Drainage Operations 2022/23

1. Summary

The 2022/23 gully cleaning programme is currently 37.5% completed (32,004 out of a gully asset of 85,393, as of 26/8/22). Over the next two months, with expected increase of in-house and supply chain partners (SCP) availability, we plan to accelerate the programme through the remaining summer months.

Comparing the data from the 2021/22 programme with the current year, we are noticing a decrease in gully silt levels, in the region of an average silt level reducing from 74% full to 59% full. This reduction demonstrates the benefits of regular cleansing and reduces the time that is needed to carry out the operation this year.

This year, we have identified a further 779 stuck covers and 359 broken or damaged covers, which have been programmed to be released or replaced. The supersucker gangs have cleared over 2,300 blocked gully outlets (averaging 6,000m of blocked drainage pipes per month) and emptying over 50 large assets (catch pits/soakaways) a month.

2. Objectives for 2022/23

- To visit and clean the 85,000 gully assets in the county of Buckinghamshire.
- To clear any defects found with regards to the gully/drainage asset.
- To capture all gully data and update the drainage asset management system.
- To add any additional data, discovered through the cyclic gully cleaning programme and to correct and amend data as necessary.
- To capture and update the asset management system we will continue to use the Kaarbontech Gully Smart system.

3. Resources for 2022/23

We will employ three in-house two-man gully cleaning gangs using 18t gully cleaning vehicles, one based in each of our operational depots at Aylesbury, Amersham and High Wycombe. These resources will be supported by two specialist gully cleaning companies, Drainline and FM Conway, operating up to four additional vehicles between them.

The gully cleaning operation is followed by a second programme using three high pressure jetting “Supersucker”, 26t vehicles. This programme deals with the jetting of blocked assets, and/or the need to carry out CCTV to identify the exact location and nature of the blockage and, lastly, emptying larger assets such as soakaways and catch pits, which can sometimes be the reason why the gully is not actually flowing as it should.

All work gangs will capture live data onto a tablet, which will be uploaded onto the Kaarbontech system daily.

Using our own in-house resource and supported by our SCP we then produce programmes of work to repair defective gully frames and covers and/or broken/fractured pipe work on the gully system.

4. Methodology

Each operational depot has a nominated supervisor who will produce a programme of works for the gully cleaning gangs to follow. The programme is developed by taking a number of things into consideration, including, risk of known issues, available resources in each area and collaboration with other planned works.

The works pack is downloaded onto individual tablets and allocated to a work gang to deliver by visiting each location to update the asset history, confirm silt level on arrival and completion, record the condition of the asset, supported by a photograph. This information is a record of works carried out, asset data and also a tool to manage productivity and time.

If a defect is found which cannot be immediately remedied, the gang will create a service request for a return visit to be carried out. This might include stuck, broken frames and covers, blocked/broken pipework or blocked outlets. A follow up visit may also be necessary where gullies cannot be accessed due to vehicles being parked over or safety related observations being made that require additional planning before they can be carried out. Once the service request has been made, the supervisor will review and add this to the programme so that a repeat visit can be carried out.

The supersucker is a 26t vehicle fitted with high-pressure jetting which is used to clear a blockage, our approach being to do this, end to end point of the drainage system, normally a catchpit, soakaway or a ditch. This approach can limit the number of locations that can be attended in a day but results in a fully functioning drainage system which is unlikely to require further attendance, at least for some time. When working in tandem with the CCTV camera to investigate problematic issues, this may identify vegetation growth within the drainage system and a root cutter will be used to remove this. During periods of severe weather, the supersucker is also often used to attend flooding locations, which understandably impacts on the programmed works.

5. Some examples of thorough gully cleaning

6. Risks and Opportunities

Known risks include the ongoing national /regional shortage of HGV drivers and skilled workers, as well as sickness absence (including Covid). Extreme weather events not only make it unsafe to work during high winds, storms and extreme heat conditions, but also impact working hours that are safe for drivers and operators to carry out.

Some level of machinery breakdown and servicing are always anticipated, however there has been an increased cost and timescale for obtaining parts and repairing vehicles, which has been noted over the last 12 months or so.

We anticipate some slippage to programmed works and make plans to catch up by working outside of normal hours and to accelerate the programme at every opportunity. Additional SCP resource, upskilling of our own workforce, enhanced training programmes and opportunities to work collaboratively with other workstreams are constantly being reviewed to improve productivity.

7. Outputs April to August 2022

On a weekly basis reports are produced and analysed to highlight issues on the network, this gives opportunity to improve the operation and to measure performance against data collected from previous years. Please find a recent report:

WARD	DISTRICT	TOTAL GULLIES	VEHICLE OVER	STUCK COVERS	BROKEN COVERS	AVERAGE SILT LEVELS	TOTAL CLEANED	STILL TO CLEAN
Abbey	Wycombe	1750	110	30	12	68%	1612	138
Amersham and Chesham Bois	Chiltern & South Bucks	1326				85%	17	1309
Aston Clinton and Bierton	Aylesbury	2369	89	116	21	35%	1965	404
Aylesbury East	Aylesbury	1883	1			86%	11	1876
Aylesbury North	Aylesbury	2016		2		56%	9	2007
Aylesbury North-West	Aylesbury	2099	1	1	2	55%	11	2088
Aylesbury South-East	Aylesbury	1764				58%	3	1761
Aylesbury South-West	Aylesbury	1393	2					1393
Aylesbury West	Aylesbury	2243		1		39%	9	2234
Beaconsfield	Chiltern & South Bucks	2112	21	7	6	36%	583	1529
Bernwood	Aylesbury	2221	69	25	13	38%	1277	944
Booker, Cressex and Castlefield	Wycombe	1140	94	20	15	34%	1067	73
Buckingham East	Aylesbury	2103	29	5	2	50%	602	1501
Buckingham West	Aylesbury	2617	131	28	11	37%	2268	349
Chalfont St. Giles	Chiltern & South Bucks	1654				77%	9	1645
Chalfont St. Peter	Chiltern & South Bucks	1423				74%	71	1352
Chesham	Chiltern & South Bucks	1197				79%	39	1158
Chess Valley	Chiltern & South Bucks	1430	1		2	92%	47	1383
Chiltern Ridges	Chiltern & South Bucks	1136			4	75%	3	1133
Chiltern Villages	Wycombe	1413	40	25	9	34%	1338	75
Cliveden	Chiltern & South Bucks	1519	80	27	17	71%	852	667
Denham	Chiltern & South Bucks	1913	22	28	6	71%	590	1323
Downley	Wycombe	1321	32	10	5	58%	482	839
Farnham Common and Burnham Beeches	Chiltern & South Bucks	1401	84	28	18	62%	1115	286
Flackwell Heath, Little Marlow and Marlow South-E	Wycombe	1632	85	10	9	39%	1533	99
Gerrards Cross	Chiltern & South Bucks	2016	18	28	1	60%	250	1766
Great Brickhill	Aylesbury	2572	58	32	7	54%	2145	427
Great Missenden	Chiltern & South Bucks	1729	62	36	28	40%	1572	157
Grendon Underwood	Aylesbury	2801			2	74%	57	2744
Hazlemere	Wycombe	1271		1	2	82%	88	1183
Iver	Chiltern & South Bucks	1594	149	42	39	64%	1438	156
Ivinghoe	Aylesbury	1926	44	10	1	37%	433	1493
Little Chalfont and Amersham Common	Chiltern & South Bucks	1364		1		93%	24	1340
Marlow	Wycombe	1769	3	10		48%	84	1685
Penn Wood and Old Amersham	Chiltern & South Bucks	2059	58	33	25	47%	1790	269
Ridgeway East	Wycombe	1639	2	5	2	47%	77	1562
Ridgeway West	Wycombe	1568		2		95%	14	1554
Ryemead and Micklefield	Wycombe	1044	102	11	10	52%	915	129
Stoke Poges and Wexham	Chiltern & South Bucks	2121	104	72	36	70%	1982	139
Stone and Waddesdon	Aylesbury	2196				54%	28	2168
Terriers and Amersham Hill	Wycombe	1078	2	5	6	71%	102	976
The Risboroughs	Wycombe	1538	1	1	2	27%	26	1512
The Wooburns, Bourne End and Hedsor	Wycombe	1509	71	16	9	33%	1422	87
Totteridge and Bowerdean	Wycombe	858	57	10	15	38%	747	111
Tylers Green and Loudwater	Wycombe	1528	4	35	1	67%	198	1330
Wendover, Halton and Stoke Mandeville	Aylesbury	2043	95	102	22	36%	1791	252
West Wycombe	Wycombe	1389	122	15	11	57%	1259	130
Wing	Aylesbury	2341		1	3	61%	32	2309
Winslow	Aylesbury	2366	2		7	75%	17	2349
TOTAL		85398	1845	831	381	58%	32004	53394

8. Customer Focus

Fix My Street queries relating to drainage and flooding have steadily decreased over the year, with 1,193 less between Jan – Jul, when compared against the number received in the same period in 2021. This is likely to be partly due to the improvements made to the reporting platform, as well as the enhanced gully cleansing and drainage repair programme that has been ongoing since April 2021.