# **ABORICULTURAL & PLANTING ASSESSMENT**

The proposal is for a single storey garden room approx. 5m x 5m located in the garden of a listed building. The building replaces an existing garden room approx. 2.5 x 5m on the same footprint and using the same foundations. There is no requirement to remove or prune any existing trees in the vicinity.

The garden is well established with mature trees to the perimeter and lawn to the centre. Some of the mature oaks have TPO orders on them. Within the proximity of the building and presenting a risk to root zones there are line of pollarded limes to the rear tight against the retaining wall to the street. There is a single laurel to one side and a mature oak (non-TPO) some 5m away from the proposed footprint. There also a small gingko tree within the lawn area but it is young and small. To the North side the ground is dug away to accommodate some 1960's garages and there is no likelihood of root ingress.





The existing building is timber framed and supported on brick sleeper walls assumed to be built of shallow concrete foundations. These foundations are to retained and the new building built direct off the brick walls with no further disturbance to the ground in the near proximity to the lime trees aligning the rear.

The proposed building is single storey insulated timber frame (SIP system) to be constructed by Vivid Green Ltd. The floor, walls and roof are to be preconstructed off site and installed within a short construction period of 2-3 days after the foundations are completed. After this the only work required on site if the cladding and the roof membrane. The short site period reduces the number of people and machinery on site and the chances of damaging tree roots through compaction in the surrounding area.

The foundations to the extended area to the front will be hand dug with micro screw piles drilled into the ground. These reduce the ground disturbance, have minimal impact on existing tree roots and do not effect ground water distribution.



Examples of screw pile foundations. These are hand drilled down into the ground and capped with a shallow concrete cap which brick sleeper walls may be constructed to match the existing building.





### Method Statement

- Prior to work starting rope off areas of root protection beyond canopy to the large oak, 1 m diameter around the gingko and all lime trees to the rear.
- Turf and top soil removed in trench 250mm wide and 200mm deep dug by hand. Roots larger than 25mm diameter to be retained.
- Screwpiles twisted into ground at approx. 500mm centres. Steel reinforcement installed to connect piles together and concrete cap poured 150mm deep.
- Brick base built to match height of existing and capped with DPC damp proof course. Allowance for through ventilation under building.
- Turf removed from area under new construction area and permeable ground membrane laid under building.

### Roofing to Garden Room

The roof of the proposed building is to be planted as a green roof with mixed sedum substrate. This is to be provided by Enviromat. They have been consulted on the proposed location (relatively shaded to the rear). They approved the location provided a maintenance regime is in place for the initial 12 months to feed and water the sedum until it is fully established. This involves a check in spring and autumn to remove fallen leaves, clear gutters and feed with fertiliser. Further watering required in first year during summer months (once established sedum is naturally drought resistant).

The green roof while acting as a visual softening from high level views also serves to slow rainwater runoff. The downpipes to front and rear fall in the same location as the existing downpipes with all rainwater kept on site. The rear downpipe will be linked to a water butt (as it is currently).

Plant species contained within the Enviromat system being provided:

S. album	White Stonecrop
S. kamtschaticum	Gold Sedum
S. pulchellum	Widow's Cross
S.reflexum Crooked	Yellow Stonecrop
S. spurium T	wo-row stonecrop
S. sexangulare Tasteless stonecrop	
S. acre	Biting stonecrop
Saxifragia granulata	Meadow Saxifrage



