

Proposed Development at 22 Park Street, Cheetham Hill

Flood Risk Assessment and Outline Drainage Strategy

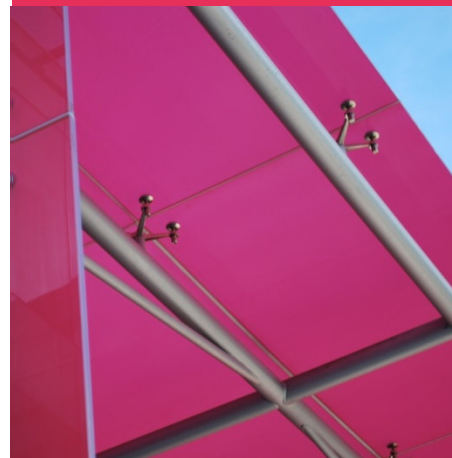
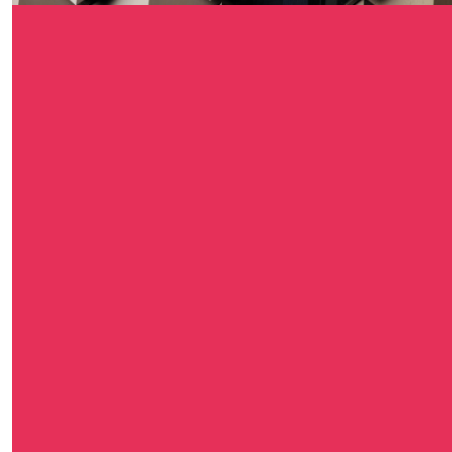
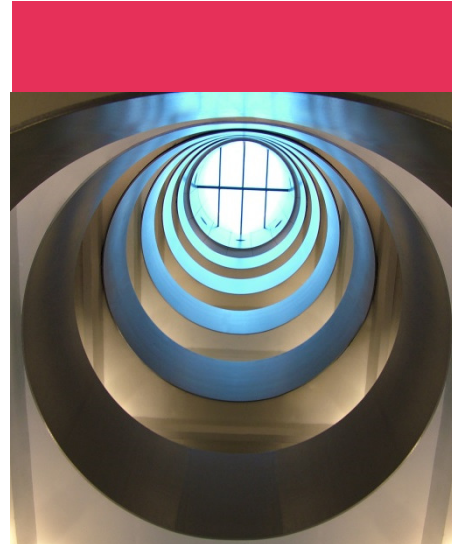
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Client Name: Views Ltd

Site Address: 22 Park Street, Cheetham Hill, Manchester, M3 1ET



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Control Sheet

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Appendices

Appendix A

Site Location and Proposed Ground Floor Layout

Appendix B

Environment Agency Flood Map for Planning

1.0 Introduction

1.1 Project Background

- 1.1.1 Curtins has been appointed by Views Ltd to provide a Flood Risk Assessment (FRA) and Outline Drainage Strategy to support a planning application to convert an existing unmade car park into a self storage facility with 76 containers and vehicular access on Land at 22 Park Street, Cheetham Hill, Manchester M3 1ET.
- 1.1.2 The report provides information on the nature of flood risk at the site and follows Government guidance regarding development and flood risk.
- 1.1.3 The report is based on currently available information and preliminary discussions.
- 1.1.4 Proposals contained or forming part of this report represent the design intent and may be subject to alteration or adjustment in completing the detailed design for this project. Where such adjustments are undertaken as part of the detailed design and are deemed a material deviation from the intent contained in this document, prior approval shall be obtained from the relevant authority in advance of commencing such works.
- 1.1.5 Where the proposed works to which this report refers are undertaken more than twelve months following the issue of this report, Curtins shall reserve the right to re-validate the findings and conclusions by undertaking appropriate further investigations at no cost to Curtins.

1.2 Scope of Assessment

- 1.2.1 The assessment is to be undertaken in accordance with the standing advice and requirements of the Environment Agency (EA) for Flood Risk Assessments as outlined in the Communities and Local Governments Planning Policy Guidance to the National Planning Policy Framework (NPPF).
- 1.2.2 The assessment will:
 - Investigate all potential risks of flooding to the site,
 - Consider the impact the development may have elsewhere with regards to flooding,
 - Consider design proposals to mitigate any potential risk of flooding determined to be present,
 - Consider the foul & surface water drainage proposals for the development.
- 1.2.3 Although the total site area is less than 1 hectare and located within low-risk Flood Zone 1, a review of the Manchester Council Strategic Flood Risk Assessment has confirmed that it is located within a Critical Drainage Area (CDA). Therefore, a Flood Risk Assessment is required to support a planning application.

- 1.2.4 In 2021, the Government made changes to the National Planning Policy Framework which made Sustainable Urban Drainage Systems (SuDS) a material consideration in the determination of planning applications for all developments.
- 1.2.5 An outline Drainage Strategy will therefore be required as part of the Planning Application for the development, as the site is considered to be 'minor' development by the Town and Country Planning Order 2015.
- 1.2.6 This Flood Risk Assessment and Drainage Strategy reviews the following information:
- Environment Agency flood maps for rivers and sea flooding.
 - UK Government Flood Warning Information Service maps for surface water flooding and reservoir flooding.
 - Manchester City, Salford City and Trafford Councils Level 1 Hybrid Strategic Flood Risk Assessment (SFRA) published in March 2010.
 - Manchester City, Salford City and Trafford Councils Level 2 Hybrid SFRA, User Guide, Final, dated May 2010.
 - Manchester City, Salford City and Trafford Councils Level 2 Hybrid Strategic Flood Risk Assessment (SFRA) published in March 2011.
 - Preliminary Flood Risk Assessment (PFRA) for Manchester County Council dated May 2011.
 - Manchester City Council SuDS Requirements for New Developments.
 - United Utilities Public Sewer Records Extract and response to a predevelopment enquiry.
 - BGS ground investigation data.

1.3 Proposed Development

- 1.3.1 The proposed scheme is for the conversion of an existing car park into a self-storage facility with 76 containers (38 at ground and 38 stacked above) of 20ft length located to the perimeter of the site with vehicular access from Park Street. The site area is approximately 0.12 hectares.
- 1.3.2 The proposed Site Context and Location Plan is enclosed in *Appendix A*.

2.0 Existing Site Details

2.1 History and Current Use

- 2.1.1 Park Street is located off Cheetham Hill Road (A665) in the north of Manchester within the Strangeways/Cheetham Hill area, approx. 500m to the northwest from Victoria Train Station. The land within the red line boundary is currently an unmade car park being accessed from Park Street. The wider area is considered to be predominantly light industrial and commercial.

Figure 1: Aerial Photograph (© Google 2022)



Figure 2: Streetview Photograph (© Google 2022)



2.2 Existing Watercourses and Other Waterbodies

- 2.2.1 The closest watercourse is The River Irk, located approximately 250m to the east of the site. This feeds into the larger River Irwell 400m to the south.

2.3 Existing Drainage

- 2.3.1 An extract from the public sewer records has been obtained for the development site and is shown in Figure 3.

- 2.3.2 The public sewer records indicate that there are no recorded public sewers located within the development site boundary.

- 2.3.3 The following public sewers are recorded within the vicinity of the site:

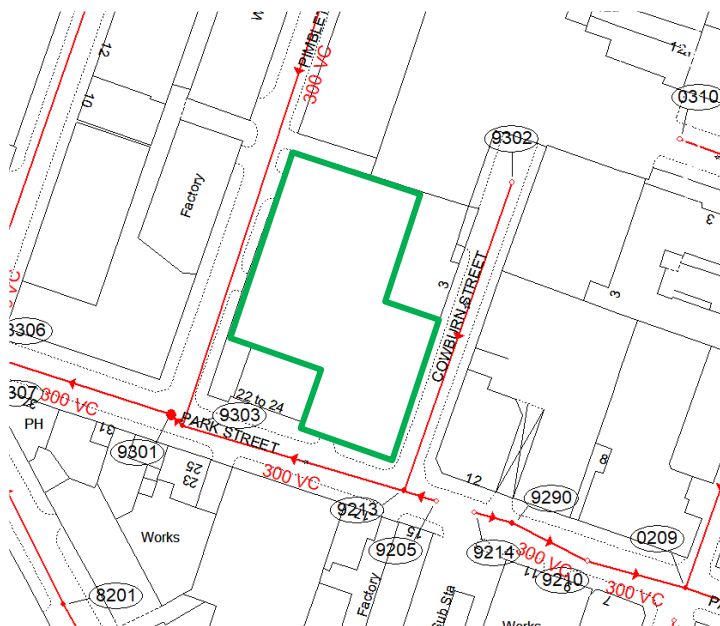
- There is a 300mm combined water sewer flowing south along Pimblett Street to the west of the site. This sewer connects to a 300mm combined sewer within Park Street, which flows in a westerly direction away from the site.

- 2.3.4 There are further public sewers identified on the public sewer records within the wider vicinity of the site, but these are not considered relevant to the scheme.

- 2.3.5 No surface water public sewers are identified in close proximity to the site.

- 2.3.6 No CCTV Drainage Survey has been completed at the site as there were no identified manhole covers identified from the site visit. As the current development is predominantly permeable, it was evident that all surface water would infiltrate through the upper the stone surface.

Figure 3: United Utilities Public Sewer Record (extract)



2.4 Topography

- 2.4.1 No topographical survey has been completed at the site. From the site visit it is evident that the red line boundary holds a very flat level at circa 40.60m AOD.

2.5 Geology

- 2.5.1 The British Geological Survey (BGS) map confirms that the superficial deposits are listed as Till comprised of sands, gravels, clay and silt.
- 2.5.2 The bedrock geology is described as the Chester Formation (sandstone)
- 2.5.3 Reviewing a local BGS borehole has indicated the strata to encompass a depth of made ground over clay with sandstone as the bedrock at depth.

3.0 Development and Flood Risk

3.1 National Planning Policy Framework (NPPF) and Planning Practice Guidance

- 3.1.1 In July 2021, the Department of Communities and Local Government published the National Planning Policy Framework document (NPPF) and the Planning Practice Guidance was published in March 2014 which provides guidance on how flood risk should be assessed during the planning and development process.

Table 1: (Extract from Planning Practice Guidance) Flood Zone Classifications

These Flood Zones refer to the probability of river and sea flooding, ignoring the presence of defences. They are shown on the Environment Agency's [Flood Map for Planning \(Rivers and Sea\)](#), available on the Environment Agency's web site, as indicated in the table below.

Flood Zone	Definition
Zone 1 Low Probability	Land having a less than 1 in 1,000 annual probability of river or sea flooding. (Shown as 'clear' on the Flood Map – all land outside Zones 2 and 3)
Zone 2 Medium Probability	Land having between a 1 in 100 and 1 in 1,000 annual probability of river flooding; or Land having between a 1 in 200 and 1 in 1,000 annual probability of sea flooding. (Land shown in light blue on the Flood Map)
Zone 3a High Probability	Land having a 1 in 100 or greater annual probability of river flooding; or Land having a 1 in 200 or greater annual probability of sea flooding. (Land shown in dark blue on the Flood Map)
Zone 3b The Functional Floodplain	This zone comprises land where water has to flow or be stored in times of flood. 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. (Not separately distinguished from Zone 3a on the Flood Map)

Table 2: (Extract from Planning Practice Guidance) 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 and ambulance stations; fire stations and command centres; telecommunications installations required to be operational during flooding. • Emergency dispersal points. • Basement dwellings. • Caravans, mobile homes and park homes intended for permanent residential use. • Installations requiring hazardous substances consent. (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’).
More Vulnerable • Hospitals • Residential institutions such as residential care homes, children’s homes, social services homes, prisons 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 waste. • Sites used for holiday or short-let caravans and camping, subject to a specific warning and evacuation plan.

Less Vulnerable

- Police, ambulance and fire stations which are **not** required to be operational during flooding.
- Buildings used for shops; financial, professional and other services; restaurants, cafes and hot food takeaways; offices; general industry, storage and distribution; non-residential institutions not included in the 'More Vulnerable' class; 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 not 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.

Water-Compatible Development

- Flood control infrastructure.
- Water transmission infrastructure and pumping stations.
- Sewage transmission infrastructure and pumping stations.
- Sand and gravel working.
- Docks, marinas and wharves.
- Navigation facilities.
- Ministry of Defence 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, subject to a specific warning and evacuation plan.

Table 3: (Extract from Planning Practice Guidance) Flood Risk Vulnerability and Flood Zone Compatibility

Flood Zones	Flood Risk Vulnerability Classification				
	Essential infrastructure	Highly vulnerable	More vulnerable	Less vulnerable	Water compatible
Zone 1	✓	✓	✓	✓	✓
Zone 2	✓	Exception Test required	✓	✓	✓
Zone 3a †	Exception Test required †	x	Exception Test required	✓	✓
Zone 3b *	Exception Test required *	x	x	x	✓*

Key:

✓ Development is appropriate

x Development should not be permitted.

Notes to table 3:

- This table does not show the application of the Sequential Test which should be applied first to guide development to Flood Zone 1, then Zone 2, and then Zone 3; nor does it reflect the need to avoid flood risk from sources other than rivers and the sea;
- The Sequential and Exception Tests do not need to be applied to minor developments and changes of use, except for a change of use to a caravan, camping or chalet site, or to a mobile home or park home site;
- Some developments may contain different elements of vulnerability and the highest vulnerability category should be used, unless the development is considered in its component parts.

† In Flood Zone 3a essential infrastructure should be designed and constructed to remain operational and safe in times of flood.

* In Flood Zone 3b (functional floodplain) essential infrastructure that has to be there and has passed the Exception Test, and water-compatible uses, should be designed and constructed to:

- remain operational and safe for users in times of flood;
- result in no net loss of floodplain storage;
- not impede water flows and not increase flood risk elsewhere.

3.2 Site Specific NPPF Flood Risk Categorisation

- 3.2.1 To assess the NPPF flood risk classification for the site, the first step was to inspect the UK Government web based 'Flood Map for Planning' which is used to inform planning of a site's Flood Zone(s) and the probability of flooding from rivers or sea (not taking into account the presence of flood defences or climate change). However, the web based 'Long Term Flood Risk Assessment for Locations in England' should also be used to identify the long-term flood risks from rivers and seas, surface water and reservoirs.
- 3.2.2 The Flood Map for Planning report is enclosed in *Appendix B*, and it can be seen that the site is located within Flood Zone 1.
- 3.2.3 Further site-specific review of the flood risk to the site is provided in section 4.

3.3 Site Specific Flood Zone Compatibility

- 3.3.1 The proposals for the development site are likely to fall within the following category:
- General industry, storage and distribution
 - Car parking
- 3.3.2 Both of these types of developments are classed as 'Less Vulnerable' development in the Flood Risk Vulnerability Classification (Table 2).

3.4 Sequential Test

- 3.4.1 The site is categorised as a 'Less Vulnerable' development (shown in table 2) and is within Flood Zone 1. Therefore, the development passes the sequential test and an exception test is not required (refer to the Flood Zone compatibility table 3 in the NPPF technical guidance).

4.0 Hydrological Assessment

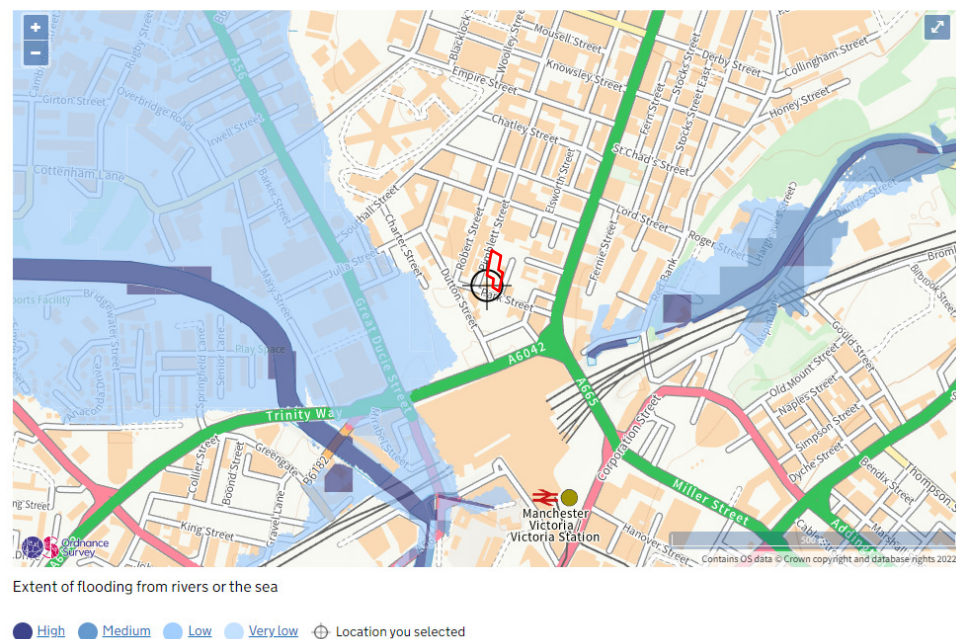
4.1 Sources of Flood Risk

- 4.1.1 This study assesses the risk from different types of flooding to the development and the risk of flooding from the development, taking into consideration climate change, as well as how flood risks should be managed. The approach to assessing flood risk at the development site was informed by the requirements of NPPF in conjunction with the client and Environment Agency / LLFA requirements.

4.2 Fluvial Flooding (Rivers and Streams)

- 4.2.1 Flooding to the site from rivers and sea is indicated below in Figure 4, taken from the UK Government's Long-Term Flood Risk Information.

Figure 4: Long Term Flood Risk Assessment Map – Flood Risk from Rivers or Sea (© Crown Copyright)



- 4.2.2 It can be seen that the site is located within Flood Zone 1. The site is not shown to be in an area which benefits from flood defences. The site has less than a 1 in 1000 annual probability of fluvial flooding (1% - 0.1%). Therefore, the proposed site is considered to be at low risk from fluvial flooding.

Figure 5: Long Term Flood Risk Assessment (Detailed Information) – Flood Risk from Rivers or Sea (© Crown Copyright)

Flood risk from rivers or the sea

Very low risk means that each year this area has a chance of flooding of less than 0.1%. This takes into account the effect of any flood defences in the area. These defences reduce but do not completely stop the chance of flooding as they can be overtopped, or fail.

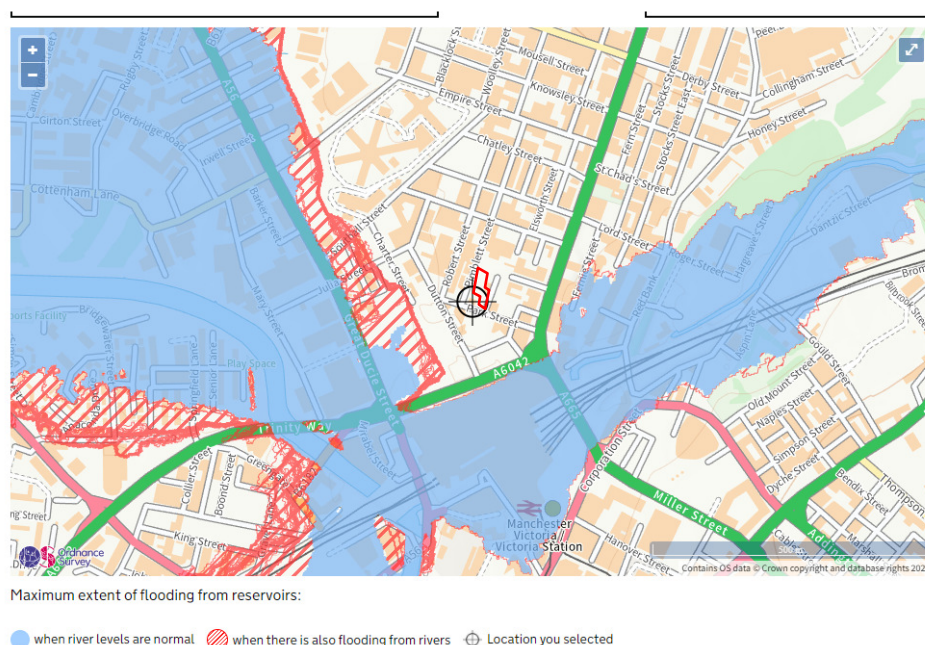
4.3 Tidal Flooding (Coastal or Estuarine)

- 4.3.1 There is currently no flood risk identified on the Environment Agency flood maps for the site and it is therefore regarded to be at low risk from tidal flooding.

4.4 Reservoir Flooding

- 4.4.1 Reservoir flooding is extremely unlikely to happen and there has been no loss of life in the UK from reservoir flooding since 1925. The Environment Agency is the enforcement authority and ensures that reservoirs are inspected regularly, and essential safety work is carried out.
- 4.4.2 The Long-Term Flood Risk Assessment (Flood Risk from Reservoirs) map shows that the site would not be flooded if a reservoir were to fail and release the water it holds (see Figure 6).

Figure 6: Long Term Flood Risk Assessment Map – Flood Risk from Reservoirs (© Crown Copy Right)



- 4.4.3 The site is located outside of the maximum extent of flooding from a reservoir. These maps are worst case scenarios and given the unlikelihood that such an event would ever occur there is no further investigation required.

4.5 Canal Flooding

- 4.5.1 The nearest canal to the site is the Rochdale canal, located approximately 1.5km to the southeast of the site.
- 4.5.2 The canals are identified in the SFRA as not generally posing a direct flood risk as they are a controlled water body. Therefore, the residual risk of canal flooding is usually associated with lower probability events such as overtopping and/or the breaching of embankments.
- 4.5.3 Given the above information, it is considered that there is low risk of canal flooding to the site.

4.6 Groundwater Flooding

- 4.6.1 The Manchester City Council SFRA states that it does not consider groundwater flooding to be a significant issue in its administrative boundary, as there is no historic evidence to suggest that groundwater flooding is an issue worth further investigation.
- 4.6.2 At the time this report was written no intrusive ground investigation works had taken place or been published; therefore, site specific depths have not been confirmed.
- 4.6.3 Based on the current information and the site elevated position, it is overall assumed that the site is at a low risk of groundwater flooding.

4.7 Public Sewers or Highway Drainage Flooding (Infrastructure Failure)

- 4.7.1 There are no highway drains recorded within the site. It is likely that there will be localised highway drainage surrounding the site (such as gullies and connections).
- 4.7.2 There are no public sewers recorded within the site.
- 4.7.3 United Utilities and Manchester City Council have not provided any records of flooding to the site or the vicinity.
- 4.7.4 United Utilities and Manchester City Council maintain their drainage assets within the vicinity of the site, if any, the risk of flooding to the proposed development site from public sewers or highway drainage is considered as low.

4.8 Surface Water Flooding to the site

4.8.1 Surface water flooding can be caused when rainwater during extreme rainfall events does not drain away through the normal drainage system or soak into the ground with flooding occurring, principally from manholes and gullies. Surcharging sewers can result in overland flows, which if originating at a higher elevation than a development site can potentially pose a flood risk.

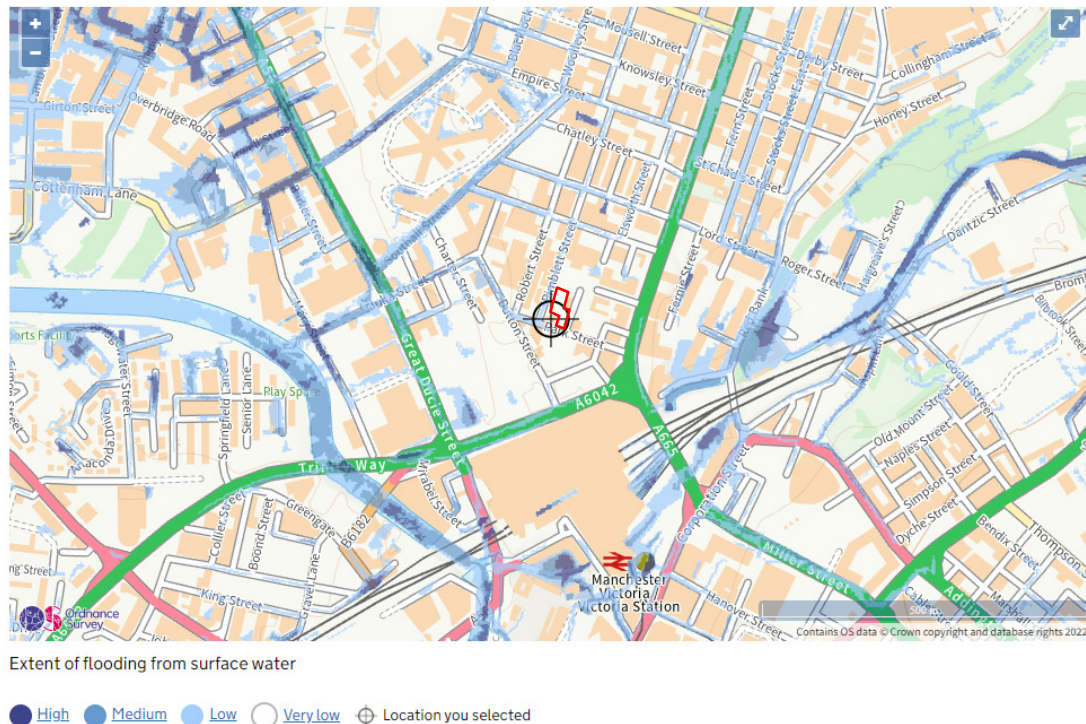
4.8.2 From the UK Government's Flood Risk from Surface Water (extent of flooding) map;

- Where a site is located in a dark blue shaded zone, this indicates that the site is at high risk of flooding, where flooding occurs as a result of rainfall with a greater than 1 in 30 (3.3%) chance in any given year.
- Where a site is located in a mid-blue shaded zone, this indicates that the site is at medium risk of flooding, where flooding occurs as a result of rainfall of between 1 in 100 (1%) and 1 in 30 (3.3%) chance in any given year.
- Where a site is located in a light blue shaded zone, this indicates that the site is at low risk of flooding, where flooding occurs as a result of rainfall of between 1 in 1000 (0.1%) and 1 in 100 (1%) chance in any given year.
- Where a site is located in a clear (unshaded) area; this indicates that the site is at very low risk of flooding, where flooding occurs as a result of rainfall with less than 1 in 1000 (0.1%) chance in any given year.

4.8.3 The extent of flooding to the site from surface water is indicated in

- 4.8.4 Figure 7 and it can be seen that the whole site is identified as being at a 'very low' risk of flooding from surface water. The surrounding roads to the southwest away from the site are classed as 'low risk'; however these areas are at a lower level than the development site. There is no overland flood flow route passing through the site.

Figure 7: Risk of Flooding from Surface Water - Extent of Flooding



- 4.8.5 Considering the above information, the risk of surface water flooding to the site is generally considered very low.

4.9 Surface Water Flooding from the site

- 4.9.1 Developers are responsible for ensuring that new development does not increase the flood risk elsewhere. Where new development is proposed, the proposed surface water drainage network shall be designed to not flood for the critical 1 in 30-year storm event and flood water generated up to the critical 1 in 100-year plus climate change storm event shall be constrained within areas on site so as not to cause damage to buildings, essential services or adjoining developments and services.
- 4.9.2 A development has the potential to increase flood risk where additional run-off from proposed paved areas and building roofs are discharged freely into the downstream drainage network. It is therefore encouraged to propose permeable areas, landscaping areas and incorporate sustainable drainage features utilising infiltration or attenuation to satisfy local and national guidance.
- 4.9.3 An assessment of the proposed surface flows is carried out within the drainage strategy in Section 6 of this report.
- 4.9.4 Overall, the surface water flooding from the site to surrounding areas is considered very low as there is no increase in the area of hardstanding post development.

4.10 Historical Flooding

4.10.1 No historic records of flooding for the site were received at the time of writing this report.

4.11 Summary of Flood Risk

4.11.1 From the evidence collated and subsequent negotiations the site can be found to be at low risk of flooding from all sources at present. Given there will be no increase in impermeable areas from the existing site, and surface water will continue to drain as existing, it is considered the site will maintain a low risk of flooding post-development. No mitigation is required due to the fact that the proposed scheme does not increase the impermeable area and intends to maintain the same permeable discharge to ground.

5.0 Drainage Strategy

5.1 Existing Drainage

- 5.1.1 The public sewer records indicate that there are no recorded public sewers located within the development site boundary.
- 5.1.2 The following public sewers are recorded within the vicinity of the site:
- There is a 300mm combined water sewer flowing south along Pimblett Street to the west of the site. This sewer connects to a 300mm combined sewer within Park Street, which flows in a westerly direction away from the site.
- 5.1.3 There are further public sewers identified on the public sewer records within the wider vicinity of the site, but these are not considered relevant to the scheme.
- 5.1.4 No surface water public sewers are identified in close proximity to the site.
- 5.1.5 No CCTV Drainage Survey has been completed at the site as there were no identified manhole covers identified from the site visit. As the current development is predominantly permeable, it is anticipated that all surface water will infiltrate to the stone surface.

5.2 Proposed Foul Water Drainage

- 5.2.1 The scheme encompasses the placement of self storage shipping containers with vehicular car parking only. No buildings will be constructed that would require a foul drainage connection.

5.3 Proposed Surface Water Drainage

- 5.3.1 The site is currently classed as permeable with a stone surface over made ground and no formal drainage infrastructure. The containers will sit off the ground, allowing surface water to run into the gravel under them. This means the total site area available for infiltration remains the same post development. It is therefore proposed that the post-development run-off rates will not change and thus no increase in flood risk to adjacent areas. Refer to drawings in Appendix A that define this layout.
- 5.3.2 In following the standard hierarchy of drainage solutions, consideration should firstly be given to the discharge of surface water runoff by sustainable methods such as infiltration.

Infiltration

- 5.3.3 A Phase 2 Intrusive Site Investigation has not been carried out at the site due to the proposals encompassing a placement of self storage containers. Given the site has had previous use, it is likely that the development will contain depths of made ground. The superficial deposits are listed as Devensian Till and the underlying deep strata is described as comprising Sandstone. Nearby boreholes available on the BGS online mapping suggest that the primary material identified is fill over clay. On this basis, infiltration will continue to occur in the upper layers.

Watercourse

- 5.3.4 The closest watercourse is The River Irk, located approximately 250m to the east of the site. This feeds into the large River Irwell 400m to the south.

Surface Water Sewer

- 5.3.5 There are no surface water sewers in close proximity to the development site.

Combined Water sewer

- 5.3.6 There are various combined sewers in the vicinity of the site.
- 5.3.7 Table 5 summarises the options for surface water disposal.

Table 5: Surface Water Disposal

Surface Water Disposal	Potential	Description
Infiltration	✓	The site currently infiltrates to the underlying made ground. As there are no building proposed and the surfacing remains unchanged, thus drainage philosophy will be maintained.
Watercourse	X	River Irk is located 250m from the site.
Surface Water Public Sewer	X	There are no surface water sewers within the vicinity of the site.
Combined Public Sewer	X	There are various combined water sewers in the vicinity of the site. However, the site will continue to infiltrate as per current arrangement.

- 5.3.8 It is therefore considered at this stage that no new formal drainage infrastructure is required and infiltration will continue post development.

Appendix A

Site Location and Context Plan



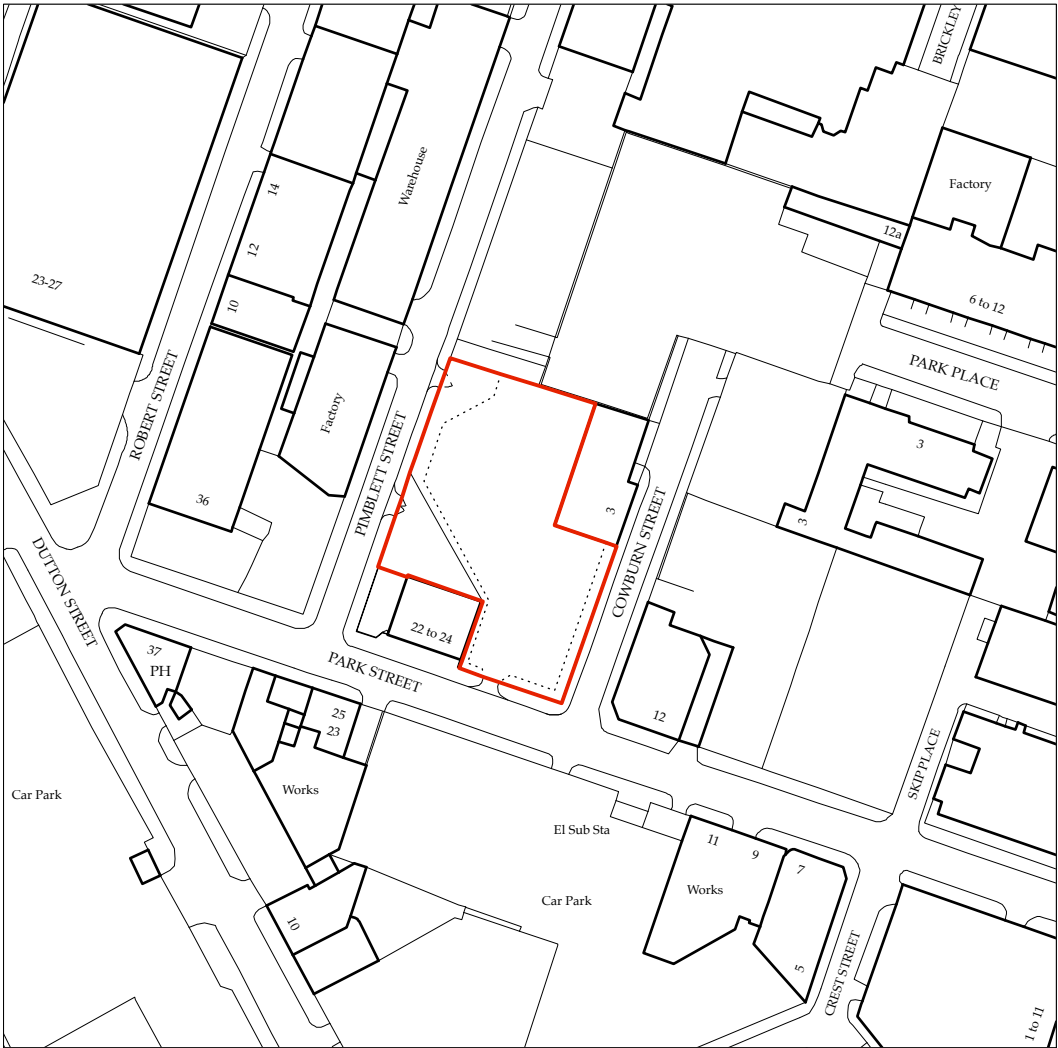
PARK STREET 495 - Containers

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- North Point

- Application Site Edge in red

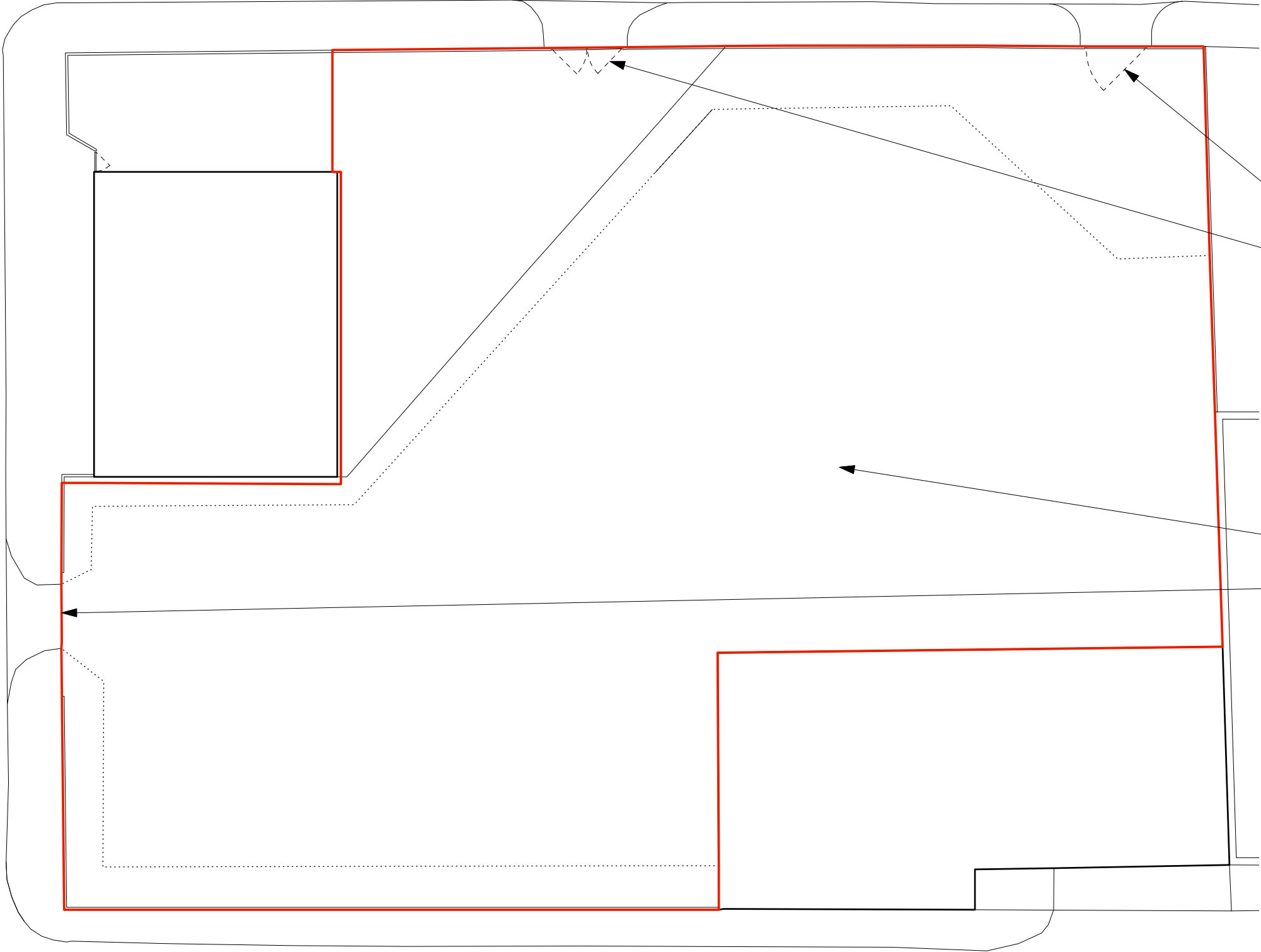


LOCATION PLAN

Rev*: First Issue

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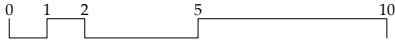
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FIRST ISSUE: 15.02.22
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SITE PLAN



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- North Point

— - Application Site Edge in red

Existing palisade gates. Not in use

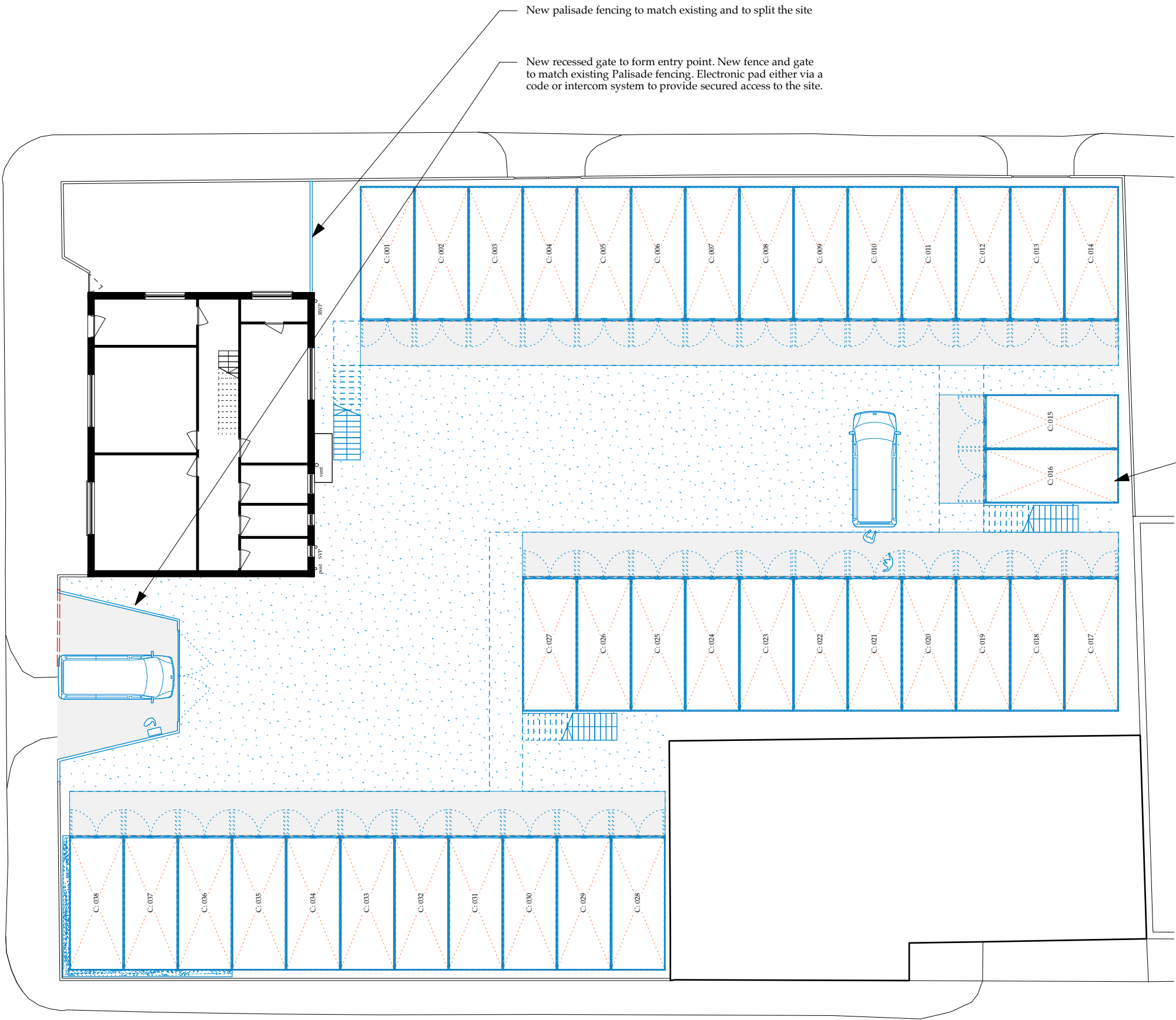
Gravel

Existing car park access

Rev*: First Issue

FOR: PLANNING	
CHECKED BY: TW	DRAWN BY: AK
SCALE: 1:200	
PAPER SIZE: A3	
JOB: PARK STREET 495 - Containers	

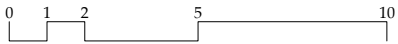
C-0.100_Rev
FIRST ISSUE: 15.02.22
EXISTING SITE PLAN



SITE PLAN



PARK STREET 495 - Containers
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- North Point

Key:	
Existing walls	
Proposed items	
Removed items	
Gravel for free drainage	
New permeable paved strips	
New first floor decking	

40 x 20 ft storage containers
Containers to be supported on concrete blocks at each corner to allow water to flow into gravel underneath
Containers to be painted the same colour throughout.

Rev*: First Issue

FOR: PLANNING	
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PAPER SIZE: A3	
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C-2.100_Rev
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PROPOSED GROUND FLOOR PLAN



PARK STREET 495 - Containers

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Proposed items



New planting bed to the south-east corner for a fast-growing ivy to cover both sides as shown in the elevations. It would be supported on a wire framework fixed to the containers.

40 x 20 ft storage containers
Containers to be supported on concrete blocks at each corner to allow water to flow into gravel underneath

Rev*: First Issue

FOR: PLANNING

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SCALE: 1:50

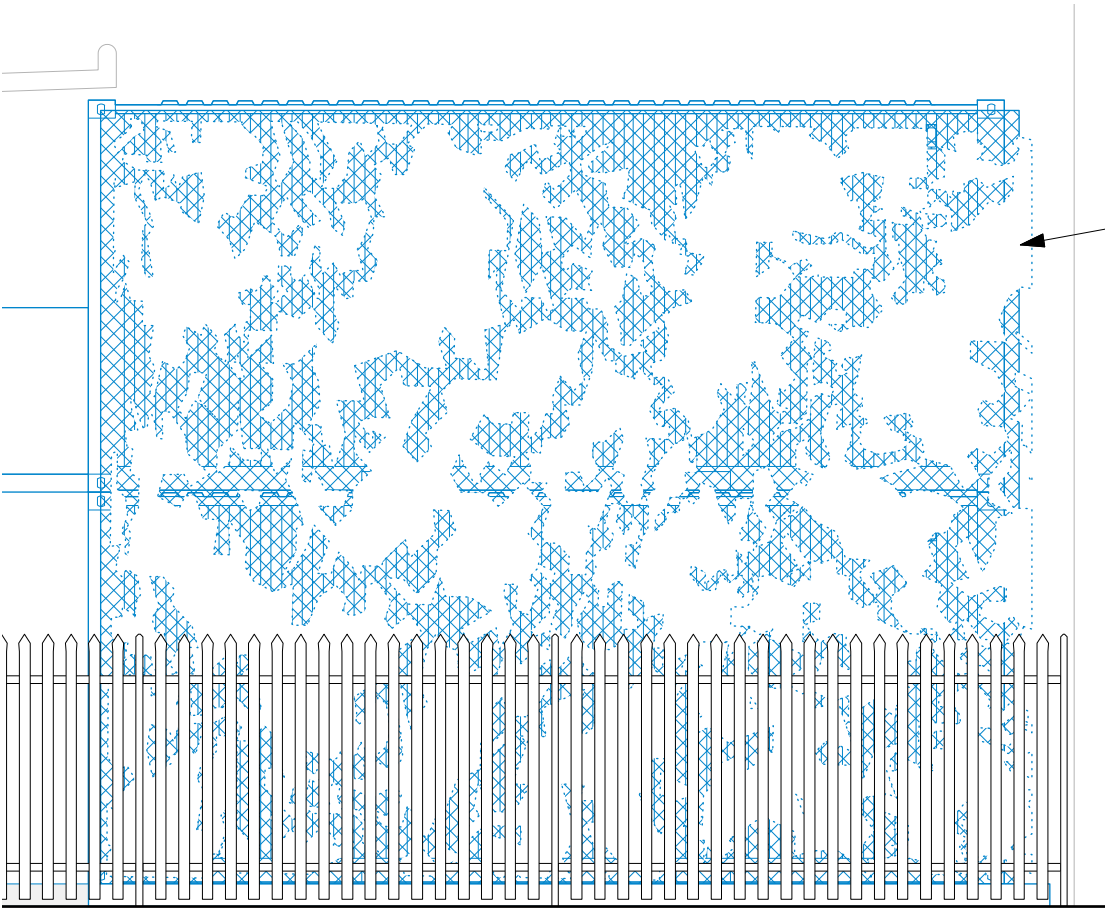
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JOB: PARK STREET 495 - Containers

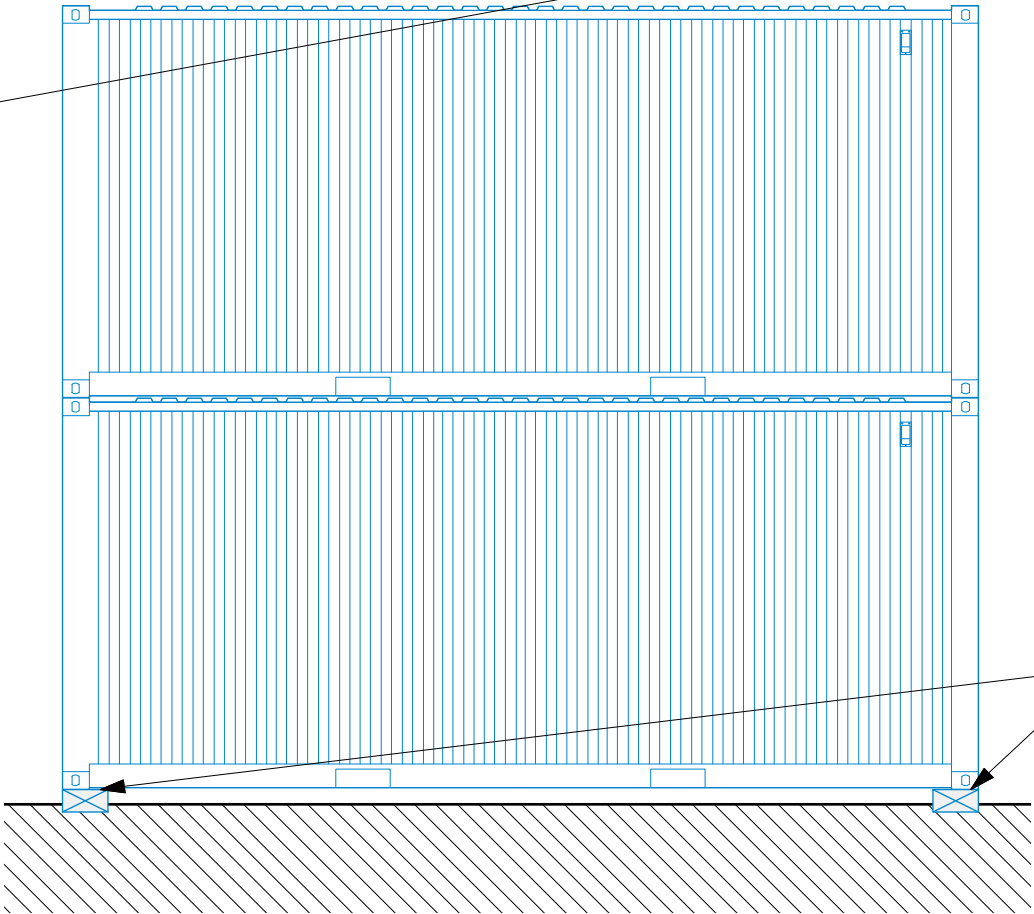
C-2.210_Rev

FIRST ISSUE: 15.02.22

CONTAINER DETAILS



DETAIL 01



DETAIL 02

Appendix B

Environment Agency Flood Map for Planning

Flood map for planning

Your reference
080414

Location (easting/northing)
383950/399326

Created
25 Feb 2022 13:16

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

This means:

- you don't need to do a flood risk assessment if your development is smaller than 1 hectare and not affected by other sources of flooding
- you may need to do a flood risk assessment if your development is larger than 1 hectare or affected by other sources of flooding or in an area with critical drainage problems

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 2021 OS 100024198. <https://flood-map-for-planning.service.gov.uk/os-terms>



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