Briefing note – Glemsford Parish Council

cc. Councillor Richard Kemp

Street Lighting

Purpose of the report.

To inform the Parish of the current situation regarding street lighting in Glemsford including:

- 1) Units owned by the Parish Council
- 2) Identification of Parish owned units that conflict with Engineering Recommendation G39/1
- 3) Identification of Parish owned units that have lamp types no longer meeting EU legislation
- 4) Proposals to address 2 and 3 above.

1.0 Units owned by the Parish Council

Glemsford Parish Council owns approximately 163no. street lights that are a mounted on a combination of columns and wooden poles. The units are maintained under a service agreement with Suffolk County Council (SCC) who in turn also purchase and recharge for the energy consumed.

The inventory of units owned by the Parish can be found in Appendix A of this report.

2.0 Parish owned units that conflict with Engineering Recommendation G39/1

Currently 37no. units of the Parish's lighting stock currently conflict with the G39/1 Engineering Recommendation. Engineering Recommendation G39/1 is where the existing unit is located within 1.5 metres of the nearest live electricity conductor and cannot be worked on safely by the maintenance contractor. Previously the only solution to units conflicting this recommendation was to remove the unit from the wooden pole and erect a new street lighting column. However SCC has been able to agree a solution with UK Power Networks (formerly EDF Energy) where an LED lantern, providing a 25 year life, can be left within the 1.5 metre safe working tolerance. In this instance the control box is required to meet G39/1 to enable the six year electrical test to be carried out and in some instances needs to be lowered on the pole; this provides a more cost effective option. Prior to any work commencing, the Parish Council will provide authorisation to proceed and additionally UK Power Networks will need to assess the wooden poles before permission can be granted for any works to be carried out where units are mounted on their wooden poles.

The Parish units that conflict with G39/1 are shown in Appendix B.

3.0 Parish owned units that contain lamps that no longer meet EU requirements

101no. units owned by the Parish Council contain an MBFU (mercury) lamp (32no. of which are also conflict with G39/1). This lamp type is no longer manufactured as it does not comply with EU requirements (due to content of mercury) and it is only by the foresight of the SCC maintenance team in procuring all remaining spares throughout the UK that these can continue to be maintained. It is estimated that a maximum of 1-2 years remain before 'outages' become un-repairable. Appendix C details these units.

4.0 Proposals to Address Issues Raised

As mentioned the county council are promoting the use of an LED 'Stela' white light lantern (as shown in Appendix D). This unit can be left within the G39/1 conflict area, has a 25 year guarantee and reduced energy consumption resulting in lower energy costs (it should be noted that energy costs increased by nearly 30% for the 2011/12 period). In addition it is envisaged that the forthcoming new contractual arrangements in April 2013 for street lighting will see a reduced maintenance cost where an LED unit is installed.

5.1 G39/1 Solutions

In accordance with the Table in Appendix B, 37no. units currently conflict with the G39/1 Engineering Recommendation. To enable compliance, it is proposed to install the cost effective solution of the LED unit within the G39/1 tolerance, ensuring the control box location complies. The works will comprise:

- Removal of exiting lantern and bracket and disposal in accordance with WEEE (Waste Electrical and Electronic Equipment) European Directive
- Installation of new bracket (where specified) mounted on wooden pole, Stela LED 18w lantern, control box (outside G39/1 conflict area) and associated control gear.
- UK Power Networks disconnection of supply and reconnection into new control box.

Appendix E includes the associated cost for this option and energy saving compared to the status Quo. No allowance has been made for annual energy increases and it should be noted that this work *will not* remove the units from G39 conflict.

5.2 MBFU Lantern Replacement to conform to EU requirements

101no. units owned by the Parish are currently of the type (MBFU) that does not comply with European Legislation due to their mercury content and subsequently these lamps are no longer manufactured. Appendix F outlines the cost for replacement with LED lanterns (69no. units are detailed not including the 32no. units that conflict with G39/1. The works will comprise:

 Removal of exiting lantern and disposal in accordance with WEEE (Waste Electrical and Electronic Equipment) European Directive Installation of new 18 LED lantern, and associated control gear.

6.0 Intelligent Lighting System

Suffolk County council are currently implementing part night lighting. These proposals generally see the street lights turned off on columns of 6 metres in height or less, these are mainly in residential areas, between midnight and 5.30am.

Based on knowledge obtained from other authorities carrying out part night lighting, SCC has indentified certain locations where close examination of lighting levels and operating times needs consideration:-

- a) Lights at major junctions/roundabouts.
- b) In town centres where there is CCTV, high security businesses like banks, and/or areas of high night time pedestrian usage for example near nightclubs and train stations, outside community facilities like the British Legion or leisure centres.
- c) Areas where street lights are needed to reduce road accidents.
- d) Areas where there could be an increase in crime through reduced lighting, like pubs and specific residential areas.
- e) Remote alleys linking residential streets.
- f) Near, pedestrian crossings, footbridges, subways.
- g) In public car parks.
- h) At bus stops.
- i) At level crossings, speed humps and traffic lights.
- j) Where there is sheltered housing for the elderly

Should the Parish wish to utilise the Intelligent Lighting System (ILS), the running costs are met by SCC and the Parish is responsible for the capital cost to fit the system nodes to their units. The Parish council can also select the times they would like their units to operate. Further information regarding the SCC Policy is available at www.suffolk.gov.uk/streetlighting

To install ILS nodes to the Parish Units would cost £ 7,335.00 and by adopting the midnight to 5:30am part night switching, an annual energy saving of £ 2,813.66 is achieved (without replacement of any fittings) as shown in Appendix G.

Should the nodes be fitted simultaneously as any lantern replacements, a saving of £10.00 per unit can be made.

Appendix A -Units Owned in Glemsford by the Parish Council

| Appendix A Onic | UNIT | in Glemsford by the Parish Council | | |
|-----------------------------|----------|------------------------------------|--|--|
| STREET | NO | LOCATION | | |
| ANGEL LANE | 50 | O/S 16 | | |
| ANGEL LANE | 51 | G39 OPP 25 | | |
| ANGEL LANE | 52 | O/S GROVE FARM | | |
| BELLS LANE | 138 | O/S 3 | | |
| BELLS LANE | 139 | G39 OPP 15 ON EDF POLE 52 | | |
| BELLS LANE | 140 | G39 O/S SHANGRI LA | | |
| BELLS LANE | 141 | G39 JUNC STANWAY CLOSE ON EDF POLE | | |
| BRICES WAY | 91 | O/S 1 | | |
| BRICES WAY | 92 | O/S 12 | | |
| BRICES WAY | 93 | O/S 19 | | |
| BROADWAY | 7 | G39 O/S 6 | | |
| BROOK STREET | 2 | JUNC DUFFS HILL | | |
| BROOK STREET | 3 | O/S NO 67 | | |
| BROOK STREET | 4 | G39 O/S 33 | | |
| BROOK STREET | 5 | 0/S 16 | | |
| CAUSEWAY CLOSE | 103 | O/S 7 | | |
| CHESTNUT ROAD CHESTNUT ROAD | 65 66 | FIRST FROM LION ROAD O/S 11 | | |
| CHESTNUT ROAD | 67 | 0/5 11 0/5 14 | | |
| CHESTNUT ROAD | 68 | O/S 22 | | |
| CHURCHGATE | 142 | JUNC OF PARK LANE | | |
| CHURCHGATE | 143 | O/S CHURCH | | |
| CHURCHGATE | 167 | OPP CHURCH ON GREEN | | |
| CHURCHGATE | 168 | BY ENTRANCE TO PARK FARM | | |
| CROWNFIELD ROAD | 151 | 1ST COLUMN ON THE LEFT | | |
| CROWNFIELD ROAD | 152 | OPP WHITLANDS | | |
| CROWNFIELD ROAD | 153 | OPP 5 | | |
| CROWNFIELD ROAD | 154 | OPP KEBBLES | | |
| CROWNFIELD ROAD | 155 | O/S 17 | | |
| CROWNFIELD ROAD | 173 | R/O 17 | | |
| DRAPERY COMMON | 59 | O/S HOLLYDON | | |
| DRAPERY COMMON | 174 | O/S NEVILLE HOUSE | | |
| DRAPERY COMMON | 175 | G39 O/S JRENICON | | |
| EGREMONT STREET | 19 | OUTSIDE OLD GARAGE OPPOSITE NO.2 | | |
| EGREMONT STREET | 20 | OPP ANGEL LANE | | |
| EGREMONT STREET | 21 | OPP YE OLD COCK PUBLIC HOUSE | | |
| EGREMONT STREET | 22 | OPP 34 | | |
| EGREMONT STREET | 23 | JUNC GREYHOUND ROAD | | |
| EGREMONT STREET | 24 | O/S 57 | | |
| EGREMONT STREET | 25 | OPPOSITE GEORGE LANE | | |
| EGREMONT STREET | 26 | O/S TYRE CENTRE OPPOSITE NEW CUT | | |
| FAIR GREEN | 6 | G39 NEXT TO DOWNS | | |
| FAIR GREEN | 137 | OPP POST OFFICE LANE | | |
| FIRST AVENUE | 102 | 0/S 15 | | |
| FLAX LANE | 53 | G39 O/S HIGH BANK | | |

| FLAX LANE | 54 | ON WALKWAY TO EGREMONT STREET | | | |
|----------------|-----|--|--|--|--|
| FLAX LANE | 162 | ON EEB POLE 162 2ND LIGHT IN ROAD | | | |
| FLAX LANE | 176 | O/S MILLBANK | | | |
| FLAX LANE | 177 | O/S SHERWOOD | | | |
| FOURTH AVENUE | 118 | O/S 10 | | | |
| FOURTH AVENUE | 119 | O/S 56 | | | |
| FOURTH AVENUE | 120 | O/S 68 | | | |
| FOURTH AVENUE | 122 | O/S 28 | | | |
| FOURTH AVENUE | 123 | O/S 18 | | | |
| GEORGE LANE | 35 | O/S 1 LODGE FARM ROAD | | | |
| GOWERS END | 94 | OPP 2 | | | |
| GOWERS END | 95 | REAR OF 28 | | | |
| GOWERS END | 96 | O/S 9 | | | |
| GREYHOUND ROAD | 36 | OPP 3 | | | |
| GREYHOUND ROAD | 37 | O/S 9 | | | |
| GREYHOUND ROAD | 38 | O/S 24 | | | |
| GREYHOUND ROAD | 39 | O/S 19/20 | | | |
| HARPURS ROAD | 60 | FIRST FROM TYE GREEN | | | |
| HARPURS ROAD | 61 | O/S 3 | | | |
| HARPURS ROAD | 121 | WALKWAY FROM FOURTH AVENUE TO KINGS RO | | | |
| HARPURS ROAD | 164 | S/O 5 ON PATH TO FOURTH AVE/KINGS ROAD | | | |
| HIGHBANK | 132 | (HIGHBANK) O/S 9 | | | |
| HIGHBANK | 133 | (HIGHBANK) SECOND COLUMN | | | |
| HIGHBANK | 134 | (HIGHBANK) O/S 17 | | | |
| HIGHBANK | 135 | (HIGHBANK) O/S 12 | | | |
| HIGHBANK | 182 | BETWEEN 1 AND 18 HIGHBANK | | | |
| HIGHBANK | 183 | O/S 11 HIGHBANK | | | |
| HIGHBANK | 184 | O/S 11 | | | |
| HOLDSWORTH | | | | | |
| CLOSE | 34 | O/S 5 | | | |
| HUNTS HILL | 16 | G39 JUNCTION WITH DRAPERY COMMON ON EL | | | |
| HUNTS HILL | 17 | G39 O/S SOCIAL CLUB ON EDF LV POLE 2 | | | |
| HUNTS HILL | 18 | OPPOSITE WEAVERS DRIVE | | | |
| HUNTS HILL | 178 | O/S 41 (9004 CONTRACTOR INVENTORY) | | | |
| HUNTS HILL | 188 | O/S NO'S 1 AND 3 | | | |
| JAQUES CLOSE | 99 | O/S 4 | | | |
| JAQUES CLOSE | 100 | O/S 9 | | | |
| KEBBLES | 179 | ON FOOTPATH O/S 12 KEBBLES | | | |
| KINGS ROAD | 69 | O/S 96 | | | |
| KINGS ROAD | 70 | O/S 76 | | | |
| KINGS ROAD | 71 | O/S 60 | | | |
| KINGS ROAD | 72 | OPP 53 | | | |
| KINGS ROAD | 73 | SIDE OF 1 SECOND AVENUE | | | |
| KINGS ROAD | 74 | SIDE OF 2 FIRST AVENUE | | | |
| KINGS ROAD | 75 | O/S 42 | | | |
| KINGS ROAD | 76 | O/S 186 | | | |
| KINGS ROAD | 77 | O/S 176 | | | |
| KINGS ROAD | 78 | O/S 164 | | | |
| KINGS ROAD | 79 | O/S 116 | | | |

| KINGS ROAD | 80 | OPP 79 |
|------------------|-----|--|
| KINGS ROAD | 81 | OPP 34 |
| KINGS ROAD | 82 | O/S 32 |
| KINGS ROAD | 83 | O/S 24 |
| KINGS ROAD | 84 | O/S 14 |
| KINGS ROAD | 85 | O/S 5 |
| KINGS ROAD | 86 | JUNC PARK LANE |
| KINGS ROAD | 87 | ON FOOTPATH O/S NO.163 OPP NO.153 |
| KINGS ROAD | 88 | O/S 135/137 |
| KINGS ROAD | 89 | WALKWAY BESIDE 128 |
| KINGS ROAD | 90 | ON FOOTPATH BETWEEN 70 AND 72 KINGS ROAD |
| KINGS ROAD | 180 | ON FOOTPATH OPP 156 (9002 ON CONTRACTOR |
| KINGS ROAD | 181 | HALFWAY ALONG FOOTPATH BETWEEN 63/65 AN |
| LION ROAD | 8 | O/S DOCTORS SURGERY |
| LION ROAD | 9 | OPP 17 |
| LION ROAD | 10 | O/S BLACK LION PUBLIC HOUSE |
| LION ROAD | 11 | O/S BLACK HORSE PUBLIC HOUSE |
| NEW CUT | 33 | G39 O/S 7 |
| ORCHARD WAY | 32 | O/S 4 |
| PANNELS CLOSE | 57 | OPP 2 |
| PANNELS CLOSE | 58 | O/S 8 |
| PANNELS CLOSE | 186 | O/S 14 |
| PARK LANE | 144 | G39 O/S PARKVIEW |
| PARKLANDS CLOSE | 104 | O/S 9 |
| PATTICROFT | 166 | O/S NO.10 |
| PATTICROFT | 187 | O/S 17 |
| POST OFFICE LANE | 158 | FIRST LIGHT IN |
| SCHOOLFIELD | 124 | O/S 3/5 |
| SCHOOLFIELD | 125 | O/S 19 |
| SCHOOLFIELD | 126 | O/S 35 |
| SCHOOLFIELD | 127 | O/S 39 |
| SCHOOLFIELD | 128 | O/S 49 |
| SCHOOLFIELD | 129 | O/S 56 |
| SCHOOLFIELD | 130 | O/S 50 |
| SCHOOLFIELD | 131 | O/S 28/30 |
| SCHOOLFIELD | 136 | BESIDE EASTERN ELECTRICITY SUB STATION |
| SECOND AVENUE | 101 | O/S 8 |
| SHEPHERDS LANE | 64 | SIDE OF SCHOOL |
| SKATES HILL | 27 | JUNC EGREMONT STREET |
| SKATES HILL | 28 | O/S STAR VIEW |
| SKATES HILL | 31 | ADJACENT ORCHARD WAY ENTRANCE |
| SKATES HILL | 159 | THIRD FROM A1092 |
| SKATES HILL | 160 | SECOND FROM A1092 |
| SKATES HILL | 161 | JUNC A1092 |
| SLADES CLOSE | 105 | O/S 19 |
| SLADES CLOSE | 106 | ON WALKWAY REAR OF 13 |
| SPRING MEADOW | 157 | O/S 12 |
| STANWAY CLOSE | 147 | FIRST FROM BELLS LANE |
| STANWAY CLOSE | 148 | SIDE OF 6 |

| STANWAY CLOSE | 149 | O/S 12 | | | |
|---------------|-----|--------------------------------------|--|--|--|
| STANWAY CLOSE | 150 | O/S 20/22 | | | |
| THE PIPPINS | 107 | O/S SIDE OF 15 | | | |
| THE PIPPINS | 108 | ON FOOTPATH SIDE OF 7 | | | |
| THE PIPPINS | 109 | O/S 23 | | | |
| THE PIPPINS | 110 | O/S 30 | | | |
| THE PIPPINS | 111 | OPP 14 | | | |
| THE PIPPINS | 112 | SIDE OF 17 | | | |
| THE PIPPINS | 165 | O/S 26 | | | |
| THIRD AVENUE | 97 | SIDE OF 16 | | | |
| THIRD AVENUE | 98 | O/S 5 | | | |
| TYE GREEN | 12 | G39 OPP CHERRY TREE PUBLIC HOUSE | | | |
| TYE GREEN | 13 | G39 OPP 11 | | | |
| TYE GREEN | 14 | G39 O/S METHODIST CHURCH | | | |
| TYE GREEN | 185 | O/S PLOUGH HOUSE BUNGALOW | | | |
| TYE GREEN | 189 | O/S NO. 29 | | | |
| WEAVERS DRIVE | 55 | FIRST FROM HUNTS HILL | | | |
| WEAVERS DRIVE | 56 | OPP 10 | | | |
| WHITLANDS | 156 | OFF CROWNFIELD ROAD O/S NO.9(MONROE) | | | |
| WINDMILL ROW | 145 | G39 O/S 6 | | | |
| WINDMILL ROW | 146 | G39 O/S 14 | | | |

Appendix B

Parish Owned Units Conflicting with Engineering Recommendation G39/1

| STREET | UNIT NO | LOCATION | | | |
|------------------|------------|---|--|--|--|
| BROOK STREET | 2 | JUNC DUFFS HILL | | | |
| BROOK STREET | 3 | O/S NO 67 | | | |
| BROOK STREET | 4 | G39 O/S 33 | | | |
| BROOK STREET | 5 | O/S 16 | | | |
| FAIR GREEN | 6 | G39 NEXT TO DOWNS | | | |
| BROADWAY | 7 | G39 O/S 6 | | | |
| LION ROAD | 8 | O/S DOCTORS SURGERY | | | |
| LION ROAD | 9 | OPP 17 | | | |
| LION ROAD | 10 | O/S BLACK LION PUBLIC HOUSE | | | |
| LION ROAD | 11 | O/S BLACK HORSE PUBLIC HOUSE | | | |
| TYE GREEN | 12 | G39 OPP CHERRY TREE PUBLIC HOUSE | | | |
| TYE GREEN | 13 | G39 OPP 11 | | | |
| TYE GREEN | 14 | G39 O/S METHODIST CHURCH | | | |
| HUNTS HILL | 16 | G39 JUNCTION WITH DRAPERY COMMON ON EDF | | | |
| HUNTS HILL | 17 | G39 O/S SOCIAL CLUB ON EDF LV POLE 2 | | | |
| HUNTS HILL | 18 | OPPOSITE WEAVERS DRIVE | | | |
| SKATES HILL | 28 | O/S STAR VIEW | | | |
| NEW CUT | 33 | G39 O/S 7 | | | |
| GEORGE LANE | 35 | O/S 1 LODGE FARM ROAD | | | |
| ANGEL LANE | 50 | O/S 16 | | | |
| ANGEL LANE | 51 | G39 OPP 25 | | | |
| ANGEL LANE | 52 | O/S GROVE FARM | | | |
| FLAX LANE | 53 | G39 O/S HIGH BANK | | | |
| FLAX LANE | 54 | ON WALKWAY TO EGREMONT STREET | | | |
| BELLS LANE | 138 | O/S 3 | | | |
| BELLS LANE | 139 | G39 OPP 15 ON EDF POLE 52 | | | |
| BELLS LANE | 140 | G39 O/S SHANGRI LA | | | |
| BELLS LANE | 141 | G39 JUNC STANWAY CLOSE ON EDF POLE | | | |
| CHURCHGATE | 142 | JUNC OF PARK LANE | | | |
| CHURCHGATE | 143 | O/S CHURCH | | | |
| PARK LANE | 144 | G39 O/S PARKVIEW | | | |
| WINDMILL ROW | 145 | G39 O/S 6 | | | |
| WINDMILL ROW | 146 | G39 O/S 14 | | | |
| POST OFFICE LANE | 158 | FIRST LIGHT IN | | | |
| SKATES HILL | 159 | THIRD FROM A1092 | | | |
| SKATES HILL | 160 | SECOND FROM A1092 | | | |
| SKATES HILL | 161 | JUNC A1092 | | | |
| FLAX LANE | 162 | | | | |
| FLAX LANE | 176 | O/S MILLBANK | | | |

Appendix C – MBFU Units

| <u> Appendix C – MB</u> | 1 | | | | |
|-------------------------|------|---|--|--|--|
| | UNIT | 100471011 | | | |
| STREET | NO | LOCATION | | | |
| BROOK STREET | 2 | JUNC DUFFS HILL | | | |
| BROOK STREET | 3 | O/S NO 67 | | | |
| BROOK STREET | 4 | G39 O/S 33 | | | |
| BROOK STREET | 5 | O/S 16 | | | |
| FAIR GREEN | 6 | G39 NEXT TO DOWNS | | | |
| BROADWAY | 7 | G39 O/S 6 | | | |
| LION ROAD | 8 | O/S DOCTORS SURGERY | | | |
| LION ROAD | 9 | OPP 17 | | | |
| LION ROAD | 10 | O/S BLACK LION PUBLIC HOUSE | | | |
| LION ROAD | 11 | O/S BLACK HORSE PUBLIC HOUSE | | | |
| TYE GREEN | 12 | G39 OPP CHERRY TREE PUBLIC HOUSE | | | |
| TYE GREEN | 13 | G39 OPP 11 | | | |
| TYE GREEN | 14 | G39 O/S METHODIST CHURCH | | | |
| HUNTS HILL | 16 | G39 JUNCTION WITH DRAPERY COMMON ON EDF | | | |
| HUNTS HILL | 17 | G39 O/S SOCIAL CLUB ON EDF LV POLE 2 | | | |
| HUNTS HILL | 18 | OPPOSITE WEAVERS DRIVE | | | |
| EGREMONT STREET | 19 | OUTSIDE OLD GARAGE OPPOSITE NO.2 | | | |
| EGREMONT STREET | 20 | OPP ANGEL LANE | | | |
| EGREMONT STREET | 21 | OPP YE OLD COCK PUBLIC HOUSE | | | |
| EGREMONT STREET | 22 | OPP 34 | | | |
| EGREMONT STREET | 23 | JUNC GREYHOUND ROAD | | | |
| EGREMONT STREET | 24 | O/S 57 | | | |
| EGREMONT STREET | 25 | OPPOSITE GEORGE LANE | | | |
| EGREMONT STREET | 26 | O/S TYRE CENTRE OPPOSITE NEW CUT | | | |
| SKATES HILL | 27 | JUNC EGREMONT STREET | | | |
| SKATES HILL | 28 | O/S STAR VIEW | | | |
| SKATES HILL | 31 | ADJACENT ORCHARD WAY ENTRANCE | | | |
| ORCHARD WAY | 32 | O/S 4 | | | |
| NEW CUT | 33 | G39 O/S 7 | | | |
| HOLDSWORTH | 2.4 | 0/55 | | | |
| CLOSE | 34 | 0/55 | | | |
| GEORGE LANE | 35 | O/S 1 LODGE FARM ROAD | | | |
| GREYHOUND ROAD | 36 | OPP 3 | | | |
| GREYHOUND ROAD | 37 | 0/5 9 | | | |
| GREYHOUND ROAD | 38 | 0/5 24 | | | |
| GREYHOUND ROAD | 39 | O/S 19/20 | | | |
| ANGEL LANE | 50 | O/S 16 | | | |
| ANGEL LANE | 51 | G39 OPP 25 | | | |
| ANGEL LANE | 52 | O/S GROVE FARM | | | |
| FLAX LANE | 53 | G39 O/S HIGH BANK | | | |
| FLAX LANE | 54 | | | | |
| WEAVERS DRIVE | 55 | | | | |
| WEAVERS DRIVE | 56 | | | | |
| PANNELS CLOSE | 57 | | | | |
| PANNELS CLOSE | 58 | O/S 8 | | | |

| DRAPERY COMMON | 59 | O/S HOLLYDON | | | |
|-----------------|-----|--|--|--|--|
| HARPURS ROAD | 60 | FIRST FROM TYE GREEN | | | |
| HARPURS ROAD | 61 | O/S 3 | | | |
| SHEPHERDS LANE | 64 | SIDE OF SCHOOL | | | |
| CHESTNUT ROAD | 65 | FIRST FROM LION ROAD | | | |
| CHESTNUT ROAD | 66 | O/S 11 | | | |
| CHESTNUT ROAD | 67 | O/S 14 | | | |
| CHESTNUT ROAD | 68 | O/S 22 | | | |
| KINGS ROAD | 69 | O/S 96 | | | |
| KINGS ROAD | 70 | O/S 76 | | | |
| KINGS ROAD | 71 | O/S 60 | | | |
| KINGS ROAD | 72 | OPP 53 | | | |
| KINGS ROAD | 73 | SIDE OF 1 SECOND AVENUE | | | |
| KINGS ROAD | 74 | SIDE OF 2 FIRST AVENUE | | | |
| KINGS ROAD | 75 | O/S 42 | | | |
| KINGS ROAD | 76 | O/S 186 | | | |
| KINGS ROAD | 77 | O/S 176 | | | |
| KINGS ROAD | 78 | O/S 164 | | | |
| KINGS ROAD | 79 | O/S 116 | | | |
| KINGS ROAD | 80 | OPP 79 | | | |
| KINGS ROAD | 81 | OPP 34 | | | |
| KINGS ROAD | 82 | O/S 32 | | | |
| KINGS ROAD | 83 | O/S 24 | | | |
| KINGS ROAD | 84 | O/S 14 | | | |
| KINGS ROAD | 85 | O/S 5 | | | |
| KINGS ROAD | 86 | JUNC PARK LANE | | | |
| KINGS ROAD | 87 | ON FOOTPATH O/S NO.163 OPP NO.153 | | | |
| KINGS ROAD | 88 | O/S 135/137 | | | |
| KINGS ROAD | 89 | WALKWAY BESIDE 128 | | | |
| KINGS ROAD | 90 | ON FOOTPATH BETWEEN 70 AND 72 KINGS ROAD | | | |
| BRICES WAY | 91 | O/S 1 | | | |
| BRICES WAY | 92 | O/S 12 | | | |
| BRICES WAY | 93 | O/S 19 | | | |
| GOWERS END | 94 | OPP 2 | | | |
| GOWERS END | 95 | REAR OF 28 | | | |
| GOWERS END | 96 | O/S 9 | | | |
| THIRD AVENUE | 97 | SIDE OF 16 | | | |
| THIRD AVENUE | 98 | O/S 5 | | | |
| JAQUES CLOSE | 99 | O/S 4 | | | |
| JAQUES CLOSE | 100 | O/S 9 | | | |
| SECOND AVENUE | 101 | O/S 8 | | | |
| FIRST AVENUE | 102 | O/S 15 | | | |
| CAUSEWAY CLOSE | 103 | O/S 7 | | | |
| PARKLANDS CLOSE | 104 | O/S 9 | | | |
| SLADES CLOSE | 105 | O/S 19 | | | |
| SLADES CLOSE | 106 | ON WALKWAY REAR OF 13 | | | |
| THE PIPPINS | 107 | O/S SIDE OF 15 | | | |
| THE PIPPINS | 108 | ON FOOTPATH SIDE OF 7 | | | |

| THE PIPPINS | 109 | O/S 23 | | | |
|------------------|-----|--|--|--|--|
| THE PIPPINS | 110 | O/S 30 | | | |
| THE PIPPINS | 111 | OPP 14 | | | |
| THE PIPPINS | 112 | SIDE OF 17 | | | |
| FOURTH AVENUE | 118 | O/S 10 | | | |
| FOURTH AVENUE | 119 | O/S 56 | | | |
| FOURTH AVENUE | 120 | O/S 68 | | | |
| HARPURS ROAD | 121 | WALKWAY FROM FOURTH AVENUE TO KINGS ROAD | | | |
| FOURTH AVENUE | 122 | O/S 28 | | | |
| FOURTH AVENUE | 123 | O/S 18 | | | |
| SCHOOLFIELD | 124 | O/S 3/5 | | | |
| SCHOOLFIELD | 125 | O/S 19 | | | |
| SCHOOLFIELD | 126 | O/S 35 | | | |
| SCHOOLFIELD | 127 | O/S 39 | | | |
| SCHOOLFIELD | 128 | O/S 49 | | | |
| SCHOOLFIELD | 129 | O/S 56 | | | |
| SCHOOLFIELD | 130 | O/S 50 | | | |
| SCHOOLFIELD | 131 | O/S 28/30 | | | |
| HIGHBANK | 132 | (HIGHBANK) O/S 9 | | | |
| HIGHBANK | 133 | (HIGHBANK) SECOND COLUMN | | | |
| HIGHBANK | 134 | (HIGHBANK) O/S 17 | | | |
| HIGHBANK | 135 | (HIGHBANK) O/S 12 | | | |
| SCHOOLFIELD | 136 | BESIDE EASTERN ELECTRICITY SUB STATION | | | |
| FAIR GREEN | 137 | OPP POST OFFICE LANE | | | |
| BELLS LANE | 138 | O/S 3 | | | |
| BELLS LANE | 139 | G39 OPP 15 ON EDF POLE 52 | | | |
| BELLS LANE | 140 | G39 O/S SHANGRI LA | | | |
| BELLS LANE | 141 | G39 JUNC STANWAY CLOSE ON EDF POLE | | | |
| CHURCHGATE | 142 | JUNC OF PARK LANE | | | |
| CHURCHGATE | 143 | O/S CHURCH | | | |
| PARK LANE | 144 | G39 O/S PARKVIEW | | | |
| WINDMILL ROW | 145 | O/S 6 | | | |
| WINDMILL ROW | 146 | O/S 14 | | | |
| STANWAY CLOSE | 147 | FIRST FROM BELLS LANE | | | |
| STANWAY CLOSE | 148 | SIDE OF 6 | | | |
| STANWAY CLOSE | 149 | O/S 12 | | | |
| STANWAY CLOSE | 150 | O/S 20/22 | | | |
| CROWNFIELD ROAD | 151 | 1ST COLUMN ON THE LEFT | | | |
| CROWNFIELD ROAD | 152 | OPP WHITLANDS | | | |
| CROWNFIELD ROAD | 153 | OPP 5 | | | |
| CROWNFIELD ROAD | 154 | OPP KEBBLES | | | |
| CROWNFIELD ROAD | 155 | O/S 17 | | | |
| WHITLANDS | 156 | OFF CROWNFIELD ROAD O/S NO.9(MONROE) | | | |
| SPRING MEADOW | 157 | O/S 12 | | | |
| POST OFFICE LANE | 158 | FIRST LIGHT IN | | | |
| SKATES HILL | 159 | THIRD FROM A1092 | | | |
| SKATES HILL | 160 | SECOND FROM A1092 | | | |
| SKATES HILL | 161 | JUNC A1092 | | | |

| FLAX LANE | 162 | ON EEB POLE 162 2ND LIGHT IN ROAD | | | |
|-----------------|-----|--|--|--|--|
| HARPURS ROAD | 164 | S/O 5 ON PATH TO FOURTH AVE/KINGS ROAD | | | |
| THE PIPPINS | 165 | O/S 26 | | | |
| PATTICROFT | 166 | O/S NO.10 | | | |
| CHURCHGATE | 167 | OPP CHURCH ON GREEN | | | |
| CHURCHGATE | 168 | BY ENTRANCE TO PARK FARM | | | |
| CROWNFIELD ROAD | 173 | R/O 17 | | | |
| DRAPERY COMMON | 174 | O/S NEVILLE HOUSE | | | |
| DRAPERY COMMON | 175 | G39 O/S JRENICON | | | |
| FLAX LANE | 176 | O/S MILLBANK | | | |
| FLAX LANE | 177 | O/S SHERWOOD | | | |
| HUNTS HILL | 178 | O/S 41 (9004 CONTRACTOR INVENTORY) | | | |
| KEBBLES | 179 | ON FOOTPATH O/S 12 KEBBLES | | | |
| KINGS ROAD | 180 | ON FOOTPATH OPP 156 (9002 ON CONTRACTOR | | | |
| KINGS ROAD | 181 | HALFWAY ALONG FOOTPATH BETWEEN 63/65 AND | | | |
| HIGHBANK | 182 | BETWEEN 1 AND 18 HIGHBANK | | | |
| HIGHBANK | 183 | O/S 11 HIGHBANK | | | |
| HIGHBANK | 184 | O/S 11 | | | |
| TYE GREEN | 185 | O/S PLOUGH HOUSE BUNGALOW | | | |
| PANNELS CLOSE | 186 | O/S 14 | | | |
| PATTICROFT | 187 | O/S 17 | | | |
| HUNTS HILL | 188 | O/S NO'S 1 AND 3 | | | |
| TYE GREEN | 189 | O/S NO. 29 | | | |

Appendix D

'Stela' Lantern (LED White Light)



Appendix E5.1 Costs (G39/1) Based on existing lighting switching off between midnight and 05:30

Appendix F - 5.2 Lantern Replacement with LED to conform to EU requirements

No allowance has been made for annual energy increases.

Appendix G - 6.0 Energy Savings Utilising Intelligent Lighting System

Retaining Existing Equipment (Status Quo) and switch off between midnight and 05:30

| | Watts | Circuit Watts | Quantity | Energy Cost Tariff 'X' (4034 hours) | Energy Cost Part night lighting with 'Trimming' (2106 hours) | Energy saving per annum |
|-------|-------|------------------|----------|---|--|----------------------------------|
| SON | 70 | 84 | 33 | £ 1,157.79 | £ 604.44 | £ 553.35 |
| SON | 50 | 62 | 21 | £ 543.81 | £ 283.90 | £ 259.91 |
| SON | 100 | 114 | 3 | £ 142.84 | £ 74.57 | £ 68.27 |
| MBFU | 80 | 94 | 101 | £ 3,965.38 | £ 2,070.18 | £ 1,895.20 |
| PLT | 42 | 47 | 3 | £ 58.89 | £ 30.75 | £ 28.15 |
| LED | 18 | 22 | 2 | £ 18.38 | £ 9.59 | £ 8.78 |
| TOTAL | | | 163 | £5,887.09 | £3,073.43 | £ 2,813.66 |

The payback period for installing the ILS and part night lighting between midnight and 05:30 is 2.6 years.

Replacement of lanterns to LED and switch off between midnight and 05:30

| Lamp type | Watts | Circuit Watts | Quantity | Energy Cost Part night lighting with 'Trimming' (2106 hours) | Energy saving per annum |
|--------------|-------|------------------|----------|--|----------------------------------|
| LED | 18 | 22 | 163 | £ 781.93 | |
| TOTAL | | | 163 | £ 781.93 | £5,105.16 |

Where LED units are installed and part night settings implemented, the annual energy saving is £5,105.16 per annum. If energy prices rise, this figure will increase accordingly.