2020 Sewer Renewals by CIPP Lining, Contract 8, Tender 387-2020

Appendix A - Repair Requirements

Sewer Details															Pre-Lining Repairs																					
DWG	Sheet	Sewer Asset	Street Name	Location	Manholes				Length	Size		Shape	Flow Type	Material	Pre-Repair Inspection Required	Sewer Services	Lump Sum Anulus Grouting per Location		Patching			Removal of Intruding Connections		Removal Roots and Grease		Solid Debris Cutting / Other				Sewer Service Grouting - Man Entry for Sewers >750mm		External Point Repair (EPR) **By Contractor**		Manhole Stabilization Grouting	
					Upstream	Depth	Downstream	Depth		Height	Width						Anulus Grouting	Description	Patch Tender <=1m	Patch Tender >=1m	Description	Intrud Conn Tender	Description	Root Tender	Description	Tender 1st 3m	Tender >3m (m)	Tender at Joints	Description	Service Grouting	Description	Length	Description	Manhole Grouting	Description
12534	1	S-MA00015124	AIKINS ST	MH@ALFREDAV-MH@ABERDEENAV	S-MH00013469	4.55	S-MH00013553	5.33	80.3	300		CIRCULAR	COMBINED	VC-VITRIFIED CLAY	No	7								1.0	76.3-79.4M DAGS @ 9-3 DS;	1.0		23	16.2M DAEJ @ 8-11 DS; 17.5M DAEJ @ 2-5 DS; 19.5M DAEJ @ 3-5 DS; 22.5M DAEJ @ 6-6 DS; 23.0M DAEJ @ 1-5 DS; 23.7M DAEJ @ 6-6 DS; 24.2M DAEJ @ 7-5 DS; 26.3M DAEJ @ 7-2 DS; 31.9M DAEJ @ 7-5 DS; 32.5M DAEJ @ 7-12 DS; 35.0M DAEJ @ 3-5 DS; 35.5M DAEJ @ 1-5 DS; 38.4M DAEJ @ 7-5 DS; 39.4M DAEJ @ 2-5 DS; 41.8M DAEJ @ 1-5 DS; 42.0M DAE @ 2-5 DS; 42.7M DAEJ @ 7-10 DS; 44.6M DAEJ @ 7-5 DS; 49.6M DAEJ @ 8 DS; 52.7M DAEJ@ 8-10 DS; 56.9M DAEJ @ 7-5 DS; 57.6M DAEJ @ 7-5 DS; 58.2M DAEJ @ 8-5 DS; 59.4M DAEJ @ 2-4, 9 DS;							
12535	2	S-MA70024822	ALBERT ST	1ST S MCDERMOT AVE - FLOW N	S-MH20014508	3.51	S-MH20014503	4.43	49.6	300		CIRCULAR	COMBINED	VC-VITRIFIED CLAY	No	7						1	29.1M TBI @ 2 DS;	1.0	41.1M RFJ @ 9, 2-4 DS; 41.6M RTL @ 12 DS;			7	16.8M DAEJ @ 1-4 DS; 28.9M DAEJ @ 12-4 DS; 32.1M DAEJ @ 3 DS; 32.7M DAEJ @ 8-11, 2-4 DS; 33.3M DAEJ @ 1-5 DS; 34.7M DAEJ @ 9, 3 DS; 35.9M DAEJ @ 10-4 DS;						1.0	US MH REQUIRES STABILIZATION. LOOSE BRICKS AND VOIDING AROUND PIPE.
12536	3	S-MA20018747	ALEXANDER AV	1ST MH E OF BUSHNELL ST - MH @ ISABEL ST (CL)	S-MH20016807	3.43	S-MH20016866	5.31	112.2	375		CIRCULAR	COMBINED	VC-VITRIFIED CLAY	No	20						7	12.2M TBI @ 1 DS; 64.4M TBI @ 10 DS; 65.1M TBI @ 2 DS; 69.7M TBI @ 1 DS; 75.6M TBI @ 10 DS; 77.3M TBI @ 2 DS; 101.9M TBI @ 11 DS;	1.0	3.2-5.1M DAGS @ 10-2 DS; 8.7M DAGS @ 1 DS; 11.4-12.9M DAGS 11-1 DS; 15.5M DAGS @ 11-1 DS; 17.9M DAGS @ 12 DS;	1	2.0	4	17.1M OBZ @ 6-8 DS; 17.6M OBJ @ 6-9 DS; 54.7M DAE @ 9-11 DS; 62.8M DAE @ 10 DS; 64.9M DAEJ @ 3 DS; 81.7M DAE @ 6, 10 DS; 93.4M DAEJ @ 8 DS; 110.7M OBZ @ 3 DS; 111.5M OBJ @ 5 DS;			2.3	EPR 110.0-112.3m DS		
12537	4	S-MA20019266	ALEXANDER AV	3RD MH E OF FOUNTAIN - MH @ PRINCESS ST	S-MH20017301	3.82	S-MH20017300	4.95	66.4	375		CIRCULAR	COMBINED	VC-VITRIFIED CLAY	No	23						2	12.8M TBI @ 10 DS; 59.8M TBI @ 12 DS;			1		5	12.8M DAEJ @ 8-10 DS; 19.3M DAEJ @ 2-5 DS; 28.9M DAE @ 11 DS; 34.2M OBJ @ 6-10 DS; 57.2M DAEJ @ 7-11 DS; 59.8M DAEJ @ 8-4 DS;							
12538	5	S-MA20018999	ALEXANDER AV	MH @ ELLEN ST - MH @ FOUNTAIN ST	S-MH70030708	4.72	S-MH70030867	5.05	64.4	450		CIRCULAR	COMBINED	VC-VITRIFIED CLAY	No	18						2	26.4M TBI @ 12 DS; 35.8M TBI @ 11 DS;					5	3.8M DAEJ @ 12 DS; 7.7M DAEJ @ 8-11 DS; 18.0M DAEJ @ 2-4 DS; 45.5M DAEJ @ 8-10 DS; 53.1M DAEJ @ 2-4 DS;							
12539	6	S-MA20014362	ALLOWAY AV	MH AT MARYLAND (EPL) TO MH AT MARYLAND (CL)	S-MH20012980	3.92	S-MH20012981	4.33	11.8	300		CIRCULAR	COMBINED	VC-VITRIFIED CLAY	No	0								1.0	0.5-3.7M DAGS @ 11-1 DS; 4.5M DAGS @ 11-1 DS; 5.2M @ 4, 8 DS; 6.5-7.7M DAGS @ 4, 8 DS; 8.3M RFJ @ 11-1 DS; 8.9M RFJ @ 1 DS; 9.6M DAGS @ 11 DS; 10.1M RFJ @ 11-1 DS; 10.8M DAGS @ 9-3 DS; 110.2M RFJ @ 10-2 DS;	1		3	0.0M DAE @ 3-4 DS; 1.0M DAEJ @ 4, 8 DS; 2.0M DAEJ @ 8 DS; 10.7M DAEJ @ 9 DS;							
12540	7	S-MA20016017	ARTHUR ST	1ST N MCDERMOT AVE - FLOW S	S-MH20014409	3.35	S-MH20014423	4.06	75.9	300		CIRCULAR	COMBINED	VC-VITRIFIED CLAY	No	9						1	29.6M TBI @ 2 DS;	1.0	72.7M DAGS @ 10-2 DS;	1	1.9	3	6.0M DAEJ @ 8-9 DS; 6.6M DAEJ @ 9, 3 DS; 21.8-25.7M DSC @ 3-9 DS; 68.8M DAE @ 8 DS; 70.5M DAEJ @ 10-2 DS;							
12541	8	S-MA20016030	ARTHUR ST	3RD MH N OF NOTRE DAME AV TO MH AT MCDERMOT AV	S-MH20014426	3.49	S-MH20014423	4.06	45.9	300		CIRCULAR	COMBINED	VC-VITRIFIED CLAY	No	9						2	10.9M TBI @ 1 DS; 34.8M TBI @ 2 DS;					21	5.1M DAEJ @ 11-3 DS; 7.5M DAEJ @ 2-4 DS; 11.5 DAEJ @ 9-11 DS; 15.4M DAEJ @ 2-4 DS; 19.2M DAEJ @ 8-4 DS; 21.7M DAEJ @ 2-5 DS; 23.5M DAEJ @ 7-5 DS; 25.5M DAEJ @ 2 DS; 26.1M DAEJ @ 2-4 DS; 26.9M DAEJ @ 2-4 DS; 27.4M DAEJ @ 2-4 DS; 27.6M DAEJ @ 10 DS; 28.1M DAEJ @ 2-5 DS; 29.4M DAEJ @ 8-11, 2-4 DS; 30.6M DAEJ @ 8-4 DS; 31.3M DAEJ @ 8-3 DS; 31.9M 9-3 DS; 33.0M DAEJ @ 9-3 DS; 34.8M DAEJ @ 2-4 DS; 36.3M DAEJ @ 8-10 DS; 37.0M DAEJ @ 9-4 DS; 43.4M DAEJ @ 1-3 DS;							
12542	9	S-MA20013417	AUSTIN ST	MH @ HENRY AV - 1ST MH S OF HIGGINS AV	S-MH20012145	3.74	S-MH20012117	4.20	74.0	300		CIRCULAR	COMBINED	VC-VITRIFIED CLAY	No	9						2	3.9M TBI @ 2 DS; 34.5M TBI @ 2 DS;			1		3	3.7M DAE @ 2-4 DS; 13.5M DAE @ 3 DS; 14.1M DAEJ @ 7-10 DS; 30.1M DAEJ @ 8-10 DS; 35.2M DAEJ @ 10 DS;							
12543	10	S-MA00013536	CHARLES ST	MH @ ALFRED (SPL) TO MH @ BURROWS AV	S-MH00012063	3.08	S-MH00012064	3.90	71.0	300		CIRCULAR	COMBINED	VC-VITRIFIED CLAY	No	5						1	2.7M TBI @ 9 DS;			1			0.0M DSC @ 5-7 DS;						
12544	11	S-MA20003720	COUNTRY CLUB BV	MH AT MEADOWSIDE DR TO 1ST MH N OF MEADOWSIDE DR	S-MH20003417	2.68	S-MH20003416	2.93	80.4	375		CIRCULAR	STORM	CO-CONCRETE	No	2						1	22.8M TBI @ 10 DS;	1.0	19.3M RTJ @ 9-1 DS; 29.5M RFJ @ 10 DS; 32.1M RFJ @ 10 DS; 37.1M RFJ @ 2, 10 DS; 38.3M RFJ @ 11, 2 DS; 39.5M RFJ @ 3 DS; 42.0M RFJ @ 10, 2 DS; 43.3M RFJ @ 10-11 DS; 44.4M RFJ @ 10 DS; 45.7M RFJ @ 3 DS; 47.0M RFJ @ 3 DS; 48.2M RFJ @ 10-11 DS; 50.7M RFJ @ 2 DS; 51.9M RFJ @ 9-11 DS; 53.1M RFJ @ 10, 2 DS; 55.6M RFJ @ 2-3 DS; 56.7M RFJ @ 10-2 DS; 58.1M RFJ @ 9-10 DS; 60.4M RFJ @ 3 DS; 71.6M RFJ @ 9 DS; 74.2M RFJ @ 3 DS; 79.1M RFJ @ 4 DS;				1	18.6M DAEJ @ 3 DS;							
12545	12	S-MA20015802	CUMBERLAND AV	1ST W HARGRAVE ST - FLOW E	S-MH20014227	4.20	S-MH20014326	5.10	72.4	375		CIRCULAR	COMBINED	VC-VITRIFIED CLAY	No	8						1	26.8M TBI @ 10 DS;			1		4	26.8M DAE @ 8-10 DS; 35.9M DAEJ @ 8-12 DS; 37.2M DAEJ @ 1-3 DS; 39.8M DAEJ @ 2-4 DS; 53.7M DAEJ @ 2-3 DS;							
12546	13	S-MA00013721	DISRAELI ST	MH AT ROVER AV TO 1ST MH S OF ROVER AV	S-MH00012226	2.25	S-MH00012227	3.60	79.7	450		CIRCULAR	COMBINED	VC-VITRIFIED CLAY	No	4								1.0	71.7M RFJ @ 7 DS; 72.4M RFJ @ 8 DS; 72.9M RFJ @ 8, DS; 73.6M RFJ @ 8 DS;								2.3	**PROVISIONAL** EPR 76.7-79.0		
12547	14	S-MA00013722	DISRAELI ST	2ND MH S OF ROVER AV TO 1ST MH S OF ROVER AV	S-MH00012554	2.99	S-MH00012226	2.25	75.5	450		CIRCULAR	COMBINED	VC-VITRIFIED CLAY	No	10						1	69.8M TBI @ 3 DS;													
12548	15	S-MA20015926	DONALD ST	1ST S NOTRE DAME AVE - FLOW N	S-MH20014335	2.70	S-MH20014340	3.06	48.5	300		CIRCULAR	COMBINED	VC-VITRIFIED CLAY	No	7						2	5.5M TBI @ 2 DS; 6.0M TBI @ 3 DS;	1.0	12.1M DAGS @ 10-2 DS; 12.8M DAGS @ 10-2 DS; 14.2M DAE @ 11-2 DS; 24.5-26.5M DAGS @ 9-3 DS; 27.5-29.9M DAGS @ 9 DS; 30.0-31.3M DAGS @ 4, 9 DS; 34.3M DAGS @ 3, 9 DS; 40.0M DAGS @ 3 DS; 43.7M DAGS @ 3 DS;	1	1.0	13	2.8M DAEJ @ 10, 3 DS; 5.5M DAE @ 3 DS; 6.0M DAE @ 4 DS; 6.5M DAEJ @ 4 DS; 8.4M DAEJ @ 8 DS; 9.0M DAEJ @ 1-2 DS; 10.1M DAEJ @ 8-3 DS; 10.8M DAEJ @ 9-3 DS; 11.4M DAEJ @ 9-2 DS; 12.0M DAEJ @ 8-4 DS; 12.7M DAEJ @ 4 DS; 15.1M DAEJ @ 8-4 DS; 15.7M DAEJ @ 2-3 DS; 17.5M DAEJ @ 8-4 DS; 18.7M DAEJ @ 2-6 DS; 35.9M DAE @ 9 DS; 37.7M DAE @ 8-10 DS;							
12549	16	S-MA20008530	DOUGLAS PARK RD	3RD MH S OF PORTAGE AV TO 4TH MH S OF PORTAGE AV	S-MH20007928	3.65	S-MH20007856	3.43	123.0	300		CIRCULAR	COMBINED	CO-CONCRETE	No	15						2	3.2M TBI @ 9 DS; 86.6M TBI @ 10 DS;	1.0	42.9M RFL @ 11 DS; 61.3M DAGS @ 4, 8 DS; 86.6M RFL @ 10 DS; 97.1M DAGS @ 8 DS; 99.2M DAGS @ 8 DS; 100.9-103.2M DAGS @ 4, 8 DS; 104.0M DAGS @ 9, 3 DS; 105.3M RFJ @ 4 DS; 105.7-107.7M DAGS @ 10, 2 DS; 107.8M RFT @ 8 DS; 111.0M DAGS @ 10 DS; 112.3M DAGS @ 10, 2 DS; 113.2M DAGS @ 10-2 DS; 114.6M DAGS @ 11 DS; 115.1M DAGS @ 2 DS; 115.4-116.8M DAGS @ 10-2 DS; 117.2M DAGS @ 11-1 DS;	1	4.0	4	5.5M DAEJ @ 3-4 DS; 6.8M DAE @ 1-4 DS; 7.1M DAEJ @ 8-12, 4 DS; 7.3M DAE @4 DS; 12.1M DAE @ 4 DS; 12.6M DAE @ 8-12 DS; 14.9M DAE @ 3-5 DS; 28.7M DAE @ 4-5 DS; 32.7M DAE @ 10-11 DS; 37.6M DAEJ @ 8-11 DS; 78.1M DAEJ @ 7-9 DS;							
12550	17	S-MA70026356	EDMONTON ST	1ST S QUAPPELLE AV-FLOW S	S-MH20015116	3.16	S-MH20015077	3.45	76.8	300		CIRCULAR	COMBINED	VC-VITRIFIED CLAY	No	3						2	31.8M TBI @ 2 DS; 47.4M TBI @ 2 DS;			1	1.0	1	31.8M DAE @ 3-4 DS; 40.2M DAE @ 11-2 DS; 54.4M DAEJ @ 8-4 DS; 61.3M DAE @ 8-10 DS; 68.6M DAE @ 4 DS;							
12551	18	S-MA20019500	ELGIN AV	3RD MH E OF XANTE ST - MH @ ARLINGTON ST	S-MH20017513	2.95	S-MH20017521	3.03	74.2	300		CIRCULAR	COMBINED	CO-CONCRETE	No	11						1	2.6M TBI @ 3 DS;			1	6.0	4	0.0M DAEJ @ 12-12 DS; 4.8M DAE @ 7-11 DS; 7.4M DAE @ 6 DS; 8.1M DAE @ 4-6 DS; 12.3M DAE @ 4 DS; 18.8M DAEJ @ 8-4 DS; 19.5M DAE @ 7 DS; 29.9M DAE @ 8 DS; 31.2M DAE @ 4-6 DS; 42.1M DAE @ 4 DS; 46.2M DAE @ 4 DS; 59.9M DAEJ @ 8, 2-4 DS; 64.7M DAEJ @ 8-4 DS;							
12552	19	S-MA70013073	ELGIN AV	CROSSING ADELAIDE ST-FLOW E	S-MH20017187	4.00	S-MH70005215	4.40	42.1	375		CIRCULAR	COMBINED	VC-VITRIFIED CLAY	No	12										1		7	2.6M DAE @ 4 DS; 4.8M DAEJ @ 7-10 DS; 11.8M DAEJ @ 8-9 DS; 16.8M DAEJ @ 9-3 DS; 24.2M DAEJ @ 1-3 DS; 29.1M OBZ @ 6 DS; 29.8M OBJ @ 6 DS; 30.0M DAEJ @ 10 DS; 30.4M DAEJ @ 8-10 DS;							
12553	20	S-MA70014619	ELLICE AV (CL)	1ST E KENNEDY - FLOW E	S-MH20015009	3.55	S-MH20014093	4.25	98.9	300		CIRCULAR	COMBINED	VC-VITRIFIED CLAY	No	12						3	46.4M TBI @ 10 DS; 55.6M TBI @ 1 DS; 56.0M TBI(GASKET) @ 2 DS;			1			46.4M DAE @ 7-10 DS; 97.2M DSC @ 6 DS;							
12554	21	S-MA20016066	FORT ST	1ST N YORK ST.-FLOW N	S-MH20014456	2.86	S-MH20014478	3.15	81.0	300		CIRCULAR	COMBINED	VC-VITRIFIED CLAY	No	18						1	24.3M TBI @ 9 DS;	3.0	21.3M DAGS @ 4 DS; 28.6M DAGS @ 9 DS; 31.1M DAGS @ 9 DS;	1	7.0	7	5.2M DAEJ @ 9-3 DS; 5.8M DAEJ @ 9-4 DS; 9.6M DSC @ 5-7 DS; 10.4M DAE @ 8 DS; 12.4M DAEJ @ 2-3 DS; 19.9M DAEJ @ 2-3 DS; 24.3M DAEJ @ 8 DS; 24.5M DAE @ 4 DS; 39.0M DAE @ 3-5 DS; 39.7M DAE @ 7-9 DS; 49.7M DAEJ @ 10 DS; 53.6M DAE @ 4 DS; 54.3M DAE @ 8 DS; 61.5M DAE @ 4 DS; 68.5M DAEJ @ 8-10 DS; 69.5M DAE @ 4-5 DS; 73.7M DAE @ 4 DS;							
12555	22	S-MA20015857	GARRY ST	3RD N GRAHAM AVE - FLOW N	S-MH20014496	3.32	S-MH20014275	3.80	62.5	300		CIRCULAR	COMBINED	VC-VITRIFIED CLAY	No	21						4	3.7M TBI @ 9 DS; 13.2M TBI @ 3 DS; 49.4M TBI @ 3 DS; 55.8M TBI @ 2 DS;			1	1.0	5	0.0M DSC @ 5-7 DS; 13.2M DAE @ 4 DS; 20.2M DAE @ 7-9 DS; 25.6M DAE @ 4 DS; 29.8M DAEJ @ 9-4 DS; 46.0M DAEJ @ 8-10 DS; 47.2M DAEJ @ 10, 2-4 DS; 48.4M DAEJ @ 9-3 DS; 53.6M DAEJ @ 9-3 DS;							

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					Upstream	Depth	Downstream	Depth		Height	Width						Anulus Grouting	Description	Patch Tender <=1m	Patch Tender >=1m	Description	Intrud Conn Tender	Description	Root Tender	Description	Tender 1st 3m	Tender >3m (m)	Tender at Joints	Description	Service Grouting	Description	Length	Description	Manhole Grouting	Description
12556	23	S-MA00013688	HALLET ST	MH AT EUCLID AV TO 1ST MH S OF REX AV	S-MH00012201	3.01	S-MH00012191	3.69	79.1	300		CIRCULAR	COMBINED	VC-VITRIFIED CLAY	No	11						4	22.2M TBI @ 2 DS; 25.1M TBI @ 10 DS; 52.0M TBI @ 11 DS; 53.4M TBI @ 10 DS;	1.0	11.4 RFJ @ 4 DS; 12.7M RFJ @ 10, 3 DS; 17.1M RFJ @ 9 DS; 22.4M RTL @ 1 DS; 36.4M RFJ @ 9 DS; 37.6M RFJ @ 4, 9 DS; 40.0M RFJ @ 1 DS; 40.6M RFJ @ 9-11 DS; 41.4M RFJ @ 3 DS; 42.0M RFJ @ 3, 9 DS; 42.5M RFJ @ 3, 9 DS; 43.2M RFJ @ 8 DS; 43.8M RFJ @ 8 DS; 45.0M RFJ @ 3, 9 DS; 53.1M RFJ @ 4, 9 DS; 53.8M RFJ @ 3 DS; 66.2M RMJ @ 8-10 DS; 67.4M RMJ @ 9-10 DS; 68.0M RFJ @ 10 DS; 70.5M RMJ @ 4, 8 DS; 71.1M RFJ @ 4 DS; 73.0M 73.0M RFJ @ 8 DS;	1			9.9M DAE @ 4 DS;							
12557	24	S-MA20013448	HENRY AV	1ST MH W OF ARGYLE ST - MH @ DISRAELI FR (E PL)	S-MH20012173	3.56	S-MH20012171	3.80	60.6	300		CIRCULAR	COMBINED	VC-VITRIFIED CLAY	No	12						1	47.7M TBI @ 10 DS;			1		11	20.4M DAEJ @ 8-3 DS; 22.6M DAEJ @ 8-10, 2-4 DS; 23.3M DAEJ @ 4, 9 DS; 24.1M DAEJ @ 8-11 DS; 30.9M DAEJ @4 DS; 33.4M DAEJ @ 8-10, 3 DS; 34.2M DAEJ @ 2 DS; 34.6M DAEJ @ 7-10 DS; 37.4M DAEJ @ 2-4 DS; 38.0M DAEJ @ 4 DS; 38.6M DAEJ @ 4, 8-10 DS; 9.4M DAE @ 8 US;							
12558	25	S-MA20019356	HENRY AV	1ST MH E OF KING ST - MH @ KING ST	S-MH20017378	3.60	S-MH70045635	4.20	32.0	300		CIRCULAR	COMBINED	VC-VITRIFIED CLAY	No	5										1		1	15.1M DAE @ 8 DS; 15.5M DAEJ @ 7-9, 2-4 DS;							
12559	26	S-MA70092759	HENRY AV	2ND MH E OF KING ST - 1ST MH E OF KING ST	S-MH20017377	2.97	S-MH20017378	3.60	43.8	300		CIRCULAR	COMBINED	VC-VITRIFIED CLAY	No	11			1							1		1	12.3M DAEJ @ 8-10 DS; 24.5M DAE @ 9 DS;							
12560	27	S-MA20019378	HIGGINS AV	MH @ PRINCESS ST - MH @ KING ST (W PL)	S-MH20017424	2.86	S-MH70045717	4.70	85.8	300		CIRCULAR	COMBINED	VC-VITRIFIED CLAY	No	7						1	4.6M TBI @ 10 DS;			1		4	19.9M DAEJ @ 5 DS; 23.5 DAEJ @ 11 DS; 45.2M DSGV @ 6 DS; 67.8M DAEJ @ 2-4 DS; 71.0M DAEJ @ 9-3 DS;							
12561	28	S-MA70037081	JAMES AV	1ST W KING ST - FLOW W	S-MH20017207	3.15	S-MH70045455	3.24	73.8	300		CIRCULAR	COMBINED	CO-CONCRETE	**Yes**	21						3	18.0M TBI @ 9 DS, 18.9M TBI @ 9 DS; 33.8M TBI @ 10 DS;			1	17.5	25	3.2M DAEJ @ 3-8 DS; 3.8M DAEJ @ 10-6 DS; 4.5M DAEJ @ 2-5 DS; 5.0M DAEJ @ 6-6 DS; 5.7M DAEJ @ 9-5 DS; 7.6M DAEJ @ 4 DS; 8.8M DAEJ @ 9-4 DS; 9.5M DAEJ @ 4-8 DS; 10.1M DAEJ @ 7-10 DS; 10.6 DAE @ 6 DS; 11.1 DAE @ 6 DS; 13.7M DAE @ 6 DS; 15.5M DAE @ 3-9 DS; 16.8M DAE @ 4-7 DS; 17.1M DAEJ @ 4 DS; 17.5-18.8M DAE @ 5-7 DS; 19.3M DAE @ 5-8 DS; 22.9M DAE @ 3-6 DS; 23.5M DAEJ @ 5-7 DS; 26.2M DAE @ 5-7 DS; 28.6M DAEJ @ 6 DS; 34.2M DAE @ 4 DS; 39.2M DAEJ @ 4, 8-11 DS; 40.7M DAEJ @ 9-10 DS; 41.2M DAE @ 3-6 DS; 41.8M DAE @ 6-9 DS; 42.3M DAEJ @ 3-5 DS; 43.2-47.4M DAE @ 12 DS; 49.6M DAE @ 2-9 DS; 51.7M DAE @ 12 DS; 52.4M DAE @ 9 DS; 53.0M DAEJ @ 7-9 DS; 53.8M DAEJ @ 3-5, 8 DS; 55.3M DAEJ @ 2-9 DS; 56.2M DAEJ @ 4 DS; 56.4M DAEJ @ 3-4 DS; 57.8M DAEJ @ 3-5, 7-9 DS; 58.5M DAEJ @ 2-4 DS; 59.2M DAEJ @ 9-4 DS; 60.3M DAEJ @ 4-7 DS; 65.7M DAE @ 3 DS; 67.7M DAEJ @ 11 DS;							
12562	29	S-MA20019012	LAURA ST	MH @ HENRY AV (S PL) - MH @ LOGAN AV	S-MH20017073	2.86	S-MH20017056	4.22	124.4	300		CIRCULAR	COMBINED	VC-VITRIFIED CLAY	No	28						7	2.6M TBI @ 2 DS; 13.2M TBI @ 3 DS; 20.1M TBI @ 10 DS; 37.7M TBI @ 9 DS; 49.2M TBI @ 9 DS; 80.7M TBI @ 10 DS; 121.2M TBI @ 12 DS;	1.0	27.5M RFJ @ 8 DS; 31.2M RFJ @ 4 DS; 39.4M RFJ @ 8 DS;	1		7	94.4M DAEJ @ 10-3 DS; 96.9M DAEJ @ 8-11 DS; 103.4M DAEJ @ 8-10 DS; 105.3M DAE @ 2-5 DS; 106.5M DAEJ @ 11 DS; 109.7M DAEJ @ 10-12 DS; 116.1M DAEJ @ 9 DS; 121.2M DAEJ @ 5 DS;							
12563	30	S-MA20019252	LIZZIE ST	1ST MH N OF ALEXANDER AV - MH @ LOGAN AV (CL)	S-MH20017287	3.74	S-MH20017294	5.78	53.7	300		CIRCULAR	COMBINED	VC-VITRIFIED CLAY	No	9										1		6	21.0M DAEJ @ 10-2 DS; 31.5M DAEJ @ 10 DS; 40.7M DAE @ 4 DS; 41.7M DAEJ @ 10 DS; 44.7M DAEJ @ 10 DS; 50.5M DAEJ @ 8-11 DS; 51.1M @ DAEJ @ 8-11 DS;							
12564	31	S-MA70021340	LOMBARD AV (CL)	1ST W MILL ST - FLOW W	S-MH20012030	2.75	S-MH20014666	4.48	101.6	375		CIRCULAR	COMBINED	VC-VITRIFIED CLAY	No	10						1	9.3M TBI @ 2 DS;					37	36.0M DAEJ @ 4 DS; 37.4M DAEJ @ 4 DS; 39.2M DAEJ @ 4 DS; 48.7M DAEJ @ 8-10 DS; 50.6M DAEJ @ 4 DS; 53.0M DAEJ @ 4 DS; 53.6M DAEJ @ 4 DS; 54.7M DAEJ @ 8 DS; 55.5M DAEJ @ 8 DS; 56.2M DAEJ @ 8 DS; 56.8M DAEJ @8 DS; 57.9M DAEJ @ 8 DS; 58.6M DAEJ @ 10 DS; 59.1M DAEJ @ 2-4 DS; 59.9M DAEJ @ 2-4, 8-10 DS; 60.3M DAEJ @ 9 DS; 62.9M DAEJ @ 2-3, 8-10 DS; 67.4M DAEJ @3, 8 DS; 68.0 DAEJ @ 8 DS; 68.7M DAEJ @ 7-10 DS; 71.8M DAEJ @ 8 DS; 73.8M DAEJ @ 3 DS; 80.7M DAEJ @ 10 DS; 87.7M DAEJ @ 8 DS; 88.3M DAEJ @ 2-4, 8 DS; 88.9M DAEJ @ 8-9 DS; 89.6M DAEJ @ 8-10 DS; 90.3M DAEJ @ 3 DS; 90.8M DAEJ @ 3, 8-10 DS; 91.4M DAEJ @ 8-10 DS; 92.0M DAEJ @ 8-4 DS; 92.7M DAEJ @ 2 DS; 93.2M DAEJ @ 2-4 DS; 94.5M DAEJ @ 9 DS; 95.3M DAEJ @ 8-10 DS; 96.6M DAEJ @ 10 DS; 97.8M DAEJ @ 3 DS;							
12565	32	S-MA20001755	LUMSDEN AV	MH AT ISBISTER ST(EPL)-MH AT RUSSENHOLT ST	S-MH20001585	4.91	S-MH20001605	4.91	76.4	300		CIRCULAR	SANITARY	CO-CONCRETE	No	0								1.0	27.2-39.9M DAGS @ 2, 10 DS; 40.0-46.8M DAGS @ 11, 2 DS; 47.0-50.0M DAGS @ 11-2 DS; 52.9-55.3M DAGS @ 12 DS; 70.6M DAGS @ 12 DS; 73.2-75.7M DAGS @ 12 DS;													
12566	33	S-MA20019293	MAIN ST	MH N.LANE@HENRY-1ST MH S. AT LOGAN	S-MH20017383	4.27	S-MH20017328	6.50	126.1	450		CIRCULAR	COMBINED	CO-CONCRETE	No	19						3	34.6M TBI @ 11 DS; 35.6M TBI @ 10 DS; 58.2M TBI @ 10 DS;	1.0	10.6M RFL @ 10 DS; 11.8M RFL @ 10 DS; 17.4M RFJ @ 3 DS; 22.5M RFL @ 10 DS; 24.6M RFJ @ 3 DS; 25.3M RFJ @ 8-4 DS; 31.3M RFJ @ 3 DS; 32.3M RFJ @ 2-4 DS; 35.6M RML @ 7-11 DS; 36.6M RFJ @ 3 DS; 38.6M RFJ @ 2 DS; 40.5M RML @ 12 DS; 41.8M RFJ @ 3 DS; 42.8M RFJ @ 9 DS; 43.7M RFJ @ 9 DS; 44.1M RFJ @ 10, 12-2 DS; 46.4M RFJ @ 9 DS; 51.3M RFJ @ 10, 2 DS; 51.9M RFJ @ 2 DS; 54.7M RFL @ 10 DS; 55.1M RFJ @ 10, 2 DS; 57.7M RFJ @ 2 DS; 58.2M RML @ 10 DS; 59.6M RFJ @ 2 DS; 61.5M RFJ @ 10 DS; 62.7M RFJ @ 2 DS; 74.7M RML @11 DS; 75.5M RFL @ 12 DS; 113.8M RFJ @ 8 DS;	1		2	18.7M DAE @ 1-3 DS; 20.5M DAEJ @ 10 DS; 68.8M DAE @ 8-2 DS; 88.0M OBZJ @ 6-8 DS;							
12567	34	S-MA20019409	MAIN ST.	8TH MH N OF HIGGINS TO 9TH MH N OF HIGGINS	S-MH20017437	1.90	S-MH20017426	2.05	18.6	225		CIRCULAR	STORM	CO-CONCRETE	No	0																			
12568	35	S-MA70062337	MARYLAND ST	2ND MH S OF WELLINGTON TO MH AT WELLINGTON	S-MH70028346	3.05	S-MH20016322	3.56	48.5	300		CIRCULAR	COMBINED	VC-VITRIFIED CLAY	**YES**	6						1	22.9M TBI @ 3 DS;			1			14.5M DAE @ 4 DS; 22.9M DAE @ 4 DS;							
12569	36	S-MA70024958	MCDERMOT AV	1ST E HARGRAVE ST - FLOW E	S-MH20014350	2.90	S-MH20014349	3.33	68.5	300		CIRCULAR	COMBINED	VC-VITRIFIED CLAY	No	13						1	55.3M TBI @ 2 DS;			1	1.0	7	9.1M DAE @ 4-5 DS; 16.7M DAE @ 4-5 DS; 17.2M DAE @ 7-9 DS; 17.8M DAEJ @ 4 DS; 25.1M DAEJ @ 2-3 DS; 39.4M DAE @ 3-5 DS; 46.0M DAEJ @ 9 DS; 47.3M DAEJ @ 9-3 DS; 57.5M DAEJ @ 7-9 DS; 59.2M DAEJ @ 8 DS; 61.0M DAEJ @ 4, 8 DS;						1.0	MH STABILIZATION GROUTING REQD AROUND PIPE AT US MH
12570	37	S-MA20016411	MCGEE ST	1ST MH N ELLICE AV TO MH AT ELLICE AV (CL)	S-MH20014765	3.84	S-MH20014772	4.78	90.7	450		CIRCULAR	COMBINED	VC-VITRIFIED CLAY	No	2								1.0	74.1M DAGS @ 8 DS; 75.8M DAGS @ 8 DS; 76.5M DAGS @ 4, 8 DS;	1		12	17.0M DAEJ @ 2, 4, 8-10 DS; 18.3M DAEJ @ 4 DS; 20.1M DAEJ @ 1-4, 8-10 DS; 23.3M DAEJ @ 2 DS; 25.2M DAEJ @ 1-3 DS; 26.9M DAEJ @ 8-10 DS; 40.3M DSGV @ 7 DS; 46.2M DAEJ @ 2-4 DS; 68.4M DAEJ @ 3 DS; 69.7M DAEJ @ 4 DS; 74.5M DAEJ @ 2 DS; 75.7M DAEJ @ 10 DS; 76.9M OBJ @ 4-10 DS; 80.8M OBZ @ 6 DS;							
12571	38	S-MA70013188	NOTRE DAME AV	1ST E FURBY ST - FLOW E	S-MH20016343	3.40	S-MH70005260	3.30	55.6	300		CIRCULAR	COMBINED	VC-VITRIFIED CLAY	No	8						1	20.6M TBI @ 11 DS;			1	2.0		2.4M DAE @ 9 DS; 15.3M DAE @ 2 DS; 15.8M DAE @ 9 DS; 20.6M DAE @ 8-10 DS; 46.8M DAE @ 10 DS;							
12572	39	S-MA70024980	NOTRE DAME AV	MH AT ARLINGTON ST (CL) TO MH AT HOME ST	S-MH20016156	2.96	S-MH20016209	3.21	95.2	300		CIRCULAR	COMBINED	VC-VITRIFIED CLAY	No	16						3	6.0M TBI @ 2 US; 45.7M TBI @ 10 US; 76.8M TBI @ 2 US;			1	1.0	11	7.9M DAE @2 US; 8.8M DAEJ @ 9-11 US; 17.7M DAEJ @ 9 US; 24.3M DAEJ @ 3 US; 68.3M DAE @ 8 US; 70.1M DAEJ @ 9-4 US; 73.1M DAEJ @ 9-3 US; 75.4M DAEJ @ 9 US; 76.8M DAE @ US; 77.9M DAEJ @ 8-10 US; 78.5M DAEJ @ 9 US; 80.1M DAEJ @ 9, 4 US; 80.5M DAE @ 4 US; 80.8M DAEJ @ 9, 3 US; 83.1M DAEJ @ 9 US;							

Appendix A - Repair Requirements

Sewer Details																Pre-Lining Repairs																					
DWG	Sheet	Sewer Asset	Street Name	Location	Manholes				Length	Size		Shape	Flow Type	Material	Pre-Repair Inspection Required	Sewer Services	Lump Sum Anulus Grouting per Location		Patching			Removal of Intruding Connections		Removal Roots and Grease		Solid Debris Cutting / Other				Sewer Service Grouting - Man Entry for Sewers >750mm		External Point Repair (EPR) **By Contractor**		Manhole Stabilization Grouting	
					Upstream	Depth	Downstream	Depth		Height	Width						Anulus Grouting	Description	Patch Tender <=1m	Patch Tender >=1m	Description	Intrud Conn Tender	Description	Root Tender	Description	Tender 1st 3m	Tender >3m (m)	Tender at Joints	Description	Service Grouting	Description	Length	Description	Manhole Grouting	Description
12573	40	S-MA20018535	PACIFIC AV	1ST MH W OF SHERBROOK ST - MH @ SHERBROOK ST	S-MH20016599	3.95	S-MH20016770	4.04	80.5	450		CIRCULAR	COMBINED	VC-VITRIFIED CLAY	No	21						2	44.8M TBI @ 2 DS; 57.6M TBI @ 1 DS;	1.0	57.1M DAGS @ 3, 9 DS;	1		2	4.0M DAE @ 3 DS; 44.8M DAEJ @ 1 DS; 53.0M DAEJ @ 11 DS; 59.9M DSC @ 5-7 DS; 67.1M OBZ @ 6 DS;								
12574	41	S-MA20004248	PARKDALE ST	1ST MH N OF PORTAGE AV TO MH AT PORTAGE AV	S-MH20003903	1.54	S-MH20003905	2.50	54.1	300		CIRCULAR	STORM	CO-CONCRETE	No	1						1	27.1M TBI @ 9 DS;	1.0	3.1M RFJ @ 4 DS; 22.1M RFJ @ 8 DS;	1		11	4.6M DAEJ @ 2 DS; 13.4M DAEJ @ 8 DS; 24.4M DAEJ @ 3-5 DS; 25.1M DAEJ @ 7-10 DS; 27.1M DAE @ 8 DS; 27.5M DAEJ @ 8 DS; 33.8M DAEJ @ 2-4, 8-10 DS; 34.6M DAEJ @ 9 DS; 37.0M DAEJ @ 9-3 DS; 39.3M DAEJ @ 10, 3 DS; 47.3M DAEJ @ 11 DS; 48.9M DAEJ @ 2-3 DS; 53.3M DSGV @ 6 DS;								
12575	42	S-MA70017850	PATRICK ST	MH @ LOGAN - 1ST MH S OF HENRY AV	S-MH70006714	3.06	S-MH20017018	5.26	112.0	300		CIRCULAR	COMBINED	VC-VITRIFIED CLAY	No	29						2	51.4M TBI @ 2 DS; 103.8M TBI @ 2 DS;			1		2	1.4M OBR @ 6 DS; 5.4M OBJ @ 7-9 DS; 78.1M DAEJ @ 10 DS; 89.4M DAE @ 10 DS; 99.0M DAEJ @ 10 DS;			5.2	EPR 33.0-38.2m DS				
12576	43	S-MA20019176	PAULIN ST	MH @ ROSS AV - MH @ PACIFIC AV (S PL)	S-MH20017278	2.77	S-MH70008769	4.34	82.3	300		CIRCULAR	COMBINED	VC-VITRIFIED CLAY	No	7								1.0	34.8M DAGS @ 4 DS;	1	4.0	23	17.1M DAE @ 8 DS; 19.4M DAEJ @ 5-7 DS; 21.9M DAEJ @ 4 DS; 26.2M DSC @ 5 DS; 27.0M DAEJ @ 5 DS; 29.3M DAE @ 4 DS; 31.3M DAEJ @ 4 DS; 33.0M DAE @ 7-9 DS; 38.5M DAE @ 3-5 DS; 41.4M DAEJ @ 7-10 DS; 42.0M DAEJ @ 8-4 DS; 42.7M DAEJ @ 7-5 DS; 43.2M DAEJ @ 8-2 DS; 43.9M DAEJ @ 2 DS; 44.5M DAEJ @ 8-11, 4 DS; 45.2M DAEJ @ 7-4 DS; 47.4M DAE @ 8 DS; 47.9M DAEJ @ 8 DS; 52.8M DAEJ @ 8-10, 3 DS; 53.3M DAEJ @ 8-5 DS; 54.0M DAEJ @ 8-10, 2-4 DS; 54.7M DAEJ @ 9-4 DS; 55.2M DAEJ @ 8 DS; 58.1M DAE @ 4 DS; 58.4M DAEJ @ 11 DS; 64.7M DAEJ @ 3 DS; 66.1M DAEJ @ 1-3 DS; 66.6M DAEJ @ 3, 7 DS; 68.5M DAEJ @ 2-4 DS; 77.9M OBJ @ 6 DS;								
12577	44	S-MA20003948	PONTIAC BY (E LEG)	MH AT ALLARD AV TO MH AT PONTIAC BY (SLG)	S-MH20003628	2.52	S-MH20003615	2.84	114.1	250		CIRCULAR	SANITARY	CO-CONCRETE	No	11								1.0	2.2M RFJ @ 9 DS; 15.8 RFJ @ 11 DS; 23.2M RFJ @ 8 DS; 29.3M RFJ @ 8 DS; 31.9M RFJ @ 4, 8 DS; 40.1M RML @ 9 DS; 40.5M RMJ @ 8-10 DS; 40.9M RFL @ 3 DS; 41.7M RFJ @ 9-3 DS;	1		14	4.7M DAEJ @ 9-3 DS; 5.9M DEAJ @ 9-3 DS; 9.6M DAEJ @ 9-3 DS; 17.0 DAEJ @ 9-3 DS; 20.7M DAEJ @ 7-5 DS; 60.1M DAEJ @ 8-5 DS; 62.6M DAEJ @ 2-5 DS; 70.1M DAEJ @ 8-11 DS; 72.5M DAEJ @ 8-5 DS; 79.9M DAEJ @ 1-5 DS; 90.5M DAE @ 8 DS; 95.9M DAEJ @ 8-4 DS; 0.0M DAEJ @ 2-5 US; 10.3M DAEJ @ 2-5 US; 11.7M DAEJ @ 3-5, 8 US;								
12578	45	S-MA20015831	PORTAGE AV	1ST MH W OF SMITH ST TO MH AT SMITH ST	S-MH20014252	3.55	S-MH20014279	4.05	47.7	450		CIRCULAR	COMBINED	VC-VITRIFIED CLAY	No	10						2	12.3M TBI @ 10 DS; 39.8M TBI @ 10 DS;														
12579	46	S-MA20016236	PORTAGE AV	3RD MH W OF WESTBROOK ST TO 4TH MH W OF WESTBROOK ST	S-MH20014602	3.23	S-MH20014620	3.89	48.4	300		CIRCULAR	COMBINED	CO-CONCRETE	**YES**	20						5	4.1M TBI @ 2 DS; 10.9M TBI @ 2 DS; 15.9M TBI @ 10 DS; 28.6M TBI @ 9 DS; 13.4M TBI @ 2 US;			1		4	10.9M DAE @ 3-5 DS; 15.9M DAEJ @ 2-4 DS; 17.4M DAEJ @ 9-10 DS; 19.7M DAEJ @ 8-10 DS; 20.5M DAEJ @ 8-9 DS; 4.0M DAE @ 8 US; 11.8M DAE @ 9 US;								
12580	47	S-MA20019379	PRINCESS ST	MH @ HIGGINS AV - 1ST MH N OF HIGGINS AV	S-MH70003651	3.85	S-MH70045717	4.41	60.1	375		CIRCULAR	COMBINED	VC-VITRIFIED CLAY	**YES**	7										1		21	2.0M DAE @ 2 DS; 2.6M DAEJ @ 2 DS; 8.1M DAE @ 3, 7-10 DS; 12.1M DAEJ @ 10 2 US; 14.2M DAE @ 2-4 US; 14.6M DAEJ @ 10-2 US; 14.9M DAEJ @ 7-9 US; 17.1M DAEJ @ 8-4 US; 17.7M DAEJ @ 10-4 US; 18.3M DAEJ @10-5 US; 18.9M DAEJ @ 8-5 US; 19.5M DAEJ @ 8-4 US; 20.2M DAEJ @ 8-4 US; 20.8M DAEJ @ 8-4 US; 21.4M DAEJ @ 7-5 US; 22.0M DAEJ @ 8 US; 22.7M DAEJ @ 8-3 US; 23.3M DAEJ @ 8-11, 2-4 US; 24.0M DAEJ @ 7-10, 2-5 US; 28.0M DAEJ @ 8-11 US; 29.5M DAEJ @ 2-4 US; 30.1M DAEJ @ 4 US; 32.0M DAEJ @ 11-4 US; 32.5M DAEJ @ 12-4 US;								
12581	48	S-MA20019108	PRINCESS ST	1ST S ELGIN AVE - FLOW S	S-MH20017145	4.30	S-MH20017146	4.20	39.8	450		CIRCULAR	COMBINED	VC-VITRIFIED CLAY	No	9						1	2.0M TBI @ 10 DS;			1	1.0	3	6.0M DSGV @ 7 DS; 9.3M DSGV @ 6 DS; 11.7M OBJ @ 4 DS; 28.0M DAEJ @ 1 DS; 29.4M DAEJ @ 9 DS; 31.1M OBZ @ 6 DS; 38.9M OBM @ 3-9 DS;								
12582	49	S-MA20019382	PRINCESS ST	MH @ HIGGINS AV - MH @ HENRY AV	S-MH70045717	4.41	S-MH20017403	4.60	68.0	450		CIRCULAR	COMBINED	VC-VITRIFIED CLAY	No	10										1	2.0	1	5.9M DAE @ 8-10 DS; 11.4M DAE @ 2 DS; 27.4M DAE @ 2-4 DS; 27.8M DAEJ @ 9-4 DS; 40.0M DAE @ 2-4 DS; 55.8M DAE @ 2-5 DS;								
12583	50	S-MA20004763	RAQUETTE ST (CL)	3RD MH N OF ALLARD AV TO 4TH MH N OF ALLARD AV	S-MH20004383	3.64	S-MH20004370	4.58	105.5	250		CIRCULAR	SANITARY	CO-CONCRETE	No	16						5	5.9M TBI @ 2 DS; 33.7M TBI @ 2 DS; 49.8M TBI @ 2 DS; 61.1M TBI @ 2 DS; 98.6M TBI @ 1 DS;			1	3.0	18	0.0-2.0M DAE @ 8-4 DS; 6.2M DAEJ @ 8 DS; 27.4M DAEJ @ 4, 8 DS; 30.5M DAEJ @ 8 DS; 33.6M DAEJ @ 8 DS; 52.4M DAEJ @ 8 DS; 65.5M DAEJ @ 8-4 DS; 67.1M DAEJ @ 8-11, 3 DS; 68.7M DAEJ @ 3 DS; 69.5M DAEJ @ 8-2 DS; 72.1M DAE @ 8-1 DS; 74.6M DAE @ 5 DS; 75.0M DAEJ @ 11 DS; 75.7M DAEJ @ 8, 12 DS; 76.6M DAEJ @ 10 DS; 80.5M DAEJ @ 8 DS; 81.2M DAEJ @ 8-10 DS; 82.0M DAEJ @ 8 DS; 83.5M DAEJ @ 9, 3 DS; 83.9M DAE @ 8-10, 4 DS; 84.3M DAEJ @ 10-4 DS; 85.9M DAEJ @ 1 DS; 98.6M DAE @ 2 DS;								
12584	51	S-MA20018294	ROSS AV	MH @ TECUMSEH - 1ST MH W OF TECHUMSEH ST	S-MH20017748	3.11	S-MH20016415	3.30	81.0	300		CIRCULAR	COMBINED	VC-VITRIFIED CLAY	No	4						1	3.4M TBI @ 1 DS;	1.0	45.9M RTJ @ 5 DS;	1		2	46.2M DAEJ @ 4 DS; 47.8M DAEJ @ 2-4 DS; 56.7M DAC @ 6 DS;								
12585	52	S-MA20018817	ROSS AV	1ST MH E OF ISABEL ST - 2ND MH E OF ISABEL ST	S-MH20016872	2.99	S-MH20016966	3.14	65.4	300		CIRCULAR	COMBINED	VC-VITRIFIED CLAY	No	11						2	42.4M TBI @ 10 DS; 44.9M TBI @ 2 DS;	1.0	2.5M DAGS @ 9, 3 DS; 23.6-25.8M DAGS @ 8 DS; 56.4M DAGS @ 8 DS; 61.6M DAGS @ 9 DS;	1	2.0		4.3M DAE @ 9 DS; 8.3M DAE @ 4 DS; 19.4M DAE @ 3 DS; 21.0M DAE @ 4 DS; 44.9M DAE @ 3 DS;								
12586	53	S-MA20019145	ROSS AV	3RD MH E OF ELLEN ST - MH @ PAULIN ST	S-MH20017179	3.76	S-MH70008769	4.48	54.6	375		CIRCULAR	COMBINED	VC-VITRIFIED CLAY	No	14						2	28.3M TBI @ 10 DS; 40.5M TBI @ 10 DS;			1		10	14.5M DAEJ @ 8 DS; 14.8M DAE @ 10 DS; 15.2M DAEJ @ 2-5 DS; 15.9M DAEJ @ 2-4 DS; 20.5M DAEJ @ 6-9 DS; 21.6M DAE @ 2-5 DS; 28.3M DAEJ @ 8-9 DS; 29.9M DAEJ @ 8-11 DS; 40.5M DAEJ @ 7-10 DS; 43.4M DAEJ @ 3 DS; 44.0M DAEJ @ 8-10 DS; 52.1M DAEJ @ 5 DS;								
12587	54	S-MA00017598	ROYAL AV	1ST MH W MAIN ST TO MH AT MAIN ST ECL	S-MH00000935	3.05	S-MH00000957	3.75	111.1	300		CIRCULAR	COMBINED	VC-VITRIFIED CLAY	No	4								1.0	2.7-4.1M DAGS @ 9-10 DS; 4.3M DAGS @ 10, 2 DS; 5.0M DAGS @ 10 DS; 11.7M DAGS @ 4 DS; 13.9M DAGS @ 9 DS; 15.4M DAGS @ 4 DS; 29.8-31.0M DAGS @ 3 DS; 33.3-34.7M DAGS @ 3 DS; 36.8M DAGS @ 3 DS; 38.4M DAGS @ 10 DS; 39.1M DAGS @ 10 DS; 75.3M RFJ @ 12 DS; 83.3M DAGS @ 9 DS; 89.3M DAGS @ 9 DS; 93.6M DAGS @ 2 DS; 98.9M DAGS @ 9 DS; 99.3M DAGS @ 3 DS; 106.3-107.7M DAGS @ 11-1 DS;	1	1.0	2	0.0M DAE @ 9-3 DS; 10.6M DAEJ @ 6-7 DS; 16.1M DAEJ @ 4 DS; 74.9M OBZ @ 2 DS; 76.2M DAE @ 2-3 DS; 110.0M DSC @ 5-7 DS;								
12588	55	S-MA70025071	SMITH ST (CL)	1ST S PORTAGE AVE - FLOW N	S-MH20014272	3.72	S-MH20014279	4.07	57.0	375		CIRCULAR	COMBINED	VC-VITRIFIED CLAY	No	14						2	2.0M TBI @ 10 DS; 10.1M TBI @ 10 DS;			1		4	4.0M DAEJ @ 11 DS; 8.3M DAEJ @ 8-3 DS; 22.4M OBJ @ 6-8 DS; 26.1M DAEJ @ 3 DS; 40.8M DAE @ 1-5 DS;								