

TECHNICAL NOTE

Job Name: Land Parcels Adjacent to Worsell Drive, Copthorne
Job No: 24205
Note No: 24205/TN1300 – Rev B
Date: November 2025
Prepared By: IA
Subject: Lighting Design

Introduction

This note summarises the lighting classification process for the following two categories of streets within the Land Parcels Adjacent to Worsell Drive. The two categories for the roads within the proposed works are:

- Public access roads – Roads to be adopted by West Sussex County Council (WSCC)
- Private access roads – Roads not to be adopted by WSCC.

Lighting Class Selection – Public Access Roads

The lighting classification selection for the public access roads is required to achieve the correct level of lighting for each of the roads. Each of the lighting classes were considered (M, C and P):

- M – intended for drivers of motorised vehicles on traffic routes, and in some countries also in residential roads, allowing moderate to high driving speeds
- C – intended for use in conflict areas on traffic routes where the composition is mainly motorised. Conflict areas occur wherever vehicles streams intersect each other or run into areas frequented by pedestrians, cyclists or other road users.
- P – Intended predominantly for pedestrians and cyclists for use on footways and cycleways, and drivers of motorised vehicles at low speeds on residential road, shoulder or parking lanes, and other road areas lying separately or along a carriageway of a traffic route or a residential road, etc.

The lighting classification P was selected for the works due to the characteristics of the streets

Lighting Weighting Values – Public Access Roads

The lighting class is calculated using the weighting values taken from Table 4, PD CEN/TR 13201-1:2014

PD CEN/TR
13201-1:2014 (E)

The parameters used for the calculations are provided in **Table 1**.

DOCUMENT ISSUE RECORD

Technical Note No	Rev	Date	Prepared	Checked	Reviewed (Discipline Lead)	Approved (Project Director)
24205/TN1300	-	22/01/25	LG	IA	PK	PK
24205/TN1300	P01	20/11/25	LG	IA	PK	PK

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Table 1: Lighting Classification Parameters

Parameter	Classification	V_w	Chosen Classifications	Chosen V_w
Travel Speed	Low	1	Low	1
	Very low (walking speed)	0		
Use Intensity	Busy	1	Quiet	-1
	Normal	0		
	Quiet	-1		
Traffic Composition	Pedestrian, cyclist and motorised traffic	2	Pedestrian, cyclist and motorised traffic	2
	Pedestrians and motorised traffic	1		
	Pedestrians and cyclists only	1		
	Pedestrians only	0		
	Cyclists only	0		
Parked Vehicles	Present	1	Present	1
	Not present	0		
Ambient Luminosity	High	1	Low	-1
	Moderate	0		
	Low	-1		
Facial Recognition	Necessary	Additional requirements	Not Necessary	No additional requirements
	Not Necessary	No additional requirements		
	V_{ws}			2
$P = 6 - V_{ws}$	Therefore:			P4

Decision Methodology – Public Access Roads

Travel Speed

All roads within the proposed works are classified as **Low** travel speed as they are below the 40km/h (24.9mph) threshold set out in Table 4, PD CEN/TR 13201-1:2014

Use Intensity

The roads within the proposed works application boundary are considered **Quiet** according to Table A.5, BS 5489-1:2020 as they fit the description “traffic flows refer to areas where the traffic usage is of a level equivalent to a residential road and mainly associated with the adjacent properties or properties on other equivalent roads accessed from this road.”

Traffic Composition

Each of the routes will be used by **pedestrians, cyclists and motorised traffic**.

Parking Vehicles

Parked vehicles are considered **Present** as there are parking bays located in various locations in the within the proposed works application boundary, and it is assumed that residents may use the carriageways for extra parking.

References

CEN/TR 13201-1:2014 (E)

Table A.5, Note 6, BS 5489-1:2020

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Ambient Luminosity

The site Environmental Zone is classified using Table 2, GN01-21 as E2 due to the characteristic 'low district brightness areas' in 'rural, small village or relatively dark urban locations. Therefore, the ambient luminosity is considered **Low**.

Facial Recognition

Facial recognition is not necessary.

Lighting Specification

All lighting columns are to be in accordance with WSCC-SD1-1400-031.

Hours of Use

75% - 20.00hrs to 23.00hrs and 50% – 23:00hrs to 6:00hrs

Lighting Class Selection – Private Access Roads

As the private access roads will not be adopted by WSCC we have allowed for low level lighting through the use of lighting bollards in areas of low lighting (such as car parking bays and along footpaths).

Consideration of other developed areas

Due to other developed areas near the proposed works, it was determined that it be best to follow the lighting classifications used within those developments, which use the lighting classification P5. Therefore, Stantec's lighting design will reflect the use of the P5 lighting classification, though our independent opinion states that the lighting classification should be P4.

Conclusion

The lighting classifications for the areas discussed in this note are summarised in **Table 4**.

Table 4: Lighting Classification Summary

Area	Lighting Classification
Residential Streets (Stantec)	P
Residential Streets (Actual)	P5

Guidance
Notes for the
Reduction of
Obtrusive Light
GN01-21.
Institution of
Lighting
Professionals