

## St Ives Business Improvement District

### SB4 - Street Lighting & Signal System - Service Baseline

Responsible Authority: **Cornwall Council**

Head of Service: **Glyn Williams** (Head of Integrated Public Transport and Technology)

Responsible Officer: **Amy Looker** (Highways Technology Manager)

Service Provided, Number of Staff & Equipment	<p>The Highway Electrical Service covers the whole county and manages the new Integrated Technologies Contract (ITC) for the installation and maintenance of lighting services, intelligent transport Solutions (ITS) &amp; signals, hydro generation turbine, open space CCTV and closed landfill site services. This baseline focuses specifically on countywide lighting, signal and some ITS services:</p> <p><b>Lighting</b></p> <ul style="list-style-type: none"><li>• Street lighting – 54,085 units</li><li>• Illuminated traffic Signs – 4,482</li><li>• Illuminated traffic bollards – 2,332</li><li>• School crossing lights – 130</li><li>• Pedestrian crossing beacons – 80</li><li>• Belisha beacons – 119</li></ul> <p><b>Signals &amp; ITS</b></p> <ul style="list-style-type: none"><li>• Traffic signal junctions – 84</li><li>• Pedestrian crossings – 105</li><li>• Cattle crossings – 3</li><li>• Wig Wag Signal – 4</li><li>• Rising Bollards – 10 sites</li><li>• Variable Message Signs (VMS) – 30 signs</li><li>• Vehicle Activated Signs (VAS) – 93 signs (incl. 4 mobile)</li><li>• Variable Speed Limit Signs (VSL) – 75 signs</li><li>• Real Time Passenger Information (RTPI) Displays – 262 signs</li><li>• Highway Pump Stations (Flood Control) – 4 sites (incl. St Ives)</li><li>• Number of staff = 9 FTE, part of Highway Electrical Service across the whole of the county &amp; not just BID area</li></ul>
Specification	<p>The Integrated Technologies Contracts (ITC) was tendered in accordance with EU procurement rules. Works undertaken is completed in accordance with the specification and conditions of contract for NEC3 Term Service Contract.</p> <ul style="list-style-type: none"><li>• Cornwall Council ITC Term Service Contract. Term 8 years + 4 year extension + 4 year extension</li></ul> <p>Maintenance strategies are contained in a committee approved maintenance plan detailing planned maintenance frequencies for each asset type.</p>

	<p>Planned maintenance, component replacement, emergency attendance to make safe and non-performance rebates in accordance with the specification.</p> <p>The contract includes: Emergency attendance to situations posing an imminent potential risk of major injury (inclusive of Road Traffic Accidents) is responded to within 2hrs.</p> <p>Target fault repair times vary dependant on infrastructure type and category of task. Normal/standard defects have a target response and repair time of no more than 5 days for lighting faults and 12 hours for traffic signal and ITS faults.</p> <p>The Integrated Technologies Maintenance Plan sets out the full specification on cyclical maintenance requirements but in summary:</p> <p><b>Lighting Systems:</b> Optical inspection and cleaning – 3 yearly Visual mechanical, structural and electrical inspection – 3 yearly Electrical safety testing – 6 yearly Routine maintenance – 28 calendar days Programmed works – 28 calendar days</p> <p>Lanterns are replaced in 28 working days. Deteriorated columns are replaced as part of a replacement programme and risk assessment.</p> <p><b>Traffic Signal &amp; ITS Systems:</b> Optical inspection and cleaning – 12 monthly Visual mechanical, structural and electrical inspection – 12 monthly Electrical safety testing – 6 yearly Operational inspection – 6 monthly Routine maintenance – 28 calendar days Programmed works – 28 calendar days</p> <p>A £14m lighting invest to save project has been implemented for Cornwall Council owned and maintained lighting assets throughout the county which took place between 2009 and 2012.</p> <p>Cornwall Council managed street lights have been replaced with white light units with an integrated dynamic control system installed. This will improve the environmental performance by removing all of the upward light spillage and allow the community to influence the lightings operational profile allow dimming or even switch off dependant on local influences.</p>
Performance Measure	<p>Future lighting installation and replacement specifications will utilise LED technology combined with a compatible dynamic control system to further reduce energy consumption and contribute to Cornwall Council’s carbon management commitments.</p> <p>Other advantages to LED lighting technology include the potential extension of maintenance frequencies which potentially reduces operational costs</p>

	<p>from less frequent maintenance visits and in turn further reducing carbon usage associated with the ITC contract.</p> <p>Rising bollards and highway pump stations are assets that attract a significant number of enquiries and are included within the team’s scope. Rising bollards are permanent bollards installed within the highway that lower and rise dependant on the set operating parameters. Rising bollards assist in the enforcement of legal traffic regulation orders to help manage traffic within set areas.</p> <p>Highway pump stations are managed and maintained by the Highways Electrical staff. These pump stations are typically installed as part of flood defence schemes to assist the local drainage systems during times of intense rainfall.</p> <p><b>Lighting &amp; Illuminated Signs</b>  3 yearly visual inspection &amp; cleaning with electrical testing every 6 years, as programmed.</p> <p>Night time inspections will take place for all lighting infrastructure awaiting conversion to the new specification. These inspections will be undertaken in line with the following schedule:</p> <ul style="list-style-type: none"> <li>- May to August (Summer) = every 4 weeks</li> <li>- September to April (Winter) = every 2 weeks</li> <li>- Emergency Response = 2 hours</li> <li>- Urgent Response = 24 hours</li> <li>- Normal repair = 5 days</li> </ul> <p><b>Traffic Signals, Crossings and other ITS systems</b>  6 monthly operational inspection and cleaning, visual inspection with electrical testing every 12 months and electrical safety testing every 6 years as programmed.</p> <p>Fault reporting at traffic signal sites and highway pump stations are carried out by electronic remote monitoring systems, reporting defects direct to the contractor.</p> <ul style="list-style-type: none"> <li>- Emergency Response = 2 hours</li> <li>- Urgent Response = 2 hours</li> <li>- Normal Repair = 12 hours</li> </ul>
Boundary Area	BID Area – St Ives