

ARBORICULTURAL REPORT & TREE SURVEY

In Accordance with BS 5837:2012 Trees in relation to design, demolition and construction - Recommendations

Site Location: 126a Glossop Road, Charlesworth, Derbyshire, SK13 5HB

Survey Date: 15th June 2026

Prepared For: Kinderview Children's Day Nursery Ltd

Local Planning Authority: High Peak Borough Council Planning Portal

1. Executive Summary

This arboriculture report has been commissioned to support a planning permission application for development at the site of a proposed new nursery school development in Charlesworth. A ground-level visual assessment was carried out on 26 trees located within and others immediately adjacent to the site boundary. The surveyed population consists entirely of Silver Birch (*Betula pendula*) and Common Alder (*Alnus glutinosa*), Downy Birch (*Betula pubescens*), Grey Willow (*Salix cinerea*).

There is a group of trees on the south-western boundary. On inspection these are located on neighbouring land and have not been recorded on this survey. The proposed new building will not impact the RPA of this group of trees as the new development is some distance away (over 15m).

The primary objective of this survey is to categorise the trees according to British Standard BS 5837:2012 to determine their retention value and establish their structural and root constraints. The results will assist design teams in avoiding conflicts with significant trees and provide the local planning authority with the required data to validate the planning application.

2. Introduction & Scope

- **Purpose:** To provide a comprehensive record of the health, dimensions, and retention categories of the 26 trees on-site, serving as an objective basis for site layout design.
- **Limitations:** The inspection was carried out from ground level using Visual Tree Assessment (VTA) methodologies. No internal decay detection diagnostics, soil excavation, or tissue sampling were conducted. Tree conditions can fluctuate based on environmental changes, pests, and severe weather events; therefore, this report is valid for a maximum of 12 months from the date of survey.
- **Statutory Protections:** Preliminary checks would suggest that no Tree Preservation Orders are in place on the site. However, before any tree

works or removals take place, the applicant must verify with High Peak Borough Council whether any trees are protected by a Tree Preservation Order (TPO).

3. Methodology

Trees were evaluated individually or as distinct groups where characteristics were uniform. The following parameters were recorded for each entry:

- **Species:** Scientific and common names.
- **Height & Crown Spread:** Estimated in metres, with height and crown spreads recorded.
- **Stem Diameter (DBH):** Measured in millimetres at 1.5 metres above ground level to calculate the Root Protection Area (RPA).
- **Age Class:** Young (Y), Semi-mature (SM), Early-mature (EM), Mature (M), or Over-mature (OM).
- **Physiological & Structural Condition:** Noted as Good, Fair, Poor, or Dead based on vigor, crown density, and structural defects.
- **BS 5837 Category:**
 - *Category A:* High quality and value (minimum 40 years useful life remaining). Green on plans.
 - *Category B:* Moderate quality and value (minimum 20 years useful life remaining). Blue on plans.
 - *Category C:* Low quality and value (minimum 10 years useful life remaining, or young trees under 150mm stem diameter). Grey on plans.
 - *Category U:* Unsuitable for retention due to advanced decline, structural failure, or dead state (less than 10 years useful life). Red on plans.

4. Tree Survey Schedule

Tree/Group ID	Species	Height (m)	DBH (cm)	Age Class	Physiological Condition	Structural Condition	BS 5837 Cat	RPA Radius (m)	Retention Comments & Recommendations
G1 Copse approx. 20 trees	Common Alder, Silver Birch (Alnus glutinosa, Betula pendula)	10-12	40-60	Early-mature	Fair	Fair	C1		Dense thicket with bramble undergrowth unable to get access to measure individual trees. On the boundary of St Margaret's School. Suggested to thin trees and remove those

									closest to bungalow to allow education use of area - Forest School. Suppressed crown due to proximity to others
T1	Silver Birch (<i>Betula pendula</i>)	8	55	Mature	Good	Good	B1	6.6	Healthy specimen proximity to existing building therefore suggest removal
T2	Common Alder (<i>Alnus glutinosa</i>)	9	60	Mature	Good	Good	B1	7.2	Healthy specimen located on boundary to existing car park. Overhanging branches require pruning. Plan is to remove as on planned roadway
T3	Downy Birch (<i>Betula pubescens</i>)	8	45	Early-M	Good	Good	B1	5.4	Normal structural integrity. Located next to existing car park. Plan to remove as located on planned roadway
T4	Silver Birch (<i>Betula pendula</i>)	10	55	Mature	Fair	Fair	C2	6.6	Co-dominant stems at 1.2m. Weak union. Remove.
T5	Silver Birch (<i>Betula pendula</i>)	13	30	Early-M	Good	Good	B1	3.6	Upright form, typical canopy development for the species. Retain.
T6	Grey Willow (<i>Salix cinerea</i>)	8	35	Mature	Good	Good	B2	4.2	Multi branched

Total Count: 6 individual trees + 20 trees in cluster group = 26 trees surveyed.

5. Root Protection Area (RPA) Constraints

The Root Protection Areas listed in the schedule represent the minimum area around each tree that must be left undisturbed to protect its root system and ensure long-term survival. For single-stemmed trees, the RPA is calculated as an area with a radius 12 times the stem diameter.

- No construction, soil level changes, or heavy machinery movements may occur within designated RPAs unless specialist measures are approved.
- If utility trenches or paving must pass through an RPA, non-destructive hand-digging or no-dig cellular confinement systems (e.g., Geocell) must be implemented.

6. Preliminary Arboricultural Impact Assessment & Recommendations

- **Tree Retention vs. Removal:** Out of the 26 trees surveyed, 1 tree (T4, Silver Birch) is graded as Category Fair and may require removal on health and safety grounds regardless of development plans. The remaining 25 trees comprise a mix of Category B (moderate quality) and Category C (low quality/boundary value) trees.
- **Design Considerations:** The site is large and whilst 11 trees have been identified as requiring removal to allow a roadway through to the proposed new building there is ample land available to plant new trees and create a play area suitable for forest school activities on site. Alder is highly responsive to hydrological alterations. Since Alders thrive in damp conditions, any site drainage designs must ensure they do not permanently dehydrate the rooting environments.
- **Tree Protection Barriers:** Prior to any plant machinery arriving on site, protective fencing in accordance with BS 5837:2012 (typically default vertical hoarding or braced weldmesh panels) must be erected along the outer limits of the RPAs of all retained trees to create a Construction Exclusion Zone (CEZ if applicable to the design plans).

7. Low Density Canopy

Spread across a site of this size, 26 trees represent a relatively low-density canopy (averaging roughly one tree per 215 m²). This indicates ample space to design a development layout around the root protection zones without requiring mass tree removals.

There is ample space for planting new trees to meet BNG 10% net gain requirements.

8. Nursery-Specific Arboricultural Constraints

- **Target Risk and Safety:** Because a nursery involves high-occupancy outdoor play areas, any retained trees within or directly overhanging the play zones must be structurally sound.
- **Microclimate and Shading:** The mature canopy of Silver Birch provides filtered, dappled sunlight rather than dense shade. This is highly beneficial for outdoor play areas, offering natural UV protection during summer months without making play areas cold or damp.
- **Pollen and Allergens:** Silver Birch (*Betula pendula*) produces airborne pollen in spring, which is a known seasonal allergen. While this does not warrant tree removal under planning policy, outdoor play areas and building ventilation intakes should ideally be positioned slightly downwind or clear of the dense birch clusters where possible.

9. Outline Method Statement & Ground Protection

1. **Barriers:** Before any heavy plant machinery, materials, or site cabins arrive, protective steel mesh fencing (e.g., Heras fencing panels secured with stabilization struts) must be anchored along the outer edge of the calculated RPAs to establish a rigid Construction Exclusion Zone (CEZ).
2. **No-Dig Infrastructure:** If access roads or parking bays must traverse any peripheral boundary RPAs, a specialized no-dig three-dimensional cellular confinement system (such as Geocell) filled with clean, angular stone aggregate must be utilised to distribute structural loads and preserve soil aeration.

10. Amenity Protection

1. **Play Area Integration:** Incorporating **G1** into a securely fenced, supervised "forest school" or eco-play trail is highly recommended. Common Alder carries no toxic berries or foliage, making it completely safe for integration into child-centric landscapes.
2. **Infrastructure Footprint:** With 5,585 m² available, the nursery building, outdoor pram stores, secure fencing, and drop-off parking loops should be concentrated in the central, clear zones of the plot. This completely avoids impacting the critical root protection areas on the boundaries.

11. Outline Method Statement for Construction Phase

1. **Fencing Protection:** Prior to any ground clearance, heavy-duty 2-metre Heras fencing panels must be clamped together and stabilized using ground pins along the RPA boundaries of trees that are to be retained. This forms the Construction Exclusion Zone (CEZ) to protect the soil from compaction by delivery vehicles.
2. **Exclusion of Toxins:** No cement mixing, fuel refueling, or topsoil stripping may take place within 10 metres of any retained tree RPA. This is particularly vital for the Alders, which rely on clean, uncompacted, damp ground conditions.

12. Updated BS 5837:2012 Engineering Recommendations

- **Foundation Design:** If foundation trenching for the 406 m² building must occur within the edge of any calculated RPA along the A626, traditional strip foundations must be rejected. Instead, a radial beam and cantilever pile foundation or a raft foundation must be specified by the structural engineer to avoid root severance.
- **Services Routing:** All new electricity, water, gas, and telecom service connections entering the site from the A626 infrastructure must bypass the RPAs of the frontage trees. If routing constraints make this impossible, services must be installed using trenchless boring (thrust boring) at a minimum depth of 1.2 metres.