



KEY

FOUL **STORM**

- Existing Adopted Sewer
- Proposed adoptable sewer & MH
- Highway gully and 150mmØ connection
- Headwall
- Existing Foul drainage run to be abandoned, removed and trench back filled with suitable material.
- Proposed Catchpit manhole
- Proposed Control manhole

COMPLEX CONTROL
MANHOLE LIMITS FLOW
RATES TO GREENFIELD
RATES DEPENDING ON
THE STORM. SEE TABLE
BELOW

Storm (1:XX Year)	l/s/ha	Discharge l/s
LTS	2	6.40
1 in 2	3.9	12.47
1 in 30	10.15	32.49
1 in 100	14.1	45.10

TWO HYDROBRAKES

H1 REF: CTL-SHE-6300-0397-6300
DESIGN HEAD: 0.397m
DESIGN FLOW: 6.3l/s
OUTLET DIA: 150mm
INVERT LEVEL: 40.450m

H2 REF: CTL
SHE-0229-2600-0500-2600
DESIGN HEAD: 0.500m
DESIGN FLOW: 26l/s
OUTLET DIA: 300mm
INVERT LEVEL: 40.857m

WEIR
WIDTH: 1.5m
INVERT LEVEL: 41.550m

BASIN TO CONTAIN SEDIMENTATION BED AND REED BEDS AT OUTFALL LOCATIONS TO PROVIDE WATER TREATMENT

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DRAINAGE NOTES:

- Do not scale.
- This drawing is to be read in conjunction with and checked against all other drawings, Engineering details, Specification and any structural, Geotechnical or other specialist document provided.
- Site layout shown for context only, refer to other project drawings for details.
- All adoptable drainage works to be constructed as detailed in design and construction guidance or as stipulated in the water authorities addendum.
- All public sewers are to be the subject of a section 104 agreement of the water industry act 1991.
- Invert levels of existing manholes and sewers are to be checked on site before construction commences and results reported to engineers.
- The contractor is responsible for maintaining continuity of flow for all existing sewers within the site boundary and limit of works for the duration of the project.
- All drainage ironworks to comply with bs en124, and be stamped with bsi kitemark. covers to suit loading as below:
 - carriageways and roads - d400
 - driveways and verges - c250
 - footways and pedestrian areas - b125
 - gardens/landscaping - a15
- All sewer pipes, up to, and including 225mm are to be vitrified clay to BS EN252. All sewer pipes 300mm diameter and above to be concrete pipes to BS EN1916. Where agreed with adopting authority pipes up to and including 600mm diameter can be PVC-U to BS EN1401.
- All drainage shall be installed and tested strictly in accordance with the manufacturers printed instructions, bs en 752, bs en 1601, local water authority requirements and the building regulations.
- All bedding shall be class s unless noted otherwise.
- All trenches under existing and proposed public highways are to be backfilled with thoroughly compacted type 1 granular sub-base material.
- Drainage laid beneath roads and areas of vehicular access (car parking etc) with less than 1200mm of cover shall be encased in concrete bed and surround with associated movement joints. drainage laid beneath paths, footways and pedestrian areas with less than 900mm of cover shall be similarly treated.
- Chambers with outgoing pipes greater than 600mm diameter shall be fitted with guard bars, safety chains or other approved safety devices.
- The use of precast concrete products made with sulphate resisting cement is mandatory, unless a laboratory report proves such precautions are not necessary.
- All sewers to be abandoned must be surveyed to identify any lateral connections that are still live with any found to be reported to the engineer.
- All foul and storm water drains which are not to be adopted as public sewers shall be in accordance with document h of the building regulations, together with rhbc standards chapter 5.3 and bs8301.
- Where pipes pass through footings, retaining or screen walls, lintels to be provided over drains.
- Where inverts are less than 0.6m deep inspection chambers (min dia. 190mm) or access fittings (225 x 100mm) to be used, elsewhere proprietary plastic, brick or pcc to be used and sized in accordance with table 11 of document h of the building regulations (<0.6m to invert min dn300, >0.6m to invert min dn475).
- Where required 1m deep root barrier of an approved type to be installed vertically along the back edging kerb of all areas of footway/ demarcation to protect from both proposed and future plantation.
- Construction details subject to refinement through detailed design/technical approval process

ALL PIPE BEDDING TO BE CLASS 'S' GRANULAR SURROUND UNLESS NOTED OTHERWISE ON THE DRAWING

Manhole cover levels are derived from a 3D digital terrain model, final cover levels to suit finished surfaces onsite.

Manhole covers to be located wholly within one surface i.e grass or hard standing/road. Manhole covers are to be fully accessible to users.

Scale 1:500

Rev	Date	Description	Drawn	Checked
G	02.26	Updated drainage design	TC	JS
F	06.25	Hydrobrake details and basin volume added, Updated Title Block & Frame	SI	SI
E	02.25	Updated to suit latest layout & comments.	LC	DS
D	08.24	Updated Outfall information	TC	DS
C	08.24	Updated Layout	TC	EP
B	07.24	Updated Design	TC	EP
A	07.24	First Issue	LC	DS

Rev Date Description Drawn Checked

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Client

BELLWAY HOMES

Project

LAND NORTH OF ARBORFIELD ROAD, SHINFIELD

Title

FULL APPLICATION DRAINAGE LAYOUT SHEET 2

Status

Scale	Date	Drawn	Checked
1:500 @ A1	JUNE 2024	LC	DS

Drawing No: HD008-FA-502

Revision: G