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Arboricultural Impact Assessment:
Miner's Welfare Ground & Charlie Wayman Fields
Ferryhill
County Durham

Prepared for:
FSL Projects
71 Plato Close
Leamington Spa
CV34 6WE

Report ref: FSL_MWG&CWF_AIA1.1

Report prepared by	**Position**	**Date**
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Report verified by	**Position**	**Date**
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1.0 EXECUTIVE SUMMARY

1.0.1 Dendra Consulting Ltd was commissioned to undertake this impact assessment by FSL Projects. The report was prepared in order to support a planning application for proposed upgrade works to Miner's Welfare Ground and Charlie Wayman Fields, Ferryhill.

1.0.2 The site visit was made on the 20th February 2024 by Liam Robson.

1.0.3 Seventy two individual trees, thirteen groups of trees and four hedgerows were surveyed. This comprised low and moderate value features.

1.0.4 Impacts are predicted from the following activities:

- Site clearance and general construction works within proximity of trees to be retained.
- Tree removal.
- Proposed new car parking spaces within RPA of trees to be retained.
- Construction of tennis court and court run off extension.
- Vehicular and pedestrian movement over RPA of trees to be retained.

1.0.5 Mitigation has been recommended as follows:

- New tree plantings – specification informed by ecological report.
- The erection of protective fencing.
- Installation of ground protection measures.
- New car parking – sensitive methodology.
- Tennis court and run off extension - sensitive methodology.

1.0.6 The proposals are likely to constitute a positive impact at a site level. A detailed summary table of the impacts before and after mitigation is provided in section 6.0.

2.0 INTRODUCTION

2.1 Background & Scope

2.1.1 Dendra Consulting Ltd was commissioned to undertake this survey and report by FSL Projects. The scope of the contract was to undertake an arboricultural impact assessment to support a planning application for proposed upgrade works to Miner's Welfare Ground and Charlie Wayman Fields, Ferryhill. The survey was carried out in line with BS 5837 – Trees in Relation to Design, Demolition and Construction- Recommendations, 2012 (BSI 2012).

2.1.2 The proposals include the following at Miner's Welfare Ground:

- New skate park to be installed.
- New car parking area comprising 15no. spaces.
- Construction of third tennis court, including run off extension.
- Refurbishment of existing pavilion.

2.1.3 The following is proposed at Charlie Wayman Fields:

- Removal of MUGA, skate park and existing changing facility.
- Construction of clubhouse, car parking and 5v5 pitch.
- Change in location/creation of football pitches.

2.2 Personnel, Timing & Weather Conditions

2.2.1 A site visit was made on the 20th February 2024 by Liam Robson. The weather was fine and dry, with no significant visibility constraints.

2.3 Survey Methodology

2.3.1 All observations were from ground level. Height was measured, where possible, using a clinometer and is expressed in metres. Crown spread is also expressed in metres. In dense tree cover height and crown spread may have been estimated. Stem Diameter at 1.5 metres was measured using calibrated DBH tape and is expressed in millimetres.

2.3.2 A tree quality assessment is made for each tree or group of trees as recommended in BS 5837. A cascade chart based on the standard is provided as figure 1.

Figure 1 – Chart for tree quality assessment. Adapted from BS 5837.

Category	Criteria		
Category U **Trees unsuitable for retention.** Trees in such a condition that they cannot be realistically retained for longer than 10 years	• Dead, dying or dangerous trees • Trees with serious structural defects • Trees with serious physiological defects		
	1. Mainly arboricultural values	**2. Mainly landscape values**	**3. Mainly cultural & conservation values**
Category A **Tree of high quality** with an estimated remaining life expectancy of at least 40 years.	Trees that are particularly good examples of their species. Particularly of rare or unusual species. Trees forming essential parts of a group	Trees, groups or woodlands of particular visual importance.	Trees, groups or woodlands of significant conservation, historical, commemorative or other value.
Category B **Trees of moderate quality** with an estimated remaining life expectancy of at least 20 years.	Trees that might be categorised in the higher category but are downgraded because of impaired condition.	Trees present in numbers such that they attract a higher collective rating than they would as individuals.	Trees with material conservation or other cultural value.
Category C **Trees of low quality** with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 15cms.	Trees not qualifying in higher categories	Trees present in groups or woodlands that do not possess significant landscape values.	Trees with no material conservation or cultural value

2.4 Root Protection Area

2.4.1 The Root Protection Area (RPA) is represented by an area in m^2 around a tree which acts as a protective zone. In our schedule of trees it is expressed both as the RPA and as the Root Protection Radius (RPR). The RPR is a figure given in metres used to identify the radius of a circle around a tree which serves to act as the RPA. In certain circumstances the shape of the RPA may be altered to suit site specific factors such as the presence of buildings, roads, other trees etc.

3.0 REPORT FINDINGS

3.1 Survey Summary

3.1.1 Seventy two individual trees, thirteen groups of trees and four hedgerows were surveyed. The full results of the survey are provided in section 8.0. The trees were examined for physiological and structural defects. Remedial works for such defects have been provided where appropriate, and this has been recommended regardless of development. **Please note that some of this work may be superseded by recommendations required for development purposes.** The results of the tree quality assessment are summarised in figure 2 below.

Figure 2 – Summary of tree quality assessment

Category	Tree/Group numbers
High	None
Moderate	T17, T20, T21, T22, T25, T26, T27, T28, T29, T30, T32, T33, T34, T35, T38, T39, T40, T41, T43, T44, T45, T46, T48, T49, T50, T51, T52, T53, T54, T58, T61, T62, T63, T64, H1, G7, G8, G9, G10, G12
Low	T1, T2, T3, T4, T5, T6, T7, T8, T9, T10, T11, T12, T13, T14, T15, T16, T18, T19, T23, T24, T31, T36, T37, T47, T55, T56, T57, T59, T60, T65, T66, T67, T68, T69, T70, T71, T72, H2, H3, H4, G1, G2, G3, G4, G5, G6, G11, G13
Unsuitable for retention	T42

3.2 Limitations

3.2.1 Several individual trees were not identified on the topographical survey. These areas have been surveyed as a collective as necessary.

3.2.2 G4 has been grouped as described above. This group has been categorised as low value, but individual trees are present within the group that are structurally compromised. It is recommended that these trees are removed, in addition to T42.

3.2.3 The details specified within this report are valid for a period of two years.

4.0 IMPACT ASSESSMENT

4.1 Assessment Process

4.1.1 This section of the report identifies and evaluates impacts in the absence of any mitigation. Mitigation is then detailed in section 5.0 of the report. Impacts are categorised into pre development, development stage and post-development phases.

4.2 Pre-development Tree Work

4.2.1 The proposals will require the removal of T55, T56, T57, T58, T64, T65, T66, T67, T68 and T69. This comprises of low and moderate value trees. All of these trees are situated on the Miner's Welfare Ground site.

4.2.2 No tree removals are required to facilitate the proposals on Charlie Wayman Fields.

4.3 Site Clearance and Ground Preparation

4.3.1 Ground works, including site clearance and preparation, will be required to prepare the sites ready for development. These works, in proximity to trees, can cause serious damage including:

- Direct collision damage to the stems and branches.
- Root damage due to changes in soil level.
- Compaction damage to the rooting environment via pedestrian and vehicular movement over the root protection area.

This has the potential to affect all surveyed trees to be retained.

4.4 Development Stage

4.4.1 Generic development works on the site, such as operation of machinery, storage of materials, etc, could result in damage to the crown, stem and root system of trees to be retained.

4.4.2 During the construction stage site traffic, both vehicular and pedestrian, may be moving constantly over of trees to be retained. This could cause compaction of the rooting environment leading to the subsequent decline of these trees on Miner's Welfare Ground.

4.4.3 Proposed new car parking will breach the RPA of T63, a moderate value tree, on Miner's Welfare Ground, and G7 on the Charlie Wayman Fields. Standard construction methods could result in root damage to this tree.

4.4.4 Installation of a third tennis court and extension to run off areas of the existing courts will breach the RPA of T54 and T62 on Miner's Welfare Ground. Standard construction methods could result in root damage to these trees.

4.5 Post Development Conflicts

4.5.1 Potential post development tree/resident conflicts such as encroachment, shading, leaf fall, honeydew, etc usually arise from the erection of buildings close to large trees. Such problems are subjective and depend entirely on different attitudes to trees. Consequently, the impacts are difficult to predict with any degree of accuracy. Given the nature of the proposals, no significant post development conflicts are predicted.

5.0 MITIGATION

5.1 Replacement Tree Planting

5.1.1 New tree plantings are proposed on both sites. This comprises of 23no. to the west of the proposed skate park location on Miner's Welfare Ground and 25no. on the west boundary of Charlie Wayman Fields.

5.2.1 The tree specification will be set out in the ecological report.

5.2 Site Clearance and Ground Preparation

5.2.1 To prevent the potential for direct damage during site works, tree protective fencing should be erected, specified in figures 3 or 4 below, as shown on the tree protection plan. The fencing should remain in place for the entire project. Signs will be attached to the fencing to state that it is a protected area.

5.3 Development Stage

5.3.1 The protective fencing recommended in section 5.2.1 will remain in place for the entire project. Signs will be attached to the fencing to state that it is a protected area and that it should not be moved during the construction phase.

5.3.2 To mitigate for the likely compaction caused by vehicular and pedestrian movement on site, ground protection measures will be put into place prior to commencement of works. This should comprise of scaffold boards overlying a compressible layer, such as 150mm of woodchips or gravel, which in turn overlies a geotextile membrane.

5.3.3 Construction of new car parking spaces and third tennis court/run off area within the RPA of T54, T62, T63 and G7 should be undertaken sensitively. The following methodology is recommended:

- The existing hard surfaces should be removed using hand tools only.

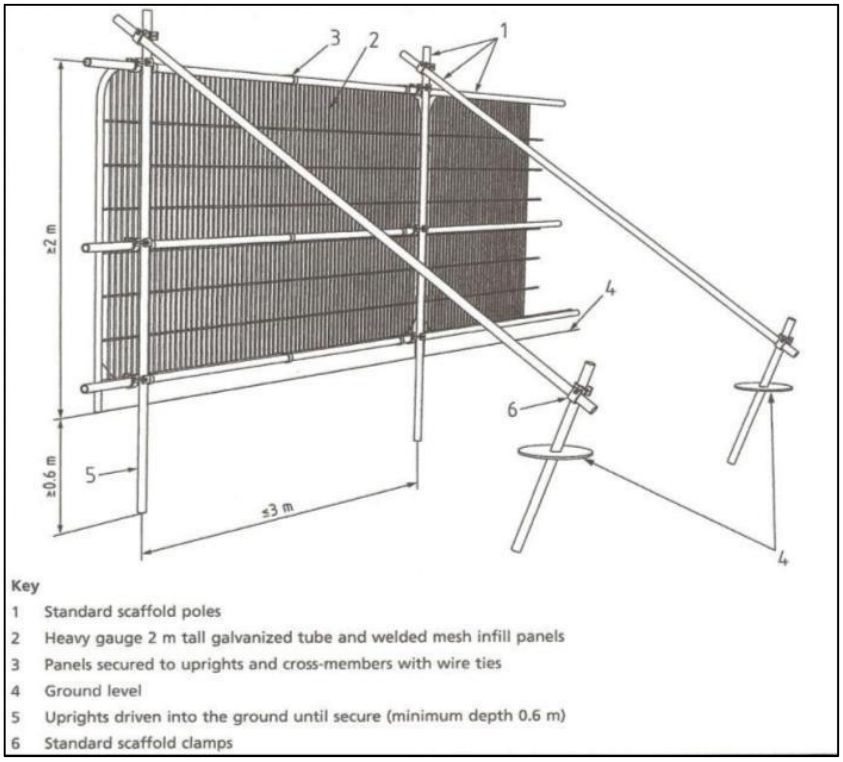
- There should be no change in ground levels greater than 50mm.
- Roots smaller than 25mm may be cut back to a side shoot using bypass secateurs or a hand saw. No roots larger than 25mm should be cut.
- Edging materials will be laid at ground level supported on pins driven into the ground.
- The final surfaces should be porous to allow moisture to the tree roots and allow gases to escape from the soil.

5.4 Post Development Tree Management

5.4.1 Minor pruning of trees may be required in the future to prevent encroachment to the tennis courts and north end of the car park on Miner's Welfare Ground.

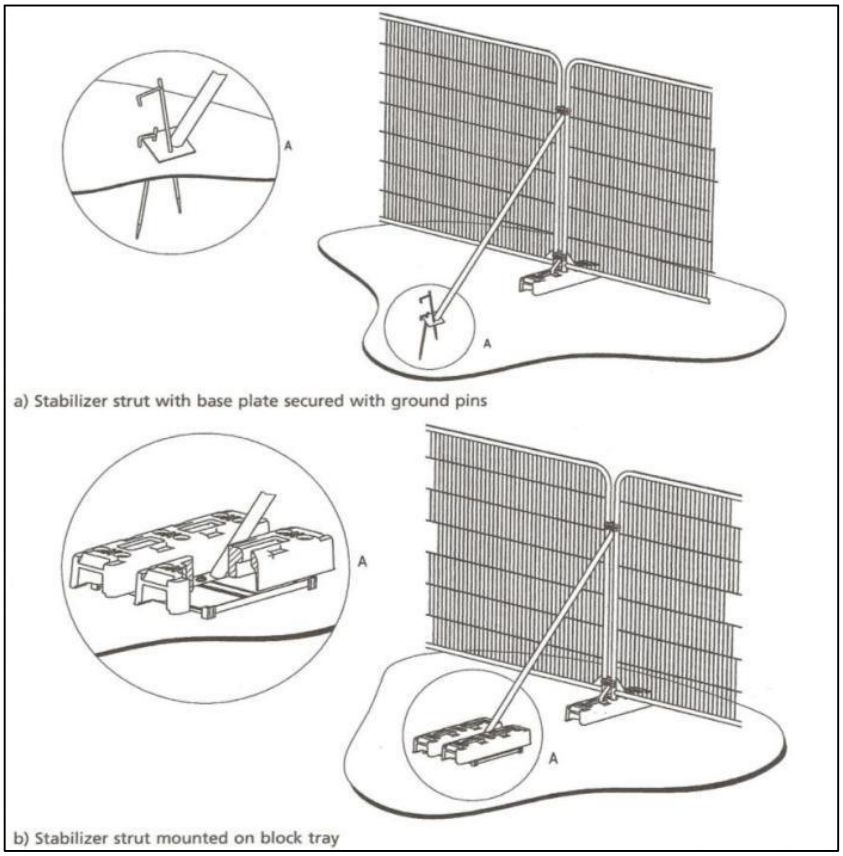
5.4.2 Pruning of G7 is also likely to be required to provide suitable clearance over the car parking area on Charlie Wayman Fields.

Figure 3 – Default protective fencing for trees on demolition/development sites.



Key
1 Standard scaffold poles
2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels
3 Panels secured to uprights and cross-members with wire ties
4 Ground level
5 Uprights driven into the ground until secure (minimum depth 0.6 m)
6 Standard scaffold clamps

Figure 4 – Alternative protective fencing for trees on demolition/development sites.



[Figures 3 & 4 reproduced with the permission of the British Standards Institute].

6.0 SUMMARY OF IMPACTS AND MITIGATION

6.1 The impacts and mitigation criteria shown in figure 5 below have been used to assess the impacts of the proposed development, which is summarised in figure 6.

Figure 5 – Impact assessment parameters and predictions

Assessment parameters	Measure of impacts
Nature and Magnitude of impact	Major negative Negative Minor negative Neutral / Negligible Minor positive Positive Major Positive
Extent of impact	Site level Street level Local level District level County level National level
Probability that impact will occur	Certain / Highly likely Likely Possible Extremely unlikely

Figure 6 – Site impacts before and after mitigation.

Proposed activity	Predicted impact without mitigation	Assessment of impact without mitigation	Proposed Mitigation	Assessment of impact with mitigation
Site clearance and ground preparation	Damage to stems, branches and roots of moderate and low and moderate value trees. Possible decline of trees	Negative Street level Possible	Protective fencing to be erected	Neutral Likely
General construction works in proximity to trees to be retained				
Pedestrian and vehicular traffic within RPA of trees to be retained	Damage to roots of moderate value trees. Possible decline of trees	Negative Site level Likely	Ground protection measures to be installed	Neutral Likely
Tree removal	Loss of low and moderate value trees on Miner's Welfare Ground	Negative Site level Certain	New tree plantings to west of proposed skate park area on Miner's Welfare Ground. New tree plantings on west boundary of Charlie Wayman Fields	Positive Site level Likely
Construction of new car parking spaces within RPA of trees to be retained	Damage to roots of moderate value trees. Possible decline of trees	Negative Site level Possible	Sensitive working methodology	Negligible Likely
Construction of third tennis court and extension to run off to existing courts	Damage to roots of moderate value trees. Possible decline of tree	Negative Site level Possible		

7.0 REFERENCES

BSI (2012) *BS5837:2012 Trees in relation to design, demolition and construction – Recommendations.* British Standards Institution. London.

8.0 SCHEDULE OF TREES

KEY

NR: Not recorded
Age: Y = Young, SM = Semi mature, EM = Early mature, M = Mature, OM = Over mature
Estimated Remaining Contribution: Expressed in years
Recommendations for health and safety reasons are not highlighted. Recommendations for development purposes are highlighted in RED

No.	Species	Height (m)	Stem diam. (mm)	Crown Spread (m)				Height of main canopy (m)	Height of first significant branch (m)	Direction of first significant branch	Age class	Estimated remaining contribution	Comments	Recommendations	Tree quality Assessment	RPA (m^2)	RPR (m)
				N	E	S	W										
T1	Swedish whitebeam	2.5	80	1.0	1.0	1.0	1.0	2.0	NR	NR	Y	40+	No major defects	No action required at the present time	C1	3	1.0
T2	Oak	5.0	210	3.0	3.0	3.0	3.0	1.5	NR	NR	SM	40+	Branches encroaching access	Crown lift to 2m	C1	20	2.5
T3	Oak	5.0	200	3.0	3.0	3.0	3.0	1.5	NR	NR	SM	40+	No major defects	No action required at the present time	C1	18	2.4
T4	Sweet Chestnut	5.0	210	3.0	3.0	3.0	3.0	1.0	NR	NR	SM	40+	No major defects	No action required at the present time	C1	20	2.5

No.	Species	Height (m)	Stem diam. (mm)	Crown Spread (m) N	E	S	W	Height of main canopy (m)	Height of first significant branch (m)	Direction of first significant branch	Age class	Estimated remaining contribution	Comments	Recommendations	Tree quality Assessment	RPA (m^2)	RPR (m)
T5	Sweet Chestnut	3.5	210	3.0	3.0	3.0	3.0	1.0	NR	NR	SM	20+	Two co dominant stems from base. Fork contains included bark	No action required at the present time	C1	20	2.5
T6	Sweet Chestnut	3.5	180	3.0	3.0	3.0	3.0	1.0	NR	NR	SM	40+	Multiple stems from 0.5m	No action required at the present time	C1	15	2.2
T7	Sweet Chestnut	3.5	180	3.0	3.0	3.0	3.0	1.0	NR	NR	SM	40+	No major defects	No action required at the present time	C1	15	2.2
T8	Sweet Chestnut	3.5	180	3.0	3.0	2.0	3.0	1.0	NR	NR	SM	40+	No major defects	No action required at the present time	C1	15	2.2
T9	Sweet Chestnut	3.5	180	3.0	3.0	3.0	3.0	1.0	NR	NR	SM	40+	No major defects	No action required at the present time	C1	15	2.2
T10	Cherry	5.0	220	3.0	3.0	3.0	3.0	1.0	NR	NR	SM	40+	No major defects	No action required at the present time	C1	22	2.6
T11	Cherry	5.0	220	3.0	3.0	3.0	3.0	1.0	NR	NR	SM	40+	No major defects	No action required at the present time	C1	22	2.6
T12	Sweet Chestnut	3.0	130	3.0	3.0	3.0	3.0	1.0	NR	NR	SM	40+	No major defects	No action required at the present time	C1	8	1.6

No.	Species	Height (m)	Stem diam. (mm)	Crown Spread (m) N	E	S	W	Height of main canopy (m)	Height of first significant branch (m)	Direction of first significant branch	Age class	Estimated remaining contribution	Comments	Recommendations	Tree quality Assessment	RPA (m^2)	RPR (m)
T13	Sweet Chestnut	2.0	100	0.5	0.5	0.5	0.5	1.0	NR	NR	SM	10+	Suppressed	No action required at the present time	C1	5	1.2
T14	Lime	3.0	100	1.0	1.0	1.0	1.0	1.0	NR	NR	SM	20+	Stem damage evident	No action required at the present time	C1	5	1.2
T15	Elm	3.0	75	0.5	0.5	0.5	0.5	1.0	NR	NR	SM	20+	Tree braced	No action required at the present time	C1	3	0.9
T16	Elm	4.0	130	1.5	1.5	1.5	1.5	1.5	NR	NR	SM	40+	No major defects	No action required at the present time	C1	8	1.6
T17	Swedish whitebeam	6.0	490	4.0	4.0	4.0	4.0	2.0	NR	NR	M	40+	Slight heave of grass around base	Monitor biennially	B1	109	5.9
T18	Lime	4.0	75	1.0	1.0	1.0	1.0	1.5	NR	NR	Y	40+	No major defects	No action required at the present time	C1	3	0.9
T19	Acer	3.0	75	1.0	1.0	1.0	1.0	1.5	NR	NR	Y	40+	No major defects	No action required at the present time	C1	3	0.9
T20	Swedish whitebeam	6.0	490	4.0	4.0	4.0	4.0	1.5	NR	NR	M	40+	No major defects	No action required at the present time	B1	109	5.9

No.	Species	Height (m)	Stem diam. (mm)	Crown Spread (m) N	E	S	W	Height of main canopy (m)	Height of first significant branch (m)	Direction of first significant branch	Age class	Estimated remaining contribution	Comments	Recommendations	Tree quality Assessment	RPA (m^2)	RPR (m)
T21	Swedish whitebeam	6.0	500	4.0	4.0	4.0	4.0	1.5	NR	NR	M	20+	Multiple stems from base. Forks contain included bark	No action required at the present time	B1	113	6.0
T22	Swedish whitebeam	6.0	500	4.0	4.0	4.0	4.0	1.5	NR	NR	M	20+	Multiple stems from base to 1.5m. Smaller forks included	No action required at the present time	B1	113	6.0
T23	Hawthorn	2.5	250	3.0	3.0	3.0	3.0	0.1	NR	NR	EM	40+	No major defects	No action required at the present time	C1	28	3.0
T24	Hawthorn	4.0	250	4.0	4.0	3.0	4.0	1.0	NR	NR	EM	40+	Multiple stems from base	No action required at the present time	C1	28	3.0
T25	Swedish whitebeam	6.0	350	4.0	4.0	3.0	3.0	1.5	NR	NR	EM	40+	No major defects	No action required at the present time	B1	55	4.2
T26	Poplar	16.0	1050	9.0	9.0	9.0	6.0	1.0	NR	NR	M	20+	Multiple stems from base. Forks contain included bark	Monitor biennially	B1	443	11.9
T27	Sycamore	10.0	500	5.0	3.0	5.0	5.0	2.0	NR	NR	M	40+	Multiple stems from base	No action required at the present time	B1	116	6.1
T28	Willow	8.0	620	4.0	3.0	5.0	5.0	0.1	NR	NR	EM	40+	Two co dominant stems from 1m	No action required at the present time	B1	174	7.4

No.	Species	Height (m)	Stem diam. (mm)	Crown Spread (m) N	E	S	W	Height of main canopy (m)	Height of first significant branch (m)	Direction of first significant branch	Age class	Estimated remaining contribution	Comments	Recommendations	Tree quality Assessment	RPA (m^2)	RPR (m)
T29	Swedish whitebeam	6.0	400	4.5	3.0	3.0	4.0	2.0	NR	NR	EM	40+	Deadwood in crown	Remove deadwood	B1	73	4.8
T30	Swedish whitebeam	4.0	300	4.0	3.0	3.0	4.0	2.0	NR	NR	EM	20+	Leaning north	No action required at the present time	B1	40	3.6
T31	Horse chestnut	2.0	300	3.0	4.0	4.0	4.0	0.1	NR	NR	EM	40+	Regrowth from stump	No action required at the present time	C1	40	3.6
T32	Silver birch	10.0	620	6.0	5.0	5.0	5.0	2.0	NR	NR	M	40+	Multiple stems base	No action required at the present time	B1	174	7.4
T33	Silver birch	10.0	410	5.0	4.0	5.5	5.5	1.0	NR	NR	M	40+	No major defects	No action required at the present time	B1	76	4.9
T34	Norway maple	8.0	540	6.0	5.0	4.0	5.0	1.0	NR	NR	M	40+	Multiple stems from base. Pruned to clear utility cable	No action required at the present time	B1	132	6.5
T35	Sycamore	8.0	400	5.0	5.0	4.0	5.0	1.0	NR	NR	EM	40+	Pruned to clear utility cable	No action required at the present time	B1	73	4.8

No.	Species	Height (m)	Stem diam. (mm)	Crown Spread (m) N	E	S	W	Height of main canopy (m)	Height of first significant branch (m)	Direction of first significant branch	Age class	Estimated remaining contribution	Comments	Recommendations	Tree quality Assessment	RPA (m^2)	RPR (m)
T36	Willow	12.0	400	5.0	5.0	5.0	5.0	1.0	NR	NR	M	20+	Inspection limited. Measurements estimated. Vegetation debris deposited around base. Multiple stems from base. Tree has been heavily reduced	Remove vegetation debris from base of tree	C1	73	4.8
T37	Willow	12.0	400	5.0	5.0	5.0	5.0	1.0	NR	NR	M	20+	Inspection limited. Measurements estimated. Vegetation debris deposited around base. Twin stems base. Tree has been heavily reduced	Remove vegetation debris from base of tree	C1	73	4.8
T38	Swedish whitebeam	6.0	400	5.0	5.0	5.0	5.0	1.0	NR	NR	M	20+	Snapped branches in crown	Tidy snapped and hanging branches	B1	73	4.8
T39	Swedish whitebeam	7.0	400	5.0	5.0	5.0	5.0	2.0	NR	NR	M	40+	No major defects	No action required at the present time	B1	73	4.8
T40	Swedish whitebeam	7.0	400	3.0	5.0	5.0	4.0	2.0	NR	NR	M	40+	Inspection limited	No action required at the present time	B1	73	4.8
T41	Swedish whitebeam	7.0	440	4.0	6.0	4.0	4.0	2.0	NR	NR	M	40+	Minor deadwood in crown	No action required at the present time	B1	88	5.3

No.	Species	Height (m)	Stem diam. (mm)	Crown Spread (m) N	E	S	W	Height of main canopy (m)	Height of first significant branch (m)	Direction of first significant branch	Age class	Estimated remaining contribution	Comments	Recommendations	Tree quality Assessment	RPA (m^2)	RPR (m)
T42	Swedish whitebeam	7.0	400	3.0	4.5	4.0	4.0	2.0	NR	NR	M	<10	Extensive stem decay	No action required at the present time	U	72	4.8
T43	Deodar cedar	14.0	630	3.5	7.0	6.0	3.0	1.5	NR	NR	M	40+	No major defects	No action required at the present time	B1	180	7.6
T44	Oak	8.0	360	4.0	7.0	4.0	3.0	1.5	NR	NR	SM	40+	Asymmetric crown to east	No action required at the present time	B1	59	4.3
T45	Cherry	10.0	410	5.0	5.0	4.5	5.0	1.5	NR	NR	M	40+	No major defects	No action required at the present time	B1	76	4.9
T46	Rowan	8.0	410	5.0	3.0	4.5	5.0	2.0	NR	NR	EM	40+	No major defects	No action required at the present time	B1	76	4.9
T47	Norway maple	10.0	560	3.0	3.5	8.0	5.0	2.0	NR	NR	M	10+	Asymmetric crown to south. Stem forks at 1.5m. Stems then crossing and growing against one another from 2.5m	Monitor annually	C1	142	6.7
T48	Willow	14.0	800	6.0	6.0	6.0	6.0	2.0	NR	NR	M	40+	Located in neighbouring property. Not inspected in detail	No comments	B1	290	9.6

No.	Species	Height (m)	Stem diam. (mm)	Crown Spread (m) N	E	S	W	Height of main canopy (m)	Height of first significant branch (m)	Direction of first significant branch	Age class	Estimated remaining contribution	Comments	Recommendations	Tree quality Assessment	RPA (m^2)	RPR (m)
T49	Norway maple	7.0	380	4.0	4.0	4.0	4.0	2.0	NR	NR	EM	40+	No major defects	No action required at the present time	B1	65	4.6
T50	Cherry	11.0	410	5.0	4.0	5.0	4.0	2.0	NR	NR	EM	40+	No major defects	No action required at the present time	B1	76	4.9
T51	Scots pine	8.0	400	4.0	4.0	4.5	3.0	2.0	NR	NR	EM	40+	No major defects	No action required at the present time	B1	72	4.8
T52	Oak	8.0	250	3.0	3.0	3.0	3.0	2.0	NR	NR	SM	40+	No major defects	No action required at the present time	B1	28	3.0
T53	Oak	7.0	250	3.0	3.0	3.0	3.0	2.0	NR	NR	SM	40+	No major defects	No action required at the present time	B1	28	3.0
T54	Cherry	7.0	410	4.0	4.0	4.0	4.0	2.0	NR	NR	EM	40+	No major defects	No action required at the present time	B1	76	4.9
T55	Cherry	5.0	130	2.0	2.0	2.0	2.0	2.0	NR	NR	SM	40+	No major defects	Fell for development	C1	8	1.6
T56	Rowan	4.0	150	2.0	2.0	2.0	2.0	2.0	NR	NR	SM	40+	No major defects	Fell for development	C1	10	1.8
T57	Oak	3.5	80	2.0	2.0	2.0	2.0	2.0	NR	NR	Y	40+	No major defects	Fell for development	C1	3	1.0

No.	Species	Height (m)	Stem diam. (mm)	Crown Spread (m)				Height of main canopy (m)	Height of first significant branch (m)	Direction of first significant branch	Age class	Estimated remaining contribution	Comments	Recommendations	Tree quality Assessment	RPA (m^2)	RPR (m)
				N	E	S	W										
T58	Swedish whitebeam	6.0	500	4.0	4.0	4.0	4.0	2.5	NR	NR	M	40+	Tree has been crown lifted over tennis courts	Fell for development	B1	113	6.0
T59	Lime	4.0	100	2.0	2.0	2.0	2.0	1.0	NR	NR	Y	40+	No major defects	No action required at the present time	C1	5	1.2
T60	Cherry	4.0	90	2.0	2.0	2.0	2.0	2.0	NR	NR	Y	40+	No major defects	No action required at the present time	C1	4	1.1
T61	Oak	7.0	220	3.0	3.0	3.0	3.0	1.0	NR	NR	SM	40+	No major defects	No action required at the present time	B1	22	2.6
T62	Swedish whitebeam	7.0	580	5.0	5.0	5.0	5.0	2.0	NR	NR	M	40+	No major defects	No action required at the present time	B1	152	7.0
T63	Swedish whitebeam	7.0	470	4.0	4.0	4.0	4.0	2.0	NR	NR	M	40+	Decay of stem evident	No action required at the present time	B1	100	5.6
T64	Swedish whitebeam	6.0	510	4.0	4.0	4.0	4.0	2.0	NR	NR	M	40+	No major defects	Fell for development	B1	118	6.1
T65	Cherry	4.0	140	2.0	2.0	2.0	2.0	2.0	NR	NR	SM	40+	No major defects	Fell for development	C1	9	1.7
T66	Oak	3.0	80	1.0	1.0	1.0	1.0	1.0	NR	NR	Y	40+	No major defects	Fell for development	C1	3	1.0

No.	Species	Height (m)	Stem diam. (mm)	Crown Spread (m) N	E	S	W	Height of main canopy (m)	Height of first significant branch (m)	Direction of first significant branch	Age class	Estimated remaining contribution	Comments	Recommendations	Tree quality Assessment	RPA (m^2)	RPR (m)
T67	Elm	3.5	100	1.0	1.0	1.0	1.0	1.0	NR	NR	Y	40+	No major defects	Fell for development	C1	5	1.2
T68	Elm	4.0	110	1.0	1.0	1.0	1.0	1.0	NR	NR	Y	40+	No major defects	Fell for development	C1	5	1.3
T69	Elm	4.0	150	2.0	2.0	2.0	2.0	1.0	NR	NR	SM	40+	No major defects	Fell for development	C1	10	1.8
T70	Oak	6	250.0	4.0	4.0	4.0	4.0	0.5	NR	NR	SM	40+	Situated >1m below existing field level	No action required at the present time	C1	28	3
T71	Hawthorn	3	130.0	2.0	2.0	2.0	2.0	0.5	NR	NR	SM	40+	Situated >1m below existing field level	No action required at the present time	C1	8	2
T72	Silver birch	6	200.0	2.0	2.0	2.0	2.0	0.5	NR	NR	SM	40+	Situated >1m below existing field level	No action required at the present time	C1	18	2
H1	Privet	2.0	50	NR	NR	NR	NR	0.1	NR	NR	EM	40+	Managed hedgerow situated around bowling green	No action required at the present time	B2	NR	NR
H2	Privet	2.0	50	NR	NR	NR	NR	0.1	NR	NR	EM	40+	Individual areas of hedgerow around site	No action required at the present time	C2	NR	NR

No.	Species	Height (m)	Stem diam. (mm)	Crown Spread (m) N	E	S	W	Height of main canopy (m)	Height of first significant branch (m)	Direction of first significant branch	Age class	Estimated remaining contribution	Comments	Recommendations	Tree quality Assessment	RPA (m^2)	RPR (m)
H3	Hawthorn	4	150.0	NR	NR	NR	NR	0.1	NR	NR	SM	40+	Situated outside boundary fencing. Unmanaged hawthorn hedgerow with occasional willow and lime trees	No action required at the present time	C2	NR	NR
H4	Hawthorn	4	120.0	NR	NR	NR	NR	0.1	NR	NR	SM	40+	Unmanaged. Situated within site boundary	No action required at the present time	C2	NR	NR
G1	Mixed	4.0	100	NR	NR	NR	NR	0.1	NR	NR	SM	40+	Species includes Rhododendron, monkey puzzle, laurel, sycamore, holly, elder, cypress and palm	No action required at the present time	C2	NR	NR
G2	Mixed	3.0	150	NR	NR	NR	NR	0.1	NR	NR	SM	40+	Located around utility kiosk. Species includes rowan and sycamore	No action required at the present time	C2	NR	NR
G3	Mixed	6.0	150	NR	NR	NR	NR	0.1	NR	NR	SM	40+	Tree at corner of site not accessible. Species in group includes laurel, sycamore and ash	No action required at the present time	C2	NR	NR

No.	Species	Height (m)	Stem diam. (mm)	Crown Spread (m) N	E	S	W	Height of main canopy (m)	Height of first significant branch (m)	Direction of first significant branch	Age class	Estimated remaining contribution	Comments	Recommendations	Tree quality Assessment	RPA (m^2)	RPR (m)
G4	Swedish whitebeam	7.0	400	NR	NR	NR	NR	2.0	NR	NR	EM	10+	Not all trees identified on topographical survey. Several trees are structurally compromised and require removal	Remove structurally compromised trees	C2	NR	NR
G5	Mixed	4.0	100	NR	NR	NR	NR	1.0	NR	NR	Y	40+	4no trees not identified on topographical survey. Species includes lime, pear and oak	No action required at the present time	C2	NR	NR
G6	Mixed	4.0	150	NR	NR	NR	NR	1.0	NR	NR	SM	40+	Species includes cherry and palm	No action required at the present time	C2	NR	NR
G7	Mixed	8.0	500	NR	NR	NR	NR	1.5	NR	NR	EM	40+	Not all trees identified as individuals on topographical survey. Located in neighbouring gardens. Not inspected in detail. Species includes sycamore, elder and cypress	No comments	B2	NR	NR
G8	Mixed	8.0	250	NR	NR	NR	NR	0.5	NR	NR	SM	40+	Not all trees identified as individuals on topographical survey. Species includes oak, silver birch and ash	No action required at the present time	B2	NR	NR

No.	Species	Height (m)	Stem diam. (mm)	Crown Spread (m) N	E	S	W	Height of main canopy (m)	Height of first significant branch (m)	Direction of first significant branch	Age class	Estimated remaining contribution	Comments	Recommendations	Tree quality Assessment	RPA (m^2)	RPR (m)
G9	Mixed	8.0	280	NR	NR	NR	NR	0.5	NR	NR	SM	40+	Not all trees identified as individuals on topographical survey. Species includes oak, silver birch and ash	No action required at the present time	B2	NR	NR
G10	Mixed	9.0	400	NR	NR	NR	NR	0.1	NR	NR	EM	40+	Not all identified as individuals. Species includes oak, silver birch, hazel and cherry	No action required at the present time	B2	NR	NR
G11	Cherry	4.0	100	NR	NR	NR	NR	0.1	NR	NR	Y	40+	Young group of cherry	No action required at the present time	C2	NR	NR
G12	Mixed	8.0	250	NR	NR	NR	NR	0.1	NR	NR	SM	40+	Species includes silver birch and cherry	No action required at the present time	B2	NR	NR
G13	Mixed	8	100.0	NR	NR	NR	NR	0.1	NR	NR	SM	40+	Majority situated outside boundary fencing. Occasional young trees on site side of fencing. Species includes alder, ash, hazel, silver birch, goat willow, hawthorn, cherry and oak	No action required at the present time	C2	NR	NR

Appendix 1a
Tree Protection Plan - MWG

KEY

Tree retention category

Category A
Category B
Category C
Category U

Tree Constraints

Crown Spread

Root Protection Area

Tree Removal

Tree to be removed

Tree Protection

Protective fencing

Ground protection measures

Sensitive working methodology

Scale: 1:1000 @ A3

The original of this plan was produced in colour - a monochrome copy should not be relied upon

Project Details
Miner's Welfare Ground & Charlie Wayman Fields
Ferryhill

Prepared for:
FSL Projects
71 Plato Close
Leamington Spa
CV34 6WE

Date: 25th April 2024

Report ref:
FSL_MWG&CWF_AIA1.1

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Appendix 1b

Tree Protection Plan - CWF

KEY

Tree retention category

Category A
Category B
Category C
Category U

Tree Constraints

Crown Spread

Root Protection Area

Tree Removal

Tree to be removed

Tree Protection

Protective fencing

Ground protection measures

Sensitive working methodology

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