

Title of Report:	Project to Replace the Council's Street Lighting Stock with LED Lighting Units
Report to be considered by:	Executive on 23 April 2015
Forward Plan Ref:	EX2954

Purpose of Report: To seek Executive approval for a funding proposal to replace the Council's street lighting stock with LED lighting units.

Recommended Action: The Executive are asked to approve the borrowing of £2.17m to supplement the £5.07m grant from the DfT Challenge Fund and authorise this project to proceed.

Reason for decision to be taken: (i) To reduce energy consumption and costs
(ii) To improve the standard of lighting
(iii) To reduce maintenance costs

Other options considered: None

Key background documentation: DfT Challenge Fund Bid

Published Works: (i) Highway Asset Management Plan
(ii) Local Highways Maintenance Challenge Fund

The proposals contained in this report will help to achieve the following Council Strategy priority:

CSP4 – Protecting the environment

The proposals will also help achieve the following Council Strategy principle:

CSP6 - Living within our means

The proposals contained in this report will help to achieve the above Council Strategy priority and principle by: Reducing the energy consumption of street lighting and reducing energy costs.

Portfolio Member Details

Name & Telephone No.:	Councillor Garth Simpson – Tel (01635) 40438
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Date Portfolio Member agreed report:	1 April 2015

Contact Officer Details

Name:	Mark Edwards
Job Title:	Head of Highways and Transport
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Implications

- Policy:** This proposal accords with the Council's policy of reducing energy consumption and associated costs.
- Financial:** The cost of repaying the £2.17 million loan would be met from existing budgets for street lighting energy and reduced maintenance costs. It is forecast that net savings of approximately £120,000 would be achieved in 2015/16, a further £100,000 in 2016/17 and a further £90,000 in 2017/18 after allowing for the cost of repaying the loan. Total ongoing revenue savings are estimated to be £310,000.
- Personnel:** No implications.
- Legal/Procurement:** The existing Electrical Term Contract will be utilised to deliver the improvement programme.
- Property:** No implications.
- Risk Management:** A Risk Register will be compiled for this project.

Is this item relevant to equality?	Please tick relevant boxes	Yes	No
Does the policy affect service users, employees or the wider community and:			
• Is it likely to affect people with particular protected characteristics differently?		<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Is it a major policy, significantly affecting how functions are delivered?		<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Will the policy have a significant impact on how other organisations operate in terms of equality?		<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Does the policy relate to functions that engagement has identified as being important to people with particular protected characteristics?		<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Does the policy relate to an area with known inequalities?		<input type="checkbox"/>	<input checked="" type="checkbox"/>
Outcome (Where one or more 'Yes' boxes are ticked, the item is relevant to equality)			
Relevant to equality - Complete an EIA available at http://intranet/EqIA			<input type="checkbox"/>
Not relevant to equality			<input checked="" type="checkbox"/>

Is this item subject to call-in?	Yes: <input checked="" type="checkbox"/>	No: <input type="checkbox"/>
If not subject to call-in please put a cross in the appropriate box:		
The item is due to be referred to Council for final approval		<input type="checkbox"/>
Delays in implementation could have serious financial implications for the Council		<input type="checkbox"/>
Delays in implementation could compromise the Council's position		<input type="checkbox"/>
Considered or reviewed by Overview and Scrutiny Management Commission or associated Task Groups within preceding six months		<input type="checkbox"/>
Item is Urgent Key Decision		<input type="checkbox"/>
Report is to note only		<input type="checkbox"/>

Executive Summary

1. Introduction

- 1.1 Since 2010 the Highways and Transport street lighting team have gradually been replacing lighting units with more energy efficient LED's using the available revenue and capital budgets. By the end of 2014/15 approximately 15% of the total stock of some 12,600 lighting units will have been converted to LED. Work completed to date has been very well received by the general public and has reduced the Council's energy consumption. To continue at this pace, full conversion to LED could take up to 40 years to complete.
- 1.2 On 9 February 2015 the Highways and Transport Service submitted a bid to the Department of Transport's Challenge Fund for £5.07m for LED replacement. On 24 March, confirmation was received that the bid had been successful. The bid was made on the basis that 30% of the total cost would be contributed by the Council.

2. Proposals

- 2.1 Officers are proposing that using this funding the replacement programme should be accelerated so that all lamps are converted to LED within the next two financial years. If approved it is anticipated that work will commence in Summer 2015.
- 2.2 The total project cost is £7.24m, made up of a £5.07m grant and a £2.17m contribution from the Council. It is proposed that this sum is borrowed from the Public Works Loan Board and repaid over a 25 year period.
- 2.3 The cost of repaying the loan would be met from savings in the existing revenue budget for street lighting energy and reduced maintenance costs. It is forecast that net savings of approximately £310,000 would be achieved by 2017/18 allowing for the cost of repaying the loan. The net present value of total revenue savings over 25 years is estimated to be £4.87m.

3. Equalities Impact Assessment Outcomes

- 3.1 An Equalities Impact Assessment is not necessary for this project.

4. Conclusion

- 4.1 There are significant advantages to be gained by implementing the LED replacement programme, and accordingly it is recommended that the project should proceed.

5. Recommendation

- 5.1 The Executive are asked to approve the borrowing of £2.17m from the Public Works Loan Board to supplement the £5.07m DfT grant and authorise this project to proceed.

Executive Report

1. Introduction

- 1.1 Since 2010 the Highways and Transport street lighting team have gradually been replacing lighting units with more energy efficient LED's using the available revenue and capital budgets. By the end of 2014/15 approximately 15% of the total stock of some 12,600 lighting units will have been converted to LED. Work completed to date has been very well received by the general public and has contributed to a reduction in the Council's energy consumption compared to previous years.
- 1.2 To continue at this pace, full LED conversion could take up to 40 years to complete. Given that an LED unit consumes approximately 50% of the energy of a conventional lamp, there is an opportunity to achieve significant savings if the programme is accelerated. The Council's annual electricity bill for running the stock of street lighting is approximately £580,000.
- 1.3 As part of the strategy for modernising the street lighting stock, officers have also gradually been replacing ageing and/or defective steel and concrete columns with aluminium columns in accordance with the Highway Asset Management Plan (HAMP) so as to minimise whole life cost. However, there remains a backlog of some 3,500 columns in need of replacement as they are more than 40 years old and so will have exceeded their original design life.
- 1.4 On 9 February 2015 the Highways and Transport Service submitted a bid to the Department of Transport's Challenge Fund for £5.07m for LED and column replacement. On 24 March, confirmation was received that the bid had been successful. The bid was made on the basis that 30% of the total cost would be contributed by the Council.

2. Proposals

- 2.1 It is proposed that the current LED and column replacement programme should be accelerated so that all lamps are converted to LED within the next two financial years, using the existing street lighting term contract. If approved it is anticipated that work will commence in Summer 2015 with completion in Autumn 2016.
- 2.2 Furthermore, all LED's will be capable of being dimmed, providing the opportunity to adjust lighting levels and potentially make further savings in the future.
- 2.3 The total project cost is £7.24m, made up of a £5.07m grant and a £2.17m contribution from the Council. It is proposed that this sum should be borrowed from the Public Works Loan Board and repaid over a 25 year period.
- 2.4 The cost of repaying the loan would be met from savings in the existing revenue budgets for street lighting energy and reduced maintenance costs. It is forecast that net savings of approximately £120,000 would be achieved in 2015/16, a further £100,000 in 2016/17 and a further £90,000 in 2017/18, after allowing for the cost of repaying the loan. Total ongoing revenue savings are estimated to be £310,000. The net present value of total revenue savings over 25 years is estimated to be £4.87m.

3. Conclusion

- 3.1 There are significant advantages to be gained by implementing the LED and street lighting column replacement programme, principally a 54% reduction in energy consumption and associated costs at the end of the installation programme.

4. Recommendation

- 4.1 The Executive are asked to approve the borrowing of £2.17m to supplement the £5.07m DfT grant and authorise this project to proceed.

Appendices

Appendix A – DfT Challenge Fund Bid

Consultees

Local Stakeholders: All Members, Town and Parish Council's will be fully informed once a decision has been made.

Officers Consulted: John Ashworth, Alan Braisher, Adrian Slaughter, Shiraz Sheikh, Mike Sullivan, Andy Walker, Gabrielle Esplin and Corporate Board

Trade Union: Not applicable.