QEII Playing Fields, Yate, Bristol

Arboricultural Method Statement

Content

On behalf of
Dodington Parish Council

Prepared by:
Chris Wright *M.Arbor.A,*
Arboricultural Consultant

November 2024

1.0 Arboricultural Method Statement

1.1 Scope

Silverback Arboricultural Consultancy have been instructed to compile a Detailed Arboricultural Method Statement for the installation of a new exercise path around perimeter of QEII Playing Fields, Yate, Bristol

1.1.1 Sections of the proposed path extend through the calculated Root Protection Areas of existing trees. A site visit between Chris Wright of Silverback Arboricultural Consultancy and Andrew Sanders South Gloucestershire Council Landscape, who is designing the pathway, was undertaken. During this visit the root protection areas of adjacent tree were noted and the construction of the pathway, within these areas, was discussed and agreed to reduce any potential impact on the tree roots

1.1.2 Constraints on the position of the path are presented in the Tree Schedule Sheets (appendix 2.1) and the Arboricultural Impact Assessment Plan (appendix 2.2). These constraints are also considered in the main body of the report below and recommended remedial works and mitigating measures.

1.1.3 The Arboricultural Impact Assessment Plan (AIA), (appendix 2.1), shows the root protection areas (RPAs) for the individual trees identified in the tree schedule tables. This represents the minimum area in m^2 which ideally, should be left undisturbed around each tree were it to be retained. Underground structures, services and other topographical feature, such as different ground levels, can influence root spread and potentially restrict extension growth.

1.1.4 Where the new path extends through the calculated root protection area of the existing trees, the path should be a no-dig construction using a three dimensional 'Cellular Confinement System' (CCS), such as "Cellweb" to prevent any ground compaction or potential impact on the health of the tree roots. (appendix 2.3). The area where CCS is required are illustrated in blue on the attached Arboricultural Impact Assessment Plan (appendix 2.1)

1.1.3 All works within the root protection areas of the trees should be undertaken by hand using hand held tools. As the CCS is installed it can be used as an access track to extend the pathway through the root protection areas of the tree. Materials should be delivered using a mini dumper situated on the CCS at all times. Warning tape can be used to indicate the root protection areas either side of the pathway route. It is not considered necessary to recommend further tree protection such as protective fencing or temporary ground protection.

1.1.4 This arboricultural method statement contains the methodology for all works in relation to the proposed path in proximity to trees located around the site boundary. Copies of the arboricultural method statement document will be available for inspection on site and will form the basis of the management of all works relating to the trees on the site for the Site Agent/Manager following commencement of the project.

1.2 Contacts

Client

Dodington Parish Council

Arboricultural Officer:

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Arboricultural Officer
South Gloucestershire Council
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Arboricultural Consultant:

Chris Wright
Silverback Arboricultural Consultancy
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1.3 Works Requiring Tree Protection

Development Operation	Tree Number	Type of Protection	Reference
General Construction	Trees along boundaries of the site	Hazard warning tape Inspection by Arboricultural Consultant submission of site visit report form once erected	Paragraph 1.4.1 Paragraph 1.5 Appendix 2.5
Installation of Cellular Confinement System to accommodate re-grading of bank	Trees along boundaries of the site	Cellweb Cellular Confinement System Monitoring by Arboricultural Consultant submission of site visit report form on completion	Paragraph 1.4.1& 1.4.2. Appendix 2.4 Paragraph 1.5 Appendix 2.5

1.4 Programme of Works

1.4.1 Tree protection

- Warning tape will be fixed to stakes driven into the ground either side of the path route to indicate the root protection areas of the trees. This will be retained in place for the duration of the works.
- The area between the warning tape and the trees will be a Construction Exclusion Zone (CEZ)
- There will be no movement of the hazard tape unless it is overseen by the project Arboricultural Consultant
- No activity is planned to take place within the CEZ; however, any work that does take place within the CEZ will be overseen and approved by the Arboricultural Consultant.

1.4.2 Construction of path within root protection area of adjacent trees

- This will be constructed using a three dimensional 'Cellular Confinement System' (CCS), "Cellweb" to prevent any ground compaction or potential impact on the health of the tree roots.
- The position of the new path will be marked out, cleared of vegetation and a general level created using hand tools and clean sand where necessary. A geo textile membrane will then be laid across the surface overlaying the edges of the area by 300mm. Any joints will be overlap by a minimum of 300mm.

- 75mm 'Cellular Confinement System' (CCS) will then be laid across the area and secured with J pins in the corners and 10x J pins per panel. Adjacent panels will be stapled together. This will provide a load-bearing and permeable structure. The cellular design and perforated cell walls reduce the vertical load pressure on sub soils to tree roots and prevents damage.
- Once the CCS is in place it will be backfilled with Type 4/20 or Type 20/40mm clean angular stone which will enable air and moisture to reach the roots and encourage healthy growth. There will be a minimum overfill of clean angular stone.
- A porous wearing course will then be applied to a depth of 30-40mm as the finished surface. The edges of the path will be retained using tannalised wooden retaining boards staked into the ground tapering down to the existing ground level with topsoil.

1.5 Supervision and Monitoring

The project arboricultural consultant will be employed to oversee operations relating to works close to or within the RPA of retained trees and produce a site inspection report on completion of the operations listed below. A copy of the site inspection reports will be maintained on site and copies forwarded to the Local Planning Authority Tree Officer.

- Initial site meeting with contractors to discuss tree protection measures
- Installation of Cellular Confinement System (CCS) to form new pathway

1.5.1 This development will be overseen Silverback Arboricultural Consultancy. If there are any alterations to the proposed working methodology necessary, works will be stopped until the arboricultural consultant has been notified and agreement reached with the Local Planning Authority Tree Officer.

1.6 References

This Method Statement has been informed by the following information

- Proposed layout Plan
- BS5837: 2012 'Trees in relation to design, demolition and construction – Recommendations'
- Cellweb Weight Capabilities data sheet

2.0 Appendices

2.1 Survey Schedule Sheets

2.2 Arboricultural Impact Assessment Plan

2.3 Proposed Layout Plan

2.4 Cellular Confinement System detail

2.5 Site Inspection Report Form

Chris Wright. ***MArborA.***

Principal Consultant

Silverback Arboricultural Consultancy

2nd December 2024

Arboricultural Survey Queen Elizabeth II Playing Fields, Dodington

Tree Number	Common name	*Botanical name*	Height (m)	Number of stems	Calculated stem diameter (mm)	Crown Spread (m)				Crown Clearance (m)	Life Stage	Structural Condition	Physiological Condition	Observations	Preliminary Recommendations	Remaining contribution (yrs)	BS Catergory	Root Protection Area Radius (m) Area m2
						N	E	S	W									
H01	Mixed species	Mixed species	6	1	100	3	3	3	3	0	Mature	Good	Good	Mixed species boundary hedgerow consisting of Dogwood, Field Maple, Hazel, Hawthorn, Guelder rose No significant defects visible at time of inspection Multi- stemmed from base	No action required at the time of inspection.	20-40 Years	B2	Radius: 1.2m. Area: 5 sq m.
H02	Mixed species	Mixed species	4	1	100	1	1	1	1	0	Mature	Fair	Good	Mixed species boundary hedgerow consisting of Hawthorn, Dogwood, Hazel, Ash No significant defects visible at time of inspection	No action required at the time of inspection.	20-40 Years	C2	Radius: 1.2m. Area: 5 sq m.
T01	Wild cherry	*Prunus avium*	8	1	200#	4	4	4	4	2	Early Mature	Good	Good	Growing in hedgerow No significant defects visible at time of inspection Suppressed by neighbouring trees	No action required at the time of inspection.	20-40 Years	C2	Radius: 2.4m. Area: 18 sq m.
T02	Wild cherry	*Prunus avium*	8	1	200#	3	4	4	4	2	Early Mature	Good	Good	Growing in hedgerow No significant defects visible at time of inspection Suppressed by neighbouring trees	No action required at the time of inspection.	20-40 Years	C2	Radius: 2.4m. Area: 18 sq m.
G03	Field maple	*Acer campestre*	10	1	250#	4	4	4	4	1.5	Mature	Fair	Good	Group of 4 Field Maples growing in hedgerow outside site boundary Multi- stemmed from base	No action required at the time of inspection.	20-40 Years	C2	Radius: 3.0m. Area: 28 sq m.

Arboricultural Survey Queen Elizabeth II Playing Fields, Dodington

Tree Number	Common name	*Botanical name*	Height (m)	Number of stems	Calculated stem diameter (mm)	Crown Spread (m)				Crown Clearance (m)	Life Stage	Structural Condition	Physiological Condition	Observations	Preliminary Recommendations	Remaining contribution (yrs)	BS Catergory	Root Protection Area Radius (m) Area m2
						N	E	S	W									
T04	Pedunculate oak	*Quercus robur*	12	1	280#	2	5	5	5	2.5	Early Mature	Fair	Fair	Growing 2m beyond boundary fence No significant defects visible at time of inspection Suppressed by neighbouring trees Minor deadwood in canopy	No action required at the time of inspection.	20-40 Years	C2	Radius: 3.4m. Area: 36 sq m.
T05	Pedunculate oak	*Quercus robur*	14	1	650#	6	6	6	6	1.5	Mature	Good	Good	Growing approximately 4m beyond boundary fence No significant defects visible at time of inspection	No action required at the time of inspection.	40+ Years	A1,2	Radius: 7.8m. Area: 191 sq m.
G06	Mixed species	Mixed species	12	1	550#	6	6	6	6	1.5	Mature	Good	Good	Group of Cherry, Oak, and Field Maple growing beyond boundary fence No significant defects visible at time of inspection Major deadwood in canopy	No action required at the time of inspection.	20-40 Years	B2	Radius: 6.6m. Area: 137 sq m.
T07	Crack willow	*Salix fragilis*	10	2	710#	3	3	3	3	1	Mature	Fair	Good	Growing beyond boundary fence Previously pollarded at 8m with regrowth Twin stemmed from base	No action required at the time of inspection.	20-40 Years	B2	Radius: 8.5m. Area: 227 sq m.
T08	Pedunculate oak	*Quercus robur*	12	1	400	5	5	5	5	0.5	Mature	Good	Good	No significant defects visible at time of inspection Suppressed by neighbouring trees Major deadwood in canopy	No action required at the time of inspection.	40+ Years	A1,2	Radius: 4.8m. Area: 72 sq m.
T09	Pedunculate oak	*Quercus robur*	12	1	800	7	10	11	8	1.5	Mature	Good	Good	No significant defects visible at time of inspection Major deadwood in canopy	No action required at the time of inspection.	40+ Years	A1,2	Radius: 9.6m. Area: 290 sq m.

Arboricultural Survey Queen Elizabeth II Playing Fields, Dodington

Tree Number	Common name	*Botanical name*	Height (m)	Number of stems	Calculated stem diameter (mm)	Crown Spread (m)				Crown Clearance (m)	Life Stage	Structural Condition	Physiological Condition	Observations	Preliminary Recommendations	Remaining contribution (yrs)	BS Catergory	Root Protection Area Radius (m) Area m2
						N	E	S	W									
G10	Mixed species	Mixed species	12	1	350#	5	5	5	5	1.5	Mature	Good	Good	Group of two Cherries and one Oak growing in hedgerow beyond boundary fence No significant defects visible at time of inspection Minor deadwood in canopy	No action required at the time of inspection.	40+ Years	B2	Radius: 4.2m. Area: 55 sq m.
T11	Field maple	*Acer campestre*	11	3	430#	6	6	6	6	0	Mature	Fair	Good	Growing as part of hedgerow Multi- stemmed from base	No action required at the time of inspection.	20-40 Years	B2	Radius: 5.2m. Area: 85 sq m.
T12	Silver birch	*Betula pendula*	7	1	180	2	3	3	1	0	Early Mature	Fair	Good	Growing on slightly raised ground Suppressed by neighbouring trees	No action required at the time of inspection.	40+ Years	C2	Radius: 2.2m. Area: 15 sq m.
T13	Silver birch	*Betula pendula*	6	1	100	0	1	2	0	1	Semi Mature	Poor	Fair	Ring barked tree	No action required at the time of inspection.	<10 years	U	No RPA due to Retention Category of U.
T14	Pedunculate oak	*Quercus robur*	8	1	220	4	4	5	2	1	Early Mature	Fair	Fair	Suppressed by neighbouring trees Minor deadwood in canopy	Remove lowest branch to crown lift to 3m	20-40 Years	C2	Radius: 2.6m. Area: 21 sq m.
T15	Weeping willow	*Salix babylonica*	12	1	870	7	7	7	7	0.5	Mature	Good	Good	No significant defects visible at time of inspection Twin stemmed from 1.5m	No action required at the time of inspection.	20-40 Years	B2	Radius: 10.4m. Area: 340 sq m.
G16	Mixed species	Mixed species	10	1	280#	3	3	4	4	1.5	Mature	Fair	Good	Mixed species group growing in hedgerow consisting of Field Maple and Cherry No significant defects visible at time of inspection Multi- stemmed from base	No action required at the time of inspection.	20-40 Years	B2	Radius: 3.4m. Area: 36 sq m.

Arboricultural Survey Queen Elizabeth II Playing Fields, Dodington

Tree Number	Common name	*Botanical name*	Height (m)	Number of stems	Calculated stem diameter (mm)	Crown Spread (m)				Crown Clearance (m)	Life Stage	Structural Condition	Physiological Condition	Observations	Preliminary Recommendations	Remaining contribution (yrs)	BS Catergory	Root Protection Area Radius (m) Area m2
						N	E	S	W									
T17	Field maple	*Acer campestre*	8	1	250#	3	3	3	3	3	Mature	Good	Good	Growing in hedgerow Multi- stemmed from base	No action required at the time of inspection.	20-40 Years	B2	Radius: 3.0m. Area: 28 sq m.
G18	Mixed species	Mixed species	9	1	150#	3	3	3	3	3	Early Mature	Fair	Good	Mixed species group growing in hedgerow consisting of Silver Birch and Field Maple No significant defects visible at time of inspection Suppressed by neighbouring trees	No action required at the time of inspection.	20-40 Years	B2	Radius: 1.8m. Area: 10 sq m.

Silverback arboricultural consultancy ltd

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Site: QEII Playing Fields	
Drawing Title: Arboricultural Impact Assessment	1:500 @ A1
Drawing Number: 241127-QEIIPF-AIA-Rev A-NB&AM	Nov 2024

Shelter
Subway
Remove small birch tree from line of path
Proposed 1.5m Linking Path
Existing Garden
WITCOMBE
KELSTON CLOSE
Pitch 1 91x55m
B
Sports Facility MUGA
Childrens Nursery
Changing room
Proposed 1.5m Linking Path
Existing Oaks retained
C
Park maintenance compound
400m marker post
3m run off safety zone
Proposed 2m Main Path
500m marker post
Exercise Path Start post
Proposed tree planting
3m run off
Proposed 1.5m circular path
Pitch 2 90x55m
300m marker post
2m between pitches
Pitch 3 90x55m
E
A
Proposed 2m Main Path
100m marker post
Proposed 1.5m circular path
200m marker post
Wellesley Primary School
D

KEY

Compacted stone dust paths

Compacted stone dust path with 150mm DoT type 1 foundation and timber board edgings.

No dig cell web path construction (to provide protection to tree roots)

No dig stone dust path with 75mm Cell web reinforcement, timber edging boards and compacted stone dust surface.

Timber exercise path marker post

NOTE:
raised cell web path edges to be made good where possible with existing topsoil excavated from site.

South Gloucestershire Council
ENVIRONMENT AND COMMUNITY SERVICES

Drawing
QE 2 Playing fields, Dodington, Yate
Proposed exercise path

Scale	Drawn	Date	Checked	Approved
1:1000@A3	AJS	08.01.2024		

Dwg No. LA247 M02

Rev G

Cellweb® TRP

Tree Root Protection

Cellweb® TRP is a 3D cellular confinement tree root protection system. The system provides a 'no dig' solution for the construction of new hard surfaces within root protection areas (RPAs). Cellweb® TRP has been designed and independently tested to comply with recommendations made in Arboricultural Practice Note 12 and BS 5837 2012 – Trees in relation to design, demolition and construction.

Cellweb® TRP Key Functions

Cellweb® is a 'no dig' solution which is constructed directly on the existing ground surface. This eliminates the requirement for excavation, preventing root severance.

Cellweb® is a completely porous system allowing continued water permeation and gas exchange between the rooting environment and atmosphere.

Cellweb® spreads point loads, minimising increases in soil compaction within the rooting environment. This maintains an open graded soil structure allowing continued root growth, water, gas and nutrient migration.

The Cellweb® TRP system comprises the following three components

Treetex™ Geotextile. Following minimal ground preparation the Treetex™ is laid onto the existing ground and top soil. This acts as a separation layer, separating the system above from the soil and rooting environment below. Treetex™ performs as a hydrocarbon pollution control measure in accordance with BS5837, holding 1.7lt of oil per square meter.

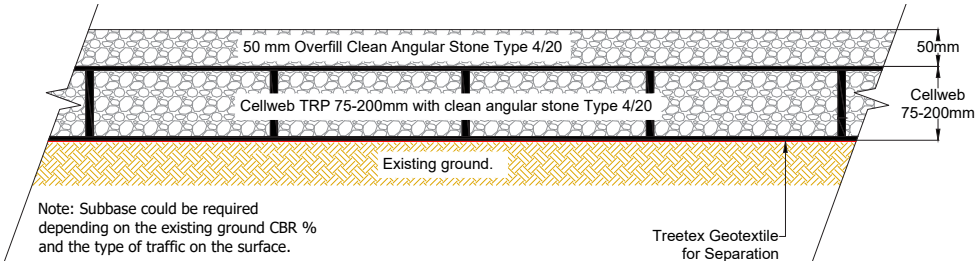
Cellweb® 3D Cellular Confinement. The Cellweb® is installed on top of the Treetex™ layer. This is fixed to the ground using ten steel J pins per panel. The panels can be cut to the required shape and adjoining panels can be connected using heavy duty staples or cell ties.

4-20mm Clean Angular Stone. The expanded Cellweb® is infilled with a 4-20mm clean angular stone. The confined angular stone locks together to produce a rigid stone mattress, while maintaining air pockets for continued water permeation and gas exchange. The low fines content of the stone prevents the Treetex™ layer from becoming blocked over time.

Which depth of Cellweb® TRP?

The Cellweb® System is provided in four different depths; 200mm, 150mm, 100mm and 75mm. The depth required is determined by the proposed traffic loadings and the site ground conditions. Geosynthetics in house engineering department can provide a free site specific technical recommendation. For free technical and engineering support please contact Geosynthetics Ltd 01455 617139 or the full installation guide can be found on our website www.geosyn.co.uk.

Indicative Cellweb with overfill



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Geosynthetics
Engineered Solutions

Arboricultural Site Inspection Report

Site Address:-

Date of Inspection:-

Present:-

Purpose:-

Assessment:-

Chris Wright. ***MArborA,***
Silverback Arboricultural Consultancy