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The Harridge, Rochdale

Arboricultural Method Statement

November 2020

Arboricultural Association Fellow Member

AA Registered Consultant trees.org.uk

UK Register of Expert Witnesses Registered

Limitation

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Supervision

Arboricultural Clerk of Works (ACoW) will be involved in the following:

Surveying to monitor arboricultural/ecological sensitivities at the site; Monitoring work activities in close proximity to sensitive arboricultural/ecological receptors to ensure impacts are minimised, e.g. preventing pollution run-off to watercourses; Auditing of site management plans and method statements to ensure arboricultural/ecological compliance; Providing advice on the delivery of agreed mitigation measures; Liaising with stakeholders such as regulators, planners and members of the public; Preparing compliance and audit reporting.

- Pre-commencement meeting;
- Tree Removals and pruning;
- Installation of protective fencing;
- Installation of protective surfaces and No-dig drive;
- Foundation excavation;
- Removal of protective measures.

All supervisory visits will be logged and a copy of the minutes circulated to all team members including the LPA. A number of the operations named above can be undertaken in a single visit.

The pre-commencement site meeting is to be held before any work is undertaken. All tree protection measures, haul routes, site storage, contractor parking, deliveries, working methods are to be freely discussed and agreed in writing. Initial site visits may be intense to ensure measures are implemented.

General site visits will be undertaken once the site is 'live' at intervals agreed with the team. Our role will be to initially to act in a compliance capacity to ensure the protective measures are fit for purpose and meet or exceed the council's (LPA) requirements and the tree works are undertaken to the required standard. Once this has been completed, our role will be one of monitoring and 'troubleshooting'.

Actions

- Pre-commencement site meeting to agree roles, responsibilities and duties in relation to tree protection. Details to be minuted and distributed.

Tree Felling/Stump Removal /Pruning

The following precautions are to be taken.

Actions

- Trees to be removed shall be felled so as to fall away from tree protection zones and to avoid pulling and breaking of roots of trees to remain. Brush can be chipped into the tree protection zone to a depth of 150 mm.
- The roots shall be removed by severing the major woody root mass before extraction. This may be accomplished by Hydro Vacuum & Suction Excavation or Compressed Air Displacement and then, cutting through the roots by hand, with a vibrating knife, rock saw, narrow trencher with sharp blades, or other approved root pruning equipment.
- Trees to be removed within the tree protection zone shall be removed by qualified tree contractors.
- All felled brush and trees shall be removed from the tree protection zone either by hand or with equipment sitting outside the tree protection zone. Extraction shall occur by lifting the material out or by 'skidding' it across the ground.
- Where tree stumps to be retained treat with EcopLugs.
- Tree Pruning in accordance with BS3998;
- Site inspections to be reported to the development team and the LPA.

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Construction Exclusion Zone Root Protection

Due to the nature of the works, standard BS 5837 fencing will be used. The Construction Exclusion Zone fence will be heras fence panels fixed to a scaffold framework. Alternatively, heras panels fixed to timber posts. The location will be marked on site by the Arboricultural Consultant and are also shown on the Drawing No. – TPP/4255/Y/200. The requirement will be assessed on a weekly basis by the A/ECoW.

Actions

- Heras fencing fixed to a scaffold framework or timber posts as illustrated.
- Fencing installed at locations shown on the plan (TPP/4255/Y/200) and marked on site.
- Location and adequacy signed off by Arboricultural Consultant and LPA advised.
- Tool Box Talk – make construction staff aware of the importance of areas by site manager.
- Signs to be erected advising of the area's importance.
- Fence to be adjusted as noted in the Construction Timetable.









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Construction Exclusion Zone Tree Stem Protection

The trunk of retained trees will be encased in plywood on a timber framework as denoted on plan TPP/4255/Y/200 (image below).



Targets

- The plywood box section constructed around the tree trunks.
- Plywood boards (24mm thickness EN 636-2 EN 314-3 CE4 CE2+ E1 – Grade - C+ / C) to be used.
- Location and adequacy signed off by Arboricultural Clerk of Works and LPA advised.
- Works to be monitored by Arboricultural Consultant.
- Completion to be reported to the LPA and signed off by Arboricultural Consultant.
- Tool Box talk.





Tree Protection Notice to be attached to fencing 1.5m from the ground, facing out of the Construction Exclusion Zone and located at regular intervals along the fence line.

The notice must be at least A4 in size

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Construction Exclusion Zone Ground Protection

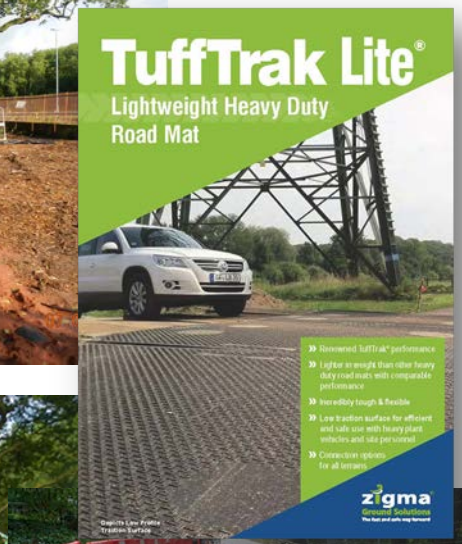
The Construction Exclusion Zone will be protected by Tuff Trak over a sand blinding as denoted on plan TPP/4255/Y/200 . Adequate protection of trees requires the installation of the correct ground protection. The temporary working surface may also incorporate the No-dig drive structure.

Actions

- The following applies to Tuff Trak (other systems follow a similar installation procedure).
- The existing grass and ground cover and any hard surfaces are to be removed by hand working.
- Permatex 300 geotextile to be laid with a sharp sand blinding layer, or wood chip compressible layer to bring to level.
- Tuff Trak laid over. This surface will be retained through the contract to form a working surface.
- Location and adequacy signed off by the Arboricultural Clerk of Works and the LPA advised.
- Works to be monitored by Arboricultural Consultant.









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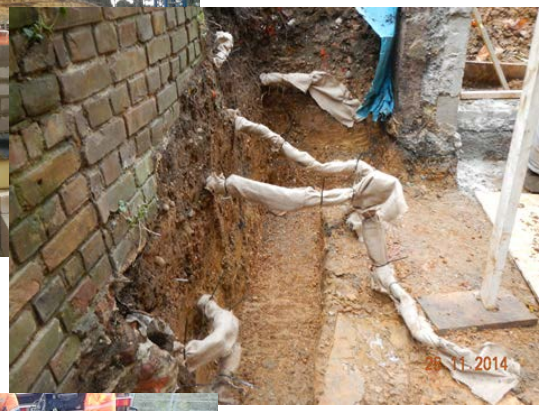
Foundation Excavation in Construction Exclusion Zone

Actions

- The works area is to be marked out. The ground to be protected as detailed. Any turf to a depth of 75 mm to be removed by a turf iron.
- Soil tested to determine excavation method. Using either Hydro Vacuum & Suction Excavation, Pneumatic Vacuum & Suction Excavation or Clay-Spade Assisted Suction Excavation, a trench will be excavated.
- In all cases: Roots <25mm ∅ are to be cut at the excavation face with secateurs. Roots >25mm ∅ are to be assessed by the Arboricultural Consultant. Findings and decision on root retention/severance to be reported to the LPA.
- Where roots >25 mm ∅ are retained around foundations they are to be wrapped in grey insulation foam (the sort the plumbers use) and then in plastic pipe cut vertically to go around, then taped up to make it watertight. These roots can be left in place and the concrete poured around the roots.
- Exposed roots to be kept moist with hessian sacking/terram.
- The excavation face to be lined with a root barrier (such as re-root 2000).
- Site inspections to be reported to the development team and the LPA.









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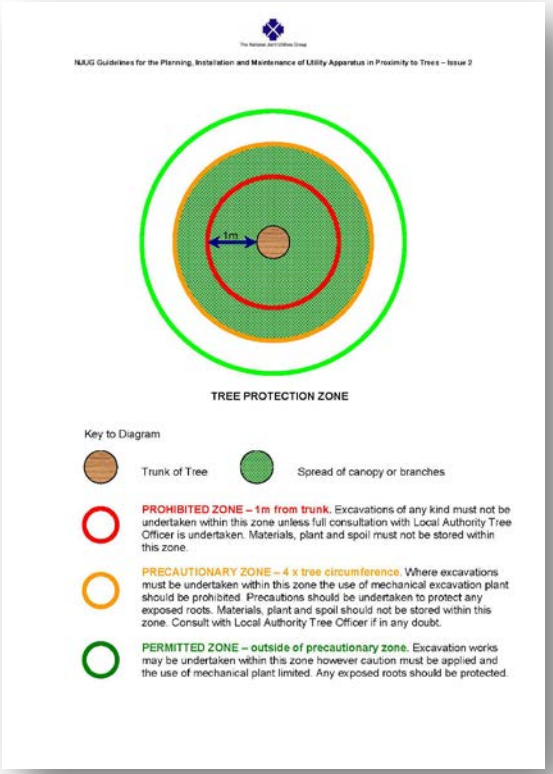
Services - NJUG 4.2
Work area to be marked out in accordance with NJUG 4.2.

Actions

- The precautionary area is to be identified.
- Suitable method of service installation to be identified.
- Location and adequacy signed off by the Arboricultural Clerk of Works and the LPA advised.
- Works to be monitored by Arboricultural Clerk of Works.



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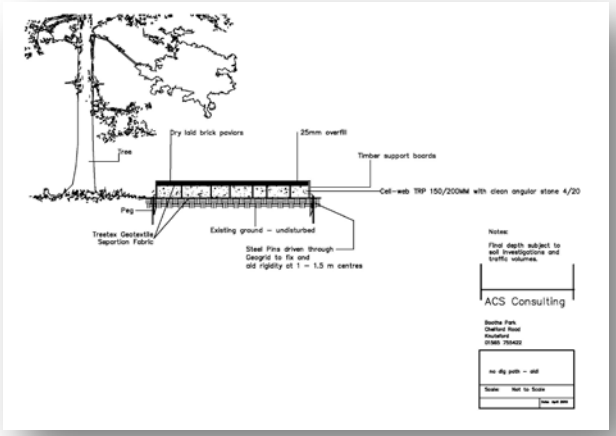
No dig Drive

The contractor is required to meet with the ACS Consulting at the site prior to beginning work to review all procedures, access and haul routes, storage and tree protection measures. Tree contractors and not construction personnel must perform additional tree pruning required for clearance during construction.

Actions

- Major protrusions: Rocks, stumps to be removed under supervision. Major hollows: All significant hollows are to be filled with SHARP sand to give a level surface. Turf to a depth of 75 mm to be removed by a turf iron. Tree tex shall be laid directly on the site
- The geogrid may be placed on the sub-grade to the path centre line or transversely. The minimum overlap shall be 300 mm, the maximum overlap shall be 600 mm. Any overlap is to be maintained. This may be achieved by pinning the overlap in position with steel pins or placing local mounds of fill material on the overlap. Timber boards shall be placed along the sides of the area, overlapping the geogrid. The boards shall be fixed in place with timber pegs.
- A WASHED, graded aggregate is considered a suitable sub-base. Type 1 or Type 2 is recommended as described in Clauses 803 and 804 in the DoT Specification for Highway Works.
- Lorry loads of the sub-base material shall be tipped into stockpiles adjacent to the Construction Exclusion Zone and NOT directly onto the geogrids. The sub-base shall be spread by suitable mechanical plant with due regard for the tree canopies. The sub-base shall be spread in such a manner that the material cascades onto the geogrids. The material will be spread in such a fashion that the material advances across the grids rather than along. The material shall be spread in layers of 100 mm thickness to the required depth.
- No compaction of the unbound sub-base is to take place.
- The final layer shall be placed over the stone. This may consist of dry laid block sets or tarmac.



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General Precautions

The retention of trees requires a number of general precautions to be taken. Compliance is to be maintained on site by the Arboricultural Consultant. The site visits are detailed at criterion 1 – Timing of Works.

Actions

- Spoil from the foundation pits or other excavations shall not be placed within the Construction Exclusion Zone.
- No materials, equipment, spoil or washout water may be deposited, stored or parked within the Root Protection Area/ Construction Exclusion Zone.
- On-site inspections to be undertaken by the Arboricultural Clerk of Works with the Arboricultural Consultant visiting during critical operations. The aim of the visits is to maintain on-going liaison with all personnel involved in the site development, Local Planning Authority and its Tree Officer.
- Any defects requiring rectification shall be notified to the Contractor/Site Manager/Arboricultural Consultant and the client.
- A site logbook for tree protection measures is kept to record all stages of the development from the erection of the protective fencing, right through to the completion of the project. This will be made available to the Arboricultural Consultant and the Local Planning Authority, if required, to show evidence of continuous site monitoring.

Protection and Emergency Procedure/Contacts

Adherence to the method statement, appointment of the Arboricultural Consultant and their involvement, at the critical construction phases, should negate any incident. The contact page details those personnel who should be contacted if an incident involving a retained tree should take place.

Actions

- Spill kit available.
- On site fuels to be located away from RPA/CEZ and contained in a bunded tank at 110% capacity.
- All incidents involving trees to be reported by telephone and email.
- Bunded storage of oil/fuels.
- Refuelling points for machinery at distance to the watercourse.
- Use of drop trays under plant/machinery overnight.
- Availability of spill kits on site – and training of site staff in their use.
- No excavation during periods of heavy rain.
- Regular maintenance and inspection of plant – engines and hydraulic systems.

Tree Works

Tag No.	Identity	Particular Schedule of Works Required
T997	Lime	Crown lift the western canopy to give crown clearance of three metres removing minor lateral branches only.

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Contact List

Title	Name	Address	Telephone	Email
ACoW	TBA			
Developer	TBA			
Architect	TBA			
Arboricultural Consultant (LPA)	TBA			

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