# CABINET

10:00	Tuesday, 23 May 2017	Committee Room 1, County Hall, Chelmsford, CM1 1QH
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#### Quorum: 3

#### Membership

Councillor David Finch Councillor Kevin Bentley

Councillor Susan Barker Councillor Ray Gooding Councillor Ian Grundy Councillor Sue Lissimore Councillor Dick Madden Councillor Louise McKinlay Councillor John Spence Councillor Simon Walsh

#### **Cabinet Member responsibility**

Leader of the Council (Chairman) Deputy Leader and Economic Growth, Skills, Infrastructure and the Digital Economy (Vice-Chairman) Culture, Communities and Customer Education Highways Housing, Property and Planning Children and Families Resources Health and Adult Social Care Environment and Waste

For information about the meeting please ask for: Judith Dignum (Secretary to the Cabinet) 03330134579 / Judith.dignum@essex.gov.uk



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#### Part 1

(During consideration of these items the meeting is likely to be open to the press and public)

Apologies for Absence	
Minutes	5 - 10
<b>Declarations of Interest</b> To note any declarations of interest to be made by Members in accordance with the Members' Code of Conduct	
<b>Questions from the Public</b> A period of up to 15 minutes will be allowed for members of the public to ask questions or make representations on any item on the agenda for this meeting.	

On arrival, and before the start of the meeting, please register with the Committee Officer.

#### 5 11 - 22 Installation of LED Street Lighting Phase 3 (FP/811/04/17)

The Equality Impact Assessment is available on line

#### 6 **Urgent Business**

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To consider any matter which in the opinion of the Chairman should be considered in public by reason of special circumstances (to be specified) as a matter of urgency.

#### Exempt Items

(During consideration of these items the meeting is not likely to be open to the press and public)

To consider whether the press and public should be excluded from the meeting during consideration of an agenda item on the grounds that it involves the likely disclosure of exempt information as specified in Part I of Schedule 12A of the Local Government Act 1972 or it being confidential for the purposes of Section 100A(2) of that Act.

In each case, Members are asked to decide whether, in all the circumstances, the public interest in maintaining the exemption (and discussing the matter in private) outweighs the public interest in disclosing the information.

Pages

#### 7 Urgent Exempt Business

To consider in private any other matter which in the opinion of the Chairman should be considered by reason of special circumstances (to be specified) as a matter of urgency.

#### Minutes of the meeting of the Cabinet, held in Committee Room 1 County Hall, Chelmsford, CM1 1QH on Tuesday, 21 March 2017

#### Present:

Councillor David Finch	Leader of the Council (Chairman)
Councillor Kevin Bentley	Deputy Leader & Economic Growth, Infrastructure & Partnerships
	(Vice-Chairman)
Councillor Ray Gooding	Education and Lifelong Learning
Councillor Dick Madden	Adults and Children
Councillor John Spence	Finance, Housing and Planning
Councillor Simon Walsh	Environment and Waste

Councillors J Aldridge (Chairman of Essex County Council), M Buckley, M Danvers, R Howard, M Mackrory, C Pond and K Twitchen also attended.

#### 1 Apologies for Absence

Apologies for absence were received from Councillors Anne Brown (Cabinet Member for Corporate and Communities), Graham Butland (Cabinet Member for Health), Stephen Canning (Cabinet Member for Digital Innovation, IT and Customer Services) and Eddie Johnson (Cabinet Member for Highways and Transport).

#### 2 Minutes

The minutes of the meeting held on 21 February 2017 were agreed as a correct record and signed by the Chairman.

#### 3 Declarations of Interest

The Chairman reminded Members to declare any interests now or at the point during the meeting at which they arose.

#### 4 Questions from the Public

No members of the public had registered an interest in asking a question or making a statement on any of the items to be considered at the meeting.

#### 5 Expansion of Roding Valley High School, Loughton

Information contained within a confidential appendix was taken into account in reaching a decision on this issue (minute 12 below refers).

The Cabinet considered report FP/658/11/16 by the Director for Commissioning: Education and Lifelong Learning (presented by the Cabinet Member for Education and Lifelong Learning) which reported on the growing demand for additional secondary school places in the Loughton/Chigwell area. Approval was sought to expand Roding Valley High School (RVHS) by 1 form of entry (150 pupils) from an 8 form entry school (1,200 pupils) to 9 forms of entry (1,350 pupils), including establishing new Post-16 provision with a further 150 pupil places (75 per year group) for September 2018.

In presenting the report, the Cabinet Member for Education and Lifelong Learning stated that the County Division affected by the proposals was Loughton Central, rather than as stated on the front page of the report.

Acknowledging the pressure on secondary school places in the Loughton area, the Cabinet Member undertook to reply to Councillor Pond outside the meeting regarding the point at which the establishment of an additional secondary school may be required in preference to the continued expansion of existing provision.

#### **Resolved:**

- 1. That Roding Valley High School should expand to serve the demand for higher secondary school places in the Loughton area from September 2018.
- 2. That authority be delegated to the Head of Infrastructure Delivery to enter into a Funding Agreement to enable Roding Valley High School to undertake and self-manage the procurement of a construction partner to enlarge the school's premises on terms which allow the release of funding only once he is satisfied that:
  - a. the total project costs are within budget;
  - b. Roding Valley High School have demonstrated their capability to deliver the scheme to ECC/EFA standards;
  - c. the construction costs proposed by the school's contractor are in overall compliance with ECC benchmarking rates and within the approved budget; and
  - d. the construction costs are within the agreed budget and represent value for money.
- 3. That the capital budget for construction and associated project fees, as per the profile set out in the confidential appendix to report FP/658/11/16 (minute 12 below refers), be approved.

#### 6 **Procurement of Medium-Term Residual Waste Disposal Services**

The Cabinet considered report FP/756/02/17 by the Executive Director for Corporate and Customer Services, presented by the Cabinet Member for Environment and Waste, which sought agreement to proceed with procurement of contingency waste disposal services for residual waste.

The Cabinet Member provided the following information in response to comments and questions by Councillors Mackrory and Pond:

- The option of sending residual waste to landfill would be invoked as a last resort only.
- Everything possible was being done to ensure the success of operations

at the Tovi waste treatment facility.

#### **Resolved:**

- 1. That the Council procure contingency residual waste disposal services pursuant to a Framework Agreement using the Open Procedure. It is proposed that the framework last for four years.
- 2. That the Executive Director for Corporate and Customer Services, in consultation with the Cabinet Member for Environment and Waste, be authorised to:
  - a. decide the lots to be used in the Framework Agreement and the procurement award criteria;
  - b. appoint suppliers to the Framework Agreement;
  - c. undertake mini-competitions in accordance with the Framework Agreement as required; and
  - d. award Service Orders in accordance with the Framework Agreement.

#### 7 Direct Award of a new Short-Term Support in the Community Service The Cabinet considered report FP/699/12/16 by the Director for Adults Social Care, presented by the Cabinet Member for Adults and Children, which sought approval for the procurement of a new Short-Term Support in the Community Service from 1 July 2017 for a maximum contract length of 46 months.

Responding to a question by Councillor Mackrory, the Cabinet Member stated that as the proposed approach represented a new model of service provision, ECL Ltd had been the only available provider. The Council was satisfied that the contract offered value for money.

In response to a question by Councillor Danvers, the Cabinet Member for Finance, Housing and Planning stated that he welcomed the promise of additional funding from the government, which would help the Council address the challenges arising from unprecedented demand for adult social care. He commented that the proposals detailed in the report were consistent with the Council's strategy of achieving effective results for Essex residents at the best price.

The Leader of the Council commented that the Government's decision to release additional funding demonstrated the effectiveness of lobbying by county councils. He was hopeful that the Government would continue to listen to the views of county councils.

Prior to inviting the Cabinet to accept the report's recommendations, the Cabinet Member for Adults and Children advised that the word 'with' in the third line of the first recommendation was superfluous and should be disregarded.

#### **Resolved:**

1. That the direct award of the Short Term Support in the Community Service contract to Essex Cares Ltd (ECL) be agreed on the basis of a

block contract of up to £21.6m. The contract will be for a period of 46 months from 1 July 2017, with a break clause exercisable on 1 May 2019 and 1 May 2020.

2. That the drawdown of £1.2m from the transformation reserve be agreed, for a one-off new revenue investment in 2017/18 with a payback in 2018/19, as set out in paragraph 5.1.5 of report FP/699/12/16.

#### 8 **Procurement of Vehicles for the Car Provision Scheme**

The Cabinet considered report FP/755/02/17 by the Director for Corporate Operations, presented by the Leader of the Council on behalf of the Cabinet Member for Corporate and Communities, which sought approval for the procurement of vehicles for the Essex County Council (ECC) Car Provision Scheme via the Hertfordshire County Council and The Procurement Partnership Limited Vehicle Contract Hire Framework HCC 1608933, (the HCC Framework).

The Leader of the Council provided the following information in response to questions by Councillors Pond and Mackrory:

- Future consideration would be given to whether diesel-fuelled cars should continue to be provided under the County Council's scheme, and to the possibility of reporting to the Council further on this issue. However, the measures under consideration at this meeting, if approved, would include diesel cars.
- The collaborative nature of the proposed arrangements would permit the acquisition of vehicles at a favourable rate. Under the scheme, there was no obligation for the Council to acquire a set number of vehicles.
- The majority of vehicles provided under the ECC car provision scheme were allocated to staff who needed them to perform their roles effectively, such as social workers. A very limited number were made available to senior members of Council staff.

#### **Resolved:**

That use of the Hertfordshire County Council Framework be approved for the procurement of vehicles for ECC employees in accordance with the ECC Car Provision Scheme.

### 9 To agree the indicative expenditure plan for NHS commissioned services within the Essex Better Care Fund Plan for 2017/18

The Cabinet considered report FP/727/01/17 by the Interim Director, Commissioning Integration, presented by the Cabinet Member for Adults and Children, which, in accordance with NHS England's requirements for a Better Care Fund Plan (BCF) for 2017/18 and 2018/19, set out the expected financial content of the 2017/18 and 2018/19 BCF and outlined the NHS England requirements regarding the content of the BCF Plan.

Approval was sought to the indicative expenditure within the BCF financial plan to allow purchase orders to be raised by Essex County Council (ECC) as the

Pooled Fund holder for the 2017/18 provision of NHS Clinical Commissioning Group commissioned services, together with authorisation for the Executive Director for People Commissioning to agree the final BCF Plan.

In presenting the report, the Cabinet for Adults and Children advised that the letters confirming that the CCGs would make the necessary payments had now been received.

#### **Resolved:**

- That the indicative expenditure plan regarding NHS Commissioned services as set out in Table 1 (paragraph 3.10) of report FP/727/01/17 be approved, and purchase orders be raised in the sum of £52.973m for the 2017/18 provision of NHS Clinical Commissioning Group commissioned BCF services, each order being conditional upon:
  - a. funding being received from the CCGs; and
  - b. receipt of letters of confirmation that the CCGs will make the necessary payments to ECC.
- 2. That the Executive Director for People Commissioning, in consultation with the Cabinet Member for Adults and Children, be authorised to
  - a. approve the final submission of the Essex BCF, as amended to reflect any alterations which he considers to be appropriate as a result of the NHS England assurance process; and
  - b. to make any consequential changes necessary to the section 75 agreements necessary to implement the Better Care Fund.

#### 10 Cabinet Decisions Report

The Cabinet received report FP/747/02/17 by the Secretary to the Cabinet setting out the decisions taken by or in consultation with Cabinet Members since the last meeting.

The Cabinet Member for Finance, Housing and Planning undertook to respond in writing to Councillor Danvers providing more detail with regard to decision reference FP/766/03/16 (Drawdown from Transformation Reserve: Organisation Design Programme Phase 2).

### 11 Exclusion of the Press and Public Resolved:

That the press and public be excluded from the meeting during consideration of the remaining item of business on the grounds that it involves the likely disclosure of exempt information as specified in paragraph 3 of part 1 of Schedule 12A of the Local Government Act 1972.

12 Expansion of Roding Valley High School - Confidential Appendix (Press and public excluded)

The Cabinet noted the confidential appendix to report FP/658/11/16, which

contained information exempt from publication referred to in that report and in decisions taken earlier in the meeting (minute 5 above refers).

The Cabinet Member for Education and Lifelong Learning undertook to provide a written response to Councillor Pond regarding the provision of sports facilities in the school's local area.

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Chairman 23 May 2017

#### Forward Plan reference number: FP/811/04/17

Report title: Installation of LED Street Lighting Phase 3				
Report to: Cabinet				
<b>Report author:</b> Andrew Cook, Director, Highways and Transportation				
Date: 23 May 2017	For: Decision			
Enquiries to: William Russell – Project Manager – william russell@essex.gov.uk				
County Divisions affected: All Essex				

#### 1. Purpose of Report

- 1.1. Cabinet is asked to agree a proposal to convert 23,284 High Wattage part night street lights to LED technology. This proposal, building on from Phase 2 of LED street light conversions, will save the council an additional £21.7m in energy, maintenance and carbon taxes over a 20 year period.
- 1.2. Cabinet is asked to agree that the work can be directly awarded to Ringway Jacobs Limited (RJ) to continue LED installations, and combine some installations in Phase 2, with the early installations from Phase 3. This will realise cost savings to ECC.

#### 2. Recommendations

- 2.1. Agree that up to £9.1m a new entry to the published Capital Programme for the third phase of LED Streetlight implementation can be spent on the installation of LED lighting units on the basis of the savings projections contained in this report.
- 2.2. Agree to commission the work directly from Ringway Jacobs Limited in accordance with the long term highways partnership agreement.
- 2.3. Delegate to the Director, Highways and Transportation authority to: -agree the technical specification; and -issue an order to RJ to complete installation.

#### 3. Summary of issue

- 3.1. The Council undertook a pilot in 2015/2016 to evaluate the use of LED street light technology as a replacement for the existing lanterns to achieve energy savings. This successful pilot led to Phase 2 of the project, currently in progress, to convert all those 19,292 lights which are currently lit all night.
- 3.2. Phase 2 delivered 9,500 LED conversions by end of March 2017. These changes will deliver year on year savings. In year savings for 2016-17 were impacted as the programme started later than was originally anticipated and the supplier was unable to supply the LED lights in line with the timescales of the project. The supplier issues have now been resolved. RJ were able to

catch up with the conversions and met their target of 9,500 conversions by the end of March 2017.

- 3.3. Phase 3 of the project is focussed on the high wattage lights which are subject to part night lighting. These lights typically located on major road routes, or leading up to (but not at) major road junctions.
- 3.4. We have captured lessons learnt from Phase 2 and RJ has used this information to inform and improve the proposal for Phase 3 of the project.
- 3.5. The Council has a long term contract with RJ. Under this contract the Council is able to award the work directly to RJ, although it is not required to do so. It is proposed that the Council should award the work to RJ because:
  - a. RJ is currently carrying out Phase 2 of the conversions. They have stated that they will be able to combine some of the Phase 3 conversions with Phase 2 conversions thereby reducing the cost to the Council
  - b. Analysis for Phase 2 shows that the price RJ charges compares favourably with our market research thereby providing good value for money for the Council.
  - c. RJ is responsible for street light maintenance under the current contract, therefore if a light fails there can be no argument about who is responsible for the defect.
  - d. RJ has been able to negotiate with Philips the supply of a smart digital LED lantern, instead of the standard LED lantern, at the same unit price. This smart digital LED lantern will help ECC trial some of the smart technologies and applications now available.
- 3.6. The intention is to commence installation work in September 2017 and complete work by January 2019.
- 3.7. The non-financial benefits of this project include a reduction in carbon emissions which benefits the environment. LED lighting is a proven technology, supplying clear white light, contains no toxic materials and are 100% recyclable which helps the people of Essex experience a high quality and a sustainable environment.

#### 4. Options

- 4.1. It is recommended that the ECC agree with the proposed implementation of Phase 3 of the installation of LED lights. It is anticipated that after a 20 year period the total gross savings made from this project are £21.7m, with net savings being £10.1m after capital costs and the cost of borrowing. The project break even payback period is just over 10 years.
- 4.2. At the end of this project we will have over 30% of our street lights converted to LED, reducing our electricity consumption by over 60% from the two phases of LED projects.

4.3. The Do Nothing option does not achieve savings for council tax payers in Essex, and with the cost of energy prices forecast to increase year on year this will put increased pressure on the ECC revenue budget.

#### 5. Issues for consideration

#### 5.1 Financial implications

- 5.1.1 The total capital cost of this project is £9.1m, and includes a risk contingency of £411,000 within that. This will result in an estimated gross revenue saving of £21.7m in energy, maintenance costs and carbon tax reduction over 20 years, with net savings being £10.1m after costs of the capital investment. Based upon a best estimate of energy price inflation of 3.1%, the payback period is just over 10 years, this is a low estimate as the energy market is very volatile at this time which makes prices difficult to predict. However, the savings will be higher and payback quicker should there be an increase in the energy price.
- 5.1.2 The project will be delivered over a 2 year period from September 2017 through January 2019. An overview of the investment required and the savings achieved by implementing this project can be seen in the Project Financial Statement in 5.1.4.
- 5.1.3 An interest free loan is available from Salix to of £3.9m (via Central Government). The Salix loan will be paid back over a 5 year period.
- 5.1.4 The average borrowing costs and split of the funding source for this project can be seen in the Project Financial Statement on page 4:

Project Financial Statement			
	£m		
	Total		
Total Project Costs Inc Contingency	9.091		
Funded by:			
0% SALIX Loan	3.990		
ECC Funding	5.101		
Total Funding	9.091		
Impact of Investment	Savings over 20 years £m		
Energy Savings	16.040		
M'tce savings	4.578		
Carbon Reduction	1.071		
Total Savings	21.689		
Cost of Capital	-11.608		
Total - (cost)/saving	10.081		

5.1.5 The revenue savings below are additional and will be added to the future years Medium Term Resource Strategy (MTRS).

	£'000 2017/18	£'000 2018/19	£'000 2019/20	£'000 2020/21	£'000 2021/22	£'000	£'000	£'000
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6-10	Year 11-20	Total
Energy Savings	116	569	650	670	691	3,789	9,555	16,040
M'tce savings	0	181	186	192	198	1,085	2,737	4,578
Carbon Reduction	11	38	43	45	46	252	636	1,071
<b>Total Revenue Budget Reductions</b>	127	787	879	907	935	5,126	12,928	21,688

#### 5.2 Legal implications:

- 5.2.1 ECC is not required to provide street lighting in most circumstances but in practice it provides a large number of lights.
- 5.2.2 The proposal to award the work to RJ is in accordance with the contract and procurement law but the Council should only take these steps if it is satisfied that this is likely to be the best value for money.

#### 6. Equality and Diversity implications

- 6.1. The Public Sector Equality Duty applies to the Council when it makes decisions. The duty requires us to have regard to the need to:
  - (a) Eliminate unlawful discrimination, harassment and victimisation and other behaviour prohibited by the Act. In summary, the Act makes Discrimination etc. on the grounds of a protected characteristic unlawful
  - (b) Advance equality of opportunity between people who share a protected characteristic and those who do not.
  - (c) Foster good relations between people who share a protected characteristic and those who do not including tackling prejudice and promoting understanding.
- 6.2 The protected characteristics are age, disability, gender reassignment, Pregnancy and maternity, marriage and civil partnership, race, religion or belief, gender, and sexual orientation. The Act states that 'marriage and civil partnership' is not a relevant protected characteristic for (b) or (c) although it is relevant for (a).
- 6.3 The equality impact assessment indicates that the proposals in this report will not have a disproportionately adverse impact on any people with a particular characteristic.

#### 7. List of appendices

Equality Impact Assessment

#### 8. List of Background papers

Phase 2 – Lessons Learnt Report



### Appendix to CMA - FP/811/04/17

## LED Street Lighting Phase 3 - Lessons Learnt - LED Replacement Phase Two

March 2017



#### 1.0 Executive Summary

We are now in Phase 2 year 1 of the programme and have achieved the year end of target of installing 9500 LED units by end of March 2017. The programme started 3 months late due to delays with Project approvals and supplier issues which have now been resolved.

The programme is now back on track and has started year 2 LED installations to ensure we meet the Year 2 in year benefit profile.

Following a review of the Installation process for Year 1 we have made improvements to the Implementation process and will carry these lessons on to the proposed Phase 3 LED installations.

Some before and after pictures are below to show improvements:







#### 2.0 Lessons Learnt

#### 2.1 Programme Start point

To ensure the successful delivery of the LED replacement program, effective planning is of key importance. The working assumption is for Phase 3 of the programme to commence in July 2017, subject to ECC Governance. Starting on this date will allow us to realise savings by using work teams already operating in the installation areas for Phase 2. This will mean we have less supervisory and operative costs and we can already utilise Traffic Work permits in operation. We plan to combine LED installations for Harlow, Brentwood and Epping. This will save ECC additional in year benefits, as outlined in the RJ commercial proposal -Essex Street Lighting CMS and LED Installation Phase 3, dated February 2017.

However, this date is indicative and could change in line with ECC approval of a budget to start the project. The schedule is intended to demonstrate key milestones and interdependencies, a final schedule would be approved subject to contract

#### 2.2 Procurement

We already have a supplier for Phase 2 of the programme and work with Telensa (who supply all our telecells) and Philips (who supply the LED lanterns). Negotiations have been made with the manufacturer and the framework has been agreed with using the same pricing from Phase 3 of the programme. This pricing has been benchmarked across our contracts is in line, or below other manufacturers for a similar product. This is providing ECC with the best price

In addition, we have also been able to negotiate with Philips to supply the latest LED luminaire with "Smart Cities" technology, for the same unit price.

This smart LED will allow ECC to build technical capabilities and trial new applications based on this new innovative LED. This could lead to additional business cases and benefit streams for ECC, and is in line with technical objectives set for the Council.

There were delays, in the early part of the programme, due to late approvals to commence installations. This had a knock on effect with ordering equipment and compounded on lead times with ordering LED lanterns and Telecells.

We now have a well-developed close working relationship with Philips and Telensa to ensure that lead times are agreed, orders are placed to lead times, and delivery orders are tracked and managed to the delivery point.

**LESSON 1** – Build in to the Business Case scenario's to allow for a late start, due to Governance processes, and potential supplier issues. This will allow expectations to be set for in year benefits should we encounter the same issues for Phase 3.



**LESSON 2 –** Order equipment from Philips and Telensa to agreed lead delivery times and allow some float within the programme plan in case of delays to ensure that installation plan is not affected. Continue with tracking process for orders, and manage via bi-weekly project meetings.

**LESSON 3 –** Philips and Telensa continue to attend team meetings to discuss ordering, project plan, installation issues and overall progress. Continue key discussion and liaison points with key project personnel, these are; Richard Dimock and Trevor Rhodes -Essex Highways, Steve Forth Linc Procurement Management, Sara Lee Telensa Account Manager, Leigh Clarke Philips Key Account Manager, Paul Andrews, ELS Managing Director (Electrical Testing) and Ruta Eviltyte, Supply Chain Account Manager.

#### 2.3 Design

Design is an important part of the project. Work in the design phase will ensure that the correct levels of lighting are achieved, but most importantly will ensure that the light levels are uniform so that there is not a 'Zebra Effect' (dark spots). RJ has a strong design capability and has the capacity to carry out 1250 unit designs per month. It is difficult to speed up this process up without increasing additional technical resource.

Phasing the designs will ensure that the lanterns can be ordered effectively and then construction can start whilst the design process is in place.

We have encountered a few issues where incorrect lantern spigots ordered, or the spigots ordered do not fit the brackets. This has now been corrected in the design process.

Some lanterns had different cable lengths and this was only discovered on inspection, prior to installation. This has now been corrected in the design process.

Our Mayrise data does contain a small number of inaccuracies. To ensure that we do not make mistakes for ordering equipment and affecting installations we have now added PCI capture prior to the design process.

**LESSON 4** – Build into the project plan design points that meet the installation schedule. Where possible, ensure design resource is in place to design in advance, de-risking the installation schedule

**LESSON 5** - Carry out design after the Pre-construction Information has been completed. This ensures that the correct lantern Spigot has been ordered. The PCI form has also been improved to provide further information, eliminating the issue

**LESSON 6 –** Lanterns with different cable lengths are now being flagged on the designs sheet to ensure that extra cable is requested when the lanterns are ordered.

**LESSON 7 –** Pre Construction Information will be captured before the designs, thus ensuring accurate information is supplied, as required under Construction, Design and Management regulations.



#### 2.4 Installation

Using the current supply chain partners RJ will be able to install on average 1250 units per month. There will be challenges involved in this process, such as bracket replacement and reducing the size of the brackets. Also quality issues such as making sure the alignment is carried out properly; will need to be taken into account. However, in our experience installing at a pace of around 1250 units per month will ensure that the quality of the installation is maintained throughout the program.

Initially some traffic permits were refused for work orders for traffic sensitive routes. Training has been provided to the Supply Chain Partner and this has resolved the problems.

Some issues were encountered when ordering lanterns based on the numbers required in the districts we were installing in. This was compounded by delays in the delivery process by Philips. We have now revised this process based on the lesson learnt.

**LESSON 8** – Ensure programme plan manages in peaks and troughs and that the installation rate does not regularly exceed highest numbers installed in Phase 2.

**LESSON 9** – Ensure training requirements are identified for any new suppliers so that working practices do not cause delays in the installation process.

**LESSON 10** –Lanterns will be ordered as a whole for each district and ordered in advance to known lead times. This allows the installation of each district to be completed rather than waiting for lanterns or moving out of installation areas to return once deliveries arrive.

#### 2.5 Energy Savings

In the early installations we did not use an automated process to update CMS, thus some energy savings were not made due to missing the cut off for CMS updates. We have now implemented an automated PDA process so that engineers making the changes can update the lighting changes post installation. This will ensure that we meet the savings identified. We have also completed audit activity post installation and have noted that some dimming profiles have not been implemented post installation, this process has now been corrected.

There were some issues with Philips lights not being provided with the correct Elexon code, which affects the dimming profile not being implemented. Designers have now been made aware of this issue.

**LESSON 11** – Ensure LED engineers are reminded to ensure that inventory data is updated the following day and that the data is correct.

 $\ensuremath{\text{LESSON 12}}$  – Ensure LED engineers are reminded to ensure that dimming profiles have been implemented on CMS



**LESSON 13** – Phillips lanterns did not have the correct Elexon code when they were initially provided. Designers need to ensure that the selected lanterns have valid Elexon codes