

Our ref: 24_487 SR 01

Carr Mount Carr House Lane Holmfirth
FOUNDATION DESIGN STATEMENT

The most appropriate foundation design for the proposed new dwelling will be dependent on existing ground conditions, and prior to detailed design work commencing a ground investigation will be carried out to establish ground conditions and most appropriate foundation solution.

Whatever ground conditions are encountered, the foundation design will be sensitive to the trees located on the site and take into account the recommendations of the Arboricultural Report to mitigate risk of damage to existing tree roots. Arboricultural Report 221025 AIA by James Royston Arboricultural Consultant considers that, based on the proposed site plan, all excavation for the development will take place outside the tree root protection areas and will have no impact on the health of retained trees.

Accordingly, detailed foundation design will be carried out to minimise excavation, avoiding excavation that would encroach into the tree root protection zone. At this stage, based on ground conditions encountered during development of a neighbouring site, it is anticipated competent rock strata will be encountered at near surface levels. Where this proves to be the case, the most appropriate form of foundation is likely to be a reinforced concrete raft, with reinforced concrete retaining wall stems cast integrally with the raft foundation/ground floor slab. Excavation beyond the perimeter line of the building to construct retaining walls may be kept to a minimum (to avoid entering any tree root protection zones) by providing temporary shoring to avoid the space required for formation of safe working batters. Avoiding external tanking, through the provision of water proof concrete in construction of retaining structures in conjunction with internal tanking/drained cavity design will help keep excavation footprints to a minimum by avoiding the need for working room around the external face of new retaining structures.

Dan Sawyer MEng CEng MStructE
Director
Sawyer Consulting Engineers Ltd