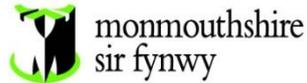


# Public Document Pack



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Wednesday, 24 February 2021

## Notice of Reports Received following Publication of Agenda

### Strong Communities Select Committee

Thursday, 4th March, 2021 at 10.00 am  
Remote Meeting

Attached are reports that the committee will consider as part of the original agenda but were submitted to democratic services following publication of the agenda.

Item No	Item	Pages
5.	Update on issues the Highways Maintenance Department has faced during the Covid-19 pandemic and the forward direction for this service.	1 - 14

**Paul Matthews**  
Chief Executive

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<b>SUBJECT:</b>	<b>INVESTMENT IN HIGHWAYS OPERATIONS FOR MAINTENANCE DRAINAGE NETWORK IN LINE WITH CODE OF PRACTICE 'WELL MAINTAINED HIGHWAYS INFRASTRUCTURE'</b>
<b>MEETING:</b>	<b>STRONG COMMUNITIES SELECT</b>
<b>DATE:</b>	<b>MARCH 4<sup>TH</sup> 2021</b>
<b>DIVISION/WARDS AFFECTED:</b>	<b>ALL</b>

## NON-PUBLICATION

N/A

### 1. PURPOSE:

To deliver a maintenance programme in line with the Code of Practice 'Well-managed highway infrastructure'. Changing from reliance on specific guidance and recommendations in the previous Codes to a risk-based approach determined by appropriate analysis, robust data and continuous review. The Code is designed to promote the adoption of an integrated asset management approach to highway infrastructure based on the establishment of local levels of service through risk-based assessment. The Code, as with previous codes, recognises that "prevention is always better than cure".

Invest in highways maintenance to establish a pro-active 'find and fix' regime. To reverse the impact of budget reductions and savings pressures, that has resulted in a reactive maintenance programme and on the basis of need regime.

There are 5 ways to help keep the drainage assets free flowing and clear:-

- Prevent debris covering the inlets and restricting flow
- Prevent debris entering the pipe and restricting the flow
- Prevent debris entering the outfalls and restricting flow
- Identifying damage to the infrastructure quickly
- Maintain the surface course of the road to prevent loss of material into the drains
- Prevent run off from adjacent land that silt up the drainage system

The proposal seeks additional funding to:-

- Sweep roads appropriate to local conditions
- Empty gullies and prove pipes and outlets appropriate to local conditions
- Repair damaged infrastructure where it cannot be cleared
- Upgrade the capacity where viable

## **2. RECOMMENDATIONS:**

- 2.1 To increase funding for highways maintenance of drainage assets in line with the Code of Practice 'Well-managed highway infrastructure'.
- 2.2 To increase funding for sweeping the priority routes to support maintenance of drainage assets
- 2.3 To deliver a cyclical programme of maintenance for drainage assets along the County priority routes
- 2.4 To identify and plot all drainage assets across the county as part of a risk based assessment and provide maintenance records regarding asset management

## **3. KEY ISSUES:**

The impact of climate change being felt across the globe and brings with it particular challenges in Monmouthshire across a range of services. The additional pressures this causes to existing budgets, when coupled with many years of austerity, is now at a critical point. The highway network is at the mercy of these changes in season. Whether through rain, snow, heat or cold they all impact negatively on the asset.

The intention of this Code of Practice 'Well Managed Highway Infrastructure' is that Authorities will develop their own levels of service and the Code therefore provides guidance for authorities to consider when developing their approach in accordance with local needs, priorities and affordability. Delivery of a safe and well maintained highway network relies on good evidence and sound engineering judgement.

Recent impacts of high rainfall in very short time periods, raised the public's concerns regarding capacity and maintenance for the existing MCC Highway drainage infrastructure. Whilst endeavoring to work to best practice guidance, keeping an estimated 25,000 drainage assets clear, maintained when required and upgraded where necessary, is increasingly difficult within current resources. Highway drainage has historically been designed to cope with a 1 in 10 year flood, in the last 18 months we have had 5 of these flooding events.

Between 2007 and 2011 a "find and fix" regime was implemented where the 25000 drains were systematically cleaned and where necessary repaired. The success of this programme reduced the number of complaints regarding blocked drains and standing water during rain events. With a reduction in issues regarding drainage and the need to reduce budgets 2 gulley cleansing vactor machines and 2 mechanical sweepers were removed from service between 2011 and 2015. This left 2 gulley vactors and 2 large mechanical sweepers maintaining the entire network.

The highway drainage network is maintained on a reactive/proactive regime with the two remaining vactors and sweepers. Where residents, highways inspectors and motorists report that drains and gullies need maintenance, the area is visited and all drains and gullies linked to that system are cleared. This approach has worked extremely well as many of the gullies remained in pristine condition following the "find and fix" programme. The weather patterns linked to climate change, the intensity of rainfall and a reactive maintenance regime risks the network becoming compromised during rain events. These major rain events being so close together stretches

resources meaning teams are often pulled on to the next job before being able to clear the full system at each location.

This work programme has been identified by the Cabinet Member has a key priority for future grant applications and capital investment along with a full schedule of prioritised maintenance works. It is recognised that whilst this will not resolve £80m capital budget pressure to improve the entire network it will provide a transparent focus of funding to priority roads that is easily accessible and communicated to the public and other stakeholders. The Code of Practice highlights the need for better communication with all stakeholders.

Preventing properties and communities from flooding will always be a challenge. Whilst a “find and fix” programme is unlikely to have reduced the impact of recent events in Magor and Portskewett, investing in targeted cyclic maintenance and repairs is best practice to reduce flooding on the highways network. Most of the recent flooding is a result of saturated ground and water courses over-topping but free-flowing drainage systems will clearly improve the situation during normal rain events.

To manage the network effectively and in line with the Code of Practice the assets should be identified and plotted. This information can be used to overlay maps of previously flooded areas and critical infrastructure to allow better targeting of resources as part of the risk based assessment. This can be achieved with a variety of GPS data systems that can provide comprehensive details of where the drainage asset is located, the last time it was maintained, any issues, the next proposed visit etc. There is an estimated 25000+ drainage assets across the county, the vast majority cause few problems and flow freely, others are prone to blocking during intense rainfall and need additional and more frequent maintenance. All this data can be captured for future scheduling.

Many of the drainage assets across the county are managed by third parties. Welsh Water Dwr Cymru manage the main sewage systems. Natural Resources Wales manage the main water courses and their tributaries. Landowners have riparian ownership of many of the roadside field ditches. Developers manage systems prior to adoption. Delivering improvements to our network will have a positive impact for residents but this can't be done in isolation and we will continue to work closely with partners on holistic solutions.

#### **4. EQUALITY AND FUTURE GENERATIONS EVALUATION (INCLUDES SOCIAL JUSTICE, SAFEGUARDING AND CORPORATE PARENTING):**

Improvements to the road network positively supports many aspects of the Equalities and Future Generations evaluation. Well maintained networks encourage active travel, delivers well connected communities, reducing litter and debris entering watercourses increasing biodiversity and reduces standing water that can increase deterioration of the network resulting in additional capital and carbon intensive repairs.

#### **5. OPTIONS APPRAISAL**

The Code promotes a risk based assessment approach to managing highways infrastructure. It highlights the need for a maintenance programme that maintains and keeps clear the drainage and gully systems proactively and captures data on each asset for scheduling future interventions.

This proposal seeks to establish a 'find and fix' programme, using capital and revenue investment. The operational delivery of this can be achieved in several ways.

- The additional resource could be incorporated into the existing work programme and continue an enhanced reactive regime.
- The additional resource could start at the top/bottom of the county and clear all 25000 drains
- The additional resource could be focussed on the MCC Priority routes and Presalting Primary network.

The priority and precautionary salting routes cover approximately 40% of the network and incorporate the roads most frequently used where snow and flooding impact our communities most. These routes are used by our emergency services, public transport and link our communities to towns and villages across the county.

For this reason the proposal is to invest the additional resource to maintain the priority routes and freeing up the existing resource to focus on reactive/proactive regime across the rest of the network.

Initial budget estimates for data collection systems has been sought and we will continue to work with APSE, CSS and neighbouring authorities to identify a system that meets our needs and where possible links to neighbouring authority systems.

## **6. EVALUATION CRITERIA**

This "find and fix" proposal is likely to be a four year programme and when completed we will have brought the drainage network back up to a standard comparable to 2011. If successful there should be a reduction in service requests relating to drains and gulleys. This will be monitored over the 4 year period and reviewed at that point with a decision to continue to fund the programme, expand or decrease the priority network, cease the programme and reduce budget spend to existing levels.

## **7. REASONS:**

The Code of Practice guidance seeks to proactively maintain the highway network through risk based assessments of the assets. Delivering services in line with the Code coupled with robust and accurate data of maintenance regimes can be used as evidence when defending claims against the highway authority.

Climate change is impacting negatively on the highways network. The public perception is that the network and particularly highways drainage systems are being neglected by the authority contributing to a greater impact of flooding. Whilst the network is not designed to deal with the volume of rain in recent flood events like Storm Dennis and Storm Christoff the Code of Practice

identifies the need for well maintained infrastructure based on asset risk assessments as key to managing the highway network.

## 8. RESOURCE IMPLICATIONS:

Investment is required for:-

- An additional 18t road sweeper machine with operator. ( these are the large HGV sweepers that Highways use to sweep the carriageways ).The cheapest and most effective way to lessen debris, leaf, grass and hedge cuttings, stone, road chippings, dirt or mud etc. from blocking or entering the drainage system
- 18t MVC combination tanker / chassis with operator and driver ( these are the large HGV gully emptier and jetter machines that Highways use to empty gullies and jet pipes), with latest electronic tracking to support asset monitoring. The only way to remove debris that has entered the drainage system or to investigate blockages and damage.
- Traffic management team ( 5ton flatbed truck with two operatives ), to support MVC and Sweeper. These teams will target the Primary Presalting Network, which tends to be high speed and present the greatest risk to traffic and workers

SWEEPER COSTS : 9 YEAR LEASE	CAPITAL	4 YEARS	note	EACH YEAR
SWEEPER AND CHASSIS	165,000	101,970		25,493
MAINTENANCE / TRANSPORT			average	9,482
FUEL			historical	9,680
TIPPING			currently tendering	50,629
DRIVER			32,786	32,786
9 YEAR LEASE RECOVERY, 40% RESIDUAL AT END YEAR 4 +vat			<b>TOTAL</b>	<b>128,070</b>

MVC COSTS : 9 YEAR LEASE	CAPITAL	4 YEARS	note	EACH YEAR
JETTER AND CHASSIS	192,000	118,656	180,000	29,664
DATA COLLECTION		12,000	estimate	6,000
MAINTENANCE / TRANSPORT			average	9,482
FUEL			historical	9,240
TIPPING			currently tendering	31,483
DRIVER			32,786	32,786
OPERATOR			32,786	32,786
9 YEAR LEASE RECOVERY, 40% RESIDUAL AT END YEAR 4 +vat			<b>TOTAL</b>	<b>151,441</b>

TRAFFIC MANAGEMENT COSTS	CAPITAL	4 YEARS	note	EACH YEAR
5TON TRANSIT CREWCAB CHASSIS	45,000	37,080		9,270
MAINTENANCE / TRANSPORT			average	4,570
FUEL			historical	3,900
SIGNS and CONES and T/M			absorb in revenue (£5k)	
CHAPTER 8 OPERATIVE			32,786	32,786

CHAPTER 8 OPERATIVE			32,786	32,786
VAN ABSORBED INTO FLEET AT END YEAR 4 + vat			TOTAL	83,312
			SUM	362,823

The proposal seeks funding from Capital for the purchase of plant and vehicles and revenue funding from either the capitalisation programme, uplift in highways operations revenue budget or redistribution of the highways capital programme.

Redistribution of the highways capital programme would reduce the amount of resurfacing and structural works that can be delivered but would not require additional revenue uplift.

Welsh Government have provided additional funding during 2020/21 for supporting repair of highway assets and infrastructure damaged by flooding. If this continues in 21/22 this additional funding will support the highways capital programme of works.

## 9. CONSULTTEES:

This is a joint proposal between Highways Operations and Highways and Flooding in conjunction with the Cabinet Member. The proposal has been reviewed by Senior Leadership Team. Strong Communities Select comments and suggestions will be included in this proposal prior to being recommended to Cabinet for approval.

## 10. BACKGROUND PAPERS: Budget pressure briefing paper, Code of Practice 'Well Managed Highways Infrastructure

## 11. AUTHOR: Carl Touhig

## 12. CONTACT DETAILS:

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<p><b>Name of the Officer completing the evaluation</b> STEVE LANE</p> <p>Phone no: 07885 225972 E-mail: STEVELANE@MONMOUTHSHIRE.GOV.UK</p>	<p><b>Please give a brief description of the aims of the proposal:</b></p> <p>The purchase of a 18ton Mechanical sweeper and 18ton medium volume combination jetter / gulley emptier to start regime of find and fix of drainage asset</p>
<p><b>Name of Service area</b></p> <p>HIGHWAYS OPERATIONS</p>	<p><b>Date</b> 25<sup>th</sup> February 2021 v.2</p>

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**4 Are your proposals going to affect any people or groups of people with protected characteristics?** Please explain the impact, the evidence you have used and any action you are taking below.

Protected Characteristics	Describe any positive impacts your proposal has on the protected characteristic	Describe any negative impacts your proposal has on the protected characteristic	What has been/will be done to mitigate any negative impacts or better contribute to positive impacts?
Age	NO IMPACT		
Disability	NO IMPACT		
Gender reassignment	NO IMPACT		
Marriage or civil partnership	NO IMPACT		
Pregnancy or maternity	NO IMPACT		

Protected Characteristics	Describe any positive impacts your proposal has on the protected characteristic	Describe any negative impacts your proposal has on the protected characteristic	What has been/will be done to mitigate any negative impacts or better contribute to positive impacts?
Race	NO IMPACT		
Religion or Belief	NO IMPACT		
Sex	NO IMPACT		
Sexual Orientation	NO IMPACT		
Welsh Language	NO IMPACT		
Poverty	NO IMPACT		

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**2. Does your proposal deliver any of the well-being goals below?** Please explain the impact (positive and negative) you expect, together with suggestions of how to mitigate negative impacts or better contribute to the goal. There's no need to put something in every box if it is not relevant!

Well Being Goal	Does the proposal contribute to this goal? Describe the positive and negative impacts.	What actions have been/will be taken to mitigate any negative impacts or better contribute to positive impacts?
<b>A prosperous Wales</b> Efficient use of resources, skilled, educated people, generates wealth, provides jobs	This local investment is into machines / equipment and should help MCC employees to	This is an uplift to resource and equipment for the routine maintenance of highway assets. We will collect data to provide added value to the

Well Being Goal	Does the proposal contribute to this goal? Describe the positive and negative impacts.	What actions have been/will be taken to mitigate any negative impacts or better contribute to positive impacts?
	improve compliance with the “Well Managed Highway Infrastructure: Code of Practice”.	process, allowing more targeted future intervention.
<b>A resilient Wales</b> Maintain and enhance biodiversity and ecosystems that support resilience and can adapt to change (e.g. climate change)	This project will help remove contaminated wastes from drainage system more regularly, allow damage and breakages to be identified sooner and potentially identify capacity and maintenance needs so their potential to negatively influence severe weather events will reduce.	Potential to reduce the flooding of the highway during extreme rain events. Data collection will improve asset knowledge and asset condition.
<b>A healthier Wales</b> People’s physical and mental wellbeing is maximized and health impacts are understood	NO IMPACT	
<b>A Wales of cohesive communities</b> Communities are attractive, viable, safe and well connected	NO IMPACT	
<b>A globally responsible Wales</b> Taking account of impact on global well-being when considering local social, economic and environmental wellbeing	The ‘Well Managed Highway Infrastructure: Code of Practice’ will assist us to consider ways to develop the Highway maintenance needs. In working toward this, we will be protecting our local community, environment and wellbeing.	There will be greater collaboration between, MCC departments, suppliers and other local Authorities. The council’s ability to highlight any concerns will ensure that best outcomes are achieved and that each stage has added value.
<b>A Wales of vibrant culture and thriving Welsh language</b> Culture, heritage and Welsh language are promoted and protected. People are encouraged to do sport, art and recreation	NO IMPACT	
<b>A more equal Wales</b>	NO IMPACT	

Well Being Goal	Does the proposal contribute to this goal? Describe the positive and negative impacts.	What actions have been/will be taken to mitigate any negative impacts or better contribute to positive impacts?
People can fulfil their potential no matter what their background or circumstances		

**3. How has your proposal embedded and prioritised the sustainable governance principles in its development?**

Sustainable Development Principle	Does your proposal demonstrate you have met this principle? If yes, describe how. If not explain why.	Are there any additional actions to be taken to mitigate any negative impacts or better contribute to positive impacts?
 <p>Long Term</p> <p>Balancing short term need with long term and planning for the future</p>	<p>We consider the proposal meets this principle. The purchase and hire agreement has been based on the longevity of the machines. Equipment can be absorbed into the fleet during the natural fleet replacement programme.</p>	<p>There will be greater collaboration between, MCC departments, suppliers and other local Authorities. The council's ability to highlight any concerns will ensure that best outcomes are achieved and that each stage has added value.</p>
 <p>Collaboration</p> <p>Working together with other partners to deliver objectives</p>	<p>The project will need the very best equipment and experience drawn from local and national suppliers. Data collection software will draw on the knowledge of other public bodies to ensure that each outcome has added value.</p>	<p>There will be greater collaboration between, MCC departments, suppliers and other local Authorities. The council's ability to highlight any concerns will ensure that best outcomes are achieved and that each stage has added value.</p>

Sustainable Development Principle	Does your proposal demonstrate you have met this principle? If yes, describe how. If not explain why.	Are there any additional actions to be taken to mitigate any negative impacts or better contribute to positive impacts?
 <p><b>Involvement</b></p> <p>Involving those with an interest and seeking their views</p>	NO IMPACT	
 <p><b>Prevention</b></p> <p>Putting resources into preventing problems occurring or getting worse</p>	Environmental and financial considerations are guiding this decision. Environmentally MCC has to do more with its climate emergency agenda. While highway infrastructure changes and develops over time, we will still have to manage the older assets ensuring they are suitable for purpose or are improved.	There will be greater collaboration between, MCC departments, suppliers and other local Authorities. The council's ability to highlight any concerns will ensure that best outcomes are achieved and that each stage has added value.
 <p><b>Integration</b></p> <p>Considering impact on all wellbeing goals together and on other bodies</p>	NO IMPACT	

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4. Council has agreed the need to consider the impact its decisions has on the following important responsibilities: Social Justice, Corporate Parenting and Safeguarding. Are your proposals going to affect any of these responsibilities?

	<b>Describe any positive impacts your proposal has</b>	<b>Describe any negative impacts your proposal has</b>	<b>What will you do/ have you done to mitigate any negative impacts or better contribute to positive impacts?</b>
Social Justice	NO IMPACT		
Safeguarding	NO IMPACT		
Corporate Parenting	NO IMPACT		

**5. What evidence and data has informed the development of your proposal?**

The initial project has been led on anecdotal evidence and a perception that the highway drainage asset is contributing to the severity of the damage caused by recent torrential rainfall events. A robust asset database, with targeted maintenance and uplift in the drainage asset capacity could have the potential to mitigate the severity of these events.

**6. SUMMARY: As a result of completing this form, what are the main positive and negative impacts of your proposal, how have they informed/changed the development of the proposal so far and what will you be doing in future?**

The project does not have negative impacts. Drawing limited Public funds to this project may mean that more established projects elsewhere suffer financial pressure though. Ensuring that we follow the guidance in the “Well Managed Highway Infrastructure: Code of Practice” will help target need. Data collected will evidence that need and the additional resource requested will potentially reduce flooding incidents.

**7. ACTIONS: As a result of completing this form are there any further actions you will be undertaking? Please detail them below, if applicable.**

What are you going to do	When are you going to do it?	Who is responsible
No action required. Project has developed to this point as a result of the FGEF.		

**8. VERSION CONTROL:** The Equality and Future Generations Evaluation should be used at the earliest stage, such as informally within your service, and then further developed throughout the decision making process. It is important to keep a record of this process to demonstrate how you have considered and built in equality and future generations considerations wherever possible.

Version No.	Decision making stage	Date considered	Brief description of any amendments made following consideration
2	SLT	Feb 21	General condition unchanged. Project no affected by Covid impact

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