Ingleton Wood

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| | **Note: This Tender addendum is to be priced in conjunction with the main specification. Note that both piled foundations and traditional foundation designs are to be priced, the piled foundation is to be taken forward to the general summary and cost saving for traditional foundation is to be offered / noted.** | | |
| **3.3** | **SUB STRUCTURE- BUILDING WORKS** | | |
| 3.3.1 | Remove existing vegetation and / or paving across the areas of the site of the new extension. Backfill voids. | | |
| 3.3.2 | Prepare the site area for reduction of levels and construction | | |
| 3.3.3 | Excavate as necessary and reduce levels over site of new extension, break out existing items and set aside excavated material in spoil heaps and on site for future re-use if required. | | |
| 3.3.4 | Allow to test for contaminants, provide results and cart away all redundant spoil upon completion. | | |
| 3.3.5 | Refer to site investigation documents contained within the appendix. Appropriate H&S guidance is to be followed as outlined within the Geo-Environmental Assessment to limit exposure to shallow soils during groundworks stage and to ensure safe development. | | |
| 3.3.6 | Note – borehole / soil samples have found no hazardous material & content where tested, however where the existing building is/ was sited this was not tested. | | |
| 3.3.7 | The following recommendations are made with respect to required control measures which should be implemented in order to protect construction workers during the site redevelopment. | | |
| 3.3.8 | A) All construction workers operating at the site should be advised of the potential for contact with made ground material within shallow soils, particularly beneath the existing buildings and hardstanding. Appropriate health and safety precautions should be adopted during any excavation works to avoid exposure to infilled soils. Reference should be made to relevant health & safety guidance including the following CIRIA document: R132 Guide to Safe Working on Contaminated Sites. | | |
| 3.3.9 | B) Should any palpable evidence of unexpected contamination be encountered during the redevelopment work, it should be reported so that an inspection can be made and appropriate sampling and assessment work carried out, a method statement for this is provided as Appendix L. | | |
| 3.3.10 | Refer to documents contained within the Appendix. Allow for safe removal to licensed disposal point. | | |
| | **To General Summary:** | | |

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| 3.3.11 | Excavate to suitable depth to accommodate new beam and block floor to a minimum depth to accommodate floor construction as described elsewhere and to allow seamless flush and level finished floor levels between all areas. Minimum 225mm ventilated void to be provided below beam and block floor as indicated on the contract drawings. | | |
| 3.3.12 | Allow for all temporary support as necessary and ensure all excavations are kept stable at all times. Keep all excavations free from water by pumping if necessary. Any excess excavations where trenches are dug too deep are to be backfilled with lean mix concrete 1:15. | | |
| 3.3.13 | Give notice if unrecorded foundations, beds, voids, basements, filling, tanks, pipes, cables, drains, manholes, watercourses, ditches, etc. not shown on the drawings are encountered. | | |
| 3.3.14 | **Form foundations as shown upon the Structural Engineers drawings. Refer to SE drawings for more information on Substructure specification.** | | |
| 3.3.15 | The foundation design is based on the assumption that strata capable of providing a design bearing capacity of 80kN/m², will be found at the depths indicated. Foundations shall be founded at the depths indicated as a minimum. The discovery of conditions not in accordance with this assumption shall be reported to the Engineer before proceeding with the construction of the foundations. | | |
| 3.3.16 | Bottoms of all foundation excavations shall be trimmed, levelled and protected from inclement weather. Excavations and the surrounding site shall be kept free of water. | | |
| 3.3.17 | Bottoms of excavations to receive reinforced concrete, shall be blinded with not less than 50mm of designated concrete grade GEN1 to BSEN206-1, BS8500-1 and BS8500-2. | | |
| 3.3.18 | Foundations taken down lower than the depths indicated shall, with the approval of the Engineer and NHBC, Building Control or other statutory bodies, be made up with designated concrete grade RC35 to BSEN206-1, BS8500-1 and BS8500-2. Also aggressive concrete mix design to incorporated for a design sulphate class of DS-1 and aggressive chemical environment for concrete (ACEC) of AC-1s. In accordance with part 1 of the BRE Special Digest 1 | | |
| 3.3.19 | Construction joints in mass concrete foundations shall be located at least 1.5m from any foundation junction, pad base or step in underside of foundation. Joints to be formed against a vertical grout tight shutter and shall incorporate 4No. H16 bars x 900 long (2 top, 2 bottom) with 100mm cover to sides | | |
| 3.3.20 | Footings to be founded 300mm below the invert of any adjacent/perpendicular existing or proposed drainage, or as shown on the drawing, whichever is the | | |
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| | deeper. | | |
| 3.3.21 | The clay at this site is of LOW volume change potential, with an allowable bearing pressure of 80kN/m². Report to the Engineer if ground conditions vary, before proceeding with construction of the foundations. | | |
| 3.3.22 | Foundation depths shall be increased as required to penetrate a minimum of 500mm below any root activity. Depths determined by this requirement shall not be less than those shown on the drawings | | |
| 3.3.23 | To ensure compliance by the Contractor with note 3, a Banksman shall be employed to inspect excavated soil during the final 500mm of any excavation. The Banksman should break open clumps of soil excavated to examine the soil for roots. If in doubt the Engineer should be consulted before proceeding further with construction of the foundations | | |
| 3.3.24 | All foundations shall be constructed with a vertical face without the presence of any overbreak or concrete overspill. The Engineer is to be informed if such criteria are not met to agree appropriate remedial action | | |
| 3.3.25 | Foundations to each plot, or group of units shall bear onto consistent ground conditions throughout. | | |
| 3.3.26 | Where foundations bear into non-shrinkable soils (such as sands and gravels) which are underlain by shrinkable clay, foundation depths may be varied to suit site conditions subject to the receipt of prior written approval of the Engineer and Local Authority. | | |
| 3.3.27 | Sleeves / lintels etc. to allow drains and services to pass through foundations and substructure walls shall allow for the following potential ground heave: | | |
| 3.3.28 | Allow for all necessary part backfill and remove surplus spoil from site. The trench bottom is to be inspected and approved by the Contract Administrator (C.A.) and Building Control before any concrete is laid. Level and ram bottom. | | |
| 3.3.29 | Should discrepancies exist between the Structural Engineering and the Architectural drawings, the Structural Engineering drawings are to take precedence at all times. | | |
| 3.3.30 | Make up levels externally in MOT type II fill material well compacted in and in accordance with structural engineer's drawings. | | |
| 3.3.31 | Refer to site layout drawing for proposed site levels. No additional costs will be permitted for soil testing or removal. | | |
| 3.3.32 | Treat all re-graded / reduced areas with an approved eradicator / herbicide. | | |
| 3.3.33 | All foundation works to be in accordance with BS8004 and to be Grade C25. No | | |

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| | concrete is to be placed when the temperature is below 2° Centigrade (36° Fahrenheit) without the permission of the C.A. | | |
| 3.3.34 | All foundation excavations are to be approved by the Structural Engineer and Building Inspector prior to placement of concrete. | | |
| 3.3.35 | Reinforcement to be incorporated to BS4449, BS4483 or BS6744, cut and bent to BS8666: | | |
| 3.3.36 | Obtain from companies holding valid certificates of approval for product conformity issued by the UK Certification Authority for Reinforcing Steels (CARES). | | |
| 3.3.37 | Form cavity and sleeper walls up to d.p.c (minimum 150mm above ground level) and beam and block floor level with 102.5mm engineering brickwork. Weak mix fill cavity to 150mm below d.p.c with haunch to external skin. Bucket handle point neatly above ground level. Cavity wall to be built off new foundations as previously described bedded in mortar 1:1:6 unless otherwise stated upon structural engineer's drawings. Incorporate stainless steel wall ties as specified elsewhere. | | |
| 3.3.38 | Incorporate air bricks built into sleeper walls to maintain cross ventilation and allow for telescopic vents to ventilate floor void. | | |
| 3.3.39 | Build in continuous Anderson Xtra-Load Elite (Polymer Modified Bitumen DPC) d.p.c to BS6398 bedded in cement mortar 1:3 mix, 150mm above ground level and lapped to a minimum of 150mm into the new damp proof membrane (D.P.M) | | |
| 3.3.40 | Ensure damp proof membrane is taken into horizontal dpc's to inner skin of all new external walls. | | |
| 3.3.41 | Supply and install 75mm claymaster to inside face of all external strip footings and as specified on the structural engineer's drawings. | | |
| | **To General Summary:** | | |



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