

Executive Summary

Site Location and Proposed Development	<i>The Pobl Group are proposing the residential development of the former Hillside Home located on Gaer Street, Newport.</i>
Site History	<i>The site was undeveloped until the existing care home was constructed in the 1960's.</i>
Geology	<i>The site is underlain by the rocks of the St Maughans Formation. No superficial deposits are shown to overlie the solid geology.</i>
Mining	<i>The site is not at risk from past shallow mining.</i>
Ground Conditions	<i>The ground conditions consist of made ground consisting of soft gravelly clays overlying weathered St Maughans Formation.</i>
Laboratory Chemical Testing	<i>All substances tested for were found at concentrations below their respective residential guidelines.</i>
Proposed Remediation	<i>No remediation required.</i>
Foundation Solution	<i>For the proposed development, it is recommended that a combination of mass concrete strip and trench fill foundations founded within the underlying St Maughans Formation.</i> <i>The depth to the in-situ founding horizon is likely to vary between 1m and 2.5m below the existing ground levels.</i> <i>For the above mass concrete strip and trench fill foundation, an allowable bearing capacity of 100 kPa may be used for design purposes where settlements will not exceed 25mm.</i> <i>In order to protect the formations from the effect of frost heave and/or thermal shrinkage the minimum foundation depth should be 900mm.</i> <i>Floor slabs should be designed as suspended.</i>