

94 Ballybawn Cottages, Enniskerry, Co. Wicklow

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Ref: RRS089787684

31<sup>st</sup> October 2023

#### For the Attention of Mr. John-Mark Bentley

Foreman of Works Howth/ Malahide Operations Department Fingal County Council Malahide Castle Malahide Co. Dublin

Dear Mr. Bentley

### Re: A Condition Assessment of Trees within the Woodland at 'Red Rock', Sutton, Dublin 13.

I inspected the trees in question within the woodland area at 'Red Rock', Sutton, Dublin 13 as requested and am pleased to submit my report which gives details of my findings and recommendations.

If you require further information please do not hesitate to contact us, and we will do our best to be of assistance.

Yours sincerely,

For Arborist Associates Ltd.

Felim Sheridan

Felim Sheridan,

F. Arbor. A, RFS Dip, Nat. Dip & NCH in Arboriculture.

#### Felim Sheridan's qualifications:

Fellow of the Arboricultural Association (F. Arbor. A), Professional diploma Arboriculture (RFS), National diploma Arboriculture (ND) and National certificate Horticulture (NCH).

## **Arborist Associates Ltd.**

# A Condition Assessment of Trees within the Woodland at 'Red Rock', Sutton, Dublin 13.

**Prepared for: Fingal County Council** 

<u>Prepared by: Felim Sheridan (F.Arbor.A, RFS Dip. Nat. Dip & NCH in Arboriculture)</u>

Date: 31st October 2023

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#### 1.0 Instructions

1.1 I have been instructed by Mr. John-Mark Bentley from the 'Operation Department' of Fingal County Council to carry out a condition assessment of the larger mature trees located within the woodland block at 'Red Rock', Sutton, Dublin 13 and to make recommendations on their management.

#### 2.0 Report Limitations

- 2.1 The inspection of these trees has been carried out from ground level only using the visual tree inspection method, is a preliminary report and does not include climbing inspections, internal investigations of the timber or below ground investigations. The assessment is based on what was visible at the time of the inspection and recommendations made are subject to the knowledge and expertise of the qualified Arboriculturist that carried out the above inspections.
- 2.2 This report only relates to factors apparent at the time of the inspection; as a result, further monitoring is imperative if potential problems/hazards are to be avoided. Recommendations made are intended to minimize or to help reduce potential hazards that may be associated with trees, but it is not possible to remove all such risks especially in the event of heavy winds or storms and as such, there is no guarantee or certainty that all hazardous conditions will be detected. The recommendations within this report are valid for a 12 month period only, unless otherwise stated within the attached report.

#### 3.0 Survey Data Collection and Methodology

- 3.1 The assessment of these trees started in the south- western corner of the site and worked over and back in an east to west direction across the woodland while working towards the northern boundary of the woodland.
- 3.2 The assessment was carried out using a walk through method reviewing all trees and tagging only those that had obvious physiological and/or structural issues noted in this walk over that pose a risk to people or structures and that need attention in order to address health and safety. Based on this method of assessing the trees within this woodland, 56No. trees were tagged (0993-1048) individually and commented upon within the condition assessment report produced in tabular format within 'Appendix 1' of this report and replicated as a work schedule within 'Appendix 2'. The tag numbers are attached to the trees at a height of 1.5- 2m from ground level and are orientated in such a way to assist in their relocation.

The GPS co-ordinates for each of these tag numbers have been recorded to aid in locating the tree again and the accuracy of the GPS co-ordinates on average is within 2-3.5m which is sufficient for management purposes.

This assessment lists the tree species, age class, physiological condition, structural condition and comments relating to condition both physiologically and structurally and recommendations on the remedial tree surgery works that are required. This information has been presented within tabular format within 'Appendix 1'.

- 3.3 The inspection of the trees involves a visual assessment from ground level only and does not include any invasive means of assessing the trees internally, their below ground parts or the aerial parts that are not visible from the ground. Good, fair and poor have been used to summarize the physiological and structural conditions of these trees with the comments giving more detail. Items such as heavy lvy cover, scrub vegetation and/or basal suckers may limit the assessment of some trees and have hidden structural defects such as decay cavities and fungal activity.
- 3.4 The recommended remedial tree surgery works have been prioritized to aid any budgetary constraints so that if need be, these works can be carried out over a period of time starting with those most urgent to promote health and safety. The prioritizing of the necessary remedial works has been derived from the following criteria:
  - 1 -Structural defects within the tree.
  - 2- Environmental site factors that would increase the likelihood of failure.
  - 3- Component/s most likely to failure and their size.
  - 4- The target that would be injured or damaged if failure occurred.
  - 5 Procedure and treatment to abate the hazard.

The following summarizes these priorities:

**Priority 1:** representing <u>high risk</u>, being the most urgent and would need to be carried out immediately.

**Priority 2:** representing <u>medium risk</u> and these works need to be carried out as soon as possible after 'Priority 1' works and preferably within an18 month period.

**Priority 3:** are those works that we feel can be carried out by the ground maintenance work force or agent as part of ongoing routine maintenance. These are generally works that can be carried out from ground level with either hand tools such as secateurs, handsaw or a chainsaw. It includes such works as felling of small sized trees, cutting lvy, removing lower branches, removing basal suckers and cleaning out/tidying up of the undergrowth. These works also need to be dealt with as soon as possible as such works as cutting lvy can improve the wind sail of a tree and lessen the risk of wind damage.

3.5 A schedule of the remedial tree surgery works prioritized 1-3 has been given within 'Appendix 2' of this document entitled 'Work Schedule' for the purpose of inclusion within tendering documents.

#### 4.0 Summary

4.1 Our assessment of the trees within this woodland block was carried out in early October 2023. The assessment started in the south-western corner of the site and worked over and back in an east to west direction across the woodland while working towards the northern boundary. Those trees with visible physiological and/or structural issues noted in this walk over were tagged and recommended for remedial works in order to address safety towards these paths and other surrounding high risk areas.

The GPS coordinates for each of the trees tagged have been recorded and the accuracy of the GPS co-ordinates on average is within 2-3.5m which is sufficient for management purposes.



Google Aerial Image: Shows the woodland area containing the mature trees outlined in red.

- 'Redrock' is located in the south-west corner of the Howth peninsula in Co. Dublin on an 4.2 elevated site where it is exposed to the elements and in particular to the sea winds. The overall area measures approx 21 hectares and the lands supports protected habitats, rare plant species and cultural heritage features, such as the 'Martello Tower' and old stone piers and remnants of old dwellings. It is a popular destination for locals and hikers and is visited by several thousand people each year. The lands are publicly owned and are designated as a SAC under the EU Habitats Directive. It is also covered by the Howth Special Amenity Area Order and UNESCO's Dublin Bay Biosphere.
- 4.3 Fingal County Council have an objective to protect and maintain this eighteenth-century agricultural landscape at 'Redrock' and the associated nature conservation values, while providing appropriate access for the public to enjoy the views and the cultural and natural heritage features of the Redrock lands.

The site is being managed to achieve the following objectives:

- To conserve and enhance the natural heritage of 'Redrock' in a sustainable manner
- To maintain the landscape characteristics of the site
- To facilitate recreational use without having a detrimental impact on the natural

#### environment

- To protect the cultural & historical features on the site.
- 4.4 The conifer woodland which is the subject of this assessment comprises mostly of Monterey Pine, Corsican pine, Scots Pine and Monterey Cypress with some broadleaf species consisting predominantly of Sycamore with some Goat Willow, Ash and Beech present. These trees are generally of a mature age class although some of the Sycamore and Goat Willow in particular are of varying age classes as these are establishing in here naturally where gaps within the woodland canopy develop as tree failures or removals occur.

The understory within this woodland is relatively open with some areas with heavy Bramble and Gorse with other understory shrub plants present such as Hawthorn, Blackthorn, Hazel, Holly and Elder. There is one true path through this woodland running from south- west to north-east with a number of other desire line paths criss crossing the woodland bringing a lot of the woodland into active use.

There is evidence of past management with understory clearance occurring and dead and dangerous trees removed which has created some openings in the woodland canopy and some new tree planting has been added to these areas using Pine species.

There is also evidence of where trees have suffered bark damage mainly to their base and lower trunks as a result of vandalism and fire which is a high risk on this type of heathland and given that Gorse is within the woodland understory which is highly flammable.

4.5 The bulk of the trees that have been included within this condition assessment are either of a mature or early-mature age class as these are the trees that are most likely to have physiological and/or structural issues that could pose a risk to the networks of paths through this area.

The remedial tree surgery works being recommended range from pruning to the removal of some trees as the most appropriate and viable management solution. Where it is thought viable to deal with physiological and structural issues by pruning, this management option has been preferred over the removal of trees that would impact on the woodland canopy and possibly opening it up to winds that it was previously sheltered from and leaving it more vulnerable to storm damage in the trees.

4.6 From our walk through assessment of the trees within this woodland block, a total of 56No.trees have been tagged individually and noted to have physiological and/or structural issues and from the list of trees that were tagged, 44No. Entries have been identified as requiring some sort of remedial tree surgery/pruning works to deal with current health and safety issues with the remaining trees being recommended for either cutting of lvy or monitoring.

This list of trees have been broken into two main priority categories depending on the type and urgency of the tree works required in order to aid management with budgets so that the more urgent works can be carried out first, although due to the accessibility issues to this woodland, it may be more beneficial to carry out all of the works in one operation. A third priority has also been included which involves works that in our opinion could be dealt with by the ground maintenance staff or if not, these also need to be tendered out to a tree surgery company.

Based on the prioritizing of these tree works to aid in management, the following gives a breakdown of the two main priority groups (1 & 2) and these works have been presented as a work schedule within 'Appendix 2' of this report:

#### Priority 1 Works – 19No. Trees.

**Tree Nos.**0996, 0998, 1003, 1010, 1014, 1015, 1016, 1018, 1019, 1020, 1021, 1022, 1023, 1024, 1026, 1029, 1033, 1042 & 1048.

#### Priority 2 – 25No. Trees.

**Tree Nos.**0994, 0995, 0997, 0999, 1000, 1001, 1002, 1005, 1008, 1009, 1012, 1013, 1025, 1032, 1034, 1035, 1036, 1037, 1039, 1040, 1041, 1043, 1044, 1045 & 1046.

#### 5.0 Tree Management/Recommendations

5.1 This woodland is in need of management otherwise the conifer plantation is in danger of being lost completely over time as trees fall or are removed and this would most likely be replaced by scrub woodland of broadleaf tree species most likely dominated by Sycamore and this landscape feature would be lost to the treescape of this area.

From our walk through assessment of the trees within this woodland, 44 of the 56 trees tagged are in need of remedial tree work to address current health and safety. These works range from the removal of large deadwood over paths and desire lines to the felling of some trees due to structural issues such as basal decay. These works have been broken into two main categories (Priority 1 & 2) with a third priority given which includes simpler works most of which can be undertaken from the ground and could be built into the routine maintenance of the woodland. These works include for the tidying up of the undergrowth and should help reduce the density of the Gorse in places and management of the new tree planting carried out and also the cutting of lvy on trees where it is heavy. Given the restricted access to this woodland, it may be more beneficial to come in and do all the work in one operation as appose to trying to get machinery into this woodland in two operations, this is something management will need to consider.

Other management works should include the further thinning out of the woodland canopy, particularly of the denser Sycamore stands and denser areas of scrub undergrowth to give the remaining trees a better chance of survival and to allow more light to reach the woodland floor to improve the woodland flora.

The existing mature trees will need ongoing monitoring for defects, particularly near the pathways and remedial works will need to be carried out as necessary to address safety issues.

A schedule of the remedial tree surgery works prioritized 1-3 has been given within 'Appendix 2' of this document entitled 'Works Schedule' for the purpose of inclusion within tendering documents. All tree works need to be carried out by a competent tree surgery firm to the recommendations of BS 3998 2010.

5.2 Between the recommended inspection period as highlighted within the limitations of this report, a competent member of staff should make a general inspection of the trees at least twice a year Arborist Associates Ltd. Condition Assessment of the trees within the Woodland at 'Red Rock', Sutton,

Dublin 13. October 2023

and any defects noted should be recorded, the necessary remedial action taken and if necessary advise should be sought. In addition to this, an inspection should also be made immediately after any exceptionally severe weather events that might have caused damage to trees such as wind or snow. It is important that all assessments whether detailed or not and carried out by either the work force/management or an Arborist are documented and retained.

5.3 Further tree planting should be carried out within this woodland where space allows in order to further improve the diversity and continuity of the tree cover within this woodland in order to secure them for the long-term. The position of any new tree planting needs to take into consideration the space required to develop undisturbed and to grow in order to support the future tree cover. Existing young tree planting and any additional new tree planting carried out will require regular maintenance to ensure their successful establishment and their contribution to the woodland in the future.

This report is for the sole use of the above named client and refers to only those trees identified within. Its use by any other person(s) in attempting to apply its contents for any other purpose renders the report invalid for that purpose.

Signed Felim Sheridan

Date 31st October 2023

Felim Sheridan,

F. Arbor. A, RFS Dip., Nat. Dip & NCH in Arboriculture.

#### Felim Sheridan's qualifications:

Fellow of the Arboricultural Association (F. Arbor. A), Professional diploma Arboriculture (RFS), National diploma Arboriculture (ND) and National certificate Horticulture (NCH).

# **Appendix 1**

A Condition Assessment of Trees within the Woodland at 'Red Rock', Sutton, Dublin 13.

Date: 31<sup>st</sup> October 2023

#### **Notes**

All codes referred to in this report are approximate and serve as a general guide only.

**Reference to Numbers:** The trees have metal tags attached and these correspond with the numbers within this report.

#### Reference to age is as follows:

**Young:** A tree, which has been planted in the last 10 years.

**Semi Mature** A tree that is less than 1/3 the expected height of the species in question.

**Early Mature:** A tree, which is approximately 2/3's the expected height of the species in question.

**Mature:** A tree that has reached the expected height of the species in question, but still increasing in

size.

**Late Mature:** A tree at the end of its life cycle and the crown is starting to break up and decrease in size.

#### Physiological Condition (Phys. Con.) -

**Good:** A tree with a full dense crown of good vigor with no evidence of pathogenic diseases.

Fair: A tree with some minor signs of sparseness/decline within its crown and minor

infection by pathogenic diseases.

**Poor:** A tree with more serious decline/dieback within its crown and evidence of

pathogenic diseases.

#### Structural Condition

**Good:** A tree of good form with no major defects.

Fair: A tree with some minor defects such as bark wounds, isolated decay pockets or

structure is affected due to overcrowding or group environment.

Poor: A tree with more serious defects such as extensive deadwood, decay or

defective to the point of being dangerous.

#### Reference to comment:

This contains information about the tree health both physiologically and structurally.

#### **Prioritizing of Tree Works**

The following summarizes these priorities:

- (1) Trees requiring immediate attention (immediately) due to major defects or being located within high hazard areas.
- (2) Trees with defects that will require attention as soon as possible after the first category to avoid potential dangers.
- (3) Items of work that can be carried out by the grounds works force.

#### Remedial Tree Works/Pruning

All tree works are to be performed to BS3998 and ANSI A300 pruning guidelines may also be referred to.

Pruning is defined as the selective removal of branches from the tree for specific results. All pruning is to be as specified in the schedule and all pruning cuts are to be made in accordance with 'natural target pruning' methods. All final cuts to be made outside the branch collar and at an angle equal but opposite to that of the branch bark ridge.

If during climbing works, a climber (tree surgeon) discovers any defects not noted in the Arborists report, he should inform and consult the Arborist in question. If it is a minor defect, it would be expected that the tree surgeon would deal with it as part of his contract. If it is deemed a serious problem, then there will be a need to consult with the client/owner and to carry out the agreed works at an additional cost. This problem may arise for example as a result of additional storm damage since the last inspection and it must be borne in mind that the survey is a visual inspection from ground level only and problems in the aerial part of the tree may not be visible from ground level or be hidden under lvy.

#### Terms used in explaining this work;

#### **Deadwooding**

This is the removal of deadwood (>5cm) without attempting to remove it from the branch tips or green foliage areas as in conifers.

It is expected that major deadwood is removed from all trees that are climbed, even if it is not stated on the survey.

#### Removal of Deadwood/Unstable Growth

This includes the removal of deadwood, diseased and dying wood, broken or split branches, epicormic growth, and basal suckers if requested and crossing or rubbing branches.

#### Crown Thinning (%)

This includes crown cleaning and the thinning out of the crown in order to allow the wind to travel more freely through the crown and to reduce its wind sail. This mainly involves the removal of secondary branches in the inner crown. This is normally expressed as a percentage of the whole crown volume, which should be considered as an approximate guideline.

#### Reduction (m)

This includes crown cleaning and the measured reduction (careful shortening) of a trees height and/or spread or an individual limb in length. The finished pruning cuts should not exceed one-third the size of the branch or stem that it is located on. The reduction works are normally expressed in meters (m) and should be considered as an approximate guideline.

#### Lightening

This technique is a combination of selective thinning together with moderate length reduction of a section or entire crown. The main objective is to reduce the end weight on potentially hazardous crown sections, individual limbs or individual branches. Crown appearance should not be altered greatly by this pruning.

#### Crown raising

The removal of the lowest branches that effectively increases the height of the main crown above ground level.

#### **Bracing and Propping**

Both bracing and propping are to be carried out in accordance with the technical standards published in BS3998 2010: Recommendations for Tree Work.

#### **Felling**

Trees to be felled shall be cut as low as possible to ground level, unless otherwise specified. Trees for felling should be dismantled (section-felled) wherever necessary using appropriate rigging techniques to avoid damage to adjacent trees/ structures and other potentially vulnerable landscape features.

#### **Stumps**

Generally, stumps of felled trees may be left cut level above ground level. Any stumps in areas of access shall be left at a height that does not present a trip hazard. Conifer stumps are to be treated with urea in accordance with the forestry commission guidelines.

Alternatively, if requested, the stumps are to be ground out using a mechanical stump grinder taking care not to cause damage to neighbouring trees.

#### **Debris Clearance**

Unless otherwise requested, all arising timber and wood chips from chipped brash to be removed from site or transported to designated site areas for composting and future use on site as agreed and/or as specified by the supervising officer.

Co- Ordinates	Tree No	Tree Species	Age Class	Phy Con	Structural Condition / Comments	Works Required	Priority
		A Condition Ass Sutton, Dublin 1		of the t	rees within the woodland block at 'Red Rock',		
		winds. The main of along with some openings within the periphery. The unand Ivy along with The woodland blowithin this woodlates more open. There are a number is being used on a have been carried of the lower dead been shorted backconsisting of main trees where it was decline within the	Conifer spenatural regular group candergrowth clumps of ock is a property and over the and vulners aregular bad out over the out over the code of the	cies incleneration of the consistence of the consis	r woodland on an elevated site which is exposed to coastal lude Corsican Pine, Monterey Cypress and Monterey Pine on of Sycamore and Ash which have developed into the ormation created by tree failure/removal and around the its of predominately coarse grass, weeds, Bramble, Gorse Holly, Blackthorn and Hawthorn developing throughout. If as a result of trees failing or being removed leaving other winds.  If un-surfaced paths that run through this woodland and it the general public for recreational use. Remedial works is with a lot of the dead trees removed or made safe. A lot moved from the trees located next to the paths or it has a k of breakage. New tree planting has also been added livy has been cut at ground level / managed on a lot of the the Pine trees in particular are showing signs of stress/require ongoing monitoring and management. There is the having been caused by fire leading to some areas of	The programme of Ivy management will need to be continued into the future to prevent it becoming heavy on trees and causing suppression or increasing wind loading.  Additional tree planting, preferably using conifer species, should be carried out in the larger openings in the canopy to help improve continuity and diversity of the woodland in the long-term.	3
		particularly those tagging only trees that require atter	along the partial along the partial along the partial along the state of the state	paths ar ous phys or in the een reco inates g	orded for the tagged trees to aid in relocating them again give an average accuracy of 2-3.5 metres, which is		

Co- Ordinates	Tree No	Tree Species	Age Class	Phy Con	Structural Condition / Comments	Works Required	Priority
-		back across the w	oodland ir	an eas	western corner of the woodland and works over and t-west direction while working towards the northern orth-eastern corner.		
(- 6.094242495 84348 53.37079766 98787)	0993	Monterey Pine Pinus radiata	Mature	Fair	Fair/ Poor It is a tall tree which has become more isolated and open due to the failure or removal of neighbouring trees. It is located close to the boundary with the neighbouring property. The main stem leans in a northeasterly direction. It forms part of the upper canopy and has received pruning previously to remove large size dead/ unstable growth.	Monitor its stability at the present time, in particular for root movement.	3
(- 6.094178999 00162 53.37079900 17645)	0994	Monterey Pine Pinus radiata	Mature	Fair	Fair/ Poor It forms part of the group canopy formation and is being sheltered within its present environment. It has suffered storm damage and contains a number of hanging branches within its crown as a result.	Remove the hanging branches from within its crown.	2
(- 6.093988827 6929 53.37074199 8595)	0995	Monterey CypressCupress us macrocarpa	Mature	Dead	Poor It is standing dead and is located within a group and is being sheltered by the surrounding trees. It is located within falling distance of a path (desire line).	I would recommend its <u>removal</u> as part of the management.	2
(- 6.093913829 3211 53.37064650 42226)	0996	Monterey Cypress Cupressus macrocarpa	Mature	Fair	Fair It forms part of the group canopy formation and has become more isolated and open by the failure or removal of the neighbouring trees. It contains exposed side branches and some of these are cracked and are prone to breakage as a result. It is located next to one of the main paths.	Make safe any large size dead/ unstable growth and reduce the heavy side/ exposed branches, in particular the two extending out over the paths that are cracked.	1

Co- Ordinates	Tree No	Tree Species	Age Class	Phy Con	Structural Condition / Comments	Works Required	Priority
(- 6.094015495 03121 53.37070417 0241)	0997	Monterey Pine Pinus radiata	Mature	Fair	Fair It forms part of the upper canopy formation and has become more isolated by the removal or failure of the neighbouring trees. It contains some cracked, broken branches within its crown.	Remove the cracked, broken branches from within its crown.	2
(- 6.094105667 48659 53.37063183 43153)	0998	Monterey Cypress Cupressus macrocarpa	Mature	Fair	Fair/ Poor It is growing up within a group environment and has become more isolated by the failure/ removal of neighbouring trees and has suffered storm damage previously. It contains a number of heavy, scaffold limbs/ branches throughout its crown along with dead/ unstable growth and is prone to storm damage. It overhangs one of the main paths.	Remove large size dead/ unstable growth and reduce its crown size, in particular end loading on heavy side limbs/ branches by 3m.	1
(- 6.093687500 48296 53.37015067	0999	Monterey PinePinus radiata (2 in total)	Mature	Fair	Fair They are large prominent trees forming part of the upper canopy formation with an understory of Sycamore developing. They have suffered bark wounding on their lower trunks due to vandalism/fire	Make safe any large size dead/ unstable growth by lightening back large size pieces of deadwood.	2
04992)		(= ;			which has exposed the underlying timber to decay and this may have a knock-on effect on their stability in time. They have suffered storm damage previously and have received pruning to remove lower deadwood and to lighten bank other large pieces of dead/ unstable growth, however they still contain deadwood within their crowns. The area around their bases is being used to some extent for recreational purposes.	Monitor the decay on their lower trunks.	3
( <u>-</u> 6.093843673 5754	1000	Beech Fagus sylvatica	Mature	Fair	Poor There is a large column of decay on the lower trunk	Remove deadwood over hanging the path/ desire line.	2
53.37006700 31955)					causing a structural weakness. Its crown size has been sculptured and contained by the sea winds with a	Monitor the basal decay.	3

Co- Ordinates	Tree No	Tree Species	Age Class	Phy Con	Structural Condition / Comments	Works Required	Priority
Ordinates	NO		Class	Con			
					compact crown at the present time. There is light lvy cover on the main trunk.		
(- 6.093805837 76198	1001	Corsican Pine Pinus nigra	Mature	Fair/ Poor	Poor It is located on the right-hand side of the central path (desire line) into the woodland. It has twisted and is	Make safe large pieces of dead/ unstable growth.	2
<u>53.37002950</u> <u>17622)</u>					now resting within the neighbouring trees and leans away from the main path. It contains deadwood in crown.	Monitor its structural stability.	3
(- 6.093639339 12882 53.36991599 80478)	1002	<b>Sycamore</b> Acer pseudoplatanus	Mature	Fair	Fair It has suffered a bark wound on the lower trunk caused by fire/vandalism. It contains deadwood in crown and some of this overhangs the path (desire line).	Remove dead/ unstable growth, in particular overhanging the path (desire line).	2
(- 6.093648666 29631 53.36983199 83902)	1003	Sycamore Acer pseudoplatanus	Early Mature	Fair	Fair It forms part of the outer canopy formation and is located on the right-hand side of the path (desire line) with some pieces of deadwood throughout its crown.	Remove dead/ unstable growth, in particular overhanging the path (desire line).	1
(- 6.093222666 33488 53.36942116 71187)	1004	Corsican Pine Pinus nigra	Mature	Fair/ Poor	Fair/ Poor It is a tall tree forming part of the outer canopy formation. Its crown is slightly thin and chlorotic compared to the other Pine trees in this area.	Monitor its condition on an annual basis.	3
(- 6.092905173 0095 53.36928933 12016)	1005	Corsican Pine Pinus nigra	Mature	Fair	Fair It forms part of the upper canopy formation and is being sheltered by the surrounding trees. It contains some hanging deadwood in crown and overhangs the path (desire line).	Make safe large pieces of dead/ unstable growth and remove all hanging branches, in particular over the path (desire line).	2
(- 6.092645162 77241	1006	Corsican Pine Pinus nigra	Mature	Fair / Poor	Fair It is a tall central tree being sheltered by the surrounding trees. The upper crown is becoming thin	Monitor its condition on an annual basis.	3

Co- Ordinates	Tree No	Tree Species	Age Class	Phy Con	Structural Condition / Comments	Works Required	Priority
53.36948850 04145)					and showing signs of sparseness, due to stress related issues, however there are no obvious physiological or structural issues evident around its base at the present time. There is Ivy cover on the main trunk.		
(- 6.092870496 58516 53.36953366 38689)	1007	Corsican PinePinus nigra	Mature	Fair	Fair / Poor It is a tall, central tree being sheltered by the surrounding trees. There is an area of bark wounding at its base as a result of fire damage/ vandalism with decay developing into its base as a result.	Monitor the basal decay and its stability.	3
(- 6.092837835 55685 53.36976483 38729)	1008	Monterey Pine Pinus radiata	Mature	Fair	Fair It is a large size tree forming part of the upper canopy formation. It has received pruning to remove dead/ unstable growth and storm damage previously with an open, top-heavy crown remaining. It has also been left more open/ exposed by the failure/removal of some neighbouring trees. A lower scaffold limb has subsided and is now resting within a neighbouring tree to the south. The next limb to the south is end-loaded and may be prone to storm damage as a result.	Make safe any large pieces of dead/ unstable growth and lighten end weight on the second limb extending out to the south by c.1-2m, using a combination of crown thinning and end weight reduction.	2
(- 6.092822001 14506 53.37007516 3291)	1009	Monterey Pine Pinus radiata	Mature	Fair	Fair It forms part of the outer canopy formation at the eastern end with an asymmetrical crown formation. It has a slight lean on the main trunk to the west and contains deadwood in crown and some of this is of a large size and overhangs the cleared area used for recreational use. It has suffered bark wounding on its lower trunk and base.	Make safe large size dead/ unstable growth.	2
(- 6.093089331 15918	1010	Corsican Pine Pinus nigra	Mature	Dead	Poor It is located on the edge of the main pathway and is standing dead and is becoming decayed and unstable.	I would recommend its <u>removal</u> as part of the management.	1

Co- Ordinates	Tree No	Tree Species	Age Class	Phy Con	Structural Condition / Comments	Works Required	Priority
53.37029217 1077)							
(- 6.093554172 18481 53.37045099 75158)	1011	Corsican Pine Pinus nigra	Mature	Fair	Fair/ Poor It has become isolated and open due to storm damage and the failure of neighbouring trees. It has an exposed crown and will be prone to storm damage as a result. Ivy cover on the main trunk is extending up into its crown.	Cut Ivy at ground level at the present time. Monitor its stability.	3
-					The survey now works back from north to south in direction across the woodland.  A lot of these trees have suffered bark wounding caused by fire/ vandalism, mainly superficial bark damage.		
(- 6.093538339 77015 53.37070183 33034)	1012	Monterey Cypress Cupressus macrocarpa	Mature	Fair	Fair It is located on the boundary with the neighbouring property to the north. It forms part of the upper canopy formation and contains storm damage along with some hanging, broken branches within its crown.	Remove storm damage from within its crown.	2
(- 6.093521172 74841 53.37063900 0334)	1013	Monterey Cypress Cupressus macrocarpa	Mature	Fair	Fair It has been left more isolated and open by the storm damage and failure of the neighbouring trees. It contains some heavy side branches and is located on the edge of the pathway and it may be prone to storm damage. It has received pruning previously in order to remove the lower deadwood.	Reduce in all heavy side limbs/ branches by up to 2m.	2
(- 6.093310328 42308 53.37057649 75088)	1014	Corsican Pine Pinus nigra	Mature	Fair	Fair It is a tall tree forming part of the group canopy formation. It is becoming more open / exposed due to storm damage within the neighbouring trees and it contains deadwood within its crown of a medium size.	Remove large size dead/ unstable growth.  Carry out any additional pruning to address any exposure of branches caused by the removal of Tree No.	1

Co- Ordinates	Tree No	Tree Species	Age Class	Phy Con	Structural Condition / Comments	Works Required	Priority
						1015.	
(- 6.093269665 93843 53.37059049 87627)	1015	Corsican PinePinus nigra	Mature	Fair	Poor There is a large area of decay at its base and this may have an impact on its stability. Its structure has been affected due to overcrowding / competition from neighbouring trees. It is located on the edge of the path.	I would recommend its <u>removal</u> as part of the management.	1
(- 6.093270828 80734 53.37049583 43733)	1016	Corsican Pine Pinus nigra	Mature	Fair	Fair It leans slightly from its base out over the main path and its crown has been left more open/ exposed due to storm damage and the failure of neighbouring trees. It contains deadwood and a hanging branch.	Remove large size dead/ unstable growth and hanging branch.	1
(- 6.093086499 96373 53.37067916 29385)	1017	Corsican Pine Pinus nigra	Mature	Fair / Poor	Fair It is growing up within a sheltered group, has been drawn up for the light and is a tall tree. Its crown is slightly sparse/ thin in foliage and is showing signs of stress/ decline throughout.	Monitor its condition on an annual basis.  It may need to be removed if its condition deteriorates.	3
(- 6.093101995 30578 53.37044333 23011)	1018	Monterey Cypress Cupressus macrocarpa	Early Mature	Fair / Poor	Poor It is located on the edge of the path and has been left more isolated/ open due to storm damage within the neighbouring trees and the top has broken out leaving some hanging branches within its crown. There is a lot of wind throw occurring within this area with other trees uprooting which is opening up the group canopy structure as a result.	I would recommend its <u>removal</u> as part of the management.	1
(- 6.093037340 58118 53.37042416 96775)	1019	Monterey Cypress Cupressus macrocarpa	Early Mature	Fair	Fair / Poor It has become more open and isolated due to storm damage and the failure of a neighbouring tree/s.	In order to retain for the benefit of the group structure, reduce crown size by 2m.	1
<u>(-</u>	1020	Monterey	Mature	Fair	Fair / Poor It initially formed part of a close knit group	Reduce crown size by 2m to address	1

Co- Ordinates	Tree No	Tree Species	Age Class	Phy Con	Structural Condition / Comments	Works Required	Priority
6.093029167 96933 53.37046850 43018)		CypressCupress us macrocarpa	Class	Con	and has since become more isolated and open due to storm damage and the failure of neighbouring trees and it may be prone to storm damage as a result.	any stability issues.	
(- 6.093005671 72774 53.37045283 07)	1021	Monterey Cypress Cupressus macrocarpa	Early Mature	Fair	Fair It is growing up within a group environment and has been left more open/ exposed by the failure of the neighbouring trees.	Reduce the height of its crown by 2m in order to address exposure and stability issues.	1
(- 6.092964828 23332 53.37039149 78368)	1022	Monterey Cypress Cupressus macrocarpa	Early Mature	Fair	Fair It is growing up within a group environment and is becoming more isolated and open due to storm damage occurring within this group and it may be prone to storm damage as a result.	Make safe any dead/unstable growth and reduce in height by 2-3m.	1
(- 6.092944001 58386 53.37038133 17839)	1023	Corsican Pine Pinus nigra	Mature	Dead	Poor It is located on the edge of the path.	I would recommend its <u>removal</u> as part of the management.	1
(- 6.092838507 13717 53.37032733 37966)	1024	Monterey Cypress Cupressus macrocarpa	Early Mature	Fair	Fair It forms part of the group canopy formation and is becoming more open and isolated by the failure or removal of the neighbouring trees.	Reduce its crown size by 1-2m to address exposure. Remove any large size dead/ unstable growth during climbing works.	1
(- 6.092863503 59786 53.37035450 05069)	1025	Monterey Cypress Cupressus macrocarpa	Early Mature	Fair	Fair It forms part of the group canopy formation and contains storm damage along with cracked /broken branches throughout its crown.	Remove dead / unstable growth from within its crown.	2
(- 6.092786827 37892	1026	Corsican Pine Pinus nigra	Mature	Dead	Poor It is becoming decayed and unstable and is located within an area being used for recreational use.	I would recommend its <u>removal</u> as part of the management.	1

Co-	Tree	Tree Species	Age	Phy	Structural Condition / Comments	Works Required	Priority
Ordinates	No		Class	Con			
53.37035683							
33.37035083 44412)							
<u>(-</u>	1027	Corsican	Mature	Fair/	Fair / Poor It is growing up within a sheltered group	Retain at the present time. Monitor its	3
6.092749330		<b>Pine</b> Pinus nigra		Poor	environment and is in declining health.	condition as its deterioration in health	
71154 53.37039449						may warrant its removal in the future.	
84361)							
<u>(-</u>	1028	Corsican Pine	Mature	Fair/	Fair/ Poor	Retain at the present time.	_
6.092739166		Pinus nigra		Poor	It is a tall, sheltered tree showing signs of		
98104 53.37038450					decline/dieback within its crown.	Monitor its condition, further	3
27684)						deterioration in health may require its	
						removal in the short-medium term.	
( <u>-</u> 6.092512331	1029	Corsican Pine	Mature	Dead	Poor	I would recommend its <u>removal</u> as	1
17554		Pinus nigra			It is located within falling distance of the main path.	part of the management.	
53.37027633							
<u>39207)</u>							
<u>(-</u>	1030	Corsican Pine	Mature	Fair/	Fair/ Poor	Monitor its condition for further	3
6.092499670 15831		Pinus nigra		Poor	It is growing from underneath the canopy of the larger	decline. It may need to be removed in	
53.37027783					neighbouring trees and is sheltered at the present time.	the future as part of management.	
03308)					Its crown is showing signs of stress/ decline throughout.		
<u>(-</u>	1031	Monterey Pine	Mature	Fair	Fair	Monitor the basal decay and the	3
<u>6.092483665</u>		Pinus radiata			It is a Large size tree forming part of the upper canopy	condition of its crown.	
73668 53.37024349					formation and provides support/ shelter to the		
97732)					surrounding trees. Pruning has been carried out		
					previously in order to remove large size deadwood.		
					The fungus 'Sparassis crispa' is present at its base and		
(-	1032	Montoro	Mature	Fair	this would indicate possible basal decay.	Remove large pieces of deadwood and	2
<u>(-</u> 6.092138340	1032	Monterey PinePinus	iviature	Fall	Fair It is a large prominent tree within the woodland and is of value to the group canopy structure. It has	lighten back the lower limb to live	2
3.032130310		rinerinus			and is or value to the group callopy structure. It has	I lighten back the lower limb to live	

Co- Ordinates	Tree No	Tree Species	Age Class	Phy Con	Structural Condition / Comments	Works Required	Priority
20989 53.37008633 72816)		radiata			suffered soil and root damage around its base and this may have a knock-on effect on its stability. The neighbouring tree to the south has fallen, possibly as a result of previous root damage leaving its crown more open/exposed. It contains deadwood within its crown and has received pruning previously to remove large size dead and unstable growth. A heavy scaffold limb is extending out over the path and a large portion of this limb is dead.	growth. Make safe any other large size deadwood throughout its crown. Lighten heavy exposed side branches by c.1-2m to lessen the risk of side branches.  Monitor its stability and condition.	3
(- 6.091927999 92046 53.37013033 3687)	1033	Sycamore Acer pseudoplatanus	Early Mature	Poor	Fair/ Poor It forms part of the outer canopy formation and a section of the upper crown is dead. It is located next to the path (desire line).	Make safe large pieces of deadwood.	1
(- 6.092316005 82431 53.37043816 72338)	1034	Corsican Pine Pinus nigra	Mature	Fair	Fair It forms part of the upper canopy formation and is being sheltered by the surrounding trees. It contains large pieces of deadwood within its upper crown and its crown is showing signs of thinning. This area is being used for recreational use.	Make safe large pieces of deadwood.	2
(- 6.092339499 8205 53.37046699 98411)	1035	Corsican Pine Pinus nigra	Mature	Fair	Fair It forms part of the group canopy formation and is located within an area being used for recreational use with paths (desire lines) running within its crown spread. It contains large size deadwood throughout its crown.	Remove large size dead/ unstable growth.	2
(- 6.092661335 54009 53.37063533	1036	Corsican PinePinus nigra	Mature	Dead	Poor It forms part of the upper canopy formation and will become decayed and unstable.	I would recommend its <u>removal</u> as part of the management. Its removal may have a knock-on effect on its group structure.	2

Со-	Tree	Tree Species	Age	Phy	Structural Condition / Comments	Works Required	Priority
Ordinates	No		Class	Con			
62637)							
(- 6.092813500 18135 53.37066433 77447)	1037	Corsican Pine Pinus nigra	Mature	Dead	Poor It forms a central tree and part of the upper canopy formation. It has suffered bark damage around its base caused by fire.	I would recommend its <u>removal</u> as part of management.	2
(- 6.092822664 32673 53.37069199 74574)	1038	Corsican Pine Pinus nigra	Mature	Fair/ Poor	Fair/ Poor It is a tall central tree of value to the group canopy structure. It has suffered a lot of fire damage around its base, possibly the cause of its declining health. It has suffered bark damage around its base caused by fire.	Retain at the present time.  Monitor condition. It is likely to require removal in the short-term as its condition deteriorates.	3
(- 6.092949507 38532 53.37068900 01225)	1039	Corsican Pine Pinus nigra	Mature	Fair	Fair It is a tall tree and it has become more isolated / open due to the failure or removal of neighbouring trees. It contains large size deadwood within its crown and is located next to the desire line/ path. It has suffered bark damage around its base caused by fire.  The survey now returns across the top of the	Make safe large pieces of deadwood.	2
(- 6.092586664 79423 53.37074916 6302)	1040	Monterey Pine Pinus radiata	Mature	Fair	Fair It forms part of the upper canopy formation and is of value to the group canopy structure. It contains some large pieces of deadwood within its crown. The area around its base is in recreational use with desire lines/paths throughout.	Make safe large size dead/ unstable growth.	2
(- 6.092486496 31597 53.37078650 25803)	1041	Monterey CypressCupress us macrocarpa	Mature	Fair	Fair / Poor It has suffered a bark wound at its base with decay developing into the exposed timber and into its root plate. Its crown has been left more open/ exposed by the failure of a tree to its east. Soil erosion has occurred around its base.	Reduce in height by 3m to improve stability issues.	2

Co- Ordinates	Tree No	Tree Species	Age Class	Phy Con	Structural Condition / Comments	Works Required	Priority
(- 6.092121160 81224 53.37068150 30393)	1042	Scots Pine Pinus sylvestris	Mature	Dead	Poor It is becoming decayed and unstable.	I would recommend its <u>removal</u> as part of management.	1
(- 6.091966834 32863 53.37059832 94397)	1043	Scots Pine Pinus sylvestris	Mature	Dead	Poor It will become decayed and unstable.	I would recommend its <u>removal</u> as part of management.	2
(- 6.091878506 47188 53.37045383 20065)	1044	Corsican Pine Pinus nigra	Mature	Fair	Fair It forms part of the upper canopy formation with some large pieces of deadwood overhanging the path (desire line).	Make safe large pieces of dead/ unstable growth.	2
(- 6.091895506 3204 53.37040100 08202)	1045	Corsican Pine Pinus nigra	Mature	Fair	Fair It forms part of the upper canopy formation and is a tall, sheltered tree. It contains deadwood within its crown and overhangs the path (desire line).	Make safe large pieces of deadwood/ unstable growth.	2
(- 6.091858493 70638 53.37037066 66289)	1046	Corsican Pine Pinus nigra	Mature	Fair	Fair It forms part of the upper canopy formation and is a tall, sheltered tree. It contains large pieces of deadwood within its crown and is located next to the path (desire line).	Make safe large pieces of deadwood/ unstable growth.	2
(- 6.091653670 05236 53.37050200 04258)	1047	Monterey PinePinus radiata	Mature	Fair	Fair/PoorIt is located on the eastern boundary wall of the woodland and forms part of the outer canopy formation. It is of some value within the group canopy structure. It leans from its base into no mans lands indicating towards previous root movement. Pruning has been carried out to remove deadwood and unstable	Monitor its condition on an annual basis, particularly its stability.	3

Co-	Tree	Tree Species	Age	Phy	Structural Condition / Comments	Works Required	Priority
Ordinates	No		Class	Con			
					growth.		
(- 6.091564003 91158 53.37051149 62682)	1048	Monterey Pine Pinus radiata	Mature	Fair	Fair It forms part of the outer group canopy formation of the woodland along the south-eastern boundary. It contains a hanging broken branch within its crown which overhangs a path (desire line) along with other dead/ unstable growth.	Make safe all large size dead/ unstable growth.	1
Notes:							

## **Appendix 2**

Schedule of Tree Works for Trees within the Woodland at 'Red Rock', Sutton, Dublin 13.

Date: 31<sup>st</sup> October 2023

#### **Summary of General Terms and Standards**

#### 1. The contractor shall:

- a. Perform all works detailed in the enclosed schedule in accordance with BS 3998 unless otherwise specified by the supervising officer/s and in the time stated. No variation of work will be allowed without prior agreement in writing with the employer.
- b. Employ a competent site foreman familiar with the work schedule who can liaise with the employer's supervising officer/s.
- c. Have visited the site and satisfied him/her as to conditions and schedule of work requirements before tendering, and that his/her tender is adequate to fulfil the tender.
- d. Be responsible for all measures necessary to safeguard the public and property while the contract is in progress.
- e. Be responsible, with assistance from the employer, for taking all adequate precaution to prevent damage to services and structures.
- f. Make copies of his insurance policies and current receipts available to the employer upon request.
- g. Not carry out any work without written authorisation or direction from the employer.
- h. Not sub-contract any or the entire contract without prior written permission from the employer. The contractor shall be responsible for maintenance of required standards and conditions of work where sub-contracting takes place.
- i. Be responsible for making good at his own cost any damage caused as a result of his work. On completion leave the site clean and tidy from his own work.

#### 2. Variables

- a. Identification of trees: Numbered with metal tags corresponding with numbers in report and schedule of works.
- b. Access: By prior agreement with the employer or supervising officer.
- c. Liaison with employer/supervisor: The contractor will be required to contact the employer/supervisor before works commence on site, should any queries arise and upon completion of the contract.
- d. The contractor is required to protect existing trees from damage during works.
- e. The work area is to be kept tidy at all times, cordoned off during works and signed.

f. Working hours and storage of vehicles on site to be agreed with the employer prior to works commencing on site.

#### 3. Safety and Standards of Work

- a. Unless otherwise stated, all work is to be carried out to a minimum of British Standard 3998 (2010) and AFAG (Arboricultural and Forestry Advisory Group) guides currently applicable.
- b. The contractors attention is drawn to regulations such as 'The Provision & Use of Work Equipment Regulations 1998' (PUWER), 'The Lifting Operations and Lifting Equipment Regulations 1998' (LOLER) and 'The Working at Heights Regulations 2005' (WAHR).
- c. All plant and equipment shall be appropriate for the task and in a well maintained order and be used only by staff trained and certified for its use.

#### d. **Pruning**

All tree works are to be performed to BS3998 and ANSI A300 pruning guidelines may also be referred to.

Pruning is defined as the selective removal of branches from the tree for specific results. All pruning is to be as specified in the schedule and all pruning cuts are to be made in accordance with 'natural target pruning' methods. All final cuts to be made outside the branch collar and at an angle equal but opposite to that of the branch bark ridge.

If during climbing works, a climber (tree surgeon) discovers any defects not noted in the Arborist report, he should inform and consult the Arborist in question. If it is a minor defect, it would be expected that the tree surgeon would deal with it as part of his contract. If it is deemed a serious problem, then there will be a need to consult with the client/owner and to carry out the agreed works at an additional cost. This problem may arise for example as a result of additional storm damage since the last inspection and it must be borne in mind that the survey is a visual inspection from ground level only and problems in the aerial part of the tree may not be visible from ground level or be hidden under lvy.

#### Terms used in explaining this work;

#### Deadwooding

This is the removal of deadwood (>5cm) without attempting to remove it from the branch tips or green foliage areas as in conifers.

It is expected that major deadwood is removed from all trees that are climbed, even if it is not stated on the survey.

#### Removal of dead/Unstable growth

This includes the removal of deadwood, diseased and dying wood, broken or split branches, epicormic growth, and basal suckers if requested and crossing or rubbing branches.

#### Crown Thinning (%)

This includes cleaning out the crown as described above and the thinning out of the crown in order to allow the wind to travel more freely through the crown and to reduce its wind sail. This mainly involves the removal of secondary branches in the inner crown. This is normally expressed as a percentage of the whole crown volume, which should be considered as an approximate guideline.

#### Reduction (m)

This includes cleaning out the crown as described above and the reduction (careful shortening) of the entire crown or an individual limb in length in all directions to leave a balance branch structure. The finished pruning cuts should not exceed one-third the size of the branch or stem that it is located on. The reduction works are normally expressed in meters (m) measuring in from the outer extremities of the crown or branch and should be considered as an approximate guideline.

#### Lightening

This technique is a combination of selective thinning together with moderate length reduction of a section or entire crown. The main objective is to reduce the end weight on potentially hazardous crown sections, individual limbs or individual branches. Crown appearance should not be altered greatly by this pruning.

#### Crown raising

The removal of the lowest branches that effectively increase the height of the main crown above ground level.

#### e. Felling

Trees to be felled shall be cut as low as possible to ground level, unless otherwise specified. Trees for felling should be dismantled (section-felled) wherever necessary using appropriate rigging techniques to avoid damage to adjacent trees/structures and other potentially vulnerable landscape features.

#### f. Stumps

Generally, stumps of felled trees may be left cut level above ground level. Any stumps in areas of access shall be left at a height that does not present a trip hazard. Conifer stumps are to be treated with urea in accordance with the forestry commission guidelines.

Alternatively, if requested, the stumps are to be ground out using a mechanical stump grinder taking care not to cause damage to neighbouring trees.

#### g. Debris Clearance

Unless otherwise requested, all arising timber and wood chips from chipped brash to be removed from site or transported to designated site areas for composting and future use on site as agreed and/or as specified by the supervising officer.

### **Priority 1 Works**

Co-Ordinates	Tree No	Species	Recommendations	Priority	Date Completed	Signed off
			Schedule of Tree Works for Trees Within the Woodland at 'Red Rock', Sutton, Dublin 13.			
(-6.0939138293211	0996	Monterey	Make safe any large size dead/ unstable growth and reduce the heavy	1		
53.3706465042226)		Cypress	side/ exposed branches, in particular the two extending out over the			
		Cupressus	paths that are cracked.			
		macrocarpa				
(-6.09410566748659	0998	Monterey	Remove large size dead/ unstable growth and reduce its crown size, in	1		
53.3706318343153)		Cypress	particular end loading on heavy side limbs/ branches by 3m.			
		Cupressus				
		macrocarpa				
(-6.09364866629631	1003	Sycamore	Remove dead/ unstable growth, in particular overhanging the path	1		
53.3698319983902)		Acer	(desire line).			
		pseudoplatanus				
(-6.09308933115918	1010	Corsican Pine	I would recommend its <u>removal</u> as part of the management.	1		
53.370292171077)		Pinus nigra				
(-6.09331032842308	1014	Corsican Pine	Remove large size dead/ unstable growth.	1		
53.3705764975088)		Pinus nigra				
			Carry out any additional pruning to address any exposure of branches			
			caused by the removal of Tree No. 1015.			
(-6.09326966593843	1015	Corsican Pine	I would recommend its <u>removal</u> as part of the management.	1		
53.3705904987627)		Pinus nigra				
(-6.09327082880734	1016	Corsican Pine	Remove large size dead/ unstable growth and hanging branch.	1		
53.3704958343733)		Pinus nigra				
(-6.09310199530578	1018	Monterey	I would recommend its <u>removal</u> as part of the management.	1		
53.3704433323011)		Cypress				
		Cupressus				
		macrocarpa				
<u>(-6.09303734058118</u>	1019	Monterey	In order to retain for the benefit of the group structure, reduce crown	1		

Co-Ordinates	Tree No	Species	Recommendations	Priority	Date Completed	Signed off
			Schedule of Tree Works for Trees Within the Woodland at 'Red Rock', Sutton, Dublin 13.			
53.3704241696775)		<b>Cypress</b> <i>Cupressus</i>	size by 2m.			
		macrocarpa				
(-6.09302916796933	1020	Monterey	Reduce crown size by 2m to address any stability issues.	1		
<u>53.3704685043018</u> )		Cypress				
		Cupressus				
		macrocarpa				
(-6.09300567172774	1021	Monterey	Reduce the height of its crown by 2m in order to address exposure	1		
<u>53.3704528307</u> )		Cypress	and stability issues.			
		Cupressus				
		macrocarpa				
(-6.09296482823332	1022	Monterey	Make safe any dead/unstable growth and reduce in height by 2-3m.	1		
53.3703914978368)		<b>Cypress</b> Cupressus				
		macrocarpa				
(-6.09294400158386	1023	Corsican Pine	I would recommend its <b>removal</b> as part of the management.	1		
53.3703813317839)		Pinus nigra				
(-6.09283850713717	1024	Monterey	Reduce its crown size by 1-2m to address exposure.	1		
<u>53.3703273337966</u> )		Cypress	Remove any large size dead/ unstable growth during climbing works.			
		Cupressus				
		macrocarpa				
(-6.09278682737892	1026	Corsican Pine	I would recommend its <b>removal</b> as part of the management.	1		
53.3703568344412)		Pinus nigra				
(-6.09251233117554	1029	Corsican Pine	I would recommend its <u>removal</u> as part of the management.	1		
53.3702763339207)		Pinus nigra				
(-6.09192799992046	1033	Sycamore	Make safe large pieces of deadwood.	1		
53.370130333687)		Acer				
		pseudoplatanus				
<u>(-6.09212116081224</u>	1042	Scots Pine	I would recommend its <u>removal</u> as part of management.	1		

Co-Ordinates	Tree No	Species	Recommendations	Priority	Date	Signed off
					Completed	
			Schedule of Tree Works for Trees Within the Woodland			
			at 'Red Rock', Sutton, Dublin 13.			
53.3706815030393)		Pinus sylvestris				
(-6.09156400391158	1048	Monterey Pine	Make safe all large size dead/ unstable growth.	1		
53.3705114962682)		Pinus radiata				

### **Priority 2 Works**

Co-Ordinates	Tree No	Species	Recommendations	Priority	Date Completed	Signed off
			Schedule of Tree Works for Trees Within the Woodland at 'Red Rock', Sutton, Dublin 13.			
(-6.09417899900162 53.3707990017645)	0994	Monterey Pine	Remove the hanging branches from within its crown.	2		
(-6.0939888276929 53.370741998595)	0995	Pinus radiata  Monterey Cypress Cupressus macrocarpa	I would recommend its <u>removal</u> as part of the management.	2		
(-6.09401549503121 53.370704170241)	0997	Monterey Pine Pinus radiata	Remove the cracked, broken branches from within its crown.	2		
(-6.09368750048296 53.3701506704992)	0999	Monterey Pine Pinus radiata (2 in total)	Make safe any large size dead/ unstable growth by lightening back large size pieces of deadwood.	2		
(	4000		Monitor the decay on their lower trunks.	3		
(-6.0938436735754 53.3700670031955)	1000	<b>Beech</b> Fagus sylvatica	Remove deadwood over hanging the path/ desire line.	2		
(-6.09380583776198 53.3700295017622)	1001	Corsican Pine Pinus nigra	Monitor the basal decay.  Make safe large pieces of dead/ unstable growth.	2		
			Monitor its structural stability.	3		
(-6.09363933912882 53.3699159980478)	1002	Sycamore Acer pseudoplatanus	Remove dead/ unstable growth, in particular overhanging the path (desire line).	2		
(-6.0929051730095 53.3692893312016)	1005	Corsican Pine Pinus nigra	Make safe large pieces of dead/ unstable growth and remove all hanging branches, in particular over the path (desire line).	2		

Co-Ordinates	Tree No	Species	Recommendations	Priority	Date Completed	Signed off
			Schedule of Tree Works for Trees Within the Woodland at 'Red Rock', Sutton, Dublin 13.			
(-6.09283783555685 53.3697648338729)	1008	Monterey Pine Pinus radiata	Make safe any large pieces of dead/ unstable growth and lighten end weight on the second limb extending out to the south by c.1-2m, using a combination of crown thinning and end weight reduction.	2		
(-6.09282200114506 53.370075163291)	1009	Monterey Pine Pinus radiata	Make safe large size dead/ unstable growth.	2		
(-6.09353833977015 53.3707018333034)	1012	Monterey Cypress Cupressus macrocarpa	Remove storm damage from within its crown.	2		
(-6.09352117274841 53.370639000334)	1013	Monterey Cypress Cupressus macrocarpa	Reduce in all heavy side limbs/ branches by up to 2m.	2		
(-6.09286350359786 53.3703545005069)	1025	Monterey Cypress Cupressus macrocarpa	Remove dead / unstable growth from within its crown.	2		
(-6.09213834020989 53.3700863372816)	1032	Monterey Pine Pinus radiata	Remove large pieces of deadwood and lighten back the lower limb to live growth. Make safe any other large size deadwood throughout its crown.  Lighten heavy exposed side branches by c.1-2m to lessen the risk of side branches.	2		
(-6.09231600582431	1024	Corsison Dine	Monitor its stability and condition.	3		
<u>(-6.09231600582431</u> <u>53.3704381672338)</u>	1034	Corsican Pine Pinus nigra	Make safe large pieces of deadwood.	2		
<u>(-6.0923394998205</u>	1035	Corsican Pine	Remove large size dead/ unstable growth.	2		-

Co-Ordinates	Tree No	Species	Recommendations	Priority	Date Completed	Signed off
			Schedule of Tree Works for Trees Within the Woodland at 'Red Rock', Sutton, Dublin 13.			
53.3704669998411)		Pinus nigra				
(-6.09266133554009 53.3706353362637)	1036	Corsican Pine Pinus nigra	I would recommend its <u>removal</u> as part of the management. Its removal may have a knock-on effect on its group structure.	2		
(-6.09281350018135 53.3706643377447)	1037	Corsican Pine Pinus nigra	I would recommend its <u>removal</u> as part of management.	2		
(-6.09294950738532 53.3706890001225)	1039	Corsican Pine Pinus nigra	Make safe large pieces of deadwood.	2		
(-6.09258666479423 53.370749166302)	1040	Monterey Pine Pinus radiata	Make safe large size dead/ unstable growth.	2		
(-6.09248649631597 53.3707865025803)	1041	Monterey Cypress Cupressus macrocarpa	Reduce in height by 3m to improve stability issues.	2		
(-6.09196683432863 53.3705983294397)	1043	Scots Pine Pinus sylvestris	I would recommend its <u>removal</u> as part of management.	2		
(-6.09187850647188 53.3704538320065)	1044	Corsican Pine Pinus nigra	Make safe large pieces of dead/ unstable growth.	2		
(-6.0918955063204 53.3704010008202)	1045	Corsican Pine Pinus nigra	Make safe large pieces of deadwood/ unstable growth.	2		
(-6.09185849370638 53.3703706666289)	1046	Corsican Pine Pinus nigra	Make safe large pieces of deadwood/ unstable growth.	2		

#### **All Tree Works**

Co-Ordinates	Tree No	Species	Recommendations	Priority	Date Completed	Signed off
			Schedule of Tree Works for Trees Within the Woodland at 'Red Rock', Sutton, Dublin 13.			
			The programme of Ivy management will need to be continued into the future To prevent it becoming heavy on trees and causing suppression or increasing wind loading.	3		
			Additional tree planting, preferably using conifer species, should be carried out in the larger openings in the canopy to help improve continuity and diversity of the woodland in the long-term.			
(-6.09424249584348 53.3707976698787)	0993	Monterey Pine Pinus radiata	Monitor its stability at the present time, in particular for root movement.	3		
(-6.09417899900162 53.3707990017645)	0994	Monterey Pine Pinus radiata	Remove the hanging branches from within its crown.	2		
(-6.0939888276929 53.370741998595)	0995	Monterey Cypress Cupressus macrocarpa	I would recommend its <u>removal</u> as part of the management.	2		
(-6.0939138293211 53.3706465042226)	0996	Monterey Cypress Cupressus macrocarpa	Make safe any large size dead/ unstable growth and reduce the heavy side/ exposed branches, in particular the two extending out over the paths that are cracked.	1		
(-6.09401549503121 53.370704170241)	0997	Monterey Pine Pinus radiata	Remove the cracked, broken branches from within its crown.	2		
(-6.09410566748659 53.3706318343153)	0998	Monterey Cypress	Remove large size dead/ unstable growth and reduce its crown size, in particular end loading on heavy side limbs/ branches by 3m.	1		

Co-Ordinates	Tree No	Species	Recommendations	Priority	Date Completed	Signed off
			Schedule of Tree Works for Trees Within the Woodland at 'Red Rock', Sutton, Dublin 13.			
		Cupressus macrocarpa				
(-6.09368750048296 53.3701506704992)	0999	Monterey Pine Pinus radiata (2 in total)	Make safe any large size dead/ unstable growth by lightening back large size pieces of deadwood.	2		
			Monitor the decay on their lower trunks.	3		
(-6.0938436735754 53.3700670031955)	1000	Beech Fagus sylvatica	Remove deadwood over hanging the path/ desire line.	2		
			Monitor the basal decay.	3		
(-6.09380583776198 53.3700295017622)	1001	Corsican Pine Pinus nigra	Make safe large pieces of dead/ unstable growth.	2		
			Monitor its structural stability.	3		
(-6.09363933912882 53.3699159980478)	1002	Sycamore Acer pseudoplatanus	Remove dead/ unstable growth, in particular overhanging the path (desire line).	2		
(-6.09364866629631 53.3698319983902)	1003	Sycamore Acer pseudoplatanus	Remove dead/ unstable growth, in particular overhanging the path (desire line).	1		
(-6.09322266633488 53.3694211671187)	1004	Corsican Pine Pinus nigra	Monitor its condition on an annual basis.	3		
(-6.0929051730095 53.3692893312016)	1005	Corsican Pine Pinus nigra	Make safe large pieces of dead/ unstable growth and remove all hanging branches, in particular over the path (desire line).	2		
(-6.09264516277241 53.3694885004145)	1006	Corsican Pine Pinus nigra	Monitor its condition on an annual basis.	3		
(-6.09287049658516 53.3695336638689)	1007	Corsican Pine Pinus nigra	Monitor the basal decay and its stability.	3		

Co-Ordinates	Tree No	Species	Recommendations	Priority	Date Completed	Signed off
			Schedule of Tree Works for Trees Within the Woodland at 'Red Rock', Sutton, Dublin 13.			
(-6.09283783555685	1008	Monterey Pine	Make safe any large pieces of dead/ unstable growth and lighten end	2		
53.3697648338729)		Pinus radiata	weight on the second limb extending out to the south by c.1-2m,			
			using a combination of crown thinning and end weight reduction.			
(-6.09282200114506	1009	Monterey Pine	Make safe large size dead/ unstable growth.	2		
<u>53.370075163291</u> )		Pinus radiata				
(-6.09308933115918	1010	Corsican Pine	I would recommend its <b>removal</b> as part of the management.	1		
<u>53.370292171077</u> )		Pinus nigra				
(-6.09355417218481	1011	Corsican Pine	Cut Ivy at ground level at the present time.	3		
<u>53.3704509975158</u> )		Pinus nigra	Monitor its stability.			
(-6.09353833977015	1012	Monterey	Remove storm damage from within its crown.	2		
<u>53.3707018333034</u> )		Cypress	_			
		Cupressus				
		macrocarpa				
(-6.09352117274841	1013	Monterey	Reduce in all heavy side limbs/ branches by up to 2m.	2		
53.370639000334)		Cypress				
		Cupressus				
		macrocarpa				
(-6.09331032842308	1014	Corsican Pine	Remove large size dead/ unstable growth.	1		
<u>53.3705764975088</u> )		Pinus nigra				
			Carry out any additional pruning to address any exposure of branches			
			caused by the removal of Tree No. 1015.			
(-6.09326966593843	1015	Corsican Pine	I would recommend its <b>removal</b> as part of the management.	1		
53.3705904987627)		Pinus nigra				
(-6.09327082880734	1016	Corsican Pine	Remove large size dead/ unstable growth and hanging branch.	1		
53.3704958343733)		Pinus nigra				
(-6.09308649996373	1017	Corsican Pine	Monitor its condition on an annual basis.	3		
<u>53.3706791629385</u> )		Pinus nigra				

Co-Ordinates	Tree No	Species	Recommendations	Priority	Date Completed	Signed off
			Schedule of Tree Works for Trees Within the Woodland at 'Red Rock', Sutton, Dublin 13.			
			It may need to be removed if its condition deteriorates.			
(-6.09310199530578 53.3704433323011)	1018	Monterey Cypress Cupressus macrocarpa	I would recommend its <u>removal</u> as part of the management.	1		
(-6.09303734058118 53.3704241696775)	1019	Monterey Cypress Cupressus macrocarpa	In order to retain for the benefit of the group structure, reduce crown size by 2m.	1		
(-6.09302916796933 53.3704685043018)	1020	Monterey Cypress Cupressus macrocarpa	Reduce crown size by 2m to address any stability issues.	1		
(-6.09300567172774 53.3704528307)	1021	Monterey Cypress Cupressus macrocarpa	Reduce the height of its crown by 2m in order to address exposure and stability issues.	1		
(-6.09296482823332 53.3703914978368)	1022	Monterey Cypress Cupressus macrocarpa	Make safe any dead/unstable growth and reduce in height by 2-3m.	1		
(-6.09294400158386 53.3703813317839)	1023	Corsican Pine Pinus nigra	I would recommend its <u>removal</u> as part of the management.	1		
(-6.09283850713717 53.3703273337966)	1024	Monterey Cypress Cupressus macrocarpa	Reduce its crown size by 1-2m to address exposure.  Remove any large size dead/ unstable growth during climbing works.	1		

Co-Ordinates	Tree No	Species	Recommendations	Priority	Date Completed	Signed off
			Schedule of Tree Works for Trees Within the Woodland at 'Red Rock', Sutton, Dublin 13.			
(-6.09286350359786 53.3703545005069)	1025	Monterey Cypress Cupressus macrocarpa	Remove dead / unstable growth from within its crown.	2		
(-6.09278682737892 53.3703568344412)	1026	Corsican Pine Pinus nigra	I would recommend its <u>removal</u> as part of the management.	1		
(-6.09274933071154 53.3703944984361)	1027	Corsican Pine Pinus nigra	Retain at the present time.	=		
		J	Monitor its condition as its deterioration in health may warrant its removal in the future.	3		
(-6.09273916698104 53.3703845027684)	1028	Corsican Pine Pinus nigra	Retain at the present time.	_		
			Monitor its condition, further deterioration in health may require its removal in the short-medium term.	3		
(-6.09251233117554 53.3702763339207)	1029	Corsican Pine Pinus nigra	I would recommend its <u>removal</u> as part of the management.	1		
(-6.09249967015831 53.3702778303308)	1030	Corsican Pine Pinus nigra	Monitor its condition for further decline. It may need to be removed in the future as part of management.	3		
(-6.09248366573668 53.3702434997732)	1031	Monterey Pine Pinus radiata	Monitor the basal decay and the condition of its crown.	3		
(-6.09213834020989 53.3700863372816)	1032	Monterey Pine Pinus radiata	Remove large pieces of deadwood and lighten back the lower limb to live growth. Make safe any other large size deadwood throughout its crown.  Lighten heavy exposed side branches by c.1-2m to lessen the risk of side branches.	2		
			Monitor its stability and condition.	3		

Co-Ordinates	Tree No	Species	Recommendations	Priority	Date Completed	Signed off
			Schedule of Tree Works for Trees Within the Woodland at 'Red Rock', Sutton, Dublin 13.			
(-6.09192799992046 53.370130333687)	1033	Sycamore Acer pseudoplatanus	Make safe large pieces of deadwood.	1		
(-6.09231600582431 53.3704381672338)	1034	Corsican Pine Pinus nigra	Make safe large pieces of deadwood.	2		
(-6.0923394998205 53.3704669998411)	1035	Corsican Pine Pinus nigra	Remove large size dead/ unstable growth.	2		
(-6.09266133554009 53.3706353362637)	1036	Corsican Pine Pinus nigra	I would recommend its <u>removal</u> as part of the management. Its removal may have a knock-on effect on its group structure.	2		
(-6.09281350018135 53.3706643377447)	1037	Corsican Pine Pinus nigra	I would recommend its <u>removal</u> as part of management.	2		
(-6.09282266432673 53.3706919974574)	1038	Corsican Pine Pinus nigra	Retain at the present time.			
			Monitor condition. It is likely to require removal in the short-term as its condition deteriorates.	3		
(-6.09294950738532 53.3706890001225)	1039	Corsican Pine Pinus nigra	Make safe large pieces of deadwood.	2		
(-6.09258666479423 53.370749166302)	1040	Monterey Pine Pinus radiata	Make safe large size dead/ unstable growth.	2		
(-6.09248649631597 53.3707865025803)	1041	Monterey Cypress	Reduce in height by 3m to improve stability issues.	2		
		Cupressus macrocarpa				
(-6.09212116081224 53.3706815030393)	1042	Scots Pine Pinus sylvestris	I would recommend its <u>removal</u> as part of management.	1		
(-6.09196683432863 53.3705983294397)	1043	Scots Pine Pinus sylvestris	I would recommend its <u>removal</u> as part of management.	2		

Co-Ordinates	Tree No	Species	Recommendations	Priority	Date Completed	Signed off
			Schedule of Tree Works for Trees Within the Woodland at 'Red Rock', Sutton, Dublin 13.			
(-6.09187850647188 53.3704538320065)	1044	Corsican Pine Pinus nigra	Make safe large pieces of dead/ unstable growth.	2		
(-6.0918955063204 53.3704010008202)	1045	Corsican Pine Pinus nigra	Make safe large pieces of deadwood/ unstable growth.	2		
(-6.09185849370638 53.3703706666289)	1046	Corsican Pine Pinus nigra	Make safe large pieces of deadwood/ unstable growth.	2		
(-6.09165367005236 53.3705020004258)	1047	Monterey Pine Pinus radiata	Monitor its condition on an annual basis, particularly its stability.	3		
(-6.09156400391158 53.3705114962682)	1048	Monterey Pine Pinus radiata	Make safe all large size dead/ unstable growth.	1		