



from
**Southern
Water**

Planning and Development Services
Arun District Council
Arun Civic Centre
Maltravers Road
Littlehampton
West Sussex
BN17 5LF

Your ref
BN/142/20/OUT

Our ref
PLAN-036494

Date
31/12/2020



Dear Sir/Madam,

Proposal: Outline planning application with all matters reserved, other than principal means of access, for up to 200 No. dwellings, with access taken from Marshall Close, associated infrastructure & landscaping & demolition of existing buildings. This application is a Departure from the Development Plan, may affect the setting of listed buildings, may affect the Church Lane, Barnham Conservation Area & affects a Public Right of Way.

Site: BN/142/20/OUT: - Land South of Barnham Station, Barnham, PO22 0EH.

Thank you for your letter dated 26/11/2020.

Please see the attached extract from Southern Water records showing the approximate position of public sewers within the site. The exact position of the public sewers must be determined on site by the applicant before the layout of the proposed development is finalised.

Please note:

- The 375 mm, 350 mm, 300 mm foul sewers requires a clearance of 3 metres on either side of the gravity sewer to protect it from construction works and to allow for future maintenance access.
- No development or tree planting should be carried out within 3 metres of the external edge of the public sewer without consent from Southern Water.
- No soakaway, swales, ponds, watercourses or any other surface water retaining or conveying features should be located within 5 metres of public sewers.
- All existing infrastructure should be protected during the course of construction works.

Please refer to: southernwater.co.uk/media/default/PDFs/stand-off-distances.pdf

Southern Water, Southern House, Yeoman Road, Worthing, West Sussex, BN13 3NX
southernwater.co.uk

Southern Water Services Ltd, Registered Office: Southern House, Yeoman Road, Worthing, West Sussex, BN13 3NX Registered in England No. 2366670

We have restrictions on the proposed tree planting adjacent to Southern Water sewers, rising mains or water mains and any such proposed assets in the vicinity of existing planting. Reference should be made to Southern Water's publication "A Guide to Tree Planting near water Mains and Sewers" (southernwater.co.uk/media/1642/ds-free-planting-guide.pdf) and the Sewerage Sector Guidance (water.org.uk/sewerage-sector-guidance-approved-documents) with regards to any landscaping proposals and our restrictions and maintenance of tree planting adjacent to sewers, rising mains and water mains.

The impact of any works within the highway/access road on public apparatus shall be assessed and approved, in consultation with Southern Water, under a NRSWA enquiry in order to protect public apparatus. Please send these enquiries to: [REDACTED]

Furthermore, it is possible that a sewer now deemed to be public could be crossing the development site. Therefore, should any sewer be found during construction works, an investigation of the sewer will be required to ascertain its ownership before any further works commence on site.

In order to protect public sewers, Southern Water requests that if consent is granted, the following condition is attached to the planning permission; The developer must agree with Southern Water, prior to commencement of the development, the measures to be taken to protect the public sewers.

Southern Water has undertaken a desktop study of the impact that the additional foul sewerage flows from the proposed development will have on the existing public sewer network. This initial study indicates that these additional flows may lead to an increased risk of foul flooding from the sewer network. Any network reinforcement that is deemed necessary to mitigate this will be provided by Southern Water.

Southern Water and the Developer will need to work together in order to review if the delivery of our network reinforcement aligns with the proposed occupation of the development, as it will take time to design and deliver any such reinforcement.

It may be possible for some initial dwellings to connect, pending network reinforcement. Southern Water will review and advise on this following consideration of the development programme and the extent of network reinforcement required.

Southern Water will carry out detailed network modelling as part of this review which may require existing flows to be monitored. This will enable us to establish the extent of any works required.

Southern Water endeavor to provide reinforcement within 24 months of planning consent being granted (Full or Outline) however for large developments our assessment of the timescales needed will require an allowance for the following which may result in an extension of the 24 month period:

- Initial feasibility, detail modelling and preliminary estimates.
- Flow monitoring (If required).
- Detailed design, including land negotiations.
- Construction.

Southern Water hence requests the following condition to be applied: Occupation of the development is to be phased and implemented to align with the delivery by Southern Water of any sewerage network reinforcement required to ensure that adequate waste water network capacity is available to adequately drain the development.

The planning application form makes reference to drainage using Sustainable Urban Drainage Systems (SuDS).

Under certain circumstances SuDS will be adopted by Southern Water should this be requested by the developer. Where SuDS form part of a continuous sewer system, and are not an isolated end of pipe SuDS component, adoption will be considered if such systems comply with the latest Sewers for Adoption (Appendix C) and CIRIA guidance available here:

water.org.uk/sewerage-sector-guidance-approved-documents

ciria.org/Memberships/The_SuDS_Manual_C753_Chapters.aspx

Where SuDS rely upon facilities which are not adoptable by sewerage undertakers the applicant will need to ensure that arrangements exist for the long-term maintenance of the SuDS facilities. It is critical that the effectiveness of these systems is maintained in perpetuity. Good management will avoid flooding from the proposed surface water system, which may result in the inundation of the foul sewerage system.

Thus, where a SuDS scheme is to be implemented, the drainage details submitted to the Local Planning Authority should:

- Specify the responsibilities of each party for the implementation of the SuDS scheme.
- Specify a timetable for implementation.
- Provide a management and maintenance plan for the lifetime of the development.

This should include the arrangements for adoption by any public authority or statutory undertaker and any other arrangements to secure the operation of the scheme throughout its lifetime.

The Council's technical staff and the relevant authority for land drainage should comment on the adequacy of the proposals to discharge surface water to the local watercourse.

Should the applicant wish to offer the sewers for adoption under section 104 of the Water Industry Act, the drainage design should comply with the Sewerage Sector Guidance (water.org.uk/sewerage-sector-guidance-approved-documents) standards and Southern Water's requirements. Please note that non-compliance with the Sewerage Sector Guidance standards will preclude future adoption of the foul and surface water sewerage network on site. The design of drainage should ensure that no groundwater or land drainage is to enter public sewers.

Due to surface water inundation issues in the Lidsey Catchment the applicant is advised to adopt, where appropriate, the measures set out in the table "Practical measures to reduce the potential impacts of development". The developer should look to protect the public sewerage system from inundation and infiltration, which contribute to flooding in unfavourable conditions.

We request that should this planning application receive planning approval, the following informative is attached to the consent: Construction of the development shall not commence until details of the proposed means of foul sewerage and surface water disposal have been submitted to, and approved in writing by, the Local Planning Authority in consultation with Southern Water.

This initial assessment does not prejudice any future assessment or commit to any adoption agreements under Section 104 of the Water Industry Act 1991. Please note that non-compliance with Sewers for Adoption standards will preclude future adoption of the foul and surface water sewerage network on site. The design of drainage should ensure that no groundwater or land drainage is to enter public sewers.

For further advice, please contact Southern Water, Southern House, Yeoman Road, Worthing, West Sussex, BN13 3NX [REDACTED]

Website: southernwater.co.uk or by email at: [REDACTED]

Yours faithfully,

[REDACTED]
Joff Edevane
Growth Planning Lead
Business Channels

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O.S. REF: SU9504SE

Scale: 1:2500

Screen Print

WARNING: BAC pipes are constructed of Bonded Asbestos Cement

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

ARUN DISTRICT COUNCIL BN/142/20/OUT



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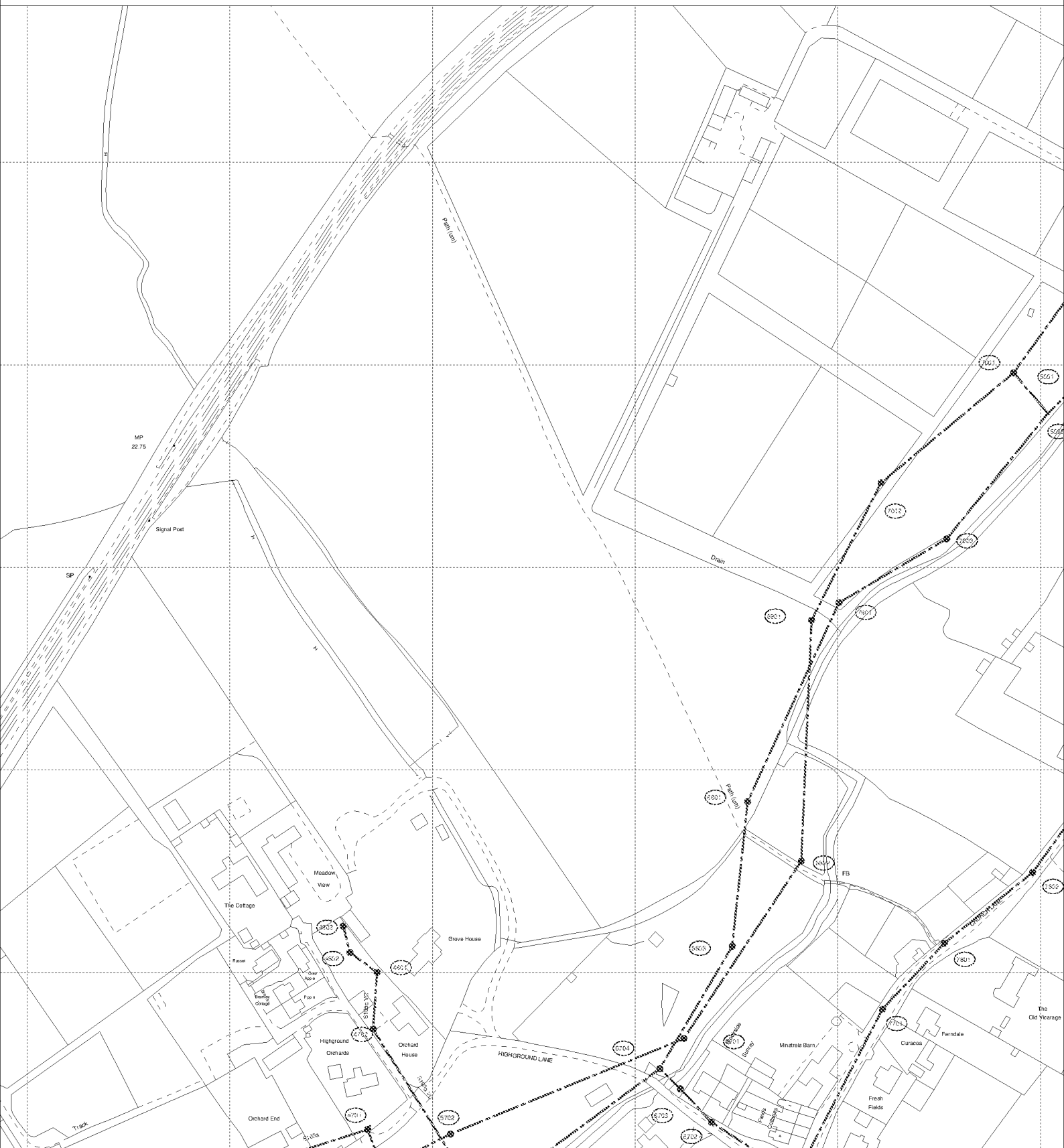
Date: 31-12-2020

Southern Water MapGuide Browser

Requested By:



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: SU9503NE

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WARNING: BAC pipes are constructed of Bonded Asbestos Cement

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Water**

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Our ref
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Date
31 December 2020



Dear Sir/Madam,

Southern Water – Your build rates and occupation information
Site Name: Land South of Barnham Station, Barnham, PO22 0EH.

We are contacting you to request information which is required by Southern Water in order to prepare for the connection of your development site (as listed above), to our public sewer network.

In April 2018, water companies in England published their new connection charges (part of the charges are also known as the infrastructure charge). A copy of the Southern Water New Connection Charging Document is available on our website: southernwater.co.uk/media/3305/new-connections-services-charging-arrangements-20_21.pdf

Under the new charging rules, our customers can connect to the closest point of connection, to a pipe of equivalent size or greater. If any reinforcement to the public sewer network is required to enable your connection, this will be provided through the new infrastructure charge. It will take time for us to provide any such network reinforcement. To enable us to plan for this, we require some information.

Action request:

Please provide the details of your anticipated occupation dates and build out rate for the site listed above. This information will support us in planning the required works across our region in readiness for your site to be occupied. If we do not receive this information about the site, we may not be able to progress with the work required to prepare for the connection of your site and your development program. Please note this does not constitute a discharge of any pre-commencement condition that may be attached to your planning consent.

Please provide the information in the form below and email this back to us as soon as possible, to the following address:

Southern Water, Southern House, Yeoman Road, Worthing, West Sussex, BN13 3NX
southernwater.co.uk

Southern Water Services Ltd. Registered Office: Southern House, Yeoman Road, Worthing West Sussex BN13 3NX Registered in England No. 2386570

Build Rate & Occupation details

Please fill out the tables below in block capital letters and email this back to us as soon as possible.
Please email the form to [REDACTED]

If the site is not proceeding please email the address above with the site references listed above and a brief description of why it is not going ahead. If you have queries about the information required, please call Developer Services on [REDACTED]

Your earliest reply would be much appreciated.

[REDACTED]

Joff Edevane
Growth Planning Lead
Business Channels

Name of person completing form	
Company	
Phone number	
Email address	
Date form completed	

Proposal
Site Name (on letter)
Site Postcode/location
Planning Reference (on letter)
Planning Authority (on letter)
Our reference (on letter)

Proposed start date	/ /
Proposed connection date	/ /
First occupation date	/ /
Forecast completion date	/ /
Proposed date of full occupancy	/ /
Proposed connecting manhole reference number	

[illegible][illegible]



Practical measures to reduce the potential adverse impacts of development

Reasons	Practical measures
Adequate and sustainable surface water drainage.	No surface water connections to the wastewater system. (See part H of the Building Regulations)
Guard against further groundwater infiltration into the foul drains or sewers serving the development.	The use of fusion jointed MDPE pipes can prevent groundwater infiltration and require a minimum of maintenance. The use of mass concrete surrounds to inspection chambers and manholes can prevent infiltration and require a minimum of maintenance
Guard against surface floodwaters entering the foul system serving the development.	Overland surface water flow routes should be provided for flows greater than those for which pipelines and culverts have been designed. Wherever possible, foul sewer routes, manhole covers, sink waste gullies, etc. should avoid overland surface water flow routes and any areas where surface water ponding may occur. Failing that they should be sealed against potential surface water inflows. Any sink waste gullies in areas of potential surface water inundation should be sealed or defended by raised brickwork or similar Bolt down sealed inspection chamber and manholes covers should be used in areas of potential surface water inundation. Raising the level of the development above the highways which serve it can protect buildings and their drainage systems from potential surface water inundation. However, care should be taken at local low spots in the highway where overland surface water flows may gather and overflow onto properties.

Protect the properties from foul flooding or unusable sanitation should the public sewerage system surcharge.	Part H of the Building Regulations contains suitable practical measures. However, the provision of an external gully is inappropriate where there is a risk of surface water flooding. In these circumstances, non-return valves are more appropriate. Dirgo or similar non-return air valves are now commonly fitted to soil vent pipes thereby allowing them to allow them to vent within the building. This practice can lead to problems with bubbling WCs, the blow out of U bend traps and odour within buildings when the sewerage system surcharges. The use of traditional external vent pipes without air valves can prevent this.
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