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Project Excellence, Battram, Leicestershire, LE67 1HT.

Drainage Strategy

May 2025

Version 1.1

Registered Company No. 04638546

DOCUMENT CONTROL

Project No:	**T/24/2757**
Report Status:	**Preliminary**
Version No:	**1.1**
Project Engineer:	**Ellie Grimsley**
Date of Issue:	**12/05/2025**

Version	Date Issued	Purpose of Issue	Author	Reviewed	Approved
V1.0	09/05/2025	Planning	ESG	JH	PJB
V1.1	12/05/2025	Planning	ESG	JH	PJB

Contents

List of Appendices

1.0 Introduction

1.1 Tier Consult have been appointed by Barberry Bardon Ltd, to prepare a drainage strategy proposal for the proposed development off Station Road, Battram, Leicestershire.

1.2 The report aims to provide an outline of the proposed drainage strategy, taking account of the requirements of the National Planning Policy Framework (NPPF) and associated Planning Practice Guidance.

2.0 Site Description and Development Proposal

2.1 The site is located adjacent off Station Road, Battram, Leicestershire. LE67 1HT. The approximate National Grid Reference for the centre of the site is SK438098 with coordinates Easting: 443814, Northing: 309801 at postcode LE67 1HT

2.2 The proposed development is 12.50Ha with a max impermeable area of 11.6Ha

2.3 A topographic survey (Appendix A) has been undertaken by Blue Earth Construction, indicates that the site predominantly falls from south to north with site levels varying from circa 162.6m to 150.3m AOD.

2.4 The soilscapes mapping details the site conditions to be Mudstone and siltstone, red-brown and greenish grey, with beds of indurated, variably dolomitic siltstone and very fine-grained sandstone common in the lower half; finely disseminated gypsum common in upper half. British Geological Survey Map indicates that the geological sequence below the site comprises mudstone of siltstone.

3.0 Existing Drainage

3.1 The development land is greenfield located southwest of Bardon Hill Industrial Estate. There are no public sewers within the site boundary.

3.2 Severn Trent Water have provided public sewer records in response to the pre-planning sewerage enquiry (Appendix B).

4.0 Surface Water Drainage

4.1 Requirement H3 of the Building Regulations 2010 and the NPPF, as suggested by Leicestershire County Council LLFA, prescribe a hierarchal approach to surface water discharge. Consideration should firstly be given to discharge to soakaway, infiltration system and watercourse in that priority order before discharge to a sewer/ formal drainage system is considered.

The government guidance to local authorities includes a hierarchy of connection, which can be summarised as follows:
a) surface water runoff is collected for use.
b) discharge into the ground via infiltration.
c) discharge to a watercourse or other surface water body.
d) discharge to a surface water sewer, highway drain or other drainage system, discharging to a watercourse or other surface water body.

e) discharge to a combined sewer.

4.2 **Infiltration/Soakaways**

4.2.1 The ground infiltration testing has not been carried out on the site at this stage, however from the desktop study reviewing the BGS and soilscapes mapping the ground conditions defined do not suggest that infiltration is achievable.

4.3 **Discharges to Watercourse**

4.3.1 There is a watercourse to the south of the development and an existing pond to the east of the site.

5.0 **Proposed Surface Water Drainage Strategy**

5.1 Following the planning guidance, the existing area of 12.5 Ha has been used to calculate the greenfield run-off rate as 54.9l/s.

5.2 As there is an existing pond to the east of the development, the proposed drainage strategy is discharge into an existing surface water network that discharges to the pond.

5.3 The storm water drainage system is to be designed in accordance with the requirements of the NPPF and associated Planning Practice Guidance to ensure that flood risk is not increased, either on or off site, for all storm events up to and including the 1 in 100 year +40% climate change events.

5.4 The strategy is to restrict the surface water discharge rate to 54.9 l/s. This is to ensure that the discharge rate at the outfall location remains the same as the greenfield run off rate of the site.

5.5 Surface water runoff from roofs, private drives and any adoptable highways, will drain via a piped network to an attenuation facility which will provide attenuation storage for all flows up to and including the 1 in 100-year event plus 40% for climatic change. Refer to appendix C.

5.6 SuDS features, such as permeable paving and attenuation ponds, will be incorporated into the surface water drainage proposals to aid in the mitigation requirements for water quality prior to discharging to the wider natural surface water drainage network.

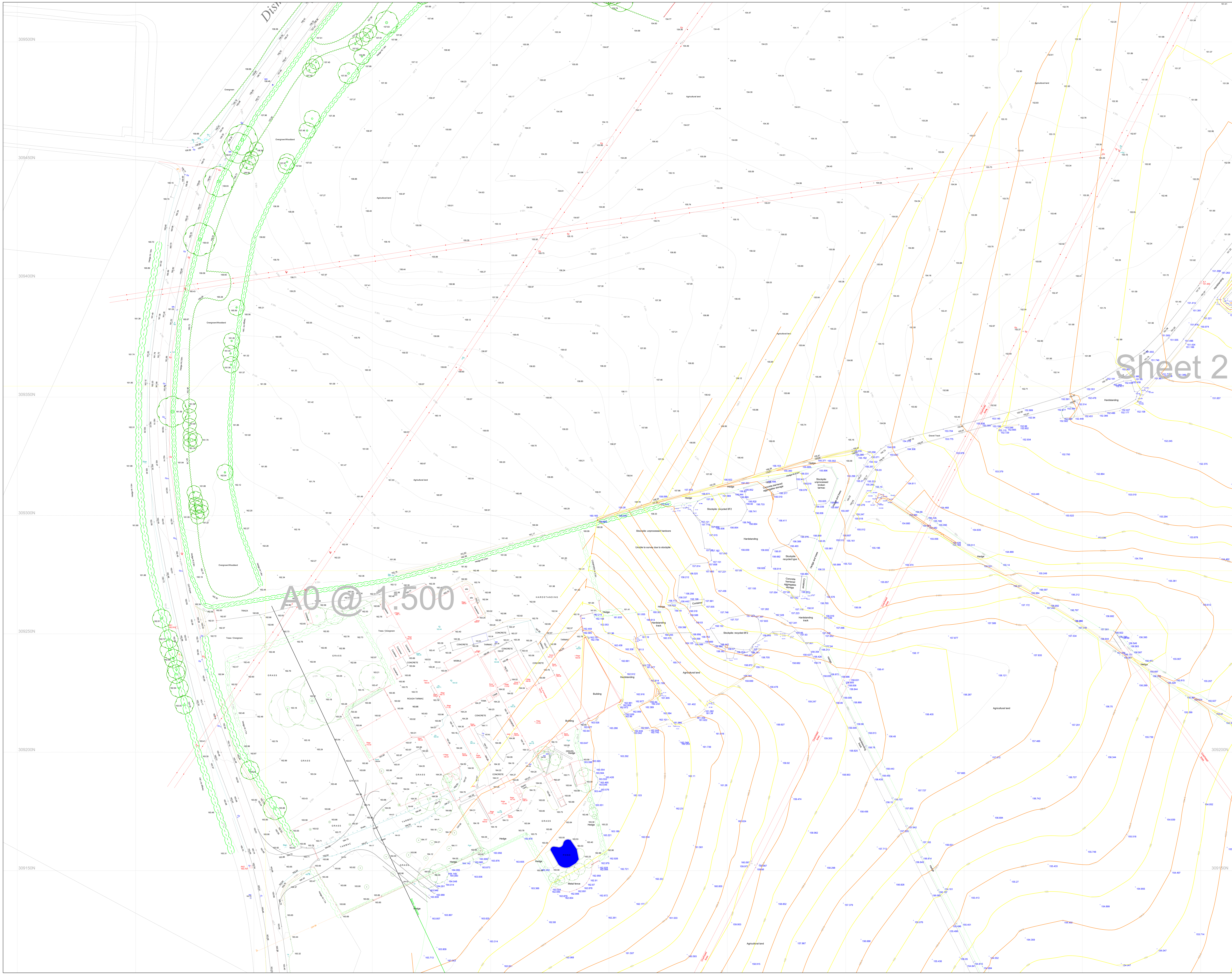
5.7 In addition to the SuDS features mentioned above, the proposals also include a petrol/ oil interceptor with an enhanced silt retention providing greater pollution mitigation indices.

6.0 Proposed Foul Drainage Strategy

6.1 The proposed foul drainage system will convey foul flows via a piped network and discharge into a proposed private pumping station. Foul water will be pumped to Station Road and connect to the Severn Trent adopted network.

Proposed drainage layout is pertained in Appendix C.

Appendix A
Topographic Survey



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Bank Bottom
AX1 100.000 Station and Name Station Level
Tree / Bush / Sapling
Area of Undergrowth
Hedge
Rdge 0.00 Ridge Level
Eave 0.00 Eaves Level
Flat 0.00 Flat Roof Level
Gate
I/W Ht 1.2m Interwoven
Railing Ht 1.2m Iron Railings
Wire Fence Ht 2.0m Wire Mesh
P & R Ht 1.2m Post & Rail
P & W Ht 1.2m Post & Wire
C\L Ht 1.2m Chain Link
Panel Fence Ht 2.0m Wooden Panels
Conc Fence Ht 2.0m Concrete Panels
Sec Fence Ht 2.0m Steel Palisade

IC Inspection chamber
PInv Pipe invert
Gy Gully
Dp Down pipe
Pipe Pipe above ground
MH Manhole
WL Water level
Fl Flood light
Lp Lamp post
Tp Telegraph post
Ep Electricity post
Tl Traffic light
Bus Bus stop
Sv Stop valve
St Stop tap
Er Earth rod
Wm Water meter
Gv Gas valve
Av Air valve
Wo Wash out
Re Rodding eye
BB Belisha beacon
CTV Cable tv
Mkr Marker post
Gmkr Gas marker post
So Soffit

Boll Bollard
IB Illuminated bollard
Bin Rubbish bin
Vp Vent pipe
Grl Ground light
Lbox Letter box
Sty Stile
IFL Internal floor level
THL Threshold level
Sp Sign post
TH Trialhole
BH Borehole
ELEC Electric
BT British Telecom
C'box Control box
IC Inspection chamber
R/wall Retaining wall
UTL Unable to lift
TCL Tree canopy level
G: Girth
MB Multi Bowl
Stmp Tree Stump
CL: Cover level
IL: Invert level

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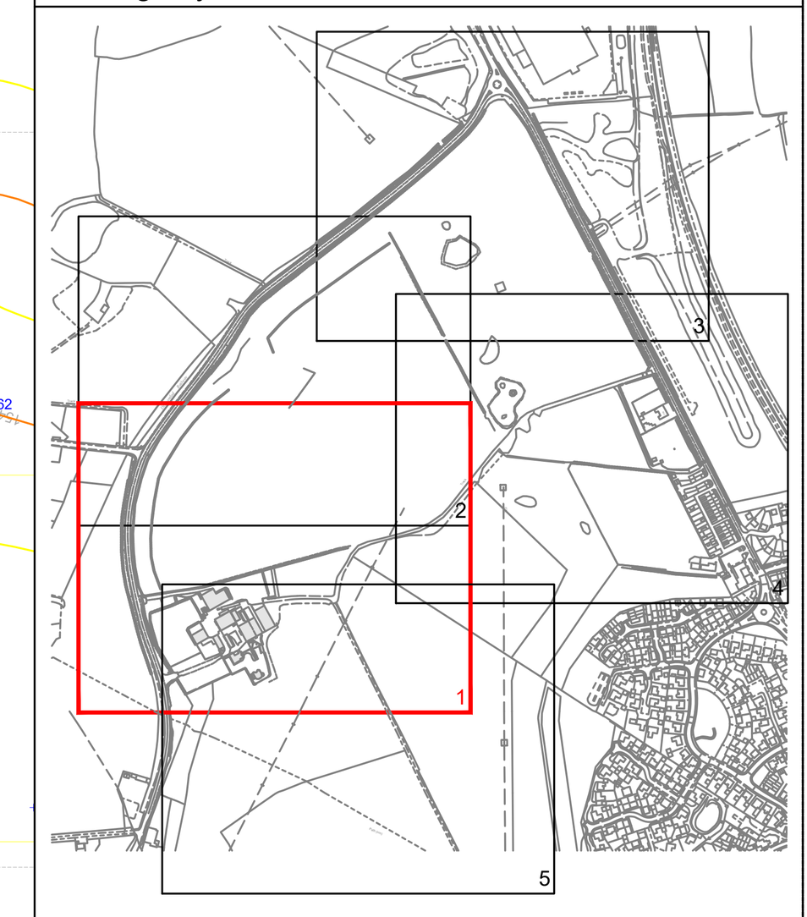
151.90 Axis Survey Surveyed Point
Hedge/Bushes
Wooden Electricity pole

Drawing Layout Plan



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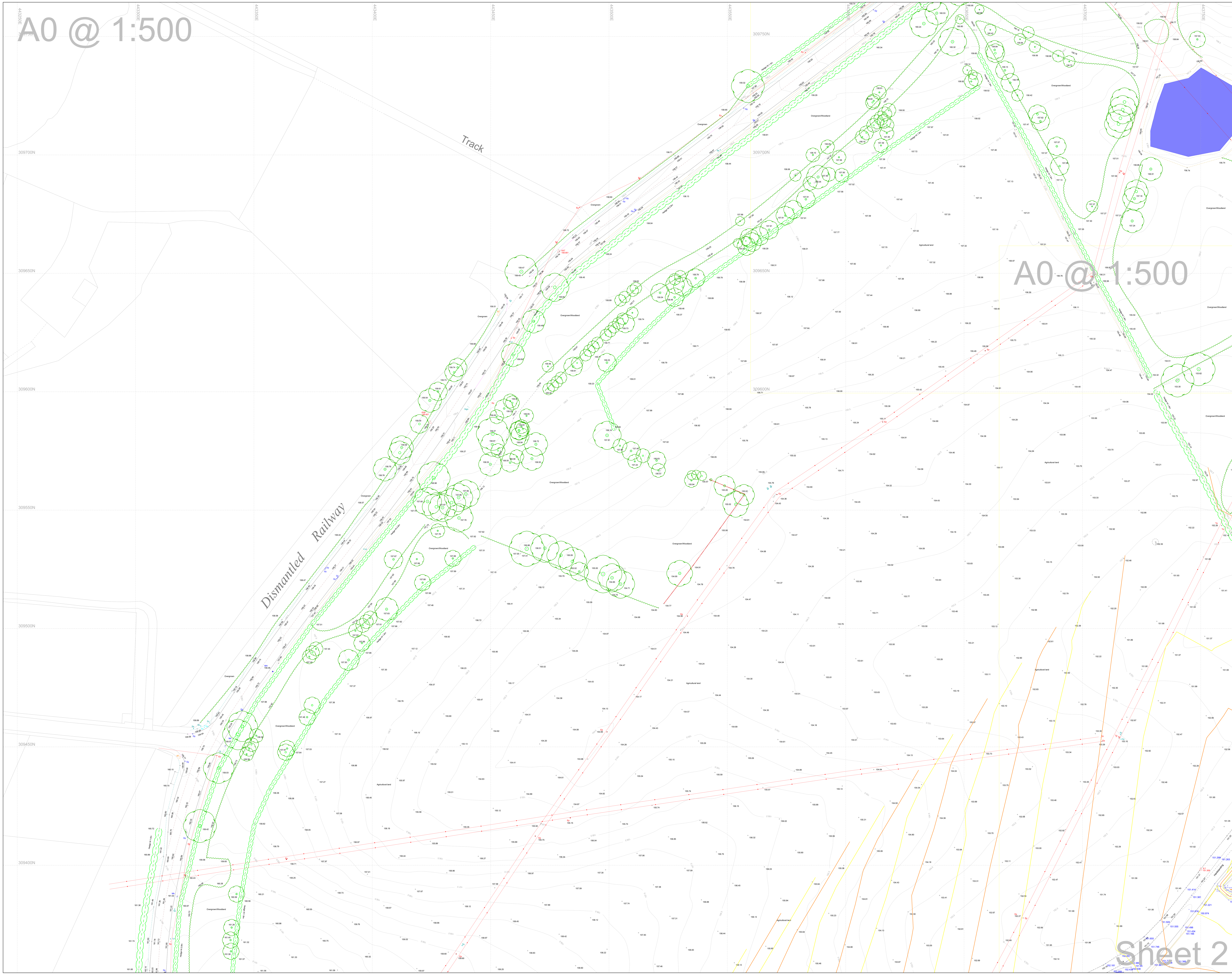

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MH Manhole
WL Water level
Fl Flood light
Lp Lamp post
Tp Telegraph post
Ep Electricity post
Tl Traffic light
Bus Bus stop
Sv Stop valve
St Stop tap
Er Earth rod
Wm Water meter
Gv Gas valve
Av Air valve
Wo Wash out
Re Rodding eye
BB Belisha beacon
CTV Cable tv
Mkr Marker post
Gmkr Gas marker post
So Soffit

Boll Bollard
IB Illuminated bollard
Bin Rubbish bin
Vp Vent pipe
Grl Ground light
Lbox Letter box
Sty Stile
IFL Internal floor level
THL Threshold level
Sp Sign post
TH Trialhole
BH Borehole
ELEC Electric
BT British Telecom
C'box Control box
IC Inspection chamber
R/wall Retaining wall
UTL Unable to lift
TCL Tree canopy level
G: Girth
MB Multi Bowl
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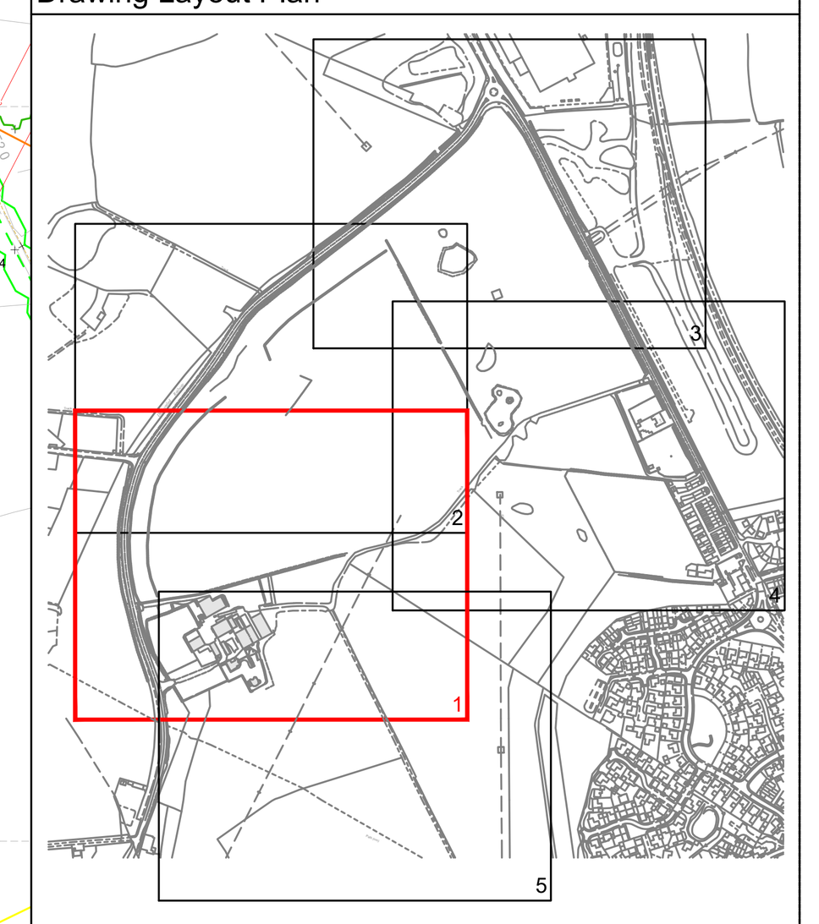

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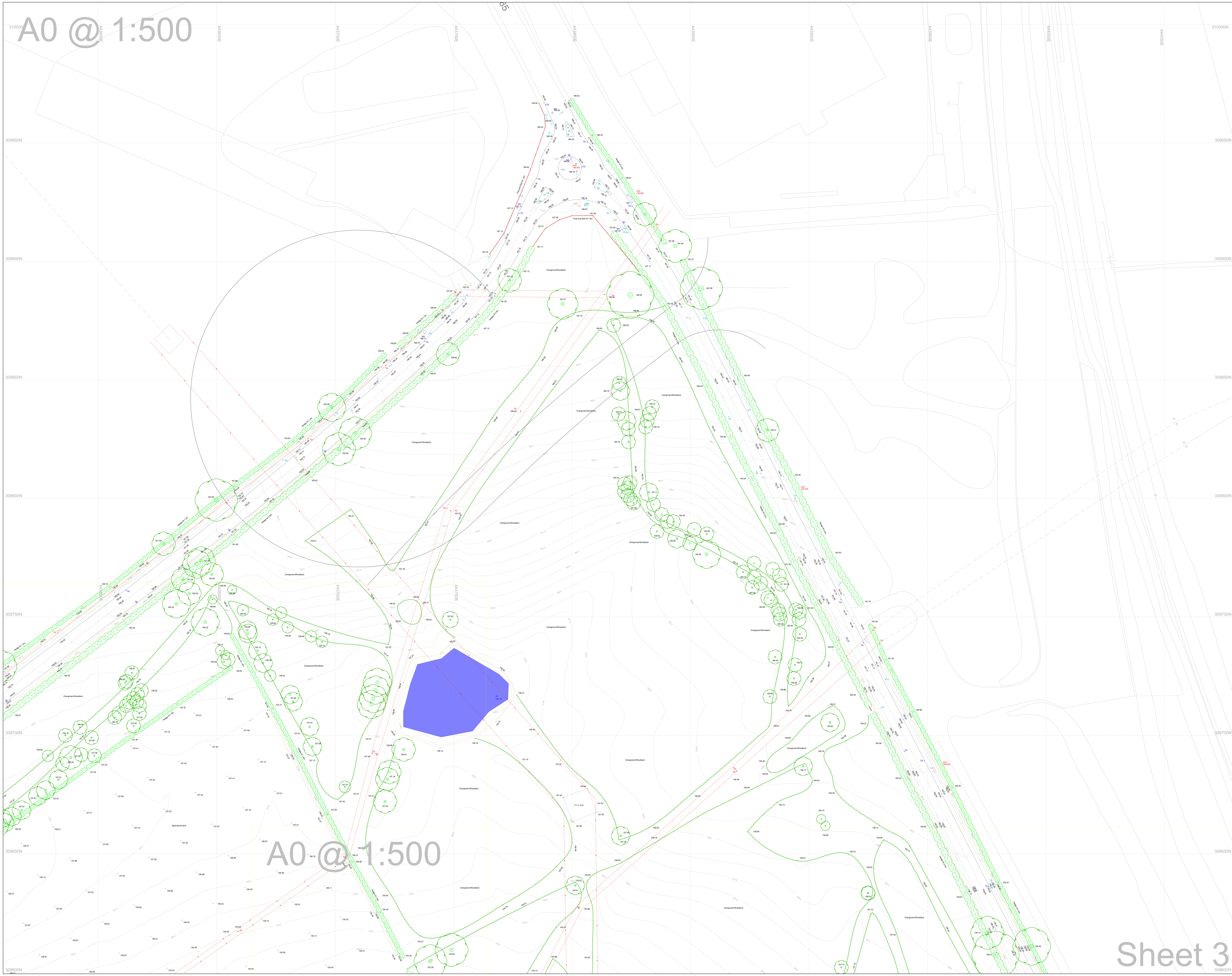

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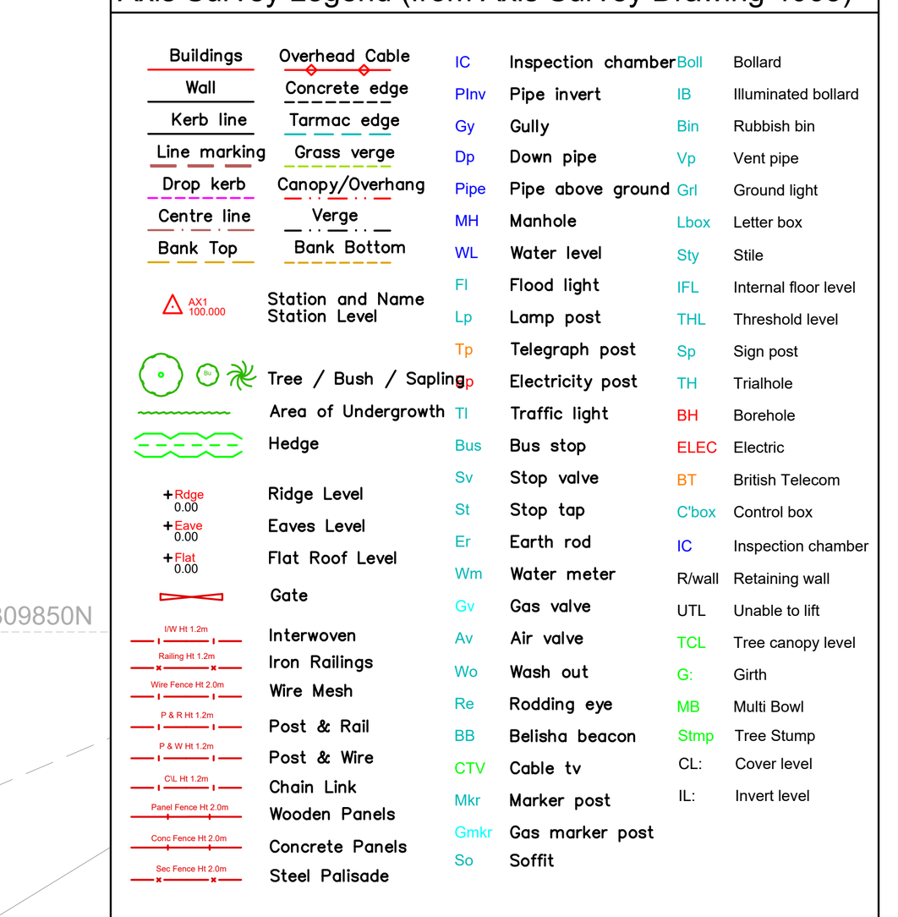

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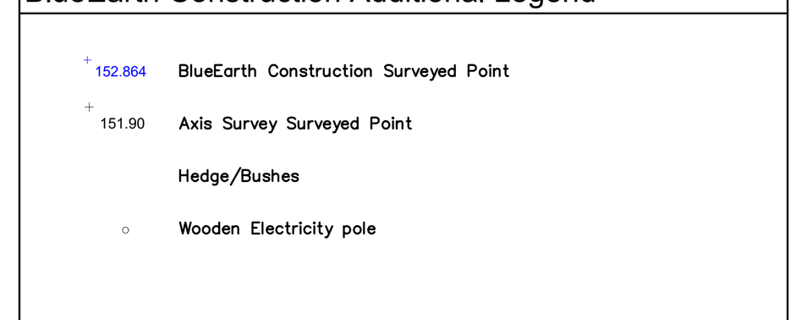

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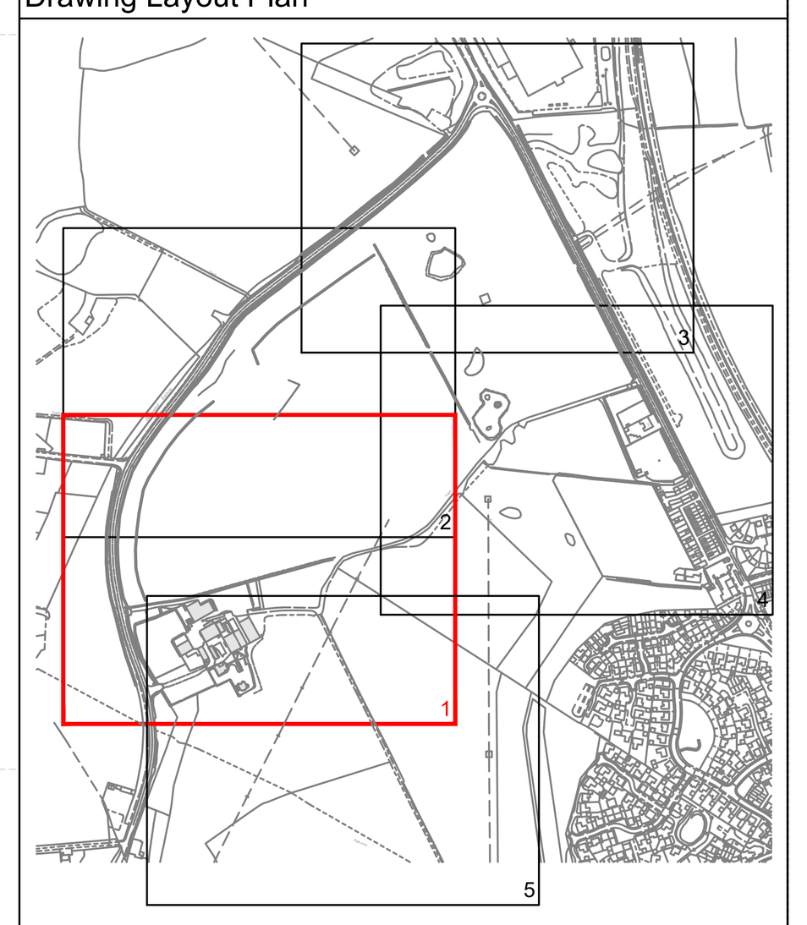

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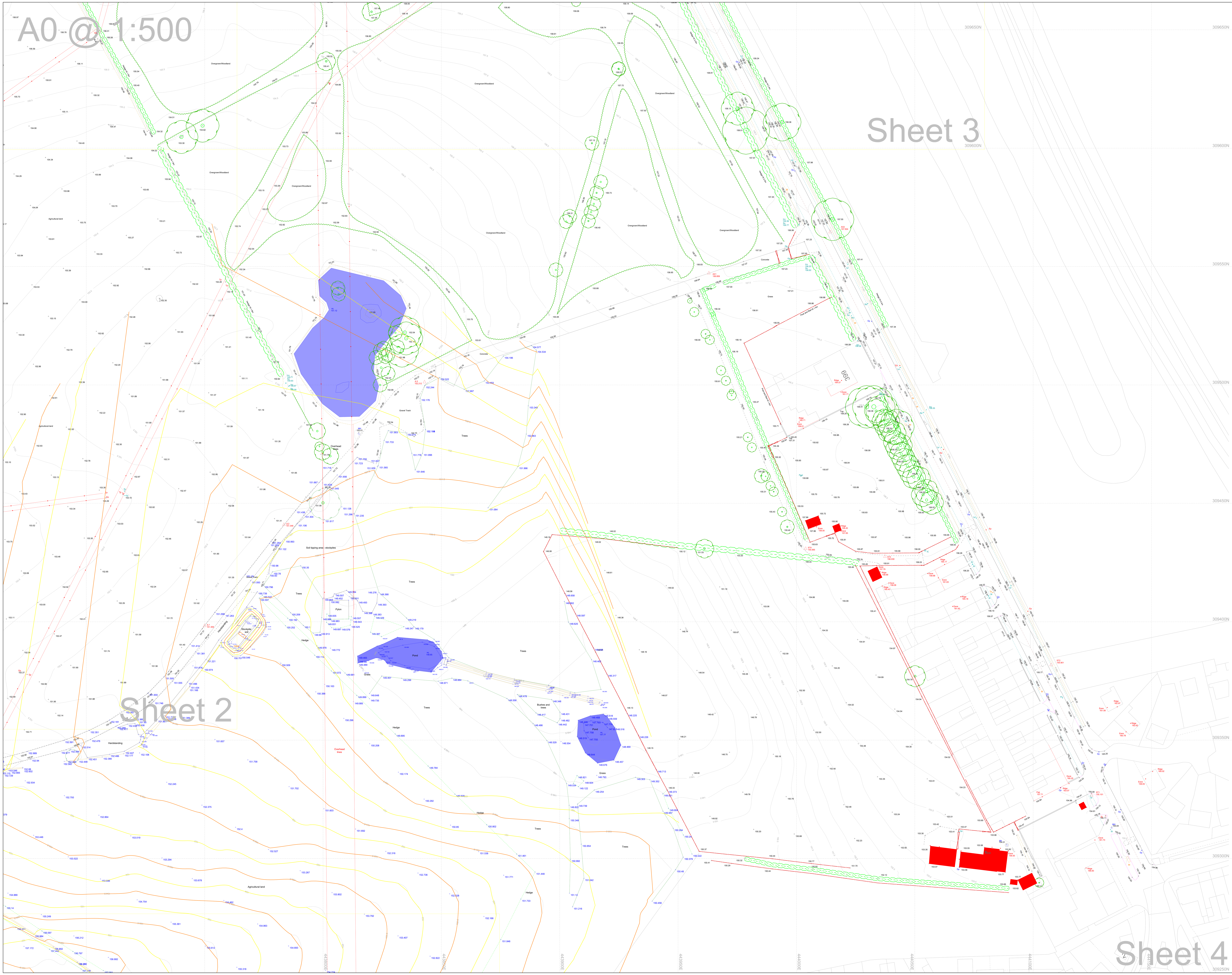

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Hedge
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Eave 0.00 — Eaves Level
Flat 0.00 — Flat Roof Level
Gate
I/W Ht 1.2m — Interwoven
Railing Ht 1.2m — Iron Railings
Wire Fence Ht 2.0m — Wire Mesh
P & R Ht 1.2m — Post & Rail
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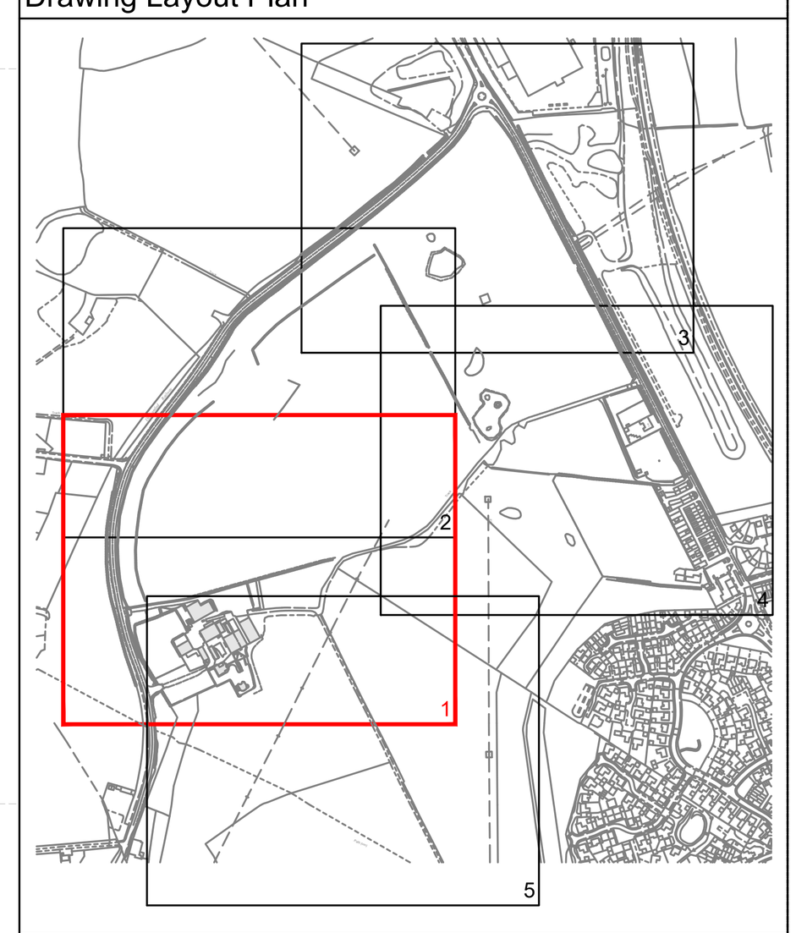
Panel Fence Ht 2.0m — Wooden Panels
Conc Fence Ht 2.0m — Concrete Panels
Sec Fence Ht 2.0m — Steel Palisade

IC	Inspection chamber	Boll	Bollard
PInv	Pipe invert	IB	Illuminated bollard
Gy	Gully	Bin	Rubbish bin
Dp	Down pipe	Vp	Vent pipe
Pipe	Pipe above ground	Grl	Ground light
MH	Manhole	Lbox	Letter box
WL	Water level	Sty	Stile
Fl	Flood light	IFL	Internal floor level
Lp	Lamp post	THL	Threshold level
Tp	Telegraph post	Sp	Sign post
Ep	Electricity post	TH	Trialhole
Tl	Traffic light	BH	Borehole
Bus	Bus stop	ELEC	Electric
Sv	Stop valve	BT	British Telecom
St	Stop tap	C'box	Control box
Er	Earth rod	IC	Inspection chamber
Wm	Water meter	R/wall	Retaining wall
Gv	Gas valve	UTL	Unable to lift
Av	Air valve	TCL	Tree canopy level
Wo	Wash out	G:	Girth
Re	Rodding eye	MB	Multi Bowl
BB	Belisha beacon	Stmp	Tree Stump
CTV	Cable tv	CL:	Cover level
Mkr	Marker post	IL:	Invert level
Gmkr	Gas marker post		
So	Soffit		

BlueEarth Construction Additional Legend

152.864 — BlueEarth Construction Surveyed Point
151.90 — Axis Survey Surveyed Point
Hedge/Bushes
Wooden Electricity pole

Drawing Layout Plan



Control Stations (taken from Axis Survey drawing 4063)

Station	Easting	Northing	Level
AA1	443317.367	309252.585	162.916
AA2	443348.747	309151.542	163.707
AX1	443963.013	309547.208	156.859
AX2	444014.249	309564.579	157.504
AX3	443952.850	309684.920	160.646
AX4	443894.131	309799.162	163.539
AX5	443824.999	309926.593	166.983
AX6	443799.935	309941.856	166.605
AX7	443478.751	309659.332	158.901
AX8	443424.396	309587.074	159.407
J10	443369.875	309490.767	157.648
JL1	443749.945	309398.271	151.309
JL2	443783.480	309440.973	151.348
JL3	443842.870	309501.210	152.212
JL4	443399.036	309507.016	157.613
JL5	443428.254	309546.283	157.775
JL6	443892.703	309750.369	160.669
JL7	443883.817	309700.878	159.702
ST1	444124.745	309326.708	155.101
ST2	444107.626	309381.766	155.901
ST3	444037.410	309427.521	156.030
ST4	444003.917	309430.860	155.565

BlueEarth Construction Ltd
Whiteley Road
Ripley
Derbyshire
DE5 3QL

Client

Richard Bailey Plant and Construction Ltd

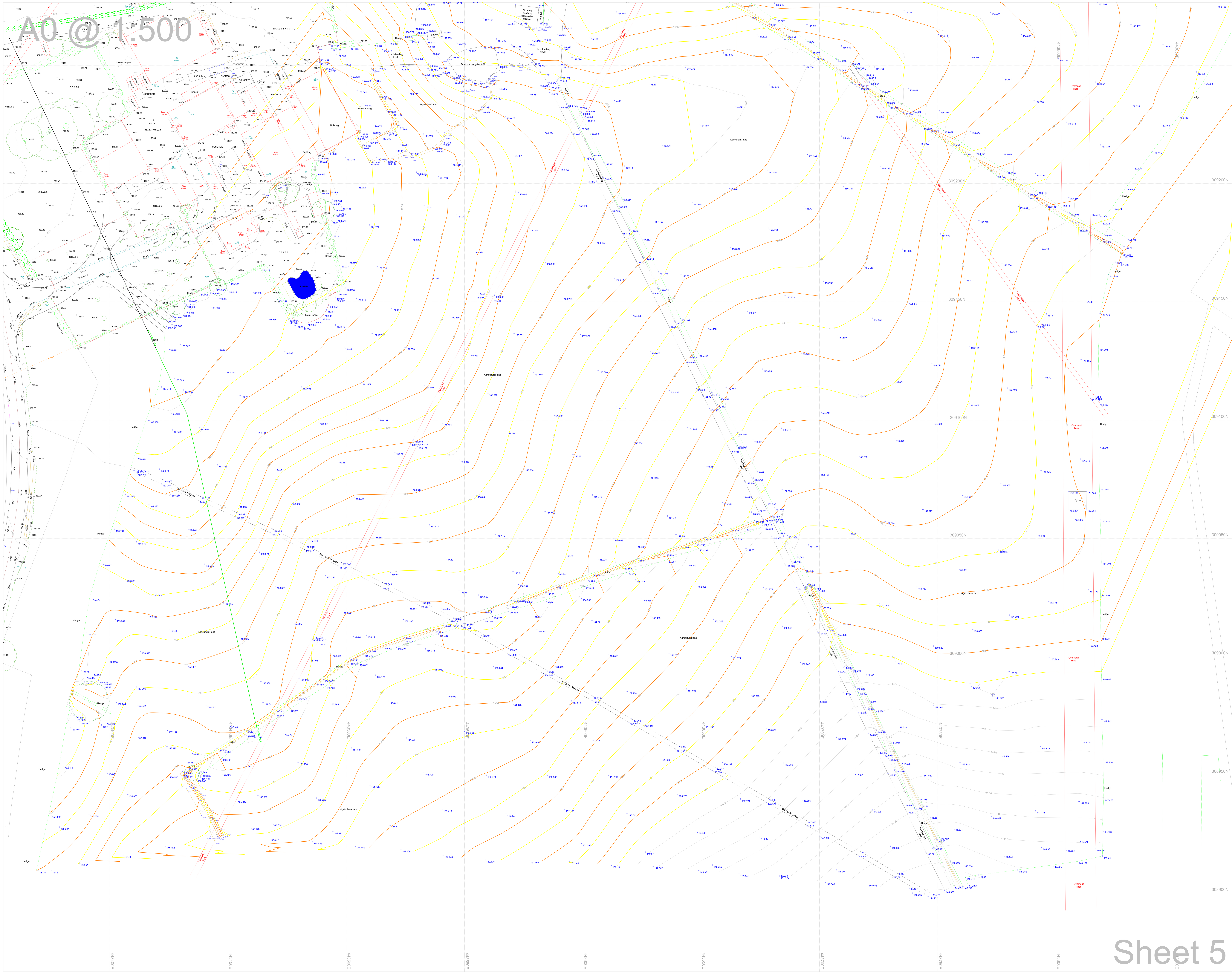
Site

Land at Wood Road, Bagworth

Drawing Title

OGL Topographical Survey - Combined BEC and Axis Survey

Date Drawn	Drawn	Checked
12/6/2023	SG	KF
Scale	**Revision**	**Sheet**
1:500 at A0	0	4/5



BlueEarth Construction Note

This drawing shows the combined topographical survey work of Axis Survey and BlueEarth construction. Axis Survey's survey work was undertaken in September 2022, within approximately the northern half of the plot. BlueEarth Construction's survey work was undertaken in June 2023. At the request of the client, we (BlueEarth Construction) have merged our survey with Axis's survey work.

The drawing title of Axis Survey's original topographic survey was titled "4063".

BlueEarth Constructions survey work has been completed based on the Control Stations listed on Axis Survey's drawing "4063"; specifically a GPS calibration to stations: AA2, AX7, AX6, ST1 and JL3.

The data points and linework of Axis Survey's survey have been mostly unaltered, except where BlueEarth Construction's survey ties into Axis Survey's survey.

Axis Survey Note (from Axis Survey Drawing 4063)

This plan should only be used for its original purpose. Axis Surveys accepts no responsibility for this plan if supplied to any party other than the original client. Do not scale, all dimensions should be checked on site prior to design and construction.

Drainage information (where applicable) has been visually inspected from the surface and therefore no allowance has been made for any sub surface entry into manholes, chambers or voids. Therefore any details relating to depths, sizes, ETC will be approximate only.

The contractor is to check and verify all building and site dimensions, levels and sewer invert levels at connection points before work starts.

Should there be any conflict between the details indicated on this drawing and those indicated on other drawings, the engineer should be informed prior to construction on site.

It is important to note that the same accuracies implied by the plotting scale are equally applicable to digital data supplied for CAD

Every effort if made to identify all visible above ground features, however is it should be borne in mind that there may be items obscured at the time of survey.

Visible features in the vicinity if the boundaries, as shown on this survey may not represent the extent of legally conveyed ownership.

THIS SURVEY HAS BEEN ORIENTATED TO THE ORDNANCE SURVEY (O.S) NATIONAL GRID (OSGB36) VIA A GLOBAL POSITION SYSTEM (GPS) AND THE O.S. ACTIVE NETWORK (OS NET).

A TRUE OSGB36 COORDINATE HAS BEEN ESTABLISHED NEAR TO THE SITE CENTRE VIA A TRANSFORMATION USING THE OSTN02 & OSGM02 TRANSFORMATION MODELS. THE SURVEY HAS BEEN CORRELATED TO THIS POINT AND A FURTHER ONE OR MORE OSGB36 POINTS ESTABLISHED TO CREATE A TRUE O.S. BEARING FOR ANGLE ORIENTATION.

Axis Survey Legend (from Axis Survey Drawing 4063)

Buildings
Wall
Kerb line
Line marking
Drop kerb
Centre line
Bank Top
Overhead Cable
Concrete edge
Tarmac edge
Grass verge
Canopy/Overhang
Verge
Bank Bottom
AX1 100.000 Station and Name Station Level
Tree / Bush / Sapling
Area of Undergrowth
Hedge
Rdge 0.00 Ridge Level
Eave 0.00 Eaves Level
Flat 0.00 Flat Roof Level
Gate
I/W Ht 1.2m Interwoven
Railing Ht 1.2m Iron Railings
Wire Fence Ht 2.0m Wire Mesh
P & R Ht 1.2m Post & Rail
P & W Ht 1.2m Post & Wire
C/L Ht 1.2m Chain Link
Panel Fence Ht 2.0m Wooden Panels
Conc Fence Ht 2.0m Concrete Panels
Sec Fence Ht 2.0m Steel Palisade

IC	Inspection chamber	Boll	Bollard
PInv	Pipe invert	IB	Illuminated bollard
Gy	Gully	Bin	Rubbish bin
Dp	Down pipe	Vp	Vent pipe
Pipe	Pipe above ground	Grl	Ground light
MH	Manhole	Lbox	Letter box
WL	Water level	Sty	Stile
Fl	Flood light	IFL	Internal floor level
Lp	Lamp post	THL	Threshold level
Tp	Telegraph post	Sp	Sign post
Ep	Electricity post	TH	Trialhole
Tl	Traffic light	BH	Borehole
Bus	Bus stop	ELEC	Electric
Sv	Stop valve	BT	British Telecom
St	Stop tap	C'box	Control box
Er	Earth rod	IC	Inspection chamber
Wm	Water meter	R/wall	Retaining wall
Gv	Gas valve	UTL	Unable to lift
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Wo	Wash out	G:	Girth
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CTV	Cable tv	CL:	Cover level
Mkr	Marker post	IL:	Invert level
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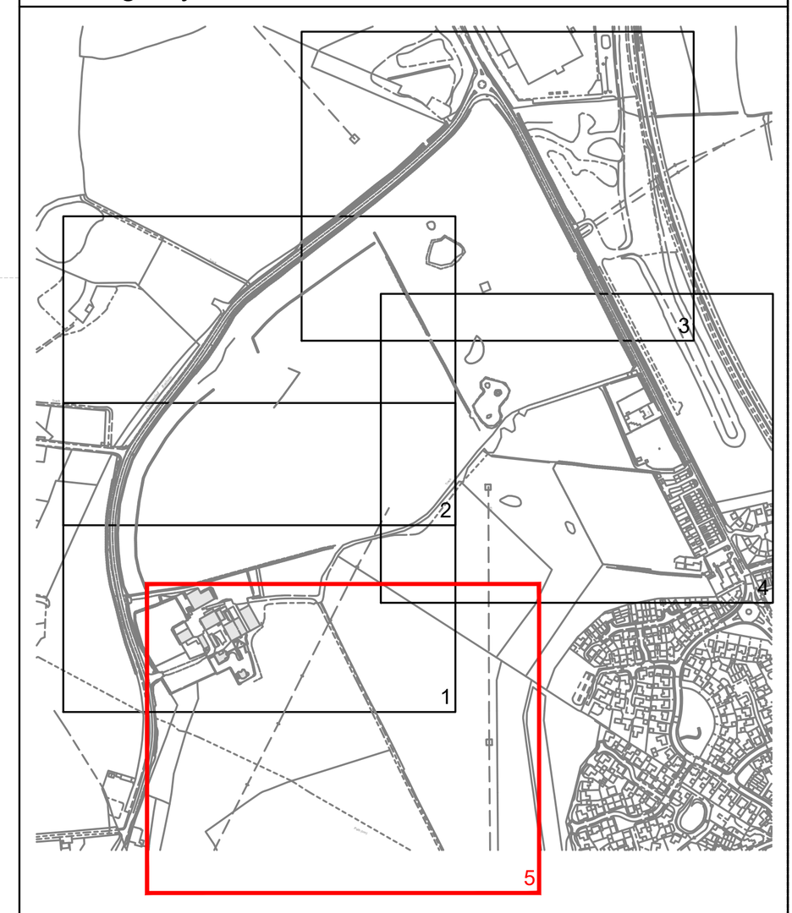
152.864 BlueEarth Construction Surveyed Point
151.90 Axis Survey Surveyed Point
Hedge/Bushes
Wooden Electricity pole

Drawing Layout Plan



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ST2	444107.626	309381.766	155.901
ST3	444037.410	309427.521	156.030
ST4	444003.917	309430.860	155.565

BlueEarth Construction Ltd
Whiteley Road
Ripley
Derbyshire
DE5 3QL

Client		
Richard Bailey Plant and Construction Ltd		
Site		
Land at Wood Road, Bagworth		
Drawing Title		
OGL Topographical Survey - Combined BEC and Axis Survey		
Date Drawn	Drawn	Checked
12/6/2023	SG	KF
Scale	Revision	Sheet
1:500 at A0	0	5/5

Appendix B
Pre-Planning Sewerage Enquiry – Severn Trent Water Response

WONDERFUL ON TAP

SEVERN TRENT

Unit 5 Office Village,
Sandpiper Court,
Chester Business Park,
Chester,
CH4 9QZ

F.A.O: Joe Botting

09/02/2024

Severn Trent Water Ltd
Leicester Water Centre
Gorse Hill
Anstey
Leicester
LE7 7GU

www.stwater.co.uk

Email:
Network.Solutions@SevernTrent.co.uk
Page Barot
Tel:
Our ref: 1106607

Dear Sir/Madam,

Proposed Development: (1 industrial unit – 3l/s) Wood Road, Coalville, LE67 1GA, 443548, 309455

I refer to your 'Development Enquiry Request' in respect of the above named site. Please find enclosed the sewer records that are included in the fee together with the Supplementary Guidance Notes (SGN) which refer to surface water disposal from development sites.

Protective Strip

No public sewers within site boundary.

Due to a change in legislation on 1 October 2011 there may be former private sewers on the site which have transferred to the responsibility of Severn Trent Water Ltd, which are not shown on the statutory sewer records, but are located in your client's land. These sewers would require protective strips of 3 metres either side of the sewer's centreline that we will not allow to be built over. If such sewers are identified to be present on the site, please contact us for further guidance.

Please note: there is no guarantee that you will be able to build over or close to any Severn Trent sewers, and where a diversion is required there is no guarantee that you will be able to undertake those works on a self-lay basis. Every approach to build near to or divert our assets has to be assessed on its own merit and the decision of what is or isn't permissible is taken based on the risk to the asset and the wider catchment it serves. It is vital therefore that you contact us at the earliest opportunity to discuss the implications of our assets crossing your site. Failure to do so could significantly

affect the costs and timescales of your project if it transpires diversionary works need to be carried out by Severn Trent.

Foul Water Drainage

After reviewing the proposed options, the 225mm combined sewer, MH SK44091301 along station Road would be the most suitable connection point for your development due it having larger capacity and can be reached via gravity. The network can accommodate flows for 1 industrial unit (2.28 l/s 2dwf). Therefore, a connection is acceptable to the company subject to a S106 submission.

Alternatively, connection to the 150mm combined network along Battram road is also a suitable connection point it can be reached via gravity and is the closest to the site. However, we are unable to confirm if this connection point has enough capacity to handle the flows as a result modelling will need to take place.

In a change to our previous process, we no longer charge developers for the hydraulic modelling service. We will liaise with you over time with regards to the outcome of our investigations and any impact that may have on the planning status, occupation, or phasing of the site. However, while we can provide a brief summary of our findings if you need us to, we will no longer provide the full external capacity assessment report.

From the application you have submitted, I am assuming that the development has not been granted planning approval. Please inform us as and when planning has progressed as this will help determine how quick we carry out the modelling exercise. In the meantime, the site will be added to our modelling tracker and reviewed regularly until the site can be progressed for sewer modelling.

Surface Water Drainage

Under the terms of Section H of the Building Regulations 2000, the disposal of surface water by means of soakaways should be considered as the primary method. If these are found to be unsuitable, satisfactory evidence will need to be submitted. The evidence should be either percolation test results or by the submission of a statement from the SI consultant (extract or a supplementary letter).

Severn Trent Water expects all surface water from the development to be drained in a sustainable way to the nearest watercourse or

land drainage channel, subject to the developer discussing all aspects of the developments surface water drainage with the Local Lead Flood Authority (LLFA). Any discharge rate to a watercourse or drainage ditch will be determined by the LLFA / EA.

Note, STW will have to be satisfied that all sustainable option have been exhausted before allowing discharge to the public network.

Sewer records show a watercourse that runs east of the site. It is advised to pursue a connection to this if feasible, with flow rates to be agreed by the LLFA.

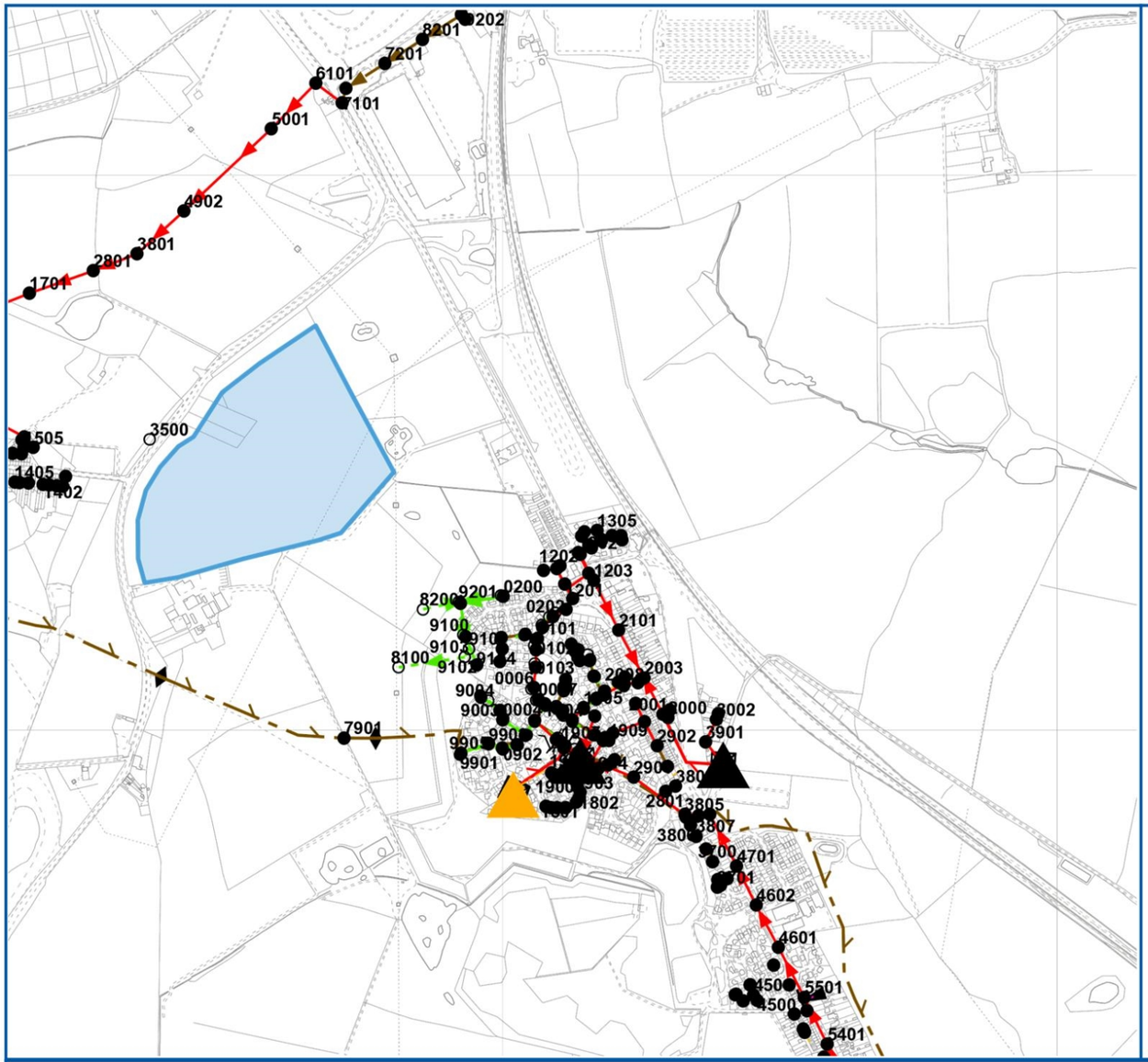
Connections

For any new connections (including the re-use of existing connections) to the public sewerage system, the developer will need to submit a Section 106 application form. Our Developer Services department are responsible for handling all new connections enquiries and applications. To contact them for an application form and associated guidance notes please call 0800 7076600 or download from www.stwater.co.uk.

Please quote the above reference in any future correspondence (including e-mails) with STW Limited. Please note that Developer Enquiry responses are only valid for 6 months from the date of this letter.

Yours sincerely

Page Barot
Network Solutions
Developer Services



Reference	Cover Level	Invert Level Upstream	Invert Level Downstream	Purpose	Material	Pipe Shape	Max Size	Min Size	Gradient	Year Laid
SK44090100	0	<UNK>	<UNK>	C	<UNK>	<UNK>	<UNK>	<UNK>	0	01/12/2011 00:00:00
SK44082902	152.6	151.65	151.2	C	VC	C	150	<UNK>	110.33	31/12/1899 00:00:00
<UNK>	<UNK>	<UNK>	<UNK>	S	<UNK>	<UNK>	<UNK>	<UNK>	<UNK>	16/05/2012 00:00:00
SK44081910	<UNK>	151.18	149.13	C	VC	C	225	<UNK>	36.92	28/06/2016 00:00:00
SK44082903	152.2899	151.8	151.65	F	VC	C	150	<UNK>	277.27	31/12/1899 00:00:00
SK44080901	<UNK>	0	0	F	U	U	0	0	0	31/12/1899 00:00:00
SK43099001	0	<UNK>	<UNK>	S	U	U	<UNK>	<UNK>	0	31/12/1899 00:00:00
SK43089901	<UNK>	<UNK>	<UNK>	S	U	U	<UNK>	<UNK>	0	31/12/1899 00:00:00
SK43099202	<UNK>	<UNK>	<UNK>	F	<UNK>	<UNK>	<UNK>	<UNK>	<UNK>	31/12/1899 00:00:00
SK44090202	0	<UNK>	<UNK>	C	<UNK>	<UNK>	<UNK>	<UNK>	0	01/12/2011 00:00:00
SK44081905	<UNK>	146.96	146.84	F	U	<UNK>	150	<UNK>	<UNK>	31/12/1899 00:00:00
SK44092001	153.1	151.65	150.6	C	VC	C	225	<UNK>	68.58	31/12/1899 00:00:00
SK44091303	155.38	153.91	153.42	C	VC	C	150	<UNK>	98.71	31/12/1899 00:00:00
SK43107201	170	0	101.89	F	VC	C	225	0	<UNK>	31/12/1899 00:00:00
SK43098200	<UNK>	<UNK>	<UNK>	S	<UNK>	<UNK>	<UNK>	<UNK>	<UNK>	31/12/1899 00:00:00
SK44081800	<UNK>	147.77	147.62	F	U	<UNK>	150	<UNK>	<UNK>	31/12/1899 00:00:00
SK43089903	<UNK>	0	0	F	U	U	0	0	0	31/12/1899 00:00:00
SK43091504	163.1289	159.07	159.59	C	VC	C	150	<UNK>	<UNK>	31/12/1899 00:00:00
SK44091304	155.3699	154.08	153.62	C	VC	C	150	<UNK>	100.7	31/12/1899 00:00:00
SK44091006	0	0	0	C	<UNK>	<UNK>	0	0	0	01/12/2011 00:00:00
<UNK>	<UNK>	<UNK>	<UNK>	S	<UNK>	<UNK>	<UNK>	<UNK>	<UNK>	16/05/2012 00:00:00
SK43091701	158.74	157.56	157.33	C	VC	C	225	<UNK>	266.87	31/12/1899 00:00:00
SK44091007	0	0	0	C	<UNK>	<UNK>	0	0	0	01/12/2011 00:00:00
SK43093801	161.69	159.87	157.94	C	VC	C	225	<UNK>	43.91	31/12/1899 00:00:00
SK44083808	157.1399	155.78	154.41	F	VC	C	150	<UNK>	17.66	31/12/1899 00:00:00
SK43099102	<UNK>	<UNK>	<UNK>	S	<UNK>	<UNK>	<UNK>	<UNK>	<UNK>	31/12/1899 00:00:00
SK43099005	0	<UNK>	<UNK>	S	U	U	<UNK>	<UNK>	0	31/12/1899 00:00:00
SK44081803	<UNK>	147.49	147.41	F	U	<UNK>	150	<UNK>	<UNK>	31/12/1899 00:00:00
SK44083802	<UNK>	<UNK>	153.31	C	VC	C	300	<UNK>	0	31/12/1899 00:00:00

LEGEND

MATERIALS

- - NONE
- AC - ASBESTOS CEME
- BR - BRICK
- CC - CONCRETE BOX CULVERT
- CI - CAST IRON
- CO - CONCRETE
- CSB - CONCRETE SEGMENTS (BOLTED)
- CSU - CONCRETE SEGMENTS (UNBOLTED)
- DI - DUCTILE IRON
- GRP - GLASS REINFORCED PLASTIC
- MAC - MASONRY IN REGULAR COURSES
- MAR - MASONRY RANDOMLY COURSED
- PE - POLYETHLENE
- PF - PITCH
- PP - POLYPROPYLENE
- PSC - PLASTIC STEEL COMPOSITE
- PVC - POLYVINYL CHLORIDE
- RPM - REINFORCED PLASTIC MATRIX
- SI - SPUN (GREY) IRON
- ST - STEEL
- U - UNKNOWN
- VC - VITRIFIED CLAY
- XXX - OTHER

CATEGORIES

- W - WEIR
- C - CASCADE
- DB - DAMBOARD
- SE - SIDE ENTRY
- FV - FLAP VALVE
- BD - BACK DROP
- S - SIPHON
- D - HIGHWAY DRAIN
- S104 - SECTION 104

SHAPE

- C - CIRCULAR
- E - EGG SHAPED
- O - OTHER
- R - RECTANGLE
- S - SQUARE
- T - TRAPEZOIDAL
- U - UNKNOWN

PURPOSE

- C - COMBINED
- E - FINAL EFFLUENT
- F - FOUL
- L - SLUDGE
- S - SURFACE WATER

Severn Trent Water Limited
Asset Data Management
PO Box 5344
Coventry
CV3 9FT
Telephone: 0345 601 6616

SEWER RECORD (Tabular)

O/S Map Scale: 1:10,000 **This map is centred upon:**

Date of Issue: 09-02-24 **X:** 444125.52 **Y:** 309355.54

Disclaimer Statement:

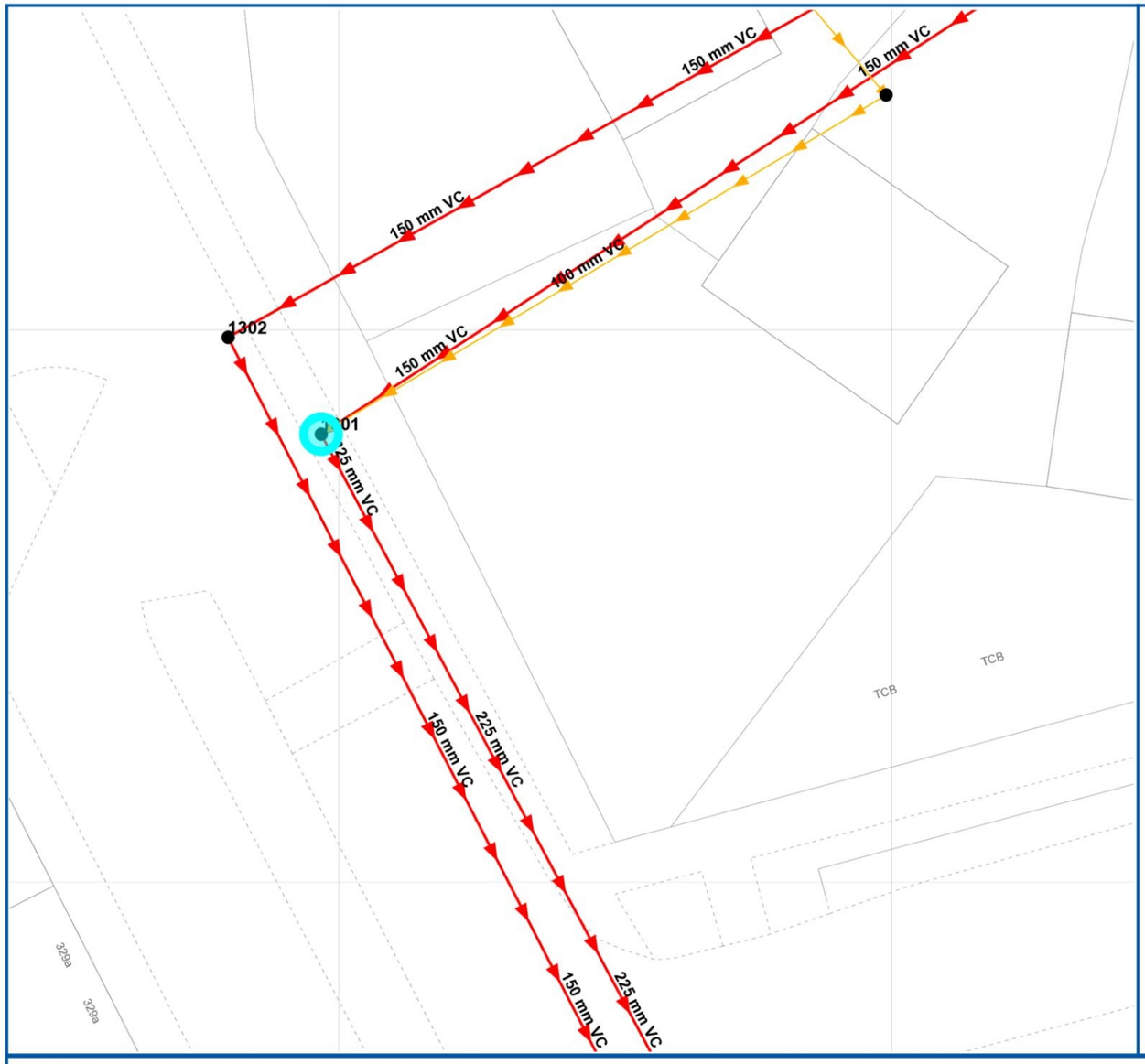
1 Do not scale off this Map.

2 This plan and any information supplied with it is furnished as a general guide, is only valid at the date of issue and no warranty as to its correctness is given or implied. In particular this plan and any information shown on it must not be relied upon in the event of any development or works (including but not limited to excavations) in the vicinity of SEVERN TRENT WATER assets or for the purposes of determining the suitability of a point of connection to the sewerage or distribution systems.

3 On 1 October 2011 most private sewers and private lateral drains in Severn Trent Water's sewerage area, which were connected to a public sewer as at 1 July 2011, transferred to the ownership of Severn Trent Water and became public sewers and public lateral drains. A further transfer takes place on 1 October 2012. Private pumping stations, which form part of these sewers or lateral drains, will transfer to ownership of Severn Trent Water on or before 1 October 2016. Severn Trent Water does not possess complete records of these assets. These assets may not be displayed on the map.

5 Ordnance Survey licence number: **100031673**

6 Document users other than SEVERN TRENT WATER business users are advised that this document is provided for reference purpose only and is subject to copyright, therefore, no further copies should be made from it.



Reference	Cover Level	Invert Level Upstream	Invert Level Downstream	Purpose	Material	Pipe Shape	Max Size	Min Size	Gradient	Year Laid
SK44091301	155.2899	153.59	153.02	C	VC	C	225	<UNK>	94.95	31/12/1899 00:00:00
SK44091302	155.2799	153.41	152.89	C	VC	C	150	<UNK>	81.71	31/12/1899 00:00:00
<UNK>	<UNK>	<UNK>	<UNK>	C	VC	<UNK>	<UNK>	<UNK>	<UNK>	31/12/1899 00:00:00

LEGEND

Operational Site
Waste Water Pump
Transferred Asset
S24
S104
S102
Null Private
Null
None
Highway Drain
Adopted Sewer

Storage
Disposal Site
Off-Line Waste Water Storage
On-Line Waste Water Storage
Wet Well

Waste Water Process Structure
Sewage Treatment Point
Sewage Treatment Structure
Sludge Treatment Point
Sludge Treatment Structure

Manhole
Twin Manhole

Foul Manhole
Surface Water Manhole
Combined Manhole
Dual Manhole
UnSurveyed Foul Manhole
UnSurveyed Surface Water Manhole
UnSurveyed Combined Manhole
Unsurveyed Unknown Manhole

Gravity Sewer Pipe
Foul Gravity Sewer
Combined Gravity Sewer
Surface Water Gravity Sewer
S104 Surface Water Gravity Sewer
S104 Combined Gravity Sewer
S104 Foul Gravity Sewer
Private Surface Water Gravity Sewer
Private Combined Gravity Sewer
Private Foul Gravity Sewer
Surface Water Unsurveyed Pipe
Combined Unsurveyed Pipe
Foul Unsurveyed Pipe
Transferred Surface Water Sewer
Transferred Combined Sewer

Transferred Foul Sewer
Disposal Pipe
Overflow Pipe
Culverted Water Course
Waste Internal Site Pipe
Sewer Service Connection
Gravity Sewer Others

Pressure Sewer Pipe
Surface Water Pressure Sewer
Combined Pressure Sewer
Foul Pressure Sewer
S104 Surface Water Pressure Sewer
S104 Combined Pressure Sewer
S104 Foul Pressure Sewer
Private Surface Water Pressure Sewer
Private Combined Pressure Sewer
Private Foul Pressure Sewer
Surface Water Vacuum Sewer
Foul Vacuum Sewer
Combined Vacuum Sewer
S104 Surface Water Vacuum Sewer
S104 Combined Vacuum Sewer
S104 Foul Vacuum Sewer

Private Surface Water Vaccum Sewer
Private Combined Vacuum Sewer
Private Foul Vacuum Sewer
Surface Water Siphon
Combined Siphon
Foul Siphon
Private Surface Water Siphon
Private Combined Siphon
Private Foul Siphon
S104 Surface Water Siphon
S104 Combined Siphon
S104 Foul Siphon
Surface Water Unsurveyed Pipe
Combined Unsurveyed Pipe
Foul Unsurveyed Pipe
Disposal Pipe

Service Pipe
Surface Water Lateral Drain
Combined Lateral Drain
Foul Lateral Drain
S104 Surface Water Lateral Drain
S104 Combined Lateral Drain
S104 Foul Lateral Drain

Private Surface Water Lateral Drain
Private Combined Lateral Drain
Private Foul Lateral Drain
Transferred Surface Water Lateral Dra
Transferred Combined Lateral Drain
Transferred Foul Lateral Drain

Ancillary
Balancing Lagoon
Grease Trap
Interceptor
Screen

Chamber
Flushing Chamber
Scalaway
Overflow

Connector
Sewer Junctions
SewerLine Connection Node

Fitting
Blind Shaft
Facility Connector
Head Node
Lamphole

Sewerage Air Valve
Sewerage Chemical Injection Point
Sewerage Hatch Box
Sewerage Pressure Washout
Vent Column
Waste Water Outfall

Control Valve
Hydrobrake
Penstock
Sewerage Isolation Valve
Sewerage Non Return Valve

LandlineSymbol
Culvert Symbol
Direction Of Flow Symbol
Boundary Half Meeting Symbol
Bench Mark Symbol
Railway Switch Symbol
Road Related Flow Symbol
Print20mLine

MATERIALS

-	- NONE
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CO	- CONCRETE
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CSU	- CONCRETE SEGMENTS (UNBOLTED)
DI	- DUCTILE IRON
GRP	- GLASS REINFORCED PLASTIC
MAC	- MASONRY IN REGULAR COURSES
MAR	- MASONRY RANDOMLY COURSED
PE	- POLYETHLENE
PF	- PITCH
PP	- POLYPROPYLENE
PSC	- PLASTIC STEEL COMPOSITE
PVC	- POLYVINYL CHLORIDE
RPM	- REINFORCED PLASTIC MATRIX
SI	- SPUN (GREY) IRON
ST	- STEEL
U	- UNKNOWN
VC	- VITRIFIED CLAY
XXX	- OTHER

CATEGORIES

W	- WEIR
C	- CASCADE
DB	- DAMBOARD
SE	- SIDE ENTRY
FV	- FLAP VALVE
BD	- BACK DROP
S	- SIPHON
D	- HIGHWAY DRAIN
S104	- SECTION 104

SHAPE

C	- CIRCULAR
E	- EGG SHAPED
O	- OTHER
R	- RECTANGLE
S	- SQUARE
T	- TRAPEZOIDAL
U	- UNKNOWN

PURPOSE

C	- COMBINED
E	- FINAL EFFLUENT
F	- FOUL
L	- SLUDGE
S	- SURFACE WATER

Severn Trent Water Limited
Asset Data Management
PO Box 5344
Coventry
CV3 9FT
Telephone: 0345 601 6616

SEWER RECORD (Tabular)

O/S Map Scale: 1:200 **This map is centred upon:**

Date of Issue: 09-02-24 **X:** 444148.41 **Y:** 309312.73

Disclaimer Statement:

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5 Ordnance Survey licence number: **100031673**

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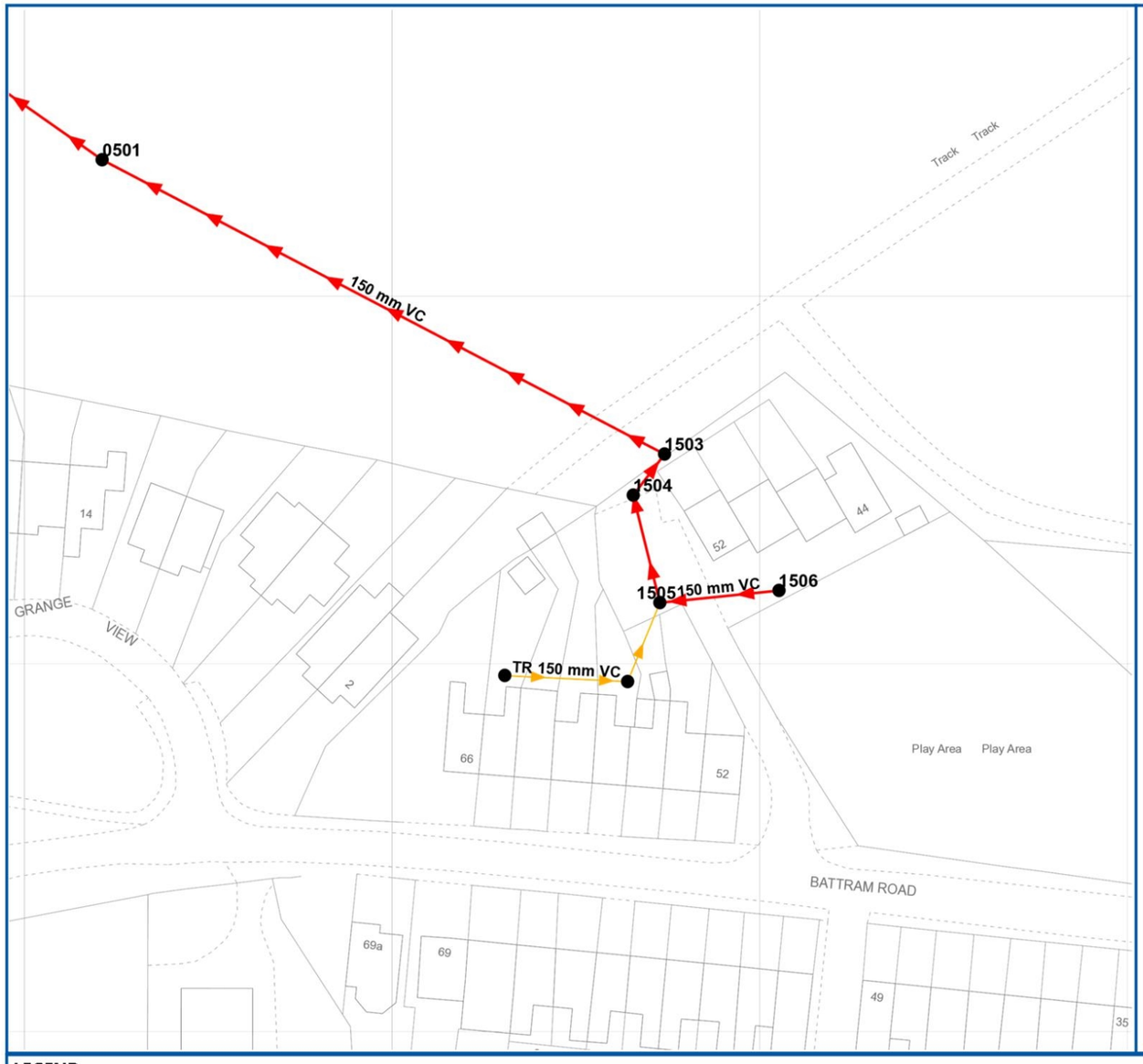

Reference	Cover Level	Invert Level Upstream	Invert Level Downstream	Purpose	Material	Pipe Shape	Max Size	Min Size	Gradient	Year Laid
SK43091503	163.5	159.63	159.37	C	VC	C	150	<UNK>	330.31	31/12/1899 00:00:00
SK43091506	163.2899	159.69	159.68	C	VC	C	150	<UNK>	1607	31/12/1899 00:00:00
SK43090501	163.1999	159.35	158.7	C	VC	C	150	<UNK>	129.17	31/12/1899 00:00:00
SK43091504	163.1289	159.07	159.59	C	VC	C	150	<UNK>	<UNK>	31/12/1899 00:00:00
SK43091505	163.5399	159.65	159.65	C	VC	C	150	<UNK>	0	31/12/1899 00:00:00
<UNK>	<UNK>	<UNK>	<UNK>	C	VC	<UNK>	<UNK>	<UNK>	<UNK>	03/11/2023 00:00:00

LEGEND

Operational Site
Waste Water Pump
Transferred Asset
S24
S104
S102
Null Private
Null
None
Highway Drain
Adopted Sewer

Storage
Disposal Site
Off-Line Waste Water Storage
On-Line Waste Water Storage
Wet Well

Waste Water Process Structure
Sewage Treatment Point
Sewage Treatment Structure
Sludge Treatment Point
Sludge Treatment Structure

Manhole
Twin Manhole

Foul Manhole
Surface Water Manhole
Combined Manhole
Dual Manhole
UnSurveyed Foul Manhole
UnSurveyed Surface Water Manhole
UnSurveyed Combined Manhole
Unsurveyed Unknown Manhole

Gravity Sewer Pipe
Foul Gravity Sewer
Combined Gravity Sewer
Surface Water Gravity Sewer
S104 Surface Water Gravity Sewer
S104 Combined Gravity Sewer
S104 Foul Gravity Sewer
Private Surface Water Gravity Sewer
Private Combined Gravity Sewer
Private Foul Gravity Sewer
Surface Water Unsurveyed Pipe
Foul Unsurveyed Pipe
Transferred Surface Water Sewer
Transferred Combined Sewer

Transferred Foul Sewer
Disposal Pipe
Overflow Pipe
Culverted Water Course
Waste Internal Site Pipe
Sewer Service Connection
Gravity Sewer Others

Pressure Sewer Pipe
Surface Water Pressure Sewer
Combined Pressure Sewer
Foul Pressure Sewer
S104 Surface Water Pressure Sewer
S104 Combined Pressure Sewer
S104 Foul Pressure Sewer
Private Surface Water Pressure Sewer
Private Combined Pressure Sewer
Private Foul Pressure Sewer
Surface Water Vacuum Sewer
Foul Vacuum Sewer
Combined Vacuum Sewer
S104 Surface Water Vacuum Sewer
S104 Combined Vacuum Sewer
S104 Foul Vacuum Sewer

Private Surface Water Vaccum Sewer
Private Combined Vacuum Sewer
Private Foul Vacuum Sewer
Surface Water Siphon
Combined Siphon
Foul Siphon
Private Surface Water Siphon
Private Combined Siphon
Private Foul Siphon
S104 Surface Water Siphon
S104 Combined Siphon
S104 Foul Siphon
Surface Water Unsurveyed Pipe
Combined Unsurveyed Pipe
Foul Unsurveyed Pipe
Disposal Pipe

Service Pipe
Surface Water Lateral Drain
Combined Lateral Drain
Foul Lateral Drain
S104 Surface Water Lateral Drain
S104 Combined Lateral Drain
S104 Foul Lateral Drain

Private Surface Water Lateral Drain
Private Combined Lateral Drain
Private Foul Lateral Drain
Transferred Surface Water Lateral Dra
Transferred Combined Lateral Drain
Transferred Foul Lateral Drain

Ancillary
Balancing Lagoon
Grease Trap
Interceptor
Screen

Chamber
Flushing Chamber
Scalaway
Overflow

Connector
Sewer Junctions
SewerLine Connection Node

Fitting
Blind Shaft
Facility Connector
Head Node
Lamphole

Sewerage Air Valve
Sewerage Chemical Injection Point
Sewerage Hatch Box
Sewerage Pressure Washout
Vent Column
Waste Water Outfall

Control Valve
Hydrobrake
Penstock
Sewerage Isolation Valve
Sewerage Non Return Valve

LandlineSymbol
Culvert Symbol
Direction Of Flow Symbol
Boundary Half Meeting Symbol
Bench Mark Symbol
Railway Switch Symbol
Road Related Flow Symbol
Print50mLine

MATERIALS

-	- NONE
AC	- ASBESTOS CEME
BR	- BRICK
CC	- CONCRETE BOX CULVERT
CI	- CAST IRON
CO	- CONCRETE
CSB	CONCRETE SEGMENTS (BOLTED)
CSU	- CONCRETE SEGMENTS (UNBOLTED)
DI	- DUCTILE IRON
GRP	- GLASS REINFORCED PLASTIC
MAC	- MASONRY IN REGULAR COURSES
MAR	- MASONRY RANDOMLY COURSED
PE	- POLYETHLENE
PF	- PITCH
PP	- POLYPROPYLENE
PSC	- PLASTIC STEEL COMPOSITE
PVC	- POLYVINYL CHLORIDE
RPM	- REINFORCED PLASTIC MATRIX
SI	- SPUN (GREY) IRON
ST	- STEEL
U	- UNKNOWN
VC	- VITRIFIED CLAY
XXX	- OTHER

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D	- HIGHWAY DRAIN
S104	- SECTION 104

SHAPE

C	- CIRCULAR
E	- EGG SHAPED
O	- OTHER
R	- RECTANGLE
S	- SQUARE
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PURPOSE

C	- COMBINED
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F	- FOUL
L	- SLUDGE
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Severn Trent Water Limited
Asset Data Management
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Coventry
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SEWER RECORD (Tabular)

O/S Map Scale: 1:750 **This map is centred upon:**

Date of Issue: 09-02-24 **X:** 443124.23 **Y:** 309518.25

Disclaimer Statement:

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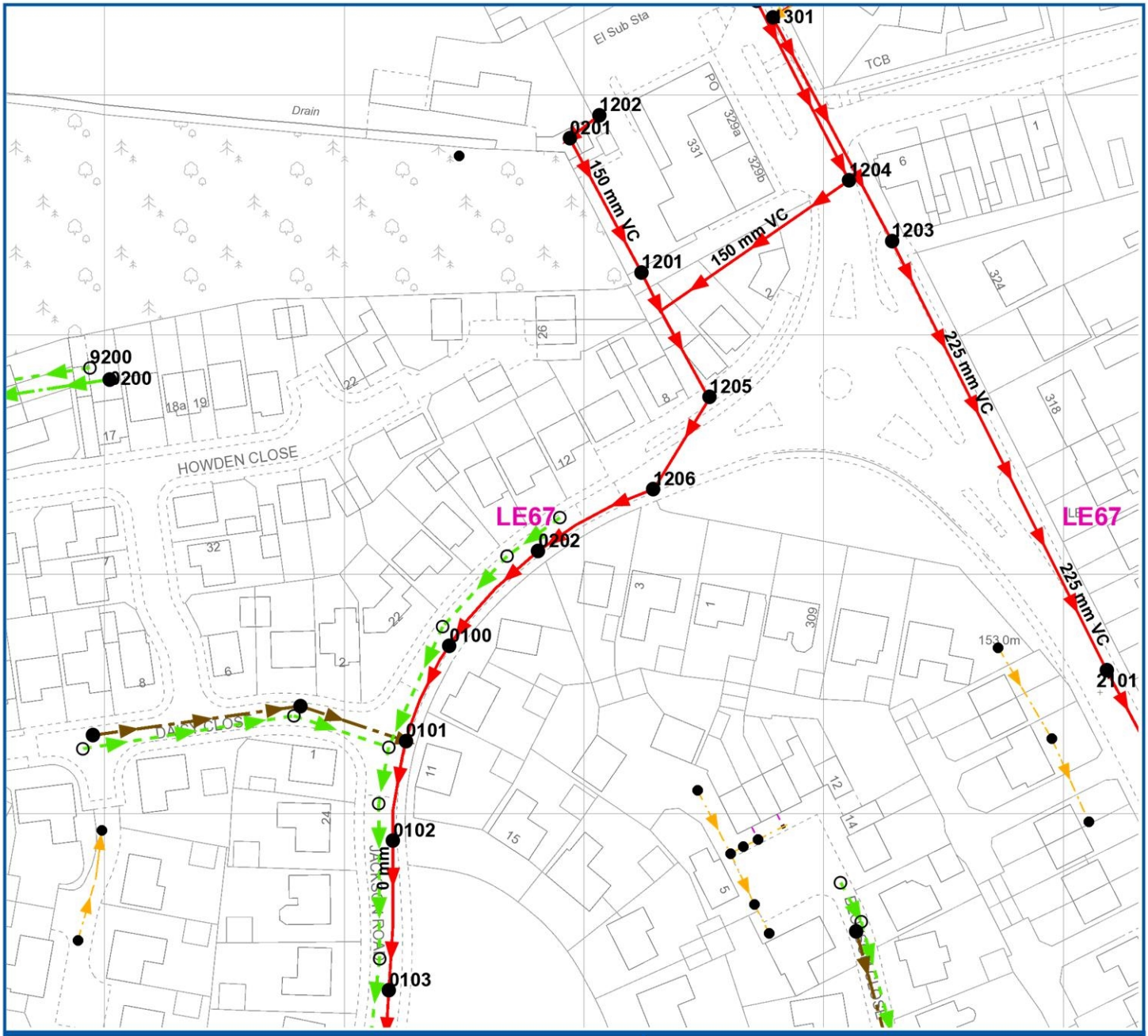

LEGEND

Operational Site

Waste Water Pump
- Transferred Asset
- S24
- S104
- S102
- Null Private
- Null
- None
- Highway Drain
- Adopted Sewer

Storage
- Disposal Site
- Off-Line Waste Water Storage
- On-Line Waste Water Storage
- Wet Well

Waste Water Process Structure
- Sewage Treatment Point
- Sewage Treatment Structure
- Sludge Treatment Point
- Sludge Treatment Structure

Manhole
- Foul Bifurcation Manhole
- Combined Bifurcation Manhole
- Surface Water Bifurcation Manhole
- Dual Manhole
- Foul Single Manhole
- Combined Single Manhole
- Surface Water Single Manhole
- Twin Manhole
- Foul Adopted Manhole
- Combined Adopted Manhole
- Surface Adopted Manhole
- Transferred Manhole
- Unsurveyed Manhole

Gravity Sewer Pipe
- Foul Gravity Sewer
- Combined Gravity Sewer
- Surface Water Gravity Sewer
- S104 Surface Water Gravity Sewer
- S104 Combined Gravity Sewer
- S104 Foul Gravity Sewer
- Private Surface Water Gravity Sewer
- Private Combined Gravity Sewer
- Private Foul Gravity Sewer
- Surface Water Unsurveyed Pipe
- Combined Unsurveyed Pipe
- Foul Unsurveyed Pipe
- Transferred Surface Water Sewer
- Transferred Combined Sewer
- Transferred Foul Sewer
- Disposal Pipe
- Overflow Pipe
- Culverted Water Course
- Waste Internal Site Pipe
- Sewer Service Connection
- Gravity Sewer Others

Pressure Sewer Pipe
- Surface Water Pressure Sewer
- Combined Pressure Sewer
- Foul Pressure Sewer
- S104 Surface Water Pressure Sewer
- S104 Combined Pressure Sewer
- S104 Foul Pressure Sewer
- Private Surface Water Pressure Sewe
- Private Combined Pressure Sewer
- Private Foul Pressure Sewer
- Surface Water Vacuum Sewer
- Foul Vacuum Sewer
- Combined Vacuum Sewer
- S104 Surface Water Vacuum Sewer
- S104 Combined Vacuum Sewer
- S104 Foul Vacuum Sewer
- Private Surface Water Vaccum Sewer
- Private Combined Vacuum Sewer
- Private Foul Vacuum Sewer
- Surface Water Siphon
- Combined Siphon
- Foul Siphon
- Private Surface Water Siphon
- Private Combined Siphon
- Private Foul Siphon
- S104 Surface Water Siphon
- S104 Combined Siphon
- S104 Foul Siphon
- Surface Water Unsurveyed Pipe
- Combined Unsurveyed Pipe
- Foul Unsurveyed Pipe
- Disposal Pipe

Service Pipe
- Surface Water Lateral Drain
- Combined Lateral Drain
- Foul Lateral Drain
- S104 Surface Water Lateral Drain
- S104 Combined Lateral Drain
- S104 Foul Lateral Drain
- Private Surface Water Lateral Drain
- Private Combined Lateral Drain
- Private Foul Lateral Drain
- Transferred Surface Water Lateral Dra
- Transferred Combined Lateral Drain
- Transferred Foul Lateral Drain

Pressure Sewer Annotation

Gravity Sewer Annotation

Service Sewer Annotation

Ancillary
- Balancing Lagoon
- Grease Trap
- Interceptor
- Screen

Chamber
- Flushing Chamber
- Scalaway
- Overflow

Connector
- Sewer Junctions
- Sewer Line Connection Node

Fitting
- Blind Shaft
- Facility Connector
- Head Node
- Lamphole
- Sewerage Air Valve
- Sewerage Chemical Injection Point
- Sewerage Hatch Box
- Sewerage Pressure Washout
- Vent Column
- Waste Water Outfall

Control Valve
- Hydrobrake
- Penstock
- Sewerage Isolation Valve
- Sewerage Non Return Valve

Manhole Annotation

LandlineSymbol
- Culvert Symbol
- Direction Of Flow Symbol
- Boundary Half Meering Symbol
- Bench Mark Symbol
- Railway Switch Symbol
- Road Related Flow Symbol

Print50mLine

Severn Trent Water Limited
Asset Data Management
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Coventry
CV3 9FT
Telephone: 0345 601 6616

SEWER RECORD

O/S Map Scale: 1:1,250

This map is centred upon:

Date of Issue: 12-12-24

X: 444097.56 **Y:** 309212.02

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5 Ordnance Survey licence number: **100031673**

Sewer Node

Sewer Pipe Data

Reference	Cover Level	Invert Level Upstream	Invert Level Downstream	Purpose	Material	Pipe Shape	Max Size	Min Size	Gradient	Year Laid
<UNK>	<UNK>	<UNK>	<UNK>	S	<UNK>	<UNK>	<UNK>	<UNK>	<UNK>	16/05/2012 00:00:00
SK44090007	0	<UNK>	<UNK>	C	<UNK>	<UNK>	<UNK>	<UNK>	0	01/12/2011 00:00:00
<UNK>	<UNK>	<UNK>	<UNK>	S	<UNK>	<UNK>	<UNK>	<UNK>	<UNK>	16/05/2012 00:00:00
<UNK>	<UNK>	<UNK>	<UNK>	S	<UNK>	<UNK>	<UNK>	<UNK>	<UNK>	16/05/2012 00:00:00
SK44091006	0	0	0	C	<UNK>	<UNK>	0	0	0	01/12/2011 00:00:00
SK44090201	154.4799	153.57	152.46	C	VC	C	<UNK>	<UNK>	28.61	31/12/1899 00:00:00
SK44090200	<UNK>	<UNK>	<UNK>	F	VC	<UNK>	<UNK>	<UNK>	<UNK>	31/12/1899 00:00:00
SK44091201	153.35	152.43	<UNK>	C	VC	C	<UNK>	<UNK>	0	31/12/1899 00:00:00
<UNK>	<UNK>	<UNK>	<UNK>	S	<UNK>	<UNK>	<UNK>	<UNK>	<UNK>	16/05/2012 00:00:00
SK44091304	155.3699	154.08	153.62	C	VC	C	150	<UNK>	100.7	31/12/1899 00:00:00
SK44090100	0	<UNK>	<UNK>	C	<UNK>	<UNK>	<UNK>	<UNK>	0	01/12/2011 00:00:00
SK44091302	155.2799	153.41	152.89	C	VC	C	150	<UNK>	81.71	31/12/1899 00:00:00
SK44090005	0	<UNK>	<UNK>	C	<UNK>	<UNK>	<UNK>	<UNK>	0	01/12/2011 00:00:00
SK44091205	0	<UNK>	<UNK>	C	<UNK>	<UNK>	<UNK>	<UNK>	0	01/12/2011 00:00:00
<UNK>	<UNK>	<UNK>	<UNK>	S	<UNK>	<UNK>	<UNK>	<UNK>	<UNK>	16/05/2012 00:00:00
<UNK>	<UNK>	<UNK>	<UNK>	S	<UNK>	<UNK>	<UNK>	<UNK>	<UNK>	16/05/2012 00:00:00
<UNK>	<UNK>	<UNK>	<UNK>	S	<UNK>	<UNK>	<UNK>	<UNK>	<UNK>	16/05/2012 00:00:00
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<UNK>	<UNK>	<UNK>	<UNK>	S	<UNK>	<UNK>	<UNK>	<UNK>	<UNK>	16/05/2012 00:00:00
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SK44091203	154.61	153	151.14	C	VC	C	225	<UNK>	54.1	31/12/1899 00:00:00
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<UNK>	<UNK>	<UNK>	<UNK>	F	<UNK>	<UNK>	<UNK>	<UNK>	<UNK>	16/05/2012 00:00:00
SK44091202	154.5	153.62	153.59	C	VC	C	150	<UNK>	283	31/12/1899 00:00:00
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<UNK>	<UNK>	<UNK>	<UNK>	S	<UNK>	<UNK>	<UNK>	<UNK>	<UNK>	16/05/2012 00:00:00
SK44090102	0	0	0	C	<UNK>	<UNK>	0	0	0	01/12/2011 00:00:00
SK44091303	155.38	153.91	153.42	C	VC	C	150	<UNK>	98.71	31/12/1899 00:00:00
SK44090103	0	0	0	C	<UNK>	<UNK>	0	0	0	01/12/2011 00:00:00
<UNK>	<UNK>	<UNK>	<UNK>	S	<UNK>	<UNK>	<UNK>	<UNK>	<UNK>	16/05/2012 00:00:00
SK44090202	0	<UNK>	<UNK>	C	<UNK>	<UNK>	<UNK>	<UNK>	0	01/12/2011 00:00:00
<UNK>	<UNK>	<UNK>	<UNK>	S	<UNK>	<UNK>	<UNK>	<UNK>	<UNK>	16/05/2012 00:00:00
SK44091007	0	0	0	C	<UNK>	<UNK>	0	0	0	01/12/2011 00:00:00
SK44092008	0	<UNK>	<UNK>	C	<UNK>	<UNK>	<UNK>	<UNK>	0	01/12/2011 00:00:00
SK44090006	0	<UNK>	<UNK>	C	<UNK>	<UNK>	<UNK>	<UNK>	0	01/12/2011 00:00:00
SK43099004	0	<UNK>	<UNK>	S	U	U	<UNK>	<UNK>	0	31/12/1899 00:00:00
SK44091204	154.8899	152.88	<UNK>	C	VC	C	150	<UNK>	0	31/12/1899 00:00:00
<UNK>	<UNK>	<UNK>	<UNK>	F	<UNK>	<UNK>	<UNK>	<UNK>	<UNK>	16/05/2012 00:00:00
SK44091206	0	<UNK>	<UNK>	C	<UNK>	<UNK>	<UNK>	<UNK>	0	01/12/2011 00:00:00

Sewer Node Sewer Pipe Data

Reference	Cover Level	Invert Level Upstream	Invert Level Downstream	Purpose	Material	Pipe Shape	Max Size	Min Size	Gradient	Year Laid
SK44091305	155.4799	154.47	153.91	C	VC	C	150	<UNK>	31.18	31/12/1899 00:00:00
SK44090101	0	0	0	C	<UNK>	<UNK>	0	0	0	01/12/2011 00:00:00
<UNK>	<UNK>	<UNK>	<UNK>	F	<UNK>	<UNK>	<UNK>	<UNK>	<UNK>	16/05/2012 00:00:00
SK44092101	152.72	151.12	150.55	C	VC	C	<UNK>	<UNK>	171.11	31/12/1899 00:00:00
SK43099200	<UNK>	<UNK>	<UNK>	S	<UNK>	<UNK>	<UNK>	<UNK>	<UNK>	31/12/1899 00:00:00
<UNK>	<UNK>	<UNK>	<UNK>	F	<UNK>	<UNK>	<UNK>	<UNK>	<UNK>	16/05/2012 00:00:00
<UNK>	<UNK>	<UNK>	<UNK>	F	P	<UNK>	<UNK>	<UNK>	<UNK>	31/12/1899 00:00:00
<UNK>	<UNK>	<UNK>	<UNK>	F	PVCMO	<UNK>	<UNK>	<UNK>	<UNK>	01/11/2024 00:00:00
<UNK>	<UNK>	<UNK>	<UNK>	C	VC	<UNK>	<UNK>	<UNK>	<UNK>	31/12/1899 00:00:00
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<UNK>	<UNK>	<UNK>	<UNK>	C	VC	<UNK>	<UNK>	<UNK>	<UNK>	31/12/1899 00:00:00
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<UNK>	<UNK>	<UNK>	<UNK>	F	PVCMO	<UNK>	<UNK>	<UNK>	<UNK>	01/11/2024 00:00:00
<UNK>	<UNK>	<UNK>	<UNK>	C	VC	<UNK>	<UNK>	<UNK>	<UNK>	31/12/1899 00:00:00
<UNK>	<UNK>	<UNK>	<UNK>	F	VC	<UNK>	<UNK>	<UNK>	<UNK>	31/12/1899 00:00:00
<UNK>	<UNK>	<UNK>	<UNK>	F	P	<UNK>	<UNK>	<UNK>	<UNK>	31/12/1899 00:00:00
<UNK>	<UNK>	<UNK>	<UNK>	F	VC	<UNK>	<UNK>	<UNK>	<UNK>	31/12/1899 00:00:00
<UNK>	<UNK>	<UNK>	<UNK>	F	VC	<UNK>	<UNK>	<UNK>	<UNK>	31/12/1899 00:00:00
<UNK>	<UNK>	<UNK>	<UNK>	F	P	<UNK>	<UNK>	<UNK>	<UNK>	31/12/1899 00:00:00
<UNK>	<UNK>	<UNK>	<UNK>	C	VC	<UNK>	<UNK>	<UNK>	<UNK>	31/12/1899 00:00:00
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<UNK>	<UNK>	<UNK>	<UNK>	F	P	<UNK>	<UNK>	<UNK>	<UNK>	31/12/1899 00:00:00

Appendix C
Drainage Layout

NOTE:
FOUL GULLIES PROVIDED FOR BIN STORE WASH DOWN - GULLY TO BE KESSEL ODOUR STOP TYPE.

FOUL GULLIES TO BE PROVIDED IN BASE OF EACH WEIGHBRIDGE AND CONNECT INTO FUEL/OIL INTERCEPTOR - DETAILS TBC UPON RECEIPT OF WEIGHBRIDGE DETAIL DRAWINGS.

FOUL DRAINAGE PROVIDED ADJACENT TO VEHICLE MAINTENANCE UNIT FOR CONNECTION TO VEHICLE PITS - ALL DETAILS TBC.

FOUL DRAINAGE MAY BE REQUIRED TO BE DEEPER TO ACCEPT DRAINAGE FROM THE WEIGHBRIDGES AND VEHICLE PITS - THIS CAN ONLY BE CONFIRMED UPON RECEIPT OF DETAILED INFORMATION CONFIRMING DEPTHS AND LOCATIONS.

DIT TYPE 3 SUB-BASE TO CENTRAL BAYS OF CARPARK BAYS TO CONTINUE UNDER CENTRAL FOOTWAY.

PROPOSED SPEL VEHICLE WASHCLASS 2 FULL RETENTION PETROL/OIL SEPARATOR MODEL WDS200/2000. ALLOW FOR A 250mm THK GRADE C28/35 CONCRETE BED AND SURROUND ON 450mm THK DIT TYPE 1 SUB-BASE TOGETHER WITH A SOLAR POWERED AUDIBLE AND VISUAL SEPARATOR ALARM MOUNTED WITHIN THE MAINTENANCE BUILDING OR FIXED TO THE YARD SLAB. EXACT LOCATION OF SEPARATOR ALARM AND SEPARATOR VENT PIPE TO BE AGREED. INSTALLATION TO BE IN ACCORDANCE WITH THE MANUFACTURES REQUIREMENTS.
CL 157.823
INLET IL
OUTLET IL

PROPOSED SPEL VEHICLE WASH SILT SEPARATOR MODEL ST800/12. ALLOW FOR A 250mm THK GRADE C28/35 CONCRETE BED AND SURROUND ON 450mm THK DIT TYPE 1 SUB-BASE. INSTALLATION TO BE IN ACCORDANCE WITH THE MANUFACTURES REQUIREMENTS.
CL 157.800

PROPOSED 2.00m DEEP ATTENUATION BASIN TO ACHIEVE A VOLUME OF 357.0m³ REQUIRED TO CATER FOR THE 1 IN 100 YEAR EVENT +40% FOR CLIMATIC CHANGE, SLOPE SIDES TO BE AT A GRADIENT OF 1 IN 3. ATTENUATION BASIN FINISH/VEGETATION TO BE ADVISED BY LANDSCAPER.
Top of Basin = 158.00 Base of Basin = 156.00
Water Level (1 IN 100YR + 40%CC) = Water Level (1 IN 2YR) =

PROPOSED PACKAGE SURFACE WATER PUMPING CHAMBER IN ACCORDANCE WITH BS EN 12050 REQUIRED REQUIRED TO PUMP A PEAK FLOW RATE OF 1L/s ON A DUTY STANDBY ARRANGEMENT. ALLOW FOR A 250mm THICK C28/35 CONCRETE BASE AND SURROUND ON 450mm THICK DIT TYPE 1 SUB-BASE. PUMP STATION TO BE COMPLETE WITH AN INTEGRAL HIGH LEVEL AUDIBLE AND VISUAL ALARM ON THE CONTROL PANEL. INSTALLATION TO BE IN ACCORDANCE WITH THE MANUFACTURES REQUIREMENTS.
CL 154.730
IL TBC BY MANUFACTURER
OUTGOING IL: (OUTGOING PUMP MAIN BY MANUFACTURER)
SUMP IL: (PUMP SUMP BY MANUFACTURER)

Ex. HIGHWAYS DRAIN OUTFALL PIPE DIA AND INVERTS TAKEN FROM TIER ENVIRONMENTAL TRIAL HOLE INVESTIGATIONS.

PROPOSED SPEL PURACEPTOR FULL RETENTION SEPARATOR MODEL P500 1C/SC. ALLOW FOR A 250mm THK GRADE C28/35 CONCRETE BED AND 250mm THK SURROUND ON 450mm THK DIT TYPE 1 SUB-BASE TOGETHER WITH A SOLAR POWERED AUDIBLE AND VISUAL SEPARATOR ALARM SECURED TO A 7505Q x 150mm THK GRADE C28/35 CONCRETE BASE ON 300mm THK DIT TYPE 1 SUB-BASE. EXACT LOCATION OF SEPARATOR ALARM AND SEPARATOR VENT PIPE TO BE AGREED. INSTALLATION TO BE IN ACCORDANCE WITH THE MANUFACTURES REQUIREMENTS.
CL 155.035

NOTE: CELLULAR ATTENUATION SYSTEMS.
ALL CELLULAR ATTENUATION SYSTEMS TO BE FULLY ENCAPSULATED WITH A 1mm THICK IMPERMEABLE MEMBRANE WITH ALL JOINTS TO BE FULLY WELDED. VENT PIPES TO BE LOCATED IN SOFT LANDSCAPED AREAS (EXACT NUMBER TO BE AGREED WITH SYSTEM MANUFACTURER). ACCESS POINTS AND INSTALLATION TO BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.

CELLULAR ATTENUATION SYSTEM 1 TO CATER FOR THE 1 IN 100 YEAR EVENT +40% FOR CLIMATIC CHANGE 1600.0m³ x 0.70m DEEP TO PROVIDE 1064.0m³.
CL 154.988 (Min. - Varies)
IL 154.204 (Top of Unit)
IL 153.504 (Base of Unit)

CELLULAR ATTENUATION SYSTEM 2 TO CATER FOR THE 1 IN 100 YEAR EVENT +40% FOR CLIMATIC CHANGE 2350.0m³ x 1.00m DEEP TO PROVIDE 2232.50m³.
CL 154.995 (Min. - Varies)
IL 154.346 (Top of Unit)
IL 153.346 (Base of Unit)

FILLING STATION AREA TO BE DESIGNED IN ACCORDANCE WITH: APEA Guidance for Design, Construction, Modification, Maintenance and Decommissioning of Filling Stations. (Blue Book 5th Edition)

PROPOSED 1.8m DEEP ATTENUATION BASIN TO ACHIEVE A VOLUME OF 638.70m³ REQUIRED TO CATER FOR THE 1 IN 100 YEAR EVENT +40% FOR CLIMATIC CHANGE. SLOPE SIDES TO BE AT A GRADIENT OF 1 IN 3. ATTENUATION BASIN FINISH/VEGETATION TO BE ADVISED BY LANDSCAPER.
Top of Basin = 154.995
Base of Basin = 153.168
Water Level (1 IN 100YR + 40%CC) =
Water Level (1 IN 2YR) =

INLET HEADWALL 1 - ALTHON PRECAST HEADWALL WITH ANTI SCOUR PROTECTION TO EMBANKMENT.
IL: 153.240

OUTLET HEADWALL 2 - ALTHON PRECAST HEADWALL WITH ANTI SCOUR PROTECTION TO EMBANKMENT.
IL: 153.168

PROPOSED SPEL PURACEPTOR CLASS 1 FORECOURT SEPARATOR MODEL FP1C. ALLOW FOR A 250mm THK GRADE C28/35 CONCRETE BED AND SURROUND ON 450mm THK DIT TYPE 1 SUB-BASE TOGETHER WITH A SOLAR POWERED AUDIBLE AND VISUAL SEPARATOR ALARM SECURED TO A 7505Q x 150mm THK GRADE C28/35 CONCRETE BASE ON 300mm THK DIT TYPE 1 SUB-BASE. EXACT LOCATION OF SEPARATOR ALARM AND SEPARATOR VENT PIPE TO BE AGREED. INSTALLATION TO BE IN ACCORDANCE WITH THE MANUFACTURES REQUIREMENTS.
CL 154.883

PRIVATE PACKAGE PUMP STATION.
CL 156.555
INCOMING IL 148.692
REQUIRED TO PUMP A PEAK FLOW RATE OF 1L/s ON A DUTY STANDBY ARRANGEMENT.

SPEL VEHICLE WASH CLASS 2, FULL RETENTION, PETROL/OIL SEPARATOR MODEL WDS200/2000.

CELLULAR ATTENUATION SYSTEM 3 TO CATER FOR THE 1 IN 100 YEAR EVENT +40% FOR CLIMATIC CHANGE 280.0m³ x 1.50m DEEP TO PROVIDE 339.0m³.
CL 155.183 (Min. - Varies)
IL 154.000 (Top of Unit)
IL 152.500 (Base of Unit)

CELLULAR ATTENUATION SYSTEM 5 TO CATER FOR THE 1 IN 100 YEAR EVENT +40% FOR CLIMATIC CHANGE 160.0m³ x 1.00m DEEP TO PROVIDE 152.0m³.
CL 155.500 (Min. - Varies)
IL 153.292 (Top of Unit)
IL 152.292 (Base of Unit)

FFL 155.945
FFL 157.920

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4. ALL LEVELS ARE IN METRES UNO & TO OS DATUM.
5. THE WORKS SHALL BE IN ACCORDANCE WITH THE NATIONAL BUILDING SPECIFICATION.
6. THE LOCATION LINE & LEVEL OF ALL KNOWN EXISTING DRAINAGE PIPEWORK INDICATED ON THE DRAWINGS ARE APPROXIMATE AND FOR GUIDANCE PURPOSES ONLY.
7. CONNECTION TO THE EXISTING PUBLIC SEWERS WILL BE SUBJECT TO THE RELEVANT APPROVALS FROM THE STATUTORY UNDERTAKER.
8. IT IS THE CONTRACTORS RESPONSIBILITY TO DETERMINE THEIR EXACT LINE AND LEVEL, BY WAY OF HAND EXCAVATED TRIAL PITS, PRIOR TO THE COMMENCEMENT OF ANY EXCAVATION WORKS ON SITE. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS AND MAINTAIN THE STRUCTURAL INTEGRITY OF ALL ABOVE AND BELOW GROUND SERVICE INSTALLATIONS.
9. THE CONTRACTOR SHALL IMPLEMENT AND MAINTAIN THROUGHOUT THE DURATION OF THE CONTRACT A FULL TRAFFIC MANAGEMENT SYSTEM TO ENSURE SAFE PASSAGE OF VEHICLES/PEDESTRIANS IN THE VICINITY OF THE WORKS. ALL TRAFFIC SIGNS, SIGNALS, BARRIERS ETC. SHALL BE IN ACCORDANCE WITH CHAPTER 8 OF THE TRAFFIC SIGNS MANUAL.
10. THE CONTRACTOR SHALL MAKE ADEQUATE PROVISION FOR DEALING WITH AND DISPOSING OF GROUND/SURFACE WATER ENCOUNTERED DURING EXCAVATIONS
11. ALL SOFT / HARD PAVED AREAS AFFECTED BY THE WORKS SHALL BE FULLY REINSTATED FOLLOWING THE INSTALLATION OF ALL DRAINAGE WORKS. ALL SURFACE MARKINGS AFFECTED BY THE WORKS SHALL BE FULLY REINSTATED.
12. ALL SURPLUS EXCAVATED MATERIAL SHALL BE DISPOSED IN A DESIGNATED AREA ON SITE.
13. UPON COMPLETION OF THE WORKS THE CONTRACTOR SHALL PROVIDE AS BUILT SETTING OUT CO-ORDINATE AND LEVEL INFORMATION ALONG WITH A FULL CCTV REPORT AND LAYOUT.
14. PIPEWORK WITH LESS THAN 750mm OF COVER IN TRAFFICKED AREAS TO BE CONCRETE ENCASED. (BEDDING CLASS 2)
15. PIPEWORK WITH MORE THAN 750mm OF COVER TO HAVE CLASS S GRANULAR BED AND SURROUND.
16. POLYPROPYLENE INSPECTION CHAMBERS OF 450Ø +1.2m DEEP TO BE FITTED WITH A REDUCED ACCESS FITTING.
17. SOIL STACKS - WHERE SOIL STACKS SERVE MULTIPLE STOREYS THE STACK REST BEND IS TO BE MINIMUM 750mm BELOW THE LOWEST BRANCH CONNECTION. WHERE SEPARATE STACKS ARE PROVIDED FOR GROUND FLOOR, REST BENDS MAY BE 450mm MINIMUM BELOW THE LOWEST CONNECTION.
18. SVP CONNECTIONS TO BE 100mm DIA UNO.
19. ALL FO AND RWP LOCATIONS TO BE TO BE COMPLETE WITH A LOW LEVEL ACCESS PLATE FOR RODDING.
20. WHERE PROPOSED DRAINAGE PIPEWORK RUNS ARE IN CLOSE PROXIMITY TO THE NEW FOUNDATIONS, THE CONTRACTOR SHALL ALLOW FOR EXTENDING THE DEPTH OF NEW FOUNDATIONS IN LEAN MIX CONCRETE DOWN TO THE PROPOSED PIPE BEDDING LEVEL.
21. THE HYDRAULIC DESIGN HAS BEEN CARRIED OUT IN ACCORDANCE WITH 'CIRIA REPORT C753 THE SuDS MANUAL' AND THE HYDRAULIC DESIGN OF PIPELINES AND OTHER CONDUITS HAS BEEN CARRIED OUT IN ACCORDANCE WITH 'BS EN 16933-2'.

Legend:

- REDLINE BOUNDARY.
- Ex. FOUL PUBLIC SEWER.
- Ex. SURFACE WATER HIGHWAY SEWER.
- Ex. SURFACE WATER HIGHWAY SEWER TO BE DIVERTED AND GRUBBED UP.
- DIVERTED ROUTE OF Ex. SURFACE WATER HIGHWAY SEWER & ASSOCIATED MANHOLES.
- PROPOSED SURFACE WATER DRAIN. (TYPICALLY 100Ø FROM RWP AND 150Ø FROM RG/SU UNO)
- PROPOSED SURFACE WATER INSPECTION CHAMBER / MANHOLE.
- PROPOSED LINEAR DRAINAGE CHANNEL.
- RG PROPOSED TRAPPED ROAD GULLY.
- SRWP PROPOSED SIPHONIC RAINWATER PIPE.
- RWP PROPOSED RAINWATER DOWN PIPE.
- PROPOSED PERMEABLE SURFACING TO PARKING BAYS - DIT TYPE 3 OR TYPE 1x TANKED WITH AN IMPERMEABLE MEMBRANE WITH UNDER FILTER DRAIN.
- PROPOSED SURFACE WATER CELLULAR ATTENUATION SYSTEM.
- PROPOSED FOUL DRAIN (100Ø UNO).
- PROPOSED FOUL RISING MAIN.
- FO PROPOSED FOUL INSPECTION CHAMBER / MANHOLE.
- PROPOSED FOUL OUTLET.

NOTE:
- ALL EXISTING DRAINAGE TBC.
- ALL SURFACE WATER CHAMBERS ARE TO BE PCC WITH D400 COVERS UNO.
- ALL FOUL CHAMBERS ARE TO BE MIN 450Ø HD PPIC WITH D400 COVERS (C250 IN SOFT LANDSCAPED AREAS) UNO.
- ALL DRAINAGE WITH LESS THAN 750 COVER IS TO BE ENCASED IN MIN 150THK C32/40 CONCRETE.
- ALL GATIC UNITS TO HAVE ACCESS BOX AT HEAD OF RUNS AND SILT BOX AT OUTLET LOCATIONS SUBJECT TO DESIGN BY ALUMASC WMS.
- VENT PIPES FROM INTERCEPTORS TO BE SITED IN SOFT LANDSCAPED AREAS.

TYPICAL D400 (min 600 x 600) SIPHONIC BREAK CHAMBER MANHOLE COVER.

FOR CONTINUATION REFER TO DRG No: T_24_2757_55_02

Rev	Date	By	Description	Chk	App
P4	13.05.2025	CCF	Client name updated	CCF	PJB
P3	08.05.2025	CCF	Updated to suit latest site plan	CCF	PJB
P2	08.04.2025	CCF	Updated to suit latest site plan	CCF	PJB
P1	02.05.2024	CCF	Preliminary Issue	JH	PJB

Status:
PRELIMINARY

TIER CONSULT GROUP.
Unit 5 Office Village,
Sandpiper Court,
Chester Business Park,
Chester,
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T: 01244 684 900

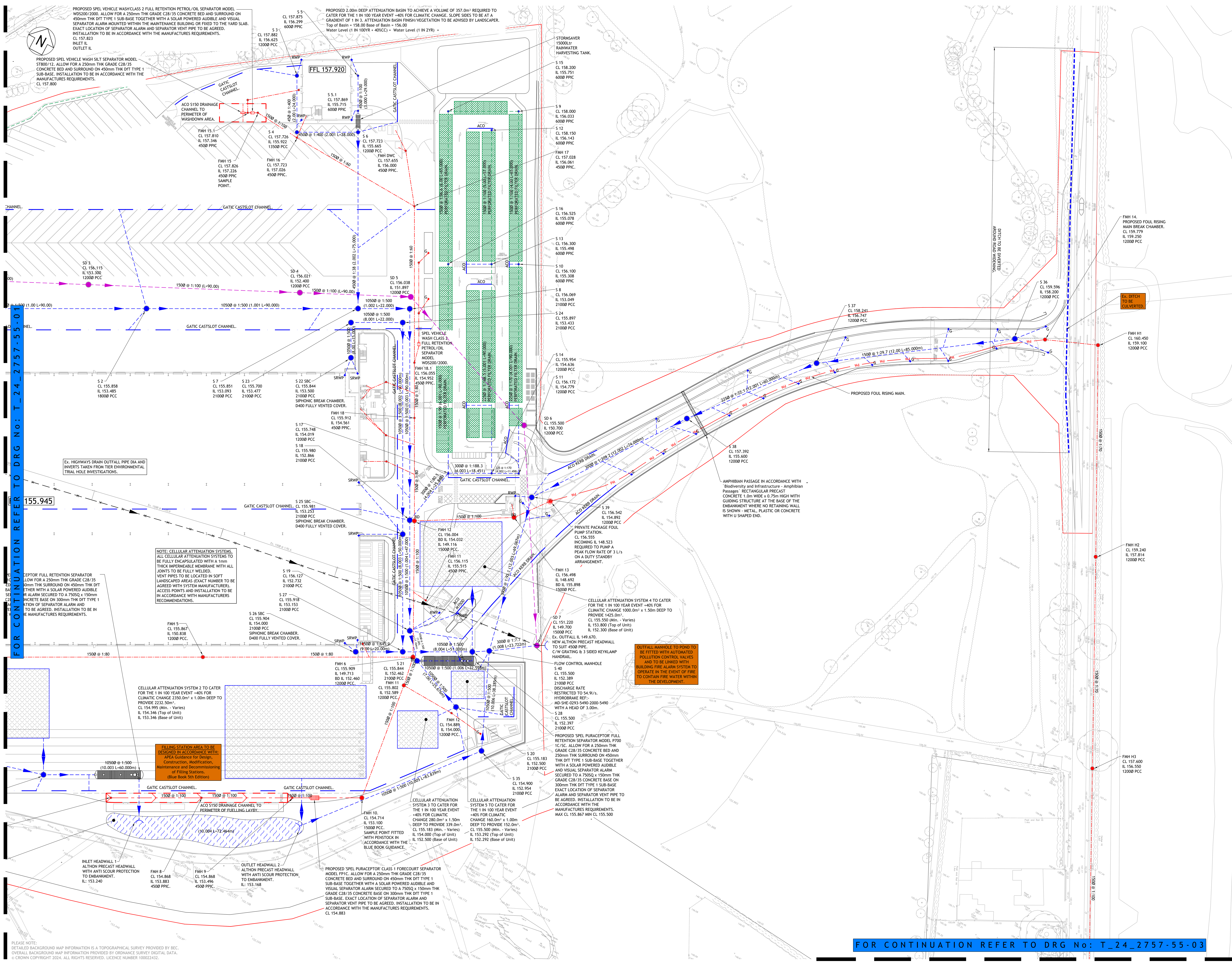
Client:
Barberry Bardon Ltd

Project Title:
PROJECT EXCELLENCE.

Drawing Title:
PROPOSED DRAINAGE LAYOUT.
SHEET 1.

Drawing Scale:	Drawn By:	Drawing Start Date:
1:500 @ A0	C.C.FITTON	25.01.2024

TIER Project Number: T_24_2757
Drawing No: T_24_2757-55-01
Revision: P4



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OVERALL BACKGROUND MAP INFORMATION PROVIDED BY ORDNANCE SURVEY DIGITAL DATA.

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13. UPON COMPLETION OF THE WORKS THE CONTRACTOR SHALL PROVIDE AS BUILT SETTING OUT CO-ORDINATE AND LEVEL INFORMATION ALONG WITH A FULL CCTV REPORT AND LAYOUT.
14. PIPEWORK WITH LESS THAN 750mm OF COVER IN TRAFFICKED AREAS TO BE CONCRETE ENCASED. (BEDDING CLASS Z)
15. PIPEWORK WITH MORE THAN 750mm OF COVER TO HAVE CLASS S GRANULAR BED AND SURROUND.
16. POLYPROPYLENE INSPECTION CHAMBERS OF 450Ø >1.2m DEEP TO BE FITTED WITH A REDUCED ACCESS FITTING.
17. SOIL STACKS - WHERE SOIL STACKS SERVE MULTIPLE STOREYS THE STACK REST BEND IS TO BE MINIMUM 750mm BELOW THE LOWEST BRANCH CONNECTION. WHERE SEPARATE STACKS ARE PROVIDED FOR GROUND FLOOR, REST BENDS MAY BE 450mm MINIMUM BELOW THE LOWEST CONNECTION.
18. SVP CONNECTIONS TO BE 100mm DIA UNO.
19. ALL FO AND RWP LOCATIONS TO BE TO BE COMPLETE WITH A LOW LEVEL ACCESS PLATE FOR RODDING.
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Legend:

- REDLINE BOUNDARY.
- Ex. FOUL PUBLIC SEWER.
- Ex. SURFACE WATER HIGHWAY SEWER.
- Ex. SURFACE WATER HIGHWAY SEWER TO BE DIVERTED AND GRUBBED UP.
- DIVERTED ROUTE OF Ex. SURFACE WATER HIGHWAY SEWER & ASSOCIATED MANHOLES.
- PROPOSED SURFACE WATER DRAIN. (TYPICALLY 100Ø FROM RWP AND 150Ø FROM RG/SU UNO)
- PROPOSED SURFACE WATER INSPECTION CHAMBER / MANHOLE.
- PROPOSED LINEAR DRAINAGE CHANNEL.
- RG — PROPOSED TRAPPED ROAD GULLY.
- SRWP — PROPOSED SIPHONIC RAINWATER PIPE.
- RWP — PROPOSED RAINWATER DOWN PIPE.
- PROPOSED PERMEABLE SURFACING TO PARKING BAYS - DfT TYPE 3 OR TYPE 1x TANKED WITH AN IMPERMEABLE MEMBRANE WITH UNDER FILTER DRAIN.
- PROPOSED SURFACE WATER CELLULAR ATTENUATION SYSTEM.
- PROPOSED FOUL DRAIN (100Ø UNO).
- PM — PROPOSED FOUL RISING MAIN.
- PROPOSED FOUL INSPECTION CHAMBER / MANHOLE.
- FO — PROPOSED FOUL OUTLET.

NOTE:

- ALL EXISTING DRAINAGE TBC. ALL SURFACE WATER CHAMBERS ARE TO BE PCC WITH D400 COVERS UNO.
- ALL FOUL CHAMBERS ARE TO BE MIN 450Ø HD PPIC WITH D400 COVERS (C250 IN SOFT LANDSCAPED AREAS) UNO.
- ALL DRAINAGE WITH LESS THAN 750 COVER IS TO BE ENCASED IN MIN 150THK C32/40 CONCRETE.
- ALL GATIC UNITS TO HAVE ACCESS BOX AT HEAD OF RUNS AND SILT BOX AT OUTLET LOCATIONS SUBJECT TO DESIGN BY ALUMASC WMS.
- VENT PIPES FROM INTERCEPTORS TO BE SITED IN SOFT LANDSCAPED AREAS.

TYPICAL D400 (min 600 x 600) SIPHONIC BREAK CHAMBER MANHOLE COVER.

Rev	Date	By	Description	Chk	App
P4	13.05.2025	CCF	Client name updated	CCF	PJB
P3	08.05.2025	CCF	Updated to suit latest site plan	CCF	PJB
P2	08.04.2025	CCF	Updated to suit latest site plan	CCF	PJB
P1	02.05.2024	CCF	Preliminary Issue	JH	PJB

Status: PRELIMINARY

TIER CONSULT GROUP.
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Sandpiper Court,
Chester Business Park,
Chester,
CH4 9QZ
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Client: Barberry Bardon Ltd

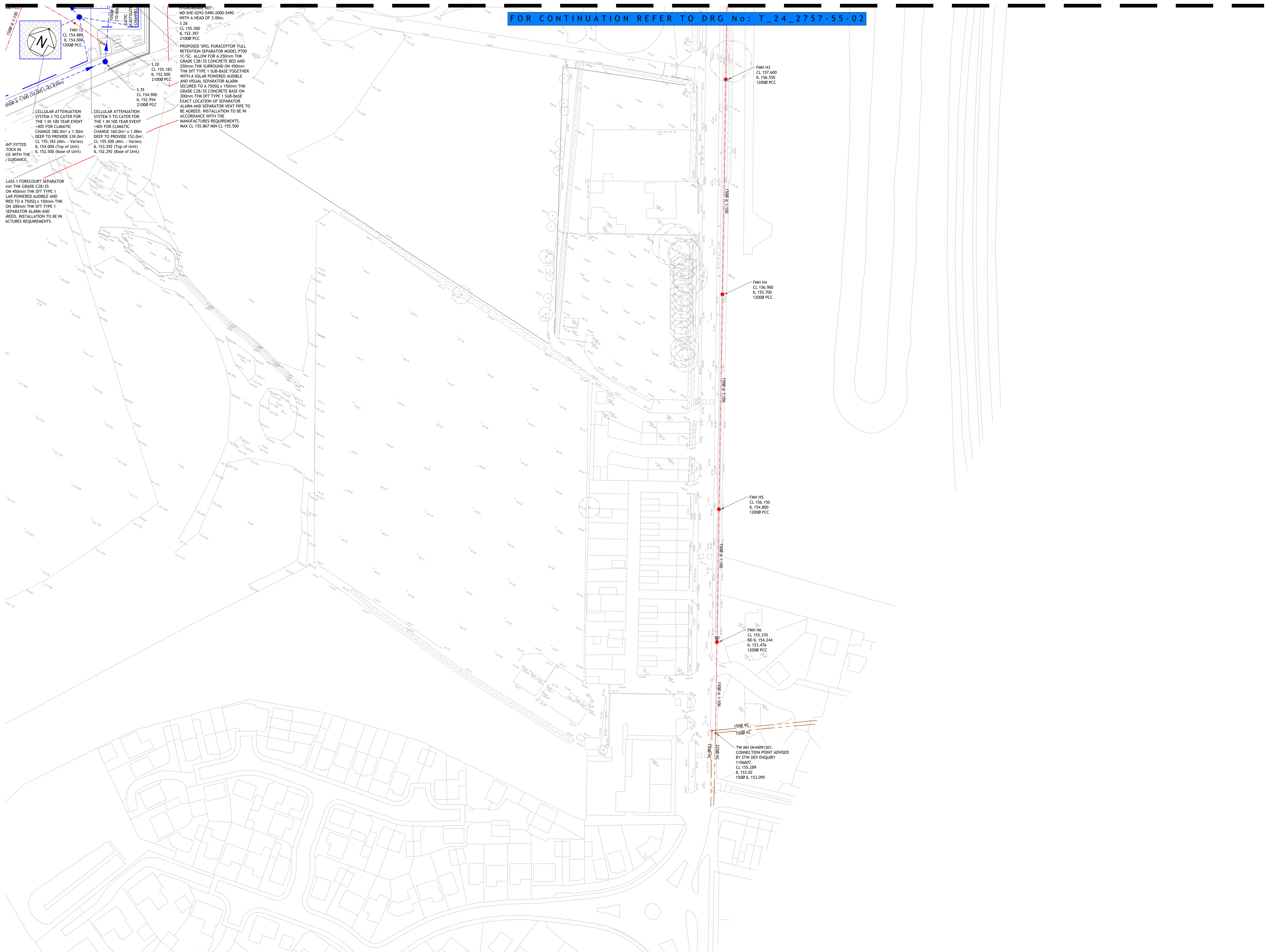
Project Title: PROJECT EXCELLENCE.

Drawing Title: PROPOSED DRAINAGE LAYOUT. SHEET 2.

Drawing Scale: 1:500 @ A0 | Drawn By: C.C.FITTON | Drawing Start Date: 25.01.2024

TIER Project Number: T_24_2757

Drawing No: T_24_2757-55-02 | Revision: P4


FOR CONTINUATION REFER TO DRG No: T_24_2757-55-02
FMH 12
CL 154.889
IL 154.000
1200Ø PCC.
1500 @ 1:100
1050Ø @ 1:500 (10.005 L=83.839m)
GATIC CASTSLOT CHANNEL
HYDROBRAKE REF:-
MD-SHE-0293-5490-2000-5490
WITH A HEAD OF 3.00m.
S 28
CL 155.500
IL 152.397
2100Ø PCC
S 20
CL 155.183
IL 152.500
2100Ø PCC
S 35
CL 154.900
IL 152.954
2100Ø PCC
PROPOSED 'SPEL PURACEPTOR' FULL RETENTION SEPARATOR MODEL P700 1C/SC. ALLOW FOR A 250mm THK GRADE C28/35 CONCRETE BED AND 250mm THK SURROUND ON 450mm THK DfT TYPE 1 SUB-BASE TOGETHER WITH A SOLAR POWERED AUDIBLE AND VISUAL SEPARATOR ALARM SECURED TO A 750SQ x 150mm THK GRADE C28/35 CONCRETE BASE ON 300mm THK DfT TYPE 1 SUB-BASE EXACT LOCATION OF SEPARATOR ALARM AND SEPARATOR VENT PIPE TO BE AGREED. INSTALLATION TO BE IN ACCORDANCE WITH THE MANUFACTURES REQUIREMENTS.
MAX CL 155.867 MIN CL 155.500
CELLULAR ATTENUATION SYSTEM 3 TO CATER FOR THE 1 IN 100 YEAR EVENT +40% FOR CLIMATIC CHANGE 280.0m² x 1.50m DEEP TO PROVIDE 339.0m³.
CL 155.183 (Min. - Varies)
IL 154.000 (Top of Unit)
IL 152.500 (Base of Unit)
CELLULAR ATTENUATION SYSTEM 5 TO CATER FOR THE 1 IN 100 YEAR EVENT +40% FOR CLIMATIC CHANGE 160.0m² x 1.00m DEEP TO PROVIDE 152.0m³.
CL 155.500 (Min. - Varies)
IL 153.292 (Top of Unit)
IL 152.292 (Base of Unit)
FMH H3
CL 157.600
IL 156.550
1200Ø PCC
FMH H4
CL 156.900
IL 155.700
1200Ø PCC
FMH H5
CL 156.150
IL 154.800
1200Ø PCC
150Ø @ 1:100
FMH H6
CL 155.370
BD IL 154.244
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BD
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225Ø VC
TW MH SK44091301.
CONNECTION POINT ADVISED BY STW DEV ENQUIRY 1106607.
CL 155.289
IL 153.02
150Ø IL 153.095

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9. THE CONTRACTOR SHALL IMPLEMENT AND MAINTAIN THROUGHOUT THE DURATION OF THE CONTRACT A FULL TRAFFIC MANAGEMENT SYSTEM TO ENSURE SAFE PASSAGE OF VEHICLES/PEDESTRIANS IN THE VICINITY OF THE WORKS. ALL TRAFFIC SIGNS, SIGNALS, BARRIERS ETC. SHALL BE IN ACCORDANCE WITH CHAPTER 8 OF THE TRAFFIC SIGNS MANUAL.
10. THE CONTRACTOR SHALL MAKE ADEQUATE PROVISION FOR DEALING WITH AND DISPOSING OF GROUND/SURFACE WATER ENCOUNTERED DURING EXCAVATIONS
11. ALL SOFT / HARD PAVED AREAS AFFECTED BY THE WORKS SHALL BE FULLY REINSTATED FOLLOWING THE INSTALLATION OF ALL DRAINAGE WORKS. ALL SURFACE MARKINGS AFFECTED BY THE WORKS SHALL BE FULLY REINSTATED.
12. ALL SURPLUS EXCAVATED MATERIAL SHALL BE DISPOSED IN A DESIGNATED AREA ON SITE.
13. UPON COMPLETION OF THE WORKS THE CONTRACTOR SHALL PROVIDE AS BUILT SETTING OUT CO-ORDINATE AND LEVEL INFORMATION ALONG WITH A FULL CCTV REPORT AND LAYOUT.
14. PIPEWORK WITH LESS THAN 750mm OF COVER IN TRAFFICKED AREAS TO BE CONCRETE ENCASED. (BEDDING CLASS Z)
15. PIPEWORK WITH MORE THAN 750mm OF COVER TO HAVE CLASS S GRANULAR BED AND SURROUND.
16. POLYPROPYLENE INSPECTION CHAMBERS OF 450Ø >1.2m DEEP TO BE FITTED WITH A REDUCED ACCESS FITTING.
17. SOIL STACKS - WHERE SOIL STACKS SERVE MULTIPLE STOREYS THE STACK REST BEND IS TO BE MINIMUM 750mm BELOW THE LOWEST BRANCH CONNECTION. WHERE SEPARATE STACKS ARE PROVIDED FOR GROUND FLOOR, REST BENDS MAY BE 450mm MINIMUM BELOW THE LOWEST CONNECTION.
18. SVP CONNECTIONS TO BE 100mm DIA UNO.
19. ALL FO AND RWP LOCATIONS TO BE TO BE COMPLETE WITH A LOW LEVEL ACCESS PLATE FOR RODDING.
20. WHERE PROPOSED DRAINAGE PIPEWORK RUNS ARE IN CLOSE PROXIMITY TO THE NEW FOUNDATIONS, THE CONTRACTOR SHALL ALLOW FOR EXTENDING THE DEPTH OF NEW FOUNDATIONS IN LEAN MIX CONCRETE DOWN TO THE PROPOSED PIPE BEDDING LEVEL.
21. THE HYDRAULIC DESIGN HAS BEEN CARRIED OUT IN ACCORDANCE WITH 'CIRIA REPORT C753 THE SuDS MANUAL' AND THE HYDRAULIC DESIGN OF PIPELINES AND OTHER CONDUITS HAS BEEN CARRIED OUT IN ACCORDANCE WITH 'BS EN 16933-2'.

Legend:

- REDLINE BOUNDARY.
- Ex. FOUL PUBLIC SEWER.
- Ex. SURFACE WATER HIGHWAY SEWER.
- Ex. SURFACE WATER HIGHWAY SEWER TO BE DIVERTED AND GRUBBED UP.
- DIVERTED ROUTE OF Ex. SURFACE WATER HIGHWAY SEWER & ASSOCIATED MANHOLES.
- PROPOSED SURFACE WATER DRAIN. (TYPICALLY 100Ø FROM RWP AND 150Ø FROM RG/SU UNO)
- PROPOSED SURFACE WATER INSPECTION CHAMBER / MANHOLE.
- PROPOSED LINEAR DRAINAGE CHANNEL.
- RG — PROPOSED TRAPPED ROAD GULLY.
- SRWP — PROPOSED SIPHONIC RAINWATER PIPE.
- RWP — PROPOSED RAINWATER DOWN PIPE.
- PROPOSED PERMEABLE SURFACING TO PARKING BAYS - DfT TYPE 3 OR TYPE 1x TANKED WITH AN IMPERMEABLE MEMBRANE WITH UNDER FILTER DRAIN.
- PROPOSED SURFACE WATER CELLULAR ATTENUATION SYSTEM.
- PROPOSED FOUL DRAIN (100Ø UNO).
- PM — PROPOSED FOUL RISING MAIN.
- PROPOSED FOUL INSPECTION CHAMBER / MANHOLE.
- FO — PROPOSED FOUL OUTLET.

NOTE:
- ALL EXISTING DRAINAGE TBC. ALL SURFACE WATER CHAMBERS ARE TO BE PCC WITH D400 COVERS UNO.
- ALL FOUL CHAMBERS ARE TO BE MIN 450Ø HD PPIC WITH D400 COVERS (C250 IN SOFT LANDSCAPED AREAS) UNO.
- ALL DRAINAGE WITH LESS THAN 750 COVER IS TO BE ENCASED IN MIN 150THK C32/40 CONCRETE.
- ALL GATIC UNITS TO HAVE ACCESS BOX AT HEAD OF RUNS AND SILT BOX AT OUTLET LOCATIONS SUBJECT TO DESIGN BY ALUMASC WMS.
- VENT PIPES FROM INTERCEPTORS TO BE SITED IN SOFT LANDSCAPED AREAS.

TYPICAL D400 (min 600 x 600) SIPHONIC BREAK CHAMBER MANHOLE COVER.

Rev	Date	By	Description	Chk	App
P4	13.05.2025	CCF	Client name updated	CCF	PJB
P3	08.05.2025	CCF	Updated to suit latest site plan	CCF	PJB
P2	08.04.2025	CCF	Updated to suit latest site plan	CCF	PJB
P1	02.05.2024	CCF	Preliminary Issue	JH	PJB

Status
PRELIMINARY

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Client:
Barberry Bardon Ltd

Project Title:
PROJECT EXCELLENCE.

Drawing Title:
PROPOSED DRAINAGE LAYOUT.
SHEET 3.

Drawing Scale: 1:500 @ A0
Drawn By: C.C.FITTON
Drawing Start Date: 25.01.2024
TIER Project Number: T_24_2757
Drawing No: T_24_2757-55-03
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