

Emsworth Primary School
Victoria Road, Emsworth.
PO10 7LX

Drainage Statement

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-	First Draft	10-10-16	JGO	SF	DR
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Emsworth Primary School Extensions - Drainage Statement

General

Emsworth Primary School is located in Victoria Road, Emsworth, Hampshire, PO10 7LX. The existing school was extended in 2013, but is proposed to be extended again due to pupil demand in the local area. The proposal is to build a new two classroom extension to provide additional teaching facilities. External landscaping areas will be adjusted to cater for this, and these measures include additional staff car parking and hard play areas to cater for increases in pupil and staff numbers. Some internal refurbishments will also be carried out.

The ground investigation undertaken by the previous extension project in June 2013 confirmed the underlying soils to comprise a shallow thickness of made ground, overlying clays and, in turn, sands of the River Terrace Deposits and the London Clay Formation deposits. It has been confirmed that soak aways are not suitable for this site due to an identified perched water table (water being found 700mm approximately below ground level), so these have not been pursued further in new proposals.

Flood Risk Assessment

Environment Agency flood maps indicate that the site is located within Flood Zone 1 where the lowest annual probability of flooding occurs, that being less than 1 in 1000 for any given year. As the site is in Flood Zone 1 and development area is less than 1 hectare no Flood Risk Assessment will be required to support the planning application.

Foul Water

Southern Water sewer records show the public foul water sewer currently located in Victoria Road. The school has an existing connection to this 225mm diameter public foul sewer. We do not envisage a new connection for the new extension.

The existing foul water drainage for the school runs internally as 100mm diameter pipe before changing diameter to 150mm south-west of the school building. A new 100mm diameter foul water connection is to be made to the existing foul water drainage system to serve the proposed extension. It is proposed to connect two additional sinks from the proposed extension, and as such the increase in foul water flow is deemed to be negligible. The existing system has capacity for the new connection.

Surface Water

All surface water on the site currently drains into the 200mm diameter public sewer in Victoria Road via a positive drainage system. The existing private surface water system has been investigated within the site from previous as-built surveys and records, and has been fully CCTV surveyed.

The new building extension does not increase the overall impermeable area locally as it will be constructed upon existing areas of hard standing. New hard surfaced landscape features, including the proposed car park area, are proposed to utilise porous surfacing materials. It should be noted that this is not intended to act as soak away however due to the nature of the ground conditions as previously mentioned. The build-up beneath the porous car park is proposed to provide additional tanked attenuation and storage which will mitigate overload effects on connection points to the existing surface water network. Water will therefore be held back until such time it can drain away through the gravity SW system.

The site's surface water will continue to discharge to the private surface water system using it's existing sewer connection. The proposed scheme will not increase the peak runoff discharge rates into the public surface water system since the overall impermeable area is not increased, and water is held back in the system until such time that it can drain without increasing peak discharge rates.

The proposal includes a shallow cellular storage system built onto key parts of the network to help attenuate surface water flow into the existing site drainage network. This is seen as a substantial betterment to the existing network in terms of site drainage resilience.

Surcharging within the new extension system will be contained for a storm event of 1:30 years plus climate change allowances. Surface water flooding effects for more extensive storms are proposed to be contained in non-critical areas on the site away from operationally critical buildings and infrastructure, and within site boundaries to prevent flooding to bordering third party properties.

APPENDICES

- PROPOSED DRAINAGE STRATEGY DRAWING (EC-P11226-001- A)
- EXTERNAL WORKS-SITE PLAN (FOR PLANNING)