YORK	
Decision Session – Cabinet Member for Communities and Neighbourhood Services	20 March 2012
Report of the Assistant Director (Environment)	

# **Annual Highway Maintenance Report**

## **Summary**

1. This report provides a review of the service performance in highway maintenance over the last year. The report examines issues arising and proposes programmes of work to be undertaken in the financial year 2012/13 and a provisional list for 2013/14.

# **Background**

- 2. The highway maintenance service covers a wide range of activities. It is delivered by a number of in-house teams, working in conjunction with external service providers. The Highway Maintenance Services (HMS) team in Communities and Neighbourhood Services (CANS) has overall management responsibilities for the highway assets; it determines works programmes for Members to consider and arranges for smaller scale routine maintenance works to be carried out on a priority basis. The Civils team in HMS carries out most of the work activities with the exception of street lighting which are provided by external contractors Amey Local Government (Amey LG). It is proposed from April 2012 to bring in-house the bus shelter maintenance which was previously carried out by Stoneplan.
- 3. Larger LTP/CYC capital and revenue schemes are designed and managed by the Design team in HMS. Works are procured through the Specialist Surfacing Framework Agreement in conjunction with other authorities in the Tees Valley Alliance. Minor works are carried out by the Civils team within HMS and through 2011/12 the team also acted as Principal Contractor on all larger schemes. This arrangement was found to be a success and has been extended into 2012/13.
- 4. Communities and Neighbourhoods, Street Scene team act as the corporate manager for grass cutting across the council and for amenity and landscaped areas requiring maintenance.

# Review of 2011/12 and Proposals for 2012/13

#### **Adoptions**

 Over the past year the highway network has increased by 1.4 kilometres of carriageway and 2.1 kilometres of footway due to adoptions and new development.

#### **Drainage**

- 6. Members allocated £55k for high priority drainage works in 2011/12. This enabled area-wide investigation and remedial works to continue in several of the locations previously identified as suffering persistent ponding problems. The area-wide approach is more effective than reactive response to individual enquiries, with all repairs carried out with a view to assisting future maintenance and reducing the recurrence of problems.
- 7. The proposed drainage allocation of £165k in 2012/13 will give the opportunity to resolve some of the long term highway flooding problems. HMS will be working with the Flood Risk Management team within City Strategy to identify, prioritise and resolve flooding issues within the highway.

## **Street Lighting**

- 8. The street lighting contracts currently with Amey LG is in the second year of a three year contract extension and are cohabiting with the Council at Hazel Court.
- 9. The current energy supply contract is procured through arrangements with YPO. The consortium procures energy on behalf of a number of authorities from greener more environmentally friendly sources whilst reducing the financial impact from a fluctuating market.
- 10. Following the previous years sample structural testing of metal street lighting columns the decision was taken to test all of the remaining stock during 2011/12. The results of this showed 6.0% at risk of immediate failure and a further 2.3% requiring likely attention within a year. All structurally failed columns have been removed to comply with the authorities legal obligations towards public safety.
- 11. Four schemes: Burton Stone Lane, Old Orchard, Alcuin Avenue and Cherry Orchard were undertaken in 2011/12 to replace columns removed as a consequence of the structural testing. These locations

- were subject of a new street lighting design which resulted in a reduction in energy usage whilst still improving the lighting quality in the street.
- 12. A £1million fund has been made available in 2012/13 to replace the remaining failed columns along with the units that need attention in one year. The funding will also allow the Council to test a proportion of its concrete columns in 2012/13 and a replacement programme for those identified as unsound.
- 13. The contractual response time for the repair of street lighting faults by the contractor from the time of notification is two working days. The existing work practices of attending faults "after hours" are continuing to deliver times well below this, thus providing a good level of service.
- 14. Street Lighting is currently continuing to trial new technologies and techniques in order to reduce energy usage and carbon emissions. These include the replacement of all mercury lighting, installation of LED technology and varying the hours of illumination.

#### Resurfacing and Reconstruction Works (R&R)

- 15. The programmes of footway schemes carried out by HMS started early in the financial year and particularly good progress has been made.

  Two schemes are to be carried over into 2012/13 refer to paragraph 22.
- 16. The footway Slurry Seal programme for 2011/12 was competed to a high standard with no remedial works being required.
- 17. The Surface Dressing programme ran very well with both the prepatching and the dressing being laid to a good standard. Inspections will be carried out in March to determine any remedial works that may be required, but initial observations are showing no signs of failure.
- 18. The surfacing material trialled for use on concrete carriageways, called Master Layer, has been successfully used at 8 locations during 2011/12. Monitoring of these sites is ongoing and the resulting recommendations will be used in future scheme designs.
- 19. During 2011/12 HMS carried out a trial of Micro Asphalt surfacing to determine whether it's use as an alternative to resurfacing is beneficial in certain locations. The technology is not new and has been used successfully by many authorities. The initial finding is encouraging and a further programme of Micro Asphalt treatment will be applied in 2012/13. In addition HMS carried out Surface Dressing to section of the major road network to prolong its lifespan and defer the need for major resurfacing works.

- 20. The carriageway resurfacing programme is on target with the majority of schemes already completed. Due to factors beyond HMS control there are however three schemes to carry over into next financial year.
- 21. The schemes to carry over into 2012/13 are: -
  - Boroughbridge Road due to the A59 park and ride project.
  - Micklegate, waiting for Northern Gas to carry out mains refurbishment.
  - Heslington Croft road surface treatment.
  - Severus Avenue, footway.
  - Berkeley Terrace, footway
- 22. Due to financial pressures of the Council and the need to provide saving in 2011/12 no funding will be carried over for the above schemes.

## Basic Maintenance (BM)

- 23. The severe weather condition of 2009/10 and 2010/11 including large deposits of snow and extreme low temperatures has had a detrimental affect on the condition of the highway. This has resulted in an increase of potholes and surface deterioration throughout the network.
- 24. Central Government acknowledge the pressure local authorities were under to repair the highway network and made funds available nationally. The Council's allocation from the fund was £434.7k in 2011/12 and was used for the large patching of the worst sections of the road network.
- 25. The More for York process has introduced a computerised works system that interfaces the call centre with the inspectors and the BM gangs. This includes the use of mobile devices by both the inspectors and BM gangs. Although the process was introduced in 2010/11 there are problems with the software and the perceived savings have not materialised. Further development of the software has been programmed in 2012/13 to alleviate the majority of the problems.
- 26. A new back office team has been created which amalgamates all admin function at Hazel Court into one unit. This new team includes members of staff that were within HMS that provided admin support to the service.
- 27. The 'area working' system operates well to ensure that there is greater coordination of work instructions. The highway inspectors work closely with the supervisors to manage the BM gangs in each area leading to a more efficient service.

28. Routine and ad-hoc inspections and the 'area working' system has again demonstrated the effectiveness of this service through the continued high repudiation rate with regard to third party public liability claims. Information over the last 10 years is shown in the table below.

Year	Total Number			Claims	Repudiation
	Of Claims	Closed		Open	Rate
			at Zero Cost		
2002/03	258	257	215	1	84%
2003/04	199	194	167	5	86%
2004/05	198	192	165	6	86%
2005/06	155	141	129	14	91%
2006/07	132	110	98	22	89%
2007/08	126	113	103	13	91%
2008/09	142	98	95	44	97%
2009/10	229	205	202	24	99%
2010/11	200	177	167	23	94%
2011/12	69 to Date	10	8	59	80%

- 29. HMS is investigating the use of industry wide innovative solutions and techniques in maintaining the highway assets. This includes the use of preformed speed cushions that are bolted to the road surface which are more durable to traffic and easier to maintain. The process of installation is much quicker than the traditional use of hot rolled asphalt and reduces the overall carbon footprint. The cushions also have a longer lifespan and are easier to maintain and are constructed of recycled materials.
- 30. The bus shelter maintenance contract with an external provider Stoneplan expires at the end of March 2012. The service will be provided in-house by the Civil's team along with assistance in bus shelter cleaning from the community payback teams.

# **Asset Management**

- 31. In May 2011 the Council reported a draft non-auditable highway asset valuation for the year 2010/11 in accordance with the CIPFA guidance. The valuation of the highway assets including carriageway, footway, structures, street lighting, traffic signals and street furniture was £1.1 billion.
- 32. The proposal for the financial year 2011/12 is the submission of a draft auditable valuation and the Council is waiting for guidance from CIPFA on the method and what assets are to be included.

- 33. The asset team continues to refine the use of hand held computer technology to log the annual condition survey in a computer database. The refined method can be used to identify those sections of a street where the condition varies along its length. This method gives a more representative condition of the network, as the process is able to record different grades along a section of highway rather than previously being predominately street based.
- 34. The condition data and the machine survey information are used to determine the list of carriageway and footway schemes for 2012/13 and the provisional list for 2013/14. The more detailed recording of survey data has given the opportunity to target the sections of highway in most need. HMS is adopting a more whole life cycle approach to optimize the treatments identified.
- 35. The adoption of an asset based methodology for assessing programmed maintenance will lead to an improved treatment model for the highway network and other assets. The processes will improve the way HMS react to adverse situation on the network, such as the recent winter weather and respond quickly to mitigate the affects on the condition of the highway.
- 36. A survey of the Council's traffic signal assets is near completion and this will be loaded into the asset register and will be used on corporate GIS layers and energy submissions to our suppliers.

# **Bridges**

- 37. Minor repairs funded by the revenue budget have been carried out to various smaller bridges and walls. The programme of General Inspections continues to provide an overview of the condition of the bridge stock and these indicate that the Council's bridge stock is in a safe and serviceable condition.
- 38. An accelerated programme of more detailed Principal Inspections is continuing on 25 of the more major bridges. By March 2012 the majority of the major bridges will have be completed with the outstanding being programmed during 2012/13. Along with the General Inspections these provide detailed information to enable the planning of a future works programme and comply with the management of highway structures code of practice.
- 39. The capital programme of the refurbishment to Severus and Piccadilly bridges for 2011/12 have been delayed and are to be carried over into 2012/13 along with their funding. Investigations in 2011/12 have indicated that a further £200k will be required to complete the works on both bridges.

#### Winter Maintenance

- 40. Approaching the middle of February 2012 the designated network for precautionary gritting has been treated on 49 occasions compare to an annual average of 65. In addition there were continuous ad hoc treatments from the 4 February through to the 8 February 2012. To date the newly designated secondary routes have received 3 treatments.
- 41. The designated footways were treated on 7 separate occasions with numerous ad-hoc treatments to deal with public and member requests for assistance to other non-designated footways.
- 42. To date the Winter Maintenance Control Group has not been convened and daily telephone conversations with key personnel and member bulletins throughout early February. There has been one radio interview to date, plus requests for assistance from areas not covered by the winter maintenance policy; these have been dealt with as resources became available.
- 43. The off road and shared cycle routes have been treated on 4 occasions using the 4 new mini tractors equipped with snow brushes and salt spreaders. These have been very effective in returning the cycle routes back to a usable condition.
- 44. At the time of writing this report there has been a fall of snow and we are still in a period of extremely cold temperatures. If this spell of cold weather persists it is anticipated these figures will increase substantially.
- 45. During the annual review of the service we have looked at various alternative methods of footway and cycleway treatments. We have concentrated on mechanical methods of snow removal from these areas. The "Euromech" cycleway sweeper and gritter, purchased ready for this winter proved to be a key piece of equipment, but was not really effective when dealing with heavy snowfall.
- 46. We have researched and are currently trialling 4 mini tractors with a view to increasing the number of units to 6. We have also purchased 2 snow ploughs that will be mounted on the Neighbourhood Pride Services tractors to supplement the gritting fleet during extended periods of severe weather.
- 47. The service will again be reviewed during the summer of 2012. All departments involved with the service will be asked to contribute in order to deliver a coordinated response.

48. It is generally accepted that the main designated routes are as concise as they can be. However budgetary constraints may have an effect on the number of roads treated in the future. The review will take into account these constraints when focusing on issues such as existing designated routes, mechanical footpath and cycle track treatments, snow wardens and salt bins.

#### **Grass and Tree Maintenance**

- 49. Grass cutting went well this year with similar changeable weather patterns to last year, resulting in varying growing conditions. The conditions led to the Council altering the frequency of grass cuts to ensure standards were maintained throughout the growing season. The Council entered the Britain in Bloom competition this year and the judges made mention of the standard of our grass verge maintenance in their feedback to us.
- 50. There is a proposed budget reduction of £41k in the Amenity Maintenance budget for 2012/13. The reduction will be offset in part by annualizing working hours for grass cutting. This will be obtained by reducing the number of rounds from 9 to 8 but still maintaining the area and number of 14 cuts. The remainder of the savings will be obtained by the use of the community payback resource for siding out and edging of grass verges.
- 51. Generally everything has gone well with tree maintenance and no serious accidents have occurred as a result of tree failures. Tree diseases are increasing year on year possibly due to global warming and as such we have lost a lot of trees through drought. We have also lost many trees during storms this winter but it's clear from past proactive work that many of the trees now falling onto the highway are from private land. Tree replacement planting is currently underway and should be finished by March but it is not possible to replace the last few years tree losses.
- 52. One quarter of the highway trees have been inspected for safety as they are checked on a 4 yearly cycle. The trees surveyed are recorded on the Arboriculture Managers Database have now been successfully plotted as layers on our York map and local view to enable staff and the public to check tree positions and species within our boundaries whilst making enquiries.

#### Performance Indicators

- 53. The new performance framework for local authorities has produced a single set of national indicators and those impacting on the services in highway infrastructure are:
  - NI 168 principal roads where maintenance should be considered (using the machine based SCANNER technique)
  - NI 169 non-principal roads where maintenance should be considered (again using SCANNER)
- 54. Both of these indicators are linked into the DfT Departmental Strategic Objective to sustain economic growth and improved productivity through reliable and efficient transport networks.

## Traffic Management Act (TMA)

55. All works carried out by HMS including street lighting is now being noticed in accordance with Traffic Management Act. A dedicated officer in the back office has been nominated and the level of workload encountered is being monitored.

# Budgets and Works Programme Proposals for 2012/13 Highway Maintenance Budgets 2012/13

- 56. The revenue budget distribution has been adjusted to accommodate the savings agreed by full council on 23<sup>rd</sup> February 2012. The effect as been to reduce the levels of pro-active maintenance on roads and footpaths.
- 57. CYC capital funding for highways in 2012/13 has been reduced by £500k while the bridges element remains the same as 2011/12 at £200k. The street lighting carbon reduction allocation of £200k remains the same as 2011/12 with an additional fund of £1million for column replacement. The LTP structural maintenance allocation decreased by £75k and is anticipated to reduce further in coming years.
- 58. This is also the third year of severe winter conditions with extreme freezing temperatures that will accelerate deterioration. The latest cold snap has not triggered an additional central government funding for repairs. The condition of the roads and footpaths will continue to be monitored over the coming years.

# Highway Programmes for 2012/13 and Provisional for 2013/14

- 59. As set out in the report to the Cabinet Member Decision Session on 15 November 2011 on the Advanced Design of Programmes, full detail of the proposed programmes of work forms part of this report.
- 60. At the time of writing the advanced programme report the budget settlement was not known. Due to the reduction in available funding it will not be possible to carry out all the schemes identified in the report during 2012/13. Those schemes that do not appear in the programme for 2012/13 have been entered onto the provisional list for 2013/14.
- 61. The detailed programmes are attached in Annexes 3 and 4 covering carriageway, footway, street lighting, drainage and bridge works funded by CYC/LTP capital.
- 62. A provisional list of schemes for 2013/14 can be found in annex 5 for approval. The list will be assessed again prior to the advanced programme report in late 2012 when this year's annual condition survey results will be available. The provisional list will form the basis of the programme for 2013/14 and will help the Council coordinate works with other departments and external bodies such as utilities.

#### Consultation

63. Due to the nature of this report no consultation has been undertaken.

## **Corporate Priorities**

64. Through the proposed measures CANS supports delivery of the Create jobs and grow the economy, Get York moving, Build strong communities, Protect vulnerable people and Protect the environment priorities from the Council Plan.

# **Implications**

# **Financial Implications**

65. The capital and LTP funding is shown in Annexes 1 to 5. The highway maintenance service will be provided in accordance with the prescribed budgets and there are no financial implications.

# Human Resources (HR) and other implications

66. There are HR implications due to the reduced revenue and capital budgets approved at full Council on 23 February 2012. The implications have been identified in the budget report and processes applied.

### **Equalities**

67. This report has taken into consideration the impact of the Council's Equality Strategy when recommending the proposed budget allocation and highway maintenance operations. Equalities Impact Assessment (EIA) is addressed in the global budget saving assessment.

#### Legal

68. The Council has a statutory duty to carry out highway maintenance under Section 41 of the Highways Act 1980 and this report sets out the proposals and budgets to allow this to happen in the forthcoming financial year.

#### **Crime and Disorder**

69. There are no crime and disorder issues.

#### Information Technology (IT)

70. There are no IT implications in this report.

#### **Property**

71. There are no property implications.

#### Other

72. There are no other implications in this report.

# Risk Management

- 73. In compliance with the Council's risk management strategy, the main risks that have been identified in this report are:
  - Strategic Risks, arising from judgements in relation to medium term goals for the service
  - Physical Risks, arising from potential underinvestment in assets
  - Financial Risks, from pressures on budgets
  - People Risks, affecting staff if budgets decline
- 74. Measured in terms of impact and likelihood the risk score for all of the above has been assessed at less than 16. This means that at this point the risks need only to be monitored, as they do not provide a real threat to the achievement of the objectives of this report.

#### Recommendations

- 75. The Cabinet Member is recommended to:
  - (i) Note the review of 2011/12 and proposals for 2012/13
  - (ii) Approve the allocation of budgets for 2012/13
  - (iii) Approve the implementation of the proposed programme
  - (iv) Approve the provisional list of schemes for 2013/14 with the ability to advance any works in conjunction with other Council projects.

**Reason:** To ensure delivery of highway maintenance services in an efficient and cost effective manner.

#### **Contact Details**

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Tel: (01904 553231)	Report Approved	<b>✓</b>	Date	5 <sup>th</sup> March 2012				
Wards Affected: All Wards					<b>√</b>			
For further information please contact the author of the report								

# **Background Papers:**

#### Annexes:

- Annex 1 Summary of Budgets and Annexes
- Annex 2 Highway Maintenance Revenue Budgets
- Annex 3 City of York Council Structural Maintenance Programme
- Annex 4 LTP Structural Maintenance Programme
- Annex 5 Provisional Programme 2013/14