

Project Summary

Dwarf walls to the front open porch/canopy pitched roof have suffered as a result of clay shrinkage due to vegetation.

At this stage the construction of the dwarf walls is unknown, we have assumed traditional double solid brickwork construction for loading purposes.

Customer Details

Date	16th April 2019
Client	Oriel
Policy Holder & Address	Paisner - 4 Heath Drive, London, NW3 7SY
Client Reference	6425717
Shire Reference	SSE-19-149
Shire Contact	Jackie Robinson – 01527 559716

Project Overview

We understand the scope of this project includes 2No dwarf/side walls to the front open porch/canopy area which has subsided due to clay shrinkage caused by vegetation. We have been provided with a Site Investigation Report completed by CET dated 5th April 2017. This revealed a brick spread foundation, 870mm deep, 270mm thick. The footing is bearing onto made ground down to 1.5m overlying stiff very silty clay down to 3.3m where the borehole terminated. Roots were found to a depth of 3m. Dimensions for the dwarf walls have been provided and measure approx. 900mm deep x 405mm wide.

Our Recommendation

We recommend installing 4No Auger Clay Piles (2No to each wall) to the external face of the dwarf walls as denoted on the pile layout plan. Based on the Site Investigation revealing roots down to 3m and NHBC Guidelines suggesting tree root influence up to 3.2m depth, the minimum depth of Auger Piles will be 10m bored into the underlying clay soils c/w 4m slip sleeves.

ENGINEERING INNOVATION
INSPECT : INVESTIGATE : REPAIR

Consulting Civil & Structural Engineers | Geotechnical Investigations | Structural Inspections
Expert Reporting | Structural Repair Specialists | Foundation Systems



The proposal is to provide piles alongside the foundation but the scheme will not include anti-heave protection below the foundation. This type of scheme is more economical, less disruptive but does give a greater risk of future damage when compared with schemes such as a new full internal piled raft with full anti-heave protection.

Where schemes are designed without anti-heave protection it is important that they are installed when the building is in the up position which is generally during the late winter/spring/early summer.

We have allowed for all piling facilitation works to be completed by Shires, this includes excavating topsoil and removal of any planting locally to enable pile installation. Reinstatement works include backfill of topsoil upon completion of piling works. Removal of spoil has been included in our quotation.

We have not included for a Building Regulation application via our partner independent Building Control as we believe it is not applicable for this scheme and we have not included for a Build Over Notice assuming no shared drains run within 3m of the piling?

Project Fee

XXXXXXXXXXXX

Price including all labour, materials, contract management & plant.

Method Statement

Facilitation Works (Enabling) – By Shires
Protection installed as required during piling works
Excavate topsoil in front of dwarf walls
Main Works – By Shires
Excavate / break out face of existing concrete foundation
Installation of 4No Auger Piles c/w 4m slip sleeves to a minimum depth of 10m
Installation of reinforcement and grouting of piles
Concrete connection detail as per pile layout plan
Reinstatement Works – By Shires
Backfill topsoil in front of dwarf walls
Remove protection & leave site clean/tidy (as found)



Equipment & H&S Welfare Required

We assume the homeowner is happy for us to use on site welfare facilities at the property and that there is access to on site water and power. If this is not the case, then let us know so we can arrange for these (costs TBA).

Pedestal Rig, Power Pack, Site Van, CAT Scanner, Auger Pile Materials, General Tools for Enabling and Reinstatement works.

Estimated Time Frame

From Start on Site to Completion = **1-2 days**

Our Assumptions

- Shires to act as Principal Contractor under CDM 2015 Regulations for the piling works.
- We have allowed for CDM 2015 regulations being applicable to this project. Our price includes for providing construction phase plans, method statements, risk assessments and COSHH assessments in our own format for the construction stage of the project including any design aspects that affect ourselves.
- Asbestos: if applicable, we require all ACM's are removed prior to our site attendance. In the event any ACM is encountered during works, all works in the vicinity shall be stopped immediately until the ACM's are removed in full. A Certificate of ACM removal shall be provided confirming ACM clearance. Any delay due to ACM will constitute a variation to the scheme costs.
- These scheme proposals are subject to Shires standard Terms and Conditions which can be made available upon request.

Project Variation Procedure

If a change to the scope of the project or scope of works is required:

- A member of Shire's Contracts Team will contact the Client. They will explain the rationale for the change & seek authority to continue &/or confirmation of next steps.
- Upon completion of the variation works, these will be invoiced or a credit note issued separately to the initial authorised project contact.