



The total control system for street lighting

Private Developments Section 38 & Section 278 Guide

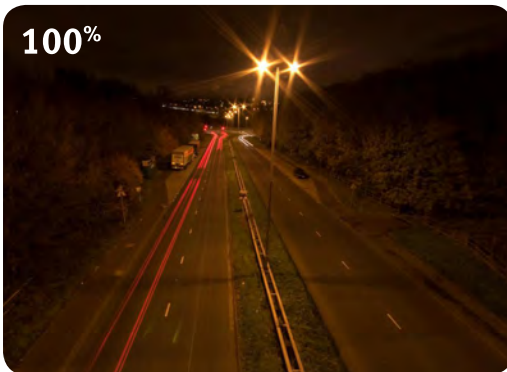


This guide is to be used as a tool to assist Private Developers with LeafNut installations according to the agreements set out in Section 38 and Section 278 of the Highways Act 1980.

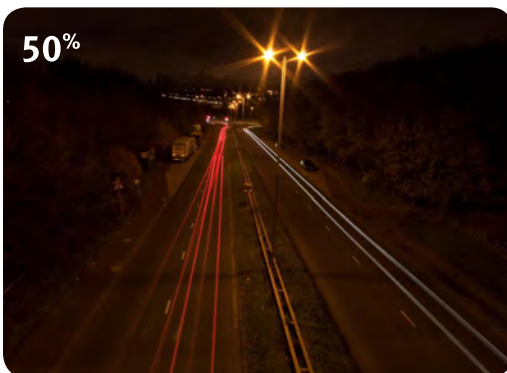
For more detailed information on these sections please consult the Highways Act.

The guide will explain the LeafNut System and how it will operate in relation to the Councils existing installations.

It will also outline what is required by the developer with regards to the installation prior to adoption.



LeafNut gives Local Authorities the capability to control and dim their Lighting Inventory via a unique and secured internet site.



Using a combination of GPRS and Radio Frequency the system reports on any maintenance that is required on site by simply logging on to the system or via an email every morning.

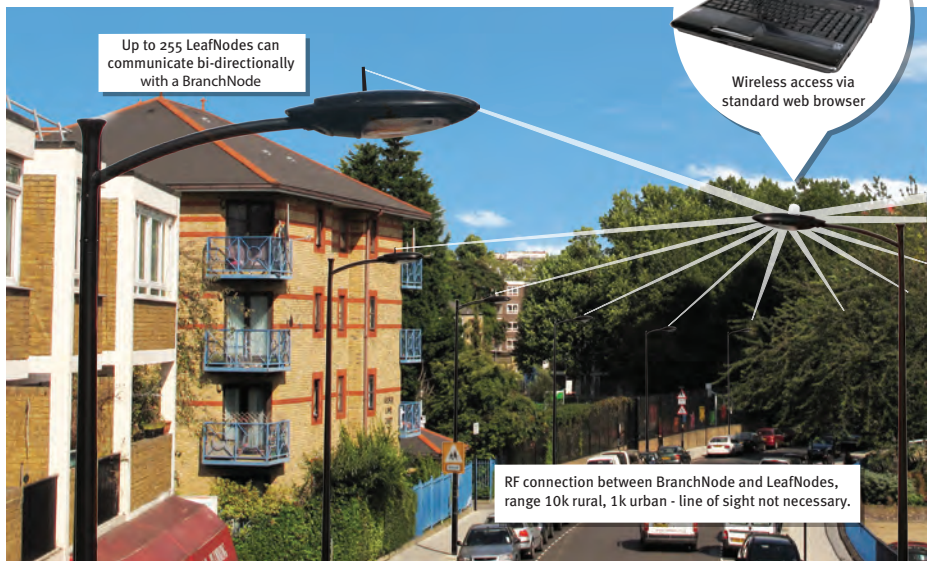
The picture below shows the LeafNut system in action.

The BranchNode ideally should be installed central to the rest of the LeafNodes on the tallest column possible and away from any obstructions. EVERY new installation requires a new BranchNode.

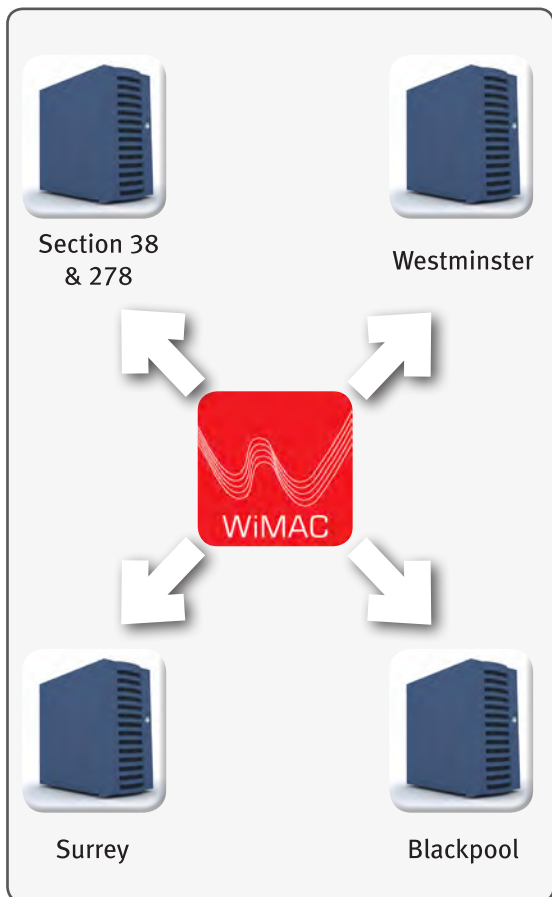
The BranchNode is the main controller unit. It tells the LeafNodes when to turn on and off and also when to dim. This is all done via Radio Frequency (868 MHz). LeafNodes also notify the BranchNode of any faults they experience during operation. The BranchNode stores this information and transfers all the data back to the servers between 0200 and 0300 every morning via GPRS Internet.

Local Authorities can access this information through their unique website (Trunk Node) and also program new Switching Profiles for the LeafNodes.

Prior to adoption by the Council all the Nodes will be managed by LeafNut Support.



Westbourne Green, London, UK.



Once the LeafNut system has been installed and the information passed to LeafNut Support, the Nodes will be hosted on our Section 38 & 278 Trunk until they are ready to be adopted by the Local Authority, at which point they will be transferred over to their own individual Trunk.

The servers are constantly monitored by WiMAC, developers of the LeafNut software. Each server can hold several Trunks but one Trunk can potentially hold limitless BranchNodes. As of September 2011 there are 50 LeafNut Trunks across the World.

The Process:

Contact LeafNut Support about the upcoming installation

Record all LeafNode and BranchNode IDs along with their locations (Street, Column Number etc)

Install LeafNodes and BranchNodes on site

Pass all data on to LeafNut Support

Data added to Section 38 & 278 Trunk by LeafNut Support

Installation to be managed on the Trunk by LeafNut Support

Any on site maintenance to be carried out by original contractor as agreed in SLA

Adoption of the site by the Local Authority

All LeafNodes and BranchNodes to be transferred to Local Authorities Trunk

System to be managed by the Local Authority

LeafNut Installation Sheet

Column #	Street Name & Road Code (NSGID)	Node ID	Unique ID Number	Lamp Wattage / Type	Ballast Type	Longitude / Eastings	Latitude / Northings	Lantern Lit?
LC37	Church Street 17426658	 12345678	142332	70w Cosmo	HPIDD-70- 240-B-CC-WM	53.777778	-1.572222	Yes

THIS IS THE INSTALLATION SHEET THAT WILL BE PROVIDED FOR ANY NEW SITE.

IT IS CRUCIAL THAT ALL INFORMATION IS RECORDED AS ACCURATELY AND AS CLEARLY AS POSSIBLE. IF THE DATA ENTERED DOES NOT MATCH UP ON SITE IT WILL LEAD TO FURTHER SITE VISITS BY THE CONTRACTOR.

EXPLANATIONS OF EACH COLUMN ARE ON THE FOLLOWING PAGE.

Installation Sheet Explained

	Where do you get it from?	Why do you need it?	What happens if it is wrong?
Column Number	Existing or new plans for installation	So the LeafNut system can be accurate and match site	Maintenance team will be sent to the wrong column
Street Name & Road Code (NSGID)	Obtained from the local Council and site plans	So it ties into the Council's Asset Management System	If NSGID can not be obtained leave it blank—as it is the Council's decision
Node ID	The 8 digit number on the tear-off label on the bottom of the LeafNode	LeafNut works on number association of the LeafNode ID and BranchNode ID	There will be no communication and the column will day burn
Unique ID Number	A number or ID that is unique to the specific column on the development	To allow LeafNut Support to differentiate between installations	It may lead to confusion of sites with same street names and column numbers
Lamp Wattage/Type	The lamp description/part code	Needs to be input on the system for UMSUG logging	Data sent to Elexon may be inaccurate
Ballast Type	Typically highlighted in a box near the Harvard logo on the ballast label	Needs to be input on the system for UMSUG logging	All WiMAC enabled ballasts are self identifying and will update on the system automatically
Longitude & Latitude / Eastings & Northings	Obtained from Google Maps, a GPS Unit, WiMAC Handheld or the Council	If the Local Authority is using mapping with LeafNut	LeafNodes will show the wrong place on the Mapping Tool
Is the Lantern Lit?	Checking before you leave site	Default operation before communication is to day burn	If it is not day burning there is a problem with the power in the lantern

Final Check List

Section 38 & Section 278 LeafNut Installation



- ☐ Notified LeafNut Support of upcoming project
- ☐ Confirmed the Service Level Agreement (SLA) with Harvard Engineering
- ☐ Have had necessary training (if required) and/or understand the 'do's and do not's' of installing LeafNut
- ☐ Have passed any site plans on to LeafNut Support for consultation on BranchNode location
- ☐ Installed the gear on site
- ☐ Accurately recorded all LeafNode/ BranchNode IDs along with their individual locations on the Installation Sheet provided
- ☐ Checked that once all work is complete that all columns are day burning
- ☐ Passed all data on the Installation Sheet to LeafNut Support



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