041	2.499	12.8	15	$140	$12,565	$1,005	$1,508	$628	$16,000
21-047_21-042	21-047	21-042	1.809	10.0	10	$130	$19,790	$1,583	$2,375	$989	$25,000
21-049_21-047	21-049	21-047	1.745	10.1	12	$135	$20,918	$1,673	$2,510	$1,046	$26,000
21-050_21-049	21-050	21-049	1.434	8.6	10	$130	$9,458	$757	$1,135	$473	$12,000
21-051_21-050	21-051	21-050	1.589	9.7	10	$130	$29,640	$2,371	$3,557	$1,482	$37,000
21-052_21-051	21-052	21-051	1.468	9.2	10	$130	$43,537	$3,483	$5,224	$2,177	$54,000
21-053_21-052	21-053	21-052	1.355	8.8	10	$130	$31,447	$2,516	$3,774	$1,572	$39,000
21-054_21-053	21-054	21-053	1.289	8.8	10	$130	$43,983	$3,519	$5,278	$2,199	$55,000

Cedar Creek
Watershed
Required Parallel Pipes
Ultimate Flows Without PRI

ID	From Manhole	To Manhole	Additional Capacity Required (cfs)	Parallel Pipe Diameter (in)	Parallel Pipe Diameter (in)	Unit Cost ($/LF)	Pipe Cost	Admin/Inspection (8%)	Design (12%)	Land Acquisition (5%)	Total Cost
21-058_21-054	21-058	21-054	0.780	6.7	8	$125	$22,925	$1,834	$2,751	$1,146	$29,000
21-060_21-058	21-060	21-058	0.481	6.1	8	$125	$41,663	$3,333	$5,000	$2,083	$52,000
21-061_21-060	21-061	21-060	0.356	5.3	8	$125	$17,375	$1,390	$2,085	$869	$22,000
21-062_21-061	21-062	21-061	0.331	5.3	8	$125	$27,900	$2,232	$3,348	$1,395	$35,000
21-063_21-062	21-063	21-062	0.274	4.9	8	$125	$44,375	$3,550	$5,325	$2,219	$55,000
27-001_27-015	27-001	27-015	27.767	33.4	42	$280	$59,430	$4,754	$7,132	$2,972	$74,000
27-002_27-001	27-002	27-001	23.297	27.5	36	$255	$127,566	$10,205	$15,308	$6,378	$159,000
27-003_27-002	27-003	27-002	26.417	31.1	36	$255	$109,660	$8,773	$13,159	$5,483	$137,000
27-004_27-003	27-004	27-003	26.287	31.0	36	$255	$109,665	$8,773	$13,160	$5,483	$137,000
27-005_27-004	27-005	27-004	25.337	32.3	42	$280	$129,027	$10,322	$15,483	$6,451	$161,000
27-015_20-013	27-015	20-013	24.646	31.9	36	$255	$12,559	$1,005	$1,507	$628	$16,000
27-016_27-015	27-016	27-015	3.433	13.4	15	$140	$53,200	$4,256	$6,384	$2,660	$67,000
27-017_27-016	27-017	27-016	2.886	10.7	12	$135	$9,165	$733	$1,100	$458	$11,000
27-018_27-017	27-018	27-017	1.846	7.5	8	$125	$21,558	$1,725	$2,587	$1,078	$27,000
27-019_27-018	27-019	27-018	1.816	7.6	8	$125	$5,971	$478	$717	$299	$7,000
27-020_27-019	27-020	27-019	1.040	5.6	8	$125	$22,874	$1,830	$2,745	$1,144	$29,000
27-022_27-021	27-022	27-021	2.217	9.8	10	$130	$38,624	$3,090	$4,635	$1,931	$48,000
27-023_27-022	27-023	27-022	0.925	5.6	8	$125	$15,125	$1,210	$1,815	$756	$19,000
27-025_27-024	27-025	27-024	1.000	6.1	8	$125	$22,016	$1,761	$2,642	$1,101	$28,000
27-033_27-032	27-033	27-032	0.588	7.5	8	$125	$27,245	$2,180	$3,269	$1,362	$34,000
27-034_27-033	27-034	27-033	0.387	6.1	8	$125	$11,374	$910	$1,365	$569	$14,000
27-036_27-035	27-036	27-035	0.161	4.6	8	$125	$17,485	$1,399	$2,098	$874	$22,000
27-006_27-005	27-006	27-005	25.381	32.3	42	$280	$139,882	$11,191	$16,786	$6,994	$175,000
27-007_27-006	27-007	27-006	22.130	26.9	36	$255	$127,653	$10,212	$15,318	$6,383	$160,000
27-008_27-007	27-008	27-007	20.393	27.0	36	$255	$127,842	$10,227	$15,341	$6,392	$160,000
27-009_27-008	27-009	27-008	25.062	32.1	36	$255	$129,665	$10,373	$15,560	$6,483	$162,000
27-010_27-007	27-010	27-007	4.295	10.8	12	$135	$46,609	$3,729	$5,593	$2,330	$58,000
27-013_27-055	27-013	27-055	1.311	9.7	10	$130	$22,372	$1,790	$2,685	$1,119	$28,000
27-043_28-285	27-043	28-285	0.297	4.2	8	$125	$20,898	$1,672	$2,508	$1,045	$26,000
27-055_27-012	27-055	27-012	1.402	8.7	10	$130	$40,866	$3,269	$4,904	$2,043	$51,000
28-013_27-010	28-013	27-010	2.455	11.8	12	$135	$40,635	$3,251	$4,876	$2,032	$51,000
28-014_28-013	28-014	28-013	2.404	11.7	12	$135	$24,300	$1,944	$2,916	$1,215	$30,000
28-015_28-014	28-015	28-014	1.411	9.6	10	$130	$12,350	$988	$1,482	$618	$15,000
28-016_28-015	28-016	28-015	1.857	9.7	10	$130	$31,200	$2,496	$3,744	$1,560	$39,000
28-017_28-016	28-017	28-016	0.811	5.6	8	$125	$21,750	$1,740	$2,610	$1,088	$27,000
28-018_28-017	28-018	28-017	1.128	6.8	8	$125	$34,850	$2,788	$4,182	$1,743	$44,000
28-021_28-020	28-021	28-020	1.608	9.2	10	$130	$30,472	$2,438	$3,657	$1,524	$38,000
28-022_28-021	28-022	28-021	1.558	9.0	10	$130	$14,430	$1,154	$1,732	$722	$18,000
28-023_28-022	28-023	28-022	1.249	8.3	10	$130	$22,866	$1,829	$2,744	$1,143	$29,000
28-024_28-023	28-024	28-023	1.193	8.2	10	$130	$15,470	$1,238	$1,856	$774	$19,000

Cedar Creek
Watershed
Required Parallel Pipes
Ultimate Flows Without PRI

ID	From Manhole	To Manhole	Additional Capacity Required (cfs)	Parallel Pipe Diameter (in)	Parallel Pipe Diameter (in)	Unit Cost ($/LF)	Pipe Cost	Admin/Inspection (8%)	Design (12%)	Land Acquisition (5%)	Total Cost
28-025_28-024	28-025	28-024	1.139	8.0	10	$130	$25,740	$2,059	$3,089	$1,287	$32,000
28-026_28-293	28-026	28-293	1.034	7.8	8	$125	$51,126	$4,090	$6,135	$2,556	$64,000
28-036_28-030	28-036	28-030	0.158	5.2	8	$125	$27,670	$2,214	$3,320	$1,384	$35,000
28-264_28-265	28-264	28-265	0.419	5.9	8	$125	$27,249	$2,180	$3,270	$1,362	$34,000
28-276_27-009	28-276	27-009	29.340	36.8	42	$280	$56,000	$4,480	$6,720	$2,800	$70,000
28-280_27-044	28-280	27-044	0.554	6.1	8	$125	$10,788	$863	$1,295	$539	$13,000
28-285_27-014	28-285	27-014	0.659	6.2	8	$125	$48,750	$3,900	$5,850	$2,438	$61,000
28-293_28-025	28-293	28-025	1.086	7.9	8	$125	$11,000	$880	$1,320	$550	$14,000
28-046_28-045	28-046	28-045	4.450	13.0	15	$140	$57,400	$4,592	$6,888	$2,870	$72,000
28-047_28-046	28-047	28-046	3.837	11.6	12	$135	$7,962	$637	$955	$398	$10,000
28-048_28-047	28-048	28-047	3.361	10.6	12	$135	$46,575	$3,726	$5,589	$2,329	$58,000
28-049_28-048	28-049	28-048	3.104	10.4	12	$135	$51,648	$4,132	$6,198	$2,582	$65,000
28-050_28-049	28-050	28-049	3.217	10.9	12	$135	$46,062	$3,685	$5,527	$2,303	$58,000
28-051_28-050	28-051	28-050	3.328	11.6	12	$135	$54,108	$4,329	$6,493	$2,705	$68,000
28-052_28-051	28-052	28-051	3.675	12.5	15	$140	$55,055	$4,404	$6,607	$2,753	$69,000
28-053_28-052	28-053	28-052	2.312	9.2	10	$130	$44,616	$3,569	$5,354	$2,231	$56,000
28-055_28-054	28-055	28-054	2.230	11.4	12	$135	$21,777	$1,742	$2,613	$1,089	$27,000
28-068_28-067	28-068	28-067	1.488	9.1	10	$130	$13,468	$1,077	$1,616	$673	$17,000
28-076_28-068	28-076	28-068	1.402	10.3	12	$135	$17,431	$1,394	$2,092	$872	$22,000
28-083_28-082	28-083	28-082	0.251	4.6	8	$125	$17,500	$1,400	$2,100	$875	$22,000
28-100_28-099	28-100	28-099	3.212	13.5	15	$140	$28,812	$2,305	$3,457	$1,441	$36,000
28-101_28-100	28-101	28-100	0.724	6.9	8	$125	$40,050	$3,204	$4,806	$2,003	$50,000
28-185_28-098	28-185	28-098	0.653	6.3	8	$125	$48,125	$3,850	$5,775	$2,406	$60,000
29-082_29-081	29-082	29-081	0.695	7.9	8	$125	$28,750	$2,300	$3,450	$1,438	$36,000
29-083_29-082	29-083	29-082	0.625	7.6	8	$125	$27,418	$2,193	$3,290	$1,371	$34,000
29-039_29-040	29-039	29-040	0.012	8.3	10	$130	$47,918	$3,833	$5,750	$2,396	$60,000
27-041_27-042	27-041	27-042	2.920	9.4	10	$130	$35,326	$2,826	$4,239	$1,766	$44,000
27-042_28-275	27-042	28-275	5.943	16.4	18	$155	$30,564	$2,445	$3,668	$1,528	$38,000
27-061_27-041	27-061	27-041	5.434	15.9	18	$155	$60,100	$4,808	$7,212	$3,005	$75,000
27-062_27-061	27-062	27-061	2.714	9.8	10	$130	$42,951	$3,436	$5,154	$2,148	$54,000
27-063_27-062	27-063	27-062	1.238	7.2	8	$125	$36,879	$2,950	$4,425	$1,844	$46,000
27-065_27-064	27-065	27-064	1.117	7.0	8	$125	$34,176	$2,734	$4,101	$1,709	$43,000
28-042_28-276	28-042	28-276	11.137	20.2	21	$170	$37,196	$2,976	$4,464	$1,860	$46,000
28-275_28-276	28-275	28-276	6.288	17.4	18	$155	$49,617	$3,969	$5,954	$2,481	$62,000
35-123_35-122	35-123	35-122	1.046	8.3	10	$130	$32,449	$2,596	$3,894	$1,622	$41,000
35-125_35-124	35-125	35-124	0.871	7.8	8	$125	$36,409	$2,913	$4,369	$1,820	$46,000
35-148_35-128	35-148	35-128	1.807	10.5	12	$135	$32,612	$2,609	$3,913	$1,631	$41,000
35-149_35-148	35-149	35-148	0.452	5.7	8	$125	$38,913	$3,113	$4,670	$1,946	$49,000
35-155_35-148	35-155	35-148	0.218	4.4	8	$125	$20,281	$1,623	$2,434	$1,014	$25,000
35-197_27-065	35-197	27-065	3.025	12.4	15	$140	$40,041	$3,203	$4,805	$2,002	$50,000

Cedar Creek
Watershed
Required Parallel Pipes
Ultimate Flows Without PRI

ID	From Manhole	To Manhole	Additional Capacity Required (cfs)	Parallel Pipe Diameter (in)	Parallel Pipe Diameter (in)	Unit Cost ($/LF)	Pipe Cost	Admin/Inspection (8%)	Design (12%)	Land Acquisition (5%)	Total Cost
35-198_35-197	35-198	35-197	1.751	11.2	12	$135	$1,863	$149	$224	$93	$2,000
35-199_35-198	35-199	35-198	1.628	10.1	12	$135	$12,407	$993	$1,489	$620	$16,000
35-200_35-199	35-200	35-199	1.566	10.0	10	$130	$15,305	$1,224	$1,837	$765	$19,000
35-201_35-200	35-201	35-200	1.543	9.9	10	$130	$19,087	$1,527	$2,290	$954	$24,000
35-203_35-201	35-203	35-201	1.462	9.7	10	$130	$18,435	$1,475	$2,212	$922	$23,000
35-204_35-203	35-204	35-203	1.436	9.7	10	$130	$15,600	$1,248	$1,872	$780	$20,000
35-205_35-204	35-205	35-204	1.196	9.0	10	$130	$11,700	$936	$1,404	$585	$15,000
35-206_35-205	35-206	35-205	0.928	8.2	10	$130	$21,875	$1,750	$2,625	$1,094	$27,000
35-207_35-206	35-207	35-206	0.647	6.5	8	$125	$15,000	$1,200	$1,800	$750	$19,000
35-209_35-208	35-209	35-208	0.520	6.0	8	$125	$15,029	$1,202	$1,803	$751	$19,000
35-213_35-209	35-213	35-209	0.427	5.6	8	$125	$19,298	$1,544	$2,316	$965	$24,000
35-269_35-150	35-269	35-150	0.261	4.7	8	$125	$7,925	$634	$951	$396	$10,000
35-273_35-272	35-273	35-272	0.320	5.3	8	$125	$22,961	$1,837	$2,755	$1,148	$29,000
28-043_28-042	28-043	28-042	19.746	26.7	36	$255	$127,561	$10,205	$15,307	$6,378	$159,000
28-044_28-043	28-044	28-043	19.798	26.7	36	$255	$130,200	$10,416	$15,624	$6,510	$163,000
28-045_28-044	28-045	28-044	4.032	12.0	12	$135	$58,343	$4,667	$7,001	$2,917	$73,000
28-105_28-044	28-105	28-044	8.081	16.8	18	$155	$69,750	$5,580	$8,370	$3,488	$87,000
28-106_28-105	28-106	28-105	9.260	18.0	21	$170	$85,748	$6,860	$10,290	$4,287	$107,000
28-107_28-106	28-107	28-106	17.683	24.1	30	$200	$107,000	$8,560	$12,840	$5,350	$134,000
28-108_28-107	28-108	28-107	15.339	22.2	24	$180	$92,066	$7,365	$11,048	$4,603	$115,000
28-110_28-109	28-110	28-109	8.968	17.4	18	$155	$77,345	$6,188	$9,281	$3,867	$97,000
29-221_29-252	29-221	29-252	0.104	5.0	8	$125	$22,926	$1,834	$2,751	$1,146	$29,000
30-300_30-301	30-300	30-301	0.105	18.5	21	$170	$54,793	$4,383	$6,575	$2,740	$68,000
30-286_30-265	30-286	30-265	0.104	4.4	8	$125	$25,558	$2,045	$3,067	$1,278	$32,000
28-109_28-108	28-109	28-108	8.671	17.2	18	$155	$65,271	$5,222	$7,832	$3,264	$82,000
36-097_28-108	36-097	28-108	4.544	13.1	15	$140	$42,434	$3,395	$5,092	$2,122	$53,000
36-098_36-097	36-098	36-097	3.481	10.7	12	$135	$21,641	$1,731	$2,597	$1,082	$27,000
36-100_36-098	36-100	36-098	4.601	14.2	15	$140	$18,806	$1,504	$2,257	$940	$24,000
36-102_36-101	36-102	36-101	4.157	13.1	15	$140	$13,860	$1,109	$1,663	$693	$17,000
36-103_36-102	36-103	36-102	1.871	8.0	10	$130	$21,910	$1,753	$2,629	$1,096	$27,000
36-104_36-103	36-104	36-103	2.791	10.1	12	$135	$11,692	$935	$1,403	$585	$15,000
36-105_36-104	36-105	36-104	3.877	12.7	15	$140	$35,267	$2,821	$4,232	$1,763	$44,000
36-106_36-105	36-106	36-105	1.888	9.9	10	$130	$14,430	$1,154	$1,732	$722	$18,000
36-107_36-106	36-107	36-106	3.747	12.6	15	$140	$20,702	$1,656	$2,484	$1,035	$26,000
36-158_36-159	36-158	36-159	0.938	6.0	8	$125	$19,153	$1,532	$2,298	$958	$24,000
36-159_36-229	36-159	36-229	1.846	8.9	10	$130	$18,275	$1,462	$2,193	$914	$23,000
36-160_36-161	36-160	36-161	1.809	7.9	8	$125	$42,175	$3,374	$5,061	$2,109	$53,000
36-161_36-175	36-161	36-175	2.329	8.9	10	$130	$39,410	$3,153	$4,729	$1,970	$49,000
36-174_36-107	36-174	36-107	2.972	10.2	12	$135	$24,829	$1,986	$2,980	$1,241	$31,000
36-175_36-174	36-175	36-174	2.517	9.4	10	$130	$25,949	$2,076	$3,114	$1,297	$32,000

Cedar Creek
Watershed
Required Parallel Pipes
Ultimate Flows Without PRI

ID	From Manhole	To Manhole	Additional Capacity Required (cfs)	Parallel Pipe Diameter (in)	Parallel Pipe Diameter (in)	Unit Cost ($/LF)	Pipe Cost	Admin/Inspection (8%)	Design (12%)	Land Acquisition (5%)	Total Cost
36-188_36-157	36-188	36-157	1.920	10.8	12	$135	$17,446	$1,396	$2,094	$872	$22,000
36-189_36-188	36-189	36-188	0.540	4.8	8	$125	$11,985	$959	$1,438	$599	$15,000
36-190_36-189	36-190	36-189	1.029	6.9	8	$125	$28,111	$2,249	$3,373	$1,406	$35,000
36-196_36-197	36-196	36-197	1.219	8.6	10	$130	$16,561	$1,325	$1,987	$828	$21,000
36-197_36-191	36-197	36-191	1.298	8.6	10	$130	$15,915	$1,273	$1,910	$796	$20,000
36-229_36-160	36-229	36-160	1.967	8.9	10	$130	$18,543	$1,483	$2,225	$927	$23,000
36-244_36-204	36-244	36-204	0.990	8.7	10	$130	$15,510	$1,241	$1,861	$776	$19,000
36-245_36-244	36-245	36-244	0.775	7.7	8	$125	$18,030	$1,442	$2,164	$902	$23,000
36-310_36-245	36-310	36-245	0.455	6.3	8	$125	$32,033	$2,563	$3,844	$1,602	$40,000
36-311_36-310	36-311	36-310	0.279	5.2	8	$125	$15,725	$1,258	$1,887	$786	$20,000
36-312_36-311	36-312	36-311	0.249	5.0	8	$125	$26,125	$2,090	$3,135	$1,306	$33,000
36-001_36-025	36-001	36-025	6.902	15.3	18	$155	$17,205	$1,376	$2,065	$860	$22,000
36-002_36-001	36-002	36-001	4.634	13.2	15	$140	$68,600	$5,488	$8,232	$3,430	$86,000
36-003_36-002	36-003	36-002	6.005	15.0	18	$155	$85,303	$6,824	$10,236	$4,265	$107,000
36-004_36-003	36-004	36-003	1.270	7.6	8	$125	$50,110	$4,009	$6,013	$2,506	$63,000
36-005_36-052	36-005	36-052	8.015	17.9	18	$155	$39,913	$3,193	$4,790	$1,996	$50,000
36-006_36-067	36-006	36-067	2.364	9.9	10	$130	$36,876	$2,950	$4,425	$1,844	$46,000
36-009_36-008	36-009	36-008	0.542	6.3	8	$125	$31,250	$2,500	$3,750	$1,563	$39,000
36-010_36-009	36-010	36-009	0.515	6.2	8	$125	$31,159	$2,493	$3,739	$1,558	$39,000
36-017_36-016	36-017	36-016	0.357	7.0	8	$125	$19,781	$1,583	$2,374	$989	$25,000
36-025_36-026	36-025	36-026	15.444	26.8	36	$255	$59,925	$4,794	$7,191	$2,996	$75,000
36-052_36-004	36-052	36-004	7.408	16.9	18	$155	$38,088	$3,047	$4,571	$1,904	$48,000
36-067_36-005	36-067	36-005	16.217	33.5	42	$280	$51,346	$4,108	$6,162	$2,567	$64,000
36-246_36-001	36-246	36-001	0.907	6.6	8	$125	$17,173	$1,374	$2,061	$859	$21,000
37-001_37-369	37-001	37-369	11.026	22.4	24	$180	$56,340	$4,507	$6,761	$2,817	$70,000
37-127_37-001	37-127	37-001	10.404	24.9	36	$255	$110,201	$8,816	$13,224	$5,510	$138,000
29-297_29-336	29-297	29-336	0.130	5.5	8	$125	$44,038	$3,523	$5,285	$2,202	$55,000
37-004_37-003	37-004	37-003	0.542	9.4	10	$130	$8,126	$650	$975	$406	$10,000
37-177_37-176	37-177	37-176	4.444	15.9	18	$155	$50,143	$4,011	$6,017	$2,507	$63,000
37-210_37-283	37-210	37-283	0.132	4.8	8	$125	$37,000	$2,960	$4,440	$1,850	$46,000
38-001_37-223	38-001	37-223	1.032	10.5	12	$135	$36,896	$2,952	$4,427	$1,845	$46,000
38-044_38-098	38-044	38-098	0.817	8.4	10	$130	$25,220	$2,018	$3,026	$1,261	$32,000
38-046_38-045	38-046	38-045	0.695	7.6	8	$125	$46,988	$3,759	$5,639	$2,349	$59,000
38-070_38-069	38-070	38-069	0.085	17.1	18	$155	$59,664	$4,773	$7,160	$2,983	$75,000
38-077_38-076	38-077	38-076	0.364	5.6	8	$125	$21,513	$1,721	$2,582	$1,076	$27,000
38-319_38-067	38-319	38-067	0.760	38.9	42	$280	$79,800	$6,384	$9,576	$3,990	$100,000
38-321_38-058	38-321	38-058	1.475	8.6	10	$130	$15,561	$1,245	$1,867	$778	$19,000
37-128_37-127	37-128	37-127	10.286	24.8	36	$255	$47,940	$3,835	$5,753	$2,397	$60,000
37-129_37-128	37-129	37-128	8.993	21.9	24	$180	$33,894	$2,712	$4,067	$1,695	$42,000
37-130_37-129	37-130	37-129	10.071	24.6	36	$255	$78,795	$6,304	$9,455	$3,940	$98,000

Cedar Creek
Watershed
Required Parallel Pipes
Ultimate Flows Without PRI

ID	From Manhole	To Manhole	Additional Capacity Required (cfs)	Parallel Pipe Diameter (in)	Parallel Pipe Diameter (in)	Unit Cost ($/LF)	Pipe Cost	Admin/Inspection (8%)	Design (12%)	Land Acquisition (5%)	Total Cost
37-131_37-347	37-131	37-347	7.462	20.4	21	$170	$30,782	$2,463	$3,694	$1,539	$38,000
37-132_37-131	37-132	37-131	7.249	20.2	21	$170	$45,220	$3,618	$5,426	$2,261	$57,000
37-133_37-132	37-133	37-132	9.226	23.8	24	$180	$48,600	$3,888	$5,832	$2,430	$61,000
37-294_37-296	37-294	37-296	0.133	5.5	8	$125	$14,460	$1,157	$1,735	$723	$18,000
37-347_37-130	37-347	37-130	10.868	28.9	36	$255	$30,291	$2,423	$3,635	$1,515	$38,000
37-348_37-347	37-348	37-347	2.722	11.0	12	$135	$2,426	$194	$291	$121	$3,000
37-350_37-349	37-350	37-349	0.622	6.7	8	$125	$1,335	$107	$160	$67	$2,000
37-134_37-133	37-134	37-133	8.078	22.7	24	$180	$39,956	$3,197	$4,795	$1,998	$50,000
37-135_37-134	37-135	37-134	4.803	15.7	18	$155	$19,786	$1,583	$2,374	$989	$25,000
37-136_37-135	37-136	37-135	7.284	21.8	24	$180	$31,837	$2,547	$3,820	$1,592	$40,000
37-137_37-136	37-137	37-136	7.175	21.7	24	$180	$33,399	$2,672	$4,008	$1,670	$42,000
37-138_37-137	37-138	37-137	5.270	17.0	18	$155	$21,353	$1,708	$2,562	$1,068	$27,000
37-227_37-177	37-227	37-177	3.012	12.4	15	$140	$10,892	$871	$1,307	$545	$14,000
37-238_37-227	37-238	37-227	2.862	12.2	15	$140	$39,007	$3,121	$4,681	$1,950	$49,000
37-310_37-133	37-310	37-133	0.625	7.3	8	$125	$47,313	$3,785	$5,678	$2,366	$59,000
37-338_37-336	37-338	37-336	0.127	4.4	8	$125	$9,779	$782	$1,173	$489	$12,000
37-228_37-237	37-228	37-237	3.351	13.7	15	$140	$34,805	$2,784	$4,177	$1,740	$44,000
37-231_37-232	37-231	37-232	2.683	12.2	15	$140	$14,787	$1,183	$1,774	$739	$18,000
37-232_37-228	37-232	37-228	3.240	14.1	15	$140	$36,610	$2,929	$4,393	$1,831	$46,000
37-237_37-238	37-237	37-238	3.395	13.8	15	$140	$39,808	$3,185	$4,777	$1,990	$50,000
37-247_37-231	37-247	37-231	3.197	12.7	15	$140	$30,807	$2,465	$3,697	$1,540	$39,000
37-248_37-247	37-248	37-247	3.039	12.1	15	$140	$50,984	$4,079	$6,118	$2,549	$64,000
37-249_37-248	37-249	37-248	2.196	10.3	12	$135	$50,039	$4,003	$6,005	$2,502	$63,000
38-281_38-282	38-281	38-282	2.895	11.2	12	$135	$24,731	$1,978	$2,968	$1,237	$31,000
38-282_38-283	38-282	38-283	3.067	11.9	12	$135	$38,810	$3,105	$4,657	$1,940	$49,000
38-283_38-284	38-283	38-284	2.859	10.8	12	$135	$39,215	$3,137	$4,706	$1,961	$49,000
38-284_37-249	38-284	37-249	2.044	9.8	10	$130	$20,691	$1,655	$2,483	$1,035	$26,000
45-003_45-002	45-003	45-002	0.478	5.4	8	$125	$13,814	$1,105	$1,658	$691	$17,000
38-082_38-081	38-082	38-081	0.741	8.1	10	$130	$19,581	$1,566	$2,350	$979	$24,000
45-006_45-005	45-006	45-005	0.679	6.6	8	$125	$49,993	$3,999	$5,999	$2,500	$62,000
45-076_45-006	45-076	45-006	0.656	6.7	8	$125	$47,454	$3,796	$5,694	$2,373	$59,000
45-080_45-003	45-080	45-003	0.132	3.7	8	$125	$39,009	$3,121	$4,681	$1,950	$49,000
45-081_45-080	45-081	45-080	0.251	5.0	8	$125	$25,493	$2,039	$3,059	$1,275	$32,000
45-082_45-081	45-082	45-081	0.189	4.4	8	$125	$50,140	$4,011	$6,017	$2,507	$63,000
45-083_45-082	45-083	45-082	0.128	3.8	8	$125	$24,470	$1,958	$2,936	$1,224	$31,000
45-042_45-066	45-042	45-066	0.365	29.5	30	$200	$64,340	$5,147	$7,721	$3,217	$80,000
Total											$12,117,000

Big Creek
Watershed
Required Parallel Pipes
Ultimate Flows Without PRI

ID	From Manhole	To Manhole	Additional Capacity Required (cfs)	Parallel Pipe Diameter (in)	Parallel Pipe Diameter (in)	Unit Cost ($/LF)	Pipe Cost	Admin/Inspection (8%)	Design (12%)	Land Acquisition (5%)	Total Cost
47-006_47-007	47-006	47-007	0.255	5.5	8	$125	$50,030	$4,002	$6,004	$2,502	$63,000
47-007_47-016	47-007	47-016	0.385	6.4	8	$125	$39,989	$3,199	$4,799	$1,999	$50,000
47-016_47-017	47-016	47-017	1.595	10.8	12	$135	$54,000	$4,320	$6,480	$2,700	$68,000
47-022_47-023	47-022	47-023	2.485	16.6	18	$155	$46,675	$3,734	$5,601	$2,334	$58,000
47-023_47-069	47-023	47-069	1.861	11.5	12	$135	$29,539	$2,363	$3,545	$1,477	$37,000
47-068_54-017	47-068	54-017	2.568	13.7	15	$140	$32,199	$2,576	$3,864	$1,610	$40,000
47-069_47-068	47-069	47-068	2.261	13.0	15	$140	$32,203	$2,576	$3,864	$1,610	$40,000
54-008_54-007	54-008	54-007	5.338	17.0	18	$155	$62,002	$4,960	$7,440	$3,100	$78,000
54-010_54-009	54-010	54-009	5.302	17.9	18	$155	$62,000	$4,960	$7,440	$3,100	$78,000
54-011_54-010	54-011	54-010	5.301	19.4	21	$170	$61,533	$4,923	$7,384	$3,077	$77,000
54-012_54-011	54-012	54-011	3.432	13.9	15	$140	$41,597	$3,328	$4,992	$2,080	$52,000
54-013_54-012	54-013	54-012	4.937	18.9	21	$170	$49,487	$3,959	$5,938	$2,474	$62,000
54-014_54-013	54-014	54-013	4.677	18.5	21	$170	$64,405	$5,152	$7,729	$3,220	$81,000
54-015_54-014	54-015	54-014	3.534	15.4	18	$155	$63,220	$5,058	$7,586	$3,161	$79,000
54-016_54-015	54-016	54-015	2.076	11.1	12	$135	$53,997	$4,320	$6,480	$2,700	$67,000
54-017_54-016	54-017	54-016	3.480	16.5	18	$155	$61,997	$4,960	$7,440	$3,100	$77,000
53-010_53-009	53-010	53-009	0.733	8.5	10	$130	$36,083	$2,887	$4,330	$1,804	$45,000
53-011_53-010	53-011	53-010	0.659	8.2	10	$130	$35,781	$2,862	$4,294	$1,789	$45,000
53-012_53-011	53-012	53-011	0.687	8.3	10	$130	$30,862	$2,469	$3,703	$1,543	$39,000
53-014_53-013	53-014	53-013	0.579	7.8	8	$125	$33,876	$2,710	$4,065	$1,694	$42,000
53-015_53-014	53-015	53-014	0.549	7.7	8	$125	$33,185	$2,655	$3,982	$1,659	$41,000
Total											$1,219,000

Maybrook
Watershed
Required Parallel Pipes
Ultimate Flows Without PRI

ID	From Manhole	To Manhole	Additional Capacity Required (cfs)	Parallel Pipe Diameter (in)	Parallel Pipe Diameter (in)	Unit Cost ($/LF)	Pipe Cost	Admin/Inspection (8%)	Design (12%)	Land Acquisition (5%)	Total Cost
14-027_14-026	14-027	14-026	1.657	11.0	12	$135	$25,529	$2,042	$3,063	$1,276	$32,000
14-045_14-027	14-045	14-027	1.337	10.1	12	$135	$13,500	$1,080	$1,620	$675	$17,000
14-002_11-126	14-002	11-126	1.083	44.4	48	$305	$59,292	$4,743	$7,115	$2,965	$74,000
14-022_14-011	14-022	14-011	2.395	12.6	15	$140	$52,850	$4,228	$6,342	$2,643	$66,000
14-023_14-022	14-023	14-022	2.239	12.3	15	$140	$56,000	$4,480	$6,720	$2,800	$70,000
14-024_14-023	14-024	14-023	2.284	12.4	15	$140	$55,958	$4,477	$6,715	$2,798	$70,000
14-025_14-024	14-025	14-024	2.064	11.4	12	$135	$53,879	$4,310	$6,465	$2,694	$67,000
01-033_01-032	01-033	01-032	0.944	8.9	10	$130	$18,850	$1,508	$2,262	$943	$24,000
01-032_01-031	01-032	01-031	1.044	8.9	10	$130	$39,000	$3,120	$4,680	$1,950	$49,000
04-008_04-007	04-008	04-007	2.151	10.4	12	$135	$54,116	$4,329	$6,494	$2,706	$68,000
04-009_04-008	04-009	04-008	1.549	9.9	10	$130	$52,000	$4,160	$6,240	$2,600	$65,000
08-127_08-126	08-127	08-126	0.271	5.2	8	$125	$15,913	$1,273	$1,910	$796	$20,000
08-065_08-016BS	08-065	08-016BS	1.767	14.6	15	$140	$6,147	$492	$738	$307	$8,000
08-066_08-065	08-066	08-065	1.957	11.2	12	$135	$14,850	$1,188	$1,782	$743	$19,000
08-067_08-066	08-067	08-066	0.918	7.1	8	$125	$30,625	$2,450	$3,675	$1,531	$38,000
08-167_08-067	08-167	08-067	1.448	9.4	10	$130	$7,827	$626	$939	$391	$10,000
Total											$697,000

Middle Big Creek
Watershed
Required Parallel Pipes
Ultimate Flows Without PRI

ID	From Manhole	To Manhole	Additional Capacity Required (cfs)	Parallel Pipe Diameter (in)	Parallel Pipe Diameter (in)	Unit Cost ($/LF)	Pipe Cost	Admin/Inspection (8%)	Design (12%)	Land Acquisition (5%)	Total Cost
56-094_56-078	56-094	56-078	1.396	8.9	10	$130	$20,098	$1,608	$2,412	$1,005	$25,000
56-095_56-094	56-095	56-094	0.916	7.3	8	$125	$19,781	$1,583	$2,374	$989	$25,000
56-096_56-095	56-096	56-095	1.159	8.3	10	$130	$52,079	$4,166	$6,250	$2,604	$65,000
56-099_56-098	56-099	56-098	1.408	9.9	10	$130	$40,266	$3,221	$4,832	$2,013	$50,000
56-100_56-099	56-100	56-099	2.471	13.5	15	$140	$40,627	$3,250	$4,875	$2,031	$51,000
56-101_56-100	56-101	56-100	1.816	10.2	12	$135	$39,022	$3,122	$4,683	$1,951	$49,000
56-103_56-102	56-103	56-102	1.420	9.1	10	$130	$21,960	$1,757	$2,635	$1,098	$27,000
56-104_56-103	56-104	56-103	1.524	9.9	10	$130	$17,057	$1,365	$2,047	$853	$21,000
56-105_56-104	56-105	56-104	1.303	9.3	10	$130	$31,496	$2,520	$3,780	$1,575	$39,000
56-106_56-105	56-106	56-105	1.298	9.6	10	$130	$14,973	$1,198	$1,797	$749	$19,000
56-107_56-106	56-107	56-106	1.171	9.3	10	$130	$28,750	$2,300	$3,450	$1,437	$36,000
56-108_56-107	56-108	56-107	1.006	8.7	10	$130	$21,169	$1,694	$2,540	$1,058	$26,000
56-109_56-108	56-109	56-108	0.834	8.1	10	$130	$37,470	$2,998	$4,496	$1,873	$47,000
56-110_56-109	56-110	56-109	0.676	7.5	8	$125	$16,023	$1,282	$1,923	$801	$20,000
56-111_56-110	56-111	56-110	0.480	6.6	8	$125	$10,575	$846	$1,269	$529	$13,000
56-112_56-111	56-112	56-111	0.432	6.4	8	$125	$18,998	$1,520	$2,280	$950	$24,000
56-116_56-115	56-116	56-115	3.679	13.7	15	$140	$48,324	$3,866	$5,799	$2,416	$60,000
56-117_56-116	56-117	56-116	3.602	14.1	15	$140	$26,286	$2,103	$3,154	$1,314	$33,000
56-118_56-117	56-118	56-117	3.504	14.0	15	$140	$43,506	$3,481	$5,221	$2,175	$54,000
56-119_56-118	56-119	56-118	2.242	13.0	15	$140	$20,828	$1,666	$2,499	$1,041	$26,000
56-120_56-119	56-120	56-119	1.111	8.5	10	$130	$15,743	$1,259	$1,889	$787	$20,000
56-121_56-120	56-121	56-120	1.094	9.9	10	$130	$12,734	$1,019	$1,528	$637	$16,000
56-122_56-121	56-122	56-121	0.685	7.6	8	$125	$12,305	$984	$1,477	$615	$15,000
56-127_56-126	56-127	56-126	0.679	9.0	10	$130	$24,543	$1,963	$2,945	$1,227	$31,000
56-132_56-127	56-132	56-127	0.200	5.0	8	$125	$24,960	$1,997	$2,995	$1,248	$31,000
56-133_56-132	56-133	56-132	0.181	5.1	8	$125	$7,424	$594	$891	$371	$9,000
56-146_56-131	56-146	56-131	0.240	5.1	8	$125	$17,194	$1,376	$2,063	$860	$21,000
60-018_60-001CO	60-018	60-001CO	13.035	30.9	36	$255	$8,084	$647	$970	$404	$10,000
60-019_60-018	60-019	60-018	4.860	15.8	18	$155	$56,637	$4,531	$6,796	$2,832	$71,000
60-022_60-021	60-022	60-021	3.090	12.5	15	$140	$10,370	$830	$1,244	$518	$13,000
60-031_60-022	60-031	60-022	2.864	13.5	15	$140	$41,171	$3,294	$4,941	$2,059	$51,000
60-033_60-018	60-033	60-018	3.904	16.0	18	$155	$55,814	$4,465	$6,698	$2,791	$70,000
60-034_60-033	60-034	60-033	4.965	18.9	21	$170	$51,000	$4,080	$6,120	$2,550	$64,000
60-066_60-019	60-066	60-019	4.654	17.1	18	$155	$15,064	$1,205	$1,808	$753	$19,000
60-074_60-066	60-074	60-066	4.484	20.7	21	$170	$9,928	$794	$1,191	$496	$12,000
60-157_60-034	60-157	60-034	4.580	18.3	21	$170	$11,016	$881	$1,322	$551	$14,000
60-161_60-160	60-161	60-160	2.553	14.7	15	$140	$25,460	$2,037	$3,055	$1,273	$32,000
60-163_60-162	60-163	60-162	0.979	9.5	10	$130	$37,694	$3,015	$4,523	$1,885	$47,000
60-165_60-164	60-165	60-164	1.290	10.0	12	$135	$17,280	$1,382	$2,074	$864	$22,000

Middle Big Creek
Watershed
Required Parallel Pipes
Ultimate Flows Without PRI

ID	From Manhole	To Manhole	Additional Capacity Required (cfs)	Parallel Pipe Diameter (in)	Parallel Pipe Diameter (in)	Unit Cost ($/LF)	Pipe Cost	Admin/Inspection (8%)	Design (12%)	Land Acquisition (5%)	Total Cost
57-042_61-327	57-042	61-327	7.015	18.9	21	$170	$51,850	$4,148	$6,222	$2,593	$65,000
61-114_61-115	61-114	61-115	7.817	18.2	21	$170	$67,660	$5,413	$8,119	$3,383	$85,000
61-115_61-116	61-115	61-116	7.818	18.2	21	$170	$50,108	$4,009	$6,013	$2,505	$63,000
61-116_61-117	61-116	61-117	8.163	19.2	21	$170	$64,631	$5,170	$7,756	$3,232	$81,000
61-117_61-118	61-117	61-118	8.053	18.4	21	$170	$63,978	$5,118	$7,677	$3,199	$80,000
61-118_61-119	61-118	61-119	8.224	19.2	21	$170	$67,091	$5,367	$8,051	$3,355	$84,000
61-323_61-114	61-323	61-114	8.570	23.2	24	$180	$39,125	$3,130	$4,695	$1,956	$49,000
61-324_61-323	61-324	61-323	7.775	20.7	21	$170	$54,919	$4,393	$6,590	$2,746	$69,000
61-325_61-324	61-325	61-324	5.322	14.3	15	$140	$8,812	$705	$1,057	$441	$11,000
61-326_61-325	61-326	61-325	8.265	22.9	24	$180	$45,837	$3,667	$5,500	$2,292	$57,000
61-327_61-326	61-327	61-326	6.221	16.3	18	$155	$8,153	$652	$978	$408	$10,000
61-122_61-003BS	61-122	61-003BS	2.539	16.7	18	$155	$10,191	$815	$1,223	$510	$13,000
64-009_64-008	64-009	64-008	1.164	12.5	15	$140	$32,631	$2,610	$3,916	$1,632	$41,000
Total											$1,986,000

South Prairie Lee
Watershed
Required Parallel Pipes
Ultimate Flows Without PRI

ID	From Manhole	To Manhole	Additional Capacity Required (cfs)	Parallel Pipe Diameter (in)	Parallel Pipe Diameter (in)	Unit Cost ($/LF)	Pipe Cost	Admin/Inspection (8%)	Design (12%)	Land Acquisition (5%)	Total Cost
26-167_26-166	26-167	26-166	0.676	4.6	8	$125	$1,795	$144	$215	$90	$2,000
26-168_26-167	26-168	26-167	1.012	7.3	8	$125	$9,860	$789	$1,183	$493	$12,000
26-169_26-168	26-169	26-168	1.355	9.4	10	$130	$15,305	$1,224	$1,837	$765	$19,000
26-170_26-169	26-170	26-169	1.408	9.9	10	$130	$21,718	$1,737	$2,606	$1,086	$27,000
26-173_26-170	26-173	26-170	1.165	8.9	10	$130	$33,157	$2,653	$3,979	$1,658	$41,000
26-174_26-173	26-174	26-173	1.034	8.3	10	$130	$22,781	$1,822	$2,734	$1,139	$28,000
26-179_26-178	26-179	26-178	0.244	4.4	8	$125	$37,835	$3,027	$4,540	$1,892	$47,000
26-180_26-179	26-180	26-179	0.571	7.1	8	$125	$48,188	$3,855	$5,783	$2,409	$60,000
26-181_26-180	26-181	26-180	0.390	5.8	8	$125	$18,086	$1,447	$2,170	$904	$23,000
26-182_26-181	26-182	26-181	0.159	4.0	8	$125	$16,625	$1,330	$1,995	$831	$21,000
26-192_26-174	26-192	26-174	0.577	6.1	8	$125	$17,325	$1,386	$2,079	$866	$22,000
26-166_26-001PS	26-166	26-001PS	0.675	4.6	8	$125	$1,615	$129	$194	$81	$2,000
26-041_26-040	26-041	26-040	8.504	18.3	21	$170	$50,114	$4,009	$6,014	$2,506	$63,000
26-044_26-041	26-044	26-041	6.964	15.6	18	$155	$54,002	$4,320	$6,480	$2,700	$68,000
26-068_26-002	26-068	26-002	9.655	19.2	21	$170	$6,496	$520	$779	$325	$8,000
26-069_26-068	26-069	26-068	9.712	19.8	21	$170	$68,000	$5,440	$8,160	$3,400	$85,000
26-070_26-069	26-070	26-069	8.346	13.2	15	$140	$30,100	$2,408	$3,612	$1,505	$38,000
26-071_26-070	26-071	26-070	9.644	19.7	21	$170	$47,600	$3,808	$5,712	$2,380	$60,000
26-076_26-071	26-076	26-071	9.582	20.4	21	$170	$49,368	$3,949	$5,924	$2,468	$62,000
26-083_26-044	26-083	26-044	8.542	23.2	24	$180	$26,775	$2,142	$3,213	$1,339	$33,000
26-084_26-083	26-084	26-083	4.968	14.9	15	$140	$7,088	$567	$851	$354	$9,000
26-085_26-084	26-085	26-084	8.259	22.9	24	$180	$65,515	$5,241	$7,862	$3,276	$82,000
33-231_33-232	33-231	33-232	5.873	14.9	15	$140	$35,060	$2,805	$4,207	$1,753	$44,000
33-232_33-233	33-232	33-233	6.825	16.8	18	$155	$31,033	$2,483	$3,724	$1,552	$39,000
33-233_33-234	33-233	33-234	7.527	18.6	21	$170	$64,865	$5,189	$7,784	$3,243	$81,000
33-234_26-085	33-234	26-085	8.634	19.6	21	$170	$46,570	$3,726	$5,588	$2,328	$58,000
33-398_33-234	33-398	33-234	0.433	5.7	8	$125	$18,750	$1,500	$2,250	$938	$23,000
26-077_26-076	26-077	26-076	9.460	20.3	21	$170	$10,880	$870	$1,306	$544	$14,000
26-078_26-077	26-078	26-077	0.466	5.8	8	$125	$47,271	$3,782	$5,673	$2,364	$59,000
26-079_26-078	26-079	26-078	0.443	5.8	8	$125	$43,750	$3,500	$5,250	$2,188	$55,000
26-080_26-079	26-080	26-079	0.240	4.3	8	$125	$32,135	$2,571	$3,856	$1,607	$40,000
26-086_26-077	26-086	26-077	8.801	97.4	8	$125	$24,625	$1,970	$2,955	$1,231	$31,000
26-087_26-086	26-087	26-086	7.974	18.4	21	$170	$33,490	$2,679	$4,019	$1,675	$42,000
26-088_26-087	26-088	26-087	8.041	19.9	21	$170	$18,290	$1,463	$2,195	$915	$23,000
26-089_26-088	26-089	26-088	7.930	19.0	21	$170	$50,497	$4,040	$6,060	$2,525	$63,000
26-094_26-089	26-094	26-089	7.193	16.7	18	$155	$40,925	$3,274	$4,911	$2,046	$51,000
26-095_26-094	26-095	26-094	7.089	16.7	18	$155	$17,053	$1,364	$2,046	$853	$21,000
26-096_26-095	26-096	26-095	5.304	10.2	12	$135	$15,660	$1,253	$1,879	$783	$20,000
26-101_26-096	26-101	26-096	5.440	10.6	12	$135	$18,506	$1,480	$2,221	$925	$23,000

South Prairie Lee
Watershed
Required Parallel Pipes
Ultimate Flows Without PRI

ID	From Manhole	To Manhole	Additional Capacity Required (cfs)	Parallel Pipe Diameter (in)	Parallel Pipe Diameter (in)	Unit Cost ($/LF)	Pipe Cost	Admin/Inspection (8%)	Design (12%)	Land Acquisition (5%)	Total Cost
26-102_26-101	26-102	26-101	6.885	16.1	18	$155	$29,140	$2,331	$3,497	$1,457	$36,000
26-103_26-102	26-103	26-102	6.662	16.7	18	$155	$51,708	$4,137	$6,205	$2,585	$65,000
26-104_26-103	26-104	26-103	5.754	12.4	15	$140	$25,298	$2,024	$3,036	$1,265	$32,000
26-105_26-104	26-105	26-104	6.500	16.5	18	$155	$48,365	$3,869	$5,804	$2,418	$60,000
26-106_26-105	26-106	26-105	6.262	15.5	18	$155	$25,343	$2,027	$3,041	$1,267	$32,000
32-108_32-109	32-108	32-109	1.621	11.5	12	$135	$62,224	$4,978	$7,467	$3,111	$78,000
32-117_32-118	32-117	32-118	0.829	8.5	10	$130	$17,334	$1,387	$2,080	$867	$22,000
32-118_32-119	32-118	32-119	0.645	7.4	8	$125	$19,036	$1,523	$2,284	$952	$24,000
32-119_32-259	32-119	32-259	0.650	7.4	8	$125	$14,673	$1,174	$1,761	$734	$18,000
32-130_32-127	32-130	32-127	0.695	7.6	8	$125	$37,516	$3,001	$4,502	$1,876	$47,000
32-261_32-260	32-261	32-260	0.209	5.1	8	$125	$15,675	$1,254	$1,881	$784	$20,000
32-440_32-441	32-440	32-441	1.922	12.3	15	$140	$36,208	$2,897	$4,345	$1,810	$45,000
32-441_32-442	32-441	32-442	3.973	17.4	18	$155	$31,865	$2,549	$3,824	$1,593	$40,000
33-195_33-223	33-195	33-223	3.272	16.2	18	$155	$63,702	$5,096	$7,644	$3,185	$80,000
33-223_33-224	33-223	33-224	3.416	16.4	18	$155	$61,966	$4,957	$7,436	$3,098	$77,000
33-224_33-225	33-224	33-225	3.416	15.2	18	$155	$62,000	$4,960	$7,440	$3,100	$78,000
33-225_33-304	33-225	33-304	1.772	10.4	12	$135	$44,078	$3,526	$5,289	$2,204	$55,000
33-227_33-228	33-227	33-228	0.941	7.6	8	$125	$50,000	$4,000	$6,000	$2,500	$63,000
33-230_33-370	33-230	33-370	1.194	8.4	10	$130	$38,026	$3,042	$4,563	$1,901	$48,000
33-235_33-231	33-235	33-231	3.011	11.2	12	$135	$54,000	$4,320	$6,480	$2,700	$68,000
33-304_33-226	33-304	33-226	3.941	17.3	18	$155	$19,479	$1,558	$2,337	$974	$24,000
33-434_33-379	33-434	33-379	0.017	9.4	10	$130	$11,167	$893	$1,340	$558	$14,000
33-237_33-436	33-237	33-436	1.775	8.8	10	$130	$36,803	$2,944	$4,416	$1,840	$46,000
33-238_33-237	33-238	33-237	2.318	10.3	12	$135	$54,000	$4,320	$6,480	$2,700	$68,000
33-239_33-238	33-239	33-238	2.872	11.9	12	$135	$43,177	$3,454	$5,181	$2,159	$54,000
33-240_33-239	33-240	33-239	3.381	13.8	15	$140	$18,084	$1,447	$2,170	$904	$23,000
33-241_33-240	33-241	33-240	2.650	11.5	12	$135	$47,075	$3,766	$5,649	$2,354	$59,000
33-390_33-408	33-390	33-408	2.256	9.6	10	$130	$28,562	$2,285	$3,427	$1,428	$36,000
33-408_33-235	33-408	33-235	3.367	12.1	15	$140	$4,900	$392	$588	$245	$6,000
33-436_33-236	33-436	33-236	4.951	13.1	15	$140	$15,694	$1,256	$1,883	$785	$20,000
31-195_31-196	31-195	31-196	0.498	9.1	10	$130	$32,903	$2,632	$3,948	$1,645	$41,000
32-049_32-067	32-049	32-067	0.206	5.0	8	$125	$50,000	$4,000	$6,000	$2,500	$63,000
32-067_32-068	32-067	32-068	0.322	6.3	8	$125	$46,963	$3,757	$5,636	$2,348	$59,000
32-068_32-108	32-068	32-108	0.777	7.7	8	$125	$10,133	$811	$1,216	$507	$13,000
32-209_32-208	32-209	32-208	0.402	30.6	36	$255	$43,614	$3,489	$5,234	$2,181	$55,000
32-247_32-246	32-247	32-246	1.267	11.3	12	$135	$54,336	$4,347	$6,520	$2,717	$68,000
33-183_33-184	33-183	33-184	2.514	11.6	12	$135	$22,626	$1,810	$2,715	$1,131	$28,000
33-184_33-191	33-184	33-191	2.627	11.8	12	$135	$43,011	$3,441	$5,161	$2,151	$54,000
33-191_33-192	33-191	33-192	2.313	10.7	12	$135	$16,436	$1,315	$1,972	$822	$21,000

South Prairie Lee
Watershed
Required Parallel Pipes
Ultimate Flows Without PRI

ID	From Manhole	To Manhole	Additional Capacity Required (cfs)	Parallel Pipe Diameter (in)	Parallel Pipe Diameter (in)	Unit Cost ($/LF)	Pipe Cost	Admin/Inspection (8%)	Design (12%)	Land Acquisition (5%)	Total Cost
33-192_33-193	33-192	33-193	2.729	11.9	12	$135	$37,800	$3,024	$4,536	$1,890	$47,000
33-193_33-194	33-193	33-194	2.773	12.0	15	$140	$27,832	$2,227	$3,340	$1,392	$35,000
33-194_33-195	33-194	33-195	2.800	12.1	15	$140	$56,034	$4,483	$6,724	$2,802	$70,000
33-222_33-260	33-222	33-260	0.275	4.8	8	$125	$17,250	$1,380	$2,070	$863	$22,000
33-242_33-277	33-242	33-277	1.357	8.0	8	$125	$45,413	$3,633	$5,450	$2,271	$57,000
33-251_33-243	33-251	33-243	0.641	6.1	8	$125	$25,900	$2,072	$3,108	$1,295	$32,000
33-257_33-251	33-257	33-251	0.718	7.7	8	$125	$26,163	$2,093	$3,140	$1,308	$33,000
33-259_33-258	33-259	33-258	0.319	5.1	8	$125	$26,978	$2,158	$3,237	$1,349	$34,000
33-260_33-259	33-260	33-259	0.350	5.4	8	$125	$24,925	$1,994	$2,991	$1,246	$31,000
33-264_33-262	33-264	33-262	0.931	8.2	10	$130	$48,867	$3,909	$5,864	$2,443	$61,000
33-267_33-264	33-267	33-264	1.027	8.8	10	$130	$32,188	$2,575	$3,863	$1,609	$40,000
33-277_33-241	33-277	33-241	5.163	79.7	8	$125	$27,504	$2,200	$3,300	$1,375	$34,000
33-302_33-267	33-302	33-267	0.823	8.1	10	$130	$46,956	$3,756	$5,635	$2,348	$59,000
33-303_33-302	33-303	33-302	1.020	9.2	10	$130	$31,057	$2,485	$3,727	$1,553	$39,000
65-020_65-022	65-020	65-022	0.497	6.7	8	$125	$30,566	$2,445	$3,668	$1,528	$38,000
65-023_33-222	65-023	33-222	0.241	4.6	8	$125	$21,891	$1,751	$2,627	$1,095	$27,000
32-451_32-248	32-451	32-248	0.978	11.7	12	$135	$16,292	$1,303	$1,955	$815	$20,000
32-452_32-451	32-452	32-451	0.569	9.6	10	$130	$31,831	$2,546	$3,820	$1,592	$40,000
32-453_32-452	32-453	32-452	0.851	11.1	12	$135	$12,980	$1,038	$1,558	$649	$16,000
32-455_32-453	32-455	32-453	0.504	9.1	10	$130	$17,973	$1,438	$2,157	$899	$22,000
40-130_40-127	40-130	40-127	0.918	11.4	12	$135	$28,836	$2,307	$3,460	$1,442	$36,000
40-170_40-160	40-170	40-160	0.136	4.3	8	$125	$49,696	$3,976	$5,964	$2,485	$62,000
40-069_40-361	40-069	40-361	0.347	4.9	8	$125	$12,719	$1,018	$1,526	$636	$16,000
40-072_40-071	40-072	40-071	0.309	4.7	8	$125	$49,963	$3,997	$5,996	$2,498	$62,000
40-074_40-072	40-074	40-072	0.265	4.4	8	$125	$38,331	$3,067	$4,600	$1,917	$48,000
40-080_40-079	40-080	40-079	0.323	5.0	8	$125	$47,081	$3,767	$5,650	$2,354	$59,000
40-191_40-110	40-191	40-110	1.242	8.9	10	$130	$41,295	$3,304	$4,955	$2,065	$52,000
40-195_40-191	40-195	40-191	0.724	6.2	8	$125	$28,854	$2,308	$3,462	$1,443	$36,000
40-196_40-195	40-196	40-195	0.851	6.9	8	$125	$25,473	$2,038	$3,057	$1,274	$32,000
40-200_40-196	40-200	40-196	1.009	7.8	8	$125	$45,916	$3,673	$5,510	$2,296	$57,000
40-201_40-200	40-201	40-200	0.930	7.5	8	$125	$23,756	$1,901	$2,851	$1,188	$30,000
40-204_40-201	40-204	40-201	1.032	8.3	10	$130	$6,176	$494	$741	$309	$8,000
32-457_32-456	32-457	32-456	1.885	11.5	12	$135	$53,915	$4,313	$6,470	$2,696	$67,000
40-005_40-047	40-005	40-047	0.320	5.9	8	$125	$43,838	$3,507	$5,261	$2,192	$55,000
40-358_32-457	40-358	32-457	1.615	10.9	12	$135	$46,587	$3,727	$5,590	$2,329	$58,000
40-359_40-358	40-359	40-358	1.190	10.2	12	$135	$50,799	$4,064	$6,096	$2,540	$63,000
40-360_40-359	40-360	40-359	0.873	9.1	10	$130	$29,272	$2,342	$3,513	$1,464	$37,000
68-003_68-005	68-003	68-005	1.581	8.3	10	$130	$49,334	$3,947	$5,920	$2,467	$62,000
68-004_68-003	68-004	68-003	2.828	10.8	12	$135	$31,903	$2,552	$3,828	$1,595	$40,000

South Prairie Lee
Watershed
Required Parallel Pipes
Ultimate Flows Without PRI

ID	From Manhole	To Manhole	Additional Capacity Required (cfs)	Parallel Pipe Diameter (in)	Parallel Pipe Diameter (in)	Unit Cost ($/LF)	Pipe Cost	Admin/Inspection (8%)	Design (12%)	Land Acquisition (5%)	Total Cost
68-005_33-183	68-005	33-183	3.280	12.2	15	$140	$22,163	$1,773	$2,660	$1,108	$28,000
68-007_68-004	68-007	68-004	2.654	10.1	12	$135	$39,518	$3,161	$4,742	$1,976	$49,000
68-008_68-007	68-008	68-007	2.584	9.9	10	$130	$15,270	$1,222	$1,832	$764	$19,000
68-009_68-008	68-009	68-008	2.773	11.0	12	$135	$34,385	$2,751	$4,126	$1,719	$43,000
68-010_68-009	68-010	68-009	2.814	11.3	12	$135	$39,017	$3,121	$4,682	$1,951	$49,000
68-011_68-010	68-011	68-010	2.534	10.5	12	$135	$9,956	$796	$1,195	$498	$12,000
68-012_68-011	68-012	68-011	2.607	11.0	12	$135	$21,975	$1,758	$2,637	$1,099	$27,000
68-101_68-012	68-101	68-012	2.568	10.9	12	$135	$54,097	$4,328	$6,492	$2,705	$68,000
68-075_68-076	68-075	68-076	2.141	11.2	12	$135	$13,916	$1,113	$1,670	$696	$17,000
68-076_33-303	68-076	33-303	2.078	10.8	12	$135	$17,847	$1,428	$2,142	$892	$22,000
68-077_68-075	68-077	68-075	1.546	9.6	10	$130	$34,060	$2,725	$4,087	$1,703	$43,000
68-081_69-022	68-081	69-022	0.192	4.5	8	$125	$20,250	$1,620	$2,430	$1,013	$25,000
68-082_68-081	68-082	68-081	0.149	4.1	8	$125	$22,500	$1,800	$2,700	$1,125	$28,000
68-124_68-083	68-124	68-083	0.271	5.6	8	$125	$52,600	$4,208	$6,312	$2,630	$66,000
69-001_68-077	69-001	68-077	0.599	7.0	8	$125	$33,500	$2,680	$4,020	$1,675	$42,000
69-002_69-001	69-002	69-001	0.450	6.3	8	$125	$43,100	$3,448	$5,172	$2,155	$54,000
69-003_69-002	69-003	69-002	0.419	6.1	8	$125	$53,225	$4,258	$6,387	$2,661	$67,000
69-003_69-004	69-004	69-003	0.317	5.5	8	$125	$12,338	$987	$1,481	$617	$15,000
69-005_69-004	69-005	69-004	0.169	4.3	8	$125	$16,964	$1,357	$2,036	$848	$21,000
69-006_69-005	69-006	69-005	0.144	4.1	8	$125	$16,913	$1,353	$2,030	$846	$21,000
40-081_40-080	40-081	40-080	0.721	8.0	10	$130	$50,057	$4,005	$6,007	$2,503	$63,000
40-210_40-372	40-210	40-372	0.658	7.2	8	$125	$4,000	$320	$480	$200	$5,000
40-082_40-081	40-082	40-081	0.190	4.2	8	$125	$40,363	$3,229	$4,844	$2,018	$50,000
40-087_40-086	40-087	40-086	0.374	29.8	30	$200	$53,474	$4,278	$6,417	$2,674	$67,000
68-127_68-101	68-127	68-101	1.939	10.8	12	$135	$39,971	$3,198	$4,796	$1,999	$50,000
68-128_68-127	68-128	68-127	1.049	6.9	8	$125	$21,893	$1,751	$2,627	$1,095	$27,000
68-129_68-128	68-129	68-128	1.492	9.5	10	$130	$49,075	$3,926	$5,889	$2,454	$61,000
68-131_68-130	68-131	68-130	0.166	4.3	8	$125	$50,064	$4,005	$6,008	$2,503	$63,000
68-157_68-158	68-157	68-158	0.484	6.6	8	$125	$6,270	$502	$752	$314	$8,000
68-158_68-159	68-158	68-159	0.487	6.7	8	$125	$46,288	$3,703	$5,555	$2,314	$58,000
68-159_68-160	68-159	68-160	0.477	6.4	8	$125	$15,025	$1,202	$1,803	$751	$19,000
68-160_68-162	68-160	68-162	0.572	7.1	8	$125	$49,850	$3,988	$5,982	$2,493	$62,000
68-162_68-163	68-162	68-163	0.551	6.7	8	$125	$13,338	$1,067	$1,601	$667	$17,000
68-163_68-164	68-163	68-164	0.463	6.0	8	$125	$30,088	$2,407	$3,611	$1,504	$38,000
68-164_68-165	68-164	68-165	0.613	7.0	8	$125	$45,040	$3,603	$5,405	$2,252	$56,000
68-165_68-166	68-165	68-166	0.651	7.2	8	$125	$50,041	$4,003	$6,005	$2,502	$63,000
68-166_68-129	68-166	68-129	0.676	7.3	8	$125	$33,550	$2,684	$4,026	$1,678	$42,000
Total											$6,341,000

West Prairie Lee
Watershed
Required Parallel Pipes
Ultimate Flows Without PRI

ID	From Manhole	To Manhole	Additional Capacity Required (cfs)	Parallel Pipe Diameter (in)	Parallel Pipe Diameter (in)	Unit Cost ($/LF)	Pipe Cost	Admin/Inspection (8%)	Design (12%)	Land Acquisition (5%)	Total Cost
17-001_24-232	17-001	24-232	0.422	6.1	8	$125	$52,688	$4,215	$6,323	$2,634	$66,000
17-004_17-003	17-004	17-003	0.207	5.0	8	$125	$45,788	$3,663	$5,495	$2,289	$57,000
17-020_17-019	17-020	17-019	0.500	6.7	8	$125	$24,000	$1,920	$2,880	$1,200	$30,000
18-110_18-109	18-110	18-109	5.437	19.5	21	$170	$67,526	$5,402	$8,103	$3,376	$84,000
24-001_25-009	24-001	25-009	3.501	12.5	15	$140	$31,529	$2,522	$3,784	$1,576	$39,000
24-010_24-001	24-010	24-001	2.963	11.5	12	$135	$26,870	$2,150	$3,224	$1,344	$34,000
24-011_24-010	24-011	24-010	4.905	18.8	21	$170	$68,425	$5,474	$8,211	$3,421	$86,000
24-012_24-011	24-012	24-011	3.207	12.4	15	$140	$35,910	$2,873	$4,309	$1,796	$45,000
24-018_24-012	24-018	24-012	2.714	11.1	12	$135	$52,164	$4,173	$6,260	$2,608	$65,000
24-019_24-018	24-019	24-018	3.438	13.4	15	$140	$57,918	$4,633	$6,950	$2,896	$72,000
25-005_25-370	25-005	25-370	3.388	11.4	12	$135	$7,488	$599	$899	$374	$9,000
25-006_25-184	25-006	25-184	4.623	15.5	18	$155	$30,861	$2,469	$3,703	$1,543	$39,000
25-007_25-006	25-007	25-006	3.076	11.1	12	$135	$20,883	$1,671	$2,506	$1,044	$26,000
25-008_25-007	25-008	25-007	2.937	10.9	12	$135	$25,676	$2,054	$3,081	$1,284	$32,000
25-009_25-008	25-009	25-008	3.088	11.3	12	$135	$54,000	$4,320	$6,480	$2,700	$68,000
25-184_25-005	25-184	25-005	5.895	20.1	21	$170	$18,717	$1,497	$2,246	$936	$23,000
25-185_25-284	25-185	25-284	1.889	8.6	10	$130	$30,862	$2,469	$3,703	$1,543	$39,000
25-186_25-185	25-186	25-185	5.189	16.9	18	$155	$28,994	$2,320	$3,479	$1,450	$36,000
25-275_25-340	25-275	25-340	7.048	21.5	24	$180	$63,463	$5,077	$7,616	$3,173	$79,000
25-276_25-275	25-276	25-275	5.949	17.0	18	$155	$59,791	$4,783	$7,175	$2,990	$75,000
25-278_25-276	25-278	25-276	10.014	24.6	30	$200	$61,846	$4,948	$7,422	$3,092	$77,000
25-279_25-278	25-279	25-278	5.538	16.6	18	$155	$52,681	$4,215	$6,322	$2,634	$66,000
25-281_25-279	25-281	25-279	6.868	18.7	21	$170	$16,842	$1,347	$2,021	$842	$21,000
25-282_25-281	25-282	25-281	5.242	15.7	18	$155	$16,835	$1,347	$2,020	$842	$21,000
25-283_25-282	25-283	25-282	7.459	17.9	18	$155	$54,323	$4,346	$6,519	$2,716	$68,000
25-284_25-283	25-284	25-283	7.436	17.9	18	$155	$61,360	$4,909	$7,363	$3,068	$77,000
25-340_18-110	25-340	18-110	7.323	21.9	24	$180	$56,164	$4,493	$6,740	$2,808	$70,000
18-029_18-030	18-029	18-030	0.350	5.7	8	$125	$33,448	$2,676	$4,014	$1,672	$42,000
18-030_18-041	18-030	18-041	0.518	6.6	8	$125	$22,908	$1,833	$2,749	$1,145	$29,000
18-042_18-043	18-042	18-043	0.972	7.9	8	$125	$21,561	$1,725	$2,587	$1,078	$27,000
18-043_18-044	18-043	18-044	0.446	4.9	8	$125	$19,750	$1,580	$2,370	$988	$25,000
18-044_18-045	18-044	18-045	1.877	11.5	12	$135	$13,757	$1,101	$1,651	$688	$17,000
18-045_18-080	18-045	18-080	1.861	11.0	12	$135	$44,667	$3,573	$5,360	$2,233	$56,000
18-059_25-188	18-059	25-188	0.190	6.3	8	$125	$14,068	$1,125	$1,688	$703	$18,000
18-060_18-069	18-060	18-069	4.567	16.1	18	$155	$12,412	$993	$1,489	$621	$16,000
18-066_18-060	18-066	18-060	4.060	15.4	18	$155	$27,540	$2,203	$3,305	$1,377	$34,000
18-067_18-066	18-067	18-066	3.998	15.3	18	$155	$30,242	$2,419	$3,629	$1,512	$38,000
18-069_25-187	18-069	25-187	4.612	16.1	18	$155	$48,761	$3,901	$5,851	$2,438	$61,000
18-076_18-067	18-076	18-067	3.404	13.3	15	$140	$42,351	$3,388	$5,082	$2,118	$53,000

West Prairie Lee
Watershed
Required Parallel Pipes
Ultimate Flows Without PRI

ID	From Manhole	To Manhole	Additional Capacity Required (cfs)	Parallel Pipe Diameter (in)	Parallel Pipe Diameter (in)	Unit Cost ($/LF)	Pipe Cost	Admin/Inspection (8%)	Design (12%)	Land Acquisition (5%)	Total Cost
18-077_18-076	18-077	18-076	1.953	8.9	10	$130	$13,607	$1,089	$1,633	$680	$17,000
18-078_18-077	18-078	18-077	2.692	13.2	15	$140	$49,686	$3,975	$5,962	$2,484	$62,000
18-079_18-078	18-079	18-078	2.602	13.0	15	$140	$51,115	$4,089	$6,134	$2,556	$64,000
18-080_18-079	18-080	18-079	2.383	12.1	15	$140	$53,124	$4,250	$6,375	$2,656	$66,000
25-187_25-186	25-187	25-186	4.677	16.2	18	$155	$26,984	$2,159	$3,238	$1,349	$34,000
18-109_25-271	18-109	25-271	6.563	21.0	21	$170	$41,176	$3,294	$4,941	$2,059	$51,000
25-217_25-329	25-217	25-329	17.621	126.3	30	$200	$12,970	$1,038	$1,556	$649	$16,000
25-267_25-JS01	25-267	25-JS01	6.958	21.4	24	$180	$70,578	$5,646	$8,469	$3,529	$88,000
25-268_25-267	25-268	25-267	6.280	20.6	21	$170	$61,321	$4,906	$7,358	$3,066	$77,000
25-269_25-268	25-269	25-268	6.314	20.7	21	$170	$68,066	$5,445	$8,168	$3,403	$85,000
25-270_25-269	25-270	25-269	6.303	20.7	21	$170	$42,599	$3,408	$5,112	$2,130	$53,000
25-271_25-270	25-271	25-270	8.185	26.0	30	$200	$60,000	$4,800	$7,200	$3,000	$75,000
25-330_25-329	25-330	25-329	0.788	7.5	8	$125	$23,200	$1,856	$2,784	$1,160	$29,000
25-331_25-330	25-331	25-330	0.532	6.2	8	$125	$26,145	$2,092	$3,137	$1,307	$33,000
25-332_25-331	25-332	25-331	0.371	5.4	8	$125	$16,106	$1,289	$1,933	$805	$20,000
25-333_25-332	25-333	25-332	0.421	6.1	8	$125	$36,166	$2,893	$4,340	$1,808	$45,000
25-334_25-333	25-334	25-333	0.477	7.3	8	$125	$17,684	$1,415	$2,122	$884	$22,000
25-JS01_25-PS01	25-JS01	25PS01	13.295	31.1	36	$255	$24,228	$1,938	$2,907	$1,211	$30,000
24-020_24-019	24-020	24-019	3.022	12.1	15	$140	$55,825	$4,466	$6,699	$2,791	$70,000
24-021_24-215	24-021	24-215	1.427	7.9	8	$125	$8,254	$660	$990	$413	$10,000
24-022_24-216	24-022	24-216	1.813	9.1	10	$130	$12,186	$975	$1,462	$609	$15,000
24-023_24-022	24-023	24-022	2.531	11.1	12	$135	$66,466	$5,317	$7,976	$3,323	$83,000
24-024_24-023	24-024	24-023	1.909	9.6	10	$130	$19,003	$1,520	$2,280	$950	$24,000
24-068_24-069	24-068	24-069	0.537	6.1	8	$125	$35,128	$2,810	$4,215	$1,756	$44,000
24-069_24-071	24-069	24-071	0.698	7.0	8	$125	$33,834	$2,707	$4,060	$1,692	$42,000
24-071_24-072	24-071	24-072	0.719	7.1	8	$125	$33,624	$2,690	$4,035	$1,681	$42,000
24-072_24-073	24-072	24-073	1.064	9.3	10	$130	$12,786	$1,023	$1,534	$639	$16,000
24-073_24-074	24-073	24-074	1.000	8.7	10	$130	$35,984	$2,879	$4,318	$1,799	$45,000
24-074_24-075	24-074	24-075	1.326	10.1	12	$135	$47,021	$3,762	$5,642	$2,351	$59,000
24-075_24-029	24-075	24-029	1.306	9.6	10	$130	$22,191	$1,775	$2,663	$1,110	$28,000
24-215_24-020	24-215	24-020	4.216	17.8	18	$155	$53,353	$4,268	$6,402	$2,668	$67,000
24-216_24-021	24-216	24-021	2.714	11.6	12	$135	$48,850	$3,908	$5,862	$2,442	$61,000
24-235_24-062	24-235	24-062	0.879	41.0	42	$280	$9,797	$784	$1,176	$490	$12,000
24-249_24-248	24-249	24-248	0.525	6.8	8	$125	$50,078	$4,006	$6,009	$2,504	$63,000
24-253_24-252	24-253	24-252	0.789	7.0	8	$125	$23,436	$1,875	$2,812	$1,172	$29,000
24-254_24-253	24-254	24-253	0.764	6.9	8	$125	$20,666	$1,653	$2,480	$1,033	$26,000
24-266_24-265	24-266	24-265	0.289	4.7	8	$125	$43,838	$3,507	$5,261	$2,192	$55,000
24-274_24-266	24-274	24-266	0.345	5.2	8	$125	$26,600	$2,128	$3,192	$1,330	$33,000
24-128_24-326	24-128	24-326	0.537	7.6	8	$125	$11,796	$944	$1,416	$590	$15,000