

**BRISTOL CITY COUNCIL
Resources Scrutiny Commission**

11 April 2014

Report of: Strategic Director - Place

Title: Outstanding Repairs to Highway Bridges and Structures

Ward: Citywide

Officer Presenting Report:

Contact Telephone Number: 0117 903 6448

RECOMMENDATION

1. The Commission notes the current level of temporary measures protecting the public from structures that require maintenance and that active planning is being carried out to establish the extent, cost and programme of structural repairs required across the city through the Transport Asset Management Plan.

Summary

The cost of the maintaining the City Council's stock of Highway Bridges and Structures, and repairing those retaining walls and cellars that are adjacent to or under the highway that need repair, exceeds the current budgets available. This results in temporary measures being placed to safely manage sites and protect the public. Work on embedding the principles of asset management into future works programmes will seek to resolve this over time (with appropriate funding).

The significant issues in the report are:

- *There are 30 structures where the City Council has temporary measures in place to protect the public from risk (Appendix 1).*
- *The cost of repairing these 30 structures is estimated to be in excess of £1m.*
- *The Highway Structure budgets are £371k revenue and £200k capital against an overall highway asset value of approximately £600m.*
- *The Council has commenced a full inspection regime of key structures across the City with a view to establishing the extent of repair work needed and the estimated cost and programme for such works.*

- *The development and introduction of an appropriate transport asset management system will significantly improve the Council's ability to manage this process.*

Introduction

1. This report has been prepared in response to the question raised by Resources Scrutiny Commission at its meeting on the 28th February 2014 regarding the number of highway structures around the City that have outstanding repair issues.

Policy

2. The City Council as Highway Authority has a statutory duty under the Highways Act 1980 to maintain highway bridges and structures in a safe condition and fit for purpose. The City Council's Highway Bridges and Structures Team manages the work streams that deliver this duty.
3. The City Council is developing its Transport Asset Management Plan (TAMP) to ensure that the programme of maintenance of all highway assets is based on sound asset management principles and draws on robust data on condition and whole life cost. Structures are a key element of the TAMP.

Consultation

4. **Internal** – Highway structures are maintained by the Council's Bridges & Structures team within the Highways & Transport Management Division. Recent organisational changes mean that this team now liaises across to the Planning & Place Strategy Division with colleagues leading on Transport Asset Management.
5. **External** - None

Context

6. The Sustainable Development & Transport Scrutiny Commission received a report on the 20th September 2012 outlining the recommendations from the Highway Maintenance Standards review Working Group on how the City Council can manage existing assets to meet requirements for the future. This endorsed the development of a Transport Asset Management Plan (TAMP) and the implementation of the TAMP over 5 years.

7. The highway bridges and structures asset is currently estimated to have an asset value of approximately £600m, and consists of:
 - 103 bridges and viaducts;
 - 80 footbridges, walkways and staircases;
 - 10 signing gantries;
 - 45 subways;
 - 93 culverts and pipes; and
 - 586 retaining walls.
8. In addition, there are in the region of 1,500 to 2,000 retaining walls in the City and an unknown number of basement cellars which are either adjacent to or extend under the highway. These may or may not be the responsibility of the City Council but the statutory duty to maintain public safety as well as the responsibility to maintain the integrity of the highway network remains. These structures, in particular the retaining walls continue to age. Many were constructed around the same time and are reaching a point in their structural life where they need significant maintenance work in order to extend their life.
9. The City Council's annual (2013/14) structures revenue budget is £371k and the capital budget is £200k. This funding is used to maintain existing bridges and structures to ensure that they continue to be safe and fit for use over their life and to make improvements where required, e.g. strengthening to ensure they can carry the weight and volume of traffic that they now carry which they may not have been originally designed to accommodate.
10. The maintenance work programme for each year is prioritised to minimise the risk of structures failing, as well as repairing those structures that have actually failed and are a safety concern or at risk of causing disruption to the operation of the City's highway network. In preparing this programme consideration is given not just to the condition of the structure itself, but also how quickly any known issues may become urgent, as well as the potential risk should the condition deteriorate further. This is informed by the Council's routine inspection regime.
11. The TAMP, as it is developed, will strengthen the prioritisation process so that a proactive maintenance strategy is in place that minimises the risk of unexpected structural failure occurring. This should also serve to provide robust evidence and data to support decisions on the level of annual funding required in order to achieve this.
12. As part of this approach, during the summer of 2013 consultants carried out inspections of 71 of the City Council's structures, as well as a gap analysis of the Council's Highway Bridges and Structures service compared to the national Management of Highway Structures Code of Practice. Given the current funding position, it is not possible to

undertake all the work required on highway related structures in need of repair in any given year, and so an assessment is made as to the relative urgency of work in the context of risk to the public and which sites can be carefully managed through temporary measures such as barriers, weight restrictions or closures.

Outstanding repairs

13. At present the City Council has temporary measures (barriers, fencing, cones, deck plates) on 30 structures around the City. This has reduced in recent months following an injection of an additional £150k to address the most urgent locations. The list of locations with temporary measures still in place is contained in **Appendix 1**. The cost of repairing just these is estimated to be between £1m to £1.5m, depending on the final extent of work required.
14. Of these structures 15 are retaining walls and cellars where the ownership, and therefore the responsibility for repair, still needs to be resolved and so the Council may or may not be responsible for the cost of maintenance work. **Appendix 1** also includes the ownership details where known. The current approach taken regarding these failures is to resolve all ownership issues before any work is carried out so unnecessary costs are not incurred by the Council. This can result in temporary measures being in place for a significant time if ownership is disputed. If any structures are considered an immediate danger to the public these are addressed immediately and the ownership issues resolved at a later date.
15. An alternative approach is for the Council to accept the repair of all structures requiring maintenance as soon as they become apparent and the ownership issues are resolved after the work has been completed. However, given the initial cost to the City Council, the difficulty in recovering costs incurred and the fact that this may result in the Council having to assume the long term responsibility for the structure in question once the work has been completed, there is a significant legal & financial risk associated with this approach.
16. With further planned development of TAMP within the Council there is a programme to change the way that structures are managed. Current working practices are fragmented and these will be brought together to deliver a robust asset management system that will allow strategic planning of all highway structures to take place.

Other Options Considered

17. Not applicable – this report is for information only.

Risk Assessment

18. Where structural issues arise, each site is assessed as to its risk to the public or to the effective operation of the highway. Where the site cannot be prioritised for immediate repair, appropriate temporary measures are put in place to maintain public safety.

Public Sector Equality Duties

Not applicable – this report is for information only.

Legal and Resource Implications

Legal

Not applicable – this report is for information only.

Financial

Revenue and Capital

Not applicable – this report is for information only.

Land

Not applicable – this report is for information only.

Personnel

Not applicable – this report is for information only.

Appendices:

Appendix 1 - Bridges and Structures with Temporary Measures and Guarding

LOCAL GOVERNMENT (ACCESS TO INFORMATION) ACT 1985

Background Papers:

None

Appendix 1 –Bridges and Structures with Temporary Measures and Guarding

Ref	Location	Condition	Ownership	Cost	Complete 2014/15?
1	Spark Evans Footbridge, St Phillips	Replacement of deck surfacing required due to holes in existing deck – temporary plates in place	BCC	£60,000	yes
2	Langton Court Road Bridge over Rail line, St Annes	Pedestrian Footbridge alongside road closed due to condition of deck and temporary traffic management in place to provide alternative. Complete refurbishment required, but as possession of the railtrack would be required this would need to be negotiated with network rail and the timescales are uncertain.	BCC	£130,000	Yes
3	Park Road, Frenchay	Temporary fencing in place guarding failed section of embankment – Stabilisation of embankment required.	BCC	£40,000	Yes
4	Cotham Grove Retaining Wall, Cotham	Temporary fencing in place guarding failed section of wall – repair/rebuild required	Currently Disputed	£20,000	No
5	St Dunstons Road Retaining Wall, Bedminster	Temporary fencing in place guarding failed section of wall – repair/rebuild required	Currently Disputed	£10,000	No
6	Grove Road Retaining Wall, Redland	Temporary fencing in place guarding failed section of wall – repair/rebuild required	Currently Disputed	£20,000	No
7	135 York Road Retaining Wall, Montpeilier	Temporary fencing in place guarding failed section of parapet – rebuild of parapet required	Unknown	£15,000	No
8	St Michaels Hill Retaining Wall, Kingsdown	Temporary fencing in place guarding failed section of wall and parapet – rebuild of both required	BCC	£10,000	Yes
9	Kingsland Road Retaining Wall, The Dings	Temporary fencing in place guarding localised shear failure section of wall – rebuild / repair required	Unknown	£27,000	No
10	St Georges Road Bridge, Cabot	Temporary barriers restricting over run/parking on the footways due to reduced strength of bridge as a result of deterioration of structural elements. Full repair/refurbishment required – or scheme to permanently restrict vehicles from mounting pavements (bollards etc).	BCC	Full repair £500,000 Traffic Scheme £10,000- £100,000	No
11	Three Lamps Junction Landslip on banks of River Avon, Windmill Hill	Temporary fencing in place to protect failed sections of retaining wall falling into the River Avon. Stabilisation of the embankment and rebuild of retaining wall that supports the highway required.	BCC	£300,000	No
12	31 Brunswick Square cellar, Ashley	Temporary fencing keeping people away from collapsed cellar.	Unknown	£7,000	Yes
13	Victoria Road Cellar	Temporary fencing keeping people away from collapsed cellar.	Unknown	£7,000	Yes

14	Royal York Crescent Retaining Wall, Clifton	Temporary fencing in place guarding failed section of wall and railings – rebuild/refurbishment required	BCC	£70,000	Yes
15	Greenbank Road retaining wall, Southville	Temporary fencing in place guarding failed section of wall– rebuild required	BCC	£10,000	Yes
16	Portland Square Cellar, Ashley	Temporary fencing keeping people away from collapsed cellar.	Unknown	£7,000	No
17	Dunbridge Lane retaining wall, St George	Temporary fencing in place guarding failed section of wall – rebuild required	Unknown	£25,000	No
18	89 Fir Tree Lane Retaining Wall, St George	Temporary fencing in place guarding failed section of wall and steps – rebuild required	Unknown	£20,000	No
19	8 Lamb Hill, retaining wall	Temporary fencing in place guarding failed section of wall – rebuild required	Unknown	£7,000	No
20	Ashton Avenue Bridge, Cabot/Southville	Temporary fencing closing off one side of bridge due to condition of deck and parapet. Repair planned as part of Metrobus	BCC	-	Yes
21	Brunel Way, Cabot	Fencing protecting damaged parapets – parapets need replacing/repairing	BCC	£15,000	Yes
22	Belgrave Hill Retaining Wall, Clifton	Temporary fencing in place guarding failed section of wall – rebuild recently agreed by owner	Private	-	No
23	Cumberland Road Parapet Railings, Cabot	Temporary fencing in place guarding damaged section to railings – replacement required	BCC	£10,000	Yes
24	Thunderbolt Steps, Totterdown	Steps remain open but the failed section of wall alongside is fenced off. Debris is falling into the adjacent private land.	Unknown	£20,000	No
25	Royal York Villas Retaining Wall, Clifton	Temporary fencing in place guarding failed section of wall – rebuild required	Private	£30,000	No
26	Cornwallis Crescent Retaining Wall, Clifton	Temporary fencing in place guarding failed section of wall and removal of parking – removal of trees and planting required prior to localised rebuild.	Unknown	£40,000	Yes
27	Hengrove Way/Whitland Road Footbridge, Hartcliffe	Temporary surface in place keeping footbridge open. Replacement of deck and ramp surface required to reduce requirement to close the footbridge in near future.	BCC	£50,000	Yes
28	Blackberry Hill Retaining Wall, Frome Vale	Temporary fencing in place guarding failed section of wall – anchor failed section of wall and localised rebuild required	Unknown/Shared?	£30,000	No
29	Blackswarth Road Retaining Wall, St George	Temporary fencing in place guarding failed section of wall and embankment – repair / rebuild required	Expected to be shared.	£50,000	No
30	50 Niblett's Hill Retaining Wall, St George	Temporary fencing in place guarding failed section of wall – rebuild required	Private	-	No