

FLOOD RISK ASSESSMENT AND DRAINAGE STRATEGY REPORT

PROPOSED DEVELOPMENT

BROOKES STREET

MIDDLETON. M24 2WQ.

For

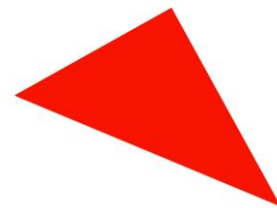
KWICK BUILD LTD



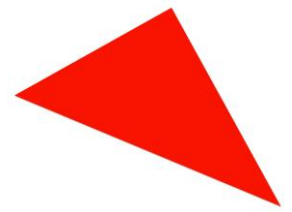
23.B.13862 REPORT REVISIONS	
- SEPTEMBER '23	Original report.

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EXECUTIVE SUMMARY	
Site Parameters	Site Area – 5,500m ² Present Impermeable Area - existing hardstanding – (approx 45%) 2,200m ² Post Development Impermeable Area (approx 62%) – 3,400m ² INCREASE in Impermeable Area – 1,200m ² NGR – 387700 (E) ; 406600 (N) Nearest Post Code – M24 2WQ.
Flooding	This report has considered flooding from a variety of sources in accordance with NPPF guidelines, and it is believed that the site is not at risk of flooding, nor does the proposed development create a risk of flooding elsewhere.
Existing Public Drainage	There are no existing public sewers crossing the vicinity of the site. The nearest combined sewer is the 225mm diameter sewer located in Boarshaw Road to the north of the site.
Surface Water Drainage	The SuDS hierarchy suggests that infiltration should be the primary consideration for the discharge of surface water from the site, however, should ground conditions prove unfavourable for infiltration following a site intrusive phase 2 site investigation discharge of surface water via infiltration can be discounted, exploring further options of the SuDS hierarchy. Discharge into a watercourse is the next order, followed by a surface water sewer, however there are none found in the immediate vicinity of the site. Therefore, as suggested by United Utilities, discharge may be made into the existing combined water sewer in Boarshaw Road, with discharge limited to greenfield run-off rates, to be agreed between UU and the LLFA at detailed design stage, but not to exceed 5l/s.
Foul Drainage	United Utilities indicate that connection to the combined sewer in Boarshaw Road would be permitted at an uncontrolled rate at a convenient position.



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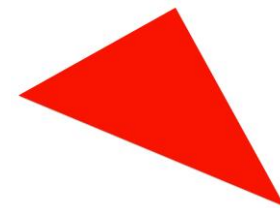
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1.0 INTRODUCTION

- 1.1 Carley Daines and Partners Limited have been commissioned by Kwick Build Ltd to undertake a Flood Risk Assessment (FRA) and Drainage Strategy for this site in accordance with the requirements of National Planning Policy Guidelines (NPPG), published in 2016 and since updated.

2.0 EXISTING SITE DETAILS

- 2.1 The site is located off Brookes Street, Middleton, Manchester. M24 2WQ. See location plan in Appendix A. It is mainly square in shape and lies between Brookes Street to the west and Boarshaw Road to the north. The overall site has an approximate area of 5,500m² (0.55ha). It is located at NGR 387700 (E) ; 406600 (N) and the nearest post code is M24 2WQ. The mean site elevation is approximately 94m AOD. The site will be accessed directly from Brookes Street via a new extended entrance leading to new a new adoptable road with a turning head, leading to private car parking spaces.
- 2.2 The existing site currently houses a derelict building and car park, formerly the phoenix works. The site features derelict and abandoned buildings in poor condition, a broken hardstanding car park/ yard area, and a large amount (approximately 60% of the site area) of overgrown shrubbery and trees. The site is currently accessed from Brookes Street, which is an unadopted track road leading into site via a security gate from Boarshaw Road.
- 2.3 The nearest surface water feature to the site is the Whit Brook which lies approximately 100m to the west of the site. The Whit Brook ultimately discharges into the River Irk south of the site.
- 2.4 There are no existing public sewer within or crossing the site. There is a 225mm diameter combined sewer to the north within Boarshaw Road, which has existing adopted tails to the site. United Utilities in their pre-development response commented that in the event that infiltration and a discharge to the watercourse is proved not possible, a controlled discharge into the combined water sewer may be permitted, with the flow controlled to a maximum rate of 5l/s. United Utilities identified the combined sewer as the preferred point of discharge for the sites foul water.
- 2.5 The Lead Local Flood Authority (LLFA) is Rochdale Council.
- 2.6 There has been a Phase 1 ground investigation, which concluded the ground conditions on site may be favourable for infiltration, however, infiltration testing and a ground intrusive phase 2 site investigation should be carried out to determine the suitability.

3.0 PROPOSED DEVELOPMENT

- 3.1 A preliminary site layout drawing has been made available to us prepared by the architect Condyllofthouse architects. The proposed development consists of 20 new residential units, all in a two storey, together with associated drainage and parking infrastructure. Vehicle access to the new development will be via the existing but widened Brookes Street off of Boarshaw Road. See the proposed site layout in Appendix C.
- 3.2 Any residential development of this type is classified in Table 2 of the NPPG below, as within the "More Vulnerable" category in consideration of flood risk and is in Flood Zone 1 (FZ1) – an area with low risk of flooding (see appendix D).

Table 2: Flood Risk Vulnerability Classification

Essential Infrastructure • Essential transport infrastructure (including mass evacuation routes) which has to cross the area at risk. • Essential utility infrastructure which has to be located in a flood risk area for operational reasons, including electricity generating power stations and grid and primary substations; and water treatment works that need to remain operational in times of flood. • Wind turbines
Highly Vulnerable • Police stations, ambulance stations and fire stations and command centres and telecommunications installations required to be operational during flooding. • Emergency dispersal points. • Basement dwellings. • Caravans, mobile homes and park homes intended for permanent residential use³. • Installations requiring hazardous substances consent⁴. Where there is a demonstrable need to locate such installations for bulk storage of materials with port or other similar facilities, or such installations with energy infrastructure or carbon capture and storage installations, that require coastal or water-side locations, or need to be located in other high flood risk areas, in these instances the facilities should be classified as “essential infrastructure”⁵.
More Vulnerable • Hospitals • Residential institutions such as residential care homes, children’s homes, social services homes, prison and hostels. • Buildings used for dwelling houses, student halls of residence, drinking establishments, nightclubs and hotels. • Non-residential uses for health services, nurseries and educational establishments. • Landfill and sites used for waste management facilities for hazardous waste⁶. • Sites used for holiday or short-let caravans and camping, <i>subject to a specific warning and evacuation plan</i>.
Less Vulnerable • Police, ambulance and fire stations which are <i>not</i> required to be operational during flooding. • Buildings used for shops, financial, professional and other services, restaurants and cafes, hot food takeaways, offices, general industry, storage and distribution, non-residential institutions not included in “more vulnerable” and assembly and leisure. • Land and buildings used for agriculture and forestry. • Waste treatment (except landfill and hazardous waste facilities). • Minerals working and processing (except for sand and gravel working). • Water treatment works which do <i>not</i> need to remain operational during times of flood. • Sewage treatment works (if adequate measures to control pollution and manage sewage during flooding events are in place.)

³ For any proposal involving a change of use of land to a caravan, camping or chalet site, or to a mobile home site or park home site, the Sequential and Exception Tests should be applied.

⁴ See Circular 04/00: *Planning controls for hazardous substances* (paragraph 18) at: www.communities.gov.uk/publications/planningandbuilding/circular/planningcontrols

⁵ In considering any development proposal for such an installation, local planning authorities should have regard to planning policy on pollution in the National Planning Policy Framework.

⁶ For definition, see *Planning for Sustainable Waste Management: Companion Guide to Planning Policy Statement 10* at www.communities.gov.uk/publications/planningandbuilding/planningsustainable
See footnote 3.

Water-compatible development • Flood control infrastructure. • Water transmission infrastructure and pumping stations. • Sand and gravel working. • Docks, marinas and wharves. • Navigation facilities. • Ministry of Defence installations. • Ship building, repairing and dismantling, dockside fish processing and refrigeration and compatible activities requiring a waterside location. • Water-based recreation (excluding sleeping accommodation). • Lifeguard and coastguard stations. • Amenity open space, nature conservation and biodiversity, outdoor sports and recreation and essential facilities such as changing rooms. Essential ancillary sleeping or residential accommodation for staff required by uses in this category <i>subject to a specific warning and evacuation plan</i>.

Notes to Table 2:

- a. This classification is based partly on Department for Environment, Food and Rural Affairs and Environment Agency research on *Flood Risks to People (FD2321/TR2)* and also on the need of some uses to keep functioning during flooding.
- b. Buildings that combine a mixture of uses should be placed in to the higher of the relevant classes of flood risk sensitivity. Developments that allow uses to be distributed over the site may fall within several classes of flood risk sensitivity.
- c. The impact of a flood on the particularly uses identified within this flood risk vulnerability classification will vary within each vulnerability class. Therefore, the flood risk management infrastructure and other risk mitigation measures needed to ensure the development is safe may differ between uses within a particular vulnerability classification.

3.3

Table 3 of the NPPG states that “more vulnerable” development is considered appropriate within FZ1. Therefore, the development passes the flood risk Sequential Test and the Exception Test does not need to be applied.

Table 3: Flood Risk Vulnerability and Flood Zone "Compatibility"

Flood risk vulnerability classification (see Table 2)		Essential Infrastructure	Water Compatible	Highly Vulnerable	More Vulnerable	Less Vulnerable
Zone (see table 1)	Zone 1	✓	✓	✓	✓	✓
	Zone 2	✓	✓	Exception Test required	✓	✓
	Zone 3a	Exception Test required	✓	✗	Exception Test required	✓
	Zone 3b functional floodplain	Exception Test required	✓	✗	✗	✗

Key: ✓ Development is appropriate
✗ Development should not be permitted.

Notes to Table 3:

This table does not show:

- a. The application of the Sequential Test which guides development to Flood Zone 1 first, then Zone 2, and then Zone 3;
- b. Flood risk assessment requirements; or
- c. the policy aims for each flood zone.

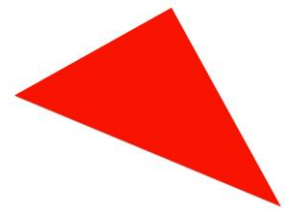
4.0 EFFECTS OF CLIMATE CHANGE

4.1 Reference is made to the Environment Agency document: Flood Risk Assessments: Climate Change Allowances dated February 2016 and updated in March 2020.

Table 2: Peak rainfall intensity allowance in small and urban catchments (use 1961 to 1990 baseline)

Applies across all England	Total potential change anticipated for 2015 - 2039	Total potential change anticipated for 2040 - 2069	Total potential change anticipated for 2070 - 2115
Upper end	10%	20%	45%
Central	5%	10%	20%

The site is unaffected by changes in sea levels.



5.0 PROBABILITY OF FLOODING

5.1 It is a requirement of the NPPG that flooding from all possible sources should be assessed. Accordingly, consideration must be given to the possibility of flooding from the following sources:

- rivers and watercourses
- sewers
- sea
- overland flows
- ground water
- reservoirs, canals and artificial sources

Consideration must also be given to the possibility of transferring flooding to other locations off site. In consideration of the above possible flood sources, the assessed risks are as follows:

5.2 Flooding from Rivers/Watercourses

The nearest watercourse to the site is the Whit Brook, located approximately 100m to the west of the site. This watercourse is a minor surface water feature, which runs from a reservoir to the north of the site, to the river Irk to the south. In light of the site being in a flood zone 1, an area with low risk of flooding, the Environment Agency flood maps show no risk of flooding to the site from this watercourse. The flood map does show the brook itself as being a flood zone 3 (high risk of flooding), and the basin local to the brook as a flood zone 2 (medium risk of flooding), however the flood basin displayed on the flood maps is only a small area and does not stretch as far as the site. The nearest river to the site is the river Irk, which is located approximately 350m south of the site. The initial topographical levels suggest that the site, with a ground level of approx. 94m AOD, is higher than both the adjacent Whit Brook and the river Irk, indicating that any flooding from the river or watercourse would be directed away from the site.

Therefore, the risk of flooding from rivers and watercourses can be assessed as LOW.

5.3 Flooding from the Sea

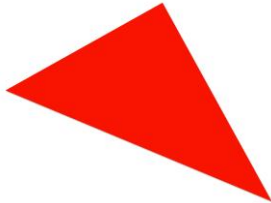
The site is at an elevation of over 90m AOD and at least 60km from the nearest coastline, in Merseyside. The risk of flooding from the sea is therefore assessed as ZERO.

5.4 Flooding from Land

There are no obvious overland paths of flood water, nor is there any known history of flooding in the area. The topographical levels in the area suggest that the site lies at a higher level above the ordnance datum than the areas around site, with levels falling away to the west. Therefore, flooding from land is assessed as LOW.

5.5 Flooding from Ground Water

The possibility of flooding from groundwater has been considered. As the proposed development is to be fully constructed above natural existing ground level, and no cellars / basements are to be incorporated into the buildings, mitigating measures in the form of specialist tanking and waterproofing are not considered to be necessary. This risk is assessed as LOW.



5.6 Flooding from Sewers

Flooding from sewers can occur when a sewer is overwhelmed by heavy rainfall, becomes blocked, is damaged or of inadequate capacity. Flooding is most likely to occur to combined sewers. The UU sewer map shows sewers in the area to be of substantial size and it is understood that there is no record of sewer flooding in the area. United Utilities did not suggest that the sites surface water is discharged into the existing local combined and surface water sewers, indicating management of the sewer capacities in the area. Hence, it can therefore be concluded that the risk of sewer flooding is VERY LOW.

5.7 Flooding from Reservoirs, Canals and Artificial Sources

There are no canals located within 5km of the site. The nearest reservoir to the site is located approximately 500m to the east of the site near Hereford Way. There is no record of flooding from any of the two reservoirs, and topographical levels suggest they are at a similar ground level AOD to site. Both reservoirs appear to have an overflow into the river Irk which lies directly south of them. Due to this and that the site lies in a flood zone 1, the risk is assessed as VERY LOW.

5.8 Flooding Elsewhere

This flood risk assessment also requires consideration to be given to the possibility of flooding being caused elsewhere. A properly designed and maintained site drainage system will meet the requirements of the sewerage provider, in that the pipelines will not flood at the critical 30-year rainfall event. Furthermore, NPPG guidelines require that all exceedance flows either infiltrate into the ground or are safely contained on site within underground or above ground safe storage areas such that there will be no risk of flooding of vulnerable or critical areas on site or other nearby areas. There will be a substantial increase in impermeable area on site, due to the proposed development. It is proposed to mitigate any potential flooding by ensuring floor levels are set above existing levels, and ground levels are suitably graded so that overland flooding is routed to an area of low risk, where no proposed or existing building or road is compromised. The risk, therefore, of transferring flooding elsewhere is LOW.

6.0 MITIGATION MEASURES

In view of the site being located in FZ1 and the very low risk of causing flooding elsewhere off site (see above) there are no further major mitigating measures proposed, though placing finished floor levels a minimum of 150mm above surrounding ground levels would be prudent.

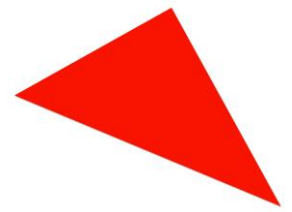
7.0 SURFACE WATER DRAINAGE STRATEGY

7.1 It is the Environment Agency, United Utilities, Building Regulations and the Lead Local Flood Authority policy for all surface water systems for development sites to be designed using Sustainable Drainage Systems (SuDs) wherever possible.

7.2 Rainfall intensities, see profiles in Appendix E, are as indicated in the table below.

	YR 2	YR 30	YR 100	YR 100 + 45%
Rainfall Intensity mm/hr	80.8	153.8	200.5	280.7

With an existing drained impermeable area on site of 2,200m², the run-off rates from existing rainfall events is presently as follows:



	YR 2	YR 30	YR 100
Peak Run-Off Litres/sec	52.04	98.7	128.75

Future run-off, post-development, with an impermeable area on site of 3,400m², peak run-off rates are predicted to be as follows:

	YR 2	YR 30	YR 100	YR 100 + 45% CC
Peak Run-Off Litres/sec	80.3	152.7	199	288.6

The post development increase in impermeable area gives a corresponding INcrease in surface water run-off of approx. 54%. However, NPPG requires that surface water discharge run-off rates are restricted as close as possible to equivalent greenfield run-off rates, as infiltration is not possible, attention should be paid to the discharge rates evaluation below.

7.3 Discharge Rates

Greenfield run-off rates are included in Appendix F. These have been calculated using the H R Wallingford greenfield run-off rates calculator, based on the IH124 Approach. The greenfield rate for the 1 in 1yr return is calculated as 3.65 l/s, the 1in 30yr return as 7.13 l/s and the 1 in 100yr as 8.72 l/s. Q_{BAR} is calculated as 4.19 l/s and this has been utilised as the governing run-off rate for this report. However, Q_{BAR} has been increased from 4.19l/s to 5 l/s as this is typically the default minimum due to flow control sizes, and United Utilities have requested no discharge is to exceed this flow rate. This can be implemented using a flow control device in the final manhole before discharge.

7.4 Discharge Method

Paragraph 080 of the NPPG: Flood Risk and Coastal Change sets out the following hierarchy of drainage options:

- Into the ground (infiltration)
- To a surface water body
- To a surface water sewer, highway drain or other drainage system
- To a combined sewer

7.5 Soakaways

The first consideration for the disposal of surface water is via soakaways. At the time of writing this report, only a stage 1 site investigation has been undertaken. The report highlights at a high level the expected ground conditions in the area. Whilst the phase 1 report may indicate that the ground conditions *may* be suitable for infiltration, further testing is required. It is suggested than infiltration testing is undertaken in accordance with BRE365 to determine the grounds permeability, and a ground intrusive phase 2 site investigation is carried out to determine if any ground contamination is present which would prevent soakaways being feasible. The phase 1 site investigation suggested the possibility of contamination, so full testing via boreholes/ trial pits and subsequent laboratory testing may be necessary. In readiness for any findings that may prove soakaways are not possible on this scheme, further contingencies for other methods of surface water disposal should be considered as below.

7.6 Watercourse

The nearest watercourse to site, the Whit Brook, is approximately 100m west of the site. Should infiltration prove not feasible, then a connection to this watercourse should be explored as a next option. Any connection would be subject to levels, and the approval from the LLFA to make a discharge into this brook.

7.7 Sewer

The next consideration is discharge to a sewer – a surface water sewer first followed finally by a combined sewer. There are no dedicated surface water sewers close to the site. United Utilities indicated in their pre-development response that in the event infiltration and a discharge to the watercourse was not viable, and evidence provided, they would agree to a discharge to the 225mm dia combined water sewer, and stated the flow rate must not exceed 5l/s. Any connection to the sewer would be subject to levels, to date no accurate invert level of this sewer has been recorded.

7.8 Attenuation Storage

As soakaways are not feasible, attenuation storage will be required. Attenuation storage estimates are included in Appendix G. In line with current best practice, storage volumes have been assessed for the 1:30yr return (the design criteria as per Sewers for Adoption) and for the exceedance event of 1:100yr + 45% cc allowance. The respective volumes are a maximum of 123m³ and 277m³. The 1:30yr volume would be in underground pipes / tanks and the exceedance (the difference between the two volumes) could either be underground or above ground if safe storage areas are available.

This would be considered at detailed design stage. Furthermore, the attenuation volumes are indicative only and should be verified at detailed design stage within the drainage drawing and the associated hydraulic calculations.

7.9 Sustainable Drainage Systems

Other options considered are as follows:

- Swales, detention basins and ponds

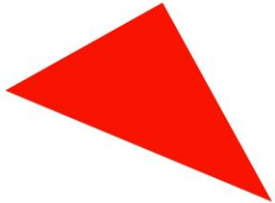
These are not considered to be suitable as this is a small dense inner urban site with no significant area of public open space.

- Rainwater Harvesting

The attenuation benefits of rainwater harvesting have been shown to be minimal and can only be realised when the tanks are not full. Also, rwh has been shown to be unsuitable when connecting to combined sewer systems due to risks of backing up and contaminating with sewage.

- Green Roofs

Green roofs are not identified on preliminary drawings. Given the nature of budgeted cost social housing, the significant additional costs involved in installing and maintaining green roofing, plus the additional dead load are not considered to be a practical option. Any benefits would be disproportionate to the likely significant construction and ongoing maintenance costs involved.

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- Porous / Permeable Paving

The site includes drives and parking areas that would have been considered for permeable paving. However, as the ground conditions have proved infiltration would not be possible due to contamination, permeable paving would actually contribute to further contaminating the ground, and if used must be lined with an Impermeable membrane, with an attached perforated land drain connection to the surface water system. This idea would be cost ineffective and would offer little to no benefit in regards to sustainable drainage, as discharge would still be via the surface water system, therefore permeable paving would not be a preferred option.

8.0 FOUL WATER DRAINAGE STRATEGY

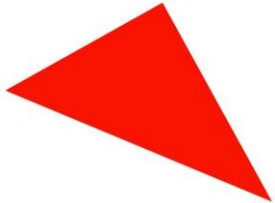
- 8.1 There are existing public sewers in the area owned and maintained by United Utilities. Guidance contained within Sewers for Adoption Edition 7 states that design foul flows should be 4,000 litres per dwelling per 24-hour period. With 20 dwellings on the site, the design foul flow will be $4,000 \times 20 \div 24 \div 3,600 = 0.93\text{l/s}$.
- 8.2 There is a 225mm diameter combined public sewer to the north of the site in Boarshaw Road. United Utilities have indicated they would accept a foul discharge into this sewer at an unrestricted rate. Any connection to the public sewer would be subject to a Section 106 application. Reference should be made to the Consultation Response in Section 11.

9.0 FLOOD RISK MANAGEMENT MEASURES

- 9.1 In the event of extreme emergency, the local authority and other emergency services have contingency plans for dealing with consequences of flooding.
- 9.2 Setting finished floor levels of the buildings at least 150mm above surrounding external ground, and shedding surface water away from the buildings, will avoid the risk of damage to buildings and contents from overland flood flows around the site.
- 9.3 The design of surface water drainage should ensure that there are no uncontrolled off-site overland flood flows created by the proposed development. Where possible, site surfaces should be modelled so that flood flows generated on site from events beyond the stipulated drainage design criteria will flow to, and be contained on site within landscaped or paved areas such that there is no increased risk of flooding to buildings and other vulnerable areas. Such flood flows should not be allowed to flow from the site onto adjoining / adjacent property or highways.
- 9.4 Home owners and landlords will be responsible for the maintenance of private drainage systems on site to ensure satisfactory performance. United Utilities will be responsible for the maintenance of any public sewers on the site.
- 9.5 Any flood flows onto the site from adjoining property will be retained on site safely or encouraged to pass across the site so there is no increased risk of flooding buildings and other vulnerable areas.

10.0 OFF-SITE IMPACTS

- 10.1 Proposed on-site drainage will be designed and constructed in accordance with Part H of The Building Regulations, Sewers for Adoption, and any additional requirements of United Utilities, the LLFA, and the Environment Agency, as appropriate.

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- 10.2 All on-site roofs and pavings are to drain into the design surface water drainage system, thereby ensuring there will be no off-site flood flows generated by the development.
- 10.3 The risk of flood flows entering and leaving the site will remain after development. The risk will be reduced as far as possible because the drainage designs will be such that there will be no flooding during all rainfall events up to and including the critical 30 year storm, and no overland flows from the critical 100 year storm.
- 10.4 By implementation of the flood procedures and by careful design of the flood protection measures as described above, all residual flood-related risks will be minimised as far as possible after the development has been completed.

11.0 UNITED UTILITIES CONSULTATION RESPONSE

- 11.1 United Utilities response dated 9th August 2023 is attached in Appendix H. In summary it states the following:-

“We have carried out an assessment of your application which is based on the information provided. This pre-development advice on your drainage strategy will be valid for 12 months. Your drainage strategy will need to be reviewed by other competent authorities as part of the planning process, and we advise that you carry out the necessary site investigations to confirm the viability of your proposals.

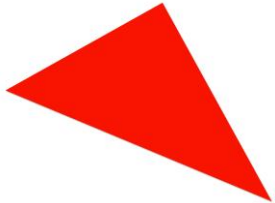
Foul flow from this site will be allowed to drain into the public foul water/combined sewer system. Our preferred point of discharge would be to the 225mm diameter public combined sewer within Boarshaw Road located to the north of your proposed development at an unrestricted rate. If you are able to identify an alternative, more suitable point of discharge, we request that you contact us at your earliest convenience so that we can assess suitability.

All surface water flow from the proposed development should drain in-line with the drainage hierarchy, as outlined in Paragraph 80, (Reference ID: 7-080-20150323), of the National Planning Practice Guidance. We also recommend you prioritise the use of multi-functional sustainable drainage systems for the management of surface water in accordance with national planning policy. Generally, the aim should be to discharge surface run off as high up the following hierarchy of drainage options as reasonably practicable. This is outlined as follows, in order of priority:

- 1. into the ground (infiltration);**
- 2. to a surface waterbody;**
- 3. to a surface water sewer or highway drain;**
- 4. to a combined sewer.**

In accordance with the hierarchy of drainage options within the National Planning Practice Guidance, both discharge to ground via infiltration and discharge to a waterbody should be discounted prior to consideration of discharging surface water to the public sewer system. Evidence should be provided to demonstrate how these have been discounted, as outlined in the North West SuDS pro-forma.

Once evidence is provided as outlined above, United Utilities will consider a connection to the 225mm diameter public combined water sewer in Boarshaw Road located north of the proposed site at a pass forward flow to be agreed by the Lead Local Flood Authority. United Utilities request that any agreed rate does not exceed 5l/s.”

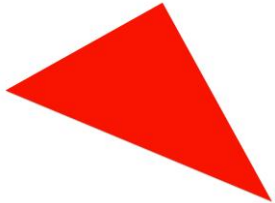
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- 11.2 From the above consultation response, Carley Daines as the civil engineer for the scheme recommend that the contractor appointed should undertake early infiltration / soakaway tests as per BRE Digest 365, and a ground intrusive phase 2 site investigation in order to ascertain whether or not infiltration into the ground is possible.
- 11.3 Based on the above response, the principal designer, Carley Daines, can assume when undertaking a drainage strategy drawing for the scheme proposing a foul discharge into the 225mm dia combined sewer in Boarshaw Road as suggested by UU. For the surface water discharge, a suitably sized infiltration/ soakaway pit should be proposed as a first priority, with a discharge into the Whit Brook as a secondary option; however, being mindful that this would be subject to infiltration testing and LLFA approval respectively and highlighting a proposed point of connection to the combined water sewer should this prove necessary.
- 11.4 With the combined sewer being a short distance from site, a detailed design should be undertaken analysing the topographical levels and accurately surveyed invert levels of all manholes and points of connection to ascertain whether a gravity connection is possible, or whether the site would require to be pumped to the nearest sewer to enable a connection to be made.

12.0 RESIDUAL RISKS

- 12.1 This Flood Risk Assessment, prepared in accordance with NPPG and EA Guidelines, demonstrates that the risk of on-site flooding from all sources resulting from the proposed development can generally be regarded as being zero to negligible.
- 12.2 Careful design of the future drainage system, together with the introduction of a significant proportion of soft landscaping, suggests that any risks of flooding are likely to be minimised.
- 12.3 Furthermore, it is believed that the risk of transferring flooding elsewhere is negligible and on-site attenuation will reduce this to a level no greater than that which currently exists.
- 12.4 Accordingly, and notwithstanding any other planning issues, it is not considered that the proposed development has any adverse effects on the current site, or the surrounding area in respect of flooding. Providing the advice contained within the Flood Risk Assessment is implemented, there are no adverse residual risks to either the development or the surrounding area.

13.0 CONCLUSIONS

- 13.1 The proposed re-development of the site involves the construction of 20 new dwellings with parking and drainage infrastructure on a brownfield site.
- 13.2 The site is located in FZ1 on the EA Flood Map – an area considered to have the lowest probability of fluvial flooding. Flooding from other sources has been assessed as LOW.
- 13.3 The proposed development will limit proposed hardstanding on site through the introduction of residential gardens and peripheral soft landscaping to limit the amount of proposed impermeable areas on site to comply with current NPPG recommendations.
- 13.4 Early infiltration testing in accordance with BRE 365 and a ground intrusive phase 2 site investigation should be undertaken to determine the ground suitability to discharge water via infiltration.

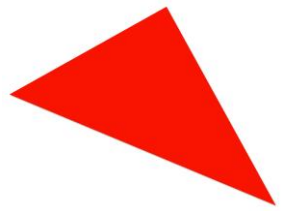
- 
- 13.5 Should it be confirmed that the ground conditions are unsuitable for infiltration, the discharge rate will be further reduced to greenfield run-off rates and attenuation provided on site to accommodate all storm events up to and including the 1 in 100yr + 45% cc event.
- 13.6 Should infiltration be found to be not possible, direct contact should be made to the LLFA to agree whether a discharge of surface water can be permitted into the Whit Brook watercourse, subject to an OWC consent application.
- 13.7 Positioning of attenuation (where required) will be considered at detailed design stage.
- 13.8 Other SuDS systems and methods which would discharge water directly into the ground have been considered but are believed to be unsuitable or inappropriate for this development for factors outlined in detail above.
- 13.9 A full site topographical survey along with existing drainage invert levels should be consulted to determine whether direct gravity connections from site can be possible, or whether the discharge from the site would need to be pumped.

SIGNED (electronically)

A Mulligan

A Mulligan BEng

CARLEY DAINES AND PARTNERS LIMITED



APPENDIX A

LOCATION AND SITE PLAN

APPENDIX A – SITE LOCATION PLAN – BROOKES STREET, MIDDLETON.

Site

Grid Reference

SD 87700 06600

Grid Reference (6 figure)

SD877066

X (Easting) , Y (Northing)

387700 , 406600

Latitude , Longitude (decimal)

53.555882 , -2.1871392

Latitude , Longitude (degs, mins, secs)

53°33'21"N , 002°11'14"W

What3Words :

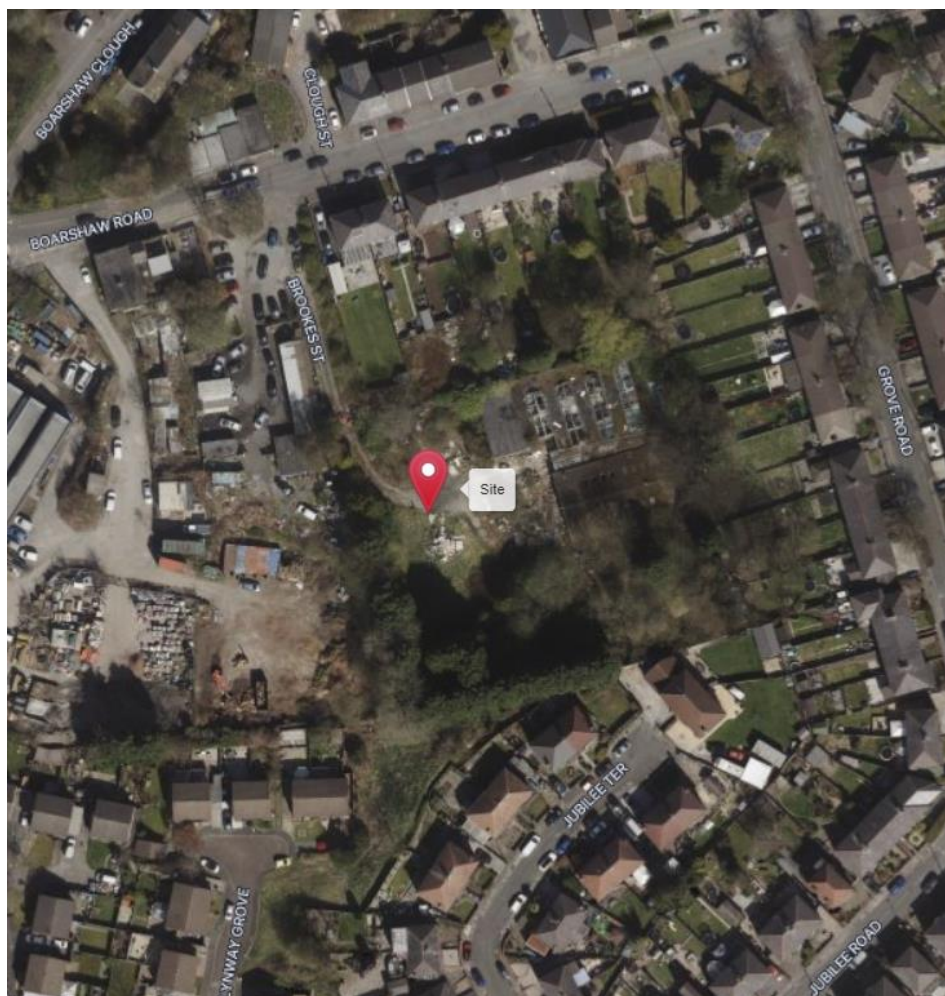
frogs.mops.codes

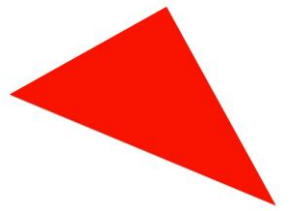
Address (near) :

**Boarshaw Road, Stanycliffe, Middleton,
Rochdale. Greater Manchester. England.**

Postcode (nearest) :

M24 2WQ

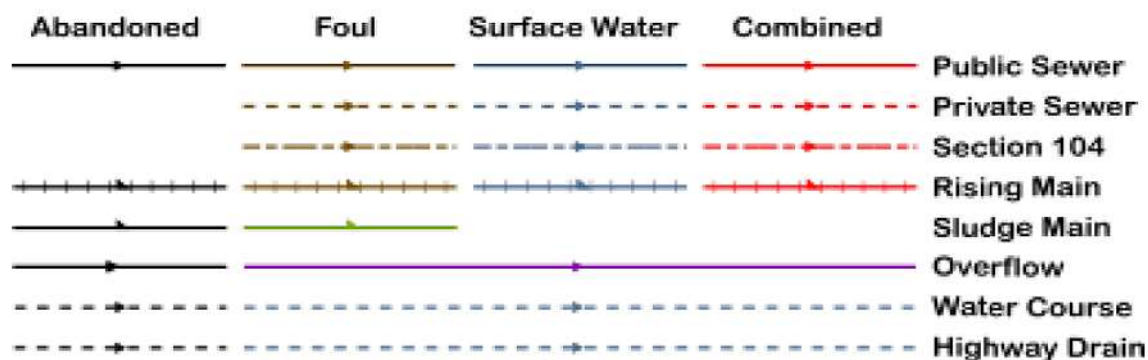




APPENDIX B

UNITED UTILITIES SEWER RECORDS

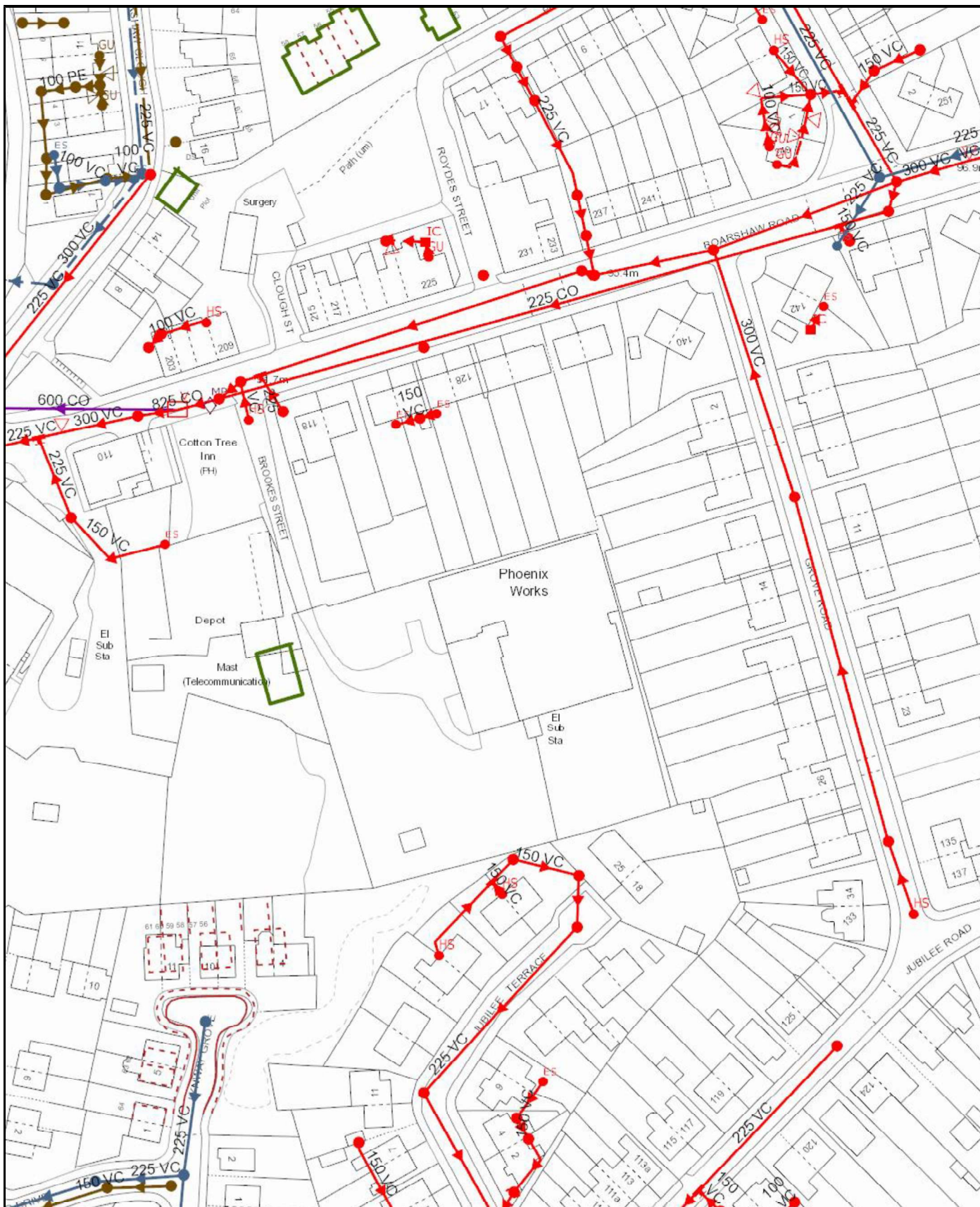
Wastewater Symbolology



All point assets follow the standard colour convention:

red – combined	brown - foul
blue – surface water	purple - overflow

- | | |
|------------------|--------------------------|
| Manhole | Side Entry Manhole |
| Head of System | Outfall |
| Extent of Survey | Screen Chamber |
| Rodding Eye | Inspection Chamber |
| Inlet | Bifurcation Chamber |
| Discharge Point | Lamp Hole |
| Vortex | T Junction / Saddle |
| Penstock | Catchpit |
| Washout Chamber | Valve Chamber |
| Valve | Vent Column |
| Air Valve | Vortex Chamber |
| Non Return Valve | Penstock Chamber |
| Soakaway | Network Storage Tank |
| Gully | Sewer Overflow |
| Cascade | Ww Treatment Works |
| Flow Meter | Ww Pumping Station |
| Hatch Box | Septic Tank |
| Oil Interceptor | Control Kiosk |
| Summit | |
| Drop Shaft | Change of Characteristic |
| Orifice Plate | |



Scale: 1:1250
Date: 17/08/2021

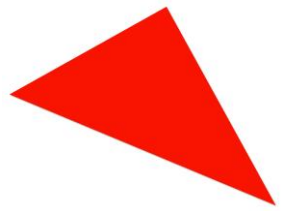
SEWER RECORDS



Address or Site Reference: 28617
Printed by: Property Searches

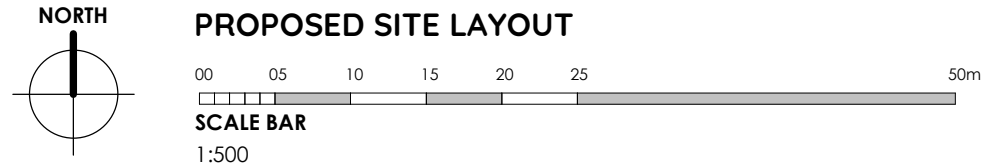
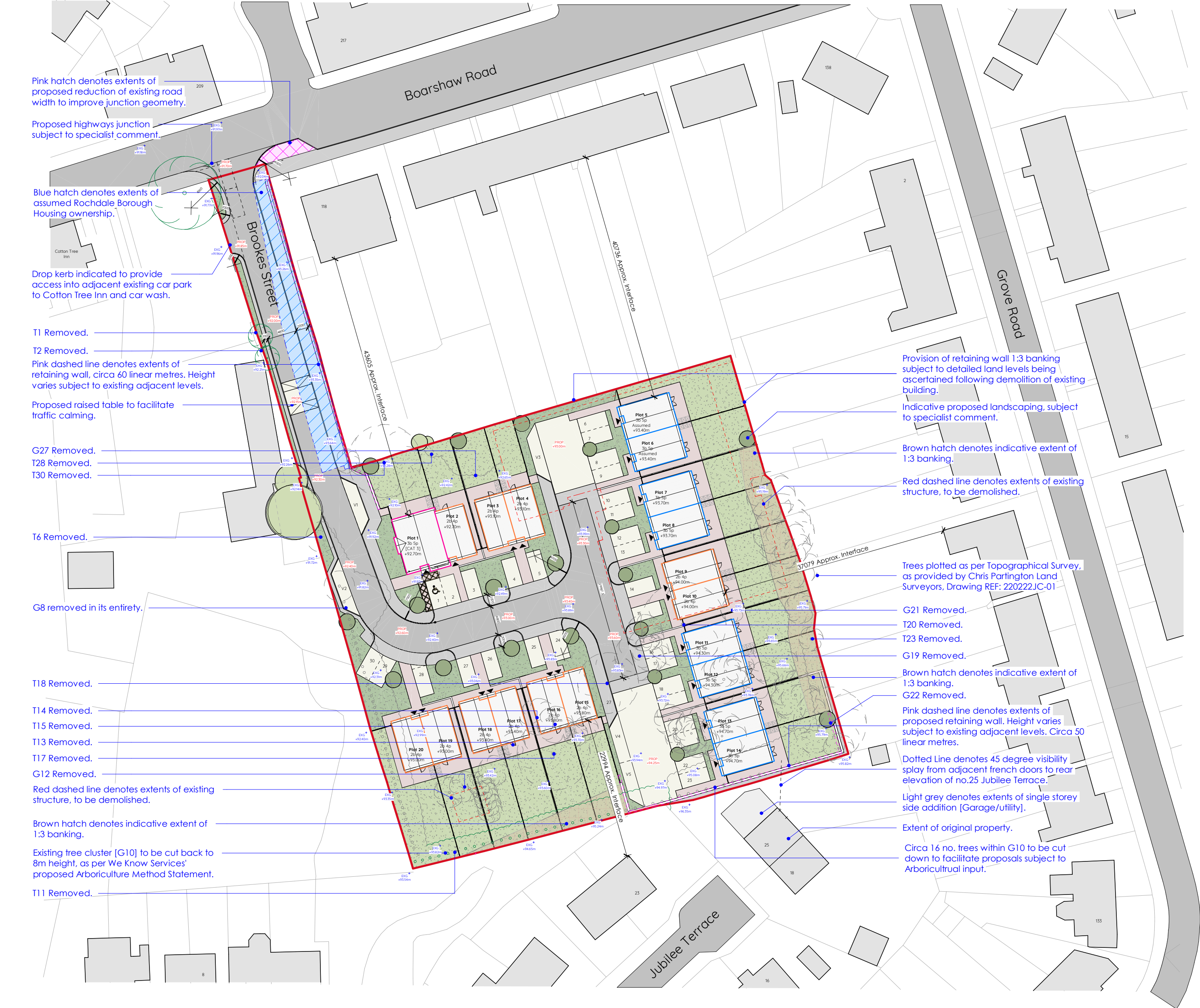
The position of the underground apparatus shown on this plan is approximate only and is given in accordance with the best information currently available. United Utilities Water will not accept liability for any loss or damage caused by the actual position being different from those shown.

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APPENDIX C

PROPOSED SITE PLAN



KEY	
	SITE BOUNDARY: Assumed extent, subject to Land Registry
	GRASS: Turf / planting beds to front of property
	GRASS: Turf to rear / side of property
	HIGHWAY: Black Tarmacadam
	PUBLIC FOOTPATH: Black Tarmacadam
	PRIVATE FOOTPATH / PATIOS: 600x600 precast concrete paving slabs
	DRIVEWAYS: Coloured Tarmacadam
	TREES: Existing tree to be removed
	TREES: Existing group of trees to be removed
	TREES: Existing tree to be retained
	TREES: Proposed new tree
	BIN STORE: Proposed bin storage

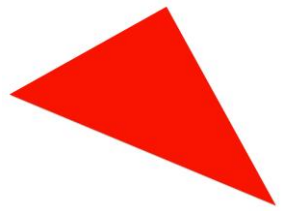
NOTE: Scheme design subject to statutory approvals. All proposed levels are indicative only and subject to detailed design. All Tree reference numbers to be cross-checked by We Know Services, following receipt of detailed Topographical survey.

SCHEDULE OF ACCOMMODATION	
House Type A	11no. 2b4p Dwellings GIFA @ 67.15 m ² / 723 ft ² approx. 2 storey dual pitched roofs over approx: Eaves @ 4800mm Ridge @ 7550mm
House Type B	8no. 3b5p Dwellings GIFA @ 79.05 m ² / 851 ft ² approx. 2 storey dual pitched roofs over approx: Eaves @ 4800mm Ridge @ 7610mm
House Type C	1no. 3b5p Dwelling CAT 3 compliant - Part M GIFA @ 116.25 m ² / 1251 ft ² approx. (GIFA subject to detail design) 2 storey dual pitched roofs over approx: Eaves @ 4800mm Ridge @ 8920mm
Each 1 & 2 bedroom dwelling consists of min. 1no. curtilage parking spaces. Note; 1 no. benefit from 200% parking provision.	
Each 3 bedroom dwelling consists of 2no. curtilage parking spaces.	
5no. visitor parking bays and 1no. disabled access parking bay provided throughout the scheme.	
OVERALL SCHEME 20no. UNITS	

FOR APPROVAL			
B	Amendments to suit Landscape Architect proposals, REF: 7181.02A	LMC	14.08.2023
A	Minor Amendments.	LMC	10.08.2023
-	First Issue.	LMC	01.07.2022



Client			
Kwick Build Ltd. / Tyson Construction			
Project			
Phoenix Works - Middleton			
Title			
Proposed Site Layout			
Scale	Date	Drawn By	
As indicated@A2	JULY 22	LMC	
Drawing No	Revision		
21-050-P-110	B		
Unit 17 Connect Business Village 24 Derby Road Liverpool L5 9PR		0151 207 4371 info@condyllofthouse.co.uk www.condyllofthouse.co.uk	



APPENDIX D

SITE SPECIFIC FLOOD DATA

Flood map for planning

Your reference
<Unspecified>

Location (easting/northing)
387715/406610

Created
18 Sep 2023 17:12

Your selected location is in flood zone 1, an area with a low probability of flooding.

You will need to do a flood risk assessment if your site is **any of the following:**

- bigger than 1 hectare (ha)
- In an area with critical drainage problems as notified by the Environment Agency
- identified as being at increased flood risk in future by the local authority's strategic flood risk assessment
- at risk from other sources of flooding (such as surface water or reservoirs) and its development would increase the vulnerability of its use (such as constructing an office on an undeveloped site or converting a shop to a dwelling)

Notes

The flood map for planning shows river and sea flooding data only. It doesn't include other sources of flooding. It is for use in development planning and flood risk assessments.

This information relates to the selected location and is not specific to any property within it. The map is updated regularly and is correct at the time of printing.

Flood risk data is covered by the Open Government Licence **which** sets out the terms and conditions for using government data. <https://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/>

Use of the address and mapping data is subject to Ordnance Survey public viewing terms under Crown copyright and database rights 2022 OS 100024198. <https://flood-map-for-planning.service.gov.uk/os-terms>

Flood map for planning

Your reference
<Unspecified>

Location (easting/northing)
387715/406610

Scale
1:2500

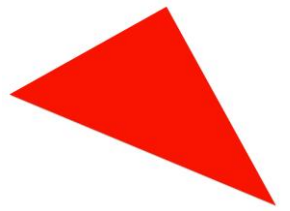
Created
18 Sep 2023 17:12

-  Selected area
-  Flood zone 3
-  Flood zone 2
-  Flood zone 1
-  Flood defence
-  Main river
-  Water storage area

0 20 40 60m

Page 2 of 2





APPENDIX E

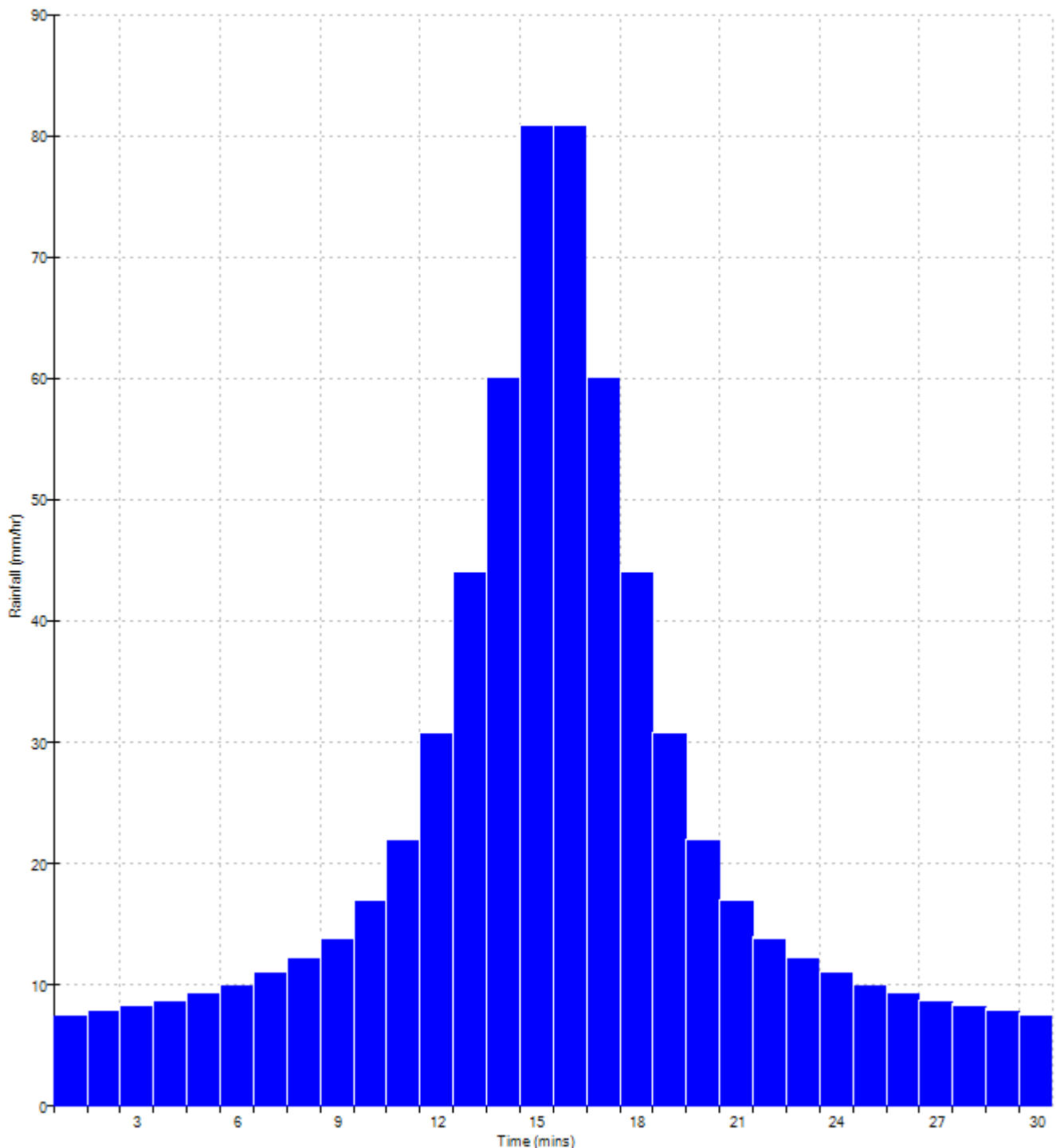
RAINFALL INTENSITIES

Carley Daines and Partners Limited		Page 1
11 Bridgewater Road Worsley Manchester, M28 3JE	Rainfall Profile Manchester 1 in 2 Year Storm Event	
Date 15/11/2021 File	Designed by A Mulligan Checked by A Mulligan	
Innovyze	Network 2019.1	

Rainfall profile

Storm duration (mins) 30

FSR Data
Region England and Wales
M5-60 (mm) 18.000
Ratio R 0.360
Peak Intensity (mm/hr) 80.767
Ave. Intensity (mm/hr) 22.854
Return Period (years) 2.0

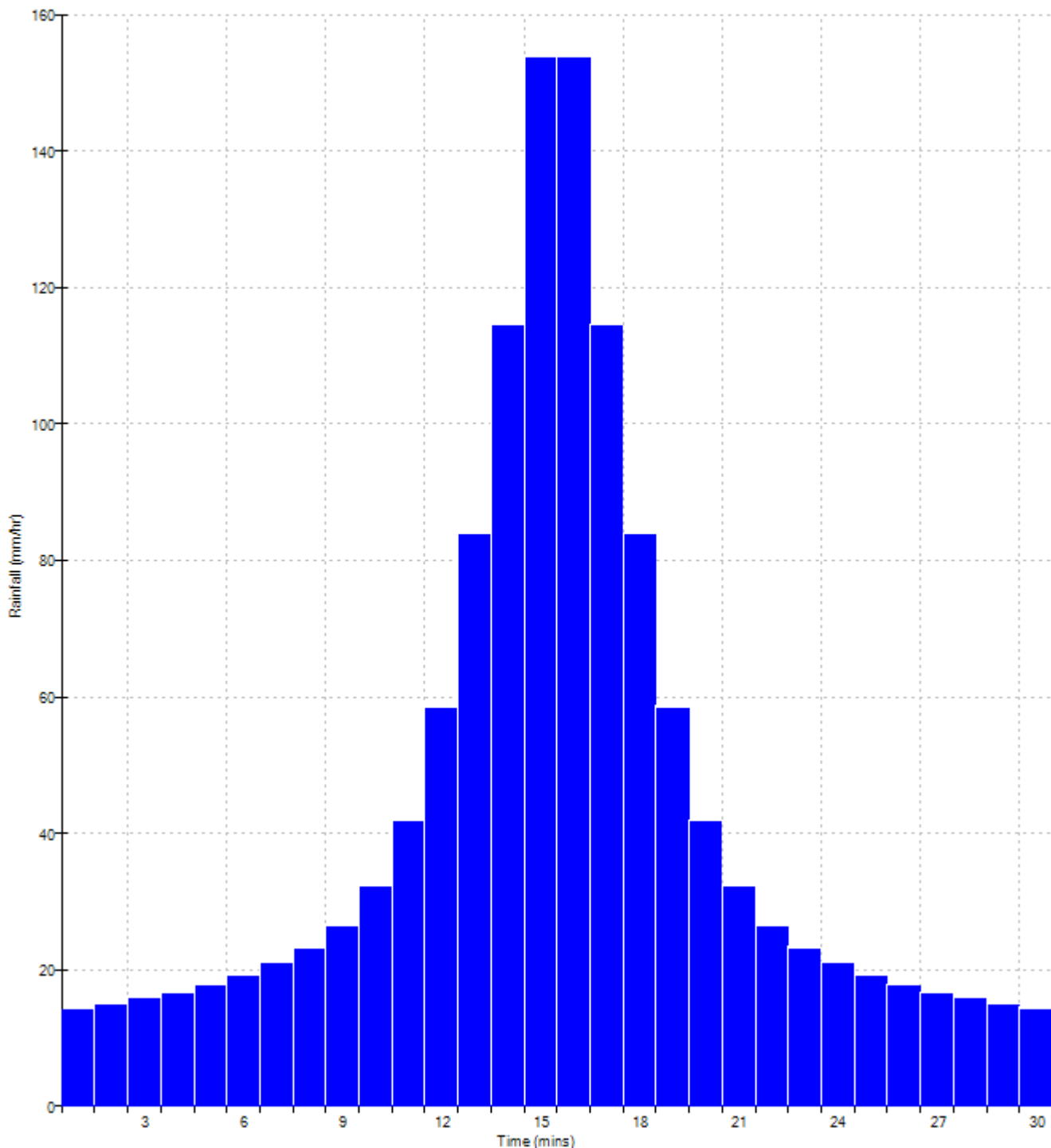


Carley Daines and Partners Limited		Page 1
11 Bridgewater Road Worsley Manchester, M28 3JE	Rainfall Profile Manchester 1 in 30 Year Storm Event	
Date 15/11/2021 File	Designed by A Mulligan Checked by A Mulligan	
Innovyze	Network 2019.1	

Rainfall profile

Storm duration (mins) 30

FSR Data
 Region England and Wales
 M5-60 (mm) 18.000
 Ratio R 0.360
 Peak Intensity (mm/hr) 153.752
 Ave. Intensity (mm/hr) 43.507
 Return Period (years) 30.0

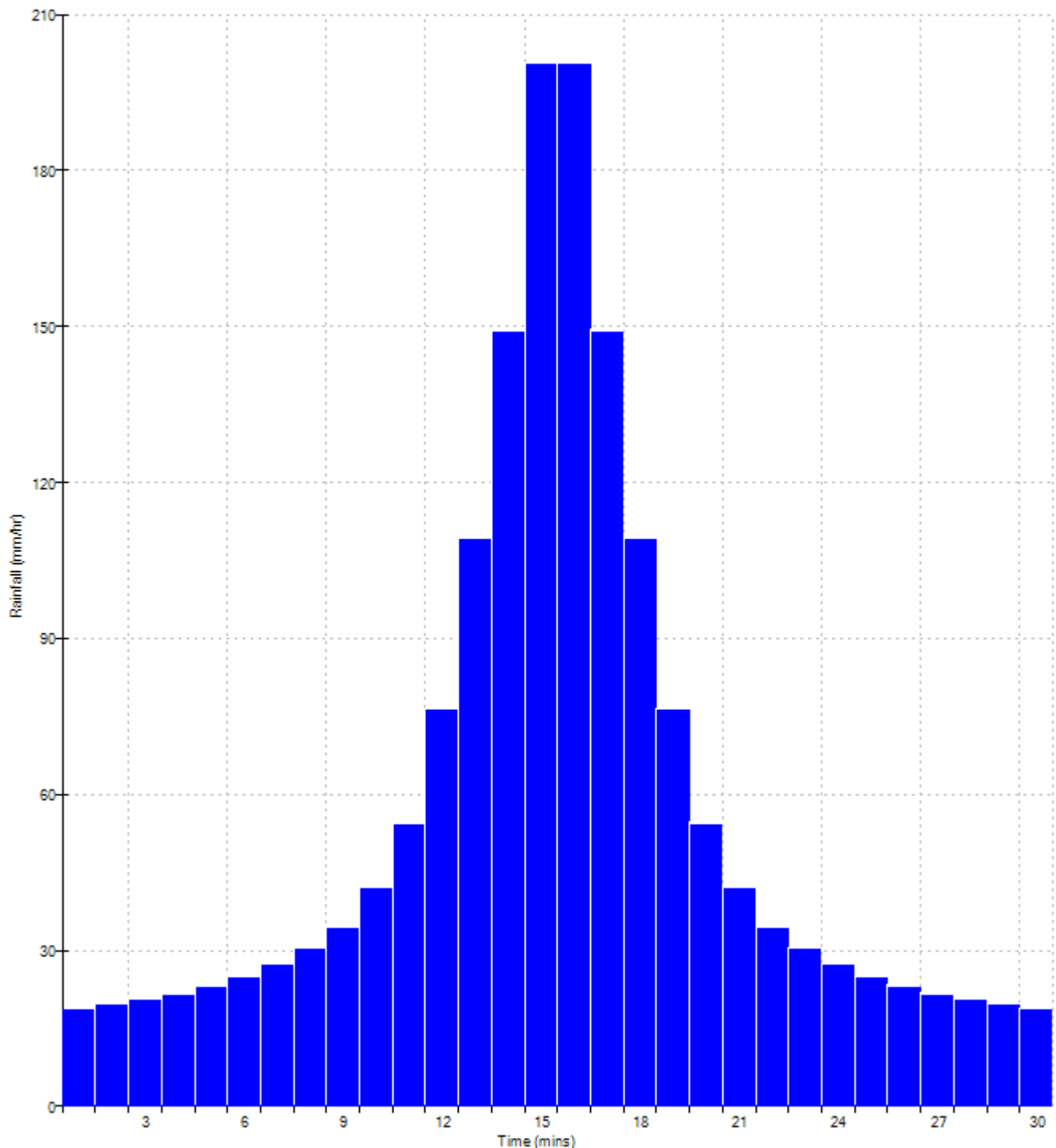


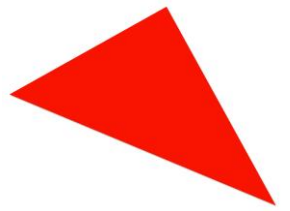
Carley Daines and Partners Limited		Page 1
11 Bridgewater Road Worsley Manchester, M28 3JE	Rainfall Profile Manchester 1 in 100 Year Storm Event	
Date 15/11/2021 File	Designed by A Mulligan Checked by A Mulligan	
Innovyze	Network 2019.1	

Rainfall profile

Storm duration (mins) 30

FSR Data
Region England and Wales
M5-60 (mm) 18.000
Ratio R 0.360
Peak Intensity (mm/hr) 200.462
Ave. Intensity (mm/hr) 56.724
Return Period (years) 100.0





APPENDIX F

GREENFIELD RUNOFF ESTIMATION

Calculated by:	Andrew Mulligan
Site name:	Brookes Street
Site location:	Middleton

This is an estimation of the greenfield runoff rates that are used to meet normal best practice criteria in line with Environment Agency guidance "Rainfall runoff management for developments", SC030219 (2013), the SuDS Manual C753 (Ciria, 2015) and the non-statutory standards for SuDS (Defra, 2015). This information on greenfield runoff rates may be the basis for setting consents for the drainage of surface water runoff from sites.

Site Details

Latitude:	53.55603° N
Longitude:	2.18702° W
Reference:	3221273599
Date:	Sep 20 2023 16:46

Runoff estimation approach

IH124

Site characteristics

Total site area (ha):	0.55
-----------------------	------

Methodology

Q _{BAR} estimation method:	Calculate from SPR and SAAR
SPR estimation method:	Calculate from SOIL type

Notes

(1) Is Q_{BAR} < 2.0 l/s/ha?

When Q_{BAR} is < 2.0 l/s/ha then limiting discharge rates are set at 2.0 l/s/ha.

Soil characteristics

	Default	Edited
SOIL type:	4	4
HOST class:	N/A	N/A
SPR/SPRHOST:	0.47	0.47

(2) Are flow rates < 5.0 l/s?

Where flow rates are less than 5.0 l/s consent for discharge is usually set at 5.0 l/s if blockage from vegetation and other materials is possible. Lower consent flow rates may be set where the blockage risk is addressed by using appropriate drainage elements.

Hydrological characteristics

	Default	Edited
SAAR (mm):	1034	1034
Hydrological region:	10	10
Growth curve factor 1 year:	0.87	0.87
Growth curve factor 30 years:	1.7	1.7
Growth curve factor 100 years:	2.08	2.08
Growth curve factor 200 years:	2.37	2.37

(3) Is SPR/SPRHOST ≤ 0.3?

Where groundwater levels are low enough the use of soakaways to avoid discharge offsite would normally be preferred for disposal of surface water runoff.

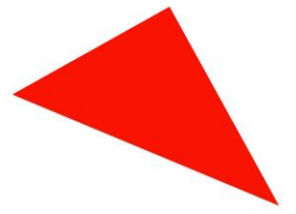
Greenfield runoff rates

Default

Edited

Q_{BAR} (l/s):	4.19	4.19
1 in 1 year (l/s):	3.65	3.65
1 in 30 years (l/s):	7.13	7.13
1 in 100 year (l/s):	8.72	8.72
1 in 200 years (l/s):	9.93	9.93

This report was produced using the greenfield runoff tool developed by HR Wallingford and available at www.uksuds.com. The use of this tool is subject to the UK SuDS terms and conditions and licence agreement , which can both be found at www.uksuds.com/terms-and-conditions.htm. The outputs from this tool are estimates of greenfield runoff rates. The use of these results is the responsibility of the users of this tool. No liability will be accepted by HR Wallingford, the Environment Agency, CEH, Hydrosolutions or any other organisation for the use of this data in the design or operational characteristics of any drainage scheme.

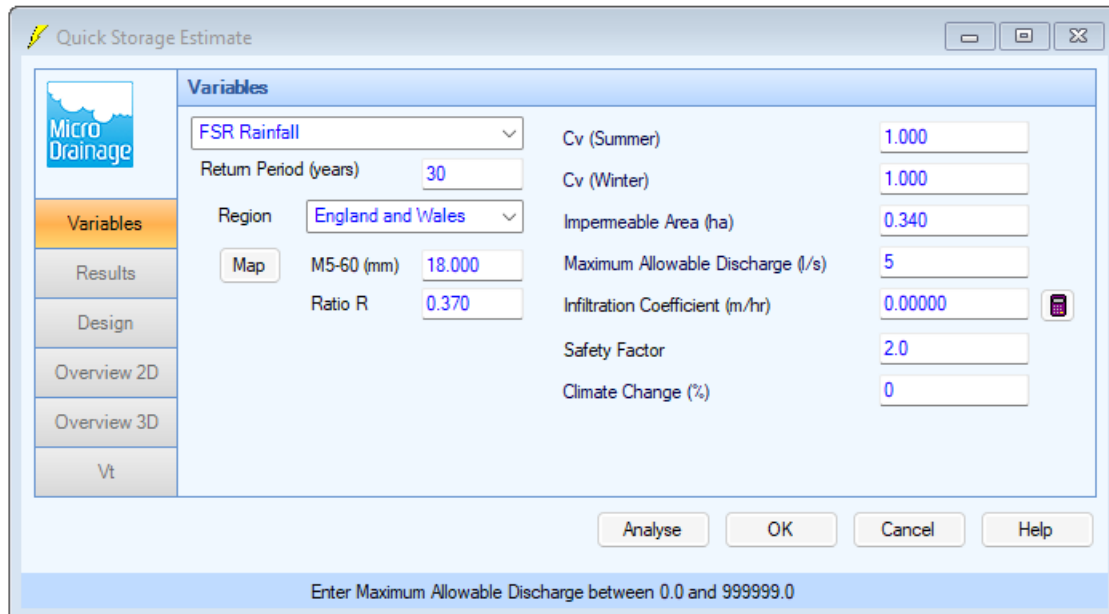


APPENDIX G

PRELIMINARY STORAGE ESTIMATE

13862 – BROOKES STREET – PRELIMINARY STORAGE ESTIMATE.

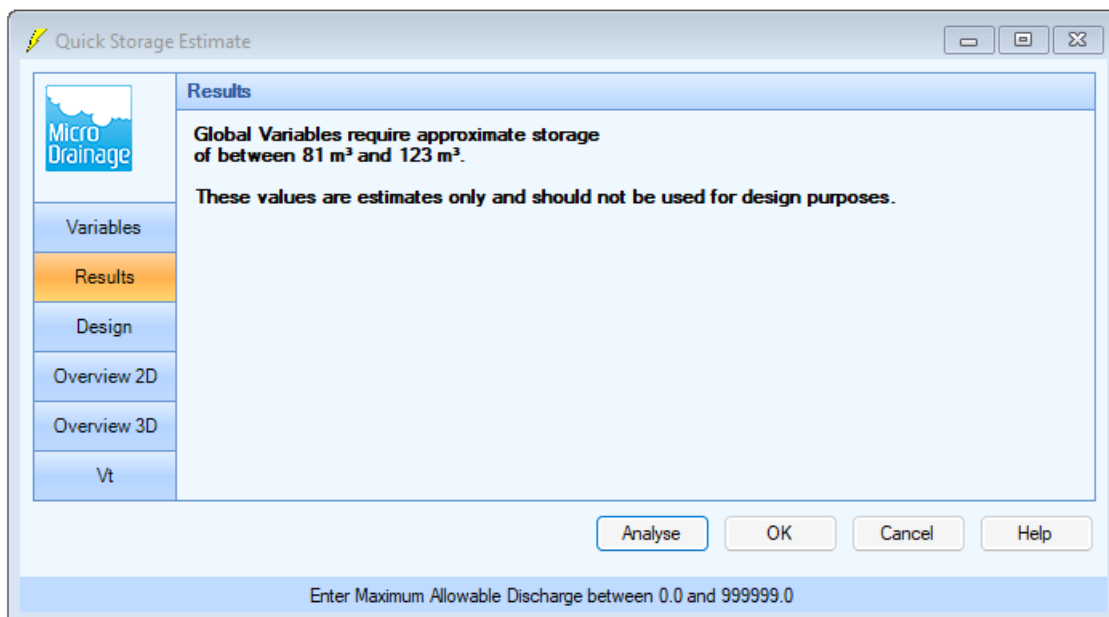
1 IN 30 YEAR STORM – UP TO 123M³ REQUIRED.



The 'Variables' screen of the 'Quick Storage Estimate' software. It features a sidebar with navigation buttons: Variables (selected), Results, Design, Overview 2D, Overview 3D, and Vt. The main area is titled 'Variables' and contains several input fields. On the left, there is a 'Map' button and a 'Region' dropdown set to 'England and Wales'. Below this are 'M5-60 (mm)' set to 18.000 and 'Ratio R' set to 0.370. On the right, there are fields for 'Cv (Summer)' (1.000), 'Cv (Winter)' (1.000), 'Impervious Area (ha)' (0.340), 'Maximum Allowable Discharge (l/s)' (5), 'Infiltration Coefficient (m/hr)' (0.00000), 'Safety Factor' (2.0), and 'Climate Change (%)' (0). A small calculator icon is next to the infiltration coefficient field. At the bottom, there are 'Analyse', 'OK', 'Cancel', and 'Help' buttons. A status bar at the very bottom reads 'Enter Maximum Allowable Discharge between 0.0 and 999999.0'.

Variable	Value
FSR Rainfall	[Dropdown]
Return Period (years)	30
Region	England and Wales
M5-60 (mm)	18.000
Ratio R	0.370
Cv (Summer)	1.000
Cv (Winter)	1.000
Impervious Area (ha)	0.340
Maximum Allowable Discharge (l/s)	5
Infiltration Coefficient (m/hr)	0.00000
Safety Factor	2.0
Climate Change (%)	0

Enter Maximum Allowable Discharge between 0.0 and 999999.0



The 'Results' screen of the 'Quick Storage Estimate' software. The sidebar is the same as the previous screen, but 'Results' is now selected. The main area is titled 'Results' and contains the following text: 'Global Variables require approximate storage of between 81 m³ and 123 m³. These values are estimates only and should not be used for design purposes.' At the bottom, there are 'Analyse', 'OK', 'Cancel', and 'Help' buttons. A status bar at the very bottom reads 'Enter Maximum Allowable Discharge between 0.0 and 999999.0'.

Results

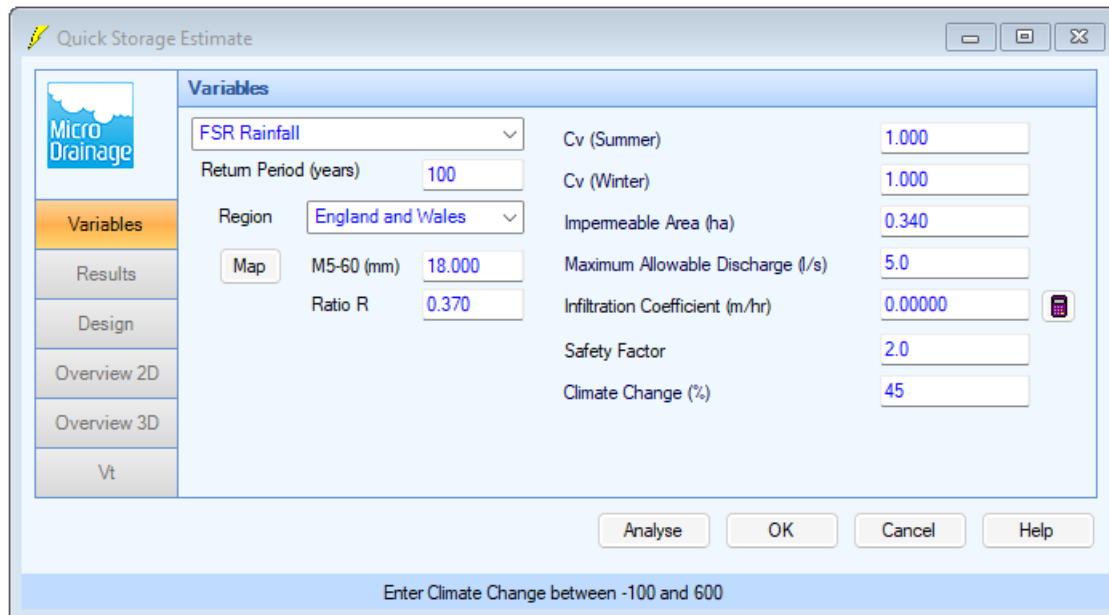
Global Variables require approximate storage of between 81 m³ and 123 m³.

These values are estimates only and should not be used for design purposes.

Enter Maximum Allowable Discharge between 0.0 and 999999.0

13862 – BROOKES STREET – PRELIMINARY STORAGE ESTIMATE.

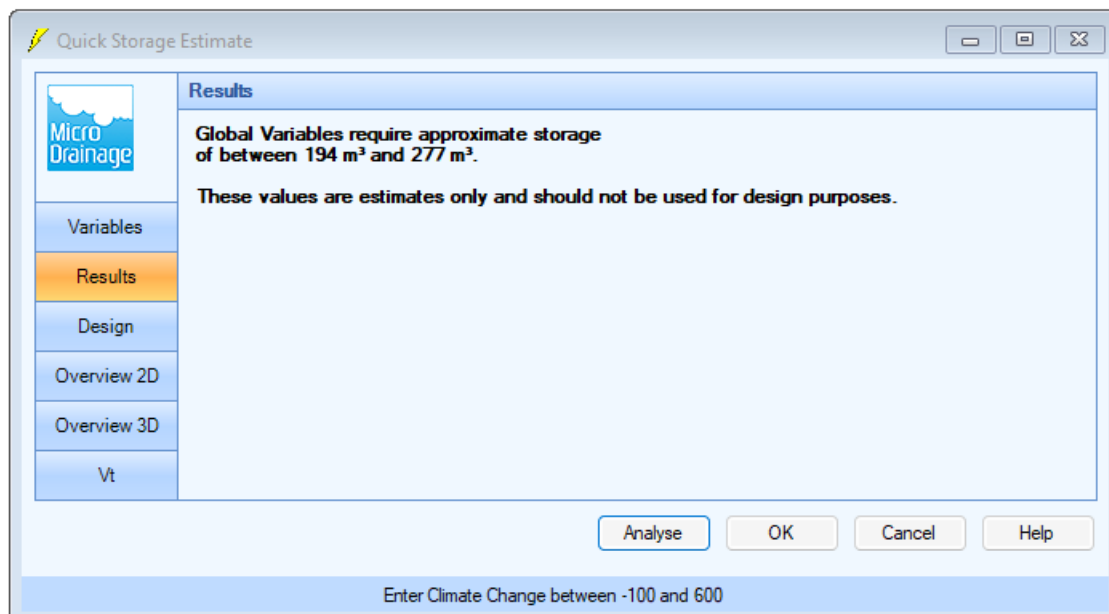
1 IN 100 YEAR STORM (+40% CLIMATE CHANGE) – UP TO 277M³ REQUIRED.



The screenshot shows the 'Variables' tab of the 'Quick Storage Estimate' software. The left sidebar contains buttons for 'Variables', 'Results', 'Design', 'Overview 2D', 'Overview 3D', and 'Vt'. The main area is titled 'Variables' and contains the following settings:

Variable	Value
FSR Rainfall	100
Return Period (years)	100
Region	England and Wales
Map	M5-60 (mm)
Ratio R	18.000
Cv (Summer)	1.000
Cv (Winter)	1.000
Impervious Area (ha)	0.340
Maximum Allowable Discharge (l/s)	5.0
Infiltration Coefficient (m/hr)	0.00000
Safety Factor	2.0
Climate Change (%)	45

Buttons at the bottom: Analyse, OK, Cancel, Help. A status bar at the bottom reads: Enter Climate Change between -100 and 600.

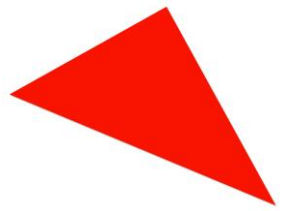


The screenshot shows the 'Results' tab of the 'Quick Storage Estimate' software. The left sidebar contains buttons for 'Variables', 'Results', 'Design', 'Overview 2D', 'Overview 3D', and 'Vt'. The main area is titled 'Results' and contains the following text:

Global Variables require approximate storage of between 194 m³ and 277 m³.

These values are estimates only and should not be used for design purposes.

Buttons at the bottom: Analyse, OK, Cancel, Help. A status bar at the bottom reads: Enter Climate Change between -100 and 600.



APPENDIX H

UNITED UTILITIES CONSULTATION RESPONSE

Andrew Mulligan

From: seweradoptions@uuplc.co.uk
Sent: 09 August 2023 13:29
To: Andrew Mulligan
Subject: Pre Development Enquiry for: Brookes Street, Manchester M24 2WQ UU
Reference Number : 04459148

Good afternoon Andrew,

Pre Development Enquiry for: Brookes Street, Manchester M24 2WQ UU Reference Number : 04459148

We have carried out an assessment of your application which is based on the information provided. This pre-development advice on your drainage strategy will be valid for 12 months. Your drainage strategy will need to be reviewed by other competent authorities as part of the planning process, and we advise that you carry out the necessary site investigations to confirm the viability of your proposals.

If your investigations require access to our public sewer network, we ask that you contact our network engineers with a request for an access certificate via our main contact telephone number 0345 6723 723 or refer to the link below:

<https://www.unitedutilities.com/builders-developers/working-near-our-assets/>

Foul Water

Foul flow from this site will be allowed to drain into the public foul water/combined sewer system.

Our preferred point of discharge would be to the 225mm diameter public combined sewer within Boarshaw Road located to the North of your proposed development at an unrestricted rate.

If you are able to identify an alternative, more suitable point of discharge, we request that you contact us at your earliest convenience so that we can assess suitability.

In accordance with our infrastructure plans we may ask you to change your point of connection. Therefore please contact us when you are ready to formalise your drainage proposals, we would suggest before you submit for Full Planning.

Surface Water

All surface water flow from the proposed development should drain in-line with the drainage hierarchy, as outlined in Paragraph 80, (Reference ID: 7-080-20150323), of the National Planning Practice Guidance. We also recommend you prioritise the use of multi-functional sustainable drainage systems for the management of surface water in accordance with national planning policy.

Generally, the aim should be to discharge surface run off as high up the following hierarchy of drainage options as reasonably practicable.

This is outlined as follows, in order of priority:

1. **into the ground (infiltration);**
2. **to a surface waterbody;**
3. **to a surface water sewer or highway drain;**
4. **to a combined sewer.**

For guidance, The **North West SuDS Pro-Forma** provides information on the appropriate evidence required at each stage of the hierarchy, to demonstrate how each level has been discounted.

The Lead Local Flood Authority has responsibility for all surface water drainage concerns and their input to your proposal is critical. You should also consider whether it is necessary to discuss your proposal with the Environment Agency, or Internal Drainage Board (if operating in your area).

The Local Planning Authority are the determining authority for any application for planning permission and the appropriate authority for determining cost viability of a proposed drainage scheme, such assessments are outside of

the jurisdiction of United Utilities.

Infiltration

Surface water runoff generated from this development should discharge to the ground via infiltration system where feasible.

A detailed evidence based feasibility assessment must be carried out in line with Chapter 25 of the CIRIA SuDS Manual 2015 to determine whether infiltration is a suitable method of surface water disposal.

Particular attention must be paid to Ground Water Source Protection Zones to ensure that the risk of pollution to these valuable resources is not compromised. Details can be obtained from the government website:

<https://www.gov.uk/guidance/groundwater-source-protection-zones-spzs#find-groundwater-spzs>

If your site is in a Groundwater Source Protection Zone, you should have regard to the Environment Agency's approach to Groundwater Protection. Information on this is available via the link below:

<https://www.gov.uk/government/publications/groundwater-protection-position-statements>

Please note that such a location could have implications for the principle of your development and the need for additional mitigating measures to protect the groundwater environment and public water supply in the detailed design of your site.

Waterbody

If an evidence based assessment has been carried out and confirms that infiltration is not feasible, we recommend that you contact the Lead Local Flood Authority and/or Environment Agency to discuss a point of discharge to the watercourse located west of the proposed site.

We would encourage you to identify and engage with any third party landowner and riparian owner to agree access and discharge rights to the water body if this is not in your ownership.

Highway Drainage

If an evidence based assessment has been carried out and confirms that infiltration is not feasible, we recommend that you investigate the possibility of draining surface water to the highway drain where this ultimately discharges to a watercourse, by contacting the relevant Highway Authority.

Public Sewer

In accordance with the hierarchy of drainage options within the National Planning Practice Guidance, both discharge to ground via infiltration and discharge to a waterbody should be discounted prior to consideration of discharging surface water to the public sewer system. Evidence should be provided to demonstrate how these have been discounted, as outlined in the North West SuDS pro-forma.

Once evidence is provided as outlined above, United Utilities will consider a connection to the 225mm diameter public combined sewer within Boarshaw Road located North of the proposed site at a pass forward flow to be agreed by the Lead Local Flood Authority. United Utilities request that any agreed rate does not exceed 5l/s.

As a Water Company, we have no obligation to accept highway drainage into our public sewer network. However, should your proposals include runoff from highways, we would request that consideration is given to SuDS components that deliver source control are incorporated within the design of the scheme to reduce the volume and frequency of discharges of these flows to the public sewer.

Levels

For low-lying sites, (where the ground level of the site or the level of a basement is below the ground level at the point where the drainage connects to the public sewer), care should be taken to ensure that the property is not at increased risk of flooding. If these circumstances exist, we recommend that you contact us to discuss further. It could affect the detailed design of your site and result in the need to incorporate appropriate mitigating measures in your drainage scheme.

Land drainage / Overland flows / track drainage

United Utilities have no obligation, and furthermore we do not accept land drainage, overland flows or track drainage into the public sewerage network under any circumstances

Existing Wastewater Assets Crossing the Site

We have reviewed our records and can confirm that there does not appear to be any charted public sewers located within the boundary of proposed development. However, due to the accuracy of the records and the public sewer

transfer legislation in 2011, not all public sewers are shown on our records so we would ask that you proceed with caution and carry out your own site investigation works. If any uncharted sewers are identified while carrying out your works we would ask that you contact United Utilities at the earliest opportunity so that we can offer guidance and update our records.

Existing Water Assets Crossing the Site

It is the developer responsibility to identify utilities on-site. Where clean water assets are shown on our records, we recommend that you contact our Water Pre-Development Team, via the following email address:

DeveloperServicesWater@uuplc.co.uk. Further information for this service can be found on our website via the link below:

<https://www.unitedutilities.com/builders-developers/larger-developments/pre-development/water-pre-dev/>

Connection Application

Although we may discuss and agree discharge points and rates in principle, please be aware that you will have to apply for a formal sewer connection. This is so that we can assess the method of construction, Health & Safety requirements and to ultimately inspect the connection when it is made. Details of the application process and the form itself can be obtained from our website by following the link below:

<https://www.unitedutilities.com/builders-developers/wastewater-services/sewer-connections/sewer-connection/>

We recommend that the detailed design should confirm the locations of all utilities in the area and ensure that any proposed drainage solution considers routing and clash checks where required.

If we can be of any further assistance please don't hesitate to contact us further.

Kind regards,



Eireann Thompson
Assistant Developer Engineer
Developer Services & Metering
Customer Services
Mobex: 07553074138
unitedutilities.com

Did you know we now have a live chat facility available to you Mon to Friday 8 -5pm. You just click on the orange live chat box on our webpage and one of our advisors will be ready to chat to you and help you with your enquiry <https://www.unitedutilities.com/builders-developers/> or you can email us at developerserviceswater@uuplc.co.uk

If you have received a great service today why not tell us?

Visit: [unitedutilities.com/wow](https://www.unitedutilities.com/wow)

----- Original Message -----

From: seweradoptions@uuplc.co.uk [seweradoptions@uuplc.co.uk]

Sent: 08/08/2023 13:45

To: andrew.mulligan@carleydaines.co.uk

Subject: y: 04459148 Brookes Street, Middleton. Manchester. M24 2WQ

Dear Andrew

PRE DEVELOPMENT APPLICATION AT: – UU Ref 04459148

Please accept this email as receipt of your application received on 4.8.2023 for the above development. This has

now been logged on our system and the job reference is 04459148 we would ask that you quote this reference in all future correspondence.

I have reviewed your application (and attachments) and can confirm this is suitable to be passed to Eireann Thompson for technical assessment. You will receive their response within 8 working days.

Kind regards Jill



Jill Ellis
Customer Advisor Advanced
Developer Services & Metering
Customer Services
Direct Tel: 01925 233 064
Tel: 0345 072 6067
unitedutilities.com

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----- Original Message -----

From: Andrew Mulligan [andrew.mulligan@carleydaines.co.uk]

Sent: 08/08/2023 13:38

To: seweradoptions@uuplc.co.uk

Subject: Automatic reply: 04459148 Brookes Street, Middleton. Manchester. M24 2WQ

Thank you for your email,

I am now out of the office on annual leave. I will respond to all emails upon my return on Tuesday 15th August.

If your enquiry is urgent, or is regarding an existing project, please call the office on 0161 799 2720 where another member of staff may be able to assist you with your query.

Thanks,

Andrew.



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