PLANNING

General Notes

1. DO NOT SCALE.
2. This drawing is to be read in conjunction with all other relevant drawings and details.
3. Should there be any conflict between the details indicated on this drawing and those on other drawings the Engineer should be informed PRIOR to construction on site.
4. Until technical approval has been obtained from the relevant Authority, it should be understood that all drawings issued are Preliminary and NOT for construction. Should the contractor procure site work prior to such approval being given it is entirely at his own risk.
5. Sketch proposals are for illustrative purposes only & as such are subject to detailed site investigation including ground conditions / contaminants, drainage, design & planning/density negotiations.
6. All dimensions are in millimetres unless otherwise stated.

NOTES

1. This drawing is PRELIMINARY only and is not to be used for Construction.
2. This drawing to be read in conjunction with all other relevant Engineers and Architect's details.
3. All work is to be carried out in accordance with the current British Standards, codes of practice, and building regulations.
4. For all surface treatments and finishes refer to the Architect's details and specifications.
5. Based on Topographical Survey drawing reference S3409/01 undertaken by NJC Surveys dated April 2022.

LEGEND

- Development Boundary
- S104 Surface Water Sewer
- Private S50 Foul Water Drain
- Private S50 Foul Water Rising Main
- Flow Control Chamber (Discharge Rate as noted)
- Sewer Easement - 2.5m from pipe centre
- Foul Pumping Station Easement - 5.0m from trees or boundaries, 7.0m from dwellings
- Private Lateral Chamber Ø1200
- Private Surface Water Filter Drain
- SuDS Detention Basin
  - ◊ Vegetated (1:3 slopes)
  - ◊ Sediment Forebay with Permeable Bund
  - ◊ Low Flow Channels
  - ◊ Permanent Pond (450mm deep with 1:4 slopes)

NOTES

1. This drawing is PRELIMINARY only and is not to be used for Construction.
2. All work is to be carried out in accordance with the current British Standards, codes of practice, and building regulations.
3. All pipes connecting to adopted manholes up to and including 300mm dia. to be Wavin Ultrarib or similar approved.
4. All pipes connecting to adopted manholes greater than 300mm dia. to be Concrete or approved U-PVC.
5. All pipework entering and exiting manholes to be connected with pipe soffits level.
6. All works are to be to the satisfaction of the Engineer, Building Officer, Severn Trent Water, local authority Highway & Flood Planning Officer.
7. All insitu services and drainage networks are to be located and protected as necessary by the Contractor prior to the commencement of the works.
8. For all surface treatments and finishes refer to the Architect's details and specifications.

Drainage Strategy Summary

1. Drainage Principles
   - 1.1. Single SW drainage system for Private areas and Adoptable highway. Network to be adopted by STW and LCC.
   - 1.2. Gravity sewer with connection and outfall to existing watercourse .
2. Existing Site Conditions
   - 2.1. Greenfield development
3. SW Outfall
   - 3.1. Connection to unnamed watercourse to western site boundary.
4. Infiltration
   - 4.1. Infiltration is not feasible on site, due to underlying geology.
5. SW Drainage Design
   - 5.1. A system of gravity sewers is proposed to convey surface water catchment to unnamed watercourse to western site boundary.
   - 5.2. The SW discharge is to be restricted to 4.34l/s/ha, and attenuated via an online SuDS detention basin.
   - 5.3. Filter drains are to be installed on the majority of shared drives.
   - 5.4. The SuDS detention basin is to include features to control the pollutant risk, including, on line basin, sediment forebay, reed beds and bio-retention areas.
6. FW Drainage Design
   - 6.1. Private gravity outfall at within Flanders Close, and a Private Foul Water Pumping Station at the western site boundary.
   - 6.2. All foul drainage on site tO be private owned.
   - 6.3. Locations for discharge agreed with STW.
7. Maintenance
   - 7.1. As per SuDS manual guidance, as shown in table.
8. Pollution Control
   - 8.1. Simple index method assessment as per SuDS Manual C753.
   - 8.2. Total mitigation indices exceed pollution hazard indices.
   - 8.3. Proposed SW strategy adequately mitigate pollutant risk

Minimum pipe cover to soffits to be per the Sewer Sector Guidance Appendix C B5.1.7:
◊ 0.35m - domestic gardens and pathways without vehicle access
◊ 0.5m - domestic driveways, parking areas and yards for vehicles <7.5T gross weight
◊ 0.9m - domestic driveways, parking areas, shared spaces with limited access for vehicles >7.5T gross weight
◊ 0.9m - agricultural land and public open space
◊ 1.2m - highway and parking areas with unrestricted access for vehicles >7.5T gross weight
Any pipes with cover to soffit less than those stated above are to have a Class Z concrete pipe bed & surround.

Internal foul drain pipe minimum gradients:
◊ 1:80 from SVP & WC to IC
◊ 1:40 from Basin & Sink to IC
Refer to Architect's/M&E drawings for pipe sizes and setting-out information.

Maximum Drainage Access Chamber Depths:
◊ Ø315mm PPIC - 1.2m - Type 4 (BS EN 13598-2)
◊ Ø450mm PPIC - 3.0m - Type 3/4 (BS EN 13598-2)
◊ Ø600mm PPIC - 3.0m - Type 3 (BS EN 13598-2)
◊ Ø1200mm Concrete - 6.0m (with standard detail)

All drainage to be constructed in accordance with Sewer Sector Guidance and Building Regulations Part H.

A CCTV, trace and level survey of the as-built drainage to OS Datum and Grid is to be undertaken by the Contractor and provided to the Engineer for final approval.

Sewer details shown have been taken from Severn Trent Water sewer records. Contractor to validate drainage locations and levels prior to commencement of the works.

Construction Note:
It is essential that new drainage associated with the development is laid from the outfall(s) into the site. This is essential to avoid unforeseen obstructions along drainage route (such as unrecorded services). If the drainage is laid from the site out to the outfall, it can result in significant abortive works and costs for the Contractor to relay and overcome such obstructions.

Surface Water Network : Summary

Allowable Runoff	: 5.10l/s (4.34l/s/ha)
Impermeable Area	: 11,734m² or 1.173ha (7,976m² Road + 5,435m² Plots and Externals)
Impermeable Area inc 10% UC	: 13,411m² or 1.341ha

Note: 10% Urban Creep applied to all development areas within hydraulic model and does not include adoptable roads.

Note: Outfall discharge rate and location point taken from Rodgers Leask FRA 19409-RLL-20-XX-RP-C-001 dated November 2020.

Private Foul Packaged Pump Station

Private Pump Station
CL: 107.200
IL: 105.600

Sediment Forebay 1

Catchment Area (No UC):	0.584ha
Forebay Area:	71.3m²
Berm Height:	0.30m
Max Volume of Sediment:	21.4m³

Sediment Forebay 1 with Permeable Bund

Low Flow Channel

Permanent Pond
Plan Area: 118.2m²
Depth: 450mm
Side Slopes: 1 in 4

Flow Control
Discharge Rate: 5.1l/s
(up to 1 in 100yr +40%cc +10%urban creep storm event)

Headwall
New connection into existing watercourse subject to LLFA approval

Unnamed Watercourse

Sediment Forebay 2

Catchment Area (No UC):	0.757ha
Forebay Area:	75.7m²
Berm Height:	0.30m
Max Volume of Sediment:	22.7m³

Sediment Forebay 2 with Permeable Bund

Detention Basin

Catchment:	1.421ha (including 10% UC to private areas)
Volume: (to max WL):	1,518m³
Top of Bank:	106.286mAOD
Bed Level:	104.786mAOD
Max Water Level:	105.741mAOD
Side Slopes:	1 in 3

	Land Use	Total Suspended Solids	Metals	Hydrocarbons
Site Hazard Risk	Individual property driveways, residential car parks, low traffic roads (eg cul-de-sacs, homezones and general access roads) and non-residential car parking with infrequent change (eg schools, offices) i.e. <300 traffic movements/day	0.5	0.4	0.4
Mitigation indices of proposed SW strategy	Filter Strips	0.4	0.4	0.4
	Detention Basin	0.5	0.5	0.6
	Is Total Mitigation greater than Risk?	TRUE	TRUE	TRUE

SAFETY, HEALTH AND ENVIRONMENTAL HAZARD INFORMATION BOX

THE HAZARDS NOTED BELOW ARE IN ADDITION TO THE NORMAL HAZARDS AND RISKS FACED BY A COMPETENT CONTRACTOR WHEN DEALING WITH THE TYPES OF WORKS DETAILED ON THIS DRAWING.

CONSTRUCTION RISKS

LIVE DRAINAGE
LIVE SERVICES
LIVE HIGHWAY

MAINTENANCE / CLEANING RISKS

NONE RELEVANT TO THIS DRAWING.

DEMOLITION RISKS

NONE RELEVANT TO THIS DRAWING.

Issue	Description	Date	By	Chkd	Appd
P01	Planning Issue	29.09.25	JD	DS	DM

THE DAVEY CORPORATION
civil | structural | highways | flood risk

8 BROWNING ROAD
RUGBY CV21 4BT

01788 336353
www.daveycorp.com

Drawn: DM
Checked: JD
Date: September 2025
Scale: 1:500 @ A0
Status: Planning

Job: Burbage Field Farm, Bullfurlong Lane, Burbage

Title: Drainage Overview Sheet 2 of 2

Project No	Originator	Zone	Level	Type	Role	Drawing No	Revision
25080	TDC	XX	ZZ	DR	C	5221	P01