



20W LED PIR Downlighter wall mounted at 2m above FGL over doors



OPA FLUSH 11W LED ceiling mounted flush bulkhead light Warm White - 3000K - 1122 lm(N)



Indicates 43707 Dylan LED post light Uses 36no 0.06w leds. Height 750mm Length 1100mm, width 120mm. 59 Lumens output with a single 2w natural light led. Part L compliant with motion sensor. These lights are 'Bat friendly'.



Indicates 9550SS LED wall/fence mounted downlighter Class 1 150mm high, 140mm protrusion built in motion sensor. Stainless steel. Runs with 36no 0.06w leds. These lights are 'Bat friendly'.

LIGHTING DESIGN REQUIREMENTS

The site at present has no major external lighting due to the rural nature of its location. It is proposed to carry a minimal lighting theme through the development ensuring safe access to all pedestrians; this would be to continue the character of lighting suitable for a rural location and therefore reduce the impact on the surrounding areas. It is likely that access points and pedestrian pathways within the development will implement external lights to the face of the building; however, these will be of a low-level design with PIR/movement sensors to ensure minimum impact/light pollution. Established and proposed planting belts around and within the development would assist in screening the additional light from neighbouring areas, once again reducing any potential impact. The lighting design of this site should be carried out by a competent person governed by the Institution of Lighting Professionals. It is recommended that the street lighting design proposals for this site shall be designed in accordance with BSS589-1:2020 & BS EN 13201-2:2015. Institution of Lighting Professionals Guidance Notes for the Reduction of Obtrusive Light (GN01: 2021) should be adhered to. This will ensure that lighting designs produced are suitable and sensitive to their surroundings. New lighting in accordance with Guidance Note 08/18 - Bats & Artificial Lighting in the UK - Bat Conservation Trust & Institute of Lighting Professionals. New external lighting/security lighting shall have controlled splays. In addition, motion sensing/timers shall be used in the provision of external lighting.

Environmental Zone

E2 Low District Brightness. Sparsely inhabited rural areas, village or relatively dark outer suburban location

INTELLIGENT LIGHTING DETAILS

The integrated intelligent lighting will be controlled by 'Smart Home' technology controlling security, lighting, climate control, cameras and domestic devices - wireless technology controlled from a central management system adjusting in response to weather, circumstance and individual need. All internal lighting to be low energy LED. LED 'strips' to be used in all habitable rooms to provide 'indirect light'. All internal and external lighting will be automatically switched off or dimmed by movement detectors. Lighting will be directed downwards wherever possible to illuminate its target. If there is no alternative to up lighting, then the use of shields and baffles will help reduce light spill to a minimum.

FIXED EXTERNAL LIGHTING

Install low energy light fittings that only take lamps having a luminous efficiency better than 80 lumens per circuit watt. External light fittings to have both the following:
 - Automatic controls which switch luminaires off in response to daylight
 - If luminous efficacy is 75 light source lumens or less automatic controls which switch luminaires off after the area lit becomes unoccupied, if luminous efficacy is greater than 75 light source lumens, manual control can be installed.
 Dwelling primary energy rate and dwelling emission rate calculations to account for the efficacy of lamps installed in the fixed lighting locations.

NOTES

All JDA issued drawings are to be read in conjunction with all relevant project drawings and specifications. Do NOT scale from this drawing or any other prepared by JDA in connection with this project. Use figured dimensions only. All levels and dimensions to be checked on site. All level and dimensional discrepancies are to be brought to the immediate attention of JDA. This drawing is copyright and may not be altered, traced, copied, photographed or used for any purpose other than for which it has been issued without written permission of the copyright holder. Responsibility cannot be accepted for alteration and/or deviation from this design without prior acknowledgement of JDA. Copyright retained in accordance with the copyright design and patents act 1988. This drawing may only be used for the client and location specified in the title block. It may not be copied or disclosed to any other third party without prior written consent from JDA. The Contractor is to check all dimensions on site and report any discrepancies PRIOR TO commencing work. All details shown on this drawing are based upon typical site conditions related to the area. No responsibility can be accepted for abnormal conditions unless they have been reported in detail so that design amendments may be considered. All relevant dimensions and levels to be ascertained or checked and verified on site before specific areas of work are commenced. All works and materials are to be in full accordance with current British Standards, Building Regulations, Agreement Certificates and Manufacturers printed instructions. All Building Regulations inspections are to be carried out at the appropriate stages of work. This drawing is to be read in conjunction with clients specification/employers requirements and structural engineers design.

GENERAL

No work to commence until all statutory approvals have been obtained. All dimensions are to be checked on site by contractor prior to the commencement of work. Drawings have been prepared solely for the procurement of statutory approvals. All dimensions are in millimetres. All levels shown are in metres. No work is to commence on site until all structural calculations have been approved on site by the Building Control authority. Any alterations to the design are to be formally agreed with the Local Authority. Exact boundary positions are to be determined by reference to the deeds to the property. Entire structure is to be built within the legal boundaries of the site. Any encroachments over any boundaries are to be formally agreed with adjoining property owners.

All new external windows and doors within the dwelling to meet the PAS 24 Security Standard for controlled fittings. The main entrance door into the dwelling to be fitted with a door chain or limiter and door viewer such as peephole, glazed screen or door-entry system. Any letterbox within the door to have a maximum size of 260mm x 40mm and be fitted with a secure flat that meets the Door and Hardware Federation (DHF) Standard 008:2012.

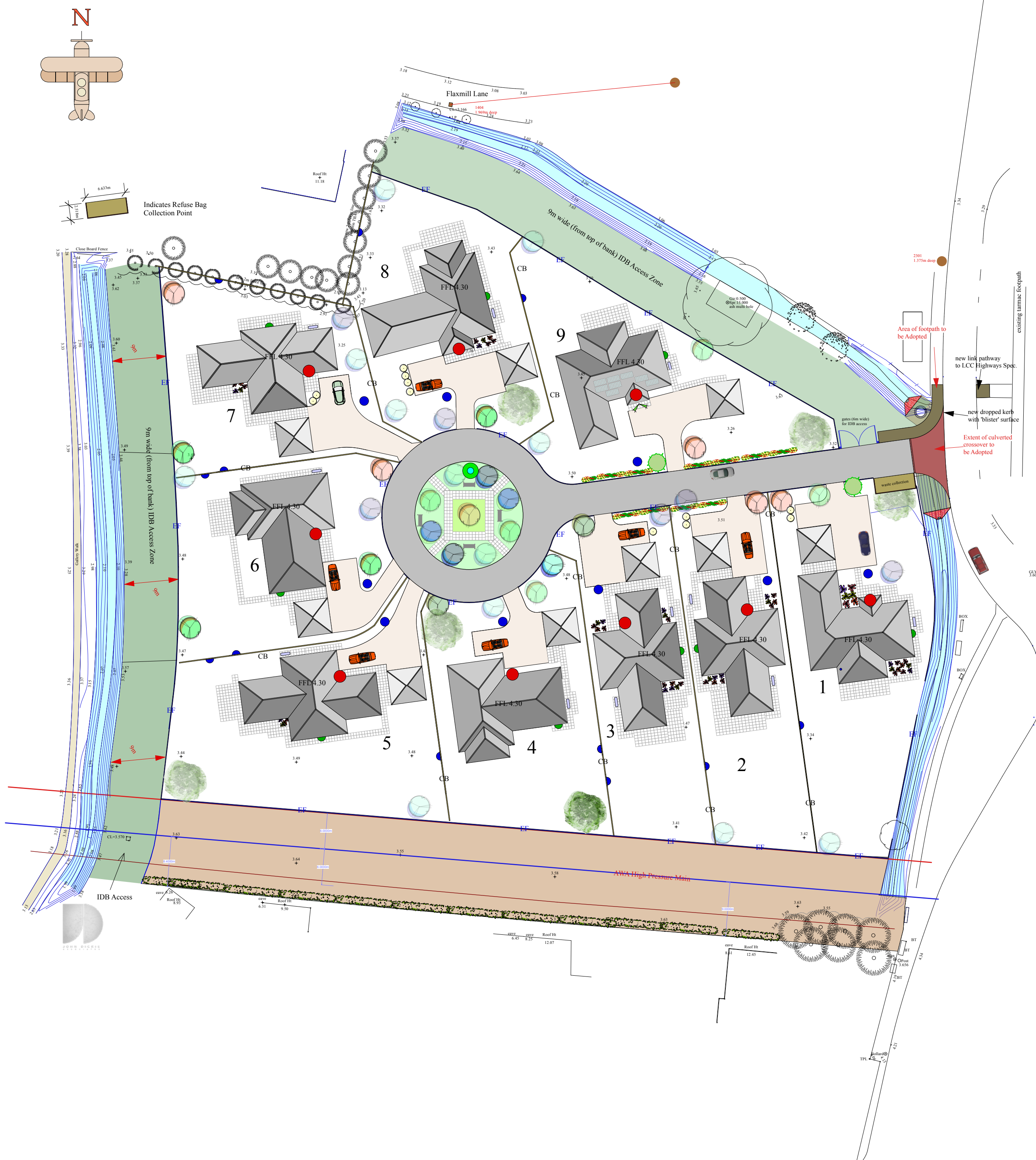
Requirement R1 is to provide the in-building physical infrastructure so that, in future, copper or fibre-optic cables or wireless devices capable of delivering broadband speeds greater than 30 MPs can be installed. A suitable position for at least one network termination point will be identified for each dwelling. Suitable ducting to be provided to connect all such network termination points to an appropriate access point.

MITIGATION MEASURES

During Construction Mitigation of the effects of the lighting installation during construction phase will include the following:
 During construction, specifying working hours, use of lighting, location of temporary floodlights in the construction compound and agreeing these with the local council. Lighting to be switched off when not required specifically for construction activities or required health and safety or security. Adhere to best practice measures as recommended by the Institution of Lighting Professionals (I.L.P), Health & Safety Executive (HSE) and CIE (International Commission on Illumination) guidance. Lighting solutions will be selected to reduce light pollution. Specifically, designed luminaires will be selected to minimise upward spread of light. The optics in the luminaires will control the distribution of light to avoid overspill, sky glow and glare. Glare will be kept to a minimum by ensuring the main beam angle of all lights directed towards any potential observer is not more than 70°. Higher mounting heights allow lower main beam angles, which can assist in reducing glare. Restrict lighting to the task area using horizontal cut-off optics and zero tilts. Operate curfew and minimise the duration of any lighting (switch off or part-night dimming).



Borough Street Lights by Candela UK



John Dickie Associates
 Chartered Building Engineers
 5, Victor Way, Cherry Holt Road,
 Bourne, Lincs PE10 9PT
 Tel 07778 297733 jda@ndirect.co.uk

Erection of Nine Dwellings on Land off
 Crossgate Lane, Pinchbeck, Spalding
 PE11 3XW

Drawing Title : Site Layout with Lighting

Client : Melbourne Properties Limited

Date February 2025

Scales 1 to 500 at A3 Portrait

Drawing No JDA/2025/775/SITE/LIGHTING.001

