

**TO: ENVIRONMENT, CULTURE & COMMUNITIES OVERVIEW & SCRUTINY PANEL  
4 JULY 2018**

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**LED PROJECT REVIEW  
Director of Environment, Culture & Communities**

**1 INTRODUCTION**

- 1.1 Prompted by the budget pressure for 2018/19, a review of the original Invest to Save Proposal was undertaken. In response from feedback from Members and as part of the agenda planning for this Overview and Scrutiny Panel. the report has been produced. This paper will be supported by a presentation

**2 SUPPORTING INFORMATION**

**Lighting the highway**

- 2.1 There is no statutory duty to provide street lighting; the prime purpose of street lights is to provide light to the publicly maintainable adopted highway. The key points in law include for:

- local authorities being empowered in the Highways Act to light the highway but does not place a duty to do so,
- there being a duty of care to road users and an obligation to light obstructions on the highway,
- a duty under the Highways Act to ensure the safety of the highway and this includes any lighting equipment placed on the highway,
- a duty on owners and operators of electrical equipment to ensure its safety.

- 2.2 Where lighting is provided its purpose is to improve the safety of the highway with chosen locations based on traffic volumes and levels of use. The fact that some highway lighting happens to spill light to adjacent properties is incidental and not its main function. There are many areas of the Borough and indeed the UK where there is no lighting to the highway network.

**The LED project**

- 2.3 By way of a recap, the Council approved the scheme to commence in April 2016. The value of the project was £7.3m to be completed over two years funded by savings in electricity, maintenance and night-time scouting.
- 2.4 The main scheme included for the replacement of all / as many of the street lights in the Borough as was practical. At the time it was not clear whether or not the heritage lights could be included. It also included for the replacement of some 1,000 life expired columns and so far we have replaced 490.
- 2.5 We are now at phase 7 of a 13 Phase project with a spend to date of circa £3.6m. As of the end May 2018 a total of 9,800 units had been replaced. Having sourced a suitable unit the project now includes for the replacement of the heritage units and the project spend for this phase of works is currently forecast at £6.2m against the original scheme.
- 2.4 Members will recall that the start of the project was delayed to allow the Council to take advantage of the bulk buying power available through Ringway by joining other schemes. The benefits gained by doing so included the free issue of cable worth

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circa £100k, a free 20 year warranty on the new lamp units worth circa £70k and a reduction in the unit prices (phase 2 onwards) relative to the approved bid worth circa £220k. Unfortunately, whilst we secured such benefits the original project revenue returns were delayed hence why there was a budget pressure relative to what had been forecast.

- 2.5 The main project is scheduled to be completed by the end of January 2019. The project will then be extended to include for the replacement of street subway lighting, illuminated signs and bollards so that by project end the business benefits to the council will include:
- (i) the removal of the need for any night scouting borough wide,
  - (ii) reduced maintenance demand,
  - (iii) reduced energy cost,
  - (iv) minimal night sky pollution,
  - (v) remote control/monitoring enabling more control and better monitoring.
- 2.6 One of the learning points from the project has been that the lighting columns particularly in the estates vary in their spacing and many are located on old standards. With the former form of lighting it has been less of an issue as the lighting tended to scatter on a 360 degree basis. This resulted in considerable light pollution but to some residents a benefit as it lit up private areas of land. The new lighting is designed for the purpose of providing for the use of the highway i.e. (adopted footpath and highway). This has resulted in some level of complaint and local Members have been very helpful in highlighting some of these local issues. In some instances we anticipate in being able to design out the problem but in other situations even if there is a practical solution it may be more be too costly. As highlighted in the Executive Member for Planning and Transportation's response to a petition received at Council, the intention is to go back to such areas and re-evaluate options at the end of the overall scheme. The budget is not unlimited but it should be sufficient to deal with the most pressing needs if these have been assessed as needing resolving.
- 2.7 Regardless of what the Council does Members need to keep in mind that the supply to the columns is invariably under the control of SSE. Once a fault is noted and it's confirmed that it's a supply issue we have to notify them and wait for their crews to rectify it. We cannot control their timeframe and unfortunately we tend to be seen as the failing service in the interim.
- 2.8 Central to the original Business Case was the overall energy consumption and the cost of electricity. The original business case predicted a 71% reduction in the kilowatts per hour. We are currently exceeding this at 81.2% but the final figure will perhaps be less as we are into the estates where the gain will be less. The original business case also assumed an energy cost of 10p per kWh and a fall in energy consumption from 5,463,131 kWh to 1,564,407 kWh, saving a total of 3,898,724 kWh. We are currently paying 11.96p per kWh and are 62% through the project, and the energy consumption reduction to date is 2,792,278 kWh. The unit costs per kWh have increased and therefore the projected savings based on the energy savings and costs to date are £333,823.
- 2.9 The chart in Annex 1 attached captures how the energy use has changed over the years from 2012/13 with the last column being the current year.

### **3 EQUALITIES IMPACT ASSESSMENT**

- 3.1 Not applicable.

### **4 STRATEGIC RISK MANAGEMENT ISSUES**

4.1 Not applicable.

Background Papers

Reports to Executive 20 October 2015, Council 25 November 2015

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