

NOTES

GENERAL

This drawing is to be used in conjunction with all relevant drawings, specifications and details.

All dimensions are in millimetres and levels in metres unless noted otherwise.

Do not scale from this drawing.

DRAINAGE

Connection points supplied by Taylor Wimpey on drawing TPWY017_100/12.

All pipe lengths and gradients are based on centre of manhole to centre of manhole.

The exact position, level, size and use of existing sewers to be confirmed on site and reported to the Engineer prior to the commencement of works.

All pipes are to be laid with level soffit's or as indicated.

All private drainage works to accord with the requirements of building regulations 2000, Part H (drainage and waste disposal).

All pipes to be bedded and backfilled in accordance with Part H, diagram 10. Shallow pipes shall be protected in accordance with Part H, diagram 11.

Unless otherwise stated, all private drainage to be 100mm diameter. Gradients have been shown where there are pipe capacity issues, however minimum gradients are as below:
Surface water 100mm diameter pipes shall not be laid flatter than 1 in 100
Surface water 150mm diameter pipes shall not be laid flatter than 1 in 150
Foul water 100mm diameter pipes shall not be laid flatter than 1 in 40 unless there is a WC connected upstream at which it can be laid at 1 in 80
Foul water 150mm diameter pipes shall not be laid flatter than 1 in 150 providing there are minimum of 5 WC's connected.

Pipes which run adjacent to buildings shall be installed in strict accordance with part h, clauses 2.23 to 2.25 and diagram 8.

All private manholes and inspection chambers situated in areas subject to vehicular loading to have Class D400 covers and frames and those not subject to vehicular loading to have class B125 covers and frames all to BS EN 124

All drains near existing or proposed trees shall be constructed in accordance with the requirements of NHBC's practice note 3 'building near trees'.

Excavation of drain trenches must not be lower than the foundation of any nearby buildings. If the trench is within 1m of foundations, the trench needs to be filled with concrete up to the lowest level of the foundation. If the trench is further than 1m away from the foundations, the trench needs to be filled with concrete to a level below the lowest level for the building, equal to the distance from the building, less than 150mm.

Trapped road gullies to be used for all gullies designed in parking areas.

New RWP and Foul connection locations are as shown on the Architects drawings. Must have rodding access.

LINEAR DRAINAGE CHANNELS

The number and location of linear drainage channel outlets shown are indicative only and shall be confirmed by the linear drainage channel manufacturer together with any required in built falls within the channels and capacity in order to accommodate the areas being drained to each length of channel. The confirmed outlet points and areas drained to each pipe must be confirmed to the Engineer for the pipe designs to be checked prior to any works being carried out.

Sumps shall be provided at outlet locations.

Covers/gratings shall be D400 Brickslot.

CELLULAR STORAGE

The structural design of the cellular storage tanks shall be in accordance with 'Structural design of buried pipelines under various conditions of loading' BS EN 1295, 'Highways Agency Specification for Highway Works', and Sewers for Adoption, 6th Edition. The design of the cellular storage shall be undertaken by the specialist supplier who will take design responsibility.

JPP Consulting takes no responsibility for the design of the cellular storage, other than providing the required capacity. Full design responsibilities for all other aspects lies with the designer of the cellular storage. Prior to construction, JPP shall be provided with all construction drawings to allow the drawings to be co-ordinated. JPP Consulting will not approve the details.

The Cellular storage shall be designed to receive:
Distributed load = 50kN/m²
Concentrated load = 100kN
Dynamic factor = 2
Material factor = 1.5
unfactored in addition to the dead load of the ground.

The cellular storage shall be designed not to float. Groundwater levels are unknown.

For design of the cellular storage, reference shall be made to the ground investigation report where no other report is available.

The contractor shall provide to the designer of the cellular storage the type of construction plant likely to be used in the area of the cellular storage prior to construction.

It is essential that construction sediments are not allowed to enter the cellular storage system and the contractor shall provide adequate protection to the drainage network to prevent this.

Maintenance Schedule	Required Action	Recommended Frequency
Regular maintenance	Inspect and identify any areas that are not operating correctly. If required, take remedial action.	Monthly for 3 months, and then six monthly
	Debris removal from catchment surface (where may cause risks to performance).	Monthly
	Where rainfall infiltrates into blocks from above, check surface of filter for blockages by silt, algae or other matter. Remove and replace surface infiltration medium as necessary.	Monthly (and after large storms)
	Remove sediment from pre-treatment structures.	Annually, or as required.
Remedial actions	Repair/rehabilitation of inlets, outlet, overflows and vents.	As required
Monitoring	Inspect/check all inlets, outlets, vents and overflows to ensure that they are all in good condition and operating as designed.	Annually and after large storms

The designer of the cellular storage shall provide full details of how the cellular storage shall be maintained during the life time of the system.

Installation of the cellular storage shall be carried out by competent personnel only and strictly in accordance with manufactures requirements.

Reference shall be made to CIRIA C698, site hand book for the construction of SUDS, prior to construction.

The design of the cellular storage shall demonstrate compliance with Ciria C680, structural design of modular geocell and drainage tanks

The main contractor and the supplier/installer of the cellular storage shall ensure that the design and installation are co-ordinated with other site works to include, but not limited to, understanding what construction plant may traffic close to or over the cellular storage.

Rev C5	Manhole sizes updated	By CDG	Checked AAK	Date 18/07/2016
Rev C4	Foul drainage reconfigured. Internal SW drainage IL amended.	By AAK	Checked AAK	Date 22/06/2016
Rev C3	Drainage amended to suit Gully's added as shown clouded.	By DT	Checked AAK	Date 13/06/2016
Rev C2	Drainage amended following contractor comments	By MTL	Checked AAK	Date 07/06/2016

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Project Community Centre and Library
Moulton Parish Council
Sandy Hill Lane Moulton

Title External Works
Drainage

Scale at A1	1:200	Drawn by	MTL	Checked by	BSA	Date	November 2015
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