



**Land at Bird in Eye Farm
South of Bird in Eye Hill, Uckfield**
Utilities Appraisal Report

On behalf of **Croudace Homes Limited and Mr & Mrs Berry**

Project Ref: 332510180/2501 | Rev: V1 | Date: April 2021

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Report Title: Utilities Appraisal Report

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For and on behalf of Stantec UK Limited				

Revision	Date	Description	Prepared	Reviewed	Approved
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1 Introduction

1.1 The Brief

- 1.1.1 Stantec UK Limited (Stantec) has been commissioned by Croudace Homes Limited and Mr & Mrs Berry ("The Client") to prepare a Utilities Appraisal Report in support of their outline planning application for up to 290 residential dwellings, 30% of which are to be affordable dwellings, at Land at Bird in Eye Farm, South of Bird in Eye Hill in Uckfield, East Sussex.
- 1.1.2 A location plan is included as **Appendix A**. The proposed development site is located to the south east of the town of Uckfield, Sussex, and currently comprises of agricultural land, including farm buildings that are to be retained.
- 1.1.3 The site is bounded to the north by the B2102 and ancient woodland to the south. There is green field land to the east and west sides and a watercourse to the west of the site.
- 1.1.4 The outline planning application covers up to 290 dwellings, associated landscaping, informal open space and strategic SANG, with access from the B2102. Appearance, landscaping, layout and scale are reserved. A copy of the Site Layout Plan can be found in **Appendix B**.

1.2 The Study

- 1.2.1 This Utilities Appraisal will outline and assess the utility issues in relation to the proposed site and will identify the need for new utility infrastructure, potential upgrade/reinforcement works, or the need for further investigation/modelling.

2 Utility Providers

2.1 Introduction

- 2.1.1 This section provides an overview of the existing utility infrastructure within and adjacent to the site.

2.2 Statutory Undertakers Contact List

- 2.2.1 The following table identifies the Statutory Undertakers that have been approached for record drawings and summarises the reported presence of utility infrastructure in the vicinity of the site, along with the likely requirement for diversion or protection of any existing infrastructure.

Utility Medium	Statutory Undertaker	Existing Infrastructure On/Near Site	Diversionary Works Required	Enquiry Date
Electricity	UK Power Networks	Yes	Yes	30/03/20
Electricity	Last Mile	No	No	20/04/20
Gas	SGN	Yes	No	03/03/20
Gas	GTC	Yes	No	02/08/14
Telecoms	COLT Telecommunications	No	No	17/04/20
Telecoms	CenturyLink (Instalcom)	No	No	17/04/20
Telecoms	CityFibre	No	No	15/04/20
Telecoms	KPN	No	No	28/04/20
Telecoms	MBNL	Yes	No	15/04/20
Telecoms	Sky	No	No	16/04/20
Telecoms	Sota	No	No	17/04/20
Telecoms	Openreach	Yes	No	15/04/20
Telecoms	Verizon UK Ltd	No	No	15/04/20
Telecoms	Virgin Media Ltd (previously NTL Telewest/Viatel)	No	No	28/04/20
Telecoms	Vodafone Group	No	No	13/05/20
Potable Water	South East Water	Yes	No	04/05/20
Foul Water	Southern Water	Yes	No	24/04/20

Table 2-1: Statutory Undertaker Contact List

- 2.2.2 An Existing Utility Infrastructure Constraints plan (Drawing No. 48494-2501-001) has been prepared showing the extent of the existing utility infrastructure within and adjacent to the site, and is contained within **Appendix C**.

- 2.2.3 The information on utilities contained within this report has been derived from data provided by the main public utility companies. No information is provided in relation to “private” utility infrastructure that might be present on site.
- 2.2.4 The Statutory Undertakers that have services within or near to the proposed development are discussed within the following sections.
- 2.2.5 It should be noted that the record mapping is only valid for a period of 90 days from issue. It is therefore recommended that up-to-date mapping is requested prior to commencement of any site works.

2.3 Information on Pre-Planning Enquiries

- 2.3.1 This outline application is for up to 290 dwellings and associated infrastructure, however at the time of making pre-planning enquiries to the various utilities undertakers the development proposals were indicated as for 288 dwellings. Owing to the minor increase in the number of dwellings (2 units - <1% increase), it is not anticipated that there will be significant variance in capacity requirements. Therefore, updated enquiries have not been issued to the various utilities undertakers. However, it should be understood that all responses related to capacity made by the utilities undertakers is subject to further detailed design and assessments following granting of outline planning consent.

3 Electrical Infrastructure

UK Power Networks (UKPN)

3.1 Existing Electrical Infrastructure

- 3.1.1 Mapping obtained from UKPN show assets present within the proposed site boundary as well as within close proximity to the site.
- 3.1.2 Existing 33kV overhead lines pass over the site, crossing in a north easterly direction from the western boundary to the northern boundary at the B2102.
- 3.1.3 Overhead low voltage cables are present in the site to serve Land at Bird in Eye Farm in the north of the site. These cables connect from the buildings, to the B2102 and then run both east and west above the highway, service existing dwellings along this road.
- 3.1.4 There are also existing overhead low voltage cables adjacent to the eastern boundary of the site.

3.2 Diversionary Works

- 3.2.1 Based on the current proposed development layout, the existing overhead 33kV cables crossing the site will need to be diverted in order for a masterplan to be achieved without constraint. A diversion plan for this can be seen in **Appendix D**.
- 3.2.2 UKPN have provided a budget estimate of £400,000 excluding VAT for the diversionary works.
- 3.2.3 This includes:
 - Removal of 3No. redundant poles and 500m of redundant cables.
 - Laying 700m of 33kV cable.
 - Installation of 2No. of 33kV underground joints.
 - Installation of 2No. of H poles with air break switch disconnectors.
 - Obtaining Legals and Consents for the new electrical infrastructure.
- 3.2.4 This quote assumes that the developer will carry out all civil works within the site boundary, at no cost to UKPN.
- 3.2.5 It is assumed that a Point of Connection (POC) is viable and cable of accepting the quoted capacity.
- 3.2.6 UKPN work can be completed within 18 months of the acceptance of the formal offer.

3.3 Proposed Infrastructure

- 3.3.1 UKPN have provided a budget estimate to connect 288 new houses with a combined load of 22577kVA.
- 3.3.2 The estimated cost of £990,000 excluding VAT covers the POC to the high voltage network within High Street, Uckfield.

- 3.3.3 This quote assumes that a viable overhead line existing along the route between the POC and the site. It is also assumed that a substation can be located on the site due to connect to the High Voltage POC.
- 3.3.4 All civils works within the site boundary including substations and excavation/reinstatement of cable trenches will be at no charge to UKPN.
- 3.3.5 Installation of equipment that may cause disturbances to UKPN's electricity distribution system such as motors or welders, may affect the estimate considerably.

3.4 GS6 Survey

- 3.4.1 A GS6 Survey is being undertaken by UKPN to review any potential risks of the surface water sewer design passing beneath existing 33kV overhead cables.
- 3.4.2 The detention basin in the south of the site is proposed to outfall to a watercourse to the south and must pass through a protected ancient woodland in order to do so. The existing 33kV overhead lines currently pass over the above-mentioned woodland. The route of the surface water sewer connecting the detention basin and the existing watercourse is proposed to lie beneath the electricity cables. This can be seen in **Appendix E**.
- 3.4.3 The outcome of the GS6 survey will be a Risk Assessment Method Statement (RAMS) specific to working on the proposed sewer in close proximity to existing overhead lines.
- 3.4.4 UKPN was contacted on 16/02/2021 regarding the pre-planning enquiry. At the time of writing no response has yet been received by Stantec from UKPN with the last chase for information via telephone call on 30/03/2021. It is anticipated that a response will be provided shortly. UKPN's response will be added to this report on receipt and the report reissued.

4 Gas

SGN

4.1 Existing Gas Infrastructure

- 4.1.1 No SGN assets are located within the proposed site boundary. However, low pressure gas mains are present adjacent to the north west boundary of the site. These are situated in the B2102 and neighbouring roads and range from 63mm diameter polyethylene (PE) to 180mm PE low pressure mains.

4.2 Diversionary Works

- 4.2.1 No onsite diversions to any SGN infrastructure are envisaged at this stage.

4.3 Proposed Infrastructure

- 4.3.1 As part of the government's drive to Net Zero Carbon, Building Regulation Part L (Conservation of fuel and power) is in the process of being updated and an interim Part L 2021 to become adopted in December 2021 and effective from June 2022. The updated Part L will in essence mean that due to emissions and carbon that gas boilers will not meet the required SAP ratings for new build and therefore all new dwellings will mostly likely be electrically heated.
- 4.3.2 A pre-planning enquiry has been submitted to SGN; however, this will likely not be required if the use of electrical heating is confirmed. SGN were contacted on 04/03/2021 regarding the pre-planning enquiry. At the time of writing no response has yet been received by Stantec from SGN with the last chase for information via telephone call on 24/03/2021. It is anticipated that a response will be provided shortly.
- 4.3.3 If a gas connection is required, a suggested point of connection is to the low-pressure gas mains mentioned in Section 4.1.1.

5 Telecommunications

Openreach

5.1 Existing Telecommunications Infrastructure

- 5.1.1 Asset location maps have been obtained from Openreach. The mapping shows underground Openreach cables within the site running from Bird in Eye Farm in the north of the site, directly north to the B2102. These cables then continue in the verges of the B2102 outside of the northern and eastern site boundaries.
- 5.1.2 Overhead Openreach lines are present near to the eastern site boundary in the western verge of the B2102 and near to the northern site boundary in the northern verge of the B2102.
- 5.1.1 Underground Openreach ducts are present within the public highways and residential developments around the proposed development site.
- 5.1.2 At present, it is not known whether the cable ducts contain copper or fibre optic cables. This detail will become available during future investigations or diversionary works at the detailed design stage of the project.

5.2 Diversionary Works

- 5.2.1 There are no diversionary works envisaged at this stage.

5.3 Proposed Infrastructure

- 5.3.1 It is assumed the supply strategy is likely to be via a new connection to the telecommunications infrastructure from existing duct network which currently serves Bird in Eye Farm in the north of the site. New Openreach infrastructure will run through the development in line with the proposed masterplan.
- 5.3.2 As of 2017, Openreach only provide fibre optic networks to new residential developments. Therefore, this development will benefit from fibre to the premise (FTTP) to all dwellings.
- 5.3.3 Openreach normally undertake to provide telephone and broadband services to all new developments free of charge with the end user ultimately paying for connection costs. All civils works will typically be undertaken by the developer using free issue Openreach ducts and Openreach specified duct boxes to Openreach confirmed design. Openreach will then pull cables through the newly installed ducts as and when required.
- 5.3.4 Openreach will make payments to the developer for the construction and installation of the Openreach network on new developments on a per unit basis. The payment amounts are agreed between Openreach and the House Builders Federation (HBF). Openreach will make payments for all sites of 11 or more plots, providing standards are met on completion, of £140 per house and £50 per flat.
- 5.3.5 In addition, if the developer has opted to self-install the internal Openreach equipment (Connectorised fibre cable, Optical Network Termination (ONT) and the battery back-up (BBU)), and this has been commissioned by Openreach then the developer can claim an extra £20 payment per plot.

5.4 Broadband

- 5.4.1 A check of the availability and quality of BT Broadband within the area of the proposed development has been undertaken.
- 5.4.2 The estimated download speed at the present time is:
- 150Mb - 900Mb for full fibre broadband
 - Minimum guaranteed speed of 100Mb for fibre broadband
 - 23Mb - 74Mb for standard fibre broadband
 - Minimum guaranteed speed of 18Mb for standard fibre broadband
- 5.4.3 The actual speeds being made available will need to be discussed in detail with BT at the design / delivery stage. A copy of these results can be found in **Appendix F**.
- 5.4.4 The above information has been sourced online from bt.com-BT-Official Site.

5.5 TV and DAB Services

- 5.5.1 The proposed development site is predicted to receive a good terrestrial TV signal from the Heathfield transmitter in the Meridian TV region.
- 5.5.2 The standard reception forecast for the area is classed as good reception with 87 channels. The HD forecast for the area is also classed as good with 47 channels. A copy of these results can be found in **Appendix G**.
- 5.5.3 The area can receive at least 33 radio stations.
- 5.5.4 The above information has been sourced online from freeview.co.uk.

6 Potable Water

South East Water (SEW)

6.1 Existing Potable Water Infrastructure

- 6.1.1 SEW has recorded a 250mm diameter ductile iron (DI) pipe within the south west of the site which is situated within an existing track.
- 6.1.2 A 15" diameter cast iron (CI) pipe is present running from the south of the site to the north east corner, along the eastern site boundary.
- 6.1.3 The surrounding area is served by SEW mains. A 4" diameter Polyvinyl chloride (PVCU) distribution water main runs in the southern verge of the B2102, to the north of the site.

6.2 Diversionary Works

- 6.2.1 The abovementioned distribution mains exist in a location that is currently proposed to be developed into a strategic Suitable Alternative Natural Green Space (SANG). Assuming that the space will be constructed as a SANG then diversionary works will not be required. However, if infrastructure is chosen to be developed in these areas then there is potential for diversionary works to the existing distribution mains.

6.3 Proposed Infrastructure

- 6.3.1 SEW have provided a pre-planning enquiry response from quotes an approximate total cost of £99,236.16 for the connection of all 288 homes.
- 6.3.2 This price is itemised in to £96,932.16 for the A-type connections and £2,304.00 for the standard infrastructure charge including the income offset reduction.
- 6.3.3 The on-site mains are predicted to cost £125 per metre.
- 6.3.4 Two options are offered for to the developers for installation of water mains: either the developer can self-lay or SEW can install the infrastructure.
- 6.3.5 SEW have suggested a point of connection from the 250mm mains in the western side of the site as mentioned in Section 6.1.1.
- 6.3.6 The costs associated with the network modelling will be funded by SEW. All network reinforcement works to create additional supply capacity will be funded and carried out by SEW.
- 6.3.7 The new mains infrastructure to serve the development will be requisitioned from SEW via S41 of The Water Industry Act.

6.4 Water Quality

- 6.4.1 The water supply zone is Barcombe. The water supply in this area is classed as slightly hard water. A copy of these results can be found in **Appendix H**.
- 6.4.2 The above information has been sourced online from southeastwater.co.uk.

7 Foul Water

Southern Water (SW)

7.1 Existing Foul Sewer Network

- 7.1.1 SW is the incumbent foul sewerage undertaker in the area. Asset location maps received from SW show no assets within the proposed site boundary.
- 7.1.2 The existing residential developments to the north of the proposed site are served by SW foul sewers.

7.2 Diversionary Works

- 7.2.1 No diversionary works to any SW foul infrastructure on the site are envisaged at this stage.

7.3 Proposed Foul Drainage Strategy

- 7.3.1 The site is within the area managed by Southern Water for foul drainage. Asset mapping received from Southern Water (see **Appendix I**) indicates that there is no recorded public infrastructure within the proposed development itself. It is not known whether Bird in Eye farm benefits from existing private foul drainage infrastructure, which could be located within the proposed site boundary.
- 7.3.2 As there is no public foul infrastructure within the proposed development site, no diversionary works are envisaged at this stage. However, consideration will need to be made should any private systems be encountered, including reaching an agreement with the affected property owners on how their future foul drainage requirements are to be provided.
- 7.3.3 To manage and drain foul flows from the proposed development, a new foul sewer system will be constructed which will connect into the existing public foul sewer network. An indicative foul drainage network layout is provided in **Appendix J**.

7.4 Point of Connection

- 7.4.1 On review of the asset mapping provided by Southern Water, the nearest and preferred Point of Connection (POC) to the existing public network would be at a manhole in Bird in Eye Hill (ref: TQ48200803) less than 100m outside of the site boundary. Connection to this manhole could be made via a S98 requisition under the Water Industry Act 1991.
- 7.4.2 Southern Water were contacted to indicate whether this POC was acceptable and if not what their preferred POC would be. They indicated that there is currently inadequate capacity at the preferred location and that the nearest POC with adequate capacity would be approximately 1.1km west of the site at manhole ref: TQ47200601. However, due to the distance from the site this is not a practical or viable option, as this would involve a route through Uckfield town centre (causing potential disruption during construction). In addition, reaching this POC would require a Sewage Pumping Station (SPS), but proposed development site currently sits at an elevation higher than Bird in Eye Hill, therefore the SPS would need to be located off site on third party land, which is not deliverable.
- 7.4.3 Under S106 of the Water Industry Act, the development has a right to connect to a public sewer, provided that the connection is to a sewer with “reasonable” capacity. In this instance, “reasonable” is defined as a sewer diameter equal to or greater than that of the new sewer making a connection e.g., a new 150mm diameter sewer could connect to a 150mm or

225mm diameter sewer but not a 100mm diameter sewer irrespective of actual available capacity.

- 7.4.4 Stantec undertook an assessment to demonstrate that a “reasonable” connection can be made to the preferred POC and therefore this is viable and deliverable option, whereas Southern Water’s POC is neither.
- 7.4.5 It was calculated that peak foul flows from the proposed development would be 14.5 l/s, which based on existing levels on site can be accommodated within a 150mm diameter pipe whilst maintaining adequate self-cleansing velocity. The sewer downstream of the preferred POC is indicated within the supplied asset mapping as being 150mm diameter. Therefore, a “reasonable” connection can be made.
- 7.4.6 As the preferred POC and downstream existing public foul sewer network is outside of the site boundary and adopted by Southern Water, it is their responsibility to provide adequate capacity within the network. Any capacity improvement works would not require additional funding from a developer beyond the S98 requisition charges (outlined in Southern Water’s Site-Specific Charges as given in their New Connections Services Charging Arrangements) and New Infrastructure Charges (which are already payable as part of the proposed development irrespective of eventual POC).
- 7.4.7 Southern Water advised that they will be able to provide additional assessments regarding a foul POC following granting of Outline planning permission.
- 7.4.8 Details of correspondence with Southern Water on this matter can be found in **Appendix K**. The onsite drainage will be constructed under S104 agreement of the Water Industry Act 1991, with the offsite sewers and final connection to the existing SW sewer network being undertaken via S98 Agreement of the Water Industry Act 1991.

8 Conclusion and Recommendation

8.1 Summary

The following table summarises the results of the investigations undertaken by Stantec.

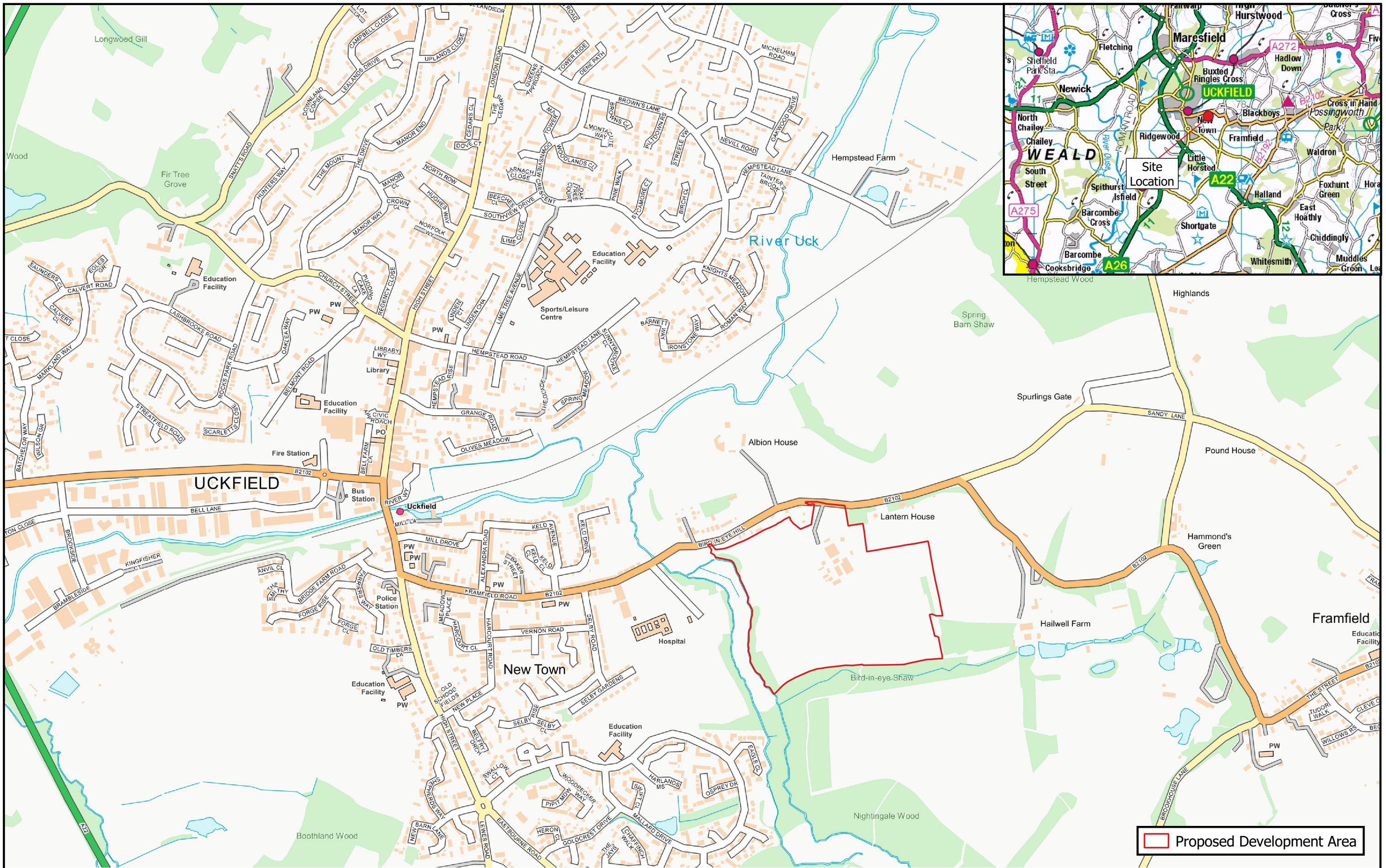
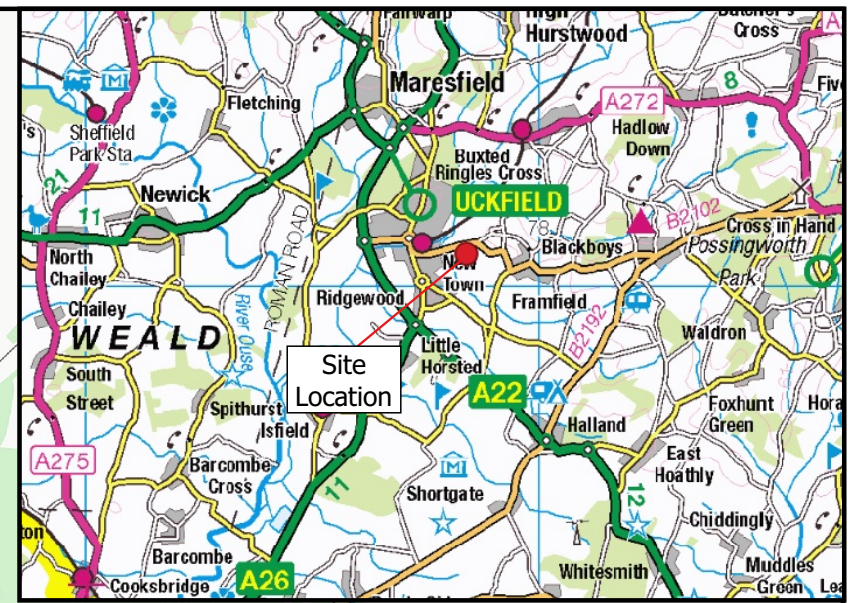
Statutory Undertaker	Existing Utility Infrastructure		New Utility Infrastructure
	Onsite / Near Development	Diversions Requirements	Requirements
UK Power Networks	33kV overhead lines pass through site. Overhead low voltage lines are present to serve existing infrastructure. Existing overhead low voltage cables to the east of the site.	Onsite 33kV overhead cables will need diverting underground and through masterplan. A budget estimate of £400,000 has been provided by UKPN.	UKPN have provided a budget estimate to connect 288 new houses with a combined load of 22577kVA. The estimated cost of £990,000 not including VAT covers the Point of Connection (POC) to the high voltage network within High Street, Uckfield.
SGN	No infrastructure onsite. LP gas main is present adjacent to the north west boundary of the site, situated in the B2102 and neighbouring roads.	No onsite diversions required.	Awaiting pre-planning enquiry response. SGN were contacted on 04/03/2021 regarding the pre-planning enquiry. At the time of writing no response has yet been received by Stantec from SGN with the last chase for information via telephone call on 24/03/2021 Gas connection may not be required although a suggested point of connection is the low-pressure gas mains to the north west of the site.
Openreach	Underground cables in the north of the site and in both verges of the B2102 outside of the site boundary. Overhead lines present in the B2102 to the east and north of the site. Underground cables present in the public highways and residential developments around the proposed development site.	No onsite diversions required.	It is assumed the supply strategy is likely to be via a new connection to the telecommunications infrastructure from existing duct network which currently serves Bird in Eye Farm in the north of the site. New Openreach infrastructure will run through the development in line with the proposed masterplan.
South East Water (Potable)	250mm pipe running in the west and centre of the site. 15" existing pipe running from south to north east of site. A 4" distribution water main runs in the B2102 to the north of the site.	Potential for diversions although this is awaiting masterplanning for the south of the site.	SEW have provided a pre-planning enquiry total cost of £99,236.16 for the connection of all 288 homes. Two options are offered for to the developers for installation of water mains: either the developer can self-lay or SEW can install the infrastructure. SEW have suggested a point of connection from the 250mm mains in the western side of the site.
Southern Water (Foul)	No infrastructure onsite. Foul infrastructure to the north west of the site serving residential developments.	No anticipated diversions required.	As there is no public foul infrastructure within the proposed development site, no diversionary works are envisaged at this stage. The nearest and preferred point of connection to the existing public network is at a manhole in Bird in Eye Hill however this has not been agreed by Southern Water. Southern Water advised that they will be able to provide additional assessments regarding a foul point of connection following granting of outline planning permission

Table 8-1: Summary of Investigations

8.2 Recommendations

- 8.2.1 Upon receiving a pre-planning enquiry response from SGN, this should be reviewed.
- 8.2.2 Upon receiving the GS6 survey from UKPN, the surface water network design should be reviewed.
- 8.2.3 TW, SEW, UKPN and SGN will need to be contacted once planning has been granted so that any upgrading works necessary are undertaken in line with the proposed development phasing.
- 8.2.4 A formal tender should be undertaken to obtain firm quotes for new supply to the proposed development. We would further recommend that in addition to the incumbent utility transporters, Utility Infrastructure Providers and Independent Connection Providers are also contacted as they may offer the client a better economic value for supplying utilities to the development site.
- 8.2.5 In respect of new water mains, it will be necessary to submit a Section 41 on the granting of detailed planning permission. This will provide the right to requisition a new water main for domestic purposes to connect the site to the public water network.
- 8.2.6 Any onsite drainage will be constructed under S104 agreement of the Water Industry Act 1991, with the offsite sewers and final connection to the existing FW sewer network being undertaken via S98 Agreement of the Water Industry Act 1991.

Appendix A Site Location Plan



 Proposed Development Area



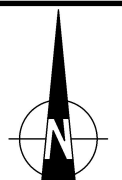
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Client:

Croudace Homes

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Land at Bird in Eye Farm, South of Bird in Eye Hill, Uckfield Site Location



First Date of Issue: 12/11/2020

Scale: NTS

Drawn By: KT Checked By: LWD

Drawing Number:

Figure 1

Appendix B Site Layout Plan



- KEY**
- Application Site Boundary
 - Area of land retained for Bird in Eye Farm
 - Area of land for SANG (part only shown)
 - Ancient Woodland
 - Ancient Woodland buffer - 15M
 - Existing Hedges with 5M buffer zone
 - Existing watercourses
 - Existing overhead electricity cables
 - Location of Listed Oast house
 - Proposed main site access
 - Proposed Visibility Splays
 - Proposed pedestrian/cycle access to connect to existing F.P. network
 - Proposed 5M landscaped buffer to farm & existing adjacent housing
 - Proposed Open Space area
 - Proposed Local Equipped Area of Play
 - Proposed footpath/cycleway
 - Potential informal footpaths within open space
 - Proposed balancing pond
 - Proposed swales
 - New tree planting within Public Realm
 - New hedgerow buffers within Public Realm
 - New trees within garden areas
 - Proposed garden planting

Rev: N 27/04/21 Joint applicant names added. Title block revised.
Rev: M 01/03/21 Red line adjacent Halliwell Farm revised.
Rev: L 24/03/21 Red line & SANG boundary updated. Road adjacent parcels N & P realigned. Parcel B revised to suit amended Lycroft boundary.
Rev: K Draft 10 10/12/20 Flat blocks in parcels B & C revised. Unit numbers change in parcels B, C, F, G & H.
Rev: J Draft 9 18/12/20 Numbers of flats reduced, more housing. Parcels C, F & G.
Rev: I Draft 8 28/08/20 SANG parking increased to 30 units.
Rev: H Draft 7 26/06/20 Latest swale & pond layout added. Existing house accesses revised. House on perimeter changed.
Rev: G Draft 5 19/05/20 First version fully coloured.
Rev: F Draft 6 26/05/20 General updates.
Rev: D Draft 4 07/05/20 Exstg trees added. LEAP revised. Play area removed. Pond updated. Parcel H extended. Parcels QR omitted. Road alignment & boundary amended.
Rev: C Draft 3 17/04/20 Fully revised 282 units. Badger sett & barn owl box added. Swale added.
Rev: B Draft 2 15/04/20 southern SANG parking removed. Lycroft access shown. Farm access added. Eastern farm track added. Play areas removed. SANG track removed.
Rev: A Draft 1 14/04/20 286 units.

Applicants:
Croudace Homes Ltd and Mr. & Mrs. Berry

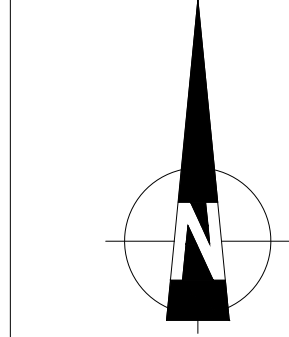
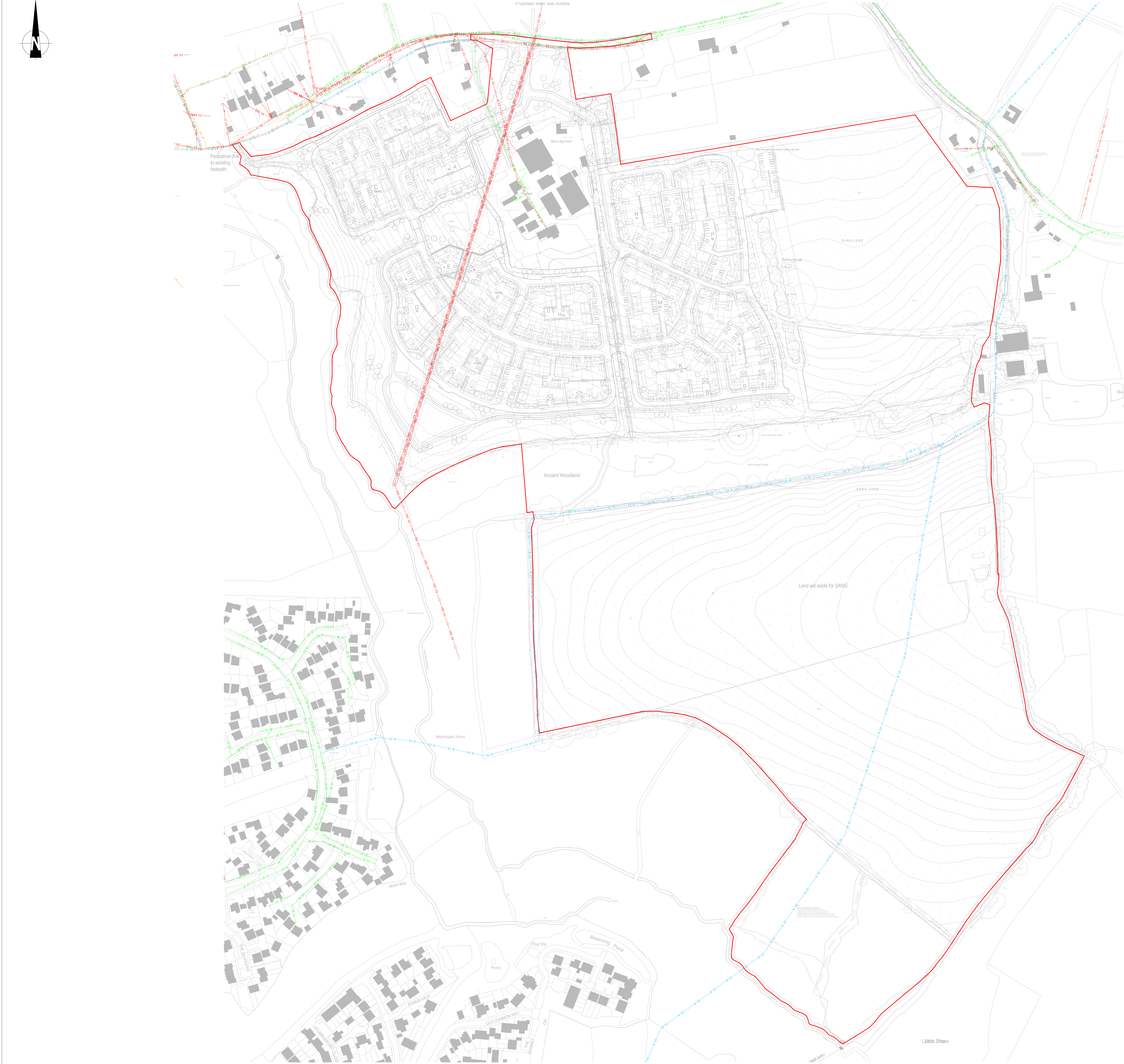
Croudace
HOMES.CO.UK

R Paul Brown RIBA Chartered Architect
14 Weymede, Green Lane, Byfleet, Surrey, KT14 7DG
T: 01932 349946 M: 07443 417 952

Land at Bird in Eye Farm, South of Bird in Eye Hill, UCKFIELD

Illustrative Site Layout
Ref: PRB/BIE/PA2N
Apr 2020

Appendix C Existing Utility Infrastructure Constraints Plan



NOTES

- ABANDONED SERVICES MAY NOT BE SHOWN ON THIS PLAN.
- TRUE POSITION OF THE SERVICES MAY BE DIFFERENT TO THAT SHOWN ON THIS PLAN, WHICH IS INTENDED FOR GENERAL GUIDANCE ONLY. NO GUARANTEE CAN BE GIVEN TO ITS ACCURACY AND IT SHOULD NOT BE RELIED UPON DURING MASTERPLANNING, INTRUSIVE INVESTIGATIONS, EXCAVATIONS AND CONSTRUCTION.
- THESE SERVICES MAY NOT RUN IN A STRAIGHT LINE EITHER HORIZONTALLY OR VERTICALLY BECAUSE OF GROUND CONDITIONS, OBSTACLES AND OTHER REASONS.
- BURIED SERVICES MAY EXIST AT VARIOUS DEPTHS AS GROUND LEVEL MAY HAVE BEEN ALTERED SINCE THE UTILITY APPARATUS WAS LAID.
- UTILITY COMPANY ASSET RECORDS (ASSETS, LOCATION AND DETAILS) ARE VALID FOR UP TO 3 MONTHS. IF WORKS DO NOT COMMENCE WITHIN THIS TIME PERIOD, THE ASSET RECORDS WILL NEED TO BE REFRESHED BEFORE ANY WORKS COMMENCE ON OR NEAR THE SITE.
- THE MASTERPLAN WAS DESIGNED BY PAUL BROWN CHARTERED ARCHITECT AND RECIEVED ON 21/05/2020.

BEFORE EXCAVATING OR GROUND WORKS

- ANY SITE INVESTIGATION OR GROUND PENETRATING ACTIVITY SHALL COMPLY WITH THE REQUIREMENTS OF HSE GUIDANCE DOCUMENT HS(G) 47 "AVOIDING DANGER FROM UNDERGROUND SERVICES"
- ALL UNDERGROUND SERVICES i.e. CABLES, PIPES, DUCTS SHOULD BE LOCATED USING THE FOLLOWING TECHNIQUES;
 - REFERENCE TO DETAILED LARGER SCALE DRAWINGS AND CABLE ROUTE PROFILES. THESE WILL NEED TO BE REQUESTED FROM THE SERVICE PROVIDER AND REFERRED TO DURING THE DESIGN STAGE AND MADE AVAILABLE ON SITE TO SITE OPERATIVES PRIOR TO THE COMMENCEMENT OF ANY GROUNDWORKS.
 - SUITABLE INSTRUMENTS i.e. GROUND PENETRATING RADAR, CABLE LOCATING DEVICES WILL NEED TO BE USED TO DETERMINE THE LOCATION AND PRESENCE OF UNDERGROUND SERVICES/OBSTRUCTIONS BEFORE EXCAVATION WORKS PROCEED.
 - SAFE DIGGING TECHNIQUES (HAND EXCAVATION) AS DETAILED IN HS(G) 47 WILL BE NECESSARY TO DETERMINE THE EXACT POSITION OF BURIED SERVICES AND OBSTRUCTIONS BEFORE WORK CAN PROCEED.
 - ALL APPARATUS FOUND SHOULD BE CROSS REFERENCED WITH THE DETAILED RECORD PLANS. ANY ABNORMALITIES SHOULD BE REPORTED TO THE PROJECT MANAGER.
- INFORMATION CONCERNING THE POSITION OF EXISTING UTILITY INFRASTRUCTURE HAS BEEN EXTRACTED FROM RECORD MAPPING OBTAINED FROM THE FOLLOWING STATUTORY UNDERTAKERS:

STATUTORY UNDERTAKER	MAPPING RECEIVED
UK POWER NETWORKS	30/03/2020
SGN	03/03/2020
GTC	15/04/2020
OPENREACH	15/04/2020
SOUTH EAST WATER	04/05/2020
SOUTHERN WATER	30/03/2020

KEY

EX W	EX W	EX W	EX W
EX FWS	EX FWS	EX FWS	EX FWS
EX LP	EX LP	EX LP	EX LP
EX LV	EX LV	EX LV	EX LV
EX 33kV	EX 33kV	EX 33kV	EX 33kV
EX 11kV	EX 11kV	EX 11kV	EX 11kV
EX BT	EX BT	EX BT	EX BT
EX ST	EX ST	EX ST	EX ST
EX 30V	EX 30V	EX 30V	EX 30V
EX 20V	EX 20V	EX 20V	EX 20V
EX 15V	EX 15V	EX 15V	EX 15V
EX 10V	EX 10V	EX 10V	EX 10V
EX 5V	EX 5V	EX 5V	EX 5V
EX 1V	EX 1V	EX 1V	EX 1V

SITE BOUNDARY
EXISTING WATER MAINS
EXISTING FOUL WATER MAINS
EXISTING LOW PRESSURE GAS MAINS
EXISTING OVERHEAD LOW VOLTAGE ELECTRICITY LINES
EXISTING OVERHEAD SERVICE LINES
EXISTING OVERHEAD 33kV ELECTRICITY LINES
EXISTING OVERHEAD 11kV ELECTRICITY LINES
EXISTING OPENREACH CABLE DUCT & CHAMBER
EXISTING OPENREACH OVERHEAD LINES

Mark	Revision	Date	Drawn	Chkd	Appd
------	----------	------	-------	------	------

SCALING NOTE: Do not scale this drawing - any errors or omissions shall be reported to Stantec without delay.
UTILITIES NOTE: The position of any existing public or private sewers, utility services, plant or apparatus shown on this drawing is believed to be correct, but no warranty to this is expressed or implied. Other such plant or apparatus may also be present but not shown. The Contractor is therefore advised to undertake their own investigation where the presence of any existing sewers, services, plant or apparatus may affect their operations.

Drawing Issue Status

FOR INFORMATION

LAND AT BIRD IN EYE FARM
SOUTH OF BIRD IN EYE HILL, UCKFIELD
EXISTING UTILITY INFRASTRUCTURE
CONSTRAINTS PLAN

Client

CROUDACE HOMES LIMITED AND MR & MRS BERRY

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TAUNTON
Tel: 01823 218 940

Date of 1st Issue 29/04/2021	Designed -	Drawn EW
A1 Scale 1:2000	Checked AD	Approved EB
Drawing Number 48494/2501/001		Revision -

Appendix D Proposed 33kV Diversion Route



- NOTES:
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER ENGINEER'S DRAWINGS.
 - ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
 - DO NOT SCALE FROM THIS DRAWING.
 - ALL LEVELS ARE IN METRES ABOVE ORDNANCE DATUM (AOD).
- KEY
- SITE BOUNDARY
 - EXISTING 33kV OVERHEAD ELECTRICITY LINE
 - PROPOSED 33kV UNDERGROUND ELECTRICITY LINE
 - EXISTING UTILITY TO BE ABANDONED

A	MASTERPLAN AND ELECTRICITY POLE LOCATIONS UPDATED	29/04/21	EW	AD	AD
Mark	Revision	Date	Drawn	Chkd	Appd

SCALING NOTE: Do not scale this drawing - any errors or omissions shall be reported to Stantec without delay.
UTILITIES NOTE: The position of any existing public or private sewers, utility services, plant or apparatus shown on this drawing is believed to be correct, but no warranty to this is expressed or implied. Other such plant or apparatus may also be present but not shown. The Contractor is therefore advised to undertake their own investigation where the presence of any existing sewers, services, plant or apparatus may affect their operations.

Drawing Issue Status

FOR INFORMATION

LAND AT BIRD IN EYE FARM
SOUTH OF BIRD IN EYE HILL, UCKFIELD
PROPOSED 33kV
DIVERSION ROUTE

Client

CROUDACE HOMES LIMITED AND MR & MRS BERRY

Date of 1st Issue
09.02.2021

Designed
EW

Drawn
EW

A1 Scale
1:1000

Checked
SM

Approved
SM

Drawing Number
48494/2501/002

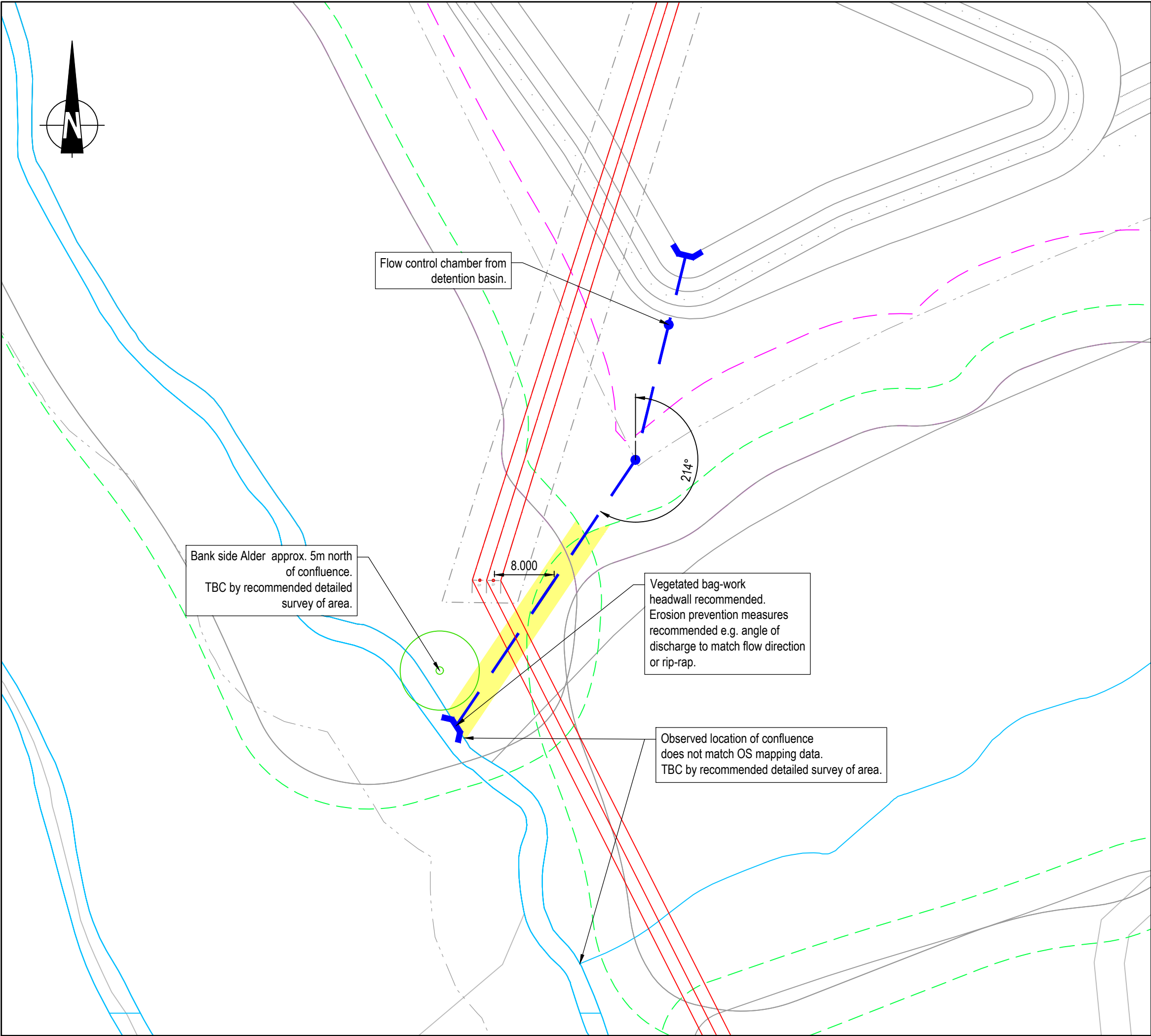
Revision
A

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TAUNTON
Tel: 01823 218 940

Appendix E Surface Water Outfall Design



- Notes:**
1. This drawing is to be read in conjunction with all other Engineer's drawings.
 2. Do not scale from this drawing.
 3. All dimensions are in metres unless noted otherwise.
 4. All levels are in metres above Ordnance Datum (AOD).
 5. Proposed installation corridor is based on site observations, minimising the impact of the surface water drainage outfall on the existing vegetation.
 6. It is recommended that final surface water drainage outfall arrangements should be informed by a detailed survey of the area, to accurately locate trees and other vegetation which are to be protected and confirm the depth of the watercourse. This should be undertaken prior to submission of any relevant Reserved Matters Applications.

Key:

	Ancient Woodland 15m Buffer Zone
	Tree Root Protection Area
	Overhead Power Lines
	Proposed Surface Water Drainage Outfall Pipe
	Proposed Surface Water Drainage Chamber
	Proposed Surface Water Drainage Headwall
	4m Installation Corridor

Mark	Revision	Date	Drawn	Chkd	Appd
------	----------	------	-------	------	------

SCALING NOTE: Do not scale this drawing - any errors or omissions shall be reported to Stantec without delay.
UTILITIES NOTE: The position of any existing public or private sewers, utility services, plant or apparatus shown on this drawing is believed to be correct, but no warranty to this is expressed or implied. Other such plant or apparatus may also be present but not shown. The Contractor is therefore advised to undertake their own investigation where the presence of any existing sewers, services, plant or apparatus may affect their operations.

Drawing Issue Status
For Information

Land at Bird in Eye Farm
South of Bird in Eye Hill, Uckfield
Surface Water Drainage
Outfall Concept Design

Client			 stantec.com/uk <small>Copyright reserved The copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorised by Stantec is forbidden.</small> TAUNTON Tel: 01823 218 940
Date of 1st Issue 18.08.2020	Designed LWD	Drawn LWD	
A3 Scale 1:500	Checked ET	Approved ET	
Drawing Number 48494/2002/SK01		Revision -	

Appendix F Broadband Availability and Speed

✔ **Brilliant, expert service**

You'll always speak to one of our team based in the UK and Ireland.

✔ **Speed guarantee**

Speeds you can rely on day and night, and a personal speed guarantee.

✔ **Powerful hub**

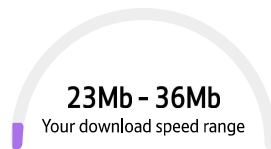
Our Smart Hubs are Which? Best Buys, giving you strong and powerful wi-fi.

✔ **Unrivalled security**

More online security features included than with other big providers.

Offer ends: 03d 08h 04m 46s

Fibre Essential



Your Stay Fast Guarantee **18Mb**

Upload speed range **5Mb - 7Mb**

What these speed estimates mean for you

Everyday browsing and streaming on one or two devices at once

No upfront fees – worth £19.99

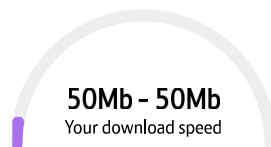
£26.99^Δ a month
24 month contract

[Customise your package](#)

Checkout now (https://secureorder.bt.com/consumerOrders/control/orderproduct?DEV=N&LR_OPTION=SLR&InsOp=SI&BTPCD_12M=Y&AOSI)

Most popular
(/options/cw/oc-complete-wifi)
Offer ends: 03d 08h 04m 46s

Fibre 1



Your Stay Fast Guarantee **25Mb**

Upload speed **10Mb - 10Mb**

What these speed estimates mean for you
Browse, stream and download on a few devices at once

Free P&P – worth £9.99

£28.99^Δ a month
24 month contract

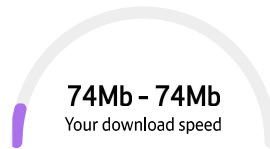
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Live Chat

(/options/cw/oc-complete-wifi)
Offer ends: 03d 08h 04m 46s

Fibre 2



Your Stay Fast Guarantee **34Mb**
Upload speed **20Mb - 20Mb**

What these speed estimates mean for you

Stream, game and download in HD on lots of devices at once

Free P&P – worth £9.99

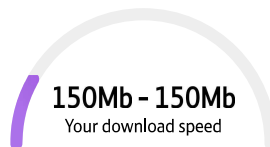
£31.99^Δ a month
24 month contract

Customise your package

Checkout now (https://secureorder.bt.com/consumerOrders/control/orderproduct?DEV=N&LR_OPTION=SLR&InsOp=SI&BTPCD_12M=Y&AOSI)

(/options/cw/oc-complete-wifi)
Offer ends: 03d 08h 04m 46s

Full Fibre 100



Your Stay Fast Guarantee **100Mb**
Upload speed **30Mb - 30Mb**

What these speed estimates mean for you

Ultrafast and super reliable – stream and download as much as you like

Free P&P – worth £9.99

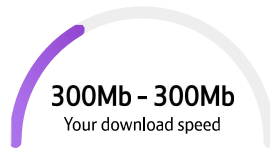
£39.99^Δ a month
24 month contract

Customise your package

Checkout now (https://secureorder.bt.com/consumerOrders/control/orderproduct?DEV=N&LR_OPTION=SLR&InsOp=SI&BTPCD_12M=Y&AOSI)

(/options/cw/oc-complete-wifi)
Offer ends: 03d 08h 04m 46s

Full Fibre 300



Your Stay Fast Guarantee **150Mb**
Upload speed **49Mb - 49Mb**

What these speed estimates mean for you

Ultrafast and super reliable – stream, game and download with more people online at once

Free P&P – worth £9.99

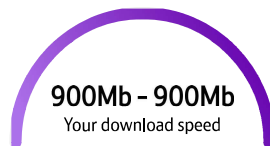
£49.99^Δ a month
24 month contract

Customise your package

Checkout now (https://secureorder.bt.com/consumerOrders/control/orderproduct?DEV=N&LR_OPTION=SLR&InsOp=SI&BTPCD_12M=Y&AOSI)

Our fastest broadband
(/options/cw/oc-complete-wifi)
Offer ends: 03d 08h 04m 46s

Full Fibre 900



Your Stay Fast Guarantee **450Mb**
Upload speed **110Mb - 110Mb**

What these speed estimates mean for you

Our fastest fibre yet – reliable gigafast speeds for the busiest connected homes

Free P&P – worth £9.99

£59.99^Δ a month
24 month contract

Appendix G Coverage Checker Results

Digital transmitters ⓘ

	Name	Region	Parent Transmitter	Grid Reference	Distance (km)	Bearing°	Aerial Group Now	Aerial Group After
Most Likely Transmitter	Heathfield	Meridian	N/A	TQ 56680 22074	9	81	B H,B H	B H,B H
Alternative Transmitter	Tunbridge Wells	Meridian	N/A	TQ 60735 43995	26	28	B V,K V	B V,K V
Alternative Transmitter	Rowridge	Meridian	N/A	SZ 44725 86540	109	251	A H,T H	A H,T H
Alternative Transmitter	Rowridge VP	Meridian	Rowridge	SZ 44725 86540	109	251	A V,A V	A V,A V
Alternative Transmitter	Midhurst	Meridian	N/A	SU 91222 24999	57	274	B H,K H	B H,K H

Coverage prediction ⓘ

N

Channel

S

Served

M

Marginal

Good reception

Variable reception

Poor reception

Heathfield																			
Step ⓘ	Date	BBC A			D3&4			BBC B HD			SDN			ARQ A			ARQ B		
		N	S	M	N	S	M	N	S	M	N	S	M	N	S	M	N	S	M
Now	15 Feb 2021	41	100	100	44	100	100	47	100	100	40	100	100	43	100	100	46	100	100
Final prediction	2025	41	100	100	44	100	100	47	100	100	40	100	100	43	100	100	46	100	100

Appendix H Water Hardness

BARCOMBE WATER SUPPLY ZONE

**1st January to 31st December
2019**

Component Name	No of samples taken	Samples Contravening PCV	Maximum	Mean	Minimum	PCV	Units
1,1,1-Trichloroethane	8	0	0.18	0.18	0.18	No Limit	µg/l
1,2-Dichloroethane	8	0	0.04	0.04	0.04	3	µg/l
Aluminium	51	0	19.60	9.52	5.00	200	µg Al/l
Ammonium (Ammonia and Ammonium Ions)	52	0	0.04	0.04	0.04	0.5	mg NH4/l
Antimony	8	0	0.20	0.13	0.10	5	µg Sb/l
Arsenic	8	0	0.50	0.50	0.50	10	µg As/l
Benzene	8	0	0.01	0.01	0.01	1	µg/l
Benzo[1,1,2]fluoranthene	8	0	0.00	0.00	0.00	0.1	µg/l
Benzo[1,1,2]perylene	8	0	0.00	0.00	0.00	0.1	µg/l
Benzo[3,4]fluoranthene	8	0	0.00	0.00	0.00	0.1	µg/l
Benzo (a) pyrene	8	0	0.00	0.00	0.00	0.01	µg/l
Bromate	8	0	3.90	1.28	0.40	10	µg BrO3/l
Cadmium	8	0	0.06	0.06	0.06	5	µg Cd/l
Calcium	8	0	36.70	35.00	33.90	No Limit	mg Ca/l
Chloride	8	0	59.75	47.94	24.78	250	mg Cl/l
Chromium	8	0	0.50	0.33	0.30	50	µg Cr/l
Clostridium perfringens (including spore)	51	0	0.00	0.00	0.00	0	cfu/100ml
Colony Count 3days at 22°C	51	0	300.00	17.37	0.00	No Abnormal Change	cfu/ml
Colony Count 48hrs at 37°C	51	0	223.00	5.04	0.00	No Abnormal Change	cfu/ml
Colour	51	0	2.00	1.02	1.00	20	mg/l Pt/Co
Conductivity	51	0	515.00	373.41	312.00	2,500	µS/cm
Copper	8	0	0.15	0.05	0.00	2	mg Cu/l
Dibromochloromethane	8	0	14.70	9.05	0.35	100	µg/l
Dichlorobromomethane	8	0	16.65	7.92	0.25	100	µg/l
E coli	143	0	0.00	0.00	0.00	0	mpn/100ml
Enterococci	8	0	0.00	0.00	0.00	0	cfu/100ml
Fluoride	8	0	0.19	0.11	0.07	1.5	mg F/l
Hydrogen Ion (pH)	51	0	8.10	7.69	7.20	9.5	pH_unit
Indeno(1,2,3-cd)Pyrene	8	0	0.00	0.00	0.00	0.1	µg/l
Iron	51	0	85.60	12.31	3.30	200	µg Fe/l
Lead	8	0	0.50	0.50	0.50	10	µg Pb/l
Magnesium	8	0	5.60	4.64	4.00	No Limit	mg Mg/l
Manganese	51	0	16.10	1.95	0.90	50	µg Mn/l
Nickel	8	0	1.80	1.21	0.40	20	µg Ni/l
Nitrate	8	0	24.90	14.58	2.00	50	mg NO3/l
Nitrite	8	0	0.01	0.01	0.01	0.5	mg NO2/l
Nitrite/Nitrate formula	8	0	0.50	0.29	0.00	1	
Odour - Quantitative	52	0	0.00	0.00	0.00	1	Dil No
Polycyclic Aromatic Hydrocarbons	8	0	0.00	0.00	0.00	0.1	µg/l
Residual Disinfectant - Free	143	0	0.96	0.33	0.05	No Limit	mg/l
Residual Disinfectant - Total	143	0	1.02	0.43	0.05	No Limit	mg/l
Selenium	8	0	0.40	0.40	0.40	10	µg Se/l
Sodium	8	0	45.30	32.50	21.80	200	mg Na/l
Taste - Quantitative	52	0	0.00	0.00	0.00	1	Dil No

Component Name	No of samples taken	Samples Contravening PCV	Maximum	Mean	Minimum	PCV	Units
Total Trihalomethanes	8	0	53.60	26.94	1.40	100	µg/l
Tribromomethane	8	0	4.02	2.40	0.18	100	µg/l
Trichloroethene	8	0	0.03	0.03	0.03	10	µg/l
Trichloromethane	8	0	19.81	7.59	0.19	100	µg/l
Turbidity	51	0	0.11	0.10	0.10	4	NTU
	Sum:	1					

Results for Free and Total Chlorine are listed as Residual Disinfectant Free and Total

The data provided is a summary of all the results of regulatory tests that were carried out on samples taken during the given period at customers' taps. The failure(s) reported have been satisfactorily investigated and submitted to the Drinking Water Inspectorate, who regulates the water industry in England and Wales for approval.

All other samples taken proved satisfactory and comply with the requirements of the Water Supply (Water Quality) Regulations 2018.

BARCOMBE MILLS NO.2 WORKS SUPPLY POINT

1st January to 31st December

2019

Component Name	No of samples taken	Samples Contravening PCV	Maximum	Mean	Minimum	PCV	Units
2,4,5-T	8	0	0.01	0.01	0.01	0.1	µg/l
2,4-D	8	0	0.01	0.01	0.01	0.1	µg/l
Aldrin	8	0	0.01	0.01	0.01	0.03	µg/l
Atrazine	8	0	0.01	0.01	0.01	0.1	µg/l
Bentazone	8	0	0.01	0.01	0.01	0.1	µg/l
Boron	8	0	0.06	0.05	0.05	1	mg B/l
Bromate	8	0	2.10	0.93	0.40	10	µg BrO3/l
Bromoxynil	8	0	0.01	0.01	0.01	0.1	µg/l
Carbendazim	8	0	0.01	0.01	0.01	0.1	µg/l
Carbetamide	8	0	0.01	0.01	0.01	0.1	µg/l
Clostridium perfringens (including spore)	156	0	0.00	0.00	0.00	0	cfu/100ml
Cyanide	8	0	2.00	2.00	2.00	50	µg CN/l
Dicamba	8	0	0.01	0.01	0.01	0.1	µg/l
Dichlobenil	8	0	0.01	0.01	0.01	0.1	µg/l
Dichlorprop	8	0	0.01	0.01	0.01	0.1	µg/l
Dieldrin	8	0	0.01	0.01	0.01	0.03	µg/l
Diuron	8	0	0.01	0.01	0.01	0.1	µg/l
Epoxiconazole	8	0	0.01	0.01	0.01	0.1	µg/l
Fluroxypyr	8	0	0.01	0.01	0.01	0.1	µg/l
Flutriafol	8	0	0.01	0.01	0.01	0.1	µg/l
Gamma-HCH (Lindane)	8	0	0.01	0.01	0.01	0.1	µg/l
Heptachlor	8	0	0.01	0.01	0.01	0.03	µg/l
Heptachlor Epoxide	8	0	0.01	0.01	0.00	0.03	µg/l
Isoproturon	8	0	0.01	0.01	0.01	0.1	µg/l
Linuron	8	0	0.01	0.01	0.01	0.1	µg/l
MCPA	8	0	0.01	0.01	0.01	0.1	µg/l
MCPB	8	0	0.01	0.01	0.01	0.1	µg/l
Mecoprop (MCP)	8	0	0.01	0.01	0.01	0.1	µg/l
Mercury	8	0	0.02	0.02	0.02	1	µg Hg/l
Metaldehyde	8	0	0.01	0.01	0.01	0.1	µg/l
Oxadixyl	8	0	0.01	0.01	0.01	0.1	µg/l
Pendimethalin	8	0	0.01	0.01	0.01	0.1	µg/l
Pesticides - Total Substances	8	0	0.01	0.01	0.00	0.5	µg/l
Prometryn	8	0	0.01	0.01	0.01	0.1	µg/l
Propazine	8	0	0.01	0.01	0.01	0.1	µg/l
Propyzamide	8	0	0.01	0.01	0.01	0.1	µg/l
Simazine	8	0	0.01	0.01	0.01	0.1	µg/l
Sulphate	8	0	50.80	40.29	25.20	250	mg SO4/l
Total Organic Carbon	8	0	3.10	2.26	1.90	No Abnormal Change	mg C/l
Tri-allate	8	0	0.01	0.01	0.00	0.1	µg/l
Triclopyr	8	0	0.01	0.01	0.01	0.1	µg/l
Trietazine	8	0	0.01	0.01	0.01	0.1	µg/l
Sum:		0					

The data provided is a summary of all the results of regulatory tests that were carried out on samples taken during the given period at Supply Points.
All samples taken proved satisfactory and comply with the requirements of the Water Supply (Water Quality) Regulations 2018.

Appendix I Southern Water Existing Assets Mapping

SOUTHERN WATER



The positions of pipes shown on this plan are believed to be correct, but Southern Water Services Ltd accept no responsibility in the event of inaccuracy. The actual positions should be determined on site.

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O.S. REF: TQ4820NW

Scale: 1:2500

Sewer Plot

WARNING: BAC pipes are constructed of Bonded Asbestos Cement

WARNING: Unknown (UNK) materials may include Bonded Asbestos Cement



Printed By: Mercy

Site Plan

Requested By:

Date: 24-4-2020



Appendix J Foul Water Drainage Strategy



- Notes:
1. This drawing is to be read in conjunction with all other Engineer's drawings.
 2. Do not scale from this drawing.
 3. All dimensions are in metres unless noted otherwise.
 4. All levels are in metres above Ordnance Datum (AOD).
 5. All areas of permeable paving comprise 300mm sub-base storage with 20mm Ø orifice flow control. Permeable paving, flow control and flow control chamber will not be proposed for adoption by Southern Water.
 6. Surface water drainage network downstream of permeable paving flow chambers is proposed for adoption by Southern Water.
 7. Surface water drainage outfall to utilise existing clearing in Ancient Woodland (as observed on site) to minimise impact. Further details included 48494/2002/SK01.
 - 8.
 9. Proposed foul drainage Point of Connection (POC) approximately 100m west of site at existing public foul drainage manhole, subject to further assessment and confirmation by Southern Water. Assessment undertaken by Stantec provided to Southern Water indicates that a reasonable connection can be made at this point.

- Key:
- Application Boundary
 - Ancient Woodland 15m Buffer Zone
 - Tree Root Protection Area
 - Proposed Surface Water Drainage Sewer (indicative only)
 - Proposed Foul Drainage Sewer (indicative only)
 - Proposed Surface Water Drainage Headwall
 - Proposed Permeable Paving
 - Proposed Swale
 - Proposed Detention Basin
 - MicroDrainage Model Reference Code

SCALING NOTE: Do not scale this drawing - any errors or omissions shall be reported to Stantec without delay.
UTILITIES NOTE: The position of any existing public or private sewers, utility services, plant or apparatus shown on this drawing is believed to be correct, but no warranty to this is expressed or implied. Other such plant or apparatus may also be present but not shown. The Contractor is therefore advised to undertake their own investigation where the presence of any existing sewers, services, plant or apparatus may affect their operations.

Drawing Issue Status

For Outline Planning

Land at Bird in Eye Farm
South of Bird in Eye Hill, Uckfield

Indicative Surface Water & Foul Drainage

Client			<div>Croudace HOMES.CO.UK</div> <div>stantec.com/uk</div> <div>Copyright reserved The copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorised by Stantec is forbidden.</div> <div>TAUNTON Tel: 01823 218 940</div>	
Date of 1st Issue	Designed	Drawn		
11.11.2020	LWD	LWD		
A1 Scale	Checked	Approved		
1:1000	ET	ET		
Drawing Number		Revision		
48494/2002/500		-		

Appendix K Correspondence with Southern Water



Stantec
33 Bowling Green Lane
Farringdon
London
EC1R 0BJ

Your ref

Our ref
DS_CC_PDE-116855

Date
07 May 2020

Contact

Tel 0330 303 0119

Dear

Site: Bird in Eye Farm, Uckfield, East Sussex, TN22 5HA.

We have completed the capacity check for the above development site and the results are as follows:

Foul Water

There is currently inadequate capacity within the foul sewerage network to accommodate a foul flow for the above development at manhole reference TQ4820**0803**. The proposed development would increase flows to the public sewerage system, and existing properties and land may be subject to a greater risk of flooding as a result. Additional off-site sewers, or improvements to existing sewers, will be required to provide sufficient capacity to service the development.

The nearest point where capacity is currently available is at manhole reference TQ4720**0601** which is located approximately **1.1 km** to the west of the proposed development site.

Please note, as on 1st April 2018 we have moved to the "New Connections Services Charging Arrangements". We understand that this may cause uncertainty for customers, particularly where they may have already committed to a development based on previous charging arrangements. We have worked with our stakeholders and Water UK to agree a set of principles by which we will base our charges. Please read through our new charging arrangement documents available at the following link:

southernwater.co.uk/infrastructure-charges

Alternatively, new appointees and variations (NAVs), also known as 'inset' companies, can provide new connection services or take ownership of the new water and wastewater connection infrastructure provided for a new development. NAVs are appointed by Ofwat and replace the regional water company. It is for the developer to choose whether to use a NAV or the regional water company to supply services for new sites, according to certain legal criteria.



It should be noted that this information is only a hydraulic assessment of the existing sewerage network and does not grant approval for a connection to the public sewerage system. A formal S106 connection application is required to be completed and approved by Southern Water Services. Please see the following link:

southernwater.co.uk/ConnectiontoPublicSewer/ApplicationForm

Should you require any further information, please contact us at the above mentioned phone number or address shown in the footer.

Yours sincerely,



Growth Planning Lead
Business Channels

Please note: - The information provided above does not grant approval for any designs/drawings submitted for the capacity analysis. The results quoted above are only valid for 12 months from the date of issue of this letter.



Your Ref: DS_CC_PDE-116855

Our Ref: 48494/2003

04 June 2020

Southern Water
Southern House
Yeoman Road
Worthing
West Sussex
BN13 3NX

Email to: Developer.Services@southernwater.co.uk

For the Attention of [REDACTED]

Dear [REDACTED]

RE: Bird in Eye Farm, Uckfield, East Sussex, TN22 5HA

Thank you for letter dated 07 May 2020 regarding existing foul sewerage capacity in the vicinity of the proposed development at Bird in Eye Farm, Uckfield.

Your letter states that there is currently inadequate capacity within the existing foul sewerage network to accommodate the foul flows generated by the above development at manhole reference: TQ48200803), and that additional off-site sewers or improvements to existing sewers will be required to provide capacity. The letter follows this by recommending additional off-site sewers will be required to provide sufficient capacity. You have also advised that the nearest point where capacity is available is approximately 1.1km to the west of the development site at manhole reference: TQ47200601.. However, it is Stantec's view that this is not a practical or viable solution.

To reach the suggested Point of Connection (POC), foul flows discharged from the site would require pumping based on the existing topography. The site currently sits at a higher elevation than Bird in Eye Hill (B2102), therefore a sewage pumping station (SPS) would need to be located off site to facilitate the required pumping to the POC. For third party landownership reasons, this is not deliverable.

The existing sewers downstream of TQ48200803 currently discharge to an existing SPS, referenced as "080P" on the supplied plans. In addition, the supplied plans indicate another SPS west of 080P referenced as 972P. Therefore, there are currently 2no. existing foul rising mains under the B2102, presumably as well as additional services and sewers. Based on our understanding of the existing topography of Uckfield, it would appear that these two rising mains run westwards towards your proposed POC at TQ47200601 (or a sewer in this vicinity) before gravity discharge to the existing sewage treatment works (STW) adjacent to the A22. Presumably most foul flows in Uckfield drain to this STW. In our opinion, the proposal to construct a third foul rising main would likely be impractical from a spatial perspective (given the existing services underneath the B2102) as well as an inefficient use of existing infrastructure.

Furthermore, the construction of 1.1km of rising main underneath a key transport route into the centre of Uckfield would be at a considerable cost to my client and also cause significant disruption to the local community over a long period of time, either of which are not desirable.

Lakeside House
Blackbrook Business Park
Blackbrook Park Avenue
Taunton TA1 2PX

Telephone: +44 (0)1823 218940
email: PBA.Taunton@stantec.com

Registered Office:
Stantec UK Ltd
Buckingham Court
Kingsmead Business Park
Frederick Place, London Road
High Wycombe HP11 1JU
Registered in England No. 1188070

For the reasons given above, Stantec maintains that TQ48200803 should be the foul POC for the proposed development, which will require improvements to existing sewers.

It is understood that developers have a right to connect to a public sewer provided that they propose to connect to a sewer with “reasonable” capacity, with “reasonable” defined as a sewer diameter equal to or greater than that of the new sewer making a connection. For example, a new 150mm diameter sewer could connect into an existing 150mm or 225mm diameter sewer but not a 100mm diameter sewer. Therefore, Stantec have undertaken an assessment to determine whether a reasonable connection can be made to TQ48200803.

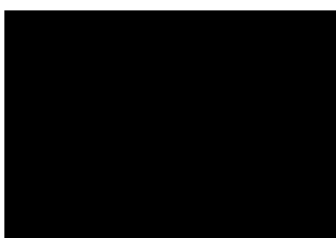
The supplied mapping indicates that the sewer downstream of TQ48200803 is a 150mm diameter vitrified clay sewer, therefore it has reasonable capacity to accept foul flows from a 150mm diameter sewer but no larger. Based on peak flows of 4,000 l/dwelling/day (0.005 l/s/day) from no more than 290 units, peak foul flows from the proposed development will be 14.5 l/s. A 150mm diameter sewer can accommodate these flows and maintain self-cleansing velocity at a gradient no flatter than 1:111 based on the pipe tables produced by HR Wallingford. The average gradient from the far north-western corner of the site (whereby all dwellings should be connected to the new foul network) to the B2102 (before connecting into TQ48200803) is 1:20.

Therefore, a 150mm diameter sewer will have adequate capacity (with self-cleansing velocities) to serve the proposed development and can make connection at TQ48200803 as the existing network has reasonable capacity to accept these flows. If the existing network downstream of TQ48200803 does not have available capacity to accept the flows from the proposed development, then it is the responsibility of Southern Water to undertake necessary improvements.

For the avoidance of doubt, Stantec propose that a new sewer connection is made from the proposed development's foul drainage network to manhole TQ48200803, as either a S98 requisition (funded under Southern Water's Site Specific Charges as given in their New Connections Services Charging Arrangements 2020/21) or S104 self-lay. If the foul network downstream of TQ48200803 requires reinforcements works, to either the existing sewers, SPS and online or offline tank, this will be funded by Southern Water through the New Infrastructure Charges already payable as part of the proposed development i.e. no additional funding required by our client.

We trust that the information above is clear and that Southern Water are in agreement with this assessment.

Yours sincerely,



on behalf of Stantec UK Ltd

[REDACTED]

From: southernwaterplanning <SouthernWaterPlanning@southernwater.co.uk>
Sent: 12 June 2020 17:00
To: [REDACTED]
Subject: FW: SWS-SUSXE-CC-004953 - DS_CC_PDE-116855 - Bird in Eye Farm, Uckfield, East Sussex, TN22 5HA
Attachments: 200604_Southern Water Foul POC Response.pdf

Hi [REDACTED]

Thank you for your email.

At this stage we would advise you to apply for outline planning permission with the local authority. If your planning application is granted it will act as a trigger for us to look into this further and provide the infrastructure at the practical point of connection.

Southern Water aim to provide this within 24 months following the date that planning has been granted for developments not identified as strategic sites in our current business plan. Strategic sites are larger developments and will often take longer than 24 months for a full solution to be provided.

If you need any further assistance please let me know.

Kind regards

[REDACTED]

**Growth Planning Coordinator for Sussex
Developer Services**

T. 03303030119
M.
southernwater.co.uk



From: [REDACTED]
Sent: 04 June 2020 15:47
To: Developer Services <Developer.Services@southernwater.co.uk>

[REDACTED]

Subject: FW: SWS-SUSXE-CC-004953 - DS_CC_PDE-116855 - Bird in Eye Farm, Uckfield, East Sussex, TN22 5HA

Dear [REDACTED]

Thank you for your recent foul capacity check response, which was sent to my colleague Simone.

Having now reviewed the information originally sent by yourself, please find attached Stantec's response. Should you have any questions, please feel free to get in touch.

Kind regards,

[Taunton](#)

COVID-19: Please note that I am now working reduced hours of 30 hours per week, which may be subject to change. I will respond to your email as soon as I can.

Better Together, Even If We're Apart. Read [more](#) about Stantec's COVID-19 response, including remote working and business continuity measures.



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From: [Redacted]

Sent: 11 May 2020 12:21



Subject: FW: SWS-SUSXE-CC-004953 - DS_CC_PDE-116855 - Bird in Eye Farm, Uckfield, East Sussex, TN22 5HA

Hi [Redacted]

We have received the foul capacity check for Bird in Eye project last week.

See below and attached documents from Southern Water.

Thanks.



Kind regards,



88 Gray's Inn Road
London
WC1X 8AA



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From: Developer Services <Developer.Services@southernwater.co.uk>

Sent: 07 May 2020 15:35

To: [Redacted]

Subject: SWS-SUSXE-CC-004953 - DS_CC_PDE-116855 - Bird in Eye Farm, Uckfield, East Sussex, TN22 5HA

Dear [Redacted]

Please find the Southern Water's response to your recent enquiry.

Yours sincerely,

Growth Planning Lead, Business Channels

T. 0330 303 0119
southernwater.co.uk



from
Southern Water 

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