Bexhill to Hastings Link Road

Planning Condition 6A

B1297000-Ph2/3000.06a/0005

Revision R3

January 2013

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Document Control Sheet

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DATE **28 January 2013**	INITIALS **AS**	INITIALS **DO'K**	INITIALS **DO'K**	INITIALS **AB**
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Contents

1 Introduction

1.1 General

This Technical Note summarises the current development of the design of the Bexhill to Hastings Link Road (BHLR) from chainage 0 to 510 m. This section of the BHLR includes the BHLR junction with the A259 Belle Hill and the BHLR corridor up to the St George's Road over-bridge. It also includes the bus gate and revised alignment of London Road where it meets the BHLR.

The current Concept Sketch Design is shown in Appendix A.

1.2 Planning Condition 6A

This stretch of the BHLR is the subject of Planning Condition 6A of the planning consent which requires the submission of full details of a number of hard and soft landscape elements.

The planning condition indicates that no development, except mitigation and compensation works and archaeological evaluation, can take place until the following details are submitted for the approval of the County Planning Authority:

'Details of the design and appearance of the section of the road scheme between Belle Hill at chainage 0 and chainage 510 at Woodsgate Park, including levels, sections, and construction details of the road, Chapel Path underpass, surface water drainage, road signage, street furniture, existing and proposed landscape features and street lighting'.

The reason for the condition is given as the protection of the visual amenity and townscape quality of this part of Bexhill.

1.3 Mott MacDonald (MM) Technical Note 5

A review of the design in August 2009 was presented in MM's Technical Note 5 which looked principally at highway design issues relating to the tie-in of the London Road Junction including the vertical alignment of London Road itself and the design of the Chapel Path underpass.

A Concept Sketch Design was also presented by MM and this is shown in Appendix B.

1.4 Further Public Consultation

The ESCC Project Manager has consulted with two local ESCC members on the outline scheme in order to seek the views of local representatives before submitting details to the planning authority. This document outlines the development of the current scheme and provides details and explanations of the design.

2 Consultation with the ESCC Planners

2.1 General

MM's Technical Note 5 outlined earlier consultations which took place with the planning authority which resulted in key design objectives as follows:

2.1.1 Chapel Path Underpass

This is to be set at the lowest practicable elevation possible taking into account such factors as:

- *Underpass headroom requirements.*
- *Achieving visibility through the barrel of the subway.*
- *Drainage considerations.*

2.1.2 Visual Impacts from Embankments and Noise Fencing

The link road on either side of the Chapel Path underpass is to be raised on embankment with noise barriers running parallel with the road alongside both verges. There is a general objective to develop the scheme to reduce the visual intrusion of the road, (including traffic, signage and lighting) and the noise barrier. This includes considering the height of the road embankments, the location and detailed design of the noise barrier and screening from earth modelling and planting.

2.2 Review of the MM Concept Sketch Design

The MM's Concept Sketch Design was again discussed in a consultation with the ESCC planners on 1st August 2012 (refer to meeting minutes in Appendix D).

Following the submission of this revised document in October 2012 a further meeting with ESCC Councillors was held in order to discuss final detail of the proposal (Appendix E). As a result of the meeting the Belle Hill Sketch Design has been updated.

The consultation noted that several aspects of the scheme design have now been developed in more detail. In particular the drainage strategy has been revised and the underground water storage tank west of London Road and opposite the Hillside Road junction is no longer required. This has opened up the design capability for the area.

The consultation suggested that the proposed scheme should be revised and developed to address the following key points in relation to pedestrian priority and landscaping, in particular:

- **Bus stop provision** - Another bus stop is required for northbound buses on London Road, currently plan only shows provision for southbound. A stop was suggested at the public open space just north of the underpass. A northbound bus stop has been added to the design.

- **Traffic control for bus only section -** Requested clarification regarding traffic control for junction of bus only section of London Road with Belle Hill i.e. traffic lights / yellow box. The proposed junction will be signal controlled with a dedicated bus turning lane.

- **Pedestrians crossing new London Road junction with link road -** Improved safety provision may be required for the pedestrian crossing at the north end of the public open space at London Road) where traffic may be quite busy). The northern pedestrian crossing near the main junction with London Road has been removed from the design and replaced with a zebra crossing slightly further north on London Road.

- **Lighting -** Jacobs to provide examples of different types of light fixture and pole that could be used for the landscape feature lighting. Fact sheets on three suggested options for landscape feature lighting are included in Appendix C. The Teceo is the unit proposed on 10m columns along the link road approaches to the Belle Hill Junction. Smaller versions could be installed on 5m columns for the landscape areas. The Kioled and Perla are possible alternatives. The more individual design of the Perla may begin to appear dated after a while, whereas the Kioled is attractive but less showy.

- **Sight lines from residential properties -** Clarity was requested with regard to road level for both the link road and London Road in relation to the existing residential properties to establish what can be seen from the windows of the houses, particularly on London Road for the bus only section and at the pedestrian underpass. Figure 2, Sketch Sections has been revised to show the houses on London Road. A new section has been added through the point where the bus-only portion of London Road rises slightly to join the link road which is descending from crossing over the pedestrian underpass. Figure 3 has been added to show the longitudinal section through the link road in the vicinity of Chapel Path pedestrian underpass. The section shows the link road, the underpass and the existing ground level.

- **Flood control measures -** Query as to whether larger flood control capacity will be provided to take Egerton Stream under the link road particularly to alleviate flooding to back gardens in Buxton Road. A new culvert of the same size as existing will be installed to take Egerton Stream under the link road. In addition flood retention swales will be excavated on both sides of the link road to provide additional floodwater storage.

The objective was to rebalance the priorities of pedestrians and traffic, although the 'shared space' on London Road was not considered appropriate. Suggestions to promote pedestrian priority included:

- *A natural throttle to traffic at the underpass steps*
- *The retention of the zebra crossing*
- *A raised platform at the Hillside Road crossing point*
- *Maximising pavement widths*
- *Establishing pedestrian desire lines*
- *Provision for pedestrians crossing the BHLR at the A259*
- *Improve safety provision for pedestrians on the east side of the London Road crossing from the small area of open space to the larger area*
- *Parking provision designed to 'calm' traffic.*
- *Provision of seating area in the form of a curved polished concrete bench, providing a place for pedestrians to rest/gather*
- *Keeping pedestrian areas open to enable visibility and security*

- *Lighting of areas using feature lighting enhancing pedestrian safety and security, including pedestrian underpasses*
- *Potential for enabling artworks in the pedestrian underpass, engaging the local community*
- *Sight lines from residential properties to be considered*

Landscape issues were also discussed as follows:

- *Large grassed areas were not considered appropriate*
- *Design to reduce maintenance*
- *Consider incorporating 'play type' features to climb on*
- *Generally paved with trees planted, especially in the larger area*
- *Trees are key, with bold planting of big species that can withstand casual vandalism*
- *Large shrubs not to be mass-planted, but a line of shrubs can be planted against the noise barrier and individual large shrubs used as planted features*
- *Design should address root heave*
- *Hard landscaping should be appropriate, not too expensive but with character*
- *Road surfaces generally in bitumen macadam and feature paving not to extend to the side roads*
- *Gateway features are not necessary*
- *Small open space should be generally grassed with mounding and trees*
- *Provide a fence / barrier around the small area to direct pedestrians to the crossing to the larger area*
- *Bus stop provision for northbound buses on London Road*
- *The planting and seeding plan has been revised*
- *Resin-bound gravel for surfacing of areas*
- *Clarification of the traffic controls at the bus only section of London Road*
- *The flood control capacities and drainage has been revised*

The ESCC planners were interested in what would be visible such as signs, lighting, and materials. The level of detail to be supplied should be similar to that in MM's drawings. The councillors proposed that once the design has been finalised, public construction exhibitions should be established to share the design with the community and answer any queries.

3 Scheme Development

3.1 General

The current Concept Sketch Design is presented in Appendix A.

3.2 Major Highway Design Issues

The inherited junction design has gone through the detailed design process to develop and optimise the junctions and carriageways around Belle Hill and London Road. The tie in of the Link Road to Belle Hill has been carried out to match in with the Belle Hill crossfalls as much as possible. There will be an element of re-profiling required but this should not be excessive.

There is still a level difference between the London Road approach and the Link Road tie in point. This has resulted from the required vertical profile of the Link Road. The approach grade will be made as gentle as possible, but once again there are a number of vertical alignment constraints in the area which are dictating the profiles here. There is a level difference in the region of 1m between the Link Road and London Road where they run parallel, but at the junction this has been brought down to approximately 400mm on the northern side of the tie in. Drainage for the Link Road tie in is also being designed at present and so far has not thrown up any issues.

3.3 London Road Pedestrian Priority Crossing Points

Where Chapel Path crosses London Road a table top zebra crossing links to the pedestrian underpass. Here the width of London Road is reduced to 6m to help traffic calming and to give sufficient width for a safe ramped access from the underpass to the footway for those pedestrians unable to use the broad flight of steps linking more directly with the zebra crossing. Careful consideration of the sight lines through the underpass gives pedestrians a clear view through the structure to the opposite side of the link road. The angle of the wing walls also helps to give an open view, preventing people from being hidden from sight at the entrances to the underpass.

A table top arrangement allows for traffic calming and pedestrian priority to allow crossing on foot at the junction of Hillside Road and London Road. This creates a strong link to the open space and seating area to the west.

3.4 Large Open Space and Seating Area

The area has been designed to link between the northern end of London Road, providing a safe and attractive route to the Chapel path underpass.

Decorative surfacing in coloured resin bound aggregate has been chosen for its aesthetics, durability and permeable drainage characteristics. A simple flowing pattern between a dark and light buff aggregate helps to break up the space and provide visual interest.

A low insitu concrete wall of simple and robust design will allow for informal seating, as well as providing a degree of earth retention to increase the enclosure from the

mounding and planting to screen the BHLR. The concrete seating wall would have a smooth polished finish.

More traditional seating is proposed to accommodate older and disabled people.

Detailed planting drawings numbered B1297000-PH2/3000.01a/0015-0017 have been submitted separately as part of submissions for Planning Condtion 6a. Planting will be designed to provide year round interest. Screening and softening of the noise barrier and other visually intrusive elements of the BHLR are also key requirements. Large nursery stock trees will provide instant impact and vandal resistance.
Tree planting within the hard surface area will be protected with proprietary underground root containment cells being used to reduce the impact of soil heave distorting the surfacing or damaging structures

3.5 Small Soft Landscape Area

A small soft landscape area of trees, grass and wildflowers, partly enclosed with a timber noise fence with mounding, shrubs and other hedgerow vegetation is proposed immediately north of the new junction between London Road and the link road. In order to avoid a pedestrian safety hazard at the junction, the footway on the west side of London Road will not extend to this area. Instead pedestrians would use a new zebra crossing to reach the east side and continue south toward the community open space. The soft landscape area will provide a pocket of natural habitat and form an attractive setting for the junction and the larger open space to the south.

3.6 Car Parking

Parking at 90° to London Road is accommodated on the eastern edge of the large open space, with footpaths around the outside of the parking to avoid pedestrian conflicts with vehicles and to provide a safe link to the underpass and zebra crossing. Further consideration of the extent of disabled parking to be provided is also required.

3.7 Noise Barrier

Detailed aesthetic design considerations for the noise barrier include the use of colour and pattern to create visual interest and to integrate with the open space and landscape design as a whole. The location and design needs to be coordinated and developed jointly with MM to achieve the scheme objectives.

3.8 Drainage

The overall drainage strategy proposes the creation of a major storage area west of BHLR (Chainage 250 to 400) consisting of a swale with rock filled gabion weirs to provide replacement flood capacity. The area is landscaped with suitable native trees and shrubs tolerant of occasional flooding. Trees and shrubs will be planted in the swales and on their edges to screen the traffic from houses west of the link road.

The box culvert accommodating the Egerton Stream is a major underground structure and its impact on tree planting within part of the open space requires further evaluation. Also, drainage pipes connecting the flood storage swales have limited the extent of tree planting west of the link road, particularly in the section from Chainage 150 to 250. Large nursery stock trees were shown in this area in the

Addendum Design and Access Statement. Large native shrubs will be planted along those sections instead of the trees. A detailed drainage proposal for hard surfacing is also being developed.

3.9 Signage

Detailed signage proposals are being developed. Major signs have been indicated on the Concept Sketch Design as these large elements could be potentially visually intrusive. Signage giving pedestrian directions towards the underpass from the vicinity of London Road and the open space will also be developed.

3.10 Lighting

The lighting scheme has been developed and is shown on Drawings B1297000-PH2/0000.01a/0001-2 submitted separately under Condition 6a. Indicative positions of the street lighting and landscape feature lighting are shown on Figure 1 in Appendix A. Appendix C shows 3 options that were considered for landscape feature lighting in the communal open space and footpath link to Bancroft Road. The Urbis Teceo 2 (on 10m columns) is proposed for the street lighting at the approach to Belle Hill Junction. The Urbis KIO LED (on 5m columns) is proposed for the landscape feature lighting.

3.11 A259 Belle Hill/Bexhill Link Road Pedestrian Crossing Points

Pedestrian crossings are signal controlled, and further detailed design is being carried out on this aspect.

3.12 Bus Stops and Routes

The A259 junction alteration requires the removal of the bus lay-by and stop serving the Leisure Centre. Further consultation on this aspect is to be carried out by ESCC. It is likely that an alternative provision would be made on the new section of London Road, with bus stops close to the pedestrian underpass, which would allow pedestrian access under the BHLR to the Leisure Centre site and the schools.

3.13 Summary of Scheme Development Requiring Further Investigation

- *There is a need to consult with the local bus operator regarding revised routes and the provision of new stops*
- *Impact of Egerton Stream box culvert on planting proposals needs further investigation*
- *Develop street lighting*
- *Signage layout is being developed*
- *Extent of existing services and impact on tree planting requires further development*

3.14 Conclusions

Although the above aspects require design development and further investigation, it is envisaged that the overall Concept Sketch Design is at a sufficiently developed stage for planning condition discharge. We will keep the planners and ESCC members informed regarding the detailed design and will seek approval for changes.

Appendix A Concept Sketch Design

Drawing number / Rev

FIGURE 1 Rev R2

NOTES

1. All dimensions in metres unless otherwise stated.

KEY

- Existing Trees
- Specimen Tree Planting
- Screen Planting - Native Trees and Shrubs
- Screen Planting - Shrubs
- Ornamental Low Shrubs
- Grass
- Wildflower Seeding
- Noise Barrier
- Embankment
- Shallow Mounding
- Block Paving Raised Platform for Pedestrian Priority
- Coloured Resin Bound Gravel Light/Dark Buff
- Seating
- Car Parking (90 Degrees to Street)
- Directional Signs (larger:3mx3m approx, smaller: 1.5-2m width approx)
- Pedestrian Crossing Point
- New Street Lighting (single or twin)
- Existing Street Lights
- Feature Lighting for Landscape Areas
- Timber Bollards

Note: Sections A,B,C & D are on Figure 2

Rev	Rev. Date	Purpose of revision	Drawn	Checkd	Rev'd	Apprv'd
R2	08-01-13	Swales and Planting West Side Changed	DG	AS	ES	AB
R1	17-12-12	Revised Layout	DG	AS	ES	AB
0	11-10-12	Original drawing	DG	ES	AS	AB

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Client: HOCHTIEF (UK) CONSTRUCTION; TAYLOR WOODROW

Employer: East Sussex County Council, eastsussex.gov.uk

Project: Bexhill to Hastings Link Road

Drawing title: Belle Hill Concept Sketch Landscape Design

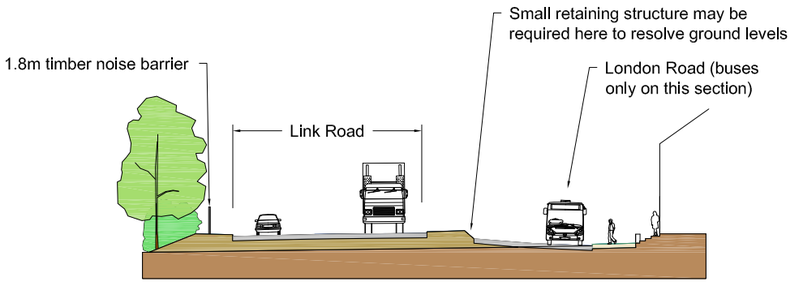
Drawing status: FOR INFORMATION

Scale	AS SHOWN @ A1	DO NOT SCALE
Jacobs No.	B1297000	
Client no.		

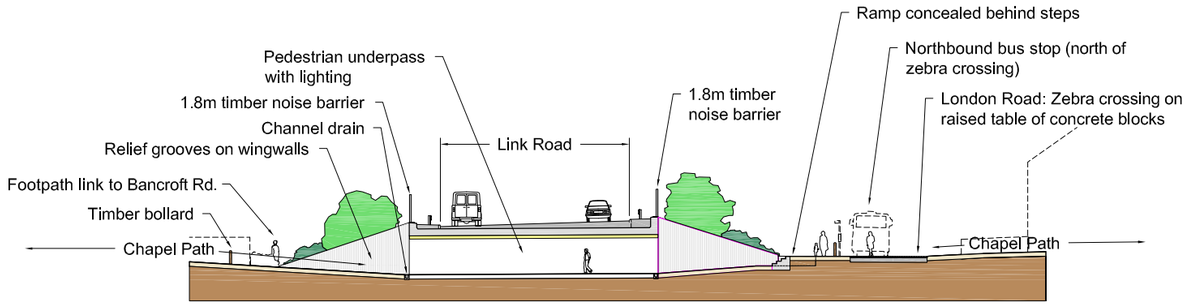
Drawing number: FIGURE 1 Rev R2

Drawing number / Rev

FIGURE 2 Rev R1



SECTION A - Chainage 80



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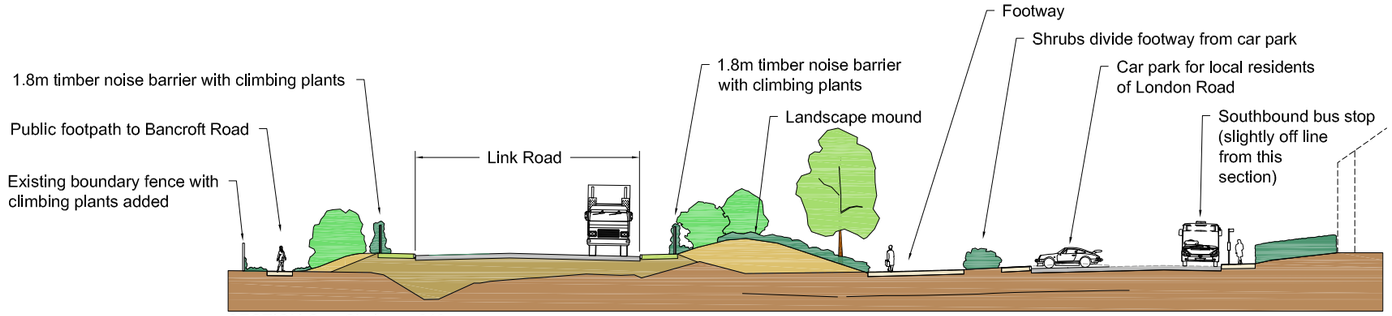
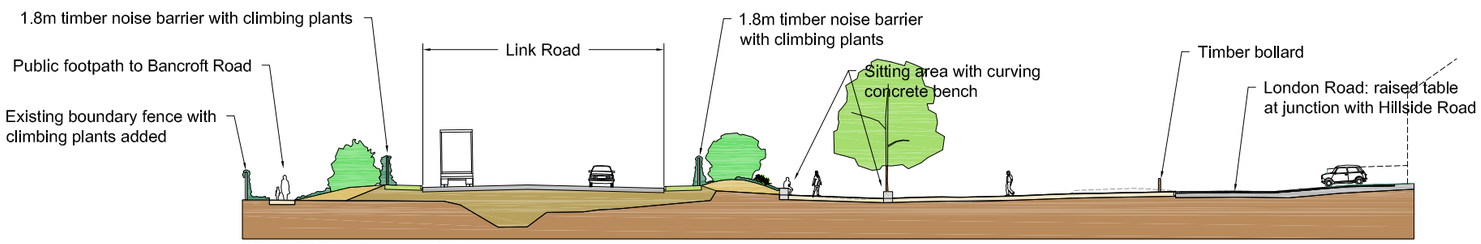


SECTION C - Chainage 210



SECTION D - Chainage 230

Key

- Existing ground
- Highway embankment
- Landscape mounding
- Road
- Concrete
- Footway
- Large Shrubs
- Low Shrubs, Groundcover and Climbing Plants
- Large growing trees

0 5 10 20m

Rev	Rev. Date	Purpose of revision	Drawn	Checkd	Rev'd	Apprv'd
R1	17/12/2012	Section A Ch80 added (CH280 deleted)	AS	ES	ES	AB
R0	18/10/2012	INITIAL ISSUE	IC	ES	AS	AB

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Employer: East Sussex County Council, eastsussex.gov.uk

Project: BEXHILL TO HASTINGS LINK ROAD

Drawing title: BELLE HILL CONCEPT SKETCH LANDSCAPE SECTIONS

Drawing status: ISSUE FOR REVIEW

Scale	SEE SCALE BAR	DO NOT SCALE
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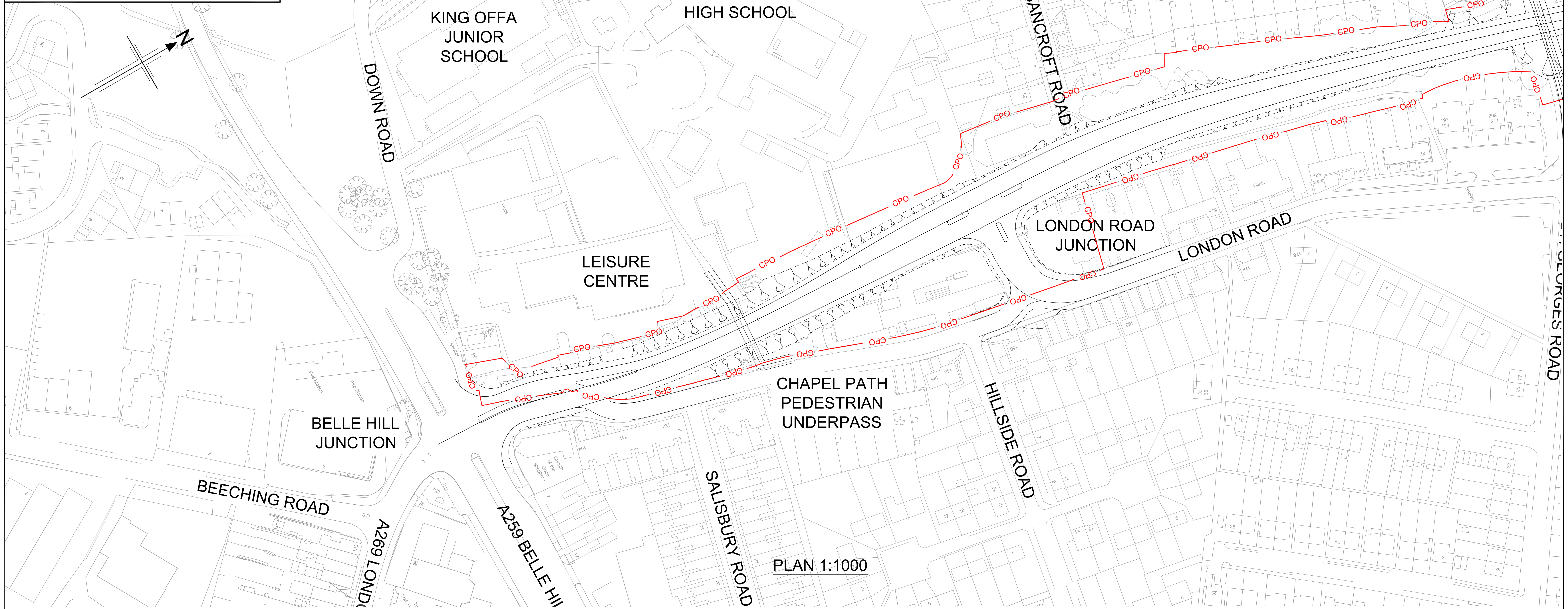
Client no.		

Drawing number: FIGURE 2 — Rev: R1

Drawing number / Rev
B1297000-PH2/3000.01a/FIGURE 3

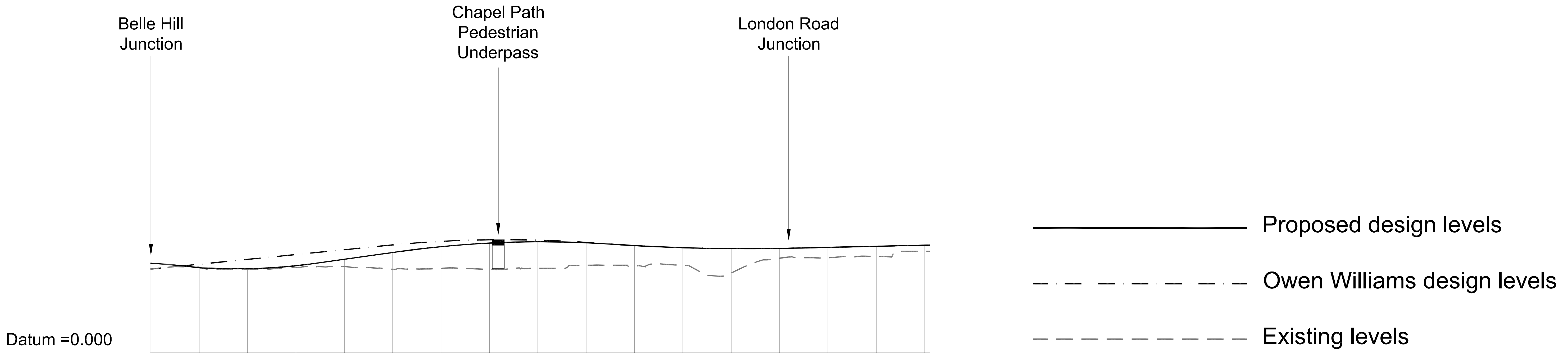


PLAN 1:1000

NOTES
1. All dimension in metres unless otherwise stated.

KEY

—CPO—	CPO boundary
▬	Proposed ponds



Chainage	Current BHLR proposed levels	Owen Williams proposed levels	Existing levels
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30.000	8.712	9.406	8.631
40.000	8.697	9.656	8.641
50.000	8.793	9.906	8.669
60.000	9.000	10.156	8.833
70.000	9.315	10.406	8.904
80.000	9.665	10.656	8.931
90.000	10.015	10.906	8.812
100.000	10.365	11.153	8.638
110.000	10.697	11.362	8.671
120.000	10.971	11.520	8.726
130.000	11.186	11.628	8.731
140.000	11.343	11.687	8.603
150.000	11.440	11.695	8.722
160.000	11.479	11.653	8.740
170.000	11.459	11.562	8.725
180.000	11.380	11.420	9.068
190.000	11.243	11.243	9.059
200.000	11.089	11.089	8.949
210.000	10.965	10.965	9.209
220.000	10.871	10.871	9.007
230.000	10.807	10.807	8.030
240.000	10.773	10.773	8.216
250.000	10.769	10.769	9.338
260.000	10.795	10.795	9.774
270.000	10.847	10.847	9.834
280.000	10.903	10.903	9.824
290.000	10.959	10.959	9.931
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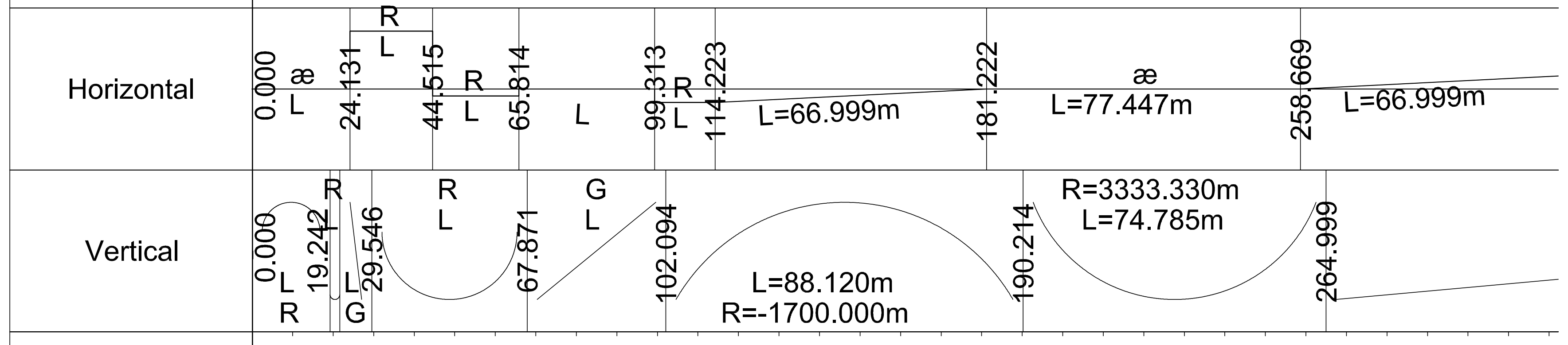
320.000	11.127	11.127	10.500



LONGITUDINAL SECTION NATURAL SCALE

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following :

CONSTRUCTION

MAINTENANCE / CLEANING

DECOMMISSIONING / DEMOLITION

It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved method statement

0 10 20 30 40 50 m
SCALE 1 : 500
0 50 100 150 200 m
SCALE 1 : 2000

Rev	Rev. Date	Purpose of revision	Drawn	Checkd	Rev'd	Apprv'd
R0	18/12/2012	INITIAL ISSUE	ASC			

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Project
BEXHILL TO HASTINGS LINK ROAD

Drawing title
GENERAL ARRANGEMENT
& LONGITUDINAL SECTION
CHAPEL PATH, BEXHILL
FIGURE 3

Drawing status
ISSUE FOR REVIEW

Scale: AS SHOWN @ A1 — DO NOT SCALE
Jacobs No.: B1297000
Client no.:
Drawing number: B1297000-PH2/3000.01a/FIGURE 3
Rev: R0

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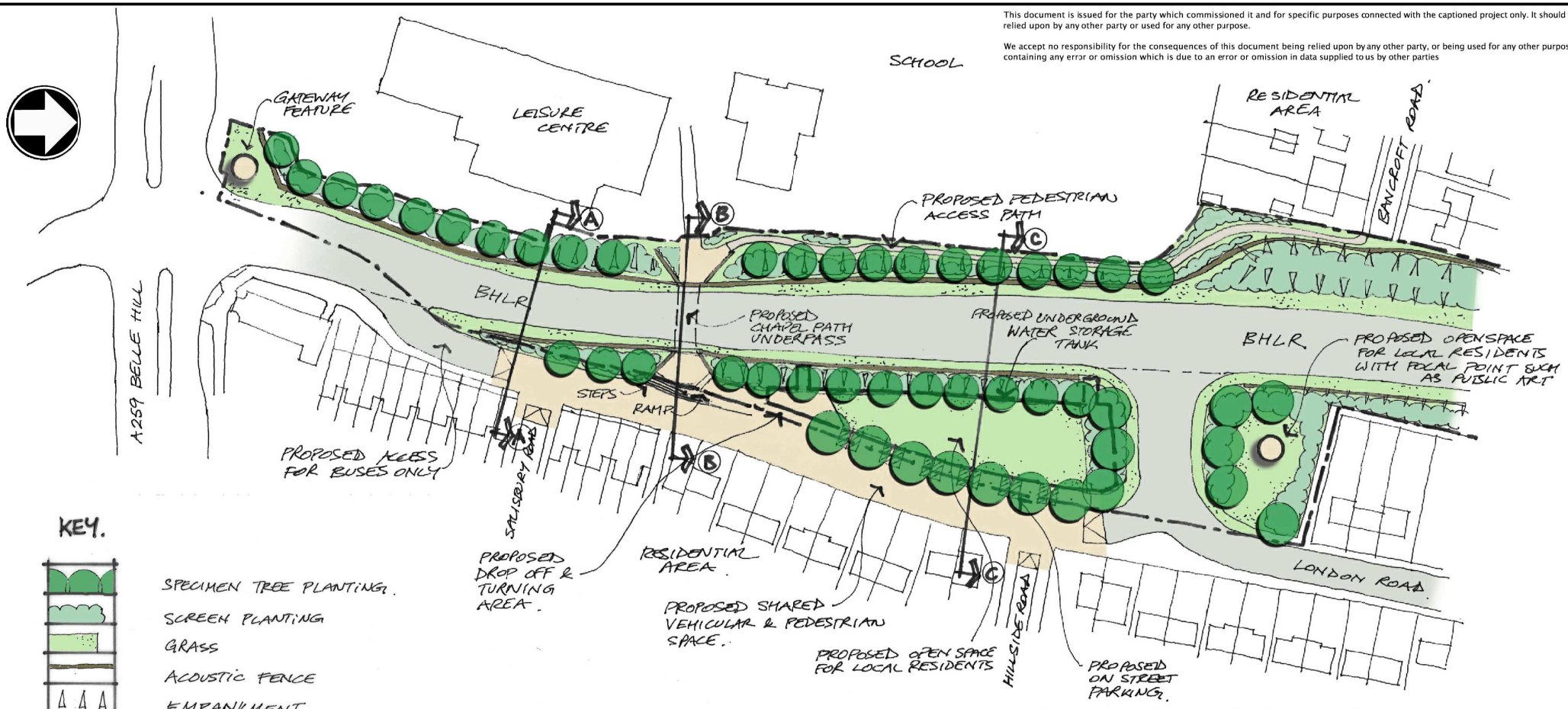
Appendix B MM's Concept Sketch Design (Superseded)



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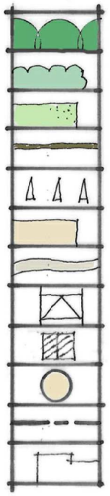

- SPECIMEN TREE PLANTING.
- SCREEN PLANTING
- GRASS
- ACOUSTIC FENCE
- EMBANKMENT
- BLOCK PAVING
- BOUND GRAVEL PATH
- RAMP
- CAR PARKING (90° TO STREET)
- FEATURE
- COMPULSORY PURCHASE ORDER BOUNDARY
- EXISTING BUILDINGS

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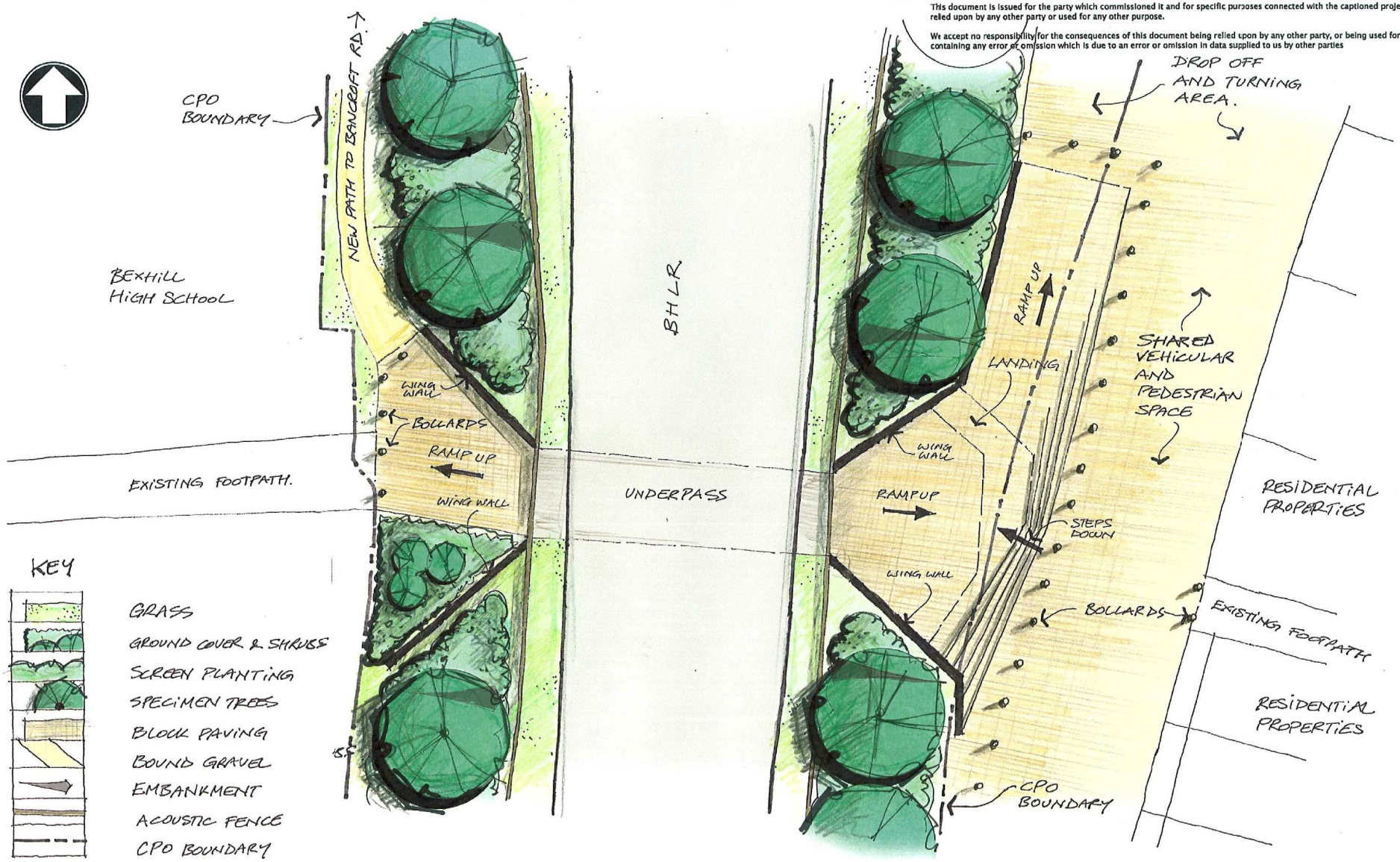
Rev	Date	Drawn	Description	Ch'k'd	App'd
P1	07.10.09	CP	Drawing Created	GPH	GD
P2	09.10.09	NJ	Rendering applied	GPH	GD

Title

Bexhill to Hastings Link Road
London Road
Concept Sketch Design

Drawn	CP
Checked	GPH
Approved	GD
Scale	1:1000
Drawing No.	255142/HWS/802
Rev	P2
Status	PRE

Cad Ref:



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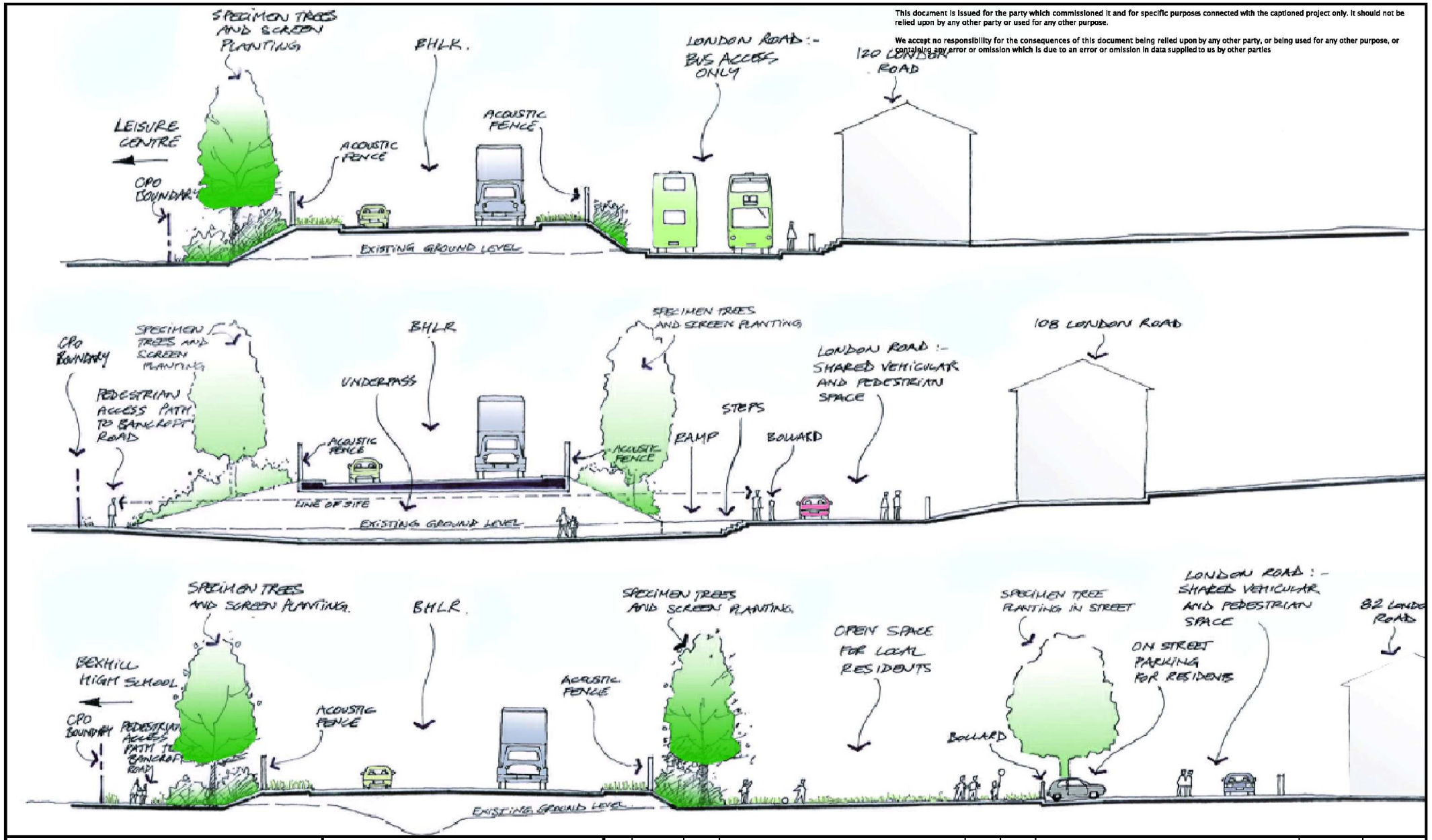
Rev	Date	Drawn	Description	Ch'k'd	App'd
P1	07.10.09	CP	Drawing Created	GPH	GD
P2	09.10.09	NJ	Rendering applied	GPH	GD

Title

Bexhill to Hastings Link Road
London Road
Chapel Path Underpass

Drawn	CP
Checked	GPH
Approved	GD
Scale	1:200
Drawing No.	255142/HWS/803
Rev	P2
Status	PRE

Cad Ref: SOUTHAMPTON\WNU\PROJECTS\255142 BEXHILL TO HASTINGS LINK ROAD PSF\ACAD\DRAWINGS\LONDON ROAD LANDSCAPE DESIGN\CARDIFF\803 CHAPEL PAT



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Rev	Date	Drawn	Description	Ch'k'd	App'd
P1	07.10.09	CP	Drawing Created	GPH	GD
P2	08.10.09	HT	Application of render	CP	GD

Title

Bexhill to Hastings Link Road
London Road
Cross Sections

Drawn	CP
Checked	GPH
Approved	GD
Scale	1:200
Drawing No.	255142/HWS/804
Rev	P2
Status	PRE

Cad Ref: SOUTHAMPTON\WNU\PROJECTS\255142 BEXHILL TO HASTINGS LINK ROAD PSF\ACAD\DRAWINGS\LONDON ROAD LANDSCAPE DESIGN\CARDIFF\804-SECTIONS\2

Appendix C Landscape feature lighting

URBIS

KIO LED

Elegance, comfort, creation of ambiance and performance

Back to list

HOME > Products > KIO LED

Description	Characteristics	Dimensions	Photometry	Installation and Maintenance	Brackets and Poles

Design: Grandesign

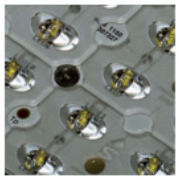
Tightness level		
Luminaire tightness level		IP 66 (*)
Impact resistance	PC	IK 09 (*)
	PMMA	IK 06 (*)
Aerodynamic resistance	(CxS)	0.080m²
Nominal voltage		230V - 50Hz
Electrical class		I or II (*)

(*) according to IEC - EN 60598 (**) according to IEC - EN 62262

Weight	(empty)	8.2kg
Materials		
Base + cover		Die-cast aluminium
Protector		Polycarbonate or metacrylate
Diffusor		Opaline
Colour		AKZO black 200 sanded

COMPACT LUMINAIRE COMBINING AESTHETIC DESIGN, HIGH PHOTOMETRIC PERFORMANCE AND EXCELLENT VISUAL COMFORT



DIRECT VERSION AND COMFORT VERSION

The The Kio LED is available in two versions: direct and comfort.
In the direct version the light from the LEDs is emitted directly through the transparent the polycarbonate or methacrylate protector.
In the Comfort version, an internal opaline diffuser provides a warm light and great visual comfort by reducing glare.

LENSOFLEX2®

Kio LED luminaires are equipped with second generation LensoFlex2® photometric engines that have been specifically developed for lighting spaces where well-being and safety of people using these environments are essential.
This system is based upon the addition principle of photometric distribution. Each LED is associated with a specific lens that generates the complete photometric distribution of the luminaire. It is the number of LEDs in combination with the driving current that determines the intensity level of the light distribution.

ENERGY SAVINGS OF UP TO 75%

The Kio LED intergrates the latest solutions. The combination of LED technology, a driver working within a constant flux system and a dimming system makes it possible to achieve energy savings that can reach up to 75% compared with luminaires equipped with traditional light sources.
With this very favourable energy balance, the Kio LED luminaires contribute to the effective management of public finances and to the responsible use of energy.

FUTUREPROOF

Kio LED luminaires have been designed to meet our FuturProof concept. Both the photometric engine and the electrical power supply can be replaced to take advantage of any future technological developments.

KIO LED THE GREEN LIGHT

Energy efficiency ratio

Lamp with small burner

Optical compartment tightness level

Limited upward flux (3%)

Limited mercury content of the light source

Lamp and gear set maintained efficacy

Electronics integration

Dimming

Remote management

Mercury free light source

Sustainable and recyclable materials

ISO 14001

Click here for a full explanation of the criteria

URBIS

PERLA

Back to list

With 3 photometric distributions and LEDs of the utmost efficiency offering a warm light, the Perla luminaire constitutes a tool that is totally dedicated to lighting and creating ambiance

Design: Michel Tortel

Tightness level		
Optical compartment		IP 66 (*)
Control gear		IP 44 (*)
Impact Resistance	(PC)	IK 09 (**)
Nominal voltage		230V - 50Hz
Electrical class		I or II (*)

(*) according to IEC - EN 60598 (**) according to IEC - EN 62262

Weight	8kg
Materials	
Body	Painted aluminium
Protector	Impact resistant, anti-UV polycarbonate
Colour	AKZO black 200 sanded AKZO grey 900 sanded Soprano 5 silver Annapurna white

A PRECIOUS RING IN THE URBAN NIGHT




OUTSTANDING DESIGN AND INTELLIGENT LIGHTING FOR THE CITY

The Perla's sober and pure line plays an important aesthetic role both by day and by night.
By day, the luminaire's curve allows the sky and the architectural environment to peek through.
By night, the LEDs in a circular form give life to a ring of light that floats in the darkness of the city. The blue LEDs further accentuate this presence.
The use of LEDs permits low height installations (4 meters) under foliage, without generating light that is intrusive for the inhabitants of buildings.

INTELLIFLEX SOLUTIONS TO MAXIMISE SAVINGS

With Schréder's wide range of IntelliFlex solutions, your lighting scheme becomes intelligent.
Our system approach allows you to use light in the smartest way with the right level, in the right place and the right moment.
You save energy, lengthen the life of your lighting installation, reduce maintenance costs, enhance comfort and increase safety.
Our range of solutions encompasses systems for small areas to complete city networks in order to perflectly suit your requests and your targets in terms of savings.
The Perla luminaire can operate with a scheduled dimming system, a Constant Light Output (CLO) or a complete remote Owlet management system.
It can also be equipped with a motion dection unit.

FLEXIBLE SCHEDULED DIMMING

With intelligent ballasts incorporated in the Perla luminaire, we can help you to choose your own optimum dimming system.
The 5-level dimming programme ensures that you can adapt the lighting level to the needs of the place and time. Intelligent ballasts work autonomously by taking switch-on and switch-off times as reference points.
This means that the system will adapt itself all through the year according to the seasons and the sunset/shine. By using light when and where it is necessary, with your own scheduled dimming program, you can easily achieve energy savings of over 25%.

URBIS

TECEO

Optimised photometric performance with a minimum total cost of ownership

Design: Michel Tortel

Tightness level		
Optical compartment		IP 66 (*)
Electronic compartment		IP 66 (*)
Impact resistance	Glass	IK 08 (**)
Aerodynamic resistance (CxS)		0.014m²
Nominal voltage		230V -50Hz
Electrical class		I or II (*)
(*) according to IEC - EN 60598 (**) according to IEC - EN 62262		
Weight		17.5kg
Materials		
Body + cover		Die-cast aluminium
Protector		Extra-clear flat glass
Colour		AKZO light grey 150 sanded

THE TECEO 2 OFFERS AN OPTIMISED TOTAL COST FOR STREET AND ROAD LIGHTING THROUGH HIGH PHOTOMETRIC PERFORMANCE AND ENERGY SAVINGS




MAXIMUM ENERGY SAVINGS

A minimal total cost of ownership was the driving force behind the development of the Teceo 2. It is equipped with LEDs and various dimming and remote management options for a dramatic reduction in energy consumption. The Teceo luminaire offers a very competitive alternative to luminaires equipped with traditional light sources such as high-pressure sodium lamps.

LENSOFLEX2®

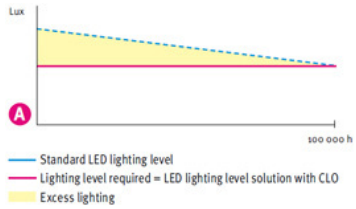
The Teceo 2 has been equipped with second generation LensoFlex2® photometric engines that have been specifically developed for lighting spaces where the well-being and safety of people using the environment are essential.

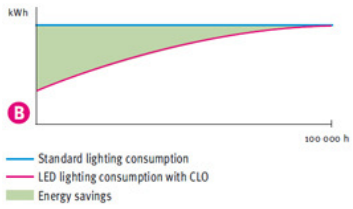
FUTUREPROOF

Using state-of-the-art technology, the Teceo luminaire has been designed to fufil the FutureProof concept.
The photometric engine is IP 66 sealed to protect the LEDs and maintain performance over time.
The optical unit can be easily removed, allowing real on-site replacement at the end of its service life, in order to take advantage of future technological developments. This easy and rapid procedure reduces maintenance costs and contributes to reducing total cost of ownership.
This FutureProof concept enables any version of the luminaire to be easily upgraded at any stage during the service life.
All models can be equipped with a completely new "plug and go" LEDSafe® optical unit at any time.

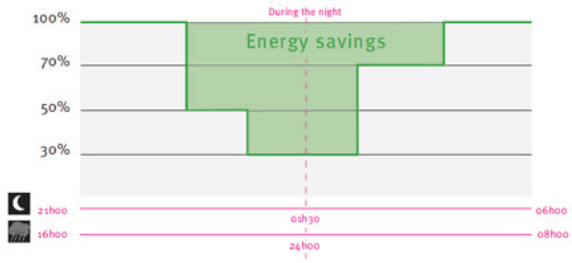
MAINTAINING THE LUMINOUS FLUX OVER TIME

With a conventional solution, the depreciation of the luminous flux over time leads to excess lighting and thus too much energy consumption when the luminaires are installed. The efficiency slowly declines to reach the minimum required level at the end of the installation's service life (graph A).
The Teceo luminaire works differently by operating with a constant luminous flux (Constant Light Output - CLO).
They control precisely and autonomously their energy needs during the luminaires' life cycle to provide the required level constantly - no more and no less - throughtout the service life (graph B).
This can generate additional energy savings of up to 10% for a lifetime of 100,000 hours.





VARIABLE INTENSITY (DIMMING) FOR GREATER SAVINGS



The right lighting is adapting precisely the quanity of light according to the real needs at a specific time (depending on daylight and more importantly activity in the area).

Dimming systems can generate substantial energy savings. The Teceo can be equipped with different dimming and remote management systems.

TECEO THE GREEN LIGHT

	Energy efficiency ratio
≤20mm	Lamp with small burner
IP66	Optical compartment tightness level
	Limited upward flux (3%)
Hg <15mg	Limited mercury content of the light source
≥70 lm/W	Lamp and gear set maintained efficacy
	Electronics integration
	Dimming
	Remote management
Hg	Mercury free light source
	Sustainable and recyclable materials
iso 14001	ISO 14001

Click here for a full explanation of the criteria

Appendix D Record of minutes from the meeting between ESCC and Planners

Bexhill to Hastings Link Road
Brief note on the Belle Hill design in respect of PC 6

Meeting on the 1/8/12
V Pullan
D Vickers
P Smart
H Coakley

Background
The project was seeking Planning input to the way forward with Belle Hill design. It was planned for construction to start in Jan '13 and PC 6 was required to be discharged before construction commenced.

There have been at least two designs presented offering very different solutions. The meeting had been called to better understand what we are trying to achieve and firm up on what is desirable / not desirable.

The project was planning:

- To hold a ½ day workshop with the designer / Motts / ESCC to come up with outline designs
- To seek further informal input from the Planners on the outline design
- To consult with the bus companies
- To consult with the local member and to seek guidance on how best to consult with the residents. A letter drop to residents showing the proposal with options indicated was favoured

It was noted that the project had significantly changed in the two years since hibernation not least that the underground tank was now not required.

Traffic
We had discussed the requirements with Mark Valleley. He had noted that the objective was to re-balance the priorities between pedestrians and traffic

- Shared space (ie no delineation between the road and the pedestrian pavements) was not seen as appropriate – not enough footfall, no shops on the other side of the road etc)
- Similarly, the area did not lend itself to a Home Zone approach
- Ideas floated
- Possibly a natural throttle to traffic at the underpass steps
- Possibly a raised platform at the underpass steps and keep the zebra crossing at that location (zebras were possibly seen as clutter)
- Possibly a raised platform at the Hillside Road end
- Maximise pavement width
- Need to establish pedestrian desire lines
- Make provision for pedestrians crossing the BHLR at the A259
- Make provision for pedestrians on the east side of the London Road crossing from the small area to the larger area
- Consider parking to 'calm' traffic. Parking provision to be same as current?

Landscape

- Grassed areas generally not preferred (who maintains? Dog mess etc)
- Low maintenance is the key
- Probably too small for a play area but we could incorporate 'play type' features to climb on

Large area

- Generally paved with trees planted.
- Trees are the key, bold planting, big species (eg London Plane). Design could address root heave
- It is not a conservation area. The materials should be appropriate, not too expensive but with character. Paving not to extend to the side roads. Road = tarmac

Small area

- Gateway features not seen as effective (probably wouldn't be seen from the A259 as the existing proposal seems to suggest)
- Generally grassed plus trees. Changes in level (ie mounded)
- Fence / barrier around the area in particular from the London Road pavement to the crossing to the larger area

Planning submission

- Planners interested in what is seen (ie signs, lighting, materials etc)
- Level of detail to be supplied should be similar to that in the Motts series of drawings

JACOBS

Appendix E Record of minutes from the meeting between ESCC and Planners

Bexhill to Hastings Link Road

Notes of Meeting

Meeting: BHLR Belle Hill Councillor Consultation
Date: Friday 16 November 2012, 14:00
Venue: Chairman's Room, Rother District Council, Town Hall, Bexhill-on-Sea
Attendees: Councillor Joy Hughes – ESCC local ward councillor
Councillor Michael Ensor – ESCC local ward councillor
Chloe de Renzy-Martin – BHLR Engagement Officer, ESCC
Alister Simpson, Jacob, Design Contractor

Background

The design and access statement submitted as part of the planning permission contains the aspiration that the Belle Hill / London Road area of the scheme should be designed to meet local needs and therefore the design should involve consultation with local representatives. Particularly there is the provision of an open space area in the vicinity of where there will be a junction with London Road and the new link road. Initially there was to be an underground flood storage tank however this is no longer required which opens up design capability for the area.

Meetings with planners have established that 'shared space' is not appropriate however the objective should be to re-balance priorities between pedestrians and traffic.

Consultation

We discussed the design with Cllrs Hughes and Ensor who were broadly happy with the outline design with the following comments / queries / suggestions:

Traffic

Bus stop provision

- Another bus stop is required for northbound buses on London Road, currently plan only shows provision for southbound. A stop was suggested at the public open space just north of the underpass. **Jacobs to update design.**

Traffic control for bus only section

- Requested clarification regarding traffic control for junction of bus only section of London Road with Belle Hill i.e. traffic lights / yellow box. **Jacobs to provide clarification.**

Pedestrians crossing new London Road junction with link road

- Councillors both thought that improved safety provision may be required for the pedestrian crossing at the north end of the public open space at London Road) where traffic may be quite busy). **Jacobs to investigate possibilities.**

Parking

- The parking bays for local residents were liked.

Open Space

Seating area

- The curved polished concrete bench was considered on balance to be a good idea worth keeping although it could become a regular gathering place for teenagers and skateboarders. It was liked because it would provide a place for people with shopping/pushchairs etc to rest.
- The large open area near the concrete bench was liked for visibility/security reasons.

Lighting

- Discussed possible lighting options and agreed feature lighting preferable to dual lighting from link road.
- Discussed possibility for low level lighting around seating area however although aesthetically pleasing not good as security lighting which was considered a priority.
- Jacobs to provide examples of different types of light fixture and pole that could be used for the landscape feature lighting. **Jacobs to supply details/pictures of options.**

Pedestrian underpass

- Agreed that the pedestrian underpass and areas near the portals must be well lit to provide a feeling of safety and security.
- Potential for artworks in the pedestrian underpass. Alister Simpson suggested providing a smooth white surface ready for painting with a mural. Cllrs suggested linking with De La Warr Pavilion (Stewart Drew) for school engagement. **ESCC to investigate options.**

Maintenance

- Requested clarification as to maintenance responsibility e.g. ESCC or RDC? **ESCC to establish**

Planting

- Agreed that large shrubs should not be mass-planted so that people can hide in them, however a line of large shrubs can planted against the noise barrier and individual large shrubs can be planted as features. The remainder of the soft landscape areas should be planted with low shrubs/groundcover plants.
- Trees should be planted large enough to better withstand casual vandalism. The tree proposed near the benches should be planted especially large.
- There is potential to plant two more trees near the north end of the public open space at the entrance to the residential, low-traffic portion of London Road. **Jacobs to reflect in design accordingly.**
- Requested information with regard to landscaping sub-contract process. **ESCC to provide.**

Surfacing

- The resin-bound gravel was liked.

<u>Other concerns</u>

Sight lines from residential properties

- Clarity was requested with regard to road level for both the link road and London Road in relation to the existing residential properties to establish what can be seen from the windows of the houses, particularly on London Road for the bus only section and at the pedestrian underpass. **Jacobs to provide sections showing route alignment.**

Flood control measures

- Query as to whether larger flood control capacity will be provided to take Egerton Stream under the link road particularly to alleviate flooding to back gardens in Buxton Road. **Jacobs to provide further information.**
- There was no objection to the flood drainage swales planted with trees.

Outcomes

Councillors were generally happy with the proposed design as representatives for the community. They proposed that once design has been finalised should establish public construction exhibitions to share design with community and answer other queries.