## Agenda Item No: 4

## STREET LIGHTING PFI ANNUAL CONTRACT REVIEW 2014/15

To: Highways and Community Infrastructure Committee

Meeting Date: 3<sup>rd</sup> November 2015

From: Executive Director: Economy, Transport and Environment

Electoral division(s): All

Forward Plan ref: N/A Key decision: No

Purpose: To inform the Committee of the Street Lighting PFI Annual

**Contract Review 2014/15** 

Recommendation: The Committee is asked to note the contents of the

review.

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#### 1. BACKGROUND

- 1.1 The street lighting PFI contract with Balfour Beatty Living Places (BBLP) commenced on 1 July 2011. The contract was supported with £100 million of PFI credits from Central Government which has allowed for the Council's street lighting stock to be brought up to a suitable standard. The project brings benefits of energy reduction, maintenance savings and generally higher quality white lighting. The purpose of the contract is to upgrade all County Council street lights so that they will last for the next 30 years and to maintain all the street lighting, illuminated road signs and bollards so that 99% of the stock is always in illumination. The replacement programme is being undertaken in the first five years of the contract known as the Capital Investment Programme. Had the Council not entered into the PFI, it would have been faced with a deteriorating and expensive to operate lighting stock, which could only have been improved through investment using the Council's own funds.
- 1.2 During the procurement process and as part of the Comprehensive Spending Review 2010, Government required the County Council to identify potential savings. These savings are to be made in part through reducing the number of street lights by 10% overall, which is delivering further maintenance and energy savings for the Council as well as to the Government through the PFI credits paid. Due to the requirements for higher standards on main roads, called traffic routes, which generally have more significant road safety issues, it is necessary to weight the reduction in lighting more heavily on residential streets. Therefore, in some circumstance residents can experience a reduction in lighting columns of up to 40% in their streets. Although the reduction in column numbers is mitigated to some degree by the higher quality of light and factors such as taller columns providing wider coverage, concerns have been raised by residents in a number of streets where darker patches have resulted from this policy.

#### 2. MAIN ISSUES

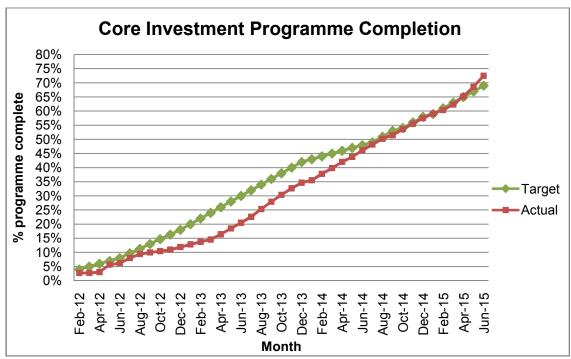
#### 2.1 Capital Investment Programme

2.1.1 The schedule of the Capital Investment Programme is detailed in Table 1 below, which includes each of the milestones and the percentage target to be complete.

Milestone	Milestone Completion Date (Projected)	Target
1	1 July 2011 to 31 December 2011	2%
2	1 January 2012 to 30 June 2012	8%
3	1 July 2012 to 31 December 2012	18%
4	1 January 2013 to 30 June 2013	31%
5	1 July 2013 to 31 December 2013	42%
6	1 January 2014 to 30 June 2014	48%
7	1 July 2014 to 31 December 2014	58%
8	1 January 2015 to 30 June 2015	69%
9	1 July 2015 to 31 December 2015	84%
10	1 January 2016 to 30 June 2016	100%

Table 1: Capital Investment Programme Milestones

2.1.2 At the end of June 2015 Balfour Beatty had completed 72.5% (Graph 1). This amounts to 40,032 streetlights upgraded since the commencement of the contract from a total of 55,180. In addition, Balfour Beatty haveupgraded 4,154 illuminated bollards, signs and feeder pillars and permanently removed 4,060 streetlights (see



Graph 1: Percentage of Programme Complete

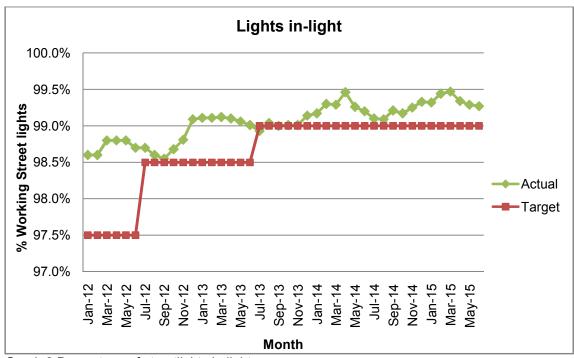
	Previous year (July 13 – June 14)	This year (July 14 – June 15)
Streetlights Upgraded	14,133	13,343
Illuminated bollards, signs and feeder pillars upgraded	1,558	1,245
Streetlights permanently removed	1,487	1,690

Table 2: Capital Investment Programme Annual Implementation

2.1.3 During the year a number of issues arose concerning the delivery of the central management system control units and identification of steel wire electricity supply armoured cables. This resulted in Balfour Beatty having to alter their programme to ensure that the overall project wasn't delayed. Unfortunately this resulted in some areas having their consultation periods accelerated and works starting on site earlier than planned causing communities to complain to Balfour Beatty, the County Council, Members and the local press. In order to address these issues, Balfour Beatty has recruited anew management team and improved the management of its sub-contractors.

## 2.2 <u>Maintenance</u>

2.2.1 The lights in-light percentage indicates the number of columns that are working. All lighting points not fitted with communicating telecells are visited monthly in the summer and twice a month in the winter. Outages for streetlightswith telecells can be remotely monitored from the central management system in Swavesey. The contractual target for lights in-light is 99%. During 2014-15 the percentage of streetlights in light remained above the target (Graph 2).



Graph 2 Percentage of streetlights in-light

2.2.2 The total number of faults reported has reduced again this year and can be attributed to the replacement of old and poorly functioning assets with new,more efficient and technologically advanced models. The average repair times for faults have increased slightly but still remain within the required contract response times. Lamps out and day burners (lights still lit during the day) remain the most frequent fault type (Figure 1). Additional training has been undertaken between December 2014 and June 2015 to bring this repair time down.

Last Year (July 13 - June 14)			This Year (July 14 - June 15)		
Fault Type Qty Average Repair (Days)		Fault Type	Qty	Average Repair (Days)	
Lamp Out	9931	4.74	Lamp Out	8109	4.96
Day Burner	1128	4.55	Day Burner	693	4.75
Lamp Dim	358	4.74	No Supply (DNO)	233	17.07
Door Off	314	31 minutes	Door Off	210	37 minutes
No Supply (DNO)	244	12.03	DNO Faults	161	15.41
3% - 3% - 2%  Lamp Out Day Burner Lamp Dim Door Off No Supply (DNO)		7%  Lamp Out  Day Burner  No Supply (DN  Door Off  DNO Faults		■ Day Burner ■ No Supply (DNO) ■ Door Off	

Figure 1: Top 5 Faults & Repair Time

2.2.3 The total number of emergency faults have more than halved this year in comparison to the previous year. Response times are slightly higher but are within the 1 hour response time required by the contract (Table 3). As outlined above; additional training has been undertaken to reduce the average response times.

	Previous Year (July 13 - June 14)	This Year (July 14 - June 15)
Quantity	1,092	483
Average Response Time (Hours)	0.45	0.61

Table 3 Emergency Faults

2.2.4 The total number of non-emergency faults has decreased this year together with the average response time (Table 4).

	Previous Year (July 13 - June 14)	This Year (July 14 - June 15)
Quantity	14,581	10,647
Average Response Time (Working Days)	4.25	3.79

Table 4 Non-emergency Faults

## 2.3 Performance Indicators

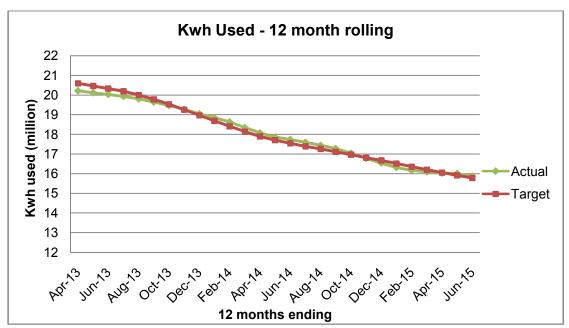
2.3.1 There are four maintenance performance indicators for the Street Lighting PFI contract andBalfour Beatty met all targets this year. Performance for LP1, LP3 and LP4 has improved; LP2 performance is behind the previous year but still remains well within target. Table 5 details the indicators and performance figures for July 2013 – June 2014 and July 2014 – June 2015. Whilst Balfour Beatty are responsible for the management of the energy supplier, UKPN, their performance has been disappointing. Balfour Beattyare currently trying to set up an independent connections provider to improve this performance indicator.

	Previous year	This year	
Indicator			Target outturn
	(July 13 – June 14)	(July 14 June 15)	
LP1			
The average number of days taken to repair a street light fault, which is under the control of the Authority.	3.97	3.79	5
LP2			
The average number of days taken to rectify a street light fault, which is under the control of the DNO or IDNO.	12.61	17.91	30
LP3			
Percentage of Lighting Points not working as planned.	0.79	0.66	<1.0%
LP4			
The average number of days taken to replace or reposition a complete unit of Apparatus from first being reported (excluding DNO or IDNO equipment).	5.10	4.60	5

Table 5 Performance Indicators

### 2.4 Energy

- 2.4.1 Reducing energy consumption and carbon emissions is a key element of the contract. A 46% reduction in energy usage will be achieved by:
  - Replacing inefficient lamps with lower wattage lamps.
  - Reducing the number of County Council owned street lights on non-traffic routes and in residential areas by 10% in total.
  - Dimming lights during off-peak periods.
  - More effective designs for traffic routes ensuring they are lit to modern standards and maximising the spacing of lighting columns.
- 2.4.2 The Council is currently exploring options for further energy reductions, such as partnight lighting and LED initiatives.
- 2.4.3 Graph 3 shows the energy usage in 12 month rolling figures to eliminate seasonal variations. 1.86m less KWh has been used during the period between July 2014 and June 2015, compared with the previous year, representing a saving of approximately £200,000 for the year.



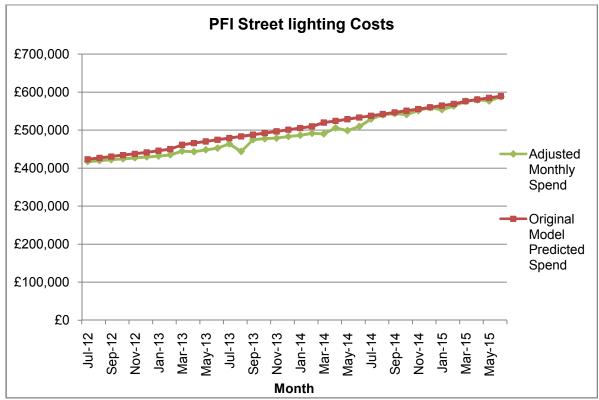
Graph 3: Rolling 12 month energy usage

2.4.4 Energy usage is currently on target and the programme is anticipated to deliver an estimated £1m of energy savings per annum over what the old streetlights would have cost to operate.

## 2.5 Contract Finance

2.5.1 The costs of the PFI contract are fixed for its 25 year duration during which time a fixed unitary charge is paid monthly to the service provider. Deductions are made from this for the number of streetlights, bollards and signs left to be upgraded during the first 5 yearsof the core investment period. In addition, any other performance criteria not met, such as not meeting customer response time targets, will result in further deductions.

Graph 4 below compares the actual monthly payments against those that would be made if no performance deductions were made.



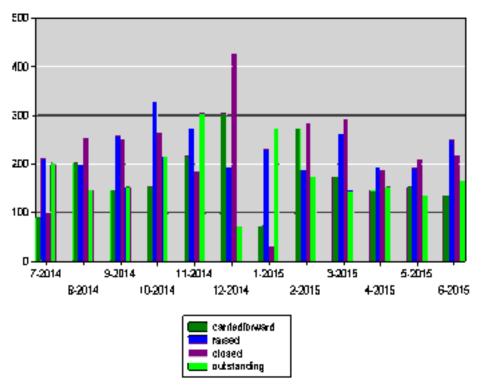
Graph 4: Streetlighting PFI Costs

2.5.2 The gap betweenadjusted monthly spend and predicted spend reduced last year. Balfour Beatty are now performing better so actual spend is more closely aligned to the predicted spend. Financial deductions totalling £97,934 have been made for other performance criteria not met throughout the year. For example, in May 2015 deductions were made for the Management Information System being unavailable to County Council staff, a late response to a customer and the failure to respond to an urgent service failure within the specified timescales.

#### 2.6 Service and Delivery

- 2.6.1 Delivering excellent customer service is not only a key element of the Street Lighting PFI contract, but remains at the forefront of Balfour Beatty's and the County Council's working practices. We are working closely in partnership to resolve any queries or complaints raised by residents, local Councillors and Parish, Town and CityCouncils.
- 2.6.2 At the start of the year issues relating to the consultation process were brought to the attention of the County Council. Balfour Beatty had not been adhering to the agreed consultation periods, which understandably causeddissatisfaction amongst the communities affected. This has now been resolved and Balfour Beatty are adhering to the required form and period of consultation
- 2.6.3 Balfour Beatty are consulting with local councillors to enable their involvement in the upgradeworks and withlocal residents to ensure they are aware in advance of works taking place giving them the opportunity to raise any questions or concerns.
- 2.6.4 Graph 5 shows the numbers of customer enquires (including complaints and representations) made in the period July 2014 to June 2015. Table 6shows a category breakdown of enquiries received by Balfour Beatty through the internet and

telephone helpdesk. There has been an increase in the total number of customer enquiries raised this year, this could be attributed to more enquiries resulting from inadequate consultation. Column removals, lighting levels and column location enquiry types have remained in the top four, representing 53% of all enquiries (Table 6).



Graph 5 Total Customer Enquiries

Previo	ous Year	This Y	This Year		
(July 13 – June 14)		(July 14 - June 15)			
442	Lighting Levels	577	Removal		
426	Location	509	Other		
310	Removal	447	Lighting Levels		
233	Other	401	Location		
78	Obstruction	248	Obstruction		
69	Damage	163	Damage		
50	Reinstatement	103	Light(s) Out		
46	Tree Obstruction	103	Open Hole		
41	BBLP Administration	58	Reinstatement		
35	Accolades	21	Tree Obstruction		
31	Light(s) Out	19	Accolades		
30	Aesthetics	16	Aesthetics		
26	Open Hole	11	Non-conformance		
16	Additional Light Requested	8	Maintenance		
4	Land Rights	4	Repair		
4	Medical	3	Vandalism		
4	Repair	1	Additional Light Requested		
3	Maintenance	1	BBLP Administration		
2	Third Party	1	Land Rights		
1	Security	1	Medical		
1	Planning Application	1	Planning Application		
		1	Security		
		1	Third Party		
<u>1852</u>	<u>Total</u>	2698	<u>Total</u>		

Table 6: Customer Enquiry Types

2.6.5 The 'Other' Category refers to all other enquiries and questions raised which are not already in the pre-populated list. This category mainly consists of queries in relation to design, works progress, and heritage type queries. These and other categories will be added to the list in future.

## 2.7 <u>Customer Satisfaction Survey</u>

2.7.1 All residents affected by the programme so far have received a customer satisfaction survey from Balfour Beatty to provide feedback on various aspects of the project. 77,548 surveys were delivered to residents last year. 606questionnaires were returned, amounting to a response rate of 0.8%.

2.7.2 Table 7 below identifies the average scores received from the 606 surveys returned

SCORE CATEGORIES	AVERAGE SCORE	AVERAGE SCORE	RATINGS
	July 13 – June 14	July 14 – June 15	
A = IMPACT	2.76	2.33	
B = SAFETY	3.48	3.16	
C = CONSULTATION	2.91	2.74	
D = DISRUPTION	3.14	2.86	5 = EXCELLENT
E = TIDYNESS	3.22	2.91	4 = GOOD
F = QUALITY	3.48	3.10	3 = ADEQUATE
G = CONDUCT	3.38	3.02	2 = POOR
H = LIGHTING	3.02	2.75	1 = VERY POOR
J = OVERALL AVERAGE	3.17	2.85	

for the twelve months between July 2014 and June 2015, together with the average scores from the previous year.

Table 7: Customer Satisfaction Survey

2.7.3 The results from the annual survey indicate that whilst only a very small percentage of residents provided their feedback, those residents who responded were less satisfied with the project than they were last year. This is true across all categories and the overall ratinghas fallen to between adequate and poor. The County Council are aware of this and are working closely with Balfour Beatty to improve customer experience by addressing concerns promptly andmonitoring more closely on the ground. Balfour Beatty have now recruited a new very experienced Head of Client Liaison. In additional to this they have recruited a further member to the Customer Liaison Officer team. The new Head of Client Liaison is ensuring robust processes are in place and proactive engagement with parishes and residents is undertaken which has resulted in significantly less complaints being raised by Parish Councils to the County Council.

#### 3. ALIGNMENT WITH CORPORATE PRIORITIES

### 3.1 People live in a safe environment

The bullet points below identify a number of ways in which the Street Lighting PFI contract supports the County Council new Operating Model outcome:

- Faults that may pose a risk to residents are rectified promptly and efficiently due to improved fault response times. With an average emergency response time of 37 minutes (See Appendix 1).
- Brand new safer columns are being installed throughout Cambridgeshire at a rate of around 1,500 per month (See Appendix 1)
- 99% of units will be illuminated during the agreed operating periods.
- Where possible, new columns are being sited at the rear of the footway so that they pose less of a risk to road users.

#### 3.2 Developing the local economy for the benefit of all

The following bullet points set out details of implications identified by officers:

- The project brings benefits of energy reduction, maintenance savings and higher quality white lighting.
- The contract provides the upgrading of all County Council street lights so that they will safely last for the next 30 years.
- The contract allows for the maintenance of all the street lighting, illuminated road signs and bollards to a standard of 99% of stock always in illumination.

### 3.3 Helping people live healthy and independent lives

The following bullet points set out details of implications identified by officers:

- The contract provides the upgrading of all County Council street lights so that they will safely last for the next 30 years.
- The contract provides for the maintenance of all the street lighting, illuminated road signs and bollards to a standard of 99% of stock always in illumination.
- 98% of waste (3,769 tonnes) diverted from landfill and recycled (See Appendix 1).

### 3.4 Supporting and protecting vulnerable people

The following bullet points set out details of implications identified by officers:

- The contract provides the upgrading of all County Council street lights so that they
  will safely last for the duration of the PFI contract.
- The contract provides for the maintenance of all the street lighting, illuminated road signs and bollards to a standard of 99% of stock always in illumination

- Had the Council not entered into the PFI contract, it would have been faced with a
  deteriorating and expensive to operate lighting stock, which could only have been
  improved through investment using the Council's own funds
- 160 CCTV cameras have been installed in partnership with police community projects (See Appendix 1).

#### 4. SIGNIFICANT IMPLICATIONS

### 4.1 Resource Implications

The following bullet points set out details of significant implications identified by officers:

- The contract was supported with £100 million of PFI credits from Central Government which has allowed for the Council's street lighting stock to be brought up to a suitable standard.
- Had the Council not entered into the PFI contract, it would have been faced with a
  deteriorating and expensive to operate lighting stock, which could only have been
  improved through investment using the Council's own funds.
- During the procurement process and as part of the Comprehensive Spending Review 2010, Government required us to identify potential savings. These savings are to be made in part through reducing the number of street lights by 10% overall, which is delivering further maintenance and energy savings for the Council. Due to the requirements for higher standards on main roads, called traffic routes, which generally have more significant road safety issues, it is necessary to weight the reduction in lighting more heavily on residential streets. Therefore, in some circumstances residents can experience a reduction in lighting columns of up to 40% in their streets. Although the reduction in column numbers is mitigated to some degree by the higher quality of light and factors such as taller columns providing wider coverage, concerns have been raised by residents in a number of streets where darker patches have resulted from this policy.

### 4.2 Statutory, Risk and Legal Implications

The following bullet points set out details of significant implications identified by officers:

- Many communities believe the provision of streetlighting is a statutory function of the County Council. However, the County Council, as the Highway Authority, has no statutory obligation to provide street lighting. The law states:
- The Highways Act 1980 empowers local authorities to light roads but does not place a duty to do so.
- The Council has a duty of care to road users and has an obligation to light obstructions on the highway.
- The Council has a statutory duty under the Highways Act to ensure the safety of the highway and this includes any lighting equipment placed on the highway.
- The Electricity at Work Regulations impose a duty on owners and operators of electrical equipment to ensure its safety.

#### 4.3 Equality and Diversity Implications

The following bullet points set out details of significant implications identified by officers:

• Whilst the provision of streetlighting is not a statutory requirement, where streetlighting has been provided many of our communities view any change to the existing service as being negative. This has been experienced strongly during the existing PFI Core Investment Period which has permanently removed 10% of the County Council's existing streetlights. Engagement has taken place with the Cambridgeshire Alliance to ensure that disability groups are fully aware of the programme and ways in which they can ask any questions or raise any possible concerns.

#### 4.4 Engagement and Consultation Implications

Implementation of the Street Lighting PFI contract impacts all residents and communities in Cambridgeshire. As such, delivering excellence in customer service and carrying out work with minimal disruption is a key element of this contract. Balfour Beatty and the County Council have focused resources to try to ensure that local councillors, parish councils and residents are effectively consulted during the upgrade works. Further details are contained above in paragraph 2.6.

#### 4.5 Localism and Local Member Involvement

Implementation of the Street Lighting PFI contract impacts all residents and communities in Cambridgeshire. As such, delivering excellence in customer service and carrying out work with minimal disruption is a key element of this contract. Balfour Beatty and the County Council have focused resources to try to ensure that local councillors, parish councils and residents are effectively consulted during the upgrade works. Further details are contained above in paragraph 2.6.

#### 4.6 **Public Health Implications**

There are no significant implications for this priority.

Source Documents	Location

# **APPENDIX 1**

Performance Report Summary

