

**Wards Affected:** Emerson Valley, Walton Park, Middleton, Stony Stratford, Linford South, Bradwell, Denbigh, Whaddon, Woughton, Loughton Park, Eaton Manor, Furzton, Campbell Park, Wolverton

**ITEM 12**

**CABINET**

**25 JULY 2012**

## **Grid Road Street Lighting**

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### **Executive Summary:**

At Council in February 2011 a decision was taken as part of the necessary budget reduction measures for the 2011/12 financial year to turn off 6000 of the 7100 grid road lights. In May 2011 a review of the impact of this decision was carried out and as a result a revised proposal was agreed through a delegated decision in September 2011 whereby only 2700 grid road street lights were switched off, the remaining 3300 were upgraded to enable energy savings to be achieved through "dimming and trimming".

The 2700 switched off were at different locations on the grid road network but specifically excluded street lights at roundabouts, junctions and bus stops or which illuminated Redways.

Following an exchange of letters with the Coroner, arising from a recent inquest, a review of the criteria applied in determining which street lights should be switched off has been undertaken by officers and has concluded that the original criteria had merit and have been beneficial in minimising the resulting risk to night time users of the grid roads. However, the report has identified a lack of understanding within the UK about the potential impact of alternating 'lit' and 'unlit' sections of road. Taking account of the unusual characteristics of the Milton Keynes grid road system, which allows vehicles to travel at relatively high speeds (leading to longer 'stopping distances'), the report recommends – on a precautionary basis – revised criteria for determining which sections of grid road street lights should be switched off. These criteria are set out at the Annex of the report.

If these criteria are adopted, only 2 sections of the grid road system would be left unlit. Through bringing forward about £0.9m of the planned investment in highways infrastructure (see separate report on this agenda) to upgrade grid road streetlights to incorporate energy reduction measures and to replace steel columns with advanced structural deterioration, the revenue cost of switching back on the bulk of the grid road street lights would be limited to £97,000 in the current financial year and £85,000 in subsequent years.

### **1. Recommendation(s)**

- 1.1 That the revised criterion for the switching off of grid road lights be approved.
- 1.2 That it be noted that as a result of the new criteria only two sections of the current grid road system will have the street lighting not illuminated.

1.3 That the illumination of the grid roads on those sections of the network that do not meet the new criteria be approved and that this be completed by the end of September 2012.

1.4 That the 2012/13 Capital Programme budget of £865,000 for street lighting to enable the subsequent dimming and trimming of the columns which have been switched back on, be approved.

1.5 That the Corporate Director, Resources, be invited to identify compensatory savings to offset the in-year financial pressure of £97,000.

## 2. **Grid Road Street Light Review**

2.1 The city fathers' vision of full segregation of vulnerable road users and vehicles through the creation of the Redway system has only partially been achieved. There is significant use of the grid roads at night by vulnerable road users particularly along the urban sections where streetlighting would be beneficial in reducing the degree of injury they might sustain in an accident.

2.2 The ability of drivers to see a vulnerable road user at night on the grid roads is being impaired by the rapid alternation of 'lit' and 'unlit' sections. This particular problem was highlighted during the course of two recent inquests. Investigation of the police recorded injury accident data indicates that there has been a 30% increase in night time accidents on those sections of road not fully lit. However the problems with partial street lighting are not unique to Milton Keynes and understanding of the issues is not widely understood within highway engineering.

2.3 The decision to switch off a proportion of the grid road street lights was one of a number of difficult cost saving measures the Council had to make in early 2011. The key cost saving arose from reduced energy usage. Since the original decision, other methods have been found to reduce the Council's energy usage through dimming and trimming of lanterns, and the use of more energy efficient lighting units such as in the borough's numerous subways which are being converted to LED lighting. It is therefore now possible to switch some of the grid road street lights back on without significantly increasing the council's energy consumption.

## 3. **Proposals**

3.1 Revised criteria have been developed to overcome in particular the issue identified from officers' investigations, and is shown in the Annex. The key change is to avoid the potential problem of alternating short sections of grid road that are 'lit' and 'unlit'. As a consequence only two sections of the grid road system would remain unlit:-

- A422 Monks Way between the petrol stations near Brickhill Street and Willen Road roundabout, 1150metres unlit.
- A422 Monks Way between Willen Roundabout and A509m 920 metres unlit.

It should be noted that both these sections of road are rural in character and that the A422 continues northwards towards Olney as the A509 and has no system of street lighting. As a check, the accident record for both these

sections of roads for the last three years has been reviewed and neither has a any recorded injury accidents during the hours of darkness.

Another section of grid road the A421, between Magna Park and the borough boundary, was also identified as a candidate to remain unlit using the revised criteria but was rejected because of the poor injury accident record for this section of road.

- 3.2 To reduce the energy consumed as a result of turning back on 2597 of the 2700 street lights it is proposed that the lights be dimmed and trimmed and where possible the tubes/bulbs be replaced with lower energy units. However this will take at least until the spring of 2013 to implement with the volume of work involved and the need to follow the Council's procedures.
- 3.3 It is therefore proposed that in order to restore the grid road lighting as quickly as possible that initially they simply be switched back on. This would ensure that the grid road lighting (with the exception of the two sections described in 3.1) be fully lit by the end of September, in time for the winter.

#### **4. Alternative Options Considered**

##### **4.1 Leave 2700 grid road lights unlit**

Retaining the current status quo will not reduce the recorded accident record, as the accident trend would strongly suggest that the hours of darkness accidents, in particular involving vulnerable road users, will continue to be above average on the grid road links with partial lighting.

##### **4.2 Pedestrian & Cycle Ban with 2700 grid road lights unlit**

Similar issues to 4.1, and would be difficult for the Police to enforce. However more importantly taking into account the circumstances of the two fatal accidents that were the subject of the recent Inquests it would not have prevented the accidents occurring.

##### **4.3 Reduced grid roads speed limit and with 2700 grid road lights left unlit**

Although it is possible to reduce the grid road speed limit to 30 mph which might increase the chances of surviving an accident as a vulnerable road user, without either vigorous enforcement of the speed limit by the police, or the construction of extensive traffic calming features on the grid roads it is unlikely that vehicular speeds will reduce significantly in the long term to achieve the necessary outcome.

##### **4.4 Reducing unlit period to Midnight to 06:00 hours**

Whilst this would considerably reduce the energy used to light the grid roads, it should be noted that the two fatal accidents were after midnight, and it was clear from evidence given by witnesses at the two inquests that there is considerable use of the grid roads after midnight by local people.

#### **5. Consultation**

5.1 Thames Valley Police have been consulted over the revised criteria. *(Their comments are awaited and will be reported verbally to Cabinet.)*

## 6. Implications

### 6.1 Policy

Improving the safety for all road users is a key council policy. Restoration of the grid road lighting using the revised criterion will clearly assist in delivering this.

### 6.2 Risks

- Not applying the revised criteria might result in a continued risk of further road traffic accidents resulting in death or serious injury.
- Delaying the implementation of the switch on whilst the street lights are dimmed and trimmed will delay completion of the works during the highest risk period for night-time users of the grid roads.
- Delaying the works to the 2013/14 financial year will leave night time users of the grid road system at risk for at least a further 12 months and might result in further accidents where the absence of street lighting might be a contributory factor.

### 6.3 Financial Impact:

Resulting on off revenue costs

In 2012/13 of £31,164 to switch on the grid road lights and for the necessary checks to the equipment prior to re-energising which will be met through economies within the Highways & Transportation budget.

Consequential revenue pressures:

There will be significant efficiency savings within the street lighting budget over future years with the implementation of the dimming and trimming of MKC car parks, dimming & trimming the other 4400 grid road lights that were not switched off, fitting of LED's to underpasses, and dimming and trimming of the 2597 columns to be switched back on. However there will still be a resulting budgetary pressure of £97,000 in the current financial year and of £85,000 for subsequent years at current energy prices if this recommendation is approved.

Capital Costs

The 2597 columns to be dimmed and trimmed will cost £865,000. This includes an allowance for the need to replace a number of the columns which have corrosion problems on the section of them below ground level. It is suggested that this is funded in the current financial year from the Transport Infrastructure Investment to be considered on another report on this agenda.

Y	Capital	Y	Revenue		Accommodation
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	IT	Y	Medium Term Plan	Y	Asset Management
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#### 6.4 Carbon and Energy Management

The scheme has been produced in accordance with the Council's carbon reduction policy. The increase in the carbon and energy used as a result of restoring the lighting has been largely offset through the use of more efficient energy systems particularly in the boroughs extensive subway system

#### 6.5 Legal

There is no legal requirement to provide street lighting in England and Wales. Section 97 of the Highways Act 1980 empowers a Highway Authority to provide lighting for any highway or proposed highway for which they are, or will be, the Highway Authority. District, Town and Parish Councils can also provide local lighting under the Public Health Act 1985 or the Parish Councils Act 1957, but need the consent of the Highway Authority to provide lighting on a highway.

In a case heard in 1921 (Sheppard v. Glossop Corporation) it was held that a street lighting authority has no duty to light the highway, even dangerous places on the highway, unless it has itself created the danger – for example by excavating the street and leaving an unlit hole. A street lighting authority acting under permissive powers is not therefore liable for accidents arising from a failure to light.

	Equalities/Diversity		Sustainability		Human Rights
	E-Government	Y	Stakeholders		Crime and Disorder

#### Background Papers:

1. Delegated decision of the 7th September 2012
2. Grid Road Street Lighting Switch Off – Technical Review June 2012
3. Exchange of letters with Coroner.