	<p align="center"><b>London Borough of Hammersmith &amp; Fulham</b></p> <p align="center"><b>CABINET</b></p> <p align="center"><b>11 FEBRUARY 2013</b></p>
<p align="center"><b>APPROVAL OF THE 2013/14 PLANNED HIGHWAY MAINTENANCE PROGRAMME</b></p>	
<p><b>Report of the Cabinet Member for Transport and Technical Services – Councillor Victoria Brocklebank-Fowler</b></p>	
<p><b>Open Report.</b></p>	
<p><b>Classification - For Decision</b></p> <p><b>Key Decision: Yes</b></p>	
<p><b>Wards Affected: All</b></p>	
<p><b>Accountable Executive Director: Nigel Pallace, Executive Director of Transport and Technical Services</b></p>	
<p><b>Report Author: Ian Hawthorn – Head of Highway Maintenance and Projects</b></p>	<p><b>Contact Details:</b>  Tel: 020 8753 3058   E-mail: <a href="mailto:ian.hawthorn@lbhf.gov.uk">ian.hawthorn@lbhf.gov.uk</a></p>

**1. EXECUTIVE SUMMARY**

- 1.1. The report seeks approval for the 2013/14 Planned Carriageway and Footway Maintenance Programme and authority to manage the programme and overall budget throughout the year. Intervention is required at specific levels of deterioration to ensure very expensive and disruptive full depth road and footway reconstruction is not required. Each scheme is individually designed according to existing condition to maximise value for money.

## **2. RECOMMENDATIONS**

- 2.1. That the list of planned carriageway and footway maintenance schemes as set out in Appendix A be approved.
- 2.2. That authority be delegated to the Cabinet Member for Transport and Technical Services, in conjunction with the Executive Director of Transport and Technical Services and the Executive Director of Finance and Corporate Governance, to make amendments to the programme as agreed for operational and cost effectiveness reasons in order to make the optimum use of resources allowing virements to contain expenditure within the approved resources and not subject to the normal virement rules.
- 2.3. That reports and updates on programme amendments (additions and removals) to the approved scheme list be made to the Cabinet Member for Transport and Technical Services.

## **3. REASONS FOR DECISION**

- 3.1. To avoid the need for repeated authorising reports, the programme needs to be managed as a whole. On this basis, officers are again seeking exception from the normal Key Decision process of seeking approval on a scheme by scheme basis noting that some schemes will exceed the £100,000 key decision threshold.

## **4. BACKGROUND**

### **4.1. Strategy**

- 4.1.1. Detailed technical condition surveys are carried out each year to examine the condition of every road in the borough. The surveys divide the roads and footways into manageable sections and return a condition score against each. These are then prioritised to formulate a list of streets with a level of defectiveness above a threshold score. This establishes a useful benchmark of the percentage of streets below the desired maintenance threshold.
- 4.1.2. These streets are then validated against engineering judgement to confirm its ranking and position on the programme. At this stage the desired maintenance treatment is established to estimate the maintenance costs for each scheme.
- 4.1.3. These surveys are based upon 'structural condition' which may not accord with the public expectation where visual non-structural defects may be more heavily weighted, for example where there are large numbers of

utility company reinstatements giving a surface patchwork appearance. All councillor and third party requests for maintenance received during the year are recorded. These streets are also inspected at the same time as that described in paragraph 4.1.1 for consideration.

- 4.1.4. Through these systematic inspections, qualitative condition surveys and prioritisation criteria together with the appropriate choice of materials the Council is able to maximise the road life at an optimum cost in a structured and systematic way.
- 4.1.5. The footway maintenance strategy has concentrated on town centre and main road footway renewals and areas of highest footfall. The opportunity is also taken to remove clutter and to reinstate the paving in full compliance with the Council's StreetSmart guide. The unit cost for this work is high but delivers significant environmental and potential economic improvements.
- 4.1.6. As the majority of the main footway areas have been completed, the local road footpaths will slowly be incorporated into the planned maintenance programme. Consideration will now be given to footways in local shopping area which form an important hierarchy for consideration in the proposed planned maintenance programme and to areas of poor condition footways..
- 4.1.7. Continued improvements are sought through working with the Council's specialist term contractors to search for new technology and new materials to ensure value for money is achieved whilst obtaining long term durability.

## **4.2. Planned Maintenance Programme**

- 4.2.1. There are always more schemes than available budgets and hence the approach is to list more schemes for approval than the budget can afford.
- 4.2.2. During the course of the year there will arise reasons why schemes need to be postponed or cancelled, and having a longer list of approved sites enables substitute or reserve schemes to be brought forward.
- 4.2.3. Additionally the exact cost of each scheme is not known at the outset. It would not be cost-effective to carryout site investigation works to determine costs although this may be done in some more extensive schemes to determine the most appropriate treatments.
- 4.2.4. The usual methodology is to price the schemes based upon historic unit rates so that a reasonable estimate can be obtained for each scheme. It is not generally necessary to accurately pre-establish the exact extent of the planned maintenance work for each individual scheme as the work is established as the work progresses. The work is undertaken and paid through competitively tendered term contracts. The provisional cost

estimates found in Appendix A are based on historic average unit price per square meter for similar works. This avoids the need for detailed work schedules and reduces site investigation work and unnecessary fee expenditure, particularly for carriageway work. The average unit rates used to make the scheme estimates are as follows:

<b>Activity</b>	<b>Unit Rate £/m<sup>2</sup></b>
Principal Road – Resurfacing (Night)	£50.00
Other Classified Road – Resurfacing (Day)	£20.00
Other Classified Road – Resurfacing (Night)	£30.00
Unclassified Road – Resurfacing	£20.00
Micro asphalt (Ralumac) Road Resurfacing	£10.00
Footway repaving	£80.00

*Table showing approximate indicative unit rates used to calculate scheme*

- 4.2.5. The use of the Council's term contracts are ideally suited to this method of working as they contain fixed priced schedules which are applied to measured work at a competitive cost accurately reflecting the extent of the work carried out
- 4.2.6. As detailed in paragraph 4.2.4 above, work is estimated using average unit rates from previous typical schemes and the work, once ordered, is subject to detailed pricing from within the contract. The prices are banded to reflect the volume of work carried out and are considered to be competitive. This system, depending upon the volume of work carried out, gives rise to some schemes spending above and others below estimate. The work is subject to detailed measurement based on the actual work carried out and accounts for specific site conditions, unforeseen ground work for example, which may be required. Adjustment of resources can therefore be made available from within the overall programme.
- 4.2.7. The programme is monitored on a monthly basis to project full expenditure. This balancing process using virements between the reactive and planned budgets and between individual planned schemes gives rise to some adjustment of the total number of planned schemes carried out and encourages optimum use of the available resources. As there are always more schemes in the programme than there are resources to fund them it is always possible to accommodate more or less schemes being carried out within the financial year. It ensures effective budget management and that the overall budgets are fully spent and overspends are avoided.
- 4.2.8. There are also frequent instances where the works of utility companies, who have statutory powers to maintain their apparatus, gives rise to the need to review individual schemes on the programme. This has been particularly problematic in previous years arising from poorly programmed works by utility companies. Despite considerable disruption officers were able to defer work until after the utility companies have concluded and to

rearrange the programme bringing forward substitute schemes from the reserve list to ensure all the available schemes requiring maintenance are treated.

- 4.2.9. To be able to manage the programme a 'cut-off' line is used to match the number of schemes against the available budgets. This approach allows for flexibility and for the cut-off line to be raised or lowered in order to ensure that as many deserving schemes are carried out within the available budgets.
- 4.2.10. The attached listings at Appendix A sets out the proposed 2013/14 schemes that would benefit from planned maintenance.

### **4.3. Programme management**

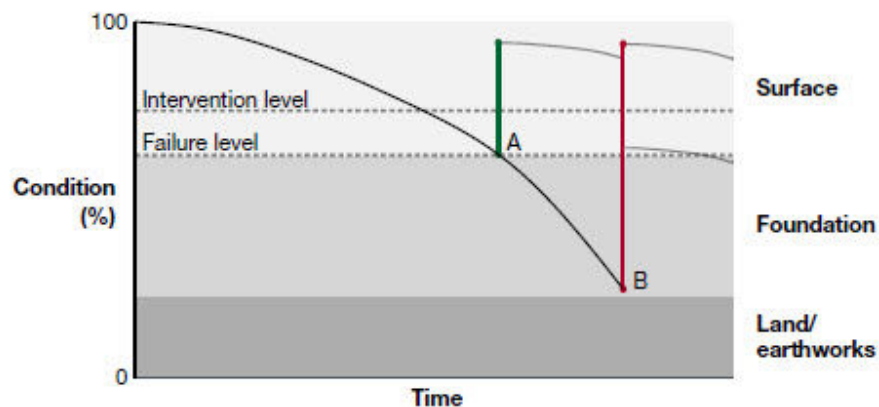
- 4.3.1. The financial resources available for the carriageway and footway planned maintenance are met from Council capital and revenue allocations, except for the Borough Principal Road Network (BPRN) structural maintenance, this is funded by directly by Transport for London (TfL) through the annual Local Implementation Plan (LIP) allocation.
- 4.3.2. All planned maintenance work is delivered through the Council's term schedule of rates contracts that have been subjected to competitive tendering.
- 4.3.3. To avoid the need for repeated authority reports the programme needs to be managed as a whole. On this basis officers are again seeking exception for the normal key decision process of seeking approval on a scheme by scheme basis noting that some schemes will exceed the £50,000 key decision threshold.
- 4.3.4. Officers are seeking approval for the scheme selection and to delegate authority to the Director of Transport and Technical Services and Director of Finance and Corporate Services in conjunction with the Cabinet Member for Transport and Technical Services, to make adjustments within the programme for operational and cost effective reasons in order to make optimum use of resources allowing virements to contain expenditure within the approved resources and not subject to the normal virement rules.
- 4.3.5. The overall highways budget for road and footway repairs is divided into minor reactive maintenance and major planned work. The reactive work, particularly the safety element of the work, is dependant on the requirement for safety or urgent repairs identified by highway inspectors and are funded wholly from revenue. The major planned work seeks to spend the resources cost effectively to optimise maintenance expenditure. Any under spending on the reactive work from revenue can be diverted into the major planned works programme. This seeks to achieve a balance between the need to keep the highway in a safe condition and to maximise planned work to spend the resources most cost effectively.

Approximately half of the total maintenance works resources are carried out on footways.

- 4.3.6. The aim of the planned maintenance programme is to prioritize roads that are just failing or showing signs of failure (a 'stitch in time' principal). Early intervention results in only the top layer of the road being resurfaced at a significantly lower unit cost. Failing to be pro-active can result in the significant additional cost of having to also repair the lower layers of the carriageway as well as the cost of minor maintenance and the risk of accidents and public liability claims. Early intervention or road resurfacing delivers maintenance at the minimum whole life cost ('prevention better than cure'). This is shown in Figure 1 below.
- 4.3.7. There is a balance between the need to provide a reactive service to keep the highway in a safe condition and the need to repair the greatest road surface area at least cost. The aim is to minimise expenditure on expensive reactive and safety maintenance thereby releasing resources to be spent on the more cost effective planned works programme. This approach seeks to maximise the use of the financial resources.

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Figure 7: Failure to intervene at the right time and with the most appropriate treatment will result in poor roads and represents poor value for money



Source: Professor Martin Snaith, University of Birmingham

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- 4.3.8. The current footway maintenance strategy focuses on repaving town centre areas, main roads and those streets with the highest footfall in the Borough.
- 4.3.9. BPRN structural road maintenance is funded from TfL based on bids through the annual LIP process. The scheme expenditure is regularly reported to TfL so adjustments in expenditure can be accommodated.

## **5. EQUALITY IMPLICATIONS**

- 5.1. The approval of the highway maintenance programme is not considered to have any equality implications.
- 5.2. A completed Equality Impact Assessment is available electronically.

## **6. LEGAL IMPLICATIONS**

- 6.1. There are no direct legal implications for the purposes of this report.

## **7. FINANCIAL AND RESOURCES IMPLICATIONS**

- 7.1. The maintenance programme is made up of minor reactive maintenance and major planned maintenance, which are funded by revenue and capital.
- 7.2. The total highways maintenance allocation for the 2013/14 financial year is as follows:

Capital Allocation    £1,880,000

Revenue Allocation   £1,506,200

TfL BSP allocation    £633,000

- 7.3. The important distinction is that whilst revenue can be used to fund capital expenditure, the reverse is not true and capital can only be used to fund major planned maintenance works. The Capital Allocation will be approved as part of the Capital Programme by Council in February 2013.
- 7.4. Appendix A contains a list of proposed borough funded maintenance schemes at an estimated cost of works of £1.8m. This contains a revenue contribution to Capital. It is this amount over which officers would like to apply some flexibility and use for either reactive or planned maintenance. If reactive maintenance is under spending then this will be used to finance the planned maintenance programme. The intention being to deploy the resources available in the most cost effective manner.
- 7.5. This will be monitored through the Corporate Revenue and Capital Expenditure monitors and reported accordingly. For planned maintenance, individual schemes will be reported at budgeted and forecast level. As well as amendments to funding of individual projects within the overall programme allocation, should it prove necessary to delete or substitute alternative schemes these will also be reported through the capital monitor.

7.6. Details of the current and future financial implications must be set out here and cleared by the relevant Finance Officer at each authority that is party to this decision. It is the responsibility of the report author to ensure this happens.

**Local Government Act 1972 (as amended) – Background papers used in the preparation of this report**

No	Description of Background Papers	Name/Ext of holder of file/copy	Department/Location
1.	Highway Condition Surveys and database output	Jonathan Addis	TTS / 5 <sup>th</sup> Floor Town Hall Extn
2.	Highway Term Maintenance Contracts	Jonathan Addis	TTS / 5 <sup>th</sup> Floor Town Hall Extn
<b>CONTACT OFFICER:</b>		<b>NAME:</b> Jonathan Addis <b>EXT.</b> 3073	



## APPENDIX A: Proposed Planned Maintenance Schemes 2013/14

### CARRIAGEWAY

Road Name	Section	Estimated Value	Condition* (1-10)	Condition Description
<b>PRINCIPAL ROADS</b>				
GLENTHORNE ROAD	Studland Street - Cambridge Grove	£100,000	8.5	Carried over from 2012/13 programme as was delayed due to development - very poor condition, multiple trenches, depressions and potholes developing
HAMMERSMITH BRIDGE ROAD	Under flyover: Slip lane to Great West Road	£110,000	8.5	Very bad condition especially in box junctions, large cracks, potholes developing
HAMMERSMITH ROAD	Beadon Road - Butterwick/Bute Gardens	£105,000	7.5	Poor condition especially at box junction, heavily trafficked route
LILLIE ROAD	North End Road - #64/66 Lillie Road	£80,000	8.0	Bad condition, multiple depressions, made safe for Olympics now requires resurfacing
LILLIE ROAD	#64/66 Lillie Road - Borough Boundary	£110,000	8.5	Very bad condition, multiple depressions, made safe for Olympics now requires resurfacing
NEW KING'S ROAD 1	Fulham High Street - Grimston Road	£120,000	8.0	Very bad condition, depressions and trenches. Multiple complaints especially from cyclists.
NEW KING'S ROAD 2	Wandsworth Bridge Road - Bagley's Lane	£79,250	8.0	Very poor condition especially at box junction.
SCRUBS LANE 1	Hythe Road (incl RAB)- South Side Railway Bridge	£117,500	8.0	Very poor condition, large transverse and longitudinal cracks present, holes at bridge joints
SCRUBS LANE 2	South Side Railway Bridge - Lamp Colum #19	£159,000	8.0	Very poor condition, large transverse and longitudinal cracks present
SHEPHERD'S BUSH ROAD	Hammersmith Road - Fire Station	£175,000	8.5	Very bad condition, multiple trenches, multiple complaints from public
WOOD LANE	Du Cane Road - North Pole Road	£122,500	7.0	Poor condition, longitudinal cracks appearing, few depressions

<b>NON-PRINCIPAL ROADS</b>				
ADELAIDE GROVE	Dunraven Road - Sawley Road	£10,000	8.0	Poor condition, holes and alligator cracking
AGATE ROAD	Whole Road	£54,000	7.5	Carried over from 2012/13 programme - trenches, delamination and unravelling
ALBION PLACE	Whole Road	£8,400	7.0	Carried over from 2012/13 programme - trenches and holes developing, do in conjunction with Galena Road
ALDBOURNE ROAD	Whole Road	£55,420	7.5	Poor condition of surface profile deterioration - cracks and crazing drainage channels profiles
ASHCHURCH PARK VILLAS	Whole Road	£42,700	6.5	Poor condition cracks and crazing surface deterioration
ASHCHURCH TERRACE	Whole Road	£27,980	7.5	Poor condition surface deterioration - cracks and crazing drainage channels profiles

AUSTRALIA ROAD	Bloemfontein Road - Durban House (SE corner)	£50,000	7.5	Large transverse cracks at regular intervals, complaints from public.
BARON'S COURT ROAD	Speed humps (incl Comeragh Rd turning area) - North End Road	£23,400	8.0	Overlay surface is coming away from the road
BRACKENBURY GARDENS	Whole Road	£17,160	8.0	Multiple patches, with uneven and worn surface
CAMBRIDGE GROVE	King Street - Glenthorne Road	£24,000	7.0	Carried over from 2012/13 programme due to conflict with gas works - poor condition, trenches down length.
CATHNOR ROAD	Whole Road	£52,140	8.0	Poor condition of surface profile deterioration - cracks and crazing drainage channels profiles
EDENVALE ROAD	Whole Road	£22,660	8.5	Terrible condition. Delamination of overlay, severe cracking, patches
ELTHIRON ROAD	Whole Road	£24,000	7.5	Poor condition, transverse crack, delamination of surface
EVERINGTON STREET	Whole Road	£37,005	6.5	Reserve scheme - lots of cracking, delamination and patches, possibly a 6mm or Ralumac overlay required
FIELDING ROAD	Whole Road	£16,200	7.5	Carried over from 2012/13 programme
GALENA ROAD	Whole Road	£16,100	8.0	Carried over from 2012/13 programme, in conjunction with Albion Place.
GRAVESEND ROAD	Whole Road	£18,440	8.5	Very poor condition, cracks and holes developing, worn surface
HALSBURY ROAD	Whole Road	£23,400	8.0	Poor condition, edge break, patches and cracking
HARTSWOOD ROAD	Stamford Brook - Wendell Road	£80,000	7.5	Cracks, poor shape, carried over from 2012/13 programme
HETLEY ROAD	Whole Road	£7,380	7.0	Carried over from 2012/13 programme
HOLCOMBE STREET	Whole Road	£8,800	6.5	Reserve Scheme - carried over from 2012/13 programme - trenches, patches and a few cracks.
HUMBOLT ROAD	Whole Road	£47,941	7.5	Cracks present, potholes, trenches and uneven surface
HURLINGHAM ROAD	New King's Road - Napier Avenue/width restriction	£42,800	8.5	Poor condition stretch of road, multiple cracking
KENMONT GARDENS	Waldo Road - Valliere Road	£26,000	7.5	Transverse cracks across whole length, overlay breaking up, edge breaks
LARNACH ROAD	Whole Road	£25,270	6.5	Reserve scheme - longitudinal cracks
LEAMORE STREET	Whole Road	£25,200	6.5	Reserve Scheme - Carried over from 2012/13 programme due to conflict with gas works - poor condition, trenches down length and cracks
LIME GROVE	Whole Road	£60,200	7.5	Cracks present, carried over from 2012/13 programme
LINDROP STREET	Whole Road	£24,520	7.0	Reserve Scheme. Poor condition - cracks appearing, patches and depressions

MACLISE ROAD	Whole Road	£32,000	8.0	Carried over from 2012/13 programme
NORTH END ROAD	Fitzjames Avenue - Talgarth Road	£80,000	8.5	Carried over from 2012/13 programme - prolific cracking, depressions and trenches
OIL MILL LANE	Whole Road	£14,200	8.0	Carried over from 2012/13 programme - holes, multiple patches & trenches
OLD OAK ROAD	Steventon Road - East Acton Lane	£64,000	8.0	Poor condition, doing this section completes the whole road as first section was resurfaced in 2012/13
PADDENSWICK ROAD	Whole Road	£94,460	7.5	Cracking widespread
PERCY ROAD	Uxbridge Road - Vespan Road	£26,600	7.5	Cracks and crazing surface deterioration wheel tracking
QUERRIN STREET	Whole Road	£17,680	7.5	Multiple patches, holes, uneven surface and worn surface
RAINVILLE ROAD	Colwith Road to Wingrave Road	£25,900	6.0	Reserve scheme - holes in surface developing, would tie in with 2012/13 resurfacing of other half of road.
RICHMOND WAY	Sinclair Gardens - Bolingbroke Road	£34,000	8.0	Carried over from 2012/13 programme
ROSEDEW ROAD	Whole Road	£30,958	7.0	Reserve Scheme - alligator cracking, depressions in wheel tracks
SOULDERN ROAD	Whole Road	£11,500	7.5	Carried over from 2012/13 programme
ST DUNSTAN'S ROAD	Whole Road	£79,600	7.5	Carried over from 2012/13 programme - longitudinal and transverse cracking, holes and patches.
ST STEPHEN'S AVENUE	Goldhawk Road - Thornfield Road	£44,000	7.0	Cracks present, carried over from 2012/13 programme
STEVENTON ROAD	Whole Road	£57,700	7.5	Poor condition of surface profile deterioration
THORPEBANK ROAD	Whole Road	£49,080	7.5	Poor condition of surface profile deterioration
WATERFORD ROAD	Harwood Terrace - Kings Road	£10,400	7.0	Patchwork of failing trenches, surface texture loss and cracks developing.

## FOOTWAY

Road Name	Section	Estimated Value	CONDITION DESCRIPTION
<b>PRINCIPAL ROADS</b>			
BEADON ROAD	Glenthorne Road - Hammersmith Grove	£60,000	Old tarmac footways, need to be replaced in line with street smart to tie in with Broadway Improvement Scheme.
FULHAM HIGH STREET	<u>WEST</u> : Church Gate - Rigault Road	£38,000	Outstanding section of a main thoroughfare road.
GLENTHORNE ROAD	Studland Street - Cambridge Grove	£105,000	A road footways that are in poor condition with high footfall, will be done in conjunction with resurfacing of the carriageway.
HAMMERSMITH ROAD	<u>NORTH</u> : Shepherds Bush Road - Bute Gardens	£23,000	Unpaved section of A Road in an important town centre location, will tie in with large Broadway scheme.

HOPGOOD STREET	Uxbridge Road - MacFarlane Road	£24,000	High footfall A road section used as cut through to Westfield Shopping Centre, old pavers & tarmac require replacing.
LILLIE ROAD	<u>SOUTH:</u> House #52/54 - North End Road	£70,000	Untidy and tired section of A Road in an important high footfall area.
MACFARLANE ROAD	Hopgood Street - Wood Lane	£12,500	High footfall A road section used as cut through to Westfield Shopping Centre, old pavers & tarmac require replacing.
NEW KING'S ROAD 1	<u>NORTH:</u> Harwood Road - Waterford Road	£16,000	Mixture off concrete and worn pavers, repaired patches
NEW KING'S ROAD 2	<u>SOUTH:</u> Wandsworth Bridge Road - Harwood Road	£23,000	Mixture off concrete, old modular pavers and tarmac sections
NORTH END ROAD	<u>EAST:</u> Thaxton Road - Lillie Road	£35,000	Untidy and tired section of A Road in an important high footfall area.

<b>NON-PRINCIPAL ROADS</b>			
BARON'S COURT ROAD	<u>SOUTH:</u> Challoner Street - North End Road	£18,000	Parade of shops, high footfall to underground station, old tarmac & paved surface
BLACK'S ROAD	<u>NORTH:</u> Queen Caroline Street - Corner/Bend	£35,000	Parade of shops, town centre area not to Street Smart, old tarmac & paved surface
BLYTHE ROAD	<u>SOUTH:</u> Caithness Road - Sterndale Road	£13,000	Parade of shops, old tarmac & paved surface
BRACKENBURY ROAD	Goldhawk Road - Dalling Road	£50,000	Busy road, mix of tarmac & old pavers, uneven surface, cracked slabs and low kerbs
DUNRAVEN ROAD	<u>SOUTH:</u> Galloway Road - Thorpebank Road	£10,000	Mixture off concrete and worn pavers, repaired patches
HECKFIELD PLACE	<u>WEST:</u> Fulham Road - Bridge	£15,000	High footfall outside Police Station - large percentage of broken slab, old concrete, low kerbs
HENCHMAN STREET	Whole Road	£20,000	Footfall to underground station, resident group request, large percentage of broken slabs over whole length of footway
NORTH END ROAD 1	Edith Road - Talgarth Road (A4)	£85,000	Shop & high footfall area along main road, mix of tarmac & old pavers, uneven surface, cracked slabs and low kerbs
NORTH END ROAD 2	Fitzjames Avenue - Edith Road	£140,000	Shop & high footfall area along main road, mix of tarmac & old pavers, uneven surface, cracked slabs and low kerbs
WORMHOLT ROAD	Wormholt Road / Byrony Road / Yew Tree Road Junction	£25,000	Junction of three roads with old pavers and old unravelling tarmac, uneven kerbs and very untidy - number of resident enquiries
THORPEBANK ROAD	Whole Road	£140,000	Uneven profile and low kerbs, would be done with carriageway resurfacing

\* The condition rating shown is based on visual inspections by Council Engineers using their engineering judgement. A rating of 1 represents a brand new surface (best possible condition), up to 10 which represents a road in extremely poor condition (worst possible condition) where substantial work is required to rectify.