

Rochdale Cricket Lacross and Squash Club

Flood Risk Assessment & Drainage Strategy

September 2026

Soul Padel Ltd

AMA Project Number: 300833

Andrew Moseley Associates
15 St Paul's Street
Leeds
LS1 2JG

www.amatp.co.uk
info@amatp.co.uk

REPORT QUALITY MANAGEMENT

	First Issue	Revision 1	Revision 2	Revision 3
Remarks	Planning	Updated with LLFA comments		
Date	May 2026	September 2026		
Prepared	JE	CS		
Checked	AY	AY		
Authorised	GS	GS		

REPORT PRODUCTION TEAM

Name	Initials	Job Title
Caitlin Shearer	CS	Graduate Flood Risk Engineer
Jasmine Ellenor	JE	Flood Risk and Drainage Engineer
Aaron Yesudian	AY	Principal Flood Risk and Drainage Engineer
Gavin Shepherd	GS	Associate Director

TABLE OF CONTENTS

1	INTRODUCTION	1
1.1	Overview.....	1
1.2	Regulatory Policy and Legislation	1
1.3	Scope of Flood Risk Assessment.....	2
1.4	Scope of Detailed Drainage Strategy	2
2	METHODOLOGY	4
2.1	Introduction	4
3	PROJECT BACKGROUND	5
3.1	Development Description and Location	5
3.2	Topography	6
3.3	Geology and Ground Conditions	6
3.4	Hydrogeology	6
3.5	Hydrology.....	7
4	POTENTIAL FLOOD RISK.....	8
4.1	Sources of Flooding.....	8
4.2	Environment Agency Flood Zones	8
4.3	Fluvial and Coastal Flooding	8
4.4	Pluvial (Surface Water) Flooding.....	9
4.5	Groundwater Flooding	10
4.6	Flooding from Artificial Sources	10
4.7	Flooding from Sewers	10
4.8	Historic Flooding	10
5	FLOOD RISK ASSESSMENT	11
5.1	Flood Risk Planning Policy.....	11
5.2	Sequential and Exception Test	11
5.3	Conclusion	12
6	FLOOD RISK MITIGATION	13
6.1	Introduction	13
6.2	Effect of Development on Wider Catchment.....	13
6.3	Site Arrangements	13
7	FOUL WATER DRAINAGE	14
7.1	Introduction	14
7.2	Existing Sewers	14
7.3	Foul Water Discharge Rates	14
7.4	Foul Water Capacity and Point of Connection	14
8	SURFACE WATER DRAINAGE STRATEGY	15
8.1	Introduction	15
8.2	Overview and Concept	15
8.3	Pre-Development Surface Water Run Off	15
8.4	Groundwater Protection	15
8.5	Methods of Surface Water Management.....	16
8.6	Infiltration	16
8.7	Watercourse	16
8.8	Public Sewers.....	16
8.9	Proposed Discharge Rates	17
8.10	Attenuation Requirements	17

8.11	Drainage Network	17
9	SUDS MAINTENANCE PLAN	19
9.1	Surface Water Drainage Maintenance and Management Schedule	19
10	SUMMARY	20
11	LIMITATIONS	21
APPENDICES.....		22

TABLES

Table 3-1	Site Context.....	5
Table 5-1	Development Appropriateness Based on Vulnerability and Flood Zones	12
Table 5-2	Pre-Mitigation Flood Risk Summary.....	12
Table 5-1	Existing Run Off Rates	15
Table 5-2	Attenuation Volume	17
Table 9-1	Attenuation Tank Maintenance Schedule.....	19
Table 9-2	Hydrobrake Manhole Maintenance Schedule.....	19

FIGURES

Figure 3-1	Site Location Plan	6
Figure 3-2	Watercourse Location	7
Figure 4-1	Environment Agency Long Term Flood Map for Planning	8
Figure 4-2	Environment Agency Long Term Flood Map – Rivers and Sea – Yearly Chance of Flooding between 2036 and 2069	9
Figure 4-3	Environment Agency Flood Map for Planning– Pluvial (Surface Water) Flooding – Yearly Chance of Flooding between 2061 and 2125.....	9

APPENDICES

Appendix A	Proposed Site Layout Plan
Appendix B	Topographic Survey
Appendix C	United Utilities Sewer Maps
Appendix D	Proposed Site Elevations
Appendix E	UK SuDS Greenfield Run-Off Rates
Appendix F	Nimbus Engineering Percolation Test Report
Appendix G	LLFA Correspondence
Appendix H	CCTV Drainage Survey
Appendix I	Causeway Flow Calculations
Appendix J	Drainage Layout Drawing

1 INTRODUCTION

1.1 OVERVIEW

- 1.1.1 This Flood Risk Assessment (FRA) and Drainage Strategy (DS) has been provided at the request of Soul Padel Ltd, hereafter referred to as “the client”, to assess possible ways of discharging surface and foul water from the site while analysing the flood risks associated with the proposed development of Rochdale Cricket Lacross and Squash Club, hereafter referred to as “the site”.
- 1.1.2 The purpose of this FRA and DS is to:
- ▶ Identify the possible hazards posed from all major sources of flooding (fluvial, surface water, groundwater, infrastructural and coastal sources);
 - ▶ Provide a qualitative assessment of the probability of each potential flood hazard representing a constraint on the proposed development, based on the proposed land use type for the development and likelihood of flood occurrence;
 - ▶ Investigate and define any potential drainage impacts associated with the site;
 - ▶ Determine and define necessary surface water management controls to ensure no exacerbation of flood risk on the site or to external receptors due to any increase in surface water runoff; and
 - ▶ Recommend appropriate and necessary mitigation measures and additional assessments that may be required to progress the sustainable development of the site.
- 1.1.3 The FRA and DS comprises the following:
- ▶ A desktop review of publicly available information, including information from the Environment Agency (EA) and Rochdale Borough Council who are the Lead Local Flood Authority (LLFA) for the proposed development area; and
 - ▶ An assessment and outline design of hydraulic controls and drainage requirements and drainage elements required to support the development of the site.
- 1.1.4 This report further details the methodologies employed within this study and provides recommendations as to any further work or investigations required to support the development of the site through the planning application process.

1.2 REGULATORY POLICY AND LEGISLATION

- 1.2.1 This assessment has been carried out in line with the current Government legislation, the National Planning Policy Framework (NPPF) 2026.
- 1.2.2 It has been assessed with reference to the following documents and legislative guidelines:
- ▶ CIRIA 753 The SUDS Manual V8 (2018);
 - ▶ DEFRA “Flood Risk Assessment Guidance for New Developments” (2006);
 - ▶ DEFRA “Surface Water Management Plan Technical Guidance” (2010);
 - ▶ BS 8533 2017 Assessing & Managing Flood Risk in Development Code of Practice (2017);
 - ▶ BS 8582:2013 Code of practice for surface water management for development Sites (2013);
 - ▶ National Planning Practice Guidance (2012 – updated 2025);
 - ▶ C624 Development and Flood Risk – Guidance for the Construction Industry’ (2004);
 - ▶ Sewage Sector Guidance (2023);
 - ▶ Planning Policy Guidance – Flood Risk and Climate Change (2014 – updated 2025).
- 1.2.3 In addition to the above, this report has also been informed by the following documents:
- ▶ Rochdale Adopted Core Strategy 2016

1.3 SCOPE OF FLOOD RISK ASSESSMENT

- 1.3.1 The objective of this analysis and report is to provide an FRA in accordance with local and national guidance.
- 1.3.2 The detail and complexity of the FRA will reflect the level of risk to the site and consider the appropriateness of the proposed development type. This will also include assessment of potential risk to property and livelihoods, consideration of climate change, and the definition of appropriate flood risk mitigations required to satisfy the planning process.
- 1.3.3 Based on the assessment of requirements for a site-specific FRA as defined within NPPF 2026 technical guidance, the site is indicated as being located within Flood Zone 1, however, as the site is at risk of surface water flooding it is necessary to provide a site-specific FRA. Flood Zone 1 refers to an area assessed as having less than 1 in 1,000 annual probability (<0.1%) of river or sea flooding in any one year.
- 1.3.4 Similarly, as the site is indicatively located in an area that may be subject to other assessable sources of flooding, such as pluvial (surface water) flooding, it is necessary to undertake a further site-specific assessment to verify the proposals for development.
- 1.3.5 Potential flood risk at the site has been assessed against the site layout plan, which has been provided as [Appendix A](#) to this report. Significant changes to the site's developable area may necessitate a further review of this document to ensure that risk of flooding is not exacerbated and has been satisfactorily addressed within the development proposal.

1.4 SCOPE OF DETAILED DRAINAGE STRATEGY

- 1.4.1 Surface water run-off must be effectively managed to ensure that there is no exacerbation of potential surface water flooding issues on the site, or at any external receptors, due to any potential increases in surface water run-off rates and volumes.
- 1.4.2 The drainage hierarchy will be applied in determining the most suitable type and point of discharge of surface waters run-off from impermeable areas on the site. This will ensure that surface water is sustainably managed on the site, and that there is no exacerbation of flood risk elsewhere as a result of undertaking the development. This will be undertaken in accordance with industry best practice principles and guidance, such as the C753 SUDS Manual (2016), Design and Construction Guidance for Sewage Sector (DCGSS) (2020) and applicable sections of the Planning Policy Guidance (PPG).
- 1.4.3 Any increase in surface water run-off rate associated with the development of the site must also be managed in accordance with the guidelines set by LPA, the LLFA for the area.
- 1.4.4 As indicated in Policy G8 of the Rochdale Adopted Core Strategy, surface water run-off from the site must adhere to the following:
 - ▶ We will ensure that new development (including flood risk mitigation measures) does not lead to any form of increased flooding locally or further downstream, does not impede natural water and flood risk management, is not detrimental to existing or potential flood storage areas, contributes where possible to alleviating existing flood risk, is itself well protected from flood risk and ensures prudent use of water resources. We will require:
 - a. Compliance with a 'sequential' approach to new development and flood risk, directing development away from areas of high risk, in accordance with the National Planning Policy Framework;
 - b. Full regard to and compliance with the advice of the Environment Agency (or equivalent agency) and the objectives and priorities for flood risk management set out in the Local Flood Risk Management Strategy, including any mitigation measures recommended for particular sites;
 - c. Full regard to the published evidence of local flood risk and its significance as included in Strategic Flood Risk Assessments, Surface Water Management

Plans and other recognised sources of flood risk data and the production of additional Flood Risk Assessments (FRAs) as appropriate;

- d. Incorporation of appropriate measures for the management of surface and flood water, including flood storage areas, Sustainable Urban Drainage Systems (SuDS) and the protection of 'overland flow paths';
- e. Compliance with any Surface Water Management Plan or drainage strategies produced, such as for the identified critical drainage areas of Littleborough and Heywood;
- f. The avoidance of culverting, and support the opening up of existing culverts wherever possible;
- g. The incorporation of measures for the conservation of water to minimise potable water consumption, including rainwater collection measures, which should be integral to the design of buildings and spaces;
- h. Development that does not directly or indirectly lead to pollution of existing water resources such as watercourses and groundwater or the derogation of the quantity of groundwater;
- i. The incorporation of measures to improve water quality; and
- j. The taking of opportunities to improve the habitat value of watercourses and water bodies.

- ▶ In addition, we will identify additional flood storage areas which will be protected from development.

- 1.4.5 The Drainage Strategy will identify potential opportunities and locations for attenuation infrastructure, as well as potential connection points and provide calculations of permissible discharge rates for run-off generated on site.
- 1.4.6 The Drainage Strategy therefore aims to provide surety that any drainage provided as part of the project development can safely and appropriately convey all flows from the site to appropriate discharge locations. This is to ensure sustainable and safe operation within the site, as well as ensuring sustainable operation of any receiving infrastructure. These assessments have been undertaken in accordance with prescribed best practice and building codes, including prioritising the incorporation of SuDS, where appropriate and practicable for the management of surface water.
- 1.4.7 Following the completion of a final site masterplan the drainage scheme proposed within this report should be reassessed to ensure surface water run-off and foul water drainage can be appropriately managed in accordance with best practise and local and national standard requirements.

2 METHODOLOGY

2.1 INTRODUCTION

- 2.1.1 This report aims to demonstrate that the proposed development is sustainable and will not be impacted by or exacerbate flood risk elsewhere through the development of the site. This assessment will account for the effects of climate change, as well as identifying further opportunities to reduce the probability and consequences of flooding within the site locality.
- 2.1.2 This report aims to identify constraints and opportunities for the site based on the development proposals provided by the client ([Appendix A](#)) and provide recommendations for the sustainable provision of drainage and mitigation of any potential flood risk for the site.
- 2.1.3 The assessment methodology is as follows:
- ▶ Desktop review of the geology, hydrology, and other pertinent environmental characteristics of the site, and how these affect flood risk of the proposed development and site drainage.
 - ▶ Produce indicative design calculations for the Drainage Strategy to determine the requirements for developing the site's surface water drainage and providing adequate storage in line with local planning policy and guidance. This will include the presentation of drawings with an indicative layout for any additional drainage and attenuation infrastructure located on the site.
 - ▶ Review the findings from the above and advise on the suitability of developing the site for the proposed development in consideration of the applicable flood risk and drainage and comment on limitations and opportunities for the site, with recommendations of further mitigation where applicable and appropriate.

3 PROJECT BACKGROUND

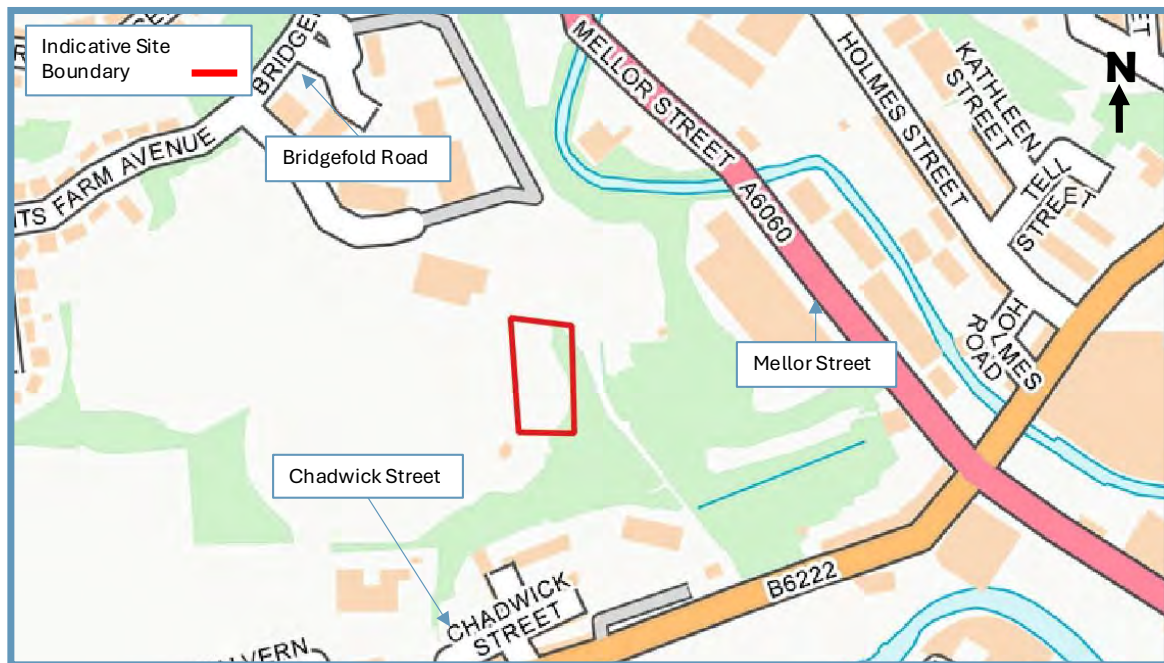
3.1 DEVELOPMENT DESCRIPTION AND LOCATION

- 3.1.1 Andrew Moseley Associates (AMA) was appointed by Soul Padel Ltd to provide a Flood Risk Assessment and Drainage Strategy in support of a padel court development, located at Rochdale Padel Club, Bridgefold Road, Rochdale, OL11 5BX.
- 3.1.2 The proposed development is located in the area of Rochdale, approximately 10 miles northeast of Manchester. Proposals for the site are for padel court use, consisting of the construction of four padel courts and a new clubhouse building with associated landscaping and infrastructure. A site layout can be found in [Appendix A](#).
- 3.1.3 The Local Planning Authority for this development is Rochdale Borough Council, who are also the Lead Local Flood Authority for the area.
- 3.1.4 This report has been prepared in accordance with the National Planning Policy Framework (NPPF) and the accompanying technical guidance to assess all forms of flooding including the management of surface water on-site.
- 3.1.5 The site is referenced in [Table 3-1](#) and [Figure 3-1](#) below.

Table 3-1 *Site Context*

Site Name	Rochdale Cricket Lacross and Squash Club
Location	Rochdale
NGR (approx..)	SD 88614 13325
General Locality	The site is located on undeveloped greenfield land and borders car parking to the north, greenfield land to the east and south, and a cricket pitch to the west. Pedestrian and vehicular access to the site is provided via an existing track, leading from Rochdale Sports Club, which can be accessed via Bridgefold Road to the northwest of the site.
Development Type	Padel Courts
EA Flood Zone	Flood Zone 1

Figure 3-1 Site Location Plan



3.2 TOPOGRAPHY

- 3.2.1 A topographic survey provided by Soul Padel Ltd and undertaken by TriCAD Solutions Ltd (Ref: TRI-4815-01) shows ground levels at the site to be in the region of 127.9 to 129.2 m Above Ordnance Datum (m AOD). The topographic survey can be seen in [Appendix B](#).
- 3.2.2 Further review of topographical data shows site levels to be lowest in the south of the site, while greatest levels are located in the north of the site. A general fall in gradient from north to south is observed across the site.

3.3 GEOLOGY AND GROUND CONDITIONS

- 3.3.1 British Geological Survey (BGS) Open Geoscience website indicates that the entire site is underlain by Pennine Lower Coal Measures Formation – Mudstone, siltstone and sandstone with overlying superficial deposits of Glaciofluvial deposits, Devensian – Sand and gravel.
- 3.3.2 The BGS website information indicates that there is no borehole record within close proximity.
- 3.3.3 As indicated by aerial imagery, the site consists of grass land consisting of light vegetation.
- 3.3.4 Information obtained from the Cranfield University's Soilscape website indicates that the site is located in an area classified as being Soilscape 10, which is defined as having freely draining slightly acid sandy soils.

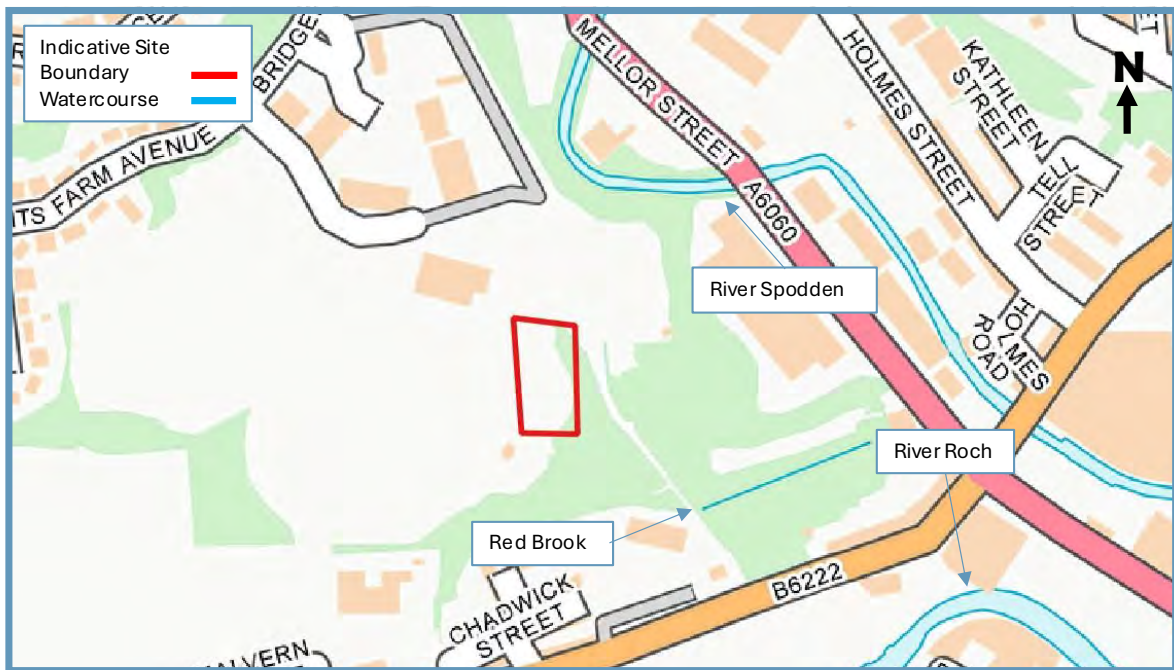
3.4 HYDROGEOLOGY

- 3.4.1 According to the Department for Environment, Food and Rural Affairs (DEFRA) MAGIC map, the site is indicated as not being located in a Groundwater Source Protection Zone (SPZ), as defined by the Environment Agency (EA) for the protection of a potable groundwater supply.
- 3.4.2 The site is located as being in an area of medium to high groundwater vulnerability and located above a Secondary A bedrock aquifer and a Secondary A superficial aquifer.

3.5 HYDROLOGY

- 3.5.1 As shown below in [Figure 3-2](#), the River Spodden is located approximately 90m to the northeast of the site at its closest point. There is also the River Roch, which is located 245m southeast of the site.
- 3.5.2 In addition to the above, the Red Brook is culverted approximately 25m south of the site boundary, which discharges into the open watercourse as shown below.
- 3.5.3 The EA's Catchment Data Explorer website indicates that the site resides within the Roch Irk Medlock operational catchment and the Spodden sub catchment.

Figure 3-2 Watercourse Location



4 POTENTIAL FLOOD RISK

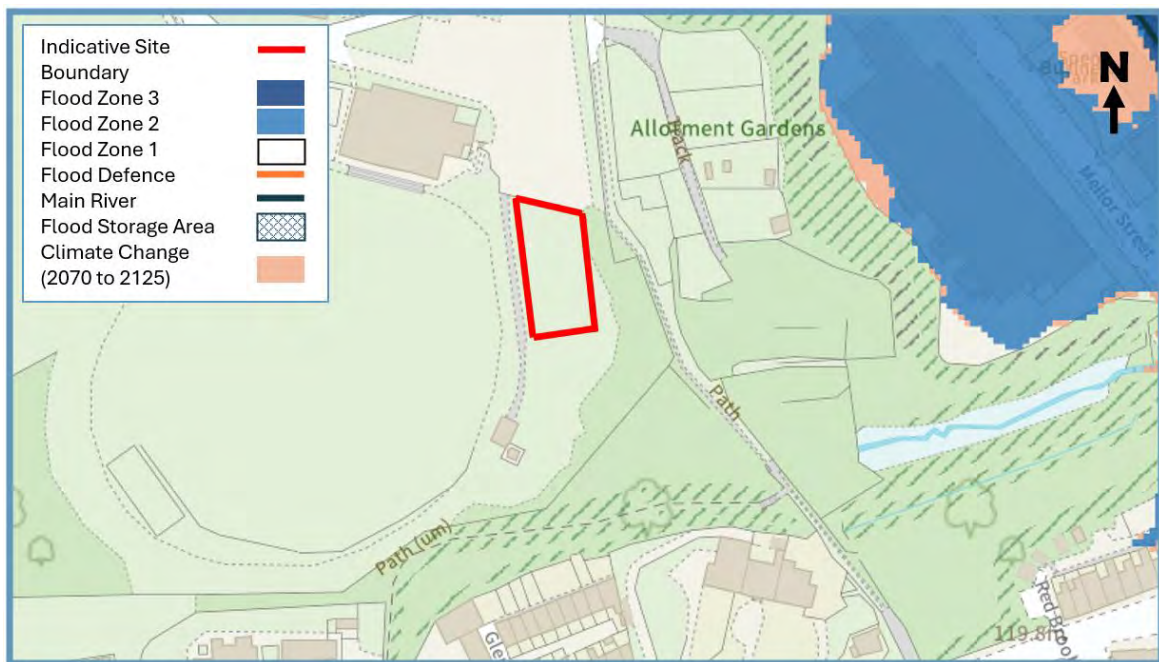
4.1 SOURCES OF FLOODING

- 4.1.1 This report is to consider flood risk from all potential sources. [Section 5](#) then discusses in further detail the probability of flooding, any potential impacts and necessary mitigation, where required.

4.2 ENVIRONMENT AGENCY FLOOD ZONES

- 4.2.1 The EA Flood Map for Planning shows the site is located within Flood Zone 1, which is designated as land having less than a 1 in 1000 probability of river or sea flooding.
- 4.2.2 This potential fluvial/coastal flood risk to the site has been illustrated in [Figure 4-1](#).

Figure 4-1 Environment Agency Long Term Flood Map for Planning



4.3 FLUVIAL AND COASTAL FLOODING

- 4.3.1 It is necessary to consider the risk of fluvial and coastal flooding at the site during both present times and with the impacts of climate change. Therefore, the EA Long Term Flood Risk Map for fluvial and coastal flooding between the years 2036 and 2069 has been presented below in [Error! Not a valid bookmark self-reference..](#) This figure indicates that the site is at very low risk of fluvial and/or coastal flooding.

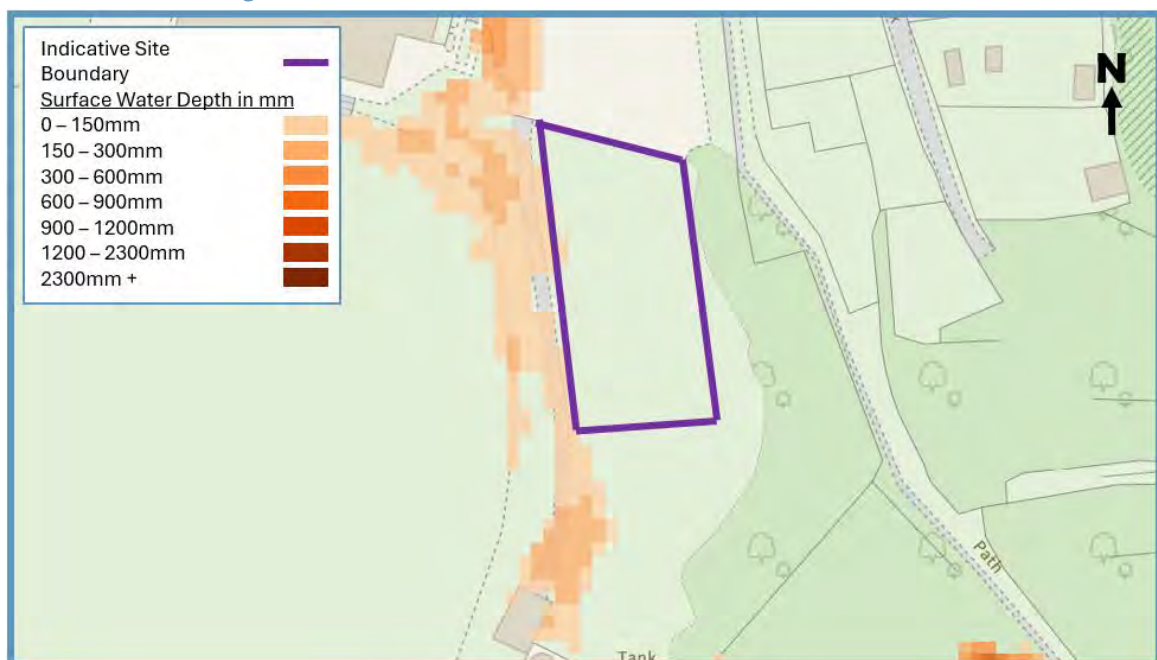
Figure 4-2 Environment Agency Long Term Flood Map – Rivers and Sea – Yearly Chance of Flooding between 2036 and 2069



4.4 PLUVIAL (SURFACE WATER) FLOODING

- 4.4.1 Similarly to that discussed in [Section 4.3](#) the impacts of climate change on the potential for surface water flooding should be considered within the assessment of the flood risk at the site. The EA Flood Map for Planning provides modelled flood extents and depths for a 1in30year, 1in100year, and a 1in1000year flood scenario, for either present day conditions or under the influence of climate change.
- 4.4.2 As the proposals are for padel court development, the design life can be considered as 100years and as such, the 1in100year plus climate change (2061 to 2125) scenario has been shown below in [Figure 4-3](#).

Figure 4-3 Environment Agency Flood Map for Planning– Pluvial (Surface Water) Flooding – Yearly Chance of Flooding between 2061 and 2125



- 4.4.3 As shown above in [Figure 4-3](#), the majority of the site is not at risk of surface water flooding during a 1in100year plus climate change scenario. There is a small section along the western boundary of the site that is at risk of flood depths up to 150mm.
- 4.4.4 During a 1in30year plus climate change scenario, the site is not at risk of surface water flooding.
- 4.4.5 To fully understand the risk of pluvial flooding on site, the 1in1000year plus climate change scenario has been analysed. This shows that the western boundary of the site is at risk of pluvial flooding. The majority of the depths are expected to be below 150mm, however there are small areas at risk of flood depths between 150-300mm.
- 4.4.6 As the proposed development of the site may potentially reduce the overall site permeability and potentially increase surface water run-off rates and volumes, the surface water discharge controls must ensure that any proposal for drainage, or discharge, does not adversely impact upon downstream drainage infrastructure or offsite receptors.
- 4.4.7 The site is therefore considered to have low potential risk of flooding from pluvial sources.

4.5 GROUNDWATER FLOODING

- 4.5.1 Ground conditions at the site consist of freely draining slightly acid sandy soils, therefore the propensity for groundwater emergence at the site is considered to be low, and the potential risk of groundwater emergence affecting the site development is considered to be low.
- 4.5.2 However, given the impermeable nature of the proposed site's hardstanding areas subsequent to development, potential elevation of groundwater or groundwater emergence within the superficial geology causing flooding within the site post-development will be largely eliminated.
- 4.5.3 During long periods of heavy rainfall, the water table within an area can rise above the natural ground level, resulting in groundwater flooding.
- 4.5.4 Site specific investigations should be able to prove the presence of ground water and propose remedial mitigation where required. Flood risk to the proposed development due to groundwater emergence is therefore considered to be low.
- 4.5.5 The site is not located in an EA groundwater flood alert area.
- 4.5.6 Flood risk to the proposed development due to groundwater emergence is considered to be low provided that all reasonable and practicable mitigation measures for any subsurface construction associated with the development are adhered to.

4.6 FLOODING FROM ARTIFICIAL SOURCES

- 4.6.1 In accordance with information taken from the EA Long Term Flood Risk information, the site and its surroundings are unlikely to experience flooding from artificial sources such as dam or canal failure. In addition, reservoirs and canals are regularly maintained by relevant local authorities and failure is extremely unlikely. Therefore, the potential risk of flooding from reservoir and/or canal failure is considered to be negligible.

4.7 FLOODING FROM SEWERS

- 4.7.1 The site currently consists of greenfield land and is not identified as having any drainage infrastructure within its boundary. The site is therefore considered to have very low potential risk of flooding from sewer flooding.

4.8 HISTORIC FLOODING

- 4.8.1 The EA historic flood map shows the site to not have experienced historic flooding.

5 FLOOD RISK ASSESSMENT

5.1 FLOOD RISK PLANNING POLICY

National Planning Policy Framework

- 5.1.1 The National Planning Policy Framework (NPPF) sets out the Government's national policies on different aspects of land use planning in England in relation to flood risk. Planning Practice Guidance is also available online.
- 5.1.2 The Planning Practice Guidance sets out the vulnerability to flooding of different land uses. It encourages development to be located in areas of lower flood risk where possible and stresses the importance of preventing increases in flood risk off site to the wider catchment area.
- 5.1.3 The Planning Practice Guidance also states that alternative sources of flooding, other than fluvial (river flooding), should also be considered when preparing a Flood Risk Assessment.
- 5.1.4 This Flood Risk Assessment is written in accordance with the NPPF and the Planning Practice Guidance.
- 5.1.5 The EA Flood Map for Planning locates the site within Flood Zone 1, i.e. land assessed as having less than 1 in 1,000 annual probability (<0.1%) of river or sea flooding in any one year.
- 5.1.6 The flood map extents indicated on this map show the potential for flooding from fluvial and coastal sources, and although they are indicative, they are a key tool in defining the appropriateness of a development type or the requirement for further assessment.
- 5.1.7 Under the NPPF (2026), Flood Zone 1 is defined as having a low probability flood risk. The proposed development includes construction of four padel courts and a new clubhouse building with associated landscaping and infrastructure, which are defined within Table 2 of the NPPF technical guidance as being 'Less Vulnerable'. Therefore, according to the criteria in Table 3 of the NPPF Technical Guidance (Flood Risk Vulnerability and Flood Zone 'Compatibility'), the proposed development may be deemed as 'Appropriate'.

5.2 SEQUENTIAL AND EXCEPTION TEST

- 5.2.1 Both the NPPG and the SFRA require the 'Sequential Test' to be applied to ensure that proposed developments are carried out in area that are at the least risk of flooding, before considering development in areas that are at risk of flooding. The proposed site falls within Flood Zone 1 and is considered to come under the 'Less Vulnerable' category as a padel court development.
- 5.2.2 Based on Table 3 in the National Planning Practice Guidance for Flood Risk and Coastal Change, the proposed use of the site is acceptable due to it being located in Flood Zone 1 and an Exception Test is not required.

Table 5-1 Development Appropriateness Based on Vulnerability and Flood Zones

Flood Risk Vulnerability Classification	Essential Infrastructure	Water Compatible	Highly Vulnerable	More Vulnerable	Less Vulnerable
Flood Zone 1	✓	✓	✓	✓	✓
Flood Zone 2	✓	✓	Exception test required	✓	✓
Flood Zone 3a	Exception test required	✓	x	Exception test required	✓
Flood Zone 3b	Exception test required	✓	x	x	x

5.3 CONCLUSION

- 5.3.1 In light of this assessment against the sites applicable flood zone (Flood Zone 1), further assessment against the sequential or exception test is not required. This should be confirmed with the LPA prior to development of the site.
- 5.3.2 **Table 5-2** summarises the pre mitigation flood risk associated with the site as well as the impacts of the flood risk on the wider catchment prior to mitigation. The mitigation measures proposed to address flood risk issues and ensure the development is appropriate for its location are discussed within **Section 6**.

Table 5-2 Pre-Mitigation Flood Risk Summary

Sources	Probability of Flood Risk	Impacts	Description
Tidal	N/A	N/A	The site is located inland and therefore, is not tidally influenced.
Fluvial	Low	Low	The site is not shown to be located in an area susceptible to fluvial flooding.
Surface Water (Pluvial)	Low	Low	Review of information from multiple sources (EA, LLFA) reveals evidence of surface water flooding along the western boundary of the site. The flood depths are not expected to exceed 150mm during a 1in100year plus climate change event.
Groundwater	Low	Low	Ground water flood risk is considered to be low.
Artificial Sources	Very Low	Low	Review of information from multiple sources (EA, LLFA) reveals no evidence of flooding from reservoirs or canals.
Sewers	Very Low	Low	The risk of flooding from the surcharging of sewers is considered to be low.
Effect of development on wider catchment	Low	Low	The impermeable area of the site is being altered.

- 5.3.3 Based on the assessable information presented, the site is considered to meet the requirements of the NPPF, given the assessed potential flood risk posed from all applicable sources, the means of adopting suitable mitigation measures to prevent increase in the potential for flood risk and based on the vulnerability of the development type. Further consideration of necessary surface water run-off mitigation measures will be provided, so as to address the potential for increase of surface water arising from the proposed development of the site.

6 FLOOD RISK MITIGATION

6.1 INTRODUCTION

- 6.1.1 **Section 4** has identified the sources of flooding which could potentially pose a risk to the site and the proposed development. This section of the FRA sets out the mitigation measures which are to be considered within the proposed development detail design to address and reduce the risk of flooding to within acceptable levels.

6.2 EFFECT OF DEVELOPMENT ON WIDER CATCHMENT

Development Drainage

- 6.2.1 The current site is considered to be greenfield. The amount of impermeable area will be altered. Therefore, the existing drainage systems will not be suitable to discharge the surface water from the site alongside the additional run-off from the proposed development. A sufficient drainage strategy will be therefore provided by AMA.

6.3 SITE ARRANGEMENTS

Sequential Arrangement

- 6.3.1 The Flood Zone mapping shows the site to be located within Flood Zone 1. Therefore, a Sequential Test has not been completed for this site.

Finished Floor Levels

- 6.3.2 Given the site's location within Flood Zone 1, there are no specific requirements for finished floor levels with regard to flood risk. However, it is recommended that an FFL of 0.15m is set for the proposed development to prevent any ingress from secondary flood sources.

7 FOUL WATER DRAINAGE

7.1 INTRODUCTION

- 7.1.1 It is proposed to install a new foul drainage system to serve the proposed padel court and clubhouse development.
- 7.1.2 The foul water system will be designed and constructed in accordance with the current Building Regulations, BS EN:752 'Drainage and Sewer Systems Outside Buildings', the Local Authority Building Control specifications and requirements, Sewers for Adoption 8th Edition and the Civil Engineering Specification for the Water Industry.

7.2 EXISTING SEWERS

- 7.2.1 AMA attained United Utilities sewer maps which can be seen in [Appendix C](#). They show that there are no public sewers within the site boundary.
- 7.2.2 There is existing private drainage infrastructure located within the adjacent sports club.

7.3 FOUL WATER DISCHARGE RATES

- 7.3.1 The estimate design peak flow generated by the proposed development, based on a gravity system, has been calculated as 0.056 litres per second.
- 7.3.2 This figure is based on an estimated peak usage of 120 people per day, at a rate of 40 litres per person per activity per day as prescribed for a sports club in British Flows and Loads.

7.4 FOUL WATER CAPACITY AND POINT OF CONNECTION

- 7.4.1 As discussed, as the proposals are located directly adjacent to the existing sports club, it is proposed that foul water will discharge through a connection into the existing foul drainage system within the facility. A CCTV drainage survey will be required to confirm the exact level and location of outfall to the existing system.

8 SURFACE WATER DRAINAGE STRATEGY

8.1 INTRODUCTION

- 8.1.1 The National Planning Policy Framework (NPPF) and accompanying Technical Guidance indicate that surface water run-off should be controlled as near to its source as possible through a sustainable drainage approach to surface water management.
- 8.1.2 Consideration should therefore firstly be given to using sustainable drainage (SuDS) techniques including soakaways, infiltration trenches, permeable pavements, grassed swales, ponds and wetlands to reduce flood risk by attenuating the rate and quantity of surface water run-off from a site. This approach can also offer other benefits in terms of promoting groundwater recharge, water quality improvement and amenity enhancements. Approved document Part H of the Building Regulations (2015) sets out a hierarchy for the disposal of surface water which encourages a SuDS approach.

8.2 OVERVIEW AND CONCEPT

- 8.2.1 As detailed in [Section 3.1](#), development proposals for the site consist of padel court use, consisting of the construction of four padel courts and a new clubhouse building with associated landscaping and infrastructure. The site plan shows the developable area of the site to be restricted to the red line boundary, as shown in [Appendix A](#), with an approximate total developable area of 0.17 ha.
- 8.2.2 Proposed elevations of the development have been provided within [Appendix D](#). As detailed within the site layout plans in [Appendix A](#), the finished floor level (FFL) of the proposed clubhouse has been set at 129.47 mAOD, and the four padel court FFLs have been set at 129.25 mAOD.
- 8.2.3 Review of the site plan shows proposals to consist of an approximate total impermeable area of 74m², associated with the proposed clubhouse. It is proposed that surrounding pathways and access are to consist of permeable surfacing and therefore do not contribute to the impermeable areas of the site.
- 8.2.4 It is considered that green open space and landscaped areas will not produce or contribute run-off to the surface water management infrastructure proposed as part of this strategy. This has been taken into account when deriving the impermeable area for the site.

8.3 PRE-DEVELOPMENT SURFACE WATER RUN OFF

Greenfield

- 8.3.1 The site is approximately 0.17 ha in area and currently comprises of undeveloped greenfield land.
- 8.3.2 For the purposes of determining the existing rate of surface water run-off the site is considered to greenfield therefore the run-off will be estimated using the IH124 method.
- 8.3.3 The table below summarises the existing greenfield run-off rates generated by the development for a range of storm return periods. A calculation summary sheet from the UK SuDS website can be found in [Appendix E](#).

Table 5-1 Existing Run Off Rates

Area (ha)	Q ₁ (l/s)	Q ₁₀ (l/s)	Q ₃₀ (l/s)	Q ₁₀₀ (l/s)	Q ₂₀₀ (l/s)
0.17	1.3	2.0	2.5	3.0	3.5

8.4 GROUNDWATER PROTECTION

- 8.4.1 The proposed development site is not identified as being within a groundwater source protection zone (SPZ), as such no special measures are required to prevent risk to drinking water supplies.

8.5 METHODS OF SURFACE WATER MANAGEMENT

8.5.1 There are three methods that have been reviewed for the management and discharge of surface water which are detailed below; these may be applied individually or collectively to form a complete strategy. They should be applied in the order of priority as listed:

- ▶ Discharge via Infiltration
- ▶ Discharge to a Watercourse
- ▶ Discharge to Surface Water Sewer or Highway Drain
- ▶ Discharge to Public Sewer

8.6 INFILTRATION

- 8.6.1 Any impermeable areas that can drain to a soakaway or an alternative method of infiltration would significantly improve the sustainability of any surface water systems.
- 8.6.2 The British Geological Society (BGS) Geology of Britain Viewer indicates that the entire site is underlain by Pennine Lower Coal Measures Formation – Mudstone, siltstone and sandstone with overlying superficial deposits of Glaciofluvial deposits, Devensian – Sand and gravel.
- 8.6.3 Information obtained from the Cranfield University's Soilscape website indicates that the site is in an area classified as being Soilscape 10, which is defined as freely draining slightly acid sandy soils.
- 8.6.4 From a desktop review of the geology and soil at the site, it is believed that infiltration would be an acceptable way of discharging surface water from the site.
- 8.6.5 Infiltration testing was undertaken by Nimbus Engineering Consultants, and they concluded that the results from the BRE365 infiltration test demonstrated that infiltration is an unfeasible method to discharge surface water from the site. This report can be found in [Appendix F](#).
- 8.6.6 As such, infiltration is not a suitable method to discharge surface water from the site.

8.7 WATERCOURSE

- 8.7.1 As discussed in [Section 3.5](#) there are a number of watercourses within the vicinity of the site. Firstly, the River Spodden is located approximately 90m to the northeast of the site at its closest point. There is also the River Roch, which is located 245m southeast of the site.
- 8.7.2 In addition to the above, the Red Brook is culverted approximately 25m south of the site boundary, which discharges into an open watercourse in the vicinity of the site.
- 8.7.3 AMA contacted the LLFA regarding the possibility of discharging surface water to the Red Brook but have not received a response at the time of writing this report. This correspondence can be found in [Appendix G](#).
- 8.7.4 As the site is in close proximity to the Red Brook, surface water from the site should be discharged here.
- 8.7.5 There is a manhole on the western boundary of the site that leads to the Red Brook. As this system has an existing connection to the watercourse, it is proposed to utilise this connection. A CCTV survey can be found in [Appendix H](#).
- 8.7.6 As such, it would be possible to discharge surface water to the Red Brook via the existing connection.

8.8 PUBLIC SEWERS

- 8.8.1 As a last resort and following the hierarchy of surface water, disposal discharge to the public sewer system may need to be considered.

- 8.8.2 In the United Utilities sewer maps ([Appendix C](#)) it is shown that there are a number of combined water sewers located to the north of the site, as well as a surface water pipe to the south.
- 8.8.3 Therefore, it would be possible to discharge surface water from the site into the surface water sewer to the south.
- 8.8.4 In addition to the above, it should be noted that as the site is located adjacent to an existing sports facility, it is likely that there are existing private sewers in which an outfall could be proposed, should no alternative options be viable for the discharge of surface water.

8.9 PROPOSED DISCHARGE RATES

- 8.9.1 Surface water from the site will be discharged to the Red Brook located to the south of the site.
- 8.9.2 As the site will be drained by discharging surface water into the watercourse, surface water will be restricted to the Qbar greenfield run-off rate of 1.5 l/s.
- 8.9.3 Typically, any discharge rate less than 5.0 l/s is prone to blockage and will create maintenance issues because of the small size of the orifice required. This would need to be confirmed by the approving authority.

8.10 ATTENUATION REQUIREMENTS

- 8.10.1 As discussed earlier the site will be drained into a watercourse, at a restricted discharge rate of 1.5 l/s. Therefore, attenuation will have to be provided.
- 8.10.2 Causeway Flow drainage design software has been used to estimate the maximum storage volume required on-site for the 100-year storm event plus 45% allowance for climate change. The results of these calculations can be found in [Appendix I](#).
- 8.10.3 The climate change allowance is in line with the 'Irwell Management' catchment area.
- 8.10.4 The results below are based on an attenuation tank to serve the proposed clubhouse. The proposed external areas are to consist of permeable surfacing and as such do not contribute to the impermeable area.
- 8.10.5 A Drainage Layout Drawing can be found in [Appendix J](#).

Total Impermeable Area

- 8.10.6 This volume is based on using an attenuation tank with a discharge rate of 1.5 l/s, subject to agreement with the LLFA. The details on the attenuation of the attenuation tank can be found in [Table 5-2](#) below.

Table 5-2 Attenuation Volume

Gross Areas (ha)	Max Discharge (l/s)	Impermeable Area (ha)	Q100+45% Volume (m³)
0.17	1.5	0.0074	1.71

8.11 DRAINAGE NETWORK

- 8.11.1 A network hydraulic model has been developed so as to assess the conveyance requirements for the proposed drainage strategy. This includes a combination of surface water pipes and manholes, which will direct surface water run-off from impermeable areas to the soakaway located in the west of the site. This will ensure that surface water flows from the site are internally managed before they leave the site and further reduce the potential for impact elsewhere.
- 8.11.2 The final surface water drainage network servicing the site should ideally consist of permeable paving to limit the run-off from any paved areas, whilst extending time of concentration for discharge to the accompanying drainage network.

- 8.11.3 For any portion of the network crossing a highway or an area to be trafficked by heavy grade vehicles (HGV's), a minimum cover requirement of 1.20 m below cover level should be provided where practically possible for the internal drainage network to satisfy Sewers for Adoption standards.

9 SUDS MAINTENANCE PLAN

9.1 SURFACE WATER DRAINAGE MAINTENANCE AND MANAGEMENT SCHEDULE

Attenuation Tank Maintenance Schedule

Table 9-1 Attenuation Tank Maintenance Schedule

Maintenance Schedule	Required Action	Frequency
Regular Maintenance	Inspect and identify areas that are not operating correctly. If required, take remedial action.	Monthly for 3 months, then annually.
	Remove debris from catchment surface (where it may cause risks to performance)	Monthly
	For systems where rainfall infiltrates into the tank from above, check surface of filter for blockage by sediment, algae or other matter; remove and replace surface infiltration medium as necessary.	Annually
	Remove sediment from pre-treatment structures and/or internal forebays	Annually, or as required.
Remedial Actions	Repair/rehabilitate inlets, outlets, overflows and vents	As required
Monitoring	Inspect/check all inlets, outlets, vents and overflows to ensure that they are in good condition and operating as designed.	Annually
	Survey inside of tank for sediment and build-up and remove if necessary.	Every 5 years or as required

Hydrobrake Manhole Maintenance Schedule

Table 9-2 Hydrobrake Manhole Maintenance Schedule

Maintenance Schedule	Required Action	Frequency
Regular Maintenance	Remove sediment and debris from flow control chambers and upstream manholes.	Monthly for first 12 months, then 6 monthly.
Remedial Actions	Replace or clean hydrobrake if performance deteriorates or failure occurs.	As necessary
Monitoring	Check flow control to ensure emptying is occurring.	Quarterly and post high intensity storm event

10 SUMMARY

- 10.1.1 The site is in an area identified as having a low probability of flooding on the EA Flood Map and is located in Flood Zone 1.
- 10.1.2 The site is in an area identified as having a low probability of flooding on the EA Flood Map and is located in Flood Zone 1.
- 10.1.3 The western boundary of the site is at risk of surface water flooding during a 1in100year plus climate change event. The depths are not predicted to exceed 150mm.
- 10.1.4 The site is not at risk of fluvial flooding, groundwater flooding, flooding from artificial sources, tidal flooding or sewer flooding.
- 10.1.5 As there is no development located in an area at risk of flooding, there is no requirement to raise any FFLs. However, it is recommended that FFLs are increased to 0.15m above adjacent ground levels to prevent any ingress of secondary flooding.
- 10.1.6 As with any drainage system, blockages within the surface water sewer systems constructed to serve the development has the potential to cause flooding or disruption. Any drainage systems which are not to be offered for adoption to either the Water Company or the Local Authority will have a suitable maintenance regime scheduled, and an appropriate management company appointed to carry out the works.
- 10.1.7 The primary option for surface water disposal is to use infiltration.
- 10.1.8 From a desktop review of the geology and soil at the site, it is believed that infiltration would be an acceptable way of discharging surface water from the site. Percolation testing has not yet been carried out on this site. It is recommended that infiltration testing to BRE 365 digest is undertaken as part of any future site investigations works at the site so that this can be used as satisfactory evidence for the LLFA or United Utilities as necessary. The results of a percolation test will also be required to produce infiltration/soakaway designs.
- 10.1.9 There is a suitable watercourse in the vicinity of the site which could be utilised to dispose of surface water from the site, should infiltration be shown to be unviable.
- 10.1.10 There is a suitable public sewer in the vicinity of the site which could be utilised to dispose of the surface water, should infiltration not be viable following site-specific infiltration testing.
- 10.1.11 Attenuation should not be required as the means of surface water disposal is through infiltration. Furthermore, there will be no need for a discharge limit.
- 10.1.12 As discussed, as the proposals are located directly adjacent to the existing sports club, it is proposed that foul water will discharge through a connection into the existing foul drainage system within the facility. A CCTV drainage survey will be required to confirm the exact level and location of outfall to the existing system.

11 LIMITATIONS

- 11.1.1 This report has been prepared for exclusive use by Soul Padel Ltd for the purpose of assisting them in evaluating the potential constraints imposed by flood risk and drainage in making a Planning Application.
- 11.1.2 AMA accepts no liability for any use of this document other than by its client and only for the purposes, stated in the document, for which it was prepared and provided. No person other than the client may copy (in whole or in part) use or rely on the contents of this document, without the prior written permission of AMA. Any advice, opinions or recommendations within this document should be read and relied upon only in the context of the document as a whole.
- 11.1.3 AMA has endeavoured to assess all information provided to them during this appraisal. The report summarises from several external sources and cannot offer any guarantees or warranties for the completeness or accuracy of information relied upon.
- 11.1.4 This report has been undertaken with the assumption that the site will be developed in accordance with the above proposals without significant change. The conclusions resulting from this study are not necessarily indicative of future conditions or operating practices at or adjacent to the site.
- 11.1.5 A topographic survey has been completed for the site and was supplied to AMA by the client. AMA accepts no liability for the accuracy of this survey, and it is recommended that it is verified on-site prior to the commencement of any construction work.
- 11.1.6 Existing drainage information is based on third party survey data and record information which is considered to be incomplete. It is therefore recommended that a FULL drainage investigation survey is commissioned to establish the precise alignment, level, and condition of ALL existing drainage within the development site to inform the masterplan and future detailed design proposals.

APPENDICES

Appendix A Proposed Site Layout Plan

Appendix B Topographic Survey

Appendix C United Utilities Sewer Maps

Appendix D Proposed Site Elevations

Appendix E UK SuDS Greenfield Run-Off Rates

Appendix F Nimbus Engineering Percolation Test Report

Appendix G LLFA Correspondence

Appendix H CCTV Drainage Survey

Appendix I Causeway Flow Calculations

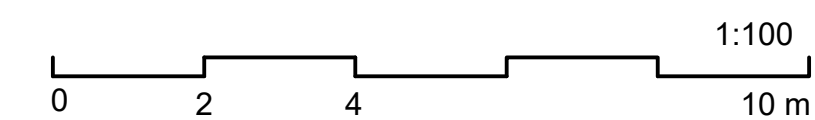
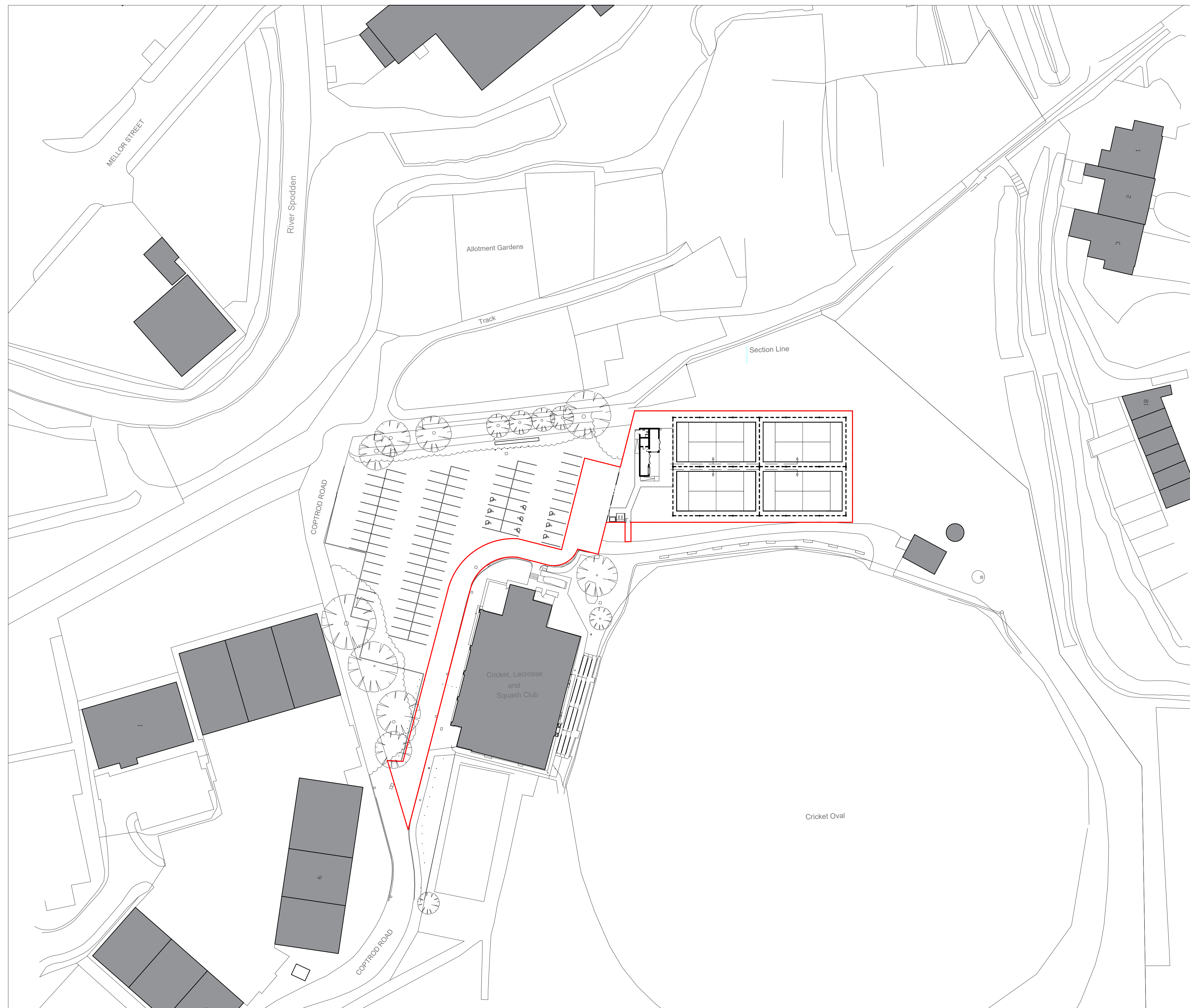
Appendix J Drainage Layout Drawing



Appendix A
Proposed Site Layout Plan

Disclaimer:

- Do not scale from this drawing.
- Discrepancies must be reported immediately to the Architect before proceeding.
- Only figured dimensions are to be used.
- Check all dimensions on site before fabrication or setting out.
- This document is copyright and may not be reproduced without permission of the owner.



Key / Location:

[illegible]

Purpose of Issue:
PLANNING

GRID

GRID Architects
128 Southwark Street,
London SE1 0SW

+44 (0) 20 7593 3260
info@gridarchitects.co.uk
www.gridarchitects.co.uk

Client:
Soul Padel

Project Name
Soul Padel
Rochdale

Drawing Title:
Proposed Site Plan

Drawn by: NL	Issued by: MKP
-----------------	-------------------

GRID Project No: 26015	Scale @A1: 1:500
---------------------------	---------------------

Drawing No: **###-GRID-00-00-DR-A-00100** Revision: **C**

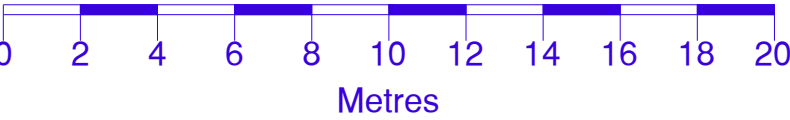
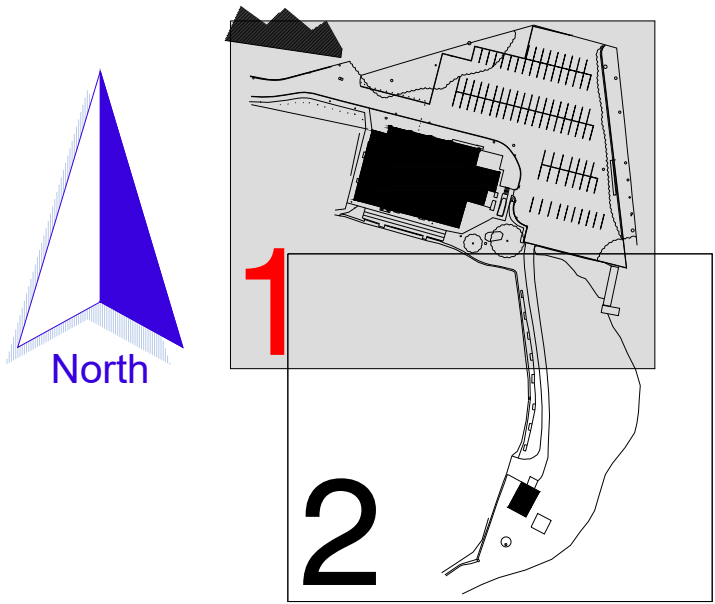
Proj. Auth. Zone Lvl Type Disc. Dwg No.



Appendix B
Topographic Survey

Notes

All Dimensions to be checked on site. Walls shown on plans are not to be assumed to be solid & should be checked for thickness, construction, load bearing capacity & stability.



ABBREVIATIONS

- BOL Bollard
- BT BT Cover
- CL Cover Level
- DK Drop Kerb
- EH Eaves Height
- FP Flag Pole
- GU Gully
- IC Inspection Cover
- LP Lamp Post
- MH Man Hole
- RE Rodding Eye
- RH Ridge/Roof Height
- RWP Rain Water Pipe
- SP Sign Post
- SVP Soil Vent Pipe
- TF Top of Fence

NOTE
All levels and coordinates relate to OSGB36(15) using GNSD data.
Levels defining edge of carriageway are observed at channel (bottom of kerb).

Rev.0 Description. Issued



2 Berkshire Close | Wilpshire | Blackburn | Lancashire | BB1 9NG
tel 01254 614055 fax 01254 209754 e-mail sales@tricadsolutions.co.uk

Site Address
Rochdale Sports Club
Rochdale
OL11 5BX

Project Description
Site Survey

Drawing Title
Existing
Site Layout

Scale 1:200@A1	Date 21/05/2025	Drawn By JB
-------------------	--------------------	----------------

Drawing Number
TRI-4815-01



Appendix C
United Utilities Sewer Maps

Jasmine Ellenor

15
15 St Pauls St,
Leeds, United Kingdom
LS1 2JG

FAO:

How to contact us:

**United Utilities Water Limited
Property Searches
Haweswater House
Lingley Mere Business Park
Great Sankey
Warrington
WA5 3LP**

Telephone: 0370 7510101

E-mail: propertysearches@uuplc.co.uk

**Your Ref: 300833
Our Ref: UUPS-ORD-728169
Date: 06/05/2026**

Dear Sirs

Location: Rochdale Squash Club

I acknowledge with thanks your request dated 05/05/2026 for information on the location of our services.

Please find enclosed plans showing the approximate position of United Utilities' apparatus known to be in the vicinity of this site.

The enclosed plans are being provided to you subject to the United Utilities terms and conditions for both the wastewater and water distribution plans which are shown attached.

If you are planning works anywhere in the North West, please read United Utilities' access statement before you start work to check how it will affect our network. <http://www.unitedutilities.com/work-near-asset.aspx>.

I trust the above meets with your requirements and look forward to hearing from you should you need anything further.

If you have any queries regarding this matter please [contact us](#).

Yours Faithfully,



Karen McCormack
Property Searches Manager

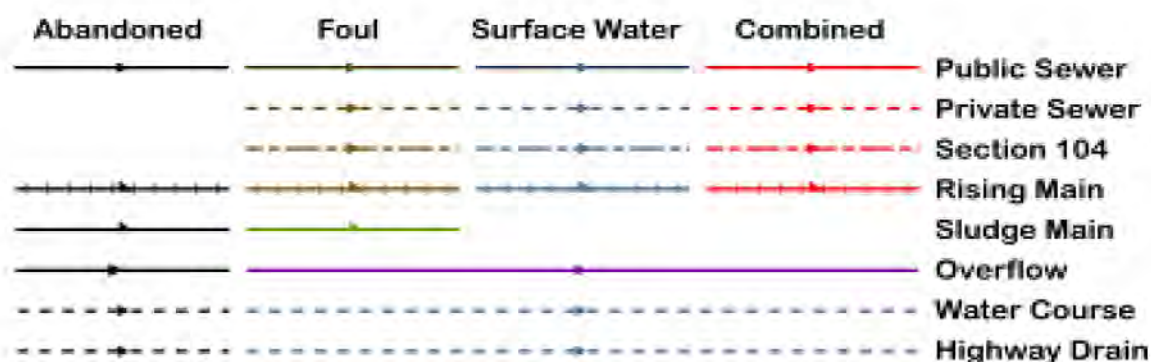
TERMS AND CONDITIONS - WASTEWATER AND WATER DISTRIBUTION PLANS

These provisions apply to the public sewerage, water distribution and telemetry systems (including sewers which are the subject of an agreement under Section 104 of the Water Industry Act 1991 and mains installed in accordance with the agreement for the self construction of water mains) (UUWL apparatus) of United Utilities Water Limited "(UUWL)".

TERMS AND CONDITIONS:

- This Map and any information supplied with it is issued subject to the provisions contained below, to the exclusion of all others and no party relies upon any representation, warranty, collateral contract or other assurance of any person (whether party to this agreement or not) that is not set out in this agreement or the documents referred to in it.
- This Map and any information supplied with it is provided for general guidance only and no representation, undertaking or warranty as to its accuracy, completeness or being up to date is given or implied.
- In particular, the position and depth of any UUWL apparatus shown on the Map are approximate only. UUWL strongly recommends that a comprehensive survey is undertaken in addition to reviewing this Map to determine and ensure the precise location of any UUWL apparatus. The exact location, positions and depths should be obtained by excavation trial holes.
- The location and position of private drains, private sewers and service pipes to properties are not normally shown on this Map but their presence must be anticipated and accounted for and you are strongly advised to carry out your own further enquiries and investigations in order to locate the same.
- The position and depth of UUWL apparatus is subject to change and therefore this Map is issued subject to any removal or change in location of the same. The onus is entirely upon you to confirm whether any changes to the Map have been made subsequent to issue and prior to any works being carried out.
- This Map and any information shown on it or provided with it must not be relied upon in the event of any development, construction or other works (including but not limited to any excavations) in the vicinity of UUWL apparatus or for the purpose of determining the suitability of a point of connection to the sewerage or other distribution systems.
- No person or legal entity, including any company shall be relieved from any liability howsoever and whensoever arising for any damage caused to UUWL apparatus by reason of the actual position and/or depths of UUWL apparatus being different from those shown on the Map and any information supplied with it.
- If any provision contained herein is or becomes legally invalid or unenforceable, it will be taken to be severed from the remaining provisions which shall be unaffected and continue in full force and affect.
- This agreement shall be governed by English law and all parties submit to the exclusive jurisdiction of the English courts, save that nothing will prevent UUWL from bringing proceedings in any other competent jurisdiction, whether concurrently or otherwise.

Wastewater Symbolology



All point assets follow the standard colour convention: **red** – combined **brown** - foul
blue – surface water **purple** - overflow

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



SEWER RECORDS

Address or Site Reference

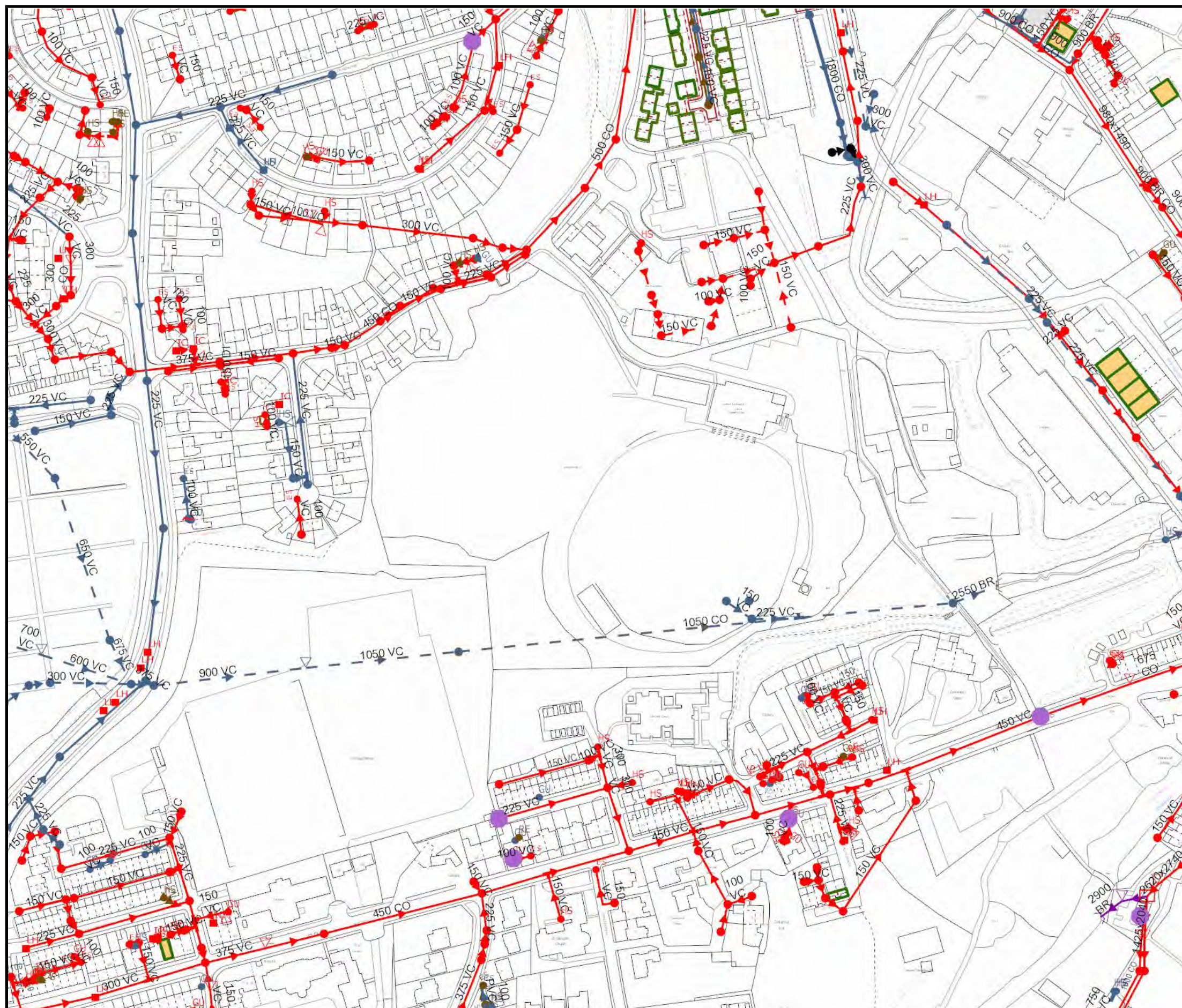
Rochdale Squash Club,

Scale: 1:2500
Date: 06/05/2026

Printed by: Property Searches

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

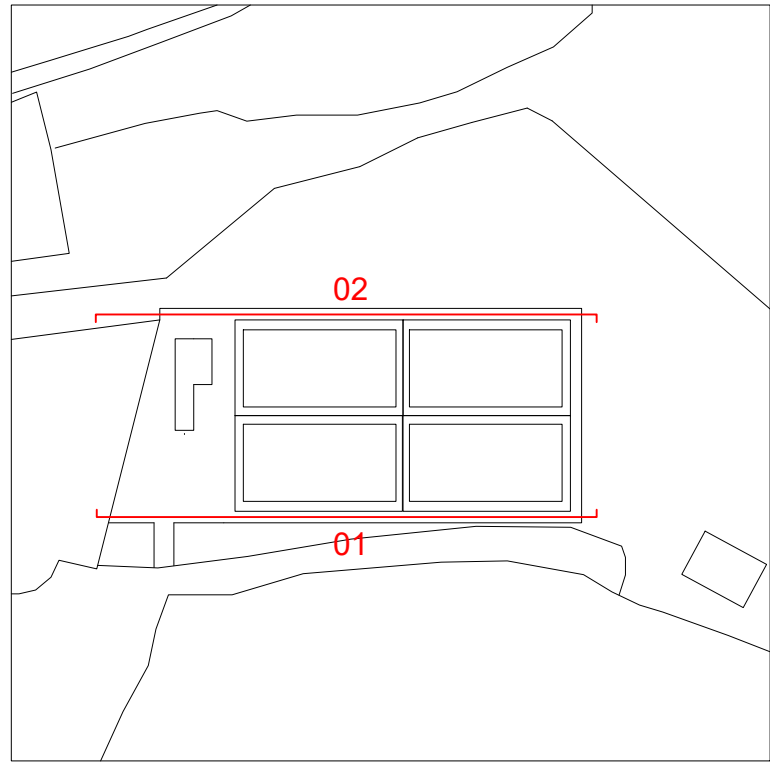
Crown copyright and database rights 2025
Ordnance Survey 0000813445.
Unauthorised reproduction will infringe these
copyrights.



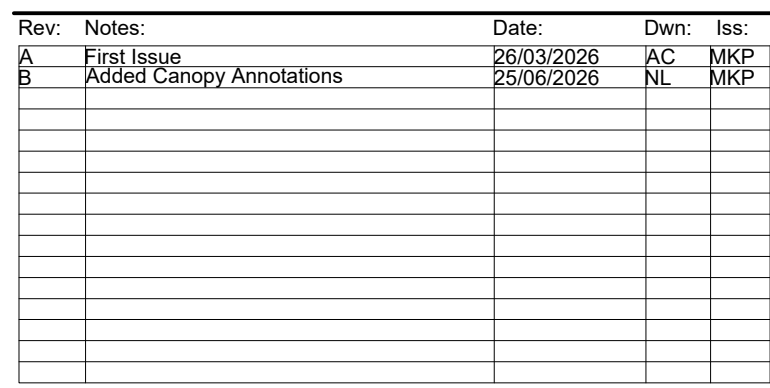


Appendix D
Proposed Site Elevations

- Do not scale from this drawing.
- Discrepancies must be reported immediately to the Architect before proceeding.
- Only figured dimensions are to be used.
- Check all dimensions on site before fabrication or setting out.
- This document is copyright and may not be reproduced without permission of the owner.



Key / Location:



PLANNING

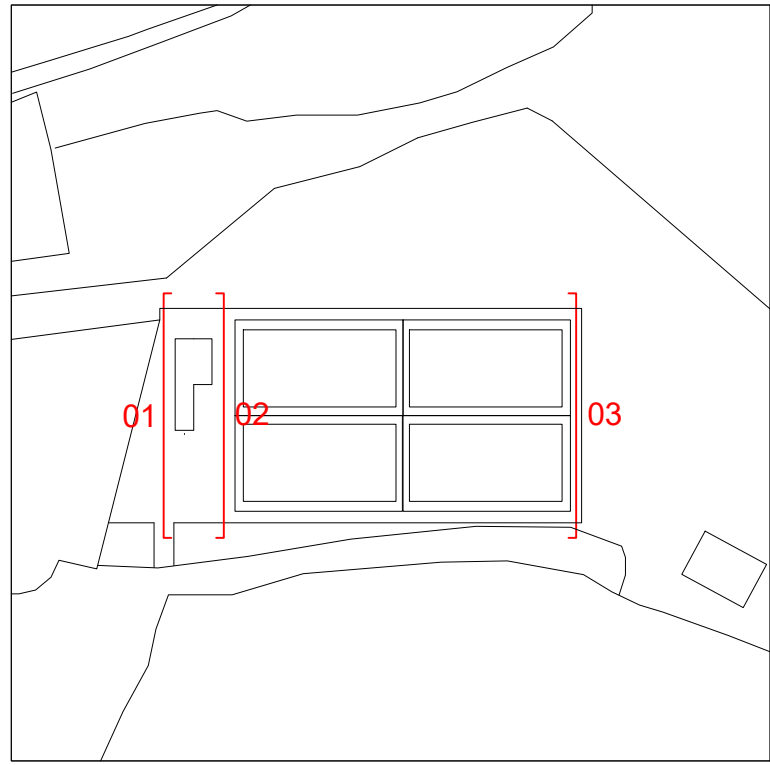
GRID Architects +44 (0) 20 7593 3260
128 Southwark Street, info@gridarchitects.co.uk
London SE1 0SW www.gridarchitects.co.uk

Drawing Title:
Proposed Elevations - Sheet 1

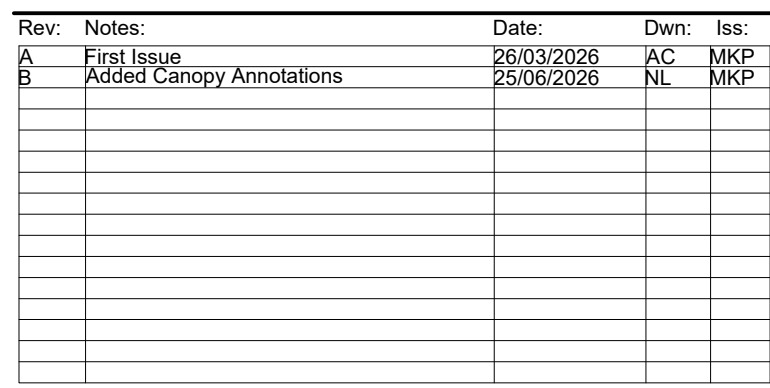
GRID Project No:	Scale @A1:
26015	1:100

Drawing No: **###-GRID-00-ZZ-DR-A-10300** Revision: **B**

- Do not scale from this drawing.
- Discrepancies must be reported immediately to the Architect before proceeding.
- Only figured dimensions are to be used.
- Check all dimensions on site before fabrication or setting out.
- This document is copyright and may not be reproduced without permission of the owner.



Key / Location:



PLANNING

GRID

Client:
Soul Padel

Drawing Title:
Proposed Elevations - Sheet 2

GRID Project No: 26015	Scale @A1: 1:100
---------------------------	---------------------

Proj.	Auth.	Zone	Lvl	Type	Disc. Dwg No.
-------	-------	------	-----	------	---------------

Appendix E
UK SuDS Greenfield Run-Off Rates

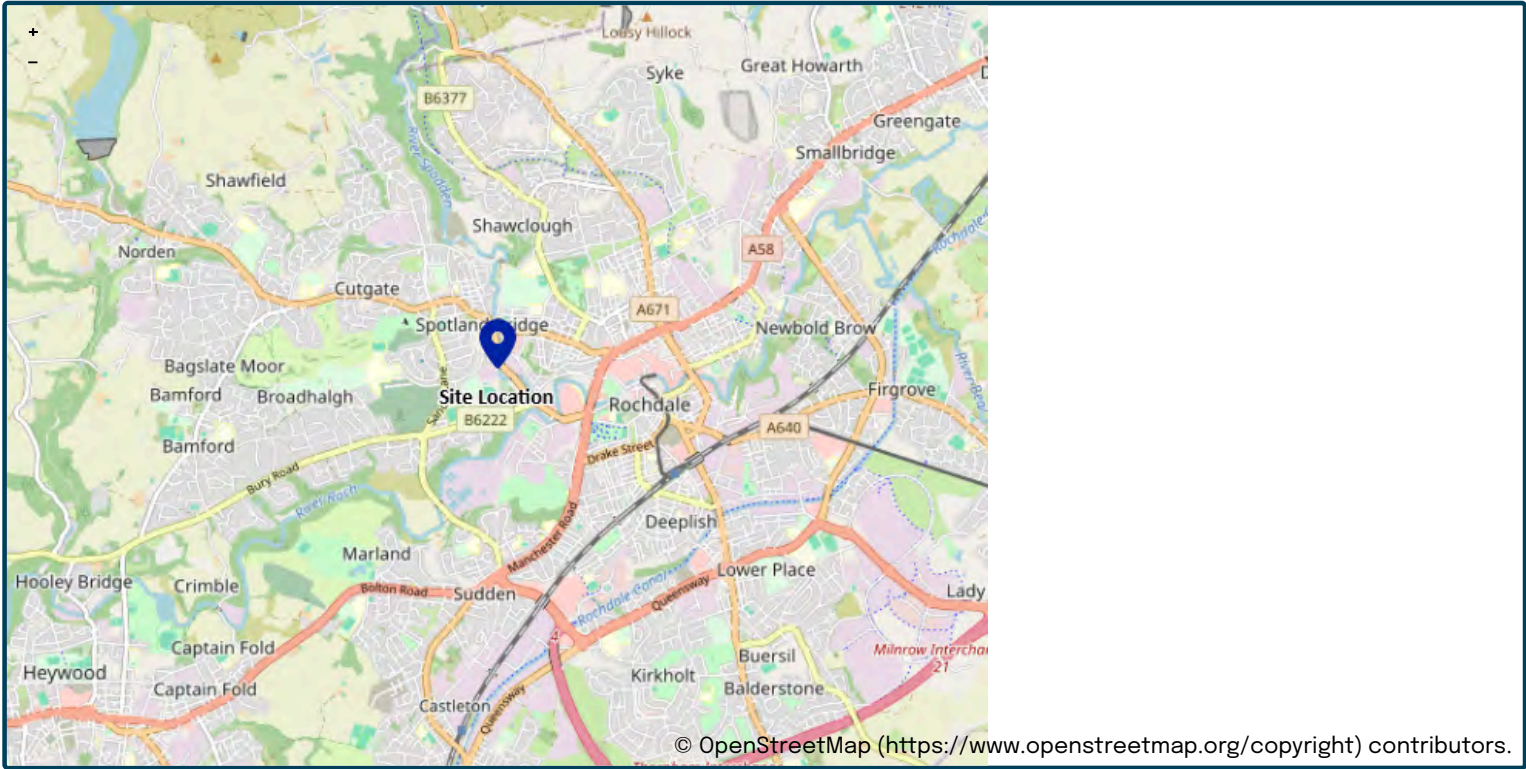
This is an estimation of the greenfield runoff rates that are used to meet normal best practice criteria in line with Environment Agency guidance “Rainfall runoff management for developments”, SC030219 (2013), the SuDS Manual C753 (CIRIA, 2015) and the non-statutory standards for SuDS (Defra, 2015).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

Project details

Date	07/05/2026
Calculated by	Jasmine Ellenor
Reference	300833
Model version	2.2.3

Location

Site name	Rochdale Cricket Lacross and Squash Club
Site location	Rochdale



Site easting (British National Grid)	388613
Site northing (British National Grid)	413322

Site details

Total site area (ha)	0.17	ha
----------------------	-----------------------------------	----

Greenfield runoff

Method

Method	IH124		
IH124			
	<u>My value</u>	☐	<u>Map value</u>
SAAR (mm)	1147mm		1147
How should SPR be derived?	WRAP soil type		
WRAP soil type	4	☐	4
SPR	0.47		
QBar (IH124) (l/s)	1.5l/s		

Growth curve factors

	<u>My value</u>	☐	<u>Map value</u>
Hydrological region	10		10
1 year growth factor	0.87		
2 year growth factor	0.93		
10 year growth factor	1.38		
30 year growth factor	1.7		
100 year growth factor	2.08		
200 year growth factor	2.37		

Results

Method	IH124
Flow rate 1 year (l/s)	1.3l/s
Flow rate 2 year (l/s)	1.4l/s
Flow rate 10 years (l/s)	2.0l/s
Flow rate 30 years (l/s)	2.5l/s
Flow rate 100 years (l/s)	3.0l/s
Flow rate 200 years (l/s)	3.5l/s

Please note runoff estimation is subject to significant uncertainty. Results are therefore normally reported to only 1 decimal place. Where 2 decimal places are provided, this does not indicate accuracy to this level, it has been adopted to prevent ‘zero’ figures from being reported. Outputs less than 0.01 l/s are reported as 0.01 l/s.

Disclaimer

This report was produced using the Greenfield runoff rate estimation tool (2.2.3) developed by HR Wallingford and available at [uksuds.com](https://www.uksuds.com/) (<https://www.uksuds.com/>). The use of this tool is subject to the UK SuDS terms and conditions and licence agreement, which can both be found at [uksuds.com/terms-conditions](https://www.uksuds.com/terms-conditions) (<https://www.uksuds.com/terms-conditions>). The outputs from this tool have been used to estimate Greenfield runoff rates. The use of these results is the responsibility of the users of this tool. No liability will be accepted by HR Wallingford, the Environment Agency, Centre for Ecology and Hydrology, Wallingford Hydrosolutions or any other organisation for the use of these data in the design or operational characteristics of any drainage scheme.



Appendix F
Nimbus Engineering Percolation Test
Report

BRE365 PERCOLATION TEST REPORT
FOR ROCHDALE CRICKET CLUB, BRIDGEFOLD
ROAD, OL11 5BX

DOCUMENT NUMBER: C3819-R1-REV-A

Prepared by:



CONTENTS

1. INTRODUCTION.....	3
2. TRIAL PIT 1	4
2.1 TEST ONE.....	5
2.2. TEST TWO	5
2.3 TEST THREE.....	5
2.4 INFILTRATION RESULTS	6
3. CONCLUSION	8

APPENDICES

APPENDIX A – TRIAL PIT LOCATION PLAN

APPENDIX B – BRE365 PERCOLATION TEST RESULTS

APPENDIX C – TRIAL PIT LOGS

1. INTRODUCTION

Nimbus Engineering Consultants Limited have been instructed to carry out a BRE365 Infiltration Test for Rochdale Cricket Club, Bridgefold Road, Rochdale, OL11 5BX.

The BRE365 Infiltration test was carried over the 6th and 7th August 2026 in one trial pit.

The test was carried out to the BRE365 Digest in order to calculate the infiltration rate for the proposed site, to treat and deal with the surface water run off.

2. TRIAL PIT 1

A test pit of dimensions 300mm by 100mm by 1000mm deep was excavated in the location of the proposed soakaway.

The excavated ground was described as:

- Approximately 100mm of lawn and topsoil
- Approximately 700mm of dense solid soil, with 10% aggregate
- Approximately 200mm of dense sandy black clay

2.1 TEST ONE

Water was added to the pit at a consistent rate and the following was measured:

- Water drained from the 100% full level to the 75% level in approximately 900 minutes

The water added did not drain any lower.

2.2. TEST TWO

N/A

2.3 TEST THREE

N/A

2.4 INFILTRATION RESULTS

The trial pit was filled with 300 litres of water and was left for 15 hours over night where it only dropped by 330mm, demonstrating the unfeasibility of infiltration.



Figure 1 – Trial Pit

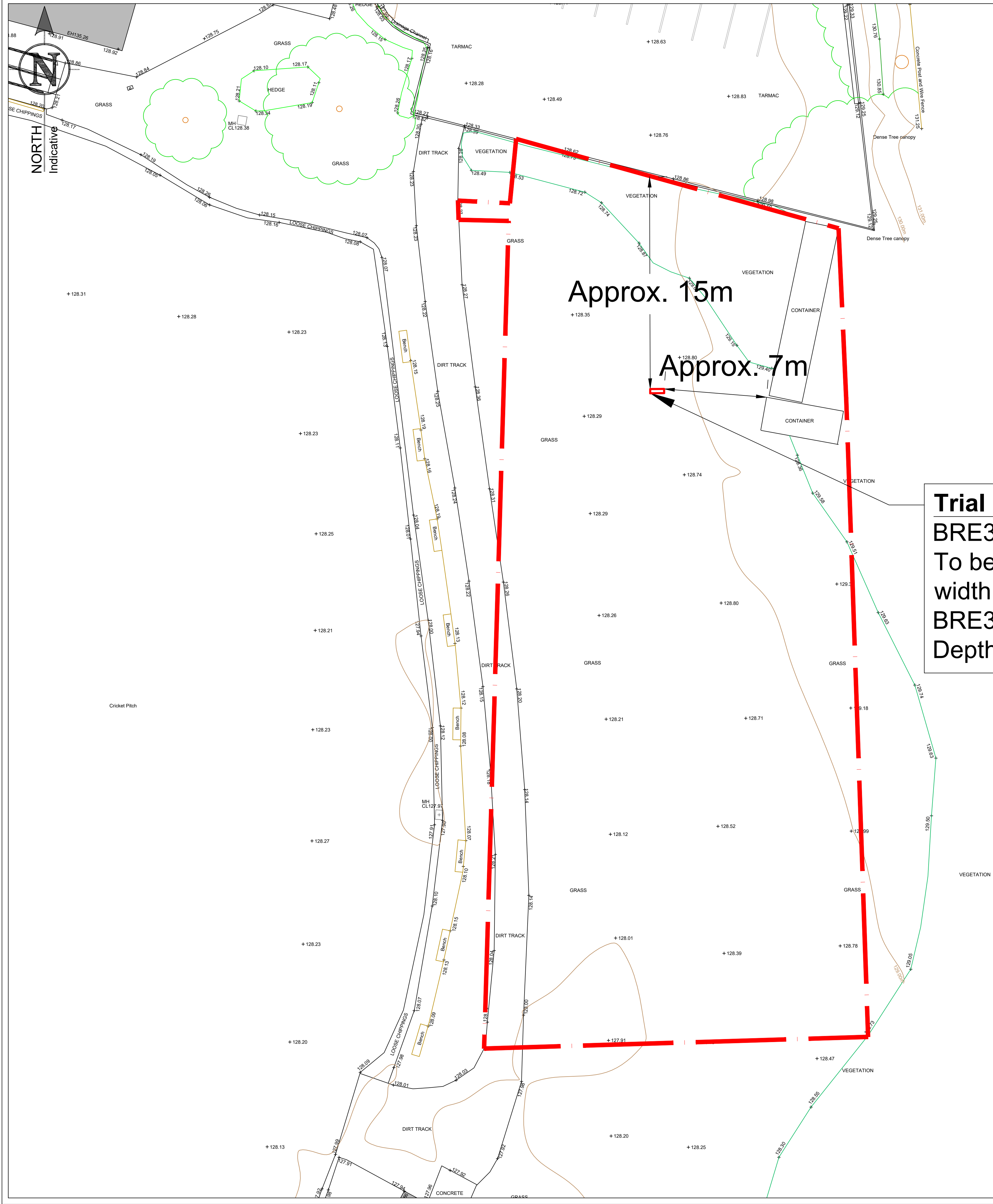
3. CONCLUSION

One test pit was excavated at the site, in order to carry out a BRE365 Infiltration test around the site.

The test sheets can be found within Appendix B.

The results show that the BRE365 Infiltration test did not pass demonstrating the unfeasibility of infiltration on site.

APPENDIX A – TRIAL PIT LOCATION PLAN



DRAWING TO BE PRINTED IN COLOUR.

KEY:

-  Proposed Trial Pit Location
-  Proposed Site Boundary

Approx. 15m

Approx. 7m

Trial Pit
BRE365 Infiltration Test
To be a minimum 0.3m x 1m in
width and length as per
BRE365 Digest Guidance
Depth to be 1m

NOT FOR CONSTRUCTION

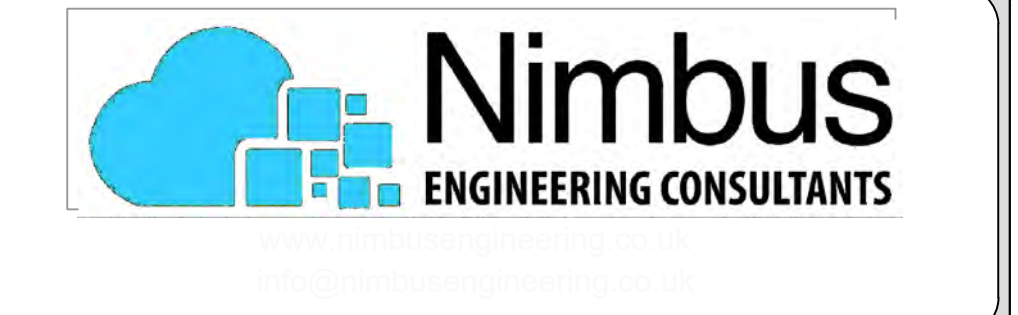
IMPORTANT
DRAWING MUST BE PRINTED IN COLOUR.
NO DEVIATION MAY BE MADE FROM THE CONTENTS OF THIS DRAWING WITHOUT
PRIOR PERMISSION FROM THE ENGINEER.
THIS DRAWING IS TO BE REMOVED FROM CURRENCY IMMEDIATELY AFTER
A REVISED EDITION HAS BEEN ISSUED.
ALL RIGHTS DESCRIBED IN CHAPTER IV OF THE COPYRIGHT DESIGN ACTS 1988
HAVE BEEN GENERALLY ASSERTED.

REV	DATE	DRAWN	DESCRIPTION	CHECK	APPR.
A	05-08-26	M.HAM	For Information.	S.L	S.L

Rochdale Cricket Club, Bridgefold Road, Rochdale, OL11 5BX

BRE365 Trial Pit Location Plan

Soul Padel Limited



S.L	05-08-26	S.L	05-08-26
L.B	1:150	C3819-01	A
05-08-26	A1		

APPENDIX B – BRE365 PERCOLATION TEST RESULTS

PERCOLATION TEST

Address: Rochdale Cricket Club, Bridgefold Road, Rochdale, OL11 5BX
Client name and contact number – Eddie Hamilton 07742 102722
Date and Time agreed to carry out test: 6/08/26 - 7/08/26
Completed by: Site Technician - Adam Lockett

Following questions to be completed:

	08.30
Weather Conditions	Dry all day
Ground Removed	0.0 – 0.1 Lawn and top soil 0.1 – 0.8 Dense solid soil with 10% 50mm aggregate 0.8 – 1 Dense sandy black clay

Photographs of the following must be included:

- The area prior to the pit being dug
- The test pit when empty
- The test pit when full
- During the test
- The area once the test has finished
- The area when the pit has been filled back in

Signed: _____

Name: Adam Lockett

Thank you - Nimbus Engineering Consultants Ltd.

CHECK SHEET – Trial Pit 1

1. Please specify the size of the soakaway that you are proposing to use:

Width (m) Length (m) Depth (m)

2. Please specify the area that is to be drained to the soakaway

3. Please specify the size of the trial pit:

Width 0.3m Length 0.1m Depth 1m

4. Please specify the proposed invert level of the drain:

5. Below is a table for you to input the data (times) gathered from the Soil Infiltration Rate tests:

Test Number	75%	25%	25% - 75%
1	900	NA	NA
2	NA	NA	NA
3	NA	NA	NA

*To be filled in when info arrives.

Key:

75%: The time taken in minutes for the water level to fall to 75% full.

25%: The time taken in minutes for the water level to fall to 25% full.

25% - 75%: The 25% time the 75% time. (This will give the time for the water level to fall from 75% full to 25% full).

Name: Adam Lockett

Signature



Date: 06/08/26 – 07/08/26

APPENDIX C – TRIAL PIT LOGS

LOGGED BY Lucy Bamber

CHECKED BY Sadia Luckett

METHOD OF EXCAVATION Manual Excavation

TOTAL DEPTH 1m

Depth (m)	Graphic Log	Material Description	Additional Observations
		LAWN & TOP SOIL	
0.5		DENSE SOLID SOIL, WITH 10% AGGREGATE	
1		DENSE SANDY BLACK CLAY	
1.5			



Appendix G
LLFA Correspondence

Caitlin Shearer

To: strategic.planning@rochdale.gov.uk
Subject: Surface Water Discharge - Rochdale Cricket Lacross and Squash Club
Attachments: 91345CCTV-01a.pdf; 91345NGUG-01a.pdf; 2026-05-14_DRAFT Proposed Clubhouse Plan.pdf

Hello,

I hope you are well.

AMA are working on a drainage strategy for a site located at Rochdale Cricket Lacross and Squash Club, OL11 5BX (attached). Infiltration testing has been completed and is found not to be a feasible method of discharging surface water. The client has informed us that there is an existing connection from the site that connects into the Red Brook, to the south of the site.

As such, we are proposing discharging surface water to the Red Brook via this connection at a restricted rate of 1.5 l/s, in line with Qbar for the site. I have attached the CCTV survey that was previously completed.

Please can you confirm if this connection and discharge rate would be acceptable?

Kind regards,

Caitlin

Caitlin Shearer
Flood Risk and Drainage Engineer

Mobile: 07585 807998

Leeds Office: 0113 418 2615

Newcastle Office: 0191 486 2745

Web: www.amatp.co.uk

Andrew Moseley Associates Ltd

Yorkshire: 15 St Pauls Street, Leeds, LS1 2JG

North East: Haylofts, 5 St Thomas' Street, Newcastle upon Tyne NE1 4LE



CONFIDENTIAL: This message, including any document or file attached, is intended only for the addressee and may contain privileged and/or confidential information. Any other person is strictly prohibited from reading, using, disclosing or copying this message. If you have received this message in error, please notify the sender and delete the message. Andrew Moseley Associates Limited, a limited company registered in England & Wales with registered number 10876561 and registered office: 15 St Pauls Street, Leeds, LS1 2JG.

Appendix H
CCTV Drainage Survey

CCTV Report



Project

Rochdale CC, Bridgefold Road,
Rochdale, OL11 5BX

Survey Date

22/07/2026

Client

Soul Padel Ltd

Surveyor

AB

Job Number

91345CCTV-01

Issue Date

05/08/2026

Checked by

DJR

Revision

A





Project-information

Project name:
Sould padel Ltd

Contract number:
91345

Contact:

Date:
28/07/2026

Client **Soul Padel Ltd**
 Contact: **Guy Brothwood**
 Position:
 Road
 Town
 County
 Telephone:
 Fax:
 Mobile: **07748656763**
 E-Mail: **guy@soulpadel.co.uk**

Site **Rochdale cc,**
 Contact:
 Position:
 Road **Bridgefold Road OL11 5BX**
 Town **Rochdale**
 County
 Telephone:
 Fax:
 Mobile:
 E-Mail:

Contractor **Survey Solutions**
 Contact: **Archie Waring**
 Position: **Surveyor**
 Road **6 Farrington Way**
 Town **Eastwood**
 County **Nottinghamshire**
 Telephone: **0845 040 5969**
 Fax:
 Mobile: **07943 312569**
 E-Mail: **nottingham@survey-solutions.co.uk**

Defect Grade Description

 Project name:
Sould padel Ltd

 Contract number:
91345

Contact:

 Date:
28/07/2026
1:
 Brick: No Structural Defects
Pipe: No Structural Defects

Acceptable Structural Condition
2:
 Brick: Minor cracking, Surface mortar loss, Spalling slight, wear slight
Pipe: Circumfrential crack, Moderate joint defects, Spalling slight, Wear slight

Minor collapse risk in short term but potential for further deterioration
3:
 Brick: Total mortorloss without other defects, single brick displaced, Deformation up to 5%, Spalling medium, Wear medium
Pipe: Fractures with deformation up tp 5%, Longitudinal cracking or mulitlpe cracking, Minor loss of level, More severe joint defects, Spalling medium, Wear medium

! Collapse unlikely in near future but future deterioration likely !
4:
 Brick: Total mortorloss with deformation greater than 10%, Deformation up to 10% and fractured, Displaced/hanging brickwork, Small number of missing bricks
Pipe: Broken, Deformation up to 10% and broken,, Fractured with deformation 5 - 10%, Multiple fractures, Serious loss of level, spalling large, wear large

!! Collapse likely in foreseeable future !!
5:
 Brick: Already Collapsed, Missing invert, Deformation over 10% and fractured, Displaced/hanging brickwork and deformation over 10%, Extensive missing bricks
Pipe: Already collapsed, Deformation over 10% and broken, Extensive areas of fabric missing, Fractured with deformation over 10%

!!! Collapsed or collapse imminent !!!



Inspection report

Date: 28/07/2026	Job N°: 91345	Weather:	Operator: AB	section number: 1	PLR: MH1 X X
Present:	Vehicle:	Camera: Solopro	Preset:	Cleaned:	Grade:

Road: Bridgeford Road	Division:	start MH: MH1 X
Place: Soul Padel	District:	end MH:
Location:	Tape No.:	Total length: 23.5 m
Purpose: Asset condition	Shape/Size: dia 150 mm	
Use: Surface water	Material: Vitrified clay	Pipe length:
Catchment:	Lining:	
	Category:	
Comment:		
Location details:		

1:175	position	code	observation	counter	photo	grade
	0.00	MH	Manhole Remark: MH1 X	00:00:00		(Constr) 0
	0.00	ST	Start of Survey	00:00:00		(Misc) 0
	0.00	WL	Water level, 0 % height/diameter	00:00:00		(Serv) 0
	2.70	S2 DES	Debris silt, 10 % cross-sectional area loss, Start	00:00:00	226_4a	(Serv) 1
	4.60	F2 DES	Debris silt, 10 % cross-sectional area loss, Finish	00:00:00		(Serv) 1
	7.10	GP	General Condition photograph	00:00:00	2_6a	(Misc) 0
	16.80	WL	Water level, 10 % height/diameter	00:00:00		(Serv) 0
	17.00	S1 DES	Debris silt, 10 % cross-sectional area loss, Start	00:00:00	21_8a	(Serv) 1
	17.70	F1 DES	Debris silt, 10 % cross-sectional area loss, Finish	00:00:00		(Serv) 1
	18.50	GP	General Condition photograph	00:00:00	2_10a	(Misc) 0
	23.50	SA	Survey abandoned, Remark: Unable to survey beyond this point due too restricted leverage.	00:00:00		(Misc) 0

Structural Defects

Constructional Features

Service Defects

Miscellaneous Features

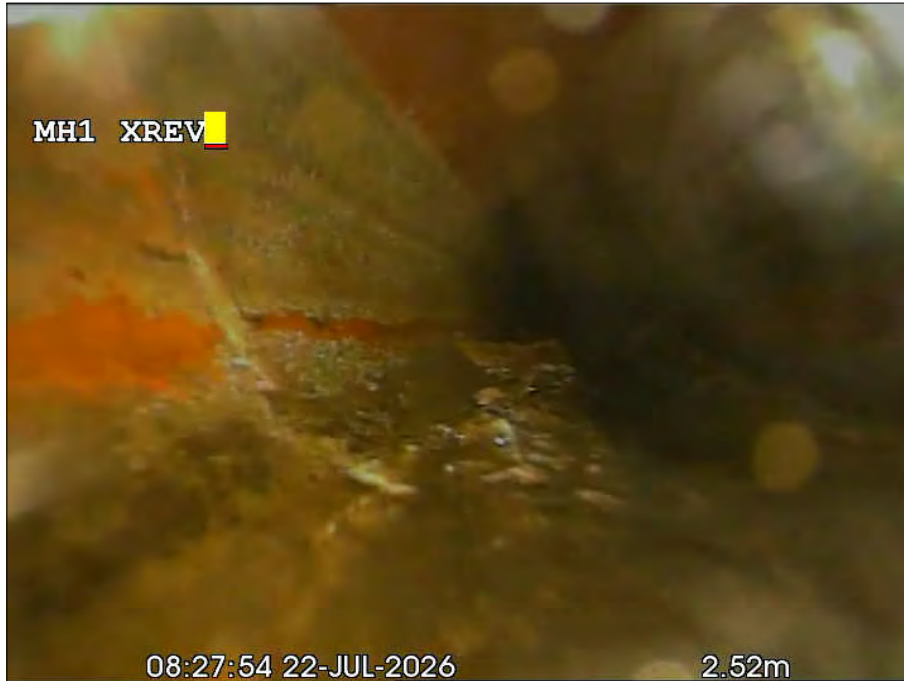
Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
28/07/2026section number:
1PLR:
MH1 X X

Photo: 226_4a, 00:00:00
2.7m, Debris silt, 10 % cross-sectional area loss, Start



Photo: 2_6a, 00:00:00
7.1m, General Condition photograph

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
28/07/2026section number:
1PLR:
MH1 X X

Photo: 21_8a, 00:00:00
17m, Debris silt, 10 % cross-sectional area loss, Start



Photo: 2_10a, 00:00:00
18.5m, General Condition photograph



Inspection report

Date: 22/07/2026	Job N°: 91345	Weather:	Operator: AB	section number: 2	PLR: X
Present:	Vehicle:	Camera: Solopro	Preset:	Cleaned:	Grade:

Road: Bridgeford Road	Division:	start MH: MH1 B
Place: Soul Padel	District:	end MH:
Location:	Tape No.:	Total length: 4.45 m

Purpose: Asset condition	Shape/Size: Circular dia 150 mm
Use: Surface water	Material: Vitrified clay Pipe length:
Catchment:	Lining:
	Category:

Comment:

Location details:

1:50	position	code	observation	counter	photo	grade
	0.00	MH	Manhole Remark: MH1 B	00:00:00		(Constr) 0
	0.00	ST	Start of Survey	00:00:00		(Misc) 0
	0.00	WL	Water level, 0 % height/diameter			(Serv) 0
	0.10	S1 DE	Debris, 10 % cross-sectional area loss, Start	00:00:00	230_4a	(Serv) 1
	0.70	C1 DE	Debris, 40 % cross-sectional area loss, Changed	00:00:00	231_5a	(Serv) 1
	1.60	C1 DE	Debris, 10 % cross-sectional area loss, Changed	00:00:00	232_6a	(Serv) 1
	2.50	F1 DE	Debris, 10 % cross-sectional area loss, Finish	00:00:00	233_7a	(Serv) 1
	2.80	GP	General Condition photograph	00:00:00	3_8a	(Misc) 0
	4.30	JDM	Joint displaced. Medium	00:00:00	234_9a	(Struct) 1
	4.40	OB	Obstruction, 60 % height/diameter loss	00:00:00	235_10a	(Serv) 2
	4.45	SA	Survey abandoned, Remark: Unable to survey beyond obstruction.	00:00:00		(Misc) 0
Structural Defects				Constructional Features		
Service Defects				Miscellaneous Features		

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
2PLR:
X

Photo: 230_4a, 00:00:00
0.1m, Debris, 10 % cross-sectional area loss, Start



Photo: 231_5a, 00:00:00
0.7m, Debris, 40 % cross-sectional area loss, Changed

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
2PLR:
X

Photo: 232_6a, 00:00:00
1.6m, Debris, 10 % cross-sectional area loss, Changed



Photo: 233_7a, 00:00:00
2.5m, Debris, 10 % cross-sectional area loss, Finish

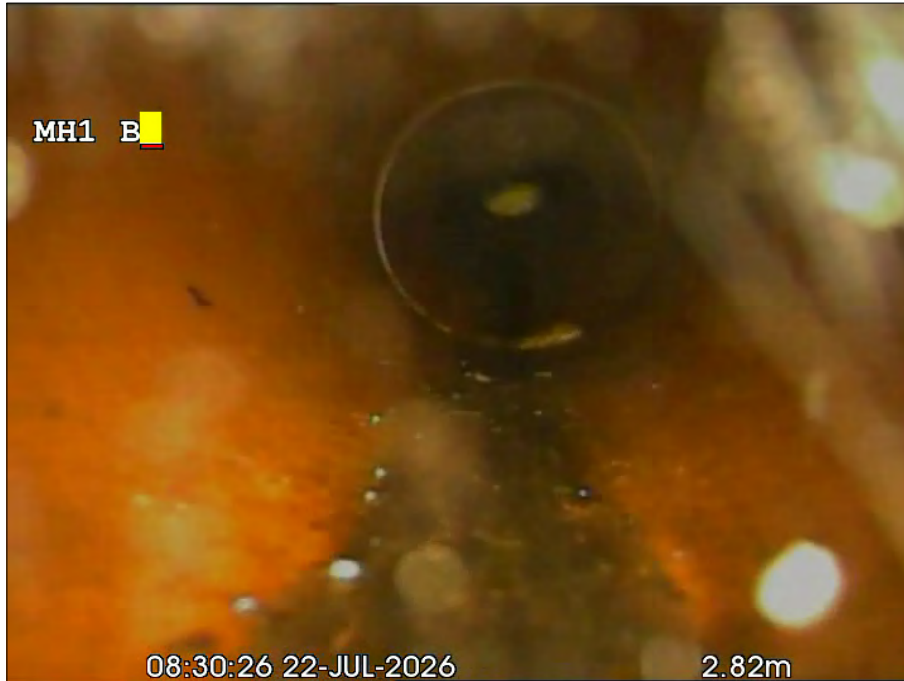
Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
2PLR:
X

Photo: 3_8a, 00:00:00
2.8m, General Condition photograph



Photo: 234_9a, 00:00:00
4.3m, Joint displaced. Medium

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
2PLR:
X

Photo: 235_10a, 00:00:00
4.4m, Obstruction, 60 % height/diameter loss



Inspection report

Date: 28/07/2026	Job N°: 91345	Weather:	Operator: AB	section number: 3	PLR: X
Present:	Vehicle:	Camera: Solopro	Preset:	Cleaned:	Grade:

Road: Bridgeford Road	Division:	start MH: MH1 A
Place: Soul Padel	District:	end MH:
Location:	Tape No.:	Total length: 11.9 m

Purpose: Asset condition	Shape/Size: Circular dia 150 mm
Use: Surface water	Material: Vitrified clay Pipe length:
Catchment:	Lining:
	Category:

Comment:

Location details:

1:100	position	code	observation	counter	photo	grade
	0.00	MH	Manhole Remark: MH1 A	00:00:00		(Constr) 0
	0.00	ST	Start of Survey	00:00:00		(Misc) 0
	0.00	WL	Water level, 25 % height/diameter	00:00:00		(Serv) 0
	3.10	WL	Water level, 10 % height/diameter	00:00:00		(Serv) 0
	5.90	GP	General Condition photograph	00:00:00	4_5a	(Misc) 0
	11.90	SA	Survey abandoned, Remark: Unable to survey beyond this point due to restricted leverage.	00:00:00		(Misc) 0

Structural Defects

Constructional Features

Service Defects

Miscellaneous Features

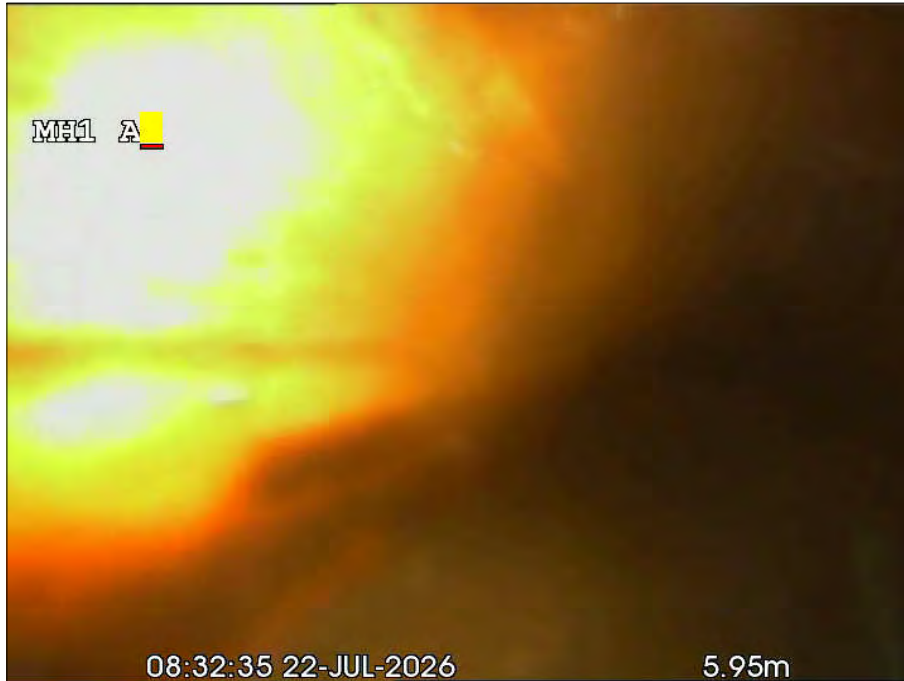
Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
28/07/2026section number:
3PLR:
X

Photo: 4_5a, 00:00:00
5.9m, General Condition photograph



Inspection report

Date: 22/07/2026	Job N°: 91345	Weather:	Operator: AB	section number: 4	PLR: X
Present:	Vehicle:	Camera: Solopro	Preset:	Cleaned:	Grade:

Road: Bridgeford Road	Division:	start MH: MH3 A
Place: Soul Padel	District:	end MH:
Location:	Tape No.:	Total length: 6.9 m

Purpose: Asset condition	Shape/Size: Circular dia 100 mm
Use: Foul	Material: Vitrified clay Pipe length:
Catchment:	Lining:
	Category:

Comment:

Location details:

1:75	position	code	observation	counter	photo	grade
	0.00	MH	Manhole Remark: MH3 A	00:00:00		(Constr) 0
	0.00	ST	Start of Survey	00:00:00		(Misc) 0
	0.00	WL	Water level, 0 % height/diameter	00:00:00		(Serv) 0
	0.50	LL	Line of Sewer deviates left	00:00:00		(Serv) 0
	4.40	GP	General Condition photograph	00:00:00	6_5a	(Misc) 0
	5.20	LU	Line of Sewer deviates up	00:00:00		(Serv) 0
	6.90	FH	Finish Survey, Remark: Rest bend reached.	00:00:00		(Misc) 0
Structural Defects			Constructional Features			
Service Defects			Miscellaneous Features			

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
4PLR:
X

Photo: 6_5a, 00:00:00
4.4m, General Condition photograph



Inspection report

Date: 22/07/2026	Job N°: 91345	Weather:	Operator: AB	section number: 5	PLR: X
Present:	Vehicle:	Camera: Solopro	Preset:	Cleaned:	Grade:

Road: Bridgeford Road	Division:	start MH: MH3 B
Place: Soul Padel	District:	end MH:
Location:	Tape No.:	Total length: 20 m

Purpose: Asset condition	Shape/Size: Circular dia 100 mm
Use: Foul	Material: Vitrified clay Pipe length:
Catchment:	Lining:
	Category:

Comment:

Location details:

1:150	position	code	observation	counter	photo	grade
	0.00	MH	Manhole Remark: MH3 B	00:00:00		(Constr) 0
	0.00	ST	Start of Survey	00:00:00		(Misc) 0
	0.00	WL	Water level, 0 % height/diameter	00:00:00		(Serv) 0
	0.50	JDM	Joint displaced. Medium	00:00:00	7_4a	(Struct) 1
	2.20	JDM	Joint displaced. Medium	00:00:00	7_5a	(Struct) 1
	3.70	JDM	Joint displaced. Medium	00:00:00	7_6a	(Struct) 1
	4.40	JDM	Joint displaced. Medium	00:00:00	7_7a	(Struct) 1
	5.10	JDM	Joint displaced. Medium	00:00:00	7_8a	(Struct) 1
	5.80	JDM	Joint displaced. Medium	00:00:00	7_9a	(Struct) 1
	7.30	JDM	Joint displaced. Medium	00:00:00	60_10a	(Struct) 1
	8.20	JDM	Joint displaced. Medium	00:00:00	61_11a	(Struct) 1
	9.10	DES	Debris silt, 25 % cross-sectional area loss	00:00:00	62_12a	(Serv) 1
	11.00	WL	Water level, 25 % height/diameter	00:00:00		(Serv) 0
	14.90	GP	General Condition photograph	00:00:00	237_14a	(Misc) 0
	17.80	WL	Water level, 10 % height/diameter	00:00:00		(Serv) 0
	20.00	JDL	Joint displaced. Large	00:00:00	7_16a	(Struct) 2
	20.00	SA	Survey abandoned, Remark: Unable to survey beyond joint displacement.	00:00:00		(Misc) 0

Structural Defects

Constructional Features

Service Defects

Miscellaneous Features

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
5PLR:
X

Photo: 7_4a, 00:00:00
0.5m, Joint displaced. Medium



Photo: 7_5a, 00:00:00
2.2m, Joint displaced. Medium

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
5PLR:
X

Photo: 7_6a, 00:00:00
3.7m, Joint displaced. Medium



Photo: 7_7a, 00:00:00
4.4m, Joint displaced. Medium

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
5PLR:
X

Photo: 7_8a, 00:00:00
5.1m, Joint displaced. Medium



Photo: 7_9a, 00:00:00
5.8m, Joint displaced. Medium

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
5PLR:
X

Photo: 60_10a, 00:00:00
7.3m, Joint displaced. Medium

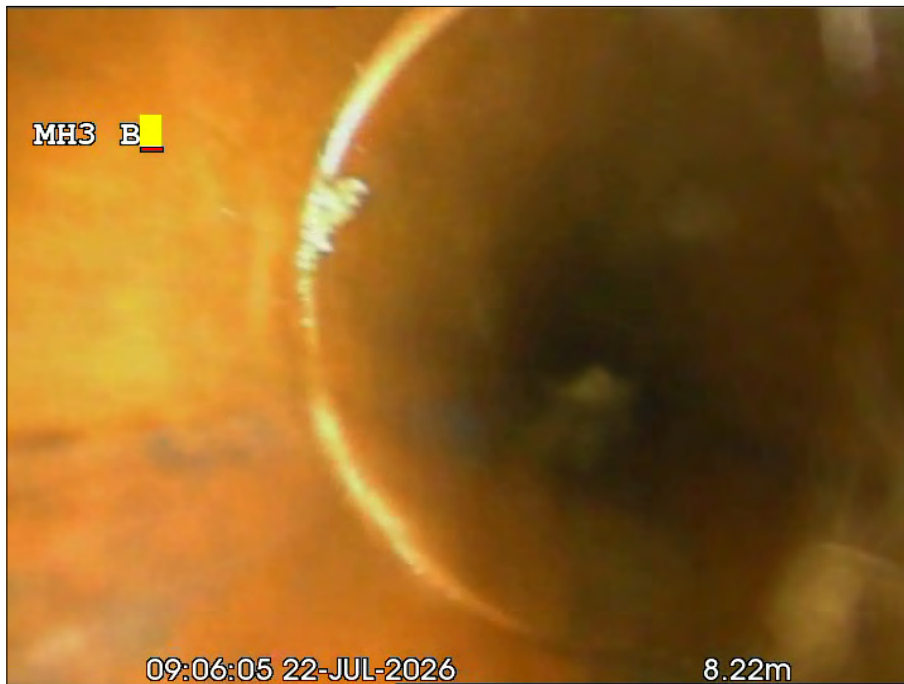


Photo: 61_11a, 00:00:00
8.2m, Joint displaced. Medium

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
5PLR:
X

Photo: 62_12a, 00:00:00
9.1m, Debris silt, 25 % cross-sectional area loss



Photo: 237_14a, 00:00:00
14.9m, General Condition photograph

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
5PLR:
X

Photo: 7_16a, 00:00:00
20m, Joint displaced. Large



Inspection report

Date: 22/07/2026	Job N°: 91345	Weather:	Operator: AB	section number: 6	PLR: X
Present:	Vehicle:	Camera: Solopro	Preset:	Cleaned:	Grade:

Road: Bridgeford Road	Division:	start MH: MH3 C
Place: Soul Padel	District:	end MH:
Location:	Tape No.:	Total length: 8.35 m

Purpose: Asset condition	Shape/Size: Circular dia 100 mm
Use: Foul	Material: Vitrified clay Pipe length:
Catchment:	Lining:
	Category:

Comment:

Location details:

1:75	position	code	observation	counter	photo	grade
	0.00	MH	Manhole Remark: MH3 C	00:00:00		(Constr) 0
	0.00	ST	Start of Survey	00:00:00		(Misc) 0
	0.00	WL	Water level, 0 % height/diameter	00:00:00		(Serv) 0
	5.30	JDM	Joint displaced. Medium	00:00:00	78_4a	(Struct) 1
	6.00	GP	General Condition photograph	00:00:00	10_5a	(Misc) 0
	6.80	LU	Line of Sewer deviates up	00:00:00		(Serv) 0
	7.60	LD	Line of Sewer deviates down	00:00:00	10_7a	(Serv) 0
	8.30	LU	Line of Sewer deviates up	00:00:00		(Serv) 0
	8.35	SA	Survey abandoned, Remark: Unable to survey beyond deviation.	00:00:00		(Misc) 0
Structural Defects			Constructional Features			
Service Defects			Miscellaneous Features			

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
6PLR:
X

Photo: 78_4a, 00:00:00
5.3m, Joint displaced. Medium



Photo: 10_5a, 00:00:00
6m, General Condition photograph

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
6PLR:
X

Photo: 10_7a, 00:00:00
7.6m, Line of Sewer deviates down



Inspection report

Date: 22/07/2026	Job N°: 91345	Weather: Dry	Operator: AB	section number: 7	PLR: MH3 X X
Present:	Vehicle:	Camera: Camera 1	Preset:	Cleaned: No	Grade:

Road: Bridgeford Road	Division:	start MH: MH3 X
Place: Soul Padel	District:	end MH: MH4
Location:	Tape No.:	Total length: 34.3 m
Purpose: Asset condition	Shape/Size: Circular dia 100 mm	
Use: Foul	Material: Vitrified clay	Pipe length:
Catchment:	Lining:	
	Category:	
Comment:		
Location details:		

1:275	position	code	observation	counter	photo	grade
	0.00	MH	Manhole Remark: MH3 X	00:00:00		(Constr) 0
	0.00	ST	Start of Survey	00:00:00		(Misc) 0
	0.00	WL	Water level, 5 % height/diameter	00:00:00		(Serv) 0
	5.00	GP	General Condition photograph	00:00:00	11_4a	(Misc) 0
	10.00	GP	General Condition photograph	00:00:00	11_5a	(Misc) 0
	15.70	JDM	Joint displaced. Medium	00:00:00	11_6a	(Struct) 1
	17.50	JDM	Joint displaced. Medium	00:00:00	11_7a	(Struct) 1
	20.00	S1 DEG	Debris grease, from 03 to 09 o'clock, 10 % cross-sectional area loss, Start	00:00:00	11_8a	(Serv) 1
	20.20	WL	Water level, 10 % height/diameter	00:00:00		(Serv) 0
	24.00	F1 DEG	Debris grease, from 03 to 09 o'clock, 10 % cross-sectional area loss, Finish	00:00:00		(Serv) 1
	24.60	JDM	Joint displaced. Medium	00:00:00	11_11a	(Struct) 1
	27.60	GP	General Condition photograph	00:00:00	11_12a	(Misc) 0
	30.00	WL	Water level, 5 % height/diameter	00:00:00		(Serv) 0
	34.10	JDM	Joint displaced. Medium	00:00:00	11_14a	(Struct) 1
	34.30	FH	Finish Survey, Remark: MH4 reached.	00:00:00		(Misc) 0

Structural Defects

Constructional Features

Service Defects

Miscellaneous Features

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
7PLR:
MH3 X X

Photo: 11_4a, 00:00:00
5m, General Condition photograph



Photo: 11_5a, 00:00:00
10m, General Condition photograph

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
7PLR:
MH3 X X

Photo: 11_6a, 00:00:00
15.7m, Joint displaced. Medium



Photo: 11_7a, 00:00:00
17.5m, Joint displaced. Medium

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
7PLR:
MH3 X X

Photo: 11_8a, 00:00:00

20m, Debris grease, from 03 to 09 o'clock, 10 % cross-sectional area loss, Start



Photo: 11_11a, 00:00:00

24.6m, Joint displaced. Medium

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
7PLR:
MH3 X X

Photo: 11_12a, 00:00:00
27.6m, General Condition photograph



Photo: 11_14a, 00:00:00
34.1m, Joint displaced. Medium



Inspection report

Date: 22/07/2026	Job N°: 91345	Weather: Dry	Operator: AB	section number: 8	PLR: X
Present:	Vehicle:	Camera: Camera 1	Preset:	Cleaned: No	Grade:

Road: Bridgeford Road	Division:	start MH: MH4 A
Place: Soul Padel	District:	end MH:
Location:	Tape No.:	Total length: 8.7 m

Purpose: Asset condition	Shape/Size: Circular dia 100 mm
Use: Foul	Material: Vitrified clay Pipe length:
Catchment:	Lining:
	Category:

Comment:

Location details:

1:75	position	code	observation	counter	photo	grade
		MH	Manhole Remark: MH4 A	00:00:00		(Constr) 0
		ST	Start of Survey	00:00:00		(Misc) 0
		WL	Water level, 0 % height/diameter	00:00:00		(Serv) 0
		GP	General Condition photograph	00:00:00	98_4a	(Misc) 0
		JDL	Joint displaced. Large	00:00:00	12_5a	(Struct) 2
		FH	Finish Survey, Remark: Rest bend reached.	00:00:00		(Misc) 0

Structural Defects

Constructional Features

Service Defects

Miscellaneous Features

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
8PLR:
X

Photo: 98_4a, 00:00:00
5m, General Condition photograph



Photo: 12_5a, 00:00:00
8.4m, Joint displaced. Large



Inspection report

Date: 22/07/2026	Job N°: 91345	Weather: Dry	Operator: AB	section number: 9	PLR: X
Present:	Vehicle:	Camera: Camera 1	Preset:	Cleaned: No	Grade:

Road: Bridgeford Road	Division:	start MH: MH4 B
Place: Soul Padel	District:	end MH:
Location:	Tape No.:	Total length: 5.9 m

Purpose: Asset condition	Shape/Size: Circular dia 100 mm
Use: Foul	Material: Vitrified clay Pipe length:
Catchment:	Lining:
	Category:

Comment:

Location details:

1:50	position	code	observation	counter	photo	grade
	0.00	MH	Manhole Remark: MH4 B	00:00:00		(Constr) 0
	0.00	ST	Start of Survey	00:00:00		(Misc) 0
	0.00	WL	Water level, 0 % height/diameter	00:00:00		(Serv) 0
	0.40	LU	Line of Sewer deviates up	00:00:00	110_4a	(Serv) 0
	1.62	GP	General Condition photograph	00:00:00	111_5a	(Misc) 0
	5.00	JDL	Joint displaced. Large	00:00:00	112_6a	(Struct) 2
	5.30	LL	Line of Sewer deviates left	00:00:00		(Serv) 0
	5.90	FH	Finish Survey, Remark: Gully reached	00:00:00		(Misc) 0

Structural Defects

Constructional Features

Service Defects

Miscellaneous Features

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
9PLR:
X

Photo: 110_4a, 00:00:00
0.4m, Line of Sewer deviates up



Photo: 111_5a, 00:00:00
1.62m, General Condition photograph

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
9PLR:
X

Photo: 112_6a, 00:00:00
5m, Joint displaced. Large



Inspection report

Date: 22/07/2026	Job N°: 91345	Weather: Dry	Operator: AB	section number: 10	PLR: X
Present:	Vehicle:	Camera: Camera 1	Preset:	Cleaned: No	Grade:

Road: Bridgeford Road	Division:	start MH: MH4 C
Place: Soul Padel	District:	end MH:
Location:	Tape No.:	Total length: 14 m

Purpose: Asset condition	Shape/Size: Circular dia 100 mm
Use: Foul	Material: Vitrified clay Pipe length:
Catchment:	Lining:
	Category:

Comment:

Location details:

1:125	position	code	observation	counter	photo	grade
	0.00	MH	Manhole Remark: MH4 C	00:00:00		(Constr) 0
	0.00	ST	Start of Survey	00:00:00		(Misc) 0
	0.00	WL	Water level, 0 % height/diameter	00:00:00		(Serv) 0
	1.90	JDM	Joint displaced. Medium	00:00:00	17_4a	(Struct) 1
	5.00	GP	General Condition photograph	00:00:00	17_5a	(Misc) 0
	10.10	GP	General Condition photograph	00:00:00	17_6a	(Misc) 0
	14.00	JDL	Joint displaced. Large	00:00:00	17_7a	(Struct) 2
	14.00	SA	Survey abandoned, Remark: Unable to survey beyond displacement.	00:00:00		(Misc) 0
Structural Defects			Constructional Features			
Service Defects			Miscellaneous Features			

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
10PLR:
X

Photo: 17_4a, 00:00:00
1.9m, Joint displaced. Medium



Photo: 17_5a, 00:00:00
5m, General Condition photograph

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
10PLR:
X

Photo: 17_6a, 00:00:00
10.1m, General Condition photograph



Photo: 17_7a, 00:00:00
14m, Joint displaced. Large



Inspection report

Date: 22/07/2026	Job N°: 91345	Weather: Dry	Operator: AB	section number: 11	PLR: X
Present:	Vehicle:	Camera: Camera 1	Preset:	Cleaned: No	Grade:

Road: Bridgeford Road	Division:	start MH: MH4 D
Place: Soul Padel	District:	end MH:
Location:	Tape No.:	Total length: 8.6 m

Purpose: Asset condition	Shape/Size: Circular dia 100 mm
Use: Foul	Material: Vitrified clay Pipe length:
Catchment:	Lining:
	Category:

Comment:

Location details:

1:75	position	code	observation	counter	photo	grade
	0.00	MH	Manhole Remark: MH4 D	00:00:00		(Constr) 0
	0.00	ST	Start of Survey	00:00:00		(Misc) 0
	0.00	WL	Water level, 0 % height/diameter	00:00:00		(Serv) 0
	0.10	LR	Line of Sewer deviates right	00:00:00		(Serv) 0
	2.30	LU	Line of Sewer deviates up	00:00:00		(Serv) 0
	5.10	GP	General Condition photograph	00:00:00	18_6a	(Misc) 0
	7.20	JDM	Joint displaced. Medium	00:00:00	18_7a	(Struct) 1
	7.60	JDM	Joint displaced. Medium	00:00:00	18_8a	(Struct) 1
	7.70	LL	Line of Sewer deviates left	00:00:00		(Serv) 0
	8.60	FH	Finish Survey, Remark: Rest bend reached.	00:00:00		(Misc) 0

Structural Defects

Constructional Features

Service Defects

Miscellaneous Features

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
11PLR:
X

Photo: 18_6a, 00:00:00
5.1m, General Condition photograph



Photo: 18_7a, 00:00:00
7.2m, Joint displaced. Medium

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
11PLR:
X

Photo: 18_8a, 00:00:00
7.6m, Joint displaced. Medium



Inspection report

Date: 22/07/2026	Job N°: 91345	Weather: Dry	Operator: AB	section number: 12	PLR: MH4 X X
Present:	Vehicle:	Camera: Camera 1	Preset:	Cleaned: No	Grade:

Road: Bridgeford Road	Division:	start MH: MH4 X
Place: Soul Padel	District:	end MH:
Location:	Tape No.:	Total length: 18.8 m

Purpose: Asset condition	Shape/Size: Circular dia 150 mm
Use: Foul	Material: Vitrified clay Pipe length:
Catchment:	Lining:
	Category:

Comment:

Location details:

1:150	position	code	observation	counter	photo	grade
	0.00	MH	Manhole Remark: MH4 X	00:00:00		(Constr) 0
	0.00	ST	Start of Survey	00:00:00		(Misc) 0
	0.00	WL	Water level, 0 % height/diameter	00:00:00		(Serv) 0
	5.00	GP	General Condition photograph	00:00:00	21_4a	(Misc) 0
	10.00	GP	General Condition photograph	00:00:00	21_5a	(Misc) 0
	11.60	WL	Water level, 5 % height/diameter	00:00:00		(Serv) 0
	13.00	JDM	Joint displaced. Medium	00:00:00	146_7a	(Struct) 1
	16.40	JDM	Joint displaced. Medium	00:00:00	147_8a	(Struct) 1
	17.30	GP	General Condition photograph	00:00:00	148_9a	(Misc) 0
	18.80	FH	Finish Survey, Remark: Restricted leverage.	00:00:00		(Misc) 0

Structural Defects

Constructional Features

Service Defects

Miscellaneous Features

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
12PLR:
MH4 X X

Photo: 21_4a, 00:00:00
5m, General Condition photograph



Photo: 21_5a, 00:00:00
10m, General Condition photograph

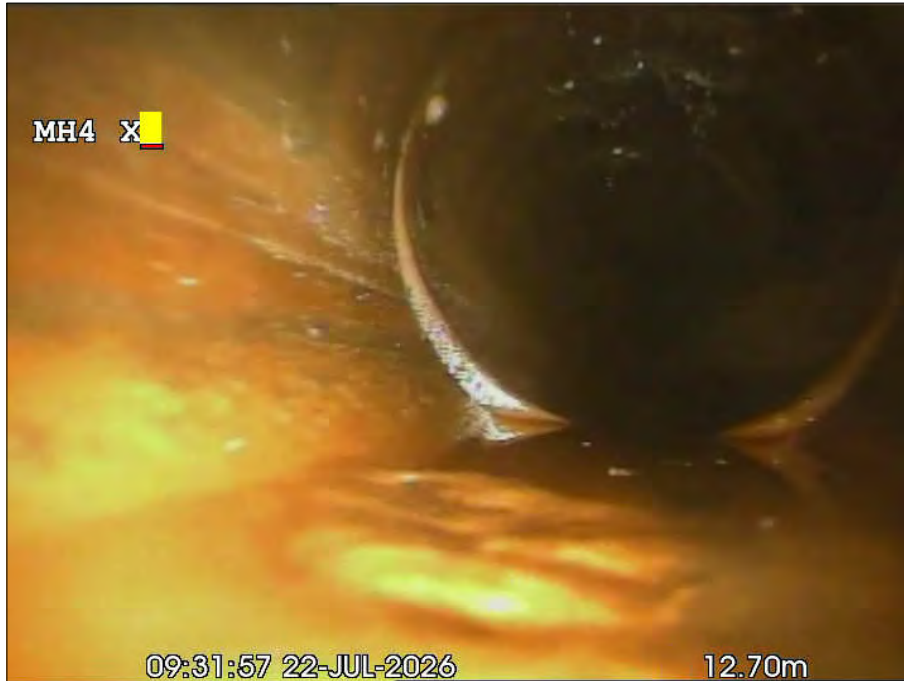
Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
12PLR:
MH4 X X

Photo: 146_7a, 00:00:00
13m, Joint displaced. Medium



Photo: 147_8a, 00:00:00
16.4m, Joint displaced. Medium

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
12PLR:
MH4 X X

Photo: 148_9a, 00:00:00
17.3m, General Condition photograph



Inspection report

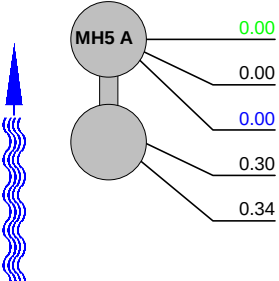
Date: 22/07/2026	Job N°: 91345	Weather: Dry	Operator: AB	section number: 13	PLR: X
Present:	Vehicle:	Camera: Camera 1	Preset:	Cleaned: No	Grade:

Road: Bridgeford Road	Division:	start MH: MH5 A
Place: Soul Padel	District:	end MH:
Location:	Tape No.:	Total length: 0.34 m

Purpose: Asset condition	Shape/Size: Circular dia 100 mm
Use: Surface water	Material: Vitrified clay Pipe length:
Catchment:	Lining:
	Category:

Comment:

Location details:

1:25	position	code	observation	counter	photo	grade
		MH	Manhole Remark: MH5 A	00:00:00		(Constr) 0
		ST	Start of Survey	00:00:00		(Misc) 0
		WL	Water level, 0 % height/diameter	00:00:00		(Serv) 0
		GP	General Condition photograph	00:00:00	154_4a	(Misc) 0
		FH	Finish Survey, Remark: Unable to survey beyond this point due too restricted leverage.	00:00:00		(Misc) 0

Structural Defects

Constructional Features

Service Defects

Miscellaneous Features

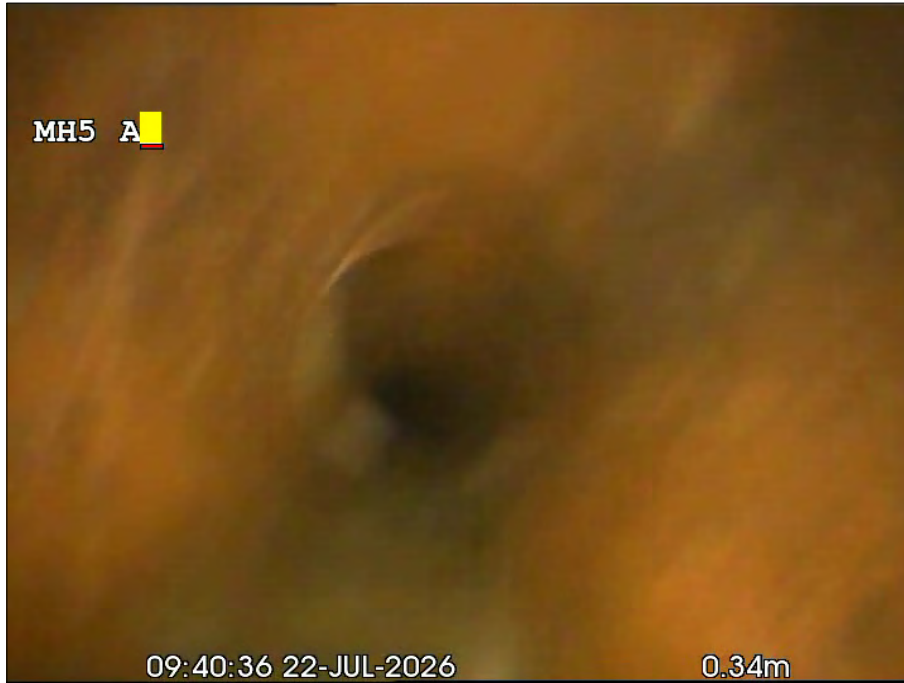
Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
13PLR:
X

Photo: 154_4a, 00:00:00
0.3m, General Condition photograph



Inspection report

Date: 22/07/2026	Job N°: 91345	Weather: Dry	Operator: AB	section number: 14	PLR: X
Present:	Vehicle:	Camera: Camera 1	Preset:	Cleaned: No	Grade:

Road: Bridgeford Road	Division:	start MH: MH5 B
Place: Soul Padel	District:	end MH:
Location:	Tape No.:	Total length: 16.8 m

Purpose: Asset condition	Shape/Size: Circular dia 150 mm
Use: Surface water	Material: Vitrified clay Pipe length:
Catchment:	Lining:
	Category:

Comment:

Location details:

1:125	position	code	observation	counter	photo	grade
	0.00	MH	Manhole Remark: MH5 B	00:00:00		(Constr) 0
	0.00	ST	Start of Survey	00:00:00		(Misc) 0
	0.00	WL	Water level, 0 % height/diameter	00:00:00		(Serv) 0
	0.10	DC	Dimension of sewer changes, new dimension dia 100 mm	00:00:00	242_4a	(Misc) 0
	0.15	S1 DES	Debris silt, 10 % cross-sectional area loss, Start	00:00:00	23_5a	(Serv) 1
	5.20	GP	General Condition photograph	00:00:00	23_6a	(Misc) 0
	8.70	F1 DES	Debris silt, 10 % cross-sectional area loss, Finish	00:00:00		(Serv) 1
	8.90	LU	Line of Sewer deviates up	00:00:00		(Serv) 0
	9.90	GP	General Condition photograph	00:00:00	23_9a	(Misc) 0
	16.00	GP	General Condition photograph	00:00:00	23_10a	(Misc) 0
	16.80	FH	Finish Survey, Remark: Unable to survey beyond this point due too restricted leverage.	00:00:00		(Misc) 0

Structural Defects

Constructional Features

Service Defects

Miscellaneous Features

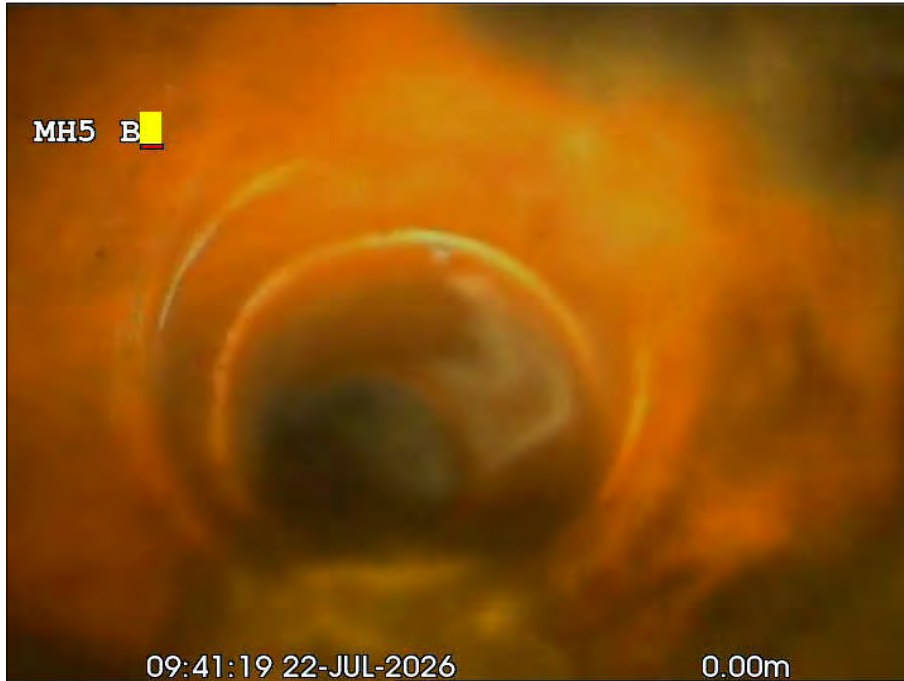
Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
14PLR:
X

Photo: 242_4a, 00:00:00
0.1m, Dimension of sewer changes, new dimension dia 100 mm



Photo: 23_5a, 00:00:00
0.15m, Debris silt, 10 % cross-sectional area loss, Start

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
14PLR:
X

Photo: 23_6a, 00:00:00
5.2m, General Condition photograph

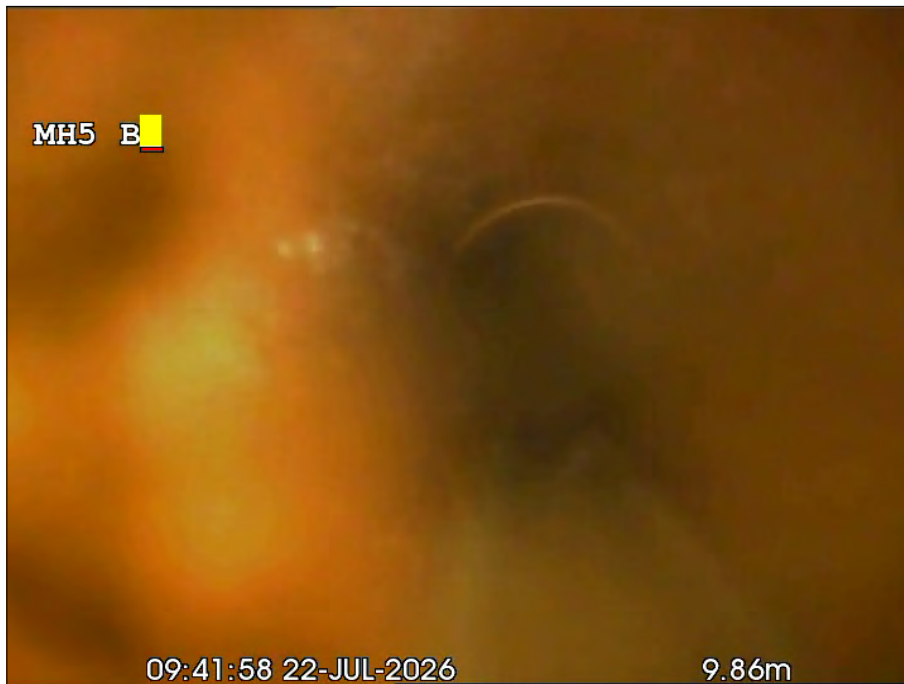


Photo: 23_9a, 00:00:00
9.9m, General Condition photograph

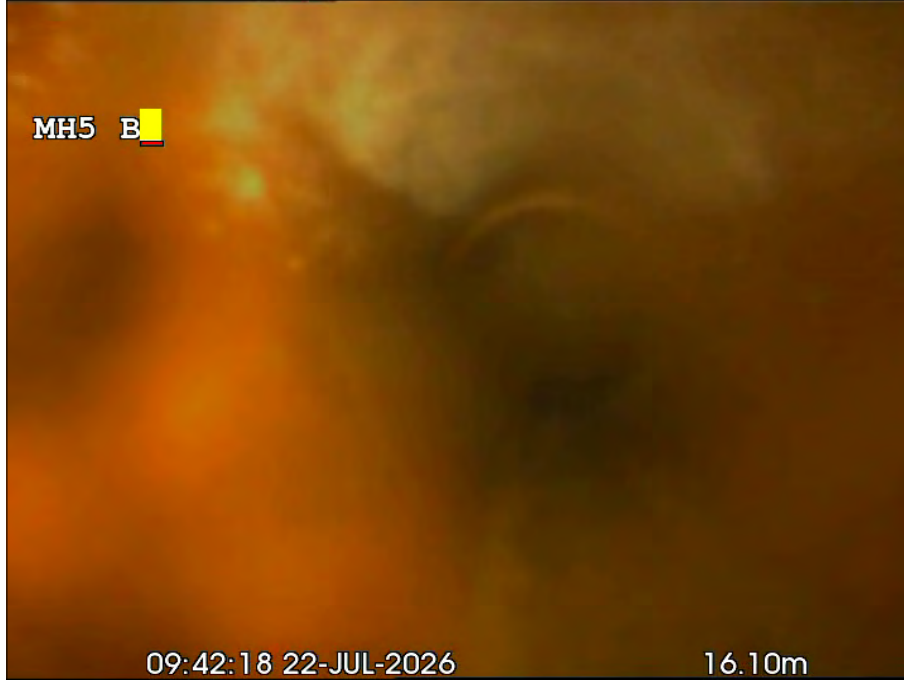
Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
14PLR:
X

Photo: 23_10a, 00:00:00
16m, General Condition photograph



Inspection report

Date: 22/07/2026	Job N°: 91345	Weather: Dry	Operator: AB	section number: 15	PLR: X
Present:	Vehicle:	Camera: Camera 1	Preset:	Cleaned: No	Grade:

Road: Bridgeford Road	Division:	start MH: MH5 C
Place: Soul Padel	District:	end MH:
Location:	Tape No.:	Total length: 33.1 m
Purpose: Asset condition	Shape/Size: Circular dia 150 mm	
Use: Surface water	Material: Vitrified clay	Pipe length:
Catchment:	Lining:	
	Category:	
Comment:		
Location details:		

1:250	position	code	observation	counter	photo	grade
	MH5 C					
	0.00	MH	Manhole Remark: MH5 C	00:00:00		(Constr) 0
	0.00	ST	Start of Survey	00:00:00		(Misc) 0
	0.00	S1	DES Debris silt, 10 % cross-sectional area loss, Start	00:00:00	169_3a	(Serv) 1
	0.00	WL	Water level, 0 % height/diameter	00:00:00		(Serv) 0
	4.00	F1	DES Debris silt, 10 % cross-sectional area loss, Finish	00:00:00		(Serv) 1
	4.00	WL	Water level, 5 % height/diameter	00:00:00		(Serv) 0
	6.40	GP	General Condition photograph	00:00:00	24_7a	(Misc) 0
	10.30	GP	General Condition photograph	00:00:00	24_8a	(Misc) 0
	15.60	GP	General Condition photograph	00:00:00	24_9a	(Misc) 0
	20.40	GP	General Condition photograph	00:00:00	24_10a	(Misc) 0
	26.30	GP	General Condition photograph	00:00:00	24_11a	(Misc) 0
	31.30	S1	DES Debris silt, 5 % cross-sectional area loss, Start	00:00:00	24_12a	(Serv) 1
	32.95	F1	DES Debris silt, 5 % cross-sectional area loss, Finish	00:00:00		(Serv) 1
	33.00	JN	Junction at 09 o'clock, dia 150 mm	00:00:00	24_14a	(Constr) 0
	33.10	SA	Survey abandoned, Remark: Unable to survey beyond junction.	00:00:00		(Misc) 0

Structural Defects

Constructional Features

Service Defects

Miscellaneous Features

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
15PLR:
X

Photo: 169_3a, 00:00:00
0m, Debris silt, 10 % cross-sectional area loss, Start



Photo: 24_7a, 00:00:00
6.4m, General Condition photograph

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
15PLR:
X

Photo: 24_8a, 00:00:00
10.3m, General Condition photograph



Photo: 24_9a, 00:00:00
15.6m, General Condition photograph

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
15PLR:
X

Photo: 24_10a, 00:00:00
20.4m, General Condition photograph



Photo: 24_11a, 00:00:00
26.3m, General Condition photograph

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
15PLR:
X

Photo: 24_12a, 00:00:00
31.3m, Debris silt, 5 % cross-sectional area loss, Start



Photo: 24_14a, 00:00:00
33m, Junction at 09 o'clock, dia 150 mm



Inspection report

Date: 22/07/2026	Job N°: 91345	Weather: Dry	Operator: AB	section number: 16	PLR: MH5 X X
Present:	Vehicle:	Camera: Camera 1	Preset:	Cleaned: No	Grade:

Road: Bridgeford Road	Division:	start MH: MH5 X
Place: Soul Padel	District:	end MH:
Location:	Tape No.:	Total length: 18 m

Purpose: Asset condition	Shape/Size: Circular dia 150 mm
Use: Surface water	Material: Vitrified clay Pipe length:
Catchment:	Lining:
	Category:

Comment:

Location details:

1:150	position	code	observation	counter	photo	grade
	0.00	MH	Manhole Remark: MH5 X	00:00:00		(Constr) 0
	0.00	ST	Start of Survey	00:00:00		(Misc) 0
	0.00	S1 DES	Debris silt, 5 % cross-sectional area loss, Start	00:00:00		(Serv) 1
	0.00	WL	Water level, 5 % height/diameter	00:00:00		(Serv) 0
	4.80	GP	General Condition photograph	00:00:00	25_5a	(Misc) 0
	7.00	F1 DES	Debris silt, 5 % cross-sectional area loss, Finish	00:00:00		(Serv) 1
	7.00	WL	Water level, 5 % height/diameter	00:00:00		(Serv) 0
	10.60	GP	General Condition photograph	00:00:00	25_8a	(Misc) 0
	15.40	GP	General Condition photograph	00:00:00	25_9a	(Misc) 0
	18.00	SA	Survey abandoned, Remark: Unable to survey beyond this point due too restricted leverage.	00:00:00		(Misc) 0

Structural Defects

Constructional Features

Service Defects

Miscellaneous Features

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
16PLR:
MH5 X X

Photo: 25_5a, 00:00:00
4.8m, General Condition photograph

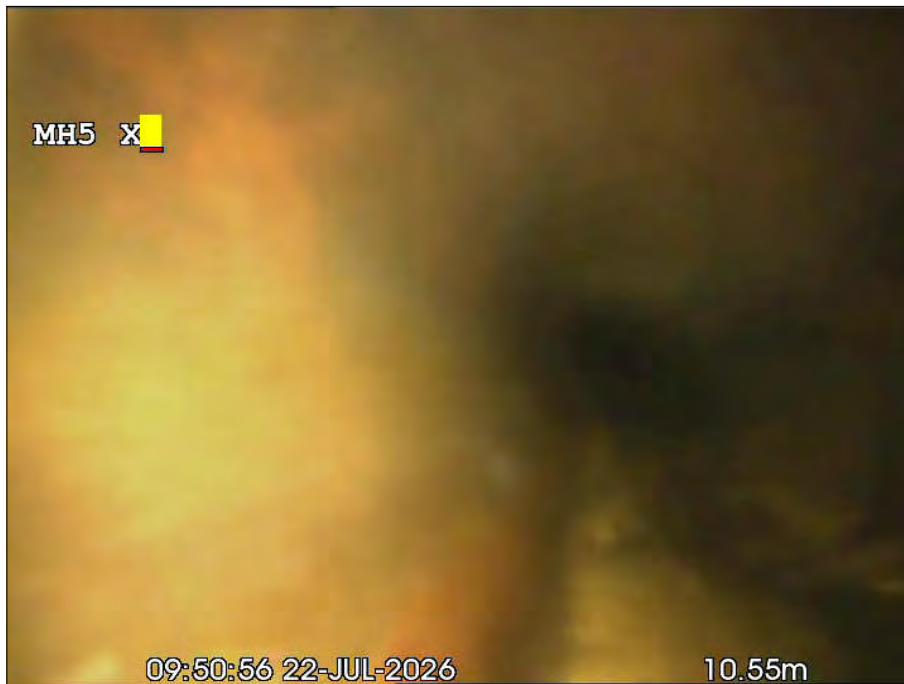


Photo: 25_8a, 00:00:00
10.6m, General Condition photograph

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
16PLR:
MH5 X X

Photo: 25_9a, 00:00:00
15.4m, General Condition photograph



Inspection report

Date: 22/07/2026	Job N°: 91345	Weather: Dry	Operator: AB	section number: 17	PLR: X
Present:	Vehicle:	Camera: Camera 1	Preset:	Cleaned: No	Grade:

Road: Bridgeford Road	Division:	start MH: MH6 A
Place: Soul Padel	District:	end MH:
Location:	Tape No.:	Total length: 12.6 m
Purpose: Asset condition	Shape/Size: Circular dia 100 mm	
Use: Surface water	Material: Polyethylene	Pipe length:
Catchment:	Lining:	
	Category:	
Comment:		
Location details:		

1:100	position	code	observation	counter	photo	grade
	0.00	MH	Manhole Remark: MH6 A	00:00:00		(Constr) 0
	0.00	ST	Start of Survey	00:00:00		(Misc) 0
	0.00	WL	Water level, 0 % height/diameter	00:00:00		(Serv) 0
	0.50	S3	DES	00:00:00	256_4a	(Serv) 1
	1.20	S2	RM	00:00:00	28_5a	(Serv) 5
	3.60	LL	Line of Sewer deviates left	00:00:00		(Serv) 0
	6.00	S3	RF	00:00:00	28_7a	(Serv) 1
	6.00	F2	RM	00:00:00		(Serv) 5
	11.30	GP	General Condition photograph	00:00:00	28_9a	(Misc) 0
	11.90	F3	RF	00:00:00		(Serv) 1
	12.50	F3	DES	00:00:00		(Serv) 1
	12.55	OB	Obstruction, 95 % height/diameter loss	00:00:00	28_12a	(Serv) 2
	12.60	SA	Survey abandoned, Remark: Unable to survey beyond obstruction.	00:00:00		(Misc) 0

Structural Defects

Constructional Features

Service Defects

Miscellaneous Features

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
17PLR:
X

Photo: 256_4a, 00:00:00
0.5m, Debris silt, 5 % cross-sectional area loss, Start



Photo: 28_5a, 00:00:00
1.2m, Mass Roots 10 % cross-sectional area loss, Start

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
17PLR:
X

Photo: 28_7a, 00:00:00
6m, Fine Roots, Start



Photo: 28_9a, 00:00:00
11.3m, General Condition photograph

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
17PLR:
X

Photo: 28_12a, 00:00:00
12.55m, Obstruction, 95 % height/diameter loss



Inspection report

Date: 22/07/2026	Job N°: 91345	Weather: Dry	Operator: AB	section number: 18	PLR: X
Present:	Vehicle:	Camera: Camera 1	Preset:	Cleaned: No	Grade:

Road: Bridgeford Road	Division:	start MH: MH6 B
Place: Soul Padel	District:	end MH:
Location:	Tape No.:	Total length: 19.2 m
Purpose: Asset condition	Shape/Size: Circular dia 100 mm	
Use: Surface water	Material: Vitrified clay	Pipe length:
Catchment:	Lining:	
	Category:	
Comment:		
Location details:		

1:150	position	code	observation	counter	photo	grade
	0.00	MH	Manhole Remark: MH6 B	00:00:00		(Constr) 0
	0.00	ST	Start of Survey	00:00:00		(Misc) 0
	0.00	WL	Water level, 0 % height/diameter	00:00:00		(Serv) 0
	5.60	GP	General Condition photograph	00:00:00	29_4a	(Misc) 0
	6.40	JN	Junction at 03 o'clock, dia 100 mm	00:00:00	29_5a	(Constr) 0
	6.80	JDM	Joint displaced. Medium	00:00:00	29_6a	(Struct) 1
	10.60	GP	General Condition photograph	00:00:00	29_7a	(Misc) 0
	16.20	JN	Junction at 03 o'clock, dia 100 mm	00:00:00	29_8a	(Constr) 0
	19.20	FH	Finish Survey, Remark: Unable to survey beyond this point due to restricted leverage.	00:00:00		(Misc) 0

Structural Defects

Constructional Features

Service Defects

Miscellaneous Features

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
18PLR:
X

Photo: 29_4a, 00:00:00
5.6m, General Condition photograph



Photo: 29_5a, 00:00:00
6.4m, Junction at 03 o'clock, dia 100 mm

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
18PLR:
X

Photo: 29_6a, 00:00:00
6.8m, Joint displaced. Medium



Photo: 29_7a, 00:00:00
10.6m, General Condition photograph

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
18PLR:
X

Photo: 29_8a, 00:00:00
16.2m, Junction at 03 o'clock, dia 100 mm



Inspection report

Date: 22/07/2026	Job N°: 91345	Weather: Dry	Operator: AB	section number: 19	PLR: MH6 X X
Present:	Vehicle:	Camera: Camera 1	Preset:	Cleaned: No	Grade:

Road: Bridgeford Road	Division:	start MH: MH6 X
Place: Soul Padel	District:	end MH:
Location:	Tape No.:	Total length: 15.7 m
Purpose: Asset condition	Shape/Size: Circular dia 100 mm	
Use: Surface water	Material: Vitrified clay	Pipe length:
Catchment:	Lining:	
	Category:	
Comment:		
Location details:		

1:125	position	code	observation	counter	photo	grade
	0.00	MH	Manhole Remark: MH6 X	00:00:00		(Constr) 0
	0.00	ST	Start of Survey	00:00:00		(Misc) 0
	0.00	WL	Water level, 0 % height/diameter	00:00:00		(Serv) 0
	5.30	GP	General Condition photograph	00:00:00	30_4a	(Misc) 0
	8.70	JN	Junction at 03 o'clock, dia 100 mm	00:00:00	30_5a	(Constr) 0
	10.70	JN	Junction at 09 o'clock, dia 100 mm	00:00:00	30_6a	(Constr) 0
	13.00	C1 DES	Debris silt, 25 % cross-sectional area loss, Changed	00:00:00	30_7a	(Serv) 1
	14.00	C1 DES	Debris silt, 50 % cross-sectional area loss, Changed	00:00:00	30_8a	(Serv) 1
	15.65	F1 DES	Debris silt, 50 % cross-sectional area loss, Finish	00:00:00		(Serv) 1
	15.70	SA	Survey abandoned, Remark: Unable to survey beyond debris silt.	00:00:00		(Misc) 0

Structural Defects

Constructional Features

Service Defects

Miscellaneous Features

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
19PLR:
MH6 X X

Photo: 30_4a, 00:00:00
5.3m, General Condition photograph



Photo: 30_5a, 00:00:00
8.7m, Junction at 03 o'clock, dia 100 mm

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
19PLR:
MH6 X X

Photo: 30_6a, 00:00:00
10.7m, Junction at 09 o'clock, dia 100 mm



Photo: 30_7a, 00:00:00
13m, Debris silt, 25 % cross-sectional area loss, Changed

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
19PLR:
MH6 X X

Photo: 30_8a, 00:00:00

14m, Debris silt, 50 % cross-sectional area loss, Changed



Inspection report

Date: 22/07/2026	Job N°: 91345	Weather: Dry	Operator: AB	section number: 20	PLR: MH7 A X
Present:	Vehicle:	Camera: Camera 1	Preset:	Cleaned: No	Grade:

Road: Bridgeford Road	Division:	start MH: MH7 A
Place: Soul Padel	District:	end MH:
Location:	Tape No.:	Total length: 24.6 m
Purpose: Asset condition	Shape/Size: Circular dia 100 mm	
Use: Surface water	Material: Polyvinyl chloride	Pipe length:
Catchment:	Lining:	
	Category:	
Comment:		
Location details:		

1:200	position	code	observation	counter	photo	grade
	0.00	MH	Manhole Remark: MH7 A	00:00:00		(Constr) 0
	0.00	ST	Start of Survey	00:00:00		(Misc) 0
	0.00	WL	Water level, 0 % height/diameter	00:00:00		(Serv) 0
	10.10	GP	General Condition photograph	00:00:00	269_4a	(Misc) 0
	11.40	D	Sewer Deformed, 5 %	00:00:00	270_5a	(Struct) 5
	12.10	WL	Water level, 10 % height/diameter	00:00:00		(Serv) 0
	14.00	WL	Water level, 40 % height/diameter	00:00:00		(Serv) 0
	19.30	GP	General Condition photograph	00:00:00	31_8a	(Misc) 0
	24.60	SA	Survey abandoned, Remark: Unable to survey beyond this point due to restricted leverage.	00:00:00		(Misc) 0
Structural Defects			Constructional Features			
Service Defects			Miscellaneous Features			

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
20PLR:
MH7 A X

Photo: 269_4a, 00:00:00
10.1m, General Condition photograph



Photo: 270_5a, 00:00:00
11.4m, Sewer Deformed, 5 %

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
20PLR:
MH7 A X

Photo: 31_8a, 00:00:00
19.3m, General Condition photograph



Inspection report

Date: 22/07/2026	Job N°: 91345	Weather: Dry	Operator: AB	section number: 21	PLR: X
Present:	Vehicle:	Camera: Camera 1	Preset:	Cleaned: No	Grade:

Road: Bridgeford Road	Division:	start MH: MH7 B
Place: Soul Padel	District:	end MH:
Location:	Tape No.:	Total length: 36.7 m

Purpose: Asset condition	Shape/Size: Circular dia 100 mm
Use: Surface water	Material: Polyvinyl chloride Pipe length:
Catchment:	Lining:
	Category:

Comment:

Location details:

1:275	position	code	observation	counter	photo	grade
	0.00	MH	Manhole Remark: MH7 B	00:00:00		(Constr) 0
	0.00	ST	Start of Survey	00:00:00		(Misc) 0
	0.00	WL	Water level, 0 % height/diameter	00:00:00		(Serv) 0
	1.60	CN	Connection, at 09 o'clock, dia 80 mm	00:00:00	279_4a	(Constr) 0
	7.30	CN	Connection, at 09 o'clock, dia 80 mm	00:00:00	280_5a	(Constr) 0
	7.50	D	Sewer Deformed, 20 %	00:00:00	281_6a	(Struct) 5
	7.70	H	Hole in sewer from 11 to 12 o'clock	00:00:00	282_7a	(Struct) 4
	11.00	CN	Connection, at 09 o'clock, dia 80 mm	00:00:00	283_8a	(Constr) 0
	15.40	CN	Connection, at 09 o'clock, dia 80 mm	00:00:00	284_9a	(Constr) 0
	19.50	CN	Connection, at 09 o'clock, dia 100 mm	00:00:00	290_10a	(Constr) 0
	24.00	CN	Connection, at 09 o'clock, dia 80 mm	00:00:00	32_11a	(Constr) 0
	28.50	CN	Connection, at 09 o'clock, dia 80 mm	00:00:00	32_12a	(Constr) 0
	30.00	GP	General Condition photograph	00:00:00	32_13a	(Misc) 0
	36.70	RM	Mass Roots 95 % cross-sectional area loss	00:00:00	32_14a	(Serv) 5
	36.70	SA	Survey abandoned, Remark: Unable to survey beyond mass roots.	00:00:00		(Misc) 0

Structural Defects

Constructional Features

Service Defects

Miscellaneous Features

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
21PLR:
X

Photo: 279_4a, 00:00:00
1.6m, Connection, at 09 o'clock, dia 80 mm



Photo: 280_5a, 00:00:00
7.3m, Connection, at 09 o'clock, dia 80 mm

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
21PLR:
X

Photo: 281_6a, 00:00:00
7.5m, Sewer Deformed, 20 %

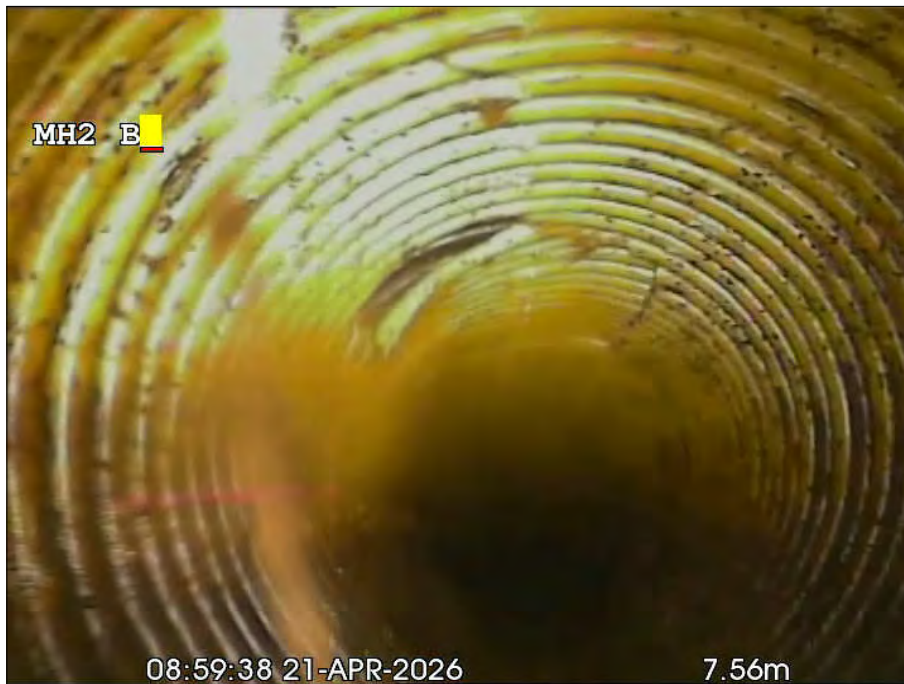


Photo: 282_7a, 00:00:00
7.7m, Hole in sewer from 11 to 12 o'clock

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
21PLR:
X

Photo: 283_8a, 00:00:00
11m, Connection, at 09 o'clock, dia 80 mm



Photo: 284_9a, 00:00:00
15.4m, Connection, at 09 o'clock, dia 80 mm

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
21PLR:
X

Photo: 290_10a, 00:00:00
19.5m, Connection, at 09 o'clock, dia 100 mm



Photo: 32_11a, 00:00:00
24m, Connection, at 09 o'clock, dia 80 mm

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
21PLR:
X

Photo: 32_12a, 00:00:00
28.5m, Connection, at 09 o'clock, dia 80 mm



Photo: 32_13a, 00:00:00
30m, General Condition photograph

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
21PLR:
X

Photo: 32_14a, 00:00:00
36.7m, Mass Roots 95 % cross-sectional area loss



Inspection report

Date: 22/07/2026	Job N°: 91345	Weather: Dry	Operator: AB	section number: 22	PLR: X
Present:	Vehicle:	Camera: Camera 1	Preset:	Cleaned: No	Grade:

Road: Bridgeford Road	Division:	start MH: MH7 C
Place: Soul Padel	District:	end MH:
Location:	Tape No.:	Total length: 26.5 m

Purpose: Asset condition	Shape/Size: Circular dia 100 mm
Use: Surface water	Material: Polyvinyl chloride Pipe length:
Catchment:	Lining:
	Category:

Comment:

Location details:

1:200	position	code	observation	counter	photo	grade
	0.00	MH	Manhole Remark: MH7 C	00:00:00		(Constr) 0
	0.00	ST	Start of Survey	00:00:00		(Misc) 0
	5.80	LL	Line of Sewer deviates left	00:00:00		(Serv) 0
	10.00	GP	General Condition photograph	00:00:00	294_4a	(Misc) 0
	20.10	GP	General Condition photograph	00:00:00	295_5a	(Misc) 0
	26.50	D	Sewer Deformed, 30 %	00:00:00	296_6a	(Struct) 5
	26.50	SA	Survey abandoned, Remark: Unable to survey beyond deformed pipe.	00:00:00		(Misc) 0

Structural Defects

Constructional Features

Service Defects

Miscellaneous Features

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
22PLR:
X

Photo: 294_4a, 00:00:00
10m, General Condition photograph



Photo: 295_5a, 00:00:00
20.1m, General Condition photograph

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
22PLR:
X

Photo: 296_6a, 00:00:00
26.5m, Sewer Deformed, 30 %



Inspection report

Date: 22/07/2026	Job N°: 91345	Weather: Dry	Operator: AB	section number: 23	PLR: X
Present:	Vehicle:	Camera: Camera 1	Preset:	Cleaned: No	Grade:

Road: Bridgeford Road	Division:	start MH: MH7 X
Place: Soul Padel	District:	end MH:
Location:	Tape No.:	Total length: 38.3 m

Purpose: Asset condition	Shape/Size: Circular dia 150 mm
Use: Surface water	Material: Polyvinyl chloride Pipe length:
Catchment:	Lining:
	Category:

Comment:

Location details:

1:300	position	code	observation	counter	photo	grade
	0.00	MH	Manhole Remark: MH7 X	00:00:00		(Constr) 0
	0.00	ST	Start of Survey	00:00:00		(Misc) 0
	0.00	WL	Water level, 5 % height/diameter	00:00:00		(Serv) 0
	4.60	DES	Debris silt, 5 % cross-sectional area loss	00:00:00	301_4a	(Serv) 1
	4.60	WL	Water level, 0 % height/diameter	00:00:00		(Serv) 0
	6.30	DES	Debris silt, 5 % cross-sectional area loss, Finish	00:00:00		(Serv) 1
	8.80	JN	Junction at 03 o'clock, dia 100 mm	00:00:00	304_7a	(Constr) 0
	9.60	S1	DES Debris silt, 20 % cross-sectional area loss, Start	00:00:00	305_8a	(Serv) 1
	10.00	F1	DES Debris silt, 20 % cross-sectional area loss, Finish	00:00:00		(Serv) 1
	13.30	JN	Junction at 03 o'clock, dia 100 mm	00:00:00	308_10a	(Constr) 0
	17.40	CN	Connection, at 03 o'clock, dia 80 mm	00:00:00	314_11a	(Constr) 0
	22.20	JN	Junction at 03 o'clock, dia 100 mm	00:00:00	34_12a	(Constr) 0
	26.80	JN	Junction at 03 o'clock, dia 100 mm	00:00:00	34_13a	(Constr) 0
	31.90	CN	Connection, at 03 o'clock, dia 80 mm	00:00:00	34_14a	(Constr) 0
	36.20	JN	Junction at 03 o'clock, dia 100 mm	00:00:00	34_15a	(Constr) 0
	38.30	SA	Survey abandoned, Remark: Unable to survey beyond this point due to restricted leverage.	00:00:00		(Misc) 0

Structural Defects

Constructional Features

Service Defects

Miscellaneous Features

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
23PLR:
X

Photo: 301_4a, 00:00:00
4.6m, Debris silt, 5 % cross-sectional area loss



Photo: 304_7a, 00:00:00
8.8m, Junction at 03 o'clock, dia 100 mm

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
23PLR:
X

Photo: 305_8a, 00:00:00
9.6m, Debris silt, 20 % cross-sectional area loss, Start



Photo: 308_10a, 00:00:00
13.3m, Junction at 03 o'clock, dia 100 mm

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
23PLR:
X

Photo: 314_11a, 00:00:00
17.4m, Connection, at 03 o'clock, dia 80 mm



Photo: 34_12a, 00:00:00
22.2m, Junction at 03 o'clock, dia 100 mm

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
23PLR:
X

Photo: 34_13a, 00:00:00
26.8m, Junction at 03 o'clock, dia 100 mm



Photo: 34_14a, 00:00:00
31.9m, Connection, at 03 o'clock, dia 80 mm

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
23PLR:
X

Photo: 34_15a, 00:00:00
36.2m, Junction at 03 o'clock, dia 100 mm



Inspection report

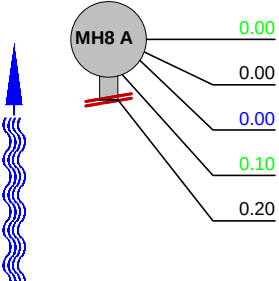
Date: 22/07/2026	Job N°: 91345	Weather: Dry	Operator: AB	section number: 24	PLR: X
Present:	Vehicle:	Camera: Camera 1	Preset:	Cleaned: No	Grade:

Road: Bridgeford Road	Division:	start MH: MH8 A
Place: Soul Padel	District:	end MH:
Location:	Tape No.:	Total length: 0.2 m

Purpose: Asset condition	Shape/Size: Circular dia 150 mm
Use: Surface water	Material: Polyvinyl chloride Pipe length:
Catchment:	Lining:
	Category:

Comment:

Location details:

1:25	position	code	observation	counter	photo	grade
		MH	Manhole Remark: MH8 A	00:00:00		(Constr) 0
		ST	Start of Survey	00:00:00		(Misc) 0
		WL	Water level, 0 % height/diameter	00:00:00		(Serv) 0
		JN	Junction at 06 o'clock, dia 150 mm	00:00:00	317_4a	(Constr) 0
		SA	Survey abandoned, Remark: Unable to survey beyond junction.	00:00:00		(Misc) 0

Structural Defects

Constructional Features

Service Defects

Miscellaneous Features

Inspection photosPlace:
Soul PadelRoad:
Bridgeford RoadDate:
22/07/2026section number:
24PLR:
X

Photo: 317_4a, 00:00:00
0.1m, Junction at 06 o'clock, dia 150 mm

CL-01	DESCRIPTION	ACCURACY/LEVEL	DESCRIPTION	ACCURACY
CL-01	100% positive hole from survey	100%	100% positive hole from survey	100%
CL-02	100% positive hole from survey	100%	100% positive hole from survey	100%
CL-03	100% positive hole from survey	100%	100% positive hole from survey	100%
CL-04	100% positive hole from survey	100%	100% positive hole from survey	100%
CL-05	100% positive hole from survey	100%	100% positive hole from survey	100%

DETECTION METHOD

IN ACCORDANCE WITH PAS 128:2022 SURVEY TYPE B

Drainage Survey

All accessible Manholes and inspection chambers have had their respective covers lifted with pipe axes, inverts, chamber elevations and service data recorded from ground level. All connections from DPs, Gullies, Drains, VPs, RE's and lampfrohes have been given wherever possible using suitable connections (AC) and/or service instrumentation where applicable. Where these methods have proved unsuccessful then assumed (AR) straight line connections will be shown.

All accessible Manholes and inspection chambers have had their respective covers lifted with pipe axes, inverts, chamber elevations and service data recorded from ground level. Pipework has been traced, accessed and collected for post processing. Drainage layout, including manhole covers not located by topographical survey, may be taken from CCTV coverage and will be shown as indicative only.

Electricity

Electric cables will have been predominantly located using EML methodology with electronically derived depths shown. GPR techniques will be employed to achieve greater quality levels as required.

British Telecom

BT cables will have been predominantly located using EML methodology with electronically derived depths shown. GPR techniques will be employed to achieve greater quality levels as required. Due to current laws and legislation protecting all BT apparatus, cabling can only be located remotely. We therefore compare all our location findings against record information to produce the final service layout. In some instances, where high amount of cable ducts are present, we may only be able to identify a linear centre peak signal rather than identifying all the individual duct positions. For further information regarding Telecoms apparatus, please contact Cymreth directly.

Cable TV &

Cable TV and/or Com cables will have been predominantly located using EML methodology with electronically derived depths shown. GPR techniques will be employed to achieve greater quality levels as required.

Fibre Optic

FO cables will have been predominantly located using GPR methodology. This is due to the materials used within fibre optic cabling, in some rare instances, fibre cabling or conductive non fibre optic cabling will be present within some or all ducting. When this is the case, both EML and GPR methodology will be combined to identify service network and achieve greater quality levels.

Lighting, Traffic Signal & Security Cables

LT, TS and/or Sec cables will have been predominantly located using EML methodology with electronically derived depths shown. GPR techniques will be employed to achieve greater quality levels as required.

Value Inc. Fuel Pipes and Hot Water Pipes

CAVOC and/or WARM pipes will have been attempted and located using both EML & GPR methodology with electronically derived depths shown for the former and depths to cover levels shown for the latter. When the Gas/Water pipe work is constructed using conductive materials, then we will be able to employ multiple geophysical techniques to identify service network and achieve greater quality levels. When a non conductive material is used, GPR methodology will be employed to locate and plot the final service layout.

Ground Penetrating Radar

GPR methodology is used to identify and locate all non metallic, non conductive piping and cabling. We also employ GPR to obtain a greater accuracy levels on EML located services. The GPR has a greater success rate on pipe or service diameter upward of 80mm, as size increments increase, so does the chance of detection. The GPR can produce varying results and as such, wouldn't be used as an independent utility surveying instrument.

Unidentified Traces

All UTIs will have been predominantly located using EML methodology with electronically derived depths shown. GPR techniques will be employed to achieve greater quality levels as required. Every effort has been made to identify the service but in this instance, is not achievable. We recommend excavation work to determine linearly and depth where applicable.

Scanning (LiDAR)

Scanning has been identified on site with a potential of an undetectable service present.

Assumed Routes & Taken from Records (CL-04/05)

Assumed routes (AR) are shown if there is evidence that a service exists but we are unable to trace it on site. The surveyor will attempt to locate various, meter/valve/meters (service evidence) etc. around site area to successfully determine an assumed route between these points. If there is little evidence on site but they believe a service is still present, then a common sense approach to an assumed route shall be employed.

GENERAL SYNOPSIS

This survey has been carried out in accordance with PAS 128:2022 & our version of the Royal Institution of Chartered Surveyors (RICS) specification for Measured Surveys of Land, Buildings and Utilities. Our survey extents have been agreed and confirmed with formal acceptance of 91345 from SOUL PADEL LTD. If you have any queries regarding the final service layout, please may we ask you to carefully read all the information within this title block in its entirety before continuing to go on.

TOPOGRAPHICAL DRAWING INFORMATION

Survey Type	Reported By	Date	Effect on Survey Results
Topo	CLIENT SUPPLIED	21/05/2025	

GENERAL SITE CONDITIONS

AVERAGE

ADDITIONAL INFORMATION	EFFECT ON SURVEY RESULTS

DESKTOP UTILITY RECORDS (PAS 128:2022 SURVEY TYPE D)

PREREQUISITE FOR PAS 128:2022 SURVEY TYPE COMMISSIONED: NO

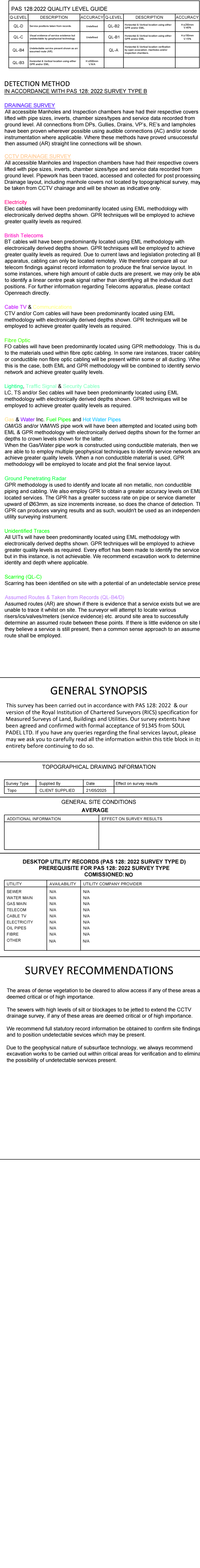
UTILITY	AVAILABILITY	UTILITY COMPANY PROVIDER
SEWER	N/A	N/A
WATER MAIN	N/A	N/A
GAS MAIN	N/A	N/A
TELECOM	N/A	N/A
CABLE TV	N/A	N/A
ELECTRICITY	N/A	N/A
LI-01 PIPES	N/A	N/A
FIBRE	N/A	N/A
OTHER	N/A	N/A

SURVEY RECOMMENDATIONS

The areas of dense vegetation to be cleared to allow access if any of these areas are deemed critical or of high importance.

The sewers with high levels of silt or blockages to be jetted to extend the CCTV drainage survey, if any of these areas are deemed critical or of high importance. We recommend full statutory record information be obtained to confirm site findings and to position undetectable services which may be present.

Due to the geographical nature of subsurface technology, we always recommend excavation works to be carried out within critical areas for verification and to eliminate the possibility of undetectable services present.



UTILITIES & UNDERGROUND INVESTIGATIONS			
ABBREVIATIONS & SYMBOLS			
10-01	100% Positive Hole	10-02	100% Positive Hole
10-03	100% Positive Hole	10-04	100% Positive Hole
10-05	100% Positive Hole	10-06	100% Positive Hole
10-07	100% Positive Hole	10-08	100% Positive Hole
10-09	100% Positive Hole	10-10	100% Positive Hole
10-11	100% Positive Hole	10-12	100% Positive Hole
10-13	100% Positive Hole	10-14	100% Positive Hole
10-15	100% Positive Hole	10-16	100% Positive Hole
10-17	100% Positive Hole	10-18	100% Positive Hole
10-19	100% Positive Hole	10-20	100% Positive Hole
10-21	100% Positive Hole	10-22	100% Positive Hole
10-23	100% Positive Hole	10-24	100% Positive Hole
10-25	100% Positive Hole	10-26	100% Positive Hole
10-27	100% Positive Hole	10-28	100% Positive Hole
10-29	100% Positive Hole	10-30	100% Positive Hole
10-31	100% Positive Hole	10-32	100% Positive Hole
10-33	100% Positive Hole	10-34	100% Positive Hole
10-35	100% Positive Hole	10-36	100% Positive Hole
10-37	100% Positive Hole	10-38	100% Positive Hole
10-39	100% Positive Hole	10-40	100% Positive Hole
10-41	100% Positive Hole	10-42	100% Positive Hole
10-43	100% Positive Hole	10-44	100% Positive Hole
10-45	100% Positive Hole	10-46	100% Positive Hole
10-47	100% Positive Hole	10-48	100% Positive Hole
10-49	100% Positive Hole	10-50	100% Positive Hole
10-51	100% Positive Hole	10-52	100% Positive Hole
10-53	100% Positive Hole	10-54	100% Positive Hole
10-55	100% Positive Hole	10-56	100% Positive Hole
10-57	100% Positive Hole	10-58	100% Positive Hole
10-59	100% Positive Hole	10-60	100% Positive Hole
10-61	100% Positive Hole	10-62	100% Positive Hole
10-63	100% Positive Hole	10-64	100% Positive Hole
10-65	100% Positive Hole	10-66	100% Positive Hole
10-67	100% Positive Hole	10-68	100% Positive Hole
10-69	100% Positive Hole	10-70	100% Positive Hole
10-71	100% Positive Hole	10-72	100% Positive Hole
10-73	100% Positive Hole	10-74	100% Positive Hole
10-75	100% Positive Hole	10-76	100% Positive Hole
10-77	100% Positive Hole	10-78	100% Positive Hole
10-79	100% Positive Hole	10-80	100% Positive Hole
10-81	100% Positive Hole	10-82	100% Positive Hole
10-83	100% Positive Hole	10-84	100% Positive Hole
10-85	100% Positive Hole	10-86	100% Positive Hole
10-87	100% Positive Hole	10-88	100% Positive Hole
10-89	100% Positive Hole	10-90	100% Positive Hole
10-91	100% Positive Hole	10-92	100% Positive Hole
10-93	100% Positive Hole	10-94	100% Positive Hole
10-95	100% Positive Hole	10-96	100% Positive Hole
10-97	100% Positive Hole	10-98	100% Positive Hole
10-99	100% Positive Hole	10-100	100% Positive Hole

DRAWING NOTES

All below ground details shown have been identified from above ground without excavation. Survey Solution uses electro-magnetic and/or ground penetrating radar (GPR) methods to investigate for underground utilities, services and features. Results using these methods are not reliable and we recommend trial excavations are carried out for verification of positions, depths and identification.

Any areas on the drawing where services or features have not been shown are not necessarily clear of services or features but are an indication that items have been identified during our investigations. All reasonable care and normal good practice should still be employed during design and construction processes.

Certain types of services such as plastic or concrete pipes, some conduit and ducting where direct access can not be achieved for tracing may not be shown and alternative locating methods should be used.

Survey Solutions has used all reasonable care to research available service records, but the completeness or use of the service records supplied to or by Survey Solutions cannot be guaranteed. Therefore Survey Solutions cannot be held responsible for any features annotated as (CL-0).

Depths obtained using electro-magnetic or GPR are affected by ground conditions and should be treated as indicative only. Electro-magnetic depths to utilities and services are generally taken to the centre of a feature. GPR depths to the top of a feature and drainage depth shown to inverts, unless otherwise indicated.

Drainage pipe sizes will be obtained without entering the chamber and therefore should be treated as approximate. Pipe dimensions which have not been obtained visually will be taken from records when available.

All services, drainage and utilities routes are assumed straight between access points, unless otherwise stated. The numbers of cables in runs will not be shown unless specifically requested. All services are below ground unless indicated.

Services, utilities and features may not have been surveyed if obstructed or not reasonably visible or accessible at the time of survey.

Survey Solutions accept no responsibility for the completeness or accuracy of either the topographical survey or base mapping on this project.

All critical dimensions and measurements should be checked and verified with any errors or discrepancies notified to Survey Solutions immediately. The accuracy of the digital data is the same as the plotting scale implies. All dimensions are in metres unless otherwise stated.

The contractor must check and verify all site and building dimensions, levels, utilities and drainage details and connections prior to commencing work.
© Land Survey Solutions Limited hold the copyright to all the information contained within this document and their written consent must be obtained before copying or using the data other than for the purpose it was originally supplied.
This drawing should only be scaled using digital methods.

PROJECT TITLE		ROCHDALE CC BRIDGEFOLD ROAD, ROCHDALE, OL11 5BX	
CLIENT		SOUL PADEL LTD	
SURVEYOR		AW, AB	
SURVEY DATE		22/07/2026	
CHECKED BY		DJR	
APPROVED BY		RDN	
DWS STATUS		FINAL	
DRAWING NUMBER		B13456789-01	
REVISION		A	
ISSUE DATE		05/08/2026	

LAND SURVEYING

BUILDING SURVEYING

UNDERGROUND SURVEYING

SITE ENGINEERING

MONITORING

0845 040 5969
www.survey-solutions.co.uk



Appendix I
Causeway Flow Calculations

Design Settings

Rainfall Methodology	FSR	Maximum Time of Concentration (mins)	30.00
Return Period (years)	100	Maximum Rainfall (mm/hr)	50.0
Additional Flow (%)	0	Minimum Velocity (m/s)	1.00
FSR Region	England and Wales	Connection Type	Level Soffits
M5-60 (mm)	19.000	Minimum Backdrop Height (m)	0.200
Ratio-R	0.270	Preferred Cover Depth (m)	1.200
CV	1.000	Include Intermediate Ground	✓
Time of Entry (mins)	5.00	Enforce best practice design rules	✓

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Depth (m)
SW 1	0.002	5.00	129.100	450	1.100
SW 2	0.002	5.00	128.870	450	0.990
SW 3	0.002	5.00	129.400	450	1.390
SW 4	0.002	5.00	128.800	450	0.960
SW 5	0.000	5.00	128.800	450	0.980
Attenuation	0.000	5.00	128.350	1200	0.780
SW 6	0.000	5.00	128.350	1200	0.800
SW 7	0.000	5.00	127.970	1200	0.770
SW 8	0.082	5.00	128.100	450	0.310

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
1.000	SW 1	SW 2	9.050	0.600	128.000	127.880	0.120	75.4	150	5.13	50.0
1.001	SW 2	SW 5	5.450	0.600	127.880	127.820	0.060	90.8	150	5.22	50.0
2.000	SW 3	SW 4	13.000	0.600	128.010	127.840	0.170	76.5	150	5.19	50.0
2.001	SW 4	SW 5	1.800	0.600	127.840	127.820	0.020	90.0	150	5.22	50.0
1.002	SW 5	Attenuation	4.110	0.600	127.820	127.770	0.050	82.2	150	5.28	50.0
1.003	Attenuation	SW 6	1.750	0.600	127.570	127.550	0.020	87.5	150	5.31	50.0
1.004	SW 6	SW 7	34.970	0.600	127.550	127.200	0.350	99.9	150	5.89	50.0
3.000	SW 8	Attenuation	2.790	0.600	127.790	127.760	0.030	93.0	150	5.04	50.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
1.000	1.159	20.5	0.4	0.950	0.840	0.002	0.0	14	0.434
1.001	1.055	18.6	0.7	0.840	0.830	0.004	0.0	20	0.508
2.000	1.151	20.3	0.4	1.240	0.810	0.002	0.0	14	0.431
2.001	1.060	18.7	0.7	0.810	0.830	0.004	0.0	20	0.510
1.002	1.109	19.6	1.4	0.830	0.430	0.008	0.0	28	0.653
1.003	1.075	19.0	16.3	0.630	0.650	0.090	0.0	107	1.205
1.004	1.005	17.8	16.3	0.650	0.620	0.090	0.0	113	1.137
3.000	1.042	18.4	14.8	0.160	0.440	0.082	0.0	102	1.157

Pipeline Schedule

Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
1.000	9.050	75.4	150	Circular	129.100	128.000	0.950	128.870	127.880	0.840
1.001	5.450	90.8	150	Circular	128.870	127.880	0.840	128.800	127.820	0.830
2.000	13.000	76.5	150	Circular	129.400	128.010	1.240	128.800	127.840	0.810
2.001	1.800	90.0	150	Circular	128.800	127.840	0.810	128.800	127.820	0.830
1.002	4.110	82.2	150	Circular	128.800	127.820	0.830	128.350	127.770	0.430
1.003	1.750	87.5	150	Circular	128.350	127.570	0.630	128.350	127.550	0.650
1.004	34.970	99.9	150	Circular	128.350	127.550	0.650	127.970	127.200	0.620
3.000	2.790	93.0	150	Circular	128.100	127.790	0.160	128.350	127.760	0.440

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
1.000	SW 1	450	Manhole	Adoptable	SW 2	450	Manhole	Adoptable
1.001	SW 2	450	Manhole	Adoptable	SW 5	450	Manhole	Adoptable
2.000	SW 3	450	Manhole	Adoptable	SW 4	450	Manhole	Adoptable
2.001	SW 4	450	Manhole	Adoptable	SW 5	450	Manhole	Adoptable
1.002	SW 5	450	Manhole	Adoptable	Attenuation	1200	Manhole	Adoptable
1.003	Attenuation	1200	Manhole	Adoptable	SW 6	1200	Manhole	Adoptable
1.004	SW 6	1200	Manhole	Adoptable	SW 7	1200	Manhole	Adoptable
3.000	SW 8	450	Manhole	Adoptable	Attenuation	1200	Manhole	Adoptable

Manhole Schedule

Node	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
SW 1	129.100	1.100	450					
				0	1.000	128.000	150	
SW 2	128.870	0.990	450		1	1.000	127.880	150
				0	1.001	127.880	150	
SW 3	129.400	1.390	450					
				0	2.000	128.010	150	
SW 4	128.800	0.960	450		1	2.000	127.840	150
				0	2.001	127.840	150	
SW 5	128.800	0.980	450		1	2.001	127.820	150
				2	1.001	127.820	150	
				0	1.002	127.820	150	
Attenuation	128.350	0.780	1200		1	3.000	127.760	150
				2	1.002	127.770	150	
				0	1.003	127.570	150	
SW 6	128.350	0.800	1200		1	1.003	127.550	150
				0	1.004	127.550	150	
SW 7	127.970	0.770	1200		1	1.004	127.200	150

Manhole Schedule

Node	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
SW 8	128.100	0.310	450		0	3.000	127.790	150

Simulation Settings

Rainfall Methodology	FSR	Analysis Speed	Detailed
FSR Region	England and Wales	Skip Steady State	x
M5-60 (mm)	19.000	Drain Down Time (mins)	240
Ratio-R	0.270	Additional Storage (m³/ha)	0.0
Summer CV	1.000	Check Discharge Rate(s)	x
Winter CV	1.000	Check Discharge Volume	x

Storm Durations

15 | 30 | 60 | 120 | 180 | 240 | 360 | 480 | 600 | 720 | 960 | 1440

Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)	Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)
1	0	0	0	100	45	0	0
30	0	0	0				

Node SW 6 Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Replaces Downstream Link	x	Sump Available	✓
Invert Level (m)	127.550	Product Number	CTL-SHE-0067-1500-0400-1500
Design Depth (m)	0.400	Min Outlet Diameter (m)	0.100
Design Flow (l/s)	1.5	Min Node Diameter (mm)	1200

Node Attenuation Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	127.570
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.95	Time to half empty (mins)	
Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	3.5	0.0	0.400	3.5	0.0
			0.401	0.0	0.0

Node SW 8 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	127.790	Slope (1:X)	500.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)		Depth (m)	0.310
Safety Factor	2.0	Width (m)	20.400	Inf Depth (m)	
Porosity	0.35	Length (m)	40.400		

Results for 1 year Critical Storm Duration. Lowest mass balance: 99.70%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute summer	SW 1	19	128.013	0.013	0.3	0.0020	0.0000	OK
30 minute summer	SW 2	19	127.899	0.018	0.6	0.0029	0.0000	OK
30 minute summer	SW 3	19	128.023	0.013	0.3	0.0020	0.0000	OK
30 minute summer	SW 4	19	127.860	0.020	0.6	0.0031	0.0000	OK
180 minute summer	SW 5	124	127.852	0.032	0.4	0.0051	0.0000	OK
180 minute summer	Attenuation	124	127.852	0.282	3.1	1.2562	0.0000	SURCHARGED
180 minute summer	SW 6	124	127.852	0.302	1.8	0.3412	0.0000	SURCHARGED
480 minute winter	SW 7	240	127.229	0.029	1.5	0.0000	0.0000	OK
180 minute summer	SW 8	124	127.852	0.062	5.3	6.8291	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute summer	SW 1	1.000	SW 2	0.3	0.311	0.015	0.0088	
30 minute summer	SW 2	1.001	SW 5	0.6	0.369	0.032	0.0090	
30 minute summer	SW 3	2.000	SW 4	0.3	0.294	0.015	0.0135	
30 minute summer	SW 4	2.001	SW 5	0.6	0.353	0.032	0.0031	
180 minute summer	SW 5	1.002	Attenuation	0.7	0.435	0.037	0.0259	
180 minute summer	Attenuation	1.003	SW 6	1.8	0.322	0.094	0.0308	
180 minute summer	SW 6	1.004	SW 7	1.5	0.613	0.084	0.0855	16.7
180 minute summer	SW 8	3.000	Attenuation	2.7	0.699	0.145	0.0253	

Results for 30 year Critical Storm Duration. Lowest mass balance: 99.70%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	SW 1	11	128.019	0.019	0.7	0.0030	0.0000	OK
240 minute winter	SW 2	196	127.914	0.034	0.4	0.0053	0.0000	OK
15 minute summer	SW 3	11	128.029	0.019	0.7	0.0030	0.0000	OK
240 minute winter	SW 4	192	127.914	0.074	0.4	0.0117	0.0000	OK
240 minute winter	SW 5	192	127.914	0.094	1.2	0.0149	0.0000	OK
240 minute winter	Attenuation	192	127.914	0.344	2.7	1.5310	0.0000	SURCHARGED
240 minute winter	SW 6	192	127.913	0.363	1.7	0.4109	0.0000	SURCHARGED
1440 minute winter	SW 7	660	127.229	0.029	1.5	0.0000	0.0000	OK
240 minute winter	SW 8	192	127.914	0.124	6.8	24.0457	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	SW 1	1.000	SW 2	0.7	0.400	0.034	0.0160	
240 minute winter	SW 2	1.001	SW 5	0.4	0.316	0.021	0.0395	
15 minute summer	SW 3	2.000	SW 4	0.7	0.356	0.034	0.0264	
240 minute winter	SW 4	2.001	SW 5	0.8	0.309	0.043	0.0181	
240 minute winter	SW 5	1.002	Attenuation	0.9	0.435	0.048	0.0594	
240 minute winter	Attenuation	1.003	SW 6	1.7	0.311	0.089	0.0308	
240 minute winter	SW 6	1.004	SW 7	1.5	0.613	0.084	0.0855	35.7
240 minute winter	SW 8	3.000	Attenuation	2.3	0.669	0.125	0.0462	

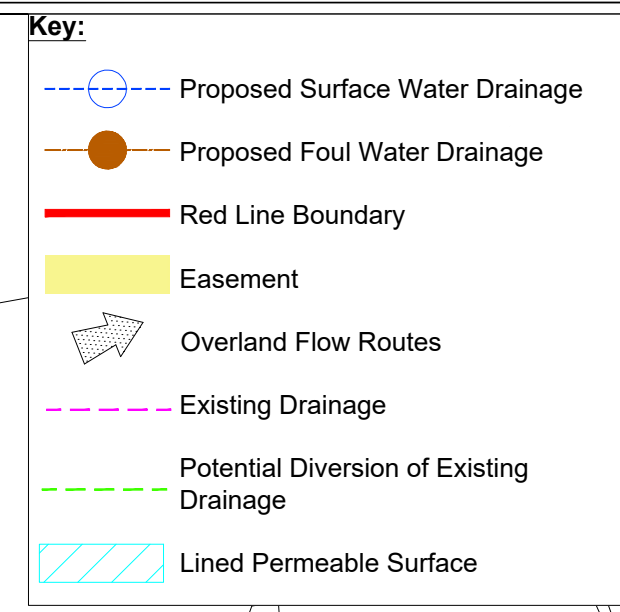
Results for 100 year +45% CC Critical Storm Duration. Lowest mass balance: 99.70%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute winter	SW 1	236	128.032	0.032	0.3	0.0051	0.0000	OK
240 minute winter	SW 2	236	128.032	0.152	0.6	0.0242	0.0000	SURCHARGED
15 minute summer	SW 3	10	128.036	0.026	1.4	0.0042	0.0000	OK
240 minute winter	SW 4	232	128.032	0.192	0.8	0.0306	0.0000	SURCHARGED
240 minute winter	SW 5	232	128.032	0.212	1.3	0.0337	0.0000	SURCHARGED
240 minute winter	Attenuation	232	128.032	0.462	2.4	1.8545	0.0000	SURCHARGED
240 minute winter	SW 6	232	128.032	0.482	1.6	0.5450	0.0000	SURCHARGED
240 minute winter	SW 7	232	127.230	0.030	1.6	0.0000	0.0000	OK
240 minute winter	SW 8	232	128.033	0.243	12.8	58.3643	0.0000	FLOOD RISK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute winter	SW 1	1.000	SW 2	0.3	0.309	0.015	0.0923	
240 minute winter	SW 2	1.001	SW 5	0.6	0.316	0.031	0.0959	
15 minute summer	SW 3	2.000	SW 4	1.4	0.401	0.067	0.0555	
240 minute winter	SW 4	2.001	SW 5	0.9	0.309	0.047	0.0317	
240 minute winter	SW 5	1.002	Attenuation	1.3	0.435	0.065	0.0724	
240 minute winter	Attenuation	1.003	SW 6	1.6	0.357	0.086	0.0308	
240 minute winter	SW 6	1.004	SW 7	1.6	0.623	0.089	0.0891	41.1
240 minute winter	SW 8	3.000	Attenuation	2.1	0.638	0.116	0.0491	



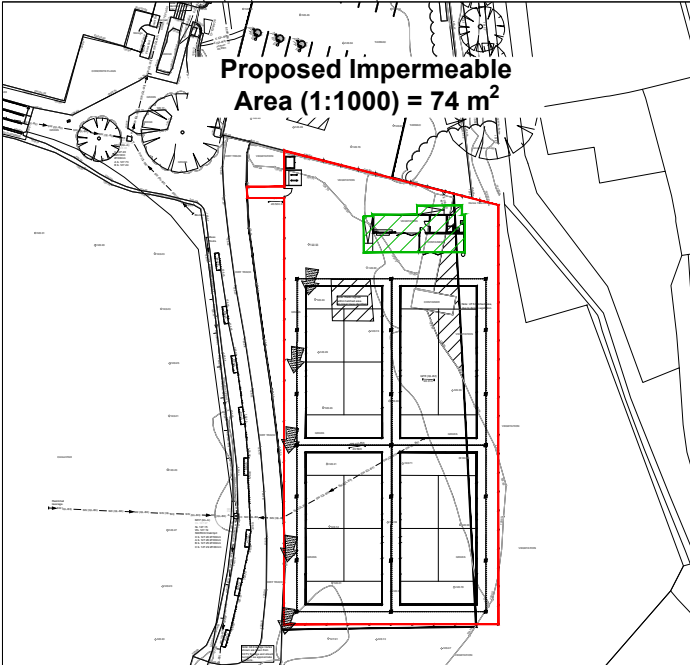
Appendix J
Drainage Layout Drawing



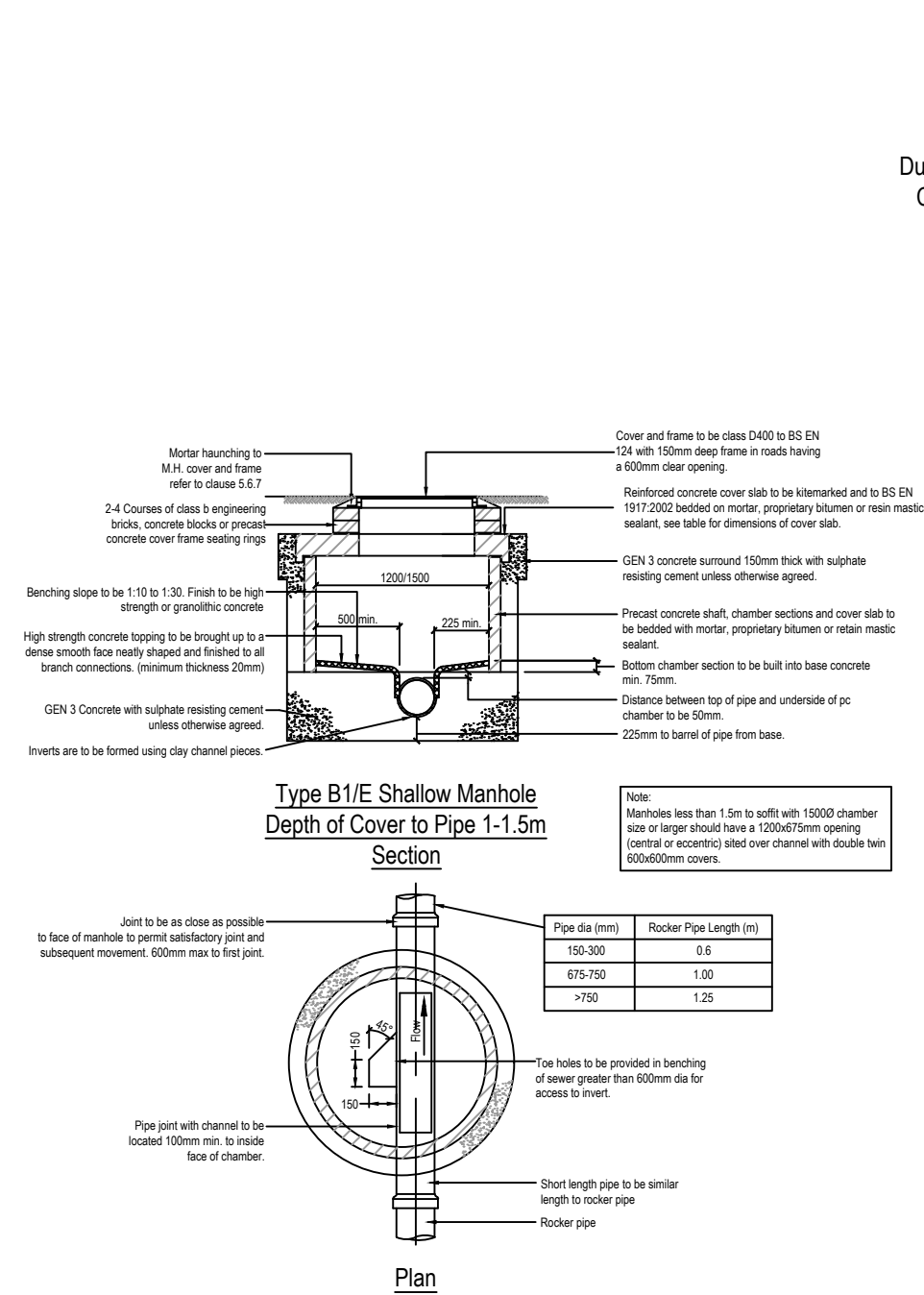
Exact level and location of outfall to existing foul network to be confirmed prior to work commencing on site.

The * indicates the cover level should be raised to provide the appropriate cover.

The details of the lined permeable surfacing should be confirmed at detailed design.

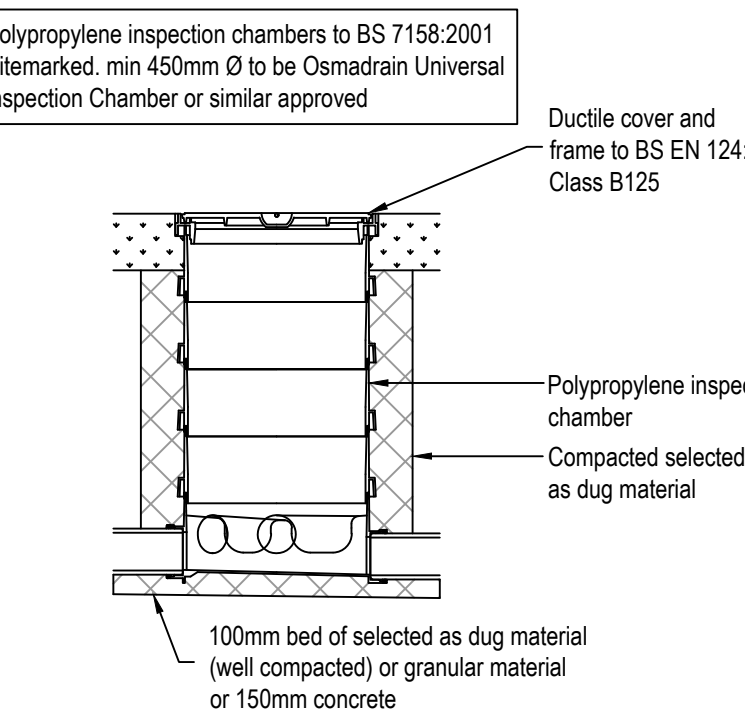


P02	Updated outfall to existing drainage	04.09.26	CS
P01	Preliminary Issue	08.05.26	JE
 Transport & Infrastructure Consultants 15 St Paul's Street Second Floor Leeds LS1 2JG www.amatp.co.uk			
Project:			
Rochdale Cricket Lacross and Squash Club			
Client:			
Soul Padel Ltd			
Drawing:			
Drainage Layout Drawing			
Drawn By:		Date:	
JE		08.05.2026	
Checked:		Scale:	Paper:
AY		1:250	A3
Drawing No.			Rev.
AMA-300833-DS-001			P02



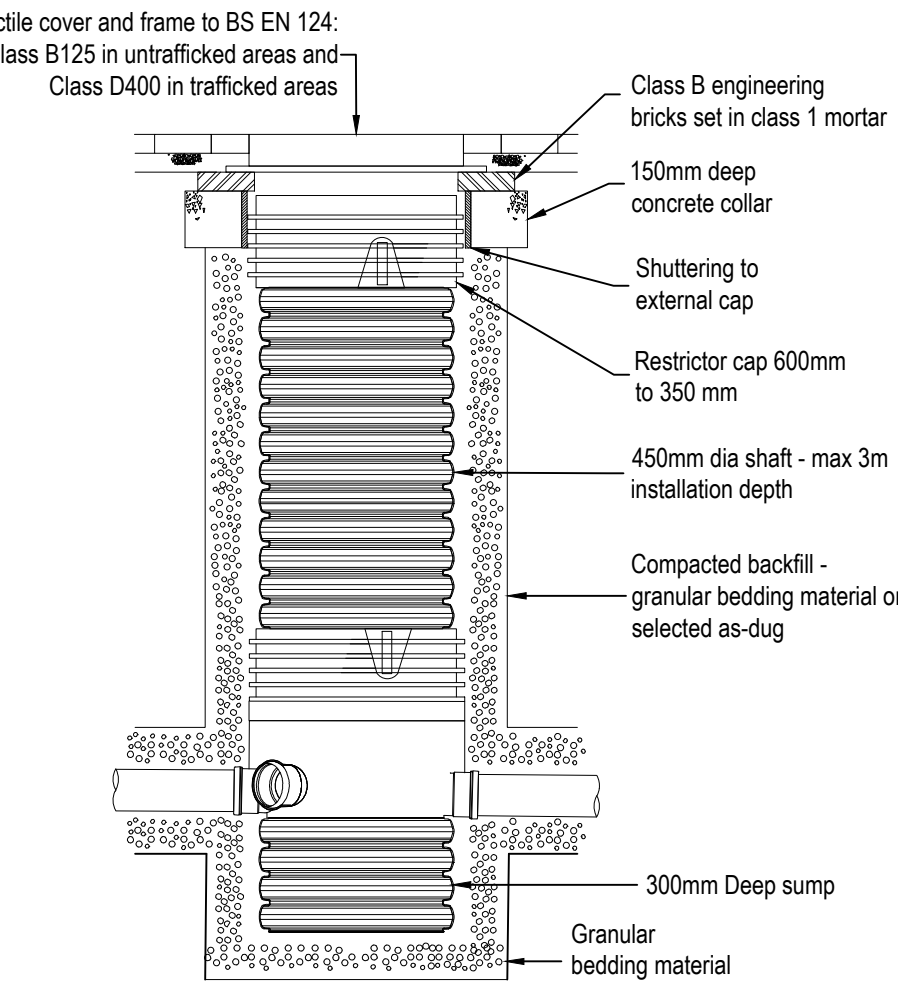
Polypropylene Inspection Chamber
(Depth 1.2 - 3m)

Scale 1:20



Polypropylene Inspection Chamber
(Depth less than 1.2m) in Untrafficked
Areas

Scale 1:20



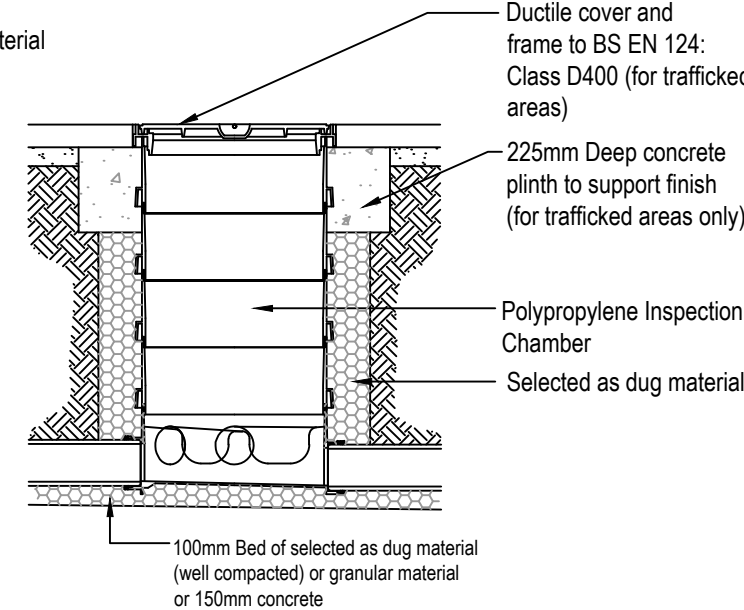
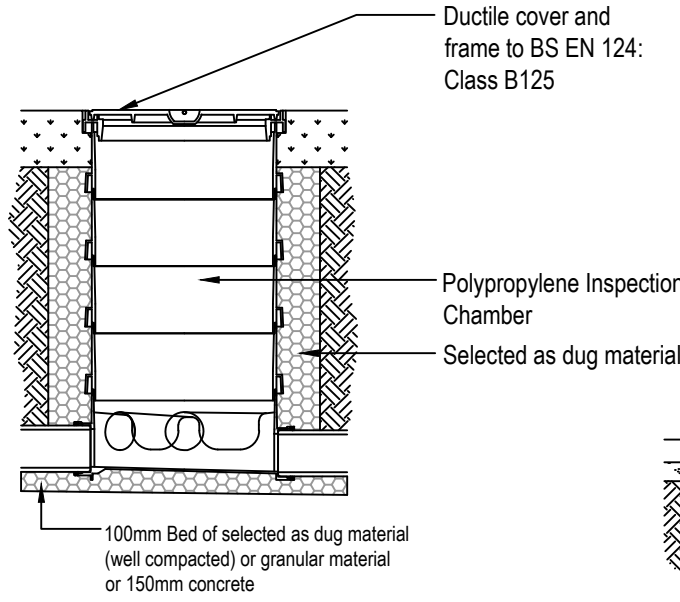
Polypropylene Inspection Chamber Catchpit

Scale 1:20

Typical Polypropylene
Inspection Chamber in
landscaped areas

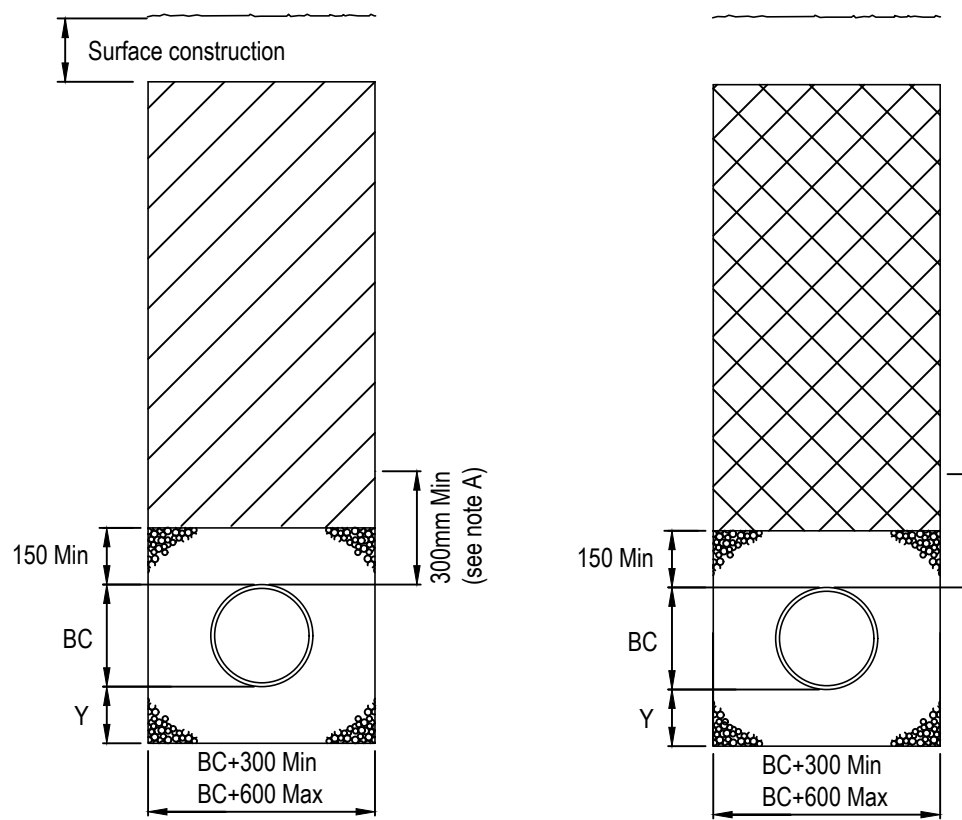
1:20

Polypropylene Inspection Chambers
to BS 7158:2001 Kitemarked, Min 450mm Ø
to BE OSMADRAIN UNIVERSAL inspection chamber



Typical Polypropylene Inspection
Chamber in trafficked areas

1:20



Drains with Flexible Bed & Surround

Type 'S'

Applicable under roads/service yards where drains have
more than 1200 cover (if adopted) or more than 600 cover areas where drains have more than 900 cover (if adopted) or
(if not adopted)

Type 'S'

Applicable under footpaths verges and other non-trafficked
areas where drains have more than 900 cover (if adopted) or
more than 600 cover (if not adopted)

Bedding & Trench Details

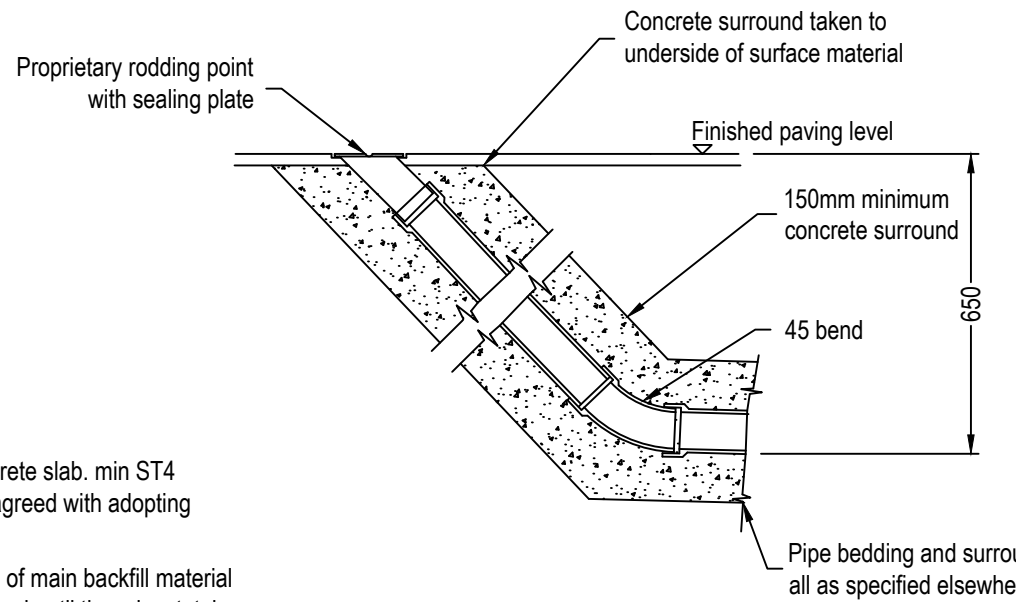
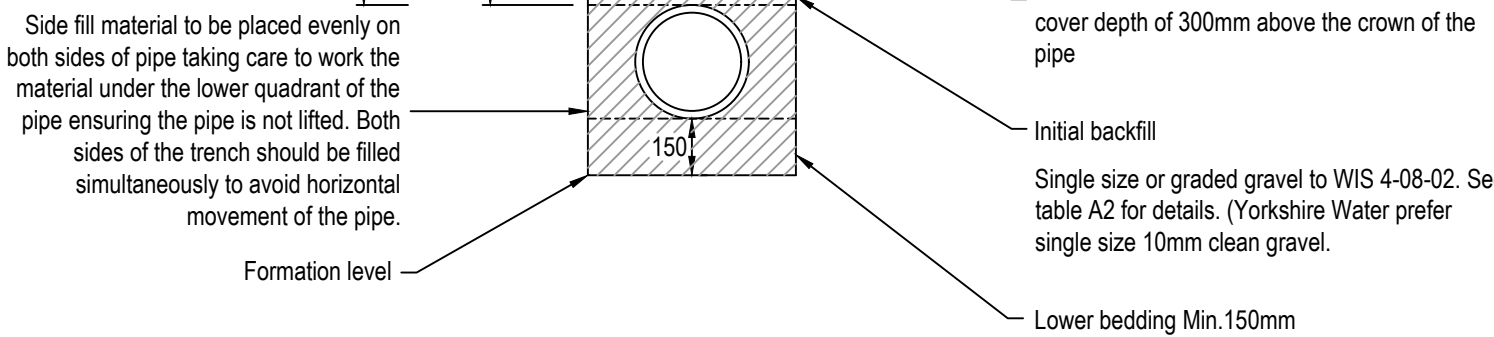
Scale 1:20

Key		Granular Material	
BC	Outside diameter of pipe.	Dia. of Drain	Aggregate
Y	BC/6 OR 100mm under barrels and 50mm min. under sockets whichever is greater (400mm max.)	100mm	10mm single size
	or	150mm	10mm or 14mm single size or 5-20mm graded.
Y	BC/4 or 200mm under barrels and 150mm min. under sockets whichever is greater (400mm max.) For trenches in hard material.	225mm-525mm	10mm or 14mm single size or 5-20mm graded.
		Over 525mm	10, 14, 20 or 40mm single size or 5-20mm graded.
	Earthworks outline.	Note A No mechanical compaction within 300mm of crown of pipe.	
	Granular material (see table)		
	Selected clean excavated material to S1HW Clause 505 & 601, Class 1, 2, OR 3.	Note B Where drains are laid under buildings refer to engineer for further details.	
	Granular Type 1 material deposited in layers not exceeding 225mm unconsolidated thickness and then fully compacted.		

Type Z Concrete Protection

Type 'Z'

Applicable under roads/service yards where drains have less than 1200 cover or footpaths verges and other
non-trafficked areas where drains have less than 600 cover

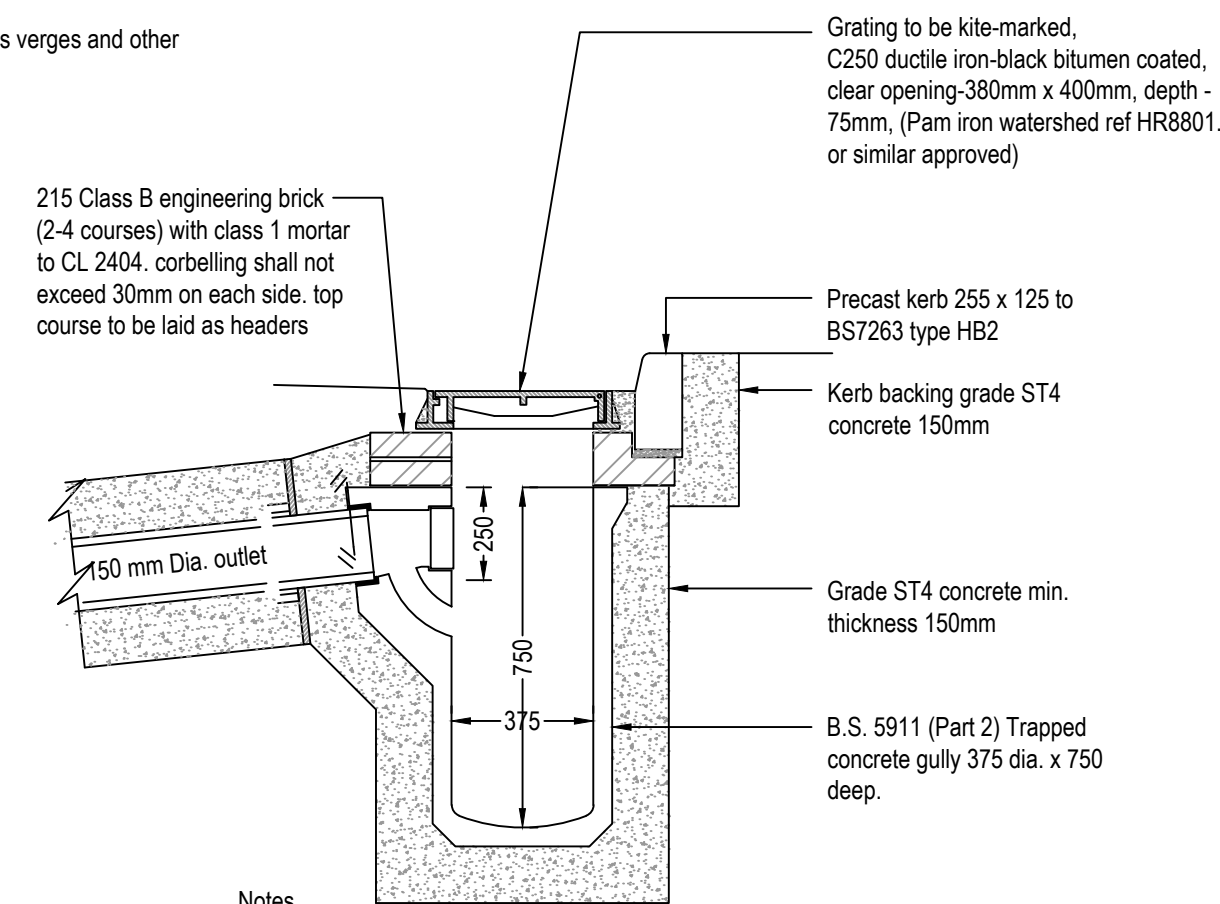
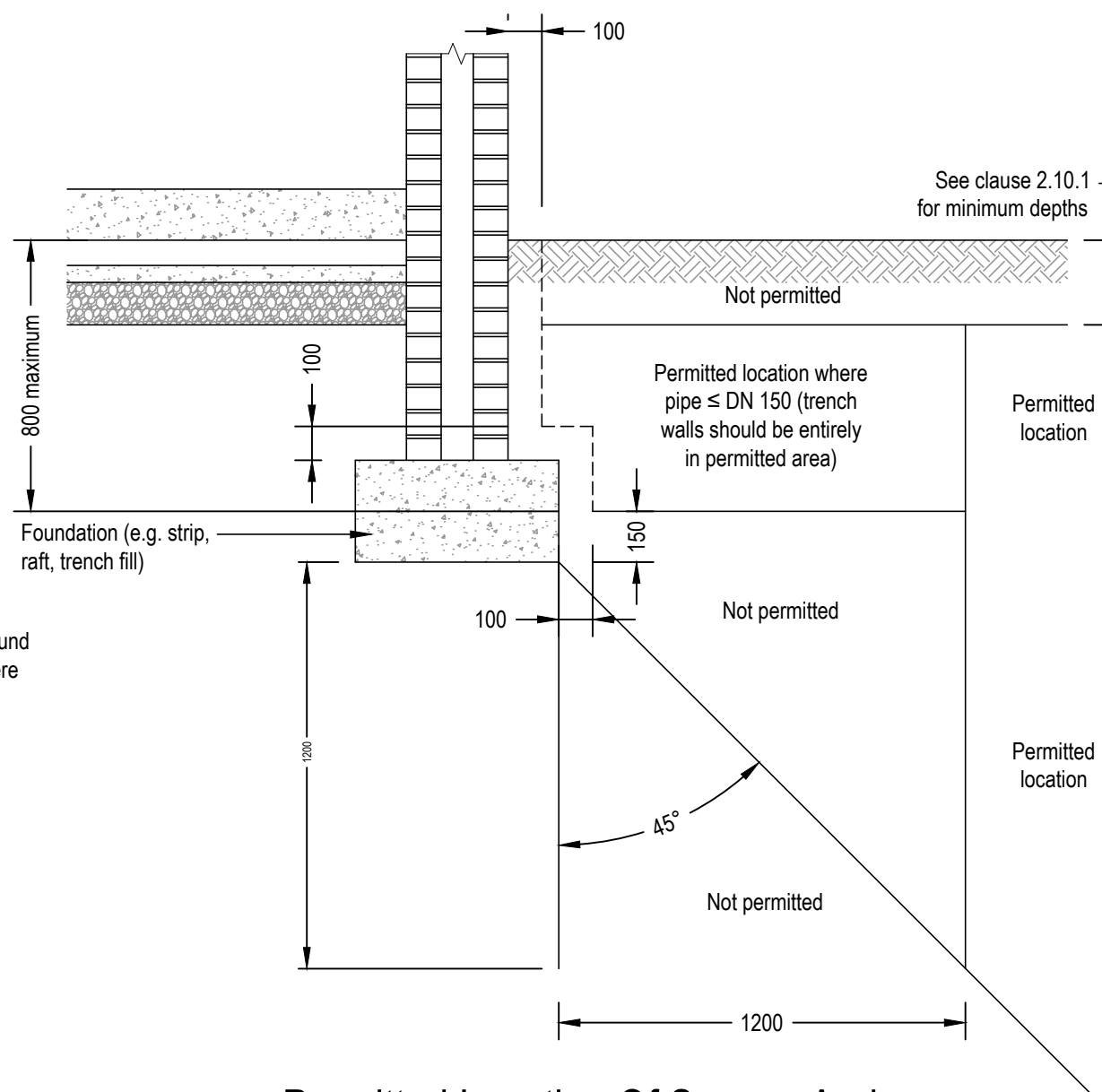


Typical Rodding Eye Detail

Scale 1:20

Permitted Location Of Sewers And
Lateral Drains In Proximity To Buildings

Scale 1:20



Notes

- Desirable min. slope of gully outfall to be 1 in 10.
- Gully connections to be Type Z bed and surround to 1.2m depth.
- Excavations around gullies to be backfilled with Class 1 material as described in table 6/1 and
compacted as described in compliance with Clause 612. where mechanical compaction is
impracticable, the excavation is to be backfilled with grade ST2 concrete.

Precast Concrete Road Gully Detail

1:20

P2	Updated outfall location	04.09.26	CS
P1	Preliminary - initial issue	08.05.26	JE
REV	DESCRIPTION	DATE	BY
AMA ANDREW MOSELEY ASSOCIATES INCORPORATED AND REGISTERED PLANNING CONSULTANTS			
Project: Rochdale Cricket Lacross and Squash Club			
Client: Soul Padel Ltd			
Drawing: Private Drainage Details Sheet 1			
Drawn By: JE	Date: 08.05.2026		
Checked: AY	Scale: As Shown @ A1	A1	
Drawing No. AMA-300833-D-501	Rev: P2		



All rights are reserved. Copyright © 2024

Andrew Moseley Associates, 15 St Paul's Street, Leeds, LS1 2JG

www.amatp.co.uk

info@amatp.co.uk