



Ross Consulting

Solutions in Arboriculture and Landscape Management

CLIENT - Zoe Mitchell and Wayne Newman

SITE - Land To The Rear Of 82 St Johns Road, Hedge End, Southampton, SO30 4DF

PROJECT - Landscape and Ecological Enhancement Planning Condition Report

REPORT DATE - 22nd October 2024 Rev A 09/01/25 Rev B 17.01.25

COMPILED BY - William Ross

William Ross, Tech Cert (Arbor A), Tech Arbor A Hnd(rm), Nd(np)
1 Appleton Close, Over Wallop, Stockbridge, Hants, SO20 8PA
TEL: 01264 781134 MOBILE: 07831614706 EMAIL: willross@rossconsultingalms.co.uk
www.rossconsultingalms.co.uk

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APPENDICES

Appendix One – Landscape Plan

Appendix Two – Ecological Enhancement Plan

Appendix Three – Ecological Enhancement Specifications

Appendix Four – Lighting Plan

Revisions

Rev A – Addresses the points raised by the Hampshire Ecology Team

6.3 Bird Boxes – Relocation of integral swift brick to North East elevation a minimum of 5m above ground level.

6.8 Lighting – Replacement of wall lighting with low-impact lighting bollards of 1 lux.

Rev B – Addresses the points raised by the EBC Landscape Team

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1.0 INSTRUCTION

1.1 Received From – Phil Laurenson on behalf of Zoe Mitchell and Wayne Newman .

1.2 Purpose – To discharge condition 6 of the Eastleigh Borough Council planning permission **Ref** F/24/97314 **Decision Date** 01.08.24 Erection of a four-bedroom bungalow with associated parking, storage, and amenity space. Land To The Rear Of 82 St Johns Road, Hedge End, Southampton, SO30 4DF

2.0 INTRODUCTION

2.1 Background – Planning Permission granted as per 1.2. Condition 6 refers to a landscape scheme which also relate to **Conditions 14** – Ecology Enhancements & **15** – Landscape Maintenance and Management in regard to practical implementation of the scheme and on-going maintenance to include replacement of losses in the first five years following implementation of the scheme.

2.2 Associated Reports – The reports listed below have recommendations some of which are included in this report: Planning Permission granted as per 1.2. Condition 8 refers to a landscape scheme which also relates to:

- Condition 5 – Addressed in the Barrell Tree Consultancy report and TPP dated 13/10/2020.
- **Condition 14** – Peach Ecology PEA 19.04.24
- **ADP External Works Drawing** – Used as base for landscape drawing

2.3 Clients Proposal – As per Planning Permission – *F/24/97314 24 Erection of a four-bedroom bungalow with associated parking, storage, and amenity space. Land To The Rear Of 82 St Johns Road, Hedge End, Southampton, SO30 4DF.*

3.0 SOIL SURVEY

3.1 Desk Study – This is not for foundation purposes; a search was carried out using the **Cranfield University online Landis Soils** Viewer with soil type being confirmed as

- **Soilscape 18** – Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils.

4.0 DESIGN RATIONALE

4.1 Clients Brief – To produce a design that:

- Enhances the proposed development
- Encourages and enables habitat establishment and enhancement for flora and fauna
- Provides general visual and amenity value whilst being low-maintenance
- Providing bird nesting and bat roost opportunities
- To allow for space to enable the occupant to personalise the garden

4.2 Consultant's Comment – The initial external works drawing produced by ADP Architects has been adapted to follow the clients brief with a number of additions, Landscape Plan (Appendix One)

5.0 LANDSCAPE SCHEME

5.1 Hard Landscaping – Refer to the Landscape Plan (Appendix One) for Hard and Soft Landscaping.

5.2 Main Drive– To consist of the following:

- Double Entrance Steel Gate
- Non – Migratory Strip leading off Norman Gardens
- New drive and parking area – Gravel on stone sub-base to clients preference

5.3 Surfacing

- **Non Migratory Strip** – Permeable surface to consist of Block Paviour (client to choose colour and type) measuring 3m Deep x Gate Width as per Landscape Plan (Appendix One).
- **Internal Drive & Parking Area** – Permeable surface to consist of angular Gravel (clients choice) on a compacted sub-base
- **Garage and House Entry** – Block paviour or slab thresholds to match the non-migratory strip or to clients preference.

5.4 Garden – Terrace on Western side measuring 18m² to match threshold to the front of house.

5.5 Fencing – 1.8 m close board fence to North & South boundaries & 2.0m to Eat with modifications to allow for hedgehog commuting as per **6.0**

5.6 Existing Soft Landscaping

5.6.1 Planting– A mixed garden hedge is situated along the South West boundary, which is to be retained, this includes Holly, Laurel, Privet, Blackthorn, Berberis and Ivy wh(Peach Ecology Report), no trees are to be retained on site, however there are trees in the neighbouring properties T2 a Blue Cedar to the South West and T5 a Contorted Willow to the South East using tree survey reference numbers.

5.6.2 Remainder– Rough ground with mixed growth. **Proposed Soft Landscaping**– As per **3.1 Clients Brief** to consist of the elements below

5.7.1 Boundary Planting – .To consist of a **Staggered Double Row** on each boundary to provide screening and habitat as there are fences present:

- **Northern Boundary** – Mixed Native species hedge, Double Staggered Row with 5 plants per Lm approx. 34m in length
- **Eastern Boundary** – Mixed Native species hedge, Double Staggered Row with 5 plants per Lm approx. 16m in length
- **Western Boundary** – Mixed Native species hedge, Double Staggered Row with 5 plants Lm approx. 34m in length

Table One

Species	Size	Root	%	Number H1 34m 170 Plants round up or down to achieve total)	Number H2 16m 80 Plants	Number H3max 34m dependant on condition of retained hedge 170 Plants (Round up or down to achieve total
Beech	60/90cm	Bare Root	20	34	16	34
Wild Privet			20	34	16	34
Hazel	60/90cm	Bare Root	20	34	16	34
Field Maple	60/90cm	Bare Root	20	34	16	34
Mixed Native Shrubs to include Guelder Rose Wayfaring Tree Spindle Dogwood Holly– Containerised 40/60 Alder Buckthorn	60/90cm	Bare Root	20 Total	34 Total	16	34

5.7.2 Trees – The Peach Ecology report recommends a minimum of two native tree species, in this case four trees with mixed attributes have been recommended, **Table Two** contains a list of species that the client can select from to suit their preference.

Table Two

Species	Size @ Purchase	Attributes	Container	Mature Size
Field Maple Various cultivars suitable for gardens	8- 10 or 10 -12cm Girth	All have a yellow Autumn colour; growth habit depends on cultivar	Yes	Medium
Crab Apple Various cultivars	8- 10 or 10 -12cm Girth	Flowers, leaf colour, fruit and Autumn colour	Yes	Small to Medium tree
Sweetgum	8- 10 or 10 -12cm Girth	Leaves, growth habit and Autumn colour	Yes	Medium
Birch	8- 10 or 10 -12cm Girth	Catkins, bark, and Autumn colour	Yes	Small to Medium

5.7.3 Shrubs – A total of Two shrub beds with a minimum of 4 medium-sized shrubs per bed as per **Table Three** and landscape plan (Appendix One)

Table Three

Species	Shrub Bed One	Species	Shrub Bed Two
Magnolia stellata	1x 3 to 5l pot	Magnolia soulangeana	1x 3 to 5l pot
English Shrub Rose	1x Pot as Available	Amelanchier lamarkii	1x 3 to 5l pot
English Shrub Rose	1x Pot as Available	English Shrub Rose	1x Pot as Available
Acer palmatum	1x 3 to 5l pot	English Shrub Rose	1x Pot as Available

5.7.4 Lawn – To be set to grass using a general purpose turf such as Inturf Classic or seeded using a hard wearing grass mix such as DFL PM51 Greenscape with Ryegrass, also see **6.0 Ecological Enhancements**, the proposed lawn wraps around the dwelling consisting of:

- East
- South
- West

6.0 ECOLOGICAL ENHANCEMENT

6.1 Peach Ecology Recommendations – The enhancements are based on those listed in the Peach report and illustrated on the mitigation and enhancement plan (Appendix E) along with additional optional suggestions made by the consultant where deemed appropriate.

6.2 Objectives To enhance the urban environment and provide a diverse habitat summarised in the words below, the proposed scheme is illustrated on the Ecological Enhancement Plan (Appendix Two) :

- Diverse Habitats for Indigenous flora and fauna
- Encouragement of beneficial insects
- Foraging opportunities for Birds, Bats and Hedgehogs etc
- Mixed amenity value for inhabitants of the house

6.3 Bird Boxes –1x integrated Swift Brick at eaves level on the North Eastern elevation (Appendix Two and Three) minimum of 5m above ground level.

6.4 Bats –1x integrated bat brick on the Southern house elevation below eaves (Appendix Three).

6.5 Bees A minimum of two Bee Bricks on the Northern elevation as per report, additional nesting opportunities such as Bee Boxes or more Bricks could be added at the client's discretion (Appendix Two and Three).

6.6 Hedgehogs

- **Access holes** – On all boundaries cut 130x130mm holes in fences to allow hedgehogs to commute between gardens (Appendix Two and Three)
- **Hedgehog refuge** – Install a hedgehog house or create a suitable natural refuge in a sheltered undisturbed corner of the garden

6.7 Optional Enhancements Suggestions made by the consultant to further enhance the property by providing additional habitat gains.

6.7.1 Wildflower Areas – As per **6.2** to provide an area of species rich grass and native wildflower species for pollinating insects, ideal areas would be under trees and on the edge of Hedge 3, again this is an **optional** suggestion for the client to choose if they are minded. An effective way to introduce wildflowers is by planting plug-grown plants at approx. 4 per m².

6.7.2 No Mow Areas – Create **no mow circles** around one or more of the New Trees, the minimum radius is 500mm around new trees, the grass can be left for as long as 6 months or cut on a more regular basis with the cut height being 150mm in height.

6.7.3 Hibernacula/Refugia – Not part of the Peach recommendations but an **optional suggestion** by the consultant to further enhance the developments ecological value which could be installed at the clients discretion

- Log pyramids can be built at any time of year
- Use wood from any broadleaved tree
- The logs should be at least the thickness of an adult's arm
- Site the logs in partial shade, if possible, to prevent them drying out
- Partially bury the logs in the soil so that they don't dry out
- Allow plants to grow over the log pyramid to retain moisture and provide shade

6.8 Lighting – A low-impact lighting scheme has been designed by the Architect to satisfy Condition 11 a copy of which can be found in Appendix Four. As a result of the ecology consultation response, the wall lights have been replaced with low-impact bollard lighting of less than 1 lux to avoid light spill.

7.0 PLANTING AND LANDSCAPING SPECIFICATION

7.1 Programme A full construction programme has yet to confirmed therefore the order of works is indicative although the actual components of the landscape scheme will be as per this report unless agreed otherwise with EBC.

7.2 Tree Planting – To be carried out in the first planting season following completion of the project in line with best practice and **BS 8545:2014** Trees: from nursery to independence in the landscape Recommendations. See landscape plan (Appendix One).

7.2.1 Planting Specification – Tree Pits to be 0.8mx0.8mx 0.6m deep, Topsoil depth 400mm with 200mm of native subsoil below see Appendix One for drawing.

7.2.2 Plant Specifications – As per landscape scheme, stock is to be well established UK container grown stock (or at least to have been grown in the UK for one season), apart from bareroot transplants for the native hedging which must be of UK provenance and grown in the UK.

7.2.3 Irrigation – Trees to be watered using a 75l water bag affixed to the tree stake, once filled the bag will release the water over a 3hr period, this should be topped up every 2 to 3 days (Dependent on weather conditions) during late March to September for at least the first two years. Additional watering may be required during extended dry periods

7.3 Shrubs Species as per Table Three

7.3.1 Planting Specification

- Shrub beds to be prepared with a 400mm depth of topsoil
- Shrubs to be planted to pot level
- Water Plants in
- Mulch with 75mm of composted woodchip, ensuring it doesn't touch plant stems

7.3.2 Maintenance – As per 8.0 and water during the first two years during dry periods.

7.4 Hedges

7.4.1 Specification

- **Garden Hedge**– Dependent on species and availability, bushy bare-root transplants 1+2 to be a minimum of 60-90cm in height with good fibrous roots, planted between October and Early March

7.4.2 Planting– To be carried out as per **5.4.1**, hedge to be mulched with composted woodchip to a depth of 75mm ensuring the chip is kept away from stems, the hedges will be planted in trenches 0.6m wide x 0.4 depth.

7.4.3 Irrigation– Install leaky hose pipe beneath chip and water as required for the first two years during April – September approx. every week for the first year or at closer intervals during dry periods.

7.5 Lawns Preparation– Following completion of construction works and planting of trees and hedges (dependant on time of year), the lawn areas are to be prepared as below:

- Ground to be cleared of debris and rotovated.
- Ground to be raked over and levelled removing stones/grass etc.
- Topsoil to be added to give a minimum depth of 150mm if required and raked level.

7.5.2 Turf or Seed – Dependant on the client's choice and proposed occupation date following completion of dwelling.

8.0 AFTERCARE

8.1 Maintenance – Initial post-implementation aftercare is key to the establishment of a scheme and will consist of :

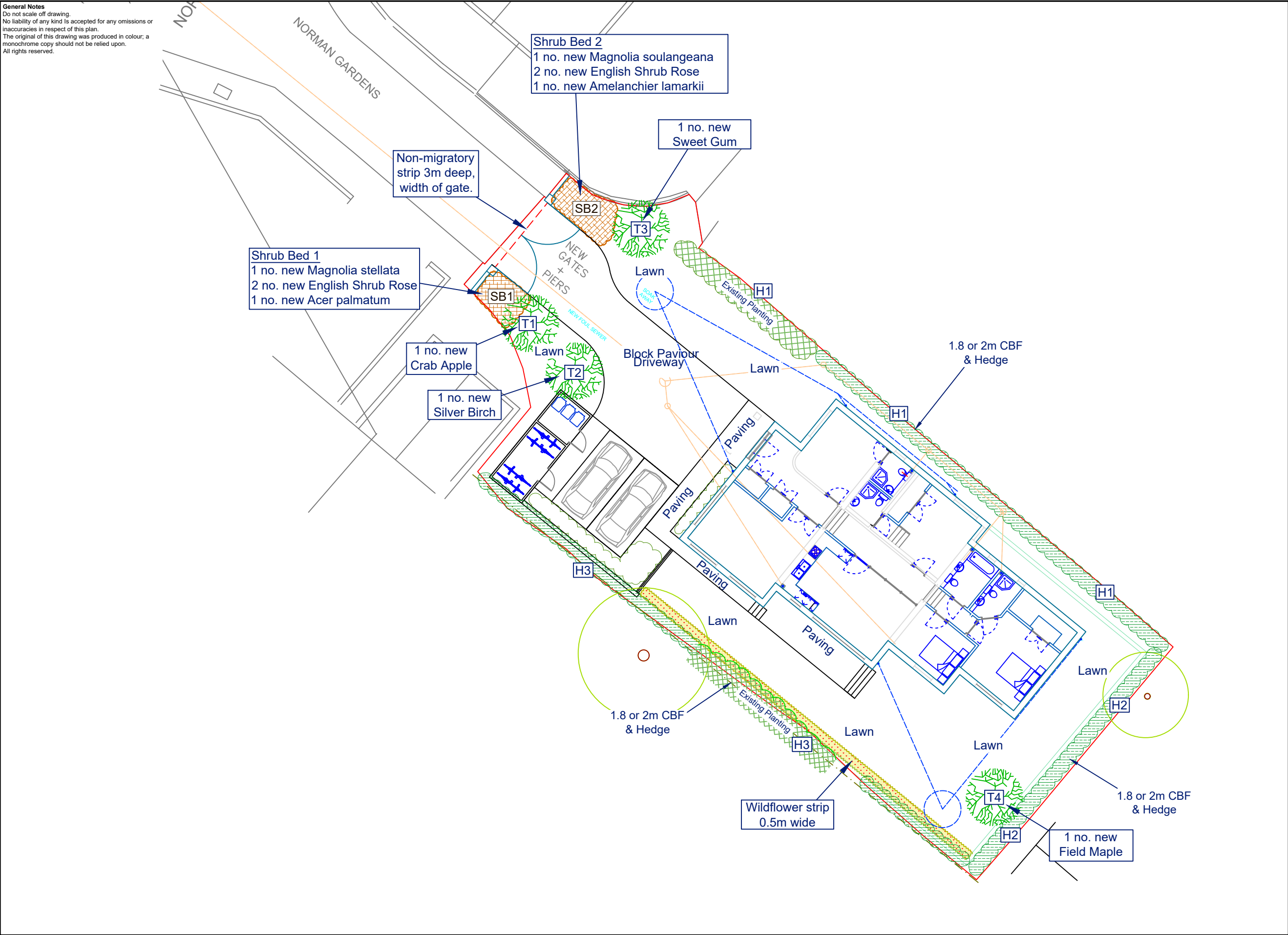
- All planting to be kept weed-free for the first 2 years to aid establishment.
- Hedge to be trimmed during the first growing season, in particular, the top to encourage branching/thickening and as required thereafter
- Formative pruning of trees to ensure they grow into sustainable specimens with a well-balanced crown.
- Wildflower Areas – To be cut after flowering/seed set, arisings to be removed

8.2 Replacements – In the case of plant deaths:

- **Hedges** – Any losses within the first five years are to be made good with replacement planting.
- **Trees** – Any losses in the first five years are to be made good with replacement planting using the same species of a similar specification

William Ross 22nd October 2024 **Rev A** 09/01/25 **Rev B** 17.01.25

APPENDIX ONE

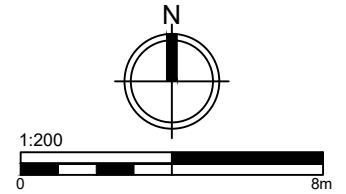


General Notes
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Key

- Existing trees
- Existing hedges/planting
- Proposed shrubs
- Proposed trees
- Proposed planting
- Proposed hedge planting
- Wildflower strip 0.5m wide

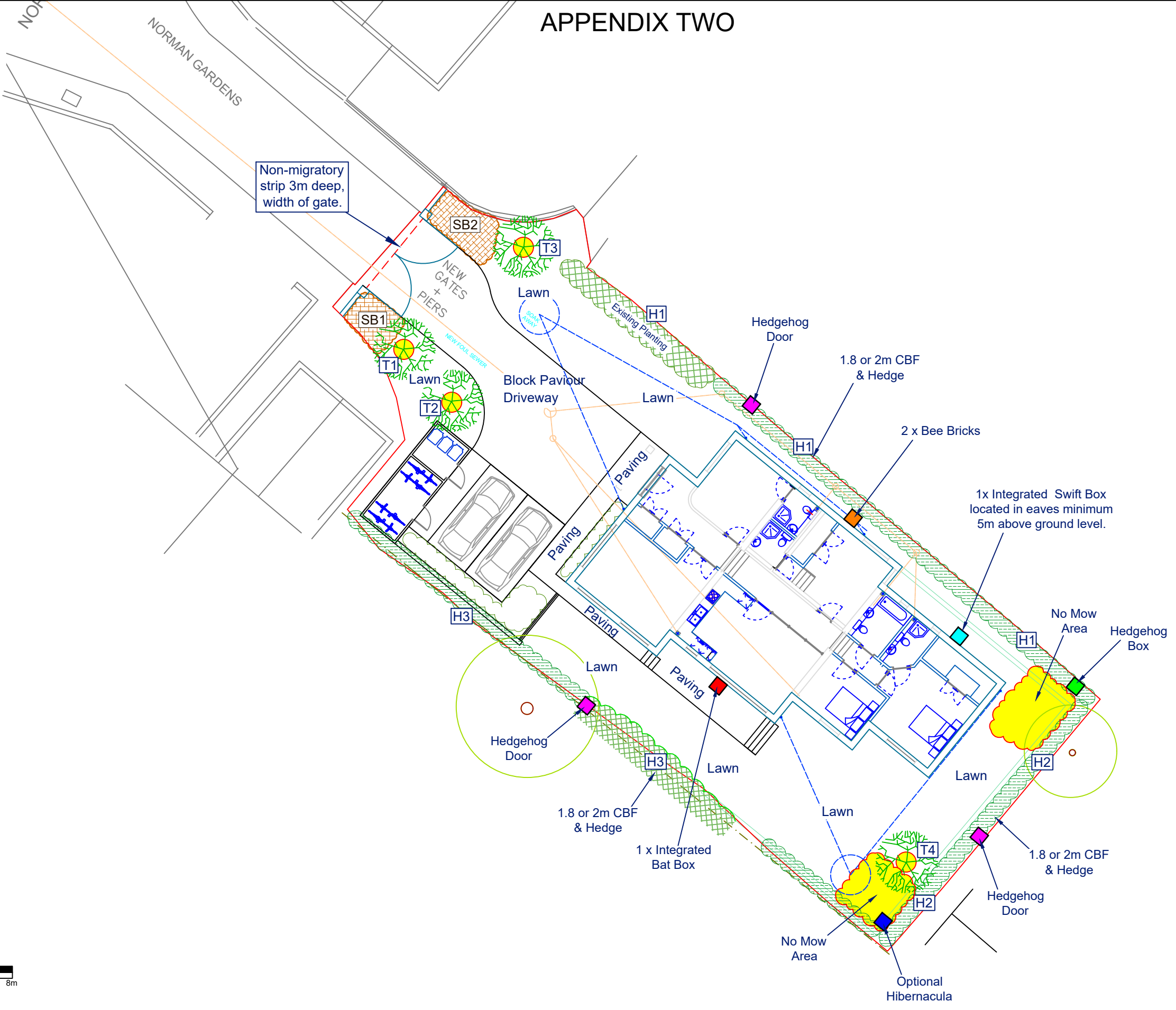
Refer to Eco Enhancements drawing for Biodiversity detail.



Drawing Title			
Landscape Plan			
Client			
Mr and Mrs Newman			
Site/Project			
Proposed Bungalow, Rear of 82 St Johns Road, Hedge End.			
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Ross Consulting			
Appleton Close, Over Wallop, Stockbridge, Hants, SO20 8PA.			
Tel: 01264 781134 Mob: 07831614706			
Email: willross@rossconsultingalms.co.uk Web: rossconsultingalms.co.uk			

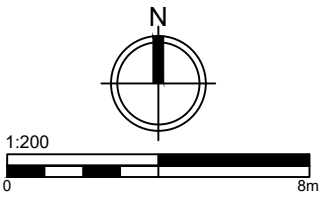
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APPENDIX TWO



Key

- Existing trees
- Existing hedges/planting
- Proposed shrubs
- Proposed trees
- Proposed planting
- Proposed hedge planting
- No-mow area
- No-mow area around trees (0.5m radius from tree stem)
- Hedgehog door
- Bee brick
- Hedgehog box
- Bat box
- Optional Hibernacula
- Swift box



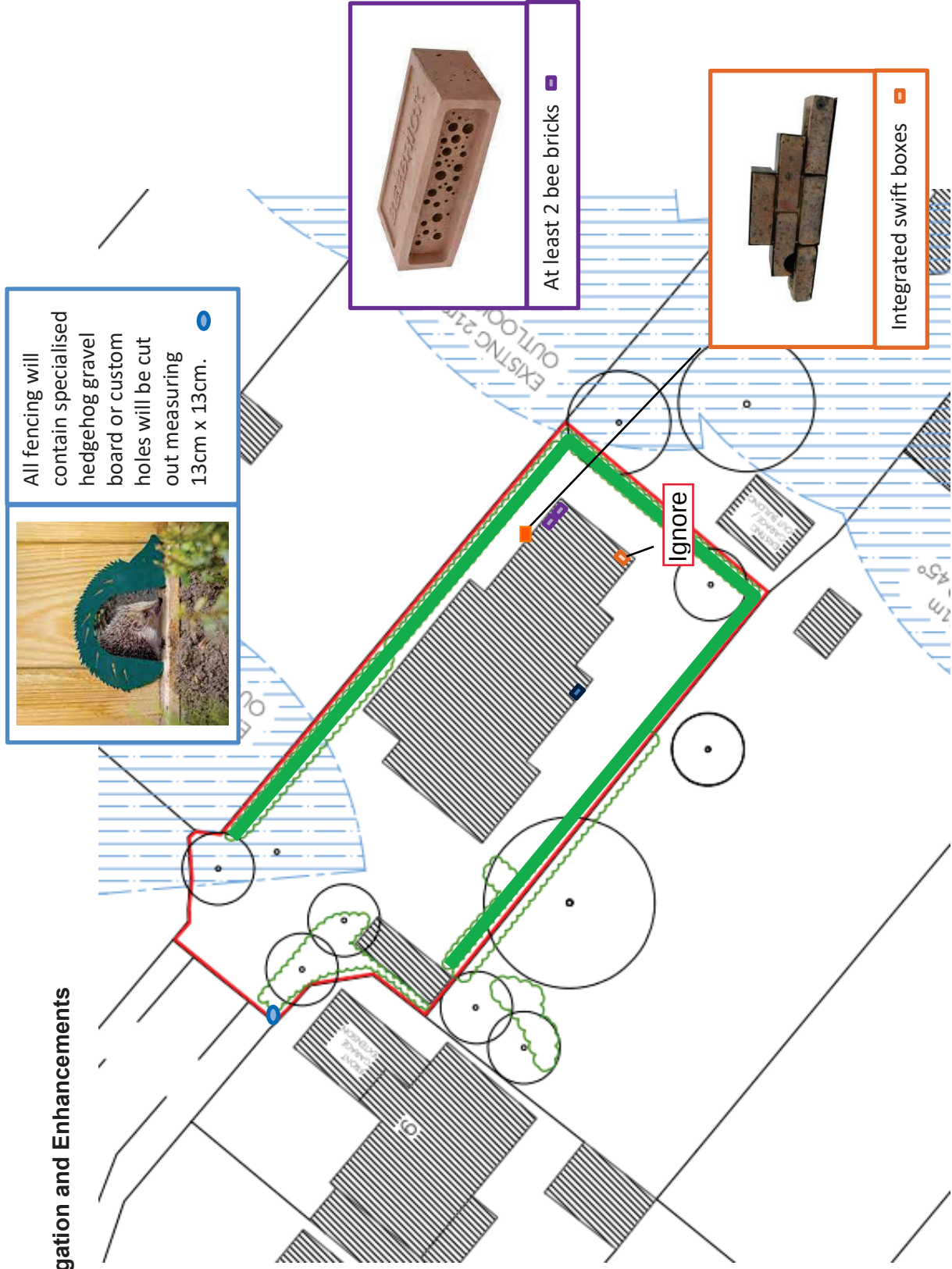
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Client			
Mr and Mrs Newman			
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Ross Consulting
Appleton Close, Over
Wallop, Stockbridge, Hants,
SO20 8PA.
Tel: 01264 781134 Mob: 07831614706
Email: willross@rossconsultingalms.co.uk
Web: rossconsultingalms.co.uk

APPENDIX THREE

Appendix E: Mitigation and Enhancements



Note - Following comments from the HCC Ecology Team the Swift Brick will be relocated to the NE corner under the Eaves at least 5m above ground level

LIGHTING DESIGN PLAN: PROTECTION OF BATS

Planning reference: Eastleigh BC F/24/97314 condition number 11

Project: Proposed bungalow, land rear of 82 St Johns Road, Hedge End, Southampton SO30 4DF

Revision A (10.01.25)

1 INTRODUCTION

Planning permission (application reference: F/24/97314) was granted by Eastleigh Borough Council on 1st August 2024. Condition 11 states:

Prior to first occupation of the dwelling hereby approved, a detailed lighting plan shall be submitted to and approved in writing by the Local Planning Authority, in line with the guidance note Bats and Artificial Lighting at Night (GN08/23) <https://www.bats.org.uk/news/2023/08/bats-and-artificial-lighting-at-night-ilp-guidance-note-update-released>. The approved plan shall not be altered without the prior written consent from the Local Planning Authority.

Reason: To ensure the protection of bats.

2 SCOPE

This document outlines the features or habitats on or adjacent to the site used by foraging and commuting bats, and identifies lighting specifications required to avoid or reduce potential impacts upon those features and species. It is based on the baseline ecological assessment for the scheme as well as current guidance, specifically:

- Bats and artificial lighting guidance note 08/23 produced by the Bat Conservation Trust (BCT) and the Institute of Lighting Professionals (ILP)

The specifications aim to balance the important safety and amenity needs of future residents of the site, with the requirement to minimise impacts upon biodiversity features on and adjacent to the site (and to comply with the relevant wildlife legislation).

3 SENSITIVE HABITAT FEATURES

Habitats which support commuting or foraging bats include retained, and once established, future boundary hedgerows, gardens and shrubs. Gardens and planting may provide foraging habitat, whilst it is likely that the rear and front boundary edge habitats provide movement corridors at a local scale.

Even low-level light pollution upon these features has the potential to impact animals using these and adjacent habitats. Therefore, the lux and duration of light reaching the features should be minimised where possible.

4 PROPOSED LIGHTING LAYOUT

External lighting proposed for the site will comprise:

- Exterior lighting for the property including within porches and on the external walls of the dwelling for paths, patios etc.; and
- Low level bollard lighting adjacent to car parking bays.

The location of lighting proposed within the porch and by the parking bays is shown in **Appendix 1**, with areas where PIR units must be used if installed along the sides or to the rear of the properties

also indicated. The technical specifications of the lighting to be installed are outlined in Appendix 2 below.

5 LIGHTING DESIGN

Guidance recommends the following mitigation measures be used to minimise lighting impacts:

- Light levels should be as low as possible, and the number of fixtures kept to the minimum required, to fulfil the lighting need;
- Lamps should have a maximum of 7.5 to 10 lux;
- LED lights should be installed, using the warm white (or amber) spectrum, with peak wavelengths >550nm (2700 or 3000°K) and no UV component;
- Lighting should be directed to where it is needed, with horizontal spillage towards retained or establishing habitats minimised. This can be achieved by restricting the height of the lighting installation and the design of the luminaire;
- Light fixtures should be erected at the lowest reasonable height;
- Luminaires must have an upward light ratio of 0%, mounted on the horizontal (or overhead in porches);
- Lighting mounted on the dwellings should incorporate Passive Infra-Red (PIR) motion sensors and timers to minimise the lit time, set to the minimum to minimise the duration of disturbance;
- As a matter of last resort, accessories such as baffles, hoods or louvres can be used to reduce light spill; and
- Low level bollard lighting design should reduce spillage to the rear and above the unit

Typical suppliers include (but not limited to):

- DW Windsor
- BEGA
- Ligman

Because bats may use boundary lines to both front and back of the properties as commuting routes (as well as side boundaries), PIR sensor switches should be installed as standard on the dwellings, with override facility for resident's for occasional use as necessary. Additional time-controlled switches could be added to porch lighting if required. Porch lighting should be mounted at a height to ensure the porch reduces light spillage (i.e. acts as a cowl).

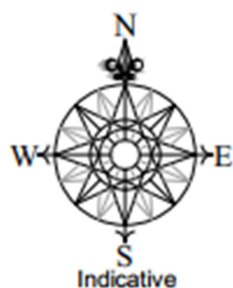
Bollards must be directional to the car parking bays and avoid upwards, sideways and backwards light pollution. Operation will be via a dusk to dawn switch, though PIR sensors can be used also as required.

6 CONCLUSION

The proposed lighting design aims to minimise impacts from artificial lighting upon wildlife (notably bat commuting and foraging habitat), whilst still providing a safe and practical solution for householders and enhancing the properties within the development.

It is the responsibility of the developer and their contractor(s) to ensure lighting installation is as per the specifications proposed. If any significant deviations or amendments are subsequently required, the prior consent of the LPA must be sought by the proposer prior to installation.

APPENDIX 1

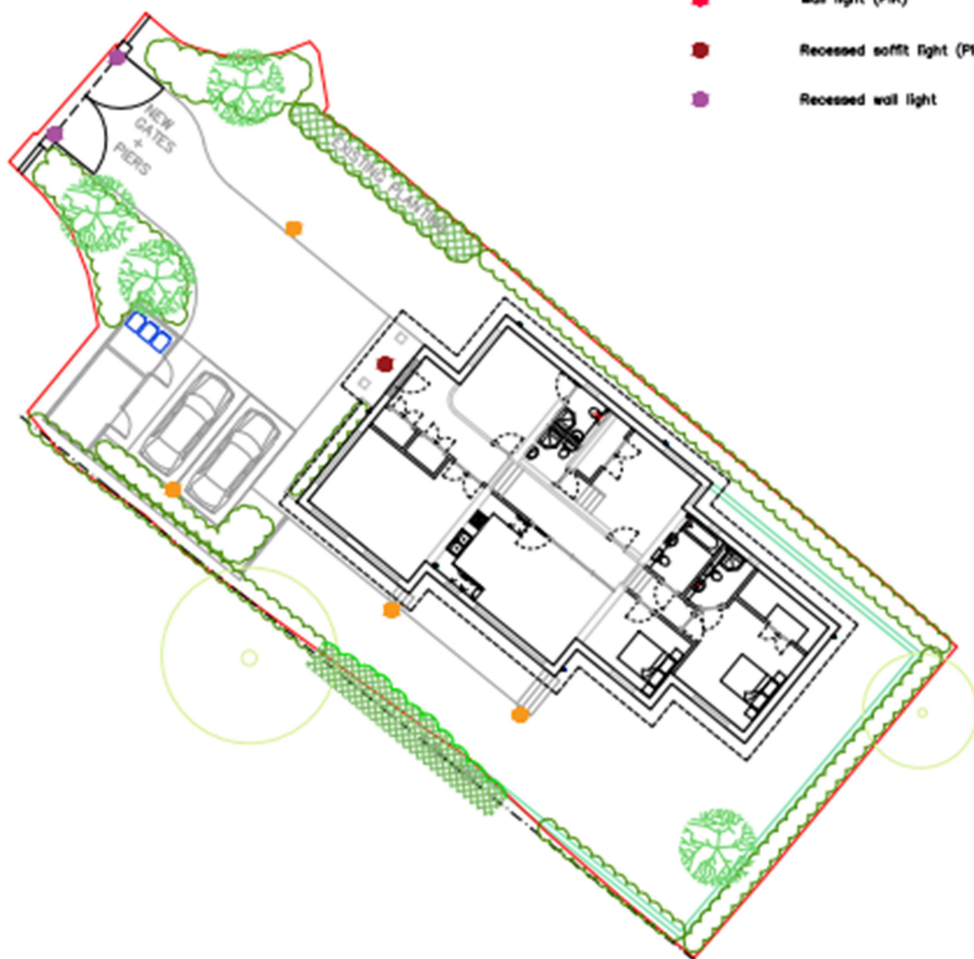


A | 15.05.25 | Wall lights omitted
not shown

LEGEND

To be read in conjunction with the Lighting Plan specification (separate document) & in accordance with the Bats & Artificial Lighting at Night guidance note GN08/23.

-  Bollard low level lighting
-  Wall light (PIR)
-  Recessed soffit light (PIR)
-  Recessed wall light



LIGHTING PLAN

Proposed Bungalow • Land R/O 82 St Johns Road • Hedge End • Mr & Mrs Newman • 2077-LP01a

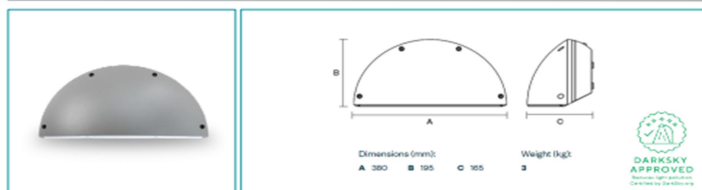
APPENDIX 2

DW Windsor (typical examples)

<https://www.dwwindsor.com/dark-sky-lighting/>



Sephora Wall



Sample Specification Text

Sephora Wall surface luminaire with 16 LED light engine. Constant light output enabled fully programmable DALI driver operating up to 700mA, 3,000K colour temperature using Diamond+ AI optic technology. International Dark-Sky Association approved. LM6 high pressure die-cast aluminium body in RAL 7046 mid grey with a polyester powder coat finish and polycarbonate glazing. IP66 and IK10 protection. 100,000 hour (L90 B10) lifetime. For -40°C to +40°C ambient operating temperatures. Class I.

Performance

Output (luminaire flux)	3,989lm (max)
Power	37W (max)
Efficacy	172lm/W (max)
Number of LEDs	8 / 16
Colour Temperatures	2,700K / 3,000K / 4,000K 3,000K (SunLike) 4,000K (SunLike)
Colour Rendering Index (CRI)	70 / 80 95 (SunLike)
Distributions	Narrow (Diamond+A1) Medium (Diamond+A5) Wide (Diamond+C2)
Upward Light Output Ratio	0% ULOR
BUG Rating	B1 - U0 - G1
International Dark-Sky Association Approved	Yes (2,700K / 3,000K CCTs only)
Certifications	UKCA, CE

Mechanical

Mounting Options	Wall mount
Glazing	Clear / frosted polycarbonate
Housing	Die-cast aluminium
Colours	Mid Grey RAL 7046 Light Grey RAL 7035 Black RAL 9005 White RAL 9016 Aluminium 9006 Metallic Grey 9007 Metallic Dark Grey DB703 Corten Brown (Other RAL colours on request)
Finish	Polyester powder coat
IP Rating	IP66
IK Rating	IK10
Weight	3kg

Electrical

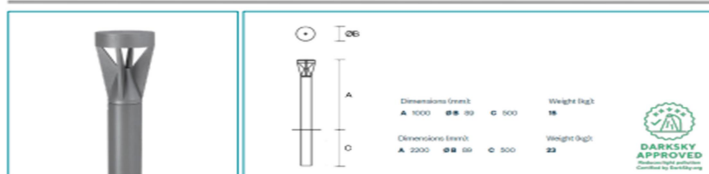
Driver Options	DALI / 1-10V (fully programmable with Constant Light Output Enabled)
Drive Current Range	300mA to 700mA
Operating Voltage	220-240V
Electrical Class	Class I / Class II
Operating Temperature Limit	-40°C to +40°C
Rated Lifetime	100,000 hours (L90 B10)

Controls

Control Options	Photo cell Part night switching Pre-programmed dimming Integral CDS Integral 3-hour emergency
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Pharola DS



Sample Specification Text

Pharola DS 1000mm bollard, 9 LED light engine with outputs up to 1,523lm with a 3,000K colour temperature and symmetric or asymmetric light distribution. International Dark-Sky Association approved with 0% ULOR. Die-cast aluminium head with polycarbonate glazing and galvanised steel body. IP66 and IK10 protection. 100,000 hour (L70) lifetime. For -20°C to +40°C ambient operating temperatures. Class I.

Performance

Output (luminaire flux)	1,523lm (max)
Power	20W (max)
Efficacy	76lm/W (max)
Number of LEDs	9
Colour Temperatures	2,700K 3,000K 4,000K
Colour Rendering Index (CRI)	70 / 80
Distributions	Symmetric (180° backshield on request) Yes (2,700K and 3,000K CCTs only)
International Dark-Sky Association Approved	Yes (2,700K and 3,000K CCTs only)
Certifications	UKCA, CE

Mechanical

Mounting Options	Root mounted / Flange plate / 1"
Glazing	Polycarbonate
Housing	Galvanised steel (body) Die-cast aluminium (head)
Colours	White RAL 9016 Black RAL 9006 Aluminium RAL 9006 Metallic Grey 9007 Metallic Dark Grey DB703 (other RAL colours on request)
Finish	Polyester powder coat
IP Rating	IP66
IK Rating	IK10
Weight	15kg (Pharola DS 1000) 23kg (Pharola DS 2200)

Electrical

Driver Options	DALI
Drive Current	700mA
Operating Voltage	220-240V
Electrical Class	Class I / Class II
Operating Temperature Limit	-20°C to +40°C
Rated Lifetime	100,000 hours (L70)

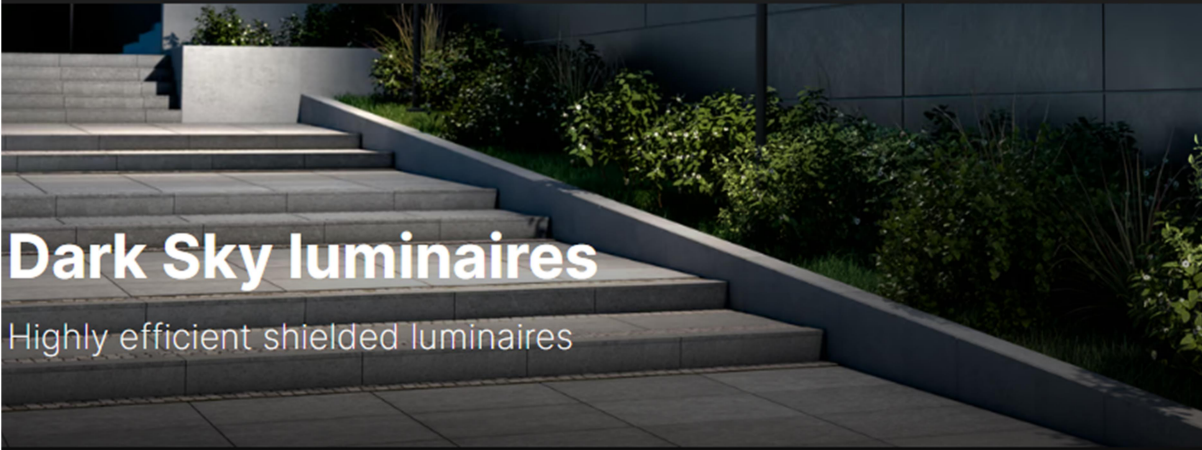
Controls

Control Options	Remote switch
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BEGA LIGHTING (typical examples)

<https://www.bega.com/en-gb/products/solutions/dark-sky-luminaires/>

BEGA PRODUCTS REFERENCES COMPANY KNOWLEDGE SERVICE + CONTACT



Dark Sky luminaires

Highly efficient shielded luminaires

The luminaires shown here are a selection of our complete product range. They all direct their light highly efficiently onto the surface to be illuminated and emit less than 1% of their luminaire luminous flux into the upper half-space of the luminaire. The exact data on the luminaire luminous flux in the upper half-space as well as statements on the BUG rating according to IES TM-15-07 and the CEN Flux Code according to EN 13032-2 can be found in the data sheets of the individual luminaires.

Please also note when planning your Dark Sky lighting: Additional regional and national regulations may apply in the project area, whose deviating or supplementary requirements must be taken into account.

Protection class IP 66

[BEGA Thermal Management®](#)

Cast aluminium, aluminium and stainless steel

[BEGA Unidure®](#) coating technology

Safety glass

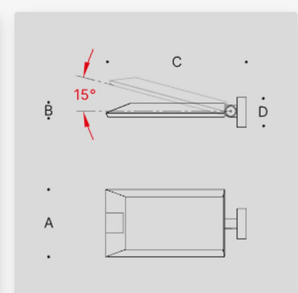
Reflector made of pure anodised aluminium

Attack angle adjustable to 0° or 15°

Can be opened without the use of tools

DALI-controllable power supply units

20-year availability guarantee for replacement parts and LED modules



Protection class IP 65

[BEGA Thermal Management®](#)

Cast aluminium, aluminium and stainless steel

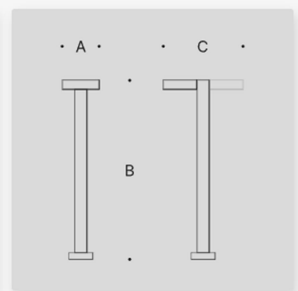
[BEGA Unidure®](#) coating technology

Light deflection through synthetic cover with optical texture

DALI-controllable power supply units

20-year availability guarantee for replacement parts and LED modules

These BEGA garden and pathway luminaires are equipped with an alignable mounting system. It can either be bolted onto a foundation provided by the customer, or onto a BEGA anchorage unit. Please order anchorage units as separate accessories.



LIGMAN (typical examples)

<https://www.ligman.com/darksky-approved-ranges/>



SOLAR lighting
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LED lighting
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Dark Sky Approved luminaires

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 CINATI	 GANDALF	 GINO	 JET
 LADOR	 MARVIK	 MATRIX	 QUARTER
 STEAMER	 TANGO	 VEKTER	 BENTON
 BENTON	 JET	 LIGHT LINEAR PT	 LIGHTZONE