



**Open Report on behalf of Andy Gutherson, Executive Director – Place**

Report to:	<b>Highways and Transport Scrutiny Committee</b>
Date:	<b>30 October 2023</b>
Subject:	<b>Highways – Gully Cleansing, Drainage Repair Schemes and Surface Water Flooding</b>

**Summary:**  
This report sets out the reactive, cyclic, and planned aspects of highways drainage maintenance including low level flooding response.

**Actions Required:**  
The committee is asked to consider and comment on the detail contained in the update and recommend any changes or actions.

## **1. Background**

### **Cyclic Maintenance**

Cyclic gully and chamber cleansing has continued with 6 gully tankers covering the County on preplanned routes. The number of gullies and chambers cleansed since April of this year is 71,180.

A site audit of 202 assets in August demonstrated a compliance rate of 96.5%.

### **Reactive Maintenance**

Since April over 805 assets been attended to with our 'Off Programme Jetter'. This would typically be to carry out cleansing of assets between cyclic visits to restore operational efficiency e.g., blockages.

Local highway teams have undertaken approximately 180 no. reactive repairs comprising urgent repairs to pipework and other drainage related assets such as chamber cover or gully grate replacement.

### **Minor Drainage Works 23/24**

Minor works schemes have been completed in the following locations:

Lincoln Road, Metheringham  
Manby Middlegate, Grimoldby  
Toll Bar Road, Marston  
Lenton Way, Frampton  
The Broadway, Woodhall Spa  
Old Fen Lane, Scrub Hill  
Woodhall Road, Tattershall Thorpe  
Bleasby Moo, Lissington  
Leagate Road, Tumbly  
Rauceby Drove, South Rauceby

### **Minor Drainage Works 24/25**

A programme of minor drainage works has been planned for 24/25 and can be viewed on the Power Bi Members Tool kit.

### **Additional Drainage Resources**

Through savings identified in year, additional resources are already or will be working within the County shortly. They are as follows:

- 2 no. gully tankers to support the local highway teams with reactive and investigation works.
- 1 no. minor works construction gang undertaking planned and reactive repairs.
- 1 no. minor works construction gang undertaking advanced works for the Minor Works Drainage programme.

### **Gully Cleansing - Parked Out Streets**

As presented at the July committee meeting, we are looking at ways of improving the access to cleanse gullies in 'parked out' streets. These typically comprise streets with dense urban housing close to town and city centres and vehicle parking on both or one side of the street depending on its width.

The issues arising are vehicles parked over or very close to the gully grate or parking in a manner that restricts the width of the road, and the gully tanker is unable to pass. Photographs 1, 2 and 3 in Appendix A demonstrate the issues faced.

Currently there are over 2500 assets on 223 streets across the county. Approximately 20% (around 500) of these are on 65 streets in Lincoln alone. Other streets are also being reviewed and some will require adding to this list.

By not being able to cleanse the gully means:

- The gully tanker has an aborted visit but can be instructed to return at the Highway Authority's cost.
- If the gully is full or blocked it can cause standing water in the highway or during extreme rainfall, there is a heightened risk of internal flooding.

The issue of parked out streets is a long standing one, with different techniques used to improve the number of gullies cleansed with varying degrees of success. Currently signs stating the exact day of cleanse are erected and a letter drop is undertaken. This has seen an improvement in the number of gullies cleansed on some streets, whilst on others the success rate is still very low.

The contract specification details the above methods but also outlines the use of measures to remove vehicle obstructions where the initial measures have not been successful.

To improve the gully cleanse success rate, we are now proposing to utilise that 'remove vehicle obstruction' method. This will entail the utilisation of temporary 'no waiting at any time' orders to prevent parking on streets to be cleansed. By its very nature this will displace vehicles and so to minimise the impact of that, routes will be developed that will allow those displaced to park nearby e.g., adjacent parked out streets won't be cleansed on the same day.

This method was used when LCC took over civil parking enforcement from the Police. Where a wholesale review of on street parking restrictions was required and because of this, large areas of residential parking, loading only and other bays, single and double yellow lines were refreshed. This required full access to streets, so temporary traffic regulation 'No Waiting at Any Time' orders were used along with physical barriers in the form of 'no waiting' cones to remove parked vehicles.

Clearly, communication is key with those affected and we are investigating ways to offer a real time notification service, particularly when cleansing is completed on a street, so residents can return their cars minimising the disruption. This will supplement letter drops and street signage.

Whilst this form of action would only be taken on a limited number of streets, without such measures the gullies remain unchecked, with the potential to silt up or become blocked and trigger the consequences previously described.

### **Highway Drainage Scheme Prioritisation**

A tool has been developed to prioritise identified drainage schemes when developing forward work programmes/annual plans. This project was a collaboration between TSP and WSP, our private sector partner, where evidence and risk-based methodologies have been devised, to ensure that schemes are promoted on community need.

Potential schemes are weighted against 19 categories that determine or 'prioritise' the individual scheme progression based on benefits to roads users, property owners and communities as a whole.

The focus of the tool is to ensure positive outcomes by improving highway safety during inclement weather and mitigating internal flooding. Examples of categories used to determine this are road hierarchy, extent and depth of standing water, known internal flooding location, structural integrity, impact on a Coastal Evacuation Route. Partnership working opportunities with other Risk Management Authorities are also identified, facilitating early discussions.

The prioritisation tool can be used for both minor and major drainage works supporting evidence-based decision making.

Appendix B shows screen shots of Prioritisation Tool during testing.

**2. Conclusion**

The Committee is asked to consider and comment on the detail contained in the report and recommend any changes or actions to the Executive Member for Highways, Transport, and IT. They are also asked to consider and comment on the collaborative working across directorates and with partners.

**3. Consultation**

**a) Risks and Impact Analysis**

Not applicable.

**4. Appendices**

These are listed below and attached at the back of the report	
Appendix A	Photographs of Issues Faced On 'Parked Out Streets'
Appendix B	Highway Drainage Prioritisation Tool

**5. Background Papers**

No background papers within Section 100D of the Local Government Act 1972 were used in the preparation of this report.

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## Appendix A

### Photographs of Issues Faced On 'Parked Out Streets'



**Photograph 1**  
Working space needed  
by gully tanker.



**Photograph 2**  
Gully tanker operation  
restricted by parked vehicles.



**Photograph 3**  
Example of a gully obstructed  
by parked vehicles.

# Highway Drainage Prioritisation Tool



## HIGHWAY DRAINAGE SCHEME PRIORITISATION - RISK FACTORS

<b>Asset Group</b>	Carriageway	<b>No Score</b>	<b>Access to Community Facilities</b>	No Access Issue Caused	0	<b>Property Flooding</b>	None	0		
	Footway and Cycleway			Impact on Public Transport, Village or Parish Hall, etc.	10		Some flooding of adjacent land which does not cause damage to buildings	10		
<b>Carriageway Hierarchy</b>	Major Road Network	10	<b>Extent of Flood</b>	No ponding or flooding on used areas	0	<b>Frequent Repeat Visits Required by Reactive Gangs</b>	None	0		
	Hierarchy 1 - Strategic Route	10		Water remains in channel	10		Infrequent Visits Recorded < 1 per year	10		
	Hierarchy 2 - Main Distributor	8		Water covers half of carriageway, footway or cycleway	20		More than once annually	20		
	Hierarchy 3 - Secondary Distributor	6		Water covers full carriageway, footway or cycleway	30		More than quarterly	40		
	Hierarchy 4 - Link Roads	4		<b>Depth of Ponding or Flooding</b>	Negligible		0	<b>Requires Additional Resource to Manage Flooding</b>	None	0
	Hierarchy 5 - Link Roads	3			<50mm		10		Sandbags, flood signage or emergency works required once	10
	Hierarchy 6 - Local Access Roads	2			Between 50 mm and 100mm		20		Sandbags, flood signage or emergency works required multiple times	20
Hierarchy 7 - Minor Access Roads	1	More than 100mm	30	Sandbags, flood signage or emergency works required each rainfall	40					
<b>Footway and Cycleway Hierarchy</b>	Hierarchy 1 - Primary Walking Routes	10	<b>Time for Ponding to Clear</b>	Less than 6 Hours	0	<b>No. Valid Enquiries Received</b>	0 to 10	0		
	Hierarchy 2 - Secondary Walking Routes	8		Between 6 and 12 Hours	20		10 to 20	5		
	Hierarchy 3 - Link Footways	7		More than 12 Hours	40		More Than 20	10		
Hierarchy 4 - Local Access Footways	6									

Screenshot 1 – Example of Risk Factors (partial screen shot)

## HIGHWAY DRAINAGE SCHEME PRIORITISATION

Site Details				Site Risk Factors											
Site Name	Forward Planning Brief Number	Easting	Northing	Date Added	Ranked Points	Ranked Position	Asset Group	Hierarchy	Speed Limit	Identified Collision Issue	Coastal Evacuation Route	Access to Community Facilities	Event of Flood	Property Flooding	Depth of Ponding or Flooding
Penny Close Junction	457132	530278	39723	09/04/2023	129	4	Carriageway	Hierarchy 6 - Local Access Roads	30mph	No Collision Evident	No	No Access Issue Caused	Water covers half of carriageway, footway or cycleway	Obstacles and some access issues make impacted	Between 50mm and 100mm
Griffith Bank, Salter	23022	549474	39302	30/09/2023	89	6	Carriageway	Hierarchy 6 - Local Access Roads	30mph	No Collision Evident	No	No Access Issue Caused	Water covers half of carriageway, footway or cycleway	Obstacles and some access issues make impacted	<50mm
Bus Lane Huddington	2300029	49194	36303	09/02/2023	47	9	Carriageway	Hierarchy 1 - Strategic Route	30mph	No Collision Evident	No	No Access Issue Caused	No ponding or flooding on used areas	None	Negligible
Victoria Av, Stead	452234	509483	34945	18/07/2022	30	13	Carriageway	Hierarchy 6 - Local Access Roads	40mph	No Collision Evident	No	No Access Issue Caused	No ponding or flooding on used areas	None	Negligible
Templeford Rd, Widdington	230053	49302	39308	09/04/2023	31	12	Carriageway	Hierarchy 4 - Link Roads	30mph	No Collision Evident	No	No Access Issue Caused	No ponding or flooding on used areas	None	Negligible
Gaithwaite Rd, Widdington	452429	497195	38440	23/09/2022	97	5	Carriageway	Hierarchy 1 - Strategic Route	30mph	No Collision Evident	No	Impact on Access to Schools or Similar Facilities	Water covers half of carriageway, footway or cycleway	Some flooding of adjacent land which does not cause damage to buildings	Negligible
Chaussée Via, Spalding	499402	623466	32278	01/02/2022	41	11	Carriageway	Hierarchy 4 - Link Roads	30mph	No Collision Evident	No	No Access Issue Caused	No ponding or flooding on used areas	None	Negligible
Fer Road, Huddington	457195	504038	38940	21/09/2022	24	16	Carriageway	Hierarchy 3 - Secondary Distributor	40mph	No Collision Evident	No	No Access Issue Caused	No ponding or flooding on used areas	None	Negligible
Chapel Gate, Spalding	4570721	623274	31890	24/02/2022	47	9	Carriageway	Hierarchy 1 - Strategic Route	30mph	No Collision Evident	No	No Access Issue Caused	No ponding or flooding on used areas	None	Negligible
School Lane North Scale	230053	494940	39989	27/09/2022	80	7	Carriageway	Hierarchy 5 - Link Roads	30mph	No Collision Evident	No	Impact on Access to Schools or Similar Facilities	No ponding or flooding on used areas	None	Negligible
Pengingale, Spalding	457160	623792	32293	09/04/2023	80	1	Carriageway	Hierarchy 5 - Link Roads	30mph	No Collision Evident	No	No Access Issue Caused	Water covers half of carriageway, footway or cycleway	Internal commercial or residential property flooding occurs	Between 50mm and 100mm
Someon Gate Lane, Widdington	452429	498998	34469	23/09/2022	100	3	Carriageway	Hierarchy 5 - Link Roads	30mph	No Collision Evident	No	No Access Issue Caused	Water covers half of carriageway, footway or cycleway	Obstacles and some access issues make impacted	<50mm
Victoria Road, Widdington	4555900	519997	362076	08/02/2023	138	2	Carriageway	Hierarchy 2 - Main Distributor	40mph	No Collision Evident	No	Impact on Access to Schools or Similar Facilities	No ponding or flooding on used areas	Internal commercial or residential property flooding occurs	Between 50mm and 100mm
Brigg Road, Carbor	457125	511942	40226	12/04/2023	26	14	Carriageway	Hierarchy 2 - Main Distributor	40mph	No Collision Evident	No	No Access Issue Caused	No ponding or flooding on used areas	None	Negligible

Screenshot 2 – Example of Test Scheme Data (partial screenshot)  
(Fictional data may have been used for testing purposes)



## HIGHWAY DRAINAGE SCHEME PRIORITISED LIST

Site Name	Forward Planning Brief Number	Easting	Northing	Date Added	Ranked Points	Ranked Position
Pennygate, Spalding	4557160	523782	322699	05/04/2023	150	1
Witham Road, Woodhall	4555800	519097	362976	06/02/2023	136	2
Somerton Gate Lane, Waddington	4554293	496908	364159	25/10/2022	130	3
Priestly Close, Kirton	4557132	530278	338723	05/04/2023	129	4
Greyfleet Bank, Saltfleet	293022	545474	393612	31/08/2021	89	5
Grantham Rd, Waddington	4554268	497785	364460	25/10/2022	87	6

Screenshot 3 – Schemes ranked according to input data  
(Fictional data may have been used for testing purposes)

## HIGHWAY DRAINAGE SCHEME PRIORITISED LIST

Site Name	Forward Planning Brief Number	Easting	Northing	Date Added	Ranked Points	Ranked Position
Grantham Rd, Waddington	4554268	497785	364460	25/10/2022	372	1
Pennygate, Spalding	4557160	523782	322699	05/04/2023	150	2
Witham Road, Woodhall	4555800	519097	362976	06/02/2023	136	3
Somerton Gate Lane, Waddington	4554293	496908	364159	25/10/2022	130	4

Screenshot 4 – Demonstrating change in ranking - Grantham Road, Waddington was set to worst case values and jumps to position 1. (Fictional data may have been used for testing purposes)