

APPENDIX A - TABLE E13.1: SITE SPECIFIC DESIGN CONDITIONS AND REPAIR REQUIREMENTS PRIOR TO PERFORMING SEWER LINING

Manitoba Avenue (Asset No. MA00007906) Combined Sewer	1st MH W of Railway (MH00007871) to 2nd MH W of Railway (MH00007872)
Drawng Number	12818
Size / Shape	375mm Circular
Material Type	VC
Total Length	64.0m
Maximum Sewer Depth to Invert	3.16m
Design Condition	Fully Deteriorated ovality 7%
Site Specific Repairs	
Location	Action Required
Distance From MH00007871 (m)	
0	Remove piece of debris from invert
3	Remove roots at joint
5.9	Remove encrustation from pipe joint @ 8:00
8.3	Remove encrustation from pipe joint @ 4:00
9	Remove encrustation from pipe joint @ 4:00
10.8	Remove encrustation at connection @ 2:00
15.2	Remove encrustation from pipe joint @ 7:00
21.3	Remove encrustation from pipe joint @ 5:00
23.6	Remove encrustation from pipe joint @ 5:00
32.7	Remove encrustation from pipe joint @ 6:00
36.6	Remove encrustation from pipe joint @ 6:00
41.1	Remove encrustation from pipe joint @ 5:00
55.2	Remove intruding service connnection @ 10:00
56	Remove intruding service connnection @ 2:00
58.7	Remove encrustation from pipe joint @ 7:00

Sinclair Street (Asset No. MA00014329) Combined Sewer	MH at Alfred (MH00012897) to MH at Burrows Av (MH00012770)
Drawng Number	12819
Size / Shape	300mm Circular
Material Type	VC
Total Length	86.2m
Maximum Sewer Depth to Invert	3.25m
Design Condition	Fully Deteriorated ovality 5%
Site Specific Repairs	
Location	Action Required
Distance From MH00012897 (m)	
0.0 to 3.5	Remove encrustation from pipe wall @ 6:00 to 10:00
0.9	Remove intruding service connnection @ 10:00
4.3 to 31.9	Remove grease from pipe wall @ 4:00 and 8:00
35.8	Remove encrustation from pipe joint @ 3:00
36.6	Remove encrustation from pipe joint @ 9:00
38.2	Remove encrustation from pipe wall @ 8:00
40.8 to 43.0	EPR w/3 service connections
49.3 to 49.9	Remove encrustation from pipe wall @ 9:00
71.2	Remove encrustation from pipe joint @ 8:00
75.1	Remove encrustation from pipe joint @ 8:00

Parr Street (Asset No. MA00014655) Combined Sewer	1st MH N of Alfred Av (MH70004963) to MH at Alfred Av (MH00013065)
Drawng Number	12820
Size / Shape	300mm Circular
Material Type	VC
Total Length	40.4m
Maximum Sewer Depth to Invert	3.83m
Design Condition	Fully Deteriorated ovality 6%
Site Specific Repairs	
Location	Action Required
Distance From MH70004963 (m)	
0.0 to 0.1	Remove concrete from pipe from 6:00 to 6:00
9.1 to 12.4	Remove encrustation from pipe wall @ 4:00 to 7:00
16.1 to 16.3	Remove encrustation from pipe wall @ 7:00
21.0 to 22.9	Remove encrustation from pipe wall @ 11:00
25.0 to 26.0	Remove encrustation from pipe wall @ 6:00 to 10:00
31.4 to 33.3	Remove encrustation from pipe wall @ 5:00 and 7:00
36.4 to 40.0	Remove encrustation from pipe wall @ 5:00 and 7:00

Alfred Avenue (Asset No. MA00014553)	Mh at McKenzie St CL (MH00012976) to 1st MH E of McKenzie St (MH00012975)
Combined Sewer	
Drawng Number	12821
Size / Shape	450mm Circular
Material Type	VC
Total Length	108.8m
Maximum Sewer Depth to Invert	3.19m
Design Condition	Fully Deteriorated ovality 9%
Site Specific Repairs	
Location	Action Required
Distance From MH00012976 (m)	
0	Remove encrustation from pipe wall @ 5:00 to 7:00
4	Remove encrustation from pipe wall @ 3:00
20.0 to 22.0	Remove encrustation from pipe wall @ 9:00 to 3:00
24.5	Remove intruding service connnection @ 3:00
29	Remove encrustation at connection @ 2:00
40.3 to 40.9	Remove encrustation from pipe wall @ 8:00 to 12:00

Burrows Avenue (Asset No. MA00014502) Combined Sewer	1st MH E of Parr St (MH00013037) to 2nd MH E of Parr St (MH00012986)
Drawng Number	12822
Size / Shape	300mm Circular
Material Type	VC
Total Length	92.7m
Maximum Sewer Depth to Invert	2.99m
Design Condition	Fully Deteriorated ovality 7%
Site Specific Repairs	
Location	Action Required
Distance From MH00013037 (m)	
3.5	Remove encrustation from pipe joint @ 10:00 and 5:00
4.2	Remove encrustation from pipe joint @ 4:00
4.9	Remove encrustation from pipe joint @ 4:00
5.6	Remove encrustation from pipe joint @ 4:00
6.7	Remove encrustation from pipe joint @ 3:00
10.4	Remove intruding service connnection @ 10:00
10.8	Remove encrustation from pipe joint @ 4:00 and 8:00
11.6	Remove encrustation from pipe joint @ 4:00 and 8:00
12.5	Remove encrustation from pipe joint @ 4:00 and 8:00
13.2	Remove encrustation from pipe joint @ 4:00 and 8:00
14	Remove encrustation from pipe joint @ 4:00 and 8:00
14.7	Remove encrustation from pipe joint @ 4:00 and 8:00
15.3	Remove encrustation from pipe joint @ 4:00 and 8:00
15.5	Remove encrustation at connection @ 10:00
26	Remove encrustation at connection @ 10:00
28.6	Remove encrustation from pipe wall @ 2:00
29.2	Remove encrustation from pipe joint @ 3:00
29.2	Remove roots at joint @ 3:00
30.8	Remove encrustation from pipe joint @ 10:00
31.6	Remove encrustation from pipe joint @ 3:00 to 10:00
33.1	Remove encrustation from pipe joint @ 2:00
33.9	Remove roots at joint @ 12:00
34.7	Remove encrustation from pipe joint @ 2:00 to 5:00
35.1	Remove encrustation at connection @ 2:00
35.4	Remove encrustation from pipe joint @ 9:00
36	Remove encrustation from pipe joint @ 5:00
37.7 to 40.8	Remove roots from pipe wall @ 12:00
41.3	Remove encrustation from pipe joint @ 2:00
42.1	Remove encrustation from pipe joint @ 2:00
42.5	Remove intruding service connnection @ 2:00
42.9	Remove encrustation from pipe joint @ 9:00 and 3:00
44.4	Remove encrustation from pipe joint @ 9:00 and 3:00
55.7	Remove encrustation from pipe wall @ 2:00
60.6	Remove encrustation at connection @ 10:00
60.6	Remove intruding service connnection @ 10:00
60.9	Remove encrustation from pipe joint @ 7:00 to 12:00
61.5 to 61.7	Remove encrustation from pipe wall @ 3:00
62.2 to 62.6	Remove encrustation from pipe wall @ 11:00
66	Remove encrustation from pipe joint @ 12:00
70.4 to 71.2	Remove encrustation from pipe wall @ 9:00
72.7	Remove encrustation from pipe joint @ 9:00
74.5	Remove encrustation from pipe wall @ 12:00
75.1	Remove encrustation from pipe joint @ 3:00
78.1	Remove encrustation from pipe joint @ 10:00
91.8	Remove encrustation from pipe joint @ 3:00

Magnus Avenue (Asset No. MA00014336) Combined Sewer	2nd MH W of Arlington (MH00012780) to 1st MH W of Arlington (MH00012899)
Drawng Number	12823
Size / Shape	300mm Circular
Material Type	VC
Total Length	86.2m
Maximum Sewer Depth to Invert	3.32m
Design Condition	Fully Deteriorated ovality 10%
Site Specific Repairs	
Location	Action Required
Distance From MH00012780 (m)	
0.0 to 0.3	Remove encrustation from pipe wall @ 5:00
30.8	Remove intruding service connnection @ 2:00
34.7	Remove encrustation at connection @ 2:00
45.2	Remove roots at joint @ 3:00
48.5	Remove roots at joint @ 3:00
49.5	Remove roots at joint @ 3:00
52	Remove roots at joint @ 9:00
63.0 to 63.7	Remove encrustation from pipe wall @ 3:00 and 9:00
65.1	Remove encrustation at connection @ 9:00
75.5	Remove intruding service connection @ 10:00
75.9	Remove intruding service connnection @ 2:00
76.9	Remove encrustation from pipe joint @ 11:00
84.2	Remove encrustation at connection @ 10:00

Magnus Avenue (Asset No. MA70030298) Combined Sewer	1st MH E of Park (MH00012964) to Mh at McKenzie W of CL (MH00012857)
Drawng Number	12824
Size / Shape	300mm Circular
Material Type	VC
Total Length	92.7m
Maximum Sewer Depth to Invert	3.15m
Design Condition	Fully Deteriorated ovality 8%
Site Specific Repairs	
Location	Action Required
Distance From MH00012964 (m)	
26.1	Remove roots at joint @ 9:00 and 3:00
39.0 to 42.3	EPR w/2 service connections
47	Remove encrustation at connection @ 9:00
52.9	Remove encrustation from pipe joint @ 10:00
59.5	Remove encrustation at connection @ 3:00
78.6 to 78.8	Remove loose pieces of liner @ 3:00
85.9 to 90.4	EPR w/2 service connections

Pritchard Avenue (Asset No. MA00014359) Combined Sewer	MH at McKenzie EPL (MH00012799) to 1st MH E of McKenzie St (MH00012819)
Drawng Number	12825
Size / Shape	300mm Circular
Material Type	VC
Total Length	93.7m
Maximum Sewer Depth to Invert	3.57m
Design Condition	Fully Deteriorated ovality 8%
Site Specific Repairs	
Location	Action Required
Distance From MH00012799 (m)	
0	Remove encrustation from pipe wall @ 6:00
2.8	Remove service saddle bolts @ 11:00
3.6	Remove service saddle bolts @ 11:00
5.8	Remove intruding service connnection @ 2:00
7.6	Remove encrustation at connection @ 10:00
8.8	Remove encrustation from pipe wall @ 9:00
16.6	Remove intruding service connnection @ 10:00
31.7	Remove encrustation from pipe wall @ 2:00 to 3:00
40	Remove encrustation at connection @ 2:00
40.4	Remove encrustation from pipe joint @ 2:00 to 4:00
43.5 to 46.0	EPR w/2 service connections
64.7	Remove encrustation from pipe joint @ 3:00
70.4	Remove encrustation from pipe joint @ 3:00
74.1 to 78.1	Remove encrustation from pipe wall @ 3:00 and 9:00
80.4 to 84.1	Remove encrustation from pipe wall @ 3:00 and 9:00
89.5	Remove encrustation at connection @ 10:00
90.1 to 90.7	Remove grease from pipe wall @ 2:00 and 10:00

Stella Avenue (Asset No. MA00014239)	
Combined Sewer	
1st MH W of Parr St (MH00012693) to MH at Parr St (MH00012694)	
Drawing Number	12826
Size / Shape	450mm Circular
Material Type	VC
Total Length	101.2m
Maximum Sewer Depth to Invert	3.80m
Design Condition	Fully Deteriorated ovality 5%
Site Specific Repairs	
Location	Action Required
Distance From MH00012693 (m)	
0.6	Remove encrustation from pipe joint @ 6:00
91.4 to 92.6	EPR w/1 service connection
92.4	Remove intruding service connection @ 11:00
93.5	Remove intruding service connection @ 2:00

Stella Avenue (Asset No. MA00012887)	
Combined Sewer	
1st MH W of McGregor St (MH00011529) to MH at McGregor St (MH00011530)	
Drawing Number	12827
Size / Shape	375mm Circular
Material Type	VC
Total Length	94.5m
Maximum Sewer Depth to Invert	3.87m
Design Condition	Fully Deteriorated ovality 9%
Site Specific Repairs	
Location	Action Required
Distance From MH00011529 (m)	
0	Remove encrustation from pipe wall @ 5:00 to 7:00
1.6 to 4.0	Remove encrustation from pipe wall @ 5:00 to 8:00
12.6	Remove intruding service connection @ 10:00
19.7	Remove intruding service connection @ 3:00
56.8	Remove intruding service connection @ 10:00

Jones Street (Asset No. MA00001016)	
Sanitary Sewer	
MH at Belmont Ave (MH00000880) to Mh at Hartford Ave (MH00000882)	
Drawing Number	12828
Size / Shape	375mm Circular
Material Type	Conc
Total Length	81.3m
Maximum Sewer Depth to Invert	3.35m
Design Condition	Fully Deteriorated ovality 6%
Site Specific Repairs	
Location	Action Required
Distance From MH00000880 (m)	
0.0 to 1.0	Remove encrustation from pipe wall @ :7:00
1.5 to 3.6	Remove grease from pipe wall @ 5:00
3	Remove encrustation from pipe wall @ 4:00
3.9	Remove encrustation from pipe wall @ 8:00
5	Remove encrustation from pipe wall @ 7:00
6.1	Remove encrustation from pipe joint @ 5:00
7.2	Remove encrustation from pipe joint @ 3:00 to 5:00
1.1 to 11.4	Remove grease from pipe wall @ 8:00
2.4 to 13.7	Remove encrustation from pipe wall @ 1:00 to 4:00 and 9:00
15.7	Remove encrustation from pipe joint @ 3:00
17	Remove encrustation from pipe joint @ 9:00
17.7	Remove encrustation from pipe wall @ 3:00
19.1	Remove encrustation from pipe wall @ 9:00
19.4	Remove encrustation from pipe joint @ 3:00
19.6 to 20.4	Remove encrustation from pipe wall @ 1:00 to 4:00
20.6	Remove encrustation from pipe joint @ 10:00
20.7 to 21.6	Remove encrustation from pipe wall @ 8:00 to 11:00
21.9 to 27.0	Remove encrustation from pipe wall @ 1:00 to 4:00
28.2	Remove encrustation from pipe joint @ 3:00 and 9:00
29.2	Remove encrustation from pipe joint @ 4:00 and 9:00
30.5	Remove encrustation from pipe joint @ 9:00
31.7	Remove encrustation from pipe joint @ 4:00 and 8:00
31.7 to 32.9	Remove encrustation from pipe wall @ 7:00 to 12:00
33.1	Remove encrustation from pipe joint @ 4:00 and 9:00
34.2	Remove encrustation from pipe joint @ 4:00 and 9:00
35.4	Remove encrustation from pipe joint @ 4:00 and 9:00
36.7 to 37.4	Remove encrustation from pipe wall @ 7:00 to 12:00
39	Remove encrustation from pipe joint @ 5:00
41.5	Remove encrustation from pipe joint @ 5:00
44	Remove encrustation from pipe joint @ 9:00
45.2	Remove encrustation from pipe joint @ 9:00
45.6	Remove encrustation at connection @ 9:00

46.6	Remove encrustation from pipe joint
46.9	Remove encrustation at connection @ 3:00
49.3	Remove encrustation from pipe joint @ 9:00
50.5	Remove encrustation from pipe joint @ 9:00
50.9	Remove encrustation from pipe wall @ 2:00
53	Remove encrustation from pipe joint @ 8:00
70.9	Remove encrustation from pipe joint @ 3:00
71.4 to 72.0	Remove encrustation from pipe wall @ 12:00
73.4	Remove encrustation from pipe joint @ 9:00
74.2	Remove encrustation from pipe joint @ 2:00
75.5	Remove encrustation from pipe joint @ 3:00
76.6	Remove encrustation from pipe joint @ 7:00
78.1	Remove encrustation from pipe joint @ 7:00
82.4	Remove encrustation from pipe joint @ 2:00 to 5:00

Alfred Avenue (Asset No. MA00014979)	
Combined Sewer	
1st MH E of Andrews St (MH00013342) to MH at Powers St (MH00013401)	
Drawng Number	12829
Size / Shape	300mm Circular
Material Type	VC
Total Length	99.4m
Maximum Sewer Depth to Invert	4.14m
Design Condition	Fully Deteriorated ovality 7%
Site Specific Repairs	
Location	Action Required
Distance From MH00013342 (m)	
6	Remove encrustation at connection @ 2:00
26.8	Remove intruding service connnection @ 2:00
27.7	Remove steel rod in pipe invert
53.6	Remove encrustation from pipe joint @ 3:00
61.3 to 62.3	Remove rebar from pipe inet
69.1	Remove encrustation from pipe wall @ 5:00
74.1	Remove intruding service connnection @ 10:00
99.1	Remove wood forms at manhole connection from 1:00 to 5:00 and 7:00 to 11:00

Alfred Avenue (Asset No. MA00015059)	
Combined Sewer	
Mh at Powers St EPL (MH00013400) to 1st MH E of Powers St (MH00013406)	
Drawng Number	12830
Size / Shape	300mm Circular
Material Type	VC
Total Length	87.3m
Maximum Sewer Depth to Invert	2.89m
Design Condition	Fully Deteriorated ovality 5%
Site Specific Repairs	
Location	Action Required
Distance From MH00013400 (m)	
0.0 to 0.2	Remove encrustation from pipe wall @ 6:00
3.6	Remove encrustation at connection @ 9:00
5.7	Remove encrustation from pipe wall @ 9:00
9.3	Remove intruding service connnection @ 10:00
13.9	Remove intruding service connnection @ 3:00
25	Remove encrustation at connection @ 3:00
25.7	Remove stick from pipe invert
26	Remove encrustation from pipe joint @ 9:00
37.8	Remove encrustation from pipe joint @ 9:00
68.0 to 69.0	Remove encrustation from pipe wall @ 10:00
68.4	Remove intruding service connnection @ 2:00
69.9 to 72.0	Remove grease from pipe wall @ 3:00
72.6 to 73.1	Remove grease from pipe wall @ 9:00 and 3:00
73.9 to 78.3	Remove grease from pipe wall @ 9:00 and 3:00
74.9	Remove intruding service connnection @ 10:00
80.0 to 81.4	Remove grease from pipe wall @ 9:00
82.1 to 82.6	Remove grease from pipe wall @ 9:00

Alfred Avenue (Asset No. MA00015021)	
Combined Sewer	
1st MH E of Powers (MH00013406) to MH at Salter St (MH00013487)	
Drawng Number	12831
Size / Shape	300mm Circular
Material Type	VC
Total Length	101.4m
Maximum Sewer Depth to Invert	3.69m
Design Condition	Fully Deteriorated ovality 6%
Site Specific Repairs	

Location	Action Required
Distance From MH00013406 (m)	
5	Remove encrustation at connection @ 3:00
5.6	Remove encrustation from pipe joint @ 9:00
13.8	Remove encrustation from pipe joint @ 3:00 and 9:00
27.7	Remove intruding service connection @ 3:00
37.3	Remove intruding service connection @ 10:00
37.7	Remove encrustation from pipe wall @ 9:00
38.5	Remove encrustation from pipe wall @ 3:00
43.6 to 45.4	Remove encrustation from pipe wall @ 7:00 to 11:00
46.2 to 46.4	Remove encrustation from pipe wall @ 12:00
51.2	Remove encrustation from pipe wall @ 3:00
52.7 to 54.4	Remove encrustation from pipe wall @ 9:00 to 5:00
60.2 to 62.0	Remove encrustation from pipe wall @ 7:00 to 4:00
62.2	Remove intruding service connection @ 10:00
62.7	Remove encrustation from pipe wall @ 10:00 and 2:00
65.8 to 68.1	Remove encrustation from pipe wall @ 9:00 to 4:00
69.7	Remove intruding service connection @ 2:00
75.8	Remove encrustation from pipe joint @ 8:00
76.6	Remove encrustation from pipe joint @ 8:00
78.1	Remove encrustation from pipe joint @ 3:00
79.1	Remove encrustation at connection @ 2:00
87.4	Remove encrustation from pipe joint @ 10:00 to 5:00
88.1	Remove encrustation from pipe joint @ 9:00 to 2:00
91.8	Remove encrustation from pipe joint @ 12:00 to 4:00

Alfred Avenue (Asset No. MA00015116) Combined Sewer	
1st MH E of Salter (MH00013488) to MH at Aikens St (MH00013469)	
Drawng Number	12832
Size / Shape	375mm Circular
Material Type	VC
Total Length	100.4m
Maximum Sewer Depth to Invert	4.64m
Design Condition	Fully Deteriorated ovality 8%
Site Specific Repairs	
Location	Action Required
Distance From MH00013488 (m)	
13.7	Remove encrustation from pipe joint @ 8:00 to 4:00
14.3	Remove encrustation from pipe joint @ 3:00
14.9	Remove encrustation from pipe joint @ 3:00
15.6	Remove encrustation from pipe joint @ 9:00
16.2	Remove encrustation from pipe joint @ 8:00
36.3 to 37.3	Remove grease from pipe wall @ 8:00 and 4:00
46.2	Remove encrustation from pipe joint @ 9:00 and 2:00
48.8 to 49.4	Remove grease from pipe wall @ 7:00 and 5:00
50.8 to 51.1	Remove grease from pipe wall @ 7:00
53	Remove encrustation from pipe joint @ 9:00 and 3:00
61.3	Remove debris from pipe invert
69.3	Remove encrustation at connection @ 2:00
75.9	Remove encrustation from pipe joint @ 9:00 to 4:00
76.5	Remove encrustation from pipe joint @ 9:00
77.2	Remove encrustation from pipe joint @ 9:00
79	Remove encrustation from pipe joint @ 10:00
81.5 to 84.4	Remove encrustation from pipe wall @ 8:00 to 3:00
90.1	Remove encrustation from pipe joint @ 10:00
92.8	Remove encrustation from pipe joint @ 2:00
99.5	Caution hole in pipe @ 3:00 and 9:00

Alfred Avenue (Asset No. MA00015111) Combined Sewer	
1st MH E of Aikens (MH00013460) to MH at Charles W of CL (MH00013451)	
Drawng Number	12833
Size / Shape	300mm Circular
Material Type	VC
Total Length	93.7m
Maximum Sewer Depth to Invert	3.85m
Design Condition	Fully Deteriorated ovality 9%
Site Specific Repairs	
Location	Action Required
Distance From MH00013460 (m)	
0.0 to 2.8	Remove grease from pipe wall @ 9:00 to 4:00
2.2	Remove intruding service connection @ 9:00
3	Remove encrustation at connection @ 3:00
3.4 to 10.0	Remove grease from pipe wall @ 9:00 and 3:00
12.6	Remove encrustation from pipe wall @ 1:00 and 9:00
13.4	Remove encrustation from pipe wall @ 12:00
13.9	Remove encrustation from pipe wall @ 12:00

15.8 to 34.1	Remove grease from pipe wall
35.4 to 39.6	Remove grease from pipe wall
44.1 to 77.3	Remove grease from pipe wall @ 9:00 to 3:00
71.3	Hole in pipe @ 2:00
79.8	Remove grease from pipe wall @ 11:00
80.5 to 85.2	Remove grease from pipe wall @ 9:00 to 3:00
85.0 to 85.4	Remove encrustation from pipe wall @ 3:00
86.4	Remove encrustation from pipe wall @ 1:00
89.2 to 91.2	EPR w/3 service connections

Main Street (Asset No. MA00013662) Combined Sewer	
1st MH S of Aberdeen (MH00012166) to 1st MH N of Alfred (MH00012167)	
Drawng Number	12834
Size / Shape	375mm Circular
Material Type	VC
Total Length	46.1m
Maximum Sewer Depth to Invert	4.53m
Design Condition	Fully Deteriorated ovality 6%
Site Specific Repairs	
Location	Action Required
Distance From MH00012166 (m)	
11.4	Remove encrustation at connection @ 10:00
12.3	Remove intruding service connnection @ 2:00
12.4	Remove intruding service connnection @ 1:00
33.3	Remove encrustation at connection @ 2:00

Magnus Avenue (Asset No. MA00013482) Combined Sewer	
MH at Aikins St EPL (MH00012025) to 1st MH E of Aikins St (MH00012068)	
Drawng Number	12835
Size / Shape	300mm Circular
Material Type	VC
Total Length	95.0m
Maximum Sewer Depth to Invert	3.53m
Design Condition	Fully Deteriorated ovality 9%
Site Specific Repairs	
Location	Action Required
Distance From MH00012025 (m)	
1.8 to 2.2	Remove encrustation from pipe wall @ 6:00
6.6	Remove intruding service connnection @ 2:00
28.2	Remove metal rod from pipe joint at 4:00
48.5	Remove intruding service connnection @ 2:00
50.2	Remove intruding service connnection @ 10:00
55.6 to 56.9	EPR w/1 service connection
60.9	Remove intruding service connnection @ 10:00
60.9	Remove encrustation from pipe wall @ 7:00
89.2	Remove encrustation at connection @ 2:00
93.3	Remove encrustation from pipe joint @ 3:00

Magnus Avenue (Asset No. MA00013492) Combined Sewer	
MH at Charles Ave (MH00012055) to 1st MH E of Charles Ave (MH00012153)	
Drawng Number	12836
Size / Shape	300mm Circular
Material Type	VC
Total Length	111.7m
Maximum Sewer Depth to Invert	4.22m
Design Condition	Fully Deteriorated ovality 5%
Site Specific Repairs	
Location	Action Required
Distance From MH00012055 (m)	
17.9	Remove piece of rebar in pipe invert
41.6	Remove intruding service connnection @ 2:00
62	Remove intruding service connnection @ 2:00
74	Remove encrustation at connection @ 2:00
82.6	remove metal debris in joint from 9:00 to 2:00
82.7	Remove intruding service connnection @ 2:00
105.1	Remove intruding service connnection @ 2:00

Manitoba Avenue (Asset No. MA00013506) Combined Sewer	
1st MH E of Charles St (MH00012045) to 1st MH W of Main St (MH00012154)	
Drawng Number	12837
Size / Shape	300mm Circular
Material Type	VC

Total Length	78.9m
Maximum Sewer Depth to Invert	3.42m
Design Condition	Fully Deteriorated ovality 6%
Site Specific Repairs	
Location	Action Required
Distance From MH00012045 (m)	
10.6	cut out water intuding copper pipe
12.4	Remove intruding service connnection @ 10:00
29.6	Remove encrustation at connection @ 3:00
56.4 to 56.7	Remove encrustation from pipe wall @ 12:00 and 3:00
78.4	Chip MH benching out from 3:00 to 4:00

Pritchard Avenue (Asset No. MA00013158) Combined Sewer	1st MH W of Salter St (MH00011749) to MH at Salter St (MH00011766)
Drawng Number	12838
Size / Shape	300mm Circular
Material Type	VC
Total Length	94.2m
Maximum Sewer Depth to Invert	4.84m
Design Condition	Fully Deteriorated ovality 9%
Site Specific Repairs	
Location	Action Required
Distance From MH00011749 (m)	
11.5	Remove encrustation at connection @ 2:00
14.4	Remove encrustation from pipe joint @ 3:00
18.2	Remove encrustation from pipe joint @ 3:00
27.2	Remove encrustation from pipe wall @ 5:00
29.9	Remove intruding service connnection @ 11:00
30.7	Remove intruding service connnection @ 1:00
48.5	Remove steel rod at 6:00
50.3	Remove intruding service connnection @ 10:00
50.8	Remove intruding service connnection @ 2:00
52.2	Remove intruding service connnection @ 2:00
71.6	Remove encrustation at connection @ 10:00

Pritchard Avenue (Asset No. MA00013187) Combined Sewer	MH at Salter St (MH00011766) to 1st MH E of Salter St (MH00011846)
Drawng Number	12839
Size / Shape	375mm Circular
Material Type	VC
Total Length	101.1m
Maximum Sewer Depth to Invert	4.84m
Design Condition	Fully Deteriorated ovality 10%
Site Specific Repairs	
Location	Action Required
Distance From MH00011766 (m)	
15.3	Remove intruding service connnection @ 2:00
18.2	Remove encrustation from pipe joint @ 5:00
26	Remove intruding service connnection @ 10:00
44	Remove encrustation from pipe joint @ 9:00
50.5	Remove intruding service connnection @ 11:00
75.2	Remove piece of broken pipe at joint below connection
99.4	Remove encrustation from pipe joint @ 9:00 to 4:00

Pritchard Avenue (Asset No. MA00013478) Combined Sewer	1st MH E of Aikens St (MH00012031) to MH at Charles St (MH00012040)
Drawng Number	12840
Size / Shape	375mm Circular
Material Type	VC
Total Length	95.4m
Maximum Sewer Depth to Invert	4.43m
Design Condition	Fully Deteriorated ovality 8%
Site Specific Repairs	
Location	Action Required
Distance From MH00012031 (m)	
0	Remove encrustation from pipe wall @ MH
2.2	Remove intruding service connnection @ 10:00
7	Remove encrustation from pipe joint @ 9:00
18.3	Remove metal rod from invert
23.6	Remove intruding service connnection @ 2:00
62.1	Remove encrustation from pipe joint @ 4:00
62.2	Remove intruding service connnection @ 10:00
78.8	Remove intruding service connnection @ 1:00

Flora Avenue (Asset No. MA00013275)	
Combined Sewer	
Drawing Number	12841
Size / Shape	375mm Circular
Material Type	VC
Total Length	101.3m
Maximum Sewer Depth to Invert	4.58m
Design Condition	Fully Deteriorated ovality 5%
Site Specific Repairs	
Location	Action Required
Distance From MH00011849 (m)	
21.8	Remove encrustation at connection @ 2:00
35.5	Remove encrustation from pipe joint @ 3:00
63.1	Remove intruding service connection @ 2:00
77.6	Remove intruding service connection @ 2:00
78.4	Remove intruding service connection @ 2:00

Stella Avenue (Asset No. MA00013022)	
Combined Sewer	
Drawing Number	12842
Size / Shape	300mm Circular
Material Type	VC
Total Length	94.9m
Maximum Sewer Depth to Invert	3.27m
Design Condition	Fully Deteriorated ovality 10%
Site Specific Repairs	
Location	Action Required
Distance From MH00011489 (m)	
5.4	Remove roots at joint
6	Remove roots at joint
7.7	remove broken piece of pipe from joint
19.2	Remove roots at joint @ 7:00
88	Remove encrustation from pipe wall @ 2:00
94.2	Repair benching at MH wall because of displaced joint

Stella Avenue (Asset No. MA00013021)	
Combined Sewer	
Drawing Number	12843
Size / Shape	300mm Circular
Material Type	VC
Total Length	95.1m
Maximum Sewer Depth to Invert	4.34m
Design Condition	Fully Deteriorated ovality 7%
Site Specific Repairs	
Location	Action Required
Distance From MH00011622 (m)	
12.1 to 12.5	Remove grease from pipe wall @ 7:00
23.9 to 25.0	Remove encrustation from pipe wall @ 9:00 to 12:00
29.8 to 32.4	Remove encrustation from pipe wall @ 7:00 to 3:00
41.9 to 42.4	Remove encrustation from pipe wall @ 3:00 and 9:00
44.3 to 47.0	Remove encrustation from pipe wall @ 7:00 to 4:00
50.7	Remove encrustation from pipe joint @ 12:00
52.8 to 53.4	Remove encrustation from pipe wall @ 4:00 and 10:00
55.8 to 56.8	Remove encrustation from pipe wall @ 3:00 and 8:00
57.6 to 58.2	Remove encrustation from pipe wall @ 3:00
62.7	Remove encrustation from pipe joint @ 9:00
80.3	Remove encrustation from pipe joint @ 6:00
86	Remove encrustation from pipe joint @ 5:00

Dufferin Avenue (Asset No. MA00012800) Combined Sewer	
1st MH E of Andrews St (MH00011631) to MH at Andrews St (MH00011482)	
Drawing Number	12844
Size / Shape	300mm Circular
Material Type	VC
Total Length	100.6m
Maximum Sewer Depth to Invert	4.28m
Design Condition	Fully Deteriorated ovality 7%
Site Specific Repairs	
Location	Action Required
Distance From MH00011631 (m)	
0.0 to 1.0	EPR
13.8	Remove intruding service connection @ 2:00

13.4 to 15.1	Remove encrustation from pipe wall @ 5:00 and 7:00
41.4	Remove intruding service connection @ 10:00
42.5	Remove intruding service connection @ 10:00
43.6	Remove intruding service connection @ 12:00
49.1	Remove intruding service connection @ 1:00
56.7	Remove intruding service connection @ 10:00
62	Remove intruding service connection @ 10:00
69.7	Remove intruding service connection @ 10:00
72.4	Remove encrustation at connection @ 2:00
92.8	Remove intruding service connection @ 10:00

Dufferin Avenue (Asset No. MA00013072) Combined Sewer	1st MH E of Powers (MH00011684) to 2nd MH E of Powers (MH00011662)
Drawng Number	12845
Size / Shape	375mm Circular
Material Type	VC
Total Length	89.1m
Maximum Sewer Depth to Invert	4.52m
Design Condition	Fully Deteriorated ovality 8%
Site Specific Repairs	
Location	Action Required
Distance From MH00011684 (m)	
0.6	Remove encrustation from pipe joint @ 7:00
3.2	Remove encrustation from pipe joint @ 8:00
4.9	Remove encrustation from pipe joint @ 3:00
5.6	Remove intruding service connection @ 11:00
6.2	Remove encrustation from pipe joint @ 8:00
6.7	Remove encrustation from pipe joint @ 9:00
11.2	Remove encrustation from pipe joint @ 2:00
11.5	Remove encrustation from pipe joint @ 9:00
13.3	Remove encrustation at connection @ 10:00
17.5	Remove encrustation from pipe joint @ 10:00
18.7	Remove encrustation from pipe joint @ 2:00 to 4:00
19.8	Remove intruding service connection @ 2:00
27.9	Remove encrustation at connection @ 2:00
28.5	Remove encrustation at connection @ 10:00
32.5	Remove encrustation from pipe joint @ 10:00
37.9	Remove intruding service connection @ 10:00
41.7	Remove intruding service connection @ 2:00
44.7	Remove encrustation at connection @ 10:00
45.5	Remove encrustation at connection @ 2:00
54.1	Remove encrustation from pipe joint @ 9:00
54.7	Remove encrustation from pipe joint @ 3:00
58	Remove intruding service connection @ 10:00
65.3	Remove intruding service connection @ 3:00
67.6	Remove intruding service connection
68.3 to 69.7	EPR w/1 service connection

Robinson Street (Asset No. 00013270) Combined Sewer	1st MH N of Dufferin Ave (MH00011874) to MH at Dufferin Ave (MH00011839)
Drawng Number	12846
Size / Shape	300mm Circular
Material Type	VC
Total Length	116.9m
Maximum Sewer Depth to Invert	4.73m
Design Condition	Fully Deteriorated ovality 7%
Site Specific Repairs	
Location	Action Required
Distance From MH00011874 (m)	
0.0 to 3.1	Remove roots at joints (4 total)
4.2 to 16.4	Remove encrustation from pipe wall @ 5:00 to 7:00
17.1 to 26.6	Remove encrustation from pipe wall @ 5:00 to 7:00
32.0 to 34.6	Remove encrustation from pipe wall @ 5:00 to 7:00
37.5 to 62.2	Remove encrustation from pipe wall @ 6:00
62.2	Remove intruding service connection @ 10:00
62.8	Remove intruding service connection @ 2:00
66.1	Remove intruding service connection @ 2:00
68.9	Remove encrustation at connection @ 2:00
79.1	Remove encrustation at connection @ 2:00
116.7	chip out concrete benching from 7:00 to 10:00

Jarvis Avenue (Asset No. MA70036485) Combined Sewer	MH at McGregor CL (MH00011466) to 1st MH E of McGregor St (MH00011425)
Drawng Number	12847

Size / Shape	450mm Circular
Material Type	VC
Total Length	99.8m
Maximum Sewer Depth to Invert	2.82m
Design Condition	Fully Deteriorated ovality 10%
Site Specific Repairs	
Location	Action Required
Distance From MH00011466 (m)	
9.7	Remove intruding service connection @ 2:00
9.9 to 10.5	Remove encrustation from pipe wall @ 7:00 to 12:00
11	Remove encrustation from pipe joint @ 3:00
14.5	Remove encrustation from pipe joint @ 3:00
15.4	Remove encrustation from pipe joint @ 3:00
23.9	Remove encrustation from pipe joint @ 10:00
24.5	Remove encrustation from pipe joint @ 3:00
25.1	Remove encrustation from pipe joint @ 3:00
28.5	Remove intruding service connection @ 2:00
28.8	Remove encrustation from pipe joint @ 3:00
31.3	Remove encrustation from pipe joint @ 9:00
37.8 to 39.1	Remove encrustation from pipe wall @ 3:00
40.3	Remove encrustation from pipe joint @ 4:00
40.8	Remove encrustation from pipe joint @ 4:00
42.0 to 42.9	Remove encrustation from pipe wall @ 7:00 to 4:00
44.1	Remove encrustation from pipe wall @ 3:00
45.4	Remove encrustation from pipe wall @ 10:00
47.2	Remove encrustation from pipe joint @ 10:00
56.6 to 66.0	Remove encrustation from pipe wall @ 9:00 to 3:00
66.8	Remove encrustation from pipe joint @ 3:00
67.6 to 68.2	Remove encrustation at connection @ 2:00
68.8	Remove encrustation from pipe joint @ 4:00 and 9:00
69.6 to 77.4	Remove encrustation from pipe wall @ 9:00 to 4:00
78.2	Remove intruding service connection @ 9:00
78.5 to 84.0	Remove encrustation from pipe wall @ 7:00 to 5:00
85.3	Remove encrustation from pipe joint @ 3:00
86	Remove encrustation from pipe joint @ 4:00
86.6	Remove encrustation from pipe joint @ 4:00
87.2	Remove encrustation from pipe joint @ 4:00
87.9	Remove encrustation from pipe joint @ 4:00
88.4	Remove encrustation from pipe joint @ 4:00
89	Remove encrustation from pipe joint @ 4:00
89.6	Remove encrustation from pipe joint @ 4:00
91.5	Remove encrustation from pipe joint @ 10:00
92.1	Remove encrustation from pipe joint @ 2:00
93.3	Remove intruding service connection @ 10:00
93.5 to 95.5	Remove encrustation from pipe wall @ 7:00 to 5:00
96.8	Remove encrustation from pipe joint @ 9:00

Jarvis Avenue (Asset No. MA00012994) Combined Sewer	2nd MH E of Powers (MH00011613) to 3rd MH E of Powers (MH00011666)
Drawng Number	12848
Size / Shape	375mm Circular
Material Type	VC
Total Length	99.8
Maximum Sewer Depth to Invert	3.32
Design Condition	Fully Deteriorated ovality 5%
Site Specific Repairs	
Location	Action Required
Distance From MH 00011613(m)	
3.5	Remove intruding service connection @ 1:00
27.4	Remove encrustation at connection @ 2:00
37.1	Remove intruding service connection @ 2:00
43.1	Remove intruding service connection @ 2:00
51.7	Remove encrustation from pipe wall @ 6:00
58.7	Remove encrustation at connection @ 10:00
70.3 to 72.8	Remove grease from pipe wall @ 3:00 and 9:00
73.7	Remove encrustation at connection @ 10:00
83.4	Caution pipe diameter change
88.8	Caution pipe diameter change
89.9	Remove encrustation at connection @ 2:00
91.4	Remove intruding service connection @ 9:00
92.5	Remove intruding service connection @ 2:00
96.2	Remove intruding service connection @ 2:00
96.6	Remove encrustation from pipe wall @ 7:00

Aberdeen Avenue (Asset No. MA00013842) Combined Sewer	2nd MH E of Main St (MH00012335) to 3rd MH E of Main St (MH00012351)
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Drawng Number	12849
Size / Shape	300mm Circular
Material Type	VC
Total Length	91.7m
Maximum Sewer Depth to Invert	3.05m
Design Condition	Fully Deteriorated ovality 10%
Site Specific Repairs	
Location	Action Required
Distance From MH00012335 (m)	
6.3	Remove encrustation at connection @ 2:00
11.5 to 12.0	Remove encrustation from pipe wall
15.7	Remove encrustation at connection @ 10:00
16.9 to 17.2	Remove encrustation from pipe wall @ 4:00
17.9 to 22.0	Remove encrustation from pipe wall @ 3:00 and 8:00
24.8 to 25.0	Remove encrustation from pipe wall @ 3:00 and 8:00
35	Remove roots at joint @ 9:00
35.4	Remove roots at connection @ 10:00
37.1	Remove roots at joint
37.9	Remove roots at joint
42.2	Remove encrustation from pipe joint @ 3:00
44.1	Remove roots at joint
45.3	Remove encrustation at connection @ 10:00
45.6	Remove roots at joint
46	Remove roots at connection @ 2:00
46.3	Remove roots at joint
47.6	Remove roots at joint
49.5	Remove roots at joint
53.8	Remove encrustation from pipe joint @ 9:00
55.2	Remove roots at joint
55.6	Remove encrustation at connection @ 10:00
56.3	Remove encrustation at connection @ 2:00
59.3	Remove encrustation from pipe joint @ 9:00
60.1 to 60.8	Remove encrustation from pipe joint @ 8:00
82.0 to 91.7	Remove heavy encrustation in invert from 4:00 to 7:00

Manitoba Avenue (Asset No. MA00013802) Combined Sewer	2nd MH E of Main St (MH00012293) to 1st MH E of Main St (MH00012294)
Drawng Number	12850
Size / Shape	300mm Circular
Material Type	VC
Total Length	25.2m
Maximum Sewer Depth to Invert	4.64m
Design Condition	Fully Deteriorated ovality 8%
Site Specific Repairs	
Location	Action Required
Distance From MH00012294 (m)	
0.6	Remove roots at joint @ 2:00
10.6 to 13.1	EPR w/3 service connections
12.3	Remove encrustation at connection @ 11:00
21.7 to 25.2	EPR w/1 service connection

Austin (Asset No. MA00013784) Combined Sewer	MH at Pritchard Ave (MH00012280) to MH at Selkirk Ave (MH00012279)
Drawng Number	12851
Size / Shape	375mm Circular
Material Type	VC
Total Length	97.9m
Maximum Sewer Depth to Invert	6.95m
Design Condition	Fully Deteriorated ovality 6%
Site Specific Repairs	
Location	Action Required
Distance From MH00012280 (m)	
8.8	Remove encrustation at connection @ 2:00
11.7	Remove encrustation from pipe joint @ 7:00
15.5	Remove encrustation from pipe joint @ 1:00
16.3	Remove encrustation from pipe joint @ 3:00
25.1	Remove encrustation at connection @ 2:00
25.5	Remove encrustation from pipe joint @ 9:00 to 5:00
31.7	Remove encrustation at connection @ 10:00
45.4	Remove encrustation from pipe wall @ 5:00
49.6 to 50.7	Remove encrustation from pipe wall @ 7:00 to 4:00
57.3	Remove encrustation at connection @ 2:00
60	Remove encrustation from pipe joint @ 7:00
66.5	Remove intruding service connnection @ 11:00
68.4	Remove encrustation from pipe wall @ 10:00
72.5 to 73.0	Remove encrustation from pipe wall @ 7:00 to 5:00

73.0 to 78.2	Remove grease from pipe wall @ 9:00 to 3:00
79.2 to 80.3	Remove grease from pipe wall @ 9:00 to 3:00
83.9 to 93.9	Remove encrustation from pipe wall @ 7:00 to 5:00
95.9	Remove encrustation from pipe joint @ 3:00

Beaconsfield Street (Asset No. MA00013824) Combined Sewer	1st MH N of Lorne Ave(MH00012319) to Mh at Lorne Ave (MH00012321)
Drawng Number	12852
Size / Shape	250mm Circular
Material Type	Conc
Total Length	41.0m
Maximum Sewer Depth to Invert	3.17m
Design Condition	Fully Deteriorated ovality 6%
Site Specific Repairs	
Location	Action Required
Distance From MH00012319 (m)	
0.0 to 1.0	Remove encrustation from pipe wall @ 3:00 and 7:00
1.2	Hole in pipe wall @ 3:00
2.5	Hole in pipe wall @ 10:00
1.2 to 5.5	Remove encrustation from pipe wall @ 7:00
6.0 to 6.6	Remove encrustation from pipe wall @ 6:00
6.9	Remove intruding service connnection @ 10:00
29.1	Remove encrustation at connection @ 9:00
32.1	Remove roots at joint @ 3:00 and 8:00
32.6	Remove roots at joint @ 3:00
37	Remove encrustation from pipe joint @ 9:00
38.1	Remove intruding service connnection @ 10:00
40.2	Caution pipe diameter change

Lusted Avenue (Asset No. MA00013749) Combined Sewer	1st MH W of Beaconsfield (MH00012253) to 2nd MH W of Beaconsfield (MH00012239)
Drawng Number	12853
Size / Shape	300mm Circular
Material Type	VC
Total Length	85.7m
Maximum Sewer Depth to Invert	3.65m
Design Condition	Fully Deteriorated ovality 5%
Site Specific Repairs	
Location	Action Required
Distance From MH00012253 (m)	
0	Chip off Concrete bencing from 6:00 to 8:00
3.7	Remove intruding service connnection @ 3:00
12.9	Remove piece of rebar in invert @ 6:00
37.5	Remove intruding service connnection @ 10:00
45.3	Remove intruding service connnection @ 10:00
82.3	Remove intruding service connnection @ 2:00

Euclid Avenue (Asset No. MA00013756) Combined Sewer	2nd MH W of Granville (MH00012247) to 1st MH W of Granville (MH00012246)
Drawng Number	12854
Size / Shape	300mm Circular
Material Type	VC
Total Length	68.7m
Maximum Sewer Depth to Invert	3.12m
Design Condition	Fully Deteriorated ovality 9%
Site Specific Repairs	
Location	Action Required
Distance From MH00012247 (m)	
7.7 to 8.2	Remove encrustation from pipe wall @ 6:00 to 9:00
15.3	Remove encrustation from pipe joint @ 11:00
18	Remove encrustation from pipe joint @ 11:00
26.9	Remove encrustation from pipe wall @ 2:00
29	Remove encrustation from pipe joint @ 12:00
32	Remove encrustation from pipe joint @ 10:00 to 2:00
33.9	Remove encrustation from pipe joint @ 11:00
37.4	Remove encrustation at connection @ 9:00
42.6	Remove intruding service connnection @ 10:00

Dufferin Avenue (Asset No. MA00016619) Combined Sewer	2nd MH W of Main St (MH00014322) to 1st MH W of Main St (MH00011915)
Drawng Number	12855
Size / Shape	300mm Circular

Material Type	VC
Total Length	74.7m
Maximum Sewer Depth to Invert	3.58m
Design Condition	Fully Deteriorated ovality 6%
Site Specific Repairs	
Location	Action Required
Distance From MH0014322 (m)	
1.2	Remove roots at joint
1.8	Remove roots at joint
2.4	Remove roots at joint
2.6	Remove roots at connection @ 10:00
3	Remove encrustation from pipe joint @ 6:00
3.6 to 6.1	Remove roots at joint
6.1 to 7.3	Remove encrustation from pipe wall @ 6:00
8.9	Remove roots at connection @ 10:00
9.1	Remove roots at joint
9.7	Remove roots at joint
11.2	Remove encrustation from pipe joint @ 5:00
16.6 to 19.0	Remove encrustation from pipe wall @ 5:00 and 7:00
19.8 to 21.0	Remove roots from pipe wall @ 7:00
28.8	Remove encrustation at connection @ 2 :00
30	Remove encrustation from pipe wall @ 7:00
32.2	Remove encrustation at connection @ 2:00
35.7 to 36.6	EPR w/1 service connection
62.7	Remove encrustation from pipe wall @ 5:00 to 8:00
69.9	Remove intruding service connnection @ 2:00
72.4	Remove intruding service connnection @ 2:00

Austin Street (Asset No. MA00013588) Combined Sewer	1st MH N of Jarvis Ave (MH00012113) to MH at Jarvis Ave (MH00014154)
Drawng Number	12856
Size / Shape	300mm Circular
Material Type	VC
Total Length	87.0m
Maximum Sewer Depth to Invert	3.34m
Design Condition	Fully Deteriorated ovality 4%
Site Specific Repairs	
Location	Action Required
Distance From MH00014154 (m)	
0.0 to 1.0	EPR
19.0 to 19.5	Remove encrustation from pipe wall @ 1:00 to 4:00
48.6	Remove intruding service connnection @ 3:00
85.2 to 87.0	EPR

Main Street (Asset No. MA70040171) Combined Sewer	1st MH S of Dufferin (MH70015900) to MH at Jarvis Av (MH00012086)
Drawng Number	12857
Size / Shape	300mm Circular
Material Type	VC
Total Length	58.9m
Maximum Sewer Depth to Invert	3.48m
Design Condition	Fully Deteriorated ovality 6%
Site Specific Repairs	
Location	Action Required
Distance From MH70015900 (m)	
9.4	Remove encrustation from pipe joint @ 10:00 to 3:00
10.6	Remove encrustation from pipe joint @ 9:00
16.4	Remove encrustation from pipe joint @ 3:00
19.9	Remove encrustation at connection @ 2:00
45.4	Remove encrustation from pipe wall @ 9:00

Jarvis Avenue (Asset No. MA00013229) Combined Sewer	1st MH W of Main St (MH00011816) to MH at Main St (MH00012086)
Drawng Number	12858
Size / Shape	300mm Circular
Material Type	VC
Total Length	74.6m
Maximum Sewer Depth to Invert	3.48m
Design Condition	Fully Deteriorated ovality 5%
Site Specific Repairs	
Location	Action Required
Distance From MH00011816 (m)	
0	Remove broken piece of concrete pipe benching at 7:00 and repair benching

5.0 to 5.6	Remove encrustation from pipe wall @ 3:00
5.6	Remove encrustation from pipe joint @ 1:00 to 3:00
6.2	Remove encrustation from pipe joint @ 1:00 to 3:00
11.4	Remove encrustation from pipe joint @ 9:00 to 4:00
12.6	Remove encrustation from pipe joint @ 1:00 to 4:00
14.8	Remove encrustation at connection @ 2:00
23.7	Remove intruding service @ 2:00
31.8	Remove encrustation from pipe joint @ 9:00
32.4	Remove encrustation from pipe joint @ 3:00
33	Remove encrustation from pipe joint @ 3:00
35.1	Remove encrustation from pipe joint @ 5:00
37.8	Remove encrustation at connection @ 2:00
38.4	Remove encrustation at connection @ 10:00
44.8	Remove intruding service @ 9:00
47.2	Remove intruding service @ 1:00
53.8	Remove encrustation at connection @ 10:00

Rover Avenue (Asset No. MA70003255) Combined Sewer	
MH at Prince Edward St N of CL (MH70001441) to MH at Barber St CL (MH00012385)	
Drawng Number	12859
Size / Shape	450mm Circular
Material Type	VC
Total Length	87.6
Maximum Sewer Depth to Invert	3.45
Design Condition	Fully Deteriorated ovality 4%
Site Specific Repairs	
Location	Action Required
Distance From MH70001441 (m)	
18.1	Remove encrustation from pipe wall @ 2:00
21	Remove encrustation from pipe joint @ 4:00
24.9	Remove roots at joint

Prince Edward Street (Asset No. MA70003250) Combined Sewer	
1st MH S of Rover (MH70001440) to 2nd MH S of Rover (MH00012214)	
Drawng Number	12860
Size / Shape	300mm Circular
Material Type	VC
Total Length	95.3m
Maximum Sewer Depth to Invert	2.57m
Design Condition	Fully Deteriorated ovality 7%
Site Specific Repairs	
Location	Action Required
Distance From MH00012214 (m)	
46.2	Remove roots at joint
55.6	Remove metal rod from pipe invert
60.2	Remove metal rod from pipe invert
64.0 to 65.3	Remove copper tubing in pipe invert
72.3 to 73.9	Remove copper tubing in pipe invert
89.7	Remove intruding service connection @ 9:00
90.2	Remove intruding service connection @ 2:00
94.1	Remove intruding service connection @ 2:00

Grove Street (Asset No. MA00013689) Combined Sewer	
2nd Mh N of Euclid Ave (MH00012196) to 1st MH N of Euclid Ave (MH00012180)	
Drawng Number	12861
Size / Shape	300mm Circular
Material Type	VC
Total Length	77.1m
Maximum Sewer Depth to Invert	3.48m
Design Condition	Fully Deteriorated ovality 8%
Site Specific Repairs	
Location	Action Required
Distance From MH00012196 (m)	
3.9 to 4.5	remove deformations in pipe wall
6.3	Remove encrustation from pipe joint @ 1:00
37.2 to 44.3	EPR w/2 service connections
51.5	Remove encrustation from pipe joint @ 8:00
60.1	Remove debris from pipe joint from 6:00 to 8:00
71.7	Remove encrustation at connection @ 3:00

Barber Street (Asset No. MA00014030) Combined Sewer	
2nd MH N of Euclid Av (MH00012563) to 1st MH N of Euclid Av (MH00012507)	

Drawing Number	12862
Size / Shape	300mm Circular
Material Type	VC
Total Length	99.1m
Maximum Sewer Depth to Invert	3.12m
Design Condition	Fully Deteriorated ovality 8%
Site Specific Repairs	
Location	Action Required
Distance From MH00012507 (m)	
8.5	Remove encrustation from pipe joint @ 9:00
9	Remove intruding service connection @ 10:00
19.6 to 22.2	EPR w/1 service connection
28.9	Remove intruding service connection @ 2:00
49	Remove intruding service connection @ 2:00
58.1	Remove intruding service connection @ 2:00
91	Remove encrustation at connection @ 2:00

Argyle Street (Asset No. MA00013961) Combined Sewer	MH at Euclid Ave SPL (MH00012458) to MH at Sutherland Av (MH00012459)
Drawing Number	12863
Size / Shape	300mm Circular
Material Type	VC
Total Length	57.7m
Maximum Sewer Depth to Invert	4.45m
Design Condition	Fully Deteriorated ovality 6%
Site Specific Repairs	
Location	Action Required
Distance From MH00012458 (m)	
0.0 to 6.2	Remove encrustation from pipe wall @ 5:00 to 7:00
7.5	Remove encrustation from pipe wall @ 10:00
7.8 to 9.0	Remove encrustation from pipe wall
12.4	Remove intruding service connection @ 2:00
21	Remove intruding service connection @ 2:00
22.1	Remove intruding service connection @ 2:00
25.2	Remove intruding service connection @ 10:00
30.1	Remove encrustation from pipe joint @ 10:00
30.8	Remove encrustation from pipe joint @ 9:00
31.7	Remove encrustation from pipe joint @ 9:00 and 3:00
32.3	Remove encrustation from pipe joint @ 9:00 and 3:00
33.2	Remove encrustation from pipe joint @ 9:00 and 3:00
38	Remove encrustation from pipe wall @ 9:00
38.6	Remove encrustation from pipe joint @ 6:00
46.6	Remove encrustation at connection @ 10:00
49.1	Remove encrustation from pipe joint @ 9:00
50	Remove encrustation from pipe joint @ 3:00
53.1	Remove encrustation from pipe joint @ 9:00

McFarlane Street (Asset No. MA00014069) Combined Sewer	1st MH N of Sutherland Av (MH00012544) to 1st MH S of Rover Av (MH00012580)
Drawing Number	12864
Size / Shape	300mm Circular
Material Type	VC
Total Length	92.9m
Maximum Sewer Depth to Invert	2.66m
Design Condition	Fully Deteriorated ovality 6%
Site Specific Repairs	
Location	Action Required
Distance From MH00012544 (m)	
2.7 to 6.9	EPR w/2 service connections
34	Remove intruding service connection @ 10:00
72.8	Remove intruding service connection @ 9:00
76.2	Caution Hole in invert

Stephens Street (Asset No. MA00015858) Combined Sewer	1st MH N of Sutherland (MH00014087) to 2nd MH N of Sutherland (MH00014082)
Drawing Number	12865
Size / Shape	300mm Circular
Material Type	VC
Total Length	75.7m
Maximum Sewer Depth to Invert	3.78m
Design Condition	Fully Deteriorated ovality 10%
Site Specific Repairs	
Location	Action Required
Distance From MH00014087 (m)	

0	Remove encrustation from pipe wall @ 10:00 to 3:00
4.7	Remove intruding service connection @ 9:00
9.6	Remove intruding service connection @ 2:00
17.7	Remove intruding service connection @ 10:00
28.2	Remove debris from pipe invert
65	Remove intruding service connection @ 2:00

Stephens Street (Asset No. MA00015857) Combined Sewer	
Mh at Sutherland NPL (MH00014086) to 1st MH N of Sutherland (MH00014087)	
Drawng Number	12866
Size / Shape	300mm Circular
Material Type	VC
Total Length	68.7m
Maximum Sewer Depth to Invert	3.00m
Design Condition	Fully Deteriorated ovality 5%
Site Specific Repairs	
Location	Action Required
Distance From MH00014086 (m)	
23.5	Remove intruding service connection @ 2:00
33.0 to 33.9	EPR w/1 service connection
43	Remove intruding service connection @ 2:00
57.9 to 58.8	EPR w/1 service connection

Angus Street (Asset No. MA00015887) Combined Sewer	
Mh at Sutherland NPL (MH00014111) to 1st MH N of Sutherland Ave (MH00014112)	
Drawng Number	12867
Size / Shape	300mm Circular
Material Type	VC
Total Length	73.7m
Maximum Sewer Depth to Invert	2.57m
Design Condition	Fully Deteriorated ovality 6%
Site Specific Repairs	
Location	Action Required
Distance From MH00014111 (m)	
2.5	Remove intruding service connection @ 3:00
5.6	Remove intruding service connection @ 10:00
6.3	Remove intruding service connection @ 3:00
12.8	Remove intruding service connection @ 10:00
58.3	Remove encrustation from pipe joint @ 3:00
65	Remove encrustation from pipe joint @ 5:00
65	Remove hanging gasket from 12:00 to 2:00

Higgins Avenue (Asset No. MA70003365) Combined Sewer	
MH at Sutherland Av (MH00014108) to 1st MH S of Sutherland Av (MH70001458)	
Drawng Number	12868
Size / Shape	300mm Circular
Material Type	VC
Total Length	30.2
Maximum Sewer Depth to Invert	3.41m
Design Condition	Fully Deteriorated ovality 5%
Site Specific Repairs	
Location	Action Required
Distance From MH00014108 (m)	
30	Remove encrustation from pipe wall @ 6:00

Argyle Street (Asset No. MA20013440) Combined Sewer	
1st MH South of Heaton Ave (MH20012164) to MH at Heaton Ave (MH20012176)	
Drawng Number	12869
Size / Shape	300mm Circular
Material Type	VC
Total Length	45.3m
Maximum Sewer Depth to Invert	3.94m
Design Condition	Fully Deteriorated ovality 6%
Site Specific Repairs	
Location	Action Required
Distance From MH20012164 (m)	
0	Remove rebar from pipe invert
2.3 to 12.7	Remove encrustation from pipe wall @ 4:00 to 7:00
3.5	Remove encrustation at connection @ 2:00
5.5 to 6.4	Remove debris from pipe invert
13.2 to 17.0	Remove grease from pipe wall
15.4	Remove encrustation from pipe joint @ 9:00 and 1:00

16.3	Remove encrustation from pipe joint @ 1:00
17.2	Remove encrustation at connection @ 10:00
18.5 to 40.9	Remove grease from pipe wall
22.5	Remove encrustation from pipe joint @ 5:00
24.1	Remove encrustation from pipe wall @ 2:00
25.6	Caution Open Joint
26.4	Remove encrustation from pipe joint @ 4:00 to 7:00
27.1	Remove encrustation from pipe joint @ 1:00 to 5:00
28	Remove encrustation from pipe joint @ 4:00
33	Remove intruding service connection @ 2:00
34.7	Remove encrustation from pipe wall @ 1:00
36.2	Remove encrustation from pipe joint @ 10:00
38.0 to 40.9	Remove encrustation from pipe wall
40.4	Remove encrustation from pipe wall @ 4:00
45.2	Remove concrete from pipe wall at 5:00 and 10:00

Curtis Street (Asset No. MA20013459) Combined Sewer	1st MH S of Higgins Ave (MH20012183) to MH at Higgins Ave CL (MH20012252)
Drawng Number	12870
Size / Shape	300mm Circular
Material Type	VC
Total Length	107.0m
Maximum Sewer Depth to Invert	4.13m
Design Condition	Fully Deteriorated ovality 6%
Site Specific Repairs	
Location	Action Required
Distance From MH20012183 (m)	
0	Remove encrustation from pipe wall @ 6:00
2.9 to 72.0	Remove roots at joints
55.6	Caution pipe diameter change
57.9	Caution pipe diameter change
63.9	Remove encrustation from pipe joint @ 3:00 to 7:00