

Report for: **Cabinet**

Date of Meeting:	16 February 2023
Subject:	Highway Infrastructure Asset Management Plan
Key Decision:	Yes, the funding for the capital investment programmes for the next two years being requested is above £1,000,000
Responsible Officer:	Dipti Patel - Corporate Director of Place; Cathy Knubley - Director of Environmental Services
Portfolio Holder:	Councillor Anjana Patel - Portfolio Holder for Environment & Community Safety Councillor David Ashton - Portfolio Holder for Finance and Human Resources
Exempt:	No
Decision subject to Call-in:	Yes
Wards affected:	All wards
Enclosures:	Appendix A - HIAMP Policy February 2023 Appendix B - Highways Asset Strategy February 2023 Appendix C – Highway Asset Programmes 2023 to 2025 (to follow) EQIA - Highways asset strategy and investment programme February 2023 v1.1

Section 1 – Summary and Recommendations

This report sets out the proposed Highways Infrastructure Asset Management Plan (HIAMP) for Harrow.

The report looks at how we manage the Council's Highways Infrastructure Asset –including carriageways, footways, street lighting, highways structures, surface drainage, and gullies. Our highways infrastructure is the most visible and most used asset by the public currently valued of £110m.

The Council's 457.4 kilometres of road network and 935.1 kilometres of footway and footpaths is critical to the well-being of the residents of Harrow, while also being strategically important for travelling to and between other parts of north-west London. The preservation, maintenance, and improvement of our highway network, together with its wide range of associated infrastructure is therefore vital to the economic and social well-being of the Borough.

The HIAMP sets out the policies and investment criteria required to keep the highway assets in a safe and serviceable condition in the most efficient and effective manner, both on a day-to-day basis and in the medium and long term.

Recommendations:

Cabinet is requested to:

1. Approve the proposed Highways Infrastructure Asset Management Plan
2. Note the 2022/23 allocation of £6.0m approved for highways infrastructure improvements at February Cabinet 2022 to progress the delivery of the HIAMP for 2022/23 and the agreed allocation (via the Capital budget setting process) of a further £5.5m for 2023/24.
3. Delegate authority to the Director of Environment, in consultation with the Portfolio Holder for Environment & Community Safety, the Director of Finance and the Director of Legal & Governance Services, to procure contractors to carry out the infrastructure improvement works in accordance with the approved programme for carriageways and footways set out in Appendix 1 and 2.
4. Note that future capital investment from 2024/25 and beyond will be considered through the Councils budget setting process.

Reason: (for recommendations)

To ensure that the Council has an effective Highway Infrastructure Asset Management Plan and associated delivery programmes that ensures the effective management and optimisation of the Council's allocated capital budget.

The implementation of the Plan will see:

- More cost-effective asset management utilising life cycle planning principles.
- Essential asset maintenance in the borough

- CO2 reductions from highway operations
- Reduce tree root trip hazards
- Complete an LED and column upgrade for all lighting across the borough
- Maintenance of all flood and water management assets.

Section 2 – Report

Introduction

The Council aims to introduce a comprehensive Highways Asset Management Plan (HIAMP). This sets out a strategy based on the need to repair our assets on a regular basis, before they fail, to extend their lifespans and reduce repair costs long-term, and provide the best value for money for the Council.

The proposed HIAMP provides a systematic long-term methodology for maintaining the borough's highway infrastructure. It will enable the Council to improve the condition and overall performance of our highway network as well as the quality of the public realm through better coordination and planning of maintenance activities.

Several options were considered to clear the current asset management maintenance backlog, carry on a steady state, and continue to maintain the current state of our highways. The proposed programme is based on available capital funding to both prioritise and efficiently address the backlog with the intention to progress and achieve a steady state for the future.

Furthermore, all materials were reviewed, and options appraised to assess the best economic, robust, and sustainable highway materials and new proposed material surfaces are being recommended, to reduce costs, reduce trip hazards and reduce CO2 based highway materials. For example, in the case of footway resurfacing, the council is proposing to move away from paving slabs (except for conservation areas) and move to an asphalt-based footway surface.

Background

In common with other local Highway Authorities Harrow has an increasing maintenance requirement which is difficult to meet through limited budgets, currently estimated in Harrow at £450k per year, with more defects appearing year on year. Against this the public expectations are rising with more reports of highways defects each year asking for repair. To date the Council has not updated its HIAMP alongside a prioritisation programme for implementation. A review highlighted that there are records of the highway asset inventory, and information and performance data to provide an understanding of network deterioration and condition. The service approach to addressing infrastructure repair and maintenance has primarily been on a reactive basis only.

It is essential that the Council has in place a comprehensive Highway Infrastructure Asset Management Strategy together with effective operating policies and procedures. An annual infrastructure maintenance programme and associated capital investment will be agreed by Cabinet. Thus, enabling the understanding of the long-term financial commitment required to maintain services and to keep the highway

infrastructure networks in a reasonable condition to support regeneration, economic growth, and communities.

Furthermore, the proposed HIAMP seeks to establish a long-term strategic vision of highways assets to investigate efficient and sustainable assets for the future, such as plastic roads via innovation grant funding as well as Lidar surveys to reduce long term costs. Lidar is a detection system which works on the principle of radar but uses light from a laser to assess a highway asset condition.

The UK government, the Council and many other local authorities have declared climate emergencies with a commitment to decarbonise their activities. The Council's Interim Climate and Ecological Emergency Strategy adopted in 2020 recognises that a significant part of the Council's organisational carbon footprint is associated with the goods and services that it procures, including maintenance and investment in its highway infrastructure. Highways contracts are particularly carbon intensive due to the high level of fossil fuel energy need to extract, process, transport and lay road and footpath surfacing. The proposed HIAMP will focus on low carbon technologies with a view to reducing the embodied carbon of highways contracts and the materials used. The proposed completion of the LED lighting programme will also have a positive effect on lowering the council's carbon emissions by reducing the council's electricity usage in relation to street lighting.

Key Implications for Highways Assets

The proposed new Highways Infrastructure Asset Management Plan (Appendix A), contains 15 modules covering various aspect of the operating policies and procedures in the following areas:

- Overall Context
- Asset Management Framework
- Asset knowledge
- Maintenance strategy
- Works programming and priorities
- Funding and expenditure
- Asset valuation
- Investment strategy
- Performance management
- Communication and customer engagement
- Service delivery
- Designing for maintenance
- Network resilience, weather, and other emergencies
- Implementation and improvement

The HIAMP will see the implementation of a plan to move the last 30% of the borough to LED lighting and to replace all lighting columns over the next 2 years. This will allow the Council to make efficiencies on large energy bills and cost avoidance on increasing energy costs. Furthermore, once complete, street lighting will move to a maintenance only regime reducing capital borrowing in future years.

The footway and carriageway programmes will see the council move to asphalt footway repairs rather than paving slabs (except in conservation areas) to reduce CO2 emissions and reduce trip hazards as well as reduce costs of delivering the

programme, meaning the Council can deliver more resurfacing within existing budgets.

Furthermore, the programme will include the implementation of tree pits to prevent issues with trips and falls as seen in residential areas with long established tree roots.

All roads in the borough have been prioritised using detailed condition data via an independent survey of the borough roads. The prioritisation of the programme is based on the condition of the road, the amount of funding being spent on reactive repairs, the usage on the road, i.e., the volume of walking, cycling and vehicles using the road. This is all then weighted based on the use, condition, and value of repairs in the road to prioritise which works to roads in the borough are carried out. .

The HIAMP aligns with both the highway roadside gulley's, and flood defence evidenced based operational asset registers and plan using bespoke software platforms developed by The Highways Asset Management Team (THAM).

Using these systems has enabled THAM to secure external funding from Flood Defence Grant in Aid (£0.75m), Local Levy from the Thames Regional Coastal Committee (£0.95m), Defra Flood Resilience and Innovation program (joint £6m with LB Barnet), Thames Water Smarter Water Catchment program (joint £5m with the 5 West London boroughs), GLA (£0.5m).

THAM have 7No. projects on the Environment Agency (EA) National program and will continue to submit bids to other funding streams to strengthen the borough's resilience to flooding on the highway network, and residential and commercial property to maintain business continuity and economic development and growth.

The purpose of the new HIAMP is to seek innovation and improvements to highways assets moving forward to look at innovative artificial intelligence surveys for asset inventory, condition, usage, and maintenance to reduce the need for officer surveys reducing costs but also to enhance a data led decision strategy for all assets to meet our statutory requirements efficiently and effectively at reduced costs.

Furthermore, the HIAMP also seeks to investigate the use innovative surfacing materials, including warm mix asphalt and emerging plastic road technology which can self-defrost, charge streetlights and electric vehicle charge points and other assets using renewable energy from the friction of the plastic road surface. Moreover, these plastic roads are 100% recyclable and allow easier access and maintenance of utilities with less disruption reducing the need for network management on the highway in the future.

This technology has not been tested in the UK and therefore the Council wish to make a bid to central government's innovation fund during the life of the HIAMP to trial this technology within a council car park as a proof on concept.

There are different budgetary scenarios in the Funding and Expenditure, and Investment Strategies modules. The new HIAMP also looks at Harrow's current funding sources, as well as historic expenditure in the Borough to help understand the impact.

Risk Management Implications

Risks included on corporate or directorate risk register. **No**

Separate risk register in place? **Yes for the investment plan**

The relevant risks contained in the register are attached/summarised below. **No**

The following key risks should be taken onto account when agreeing the recommendations in this report:

Risk Description	Mitigations	RAG Status
The publication of our HIAMP together with the future investment programmes on Council's website may result in more enquiries being generated from members of public etc.	<ul style="list-style-type: none"> ▪ Staff will be trained against the new strategy and investment programme to advise the public how it works to answer queries ▪ The Council website will be updated with all information on the new strategy and investment programme, to enable transparency on the programme and what works are being carried out. ▪ Monthly briefing updates to Portfolio Holder on the programme to report on progress and any issues. 	Green
The funding for the Highways infrastructure asset management strategy is inadequate with a gap of £2.78m identified (see Finance Section)	<ul style="list-style-type: none"> ▪ The remaining funding for future years has not been established and the Council needs to resolve this in line with the future MTFS planning cycles. ▪ Until the funding gap is addressed through future MTFS planning cycles, expenditure will be capped at current budget levels to prevent a budget pressure 	Amber
The HIAMP does not achieve its aims e.g., reduce CO2 in our highway assets or meet the resurfacing investment for 23/24	<ul style="list-style-type: none"> ▪ The project manager will report weekly to the highway manager on progress and issues with monthly highlight reports to the portfolio holder to ensure the programme is delivered on time and on budget. ▪ Finance monitoring monthly via the update reports and budget monitoring 	Green
The HIAMP does not achieve compliance with section 41(1) of the Highways Act 1980 (HA 1980) to maintain a highway	<ul style="list-style-type: none"> ▪ The purpose of the strategy and investment plan is to ensure we meet our statutory duties as well as invest the funding available on key strategic assets to keep traffic moving in line with the Traffic Management Act. Therefore, the strategy and 	Green

	investment programme monitoring are key to this ensuring we comply with the strategy agreed. ▪ As stated above monthly monitoring will be in place to mitigate this risk	
--	---	--

Legal Implications

The statutory framework setting out the Council's legal powers and duties in relation to highways is primarily contained in the following legislation:

- Highways Act 1980
- Traffic Management Act 2004
- New Roads and Street Works Act 1991
- Flood and Water Management Act 2010
- Wildlife and Countryside Act 1981
- Town and Country Planning Act 1990
- Countryside and Rights of Way Act 2000
- Road Traffic Regulation Act 1984
- The Local Government Act 2003

The Council as highway authority has a duty under section 41(1) of the Highways Act 1980 (HA 1980) to maintain a highway maintainable at the public expense, unless it can prove that someone else is responsible. The duty to maintain is confined to a duty to repair and keep in repair.

The duty to maintain a publicly maintainable highway under section 41(1) of the HA 1980 is owed by the highway authority to all users of the highway. A private law action for damages can be brought against the highway authority for breach of statutory duty. If the claimant establishes a breach of statutory duty, the highway authority has primary liability for physical injury or damage resulting from that breach, subject to a special statutory defence "that the authority had taken such care as in all the circumstances was reasonably required to secure that the part of the highway to which the action relates was not dangerous for traffic." (Section 58(1), HA 1980)

The highway authority's statutory duty to maintain the highway extends to the repair and maintenance of drainage systems beneath the highway surface. The duty to repair is not limited to fixing defective drains but extends to clearing blockages.

The Council must also ensure, so far as is reasonably practicable, that safe passage along a highway is not endangered by snow or ice (section 41(1A), HA 1980).

Procurement Implications

Any aspect of procurement that may arise out of the recommendations of this report will be undertaken in accordance with Public Contracts Regulations 2015 (as amended) and with the support and advice of the procurement team

Financial Implications

In the 2022/23 budget setting process, a 3-year Capital Programme was approved in February 2022 by Cabinet and Council. There is a total budget allocation of £24m for Highway Programme, Street Lighting and Highway Drainage & Flood Defence as summarised in the table below.

	2022/23	2023/24	2024/25	Total
	£'000	£'000	£'000	£'000
Highway Programme	6,000	5,500	6,000	17,500
Street Lighting	1,500	1,500	2,000	5,000
Highway Drainage and Flood Defence	500	500	500	1,500
Total	8,000	7,500	8,500	24,000

The capital budget allocated in 2022/23 is not fully released at this stage. Of the total funding of £8m, £6.267m is not yet committed. Subject to the approval of budget carry forward as part of the year-end process, this sum may be used to contribute towards the implementation of highway infrastructure improvement works.

As part of the 2023/24 budget settling process and in setting the 3-year Capital Programme, a total capital allocation of £8.5m for 2025/26 is being added to the rolling programme to continue the capital investment in the highway network.

Within the annual capital budget, a sub-allocation of around £5.5m per annum is for the delivery of physical works and the remainder is utilised to fund surveys, designs, and fees.

Appendix B (HAMS Module H – Investment Strategies) quoted a budget requirement of £8.2m per annum to provide Steady State investment. This is £2.7m more than the level of funding currently provided in the Capital Programme. While there is a financial limitation on funding the HIAMP, it is the intention to spend under the principles of this investment strategy. This direction of travel will support the Council to move towards delivering the HIAMP going forward. The capital funding will be reviewed as part of the capital MTFs refresh annually.

Equalities implications / Public Sector Equality Duty

An EQIA has been undertaken to gauge the impact of HIAMS on equalities implications.

Council Priorities

Please identify how the decision sought delivers these priorities.

A borough that is clean and safe

The proposed strategy will improve the safety and perception of the borough with well-maintained highways assets, improvements to street lighting and prevent trips and falls for our residents.

Section 3 - Statutory Officer Clearance

Statutory Officer: Dawn Calvert

Signed by the Chief Financial Officer

Date: 17th January 2023

Statutory Officer: Stephen Dorrian

Signed on behalf of the Monitoring Officer

Date: 25th January 2023

Chief Officer: Dipti Patel

Signed off by the Corporate Director

Date: 2nd February 2023

Chief Officer: Nimesh Mehta

Signed off by the Corporate Director

Date: 17th January 2023

Head of Internal Audit: Susan Dixon

Signed by the Head of Internal Audit

Date: 25th January 2023

Mandatory Checks

Ward Councillors notified: No, as it impacts on all Wards

EqlA carried out: 20th January 2023

EqlA cleared by: Jennifer Rock

Section 4 - Contact Details and Background

Papers

Contact: Nicolina Cooper, Interim Head of Traffic, Highways and Asset Management, 07423621435, Nicolina.cooper@harrow.gov.uk

Background Papers: None

Call-in waived by the Chair of Overview and Scrutiny Committee

NO