

WEST NORTHAMPTONSHIRE COUNCIL CABINET

11 July 2023

**Councillor Phil Larratt, Cabinet Member for Environment, Transport,
Highways and Waste**

Report Title	Highways Maintenance Machinery
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List of Approvers

Monitoring Officer	Catherine Whitehead	21/06/2023
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Other Director	Stuart Timmiss	
Head of Communications	Becky Hutson	21/06/2023

List of Appendices

None

1. Purpose of Report

- 1.1 The report provides background information concerning the purchase of innovative machinery that significantly improves the efficiency and productivity to improve the condition of the road surfaces throughout West Northants

2. Executive Summary

- 2.1 The Council, through its budgetary processes, identified an increase in funding for the purpose of improving the condition of the highway. This funding of £1m was supplemented by further

additional support from central government of £1.8m. Analysis of best practice elsewhere has identified that the purchase of additional machinery which focuses on larger scale patching and repairs will ensure we have a long-term benefit in productivity.

- 2.2 As a consequence of this purchase, it is acknowledged that we need to balance the capital investment with an ongoing capital and revenue investment ensuring that we maximise performance by utilising the machinery on a full-time basis. Due to the priority of this project orders have already been placed utilising the Highways Maintenance and Services Contract to purchase a JCB Pothole Pro and an additional Thermal Road Repair (TRR) machine.
- 2.3 The JCB Pothole Pro will enable twice the area of carriageway to be treated, whilst the TRR machine will allow one and a half times the area to be treated when compared to traditional methods utilising the same budget.
- 2.4 The purchase order is currently aligned to existing capital budgets which, if not supplemented, would result in a reduction to the 2023/24 capital maintenance programme, therefore the request, as set out, not only provides a long-term opportunity for continued improvement but ensures we maintain a full programme of renewal which will improve large stretches of highway.
- 2.5 The provision of an additional capital budget of £450,000 to fund the purchase will allow for the full 2023/24 programme to continue.

3. Recommendations

- 3.1 It is recommended that the Cabinet:
 - a) Note the contents of the report
 - b) Endorse the officer decision to purchase the additional highway maintenance machinery
 - c) Agree to allocate an additional capital budget of £450,000 to fund the purchase of the new machinery

4. Reason for Recommendations

- The recommended course of action will allow for an increase in productivity and efficiency of the Council's highway maintenance for this year and future years without the need to reduce the agreed 2023/24 capital maintenance programme.

5. Report Background

- 5.1 To improve the condition of the highway network within existing budget limits it is necessary to utilise more innovative, efficient methods of carrying out repairs.
- 5.2 Together with the Portfolio Holder and the Council's maintenance provider the Highway Service Manager has been investigating the best way to achieve this and has considered best practice and solutions that are currently available within the marketplace.

- 5.3 A visit was undertaken to Staffordshire to have a demonstration of JCB's new Pothole Pro machine at JCB's headquarters and a visit to Stoke to see the machine in operation and to discuss the use and potential of the machine with members of Stoke City Council's operational team.
- 5.4 The Pothole Pro is self-propelled machine that can travel to a site and quickly excavate an area of carriageway forming vertical joints and sweep the area collecting the arisings to load into a vehicle to be taken from the site. The resulting area can then be patched using traditional techniques i.e., hand laying or using a small paving machine depending on the size of the are being treated.
- 5.5 The council's existing TRR machine has been used by the highways maintenance contractor to deliver higher quality more efficient road repairs since the machine was purchased in 2020.
- 5.6 The TRR machine has several benefits when compared to a traditional repair gang:
- the repair creates a patch without joints which increases the longevity of the repair
 - the machinery uses less material to repair defects as it reuses existing material that would normally be excavated and disposed of.
 - The machine is less noisy than traditional treatment methods and so can be used at locations and times where noise is an issue.
 - the van that houses the machinery and the machine itself has solar panels that recharge the machine reducing its carbon footprint
- 5.7 The new machines will be used proactively in areas where there are several defects near each other to achieve a better repair. This reduces the likelihood of other potholes developing between smaller repairs and enables areas to be treated where not all defects at a location are currently at intervention level in a single visit, rather than carrying out smaller repairs and needing to return to the location when the other defects reach intervention levels.
- 5.8 The JCB Pothole Pro will enable twice the area of carriageway to be treated, whilst the TRR machine will allow one and a half times the area to be treated when compared to traditional methods utilising the same budget.

6. Issues and Choices

- 6.1 The decision has been taken to purchase one Pothole Pro and one additional TRR Machine. Delivery of the machinery is anticipated late in July / early August 2023 and will be operational shortly after this once training of the operatives is complete.
- 6.2 This purchase will be funded either from existing capital budgets resulting in a reduction to the planned programme of works in 2023/24 or from an additional capital budget, allowing the 2023/24 planned programme of works to continue in full.
- 6.3 If the existing budgets are required to fund the purchase, then the removal of schemes from the existing 2023/24 programme will result in additional deterioration of the sites and additional minor repairs may be required in the intervening period leading to pressure on the

revenue budget. The delay to the schemes will also result in those capital scheme costs increasing due to the additional deterioration and inflationary increases.

7. Implications (including financial implications)

7.1 Resources and Financial

7.1.1 The additional capital budget required to purchase the machinery is £450,000. This will be funded through borrowing.

7.1.2 Existing capital budgets can fund these purchases, however in doing so it will be necessary to remove some schemes from the 2023/24 programme. This will result in the potential for these areas to deteriorate further requiring some repairs in the intervening period causing potential pressure on the 2023/24 revenue budget and also resulting in the scheme cost increasing due to the deterioration and inflationary increases.

7.1.3 The purchase of the machinery and the additional budget will ensure the most cost effective and efficient solution for pothole management in the local authority area.

7.2 Legal

7.2.1 There are no specific legal implications arising from the proposals.

7.2.2 By utilising the Highways Maintenance and Services Contract to purchase the machinery, the purchase is compliant with the Council's Contract Procedure Rules and the Public Contracts Regulations 2015.

7.3 Risk

7.3.1 The risk of not funding the machinery from an additional budget is that schemes in the 2023/24 programme will need to be pushed back into 2024/25 and these sites are likely to further deteriorate in the intervening period.

7.4 Consultation and Communications

7.4.1 No consultation has been carried out in relation to this proposal, however highways colleagues have engaged with contract partners at Kier to explore and ensure the most beneficial machinery for West Northants. The communications and engagement team will share information regarding the machinery and its expected outcomes with members of the public via the established communications channels in partnership with Kier Highways, the Council's Highways contract partner.

7.5 Consideration by Overview and Scrutiny

7.5.1 Overview and Scrutiny have not considered this proposal.

7.6 Climate Impact

7.6.1 The use of a TRR machine reduces the environmental impact of carrying out maintenance to the highway due to the reuse of all material on site with only a small quantity of additional material required to be added equivalent to any potholes etc within the area being repaired. It also utilises solar panels to provide the electrical power required for the machinery

7.6.2 The use of a Pothole Pro does not have a significant environmental impact compared to traditional methods or repair.

7.7 **Community Impact**

7.7.1 The machinery will be used across West Northamptonshire in areas of need and so there will be no differential impact on the communities in the authority.

8. **Background Papers**

8.1 None