

London Oxford Airport Science Park - Flood Risk Assessment

Final Report

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Prepared for:

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Abbreviations

| AEP | .Annual Exceedance Probability |
|--------|---|
| BGS | .British Geological Survey |
| CFMP | .Catchment Flood Management Plan |
| DTM | .Digital Terrain Model |
| EA | .Environment Agency |
| FRA | .Flood Risk Assessment |
| LiDAR | Light Detection And Ranging |
| NGR | .National Grid Reference |
| NPPF | .National Planning Policy Framework |
| OS | .Ordnance Survey |
| OS NGR | Ordnance Survey National Grid Reference |
| PPG | .Planning Policy Guidance |
| SFRA | .Strategic Flood Risk Assessment |



Executive Summary

Background and site context

JBA Consulting were commissioned by Civils Contracting Ltd in January 2023 to undertake a Flood Risk Assessment (FRA) and prepare a detailed surface water drainage strategy and an outline foul water drainage strategy for the London Oxford Airport Science Park development.

This report contains the FRA only, whereas the drainage strategies are contained in a separate report.

The proposed site is located on the south-east corner of London Oxford Airport. The existing 3.5ha site was occupied by London Oxford Airport facilities, including seven buildings in commercial use, access roads and parking areas. Some of the existing buildings have already been demolished in preparation for redevelopment.

The proposed development comprises a Science Park, including five modern twostorey commercial units, including laboratories, and associated road and parking infrastructure and landscaping.

The British Geological Survey data indicates that the site is underlain by sedimentary bedrock (such as limestone, bioclastic wackestone and packstone). Overlying sedimentary superficial deposits of sands and gravels are present. Borehole information confirms that the deposits comprise of Great Oolite Group and Inferior Oolite Group.

The closest watercourse to the proposed site is approx. 340m to the east (unnamed ordinary watercourse). Oxford Canal and River Cherwell, main river, are located further to the east. Another ordinary watercourse, Rowel Brook, is located to the west of A44, Woodstock Road.

Flood risk

- The Environment Agency's Flood Map for Planning indicates that the proposed site is within Flood Zone 1, and thus at 'very low' risk of flooding from fluvial sources. Furthermore, there are no indications that the site has flooded in the past from any fluvial sources.
- Groundwater flood risk is widely affecting the north west of Kidlington, however, it is unlikely to significantly affect the proposed site due to encountered low groundwater levels, thus the risk of groundwater flooding has been assessed as 'low'.
- The Environment Agency's Risk of Flooding from Surface Water mapping indicates that only localised surface water flooding affects parts of the site, mainly due to topographical depressions and configuration of the existing



buildings. There are no overland flow routes through the site. The risk of surface water flooding is therefore considered 'low'.

- The site is considered at low risk of flooding from sewers.
- Based on the Environment Agency's 'Risk of Flooding from Reservoirs' dataset the site is not at risk of flooding from reservoirs during either a dry day or wet day scenario.
- The site is not at risk of flooding from the Oxford Canal and any other artificial sources.
- In the unlikely event of a flood, safe and dry access will be available to and from all areas of the proposed site via the entrance and exit route of site.

Recommendations

It is recommended that:

- Finished Floor Levels (FFL) and openings (e.g. air bricks) of the proposed buildings should be set to a minimum of 150mm above the finished surrounding ground levels. It is recommended that the surface water drainage system of the site and the finished floor levels of the properties should be designed with care regarding the appropriate requirements for exceedance flows and appropriate allowances for freeboard.
- The surface water runoff originating within the redeveloped site is managed using SuDS techniques and the finished floor levels of the buildings should be designed with care regarding the appropriate requirements for exceedance flows and appropriate allowances for freeboard.



1 Introduction

1.1 Terms of reference

JBA Consulting were commissioned by Civils Contracting Ltd in January 2023 to undertake a Flood Risk Assessment (FRA) and prepare a detailed surface water drainage strategy and an outline foul water drainage strategy for a new development London Oxford Airport Science Park.

This report contains the FRA only, whereas the drainage strategies are contained in a separate report.

This FRA provides information on all aspects of flood risk pertaining to the site in accordance with the revised National Planning Policy Framework (NPPF) and associated Planning Practice Guidance (PPG) relating to development and flood risk. It also considers the flood risk mitigation relevant to the nature of the proposed development and the Flood Zone classification of the site.

The flood risk to and from the site has been determined from publicly available information and information provided by the client, such as topographical surveys and site investigations.

1.2 FRA requirements

It is a requirement for development applications to consider the potential risk of flooding from various sources to a proposed development over its lifetime and any possible impacts on flood risk elsewhere as a result of the development.

Where appropriate, the following aspects of flood risk should be addressed and the extent to which the development is designed to deal with flood risk:

- the nature and expected lifetime of the development and the extent to which the development is designed to deal with flood risk;
- the area liable to flooding from various sources;
- the probability of the current and future flood risk;
- the extent and standard of existing flood defences and their effectiveness over time;
- the likely depth of flooding;
- · the rates of predicted flows;
- the likelihood to impacts on other areas, properties, and habitats; and
- the effects of climate change.

The level of flood risk to the site has been determined based on open license flood risk datasets provided on the Defra Data Services website by the Environment Agency. This includes the Flood Map for Planning, LIDAR Digital Terrain Model (DTM) and flood history datasets.



2 Study Area

2.1 Existing site

The proposed development is located on the south-east corner of London Oxford Airport, which is located to the north east of Kidlington, OX5 1RA. The existing 3.5ha site was occupied by London Oxford Airport facilities, including seven buildings in commercial use, access roads and parking areas. Some of the existing buildings have already been demolished in preparation for redevelopment.

The site is bounded by airport facilities to the north and west, the Boulevard to the east and Langford Lane to the south.

The site location plan and site details are included in Table 2-1 and Figure 2-1.

Table 2-1: Summary of site details

| Site Name | Science Park | |
|----------------------------|----------------------------|--|
| Site area | London Oxford Airport | |
| Existing site use | Offices and commercial | |
| OS NGR | SP 47605 14923 | |
| County | Oxfordshire | |
| Country | England | |
| Local Planning Authority | Cherwell District Council | |
| Lead Local Flood Authority | Oxfordshire County Council | |
| Sewerage Undertaker | Thames Water | |



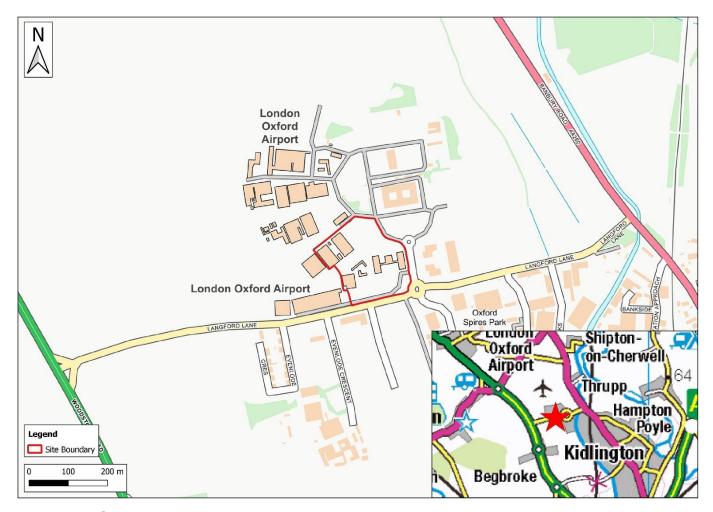


Figure 2-1: Site location plan

2.2 Proposed development

The proposed development is for a Science Park. This includes the re-development of the entrance area to London Oxford Airport, demolition of the existing buildings and construction of five modern two-storey commercial units, including laboratories, and associated road and parking infrastructure and landscaping.

The proposed development layout is shown in Appendix A.



2.3 Topography

A site-specific topographic survey was undertaken by KND Surveys Ltd, this is included as Appendix B. The survey indicates that ground levels fall between 72.97m above ordnance datum (AOD) and 71.12m AOD. Land is shown to be generally flat and slopes from the northwest to southeast direction.

The Environment Agency's (EA's) 2020 LiDAR DTM dataset has also been used to provide a topographical visualisation of the wider area and is shown in Figure 2-2.

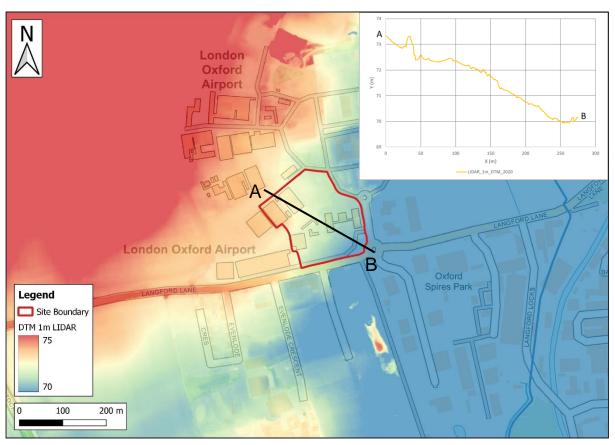


Figure 2-2: LiDAR Digital Terrain Model



2.4 Geology

British Geological Survey (BGS)¹ data indicates that the site is underlain by sedimentary bedrock (such as limestone, bioclastic wackestone and packstone). Overlying sedimentary superficial deposits of sands and gravels are present. The deposits consist of Great Oolite Group and Inferior Oolite Group.

2.5 Hydrogeology

Hydrogeological information was obtained from the online Magic Maps service². These maps indicate that the site is underlain by a Great Oolite Group and Inferior Oolite Group superficial aquifers. Groundwater levels can vary seasonally within the aquifer (Allen et al., 1997)³.

The maps also indicate that the site is underlain by a Cornbrush Formation bedrock aquifer with Soluble Rock Risk which has 'freely draining slightly acid but base-rich soils'.

The site is not located within a Source Protection Zone (SPZ). The site is within a Nitrate Vulnerable Zone which could result in vulnerability of the aquifer to pollutants discharged at the surface.

A site investigation was undertaken by Southern Testing Ltd in March 2017, this confirmed that groundwater levels (recorded in February 2017) is approximately 6-10 meters below ground level as the ground level is approx. 70.8 - 73.5mAOD. This is consistent with historic records from the BGS which struck groundwater at 70 - 73m AOD and indicated resting water levels at approx. 60 - 67mAOD4. The resting water level was measured in March 1941 and was at 60.2mAOD.

¹ BGS Geology of Britain viewer: www.bgs.ac.uk/map-viewers/geology-of-britain-viewer/

² DEFRA Magic Maps https://magic.defra.gov.uk/magicmap.aspx

³ Allen, DJ., Brewerton, LJ., Coleby, LM., Gibbs, BR., Lewis, MA., MacDonald, AM., Wagstaff, SJ., and Williams, AT (1997) The physical properties of major aquifers in England and Wales. British Geological Survey Technical Report WD/97/34. Environment Agency R&D Publication 8

⁴ Local Flood Risk Management Strategy

www2.oxfordshire.gov.uk/cms/sites/default/files/folders/documents/environmentandplanning/flooding/OxfordshireFloodRiskManagementStrategy.pdf



2.6 Watercourses

Environment Agency mapping has been used to identify the locations of watercourses within and around the development site.

The nearest main river is an unnamed watercourse and its tributary some 340m east of the site. It runs parallel to the Oxford Canal, that lies approximately 570m east to the proposed site. The River Cherwell is a main river located approximately 1.2km away from the site.

There is also Rowel Brook, an ordinary watercourse, to the west of Woodstock Road.

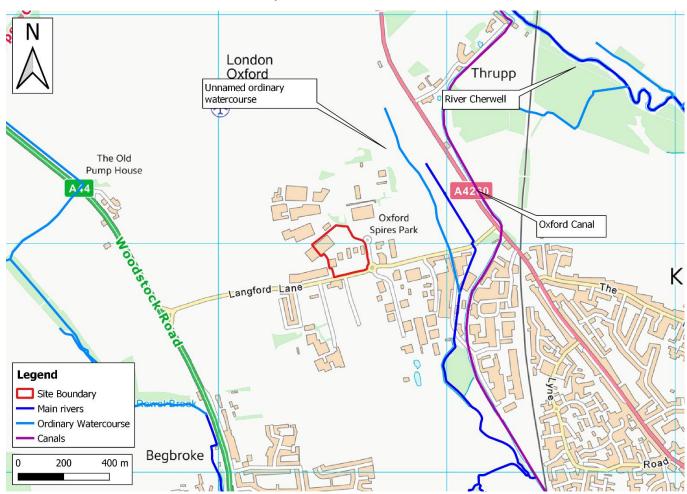


Figure 2-3: Surrounding watercourses



3 Planning Policy and Flood Risk

3.1 Planning context

The NPPF was introduced by the Department for Communities and Local Government in March 2012. The NPPF was revised a number of times since, with the latest update made in July 2021. The revised NPPF considers flood risk to developments using a sequential characterisation of all sources of flood risk, based on planning zones and the EA Flood Map. The revised NPPF is supported by the PPG, originally published in March 2014, and last updated in August 2022, which gives additional information on the assessment of flood risk. The main study requirement is to identify the flood zones and vulnerability classification relevant to the proposed development, based on an assessment of current and future conditions.

3.2 Development sites in flood zones

The EA states that the flood risk is a function of:

- "The likelihood of a particular flood happening, best expressed as a chance or probability over a period of one year. For example, 'There is a 1 in 100 chance of flooding in any given year in this location'.
- "The impact or consequences that will result if the flood occurs."

The EA has developed a Flood Map which shows the risk of flooding in England for different return period events, assuming no flood defences. This map provides the basis for the assessment of flood risk and development suitability under the NPPF. This map is divided into flood zones which indicate the probability of flooding that land in each zone has, as outlined in Table 3-1.

Table 3-1: Flood Zone classifications

| Flood Zone | Definition |
|----------------------------|---|
| Zone 1: Low Probability | Land assessed as having a less than 1 in 1000 annual probability of river or sea flooding in any year (<0.1% AEP). |
| Zone 2: Medium Probability | Land assessed as having between a 1 in 100 and 1 in 1000 annual probability of river flooding (1% – 0.1% AEP) or between a 1 in 200 and 1 in 1000 annual probability of sea flooding (0.5% – 0.1% AEP) in any year. |
| Zone 3a: High Probability | Land assessed as having a 1 in 100 or greater probability of river flooding (>1% AEP) or a 1 in 200 or greater annual probability of flooding from the sea (>0.5% AEP) in any year. |



| Flood Zone | Definition |
|------------|--|
| Floodplain | This zone comprises land where water from rivers or the sea has to flow or be stored in times of flood. The identification of functional floodplain should take account of local circumstances and not be defined solely on rigid probability parameters. Functional floodplain will normally comprise: • land having a 3.3% or greater annual probability of flooding, with any existing flood risk management infrastructure operating effectively; or • land that is designed to flood (such as a flood attenuation scheme), even if it would only flood in more extreme events (such as 0.1% annual probability of flooding). Local planning authorities should identify in their Strategic Flood Risk Assessments areas of functional floodplain and its boundaries accordingly, in agreement with the Environment Agency. |
| | |

3.3 Sequential and exception tests

The NPPF requires that the Sequential and Exception Tests be applied when choosing the location of new development and the layout of the development site. The Sequential Test aims to promote development in low flood risk areas (Flood Zone 1). The Exception Test is used where no suitable development areas can be found in low-risk zones.

The Sequential Test should be applied to identify suitable sites which are at low risk from all sources of flooding, avoiding medium and high-risk areas where possible. If no suitable areas can be identified in low-risk areas, then sites with the lowest flood risk should be considered next. If development is necessary within a medium or high-risk zone, an exception test may be required to demonstrate the need for the development in that location and plans to mitigate the flood risk. The requirement for the application of the Exception Test is outlined in Section 3.4 below.

3.4 NPPF and PPG flood vulnerability and flood zone incompatibility

Table 3-1 shows how Flood Zones are defined (as based on Table 1 of the PPG). Annex 3 of the NPPF shows the classification of flood risk vulnerability in relation to a proposed development type. Table 3-2 (reproduced from Table 2 of the PPG) shows the compatibility of these flood zones and vulnerability classifications.

The proposed development will consist of a Science Park (commercial) which is classified as 'less vulnerable' under the NPPF. This classification of development is



considered compatible with Flood Zone 1, and application of the Exception Test is not required, as shown in Table 3-2.

Table 3-2: Flood risk vulnerability and flood zone 'incompatibility'

| Flood Zone | Essential Infrastructure | Highly Vulnerable | More Vulnerable | Less Vulnerable | Water Compatible |
|---------------|-------------------------------|-------------------------------|-------------------------------|--------------------|---------------------|
| Zone 1 | ✓ | \checkmark | √ | √ | ✓ |
| Zone 2 | ✓ | Exception Test Required | ✓ | ✓ | ✓ |
| Zone 3a | Exception Test Required | X | Exception Test Required | ✓ | ✓ |
| Zone 3b | Exception Test Required | X | X | X | ✓ |

Notes:

3.5 Climate change allowances

The NPPF and supporting PPG on Flood Risk and Coastal Change explain when and how flood risk assessments should be used. This includes demonstrating how flood risk will be managed now and over the development's lifetime, taking climate change into account.

On 19 February 2016, the EA released new guidance on climate change allowances to support the NPPF. The guidance was last updated on 27 May 2022. The climate changes allowances are predictions of anticipated changes for the following:

- peak river flow allowances for each river basin district;
- peak rainfall intensity;
- · sea level rise; and
- offshore wind speed and extreme wave height.

3.5.1 Peak river flows

The guidance provides advice on which peak river flow allowances, based on river basins, should be used for FRAs for sites in all Flood Zones.

As the proposed development is for a commercial use, the lifetime of the development is considered to be a minimum of 75 years and therefore the central climate change

[√] Exception Test is not required

X Development should not be permitted.



allowance for the 2080s epoch (2070–2115) has been considered using the DEFRA Climate Change Allowances⁵.

In the Gloucestershire and the Vale Management Catchment, this equates to an allowance of 26% as shown in Table 3-3 for this particular site. The 1 in 100-year event plus climate change is also known as the design flood. It should be noted that consideration of peak river flows will not be required at this site as the site is not at risk of fluvial flooding.

Table 3-3: Peak river flow allowances for the Gloucestershire and the Vale Management Catchment

| 3 | | | |
|----------------|---|---|---|
| Allowance | Total anticipated for the 2020s (2015-2039) | Total potential change anticipated for the 2050s (2040- 2069) | Total potential change anticipated for the 2080s (2070- 2115) |
| Central | 11% | 11% | 26% |
| Higher central | 17% | 19% | 41% |
| Upper end | 33% | 43% | 84% |

3.5.2 Peak rainfall intensities

Peak rainfall intensity allowances must also be considered and are applicable to surface water drainage design or surface water modelling studies. The lifetime of the proposed development is considered to be 75 years and therefore the central and upper end climate change allowances for the 2070s epoch (2061–2125) has been considered.

In the Gloucestershire and the Vale Management Catchment, this equates an allowance of 40%, as shown in Table 3-4 for peak rainfall intensity in the 1 in 100-year event.

Table 3-4: Peak rainfall allowances for the Gloucestershire and the Vale Management Catchment

| Allowance 1% AEP | Total potential change anticipated for the 2050s (2040-2060) | Total potential change anticipated for the 2070s (2061-2125) |
|---------------------|--|--|
| Central | 20% | 40% |
| Upper end | 25% | 40% |

 $^{5\ \}mathsf{DEFRA}\ \mathsf{Climate}\ \mathsf{Change}\ \mathsf{Allowances}\ \mathsf{environment}. \\ \mathsf{data}. \\ \mathsf{gov.uk/hydrology/climate-change-allowances/rainfall?mgmtcatid=3038$



3.6 Policy review

3.6.1 Local Plan

The Cherwell Local Plan⁶ guides planning and development across Cherwell District.

The proposed development is located on previously developed land within the Green Belt and supports the aims of the Local Plan which intends to secure the growth potential from the presence of London-Oxford Airport and accommodate high value employment uses on the site. Policy ESD6 of the Local Plan discusses sustainable flood risk management and states:

- "Site specific flood risk assessments will be required to accompany development proposals for development proposals of 1 hectare or more located in flood zone 1.
- Flood risk assessments should assess all sources of flood risk and demonstrate
 that there will be no increase in surface water discharge rates or volumes during
 storm events up to and including the 1 in 100 year storm event with an allowance
 for climate change (the design storm event).
- Flood risk assessments should demonstrate that developments will not flood from surface water up to and including the design storm event or any surface water flooding beyond the 1 in 30 year storm event, up to and including the design storm event will be safely contained on site".

3.6.2 Oxfordshire County Council Strategic Flood Risk Assessment

A Strategic Flood Risk Assessment (SFRA) is undertaken by the Local Planning Authority to help manage the current and future flood risks from surface water, ground water and ordinary watercourses. The current Level 1 Strategic Flood Risk Assessment⁷ was published in May 2017.

The SFRA states that river flooding in Oxfordshire is significant. Historic flood events were reported which occurred throughout the whole county but affected Oxfordshire severely. Therefore, recommendations were made to improve the severity of flooding events in the county. The proposed site is located further away from any rivers, reservoirs or watercourses, therefore the risk of flooding is very low. Although, surface water flooding from rainfall events can impact the area.

The SFRA identifies the Oxford Canal and River Cherwell as being the main source of flooding in the Kidlington region and the Oxford Canal could pose a risk of flooding

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⁶ Final Adopted Local Plan 2011-2031 (incorporating re-adopted Policy Bicester 13)

https://www.cherwell.gov.uk/downloads/download/45/adopted-cherwell-local-plan-2011-2031-part-1-incorporating-policy-bicester-13-re-adopted-on-19-december-2016

⁷ Cherwell and West Oxfordshire Level 1 Strategic Flood Risk Assessment www.westoxon.gov.uk/media/vlspjzlm/strategic-flood-risk-assessment.pdf



and the northwest of Kidlington is known to be widely affected by groundwater flooding, although this is unlikely to impact London Oxford Airport.

3.6.3 Oxfordshire County Council Local Flood Risk Management Strategy

Oxfordshire County Council fulfils the role of the Lead Local Flood Authority (LLFA) and published a Local Flood Risk Management Strategy⁸. The strategy has been developed in partnership with the City and District Councils, the Environment Agency and Thames Water. The Oxfordshire County Council has responsibility to 'develop, maintain, apply and monitor' a flood risk management strategy. The LFRMS does not identify specific issues for the site.

3.6.4 Thames Catchment Flood Management Plan

The Thames Catchment Flood Management Plan was prepared by the Environment Agency in December 2009⁹ and has been reviewed as part of this study. The CFMP highlights that the EA aim to work with natural processes and manage the probabilities and consequences of flooding. In most years, surface water flooding occurs after heavy storms.

The site falls within Policy 6 of the CFMP, this policy is defined as an area of low to moderate flood risk where the EA will take action to store water and manage run-off to reduce flood risk and to mitigate the impacts of climate change. The EA aims to work with LPAs to set policies that lead to long-term adaptation of urban areas and identify locations where the use of water catchments can benefit communities by reduction in flood risk and environmental benefits.

3.6.5 Thames River Basin Management Plans

The Thames River Basin District Management Plans, published in December 2009, highlights the importance of a sustainable water use which can later benefit the wildlife and local communities. The site falls under the Thames River Basin District which is one of the driest in the UK with annual rainfall levels¹⁰. The RBMP identifies that maintaining and improving the quality of groundwater is a high priority. The aim is to ensure that the watercourses achieve a 'good status'.

⁸ Local Flood Risk Management Strategy

www2.oxfordshire.gov.uk/cms/sites/default/files/folders/documents/environmentandplanning/flooding/OxfordshireFloodRiskManagementStrategy.pdf

⁹ Thames Catchment Flood Management Plan December 2009

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/293903/Thames_Catchment_Flood_Management_Plan.pdf

¹⁰ Thames Catchment Flood Management Plan December 2009

 $https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/293903/Thames_Catchment_Flood_Management_Plan.pdf$



4 Assessment of Flood Risk

4.1 Historic flooding

The Environment Agency's Recorded Flood Outlines dataset has been reviewed for the site.

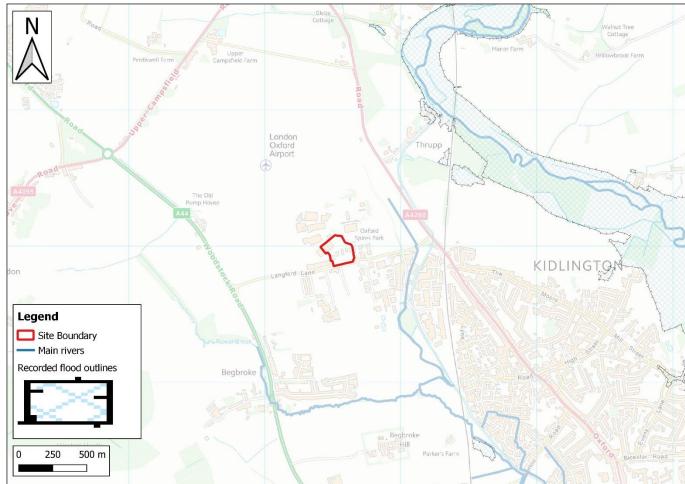


Figure 4-1 indicates that the site has not flooded historically from fluvial sources.



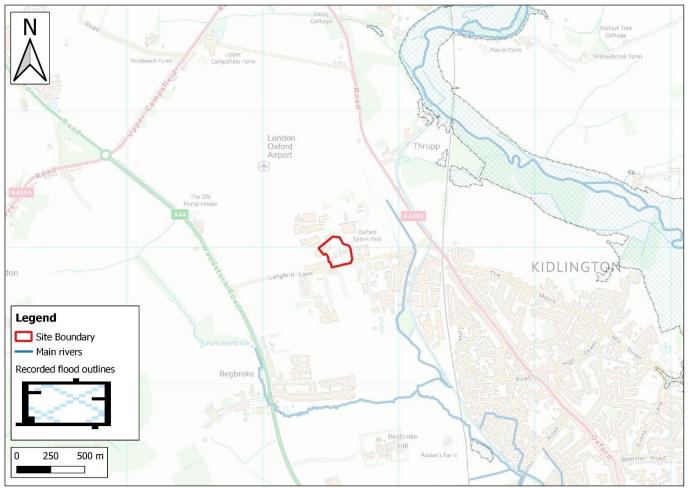


Figure 4-1: EA Recorded Flood Outlines

4.2 Fluvial flood risk

4.2.1 Flood Map for Planning

The EA Flood Map for Planning has been reviewed to assess risk of flooding from fluvial sources. This indicates that the site is within Flood Zone 1, which is land that have less than 0.1% chance of fluvial flooding annually.



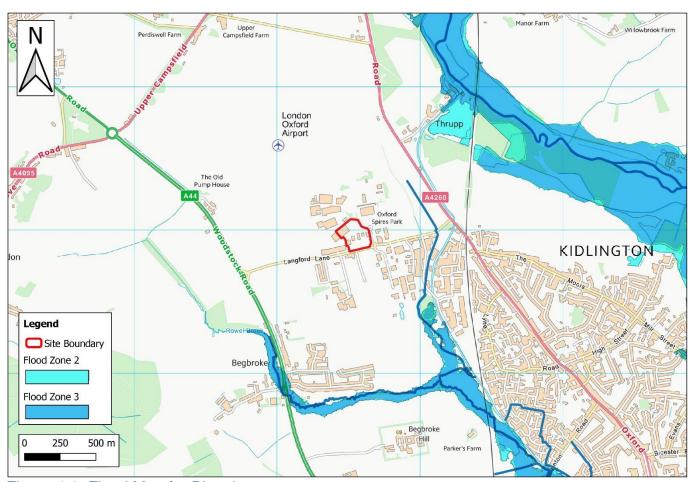


Figure 4-2: Flood Map for Planning

It should be noted that the flood modelling does not extend to the ordinary watercourse to the west of the site. Ground levels at the site and the watercourse have been assessed using the Environment Agency's 1m LIDAR DTM as follows:

- Eastern site boundary = 70.25mAOD
- Right bank of unnamed ordinary watercourse = 63.68mAOD

This indicates that there is difference of 6.57m between the lowest point of the site and the site is highly unlikely to be at risk of flooding from this watercourse. Consequently, the site is considered at 'low' risk of flooding from fluvial sources.

4.3 Surface water flood risk

Surface water flooding arises when rain falling on saturated ground flows overland, following the local topography. Overland flow can pose a risk to both the development site and land surrounding the development site. In the former case, overland flow may originate from the site itself or from adjoining land at a higher elevation from which flow migrates onto the development area. In the latter case, existing developments at a lower elevation may be subject to flooding due to overland flow originating from the site and migrating towards lower areas. The layout of the proposed development needs to reflect and, where necessary, mitigate against the risks.



The Risk of Flooding from Surface Water (RoFSW) dataset has been used to determine the potential extents of surface water flooding at the site (Figure 4-3). RoFSW mapping indicates that only small, localised areas of medium and high flood risk are present on site. There are no evident overland flow routes through the site and the ponding areas are largely due to topographical depressions and locations of particular buildings. Based on the topography, surface water also naturally ponds in the low-lying southeast corner of the site (approx. 69mAOD).



Figure 4-3: Risk of flooding from surface water mapping

Flood hazard has been reviewed for the 0.1% AEP event (Figure 4-4). This return period has been used as a proxy for climate change as no climate change modelling of the Risk of Flooding for Surface Water mapping has been made available. The hazard data indicates that most of the site has a low hazard rating (Caution) with only localised areas rated as 'danger for some'. As a result, it is highly unlikely that surface water flooding would pose a significant danger or impede access by emergency vehicles. Consequently, the site is considered to be at a low risk of surface water flooding.





Figure 4-4: Flood hazard map of surface water flooding in a 0.1% AEP event

4.4 Groundwater flood risk

Groundwater flooding occurs when the water table rises above ground level, particularly after prolonged rainfall events. This is most likely to occur in low-lying areas that are underlain by permeable bedrock and superficial geologies. Unlike other forms of flooding, groundwater flooding does not pose a significant risk to life but can cause serious damage to property.

The site is underlain by superficial deposits comprised of sands and gravels which are considered relatively permeable, however site investigation work and historic records indicate that groundwater levels are estimated to be approximately 6-10m below ground level and recorded during February when groundwater levels would likely be high. As a result, the risk of groundwater flooding at the site is considered to be low.

4.5 Sewer flood risk

Sewer flooding can occur when drainage systems become overwhelmed by heavy rainfall or when pipes become blocked. The site is served by private surface and foul water drainage systems, which discharge to the local public sewers based on Thames



Water sewer records (Appendix C). This is currently being confirmed by on-site drainage investigation.

No information on sewer flooding events was found in the SFRA near the proposed site, and this information is often not made publicly available by water companies. Nevertheless, the road levels where the sewers can be located are at a lower elevation than the site. Consequently, the risk of sewer flooding is assessed as 'low'.

It should be noted that existing private drainage systems within the site will be made redundant and replaced with new separate surface and foul water systems designed in line with the current industry standards.

4.6 Flooding from artificial sources

The Environment Agency's 'Risk of Flooding from Reservoirs' dataset has been reviewed, this indicates that the site is not at risk of flooding from reservoirs during either a dry day or wet day scenario.

The Oxford Canal is situated approximately 600m east of the site. Ground levels at the site and the right bank of the Oxford Canal have been assessed using the Environment Agency's 1m LIDAR DTM as follows:

- Eastern site boundary = 70.25mAOD
- Right bank of Oxford Canal = 66.33mAOD

This indicates that there is a difference of 3.92m between the lowest site level and the top of the right bank of the Oxford Canal and in the unlikely event the canal was to flood, this would not affect the site. If it was to be breach, flows would be discharged to the south, along the path of the existing main river and away from the site.



5 Flood Mitigation Measures

Overall, the site is at low risk of flooding from all considered sources and it is highly unlikely that the development would result in any adverse off-site impacts.

Nevertheless, the following recommendations have been made as part of this FRA.

5.1 Finished floor levels

The proposed site is not at risk of fluvial flooding, however, it is suggested that the floor levels are raised to avoid any surface water or groundwater flooding should they occur.

In line with part H of Building Regulations, the finished floor levels (FFL) and openings (e.g. air bricks) of the proposed buildings should be set to a minimum of 150mm above the surrounding finished ground levels. This is to prevent flooding from flowing or ponding storm water near doorways and other ingress routes such as vents and air bricks.

5.2 Safe access and egress

The proposed site is located within Flood Zone 1 and safe access and egress will be achievable for all sources of flooding and during all events up to and including the 0.1% AEP surface water flood event.

In the unlikely event of a flood, safe and dry access will be available to and from all areas of the proposed site via the entrance and exit route of site.

5.3 Surface water drainage

It is recommended that the surface water runoff originating within the redeveloped site is managed using SuDS techniques and that exceedance flow routing is considered.

A drainage strategy has been prepared as part of the commission and is included in a separate report.



6 Conclusions and Recommendations

6.1 Conclusions

- JBA Consulting were commissioned by Civils Contracting Ltd in January 2023 to undertake a Flood Risk Assessment (FRA) and prepare a detailed surface water drainage strategy and an outline foul water drainage strategy for the London Oxford Airport Science Park development. This report contains the FRA only, whereas the drainage strategies are contained in a separate report.
- The proposed site is located on the south-east corner of London Oxford Airport.
 The existing 3.5ha site was occupied by London Oxford Airport facilities, including seven buildings in commercial use, access roads and parking areas.
 Some of the existing buildings have already been demolished in preparation for redevelopment.
- The proposed development comprises a Science Park, including five modern two-storey commercial units, including laboratories, and associated road and parking infrastructure and landscaping.
- The British Geological Survey data indicates that the site is underlain by sedimentary bedrock (such as limestone, bioclastic wackestone and packstone).
 Overlying sedimentary superficial deposits of sands and gravels are present.
 Borehole information confirms that the deposits comprise of Great Oolite Group and Inferior Oolite Group.
- The closest watercourse to the proposed site is approx. 340m to the east (unnamed ordinary watercourse). Oxford Canal and River Cherwell, main river, are located further to the east. Another ordinary watercourse, Rowel Brook, is located to the west of A44, Woodstock Road.
- The Environment Agency's Flood Map for Planning indicates that the proposed site is within Flood Zone 1, thus at 'very low' risk of flooding from fluvial sources. Furthermore, there are no indications that the site has flooded in the past from any fluvial sources.
- The closest watercourse to the proposed site is approx. 340m away (unnamed ordinary watercourse). Flooding from this watercourse would not affect the proposed site due to difference of approximately 6.50m between the lowest point of the site and the watercourse bank levels.
- Groundwater flood risk is widely affecting the north west of Kidlington, however, it is unlikely to significantly affect the proposed site due to encountered low groundwater levels, thus the risk of groundwater flooding has been assessed as 'low'.
- The Environment Agency's Risk of Flooding from Surface Water mapping indicates that only localised surface water flooding affects parts of the site,

JSP-JBAU-XX-XX-RP-HM-0001-A1-C01-Flood Risk Assessment



mainly due to topographical depressions and configuration of the existing buildings. There are no overland flow routes through the site and the hazard to people is mostly low. The risk of surface water flooding is therefore considered 'low'.

- The site is considered at low risk of flooding from sewers.
- Based on the Environment Agency's 'Risk of Flooding from Reservoirs' dataset the site is not at risk of flooding from reservoirs during either a dry day or wet day scenario.
- Ground levels at the site and the right bank of the Oxford Canal have been assessed using the Environment Agency's 1m LIDAR DTM. This indicates that there is a difference of approximately 3.90m between the lowest site level and the top of the right bank of the Oxford Canal and in the unlikely event the canal was to flood, this would not affect the site.
- In the unlikely event of a flood, safe and dry access will be available to and from all areas of the proposed site via the entrance and exit route of site.

6.2 Recommendations

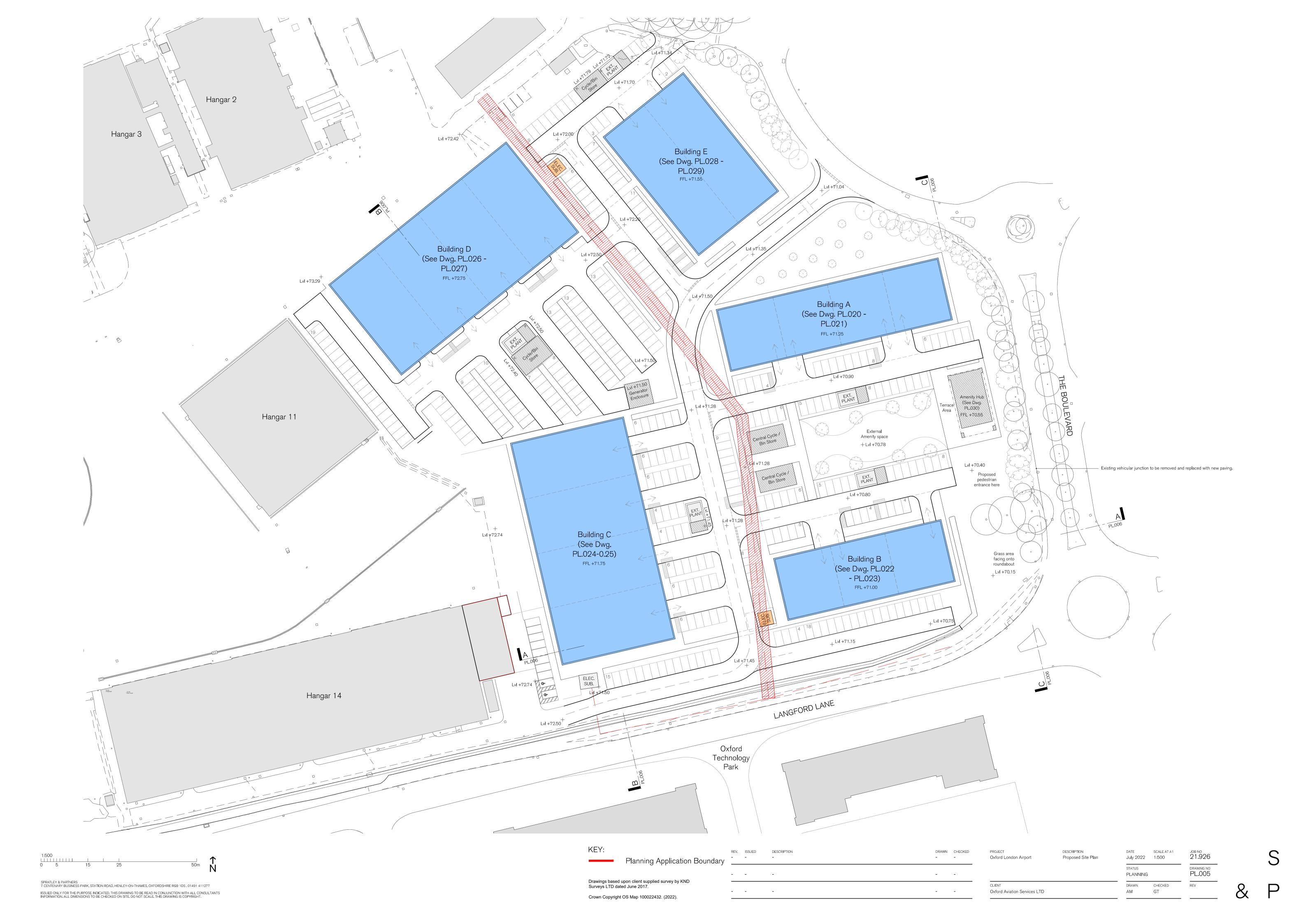
It is recommended that:

- Finished Floor Levels (FFL) and openings (e.g. air bricks) of the proposed buildings should be set to a minimum of 150mm above the finished surrounding ground levels. It is recommended that the surface water drainage system of the site and the finished floor levels of the properties should be designed with care regarding the appropriate requirements for exceedance flows and appropriate allowances for freeboard.
- The surface water runoff originating within the redeveloped site is managed using SuDS techniques and the finished floor levels of the buildings should be designed with care regarding the appropriate requirements for exceedance flows and appropriate allowances for freeboard.



A Proposed development layout

JSP-JBAU-XX-XX-RP-HM-0001-A1-C01-Flood_Risk_Assessment





B Topographic survey

 ${\sf JSP\text{-}JBAU\text{-}XX\text{-}XX\text{-}RP\text{-}HM\text{-}0001\text{-}A1\text{-}C01\text{-}Flood_Risk_Assessment}}$





C Thames Water sewer records

 ${\sf JSP\text{-}JBAU\text{-}XX\text{-}XX\text{-}RP\text{-}HM\text{-}0001\text{-}A1\text{-}C01\text{-}Flood_Risk_Assessment}}$

Asset location search



Yes Engineering Group Limited
The Moat House, 133 The Moat House

STAFFORD ST16 2EZ

Search address supplied London Oxford Airport

Langford Lane Kidlington Oxford Oxfordshire OX5 1RA

Your reference 1703902

Our reference ALS/ALS/24/2018_3789993

Search date 8 May 2018

Keeping you up-to-date

Knowledge of features below the surface is essential in every development. The benefits of this not only include ensuring due diligence and avoiding risk, but also being able to ascertain the feasibility for any commercial or residential project.

An asset location search provides information on the location of known Thames Water clean and/or wastewater assets, including details of pipe sizes, direction of flow and depth. Please note that information on cover and invert levels will only be provided where the data is available.



Thames Water Utilities Ltd Property Searches, PO Box 3189, Slough SL1 4WW DX 151280 Slough 13



searches@thameswater.co.uk www.thameswater-propertysearches.co.uk





Asset location search



Search address supplied: London Oxford Airport, Langford Lane, Kidlington, Oxford, Oxfordshire, OX5 1RA

Dear Sir / Madam

An Asset Location Search is recommended when undertaking a site development. It is essential to obtain information on the size and location of clean water and sewerage assets to safeguard against expensive damage and allow cost-effective service design.

The following records were searched in compiling this report: - the map of public sewers & the map of waterworks. Thames Water Utilities Ltd (TWUL) holds all of these.

This searchprovides maps showing the position, size of Thames Water assets close to the proposed development and also manhole cover and invert levels, where available.

Please note that none of the charges made for this report relate to the provision of Ordnance Survey mapping information. The replies contained in this letter are given following inspection of the public service records available to this company. No responsibility can be accepted for any error or omission in the replies.

You should be aware that the information contained on these plans is current only on the day that the plans are issued. The plans should only be used for the duration of the work that is being carried out at the present time. Under no circumstances should this data be copied or transmitted to parties other than those for whom the current work is being carried out.

Thames Water do update these service plans on a regular basis and failure to observe the above conditions could lead to damage arising to new or diverted services at a later date.

Contact Us

If you have any further queries regarding this enquiry please feel free to contact a member of the team on 0845 070 9148, or use the address below:

Thames Water Utilities Ltd Property Searches PO Box 3189 Slough SL1 4WW

Email: searches@thameswater.co.uk

Web: www.thameswater-propertysearches.co.uk

Asset location search



Waste Water Services

Please provide a copy extract from the public sewer map.

The following quartiles have been printed as they fall within Thames' sewerage area:

SP4715SE SP4714NW SP4715SW SP4714NE

Enclosed is a map showing the approximate lines of our sewers. Our plans do not show sewer connections from individual properties or any sewers not owned by Thames Water unless specifically annotated otherwise. Records such as "private" pipework are in some cases available from the Building Control Department of the relevant Local Authority.

Where the Local Authority does not hold such plans it might be advisable to consult the property deeds for the site or contact neighbouring landowners.

This report relates only to sewerage apparatus of Thames Water Utilities Ltd, it does not disclose details of cables and or communications equipment that may be running through or around such apparatus.

The sewer level information contained in this response represents all of the level data available in our existing records. Should you require any further Information, please refer to the relevant section within the 'Further Contacts' page found later in this document.

For your guidance:

- The Company is not generally responsible for rivers, watercourses, ponds, culverts
 or highway drains. If any of these are shown on the copy extract they are shown for
 information only.
- Any private sewers or lateral drains which are indicated on the extract of the public sewer map as being subject to an agreement under Section 104 of the Water Industry Act 1991 are not an 'as constructed' record. It is recommended these details be checked with the developer.

Clean Water Services

Please provide a copy extract from the public water main map.

The following quartiles have been printed as they fall within Thames' water area:

Asset location search



SP4715SE SP4714NW SP4715SW SP4714NE

Enclosed is a map showing the approximate positions of our water mains and associated apparatus. Please note that records are not kept of the positions of individual domestic supplies.

For your information, there will be a pressure of at least 10m head at the outside stop valve. If you would like to know the static pressure, please contact our Customer Centre on 0800 316 9800. The Customer Centre can also arrange for a full flow and pressure test to be carried out for a fee.

For your guidance:

- Assets other than vested water mains may be shown on the plan, for information only.
- If an extract of the public water main record is enclosed, this will show known public
 water mains in the vicinity of the property. It should be possible to estimate the
 likely length and route of any private water supply pipe connecting the property to
 the public water network.

Payment for this Search

A charge will be added to your suppliers account.

Asset location search



Further contacts:

Waste Water queries

Should you require verification of the invert levels of public sewers, by site measurement, you will need to approach the relevant Thames Water Area Network Office for permission to lift the appropriate covers. This permission will usually involve you completing a TWOSA form. For further information please contact our Customer Centre on Tel: 0845 920 0800. Alternatively, a survey can be arranged, for a fee, through our Customer Centre on the above number.

If you have any questions regarding sewer connections, budget estimates, diversions, building over issues or any other questions regarding operational issues please direct them to our service desk. Which can be contacted by writing to:

Developer Services (Waste Water) Thames Water Clearwater Court Vastern Road Reading RG1 8DB

Tel: 0800 009 3921

Email: developer.services@thameswater.co.uk

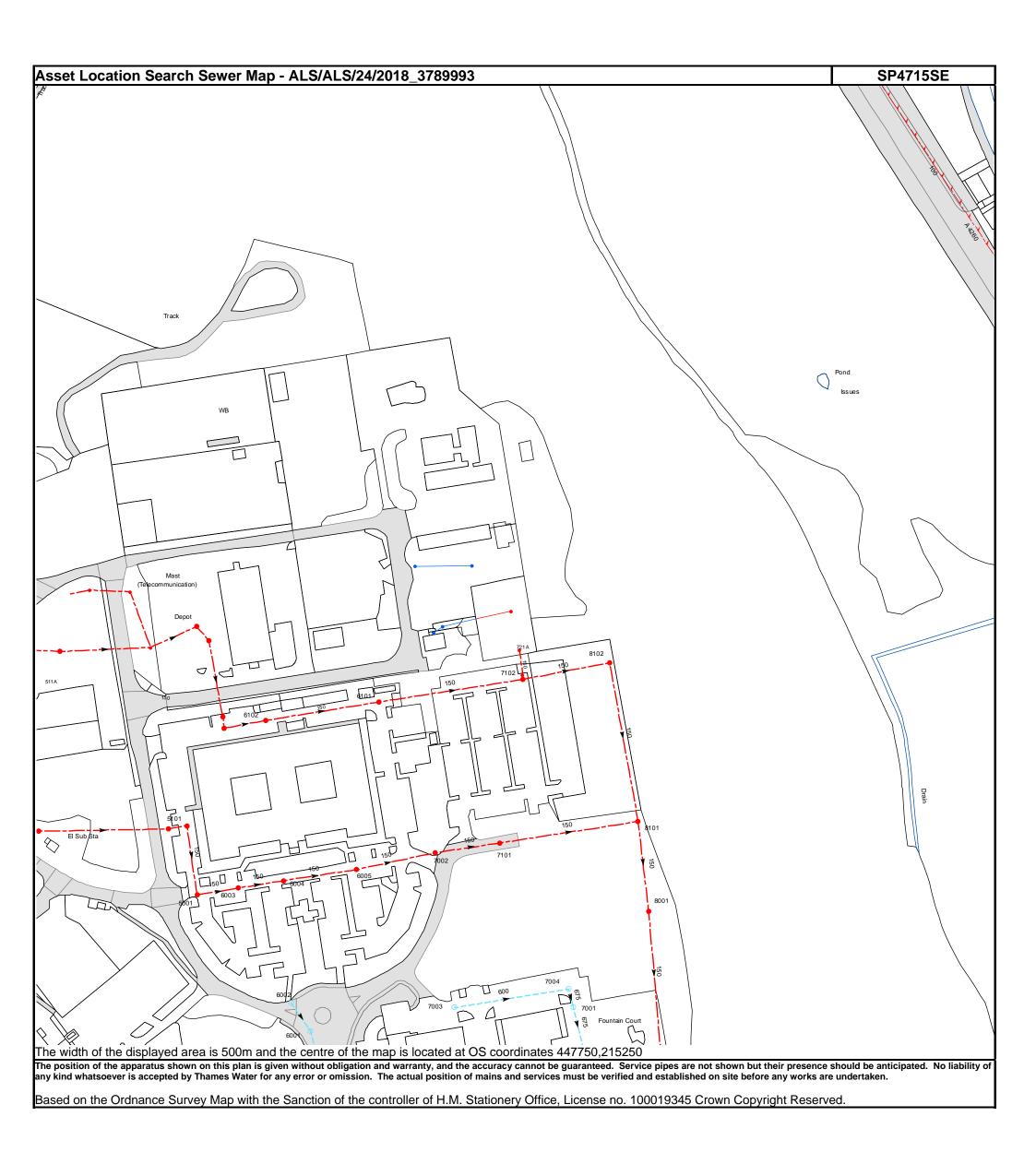
Clean Water queries

Should you require any advice concerning clean water operational issues or clean water connections, please contact:

Developer Services (Clean Water) Thames Water Clearwater Court Vastern Road Reading RG1 8DB

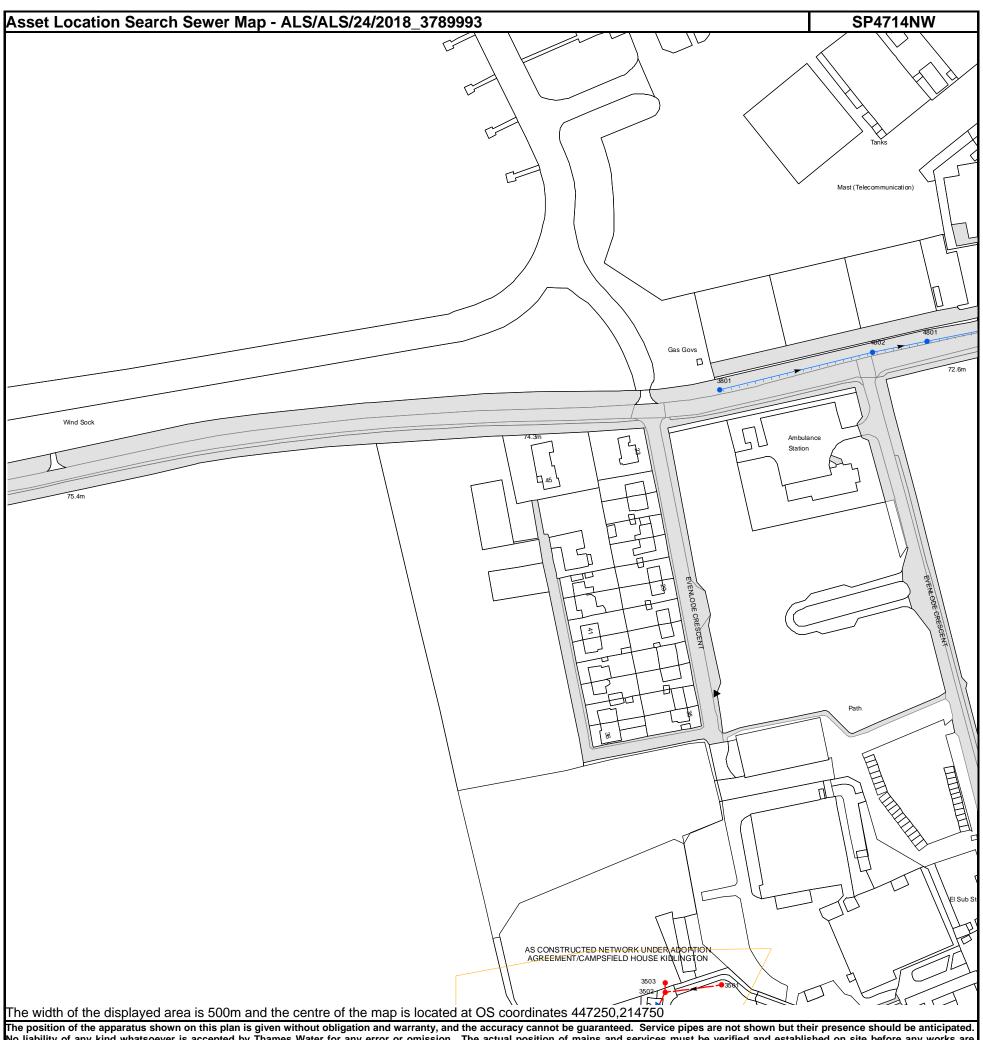
Tel: 0800 009 3921

Email: developer.services@thameswater.co.uk

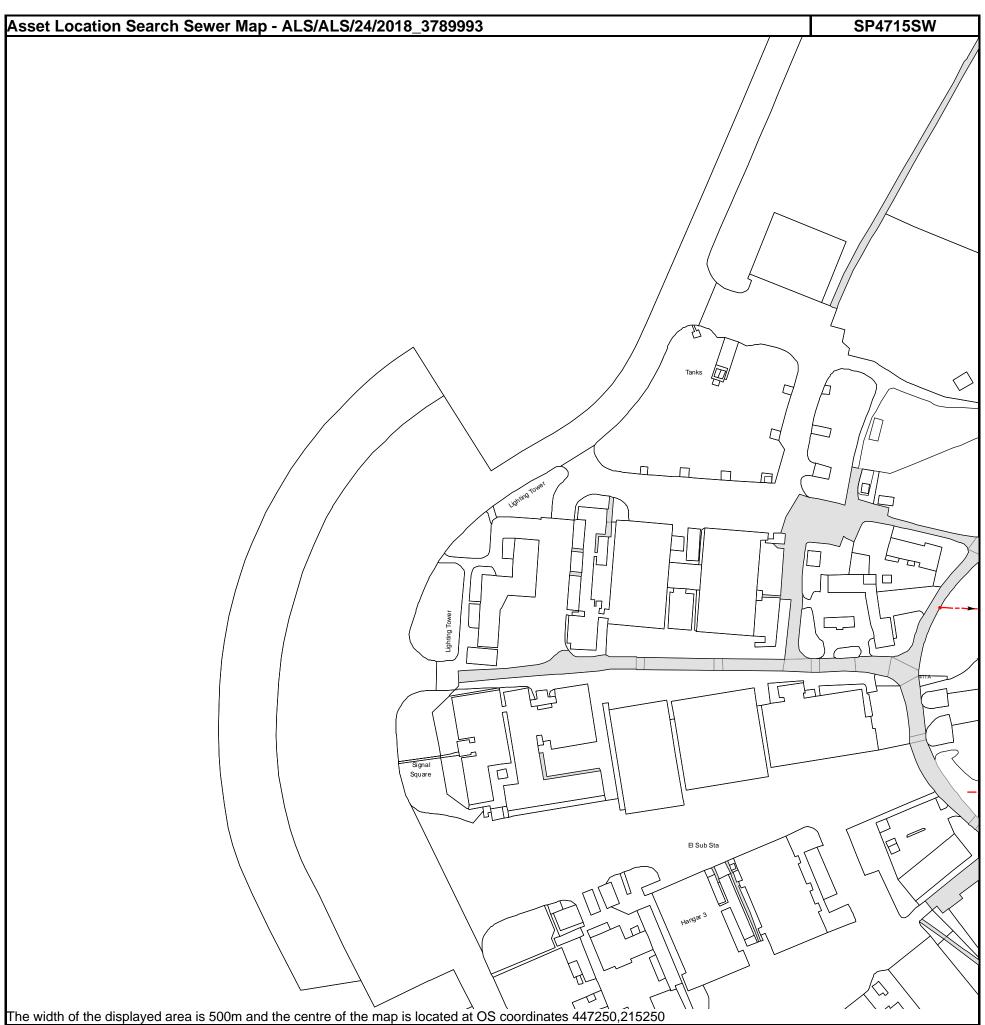


<u>Thames Water Utilities Ltd</u>, Property Searches, PO Box 3189, Slough SL1 4W, DX 151280 Slough 13 **T** 0845 070 9148 **E** <u>searches@thameswater.co.uk</u> **I** <u>www.thameswater-propertysearches.co.uk</u>

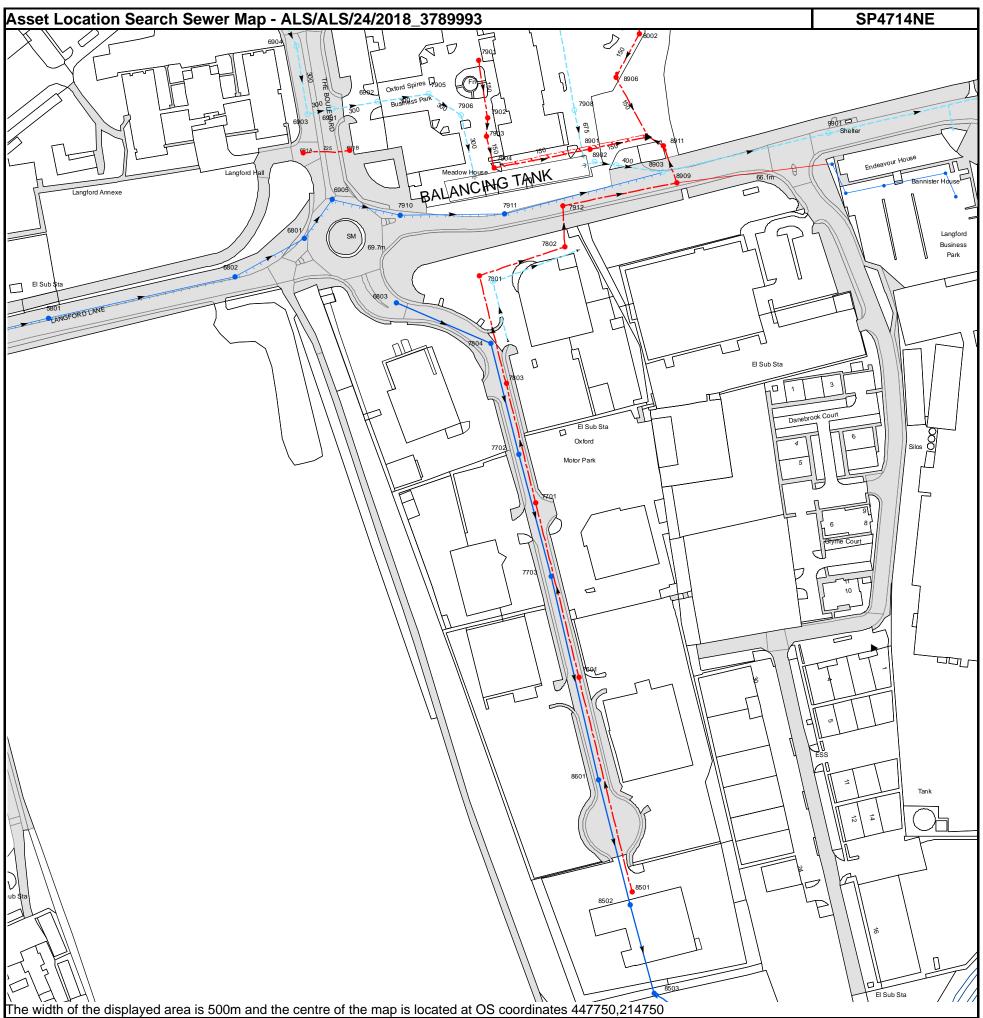
| Manhole Reference | Manhole Cover Level | Manhole Invert Level |
|-------------------|---------------------|----------------------|
| 7004 | 68.08 | 66.2 |
| 7001 | n/a | n/a |
| 8001 | 67.3 | 64.81 |
| 6003 | n/a | n/a |
| 6004 | 70.21 | 67.47 |
| 6005 | 69.81 | 66.76 |
| 7002 | 69.2 | 66.16 |
| 7101 | 68.61 | 65.91 |
| 8101 | 68.5 | 65.35 |
| 511E | n/a | n/a |
| 6102 | 70.3 | 68.24 |
| 511D | n/a | n/a |
| 6101 | 70.23 | 67.55 |
| 7102 | 69.6 | 66.86 |
| 8102 | 68.9 | 66.46 |
| 721A | n/a | n/a |
| 721C | n/a | n/a |
| 721D | n/a | n/a |
| 721E | n/a | n/a |
| 621A | n/a | n/a |
| 721B | n/a | n/a |
| 6002 | n/a | n/a |
| 6001 | n/a | n/a |
| 7003 | 68.08 | 66.5 |
| 511B | n/a | n/a |
| 521C | n/a | n/a |
| 521D | n/a | n/a |
| 521E | n/a | n/a |
| 511A | n/a | n/a |
| 511C | n/a | n/a |
| 5101 | 70.84 | 69.59 |
| 521A | n/a | n/a |
| 5001 | 70.81 | 68.5 |
| 521B | n/a | n/a |
| | | |
| | | |



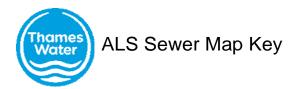
| Manhole Reference | Manhole Cover Level | Manhole Invert Level |
|-------------------|---------------------|----------------------|
| 3801 | n/a | n/a |
| 4802 | n/a | n/a |
| 4801 | n/a | n/a |
| 3502 | n/a | n/a |
| 3501 | n/a | n/a |
| 3503 | n/a | n/a |
| | | |
| | | |



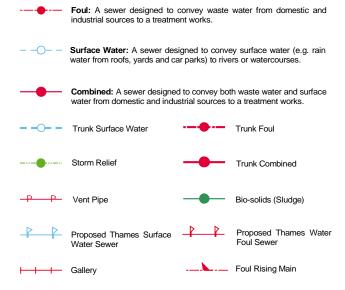
| Manhole Reference | Manhole Cover Level | Manhole Invert Level |
|-------------------|---------------------|----------------------|
| 411A | n/a | n/a |
| | | |



| Manhole Reference | Manhole Cover Level | Manhole Invert Level |
|-------------------|---------------------|----------------------|
| 8911 | n/a | n/a |
| 8909 | n/a | n/a |
| 9901 | n/a | n/a |
| 991A | n/a | n/a |
| 991G | n/a | n/a |
| 991F | n/a | n/a |
| 991E | n/a | n/a |
| 991C | n/a | n/a |
| 991D | n/a | n/a |
| 7911 | n/a | n/a |
| 7803 | n/a | n/a |
| 7702 | n/a | n/a |
| 7701 | n/a | n/a |
| 7912 | n/a | n/a |
| 7802 | n/a | n/a |
| 7908 | n/a | n/a |
| 8901 | n/a | n/a |
| 8902 | n/a | 65.35 |
| 8906 | 67 | 63.92 |
| 891B | n/a | n/a |
| 8002 | 66.6 | 64.27 |
| 8903 | n/a | n/a |
| 5801 | n/a | n/a |
| 6802 | n/a | n/a |
| 6904 | n/a | n/a |
| 691A | n/a | n/a |
| 6801 | n/a | n/a |
| 6903 | n/a | n/a |
| 6905 | n/a | n/a |
| 6901 | n/a | n/a |
| 691B | n/a | n/a |
| 6902 | n/a | n/a |
| 6803 | n/a | n/a |
| 7910 | n/a | n/a |
| 7905 | n/a | n/a |
| 7906 | n/a | n/a |
| 7901 | n/a | n/a |
| 7801 | n/a | n/a |
| 7903 | n/a | n/a |
| 7902 | n/a | n/a |
| 7804 | n/a | n/a |
| 781G | n/a | n/a |
| 7904 | n/a | n/a |
| 8503 | n/a | n/a |
| 8502 | n/a | n/a |
| 8501 | n/a | n/a |
| 8601 | n/a | n/a |
| 7601 | n/a | n/a |
| 7703 | n/a | n/a |
| | | |
| | | |
| | | |



Public Sewer Types (Operated & Maintained by Thames Water)



Sewer Fittings

A feature in a sewer that does not affect the flow in the pipe. Example: a vent is a fitting as the function of a vent is to release excess gas.

Air Valve

Dam Chase

Fitting

Meter

♦ Vent Column

Operational Controls

A feature in a sewer that changes or diverts the flow in the sewer. Example: A hydrobrake limits the flow passing downstream.

Control Valve

Drop Pipe

Ancillary

✓ Weir

End Items

End symbols appear at the start or end of a sewer pipe. Examples: an Undefined End at the start of a sewer indicates that Thames Water has no knowledge of the position of the sewer upstream of that symbol, Outfall on a surface water sewer indicates that the pipe discharges into a stream or river.

**** ✓ Outfall

Combined Rising Main

Proposed Thames Water

Undefined End

✓ Inle

Notes:

----- Vacuum

- 1) All levels associated with the plans are to Ordnance Datum Newlyn.
- 2) All measurements on the plans are metric.

Surface Water Rising

Sludge Rising Main

- Arrows (on gravity fed sewers) or flecks (on rising mains) indicate direction of flow.
- Most private pipes are not shown on our plans, as in the past, this information has not been recorded.
- 5) 'na' or '0' on a manhole level indicates that data is unavailable.

6) The text appearing alongside a sewer line indicates the internal diameter of the pipe in milimetres. Text next to a manhole indicates the manhole reference number and should not be taken as a measurement. If you are unsure about any text or symbology present on the plan, please contact a member of Property Insight on 0845 070 9148.

Other Symbols

Symbols used on maps which do not fall under other general categories

▲ / ▲ Public/Private Pumping Station

* Change of characteristic indicator (C.O.C.I.)

< Summit

Areas

Lines denoting areas of underground surveys, etc.

Agreement

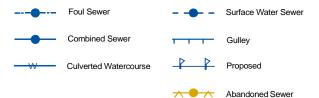
/// Operational Site

:::::: Chamber

Tunnel

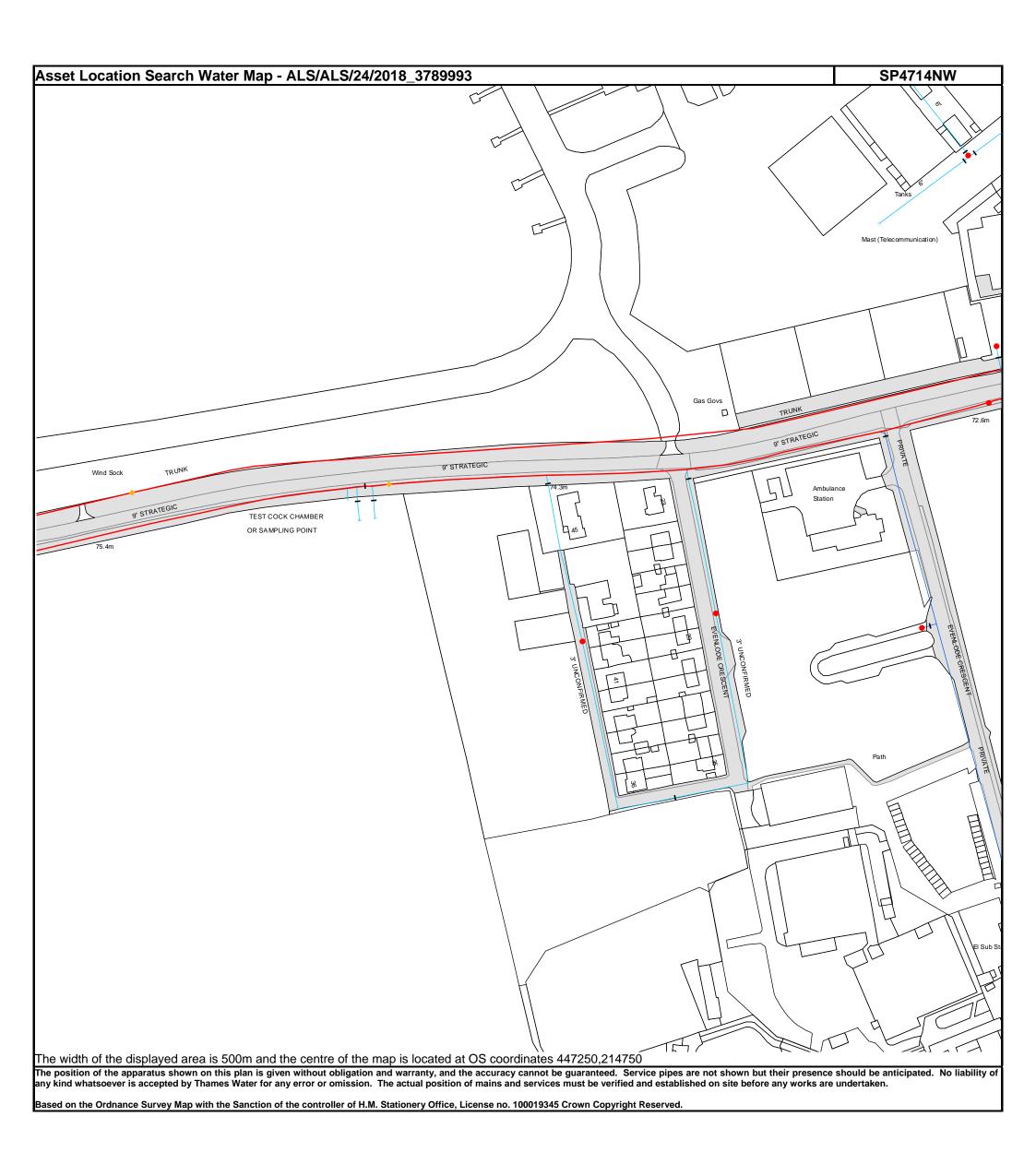
Conduit Bridge

Other Sewer Types (Not Operated or Maintained by Thames Water)

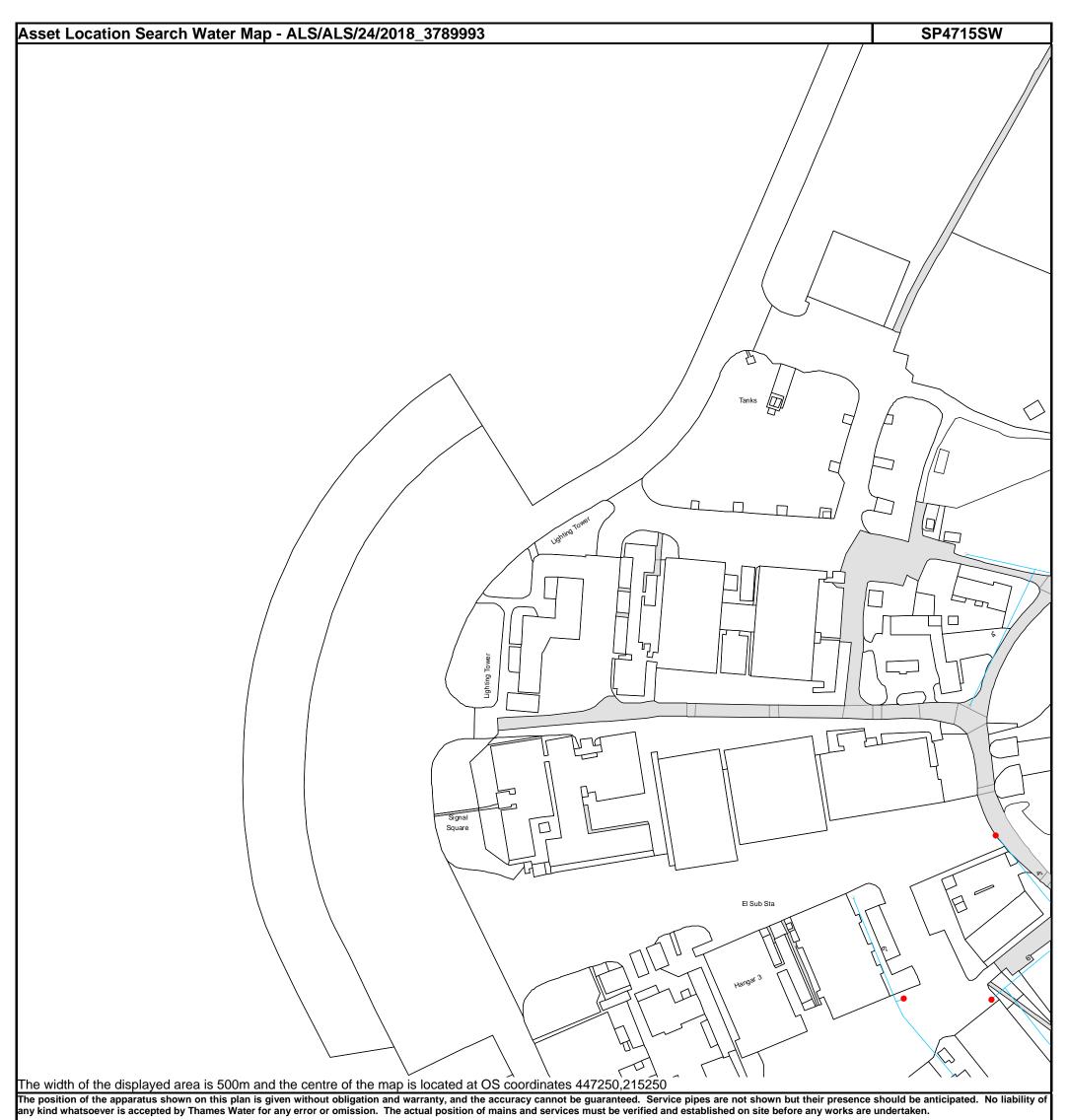




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Water Pipes (Operated & Maintained by Thames Water)

| | F (-) |
|------------|---|
| 4" | Distribution Main: The most common pipe shown on water maps. With few exceptions, domestic connections are only made to distribution mains. |
| 16" | Trunk Main: A main carrying water from a source of supply to a treatment plant or reservoir, or from one treatment plant or reservoir to another. Also a main transferring water in bulk to smaller water mains used for supplying individual customers. |
| 3" SUPPLY | Supply Main: A supply main indicates that the water main is used as a supply for a single property or group of properties. |
| 3" FIRE | Fire Main: Where a pipe is used as a fire supply, the word FIRE will be displayed along the pipe. |
| 3" METERED | Metered Pipe: A metered main indicates that the pipe in question supplies water for a single property or group of properties and that quantity of water passing through the pipe is metered even though there may be no meter symbol shown. |
| | Transmission Tunnel: A very large diameter water pipe. Most tunnels are buried very deep underground. These pipes are not expected to affect the structural integrity of buildings shown on the map provided. |
| | Proposed Main: A main that is still in the planning stages or in the process of being laid. More details of the proposed main and its reference number are generally included near the main. |

| PIPE DIAMETER | DEPTH BELOW GROUND |
|-----------------------------|--------------------|
| Up to 300mm (12") | 900mm (3') |
| 300mm - 600mm (12" - 24") | 1100mm (3' 8") |
| 600mm and bigger (24" plus) | 1200mm (4') |

Valves Operational Sites General PurposeValve **Booster Station** Air Valve Other Pressure ControlValve Other (Proposed) Customer Valve Pumping Station Service Reservoir **Hydrants** Shaft Inspection Single Hydrant Treatment Works Meters Unknown Meter Water Tower **End Items Other Symbols** Symbol indicating what happens at the end of ^L a water main. Data Logger Blank Flange Capped End Emptying Pit Undefined End Manifold Customer Supply

Fire Supply

| Other \ | Water Pipes (No | t Operated or Maintained by Thames Water |
|---------|----------------------|--|
| | water pipes may over | ny Main: Occasionally other water company lap the border of our clean water coverage e denoted in purple and in most cases have displayed along them. |
| | by Thames Water. The | s that the water main in question is not owned ase mains normally have text associated with ameter and owner of the pipe. |

Terms and Conditions

All sales are made in accordance with Thames Water Utilities Limited (TWUL) standard terms and conditions unless previously agreed in writing.

- 1. All goods remain in the property of Thames Water Utilities Ltd until full payment is received.
- 2. Provision of service will be in accordance with all legal requirements and published TWUL policies.
- 3. All invoices are strictly due for payment 14 days from due date of the invoice. Any other terms must be accepted/agreed in writing prior to provision of goods or service, or will be held to be invalid.
- 4. Thames Water does not accept post-dated cheques-any cheques received will be processed for payment on date of receipt.
- 5. In case of dispute TWUL's terms and conditions shall apply.
- 6. Penalty interest may be invoked by TWUL in the event of unjustifiable payment delay. Interest charges will be in line with UK Statute Law 'The Late Payment of Commercial Debts (Interest) Act 1998'.
- 7. Interest will be charged in line with current Court Interest Charges, if legal action is taken.
- 8. A charge may be made at the discretion of the company for increased administration costs.

A copy of Thames Water's standard terms and conditions are available from the Commercial Billing Team (cashoperations@thameswater.co.uk).

We publish several Codes of Practice including a guaranteed standards scheme. You can obtain copies of these leaflets by calling us on 0800 316 9800

If you are unhappy with our service you can speak to your original goods or customer service provider. If you are not satisfied with the response, your complaint will be reviewed by the Customer Services Director. You can write to her at: Thames Water Utilities Ltd. PO Box 492, Swindon, SN38 8TU.

If the Goods or Services covered by this invoice falls under the regulation of the 1991 Water Industry Act, and you remain dissatisfied you can refer your complaint to Consumer Council for Water on 0121 345 1000 or write to them at Consumer Council for Water, 1st Floor, Victoria Square House, Victoria Square, Birmingham, B2 4AJ.

Ways to pay your bill

| Credit Card | BACS Payment | Telephone Banking | Cheque |
|--|--|--|---|
| Call 0845 070 9148 quoting your invoice number starting CBA or ADS / OSS | Account number 90478703 Sort code 60-00-01 A remittance advice must be sent to: Thames Water Utilities Ltd., PO Box 3189, Slough SL1 4WW. or email ps.billing@thameswater. co.uk | By calling your bank and quoting: Account number 90478703 Sort code 60-00-01 and your invoice number | Made payable to 'Thames Water Utilities Ltd' Write your Thames Water account number on the back. Send to: Thames Water Utilities Ltd., PO Box 3189, Slough SL1 4WW or by DX to 151280 Slough 13 |

Thames Water Utilities Ltd Registered in England & Wales No. 2366661 Registered Office Clearwater Court, Vastern Rd, Reading, Berks, RG1 8DB.



Search Code

IMPORTANT CONSUMER PROTECTION INFORMATION

This search has been produced by Thames Water Property Searches, Clearwater Court, Vastern Road, Reading RG1 8DB, which is registered with the Property Codes Compliance Board (PCCB) as a subscriber to the Search Code. The PCCB independently monitors how registered search firms maintain compliance with the Code.

The Search Code:

- provides protection for homebuyers, sellers, estate agents, conveyancers and mortgage lenders who
 rely on the information included in property search reports undertaken by subscribers on residential
 and commercial property within the United Kingdom
- · sets out minimum standards which firms compiling and selling search reports have to meet
- promotes the best practise and quality standards within the industry for the benefit of consumers and property professionals
- enables consumers and property professionals to have confidence in firms which subscribe to the code, their products and services.

By giving you this information, the search firm is confirming that they keep to the principles of the Code. This provides important protection for you.

The Code's core principles

Firms which subscribe to the Search Code will:

- display the Search Code logo prominently on their search reports
- act with integrity and carry out work with due skill, care and diligence
- at all times maintain adequate and appropriate insurance to protect consumers
- conduct business in an honest, fair and professional manner
- handle complaints speedily and fairly
- ensure that products and services comply with industry registration rules and standards and relevant laws
- monitor their compliance with the Code

Complaints

If you have a query or complaint about your search, you should raise it directly with the search firm, and if appropriate ask for any complaint to be considered under their formal internal complaints procedure. If you remain dissatisfied with the firm's final response, after your complaint has been formally considered, or if the firm has exceeded the response timescales, you may refer your complaint for consideration under The Property Ombudsman scheme (TPOs). The Ombudsman can award compensation of up to £5,000 to you if he finds that you have suffered actual loss as a result of your search provider failing to keep to the Code.

Please note that all queries or complaints regarding your search should be directed to your search provider in the first instance, not to TPOs or to the PCCB.

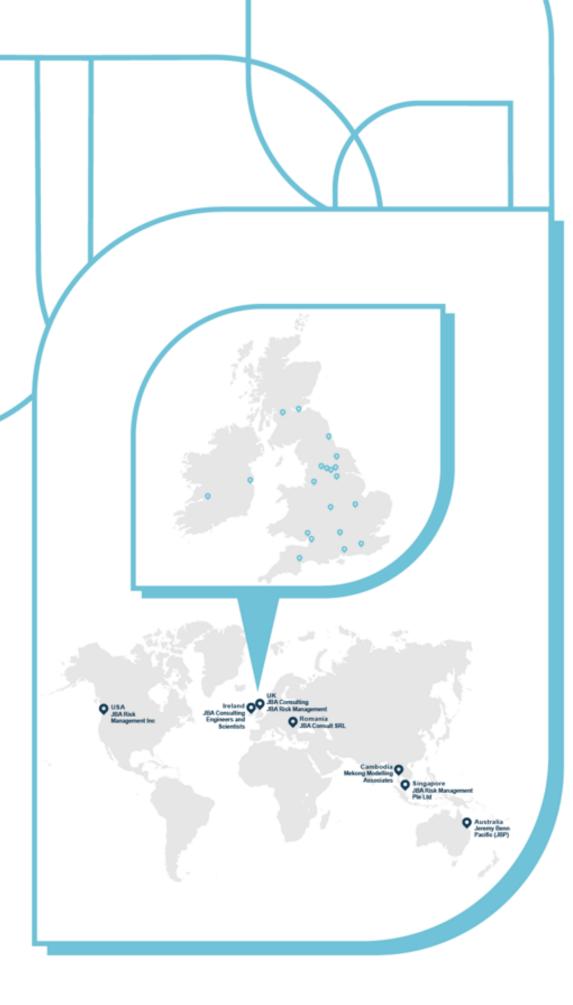
TPOs Contact Details

The Property Ombudsman scheme Milford House 43-55 Milford Street Salisbury Wiltshire SP1 2BP Tel: 01722 333306

Fax: 01722 333206 Email: admin@tpos.co.uk

You can get more information about the PCCB from www.propertycodes.org.uk

PLEASE ASK YOUR SEARCH PROVIDER IF YOU WOULD LIKE A COPY OF THE SEARCH CODE





Offices at

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JBA Group Ltd is certified to: ISO 9001:2015 ISO 14001:2015 ISO 27001:2013 ISO 45001:2018









