

Land off Link Park Road, West Drayton UB7
7EZ

Flood Risk Assessment & Drainage Strategy
for Metal Recycling Yard

Client: KHC Management Services Ltd

Report Reference: CWC540-FRA Rev2

CONTENTS

QUALITY ASSURANCE RECORD	4
Contributors for Corner Water Consulting Ltd:	4
Document Status and Revision History:	4
Limitation of liability and use	4
1 INTRODUCTION	5
1.1 Purpose of this report	5
1.2 Background and Consultation	5
1.3 Sources of Information	6
2 SITE DETAILS	7
2.1 Site Location and Existing Details	7
2.2 Site Details	8
2.3 Topographical Details	9
2.4 Proposed Development	12
2.5 Ground Conditions	16
3 FLOOD RISK	18
3.1 Flood Zones	18
3.2 Climate Change Impact	18
3.3 Environment Agency Consultation (Product 6)	18
3.4 Flood Plain Compensation	19
3.5 Surface Water Flood Risk	19
3.6 Groundwater Flood Risk	20
3.7 Summary of Flood Risks	21
3.8 Flood Mitigation measures	21
4 SURFACE WATER DRAINAGE PROPOSALS	22
4.1 Drainage Philosophy	22
4.2 Rainwater Harvesting	23
4.3 Storage Requirements	24
4.4 Water Quality	24
4.5 Drainage Maintenance	24
5 SUMMARY AND CONCLUSIONS	26
REFERENCES	27
APPENDIX 1: Topographical Survey	28
APPENDIX 2: CCTV Survey	29
APPENDIX 3: Drainage Modelling	30
APPENDIX 4: Drainage Layout Plan & Construction Details	31

Figure 1 – Location Plan	7
Figure 2 – Site Location Details	8
Figure 3 - Site location OS Details	8
Figure 4 – Aerial View of the Site and Local Area (Imagery from 2026)	9
Figure 5 – Aerial View of the Site (March 2022)	9
Figure 6 – Topographic Survey Extract	10
Figure 7 – Topographical survey of headwall at Bigley Ditch	10
Figure 8 – Topographic Survey Extract	11
Figure 9 – Proposed Site Layout – Source Oaktree drawing	12
Figure 10 – Depollution Building – Source Oaktree drawing	13
Figure 11 – Boundary Wall Treatment – Source Oaktree drawing	14
Figure 12 – Welfare Building – Source Oaktree drawing	14
Figure 13 – Proposed Office Building – Source Oaktree drawing	15
Figure 14 – British Geological Survey (https://mapapps2.bgs.ac.uk/geindex/home.html)	16
Figure 16 – Soilscares Mapping	17
Figure 17 – Extract from the EA's Flood Zones dataset	18
Figure 18 – Environment Agency's Product 6 Flood Levels (1%AEP20CC)	19
Figure 19 – EA's Surface Water Flood Risk – Climate Change Scenario	20
Figure 20 – Detail of Surface Water Flood Risk at link between Link Park Road and Thorney Mill Road	20
Figure 21 – Surface Water Drainage Strategy	23
Table 1 – Summary of sources of flood risk to the site	21
Table 2 – Comparison between Current Day Brownfield runoff rates and proposed post-development discharge rates	22
Table 3 – Comparison between greenfield runoff rates and post-development discharge rates	24
Table 4 – Drainage Maintenance Schedule	25

QUALITY ASSURANCE RECORD

Contributors for Corner Water Consulting Ltd:

Name	Role
Alan Corner	Project Director

Document Status and Revision History:

Revision	Date	Project Contact	Status / Comment
1	09/06/2026	AC	First issue
2	07/07/2026	AC	Second Issue
3	31/07/2026	AC	Third Issue

Limitation of liability and use

The work described in this report was undertaken for the party or parties stated, for the purpose or purposes stated, to the time and budget constraints stated. No liability is accepted for use by other parties or for other purposes, or unreasonably beyond the terms and parameters of its commission and its delivery to normal professional standards. Circumstances, regulations, assessment methodology and professional standards do change which could subsequently affect the validity of this Report.

The methodologies adopted plus the sources of information used by Corner Water Consulting Ltd (CWC) in providing its services are outlined within this Report. Any information provided by third parties and referred to herein has not been checked or verified by CWC, unless otherwise expressly stated within this Report. This Report was checked and approved for issue on the date of issue shown, all data, parameters and methodology are valid on this date.

1 INTRODUCTION

1.1 Purpose of this report

This report relates to a site with a Red-Line boundary enclosing 3,675m² which includes that section of the access roadway Link Park Road necessary for vehicles to reach the site. The site is a plot of land off Link Park Road, West Drayton. The purpose of this report is to provide a Flood Risk Assessment (FRA) and Drainage Strategy to accompany a planning application for a new metal recycling yard. An FRA is required as the edge of the site alongside the adjacent watercourse is affected by Flood Zone 2 and Flood Zone 3.

For the site location see Figure 1 to Figure 3. To access the site vehicles will continue to use the current roadways and site entrances.

The FRA has been prepared to comply with Local Authority policies, National Planning Policy Framework (NPPF) requirements plus planning guidance and local plus national requirements.

To ensure the scheme mitigates the risk of flooding to appropriate levels, for a Less Vulnerable development, this report meets Government and Environment Agency guidance for preparing a flood risk assessment.

1.2 Background and Consultation

NATIONAL PLANNING POLICY FRAMEWORK

The National Planning Policy Framework (NPPF) is updated regularly and sets out the Government's planning policies for England and how these are expected to be applied. Planning Practice Guidance is published online and details how flood risk should be assessed as part of a planning application.

Flooding is addressed, principally within Chapter 14 – “Meeting the challenge of climate change, flooding and coastal change”, paragraphs 157 to 179 of the NPPF. Policy seeks to avoid inappropriate development in areas at risk of flooding by steering development away from areas at highest risk, but where development is necessary, making it safe without increasing flood risk elsewhere.

A site-specific flood risk assessment is required for proposals of 1 hectare or greater in Flood Zone 1; all proposals for new development (including minor development and change of use) in Flood Zones 2 and 3; in an area within Flood Zone 1 which has critical drainage problems (as notified to the local planning authority by the Environment Agency); and where proposed development or a change of use to a more vulnerable class may be subject to other sources of flooding.

A site-specific flood risk assessment must demonstrate the following:

- that the development will be safe for its lifetime taking account of the vulnerability of its users;
- it should not increase flood risk elsewhere;
- it should, if possible, reduce flood risk overall.

According to ‘Annex3: Flood vulnerability Classification’, the development is classed as ‘less vulnerable’:

- *“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.”*

As this site is partly affected by Flood Zones 2 and 3 a site-specific FRA has been prepared.

1.3 Sources of Information

This Report has been informed by:

- Location and proposal details;
- The published Flood Map for Planning;
- EA Product 5 & 6;
- EA GIS datasets of river and surface water flood risk;
- DEFRA's LiDAR Digital Elevation Models;
- The National Planning Policy Framework (NPPF) plus the Technical Guidance to the NPPF;
- The CIRIA SuDS Manual C753.

2 SITE DETAILS

2.1 Site Location and Existing Details

The red-line extent of the proposed development site covers some 3,675m² and is shown in Figure 1. The site address and other location details are shown in Figure 2. Local area Ordnance Survey mapping is given in Figure 3.

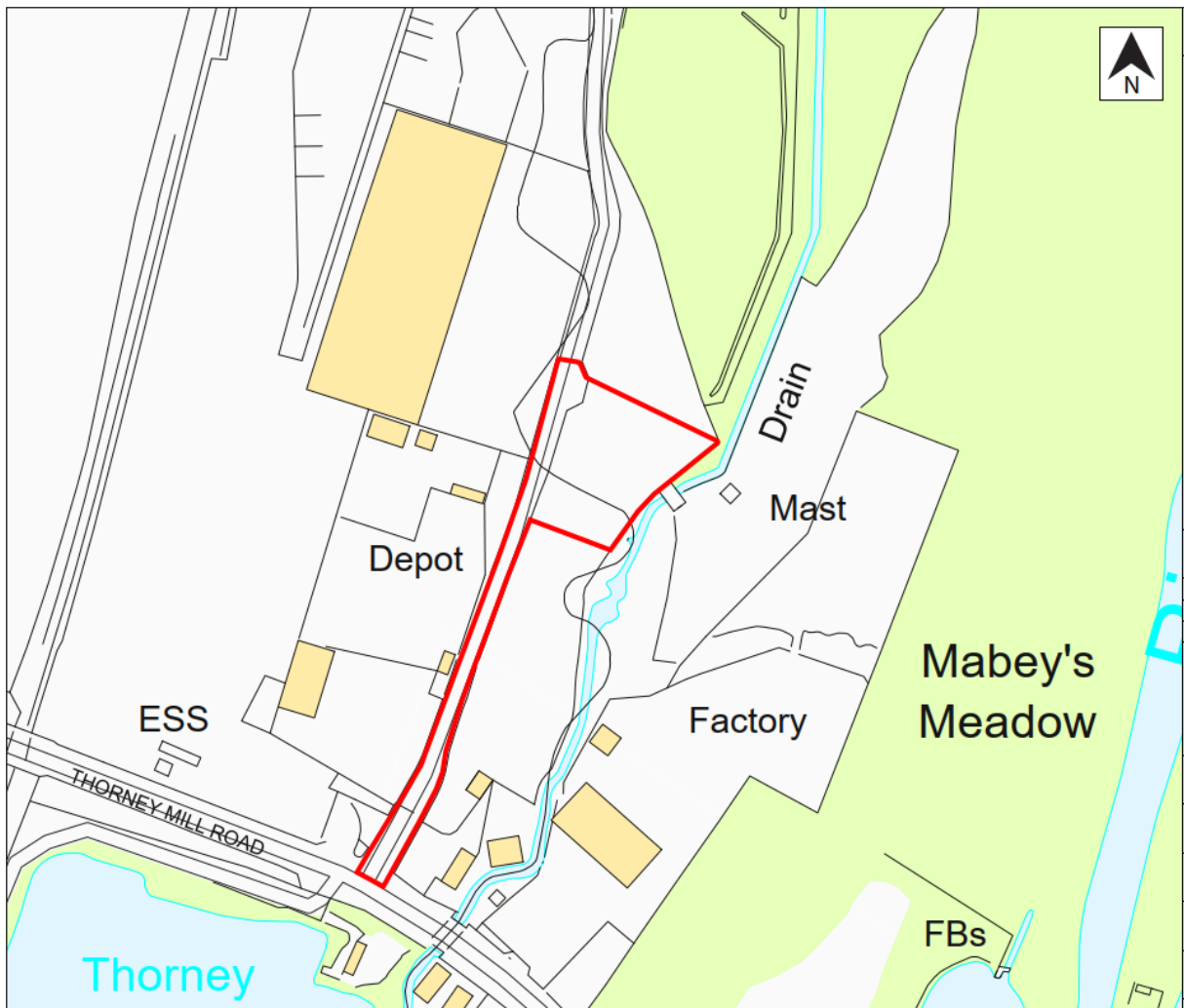


Figure 1 – Location Plan

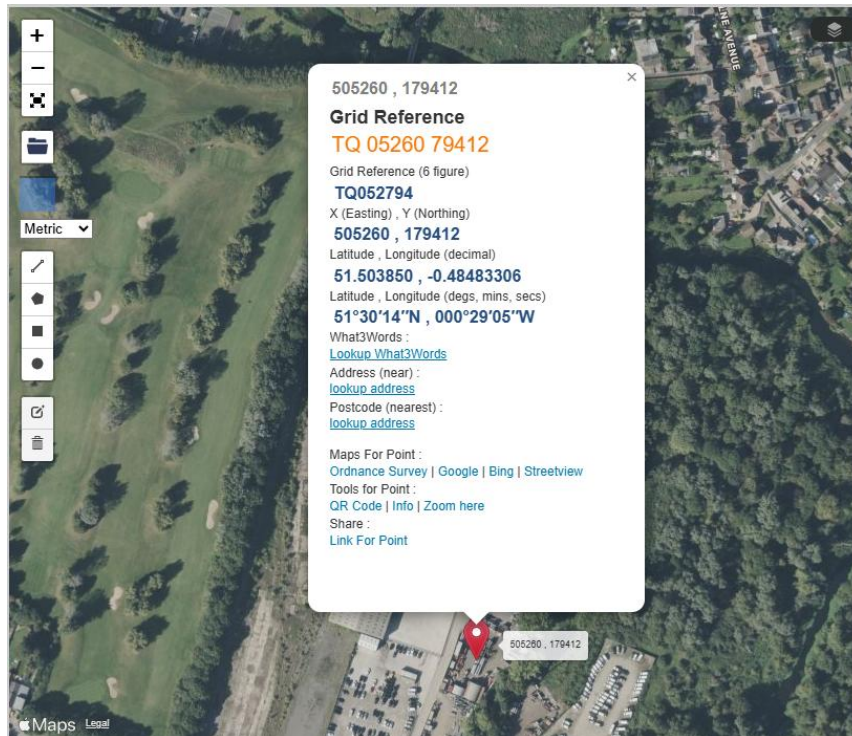


Figure 2 – Site Location Details



Figure 3 - Site location OS Details

Source OS Premium Licence - Reproduced under OS Licence AC0000860926

2.2 Site Details

The site is an entirely hard paved space with no formal buildings or arrangements.

A topographical survey has been undertaken that provides levels plus details of chambers and open watercourse that runs alongside the southeast edge of the site, see extracts in Figure 6 and Figure 7.

The aerial image of the site in Figure 4 shows that the area is currently vacant, without any form of buildings or stored equipment. Notwithstanding this, aerial imagery dated from 2022 shows the site to store various forms of plant equipment and shows a building at the southeast corner of the site.

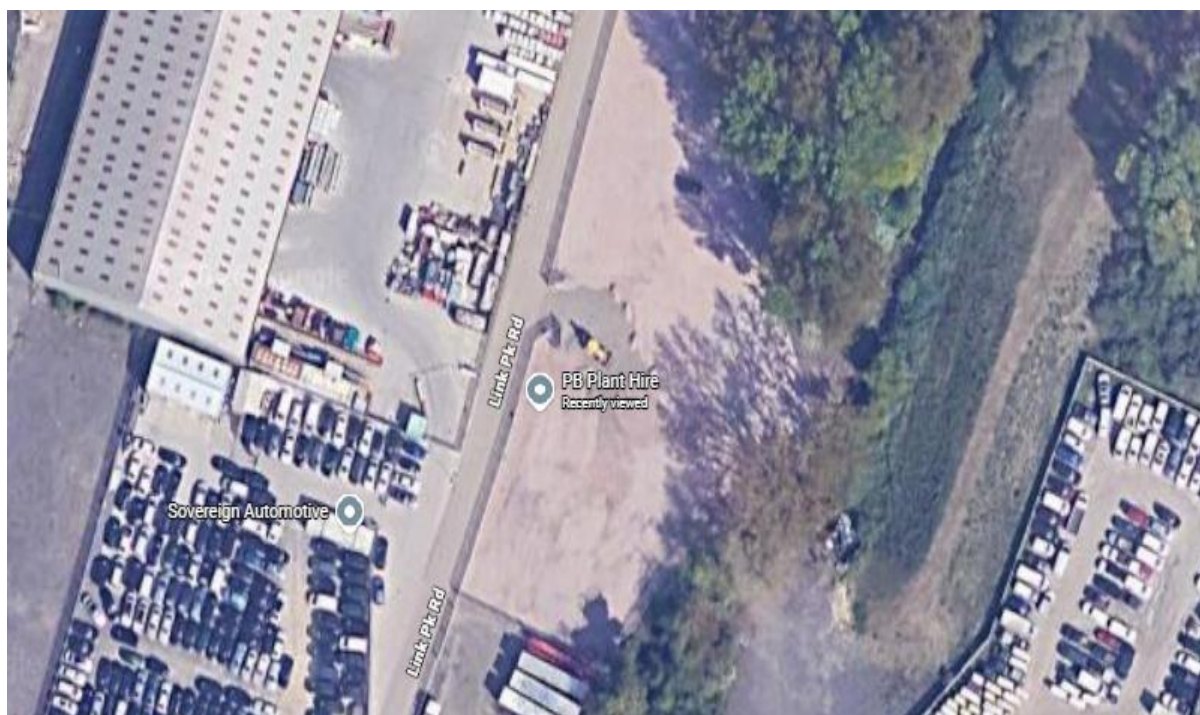


Figure 4 – Aerial View of the Site and Local Area (Imagery from 2026)
Google product screen shot(s) reprinted with permission from Google. © 2025 Google and Airbus

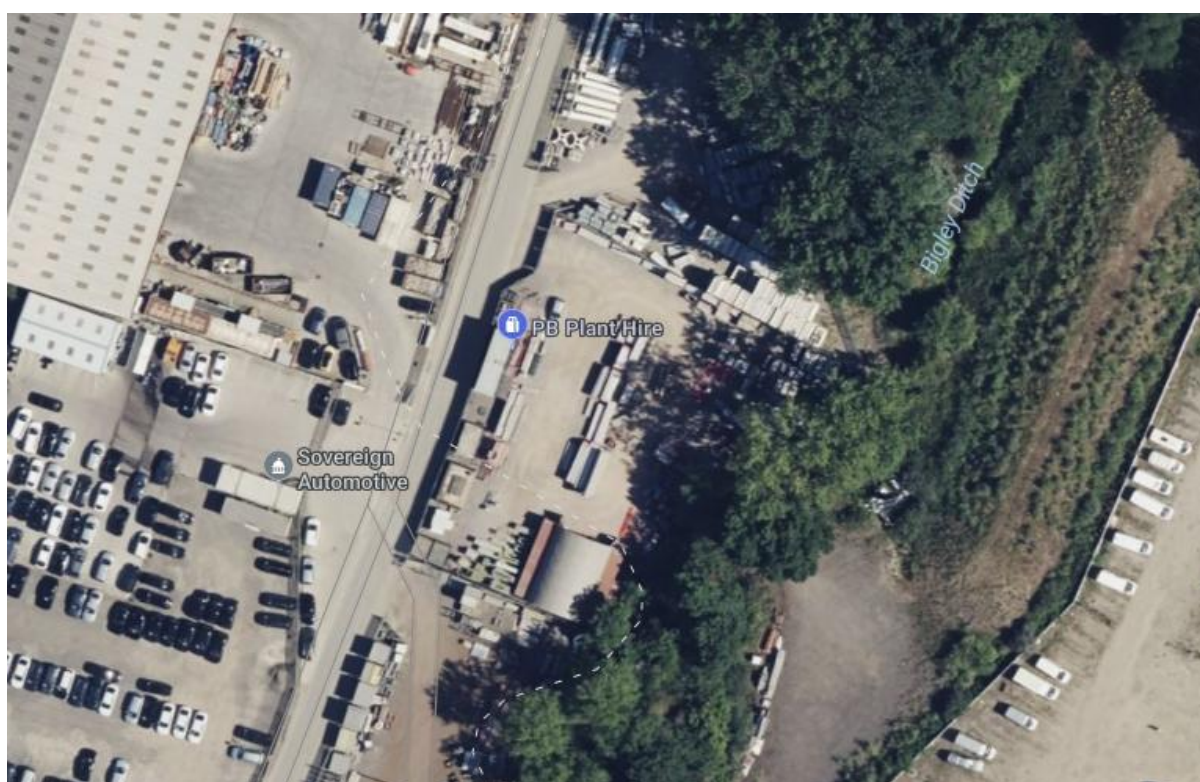


Figure 5 – Aerial View of the Site (March 2022)
Google Earth Pro screen shot(s) reprinted with permission from Bing Maps © 2025

2.3 Topographical Details

A detailed site topographical survey was made available to inform this assessment – Appendix 1. The survey shows a mixture of hard paved concrete areas and Type 1 granite across the site. A manhole

chamber (MH01) is also identified close to the east boundary of the site. The site is surrounded by open fences and comprises two accesses to Link Park Road i.e. a pedestrian access in the south and a vehicular access at the north. The survey shows ground levels to vary between 25.40m AOD adjacent to the watercourse and 25.99m AOD at the northeast corner of the site.



Figure 6 – Topographic Survey Extract

Figure 7 comprises an extract from the topographical survey and shows a headwall located in Bigley ditch.

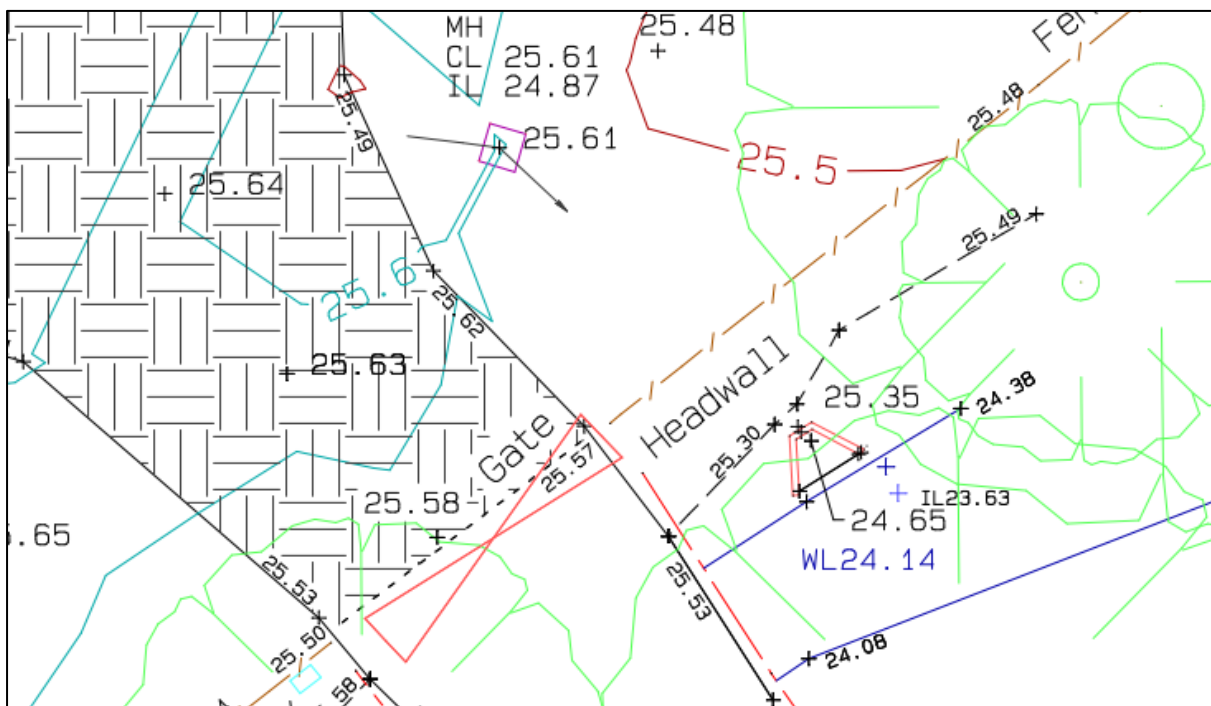


Figure 7 – Topographical survey of headwall at Bigley Ditch

A CCTV survey was undertaken to inspect the drainage arrangements found at the site, where the manhole chamber and incoming/outgoing connections were surveyed – Appendix 2. The survey confirms the connection between the manhole and the headwall located in the right bank of Bigley Ditch.

A permanent water level was also found in the surface water pipework upstream of the manhole chamber MH01, potentially indicating the presence of a rising main. From MH01 to the watercourse the pipe falls 200mm over a 6m length so the final section is a 1 in 30 gravity outfall. The proposed SuDS system utilises this outfall to avoid any work in the watercourse.

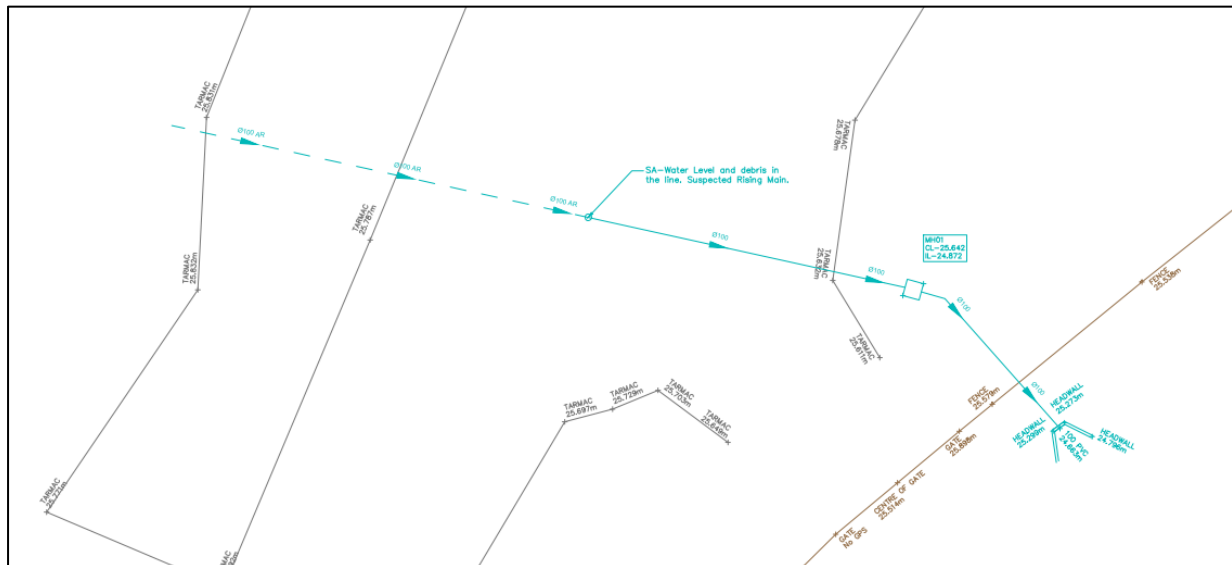


Figure 8 – Topographic Survey Extract

2.4 Proposed Development

The development plans show the new arrangements to comprise a depollution building and a hazardous waste storage. A weighbridge, a welfare unit and various vehicular parking bays are also part of the new arrangements, see Figure 9.

The new building covers a total area of 168m², whilst the hazard waste storage area covers a total of 73m². The proposed depollution building details are shown in Figure 10. The other details are shown in Figure 11 to Figure 13.

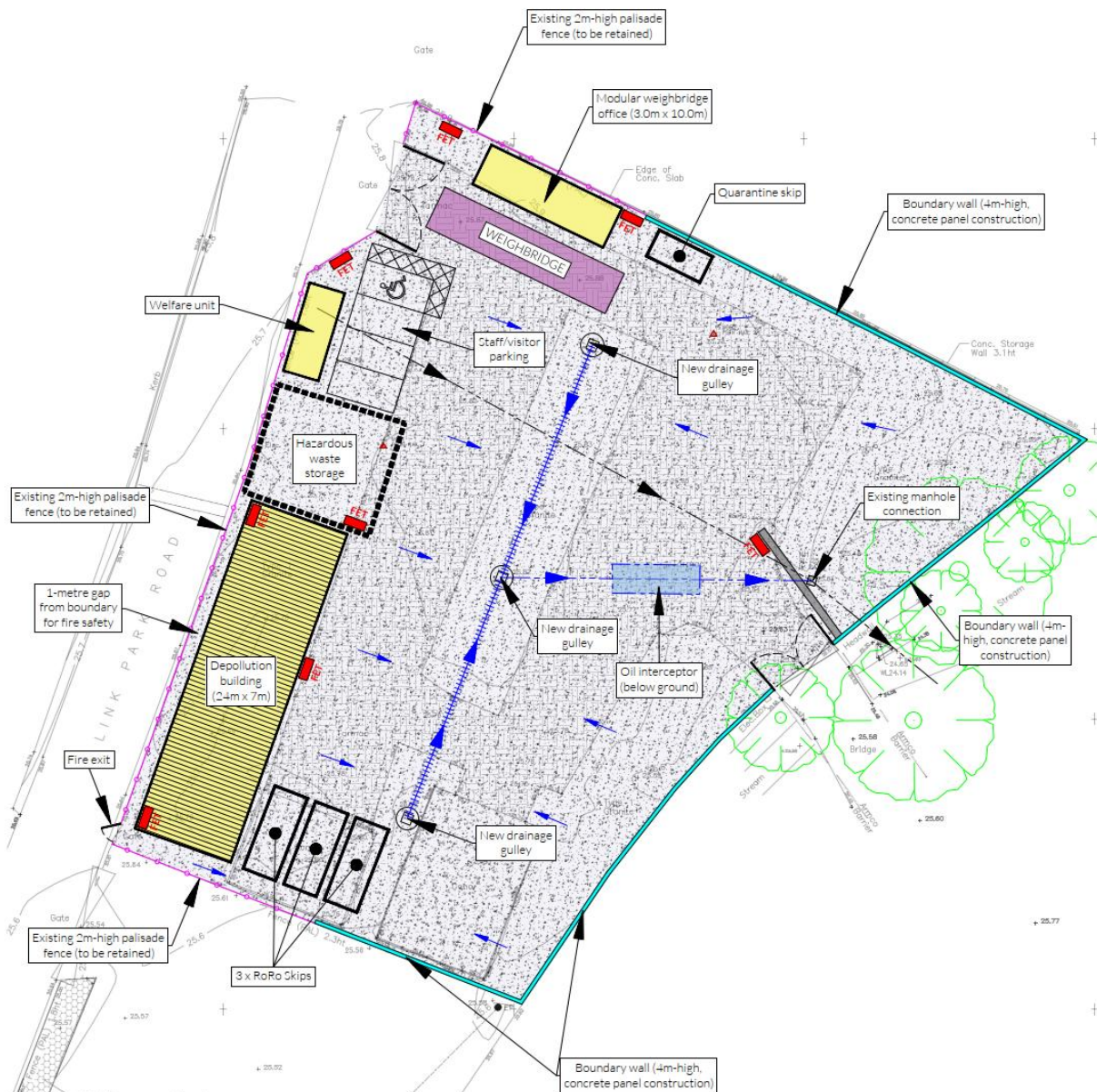


Figure 9 – Proposed Site Layout – Source Oaktree drawing

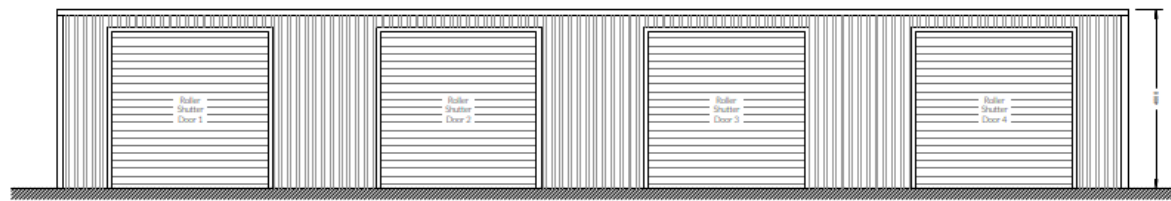


Figure 1: Front (East-Facing) Elevation

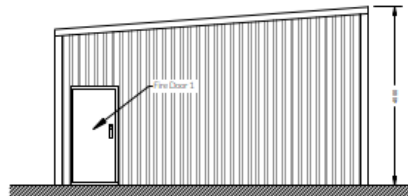


Figure 2: Side 1 (South-Facing) Elevation

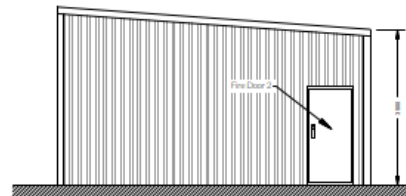


Figure 3: Side 2 (North-Facing) Elevation

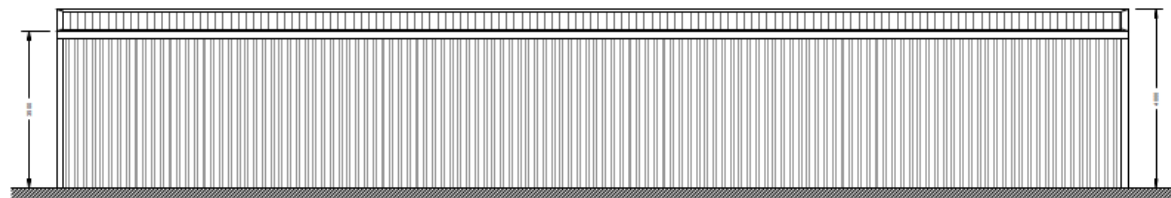


Figure 4: Rear (West-Facing) Elevation

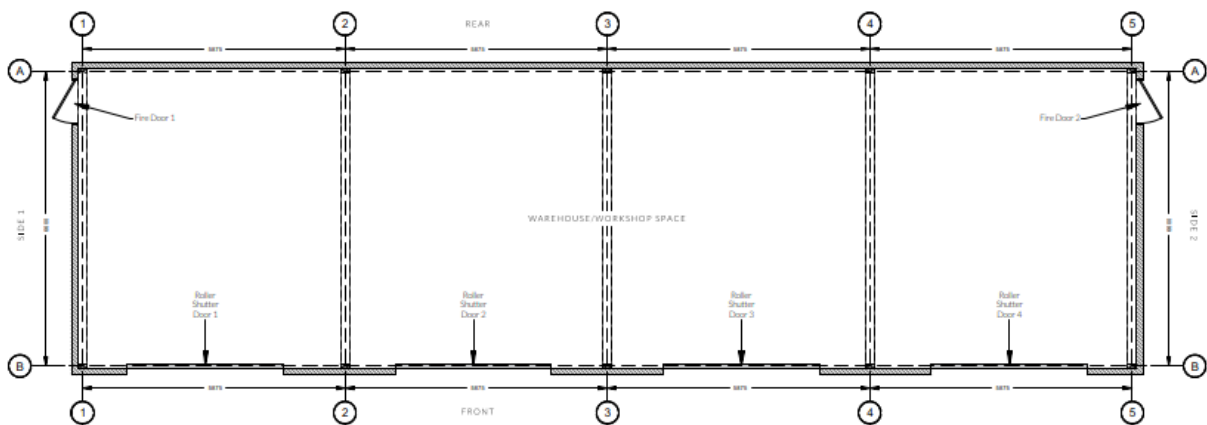


Figure 5: Floor Plan

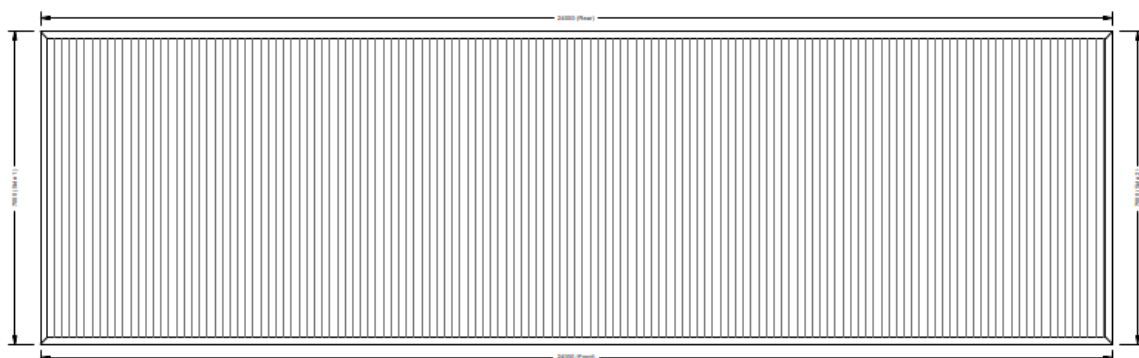


Figure 6: Roof Plan

Figure 10 – Depollution Building – Source Oaktree drawing

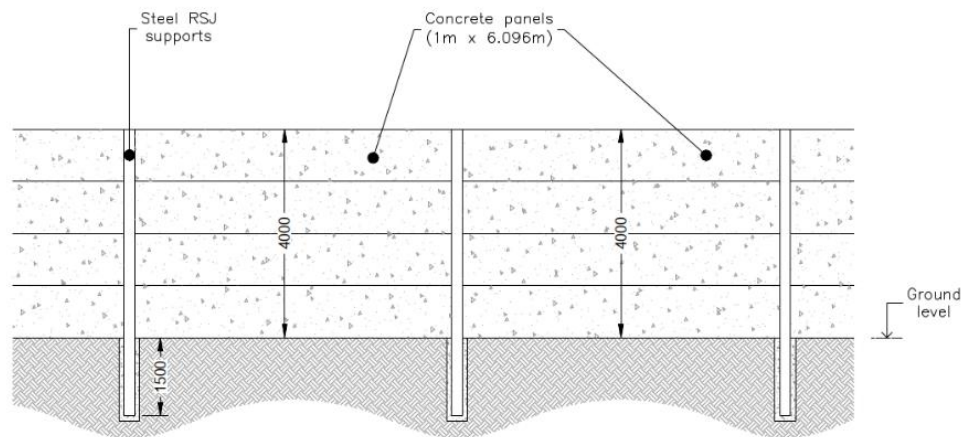


Figure 11 – Boundary Treatment – Source Oaktree drawing

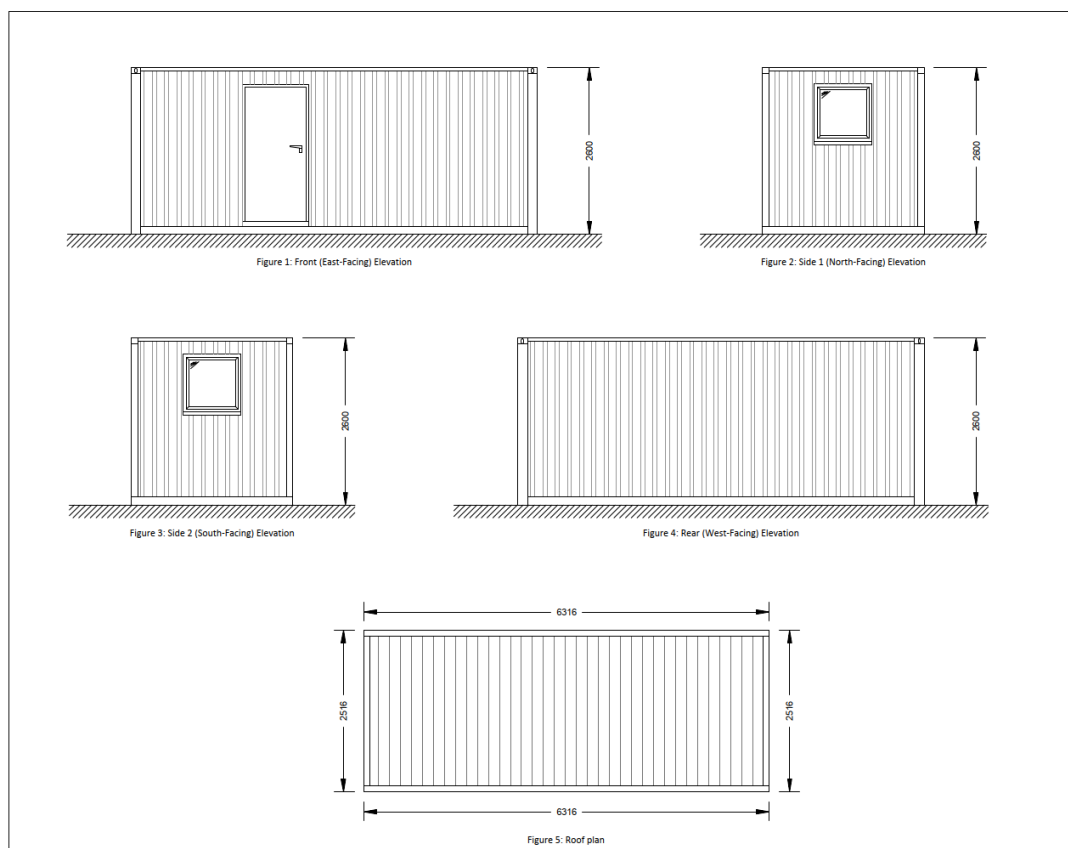


Figure 12 – Welfare Building – Source Oaktree drawing

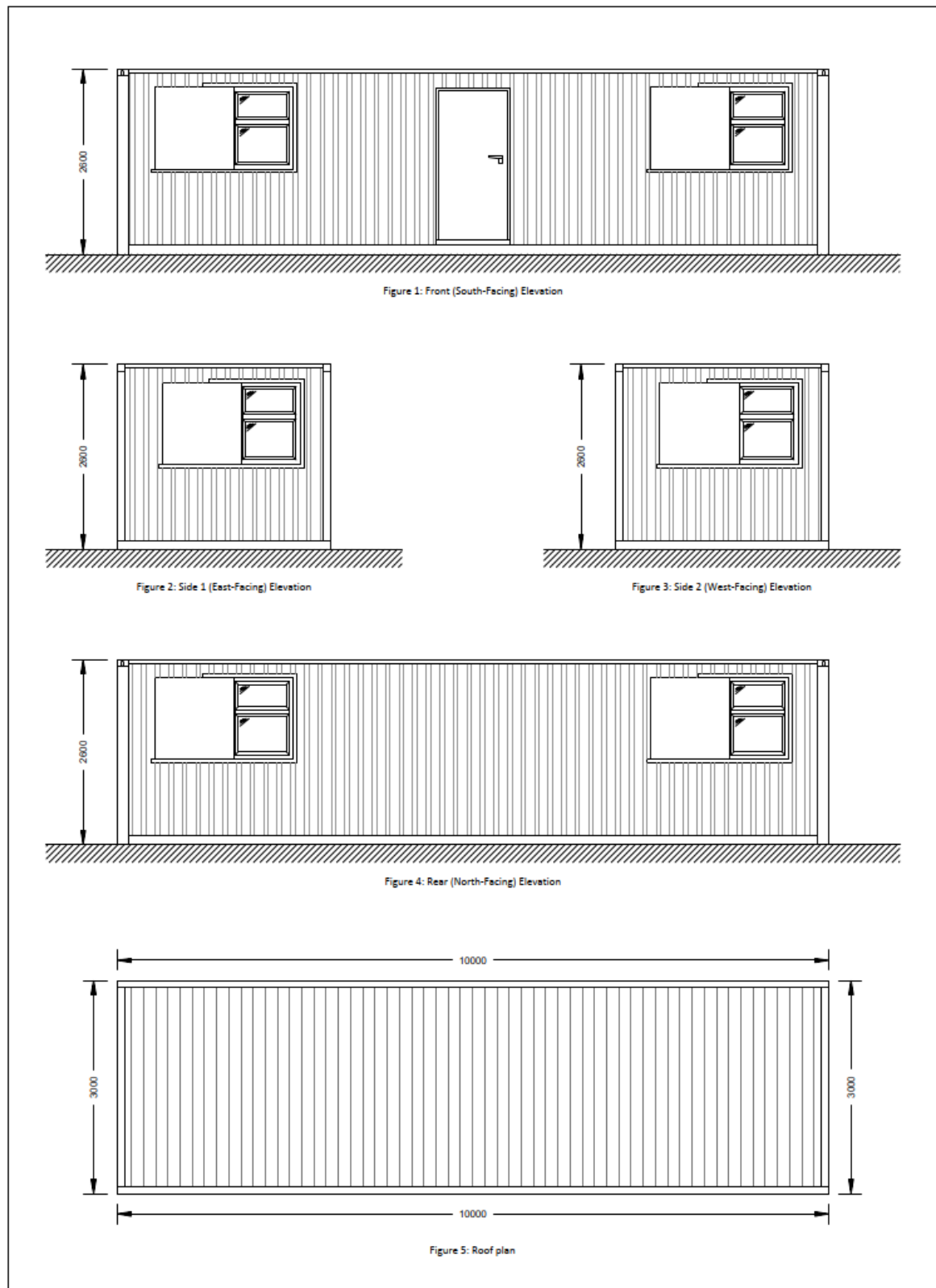


Figure 13 – Proposed Office Building – Source Oaktree drawing

2.5 Ground Conditions

The BGS *webmaps* show the site and its immediate surroundings to be underlain by alluvium deposits, which are in turn underlain by the London Clay Formation, Figure 14.

Soilscapes maps the soil below the site as Loamy and clayey floodplain soils with naturally high groundwater, see Figure 15. Neither of these classifications is compatible with soakaways.

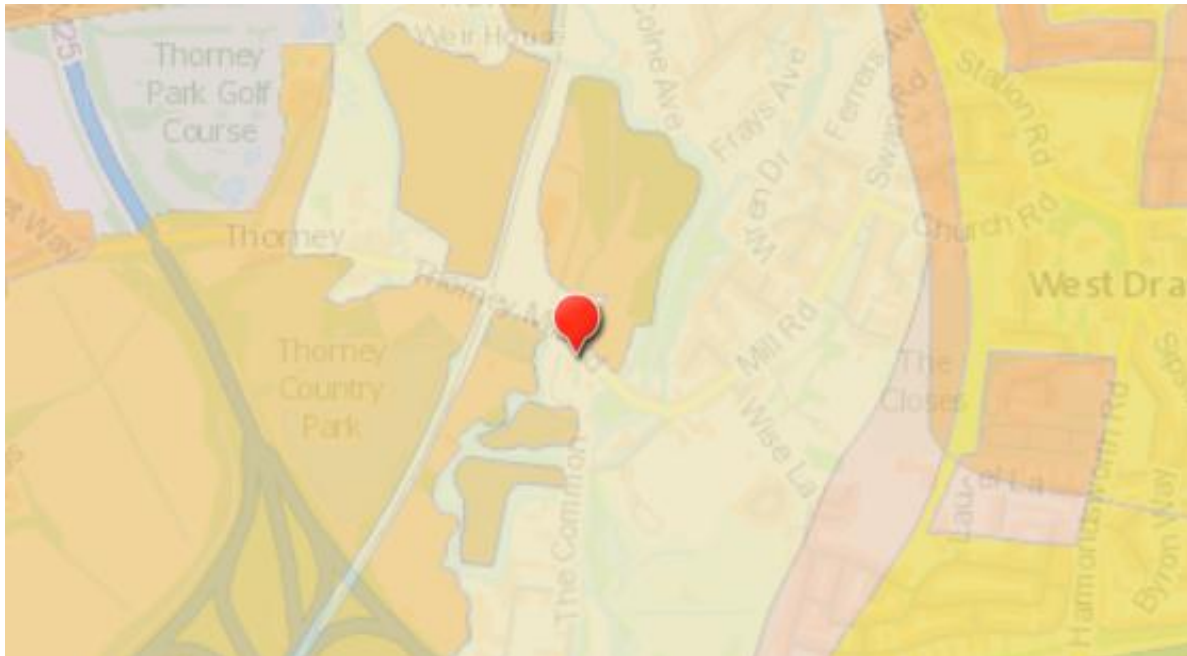


Figure 14 – British Geological Survey (<https://mapapps2.bgs.ac.uk/geoindex/home.html>)

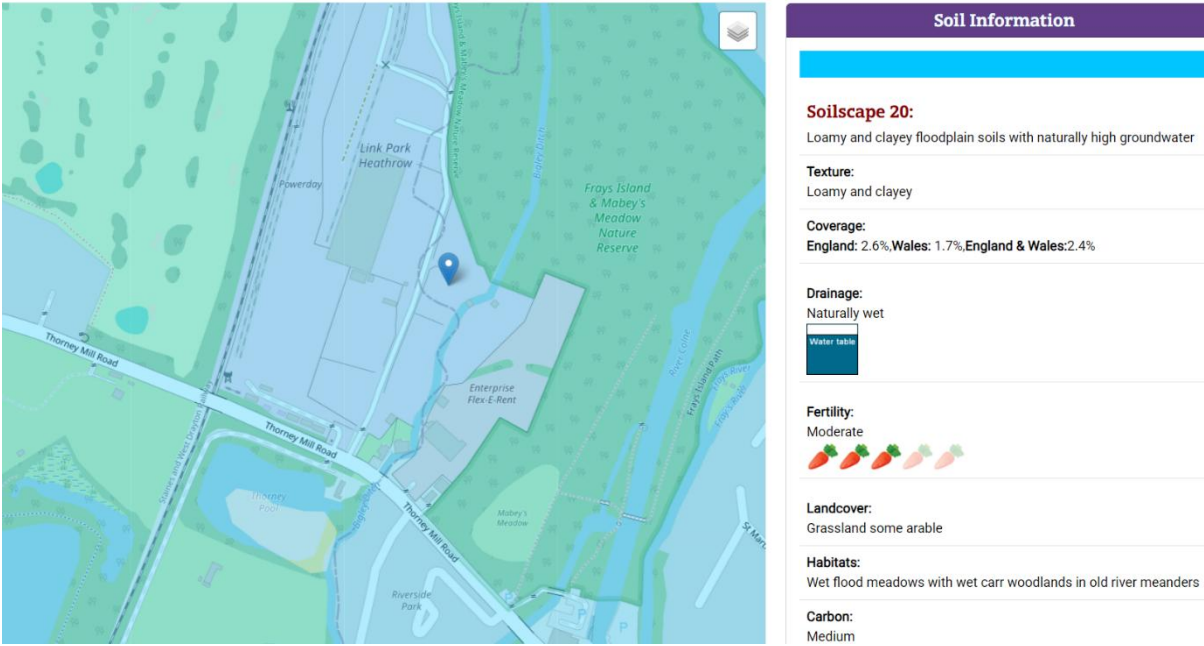


Figure 15 – Soilscape Mapping

3 FLOOD RISK

3.1 Flood Zones

Consultation of the Flood Zone *wms* dataset shows the southwest edge of the Application Site to be affected by Flood Zones 2 and 3 – Figure 16.

At the same time, the flood extents appear to indicate that Bigley Ditch remains within banks near the Application Site, potentially indicating that the flood extents shown outside the banks of the watercourse may be the result of the limited resolution of the hydraulic model grid and inherent elevation dataset.

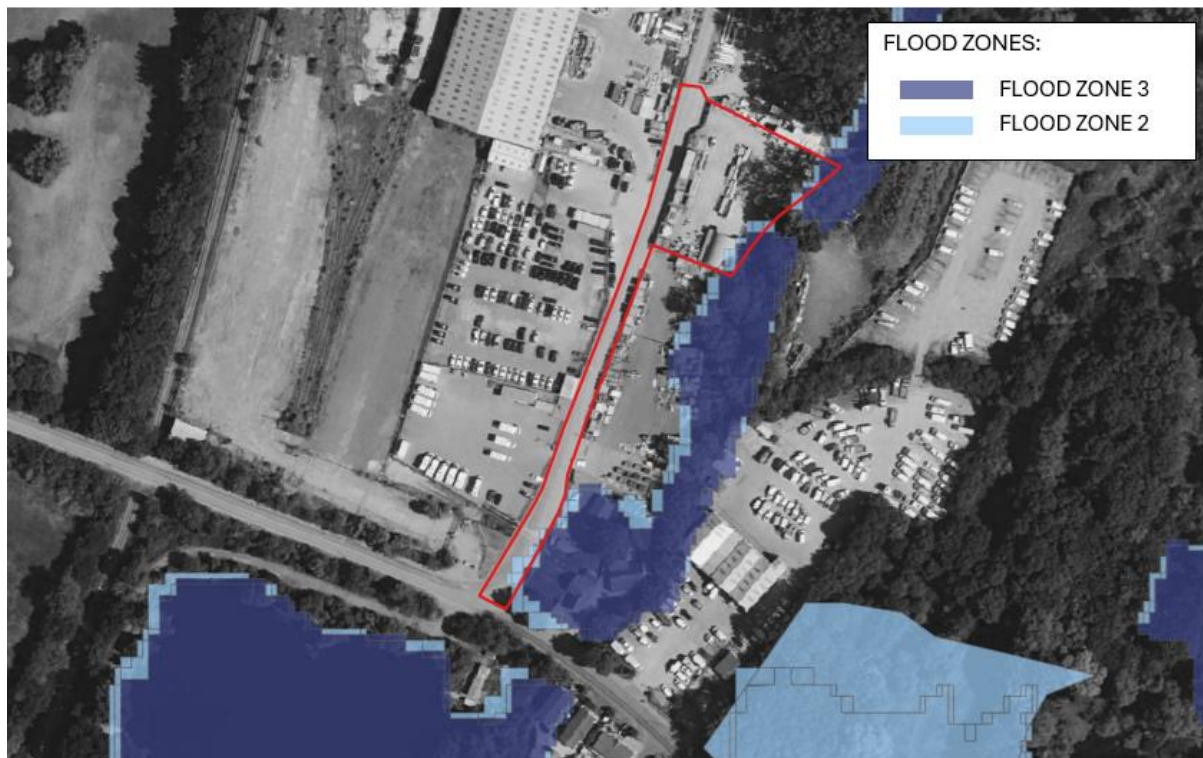


Figure 16 – Extract from the EA's Flood Zones dataset

3.2 Climate Change Impact

The *gov.uk* guidance states that the central and higher central allowances should be taken in account when assessing flood risk in flood zone 2 and flood zone 3a. The central allowance should in turn be used for less vulnerable developments.

The appropriate climate change allowance to be applied is detailed in the Hydrology Data Explorer. This source states that the Central 2080's peak river flow allowance is 21% for the Colne Management Catchment.

The Environment Agency's Product 6 provides flood extents and flood levels for the 100-year 20% climate change allowance, which is deemed reasonably close to the *gov.uk* required allowance, and therefore the 20% allowance will be adopted to inform this assessment.

3.3 Environment Agency Consultation (Product 6)

In April 2026 the Environment Agency was contacted and Product 6 was requested. As part of the response, the EA provided detailed hydraulic modelling outputs, including flood extents and flood levels.

The flood extents for the defended and undefended 0.1%AEP flood events were compared, and it was found that the extents are relatively similar and therefore it can be concluded that the site does not benefit from the protection of flood defences up to the 0.1%AEP flood event.

As part of the detailed hydraulic modelling data, the defended 1%AEP20CC water elevations were provided. The design flood level (1%AEP20CC) was assessed as 24.56m AOD i.e. 840mm below the lowest bank level adjacent to the boundary of the site. This indicates that flood extents remain within the banks of the watercourse for the design flood event.

Albeit the 2D flood levels for the 0.1%AEP were not provided as part of the hydraulic modelling data, the 1D nodes show flood levels within the banks of the watercourse to reach 24.66m AOD, which remain significantly below the lowest bank level of 25.40m AOD.



Figure 17 – Environment Agency's Product 6 Flood Levels (1%AEP20CC)

3.4 Flood Plain Compensation

Albeit the Flood Zones dataset shows the Application Site to be affected by Flood Zone 2 and Flood Zone 3, detailed hydraulic modelling outputs provided by the Environment Agency show both the 1%AEP20CC and the 0.1%AEP to remain within the banks of the channel.

Therefore, the Application Site remains dry up to the design flood event and no provision for floodplain compensation is required.

3.5 Surface Water Flood Risk

The Environment Agency's surface water flood extents show that the Application Site remains dry for all storm events up to the 0.1%AEP+CC event, as shown in Figure 18. The only exception is a small part of the access road at the junction with Thorney Mill Road (Figure 19), where a limited part of the road is affected. Notwithstanding this, no disruption to access and egress from/to site is envisaged.

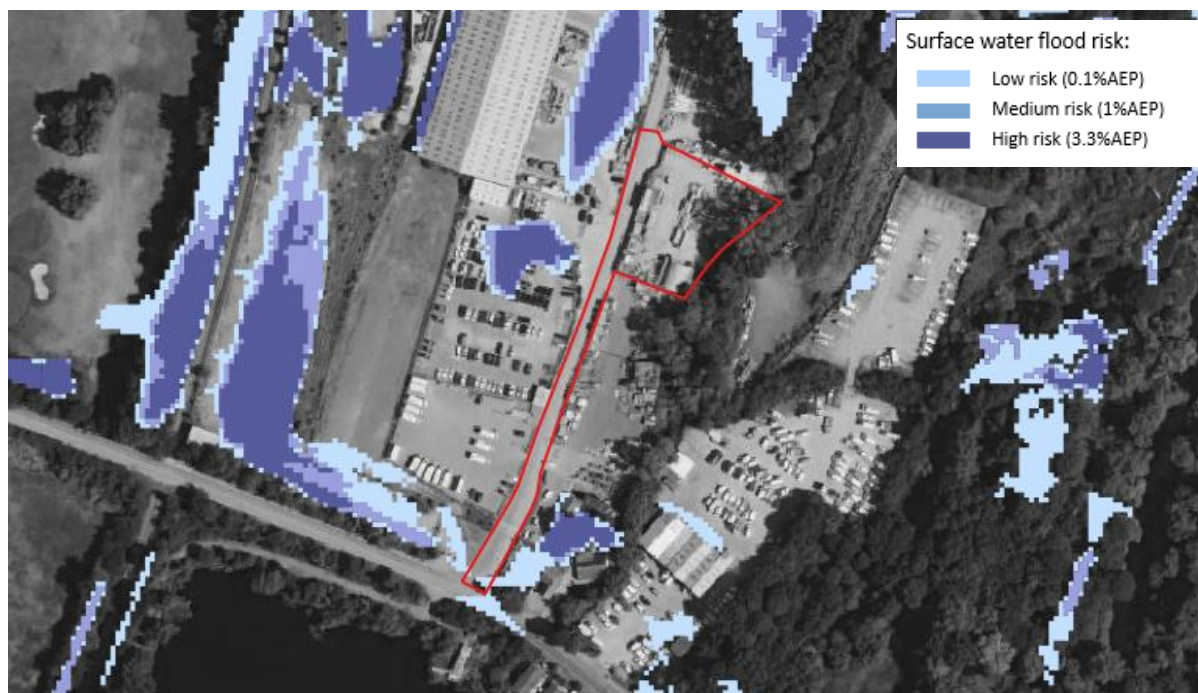


Figure 18 – EA's Surface Water Flood Risk – Climate Change Scenario

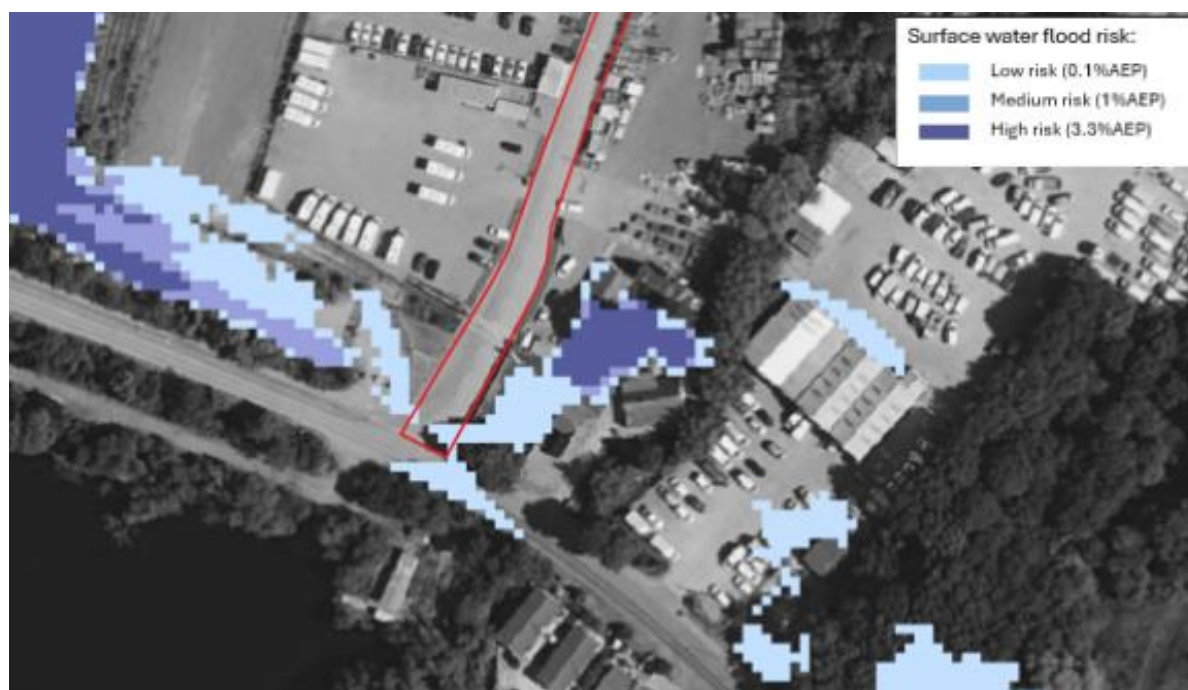


Figure 19 – Detail of Surface Water Flood Risk at link between Link Park Road and Thorney Mill Road

3.6 Groundwater Flood Risk

The *gov.uk* Long-Term Flood Risk Map states that the area is not in a groundwater flood alert area.

The BGS webmap was consulted and various local borehole records were inspected. Borehole ref. TQ07NE307 recorded a groundwater level of 1.3m BGL, which indicates the presence of high groundwater levels.

3.7 Summary of Flood Risks

The site is at low to medium risk of flooding from all sources as shown in Table 1.

Key sources of flooding	Possibility at Site
Fluvial (Rivers)	<i>Very Low Risk – Flood Zone 1</i>
Tidal	<i>N/A</i>
Groundwater	<i>No site-specific information, but a nearby borehole record shows a groundwater level of 1.3m BGL, indicating the presence of high groundwater levels</i>
Sewers	<i>A private drain crosses the site, however there is no change in diameter or incoming connections that may prompt flooding</i>
Surface water	<i>Most of the site is at very low risk from surface water flooding, A very limited part of the access to Thorney Mill Road is shown at low risk from surface water flooding, albeit this is not expected to interfere with the access and egress to/from the site</i>
Infrastructure failure	<i>Part of the access to Thorney Mill Road is affected by reservoir flooding. However, the developable area of the site remains dry in the event of a breach</i>

Table 1 – Summary of sources of flood risk to the site

3.8 Flood Mitigation measures

It is expected that the development will remain dry throughout its lifetime and therefore no mitigation measures are deemed required to address flood risk.

4 SURFACE WATER DRAINAGE PROPOSALS

4.1 Drainage Philosophy

The site will be redeveloped into a fully paved area to support metal recycling activities. The site will see the development of a depollution building, a hazardous waste storage area, a weighbridge, office and welfare building.

The site will be designed to discharge at very close to Greenfield Runoff Rates which are considerably lower than the current day Brownfield Runoff rates from the already hard paved site. The current day, Greenfield and proposed rates are shown in Table 2.

Return Period	Current Brownfield runoff rate (l/s)	Greenfield equivalent runoff rate (l/s)	Post-development discharge rate (l/s)
1-year	43	0.30 (2-year)	1.3
30-year	108	0.75	1.4
100-year	139.5	1.01	1.6

Table 2 – Comparison between Current Day Brownfield runoff rates and proposed post-development discharge rates

As stated in section 2.5, the site is noted to be underlain by the London Clay Formation and nearby boreholes have shown potentially high groundwater levels, which may compromise the use of infiltration SuDS. As an alternative, surface water runoff generated at the site will be partly harvested for rainwater reuse, and attenuated to greenfield runoff rates prior to discharge into Bigley Ditch. To ensure that the development does not increase the downstream flood risk within Bigley Ditch, a SuDS scheme is proposed to deal with the predicted 40% increase in rainfall due to Climate Change and is shown in Figure 20.

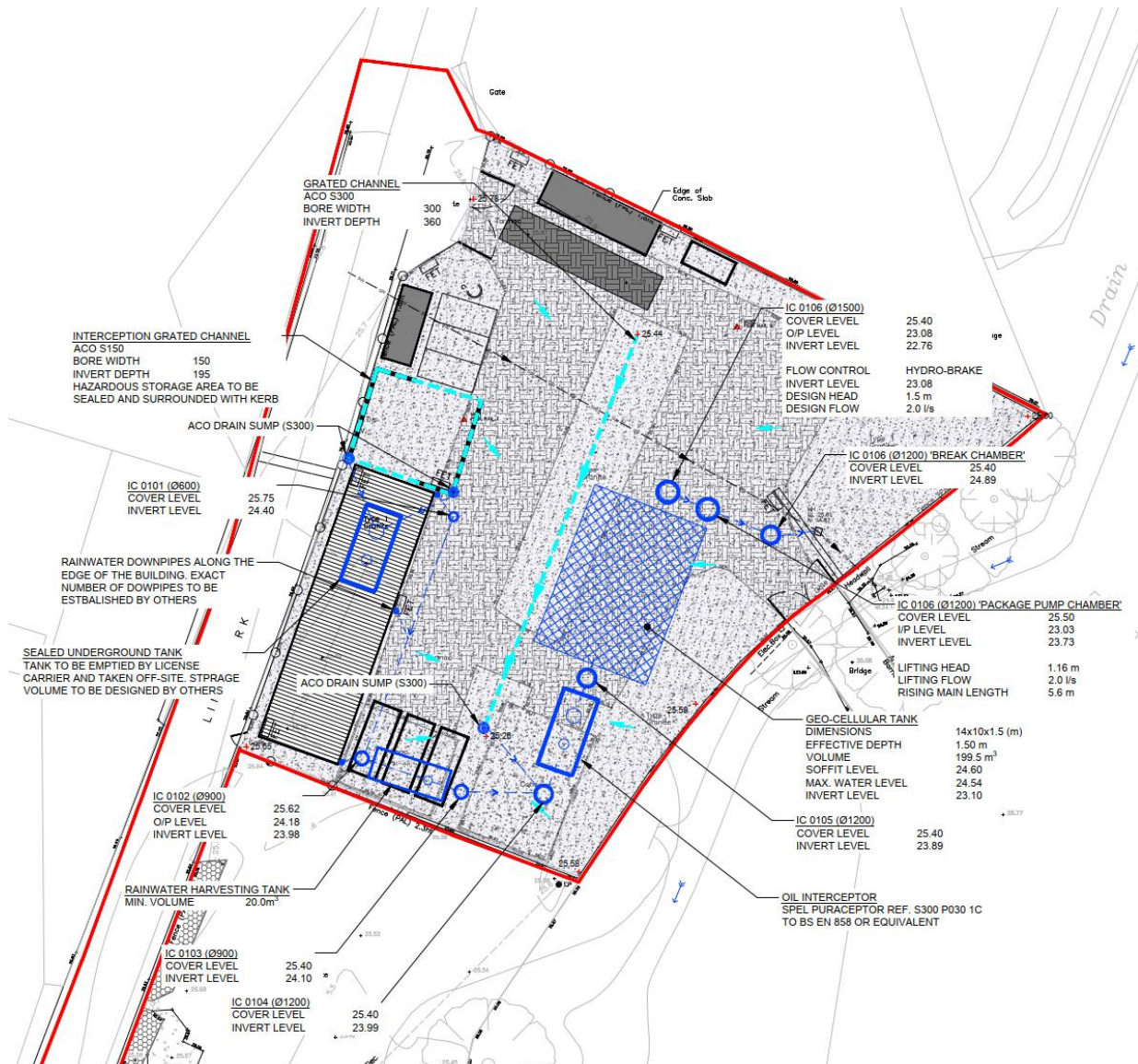


Figure 20 – Surface Water Drainage Strategy

4.2 Rainwater Harvesting

Rainwater harvesting is proposed from the depollution building roof area and reused for non-potable ends. Therefore, a rainwater harvesting tank with a minimum storage volume of 20m³ is proposed on the basis of the lowest of the following:

- A yield rainfall volume for a catchment area of 80m² and a SAAR of 621mm (overall efficient of 81%), over a period of 60 days;
- A storage requirement of 333 l/day over a dry period of 60 days, including a dedicated firefighting volume.

4.3 Storage Requirements

To slow down the rate of runoff to 1.9 l/s the proposal comprises an attenuation tank under the recycling yard. The tank provides a total volume of 199.5m³ and a Hydro-Brake flow control chamber (58mm outlet) to restrict flows on the basis of a design flow of 2.0 l/s. Due to the depth of the attenuation tank, a package pump chamber is required to lift flows and to achieve a gravity connection to the existing private drain that crosses the site.

The ownership of the surface water drain that crosses the site could not be established. Public sewer records were requested from Thames Water and it was confirmed that Thames Water have no assets recorded at the site. The CCTV survey suggests that the pipe could be a pumping main across the site up to MH01 that is near the eastern boundary, except for the 6m long outfall section where the proposed drainage connects.

The system has been analysed for rainfall events up to the 1 in 100-year plus 40% Climate Change and for all storm durations between 15 minutes and 7-days, with a full modelling report provided in Appendix 3. The hydraulic model takes in account the full developable area of the site (2,140m²) with a runoff coefficient of 100%. The comparison between greenfield runoff rates and post-development attenuated discharge rates can be found in Table 3.

The drainage layout plan and construction details can be found in Appendix 4.

4.4 Water Quality

Any liquids arising inside the depollution building are collected into the internal below slab level tank. This tank is emptied as required by a licenced waste carrier and taken off site for treatment.

From a water quality perspective, the scheme includes an oil interceptor upstream of the attenuation tank to remove any pollutants, including hydrocarbons, heavy metals and silt. This is an alternative to the use of green SuDS, which cannot be delivered under the present development due to the lack of space available and the limitations associated with the day-to-day operations.

In terms of the biodiversity and amenity criteria, these pillars could not be addressed due to the limited scope for open and green SuDS. Notwithstanding this, biodiversity will be protected by also protecting water receptors.

Return Period	Greenfield runoff rate (l/s)	Post-development discharge rate (l/s)
2-year	0.30	1.3
30-year	0.75	1.4
100-year	1.01	1.6
100-year + 40%CC	-	1.9

Table 3 – Comparison between greenfield runoff rates and post-development discharge rates

4.5 Drainage Maintenance

The maintenance of all SuDS components will be in accordance with the best practices and the CIRIA C753 The SuDS Manual.

The recommended Operation and Maintenance requirements for the proposed drainage system are outlined in Table 4.

Maintenance Task	Description	Frequency
Regular Maintenance		
Litter management	Pick up all litter paved areas, planters and remove from site.	Monthly
Inlets and outlets	Inspect monthly, remove silt from paved areas and debris. Strim 1m round for access.	Monthly
Hard surfaces	Sweep all paving regularly.	As required
Occasional tasks		
Inspection and control chambers	Annual inspection, remove silt and check free flow. For rainwater harvesting tanks, clean filters.	Annually
Remedial work		
Repairs	Inspect SuDS system regularly to check for damage or failure. Undertake remedial work as required.	As required

Table 4 – Drainage Maintenance Schedule

5 SUMMARY AND CONCLUSIONS

A summary of the main conclusions of this FRA-SWMP are presented below:

- The proposal is for the redevelopment of an existing 2,140m² sqm yard to support metal recycling activities, located on a plot of land East of and adjacent to the Link Park Road (UB7 7EZ). The Red-Line boundary is larger as it also includes part of the Link Park Road.
- The proposals comprise a fully paved yard, with no permeable or grassed areas.
- The Flood Map for Planning shows the site to be slightly affected on the very eastern edge by Flood Zone 2 and Flood Zone 3, however detailed hydraulic modelling data provided by the Environment Agency shows the developable area of the site to remain outside the 1%AEP+20CC flood extents, with flows contained wholly within the banks of the watercourse channel. The design flood level was assessed as 24.56m AOD, which remains 840mm below the lowest bank level.
- The developable area of the Application Site is therefore deemed to be at very low risk from all sources of flooding.
- In terms of drainage arrangements, the drainage scheme relies on an underground geo-cellular tank to restrict outflows to a rate no greater than 1.9 l/s up to the 1%AEP40CC storm event.
- The drainage scheme also makes use of rainwater harvesting to promote reuse of rainwater generated in the roof of the depollution building.

REFERENCES

Author	Date	Title/Description
Department for Levelling Up, Housing and Communities		National Planning Policy Framework - Planning practice guidance
Department for Levelling Up, Housing and Communities		National Planning Policy Framework
HM Government		The Flood Map for Planning Flood map for planning - GOV.UK (flood-map-for-planning.service.gov.uk)
EA and DEFRA	Post April 2025	LiDAR plus GIS data on flood risk – all latest releases and current versions.
EA West Midlands	March 2023	Climate Change Allowances for Planning
DEFRA	July 2025	National standards for sustainable drainage systems (SuDS)

APPENDIX 1: Topographical Survey



EXISTING SURFACE

- Concrete
- Tarmac
- Oversize Granite
- Rolled Type 1 Granite

KEY

- BH Benchole
- BL Bollard
- C/B Close boarded Fence
- CL Chain Link Fence
- CL Cover Level
- CT Contour Tree
- Conc Concrete
- CTV Cable TV Cover
- DV Down Valve
- EP Electricity Pole
- EP Engraved Floor Level
- FL Fine Hydrant
- FL Flood Light
- G Gas
- GL Gas Well
- HT Height
- IC Inspection Cover
- IL Invert Level
- IL Low Level
- LSS Loosefill Safety Surface
- LW Lined Wall
- LP Lamp Post
- LP Non Light
- P/R Post & Rail Fence
- P/W Post & Wire Fence
- PAL Palisade Fence
- PS Playground Safety Surface
- PSIN Survey Station
- RE Rising Eye
- RP Rain Water Pipe
- RS Road Sign
- SC Service Cover
- SV Stop Valve
- TBM Temporary Bench Mark
- TCD Traffic Calming Device
- TEL Telecommunications
- TL Traffic Light
- TP Telegraph Pole
- TPS Tactile Paving Slabs
- VP Vent Pipe
- W Window
- W/M Wire Mesh
- WL Water Level
- WM Water Meter

APPENDIX 2: CCTV Survey

Project**Project Name:** 0746 Link Park-UB7 7EZ**Project Description:** WinCan Import in Miraculix Standard**Project Date:** 14/11/2025**RESERVOIR & WATER**
Services



Table of Contents

Project Name
0746 Link Park-UB7 7EZ

Project Number

Project Date
14/11/2025

Project Information	P-1
Section Item 1: MH01 > OUTFALL 01 (MH01X)	1
Section Item 2: MH01A > MH01 (MH01AX)	3



Project Information

Project Name
0746 Link Park-UB7 7EZ

Project Number

Project Date
14/11/2025

Client

Company: Reservoir and Water Services
Description: CCTV and Topographical Surveys
Contact: Tom Butler
Department: 0746 Link Park-UB7 7EZ
Email: tom.butler@reservoirandwater.co.uk



Site

Company: Reservoir and Water Services
Description: CCTV and Topographical Surveys
Contact: Tom Butler
Department: 0746 Link Park-UB7 7EZ
Email: tom.butler@reservoirandwater.co.uk



Contractor

Company: Reservoir and Water Services
Description: 0746 Link Park-UB7 7EZ
Street: 0746 Link Park-UB7 7EZ
Town or City: Iver
Email: tom.butler@reservoirandwater.co.uk





Section Inspection - 17/11/2025 - MH01X

Item No. 1	Insp. No. 1	Date 17/11/25	Time 5:44	Client's Job Ref 01	Weather No Rain Or Snow	Pre Cleaned No	PLR MH01X
Operator LC		Vehicle Not Specified		Camera Mc	Preset Length Not Specified	Legal Status Not Specified	Alternative ID 1

Town or Village:	West Drayton	Inspection Direction:	Downstream	Upstream Node:	MH01
Road:	Thorney Mill Road	Inspected Length:	6.15 m	Upstream Pipe Depth:	
Location:	Other walkway	Total Length:	6.15 m	Downstream Node:	OUTFALL 01
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:		Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:

Recommendations:

Scale:	1:54	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m MH01							
		0.00	MH	Start node, manhole, reference: MH01	00:00:01		
		0.00	WL	Water level, 5% of the vertical dimension	00:00:02		
		0.77	LR	Line deviates right	00:00:19	MH01X_ef dda387-e2 95-4b48-a	
		3.36	DER	Settled deposits, coarse, 5% cross-sectional area loss	00:00:41	MH01X_5 d0f0135-f2 8d-4204-9	3
		5.18	JDM	Joint displaced, medium	00:01:01	MH01X_9 ebad77c-1 627-45fe-a	1 / 3
		6.15	OCF	Finish node, other special chamber, reference: OUTFALL 01: OUTFALL VALVE	00:01:20	MH01X_6 4ba4c82-0 a89-442b-	
OUTFALL 01 Depth: m							

Construction Features

Structural Defects

Miscellaneous Features

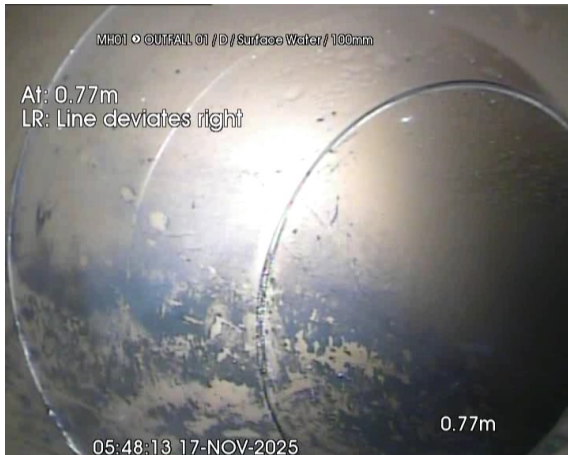
Service & Operational Observations

STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
1	1.0	0.2	1.0	1.0	2	2.0	0.7	4.0	3.0



Section Pictures - 17/11/2025 - MH01X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
1	Downstream	MH01X	01	



MH01X_efdda387-e295-4b48-abd0-4c790f7df31d_20251114_150530_501.jpg, 00:00:19, 0.77 m
Line deviates right



MH01X_5d0f0135-f28d-4204-93b7-4b86a68ea43d_20251114_150558_942.jpg, 00:00:41, 3.36 m
Settled deposits, coarse, 5% cross-sectional area loss



MH01X_9ebad77c-1627-45fe-aa61-7b387f23d6e7_20251114_150602_827.jpg, 00:01:01, 5.18 m
Joint displaced, medium



MH01X_64ba4c82-0a89-442b-89d8-16b16120b461_20251114_150607_229.jpg, 00:01:20, 6.15 m
Finish node, other special chamber, reference: OUTFALL 01, OUTFALL VALVE



Section Inspection - 17/11/2025 - MH01AX

Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
2	2	17/11/25	5:52	01	No Rain Or Snow	No	MH01AX
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
LC		Not Specified		Mc	Not Specified	Not Specified	1

Town or Village:	West Drayton	Inspection Direction:	Upstream	Upstream Node:	MH01A
Road:	Thorney Mill Road	Inspected Length:	10.14 m	Upstream Pipe Depth:	
Location:	Other walkway	Total Length:	10.14 m	Downstream Node:	MH01
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:		Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:

Recommendations:

Scale: 1:88 Position [m] Code Observation MPEG Photo Grade

Depth: m
MH01



0.00	MH	Start node, manhole, reference: MH01	00:00:04	
0.00	WL	Water level, 10% of the vertical dimension	00:00:05	
0.12	WL	Water level, 80% of the vertical dimension	00:00:18	
0.34	REM	General remark: SUSPECTED RISING MAIN DUE TO IMMEDIATE WATER LEVEL	00:00:21	MH01AX_523d4bc2-a77b-484d
0.55	S01 CUW	Loss of vision, camera under water, start	00:00:27	
10.10	REM	General remark: FEELS LIKE DES IN LINE	00:02:57	
10.14	F01 CUW	Loss of vision, camera under water, finish	00:02:47	
10.14	SA	Survey abandoned: UNABLE TO PUSH CAM	00:02:51	MH01AX_7bb61f7a-6cf7-4328-

Construction Features

Structural Defects

Miscellaneous Features

Service & Operational Observations

STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

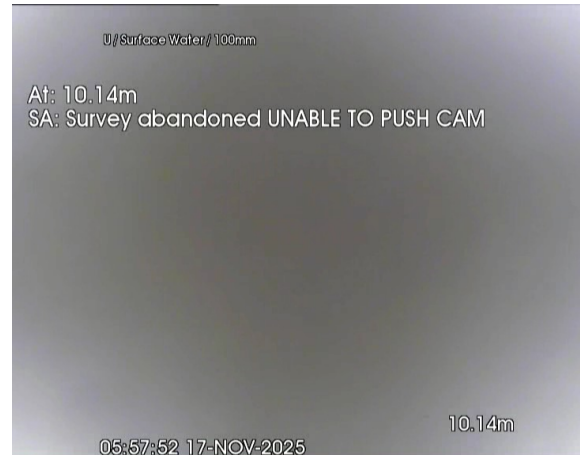


Section Pictures - 17/11/2025 - MH01AX

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
2	Upstream	MH01AX	01	



MH01AX_523d4bc2-a77b-484d-8643-d08ce54c795f_20251114_171910_855.jpg, 00:00:21, 0.34 m
General remark, SUSPECTED RISING MAIN DUE TO IMMEDIATE WATER LEVEL



MH01AX_7bb61f7a-6cf7-4328-a855-52e4dcea20f7_20251114_172145_774.jpg, 00:02:51, 10.14 m
Survey abandoned, UNABLE TO PUSH CAM

APPENDIX 3: Drainage Modelling

Project: WRM Link Road Brownfield Runoff Rates		Date: 31/07/2026		Corner Water Consulting	
		Designed by: CWC	Checked by:		Approved By: CWC
Report Details: Type: Junctions Storm Phase: Proposed		Company Address: Corner Water Consulting Ltd 1 Cricklade Court Cricklade Street, Swindon SN1 3EY			

Name	Junction Type	Easting (m)	Northing (m)	Cover Level (m)	Depth (m)	Invert Level (m)	Sump Depth (m)	Chamber Shape
S0101	Manhole	505250.157	179410.736	25.750	1.350	24.400	0.000	Circular
S0102	Manhole	505242.513	179390.624	25.620	1.640	23.980	0.200	Circular
S0103	Manhole	505249.125	179388.570	25.400	1.300	24.100	0.000	Circular
S0104	Manhole	505257.659	179387.657	25.400	1.410	23.990	0.000	Circular
S0105	Manhole	505261.231	179397.362	25.400	1.510	23.890	0.000	Circular
S0106	Manhole	505268.025	179412.795	25.400	2.640	22.760	0.320	Circular
S0107_pump	Manhole	505271.351	179411.376	25.500	2.766	22.734	0.000	Circular
S0108	Manhole	505276.602	179409.220	25.400	0.483	24.917	0.000	Circular
MH EX01	Manhole	505281.312	179409.628	25.610	0.740	24.870	0.000	Circular
J0101	Simple Junction	505265.493	179425.908					
SUMP_0202	Manhole	505252.677	179393.133	25.260	0.711	24.549	0.000	Rectangular
Oil Separator	Simple Junction	505259.915	179393.754					

Name	Diameter (m)	Diameter (m)	Width (m)	Lock
S0101	1.200			None
S0102	1.200			None
S0103	1.200			None
S0104	1.200			None
S0105	1.200			None
S0106	1.500			None
S0107_pump	1.500			None
S0108	1.200			None
MH EX01	1.200			None
J0101				
SUMP_0202		0.360	0.500	None
Oil Separator				

Inlets

Junction	Inlet Name	Incoming Item(s)	Bypass Destination	Capacity Type
S0101	Inlet	roof	(None)	No Restriction
S0102	Inlet	1.000	(None)	No Restriction
S0103	Inlet	1.001	(None)	No Restriction
S0104	Inlet	1.002	(None)	No Restriction
	Inlet (1)	2.001	(None)	No Restriction
S0105	Inlet	1.003b	(None)	No Restriction
S0106	Inlet (1)	1.004b	(None)	No Restriction
S0107_pump	Inlet	1.005	(None)	No Restriction
S0108	Inlet	1.006	(None)	No Restriction
MH EX01	Inlet	1.007	(None)	No Restriction
J0101	Inlet	yard_03	(None)	No Restriction
	Inlet (1)	yard_02	(None)	No Restriction
	Inlet (2)	Catchment Area	(None)	No Restriction
	Inlet (3)	yard_01	(None)	No Restriction
SUMP_0202	Inlet	Rectangular Channel	(None)	No Restriction
Oil Separator	Inlet	1.003a	(None)	No Restriction

Project: WRM Link Road Brownfield Runoff Rates	Date: 31/07/2026			Corner Water Consulting
	Designed by: CWC	Checked by:	Approved By: CWC	
Report Details: Type: Junctions Storm Phase: Proposed	Company Address: Corner Water Consulting Ltd 1 Cricklade Court Cricklade Street, Swindon SN1 3EY			

Outlets			
Junction	Outlet Name	Outgoing Connection	Outlet Type
S0101	Outlet	1.000	Free Discharge
S0102	Outlet	1.001	Free Discharge
S0103	Outlet	1.002	Free Discharge
S0104	Outlet	1.003a	Free Discharge
S0105	Outlet	1.004a	Free Discharge
S0106	Outlet	1.005	Hydro-Brake®
	Invert Level (m)	23.080	
	Design Depth (m)	1.500	
	Design Flow (L/s)	2.0	
	Objective	Minimise Upstream Storage Requirements	
	Application	Surface Water Only	
	Sump Available	☐	
	Unit Reference	CHE-0058-2000-1500-2000	
S0107_pump	Outlet	1.006	Pump
	Invert Level (m)	22.734	
	Depth (m)	Outflow (L/s)	
	0.010	5.0	
	2.000	5.0	
S0108	Outlet	1.007	Free Discharge
J0101	Outlet	Rectangular Channel	Free Discharge
SUMP_0202	Outlet	2.001	Free Discharge
Oil Separator	Outlet	1.003b	Free Discharge

Project: WRM Link Road Brownfield Runoff Rates	Date: 31/07/2026			Corner Water Consulting
	Designed by: CWC	Checked by:	Approved By: CWC	
Report Details: Type: Stormwater Controls Storm Phase: Proposed	Company Address: Corner Water Consulting Ltd 1 Cricklade Court Cricklade Street, Swindon SN1 3EY			



Cellular Tank

Type : Cellular Storage

Dimensions

Exceedance Level (m)	24.610
Depth (m)	1.500
Base Level (m)	23.100
Number of Crates Long	14
Number of Crates Wide	20
Number of Crates High	3
Porosity (%)	95
Crate Length (m)	1
Crate Width (m)	0.5
Crate Height (m)	0.5
Total Volume (m³)	199.510

Inlets

Inlet

Inlet Type	Point Inflow
Incoming Item(s)	1.004a
Bypass Destination	(None)
Capacity Type	No Restriction

Outlets

Outlet

Outgoing Connection	1.004b
Outlet Type	Free Discharge

Project: WRM Link Road Brownfield Runoff Rates		Date: 31/07/2026		Corner Water Consulting	
		Designed by: CWC	Checked by:		Approved By: CWC
Report Details: Type: Connections Storm Phase: Proposed		Company Address: Corner Water Consulting Ltd 1 Cricklade Court Cricklade Street, Swindon SN1 3EY			

Name	Length (m)	Connection Type	Slope (1:X)	Manning's n	Colebrook-White Roughness (mm)	Diameter / Base Width (mm)	Height (mm)	Upstream Cover Level (m)
1.000	21.516	Pipe	97.802		0.6	100		25.750
1.001	6.924	Pipe	86.550		0.6	100		25.620
1.002	8.583	Pipe	78.028		0.6	100		25.400
1.003a	6.502	Pipe	100.463		0.6	100		25.400
1.004a	1.744	Pipe	107.254		0.6	100		25.400
1.005	3.615	Pipe	78.524		0.6	100		25.400
1.006	5.677	Pipe	-2.601		0.6	75		25.500
1.007	4.727	Pipe	100.570		0.6	100		25.400
1.004b	1.876	Pipe	95.164		0.6	100		24.610
1.003b	3.840	Pipe	108.831		0.6	100		25.400
2.001	7.403	Pipe	13.244		0.6	225		25.260
Rectangular Channel	35.191	Rectangular Channel	195.505	0.015		300	360	25.440

Name	Upstream Invert Level (m)	Downstream Cover Level (m)	Downstream Invert Level (m)	Lock	Flow Restriction (L/s)	Culvert Type	Culvert Entrance	Wall Thickness (mm)
1.000	24.400	25.620	24.180	None		(None)	(None)	0
1.001	24.180	25.400	24.100	None		(None)	(None)	0
1.002	24.100	25.400	23.990	None		(None)	(None)	0
1.003a	23.990	25.400	23.925	None		(None)	(None)	0
1.004a	23.890	24.610	23.874	All		(None)	(None)	0
1.005	23.080	25.500	23.034	All	2.2	(None)	(None)	0
1.006	22.734	25.400	24.917	All	5.0	(None)	(None)	0
1.007	24.917	25.610	24.870	None		(None)	(None)	0
1.004b	23.100	25.400	23.080	None		(None)	(None)	0
1.003b	23.925	25.400	23.890	None		(None)	(None)	0
2.001	24.549	25.400	23.990	None		(None)	(None)	0
Rectangular Channel	25.080	25.260	24.900	All				

Name	Material	Trench Width (mm)	Bedding Material	Surrounding Material
1.000		0		
1.001		0		
1.002		0		
1.003a		0		
1.004a		0		
1.005		0		
1.006		0		
1.007		0		
1.004b		0		
1.003b		0		
2.001		0		
Rectangular Channel				

Project: WRM Link Road Brownfield Runoff Rates		Date: 31/07/2026		Corner Water Consulting	
		Designed by: CWC	Checked by:		Approved By: CWC
Report Details: Type: Manhole Schedule Storm Phase: Proposed		Company Address: Corner Water Consulting Ltd 1 Cricklade Court Cricklade Street, Swindon SN1 3EY			

Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
S0101	25.750 24.400	Diameter / Length: 1.200					Manhole
E:505250.157 N:179410.736	1.350						
			{a} 1.000	Pipe	24.400	Diam/Width:100	Not Applicable
S0102	25.620 23.980	Diameter / Length: 1.200	{1} 1.000	Pipe	24.180	Diam/Width:100	Manhole
E:505242.513 N:179390.624	1.640						
			{a} 1.001	Pipe	24.180	Diam/Width:100	Not Applicable
S0103	25.400 24.100	Diameter / Length: 1.200	{1} 1.001	Pipe	24.100	Diam/Width:100	Manhole
E:505249.125 N:179388.570	1.300						
			{a} 1.002	Pipe	24.100	Diam/Width:100	Not Applicable
S0104	25.400 23.990	Diameter / Length: 1.200	{1} 1.002	Pipe	23.990	Diam/Width:100	Manhole
E:505257.659 N:179387.657	1.410		{2} 2.001	Pipe	23.990	Diam/Width:225	
			{a} 1.003a	Pipe	23.990	Diam/Width:100	Not Applicable
S0105	25.400 23.890	Diameter / Length: 1.200	{1} 1.003b	Pipe	23.890	Diam/Width:100	Manhole
E:505261.231 N:179397.362	1.510						
			{a} 1.004a	Pipe	23.890	Diam/Width:100	Not Applicable

Project: WRM Link Road Brownfield Runoff Rates		Date: 31/07/2026		Corner Water Consulting	
		Designed by: CWC	Checked by:		Approved By: CWC
Report Details: Type: Manhole Schedule Storm Phase: Proposed		Company Address: Corner Water Consulting Ltd 1 Cricklade Court Cricklade Street, Swindon SN1 3EY			

Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
S0106	25.400 22.760	Diameter / Length: 1.500	{1} 1.004b	Pipe	23.080	Diam/Width:100	Manhole
E:505268.025	2.640						
N:179412.795			{a} 1.005	Pipe	23.080	Diam/Width:100	Not Applicable
S0107_pump	25.500 22.734	Diameter / Length: 1.500	{1} 1.005	Pipe	23.034	Diam/Width:100	Manhole
E:505271.351	2.766						
N:179411.376			{a} 1.006	Pipe	22.734	Diam/Width:75	Not Applicable
S0108	25.400 24.917	Diameter / Length: 1.200	{1} 1.006	Pipe	24.917	Diam/Width:75	Manhole
E:505276.602	0.483						
N:179409.220			{a} 1.007	Pipe	24.917	Diam/Width:100	Not Applicable
MH EX01	25.610 24.870	Diameter / Length: 1.200	{1} 1.007	Pipe	24.870	Diam/Width:100	Manhole
E:505281.312	0.740						
N:179409.628							Not Applicable
J0101		Diameter / Length: 0.300					Simple Junction
E:505265.493							
N:179425.908			{a} Rectangular Channel	Rectangular Channel	25.080	Diam/Width:300 Height:360	Not Applicable

Project: WRM Link Road Brownfield Runoff Rates		Date: 31/07/2026		Corner Water Consulting	
		Designed by: CWC	Checked by:		Approved By: CWC
Report Details: Type: Manhole Schedule Storm Phase: Proposed		Company Address: Corner Water Consulting Ltd 1 Cricklade Court Cricklade Street, Swindon SN1 3EY			

Name	Cover Level (m) Invert Level (m)		Connection Details				Type
Coordinates (m)	Depth (m)	Manhole Size (m)	Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
SUMP_0202	25.260 24.549	Diameter / Length: 0.360	{1} Rectangular Channel	Rectangular Channel	24.900	Diam/Width:300 Height:360	Manhole
E:505252.677 N:179393.133	0.711	Width: 0.500	{a} 2.001	Pipe	24.549	Diam/Width:225	Not Applicable
Oil Separator		Diameter / Length: 1.200	{1} 1.003a	Pipe	23.925	Diam/Width:100	Simple Junction
E:505259.915 N:179393.754			{a} 1.003b	Pipe	23.925	Diam/Width:100	Not Applicable

Project: WRM Link Road Brownfield Runoff Rates		Date: 31/07/2026		Corner Water Consulting	
		Designed by: CWC	Checked by:		Approved By: CWC
Report Details: Type: Network Design Criteria Storm Phase: Proposed		Company Address: Corner Water Consulting Ltd 1 Cricklade Court Cricklade Street, Swindon SN1 3EY			

Flow Options

Peak Flow Calculation	(UK) Modified Rational Method
Min. Time of Entry (mins)	5
Max. Travel Time (mins)	30

Pipe Options

Lock Slope Options	None
Design Options	Minimise Excavation
Design Level	Level Soffits
Min. Cover Depth (m)	1.200
Min. Slope (1:X)	500.00
Max. Slope (1:X)	40.00
Min. Velocity (m/s)	1.0
Max. Velocity (m/s)	3.0
Use Flow Restriction	☐
Reduce Channel Depths	☐

Manhole Options

Apply Offset	☐
--------------	--------------------------

Project: WRM Link Road Brownfield Runoff Rates	Date: 31/07/2026			Corner Water Consulting
	Designed by: CWC	Checked by:	Approved By: CWC	
Report Title: Rainfall Analysis Criteria	Company Address: Corner Water Consulting Ltd 1 Cricklade Court Cricklade Street, Swindon SN1 3EY			

Runoff Type	Dynamic
Output Interval (mins)	5
Time Step	Default
Urban Creep	Apply Global Value
Urban Creep Global Value (%)	0
Junction Flood Risk Margin (mm)	300
Prefill Manhole Sumps	☐
Perform No Discharge Analysis	☐

Rainfall

FEH		Type: FEH
Site Location	GB 505260 179412 TQ 05260 79412	
Rainfall Version	2022	
Summer	☒	
Winter	☒	

Return Period

Return Period (years)	Increase Rainfall (%)
2.0	0.000
30.0	0.000
100.0	0.000
100.0	40.000

Storm Durations

Duration (mins)	Run Time (mins)
15	30
30	60
60	120
120	240
180	360
240	480
360	720
480	960
600	1200
720	1440
960	1920
1440	2880
2160	4320
2880	5760
4320	8640
5760	11520
7200	14400
8640	17280
10080	20160

Project: WRM Link Road Brownfield Runoff Rates		Date: 31/07/2026		Corner Water Consulting	
		Designed by: CWC	Checked by:		Approved By: CWC
Report Details: Type: Inflows Summary Storm Phase: Proposed		Company Address: Corner Water Consulting Ltd 1 Cricklade Court Cricklade Street, Swindon SN1 3EY			



FEH: 2 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Inflow

Inflow	Storm Event	Inflow Area (ha)	Max. Inflow (L/s)	Total Inflow Volume (m³)
roof	FEH: 2 years: +0 %: 15 mins: Summer	0.02	4.3	1.849
yard_01	FEH: 2 years: +0 %: 15 mins: Summer	0.03	5.7	2.478
yard_02	FEH: 2 years: +0 %: 15 mins: Summer	0.04	8.3	3.623
yard_03	FEH: 2 years: +0 %: 15 mins: Summer	0.05	10.7	4.627
Catchment Area	FEH: 2 years: +0 %: 15 mins: Summer	0.07	14.4	6.242

Project: WRM Link Road Brownfield Runoff Rates		Date: 31/07/2026		Corner Water Consulting	
		Designed by: CWC	Checked by:		Approved By: CWC
Report Details: Type: Inflows Summary Storm Phase: Proposed		Company Address: Corner Water Consulting Ltd 1 Cricklade Court Cricklade Street, Swindon SN1 3EY			



FEH: 30 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Inflow

Inflow	Storm Event	Inflow Area (ha)	Max. Inflow (L/s)	Total Inflow Volume (m³)
roof	FEH: 30 years: +0 %: 15 mins: Summer	0.02	10.7	4.627
yard_01	FEH: 30 years: +0 %: 15 mins: Summer	0.03	14.3	6.218
yard_02	FEH: 30 years: +0 %: 15 mins: Summer	0.04	20.9	9.083
yard_03	FEH: 30 years: +0 %: 15 mins: Summer	0.05	26.7	11.606
Catchment Area	FEH: 30 years: +0 %: 15 mins: Summer	0.07	36.1	15.654

Project: WRM Link Road Brownfield Runoff Rates		Date: 31/07/2026		Corner Water Consulting	
		Designed by: CWC	Checked by:		Approved By: CWC
Report Details: Type: Inflows Summary Storm Phase: Proposed		Company Address: Corner Water Consulting Ltd 1 Cricklade Court Cricklade Street, Swindon SN1 3EY			



FEH: 100 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Inflow

Inflow	Storm Event	Inflow Area (ha)	Max. Inflow (L/s)	Total Inflow Volume (m³)
roof	FEH: 100 years: +0 %: 15 mins: Summer	0.02	13.8	5.982
yard_01	FEH: 100 years: +0 %: 15 mins: Summer	0.03	18.5	8.032
yard_02	FEH: 100 years: +0 %: 15 mins: Summer	0.04	27.0	11.736
yard_03	FEH: 100 years: +0 %: 15 mins: Summer	0.05	34.5	14.996
Catchment Area	FEH: 100 years: +0 %: 15 mins: Summer	0.07	46.6	20.226

Project: WRM Link Road Brownfield Runoff Rates		Date: 31/07/2026		Corner Water Consulting	
		Designed by: CWC	Checked by:		Approved By: CWC
Report Details: Type: Inflows Summary Storm Phase: Proposed		Company Address: Corner Water Consulting Ltd 1 Cricklade Court Cricklade Street, Swindon SN1 3EY			



FEH: 100 years: Increase Rainfall (%): +40: Critical Storm Per Item: Rank By: Max. Inflow

Inflow	Storm Event	Inflow Area (ha)	Max. Inflow (L/s)	Total Inflow Volume (m³)
roof	FEH: 100 years: +40 %: 15 mins: Summer	0.02	19.3	8.372
yard_01	FEH: 100 years: +40 %: 15 mins: Summer	0.03	25.9	11.250
yard_02	FEH: 100 years: +40 %: 15 mins: Summer	0.04	37.9	16.436
yard_03	FEH: 100 years: +40 %: 15 mins: Summer	0.05	48.4	21.001
Catchment Area	FEH: 100 years: +40 %: 15 mins: Summer	0.07	65.2	28.321

Project: WRM Link Road Brownfield Runoff Rates		Date: 31/07/2026			
Report Details: Type: Junctions Summary Storm Phase: Proposed		Designed by: CWC	Checked by:		Approved By: CWC
		Company Address: Corner Water Consulting Ltd 1 Cricklade Court Cricklade Street, Swindon SN1 3EY			



FEH: 2 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Depth

Junction	Storm Event	Cover Level (m)	Invert Level (m)	Max. Level (m)	Max. Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Status
S0101	FEH: 2 years: +0 %: 15 mins: Summer	25.75 0	24.40 0	25.209	0.809	4.3	0.915	0.000	1.6	1.859	Surcharged
S0102	FEH: 2 years: +0 %: 15 mins: Summer	25.62 0	23.98 0	25.198	1.218	4.6	1.377	0.000	3.9	2.696	Surcharged
S0103	FEH: 2 years: +0 %: 15 mins: Summer	25.40 0	24.10 0	25.191	1.091	8.5	1.234	0.000	6.0	4.981	Flood Risk
S0104	FEH: 2 years: +0 %: 15 mins: Summer	25.40 0	23.99 0	25.177	1.187	30.3	1.343	0.000	17.5	20.643	Flood Risk
S0105	FEH: 2 years: +0 %: 15 mins: Summer	25.40 0	23.89 0	24.238	0.348	17.6	0.393	0.000	17.6	18.192	Surcharged
S0106	FEH: 2 years: +0 %: 360 mins: Winter	25.40 0	22.76 0	23.443	0.683	1.4	1.207	0.000	1.3	33.493	Surcharged
S0107_pump	FEH: 2 years: +0 %: 2160 mins: Winter	25.50 0	22.73 4	22.737	0.003	1.3	0.005	0.000	1.3	88.246	OK
S0108	FEH: 2 years: +0 %: 2160 mins: Winter	25.40 0	24.91 7	24.950	0.033	1.3	0.038	0.000	1.3	88.245	OK
MH EX01	FEH: 2 years: +0 %: 2160 mins: Winter	25.61 0	24.87 0	24.901	0.031	1.3	0.000	0.000	1.3	88.245	OK
J0101	FEH: 2 years: +0 %: 15 mins: Summer		25.08 0	25.233	0.153	39.1			35.6	16.214	OK
SUMP_0202	FEH: 2 years: +0 %: 15 mins: Summer	25.26 0	24.54 9	25.179	0.630	35.6	0.113	0.000	30.3	16.728	Flood Risk
Oil Separator	FEH: 2 years: +0 %: 15 mins: Summer		23.92 5	24.640	0.714	17.5			17.6	18.246	Surcharged

Project: WRM Link Road Brownfield Runoff Rates		Date: 31/07/2026			
Report Details: Type: Junctions Summary Storm Phase: Proposed		Designed by: CWC	Checked by:		Approved By: CWC
		Company Address: Corner Water Consulting Ltd 1 Cricklade Court Cricklade Street, Swindon SN1 3EY			



FEH: 30 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Depth

Junction	Storm Event	Cover Level (m)	Invert Level (m)	Max. Level (m)	Max. Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Status
S0101	FEH: 30 years: +0 %: 30 mins: Summer	25.75 0	24.40 0	25.640	1.240	6.9	1.402	0.000	6.6	5.359	Flood Risk
S0102	FEH: 30 years: +0 %: 30 mins: Summer	25.62 0	23.98 0	25.429	1.449	6.6	1.638	0.000	6.4	5.090	Flood Risk
S0103	FEH: 30 years: +0 %: 30 mins: Summer	25.40 0	24.10 0	25.357	1.257	6.4	1.421	0.000	6.8	6.469	Flood Risk
S0104	FEH: 30 years: +0 %: 30 mins: Summer	25.40 0	23.99 0	25.283	1.293	20.0	1.462	0.000	18.7	59.011	Flood Risk
S0105	FEH: 30 years: +0 %: 30 mins: Summer	25.40 0	23.89 0	24.262	0.372	18.4	0.420	0.000	18.4	55.783	Surcharged
S0106	FEH: 30 years: +0 %: 360 mins: Winter	25.40 0	22.76 0	23.858	1.097	1.4	1.939	0.000	1.4	49.350	Surcharged
S0107_pump	FEH: 30 years: +0 %: 360 mins: Winter	25.50 0	22.73 4	22.737	0.003	1.4	0.005	0.000	1.4	49.310	OK
S0108	FEH: 30 years: +0 %: 360 mins: Winter	25.40 0	24.91 7	24.952	0.035	1.4	0.039	0.000	1.4	49.268	OK
MH EX01	FEH: 30 years: +0 %: 360 mins: Winter	25.61 0	24.87 0	24.903	0.033	1.4	0.000	0.000	1.4	49.268	OK
J0101	FEH: 30 years: +0 %: 15 mins: Summer		25.08 0	25.415	0.335	98.0			94.7	40.674	OK
SUMP_0202	FEH: 30 years: +0 %: 30 mins: Summer	25.26 0	24.54 9	25.285	0.736	63.7	25.535	25.407	20.0	54.817	Flood
Oil Separator	FEH: 30 years: +0 %: 30 mins: Summer		23.92 5	24.697	0.772	18.7			18.4	56.126	Surcharged

Project: WRM Link Road Brownfield Runoff Rates		Date: 31/07/2026			
Report Details: Type: Junctions Summary Storm Phase: Proposed		Designed by: CWC	Checked by:		Approved By: CWC
		Company Address: Corner Water Consulting Ltd 1 Cricklade Court Cricklade Street, Swindon SN1 3EY			



FEH: 100 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Depth

Junction	Storm Event	Cover Level (m)	Invert Level (m)	Max. Level (m)	Max. Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Status
S0101	FEH: 100 years: +0 %: 15 mins: Summer	25.750	24.400	25.750	1.350	13.8	1.854	0.327	8.3	4.901	Flood
S0102	FEH: 100 years: +0 %: 15 mins: Summer	25.620	23.980	25.494	1.514	8.3	1.713	0.000	7.3	4.240	Flood Risk
S0103	FEH: 100 years: +0 %: 30 mins: Summer	25.400	24.100	25.400	1.300	7.3	1.523	0.053	7.3	6.984	Flood
S0104	FEH: 100 years: +0 %: 30 mins: Summer	25.400	23.990	25.299	1.309	19.3	1.480	0.000	18.6	61.367	Flood Risk
S0105	FEH: 100 years: +0 %: 30 mins: Summer	25.400	23.890	24.266	0.376	18.6	0.425	0.000	18.6	57.684	Surcharged
S0106	FEH: 100 years: +0 %: 480 mins: Winter	25.400	22.760	24.100	1.339	1.6	2.367	0.000	1.6	74.962	Surcharged
S0107_pump	FEH: 100 years: +0 %: 480 mins: Winter	25.500	22.734	22.737	0.003	1.6	0.006	0.000	1.6	74.919	OK
S0108	FEH: 100 years: +0 %: 480 mins: Winter	25.400	24.917	24.955	0.038	1.6	0.043	0.000	1.6	74.874	OK
MH EX01	FEH: 100 years: +0 %: 480 mins: Winter	25.610	24.870	24.905	0.035	1.6	0.000	0.000	1.6	74.874	OK
J0101	FEH: 100 years: +0 %: 15 mins: Summer		25.080	25.509	0.429	126.7			119.8	53.029	OK
SUMP_0202	FEH: 100 years: +0 %: 30 mins: Summer	25.260	24.549	25.301	0.752	82.8	41.634	41.506	19.3	57.356	Flood
Oil Separator	FEH: 100 years: +0 %: 30 mins: Summer		23.925	24.707	0.781	18.6			18.6	58.142	Surcharged

Project: WRM Link Road Brownfield Runoff Rates		Date: 31/07/2026			
Report Details: Type: Junctions Summary Storm Phase: Proposed		Designed by: CWC	Checked by:		Approved By: CWC
		Company Address: Corner Water Consulting Ltd 1 Cricklade Court Cricklade Street, Swindon SN1 3EY			



FEH: 100 years: Increase Rainfall (%): +40: Critical Storm Per Item: Rank By: Max. Depth

Junction	Storm Event	Cover Level (m)	Invert Level (m)	Max. Level (m)	Max. Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Status
S0101	FEH: 100 years: +40 %: 15 mins: Summer	25.750	24.400	25.752	1.352	19.3	3.622	2.095	7.7	7.284	Flood
S0102	FEH: 100 years: +40 %: 30 mins: Summer	25.620	23.980	25.495	1.515	7.8	1.713	0.000	7.4	9.336	Flood Risk
S0103	FEH: 100 years: +40 %: 30 mins: Summer	25.400	24.100	25.401	1.301	7.4	2.203	0.733	6.8	10.259	Flood
S0104	FEH: 100 years: +40 %: 60 mins: Winter	25.400	23.990	25.329	1.339	21.2	1.514	0.000	18.8	124.533	Flood Risk
S0105	FEH: 100 years: +40 %: 240 mins: Summer	25.400	23.890	24.590	0.700	18.7	0.792	0.000	18.7	203.479	Surcharged
S0106	FEH: 100 years: +40 %: 480 mins: Winter	25.400	22.760	24.535	1.774	2.0	3.135	0.000	1.9	89.671	Surcharged
S0107_pump	FEH: 100 years: +40 %: 480 mins: Winter	25.500	22.734	22.738	0.004	1.9	0.007	0.000	1.9	89.623	OK
S0108	FEH: 100 years: +40 %: 480 mins: Winter	25.400	24.917	24.959	0.042	1.9	0.047	0.000	1.9	89.570	OK
MH EX01	FEH: 100 years: +40 %: 480 mins: Winter	25.610	24.870	24.909	0.039	1.9	0.000	0.000	1.9	89.570	OK
J0101	FEH: 100 years: +40 %: 15 mins: Summer		25.080	25.723	0.643	177.4			164.8	74.980	OK
SUMP_0202	FEH: 100 years: +40 %: 60 mins: Winter	25.260	24.549	25.332	0.783	80.0	72.140	72.012	21.2	115.186	Flood
Oil Separator	FEH: 100 years: +40 %: 240 mins: Winter		23.925	24.860	0.934	18.6			18.6	203.980	Surcharged

Project: WRM Link Road Brownfield Runoff Rates		Date: 31/07/2026			
		Designed by: CWC	Checked by:	Approved By: CWC	
Report Details: Type: Stormwater Controls Summary Storm Phase: Proposed		Company Address: Corner Water Consulting Ltd 1 Cricklade Court Cricklade Street, Swindon SN1 3EY			



FEH: 2 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Flooded Volume

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Total Lost Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Percentage Available (%)	Status
Cellular Tank	FEH: 2 years: +0 %: 15 mins: Summer	23.224	23.224	0.124	0.124	17.6	16.503	0.000	0.000	2.8	1.690	91.728	OK

Project: WRM Link Road Brownfield Runoff Rates		Date: 31/07/2026			Corner Water Consulting
		Designed by: CWC	Checked by:	Approved By: CWC	
Report Details: Type: Stormwater Controls Summary Storm Phase: Proposed		Company Address: Corner Water Consulting Ltd 1 Cricklade Court Cricklade Street, Swindon SN1 3EY			



FEH: 30 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Flooded Volume

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Total Lost Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Percentage Available (%)	Status
Cellular Tank	FEH: 30 years: +0 %: 15 mins: Summer	23.286	23.286	0.186	0.186	18.4	24.718	0.000	0.000	1.5	2.002	87.611	OK

Project: WRM Link Road Brownfield Runoff Rates		Date: 31/07/2026		Corner Water Consulting	
		Designed by: CWC	Checked by:		Approved By: CWC
Report Details: Type: Stormwater Controls Summary Storm Phase: Proposed		Company Address: Corner Water Consulting Ltd 1 Cricklade Court Cricklade Street, Swindon SN1 3EY			



FEH: 100 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max.

Flooded Volume

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Total Lost Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Percentage Available (%)	Status
Cellular Tank	FEH: 100 years: +0 %: 15 mins: Summer	23.291	23.291	0.191	0.191	18.5	25.351	0.000	0.000	1.6	2.036	87.293	OK

Project: WRM Link Road Brownfield Runoff Rates		Date: 31/07/2026			Corner Water Consulting
		Designed by: CWC	Checked by:	Approved By: CWC	
Report Details: Type: Stormwater Controls Summary Storm Phase: Proposed		Company Address: Corner Water Consulting Ltd 1 Cricklade Court Cricklade Street, Swindon SN1 3EY			



FEH: 100 years: Increase Rainfall (%): +40: Critical Storm Per Item: Rank By:
 Max. Flooded Volume

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Total Lost Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Percentage Available (%)	Status
Cellular Tank	FEH: 100 years: +40 %: 15 mins: Summer	23.297	23.297	0.197	0.197	18.7	26.225	0.000	0.000	2.0	2.076	86.855	OK

Project: WRM Link Road Brownfield Runoff Rates		Date: 31/07/2026			
		Designed by: CWC	Checked by:	Approved By: CWC	
Report Details: Type: Connections Summary Storm Phase: Proposed		Company Address: Corner Water Consulting Ltd 1 Cricklade Court Cricklade Street, Swindon SN1 3EY			



FEH: 2 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Flow

Connection	Storm Event	Connection Type	From	To	Upstream Cover Level (m)	Max. US Water Level (m)	Max. Flow Depth (m)	Discharge Volume (m³)	Max. Velocity (m/s)	Flow / Capacity	Max. Flow (L/s)	Status
1.000	FEH: 2 years: +0 %: 30 mins: Winter	Pipe	S0101	S0102	25.750	25.127	0.100	2.324	0.5	0.35	2.1	Surcharged
1.001	FEH: 2 years: +0 %: 15 mins: Summer	Pipe	S0102	S0103	25.620	25.198	0.100	1.606	0.5	0.6	3.9	Surcharged
1.002	FEH: 2 years: +0 %: 15 mins: Summer	Pipe	S0103	S0104	25.400	25.191	0.100	1.591	0.8	0.87	6.0	Flood Risk
1.003a	FEH: 2 years: +0 %: 15 mins: Summer	Pipe	S0104	Oil Separator	25.400	25.177	0.100	18.282	2.2	2.91	17.5	Flood Risk
1.004a	FEH: 2 years: +0 %: 15 mins: Summer	Pipe	S0105	Cellular Tank	25.400	24.238	0.100	18.192	2.2	3.02	17.6	Surcharged
1.005	FEH: 2 years: +0 %: 2160 mins: Winter	Pipe	S0106	S0107_pump	25.400	23.248	0.031	88.244	0.6	0.19	1.3	Surcharged
1.006	FEH: 2 years: +0 %: 2160 mins: Winter	Pipe	S0107_pump	S0108	25.500	22.737	0.018	88.247	0.0	0.4	1.3	OK
1.007	FEH: 2 years: +0 %: 2160 mins: Winter	Pipe	S0108	MH EX01	25.400	24.950	0.032	88.245	0.6	0.22	1.3	OK
1.004b	FEH: 2 years: +0 %: 15 mins: Winter	Pipe	Cellular Tank	S0106	24.610	23.224	0.100	1.697	0.7	0.46	2.9	Surcharged
1.003b	FEH: 2 years: +0 %: 15 mins: Summer	Pipe	Oil Separator	S0105	25.400	24.640	0.100	18.246	2.2	3.05	17.6	Surcharged
2.001	FEH: 2 years: +0 %: 15 mins: Summer	Pipe	SUMP_0202	S0104	25.260	25.179	0.225	16.728	0.5	0.11	30.3	Flood Risk
Rectangular Channel	FEH: 2 years: +0 %: 15 mins: Summer	Rectangular Channel	J0101	SUMP_0202	25.440	25.233	0.193	16.214	0.9	0.31	35.6	OK

Project: WRM Link Road Brownfield Runoff Rates	Date: 31/07/2026			Corner Water Consulting
	Designed by: CWC	Checked by:	Approved By: CWC	
Report Details: Type: Connections Summary Storm Phase: Proposed	Company Address: Corner Water Consulting Ltd 1 Cricklade Court Cricklade Street, Swindon SN1 3EY			



FEH: 30 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Flow

Connection	Storm Event	Connection Type	From	To	Upstream Cover Level (m)	Max. US Water Level (m)	Max. Flow Depth (m)	Discharge Volume (m³)	Max. Velocity (m/s)	Flow / Capacity	Max. Flow (L/s)	Status
1.000	FEH: 30 years: +0 %: 30 mins: Summer	Pipe	S0101	S0102	25.750	25.640	0.100	5.340	0.8	1.08	6.6	Flood Risk
1.001	FEH: 30 years: +0 %: 30 mins: Summer	Pipe	S0102	S0103	25.620	25.429	0.100	4.199	0.8	0.98	6.4	Flood Risk
1.002	FEH: 30 years: +0 %: 30 mins: Winter	Pipe	S0103	S0104	25.400	25.349	0.100	3.418	0.9	1.01	6.9	Flood Risk
1.003a	FEH: 30 years: +0 %: 30 mins: Summer	Pipe	S0104	Oil Separator	25.400	25.283	0.100	56.709	2.4	3.1	18.7	Flood Risk
1.004a	FEH: 30 years: +0 %: 30 mins: Summer	Pipe	S0105	Cellular Tank	25.400	24.262	0.100	55.783	2.3	3.16	18.4	Surcharged
1.005	FEH: 30 years: +0 %: 360 mins: Winter	Pipe	S0106	S0107_pump	25.400	23.858	0.032	49.314	0.7	0.21	1.4	Surcharged
1.006	FEH: 30 years: +0 %: 360 mins: Winter	Pipe	S0107_pump	S0108	25.500	22.737	0.021	49.309	0.0	0.43	1.4	OK
1.007	FEH: 30 years: +0 %: 360 mins: Winter	Pipe	S0108	MH EX01	25.400	24.952	0.034	49.268	0.6	0.24	1.4	OK
1.004b	FEH: 30 years: +0 %: 30 mins: Winter	Pipe	Cellular Tank	S0106	24.610	23.492	0.100	3.826	0.7	0.4	2.5	Surcharged
1.003b	FEH: 30 years: +0 %: 30 mins: Summer	Pipe	Oil Separator	S0105	25.400	24.697	0.100	56.126	2.3	3.19	18.4	Surcharged
2.001	FEH: 30 years: +0 %: 60 mins: Winter	Pipe	SUMP_0202	S0104	25.260	25.282	0.225	67.824	0.5	0.07	21.4	Flood
Rectangular Channel	FEH: 30 years: +0 %: 15 mins: Summer	Rectangular Channel	J0101	SUMP_0202	25.440	25.415	0.351	40.544	0.9	0.82	94.7	OK

Project: WRM Link Road Brownfield Runoff Rates		Date: 31/07/2026		Corner Water Consulting	
		Designed by: CWC	Checked by:		Approved By: CWC
Report Details: Type: Connections Summary Storm Phase: Proposed		Company Address: Corner Water Consulting Ltd 1 Cricklade Court Cricklade Street, Swindon SN1 3EY			



FEH: 100 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Flow

Connection	Storm Event	Connection Type	From	To	Upstream Cover Level (m)	Max. US Water Level (m)	Max. Flow Depth (m)	Discharge Volume (m³)	Max. Velocity (m/s)	Flow / Capacity	Max. Flow (L/s)	Status
1.000	FEH: 100 years: +0 %: 15 mins: Summer	Pipe	S0101	S0102	25.750	25.750	0.100	4.874	1.1	1.36	8.3	Flood
1.001	FEH: 100 years: +0 %: 15 mins: Summer	Pipe	S0102	S0103	25.620	25.494	0.100	3.279	0.9	1.13	7.3	Flood Risk
1.002	FEH: 100 years: +0 %: 30 mins: Winter	Pipe	S0103	S0104	25.400	25.400	0.100	3.765	0.9	1.06	7.3	Flood
1.003a	FEH: 100 years: +0 %: 60 mins: Winter	Pipe	S0104	Oil Separator	25.400	25.296	0.100	98.386	2.4	3.1	18.7	Flood Risk
1.004a	FEH: 100 years: +0 %: 30 mins: Summer	Pipe	S0105	Cellular Tank	25.400	24.266	0.100	57.684	2.4	3.19	18.6	Surcharged
1.005	FEH: 100 years: +0 %: 480 mins: Winter	Pipe	S0106	S0107_pump	25.400	24.100	0.034	74.924	0.7	0.24	1.6	Surcharged
1.006	FEH: 100 years: +0 %: 480 mins: Winter	Pipe	S0107_pump	S0108	25.500	22.737	0.023	74.918	0.0	0.49	1.6	OK
1.007	FEH: 100 years: +0 %: 480 mins: Winter	Pipe	S0108	MH EX01	25.400	24.955	0.036	74.874	0.6	0.27	1.6	OK
1.004b	FEH: 100 years: +0 %: 30 mins: Winter	Pipe	Cellular Tank	S0106	24.610	23.506	0.100	3.913	0.7	0.5	3.1	Surcharged
1.003b	FEH: 100 years: +0 %: 30 mins: Summer	Pipe	Oil Separator	S0105	25.400	24.707	0.100	58.142	2.4	3.21	18.6	Surcharged
2.001	FEH: 100 years: +0 %: 15 mins: Winter	Pipe	SUMP_0202	S0104	25.260	25.293	0.225	29.237	0.3	0.1	27.6	Flood
Rectangular Channel	FEH: 100 years: +0 %: 15 mins: Summer	Rectangular Channel	J0101	SUMP_0202	25.440	25.509	0.360	52.870	1.1	1.04	119.8	Flood

Project: WRM Link Road Brownfield Runoff Rates		Date: 31/07/2026			
Report Details: Type: Connections Summary Storm Phase: Proposed		Designed by: CWC	Checked by:		Approved By: CWC
		Company Address: Corner Water Consulting Ltd 1 Cricklade Court Cricklade Street, Swindon SN1 3EY			



FEH: 100 years: Increase Rainfall (%): +40: Critical Storm Per Item: Rank By: Max. Flow

Connection	Storm Event	Connection Type	From	To	Upstream Cover Level (m)	Max. US Water Level (m)	Max. Flow Depth (m)	Discharge Volume (m³)	Max. Velocity (m/s)	Flow / Capacity	Max. Flow (L/s)	Status
1.000	FEH: 100 years: +40 %: 30 mins: Summer	Pipe	S0101	S0102	25.750	25.752	0.100	9.836	1.0	1.28	7.8	Flood
1.001	FEH: 100 years: +40 %: 15 mins: Summer	Pipe	S0102	S0103	25.620	25.495	0.100	5.610	0.9	1.13	7.4	Flood Risk
1.002	FEH: 100 years: +40 %: 15 mins: Winter	Pipe	S0103	S0104	25.400	25.400	0.100	4.171	0.9	1.01	6.9	Flood
1.003a	FEH: 100 years: +40 %: 60 mins: Winter	Pipe	S0104	Oil Separator	25.400	25.329	0.100	122.631	2.4	3.12	18.8	Flood Risk
1.004a	FEH: 100 years: +40 %: 60 mins: Winter	Pipe	S0105	Cellular Tank	25.400	24.273	0.100	121.285	2.4	3.23	18.8	Surcharged
1.005	FEH: 100 years: +40 %: 480 mins: Winter	Pipe	S0106	S0107_pump	25.400	24.535	0.038	89.629	0.7	0.28	1.9	Surcharged
1.006	FEH: 100 years: +40 %: 480 mins: Winter	Pipe	S0107_pump	S0108	25.500	22.738	0.026	89.620	0.0	0.59	1.9	OK
1.007	FEH: 100 years: +40 %: 480 mins: Winter	Pipe	S0108	MH EX01	25.400	24.959	0.040	89.570	0.7	0.32	1.9	OK
1.004b	FEH: 100 years: +40 %: 15 mins: Winter	Pipe	Cellular Tank	S0106	24.610	23.299	0.100	2.089	0.7	0.34	2.1	Surcharged
1.003b	FEH: 100 years: +40 %: 60 mins: Winter	Pipe	Oil Separator	S0105	25.400	24.725	0.100	121.741	2.4	3.25	18.8	Surcharged
2.001	FEH: 100 years: +40 %: 15 mins: Winter	Pipe	SUMP_0202	S0104	25.260	25.314	0.225	27.859	0.4	0.11	32.6	Flood
Rectangular Channel	FEH: 100 years: +40 %: 15 mins: Summer	Rectangular Channel	J0101	SUMP_0202	25.440	25.723	0.360	74.788	1.5	1.43	164.8	Flood

Project: WRM Link Road Brownfield Runoff Rates		Date: 31/07/2026		Corner Water Consulting	
		Designed by: CWC	Checked by:		Approved By: CWC
Report Details: Type: Phase Management Storm Phase: Proposed		Company Address: Corner Water Consulting Ltd 1 Cricklade Court Cricklade Street, Swindon SN1 3EY			



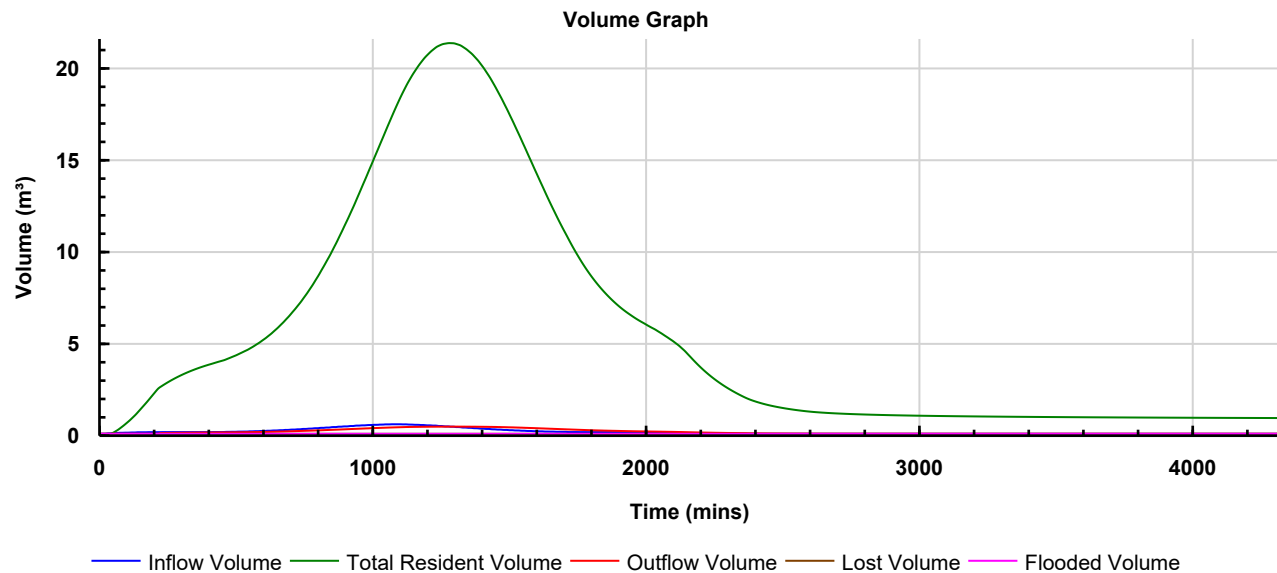
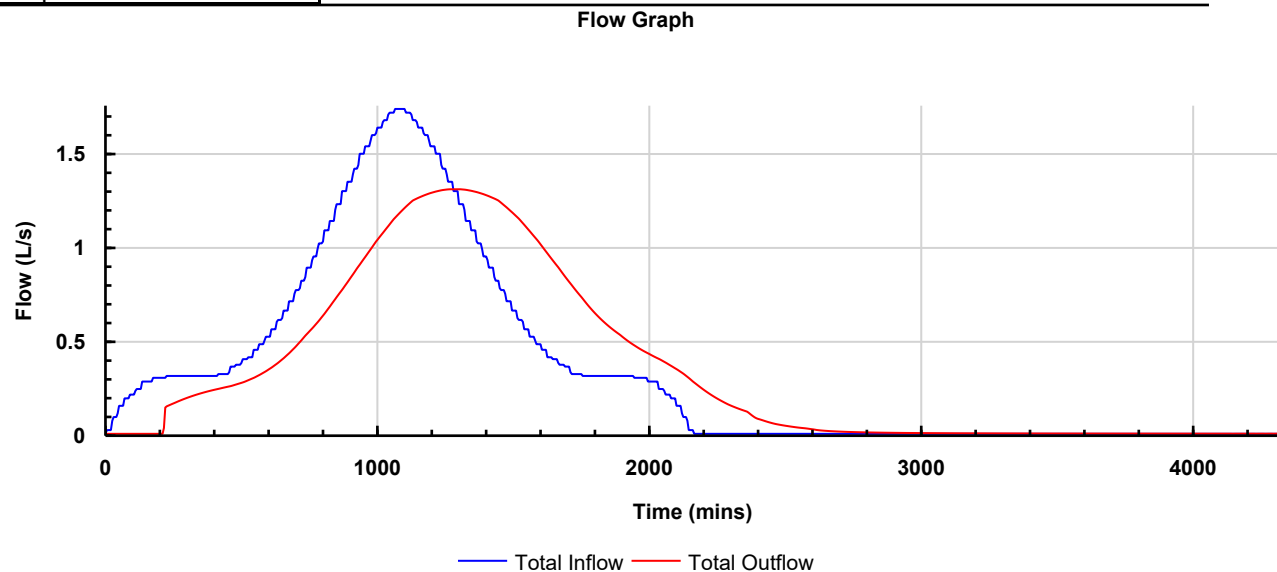
Proposed

FEH: 2 years: Increase Rainfall (%): +0: 2160 mins: Winter

Tables

Name	Max. Inflow (L/s)	Total Inflow Volume (m³)	Max. Outflow (L/s)	Total Outflow Volume (m³)
MH EX01			1.3	88.245
TOTAL	1.7	89.214	1.3	88.245

Graphs



Project: WRM Link Road Brownfield Runoff Rates		Date: 31/07/2026		Corner Water Consulting	
Report Details: Type: Phase Management Storm Phase: Proposed		Designed by: CWC	Checked by:		Approved By: CWC
		Company Address: Corner Water Consulting Ltd 1 Cricklade Court Cricklade Street, Swindon SN1 3EY			



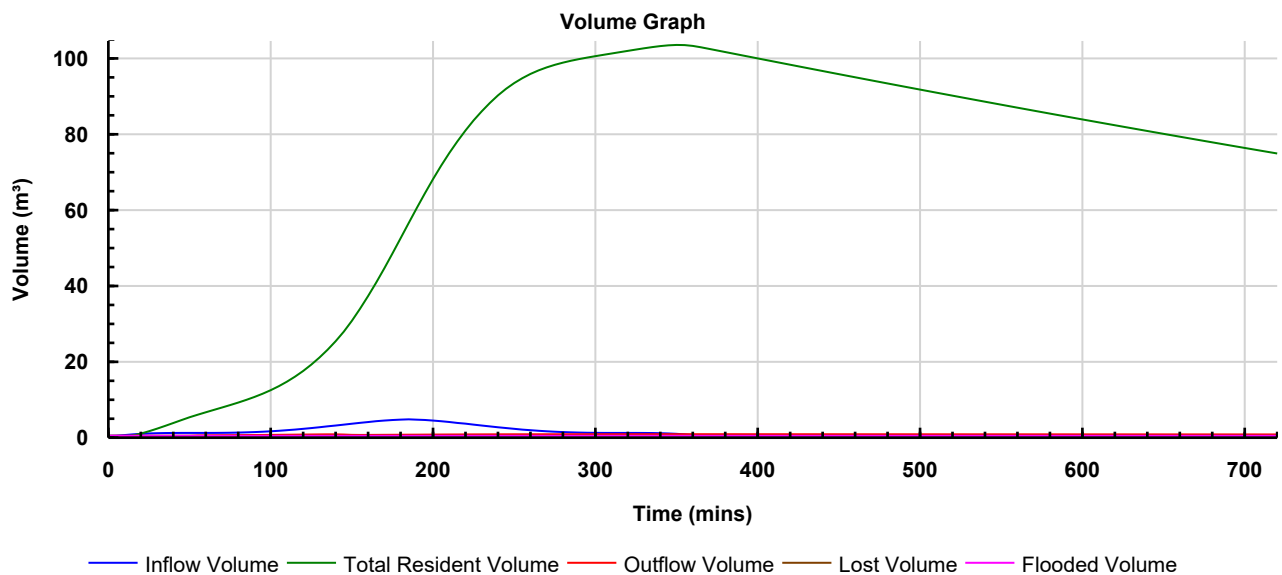
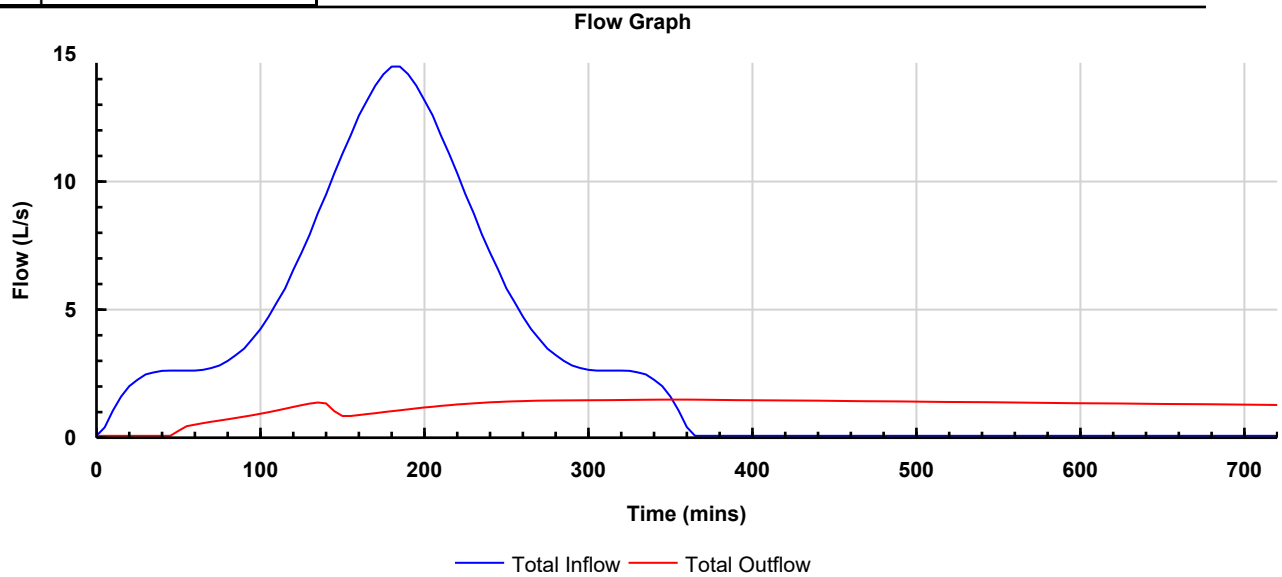
Proposed

FEH: 30 years: Increase Rainfall (%): +0: 360 mins: Winter

Tables

Name	Max. Inflow (L/s)	Total Inflow Volume (m³)	Max. Outflow (L/s)	Total Outflow Volume (m³)
MH EX01			1.4	49.268
TOTAL	14.5	124.228	1.4	49.268

Graphs



Project: WRM Link Road Brownfield Runoff Rates		Date: 31/07/2026		Corner Water Consulting	
Report Details: Type: Phase Management Storm Phase: Proposed		Designed by: CWC	Checked by:		Approved By: CWC
		Company Address: Corner Water Consulting Ltd 1 Cricklade Court Cricklade Street, Swindon SN1 3EY			



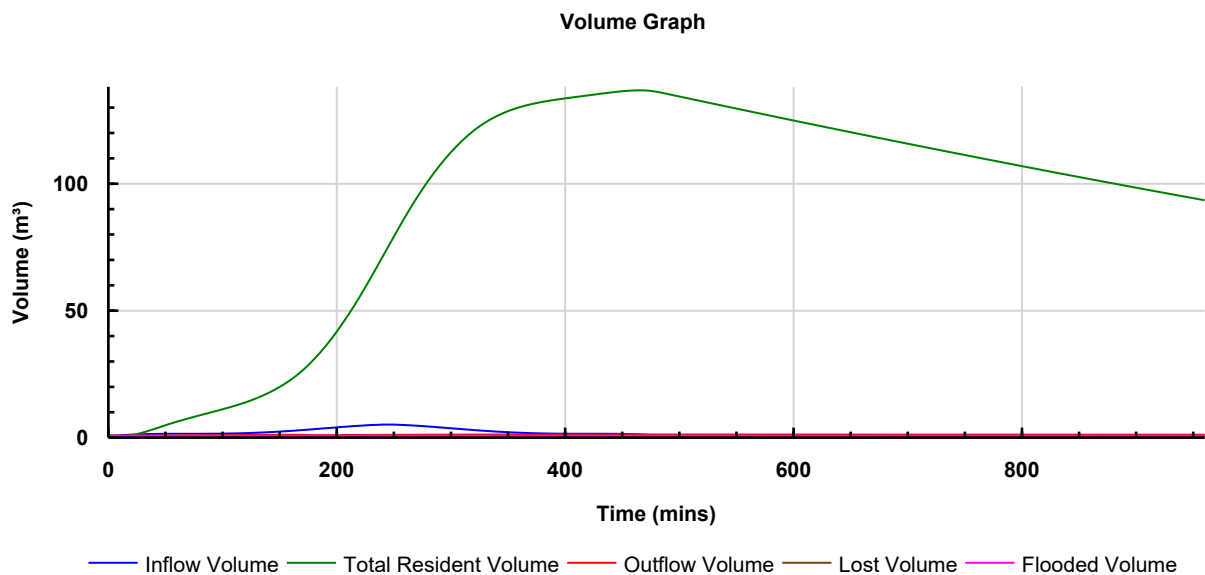
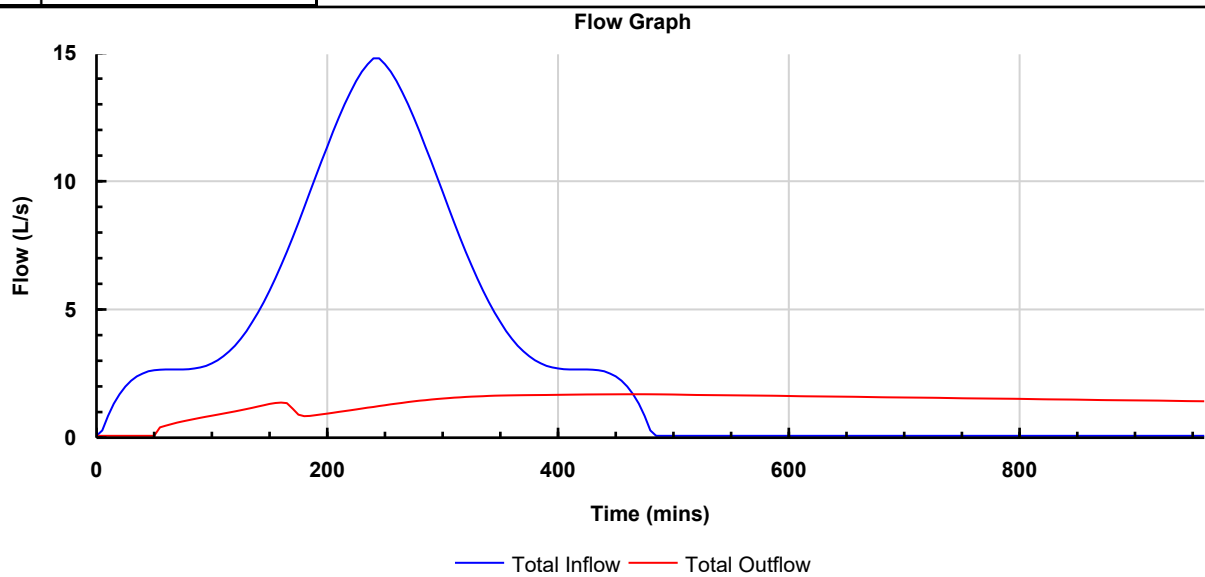
Proposed

FEH: 100 years: Increase Rainfall (%): +0: 480 mins: Winter

Tables

Name	Max. Inflow (L/s)	Total Inflow Volume (m³)	Max. Outflow (L/s)	Total Outflow Volume (m³)
MH EX01			1.6	74.874
TOTAL	14.8	168.409	1.6	74.874

Graphs



Project: WRM Link Road Brownfield Runoff Rates		Date: 31/07/2026		Corner Water Consulting	
Report Details: Type: Phase Management Storm Phase: Proposed		Designed by: CWC	Checked by:		Approved By: CWC
		Company Address: Corner Water Consulting Ltd 1 Cricklade Court Cricklade Street, Swindon SN1 3EY			



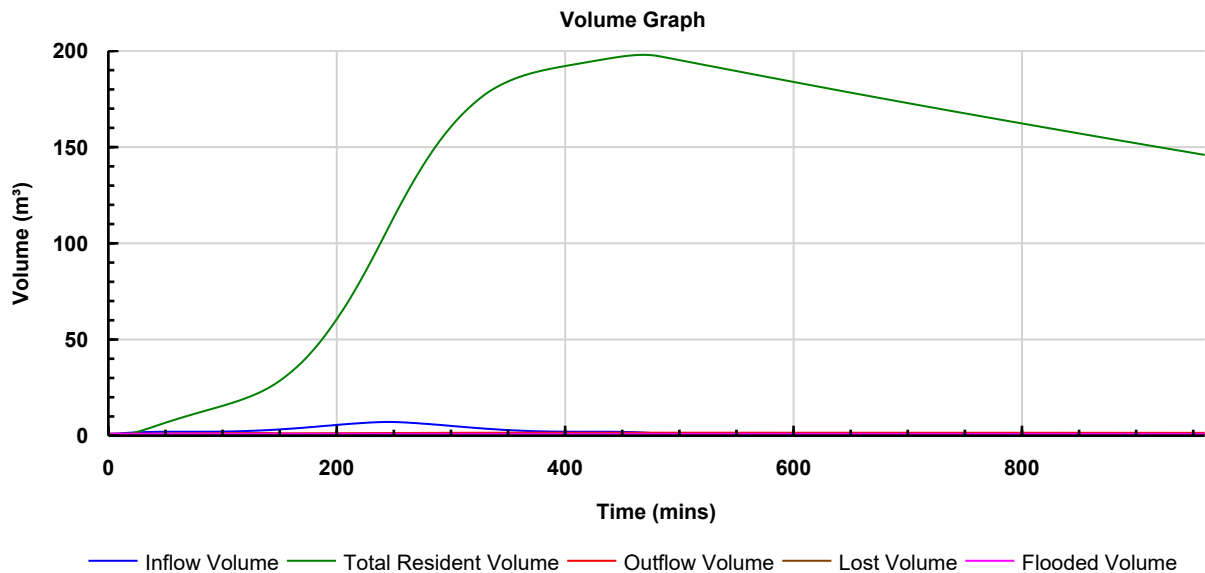
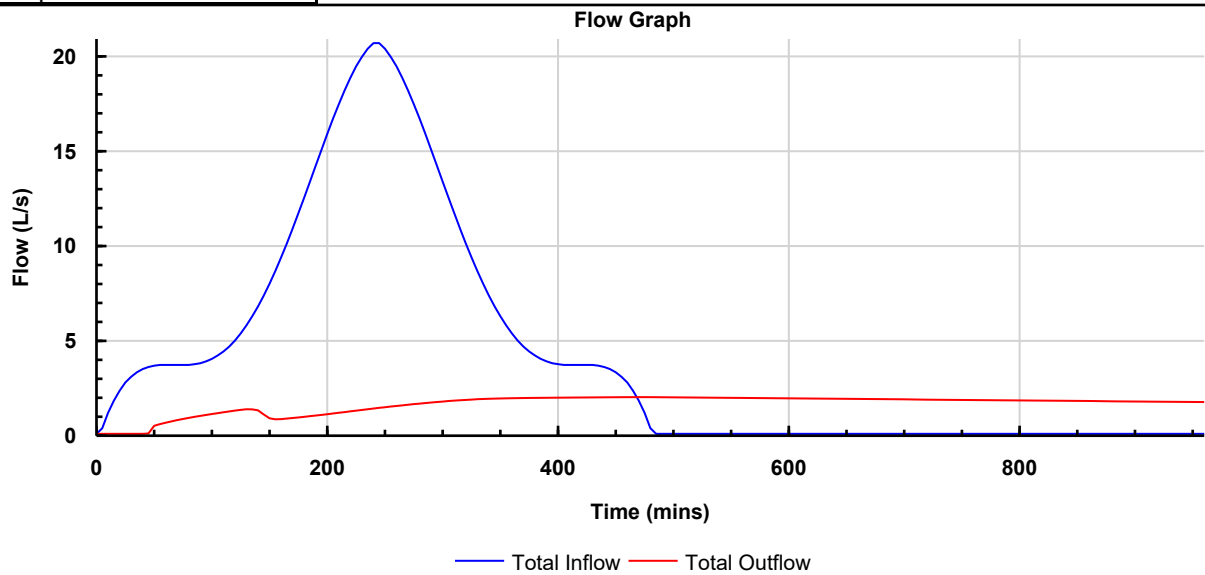
Proposed

FEH: 100 years: Increase Rainfall (%): +40: 480 mins: Winter

Tables

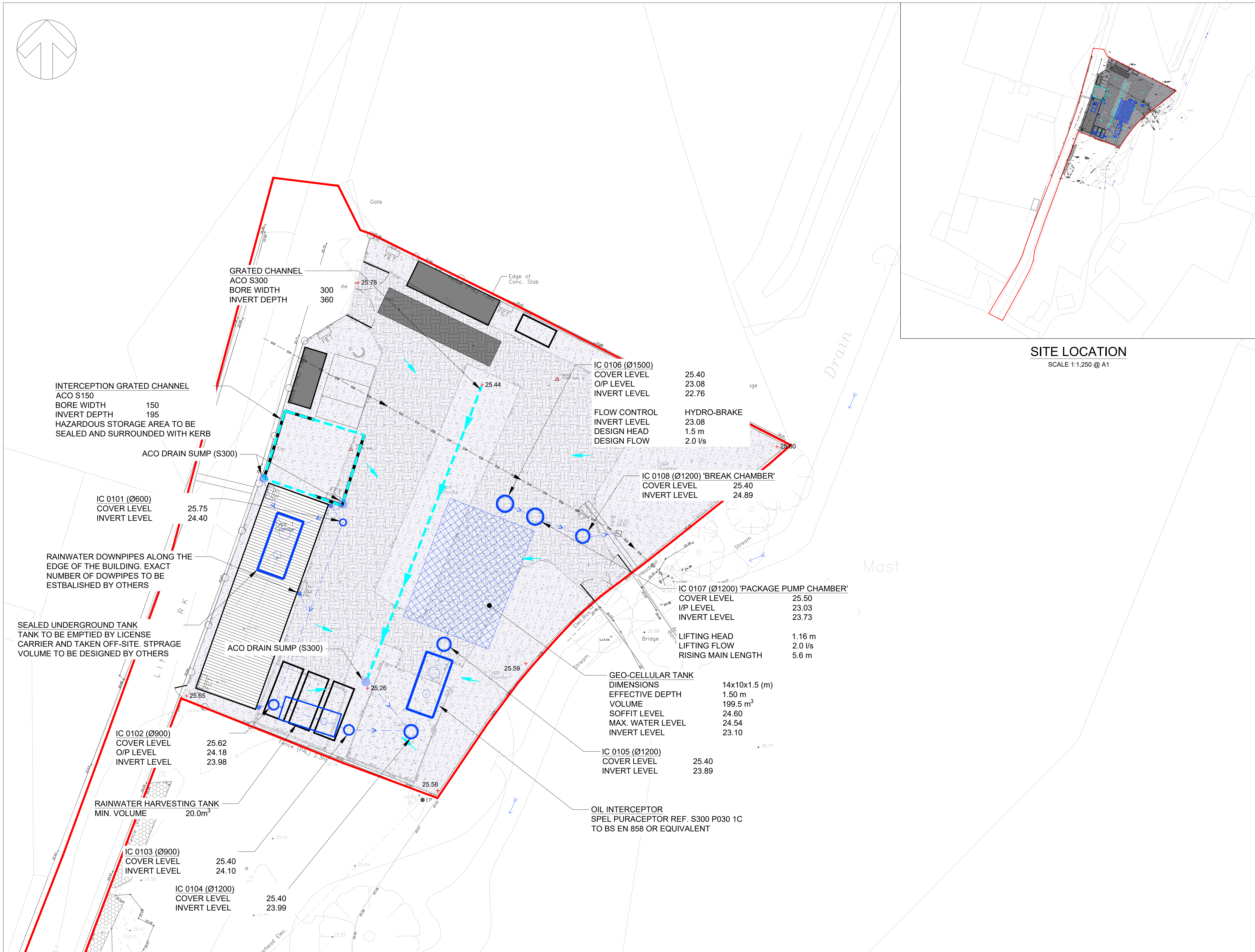
Name	Max. Inflow (L/s)	Total Inflow Volume (m³)	Max. Outflow (L/s)	Total Outflow Volume (m³)
MH EX01			1.9	89.570
TOTAL	20.7	235.799	1.9	89.570

Graphs



APPENDIX 4: Drainage Layout Plan & Construction Details

File name C:\USERS\ALAN\CORNER\DRIVE - CWC\PROJECTS\CWC540 KALEX WRM LINK PARK ON SPIN\INTERNAL DATA\DRAWINGS\2 CAD\CWC540-DR-SWD-001.DWG, printed on 31 July 2026 14:36:03, by Alan Comer



GENERAL ARRANGEMENT
SCALE 1:200 @ A1

SITE LOCATION
SCALE 1:1,250 @ A1

DO NOT SCALE

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES (mm) AND ALL LEVELS ARE IN METRES ABOVE ORDNANCE DATUM (mAOD) UNLESS STATED OTHERWISE.
2. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH DRAWING REF. CWC540-DR-SWD-002.
3. THIS DRAINAGE LAYOUT PLAN IS SUBJECT TO AN INTER-DISCIPLINE STANDARD REVIEW.
4. THIS DRAWING IS FOR DISCHARGE OF PLANNING CONDITIONS. CONTRACTOR TO DEVELOP AS REQUIRED FOR CONSTRUCTION AND RECORD COPY. NO LIABILITY AS A RESULT OF THE USE OF THIS DRAWING FOR OTHER PURPOSES IS ACCEPTED.
5. STRUCTURAL FEATURES ASSOCIATED WITH DRAINAGE APPARATUS ARE SUBJECT TO A STRUCTURAL AND GEO-TECHNICAL DESIGN AT THE DETAILED DESIGN STAGE.
6. DESIGN SUBJECT TO SITE INVESTIGATIONS TO CONFIRM PRESENCE OF UTILITIES AND PEAK SEASONAL GROUNDWATER LEVELS.
7. GEO-CELLULAR ATTENUATION TANK DESIGNED UNDER THE ASSUMPTION OF A MAXIMUM VEHICLE LOAD OF 9-TON.

KEY:

- SITE BOUNDARY
- ADOPTABLE SW CHAMBER
- SURFACE WATER NETWORK
- EXISTING SURFACE WATER DRAIN
- ACO DRAIN
- RAINWATER DOWNPIPE
- ACO DRAIN SUMP
- OIL INTERCEPTOR / CESSPIT
- RAINWATER HARVESTING TANK
- EXCEEDANCE FLOW ROUTES
- WATERCOURSE FLOW DIRECTION

D	31/07/2026	AC	GEO-CELLULAR LABEL AMENDED TO TANK	AC	AC
C	17/06/2026	JG	DESIGN TO INCORPORATE CLARIFICATION NOTES ON SUMPS AND RAINWATER DOWNPIPES	AC	AC
B	06/02/2026	JG	FOR PLANNING APPROVAL	AC	AC
A	06/01/2026	JG	ISSUE FOR COMMENT ONLY	AC	AC
REV	DATE	BY	DESCRIPTION	CHK	APP

CLIENT:
KHC MANAGEMENT SERVICES LTD

SITE/PROJECT:
METAL RECYCLING YARD
LINK PARK ROAD
IVER, UB7 7EZ

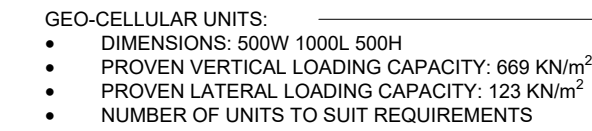
TITLE:
SURFACE WATER DRAINAGE
LAYOUT PLAN

SCALE @ A1: 1:200
DESIGNED: JG
CHECKED: AC

STATUS: FOR COMMENT ONLY
DATE: May 26

DRAWING No: CWC540-DR-SWD-001
REV: D

CORNER WATER CONSULTING



PERMEABLE WOVEN POLYPROPYLENE ———
GEOTEXTILE TO BE BONTEC HF400 OR SIMILAR

UPPER LAYER (TAMARC OR CONCRETE SLAB) ↘

BACKFILL MATERIAL:

- LOCAL SOILS ARISING FROM EXCAVATIONS, OR;
- GRANULAR MATERIAL TO SHW SERIES 600 CLASS 6N;
- DEPTH OF COVER TO SUIT REQUIREMENTS.

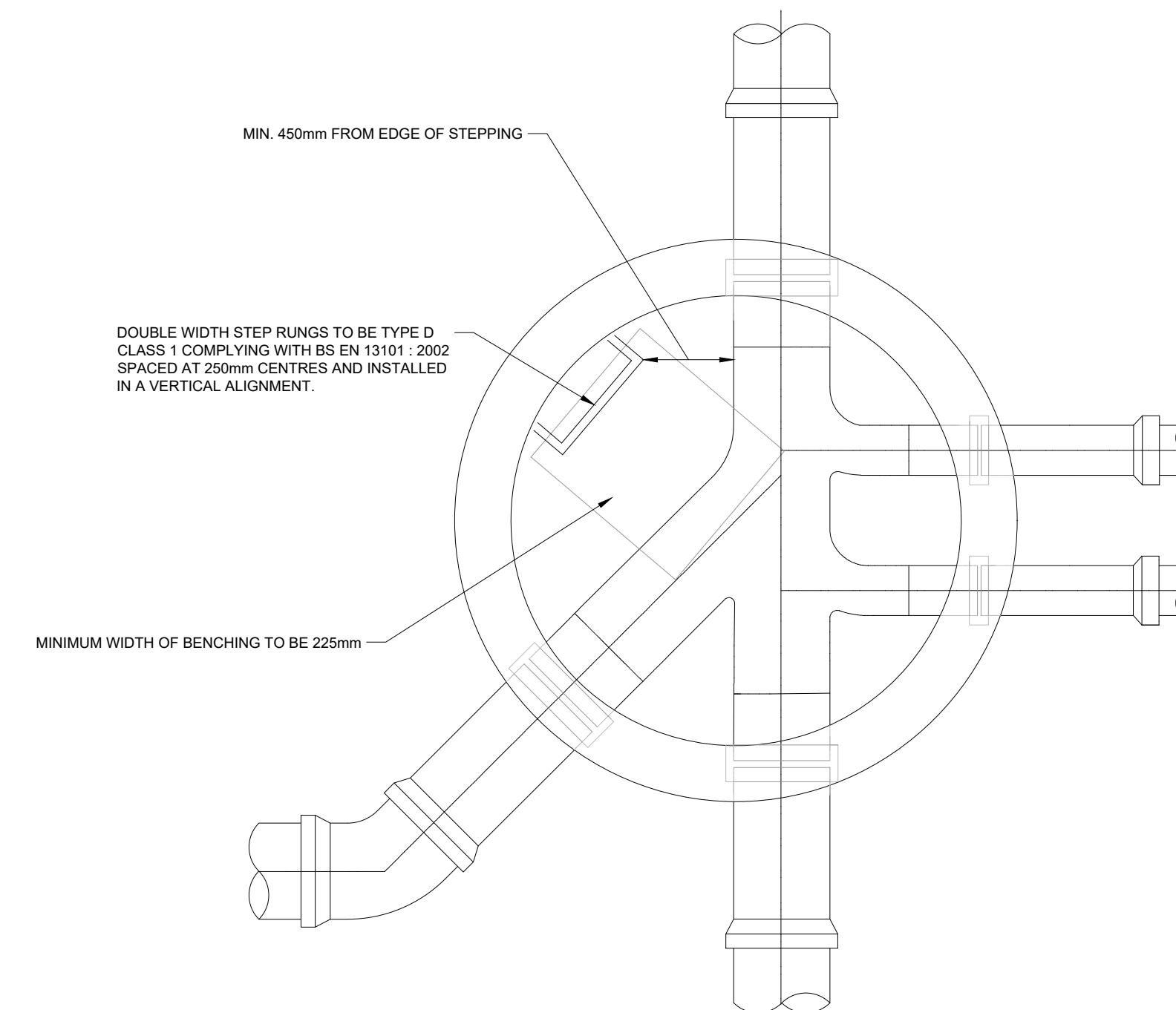
BASIN TO BE LINED WITH IMPERMEABLE MEMBRANE (SEE NOTE 3). MIN COVER TO LINER IS 200mm. LINER TO BE PROTECTED WITH WOVEN PROPYLENE GEOTEXTILE TO BOTTOM AND TOP. REFER TO NOTE 3 T FURTHER DETAILS.

- PERMEABLE WOVEN POLYPROPYLENE
GEOTEXTILE TO BE BONTEC HF400 OR
SIMILAR

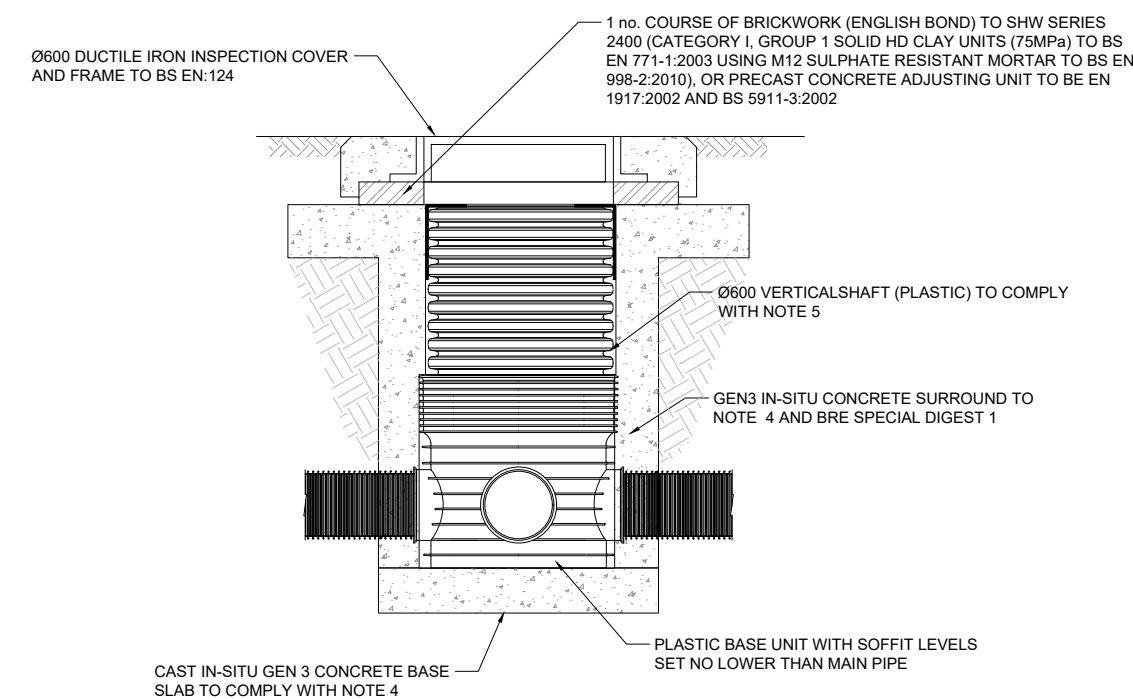
100 THK 4/20 GC 80/20 GRADED MATERIAL TO
BS EN 13242 TO SIDES AND OF GEO-CELLULAR
CRATES

50-100 SHARP SAND OR 4/20 GC 80/20 TO BS 13242

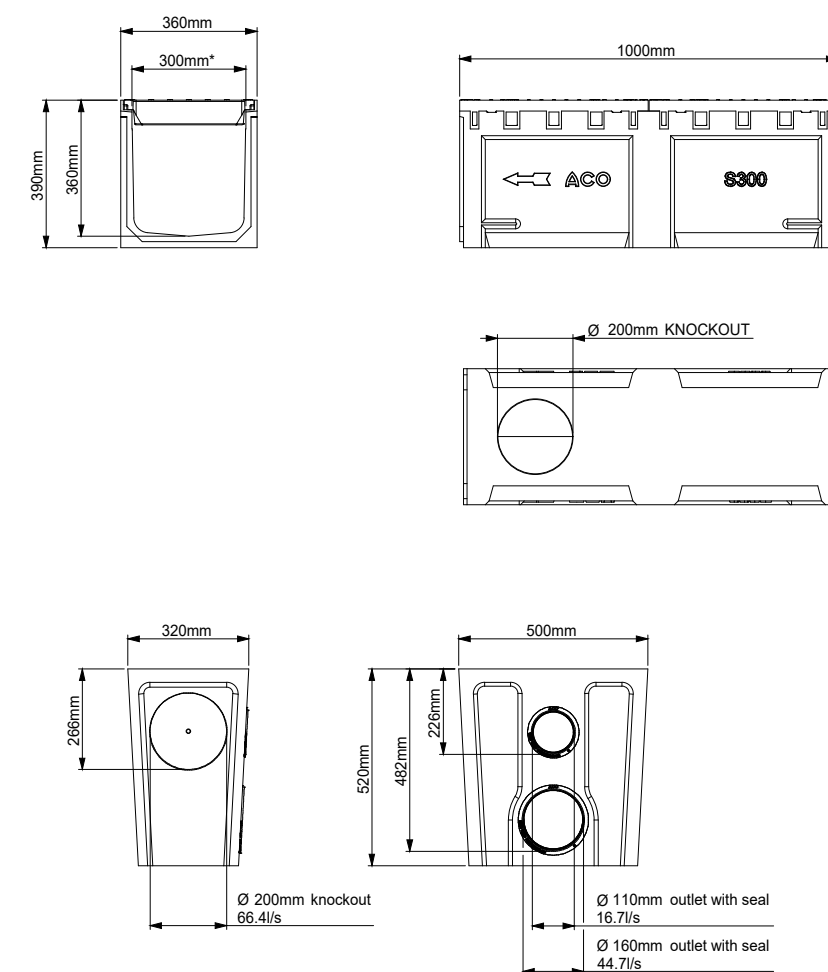
GEO-CELLULAR ATTENUATION TANK
SCALE 1:20 @ A1



MANHOLE CHAMBER (Ø1200 - Ø1500)
SCALE 1:20 @ A1



INSPECTION CHAMBER (Ø600- Ø900)
SCALE 1:20 @ A1



ACO S300 (CHANNEL & SUMP)
SCALE 1:20 @ A1

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES (mm) AND ALL LEVELS ARE IN METRES ABOVE ORDNANCE DATUM (mAOD) UNLESS STATED OTHERWISE.
2. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH DRAINAGE LAYOUT PLAN REF. CWC540-DR-SWD-002.

B	09/06/2026	JG	ISSUE FOR PLANNING APPROVAL	AC	AC
A	01/06/2026	JG	ISSUE FOR COMMENT ONLY	AC	AC
REV	DATE	BY	DESCRIPTION	CHK	APP

CLIENT

KHC MANAGEMENT SERVICES LTD

SITE/PROJECT:

METAL RECYCLING YARD
LINK PARK ROAD
IVER, UB7 7EZ

TITLE:

CONSTRUCTION DETAILS

SCALE @ A1: 1:200	DESIGNED: JG	CHECKED: AC
----------------------	-----------------	----------------

STATUS:	DATE:
FOR PLANNING APPROVAL	June 26

DRAWING No:	CWC540-DR-SWD-002	REV:	B
-------------	-------------------	------	---

CORNER WATER CONSULTING

Corner Water Consulting

Registered office:

1 Cricklade Court

Cricklade Street

Swindon SN1 3EY

Registered in England

13675352

Contact

info@cornerwaterconsulting.co.uk
