LEAD MEMBER FOR TRANSPORT AND ENVIRONMENT

DECISIONS to be made by the Lead Member for Transport and Environment, Councillor Nick Bennett

MONDAY, 19 NOVEMBER 2018 AT 10.00 AM

COMMITTEE ROOM - COUNTY HALL, LEWES

AGENDA

1 Decisions made by the Lead Cabinet Member on 15 October 2018 *(Pages 3 - 4)*

2 Disclosure of Interests
Disclosure by all Members present of personal interests in matters on the agenda, the nature of any interest and whether the Members regard the interest as prejudicial under the terms of the Code of Conduct.

3 Urgent items
Notification of any items which the Lead Member considers urgent and proposes to take at the appropriate part of the agenda.

4 Highway Policy Review *(Pages 5 - 130)*
Report by the Director of Communities, Economy and Transport

5 Communities Highway review and allocation of the 2018/19 Community Match Funding *(Pages 131 - 154)*
Report by the Director of Communities, Economy and Transport

6 Any urgent items previously notified under agenda item 3

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9 November 2018

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LEAD MEMBER FOR TRANSPORT AND ENVIRONMENT

DECISIONS made by the Lead Member for Transport and Environment, Councillor Nick Bennett, on 15 October 2018 at County Hall, Lewes

23 DECISIONS MADE BY THE LEAD CABINET MEMBER ON 17 SEPTEMBER 2018

23.1 The Lead Member approved as a correct record the minutes of the meeting held on 17 September 2018.

24 REPORTS

24.1 Reports referred to in the minutes below are contained in the minute book.

25 EASTERN COUNTY HIGHWAYS MAINTENANCE DEPOT PROJECT

25.1 The Lead Member considered a report by the Director of Communities, Economy and Transport.

DECISION

25.2 The Lead Member RESOLVED to (1) note the need for a new Highways Maintenance Depot; and

(2) approve the allocation of £370k from the 2019/20 Capital Structural Maintenance budget to enable the progression and completion of the project.

Reasons

25.3 There is an increasing risk that maintenance services will have to cease in the future if the limitations and shortfalls with the current facilities at Sidley and Cripps Corner depots are not addressed. This would lead to significant increases in revenue costs if operations for the east of the county had to operate from the nearest alternative depot in Heathfield. However, an opportunity to develop a modern and 'future proofed' facility at Queensway has been identified to ensure highway maintenance can be delivered effectively in the east of the county long into the future.

25.4 The Council's Capital Strategic Asset Board confirmed that no additional funding is available and that the additional funding should come from within the existing CET allocations. The re-allocation of £370k from the 2019/20 Capital Structural Maintenance budget will enable the development of a new depot facility at Queensway to complete the project.

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Report to:	**Lead Member for Transport and Environment**
Date of meeting:	**19 November 2018**
By:	**Director of Communities, Economy and Transport**
Title:	**Highway Policy Review**
Purpose:	**To seek Lead Member agreement for the amendments to Highway Service policies and strategies**

RECOMMENDATIONS: **The Lead Member is recommended to:**

(1) Rescind the policy sections and Drainage Management Strategy summarised in Appendix B and detailed in Appendix C;

(2) Approve the proposed new Highway Skid Resistance policy summarised in Appendix B and detailed in Appendix D; and

(3) Approve the proposed amendments to the policies and Highway Asset Management Strategy summarised in Appendix B and detailed in Appendix E.

1. Background Information

1.1 Many of the maintenance tasks carried out by East Sussex County Council's Highways department are statutory duties or powers required by legislation. The Council's highway policies set out the Council's approach where local discretion is permitted in how duties or powers are applied, or in areas for which there is no legislation.

1.2 Highway maintenance policies and standards have been developed and adopted by East Sussex County Council Highways over the years to:

- ensure compliance with new statutory requirements and industry best practice;
- respond to incremental changes and improvements to operational practices; and
- provide consistency and clarity for customers and key decision-makers.

1.3 During 2017 an initial review of the highway policies was undertaken with those that required amendments being updated and approved by Lead Member at the meeting on 16 October 2017. Further reviews of highway policies and related strategies have been carried out to ensure that they comply with:

- current legislation, guidance and best practice;
- corporate policies and priorities along with the local transport policy; and
- Highways and Infrastructure Services Contract needs and outcomes.

2 Supporting Information

2.1 In carrying out these reviews, consultation has been carried out with key stakeholders including the officers and contractors with particular expertise in each area and those responsible for delivering the highway service. This has included the appropriate technical experts including the Highways Asset Management Team. Policies have also been compared to those of neighbouring authorities to ensure a consistent approach.

2.2. An Equality Impact Assessment has been carried out and a summary of the findings is detailed in Appendix A. The analysis and evidence provided demonstrates that there is little potential for discrimination and that all appropriate opportunities to advance equality and foster good relations between groups have been taken.

2.3 Following the review of existing highway policies, proposals have been made to amend a number as appropriate and the need for a new policy to formalise our approach to the management of highway skid resistance has been identified.

2.4 The following list summarises the proposals for each of the policies included in this report. A summary of each recommendation can be found in Appendix B; copies of the policies to be rescinded are detailed in Appendix C and a new proposed policy is detailed in Appendix D. Appendix E shows the policies and strategies in their current form and with their proposed amendments.

Policies to be rescinded (Appendix C)

- Highway Drainage Strategy 2015 – 2018
- Transport Asset Management Plan – Chapter 2 section detailing Carriageway and Footway Warning Levels
- Transport Asset Management Plan – Chapter 6 Guidance Notes on SCRIM and Skidding Resistance

New Policies (Appendix D)

- Highway Skid Resistance Policy

Policies to be updated (Appendix E)

- Highway Asset Management Policy
- Highway Asset Management Strategy 2018-2024
- Highway Drainage Policy

2.5 It should be noted that this is not a comprehensive list of all Highway related policies and that there are additional policies for which no changes were considered necessary during this review.

3 Financial Appraisal

3.1 There are no additional financial implications in respect of the recommendations detailed in this report.

4 Conclusion and Reasons for Recommendations

4.1. The highways maintenance policies have been reviewed to ensure that they support:

- current legislation, guidance and best practice;
- the County Council's corporate priorities and local transport policy; and
- Highways Infrastructure Services Contract needs.

4.2. The Lead Member is recommended to approve the proposals summarised in Appendix B and detailed in Appendices C, D and E, to ensure that East Sussex County Council has clear, consistent and up to date policies describing its approach to managing and maintaining the highway network across the county.

RUPERT CLUBB
Director of Communities, Economy and Transport

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LOCAL MEMBERS
All

BACKGROUND DOCUMENTS
Equality Impact Assessments

Equality impact assessment summary report for Highway Policy Review 2018

Please complete this summary, which will be used to publish the results of your impact assessment on the County Council's website.

Date of assessment: September 2018

Manager(s) name: Mathew Jasper **Role:** Team Manager - Asset Management

Proposal, project, service, strategy or policy, that was impact assessed:

Highway Asset Management Policy
Highway Asset Management Strategy
Highway Asset Management Drainage Policy
Highway Asset Management Drainage Strategy 2015-2018
Highway Skid Resistance Policy
Transport Asset Management Plan

Summary of findings:

Research indicates that the proposed recommendations and updates to these policies would have a neutral impact. The reviewed policies reflect current legislation and best practice, and provide a greater level of clarity for all users. There will be no significant change in the impact of these policies on the different equality groups.

Summary of recommendations and key points of action plan:

No further actions are considered necessary.

A system is in place to review these policies every two years or more often where incidents, complaints / feedback, changes to legislation or best practice necessitate a more urgent review. The policy review process will take into consideration feedback / complaints from users, particularly where it relates to equality, to help support and inform decision making.

Groups that this project or service will impact upon

Please mark the appropriate boxes with an 'x'

	Positive	Negative	Neutral
Age			X
Disability			X
Ethnicity			X
Gender/Transgender			X
Marital Status/Civil Partnership			X
Pregnancy and Maternity			X
Religion/Belief			X
Sexual Orientation			X
Other (carers, literacy, health, rurality, poverty)			X

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Appendix B – Rationale for proposed changes to policies and strategies

Policies / Strategies to be rescinded			
POLICY/STRATEGY and DESCRIPTION	**LAST UPDATED**	**ISSUES and RECOMMENDATIONS**	**IMPACT OF POLICY CHANGE**
Highways Drainage Strategy 2015 – 2018 The Highways Drainage Strategy was approved in readiness for the new Highways maintenance contract in 2016.	Lead Member Meeting – 19 October 2015	The Highways Drainage Strategy has been superseded by the updated Highways Drainage Policy, Highways Asset Management Plan and Drainage Plan. These Plans provide the desired short, medium and long term outcomes for the drainage asset. **Recommendation: To rescind the strategy**	No changes to current practice.
Transport Asset Management Plan (TAMP) – Chapter 6 Guidance Notes on SCRIM and Skidding Resistance	Lead Member Meeting – 26 March 2007	Chapter 6 of the Transport Asset Management Plan on skidding resistance has been superseded by a new Skid Resistance Policy and plan, which have been drafted in line with the most recent standards. **Recommendation: To rescind Chapter 6 of the TAMP**	No impact on the service delivery.
Transport Asset Management Plan (TAMP) – Chapter 2 section on carriageway and footway warning levels	Lead Member Meeting – 26 March 2007	The carriageway and footway warning levels details in Chapter 2 of the Transport Asset Management Plan were introduced to have a neutral impact on service delivery, but to assist with works programming. They are no longer considered relevant as East Sussex County Council now follows an asset management approach in determining highway maintenance priorities. **Recommendation: To rescind the relevant section from Chapter 2 of the TAMP**	No impact on the service delivery.

Policy / Strategy to be updated			
POLICY / STRATEGY and DESCRIPTION	**LAST UPDATED**	**ISSUES and RECOMMENDATIONS**	**IMPACT OF POLICY CHANGE**
Highway Asset Management Policy The policy was created to reflect the council's commitment to infrastructure asset management and to demonstrate how this approach aligns with the County Council's priorities. It is a prerequisite of the Department for Transport (DfT), which is also linked to funding, for authorities to have an externally published Highway Asset Management Policy.	Lead Member for Transport and Environment – 19 October 2015 Agenda item 8	1. The purpose of the policy is currently stated as: "*East Sussex County Council (ESCC) the vital role played by the local highway network in supporting the Council Plan 2014-2018 and the Local Transport Plan 2011-2026. ESCC considers an asset management approach to the maintenance of the highways network will support the achievement of the Council's visions, namely*:" It is recommended to replace this with a more succinct sentence: '***East Sussex County Council considers that an asset management approach to the maintenance of the highway network will support the achievement of the Council Priorities and Local Transport Plan aims*** **Recommendation: Update the purpose of the policy to make it more concise.** 2. The policy statement currently states: **"***East Sussex County Council is committed to adopting the principles of asset management to ensure it has a highway network that meets the needs of its community, supports the changing requirements of businesses and local economic growth. By taking an asset management based approach, the right investment decisions will be made with the investment available, to maximise value for money, targeting resources and managing risks to maintain a highway environment that is safe and secure for its users*." It is recommended that the policy statement be replaced with the following to better align with national guidance: **"*East Sussex County Council is committed to asset management as a means to deliver a more efficient and effective approach to management of highway infrastructure assets through longer term planning and ensuring that levels of service are defined and achievable for available budgets. It supports making the case for funding, for better communication with stakeholders, and facilitates a greater understanding of the*	No impact on the service as the policy still reflects current legislation and best practice.

		***contribution highway infrastructure assets make to economic growth and social well-being of local communities*.”** **Recommendation: Update the policy statement to reflect best practice and legislation.** 3. The current policy contains a section ‘specific policies’ which detail how the asset management objectives align with the Council priorities. This section will be removed and the text will be transferred into the policy statement section of the updated policy (above) with no changes. **Recommendation: To remove ‘specific policies’ as a section and transfer the text into the policy statement.**	
Highway Asset Management Strategy	Lead Member for Transport and Environment – 19 October 2015 Agenda item 8	1. The Highways Asset Management Strategy 2015 - 2022 has been updated with the most recent figures available for 2018 and sections updated in line with current County Council approaches and DfT requirements and the Code of Practice 'Well-managed highway infrastructure'. **Recommendation: To approve the updated strategy for 2018-2024.**	No impact on the service as the strategy still reflects current legislation and best practice.
Highway Drainage Policy	Lead Member for Transport and Environment – 18 April 2016 Agenda item 4	1. The purpose of the policy is currently stated as: “*ESCC considers maintenance of the highway drainage system, including but not limited to: drains, linear drainage systems, gullies, chambers, catchpits, soakaways, outfalls associated pipework, ditches and grips, as a means of ensuring the drainage asset continues to function as intended*”. It is recommended that this statement be replaced with the following statement: “***ESCC is committed to ensuring that it has the best highway network for the investment available. A targeted approach to the maintenance of its drainage assets will endeavour to ensure that surface water on the highway is captured and discharged appropriately***.” This provides a clearer purpose of intent. **Recommendation: Update the policy purpose to a clearer statement of intent.**	Some gullies will now be cleansed at a minimum of every 36 months, the previous service level being every 24 months. This is due to a risk-based approach and modelling conducted by our contractor. Higher risk gullies will now be cleansed more frequently.

		2. The policy purpose currently lists the Council Priorities, Local Transport Plan and East Sussex Highway Service Outcomes. The statement would be clearer and more concise by removing these lists, as they can be found on the ESCC website and in the Asset Management Strategy. **Recommendation: Update the policy purpose by removing unnecessary wording that is available in other documents.** 3. The policy statement is currently**: "***Drainage assets will be inspected and cleansed using a risk based and targeted approach as determined by recorded silt levels. This approach will be applied to whole sections of road, rather than individual assets, ensuring maximum operational efficiency and effectiveness*". This will be replaced with the following new policy statement: 1. Highway drainage assets will be maintained through a risk based approach and the maintenance regime will, at a minimum, be reviewed annually. 2. All highway gullies and catchpits will be inspected and cleaned at frequencies determined according to known historical records of silt levels and local intelligence about flood risk. These frequencies shall be detailed in the highway drainage management plan. Where the inspection or cleaning has not been successful, the reasons for failure shall be recorded and remedial action shall be made according to a risk-based approach as described in the highway drainage maintenance plan. 3. The performance of the highway drainage asset shall be monitored through drainage inspection records, safety inspection records and stakeholder contact to ensure that the asset is managed effectively. The highway drainage management plan will include measures to mitigate specific identified flood risks. 4. All other drainage assets will be maintained as specified in the highway drainage management plan. 5. Drainage assets are recorded in the drainage asset register and located using GPS coordinates. The register is linked to inspection records that provide the current condition of the asset, with the records required detailed in the current contract. 6. Where appropriate, an emergency response to reports of blocked drainage assets or standing water will be provided.' **Recommendation: Update the policy statement.**	

		4. The current policy contains a section 'specific policies: 1.All highway drainage assets to be inspected no less than once every twenty-four months. 2.Where the gully or catchpit is silted and/or has a blocked outlet, it will be cleaned fully to the base of the gully / catchpit and the connection jetted up to 5 metres. 3.Drainage assets to be GPS mapped and condition noted including silt levels before and after inspection.4.Provision of an emergency response to reports of blocked drainage assets or standing water. It is recommended that this section is removed and information that remains current is transferred into the new policy statement above. Information that refers to operational matters will be removed. **Recommendation: Remove 'specific policies' and transfer relevant information to the new policy.**	

New policies

POLICY and DESCRIPTION	LAST UPDATED	ISSUES and RECOMMENDATIONS	IMPACT OF POLICY CHANGE
Highway Skid Resistance Policy The purpose of the policy is to set out the principles for how ESCC monitors and maintains skid resistance across the county. It provides evidence of the council's proactive approach to skid resistance management.	N/A	Effective maintenance of the highway network includes the requirement to monitor the skid resistance of the road surface and to take a proactive approach in order to maintain the skid resistance across the network to an appropriate standard. **Recommendation: To approve the new policy.**	There will be no impact on the service currently provided. The policy formalises the approach currently in place.

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East Sussex
County Council

Highway Asset Management

Drainage Strategy 2015-2018

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Highway Drainage – A Critical Asset

The highway drainage asset is critical to ensuring the controlled removal of water from the carriageway to allow customers to use it safely. The impact that failure of the drainage asset can have on other highway assets, wider transport infrastructure and private property is significant.

The Highways Act 1980 empowers highway authorities to construct and maintain drainage systems to remove surface water from the highway. More recently, the **Flood and Water Management Act 2010** gives local authorities a role for the management of local flood risk.

The biggest challenge facing highway authorities in managing highway drainage and local flood risk is **defining the asset to identify the need**. In many cases the location and condition of highway drainage assets are far from understood which presents real challenges in making the case for investment.

Highway drainage assets across East Sussex have suffered from significant under investment over many years. As a result **we have a dated drainage system that we have very little knowledge about** which is costing us more to maintain year on year. Our existing approach to maintaining highway drainage assets is largely reactive. This is very costly and does not address the issue of needing to understand where to invest to halt the deterioration.

Council Priorities

The Highway Asset Management function and approach to highway drainage is following the **'One Council'** approach and will be steered by the Council's Priorities:

- Helping People Help Themselves
- Driving Economic Growth
- Making Best Use of Our Resources
- Keeping Vulnerable People Safe

The East Sussex County Council **Highway Asset Management Policy** establishes the Council's commitment to Highway Asset Management and demonstrates how this approach aligns with the Council Plan. The Policy has been published alongside the **Highway Asset Management Strategy** on the Council's website.

Drainage Objectives

To help deliver the Council Priorities and implement the relevant recommendations from the **Highways Maintenance Efficiency Programme (HMEP) – Guidance on the Management of Highway Drainage Assets (2012)**, the objectives for highway drainage in East Sussex are as follows:

- Define the Highway Drainage Asset
- Deliver an Efficient & Effective Highway Drainage Service
- Work in collaboration with People & Partnerships

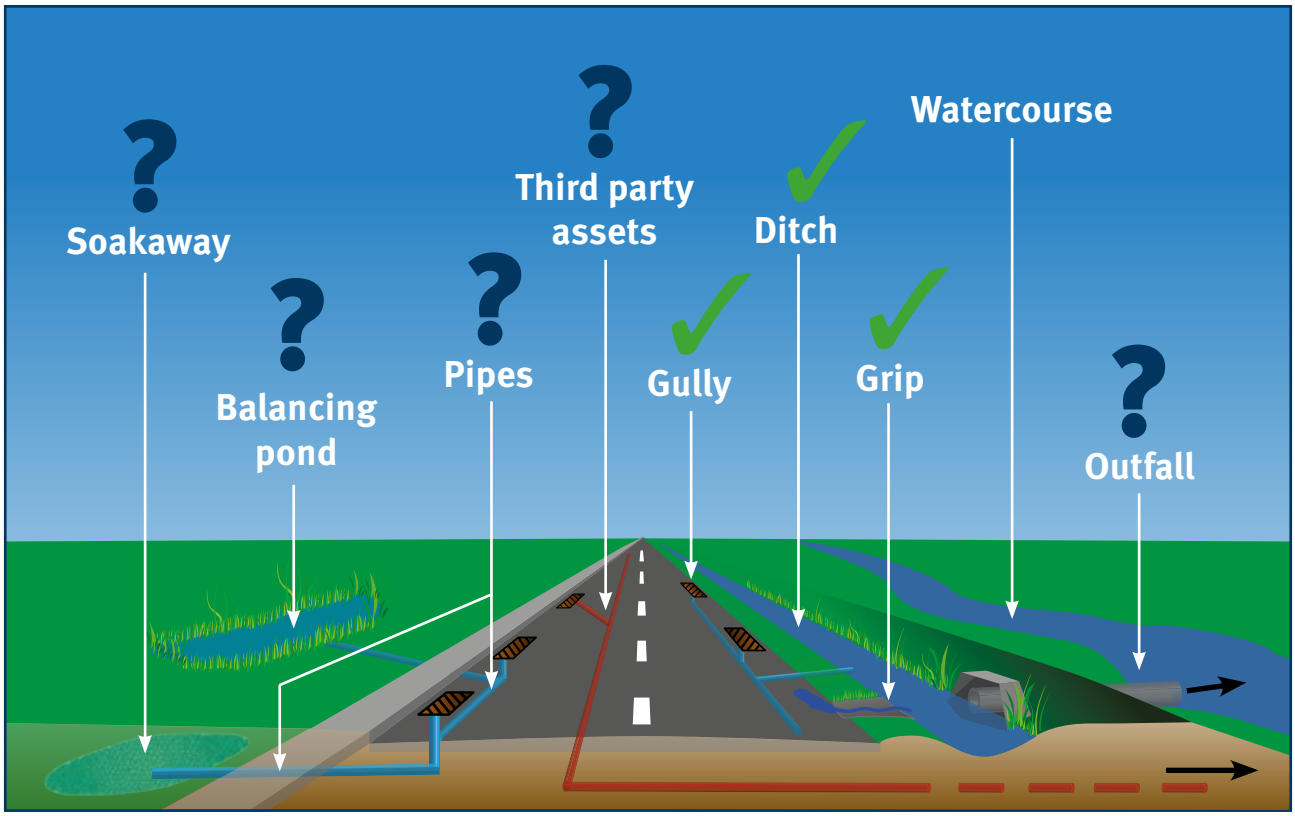
These objectives will guide the approach to highway drainage asset management in East Sussex and will focus the delivery of the actions identified within this strategy.

Objective 1 – Define the Highway Drainage Asset

Improving our understanding

The current inventory of highway drainage assets across East Sussex includes approximately **98,000 gullies**, **10,000 grips** and **500km of ditch**. In addition to details about the location and specification of these assets there is a good understanding of their condition from inspections and surveys. In particular, observation of silt levels in gullies at regular inspections provides useful statistics to help focus, support and inform our maintenance approach. What we do not know is the location, specification and most importantly, the condition of other connecting drainage assets (see **Figure.1**).

Figure.1 Illustration of highway drainage system (known/unknown assets).



To direct resources to define the highway drainage asset in areas of **greatest risk first**, targeted surveys will be undertaken in areas of East Sussex which are at risk of local flooding. We use a **'whole system'** approach to build an inventory of drainage assets from inputs (e.g. gullies) to outputs (e.g. ditches) and every element in between (e.g. pipes). An understanding of the drainage asset as whole systems in areas at risk of local flooding will help to identify issues and constraints while focusing, supporting and informing maintenance activities.

Objective 2 – Deliver an Efficient & Effective Highway Drainage Service

Historically, the approach in East Sussex to repairing and improving our highway drainage assets has been **predominantly reactive**, rather than pro-active.

We are now shifting our focus to proactively maintain our drainage asset and **deliver a safe, serviceable and sustainable drainage service** into the future.

To achieve an efficient and effective drainage service we will deliver the following:

- **Safety** – Ensuring the controlled removal of water from the carriageway to allow customers to use it safely.
- **Serviceability** – Maintaining the drainage asset to a condition in which it remains functional for draining the highway.
- **Sustainability** – Designing, constructing and maintaining drainage assets to meet both current and future needs in a changing environment while making effective use of limited budgets.

Future Delivery

The principles of Asset Management are at the core of the new Highways Contract beginning in May 2016. With a focus upon outcome delivery and performance, the new contract has been structured to accommodate the limited understanding of asset condition, meanwhile encouraging collaborative working between both Employer (County Council) and Contractor to improve this understanding through the life of the contract (2016-2023).

We will work with the incoming Contractor to deliver a safe, serviceable and sustainable drainage service while improving our understanding of the drainage asset.

Efficiency and Effectiveness

The two elements of efficiency and effectiveness must be balanced appropriately to ensure the effective use of limited budgets.

We are addressing this balance by ensuring that our gully cleansing operations are undertaken efficiently by targeting **all** gullies along a whole road instead of individual gullies. Whole roads are visited on a prioritised basis informed by recorded silt levels. Effectiveness of the operation is monitored by recording silt levels after cleansing in addition to site audits.

We will continue to target our gully cleansing resource to areas where the gullies need cleansing more often. By **applying a risk factor to every one of our gullies based on flood risk and road hierarchy** we have been able to prioritise which gullies need to be fixed first when a problem is reported.

Data & Systems

It is recognised that effective Asset Management planning and decision making relies on having the appropriate data available to those who need it and for that data to be appropriate, reliable and accurate.

We have worked with external software providers to build a **Data Management System** which holds our current drainage inventory along with condition information. We will continue to develop this system further by mapping know areas at risk of flooding (hotspots) which will focus maintenance activities. The development of this system will ensure that we address the causes of failing drainage assets rather than just the symptoms.

Source – horizons.yotta.co.uk

Objective 3 – Work in collaboration with People & Partnerships

County Council employees and other organisations responsible for drainage assets and flood risk management are a valuable source of asset management information. Therefore, both individuals and partnering organisations will be engaged and their knowledge captured and incorporated into data records.

We will be working with the Council's **Flood Risk Management Team** to draw upon flood history records from **Surface Water Management Plans**. These have been undertaken in areas at risk of local flooding across the County. Furthermore, we will assist in delivering the actions identified within the **Local Flood Risk Management Strategy**.

External organisations such as the Environment Agency and Southern Water will be engaged to address water management issues and share information and data to help **achieve shared objectives**.

The Drainage Challenge

Due to historic under investment in the maintenance of our highway drainage systems there is a **significant backlog** of defective drainage assets across the county. Addressing this backlog will put pressure on limited revenue budgets and therefore we will **target capital investment** to resolve the cause of the drainage issues rather than just the symptoms.

By investing in capital drainage schemes, savings will be realised through reducing the maintenance cost to other highway infrastructure, especially carriageway which often suffers from accelerated deterioration as a result of failing drainage systems.

The immediate future (2015-2016)

Asset Management will be at the core of the new Highways Contract beginning in May 2016. In preparation for this, we will begin building our understanding of the drainage asset by undertaking a series of targeted inventory surveys in areas at risk of local flooding. We will work to co-ordinate maintenance activities across our teams and drainage assets whilst collecting on-the-go inventory and condition data for use in the future. This will improve the performance of this critical asset in the short term and begin to set the building blocks in place for **future programmes of prioritised maintenance**.

Department for Transport (DfT) - Future Funding

We will be improving our knowledge of drainage infrastructure across the county to develop **capital schemes of between £5-20m**. These schemes will demonstrate evidence based decisions on drainage improvements, enabling us to bid for capital funding under the **DfT Challenge Fund in 2017** and meet the requirements for the **DfT Incentive Fund**.

Action Plan (2015-2018)

To achieve the County Council's Priorities and the objectives for highway drainage asset management in East Sussex a plan has been developed which will be delivered between 2015 and 2018.

Action Plan (2015-2018)

Drainage Objectives	Action	Timescale	Links to County Council Priority Outcomes	Links to the HMEP – Guidance on the Management of Highway Drainage Assets (2012)
Define the Highway Drainage Asset	Define investment required and **areas at risk of local flooding** for targeted inventory and condition surveys to be undertaken.	August 2016	Making Best Use of Our Resources Keeping Vulnerable People Safe	Recommendation 3 Recommendation 4
	Undertake targeted **inventory & condition surveys** in areas at risk of local flooding	December 2018	Making Best Use of Our Resources Keeping Vulnerable People Safe	Recommendation 3 Recommendation 4
Deliver an Efficient & Effective Highway Drainage Service	Complete the agreed two-year targeted cyclical **gully cleansing** programme on-time.	April 2017	Making Best Use of Our Resources Keeping Vulnerable People Safe	Recommendation 1 Recommendation 6 Recommendation 9 Recommendation 11
	Implement new process for **prioritising investigation of drainage defects**	October 2015	Making Best Use of Our Resources Keeping Vulnerable People Safe	Recommendation 1 Recommendation 6 Recommendation 11
	Develop **prioritised programme** of capital schemes in advance of **DfT's Challenge Fund 2017.**	March 2017	Making Best Use of Our Resources	Recommendation 1 Recommendation 6
Work in collaboration with People & Partnerships	Engage with **internal teams and external organisations** especially in relation to flood risk management	December 2015	Making Best Use of Our Resources Helping People Help Themselves	Recommendation 2 Recommendation 7 Recommendation 8 Recommendation 10
	Develop existing **Data Management System** to include all known drainage asset inventory and mapped areas at risk of flooding to focus maintenance activities.	December 2018	Helping People Help Themselves	Recommendation 5

Glossary

The following terms are used in this strategy:

Asset management

A strategic approach which identifies the optimal allocation of resources for the management, operation, preservation and enhancement of the highway infrastructure to meet the needs of current and future customers.

Critical asset

An asset without which you cannot deliver a statutory service.

Cyclical maintenance

Works which are carried out on a planned and regular basis.

Deterioration

The change in physical condition of an asset resulting from use or ageing.

Grip

A grip is a shallow ditch/channel connecting the road edge to the roadside ditch.

Gully

A drainage pit covered by an open metal grating located on the road edge. Its purpose is to drain rain water from the highway.

Inventory

A list of assets with details of location, specification and condition.

Local Flood Risk Management Strategy

A high level strategy which assesses local flood risk across the county and sets out objectives and actions for managing it.

Outfall

A structure through which a drainage system discharges into ditch or watercourse.

Proactive maintenance

Maintenance undertaken before the function of an asset is affected.

Reactive maintenance

Maintenance undertaken when the function of an asset has already been affected.

Soakaway

A pit, typically filled with hard core, into which water is piped so that it drains slowly out into the surrounding soil.

Surface Water Management Plans

A study to understand the flood risk that arises from local flooding, which is defined by the Flood and Water Management Act 2010 as flooding from surface runoff, groundwater, and ordinary watercourses.

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TRANSPORT ASSET MANAGEMENT PLAN
-
MAINTENANCE MANAGEMENT POLICY DOCUMENTS

MAINTENANCE STANDARDS & WARNING LEVELS

CHAPTER TWO

East Sussex County Council
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INTRODUCTION

Under section 58(2) of the Highways Act[1] the highway authority has a special defence against an action for damages for non-repair of highway, if the following criteria have been considered;

(a) the character of the highway, and traffic which was reasonably to be expected to use it;
(b) the standard of maintenance appropriate for a highway of that character and used by such traffic;
(c) the state of repair in which a reasonable person would have expected to find the highway;
(d) whether the highway authority knew, or could reasonably have been expected to know, that the condition of the part of the highway to which the action relates was likely to cause danger to users of the highway;
(e) where the highway authority could not reasonably have been expected to repair that part of the highway before the cause of action arose, what warning notices of its condition had been displayed;

This section defines the maintenance standards approved by this Highway Authority for roads, footways and cycleways in consideration of (b) and (c) above.

MAINTENANCE STANDARDS

The main reference document for maintenance standards is the 'Well-maintained Roads Code of Practice for Highway Maintenance Mangement[2]', which contain national standards that have been established after research and represent a range of values, thus enabling a highway authority to select standards appropriate to its policies and local circumstances.

The maintenance standards and warning levels which follow have been grouped into the county's maintenance budget headings for ease of reference.

1. *Routine Maintenance*

Cyclic Maintenance

These can be grouped into the following types of work:-

a. ***Gully Emptying, Drain Cleaning and Minor Repairs***

The emptying of gullies and catchpits and hydraulic jetting of gully connections and drain runs, and minor repairs to gullies catchpits, grip clearing and cleaning gully tops and the drainage system.

b. ***Traffic Signs***

The cleaning of traffic signs.

2. *Preventative and Structural Maintenance*

Preventative and structural maintenance although two separate types of work are, for the purposes of setting maintenance standards, interlinked. If preventative maintenance is not undertaken at a certain stage in the life of a carriageway or footway then at a later stage more expensive structural maintenance measures will have to be undertaken.

There are two different types of standard which can be set for carriageway or footway, these are;

1. *Warning Levels*

These are an engineering measurement and are used as a method for prioritising work on a needs basis, within the resources available.

2. *Intervention Levels*

These are levels at which intervention needs to be considered and can include the size of particular defects which the highway authority would be expected to take immediate action to make safe. These can be found in **TAMPMMPD-04 - Guidance Notes for Inspectors when Undertaking 'Safety' Inspections**.

a. Carriageways

There are a number of modes of deterioration for carriageways with the condition being measured in the following ways;

(i) Loss of Anti-skid Surfacing

The loss or stripping off of anti-skid material which has normally been laid at sensitive locations.

(ii) Surface Fatting Up

The surface of the road becoming bitumen rich. This can occur due to a combination of excess bitumen migrating to the surface with the aggregate moving below the surface.

(iii) Heavy Crazing/Cracking

The cracking and coarse crazing of the surface leading to the ingress of water into the road foundation.

(iv) Pushing/Rutting and Deformation

This is the pushing of the top surface due to the action of the vehicles. The formation of ruts or channels in the wheel tracks and deformation due to a week foundation.

(v) Minor Potholing

Extensive areas of minor potholing which would not be identified within the safety inspections as a category 1 defect.

(vi) Verge Damage

Excessive damage to the verge by overriding of vehicles.

(vii) Drainage Competence

Ponding of water on the surface showing either inadequate drainage or poor vertical alignment.

(viii) Road Marking Visibility

The loss of road markings at junctions and solid white lines in the centre of the road.

The following are the warning levels for each category of road taken from the road hierarchy[2],

CARRIAGEWAY - WARNING LEVELS			
Location	**Warning Category**	**Road Category**	
		1 & 2	**3 & 4**
Loss of Anti-Skid Surfacing			
Whole Road	High	Length ***greater than 25metres*** in either lane	Length ***greater than 50metres*** in either lane
	Medium	Length between ***10metres to 25metres*** in either lane	Length between ***25metres to 50metres*** in either lane
	Low	Length between ***5metres to 10metres*** in either lane	Length between ***10metres to 25metres*** in either lane
Surface Fatting Up			
On a sharp bend (warning sign present), or the approaches to pedestrian crossing or signalised junction.	High	Length ***greater than 25metres*** in either lane	Length ***greater than 50metres*** in either lane
	Medium	Length between ***10metres to 25metres*** in either lane	Length between ***25metres to 50metres*** in either lane
	Low	Length between ***5metres to 10metres*** in either lane	Length between ***10metres to 25metres*** in either lane
Approaches to sharp bend (warning sign present) or major junctions (A or B roads)	High	Length ***greater than 100metres*** in either lane	Length ***greater than 200metres*** in either lane
	Medium	Length between ***50metres to 100metres*** in either lane	Length between ***100metres to 200metres*** in either lane
	Low	Length between ***25metres and 50metres*** in either lane	Length between ***50metres and 100metres*** in either lane
Non-event section of road	High	Length ***greater than 200metres*** in either lane	Length ***greater than 300metres*** in either lane
	Medium	Length between ***100metres to 200metres*** in either lane	Length between ***200metres to 300metres*** in either lane
	Low	Length between ***50metres and 100metres*** in either lane	Length between ***100metres and 200metres*** in either lane
Heavy Crazing/Cracking			
Whole Road	High	Length ***greater than 50metres*** in either lane	Length ***greater than 100metres*** in either lane
	Medium	Length between ***25metres to 50metres*** in either lane	Length between ***50metres to 100metres*** in either lane
	Low	Length between ***10metres to 25metres*** in either lane	Length between ***25metres to 50metres*** in either lane

CARRIAGEWAY - WARNING LEVELS

Location	Warning Category	Road Category	
		1 & 2	3 & 4
Pushing/Rutting/Deformation			
On sharp bend (warning sign present), or the approaches to pedestrian crossing or signalised junction.	High	Length ***greater than 25metres*** in either lane	Length ***greater than 50metres*** in either lane
	Medium	Length between ***10metres to 25metres*** in either lane	Length between ***25metres to 50metres*** in either lane
	Low	Length between ***5metres to 10metres*** in either lane	Length between ***10metres to 25metres*** in either lane
Approaches to sharp bend (warning sign present) or major junctions (A or B road)	High	Length ***greater than 100metres*** in either lane	Length ***greater than 200metres*** in either lane
	Medium	Length between ***50metres to 100metres*** in either lane	Length between ***100metres to 200metres*** in either lane
	Low	Length between ***25metres and 50metres*** in either lane	Length between ***50metres and 100metres*** in either lane
Non-event section of road	High	Length ***greater than 200metres*** in either lane	Length ***greater than 300metres*** in either lane
	Medium	Length between ***100metres to 200metres*** in either lane	Length between ***200metres to 300metres*** in either lane
	Low	Length between ***50metres and 100metres*** in either lane	Length between ***100metres and 200metres*** in either lane
Minor Potholing			
Whole Road	High	Length ***greater than 50metres*** in either lane	Length ***greater than 100metres*** in either lane
	Medium	Length between ***25metres to 50metres*** in either lane	Length between ***50metres to 100metres*** in either lane
	Low	Length between ***10metres to 25metres*** in either lane	Length between ***25metres to 50metres*** in either lane
Verge Damage			
Either Verge	High	Length ***greater than 50metres***	Length ***greater than 100metres***
	Medium	Length between ***25metres to 50metres***	Length between ***50metres to 100metres***
	Low	Length between ***10metres to 25metres***	Length between ***25metres to 50metres***
Drainage Competence			
Whole Road	High	Length ***greater than 25metres*** in either lane	length ***greater than 50metres*** in either lane
	Medium	Length between ***10metres to 25metres*** in either lane	Length between ***25metres to 50metres*** in either lane
	Low	Length between ***5metres to 10metres*** in either lane	Length between ***10metres to 25metres*** in either lane

CARRIAGEWAY - WARNING LEVELS			
Location	**Warning Category**	**Road Category**	
		1 & 2	**3 & 4**
Road Marking Visibility			
Junctions including right turn hatched marking lanes	High	***At least 50%*** of the junction road markings lost	***At least 75%*** of the junction road markings lost
	Medium	***Between 25% and 50%*** of the junction road markings lost	***Between 50% and 75%*** of the junction road markings lost
	Low	***Between 10% and 25%*** of the junction road markings lost	***Between 25% and 50%*** of the junction road markings lost
Solid white line centre markings	High	Length ***greater than 25metres***	length ***greater than 50metres***
	Medium	Length between ***10metres to 25metres***	Length between ***25metres to 50metres***
	Low	Length between ***5metres to 10metres***	Length between ***10metres to 25metres***

b. Footways & Kerbs

There are a number of modes of deterioration for footways;

(i) Cracked/Broken Paving Slabs

Extensive cracked or broken slabs.

(ii) Heavy Crazing/Cracking Blacktop Footway

The cracking and coarse crazing of the surface leading to the ingress of water into the road foundation.

(ii) Displaced Kerbs

Lengths of kerbs which have been displaced.

The following are the warning levels for each category of footway taken from the footway hierarchy[3],

FOOTWAY - WARNING LEVELS			
Location	**Warning Category**	**Footway Category**	
		1 & 2	**3 & 4**
Cracked/Broken Paving Slabs			
Whole Footway	High	Length ***greater than 25metres***	Length ***greater than 50metres***
	Medium	Length between ***10metres to 25metres***	Length between ***25metres to 50metres***
	Low	Length between ***5metres to 10metres***	Length between ***10metres to 25metres***

FOOTWAY - WARNING LEVELS			
Location	**Warning Category**	**Footway Category**	
		1 & 2	**3 & 4**
Heavy Crazing/Cracking Blacktop Footway			
Whole Footway	High	Length ***greater than 25metres***	Length ***greater than 50metres***
	Medium	Length between ***10metres to 25metres***	Length between ***25metres to 50metres***
	Low	Length between ***5metres to 10metres***	Length between ***10metres to 25metres***
Displaced Kerbs			
Whole Footway	High	Length ***greater than 50metres***	Length ***greater than 100metres***
	Medium	Length between ***25metres to 50metres***	Length between ***50metres to 100metres***
	Low	Length between ***10metres to 25metres***	Length between ***25metres to 50metres***

c. *Drainage*

The objective of highway drainage is supporting the principal objectives of structural maintenance by ensuring that surface water is removed from the carriageway as quickly as possible and not allowed to pond or penetrate to the foundations of the road.

d. Roadmarkings and Roadstuds.

Maintenance and replacement of the existing roadmarkings and roadstuds.

ROADMARKING AND ROADSTUD - MAINTENANCE STANDARDS

Replacement due to Maintenance Works

i. Temporary warning signs must be provided where mandatory markings are removed and shall be retained until the permanent markings have been replaced.

ii. Markings and road studs should be replaced as soon as economically practicable after completion of the surfacing works, but not more than 28days.

e. Traffic Signs (non-illuminated)

Maintenance and replacement of the existing non-illuminated traffic signs and bollards.

TRAFFIC SIGNS (NON-ILLUMINATED) - MAINTENANCE STANDARDS

	Description	Standard
I	Cleaning	When required
ii	Replacement and repair of signs and bollards	The speed of permanent repair or replacement will depend on the degree of danger.
iii	Painting of fingerposts, supports and frames	When required (condition reported when cleaned) but not exceeding 10 years interval

f. Fences, Barriers and Walls

Those safety barriers, pedestrian barriers, fences and small retaining walls owned by the Highway Authority.

FENCES, BARRIERS AND WALLS - MAINTENANCE STANDARDS

	Description	Standard
i.	Painting	When required
ii	Cleaning	This is only expected to occur where safety barriers or guard railings are being used in lieu of chevron warning signs.

Note

1 A small retaining wall has a retained height less than 1.0m

3 *Structural Maintenance*

The standards and warning levels for carriageway and footway works are the same as for preventative maintenance.

4 *Winter Maintenance*

The main reference document for national standards is the Winter Maintenance Chapter to the Code of Practice[2].

Detailed arrangements for winter maintenance are published annually by the Transport and Environment department within a Winter Service Policy & Plan. This document sets out the standards for salt, plant and vehicles, weather information, performance monitoring and communications. The following is a summary of the main standards adopted:-

WINTER - MAINTENANCE STANDARDS

Precautionary Salting Roads

The following categories of road will be included within the schedule of routes to be precautionary salted:

Category 2	-	Strategic Routes
Category 3A	-	Main Distributors
Category 3B	-	Secondary Distributors
Category 4A	-	Link Road

Precautionary Salting Response and Treatment Times

Response Time

1 hour — period between a decision being taken to begin treatment and vehicles leaving the depot

Treatment Time

3 hours — period vehicles leaving the depot and the completion of treatment on all priority routes.

This authority aims to:

(i) complete precautionary salting of priority carriageways by 7.30am.

These targets are designed to ensure that precautionary salting is completed before the morning rush hour, but there will be occasions when weather conditions dictate otherwise.

Weather Forecast

This shall include as a minimum the following requirements:-

(i) a detailed 24 hour road weather forecast;
(ii) a 2 to 5 day forecast for planning purposes;
(iii) a 24 hour Consultancy service;
(iv) the timing of forecasts to ensure that they meet the authority's decision making needs.

Road Danger Warnings are also to be received in October and April

5 Traffic Signals

The following standards have been adopted for traffic signal and signalised pedestrian crossings;

TRAFFIC SIGNAL - MAINTENANCE STANDARDS

	Description	Standard
i	Lamp changing	Lamps are changed at 6 monthly intervals
ii	Mechanism/Electrical	Annually or when a fault is suspected
iii	External cleansing	6 monthly or when a fault is suspected
iv	Fault logging	Daily

Notes

1. Remote monitoring systems linked to controllers via telephone lines report most faults which can occur.

[1] For the definitions of footway and road hierarchies see TAMPMMPD-02 - Guidelines for Determining Approved Maintenance Hierarchies for Roads, Footways and Cycleway.

TRANSPORT ASSET MANAGEMENT PLAN
-
MAINTENANCE MANAGEMENT POLICY DOCUMENTS

GUIDANCE NOTES ON SCRIM AND SKIDDING RESISTANCE

CHAPTER SIX

East Sussex County Council
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INTRODUCTION

This document sets out the policy on measuring the skidding resistance of the County Road network. It identifies the survey type and the frequency of surveys utilised to determine skidding resistance and action to be taken with the results of the survey.

STRATEGY

Roads to be Surveyed

The category of roads, on which a SCRIM survey will be undertaken on the following category of roads as defined in **TAMPMMPD-01**[12]:-

Category 2: ***Strategic Routes***, including local authority motorways, primary routes and the most important urban traffic links with more than local significance.

Category 3: ***Distributor Roads***, both main and secondary serving a local purpose and connecting to strategic routes.

This shall be known as the SCRIM network.

A list of all roads to be surveyed will be kept along with a list of roads, or sections of road, that are to be excluded from the survey with a reason for this exclusion. Reasons for exclusions could include traffic calming schemes, speed humps and tables, width, height or weight restrictions, 20 mph zones or road layouts where it is not possible or safe to maintain the survey speed.

Additional lengths of road may be surveyed at the request of the Area Network Manager or Traffic and Safety. However, these surveys will only be undertaken in the year they are requested and will not be permanently included in the survey schedule.

Survey Type and Methodology

Skidding resistance will be measured by employing a SCRIM survey. East Sussex will employ the Mean Summer SCRIM Coefficient (MSSC) method which is based on the average of three readings taken from surveys carried out on three separate occasions during the test season. The test season runs from 1st May to 30 September.

The testing speed for the whole SCRIM survey will be 50 km/hr. The survey at 20 km/hr will no longer be undertaken. Testing will be undertaken in the left hand lane and in both directions.

Approximately one third of the network will be surveyed each year, with the whole SCRIM network being surveyed every 3 years.

INVESTIGATORY LEVELS

Definition of Investigatory Level

The Investigatory Level is the level of skid resistance, measured as MSSC, at or below which a site investigation is to be considered.

Standards

In developing these guidance notes reference has been made to skidding resistance standards HD28/04[13] developed by the Department for Transport's Highways Agency. The site categories and associated Investigatory Levels defined in HD 28/04 have been developed for motorways and trunk roads. Therefore in formulating these guidance notes it has been recognized that these standards may not be applicable to the more diverse nature of local authority roads. A table of approved Investigatory Levels is contained in Appendix 1. A schedule detailing the rationale for the Investigatory Levels and variations from HD 28/04 can be found in Appendix 2.

All Investigatory Levels will be reviewed on a three year cycle, which shall identify significant changes to the network, such as new traffic lights and pedestrian crossings and changes to speed restrictions.

The following conventions shall be applied:-

- Where more than one site category is considered to be appropriate at a location then the site category with the higher Investigatory Level will be selected.

- Site categories Q and K will as a rule is the 50m approach to the feature, though this may be extended where it is justified by site characteristics.

- When defining site categories, no site shall be defined as being less than 50% of its averaging length. Where this occurs then the site should be included in either the preceding or following site, whichever has an investigatory level nearest to and at or above the investigatory level of the site being defined.

ACTION TO BE TAKEN AT SITES AT OR BELOW MSSC

Site Investigation

An investigation will be undertaken of each site where the MSSC is at or below the IL for the site category. The objective of the site investigation is to consider:-

a) Whether the measured skidding resistance for the site is representative and, if necessary, an assessment of reasons why the survey may not be representative. The following may have an adverse affect on the MSSC:-

   i. an especially dry summer can create conditions for a lower than normal MSSC.
   ii. housing, industrial or off road development where mud and detritus is carried onto the highway.
   iii. in rural areas vehicular movement out of fields where mud and detritus is carried onto the highway.
   iv. mud and detritus being washed onto the highway from adjacent fields.

b) The site will need to be assessed to see whether it has reached its equilibrium level of skidding resistance, or whether it is likely to fall still further.

c) Whether some form of action is required or whether the site should be kept under review.

A record of the technical assessment shall be retained by the network office for future reference.

Warning Signs

Where the MSCC is found to be 0.10 units below the Investigatory Level for the site slippery road signs shall be erected.

Slippery road signs shall be removed as soon as they are no longer required. This should be after the remedial action has been taken and the area office is satisfied that skidding resistance levels have been returned to an appropriate level.

Remedial Action

Where skidding resistance is found to be 0.10 units below the Investigatory Level and there are clear indications that improving the condition of the surface is likely to significantly reduce the risk of accidents occurring then remedial treatment should be prioritised as a matter of urgency.

Priority shall be given to treating the following sites:-

- Category K, G2 and S2r where the skid resistance is at least 0.05 MSCC below the Investigatory Level.
- Where the accident history shows there to be a clearly increased risk of wet or skidding accidents.

Where investigations show that treatment is necessary, consideration should be given to whether surface treatment or other measures are appropriate. This assessment shall include whether the site can more effectively treated by:-

i. improving the skidding resistance;
ii. improvements to the site in other respects; or
iii. a combination of both.

INVESTIGATORY LEVELS FOR SKIDDING RESISTANCE

Appendix 1

Site Category	Definition	Investigatory Level At 50 km/hr					
		0.30	0.35	0.40	0.45	0.50	0.55
B	Dual Carriageway, non-event section						
Cs	Single Carriageway (Strategic Routes), non-event section						
Cd	Single Carriageway (Distributor Routes), non-event section						
Q	Approaches to and across minor[1] and major[2] junctions and approaches to un-surveyable[3] roundabouts						
K	Approaches to Pedestrian Crossings, traffic lights, survey-able roundabouts and other high risk situations.						
R	Roundabouts						
G1	Gradient 5-10%, longer than 50m						
G2	Gradient >10%, longer than 50m						
S1	Bend radius <500m, longer than 50m – Dual Carriageway						
S2	Bend radius <500m, longer than 50m – Single Carriageway						
S2r	Bend radius <100m, longer than 30m not subject to 40mph or less speed restriction						

[1] - In urban areas, those subject to 40 mph or less speed restrictions, minor junctions will only include junctions with category 3a, 3b and 4a roads. In rural areas minor junctions shall include all main interconnecting roads.

[2] - In both urban and rural areas major junctions shall include all junctions with category 2 roads.

[3] - An 'unsurveyable' roundabout is one where the survey speed of 50 km/hr cannot be safely maintained.

Notes:

i. Investigatory levels are for the MSSC within the appropriate averaging lengths.

ii. Investigatory levels for site categories B, Cs and Cd are based on 100m averaging lengths.

iii. Investigatory levels for site categories Q, K, G1, G2, S1, S2 and S2r are based on 50m averaging lengths.

iv. Investigatory levels for site category R are based on 10m lengths.

v. Residual lengths less than 50% of a complete averaging length may be attached to the penultimate full averaging length, providing the site category is the same.

Survey Regime & Site Category Investigatory Level Ranges

Survey Regime	-	HD28/04 has been developed for trunk roads and motorways and favours the Single Annual Survey Method. Under this method the entire SCRIM network is surveyed every year with a single run and a correction factor applied to give a characteristic SCRIM coefficient (CSC). This survey methodology has been adopted in order to try and remove both the in-year seasonal variations and larger cycle year-on-year variations. This is achieved by undertaking the surveys in successive years in the early, middle and late part of the test season respectively and over a three year period deriving a correction factor that can then be applied to the single readings. This method will take three years to become established and provide reliable results. In the case of the County Road network it is considered that that there could be problems with the accuracy of applying one correction factor to the numerous surfacing types present. Therefore if this method were adopted several correction factors would need to be maintained along with a detailed record kept of surfacing materials over the entire SCRIM network. The county has been employing the current policy of surveying the network using three runs within a year to obtain a Mean Summer SCRIM Coefficient (MSSC) for a number of years and as such has a high level of confidence in the results obtained. Surveying the network in this manner also highlights possible variations in results due to local circumstances to be highlighted when site investigations are undertaken. It is therefore considered that the Mean Summer SCRIM Coefficient method of surveying is the more appropriate and reliable technique of undertaking the surveys.
Ranges for Investigatory Level Site Categories	-	The ranges of Investigatory Levels shown for each site category in HD 28/04 have not been used. A single value Investigatory Level for each site category has been chosen to define the appropriate Investigatory Levels.

Site Categories and Investigatory Levels			
Adopted Site Category and Definition		**HD 28/04 Site Category**	**Comments**
B	Dual Carriageway, non-event section	B	Investigatory level defined as 0.35 and set at the lowest ranking Investigatory Level in HD 28/04 as it is considered that on the more lightly trafficked county road dual carriageway network there is a diminished safety risk from lower Investigatory Levels than on the more heavily trafficked trunk roads.
Cs	Single Carriageway (Strategic Routes), non-event section	C	Investigatory Level of 0.40 defined and set at the lowest ranking Investigatory Level in HD 28/04 as it is considered that on the more lightly trafficked county road single carriageway strategic network there is a diminished safety risk from lower Investigatory Levels than on more heavily trafficked trunk roads.
Cd	Single Carriageway (Distributor Routes), non-event section	C	Investigatory Level of 0.35 defined for distributor routes as this type of road is more lightly trafficked than strategic routes and there is a diminished risk to safety in adopting this level. This Investigatory Level compares with the lowest rank for category C in HD28/04.
Q	Approaches to and across minor and major junctions and approaches to un-surveyable roundabout.	Q	Minor and major junction approaches have been retained at an Investigatory Level of 0.45 which is considered appropriate for this the more lightly trafficked county road network. The technique adopted in HD28/04 of considering approaches to all roundabouts regardless of size as junctions has been adopted. Previously all roundabout approaches were treated in the same manner, category J, whether they were large roundabouts on rural sections of principal roads or mini-roundabouts on unclassified roads in towns. The approaches to mini-roundabouts and those with a radius too small to be surveyed will be given an Investigatory Level of 0.45.
K	Approaches to Pedestrian Crossings, traffic lights, surveyable roundabout and other high risk situations.	K	Investigatory Level defined as 0.50 as county roads are more lightly trafficked than strategic routes and it is considered that there is a diminished risk to safety in adopting this level. This Investigatory Level compares with the lowest rank for category C in HD28/04.

Site Categories and Investigatory Levels			
Adopted Site Category and Definition		**HD 28/04 Site Category**	**Comments**
R	Roundabouts	R	Surveys will now only being carried out at 50 km/hr and as such only the largest of roundabouts will be able to be surveyed. The higher survey speed has the effect of giving lower skidding resistance readings so it is considered that on the more lightly trafficked county roads the lowest rank Investigatory Level from HD 28/04 is suitable.
G1	Gradients between 5-10%	G1	Investigatory level defined as 0.45 and set at the lowest ranking Investigatory Level in HD 28/04 as it is considered that on the more lightly trafficked county road network where these gradients occur then there is a diminished safety risk from lower Investigatory Levels than on the more heavily trafficked trunk roads.
G2	Gradients greater that 10%	G2	Investigatory level defined as 0.50 and set at the lowest ranking Investigatory Level in HD 28/04 as it is considered that on the more lightly trafficked county road network where these gradients occur then there is a diminished safety risk from lower Investigatory Levels than on the more heavily trafficked trunk roads.
S1	Bend radius <500m, longer than 50m – Dual Carriageway	S1	Bends were not previously considered if they were subject to a 40 mph or lower speed restriction and no differentiation was made between single and dual carriageway roads. Bends on dual carriageways have been given an Investigatory Level of 0.45 compared with the lowest rank in HD 28/04 as it is considered that on the more lightly trafficked county road dual carriageway network there is a diminished safety risk from lower Investigatory Levels than on the more heavily trafficked trunk roads.
S2	Bend radius <500m, longer than 50m – Single Carriageway	S1	HD 28/04 does not differentiate between rural and urban bends and as such this category includes those bends in areas subject to a 40 mph or lower speed restriction that did not previously have a separate category. The bend radius has also been increased from 250m to 500m, dramatically increasing the length of the network now considered to be a bend. An Investigatory Level of 0.40 has been defined as it is considered that on the more lightly trafficked county road single carriageway strategic network there is a diminished safety risk from using a lower rank Investigatory Level than on the more heavily trafficked trunk roads.

Site Categories and Investigatory Levels			
Adopted Site Category and Definition		**HD 28/04 Site Category**	**Comments**
S2r	Bend radius <100m, longer than 30m not subject to 40 mph or less speed restriction.	H2	Within HD 28/04 all bends, whatever their radius, are potentially given the same Investigatory Level. This is considered to be unrealistic for county roads as there are a small number of very sharp bends, with radii less than 100m, in areas not subject to a 40mph or lower speed restriction. A category has been incorporated on safety grounds to allow a higher Investigatory Level to be applied to the sharper bends in rural areas. They will be surveyed at the higher survey speed of 50 km/hr and it is considered that an Investigatory Level of 0.50 is deemed appropriate.

Bibliograph;

[1] TAMPMMPD-02 – Guidelines for Determining Approved Maintenance Hierarchies for Roads and Footways

[1] HD28/04 – Skid Resistance Volume 7, Section 3 of the Design Manual for Roads and Bridges published by the Highways Agency.

Bibliography

1 Highways Act 1980 published by The Stationery Office

2 See TAMPMMPD-01 - Guidelines for Determining Approved Maintenance Hierarchies for Roads, Footways and Cycleways.

4 Highways Act 1980 published by The Stationery Office.

5 County Structure Plan 1991 - 2011, Urban and Rural Background Papers.

6 Well- maintained Highways Code of Practice for Highway Maintenance Management published in 2005 by the Roads Liaison Group

7 Department of Transport Design Manual for Roads and Bridges Volume 3 - BD 63/94 - Inspection of Highway Structures

8 Management of Highway Structures - A Code of Practice published in 2005 by the Roads Liaison Group

9 Department of Transport Design Manual for Roads and Bridges Volume 3 - BD 21/93 - The Assessment of Highway Bridges and Structures

10 For the definitions of footway and road hierarchies see TAMPMMPD-02 - Guidelines for Determining Approved Maintenance Hierarchies for Roads, Footways and Cycleway.

~~Bibliography~~

~~11 Highways Act 1980 published by The Stationery Office~~

Bibliograph;

12 TAMPMMPD-02 – Guidelines for Determining Approved Maintenance Hierarchies for Roads and Footways.

13 HD28/04 – Skid Resistance Volume 7, Section 3 of the Design Manual for Roads and Bridges published by the Highways Agency.

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EAST SUSSEX COUNTY COUNCIL
LEAD MEMBER - TRANSPORT AND ENVIRONMENT
POLICY SUMMARY

PS	Highway Skid Resistance Policy

Purpose of Policy

East Sussex County Council (ESCC) recognises the vital role played by the local highway network.

The purpose of this policy is to set out how the County Council will monitor the skid resistance of the road and the approach it will take to ensure that skid resistance across the network is maintained to an agreed standard.

In carrying out this policy, ESCC will meet its statutory obligations and will also support the Council's Priorities, Local Transport Plan and Highway Service Outcomes.

Policy Statement

The Council has a statutory duty under Section 41 of the Highways Act 1980 to maintain adopted highways at the public expense. The management of highway skid is considered good practice, and supports the aims and objectives of the Highway Asset Management Policy. The Council will ensure that adequate levels of skid resistance are maintained within reasonable expectations as outlined in the Highways Act 1980. The following actions will be taken:

1. Skid resistance surveys completed annually on defined parts of the highway network
2. Sites where skid resistance falls below investigatory level will be identified for further investigation
3. As a result of investigation any sites requiring intervention will be prioritised for works using a risk-based approach

Supporting Information

Highway Asset Management Policy

Highway Asset Management Strategy

Skid Resistance Plan

Version control	Date of last review:

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EAST SUSSEX COUNTY COUNCIL
LEAD MEMBER - TRANSPORT AND ENVIRONMENT
POLICY SUMMARY

Highway Asset Management Policy

Purpose of Policy

East Sussex County Council (ESCC) the vital role played by the local highway network in supporting the Council Plan 2014-2018 and the Local Transport Plan 2011-2026.

ESCC considers an asset management approach to the maintenance of the highways network will support the achievement of the Council's visions, namely:

Council Priorities:	'To deliver our priorities at a time of reducing resources and increasing demand we must work as One Council with a clear focus on achieving the best outcomes we can for East Sussex.'
Local Transport Plan Vision:	'To make East Sussex a prosperous county where an effective, well managed transport infrastructure, and improved travel choices help businesses to thrive and deliver better access to jobs and services, safer, healthier, sustainable and inclusive communities and a high quality environment.'

Policy Statement

East Sussex County Council is committed to adopting the principles of asset management to ensure it has a highway network that meets the needs of its community, supports the changing requirements of businesses and local economic growth. By taking an asset management based approach, the right investment decisions will be made with the investment available, to maximise value for money, targeting resources and managing risks to maintain a highway environment that is safe and secure for its users.

Specific Policies

Helping People Help Themselves

An asset management approach will enable a focus on customer engagement and satisfaction. Through the effective use of asset management principles, we will aim to:

- gain feedback to manage and improve our service;
- focus on local engagement whilst communicating messages clearly; and
- support and encourage local engagement.

Driving Economic Growth

The Council is responsible for looking after most of the roads in the county, which are a vital part of the infrastructure for economic growth. Most of the highways maintenance budget is spent through the highways contract, which is being re-let in 2016. Through the effective use of asset management principles, we will aim to:

- get the maximum value out of the new highways contract to enable us to focus on improving the condition of highways within the county to create the conditions for growth and improve enterprise;
- balance competing needs across the highway network and select options which best meet the desired outcomes; and
- ensure that the East Sussex highway network is in the best condition for the investment available.

Keeping Vulnerable People Safe

We have broad duties to keep people safe in the county, for example our work in partnership with others on road safety encompasses education and behaviour change as well as engineering solutions. Our aim is to reduce the number of road casualties within the county, whilst minimising the human cost and severity of injuries. Through the effective use of asset management principles, we will aim to:

- maintain a safe and secure highway environment;
- comply with all statutory obligations, meeting users' needs for safety; and
- consider road safety at all times when developing forward programmes of work.

Making Best Use of Our Resources

An asset management approach has been widely accepted by central and local government as a means of delivering a more efficient and effective approach to highway maintenance through longer term planning. Such an approach enables more efficient and effective use of resources, while fulfilling legal obligations, delivering stakeholder needs and safeguarding the engineering integrity of the network. Through the effective use of asset management principles, we will aim to demonstrate value for money by:

- adopting a lifecycle approach to planning asset investment and management decisions;
- adopting a continuous improvement approach to asset management policies and practices; and
- by defining desired levels of service for highway assets in consultation with elected representatives.

Supporting Information

The Highway Asset Management Strategy

The strategy sets out how an asset management approach is utilised to support the achievement of the priorities within the Council Plan, as summarised above. The strategy takes into account current and projected financial pressures and explains how available funds and resources will be utilised to maximise their benefit.

Further Information:	Date of Approval:
Lead Member for Transport and Environment- Agenda Item 8 Reviewed – October 2017	19 October 2015

EAST SUSSEX COUNTY COUNCIL
LEAD MEMBER - TRANSPORT AND ENVIRONMENT
POLICY SUMMARY

Highway Asset Management Policy

Purpose of Policy

East Sussex County Council considers that an asset management approach to the maintenance of the highway network will support the achievement of the Council Priorities and Local Transport Plan visions

Council Priorities:	'To deliver our priorities at a time of reducing resources and increasing demand we must work as One Council with a clear focus on achieving the best outcomes we can for East Sussex.'
Local Transport Plan Vision:	'To make East Sussex a prosperous county where an effective, well managed transport infrastructure, and improved travel choices help businesses to thrive and deliver better access to jobs and services, safer, healthier, sustainable and inclusive communities and a high quality environment.'

Policy Statement

East Sussex County Council is committed to Asset management as a means to deliver a more efficient and effective approach to management of highway infrastructure assets through longer term planning and ensuring that levels of service are defined and achievable for available budgets. It supports making the case for funding, for better communication with stakeholders, and facilitates a greater understanding of the contribution highway infrastructure assets make to economic growth and social well-being of local communities.

ESCC will achieve this by:

Helping People Help Themselves
An asset management approach will enable a focus on customer engagement and satisfaction. Through the effective use of asset management principles, we will aim to:
- gain feedback to manage and improve our service;
- focus on local engagement whilst communicating messages clearly; and
- support and encourage local engagement.

Driving Economic Growth
The Council is responsible for looking after most of the roads in the county, which are a vital part of the infrastructure for economic growth. Most of the highways maintenance budget is spent through the highways contract. Through the effective use of asset management principles we aim to:
- get the maximum value out of the highways contract to enable us to focus on improving the condition of highways within the county to create the conditions for growth and improve enterprise;
- balance competing needs across the highway network and select options which best meet the desired outcomes;
- ensure that the East Sussex highway network is in the best condition for the investment available.

Keeping Vulnerable People Safe

We have broad duties to keep people safe in the county, for example our work in partnership with others on road safety encompasses education and behaviour change as well as engineering solutions. Our aim is to reduce the number of road casualties within the county, whilst minimising the human cost and severity of injuries. Through the effective use of asset management principles, we will aim to:

- maintain a safe and secure highway environment;
- comply with all statutory obligations, meeting users' needs for safety; and
- consider road safety at all times when developing forward programmes of work.

Making Best Use of Our Resources

An asset management approach has been widely accepted by central and local government as a means of delivering a more efficient and effective approach to highway maintenance through longer term planning. Such an approach enables more efficient and effective use of resources, while fulfilling legal obligations, delivering stakeholder needs and safeguarding the engineering integrity of the network. Through the effective use of asset management principles, we will aim to demonstrate value for money by:

- adopting a lifecycle approach to planning asset investment and management decisions;
- adopting a continuous improvement approach to asset management policies and practices; and
- defining desired levels of service for highway assets in consultation with elected representatives.

Supporting Information

The Highway Asset Management Strategy

The strategy sets out how an asset management approach is utilised to support the achievement of the priorities within the Council Plan, as summarised above. The strategy takes into account current and projected financial pressures and explains how available funds and resources will be utilised to maximise their benefit.

Well-managed Highway Infrastructure: A Code of Practice UK Roads Liaison Group 2016

Council Plan

Local Transport Plan

Further Information:	Date of Approval:

EAST SUSSEX COUNTY COUNCIL
LEAD MEMBER - TRANSPORT AND ENVIRONMENT
POLICY SUMMARY

Highway Drainage Maintenance Policy

Purpose of Policy

East Sussex County Council (ESCC) recognises the vital role played by the local highway network. ESCC considers maintenance of the highway drainage system, including but not limited to: drains, linear drainage systems, gullies, chambers, catchpits, soakaways, outfalls associated pipework, ditches and grips, as a means of ensuring the drainage asset continues to function as intended. In carrying out this maintenance, ESCC will meet its statutory obligations and will also support the Council's Priorities, Local Transport Plan and Highway Service Outcomes, namely:

Council Priorities:

- Driving economic growth
- Keeping vulnerable people safe
- Helping people help themselves; and
- Making best use of resources

Local Transport Plan Vision:

'To make East Sussex a prosperous county where an effective, well managed transport infrastructure, and improved travel choices help businesses to thrive and deliver better access to jobs and services, safer, healthier, sustainable and inclusive communities and a high quality environment.'

East Sussex Highway Service Outcomes:

- Improved Network Condition (principal requirement);
- Improve asset condition;
- Promote economic growth;
- Reduce the level of third party claims;
- Provide value for money;
- Promote local engagement; and
- Improve customer satisfaction

Policy Statement

ESCC is committed to ensuring that it has the best highway network for the investment available. A targeted approach to the maintenance of drainage assets will ensure that surface water on the highway is captured and discharged appropriately. Drainage assets will be inspected and cleansed using a risk based and targeted approach as determined by recorded silt levels. This approach will be applied to whole sections of road, rather than individual assets, ensuring maximum operational efficiency and effectiveness.

Specific Policies

1. All highway drainage assets to be inspected no less than once every twenty-four months.
2. Where the gully or catchpit is silted and/or has a blocked outlet, it will be cleaned fully to the base of the gully / catchpit and the connection jetted up to 5 metres.
3. Drainage assets to be GPS mapped and condition noted including silt levels before and after inspection.
4. Provision of an emergency response to reports of blocked drainage assets or standing water.

Supporting Information

Highway Asset Management – Drainage Strategy 2015-2018
The drainage strategy identifies the need to define the highway drainage asset in East Sussex in order to deliver an efficient and effective service into the future.

Further Information:	**Date of Approval:**
Approved by Lead Member for Transport & Environment	**18 April 2016**

EAST SUSSEX COUNTY COUNCIL
LEAD MEMBER - TRANSPORT AND ENVIRONMENT
POLICY SUMMARY

PS	Drainage Policy

Purpose of Policy

East Sussex County Council (ESCC) recognises the vital role played by the local highway network.

ESCC is committed to ensuring that it has the best highway network for the investment available. A targeted approach to the maintenance of its drainage assets will ensure that surface water on the highway is captured and discharged appropriately.

In carrying out this work, ESCC will meet its statutory obligations and will also support the Council's Priorities, Local Transport Plan and Highway Service Outcomes.

Policy Statement

1. Highway drainage assets will be maintained using a risk based approach and the maintenance regime will, at a minimum, be reviewed annually.

2. All highway gullies and catchpits will be inspected and cleaned at frequencies determined according to records of silt levels and local intelligence about flood risk. These frequencies shall be presented in the highway drainage management plan. Where the inspection or cleaning has not been successful, the reasons for failure shall be recorded and remedial action shall be made according to a risk-based approach as described in the highway drainage maintenance plan.

3. The performance of the highway drainage asset shall be monitored through drainage inspection records, safety inspection records and stakeholder contact to ensure that the asset is managed effectively. The highway drainage management plan will include measures to mitigate specific identified flood risks.

4. All other drainage assets will be maintained as specified in the highway drainage management plan.

5. Drainage assets are recorded in the drainage asset register and located using GPS coordinates. The register is linked to inspection records that provide the current condition of the asset, with the records required detailed in the current contract.

6. Where appropriate, an emergency response to reports of blocked drainage assets or standing water will be provided.

Supporting Information

Well-managed Highway Infrastructure, 2016, UK Roads Liaison Group

Guidance on the Management of Highway Drainage Assets, 2012, Highways Maintenenace Efficiency Programme Board

Version control	**Date of last review:**
Approved by Lead Member for Transport & Environment April 2016	**August 2018**

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East Sussex
County Council

Highway Asset Management Strategy 2015-2022

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Foreword

We are pleased to be able to introduce East Sussex County Council's Highway Asset Management Strategy for 2015 to 2022.

The local highway network is East Sussex's largest and most valuable publically owned asset with a replacement value of £7.8bn. It is used every day by residents, businesses and visitors and provides a vital contribution towards the economic, social and environmental well-being of the County.

This Strategy sets out how the highway service will deliver against the Council's key priorities, taking into consideration customer needs, asset condition and best use of available resources.

The timing of this strategy coincides with the commencement of our new Highway Maintenance Contract. Work will continue to build on our understanding of the condition of the County's highway network, and in particular our understanding of other 'key' asset types e.g. drainage, bridges and structures, and street lighting. The importance of asset management and continuous efficiency has also been reinforced by Central Government, where future funding streams will be linked to those authorities who can demonstrate value for money and efficient delivery of highway maintenance activities.

The County Council is committed to the development of good practice and continuous improvement. Formal reviews of both the Highway Asset Management Strategy and Asset Management Policy will be undertaken annually, and we shall continue to work in partnership with our customers, elected Members and staff.

By employing an asset management approach, East Sussex will continue to increase the value achieved in road maintenance, improving network resilience and reducing the burden on revenue budgets through the delivery of effective programmes of preventative maintenance over the next seven years and beyond.

Rupert Clubb
Director of Communities,
Economy and Transport

Cllr Carl Maynard
Lead Member for
Transport and Environment

Introduction

The importance of Highway Infrastructure to East Sussex

East Sussex highway infrastructure provides a vital contribution to the economic growth of this county. In addition to meeting the needs of local communities and supporting the changing requirements of businesses and the Council's corporate priorities, the local highway network is without doubt the most valuable publically owned asset managed by East Sussex County Council. With a total replacement cost of £7 billion, the importance of its effective and efficient management cannot be understated.

Why Asset Management?

Asset management is a strategic approach that seeks to optimise the value of highway assets over their whole life (Whole Life Cost). East Sussex County Council recognises that by taking an asset management based approach to its local highway maintenance, investment can be targeted on long-term planned activities that prevent expensive short-term repairs. This approach not only maximises value for money, ensuring informed investment decisions can be made, but also manages risk and maintains a highway environment that is safe and secure and accessible for our customers.

Asset Management Policy

The East Sussex County Council Highway Asset Management Policy is a high level document which establishes the Council's commitment to Infrastructure Asset Management and demonstrates how this approach aligns with the Council Plan. The Policy is a stand-alone document and has been published alongside this strategy on the Council's website.

Asset Management Strategy

This Asset Management Strategy sets out how the Asset Management Policy will be delivered. It is informed by the adoption of a highway asset management framework which establishes the activities and processes that are necessary to develop, document, implement and continually improve highway asset management within East Sussex. It is aligned to the Council's corporate objectives and seeks to follow the latest advice, particularly that arising from the Highway Maintenance Efficiency (HMEP) Programme led by the Department for Transport.

In support of the Council Plan 2014-2018 and the Local Transport Plan 2011-2026, this Council recognises that an asset management approach to the maintenance of the highways network will aid in the achievement of the Council's vision, as set out below:

Council vision: 'To deliver our priorities at a time of reducing resources and increasing demand we must work as One Council with a clear focus on achieving the best outcomes we can for East Sussex.'

Local transport: plan vision: 'To make East Sussex a prosperous county where an effective, well managed transport infrastructure, and improved travel choices help businesses to thrive and deliver better access to jobs and services, safer, healthier, sustainable and inclusive communities and a high quality of life.'

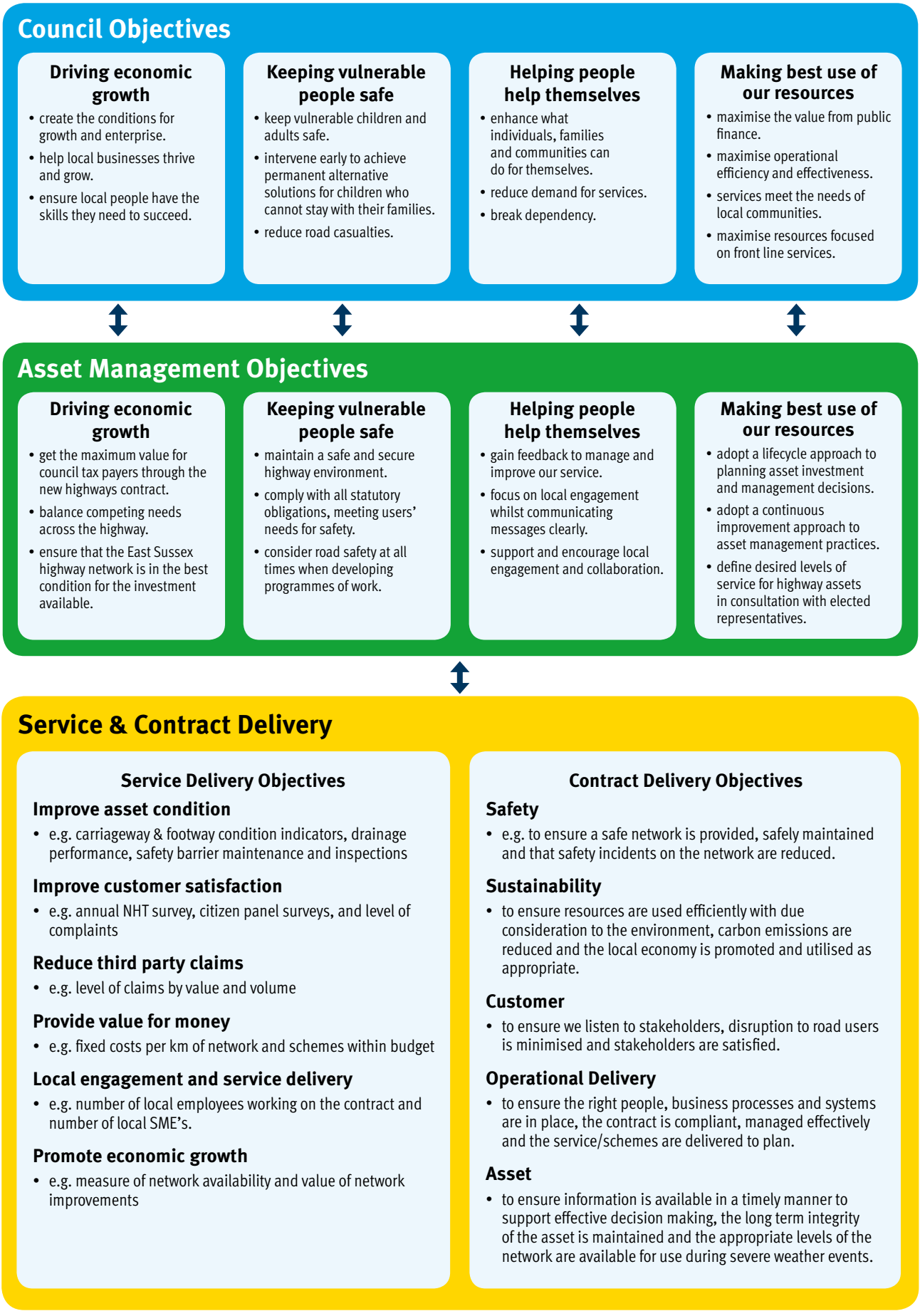
Service and Contract Delivery Objectives

East Sussex County Council recognises that the delivery of an efficient highway service cannot be undertaken without effective maintenance of the existing highway network. It is therefore essential that new infrastructure that supports the Council's objectives can be maintained to the appropriate standard in the future and that existing highway infrastructure remains serviceable. The Council is committed to having the best network condition for the investment available, and supports an asset management based approach for the maintenance of the highway network

A newly procured highway maintenance contract is due to commence in 2016. An Executive Client organisation will be created providing specialist contract, commercial, performance and asset management functions. A series of asset management objectives linked to service outcomes have been created that are directly linked to the achievement of the Council Plan. These objectives will be achieved via the full implementation of the Council's highway asset management framework.

The highway service will be delivered via the new highway maintenance contract for which a series of service delivery and contract outcomes have been established respectively. The relationships between these objectives are shown as Figure 1. The highways programmes will be established on an asset management basis for delivery by the highways contract. This will ensure the works remain aligned to this asset management policy and strategy and the Council's strategic objectives. It will also support advance planning of key investment decisions for the Council.

Figure 1 – Relationship between council objectives and asset management objectives



Asset Management Framework

East Sussex County Council has developed a Highway Asset Management Framework (see figure 2.) that is based on the recommendations made within the 2013 HMEP Highway Infrastructure Asset Management Guidance. The framework summarises all activities and processes that are necessary to develop, document, implement and continually improve our approach to asset management. An Asset Management Implementation Road Map and a supporting Implementation Plan are being used to ensure the full implementation of the framework. The framework is shown in figure 2 and is summarised below.

Context

This establishes the context for highway infrastructure asset management in East Sussex. The context includes a variety of factors that need to be taken into consideration when determining the Council's expectations for the highway service. The factors include: national transport policy, local vision and local transport policies, expectations of stakeholders and legal and financial constraints.

Planning

This sets out the key activities that are undertaken by East Sussex as part of the asset management planning process. The activities include:

- **Policy** – East Sussex's published commitment to highway asset management.
- **Strategy** – East Sussex's published statement on: how the policy will be implemented, the implementation of an asset management framework, the strategy for each asset group, and the commitment to continuous improvement.
- **Performance** – The levels of service to be provided by East Sussex's highway service and how performance will be measured and reported.
- **Data** – East Sussex's strategy for data collection and management, without which informed decisions cannot be taken.
- **Lifecycle planning** – East Sussex's lifecycle plans for each asset group which when combined with funding levels and desired levels of service enable informed decisions to be taken.
- **Works programmes** – East Sussex's rolling programme of works for each asset group.

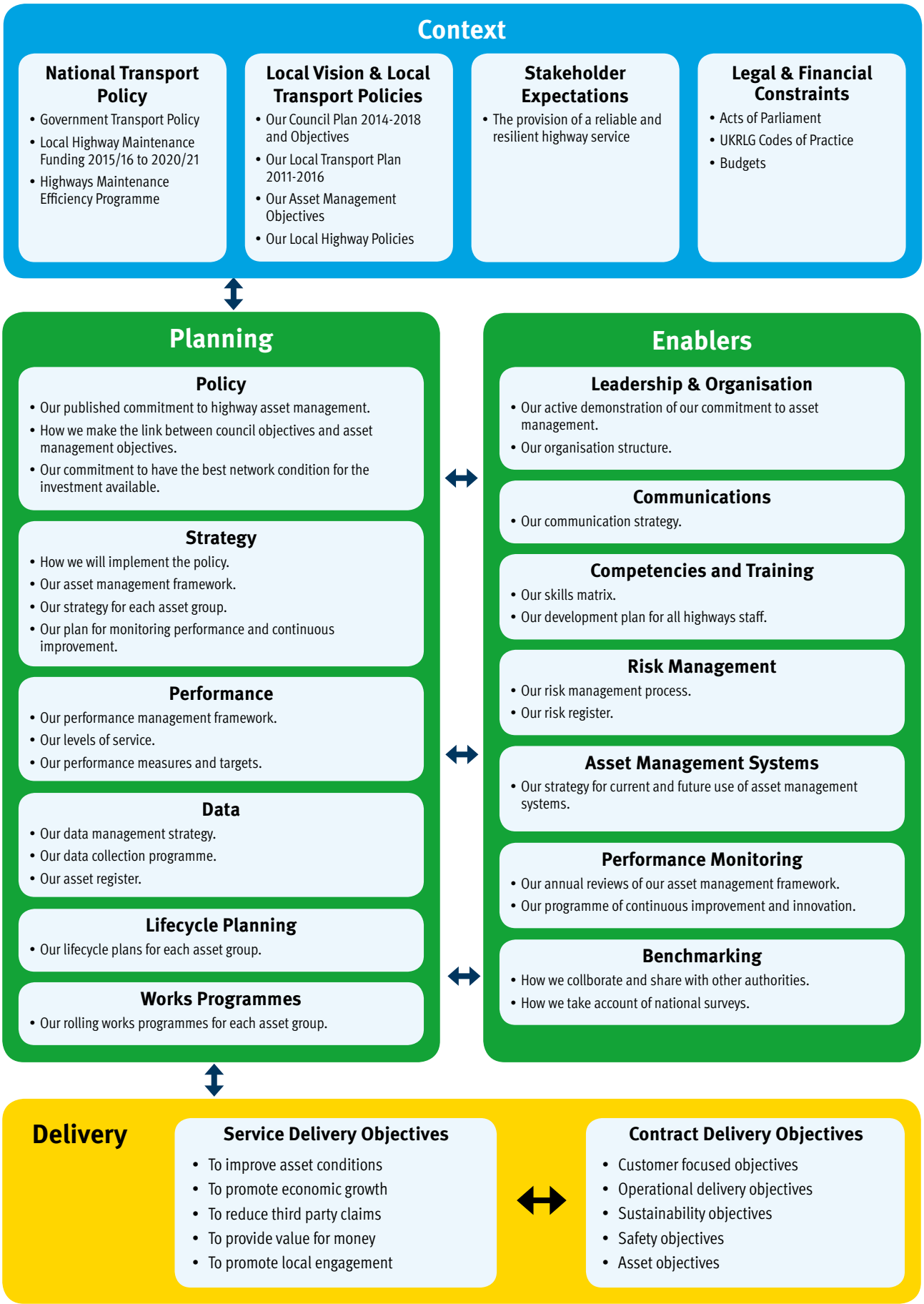
Enablers

Enablers are a series of supporting activities that support the implementation of the Asset Management Framework. They provide a means of: developing organisational leadership and the adoption of an asset management culture; a means of effectively communicating and collaborating with all stakeholders; the development of the competencies and skills of all highways staff, an effective means of managing risk; a strategy for the use of asset management systems; a means of measuring the performance of the asset management framework; a means of benchmarking progress and collaborating with other highway authorities, and above all, fostering a culture of continuous improvement and innovation.

Delivery

As set out in Section 1, the delivery component of the framework sets out how the highway service will be delivered via the new highway maintenance contract for which a series of service delivery and contract delivery objectives have been established respectively.

Figure 2 – Highway Asset Management Framework



Strategy for Main Asset Groups

Introduction

This section summarises the existing highway asset, its current condition, and a summary of the strategy to be employed for each asset type in the future. An understanding of, and agreement to, the levels of service required from each asset type is essential for the successful delivery of the strategy.

Highway Asset

The highway asset is shown below together with a summary of its current condition.

Table 1 – Summary of Highway Asset

Asset group	Quantity	Condition
Carriageways	3,210km	Approximately 15% of the carriageway network in East Sussex is identified as requiring maintenance.
Footways and cycleways	2,481km	East Sussex is currently 40% through a 5 year condition survey for footways. Approximately 67% of the network is identified as requiring maintenance.
Structures	974 bridges, 300 retaining walls and 5 tunnels.	At present the Bridge Condition Stock Indicator rates the average condition of East Sussex County Council bridge stock at 85.8. The BCSI (critical element) value is lower at 75.7. At present ESCC monitors 18 structures which are substandard.
Drainage	98,000 gullies and 525km ditches.	According to current defect reports, approximately 90% of our gullies are free and running.
Street lighting	37,000 column and wall mounted street lights, 10,000 other inventory items, 3000 street lights for parish, borough and district councils.	Street lighting asset is monitored in accordance with 'Institute of Lighting Professionals Technical Report 22' with a target to maintain the number of columns in excess of the action age at less than 50%.
Traffic signals	66 signal controlled junctions and 140 traffic signal crossings.	Target to maintain the number of columns in excess of the action age at less than 50%.
Road markings, signs and street furniture	1001 grit bins, 24.7km of guard rail, 39,875 safety bollards, 43,695 road signs and 2,500km road markings 664 safety barriers	A shift to maintain deteriorated road markings with a risk based preventative approach. Coordinate design and maintenance, moving towards an asset management approach and developing community engagement.

Highway Asset Hierarchy

The carriageway asset is currently managed according to a hierarchy based on road classification, and further divided by urban/rural road type as outlined in Table 2. The purpose of the hierarchy is to recognise that the failure of certain routes or items of infrastructure would have a greater impact on East Sussex's economy and communities than others. The asset hierarchy is therefore used as a tool to help ensure that highway maintenance activities are effectively prioritised.

Table 2 – Asset Hierarchy

Category	Road maintenance hierarchy description	East Sussex road hierarchy general description
1	Motorways	Category 1 not applicable to East Sussex
2	Strategic Route	Primary Route
3a	Main Distributor	Inter Urban Route
3b	Secondary Distributors	Intra-Urban Routes
		Intra-Rural Routes
4a	Link Roads	Business or Industrial Roads
		Residential Roads
		Village Roads
4b	Local Access Roads	Country Lanes
		Minor Urban Roads
		Minor Rural Roads

Carriageways

Carriageways are the most valuable highway asset in East Sussex, having a Gross Replacement Cost of nearly £3.5 billion and receive the greatest levels of maintenance expenditure. They were the first asset, for which lifecycle plans have been developed, resulting in the creation of several investment scenarios which have modelled current condition, investment levels and desired performance outcomes. This has enabled a greater understanding of where to target investment to achieve the desired levels of service.

East Sussex County Council is responsible for the maintenance of 370km of principal (A) roads, providing transport links within or between large urban areas. The Council is also responsible for 1,110km of non-principal (B&C) roads connecting towns and villages and feeding traffic between principal and smaller roads. Unclassified, estate and rural roads serving local traffic account for 1,730km, the largest proportion of the East Sussex network. The condition of the carriageway asset is measured through annual surveys and inspections. In 2013, 25% of the unclassified network was identified as requiring maintenance, compared to just 8% of principal roads and 10% of non-principal roads.

Planned maintenance is delivered by an annual programme. This programme is capital funded and since 2014, schemes of work have been identified using an asset management approach. This evidence approach to maintenance is endorsed by Council Members and has achieved a £70 million funding commitment for the period between 2014 and 2018. This funding is linked to defined performance outcomes that are measured and reported annually.

Management of potholes and other carriageway safety issues arising across the network is delivered using revenue funding which is anticipated to reduce over coming years. By employing an asset management based approach and improving the coordination of road maintenance and improvement activity, East Sussex will continue to increase the value achieved in road maintenance, improve network resilience and reduce the burden on revenue budgets through the delivery of effective programmes of preventative work.

Short-term desired outcomes (current year): To deliver the current annual carriageway programme, achieving performance targets of 21% of unclassified roads requiring maintenance whilst holding condition at 10% for non-principal roads and 8% for principal roads.

Medium-term desired outcomes (2 to 5 years): To develop Member endorsed, programmes of work for the following 2 years, achieving annual performance targets of 20% of unclassified roads requiring maintenance, 10% of non-principal and 8% of principal.

Long-term desired outcomes (5 to 10 years): Through the adoption of good asset management principles, develop a compelling case for the funding of carriageway maintenance in East Sussex and to maintain and implement programmes of work delivering best value against Council and Highway Service objectives.

Approach: Desired outcomes will be achieved through the continued development and implementation of the carriageway strategy in line with the East Sussex Highway Asset Management Framework, following standards of best practice and collaborating with our contractors.

Footways and Cycleways

Footways and cycleways are critical assets supporting access and mobility for people in East Sussex. Securing continuous improvement in the safety and serviceability of footways and cycleways is necessary to encourage alternatives to car, particularly for journeys in urban areas. Well maintained footways aid social inclusion, particularly improving accessibility for vulnerable people.

East Sussex County Council is responsible for the maintenance of 2,380km of prestige footways in high footfall areas, for example town centres, and 75km of footways providing access in residential and remote areas. The Council also maintains the length of the cycleways. The footway and cycleway asset has a Gross Replacement Cost of nearly £350 million. The typical annual maintenance expenditure is around £1 million, less than 5% of the available highway maintenance budget and below the national average of around 25% for comparable County authorities.

Footway and cycleway condition is assessed through annual condition surveys and inspections, and planned maintenance has historically been determined on a worst first basis and concentrated in urban areas with high footfall and a history of claims. The shortfall in maintenance budget or expenditure has resulted in overall deterioration of the footway and cycleway network, a problem experienced by highway authorities nationally. The most recent footway condition survey for East Sussex identified 67% of the total footway network as requiring maintenance with the worst conditions found in outlying areas.

Addressing the footway maintenance backlog is a priority for the Council. This will require significant investment and a change to the way in which maintenance for footways and cycleways is managed. This change is now being implemented and a lifecycle plan for these assets is being developed. As with carriageways this will enable the prioritisation of maintenance in line with an asset management based approach and will provide evidence to make the case to decision makers for funding.

Short-term desired outcomes (current year): To develop a fully comprehensive inventory of all footways, footpaths and cycle infrastructure in East Sussex. To use asset inventory and condition data to produce a lifecycle model demonstrating the funding requirement for various performance outcomes, including improvement, sustained condition, or managed deterioration of the asset.

Medium-term desired outcomes (2 to 5 years): To use the developed maintenance model and options as evidence to support a case to decision makers for maintenance funding in 2016 and to develop a 5 year, Member endorsed forward plan of preventative maintenance.

Long-term desired outcomes (5 to 10 years): As part of an asset management based approach, to develop a compelling case for the funding of footway and cycleway maintenance in East Sussex and to implement programmes of work delivering best value against Council and Highway Service objectives.

Approach: Desired outcomes will be achieved through the continued development and implementation of the carriageway strategy in line with the East Sussex Highway Asset Management Framework.

Structures

East Sussex County Council actively manages its structural assets in accordance with principles set out in the UK Roads Liaison Group publication 'The Management of Highway Structures, A Code of Practice'.

There are approximately 974 bridges and culverts, 300 retaining walls and 5 tunnels being maintained, with a Gross Replacement Cost estimated to be £516 million. Routine maintenance of structures is based on a prioritised system of required work with the aim of minimising the risk to public safety and future maintenance costs.

The condition of the structures asset is measured primarily by two factors, BSSCI (Bridge Structural Stock Condition Indicator) and BSCIcrit (Bridge Structure Condition Indicator critical) which are derived from bridge inspections. In accordance with the nationally recognised indicators published by ADEPT and in common with most Local Authorities, there has been a slow reduction in the overall stock value which at present in East Sussex is within the range denoted 'fair'. Out of the total stock, 50 structures are rated below this level. This information is stored within a bespoke database and used to determine lifecycle planning strategies.

All structures are maintained in a condition 'fit for purpose and safe for use'. If safety critical components are identified as being deficient after inspections, immediate steps are taken to make them safe. At present, 18 substandard structures are monitored to determine their structural performance and are managed in accordance with the code of practice.

Desired outcomes: The principle factor for determining the forward strategy is to maintain the asset in a condition 'fit for purpose and safe for use'. The target is to adhere to our 10 Year Structures Plan and maintain the level of the BSSCI. Additional targets include alleviating culverts that cause property flooding, enhancing safety at highway structures and mitigating railway sites where vehicle incursion is an issue.

Approach: There are likely to be further financial pressures in the future, reducing the availability of finance for the maintenance of the structures stock. The key financial driver is to ensure that the time for intervention of planned maintenance to a structure, is determined to provide the best financial return for that investment. This will be managed by use of the structures toolkit, reviewing the 10 Year Plan, monitoring the BSSCIs and applying professional, qualified engineering judgement.

Drainage

The Council's highway **drainage** asset is critical to ensuring the controlled removal of water from the carriageway to allow customers to use it safely. The impact that failure of the drainage asset can have on other highway infrastructure is significant, particularly to the carriageway.

The current inventory of highway drainage assets across East Sussex includes approximately 98,000 gullies, 10,000 grips; and 500km of drainage ditches. These drainage assets are all proactively maintained through routine clearance works. Outside of routine maintenance, the current approach to repairs and improvements is predominantly reactive. This is the result of an incomplete inventory, lack of condition data and a lack of knowledge of the risks posed by this critical asset across the county. The limitations of this approach have been made evident with the current backlog of drainage defects identified. Our ability to model a capital programme and lifecycle plan for our highway drainage asset is limited for these reasons.

To proactively maintain the entire drainage asset into the future, we will continue to build a complete inventory and good understanding of condition including the associated risks that come with failure. This will enable us to undertake programmes of preventative maintenance whilst monitoring and reviewing performance.

Improving our knowledge of drainage infrastructure across the county enables us to demonstrate evidence-based decisions on drainage maintenance and support our ability to secure future funding investment, while demonstrating savings in revenue expenditure through efficient and effective maintenance.

Desired outcomes: To move away from reactive maintenance towards planned improvements of our whole highway drainage asset. The implementation of a proactive maintenance approach applied across all drainage assets to reduce flooding of the highway and damage to other highway infrastructure.

Approach: Continued proactive maintenance of known drainage assets (gullies, grips and ditches) in accordance with industry guidance such as the HMEP document entitled 'Guidance on the Management of Highway Drainage Assets'. The collection of inventory and condition information for the remaining unknown drainage assets to enable clear lifecycle plans to be developed, and a proactive approach for future programmes of prioritised maintenance to be achieved.

Street Lighting

Street lighting is an important highway asset, contributing to public amenity, safety and the night time economy. With a Gross Replacement Cost of £69 million, the lighting asset consists of approximately:

- 37,000 East Sussex street lights (column and wall mounted);
- 10,000 other inventory items (such as illuminated and reflective bollards, subway lighting, internally and externally illuminated signs and school warning lights, and so on);
- 3,000 street lights for parish, borough and district councils under individual, rechargeable maintenance agreements.

The overall condition of the street lighting asset is monitored in accordance with 'Institute of Lighting Professionals Technical Report 22' with a target to maintain the number of columns in excess of the action age at less than 50%.

East Sussex County Council operates a six year routine maintenance cycle, with all columns in the county being visually inspected for structural and electrical condition at each visit. Monthly night scout patrols are also in operation, allowing faults to be identified and logged into a lighting management system. This maintenance cycle has an overall aim of minimising non-routine visits and improves the

efficient operation of the asset. The frequency of these visits has been extended to six years due to the introduction of part-night street light operation and LED light sources.

In addition to these maintenance activities, further capital column replacement projects to replace life expired lighting columns are also undertaken. Replacing the columns at these locations with newer equipment minimises the risk of failure and the occurrence of non-routine faults.

Desired outcomes: To ensure the safety of the public, reduce the risk to maintenance operatives, reduce energy consumption, reduce the cost of maintenance and halt deterioration of the asset.

Approach: Combine routine inspection, regular night scouting, testing and cleaning and record public fault reports to ensure the most efficient and economic routine maintenance service is provided. Continue with several key projects to meet targets for reduced energy consumption, including the reintroduction of part night lighting where appropriate and the installation of dimming and more efficient equipment, such as LED lanterns within East Sussex. These projects will be supported with the use of a computer inventory systems and programmes which also help to mitigate risk and comply with current British standards.


Colas
THIS VEHICLE
MAKES
FREQUENT STOPS
GN55 UAS
HIGHWAY M
GN55 UAS

Traffic Signals

Traffic signal controlled junctions and pedestrian crossings form an important highway asset, contributing to the safe and efficient use of the road network and promoting economic growth within the county. Its efficient operation and maintenance allows those using the road network to move around the county with the minimum of delay and disruption. Efficient maintenance regimes also ensure that the traffic signal installations are maintained in a safe structural and electrical condition.

There are currently 66 signal controlled junctions, 140 pedestrian signal crossings and 147 vehicle actuated signs (VAS) installed across the county with a Gross Replacement Cost of £15 million. The traffic signal sites also have white lining, anti-skid and pedestrian barrier rails associated with them. An annual inspection is undertaken which checks the physical condition of the infrastructure and the operation of the equipment. This includes a visual assessment of the structural and electrical condition as well as an electrical test on every sixth year and for VAS assets, a sign replacement programme is currently in place for signs greater than 10 years old.

A significant number of our installations used to be equipped with remote fault monitoring but this has now been removed to reduce communication costs. Fault notification is now based solely on reports from the public, police and our contractors. Key Performance Indicators (KPI's) are set and monitored to ensure that our contractor attends and rectifies faults within specified contract time periods. An age based refurbishment programme is generated on an annual basis which is reviewed along with the annual inspection results to ensure that all of the signal sites are maintained in an acceptable operational condition.

Desired outcomes: To ensure the safety of the public, the efficient operation of the asset, reduce the risk to maintenance operatives, reduce energy consumption, reduce the cost of maintenance and halt deterioration of the asset.

Approach: Combined routine inspection, testing and cleaning to ensure the most efficient and economic routine maintenance service is provided. The timely attendance and repair of faults and ordered work to ensure the safe operation of the asset. The use of a computer inventory system to record and monitor fault and asset information. A schedule of annual inspections to identify issues that poses a risk to operational efficiency and public safety. Reduced energy consumption through the use of LED lanterns signal heads. The de-cluttering and removal of unwanted equipment or its relocation on to other existing assets to reduce the number of items to maintain and reduce future maintenance costs (combined infrastructure). The replacement of surface cut detection loops with underground vehicle sensors to reduce future maintenance costs, reduce the opportunity of loop failure and maintain the long term structural integrity of the road surface. The design of efficient replacement traffic signals schemes that deliver the lowest whole life costs.


Push button
Wait for signal

Road Markings, Signs and Street Furniture

A well designed and managed highway environment generates benefits for residents, businesses and visitors to the county. Road markings, signs and street furniture have a significant presence within this environment and appropriate design and maintenance of these assets is required to offer a safe and attractive public realm to road users.

East Sussex County Council is responsible for the maintenance of over: 900 grit bins, 24.7km of pedestrian guard rail, 40,000 safety bollards, 631 safety barriers, 44,000 road signs and nearly 2,500km of road markings.

Road markings, signs and street furniture have historically been maintained by routine and reactive means. With a comprehensive asset inventory collected in 2013, an asset management based approach, delivering prioritised programmes of maintenance is now being developed. In maintaining these assets, the approach will coordinate design and maintenance functions, ensuring that new assets meet the objective of the highway service, are sustainable and serviceable, offering good long term value.

Community initiatives have been set up to work alongside parish and town authorities, to jointly-fund the maintenance of some assets of local importance such as fingerposts.

Short-term desired outcomes (current year): Develop a prioritised programme of preventative maintenance for Road markings in 2015/16 and reduce the level of associated reactive maintenance.

Medium to long-term desired outcomes (2 to 10 years): To develop a case for the funding road markings, signs and street furniture maintenance in East Sussex and to implement programmes of work delivering best value against Council and Highway Service objectives.

Approach: Using inventory data develop a lifecycle model for road markings, signs and street furniture and implement a programme of preventative maintenance in 2015/16. This programme will consider all existing road marking maintenance activity and propose a plan offering a coordinated, best value approach in future. In addition, the signage inventory data will be used to support initiatives such as street de-cluttering to improve the public realm for road users and limit future maintenance liability.

Data Management

East Sussex understands that in order to drive continuous improvement and inform effective asset management based decision making, having the right data management systems in place is vital.

The road network is surveyed every year using SCANNER, achieving complete network coverage. In addition, county-wide footway and drainage condition surveys are undertaken, with the current footway data collection having been completed in 2013. It is intended that the collection and updating of this data will continue, as it will support the asset management objectives of the Council and will ensure that the outcomes for the individual asset strategies can be met.

The data gathered in these surveys, including details on inventory, asset location and performance, is recorded and stored in asset information databases. These provide a central repository for asset information which can be easily interrogated to obtain information necessary for the day to day management of the asset and to inform short and long-term maintenance needs. As part of the implementation of asset management, we will review current data collection techniques and develop a data management strategy.

Best Practice and Performance Monitoring

East Sussex County Council is committed to the development of good practice and continuous improvement, having already played a leading role in the development of the regional agenda on highway asset management. Examples of activities that demonstrate our commitment include:

- Membership of the South East 7 Alliance;
- Membership of the South East Service Improvement Group;
- Participation in Project Outcome (with Surrey);
- Membership of the CIPFA HAMP Network; and
- Attendance at a variety of local and regional events.

Performance Monitoring

An Asset Management Implementation Road Map and a supporting Implementation Plan has been developed. We are continually reviewing our progress against this plan and will be undertaking formal annual reviews. Asset management objectives as well as service delivery and contract delivery objectives have also been developed. We will monitor performance against these objectives to enable us to identify where we are making progress and where we may need to make changes to ensure we continue to manage the asset in the most efficient manner, and to ensure that we are able to continuously improve.

Strategy Review

This strategy and our Asset Management Policy will be reviewed annually, updated and re-published as appropriate. This process will be managed and implemented by East Sussex County Council officers.

Glossary

The following terms are used in this strategy:

Asset management

A strategic approach which identifies the optimal allocation of resources for the management, operation, preservation and enhancement of the highway infrastructure to meet the needs of current and future customers.

Asset valuation

The calculation of the current monetary value of an authority's assets. It excludes therefore any consideration of the value to the community in terms of the economic and social benefits of providing a means for people to travel in order to work, socialise and live.

Critical asset

An asset without which you cannot deliver a statutory service.

Deterioration

The change in physical condition of an asset resulting from use or ageing.

Gross Replacement Cost

The total admissible cost of replacing the existing highway asset to a modern equivalent standard, taking into account up-to-date technology and materials.

Levels of service

Levels of service typically cover condition, availability, capacity, amenity, safety, environmental impact and social equity.

Lifecycle Planning

Making the right investment at the right time to ensure that the asset delivers the requisite level of service over its full expected life, at the minimum cost.

Whole Life Cost

The total costs incurred in the creation, maintenance and disposal of an asset.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East Sussex
County Council

Highway Asset Management Strategy 2018-2024

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Foreword

We are pleased to be able to introduce East Sussex County Council's Highway Asset Management Strategy for 2018 to 2024.

The local highway network is East Sussex's largest and most valuable publically owned asset with a replacement value of £8.58bn. It is used every day by residents, businesses and visitors and provides a vital contribution towards the economic, social and environmental well-being of the County.

This Strategy sets out how the highway service will deliver against the Council's key priorities, taking into consideration customer needs, asset condition and best use of available resources.

The importance of asset management and continuous efficiency has also been reinforced by Central Government, where funding streams are linked to those authorities who can demonstrate value for money and efficient delivery of highway maintenance activities.

The County Council is committed to the development of good practice and continuous improvement. Reviews of both the Highway Asset Management Strategy and Asset Management Policy will be undertaken annually, and we shall continue to work in partnership with our customers, elected Members and staff.

By employing an asset management approach, East Sussex will continue to increase the value achieved in road maintenance, improving network resilience and reducing the burden on revenue budgets through the delivery of effective programmes of preventative maintenance over the next six years and beyond.

Rupert Clubb
Director of
Communities, Economy
and Transport

Cllr Nick Bennett
Lead Member for
Transport and Environment

Introduction

The importance of Highway Infrastructure to East Sussex

East Sussex highway infrastructure provides a vital contribution to the economic growth of the county. The local highway network is without doubt the most valuable publically owned asset managed by East Sussex County Council (ESCC) with a total value of £8.58 billion (2017). The importance of the highway infrastructure to the communities of East Sussex is substantial.

Why Asset Management?

Asset management is a strategic approach that seeks to optimise the value of highway assets over their whole life (Whole Life Cost). East Sussex County Council recognises that by taking an asset management based approach to its local highway maintenance, investment can be targeted on long-term planned activities that prevent expensive short-term repairs. This approach is in line with suggested best practice and Government guidance.

Our Asset Management approach not only maximises value for money, ensuring informed investment decisions can be made, but also manages risk and maintains a highway environment that is safe and secure and accessible for our customers.

Asset Management Policy

The ESCC Highway Asset Management Policy is a high level document which establishes the Council's commitment to infrastructure investment through an asset management approach aligned with the Council Plan. The Policy is not a stand-alone document and is published alongside this strategy on the Council's website.

Asset Management Strategy

This Highway Asset Management Strategy sets out how the Asset Management Policy will be delivered. It is informed by the adoption of a highway asset management framework which establishes the activities and processes that are necessary to develop, document, implement and continually improve highway asset management within East Sussex. It is aligned to the Council's priority outcomes and seeks to follow the latest advice and guidance from recognised bodies such as the Department for Transport (DfT).

In support of the Council Plan 2014-2018[1] and the Local Transport Plan 2011-2026, this Council recognises that an asset management approach to the maintenance of the highway network will aid in the achievement of the Council's vision, as set out below:

Council vision:	'To deliver our priorities at a time of reducing resources and increasing demand we must work as One Council with a clear focus on achieving the best outcomes we can for East Sussex.'
Local transport plan vision:	'To make East Sussex a prosperous county where an effective, well managed transport infrastructure, and improved travel choices help businesses to thrive and deliver better access to jobs and services, safer, healthier, sustainable and inclusive communities and a high quality of life.'

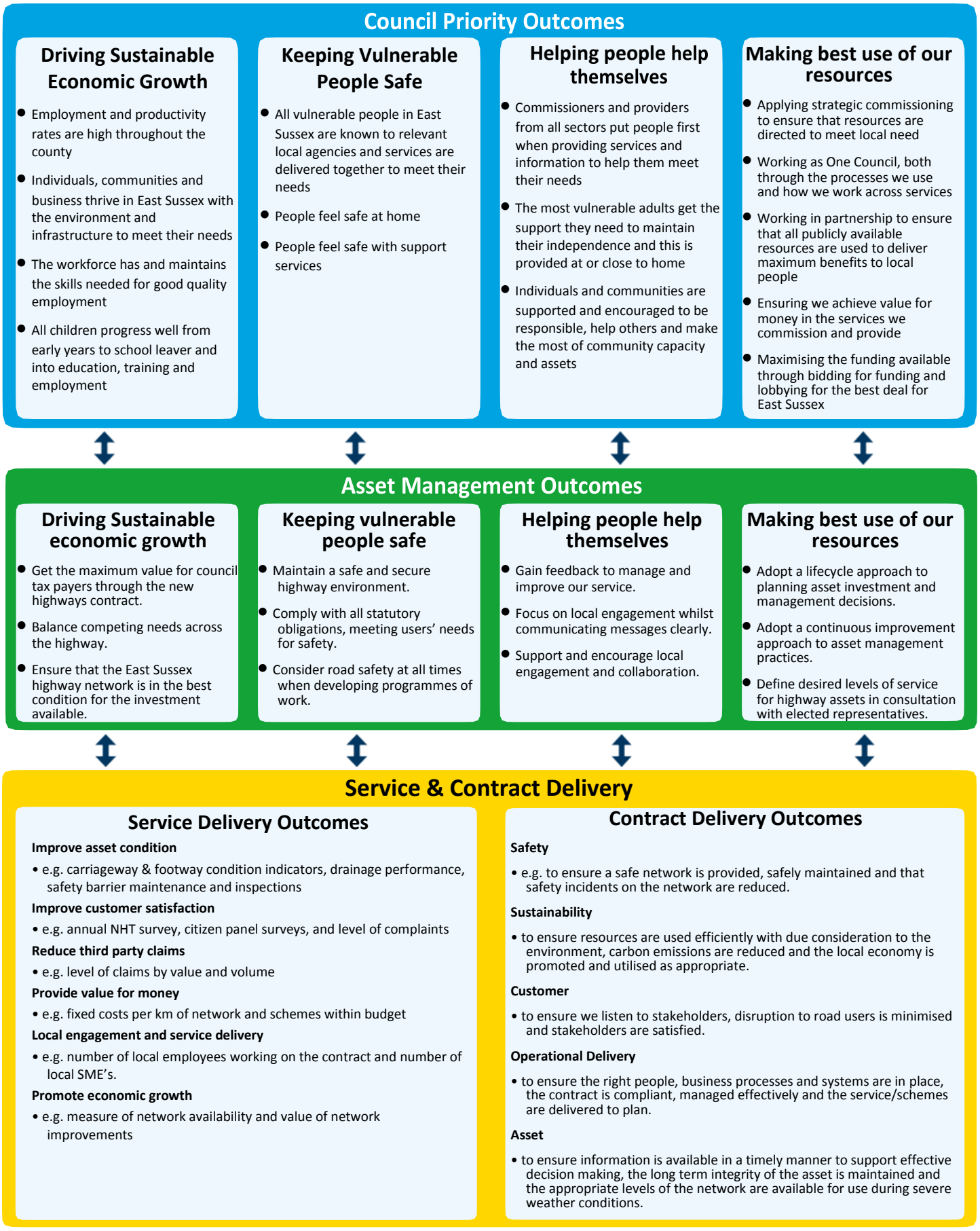
Service and Contract Delivery Outcomes

East Sussex County Council recognises that the delivery of an efficient highway service cannot be undertaken without effective maintenance of the existing highway network. It is therefore essential that new infrastructure that supports the Council's priority outcomes can be maintained to the appropriate standard in the future and that existing highway infrastructure remains serviceable. The Council is committed to having the best network condition for the investment available, and supports an asset management based approach for the maintenance of the highway network.

The current highways contract arrangement commenced in May 2016 and a Contract Management Group was established to oversee the delivery of this providing specialist contract, commercial, performance and service development functions. A series of asset management outcomes linked to service outcomes have been created that are directly aligned to the achievement of the Council Plan.

The highway service is delivered through a highway maintenance and infrastructure contract for which a series of service delivery and contract outcomes have been established respectively. The relationships between these outcomes are shown as Figure 1. The highways work programmes are established on an asset management basis for delivery through the highways contract. This will ensure the works remain aligned to this asset management policy and strategy and the Council's priority outcomes. It will also support advance planning of key investment decisions for the Council.

Figure 1 – Relationship between council outcomes and asset management outcomes



Asset Management Framework

East Sussex County Council has developed a Highway Asset Management Framework (see figure 2.) that is based on the recommendations made within the 2013 Highway Management Efficiency Plan (HMEP). The framework summarises all activities and processes that are necessary to develop, document, implement and continually improve our approach to asset management. An Asset Management Implementation road map and a supporting implementation plan are being used to ensure the full implementation of the framework. The framework is shown in figure 2 and is summarised below.

Context

This establishes the context for highway infrastructure asset management in East Sussex. The context includes a variety of factors that need to be taken into consideration when determining the Council's expectations for the highway service. The factors include: national transport policy, local vision and local transport policies, expectations of stakeholders and legal and financial constraints.

Planning

This sets out the key activities that are undertaken by East Sussex as part of the asset management planning process. The activities include:

- Policy – East Sussex's published commitment to highway asset management.
- Strategy – East Sussex's published statement on: how the policy will be implemented, the implementation of an asset management framework, the strategy for each asset group, and the commitment to continuous improvement.
- Performance – The levels of service to be provided by East Sussex's highway service and how performance will be measured and reported.
- Data – East Sussex's strategy for data collection and management, without which informed decisions cannot be taken.
- Lifecycle planning – East Sussex's lifecycle plans for each asset group which when combined with funding levels and desired levels of service enable informed decisions to be taken.
- Works programmes – East Sussex's rolling programme of works for each asset group.

Enablers

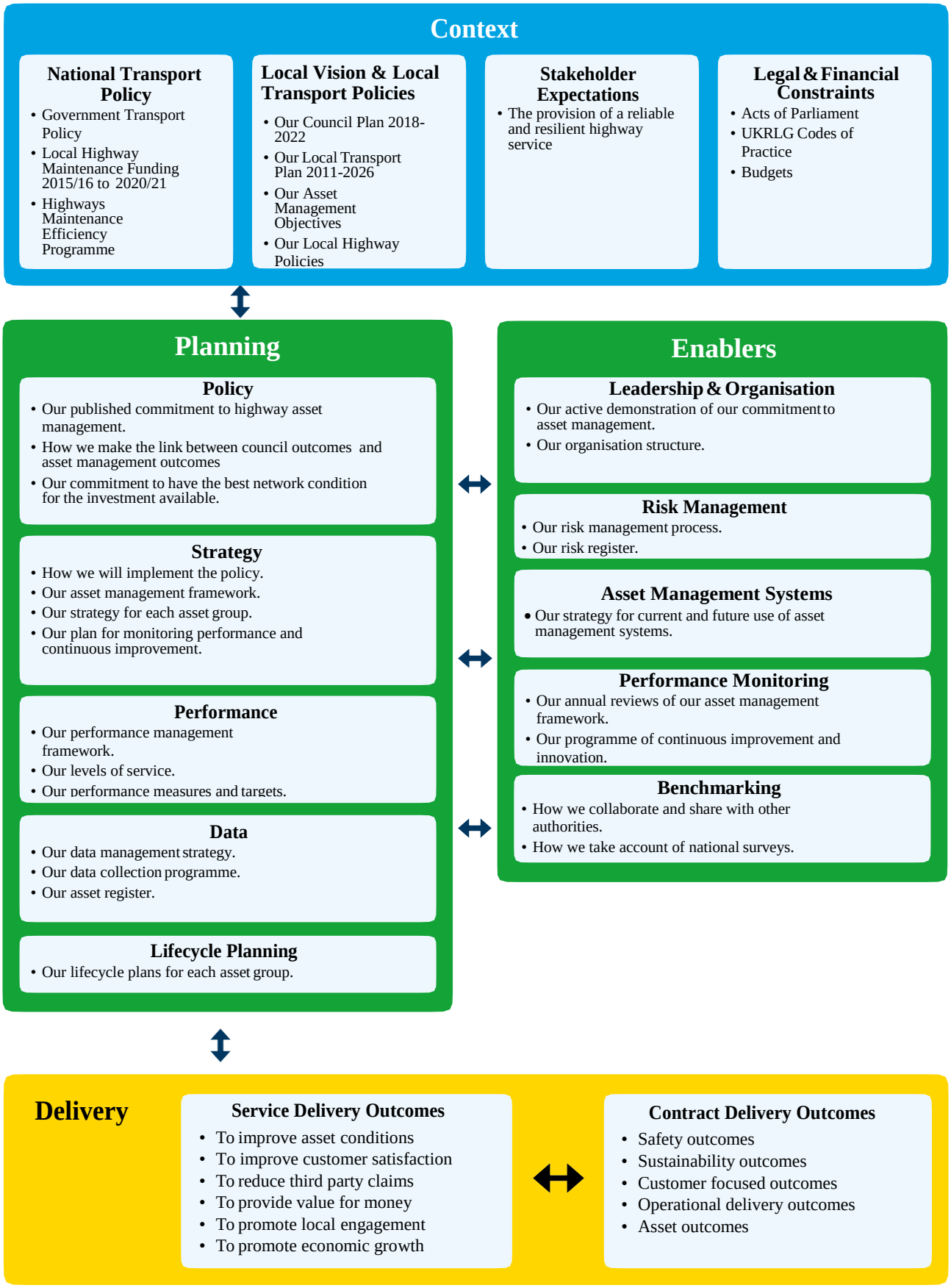
Enablers are a series of supporting activities that support the implementation of the Asset Management Framework. They provide a means of:

- developing organisational leadership and the adoption of an asset management culture
- effectively communicating and collaborating with all stakeholders
- development of the competencies and skills of all highways staff
- effective means of managing risk
- strategy for the use of asset management systems
- measuring the performance of the asset management framework
- benchmarking progress and collaborating with other highway authorities
- fostering a culture of continuous improvement and innovation

Delivery

As set out in Section 1, the delivery component of the framework sets out how the highway service will be delivered via the new highway maintenance contract for which a series of service delivery and contract delivery outcomes have been established respectively.

Figure 2 – Highway Asset Management Framework



Strategy for Main Asset Groups

Introduction

This section summarises the existing highway asset, its current condition, and a summary of the strategy to be employed for each asset type in the future. An understanding of, and agreement to, the levels of service required from each asset type is essential for the successful delivery of the strategy.

Highway Asset

The highway asset is shown below together with a summary of its current condition.

Table 1 – Summary of Highway Asset – 2016/17 figures

Asset Group	Quantity	Condition
Carriageways	3,375km	Approximately 5% of the principal network, 6% of the non-principal and 19% of the unclassified network in East Sussex is identified as requiring maintenance.
Footways and Cycleways	2,481Km	The 2016/17 performance figures for the footway network show that 30% of the network is either functionally impaired or structurally unsound.
Structures	483 bridges, 239 retaining walls and 2 tunnels	The Bridge Condition Stock Indicator rates the average condition of East Sussex County Council bridge stock at 86 (Good). The BCSI (critical element) value is lower at 76 (Fair). At present ESCC monitors 18 structures at substandard.
Drainage	98,000 gullies and 505 km ditches	96% of the gully stock is free flowing
Street Lighting	37,500 column and wall mounted street lights, 10,000 other inventory items, 3,000 street lights belonging to Parish, Borough and District Councils.	Street lighting assets are monitored in accordance with the Institute of Lighting Professionals.
Traffic signals	66 signal controlled junctions and 140 signal controlled crossings.	A detailed review of condition is taking place in 2018.
Road markings signs and street furniture	900 grit bins, 24.7km of guard rail, 40,000 safety bollards, 43,695 road signs, 2,500km of road markings, 28.5km of safety fences/barriers	Road markings are renewed on a budget capped approach with key lines being replaced as a priority and as need arises.
Soft Estate	4,468km of vegetated verge, 75km of verge designated as Wildlife Verges and 55,000 individual trees, 36km of hedges and 50 ornamental shrub sites.	Existing information is being gathered, collated and gap analysis undertaken. Once the gaps in knowledge have been ascertained, surveys will be carried out to plug these, especially relating to the tree resource and the ecology of the soft estate.
Asset Data Management	Inventory of all of the above	The data sets vary in their completeness but they are the source of all that is undertaken upon the highway and key to the highway service achieving its goals.
Highway Asset Lifecycle Planning	Assessing best investment practice for the assets.	Approximately 50% complete 2016 review.

Highway Asset Hierarchy

The carriageway asset is currently managed according to a hierarchy based on road classification, and further divided by urban/rural road type as outlined in Table 2 below. The hierarchy is designed to recognise the relative importance of routes to the communities (social and economic) that they serve. The carriageway hierarchy traditionally has been used as a tool to help ensure that highway maintenance activities are effectively prioritised.

Table 2 – Asset Hierarchy

Category	Road maintenance hierarchy description	East Sussex road hierarchy general description
1	Motorways	Category 1 not applicable to East Sussex
2	Strategic Route	Primary Route
3a	Main Distributor	Inter Urban Route
3b	Secondary Distributors	Intra-Urban Routes
		Intra-Rural Routes
4a	Link Roads	Business or Industrial Roads
		Residential Roads
		Village Roads
4b	Local Access Roads	Country Lanes
		Minor Urban Roads
		Minor Rural Roads

Value and Scope of carriageways

Carriageways are the most valuable highway asset in East Sussex, having a gross replacement cost (GRC) of nearly £3.5 billion and they receive the greatest levels of maintenance expenditure. They were the first asset for which lifecycle plans were developed using current condition and have resulted in the creation of several investment scenarios. This has enabled a greater understanding of where to target investment to achieve the desired levels of service. Lifecycle planning will allow the impact of highway maintenance activities in terms of whole life carbon costs to be taken into account when determining interventions, materials and treatments.

East Sussex County Council is responsible for the maintenance of 3,375km of roads, providing transport links across the county from housing areas to the national motorway network. The condition of the carriageway asset is measured through annual surveys and inspections. In 2016, 19% of the unclassified network was identified as requiring maintenance, compared to just 5% of principal roads and 6% of non-principal roads. The national average figures were: 17% unclassified; 6% non-principal and 3% principal. The figures need to be viewed in context with the increase in local authority road traffic numbers. There was an increase in East Sussex from 1993 to 2016 of 483 million vehicle miles, up 21.4%.

Planned maintenance is delivered by an annual works programme. This programme is capital funded and schemes have been identified using an asset management approach. This evidence approach is endorsed by Council Members and achieved a four year capital programme for carriageways of £70 million between 2014 and 2018 a further five years of programme of capital funding has been agreed totalling £75million to achieve a steady state of condition commencing in 2017/18, £15 million per year.

Management of potholes and other carriageway safety issues arising across the network is delivered using revenue funding which is anticipated to reduce over coming years. By employing an asset management based approach and improving the coordination of road maintenance East Sussex will continue to increase the value achieved in road maintenance. Asset Management will also improve network resilience and reduce the burden on revenue budgets through the delivery of effective capital programmes of preventative work.

Surveying the carriageway and Prioritisation of work

ESCC has reviewed its carriageway survey standards to ensure it records sufficient information to understand the condition of it highway assets and to meet the reporting requirements of the Department for Transport and our approach is to undertake annual SCANNER surveys to meet the requirements of the DfT:

1. SCRIM surveys annually of the primary network
2. Explore the use of Highway Safety Inspectors Reports
3. Explore the use of video surveys for footways and unclassified routes
4. Explore the potential for introducing deflectograph surveys on the primary network

Approach: Desired outcomes will be achieved through the continued development and implementation of the carriageway strategy in line with the East Sussex Highway Asset

Performance Indicator	12/13	13/14	14/15	15/16	16/17
% Principal Roads requiring maintenance (Council Plan)	8	7	5	5	5
% Non-Principal Roads requiring maintenance (Council Plan)	10	9	9	6	6
% Unclassified Roads requiring maintenance (Council Plan)	19	25	17	22	19

Framework to achieve short, medium and long term goals

- Continue to improve the forward programme of works by improved data management
- Introduce more detailed scheme briefs at handover stage to improve the quality of the final product
- Continue to develop and refine lifecycle models
- Benchmark with other authorities and continue to follow and develop best practices
- Seek to secure appropriate funding levels to achieve its aims through the lifecycle plans

Short-term desired outcomes (18/19 Financial Year):

To sustain a steady state of condition with the highway asset:

- 19% of unclassified roads requiring maintenance
- 6% for non-principal roads
- 5% for principal roads

Medium-term desired outcomes 5 years (18/19 to 23/24 Financial Year):

To develop a Member endorsed programme of work for the following five years to effectively deliver the budget plan, and a steady state of annual performance targets:

- 19% of unclassified roads requiring maintenance
- 6% of non-principal
- 5% of principal

Long-term desired outcomes 5 to 10 years (23/24 to 28/29 Financial Year):

- Develop a compelling case for the funding of carriageway maintenance beyond the current five year budget plan
- Implement programmes of work delivering best value against service outcomes

Footways and Cycleways

Footways and cycleways are critical assets supporting access and mobility for people in East Sussex. Securing continuous improvement in the safety and serviceability of footways and cycleways is necessary to encourage alternatives to car, particularly for journeys in urban areas. Well maintained footways aid social inclusion, particularly improving accessibility for vulnerable people.

East Sussex County Council is responsible for the maintenance of 2,433km of footways providing access to residential and rural areas. The Council also maintains 48 Km of cycleways both on and off carriageway. The footway and cycleway asset has a gross replacement cost of approximately £399 million.

Footway:	(any defect in the footway or designated cycleway, causing in a change in level, resulting from raised or sunken ironwork, pothole, failed surface, displaced paving, kerb)
High: Cat 1	Greater than 40mm deep and at least 200mm wide in all directions
Medium: Cat 2	Greater than 30mm and less than 39mm deep and at least 200mm in all directions
Low: Cat 3	Greater than 20mm

ESCC is reviewing its present footway network to ensure alignment with the Code of Practice and to make sure that limited resources are appropriately targeted.

Cycleways

The cycleway hierarchy is determined not by use or functionality but by location which reflects the differing risks associated with shared, partially segregated and fully segregated cycle routes. See below.

	Description
1	Cycle lane forming part of the carriageway, commonly a strip adjacent to the nearside kerb. Cycle gaps at road closure point (No Entry to Traffic, but allowing cycle access).
2	Cycle track – a highway route for cyclists not contiguous with the public or carriageway. Shared cycle /pedestrian paths, either segregated by a white line or other physical segregation, or un-segregated.
3	Cycle provision on carriageway, other than a marked cycle lane or marked cycle provision, where cycle flows are significant.
4	Cycle trails, leisure routes through open spaces. These are not necessarily the responsibility of the Highway Authority, but may be maintained by an authority under other powers or duties.

Similarly to footways ESCC needs to review its present cycleway network and reflect the Code of Practice so that limited resources are appropriately targeted.

Surveying the footway / cycleway and Prioritisation of work

ESCC has been reviewing its survey standards and exploring more efficient ways of capturing data and records sufficient information to understand the condition of the asset and to meet the reporting requirements of the Department for Transport.

Work prioritisation needs to be comprehensible to all users of the asset in that it uses criteria which are 'smart': specific, measurable, achievable, realistic and timely. The prioritisation also needs to be flexible to meet the aspirations of stakeholders. ESCC are working on a system that joins condition, hierarchy and risk together, but is also flexible to meet changing needs.

Approach: Desired outcomes will be achieved through the continued development and implementation of the carriageway strategy in line with the East Sussex Highway Asset Management Framework.

Our Performance

Performance	2012/13	2013/14	2014/15	2015/16	2016/17
% footway that is structurally unsound (lower is better)		12	21	15	14
% footway that is functionally impaired (lower is better)		19	3	15	16
% total footway requiring maintenance(lower is better)		31	24	30	30

Framework to achieve short, medium and long term goals

- Continue to improve the forward programme of works by improved data management
- Introduce more detailed scheme briefs at contractor handover stage to improve the quality of the final product
- Continue to develop and refine lifecycle models
- Benchmark with other authorities as it continues to follow and develop best practices
- Seek to secure appropriate funding levels to achieve aims through the lifecycle plans

Short-term desired outcomes (18/19 Financial Year):

- To sustain a steady state of condition with the footway and cycleway asset
- To undertake a high definition photographic survey of part of the network (1/3) and understand its condition

Medium-term desired outcomes (18/19 to 23/24 Financial Year):

- To develop a Member endorsed programme of work for the following five years
- To undertake a high definition photographic survey of part of the network (1/3) and understand its condition
- To sustain a steady state of condition/ improvement with the footway and cycleway asset
- To refine the condition survey to meet the objectives of ESCC

Long-term desired outcomes (23/24 to 28/29 Financial Year):

- To develop a second Member endorsed programme of work for five years
- To undertake a high definition photographic survey of the last third of the network and understand its condition
- To sustain a steady state of condition/ improvement with the footway and cycleway asset
- To refine the condition survey to meet the outcomes of ESCC

Structures

East Sussex County Council actively manages its highway structures in accordance with principles set out in the UK Roads Liaison Group publication 'Well Managed Highway Infrastructure, A Code of Practice'.

There are 483 bridges and 296 culverts which belong to East Sussex County Council, 239 retaining walls and 2 tunnels being maintained, with a gross replacement cost estimated to be £523.8 million (2017 values). A further 311 structures are being inspected to ensure the safety of the highway user. Routine maintenance of structures is based on a prioritised system of required work with the aim of minimising the risk to public safety and future maintenance costs.

The condition of the structures asset is measured primarily by two factors: BSCIavi (Bridge Stock Condition Indicator average) and BSCIcrit (Bridge Structure Condition Indicator critical) which are derived from bridge inspections.

In accordance with the nationally recognised indicators published by ADEPT (The Association of Directors of Environment, Economy, Planning and Transport) and in common with most Local Authorities, there has been a slow reduction in the overall stock value which at present in East Sussex is within the range denoted 'good'. Out of the total stock, 58 structures are rated below 'fair'. This information is stored within a bespoke database and used to determine lifecycle planning strategies.

All structures are maintained in a condition 'fit for purpose and safe for use'. If safety critical components are identified as being deficient after inspections, immediate steps are taken to make them safe. At present, 18 substandard structures are monitored to determine their structural performance and are managed in accordance with the code of practice.

Desired outcomes: The principle factor for determining the forward strategy is to maintain the asset in a condition 'fit for purpose and safe for use'. The target is to adhere to our 10 Year Structures Plan and maintain the level of the BSCI. Additional targets include alleviating culverts that cause property flooding, enhancing safety at highway structures and mitigating railway sites where vehicle incursion is an issue.

Approach: There are likely to be further financial pressures in the future, reducing the availability of finance for the maintenance of the structures stock. The key financial driver is to ensure that the time for intervention of planned maintenance to a structure is determined to provide the best financial return for that investment. This will be managed by use of the structures lifecycle models, reviewing the 10 Year Plan, monitoring the BSCIs and applying professional, qualified engineering judgement.

Our Performance

Performance	2012/13	2013/14	2014/15	2015/16	2016/17
Number of substandard structures (Lower is better)	17	17	18	18	18
BSCI average rating (Higher is better)	86 good	86 good	86 good	86 good	86 good
BSCI critical element (Higher is better)	76 fair	75 fair	76 fair	76 fair	76 fair

Framework to achieve desired goals

- Continue to improve the forward programme of works
- Introduce more detailed scheme briefs at handover stage
- Continue to develop and refine lifecycle models
- Benchmark with other authorities as it continues to follow and develop best practices
- Seek to secure appropriate funding levels to achieve its aims through the lifecycle plans

Medium-term desired outcomes 5 years (18/19 to 23/24 financial years)

- To maintain the asset as 'fit for purpose' and 'safe for use'
- Target and maintain the existing BSCI scores
- Alleviate any culverts that are causing flooding to third parties
- Mitigate any risk from road over rail vehicle incursions

Long-term desired outcomes 5 to 10 years (23/24 to 28/29 financial years)

- Build a strategic investment plan for the asset to facilitate investment at the right time for each structure
- Ensure the structures are maintained to the highest safety and condition standard within the available budget

Drainage

East Sussex County Council is adopting a risk management approach towards highway drainage, taking into account the geographical location of the assets, known local flooding hot spots and risk to the highway. The Council's highway drainage asset is critical to ensuring the controlled removal of water from the carriageway for its safe use. The impact of failure from the drainage asset on other highway infrastructure is significant, particularly to the carriageway. As a consequence it is vital that we have an up to date inventory of all highway drainage assets and their condition.

The current inventory of highway drainage assets across East Sussex includes approximately 98,000 gullies 10,000 grips and 500km of drainage ditches. Outside of routine maintenance the current approach to repairs and improvements is predominantly reactive. This is the result of an incomplete inventory, lack of condition data and a lack of knowledge of the risks posed by this critical asset across the county performance.

The limitations of this approach have been made evident with the current backlog of drainage defects identified. Our ability to model a capital programme and lifecycle plan for our highway drainage asset is limited for these reasons.

To proactively maintain the entire drainage asset into the future, we will continue to build a complete inventory and good understanding of condition including the associated risks that come with failure. This will enable us to undertake programmes of preventative maintenance whilst monitoring and reviewing performance.

Improving our knowledge of drainage infrastructure across the county enables us to demonstrate evidence-based decisions on drainage maintenance and supports our ability to secure future funding investment, while demonstrating savings in revenue expenditure through efficient and effective maintenance.

The proposed new performance indicators are to drive this required improvement in our knowledge.

UFRN	Description	Measure
1	Number of road gullies cleaned and checked as 'free flowing' with their position recorded appropriately	Number
2	Length of drain validated as fit for purpose and position recorded appropriately.	Length metres
3	Length of ditching cleaned and validated as fit for purpose and position recorded appropriately	Length metres
4	Number of headwalls inspected and checked as 'free flowing' and position recorded appropriately	Number
5	Number of Manholes / access chambers inspected and checked as free flowing and position recorded appropriately	Number

Desired outcomes:

- Move away from reactive maintenance towards planned improvements
- Implementation of a proactive maintenance approach to reduce flooding and damage to other highway infrastructure

Approach:

- Continued proactive maintenance of known drainage assets in accordance with industry guidance such as the HMEP Guidance documents
- Collection of inventory and condition information for the remaining unknown drainage assets to enable clear lifecycle plans to be developed
- A proactive approach for future programmes of prioritised maintenance to be achieved

Our Performance

Performance Indicator	12/13	13/14	14/15	15/16	16/17
% Highway gullies that are free flowing and clear of obstruction (PP)		98%	98%	98%	96%

Framework to achieve desired goals

- Continue to improve the forward programme of works by improved data management
- Introduce more detailed scheme briefs at contractor handover stage to improve the quality of the final product
- Continue to develop and refine lifecycle models
- Benchmark with other authorities as it continues to follow and develop best practices
- Seek to secure appropriate funding levels to achieve its aims through the lifecycle plans
- Develop a forward programme of capital improvement works to deliver extra investment in drainage over the next six years

Short-term desired outcomes (18/19 Financial Year):

To sustain a steady state of condition with the drainage asset:

- Resolve the various historic paper records into a single image of the network
- Work with the County Flood Risk Management Team and build relationships with the Environment Agency, Southern Water and Borough / Districts in East Sussex to better understand the associated third party concerns

Medium-term desired outcomes 5 years (18/19 to 23/24 Financial Year):

- Continue working with the County Flood Risk Management Team and build relationships with the Environment Agency, Southern Water and Borough / Districts in East Sussex to better understand the associated third party concerns
- Continue to build a robust set of drainage records
- Produce a Member endorsed five year works programme

Long-term desired outcomes 5 to 10 years (23/24 to 28/29 Financial Year):

- Continue to build a robust set of drainage records
- Produce a second five year Member endorsed programme
- Continue working with the County Flood Risk Management Team and build relationships with the Environment Agency, Southern Water and Borough / Districts in East Sussex to better understand the associated third party concerns

Street Lighting

Street lighting is an important highway asset, contributing to public amenity, safety and the night time economy. With a gross replacement cost of £70.173million (2017), the lighting asset consists of approximately:

- 37,500 East Sussex street lights (column and wall mounted)
- 10,000 other inventory items (such as illuminated and reflective bollards, subway lighting, internally and externally illuminated signs and school warning lights)
- Approximately 2,000 concrete columns installed before 1982
- 3,000 street lights for parish, borough and district councils under individual, rechargeable maintenance agreements

There is concern as to the accuracy of the inventory figures and stock condition; as a result the following is required:

- Complete inventory undertaken
- Condition data on the inventory
- Listing of any critical risks

East Sussex County Council operates a six year routine maintenance cycle, with all columns in the county being visually inspected for structural and electrical condition at each visit. Monthly night scout patrols are also in operation, allowing faults to be identified and logged into a lighting management system. This maintenance cycle has an overall aim of minimising non-routine visits and improves the efficient operation of the asset. The frequency of these visits has been extended to six years due to the introduction of part-night street light operation and LED (light emitting diodes) light sources.

In addition to these maintenance activities, limited capital column replacement projects to replace life expired lighting columns are also undertaken. Replacing the columns at these locations with newer equipment minimises the risk of failure and the occurrence of non-routine faults.

ESCC are also investigating the opportunity of 'Green Bank' funding to bring the stock up to a modern standard.

Desired outcomes:

- To ensure the safety of the public
- Full inventory and condition assessment
- Reduce the risk to maintenance operatives
- Reduce energy consumption
- Reduce the cost of maintenance
- Halt deterioration of the asset

Approach:

- Working with the Joint Venture and / or a third party for data collection
- Combine routine inspection
- Regular night scouting
- Testing and cleaning
- Record public fault reports
- Continue with key projects to meet targets for reduced energy consumption, including the reintroduction of part night lighting where appropriate, and the installation of dimming and more efficient equipment

The above approach will be supported with the use of inventory systems programmes which also help to mitigate risk, and comply with current British Standards.

Our Performance

Performance	2012/13	2013/14	2014/15	2015/16	2016/17
Number of street light columns in excess of the action age (lower is better)	5,983 16% of total stock	6,137 16.3% of total stock	7,472 19.9% of total stock	7,977 21.3% of total stock	
Kilowatt hours	14,239,492	12,419,934	10,722,502	9,694,404	9,693,828
Carbon used	7,704	6,719	5,716	4,812	4,329

Framework to achieve desired goals

- Continue to improve the forward programme of works
- Introduce more detailed scheme briefs at handover stage
- Continue to develop and refine lifecycle models
- Benchmark with other authorities as it continues to follow and develop best practices
- Seek to secure appropriate funding levels to achieve its aims through the lifecycle plans
- Develop approach and funding to replace concrete columns

Medium-term desired outcomes 2 to 5 years (20/21 to 23/24 Financial Year):

- Develop a fully comprehensive inventory of all lighting elements
- Produce a hierarchy of need based upon community reassurance
- Refine the lifecycle model demonstrating funding requirement for various performance outcomes
- Develop a five year, Member endorsed forward plan of preventative maintenance

Long-term desired outcomes 5 to 10 years (23/24 to 28/29 Financial Year):

- Develop a programme of work which is Member endorsed for the funding of lighting elements for a second five year period
- Implement programmes of work delivering best value against the proposed investment plan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Traffic Signals

Traffic signal controlled junctions and pedestrian crossings form an important highway asset, contributing to the safe and efficient use of the road network and promoting economic growth within the county. Their efficient operation and maintenance allows those using the road network to move around the county with the minimum of delay and disruption. Efficient maintenance regimes ensure that the traffic signal installations are maintained in a safe structural and electrical condition.

There are currently 266 signal controlled junctions, 155 pedestrian signal crossings and 151 vehicle activated signs (VAS) installed across the county with a gross replacement cost of £16.38million (2017). The traffic signal sites also have white lining, anti-skid surface and pedestrian barrier rails associated with them. An annual inspection is undertaken which checks the physical condition of the infrastructure and the operation of the equipment. This includes a visual assessment of the structural and electrical condition as well as an electrical test every sixth year.

There is concern as to the accuracy of the inventory figures and stock condition of this asset and as a result the following is required:

- A complete inventory undertaken
- Condition data on the inventory
- Listing of any critical risks

Fault notification is based on reports from the general public, the Police and our partner. Key Performance Indicators (KPI's) are set and monitored to ensure that our contractor attends and rectifies faults within specified contract time periods. An age-based refurbishment programme is generated on an annual basis which is reviewed along with the annual inspection results, to ensure that all of the signal sites are maintained to an acceptable operational condition.

Desired outcomes:

- Ensure the safety of the public
- Full inventory and condition assessment
- Efficient operation of the asset
- Reduce the risk to maintenance operatives
- Reduce energy consumption
- Reduce the cost of maintenance
- Halt deterioration of the asset
- Move towards automatic fault reporting systems

Approach:

- Working with the Joint Venture and / or a third party for data collection
- Combined routine inspection and testing
- Timely attendance and repair of faults to ensure the safe operation of the asset
- Use of an inventory system to record and monitor fault and asset information
- Schedule of annual inspections to identify issues that pose a risk
- Reduced energy consumption through the use of LED lanterns signal heads
- De-cluttering and removal of unwanted equipment or its relocation on to other existing assets to reduce the number of items to maintain and reduce future maintenance costs (combined infrastructure)
- Replacement of surface cut detection loops with underground vehicle sensors to reduce future maintenance costs, reduce the opportunity of loop failure and maintain the long term structural integrity of the road surface
- Design of efficient replacement traffic signals schemes that deliver the lowest whole life costs

Our Performance

Performance	2012/13	2013/14	2014/15	2015/16	Performance
Number of Signal Controllers (Junction and Pedestrian crossings) in excess of action age (Lower is better)	8	52	10	13	Number of Signal Controllers (Junction and Pedestrian crossings) in excess of action age (Lower is better)

Framework to achieve desired goals

- Continue to improve the forward programme of works by improved data management
- Introduce more detailed scheme briefs at contractor handover stage to improve the quality of the final product
- Continue to develop and refine lifecycle models
- Benchmark with other authorities as it continues to follow and develop best practices
- Seek to secure appropriate funding levels to achieve its aims through the lifecycle plans

Framework to achieving desired goals: Short to Medium-term desired outcomes:

- A full survey of all of the sites that have powered lights/ equipment is required to understand the type and state of the facilities
- The survey results need to be put into a formal report with recommendations for investment based upon risk to the public, operatives and corporate image
- From the above a formal request for monies so that a programme of works can be instigated

Medium-term desired outcomes 2 to 5 years (20/21 to 23/24 Financial Year):

- Develop fully comprehensive inventory of all traffic signal controlled equipment
- Refine the lifecycle model demonstrating funding requirement for various performance outcomes
- Develop a 5 year, Member endorsed forward plan of preventative maintenance

Long-term desired outcomes 5 to 10 years (23/24 to 28/29 Financial Year):

- Develop a compelling case for long term sustainable funding beyond the current five year budget plan
- Implement programmes of work delivering best value against the proposed preventative investment plan


Push button
Wait for signal

Road Markings, Signs and Street Furniture

Road markings, signs and street furniture have a significant presence within the public highway environment and appropriate design and maintenance of these assets is required to offer a safe, clear and attractive public space for all users.

East Sussex County Council is responsible for the maintenance of over: 900 grit bins; 24.7km of pedestrian guard rail; 40,000 safety bollards; 28.5km of safety fences / barriers; 43,695 road signs and nearly 2,500km of road markings. In maintaining these assets, the approach is to ensure that they offer good long term value. Community initiatives have been set up to work alongside parish and town authorities such as jointly-funding the maintenance of fingerposts. There is a need to have a robust inventory that is regularly checked and updated to ensure the continuing knowledge of the asset condition.

Approach:

- Develop a lifecycle model for road markings, signs and street furniture from inventory
- Implement a programme of preventative maintenance in 2019/20
- The programme will consider all existing road marking maintenance activity and propose a plan offering a coordinated, best value approach in future
- Use of the signs inventory to support initiatives such as street de-cluttering to improve the public realm for road users and limit maintenance liability

Framework to achieve desired goals

- Continue to improve the forward programme of works by improved data management
- Introduce more detailed scheme briefs at contractor handover stage to improve the quality of the final product
- Continue to develop and refine lifecycle models
- Benchmark with other authorities as it continues to follow and develop best practices
- Seek to secure appropriate funding levels to achieve its aims through the lifecycle plans

Medium-term desired outcomes 5 years (18/19 to 23/24 Financial Year):

- Develop a methodology for collecting data that will allow the Asset Management Team to know precisely what assets there are in this category and their condition
- Implement programmes of work delivering best value against service objectives

Long-term desired outcomes 5 to 10 years (23/24 to 28/29 Financial Year):

- Develop a compelling case for long term sustainable funding beyond the current fiv year budget plan
- Implement programmes of work deliverin best value against service objectives

Soft Estate

The highway soft estate provides the setting for the county's roads. It includes trees, hedges, verges and other vegetated and natural areas within the boundary of land managed as public highway.

In urban areas it generally comprises verges between the road and pavement and any trees growing within them, but also larger green areas associated with the highway, and individual trees within paved areas. Especially in rural areas, more extensive areas of habitat can be included, often comprising areas of woodland planted to mitigate the visual impact of new roads, and wetland and other habitats provided to compensate for habitat lost during new road construction.

Drainage assets such as ditches, soakaways and balancing ponds often form part of the soft estate.

Increasingly organisations' soft estate elements such as woodlands and wetlands are considered as natural capital with a measurable value, providing equally measurable benefits year on year in the form of what are known as ecosystem services – in other words 'what nature does for us'.

The East Sussex Highway soft estate is no exception, and ecosystem services provided include:

- Visual amenity and aesthetic value; enhancing economic values, improving quality of life and providing health benefits for residents and enhancing the attractiveness of the county to tourists
- Screening to residential areas
- Psychological traffic calming and a safer road environment
- Highway drainage management through run-off areas, ditches and wetlands
- Absorption of atmospheric carbon through vegetation growth
- Air pollution removal by trees and other vegetation, e.g. particulates and noxious gases.

Recent work (2015) in Highways England's Area 1 (Devon and Cornwall) valued the 300,000 or so trees on the network's verges at over £40m using the Capital Asset Valuation for Amenity Trees (CAVAT) method, and the total **annual** benefits provided by the highway soft estate at over £760,000.

The management of the East Sussex's highway soft estate has suffered in recent years from continual reductions in the funding of planned works such as grass cutting, leading to poor appearance and reduced customer satisfaction, whilst lack of knowledge of the asset has led to a reliance on reactive management of trees and other woody vegetation.

An asset management approach in the future could save money by targeting works aimed at improving the soft estate's aesthetic appeal, the ecosystem services it produces, and its biodiversity, thus also helping the county to comply with wildlife legislation.

The gathering and amalgamation of data currently held in diverse forms, together with new ecological, arboriculture, and other surveys will help us to accurately define our asset whilst ongoing research will provide innovative and cost effective solutions to our soft estate management.

The highway soft estate asset includes approximately 4,468km of vegetated verge, at least 55,000 individual trees on A roads and in major towns and approximately 36km of council maintained hedge. In addition there are a number of areas of woodland and scrub, ornamental shrubs and wetland areas.

Nearly 75km of verges are designated as Wildlife Verges and managed specifically for the wildlife interest they contain.

Approach: Desired outcomes will be achieved through the continued development and implementation of the carriageway strategy in line with the East Sussex Highway Asset Management Framework, following standards of best practice and collaborating with our partners.

Framework to achieve short, medium and long term goals

- Continue to improve the forward programme of works by ongoing survey works where knowledge gaps exist and improved data management
- Introduce more detailed scheme briefs at contractor handover stage to improve the quality of the final product
- Continue to develop and refine lifecycle models
- Benchmark with other authorities as it continues to follow and develop best practices
- Seek to secure appropriate funding levels to achieve aims through the lifecycle plans

Short-term desired outcome – 2018

1. The production of a document that can explain the journey required to achieve a safe, visually appealing and bio-diverse soft estate which is economic to maintain and meets the aspirations of the various communities of East Sussex.
2. The above will need a consultation document produced.

Medium-term desired outcomes 5 years (2019/20 to 24/25)

1. Develop a methodology for collecting data will allow the Asset Management Team to know precisely what assets there are in this category and their condition. Based upon the above document.
2. Implement programmes of work delivering best value against service objectives developed through the consultation process.

Long-term desired outcomes 5 to 10 years (2019/20 to 2029/2030)

1. Develop a compelling case for long term sustainable funding beyond the current five year budget.
2. Implement programmes of work delivering best value against service objectives.

Risk Management

Managing risk is integral to the effective and efficient management of the highway asset. The identification of current and future risks associated with all aspects of Highway management is embedded in the asset management approach, in accordance with our Corporate Risk Management Framework and established best practice.

Risk types include:

- Health and Safety
- Strategic
- Financial
- Regulatory
- Reputational
- Operational

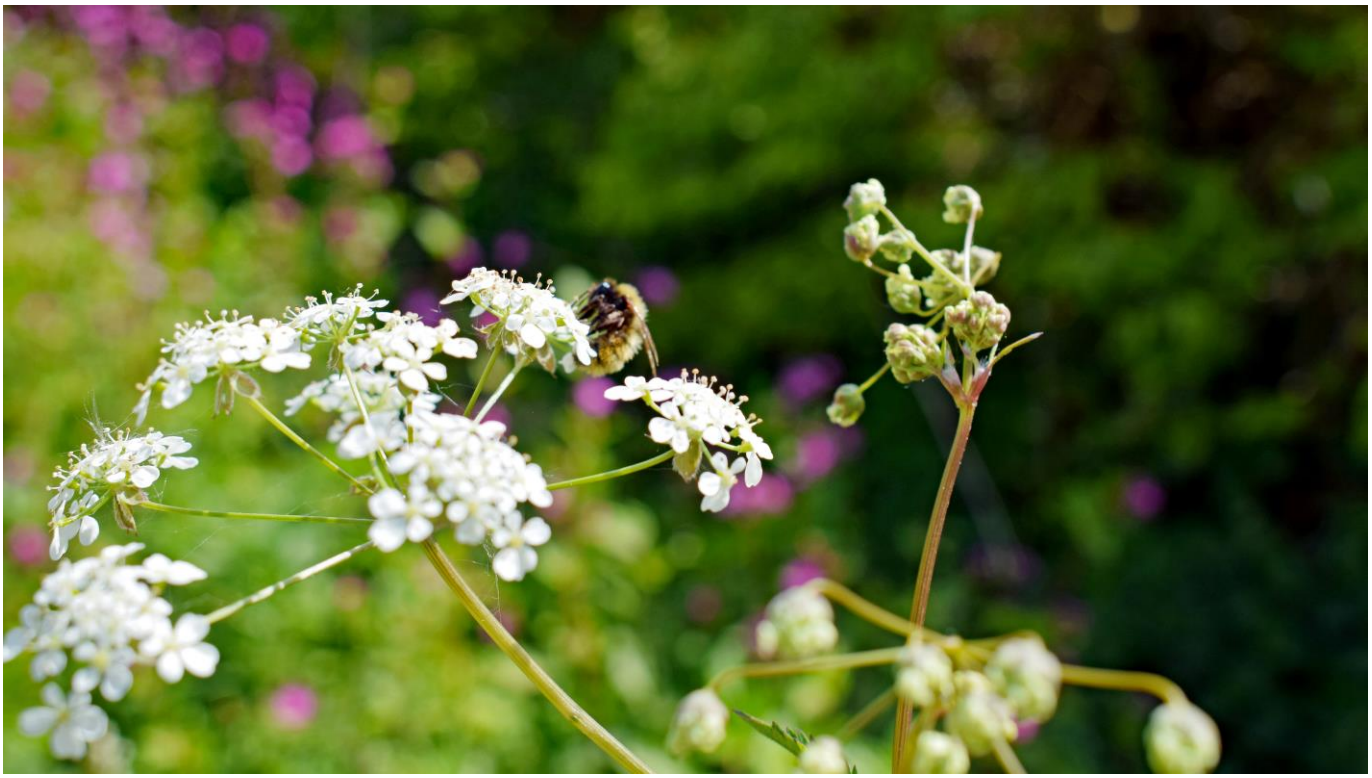
Risk information is recorded corporately as a county council and with our contract partners within the Highways risk register. The Highway risk targets the identification of strategic and operational risks encountered within our works and operations. Risk registers also exist at all levels within the organisation to ensure potential issues are captured, analysed and mitigated.

Risk based decision making is used to inform and define the management approach to our assets, including, inspection regimes, setting levels of service, responses, resilience, priorities and programmes. By adopting a risk based approach highways maintenance can be carried out in accordance with local needs, safety, priorities and affordability. Guidance and training of the risk based approach and its implementation is provided to all those roles with responsibility for taking the risk based decisions. Competencies and training for those staff have been identified and are regularly updated providing a programme of continuing professional development.

A review of the current network hierarchies in East Sussex was undertaken in 2018 to ensure that appropriate management is targeted towards roads of greatest need, in order to reflect our risk based approach to the highway network.

Each asset group has different needs based upon its usage and that variance in need is reflected in the management approach taken to the asset.

Sustainability



The East Sussex Highways Sustainability Action Plan provides actions to mitigate direct and indirect impacts of highway maintenance on the environment and communities. This includes; Consideration of whole life carbon costs; Appraisal of materials, products and treatments for maintenance for environmental impact, nature conservation and biodiversity; and risk assessment and mitigations for the effects of extreme weather on highway infrastructure assets (Climate Change Adaptation).

Issues affecting the environment that are taken into account in highway maintenance, include:

- Carbon costs and energy reduction
- Noise
- Materials utilisation
- Waste management and recycling
- Air quality and pollution control
- Nature conservation and biodiversity
- Environmental intrusion

Actions include production and application of a carbon model, operational carbon footprint analysis, and training for sustainable designs of projects.

Highway maintenance sustainability links to the wider environment and sustainability principles and outcomes of East Sussex County Council and our Highways contractors.

East Sussex County Council undertakes a risk based approach to asset management through its knowledge of the various elements of the highway. The knowledge of the asset is undertaken by:

- Holding and updating all appropriate records
- Validating the records
- Ensuring the data is transparent for decision makers

A data management strategy is one way of documenting information and demonstrating the benefits of data. The East Sussex County Council strategy comprises the following elements:

- **Identify business need** - This is through the appropriate data being collected and an appreciation of the validity of the information and how it is best used

- **Data ownership and accessibility** - The Asset Management Team has designated owners of data who are responsible for its validity and access to it

- **Data collection** - East Sussex County Council strives to ensure the data collected is accurate, appropriate and collected in such a way that repeatability of collection is achievable

- **Frequency of collection** - The data collection is based around the risk of that data from changes to the highway network through climate and use

- **Data Storage** – The data is stored to meet the requirements of East Sussex County Council I.T. Strategy and the Data Protection Act 2010

- **Data Management** – The data is managed currently through the ESAMS system developed by East Sussex

- **Data Disposal** – The data collected is not going to be disposed in the medium term as it allows for a reflection on the management changes to the network

East Sussex County Council will collect appropriate data that allows it to make sound judgements on the rate of deterioration of the highway and all of its component parts, these include:

- Carriageways
- Footways
- Structures
- Lighting columns and associated electrical apparatus
- Road gullies, associated pipework and chambers
- Trees, vegetation and associated green space (ecological concerns)
- Safety barriers and fences
- Any other attributes to or on the highway

The data gathered in these surveys, including details on inventory, asset location and performance, is recorded and stored in asset information databases. These provide a central repository for asset information which can be easily interrogated to obtain information necessary for the day to day management of the asset and to inform short and long-term maintenance needs. As part of the implementation of asset management, we will review current data collection techniques and continue to update our data management strategy.

Life Cycle Planning

Life cycle planning comprises the approach to the maintenance of an asset from construction to disposal. It is the prediction of future performance of an asset or a group of assets based upon investment scenarios, usage and maintenance strategies.

Typically there are five stages to the life of an asset:

1. Creation/ acquisition – a new asset as a result of a new development of capital project
2. Routine maintenance – cyclic and reactive maintenance designed to maintain the asset in a serviceable condition
3. Renewal/ replacement – major work required when cyclic maintenance / reactive works are unable to sustain the asset to the required standard
4. Upgrading – improvement to an asset to meet increased demands
5. Disposal – decommissioning of an asset when past its economic life

Effective lifecycle planning is about making the right investment decision at the right time to ensure that the asset delivers the required level of service over its expected life span to a minimum cost.

The work undertaken by East Sussex Highways is driven by a lifecycle approach through its:

- Knowledge of the asset through the survey work
- The cyclic work undertaken to repair minor faults
- The upgrading work that takes place each year to meet increased demand on the original asset.

Best Practice and Performance Monitoring

East Sussex County Council is committed to the development of good practice and continuous improvement, having already played a leading role in the development of the regional agenda on highway asset management.

Examples of activities that demonstrate our commitment include:

- Membership of the South East 7 Alliance
- Membership of the South East Service Improvement Group
- Participation in Project Outcome (with Surrey)
- Performance Management Framework
- NHT National Survey
- CQC Efficiency Network
- Membership of the CIPFA HAMP Network
- Attendance at a variety of local and regional events

We are continually reviewing our progress against this plan. Asset management, service delivery and contract delivery outcomes are key to good delivery. We will monitor our performance against those outcomes in this document to enable us to identify where we are making progress and where we may need to make changes, to ensure we continue to manage the asset in the most efficient manner, and to ensure that we are able to continuously improve.

Glossary

The following terms are used in this strategy:

Asset management

A strategic approach which identifies the optimal allocation of resources for the management, operation, preservation and enhancement of the highway infrastructure, to meet the needs of current and future customers.

Asset valuation

The calculation of the current monetary value of an authority's assets. It excludes therefore any consideration of the value to the community in terms of the economic and social benefits of providing a means for people to travel in order to work, socialise and live.

Critical asset

An asset without which you cannot deliver a statutory service.

Deterioration

The change in physical condition of an asset resulting from use or ageing.

Gross Replacement Cost

The total admissible cost of replacing the existing highway asset to a modern equivalent standard, taking into account up-to-date technology and materials.

Levels of service

Levels of service typically cover condition, availability, capacity, amenity, safety, environmental impact and social equity.

Lifecycle Planning

Making the right investment at the right time to ensure that the asset delivers the requisite level of service over its full expected life, at the minimum cost.

Whole Life Cost

The total costs incurred in the creation, maintenance and disposal of an asset.

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Report to:	**Lead Member for Transport and Economy**
Date of meeting:	**19 November 2018**
By:	**Director of Communities, Economy and Transport**
Title:	**Community Highways review and allocation of the 2018/19 Community Match Funding**
Purpose:	**To update Lead Member on the Community Highways initiative, to seek approval for the proposed allocation of match funding for 2018/19 and to seek approval of the local delivery Volunteering Guidance Document.**

RECOMMENDATIONS: **The Lead Member is recommended to:**

(1) Note the review to the Community Highways initiative set out in the report;

(2) Agree that £37,500 of match funding should be allocated to three community led transport improvement schemes; and

(3) Approve the Volunteering Guidance Document.

1 Background Information

1.1 The Community Highways initiative was launched in 2014 comprising three key elements: Community Match, Community Extras and Community Local Delivery. In May 2016 as part of their Social Value commitment and offering, the new highways contractor took on the responsibility of managing and delivering the Community Highways projects in conjunction with the County Council, introducing a new approach and relaunching the suite of products available to local councils and communities. The products are summarised as follows:

- *Community Match* – An initiative which enables local communities to take forward small scale transport schemes that are not of sufficient priority to be delivered using County Council funding alone. Funding was initially set at £100,000 per annum but this was increased to £250,000 per annum for the purposes of taking forward schemes of local importance.

- *Community Extras* – A pay as you go option for local communities to purchase extra support and works for highway services and funded entirely by the Parish Council or Local Community Group. Requests can include items such as fingerpost maintenance, traffic management hire and grit bin installation.

- *Community Local Delivery* – a way of enabling communities to take on some elements of maintenance within their local area and deliver services using local suppliers e.g. employing their own grass cutting contractor or by organising local volunteer groups.

1.2 Following the relaunch in May 2016 a number of changes were made to improve and update the Community Highways offering, particularly in relation to the delivery of the Community Match initiative with the introduction of a feasibility study to assist Parishes and Communities in identifying possible solutions and determining cost estimates. A review has been undertaken of Community Match to assess the progress over the previous two years, evaluate the feedback and any lessons

learnt to improve the offering. A summary of the review is provided in Appendix A and those schemes which have been delivered since 2016 are detailed in Appendix B.

2 Supporting Information

Community Match Schemes for 2018/19

2.1 A sum of £250,000 has been allocated from the County Council's 2018/19 Capital Programme for Local Transport Improvements to match fund improvement schemes of local importance through the Community Match Fund. The funding that was unallocated in 2017/18 has also been rolled forward at the beginning of 2018/19, giving a total of £312,276 available to take forward schemes in this financial year.

2.2 Although since the re-launch of Community Match there have been many feasibility studies (listed in Appendix C) requested, there have only been three subsequent applications to take schemes forward. As there is sufficient funding available to deliver all the applications, it was recommended to the Cross Party Member Panel that they should all be taken forward, The Cross Party Member Panel unanimously agreed that the Sevenoaks Road and Friston schemes should be recommended to be taken forward. However one member of the panel had concerns over the value of implementing double yellow lines in Robertsbridge due to lack of enforcement. The Parish Council are keen to proceed with this scheme to resolve parking issues in the vicinity, and we are working towards implementing Civil Parking Enforcement within Rother District, so we would anticipate that in the future there will be consistent enforcement of double yellow lines.

2.3 The schemes, together with estimated costs are shown below. The community contribution will be 50% of the costs for all three schemes.

Scheme	**Total cost**	**Community contribution**	**ESCC contribution**
Sevenoaks Road – pedestrian crossing/traffic calming	£50,000	£25,000	£25,000
A259 Friston – pedestrian buildout	£20,000	£10,000	£10,000
Station Road, Robertsbridge – double yellow lines	circa £5000	£2,500	£2,500

Community Extras

2.4 Community Extras continues to be a popular initiative with Parishes and Community Groups with varied items requested or purchased through this. Fingerpost repairs remain one of the most popular items as Parishes take great pride in the upkeep of these. Further requests include dropped kerbs, signage and as the winter season approaches we receive requests for the installation of new grit bins and filling of current grit bins.

Community Highways Volunteering Guidance

2.5 Parishes and Local Communities have shown a keen interest in the potential to self-deliver certain activities associated with the highway in their local area. These are things that are important to local communities, but where the County Council do not have a statutory requirement to deliver, for example cleaning signs, painting or tidying up vegetation and foliage. In some areas local

communities have already been undertaking volunteering activities such as litter picking and cleaning signs.

2.6 In order to provide clarity to parishes and volunteer groups and ensure the safety of volunteers a guidance document has been produced (shown in Appendix D). The guidance provides advice and support for those looking to undertake volunteering activities which are on or around the public highway and sets out the minimum requirements that need to be met for a local community group or parish council in order for them to be permitted to carry out volunteer tasks on or near the highway.

2.7 This guidance only covers requests for volunteers working in 30mph or less zones and no work will be permitted on those roads with higher speed limits or on the carriageway itself. This recognises both the dangers of working on the public highway, as well as the statutory requirement to adhere to safety and traffic management legislation. It also recognises the County Council's responsibility to ensure the safety of those carrying out maintenance or working on the public highway.

3 Risks and Opportunities

3.1 Community Highways is seen as a positive initiative which provides an option for Parishes to purchase additional items, deliver schemes that are important to them locally and explore different options of meeting the needs of the local community. However aspects of Community Highways have proved to be very time consuming as despite careful management there can often be divided opinions within communities about solutions, how best to proceed and requests for changes or amendments to designs which can also have a further cost implication or lead to the scheme not going ahead. This can impact on the amount of time spent by Parish Councils on those who do not always have the appropriate amount of resources to handle these additional enquiries. Community expectations are not always realistic and costs are often more than Parishes expect which is difficult to mitigate if changes are made to the design or construction of a scheme. It is recognised that strong stakeholder management is key in the successful delivery of Community Highway projects, as well as improving the perception and understanding of parishes and local communities about the highways service.

3.2 For Community Match schemes there is a notable risk around delivering solutions which include the need for a Traffic Regulation Order (TRO), and the increase in costs that comes with delivering these types of schemes due to the additional resource and administration required to deliver. It can be difficult to justify community led TRO schemes as they are not a County Council priority and usually there are no evidenced safety implications.

3.3 The County Council needs to review whether speed limit and parking restrictions are appropriate projects for Community Highways. Although they are popular, they can be disproportionately expensive to implement, and there may be better ways the County Council can help Parishes with speeding issues, for example awareness campaigns. For Parishes that are within controlled parking areas, requests for parking restrictions could be taken forward via the regular parking reviews.

3.4 There is an opportunity for the County Council to review what pre-application steps a parish council or local community group takes, including requiring a more detailed consultation with local residents. It is important that projects have significant justification and represent the desires of the Parish and not just one or two residents. It is also important that all projects are compliant with the County Council's policies.

3.5 A review of the Community Match initiative has been undertaken considering which schemes such as TRO's and Road Safety should be included and a further report will be presented to Lead Member for Transport and Environment in 2019.

4 Conclusion and Reasons for Recommendations

4.1 Lead Member is therefore asked to: note the review of the Community Highways initiative; agree that £37,500 of match funding should be allocated to deliver three community led transport improvement schemes in 2018/19; and approve the Volunteering Guidance Document and concept for implementation under Community Local Delivery.

RUPERT CLUBB
Director of Communities, Economy and Transport

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LOCAL MEMBERS
ALL

BACKGROUND DOCUMENTS
None

Appendix A – Review of Community Match

Community Match Review

Background

Community Match was launched in 2014 and provided a framework under which officers have worked with communities to take forward their locally important small scale transport improvements that were not of sufficient priority to be delivered using County Council funding alone.

Communities commit to take ownership of their scheme, carry out local consultation to demonstrate support for the scheme and provide at least 50% of the scheme costs. The County Council has then match funded the remainder of the costs, and worked together with the community to design and construct the scheme. Since its inception over £250,000 of capital funding has been allocated to take these schemes forward.

Review of Community Match

Whilst Community Match has successfully delivered a wide range of local transport improvements that have made a real difference to communities which otherwise would not have been taken forward, the delivery of some of these schemes has not always been a smooth process and a number of issues have arisen. Taking the opportunity of the award of the new Highways Contract to the Costain and its partnership with Joint Venture company Jacobs (formally CH2M), the operation of Community Match was thoroughly reviewed to learn lessons and improve the offer to communities.

As a result, there were a number of changes proposed to the way Community Match operates. The County Council retains approval of schemes and the allocation of match funding, but responsibility for delivering Community Match is carried out by Costain and Jacobs and been incorporated into their Social Value offering.

Feasibility of Schemes

A new feasibility study stage was introduced in 2016, whereby communities can commission Costain and Jacobs to undertake a feasibility study for their schemes. A feasibility study can be requested at any time by communities and will cost in the region of £500-£1000. This includes a site visit and meeting with the community group by an engineer who will assess the merits and feasibility of the scheme based on current highway and traffic, highway boundaries, safety implications and logistics of request, as well as giving an indicative cost for the design and construction of the project.

It is recommended that prior to submitting a Community Match application communities should commission a feasibility study to take their concept to a defined scheme. This may need to include the community commissioning speed surveys and gathering crash data and other information necessary to define their scheme.

Aiming to help communities take forward their locally important schemes, often only very limited feasibility design work had been carried out before the community made an application and a broad concept rather than an actual defined scheme was progressed through the application process. Sometimes significant issues that had an effect on the scope of the scheme and its timescale for delivery and cost did not come to light until much later on in the delivery process.

To alleviate these problems Community Match required a mechanism whereby more formal early feasibility design work could be carried out before a community makes an application for match funding. This ensures that schemes are actually feasible, as well as identifying the necessary scope of the scheme and providing communities better information about the likely cost of their scheme, for them to determine if it is affordable and deliverable. For schemes that are then subsequently taken forward this also helps identify potential issues early on when they can be more easily resolved during the design process, reducing the likelihood of time delays and cost increases later on during construction.

Lessons Learnt

Several issues have occurred frequently with schemes that have been delivered through Community Match, and they can be summarised into several main categories, discussed below:

- **Aims and Objectives**

  Several applications were received from communities keen to have "something" done, but often what they were asking for did not refer to an identified problem they were trying to resolve.

  We need to ensure that limited resources are directed to schemes that deliver clear benefits and this should apply equally to schemes that are jointly funded by the local community. To ensure that this is the case, when making an application, communities should clearly identify what the problem or issue is that they are trying to address, and the benefits that their scheme will deliver. The problem should be backed up by evidence such as speed data or crash records. A review of the application form and information held on the website has been carried out to ensure Parishes are better informed.

- **Public Consultation, Support and Opposition to schemes**

  There have been several instances when significant opposition has been encountered to schemes, often late on in the delivery process and even though the scheme was reported to be supported by the local community.

  It is recommended that following their feasibility study communities should carry out a local consultation with their residents and other stakeholders. The responses from the consultation should then be considered by the relevant Parish Council or organisation in deciding whether or not to proceed with making a Community Match application. Communities need to more clearly demonstrate that their schemes have local support and that any opposition to their schemes has been considered.

- **Traffic Regulation Orders**

  Several schemes have been taken forward that have required TRO's such as parking restrictions and speed limits. In a number of cases, objections have been received to the TRO when it has been advertised. Whilst objections can be considered by Planning Committee, often these schemes do not have evidence to counter the objections, leaving the scheme in a precarious position and potentially then with abortive work and costs should it not proceed to construction. By focussing on the evidence to identify the problem and also carrying out greater early consultation, these issues could be reduced; however there will always remain the chance that objections will be received to TRO's.

- **Costs and Timescales**

  Communities have been surprised at the length of time it takes to deliver schemes and the processes involved. The cost of schemes has also caused surprise. Cost rises due to changes either as part of the design process, or during construction on site have also caused issues.

  As part of the feasibility study, outline cost information is given, which will allow communities to determine if their scheme is affordable at an earlier stage and avoid abortive design costs if they are not in a position to find the necessary funds.

  It is also proposed that once a scheme is approved for design and construction, the work will then be carried out on a fixed fee basis, rather than the current share of outturn costs. This will give communities greater cost certainty.

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Appendix B – List of Schemes Delivered or Scheduled for Delivery in the 2017/18 and 2018/2019 Financial Years.

The below table shows the Community Match schemes which have been completed on site from April 2017 to date and those which are currently still ongoing to be delivered during the rest of the 2018/19 financial year.

Scheme	Parish	Description	Status
Coopers Green Road speed limit reduction	Buxted	Reduction in the national speed limit to 40mph along Coopers Green Road Buxted. Some additional signing and lining (repeaters/roundels) required to reduce current speeds.	Completed
Cripps Corner Road Staplefield proposed layby	Ewhurst	Provision of a new layby to formalise existing parking on the verge.	Completed
Buildout outside Catsfield school 30mph speed limit and Double Yellow Lines	Catsfield	Buildout outside Catsfield school, extension of the 30mph speed limit and Double Yellow Lines to protect junctions	Ongoing - technical issues to resolve
Seaford Town Centre Tourist Signs	Seaford	Provision of new tourist information and pedestrian signs.	Completed funded entirely by Seaford Town Council
Brighton Road Lewes, Puffin Crossing	Lewes	New Puffin Crossing on Brighton Road, Lewes in the vicinity of Montacute Road	Completed
Cottage Lane, Westfield, provision of new footway	Westfield	New footway along Cottage Lane in Westfield	Awaiting updated costs, ongoing - land issues to be resolved
Sacred Heart School	Wadhurst	Flashing school signs	Completed
St Andrews School	Eastbourne	Zebra crossing	Completed
Church Lane, Danehill	Danehill	Double Yellow Lines	Completed
Nether Lane, Nutley	Maresfield	30mph speed limit	Scheme cancelled - objections received to TRO, and surveys showed speeds already approximately 20mph

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Appendix C – List of Feasibility Studies

The below table shows the feasibility studies that have been carried out or been requested from the 1st May 2016 to 1st September 2018.

Request Summary	Community Details	Feasibility Report Complete and Issued	Match Funding Application Received	Status
Crowborough Road, traffic calming	Maresfield Parish Council	23/06/2017	No	
Friars Hill - C23 Pett Road speed limit reduction	Guestling Parish Council	14/08/2017	No	Parish Council cannot afford to proceed at the moment.
A259, Pedestrian crossing point	East Dean Friston Parish Council	12/07/2017	30/10/2017	Recommended for approval in 2018/19 Community Match programme
Rotherfield Parish Council, 20mph speed limit request	Rotherfield Parish Council	29/11/2017	23/10/2017	Ongoing
High Street, Buxted	Buxted Parish Council		30/10/2017	Scheme Withdrawn
The Green, Catsfield	Catsfield Parish Council	11/12/2017	No	
Speed limits in Blackboys B2192	Framfield Parish Council	No	No	Scheme Withdrawn
Eastbourne, Sevenoaks Road pedestrian crossing/traffic calming	Alan Shuttleworth	26/01/2018	11/09/2017	Recommended for approval in 2018/19 Community Match programme
Crossover on A271 opposite Limes Lane	Herstmonceux Parish Council	No	No	
Station Road Robertsbridge, double yellow lines	Salehurst & Robertsbridge Parish Council	N/A	30/10/2017	Recommended for approval - subject to Parish agreement of costs in 2018/19 Community Match programme
School Lane, Danehill, safety scheme	Danehill Parish Council	03/01/2108	No	
Withyham Parish Council, Blackham to Ashurst pedestrian route	Withyham Parish Council	Study underway	-	Previous scheme was approved but unable to be delivered. New feasibility study being undertaken to review the situation.

Request Summary	Community Details	Feasibility Report Complete and Issued	Match Funding Application Received	Status
Winchelsea traffic calming Speed Survey received	Icklesham Parish Council	25/05/2018	-	Parish will now undertake consultation on the outcomes from the feasibility study
Proposal for a safe crossing point on the A267 at Mark Cross	Rotherfield Parish Council	25/05/2018		
40mph speed limit in Plumpton Lane and Station Road	Plumpton Parish Council	23/04/2018	No	
Pedestrian crossing at Wadhurst station	Wadhurst Parish Council	27/02/2018		Parish considering whether to proceed.
Pathway along the B2165	Ewhurst Parish Council	27/03/2018		Parish exploring options.
Cycle path in Ringmer	Ringmer Parish Council	06/06/2018		
Lewes - footpath 51	Lewes District Council	06/06/2018		Parish advised to submit a Community Match application
Gleneagles Drive - ped crossing, speed limit and ban of HGV's	Gleneagles Drive Residents Association	09/08/2018		Parish considering whether to take this further due to wider improvements being explored which may ease congestion.

Community Highways

Volunteer Guidance

Version	Approved By	Date
Final draft reviewed and updated	Service Development Team	17 August 2018
KT Amendments		04 October 2018

1. Background

1.1 East Sussex County Council (ESCC) as the Highway Authority is responsible for maintaining the public highway across the County. However, it is recognised that there are additional services, that are important to local communities, but that ESCC no longer have the resources to carry out, and there is an increasing appetite from local communities for volunteers to carry out some of these activities.

1.2 To enable local communities to access and deliver additional services, a suite of products, collectively titled "Community Highways" has been introduced by East Sussex Highways. One of these products is the "Community Local Delivery" initiative, which enables Parish and Town Councils to take on responsibility for the delivery of certain maintenance activities in their area such as undertaking Volunteer Tasks.

1.3 Carrying out maintenance activities on or close to the public highway (road, verge and pavement) is high risk and ESCC staff and contractor staff undergo regular health and safety training. There is numerous legistlation governing work on the public highway, not least the Health & Safety at Work Act, Highways Act, New Roads and Street Works Act and Traffic Management Act and all ESCC staff and contractor staff undergo regular training and have to hold appropriate certification before carrying out work on the highway. In allowing community volunteer groups to carry out minor maintenance on behalf of ESCC the County Council would be responsible for their health and safety and their compliance with legistlation.

1.4 This guidance document recognises those responsibilities and risks to the County Council, and provides guidance for community groups wishing to carry out minor highway maintenance activities in their local communities.

1.5 Recognising the risks to both the County Council and to those volunteers wishing to carry out maintenance on behalf of ESCC, no voluteers will be permitted to work on the carriageway itself, or within one metre of the edge of the carriageway. This is to ensure the safety of those volunteers who will not have benefited from the same level of training as ESCC staff and are not experienced in working in close proximity to live traffic. Whilst this may preclude certain maintenance activites, simple tasks will be possible including but not limited to: weed and vegetation clearance; grass cutting in village centres and village greens; trimming the edges of grass verges; cleaning of traffic signs, road name signs and village gateways; painting of fingerposts and pedestrian railings; salting of pavements and village centres during times of snowfall;

2. Definitions

2.1 In this Volunteer Guidance, the following terms are used: -

Community Highways	is an initiative which provides opportunities to local communities, to fund, design and carry out highway works.

Community Local Delivery Initiative	is a way of allowing local communities to take ownership for their particular parish and deliver services which are not a ESCC priority.
ESCC Highway Network	means the network of roads and assets which ESCC are responsible for.
ESCC Staff	means East Sussex County Council and contracted staff who work within the Highways department;
Local Community Groups	means groups of residents who have formed formal groups who wish to undertake Volunteer Tasks within their communities.
Supervisor	means the person identified as being responsible for the group of volunteers as set out in the populated Appendix 3, whose responsibilities are set out in section 3.1.8 of this Guidance;
Volunteer Tasks	means the work that will be carried out by the Local Community Group volunteers on the Highway Network or ESCC Asset
Volunteer	means the person from the Local Community Group who will offer to carry out Volunteer Tasks, in their own time, on the Highway Network or ESCC asset, but will receive no salary for doing so.

3. Requirements

3.1 Parish Councils and / or Local Community Groups are responsible for the organisation and management of volunteers, as well as ensuring the following requirements are adhered to:

3.1.1. Parish Councils / Local Community Groups must register with ESCC to confirm their intention of organising and managing volunteering activities in their area (Please refer to Appendix 1);

3.1.2. All Local Community Groups must be acting with the full knowledge and agreement of the relevant Parish or Town Council. (i.e. the Parish or Town Council responsible for the area they will be working in), and evidence of such agreement must be provided to ESCC;

3.1.3. All Volunteers are to be registered with ESCC prior to any work being undertaken. (Note: Registration does not automatically provide permission for Volunteer Tasks to be completed);

3.1.4. ESCC will require evidence that all Volunteers have received appropriate training and are competent in the relevant statutory rules and regulations, in

particular relating to Health and Safety. This is required before an agreement can be entered into. Guidance is available on the HSE web site. (www.hse.gov.uk/simple-health-safety) and from East Sussex Highways;

3.1.5. All Volunteers are to be provided with basic level (typically 3 to 4 hour) first aid training, evidence of which is to be provided to ESCC;

3.1.6. All Volunteers must be eighteen (18) years old or over;

3.1.7. All Volunteer Tasks that the Local Commuinity Group Volunteers wish to undertake must be clearly identified, with written notification being sent to ESCC on each occasion. This is to include a "Notification of Volunteer Tasks" form (Please refer to Appendix 3) and "Risk Assessment(s)" (Please refer to Appendix 4). Work is not to commence until written confirmation has been given by ESCC to the relevant Parish Council / Local Community Group on each occasion; and

3.1.8. A Supervisor must be identified for each group of Volunteers. Details of the Supervisor are to be included in the "Notification of Volunteer Tasks" form, under *"lists of responsibilities".* The Supervisor is responsible for the following;

- understanding the terms and parameters under which Volunteer Tasks are to be carried out, as well as ensuring all volunteers work in compliance with statutory regulations and guidelines;
- knowing the permitted location of the Volunteer Tasks;
- understanding the level of requirements of Volunteer Tasks, including the accepted standard and finish; and
- designating an officer as a key contact for the Supervisor in the event of an emergency.

3.2. Prior to the commencement of any Volunteer Tasks, the following requirements must be adhered to by the relevant Parish Council / Local Community Group;

3.2.1. All appropriate insurances have been acquired, with a copy of the certificate being provided to ESCC, prior to the commencement of carrying out Volunteer Tasks.

3.2.2. The insurance must allow for working on the highway network, and must have public liability insurance against all loss of and damage to property and injury to persons (including death) under which the cover shall not be less than ten million pounds (£10,000,000) in respect of any one incident. The Local Community Group/Parish Council will also require Employers Liability Insurance with a minimum value of 5 million pounds (£5,000,000). The Local Community Group / Parish Council should contact their insurance providers if they need clarity over what cover they require;

3.2.3. All Volunteers are to be provided with a process for the reporting of incidents and accidents. The process will be provided by ESCC prior to the commencement of Volunteer Tasks. If there is an incident on the Highway, no

matter how minor, Volunteer Tasks must stop and it must be reported to ESCC immediately (within 24 hours) via the Supervisor. The Supervisor should call the Highways Contact Centre on 0345 60 80 193;

3.2.4. The appropriate Personal Protective Equipment (PPE) is to be provided to Volunteers, dependent on the Volunteer Task that will be carried out. This will include high visibility clothing, appropriate footwear, gloves, eyewear and headwear. Further guidance is available on www.hse.gov.uk/toolbox/ppe.htm; and

3.2.5. Warning signs must be displayed whilst Volunteer Tasks are being carried out on the highway.

4. Conditions of Work and Restrictions

4.1. All Volunteer Tasks must be carried out in compliance with the conditions and restrictions below. The Parish Council / Local Community Group is responsible for ensuring the below are adhered to;

4.1.1. Volunteers will only be permited work on pavements, footpaths, and bridleways. Volunteers are **NOT**, in **any circumstances**, permitted to work on the carriageway itself. Volunteers should not be put, or put themselves, at any further risk than a pedestrian would by using the pavement;

4.1.2. When undertaking a Volunteer Task on the highway Volunteers **must** be at **least** one (1) metre from the edge of the carriageway and are not permitted to be on the roadside of those roads with a speed limit in excess of 40mph;

4.1.3. Volunteers must not break the (dig) ground **under any circumstance** because of the risk of damaging underground services / electrocution;

4.1.4. Volunteers are **not permitted in any circumstances,** to undertake Volunteer Tasks within ten (10) metres of overhead services (Please refer to HSE Guidance Note GS6); to work at height (work which if there were no precautions taken a person could fall a distance liable to cause personal injury); work in confined spaces; or to carry out asbestos, electrical or gas works;

4.1.5. Volunteers are not permitted to use electrical power tools to avoid the risk of electrocution (all power tools in the construction industry are rated at 110v) and the risk of trailing power leads;

4.1.6. All waste, must be removed from site and disposed of in the correct manner and in accordance with all relevant legislation;

4.1.7. In the event that a Volunteer has access to Confidential Information for the purposes of carrying out the Volunteer Tasks, the Volunteer may only share the Confidential Information with ESCC Staff and Volunteers who also require the information to carry out the Volunteer Tasks;

4.1.8. Volunteers must be made aware of the requirements of the General Data Protection Regulation (GDPR), and must adhere to said requirements.

4.1.9. Any solvent or product to be used by the volunteers whilst carrying out their tasks must be approved by ESCC prior to the commencement of work. Details of the product should be included on the Method Statement (Appendix 1); and

4.1.10. Volunteers are not permitted to work alone and there must be a minimum of two volunteers carrying out each task.

4.2. ESCC may conduct audit inspections on Volunteer Tasks being carried out on the highway network, as well as possibly carrying out inspections on completed work, without providing prior notice to the Parish Council / Local Community Group.

4.3. The Parish Council / Local Community Group is, responsible for ensuring that there are processes in place to regularly monitor the work being carried out.

4.3.1. ESCC reserves the right to instruct Volunteer Tasks to stop or revoke permission if it is considered that the Volunteer Tasks are not being carried out appropriately or if any of the conditions or restrictions included in this guidance document are not adhered to.

4.3.2. If Volunteer Tasks carried out cause any damage to the Highway Network, or create a Safety Hazard to the users of the network, the Parish Council / Local Community Group will be responsible for the funding and delivery of any remedial works requested by ESCC.

4.4. When Volunteer Tasks are completed, the Parish / Town Council is required to submit a copy of the Volunteer Log Sheet (Please refer to Appendix 5) as well as photographic evidence of the work. Both before and after images.

5. Further Information

5.1. If a Parish Council or Local Community Group require further advice or information please email contracts.managementgroup@eastsussex.gov.uk

Appendix 1 – Parish Councils and / or Local Community Groups Registration Form (To be completed and read in Conjunction with Community Highways: Volunteer Guidance document)

Contact Details	
Name of Parish Council and / or Local Community Group	
Registered Address	
Coordinator's Name	
Telephone Number	
Email Address	
Insurance Details	
Insurers Name and Address	
Policy Number and Expiry Date	
Public Liability Cover	
Employees Liability Cover	

(By Signing this Form, Parish Councils and / or Local Community Groups are confirming that any Volunteer Tasks carried out by Volunteers they manage will be done in compliance with the restrictions and conditions set out in "Community Highways: Volunteer Guidance")

Signed by Parish Council and / or Local Community Group:

Date:

Appendix 2 – Volunteer Registration Form

Contact Details	
Name	
Address	
Telephone	
Email	
Training Received	*Evidence of training to be provided to ESCC in conjunction with this form.*
Details of who to contact in an emergency (Name and Telephone)	
Do you have any health problems? (asthma, eczema, allergies, diabetes, epilepsy, back or knee problems etc)?	

Personal information collected on forms

Where we ask you for personal information through a form, this information will only be used for the purpose indicated and it will be held in a secure manner. It will not be used for any other purpose without your permission and will not be kept for longer than necessary.

Approved by XXX Parish Council and / or Local Community Group Name	*(Please sign)*

Appendix 3 –Notification of Volunteer Tasks Template

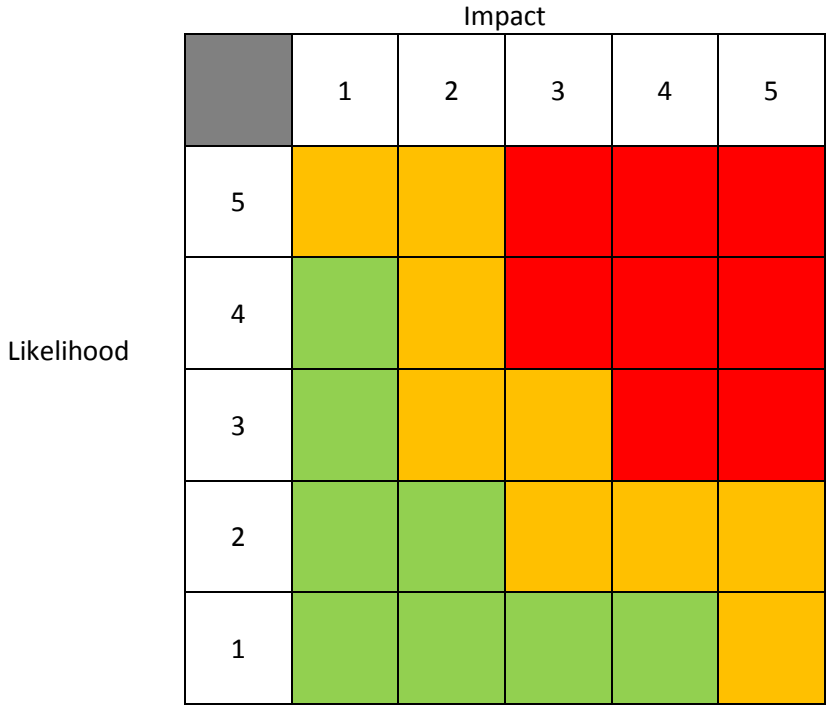
The Task: *Fill in title of the Volunteer Task*	
Location of the Volunteer Task and Working Environment Considerations	*Provide detail of where the task will be carried out as well as details of the environment and what considerations need to be made.*
Preferred Date for Volunteer Task to Commence and estimated duration of task	
Scope and detail of Volunteer Tasks which will be Carried Out?	*Provide information as to the scope of the task being carried out, and the process that will be followed to carry out the task.*
Equipment / Materials and Welfare Arrangements	*Provide detail of the equipment and materials to be used. There should also be detail as to the welfare arrangements being provided to the volunteers (For example bathroom facilities they can have access to, refreshments, breaks etc.)*
PPE to be Provided	*List the PPE which will be provided to the volunteers carrying out the task*
Linked Risk Assessment	*Record which risk assessment(s) relates to this task*
Volunteers:	
Volunteer Name and Training Received	*List the volunteers who will carry out the task as well as the relevant training they have received.(Including details of Health and Safety Training,First Aid Training and task specific training)*
Volunteer Name and Training Received	*List the volunteers who will carry out the task as well as the training they have received.(Including details of relevant Health and Safety Training and First Aid Training)*
Volunteer Name and Training Received	*List the volunteers who will carry out the task as well as the training they have received.(Including details of relevant Health and Safety Training and First Aid Training)*
Supervisor for Task	*Include contact details of the Supervisor for the task*

Appendix 4 - Risk Assessment Template

The below template can be used to assess the risk surrounding a particular task. For each hazard associated with the task, you must rate the Likelihood and Impact from one (1) (very unlikely / minimal impact) to five (5) (almost certain to happen / very high impact).

Once you have rated the task, you need work out the *Initial Potential for Harm*, multiply the *Likelihood* score by the *Impact* score. This calculation will give you the Risk Rating (1-4 Low Risk, 5-10 Medium Risk, 11+ High Risk) of the task, (Please see image below).

For those tasks which are given a Medium or High Risk Rating, *Control Measures* must be put in place to mitigate the risk of the hazard, or remove the hazard all together. After introducing *Control Measures* to the hazard, revaluation of the residual potential for harm must be carried out. This involves rating the Likelihood and Impact again (as above) and then multiplying those figures to get a Risk Rating after the implementation of *Control Measures*. Risk Assessments should be produced for every task, and updated as and when required. The Risk Assessments must be provided to the Volunteers before they begin work on the Highway



Location:											
Operation/Activity:											
Risk Assessment No.	1										
				Initial Potential for Harm				Residual Potential for Harm			
	Hazards (potential for harm)	Who may be harmed	Initial Risk: likely result if hazard is realised	Likelihood	Impact	Risk Rating	Control Measures ***Can the hazard be removed?***	Likelihood	Impact	Risk Rating
1				0	0	0		0	0	0
2				0	0	0		0	0	0

Appendix 5 - Volunteer Task Log Sheet

Volunteer Details	Location of Work	Work Carried out	Date	Time