

LED Replacement Programme

Cromhall Parish





Who are we?

Ryan Brown
Senior Project Engineer (Lighting)

Andrew Porter
Street Lighting Manager

James Hare LED Technician



Introduction

South Gloucestershire Council (SGC) needs to make significant revenue savings and reductions in CO₂ emissions over the coming years.

LED lighting, due its reduced energy consumption and maintenance requirements, plays a crucial role in contributing to these savings.



What are we doing?

10yr project – 2014 until 2024 30,000 lanterns - 3,000 a year

From this:







Annual lantern evaluation & tender



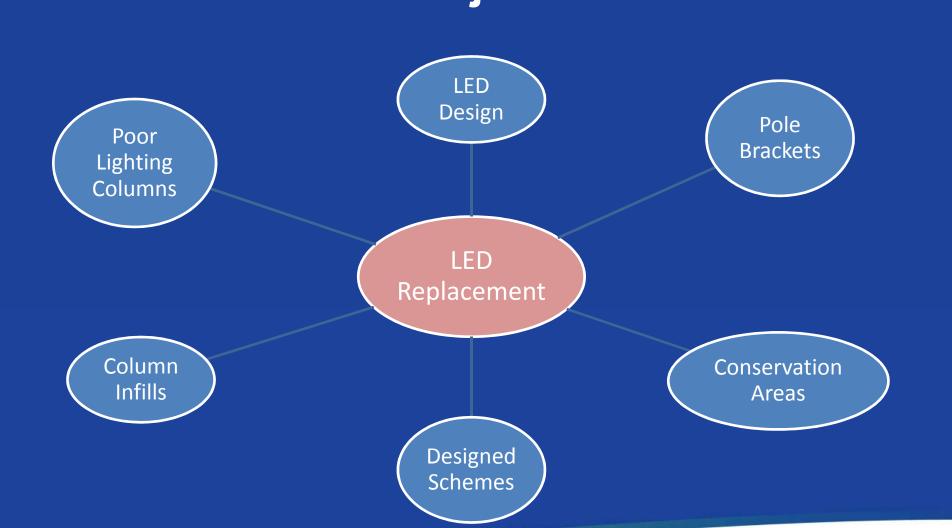
What is the LED Replacement?

- Like for like replacement
- Design each road aiming for British Standard
- All-night lighting with dimming:

Time Period	Light Output
35 lux to 11:00 PM GMT	75%
11:00 PM GMT to 06.00 AM GMT	50%
06:00 AM GMT to 18 lux	75%



More than just LED....





The Good, the Bad and the Ugly...

Pros

- Reduced maintenance
- Dimming and trimming
- Reduced 'sky-glow'
- Up to 70% reduction in energy & CO₂ consumption
- Direct light source

Cons

- Different appearance
- Large capital investment





Pictures taken from Charfield installation.



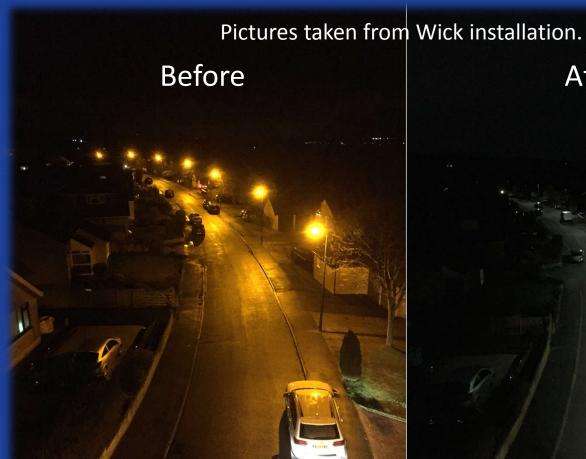
Before



After













Pictures taken from Westerleigh installation.



Order of Works

1 - A Roads

Biggest Wattage = Biggest Savings
Highly Visible Roads

2 – Parish by Parish

Follow Maintenance Regime

Reduces Revenue Costs



Changed so far...

Trial – July '13

Charfield

Year 1 – 14/15

- A38 (Falfield to Filton)
- Refuge Beacons
- Hanham
- Industrial estates
- A4174

Year 2 – 15/16

- A420
- A432
- A403
- A4018
- A431
- Cribbs Causeway
- Bradley Stoke (part 1)

Year 3 – 16/17

- Bradley Stoke (part 2)
- Oldland Parish
- Siston Parish
- Wick and Abson Parish

Year 4 – 17/18

- Woodstock
- Kings Chase
- Staple Hill
- Rodway

Year 5 – 18/19

- Bitton Parish
- Emersons Green Parish
- Westerleigh Parish

Year 6 - 19/20

- Pucklechurch Parish
- Downend & Bromley Heath Parish
- Winterbourne Parish
- Frampton Cotterell Parish





Areas for Year 7 – 2020/21

Filton

Tytherington

18. Dyrham & Hinton

Pilning & Severn 2.

10. Wickwar

19. Doynton

Beach

11. Iron Acton

20. Cold Ashton

3. Olveston

12. Hawkesbury

21. Marshfield

Alveston

13. Horton

Oldbury-upon-Severn 14. Little Sodbury 5.

Rockhampton 6.

15. Badminton

7. Falfield

16. Acton Turville

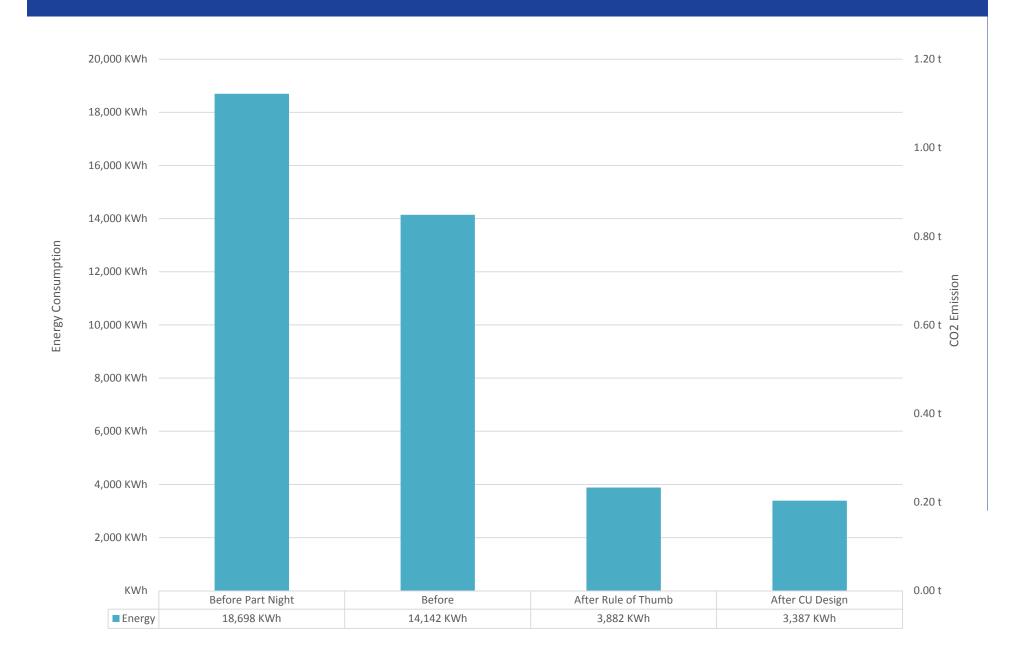
Cromhall 8.

17. Tormarton





What will it save in Cromhall?



When is it happening?

LED Installation Beginning in Aug / Sep 2020.

Lighting column infills and poor column works beforehand

May cause minor disruption.





Key Points

- Revenue savings
- Avg. 3,000 lanterns per year
- Up to 70% energy savings
- Like for like replacement
- 'All Night' lighting
- Direct light source
- Starting Aug / Sep 2020





Thank you for listening





Contact Us

ryan.brown@southglos.gov.uk
01454 863512

Or

andrew.porter@southglos.gov.uk

Or

www.southglos.gov.uk/LED

