

Bringing Dublin Port To 2040

Port Park: Arboricultural Assessment







Third & Final Masterplan Project

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PART ONE - ARBORICULTURAL ASSESSMENT Introduction

The purpose of this report is to set out the findings following the inspection of trees on site at, **Port Park, South Bank Road, Ringsend, Dublin 4** and set out their condition. The survey work was undertaken between 23rd June to the 30th June 2023 by the undersigned a qualified arboricultural consultant. The term of reference for the report is a submission as part of a planning application on the site. The following categories have been used within the tree report tables and, where appropriate, the criterion used to define each category is defined.

- Tree No. : refers to the identification number for each tree [also identified as such on the accompanying survey drawings]
- **Species** : refers to the common and scientific name given to the tree.
- Stem diameter: refers to the diameter of the tree stem in millimetres, as measured at 1.5 metres above ground level and above the root flare for multi-stemmed trees.
- **Height (Ht)**: refers to the total height of the tree in metres. (Heights measured with a TruPluse[®] 200)
- **Crown spread** : refers to the width of the crown in metres, measured at each cardinal point on the compass. [Dimensions marked with # are estimates as per 4.4.2.6 c) BS 5837:2012]
- **Condition (Cond)**: refers to the physiological condition of the tree as a whole described as:

Good – Full healthy canopy but possibly including some suppressed or damaged branches

 $\ensuremath{\textit{Fair}}$ – Slightly reduced leaf cover, minor dead wood or isolated major dead wood

Poor – Overall sparse leafing or extensive dead wood

Age An estimation of the age of the tree described as;

V- Veteran, trees, which by recognized criteria, show features of biological, cultural or aesthetic value that are characteristic of, but not exclusive to individuals surviving beyond the typical age range for the species concerned.

OM – Over Mature, trees reaching the end of their life, in decline and senescent.

M – Mature, fully grown, with only small annual increments.

EM – Early Mature, one-third to two thirds of total life expired.

Y – Young, recent planting, with up to one third of total life expired.

• **Remarks**: Descriptive comments about the health (physiological) or form (structural) of the tree, its environment or external influences and may include preliminary management recommendations.



Category grade (CG)

- **U** -Those trees in such a condition that any existing value would be lost within 10years and which should be in the correct context, be removed for reasons of sound arboricultural management.
- A –Those trees of a high quality and value in such a condition as to be able to make a substantial contribution.
- **B** Those trees of a moderate quality and value in such a condition as to be able to make a significant contribution.
- **C** Those trees of a low quality and value currently inadequate condition to remain until new planting could be established, or young trees with a stem diameter below 150mm
- Estimated remaining contribution in years (ERC): Expressed as less than 10, 10+, 20+, more than 40

Glossary of terms used:

Basal: The base of the tree close to the ground, (basal shoots are those emanating from the base).

Crown (canopy): The leaves and branches of a tree.

Co-dominant: Stems or branches of near equal diameter, often weakly attached.

Decay: Degradation of wood by fungi and/or bacteria.

Defect: Any feature of a tree which detracts from the uniform distribution of mechanical stress, or which makes the tree mechanically unsuited to its environment.

Dieback: The death of part of a plant, usually starting from a distal point and often progressing in stages.

Epicormic: Pertaining to shoots or roots, which are initiated on mature woody stems; shoots may form in this way from dormant buds or they may be adventitious.

Dysphotic zone : A zone within the canopy which does not have enough light to carry out photosynthesis.

Included Union: bark and cambium of adjacent parts of a tree's stem (usually in forks, acutely angled branches or basal flutes), which is in face-to-face contact, so that there is weakness due to the lack of a woody union.

Lean: Departure of the trunk from the vertical.

Scaffold limbs: The branches, which form the main framework of the crown of a tree with a decurrent growth habit.

Shoot: A shoot derived from a dormant or adventitious bud on the main stem or branch.

Stub/peg: A short section of a branch, which may have, been left after previous pruning or storm damage.

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Wound: Injuries on the surface of a trunk or branch.

Full: A canopy, which extends to the ground or nearly to the ground

Natural suppressed deadwood: Deadwood in conifers, which died as the crown height extended and the lower branch no longer have a function in the production of foliage.

Pathogens: Fungal and /or bacterial infections, which degrade the wood and render trees liable to failure

Wound wood: Wood with atypical anatomical features, formed in the vicinity of a wound or the occluding tissue around a wound

Hazard Limb: An upwardly curved part in which strong internal stresses may occur, cause wood to crack

Burr: Woody protuberances, especially those derived from the mass proliferation of adventitious buds.

Root protection area (RPA): layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority.



Survey Results

Tree no.	Species	Ht. (m)	Stem dia. (mm)	Spread (m)	Cond.	Age	ERC	Remarks	CG
1	Holm Oak Quercus ilex	5.0	150	N1.5 S1.5 E1.5 W1.5	Fair	EM	40+	A twin stem tree, it is suppressed by the adjoining Apple tree.	С
2	Apple Malus domestica	7.0	200	N2.0 S2.0 E2.0 W2.0	Fair	EM	20+	This tree bifurcates at its base, it has a wide crown and a dense canopy.	С
3	Scots' Pine Pinus sylvestris	5.5	150	N3.0 S3.0 E3.0 W3.0	Good	EM	40+	A tree with a single stem, it has good form and vigour.	В
4	Holm Oak Quercus ilex	5.5	150	N3.0 S3.0 E3.0 W3.0	Good	EM	40+	This trees stem divides, to form a full canopy with multiple scaffolds, it has good vigour.	В
5	Maritime pine Pinus pinaster	6.5	200	N2.0 S2.0 E2.0 W2.0	Good	EM	40+	This tree has a main stem and a sub- dominant lateral, it has good vigour.	В
6	Maritime pine Pinus pinaster	8.0	300	N3.0 S3.0 E3.0 W3.0	Fair	EM	40+	A tree with a distorted stem, with good vigour and a full canopy.	В
7	Maritime pine Pinus pinaster	7.0	250	N3.5 S3.5 E3.5 W3.5	Fair	EM	40+	A tree with a bushy form, it has good form and vigour. It has shed a branch leaving a gap in the canopy.	С
8	Apple Malus domestica	5.0	100	N2.0 S2.0 E1.5 W2.0	Fair	EM	20+	Suppressed by the adjoining Pine, it has a full canopy with multiple scaffolds.	С
9	Holm Oak Quercus ilex	5.5	100	N2.5 S2.5 E2.5 W2.5	Fair	EM	40+	A tree with a full canopy and multiple scaffolds. It has a full crown.	В

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Tree no.	Species	Ht. (m)	Stem dia. (mm)	Spread (m)	Cond.	Age	ERC	Remarks	CG
10	Maritime pine Pinus pinaster	7.0	300	N3.0 S3.0 E3.0 W3.0	Fair	EM	40+	A tree sparse foliage, it is no apical leader. It has co-dominant leaders.	С
11	Holm Oak Quercus ilex	5.0	100	N2.0 S2.0 E2.0 W2.0	Good	Y	40+	A tree with a full canopy with multiple scaffolds.	В
12	Scots Pine Pinus sylvestris	5.0	150	N2.0 S1.5 E2.0 W2.0	Fair	Y	40+	This tree is slightly suppressed by the adjoining Holm Oak. It has a full canopy.	В
13	Holm Oak Quercus ilex	5.5	400	N5.0 S5.0 E5.0 W5.0	Good	EM	40+	A tree with multiple stems forming a wide crown. It has a full canopy with good vigour. Last year's foliage has been infested with Holm oak blotch leaf-miner (Phyllonorycter messaniella).	В
14	Scot's pine Pinus sylvestris	5.0	100	N2.0 S2.0 E2.0 W2.0	Good	EM	40+	A tree with good form, it has bushy shape, it has good vigour.	В
15	Holm Oak Quercus ilex	5.0	200	N2.0 S2.0 E2.0 W2.0	Good	EM	40+	A tree with a full canopy and good vigour. Last year's foliage has been infested with Holm oak blotch leaf-miner (Phyllonorycter messaniella).	В
16	Apple Malus domestica	4.5	250	N3.0 S3.0 E3.0 W3.0	Good	EM	40+	A tree with good form, it has a symmetric canopy, it has a dense branch structure.	В



Tree no.	Species	Ht. (m)	Stem dia. (mm)	Spread (m)	Cond.	Age	ERC	Remarks	CG
17	Scot's Pine Pinus sylvestris	5.5	200	N1.5 S1.5 E1.5 W1.5	Good	EM	40+	A tree with a good shape, it has some naturally suppressed deadwood.	В
18	Holm Oak Quercus ilex	6.0	450	N4.0 S4.0 E4.0 W4.0	Good	EM	40+	A tree with multiple scaffolds forming a full crown. It has good vigour. Last year's foliage has been infested with Holm oak blotch leaf-miner (Phyllonorycter messaniella).	В
19	Apple Malus domestica	4.0	250	N3.0 S3.0 E3.0 W3.0	Fair	EM	40+	A tree with a full canopy formed by multiple scaffolds. It as a dense canopy.	С
20	Holm Oak Quercus ilex	5.0	400	N3.0 S3.0 E3.0 W3.0	Good	EM	40+	A tree with a dense, full canopy, with multiple scaffolds. Last year's foliage has been infested with Holm oak blotch leaf-miner (Phyllonorycter messaniella).	В
21	Scots Pine Pinus sylvestris	6.0	200	N2.0 S2.0 E2.0 W2.0	Fair	EM	40+	A tree with a full canopy, it has dense ivy cover, it has good form. Further up the slope is a small Pine.	В
22	Holm Oak Quercus ilex	5.0	300	N3.0 S3.0 E3.0 W3.0	Good	EM	40+	A tree with full canopy, it has multiple scaffolds. Last year's foliage has been infested with Holm oak blotch leaf- miner (Phyllonorycter messaniella).	В



Tree no.	Species	Ht. (m)	Stem dia. (mm)	Spread (m)	Cond.	Age	ERC	Remarks	CG
23	Holm Oak Quercus ilex	5.5	350	N3.5 S3.5 E3.5 W3.5	Good	EM	40+	A tree with a dense branch structure and a full canopy. Last year's foliage has been infested with Holm oak blotch leaf-miner (Phyllonorycter messaniella).	В
24	Holm Oak Quercus ilex	4.0	250	N5.0 S5.0 E5.0 W5.0	Fair	EM	40+	This tree appears to be suffered from exposure. Last year's foliage has been infested with Holm oak blotch leaf- miner (Phyllonorycter messaniella).	В
25	Scot's pine Pinus sylvestris	5.0	100	N2.0 S3.0 E2.0 W2.0	Poor	EM	20+	A weak specimen, it has dense ivy cover. It has dominant leaders and has poor form.	С
26	Maritime pine Pinus pinaster	5.0	200	N2.0 S2.0 E2.0 W2.0	Fair	EM	40+	A tree with a single distorted stem, it has good shape. It has moderate ivy cover.	В
27	Holm Oak Quercus ilex	5.0	100	N1.0 S1.0 E1.0 W1.0	Fair	EM	40+	A tree with a narrow canopy, it has good vigour and has dense ivy growth.	В
28	Maritime pine Pinus pinaster	4.0	90	N3.0 S3.0 E3.0 W3.0	Good	EM	40+	A tree with a full canopy, it has good form and good vigour.	В
29	Apple Malus domestica	4.0	250	N3.0 S3.0 E3.0 W3.0	Good	EM	20+	A tree with multiple scaffold branches, it has a dense full canopy.	С
30	Maritime pine Pinus pinaster	4.5	150	N3.0 S3.0 E2.0 W2.0	Fair	EM	20+	A tree with a distorted stem, it has a sub- dominant lateral and sparse foliage.	С



Tree no.	Species	Ht. (m)	Stem dia. (mm)	Spread (m)	Cond.	Age	ERC	Remarks	CG
31	Scots Pine Pinus sylvestris	5.0	150	N2.0 S2.0 E2.0 W2.0	Fair	EM	40+	A tree with reasonable form, it has a single stem.	С
32	Maritime pine Pinus pinaster	5.0	150	N1.5 S1.5 E1.5 W1.5	Fair	EM	40+	A tall drawn up tree with co-dominant leaders.	С
33	Maritime pine Pinus pinaster	5.0	100	N1.5 S1.5 E1.5 W1.5	Fair	EM	40+	A tree with a single stem, it has good form. It is suppressed by the adjoining Holm oak.	В
34	Holm Oak Quercus ilex	5.0	250	N3.0 S3.0 E3.0 W3.0	Good	EM	40+	A tree with a full canopy, it has multiple scaffolds. Last year's foliage has been infested with Holm oak blotch leaf-miner (Phyllonorycter messaniella).	В
35	Maritime pine Pinus pinaster	4.5	200	N1.5 S1.5 E1.5 W1.5	Good	EM	40+	A tree with a single stem, it has good form. It is slightly suppressed by the adjoining Holm oak.	В
36	Holm Oak Quercus ilex	4.0	150	N2.0 S2.0 E2.0 W2.0	Fair	Y	40+	A small specimen, with a full bushy form. It has good vigour.	В
37	Scot's pine Pinus sylvestris	4.0	150	N2.0 S2.0 E2.0 W2.0	Fair	Y	20+	A tree with a weak structure and poor form. It has good vigour.	С
38	Scot's pine Pinus sylvestris	4.0	70	N1.0 S1.0 E1.0 W1.0	Fair	Y	40+	A twin stem with a narrow crown, it has reasonable vigour. It has poor form.	С



Tree no.	Species	Ht. (m)	Stem dia. (mm)	Spread (m)	Cond.	Age	ERC	Remarks	CG
39	Holm Oak Quercus ilex	4.0	80	N1.5 S1.5 E1.5 W1.5	Fair	Y	40+	A tree with multiple scaffolds with a narrow crown, it has reasonable vigour. It has poor form.	С
40	Scot's pine Pinus sylvestris	4.5	150	N2.0 S2.0 E2.0 W2.0	Fair	Y	40+	A tree with poor form, it has multiple scaffolds. It has co-dominant leaders.	С
								Between the Pine and the next Pine are a small Holm oak and a small Pine.	
41	Maritime pine Pinus pinaster	5.0	100 150	N2.5 S2.5 E2.5 W2.5	Good	EM	40+	A tree with bushy form, it has good vigour, there are two trees planted together with a shared canopy.	В
42	Maritime pine Pinus pinaster	4.5	200	N2.0 S2.0 E2.0 W2.0	Good	EM	40+	A tree with good form, and good vigour. It has a full canopy.	В
43	Holm Oak Quercus ilex	5.0	300	N3.0 S3.0 E1.0 W2.0	Good	EM	40+	A tree with multiple scaffolds and a full crown and good vigour.	В
44	Maritime pine Pinus pinaster	6.0	300	N3.0 S3.0 E3.0 W3.0	Good	EM	40+	A well-established tree with good vigour, it has a bushy form and full crown formed by multiple scaffolds.	В
45	Scot's pine Pinus sylvestris	6.0	250	N2.5 S2.5 E2.5 W2.5	Good	EM	40+	A well-established tree with good vigour, it has a bushy form and full crown formed by a single stem.	В
								To the front of the trees, is a small Pine, small Holm Oak and a Cotoneaster.	



Tree no.	Species	Ht. (m)	Stem dia. (mm)	Spread (m)	Cond.	Age	ERC	Remarks	CG
46	Maritime pine Pinus pinaster	6.0	300	N3.0 S3.0 E3.0 W3.0	Good	EM	40+	A tree with a full canopy and a single stem, with multiple branches. It has good vigour.	В
47	Maritime pine Pinus pinaster	6.0	300	N2.0 S2.0 E2.0 W2.0	Good	EM	40+	A tree with a full canopy and a single stem, with multiple branches. It has good vigour.	В
48	Maritime pine Pinus pinaster	6.0	300	N2.5 S2.5 E2.5 W2.5	Good	EM	40+	A tree with a single stem, it has good form and good vigour. It has some naturally suppressed deadwood.	В
49	Sea buckthorn Hippophae rhamnoides							A small bush, it is the only one of its species on the site.	
	Scot's pine Pinus sylvestris							A small tree with a open form.	
50	Maritime pine Pinus pinaster	8.0	350	N4.0 S4.0 E4.0 W4.0	Good	EM	40+	A tree with a single stem, its has established well and has good form. It has good vigour and some naturally suppressed deadwood.	В
51	Maritime pine Pinus pinaster	8.0	350	N3.0 S3.0 E3.0 W3.0	Good	EM	40+	A tree with a single stem, and a sub- dominant lateral with is competing for apical dominance its has established well and has good form. It has good vigour and some naturally suppressed deadwood.	В



Tree no.	Species	Ht. (m)	Stem dia. (mm)	Spread (m)	Cond.	Age	ERC	Remarks	CG
52	Maritime pine Pinus pinaster	8.0	300	N3.0 S3.0 E3.0 W3.0	Good	EM	40+	A tree with a single stem, it has established well and has good form. It has good vigour and some naturally suppressed deadwood.	В
53	Maritime pine Pinus pinaster	8.0	300	N3.0 S3.0 E3.0 W3.0	Good	EM	40+	A tree with a single stem, it has established well and has good form. It has good vigour and some naturally suppressed deadwood.	В
54	Maritime pine Pinus pinaster	7.0	300	N3.0 S3.0 E3.0 W3.0	Good	EM	40+	A tree with a single stem, it has a one sided crown by the path. It has been cut back with a mechanical flail. It has a dense canopy and good vigour.	В
55	Sycamore Acer pseudoplat anus	9.0	400	N3.0 S3.0 E3.0 W3.0	Good	EM	20+	This tree's stem divides to form multiple scaffolds. It has a full canopy. It has dense canopy and good vigour. It has a Holm Oak at its base, which is close to the path and has been flailed.	С
56	Holm Oak Quercus ilex	4.0	150	N2.0 S2.0 E2.0 W0.5	Fair	EM	20+	A tree with a full canopy, its located close to the path and the canopy has been cut back with a mechanical flail.	С
57	Sycamore Acer pseudoplat anus	5.0	450	N4.0 S4.0 E4.0 W4.0	Good	EM	20+	Growing on the hill above bench, this tree's stem divides to form multiple scaffolds. It has a full canopy. It has dense canopy and good vigour.	С



Tree no.	Species	Ht. (m)	Stem dia. (mm)	Spread (m)	Cond.	Age	ERC	Remarks	CG
58	Holm Oak Quercus ilex	3.5	100	N1.0 S1.0 E1.0 W1.0	Fair	EM	20+	A tree with multiple scaffolds from it base. It ahs good vigour. The canopy has been cut back with a mechanical flail.	С
59	Holm Oak Quercus ilex	4.0	200	N2.0 S2.0 E2.0 W1.0	Fair	EM	20+	Growing close to the path, it has good vigour with a full canopy. the canopy has been cut back with a mechanical flail.	С
60	Apple Malus domestica	4.0	200	N2.0 S2.0 E2.0 W2.0	Fair	EM	20+	A tree with full canopy and a dense branch structure, it has short stem and it has multiple scaffolds.	С
61	Holm Oak Quercus ilex	4.0	200	N2.0 S2.0 E2.0 W2.0	Good	EM	40+	A tree with a full canopy, with dense branch structure and has good vigour.	В
62	Sycamore Acer pseudoplat anus	4.0	200	N2.0 S2.0 E2.0 W2.0	Fair	EM	40+	This tree's stem bifurcates to form multiple scaffolds and a full canopy.	С
63	Scot's pine Pinus sylvestris	5.0	200	N3.0 S3.0 E3.0 W3.0	Good	EM	40+	A tree with a single stem and a large sub- dominant lateral branch. It has a full canopy with good vigour.	В
64	Scot's pine Pinus sylvestris	5.0	100	N1.0 S2.5 E2.5 W2.5	Good	EM	40+	One of a group of four trees with a shared canopy. It has good vigour, it has naturally suppressed deadwood.	В



Tree no.	Species	Ht. (m)	Stem dia. (mm)	Spread (m)	Cond.	Age	ERC	Remarks	CG
65	Scot's pine Pinus sylvestris	4.0	100	N2.5 S1.0 E2.5 W2.5	Good	EM	40+	One of a group of four trees with a shared canopy. It has good vigour, it has naturally suppressed deadwood.	В
66	Scots Pine Pinus sylvestris	4.0	150	N3.0 S1.0 E4.0 W1.0	Good	EM	40+	One of a group of four trees with a shared canopy. It has good vigour, it has naturally suppressed deadwood. It has large lateral to the north-east.	В
67	Scots Pine Pinus sylvestris	5.0	150	N1.0 S3.0 E3.0 W1.0	Good	EM	40+	One of a group of four trees with a shared canopy. It has good vigour, it has naturally suppressed deadwood.	В
68	Holm Oak Quercus ilex	4.0	200	N1.5 S1.5 E1.5 W1.5	Good	EM	40+	A tree with a full canopy formed by multiple scaffolds with good vigour.	В
69	Holm Oak Quercus ilex	4.0	150	N2.0 S2.0 E2.0 W2.0	Fair	EM	40+	Growing by the path, it has multiple scaffolds and has good vigour. There is a small tree beside it. It has been cut back with a mechanical flail.	В
70	Apple Malus domestica	4.5	200	N3.0 S3.0 E3.0 W3.0	Fair	EM	20+	This tree has a full canopy with a dense branch structure and multiple scaffolds.	С
71	Apple Malus domestica	3.0	90	N2.0 S2.0 E2.0 W2.0	Poor	EM	20+	A squat, weak specimen with a dense branch structure.	С
72	Sycamore Acer pseudoplat anus	3.0	200	N2.0 S2.0 E2.0 W2.0	Fair	EM	20+	A tree with multiple scaffolds, it has good vigour, it has no dominant leader and has a bushy form.	С



Tree no.	Species	Ht. (m)	Stem dia. (mm)	Spread (m)	Cond.	Age	ERC	Remarks	CG
73	Sycamore Acer pseudoplat anus	4.0	250	N3.5 S3.5 E3.5 W3.5	Fair	EM	20+	A tree with multiple scaffolds, it has good vigour, it has no dominant leader and has a bushy form.	С
								Upper section of the berm	
74	Sycamore Acer pseudoplat anus	6.0	250	N3.0 S3.0 E3.0 W3.0	Fair	EM	20+	Growing in the valley, behind the berm. It has multiple scaffolds with a dense branch structure.	С
75	Sycamore Acer pseudoplat anus	7.0	200	N3.0 S3.0 E3.0 W3.0	Fair	EM	20+	Growing on the top of the bank, it has multiple scaffolds and a dense canopy.	С
76	Sycamore Acer pseudoplat anus	5.0	100	N1.5 S1.5 E1.5 W1.5	Fair	EM	20+	A small specimen, on the back of the berm, it has multiple scaffolds with good vigour.	С
77	Sycamore Acer pseudoplat anus	5.0	200	N3.0 S3.0 E3.0 W3.0	Fair	EM	20+	A busy tree on the middle of the back slope of the berm. It has multiple scaffolds and has good vigour.	С
78	Sycamore Acer pseudoplat anus	6.5	250	N4.0 S4.0 E4.0 W4.0	Fair	EM	20+	A tree with a wide crown formed by multiple scaffolds, it has good vigour.	С
79	Sycamore Acer pseudoplat anus	6.0	20	N3.0 S3.0 E3.0 W3.0	Fair	EM	20+	A tree with a wide crown formed by multiple scaffolds, it has good vigour.	С
80	Sycamore Acer pseudoplat anus	5.0	250	N2.5 S2.5 E2.5 W2.5	Fair	EM	20+	A tree with a wide crown formed by multiple scaffolds, it has good vigour.	С



Tree no.	Species	Ht. (m)	Stem dia. (mm)	Spread (m)	Cond.	Age	ERC	Remarks	CG
81	Ash Fraxinus excelsior	5.0	200	N1.5 S1.5 E1.5 W1.5	Poor	EM	<10	A tree with dense ivy cover, it is infected with the fungal infection Ash Die Back. It is in terminal decline. At the bottom of the slope is a sapling Sycamore.	U
82	Sycamore Acer pseudoplat anus	5.0	150	N2.0 S2.0 E2.0 W2.0	Fair	EM	20+	A tree with multiple scaffolds, it has poor form, with small leaves and poor vigour. It is growing in the valley.	С
83	Sycamore Acer pseudoplat anus	9.0	300	N4.0 S4.0 E4.0 W4.0	Fair	EM	20+	Growing from near the top of the top of the bank. It has multiple scaffolds forming a wide crown. It has good vigour.	С
84	Sycamore Acer pseudoplat anus	8.0	250	N4.0 S4.0 E4.0 W4.0	Fair	EM	20+	Growing from near the top of the top of the bank. It has multiple scaffolds forming a wide crown. It has good vigour.	С
85	Sycamore Acer pseudoplat anus	9.0	300	N4.0 S4.0 E4.0 W4.0	Fair	EM	20+	Growing in the bottom of the bank in the valley. It has multiple scaffolds from the base forming a wide canopy with good vigour. It has a dense branch structure.	С
86	Sycamore Acer pseudoplat anus	8.0	200	N4.0 S4.0 E4.0 W4.0	Fair	EM	20+	Growing in the bottom of the bank in the valley. It has multiple scaffolds from the base forming a wide canopy with good vigour. It has a dense branch structure.	С



Tree no.	Species	Ht. (m)	Stem dia. (mm)	Spread (m)	Cond.	Age	ERC	Remarks	CG
87	Sycamore Acer pseudoplat anus	4.0	150	N2.0 S2.0 E2.0 W2.0	Fair	EM	20+	A tree with multiple scaffolds, it is growing on the slope, it has a dense branch structure ad good vigour. Between #86 and 87 are a group of sapling Sycamore, Buddleia and Apple.	С
88	Sycamore Acer pseudoplat anus	6.0	200	N1.5 S1.5 E1.5 W1.5	Fair	EM	20+	A tree with a single stem with a full canopy. It has good vigour.	С
89	Sycamore Acer pseudoplat anus	8.0	250	N4.0 S4.0 E4.0 W4.0	Fair	EM	20+	A tree with a wide crown formed by low suckers, its crown has multiple scaffolds and has good vigour.	С
90	Sycamore Acer pseudoplat anus	4.0	200	N2.0 S1.0 E1.0 W2.0	Fair	EM	20+	A tree with a single stem, and multiple laterals, it has suffered damage to the exposed crown, and has responsive regrowth. It has wounds on its stem with good wound wood. It has good vigour.	С
91	Sycamore Acer pseudoplat anus	8.0	250	N3.0 S3.0 E3.0 W3.0	Fair	EM	20+	A tree grow in the valley behind the berm, it has a wide crown formed by multiple scaffolds, with a dense branch structure. It has good vigour.	С
92	Sycamore Acer pseudoplat anus	8.0	250	N4.5 S4.5 E4.5 W4.5	Fair	EM	20+	A tree grow in the valley behind the berm, it has a wide crown formed by multiple scaffolds, with a dense branch structure. It has good vigour.	С



Tree no.	Species	Ht. (m)	Stem dia. (mm)	Spread (m)	Cond.	Age	ERC	Remarks	CG
93	Sycamore Acer pseudoplat anus	8.0	200	N4.0 S4.0 E4.0 W4.0	Fair	EM	20+	A tree grow in the valley behind the berm, it has a wide crown formed by multiple scaffolds, with a dense branch structure. It has good vigour. There is a large Cotoneaster bush in front of it.	С
94	Sycamore Acer pseudoplat anus	8.0	300	N3.0 S3.0 E3.0 W3.0	Fair	EM	20+	A tree with a single stem, which bifurcates, it has multiple scaffolds with a dense branch structure. It has good vigour.	С
95	Sycamore Acer pseudoplat anus	8.0	250	N4.0 S4.0 E4.0 W4.0	Fair	EM	20+	A tree with a single stem, which bifurcates, it has multiple scaffolds with a dense branch structure. It has moderate vigour.	С
								In the next section there are no trees on the back of the berm. There is a palisade fence defining a boundary to the sand processing yard. The east of the silos are a stand of early mature trees; Birch, Oak, Pine and Willow.	
								To the west are a stand of early mature to mature Birch.	
96	Sycamore Acer pseudoplat anus	5.0	90	N1.5 S1.5 E1.5 W1.5	Fair	Y	20+	A sapling tree it has a spreading canopy and good vigour.	С
97	Sycamore Acer pseudoplat anus	6.0	100	N2.5 S2.5 E2.5 W2.5	Fair	EM	20+	A tree with multiple scaffolds and a dense branch structure, it has good vigour.	С

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Tree no.	Species	Ht. (m)	Stem dia. (mm)	Spread (m)	Cond.	Age	ERC	Remarks	CG
98	Sycamore Acer pseudoplat anus	8.0	150	N2.5 S2.5 E2.5 W2.5	Poor	EM	20+	A self-seeded tree, its crown is formed by regrowth, which is tall drawn up. It appears to have been cut back in the past. It has good vigour.	С
99	Sycamore Acer pseudoplat anus	8.0	150	N3.0 S3.0 E3.0 W3.0	Poor	EM	20+	A self-seeded tree, its crown is formed by regrowth, which is tall drawn up. It appears to have been cut back in the past. It has good vigour.	С
100	Sycamore Acer pseudoplat anus	9.0	250	N5.0 S5.0 E5.0 W5.0	Fair	EM	20+	Growing against and through the palisade fence. It has multiple scaffolds and suckers from its base. It appears to have been cut back in the past and the crown is substantially regrowth. It has good vigour.	С
101	Sycamore Acer pseudoplat anus	9.0	250	N5.0 S5.0 E5.0 W5.0	Fair	EM	20+	Growing against and through the palisade fence. It has multiple scaffolds and suckers from its base. It appears to have been cut back in the past and the crown is substantially regrowth. It has good vigour.	С



Ash Die Back

Ash dieback is a serious disease of ash trees caused by the invasive fungal pathogen *Hymenoscyphus fraxineus* (previously known as *Chalara fraxinea*), which originates in Asia and was brought to Europe in the early 1990's. Today, the pathogen covers most of the natural range of ash in Europe causing high mortality rates of ash trees.

Ash dieback was first detected in the Republic of Ireland in October 2012 on plants imported from continental Europe. The disease is now prevalent throughout most of the island of Ireland and is likely to cause the death of the majority of the ash trees over the next two decades, it is estimate that 5% of trees may hold resistance.

The disease causes leaf loss and crown dieback in affected trees and can lead to the death of the tree. The disease can affect ash trees of any age and in any setting. The disease can be fatal, particularly among younger trees. Ash dieback is more severe in wet sites, where it is more likely to cause collar infections in ash trees.

Ash die back, Hymenoscyphus fraxineus is an ascomycete fungus that causes ash dieback, a chronic fungal disease of ash trees in Europe characterised by leaf loss and crown dieback in infected trees. The fungus was first scientifically described in 2006 under the name Chalara fraxinea. Four years later it was discovered that *Chalara fraxinea* is the asexual (anamorphic) stage of a fungus that was subsequently named Hymenoscyphus pseudoalbidus and then renamed as Hymenoscyphus fraxineus. The asexual stage (anamorph) grows in affected trees attacking the bark and encircling twigs and branches, causing the die back.

The disease affects the native, indigenous trees in different ways, some trees are more susceptible and succumb to the infection quicker which results in very rapid decline. Trees can be re-infected.

A paper published in the Arb magazine in 2020 by Paul Hanson has defined the stages of die back into four class.

I am recommending felling trees in class and three and four.



Grades of Ash die back (Paul Hanson & ADRGS)



Assumptions and Limitations

This tree survey was carried out from the ground, no invasive or destructive evaluation techniques were used; all findings observations and recommendations are based on the knowledge and experience of the undersigned a qualified Arboriculturalist. Information contained in this report covers only those items that were examined and reflects the condition of those items at the time of the inspection.

Findings are based on a visual report from ground level only and it should be borne in mind it is subject only to faults visible at the time of inspection, certain pathogens only produce seasonal fruiting bodies and consequentially may not have been noted during this assessment.

All trees should be monitored on a regular basis for signs of defects and should be reported to a person qualified to diagnose them and to recommend treatment.

In the event of adverse weather conditions, there is the possibility of any tree, despite having a good report, falling over or suffering crown damage. In the event of a falling tree causing damage to residential or non-residential buildings in their proximity, or to any person, any property public or private, or any mechanical vehicle or otherwise no liability will attach to this firm.

There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the trees in question may not arise in the future. The author takes no responsibility for any actions taken by the landowner or their agents by reasons of this report unless subsequent contractual arrangements are made.

This report is intended solely for the benefit of the parties to whom it is addressed and no responsibility is extended to any third party for the whole or any part of its contents. All trees mentioned in this report should be subject to reassessment every two years to assess physiological and environmental changes.



PART TWO - ARBORICULTURAL IMPACT ASSESSMENT

General Description of Site and Surroundings

The site is located on the southern end of the Poolbeg Peninsula in Dublin 2. It is bounded by the South Bank Road to the north, existing Dublin Port industrial yards to the east, Pembroke Cove due south and an existing Landscape berm south and eastwards towards Irish town Nature Reserve. The man made berm has a valley between two high points. The Berm has been planted with trees which include Maritime pine, Holm oak, Sycamore, Scot's pine, Field maple and Apple. There shrubs and herbaceous plants. Shrubs include; Cotoneaster, Buddleia, Willow, Hawthorn, dog rose. Herbaceous plants include; teasel, Red Valerian, Yarrow, Fennel, Mallow, Wild Oats, winter heliotrope, Bindweed, Vetch, Red clover, Yellow fumitory and St. john's wort and Some Japanese knotweed. Along the base of the berm is a public footpath.

Description of Proposed Development

The proposed development site for the new Port Park is located on the southern end of the Poolbeg Peninsula in Dublin 2, bounded by South Bank road to the north, existing Dublin Port industrial yards to the east, Pembroke Cove due south and existing landscaped berm south and eastwards towards Irishtown Nature Reserve. The western Park boundary forms the combined proposal for the Active Travel Route (abreviated as 'ATR' within this document), with the future development of the 'Glass Bottle Site' further west.

The new proposed site will comprise a total area of 5.2 Ha and will constitute an amalgamation of industrial lands currently underutilised for this prominent location on the fringe of Dublin Bay. Connection to the very popular leisure walk towards Irishtown Nature reserve is considered in the site extents, with the subject site boundary extending eastwards to ensure tree planting south of the landscaped berm can be undertaken. This extension is designed to enhance the overall environmental opportunities, result with low visual impact of the 3FM project, while also ensuring that the site remains connected to the surrounding natural environment and leisure opportunities.

Proposed Port Park masterplan includes a large sport pitch with a natural ground surface, pedestrian routes and pathways, Pavilion building with public toilets, public square and urban realm treatment, a children's play tower, and a large wild flower meadow to the east. A 'share with care' corridor has been adopted on the western fringe of the Park to allow for a shared cyclist and pedestrian corridor which forms a central portion of the wider 3FM Project Active Travel Route. JM MCCONVILLE + ASSOCIATES 22



Overall, the Port Park proposals seek to revitalize the industrial lands, by providing a contemporary parkland with public spaces and amenities to cater for a diverse range of activities, functions, and environmental considerations. A combined approach was adopted by the design team in the parkland design, and has resulted in a welcoming hub for the local community and visitors from afar. A number of consultations and meetings were held with Dublin City Council Parks department to review the design, with feedback being adhered to its the design development. This also included a site walk with the design team to discuss the existing site conditions and development consideration at the beginning of the project.

Designations Relating to Trees

There are no Tree Preservation Orders on the site. There is no objective in the County Development plan to protect and preserve trees and Woodlands at locations within the site.

Implications of Proposed Development

The current proposal under consideration has the following impact on the existing trees.

(1) Direct Loss of Trees

As part of the development it is planned to remove part of the berm to construct the public park. And western end of the site. A section of trees will have to be removed due to a direct impact;

Trees# 98, 99, 100 and 101, Sycamores, Three sycamore and a pine at the edge of the site boundary, trees #1-14 which include three apple trees, five Holm Oak and seven Pine (Scot's ad Maritime), all of which are early mature..



Summary Table of survey trees

Grade	Total No.	No. to be removed	% of all trees (105)
U (worst – remove)	1	1	.95%

Grade	Total No.	No. to be removed*	% of grade	% of all trees (105)
'V' Veteran	0	0	0	0
'A' (best quality)	0	0	0	0
'B' (moderate quality)	50	10	20%	9.5%
'C' (low quality)	54	9	16.6%	8.5%
Total	105	20		

(2) Indirect Impacts

Changes in Ground Level / Changes in Ground Surface within Root protection area (RPA).

There are no planned changes in ground levels or ground surfaces with the root protection of retained trees.

Services

No services are planned within the Root protection zone of retained trees.

Condition

One tree needs to be removed due to its condition tree# 81 an ash, infected with Ash Die Back.

Change in Site Use and Tree Management Implications

Above ground constraints

The retained trees are in locations where they will not be affected by the proposed buildings.

Potential Nuisance

The proposed development is being constructed with in part within an industrial complex and an existing public amenity. There will no risk of potential nuisance from retained trees that might cause concerns and a requirement to remove them. All retained trees will have appropriate remedial tree surgery works, to remove all deadwood and potential hazard branches from their canopies prior to the development being occupied and will have normal ongoing arboricultural management.

Construction Implications

General precautions in storage or mixing of materials that may be injurious to trees will need to be taken. All toxic materials, (cement, mortar, bitumen, diesel, bonding agents, etc) will be stored 10m from root protection areas. No wash out facilities will JM MCCONVILLE + ASSOCIATES 24



be provided for ready mix concrete/mortar deliveries. All fuels stored on site will be bunded to prevent spillage or leakage.

Proposals for tree management

All retained trees will have necessary remedial tree surgery to ensure there are no hazard branches, deadwood and weak limbs. All retained trees will be subject to regular inspections.



PART THREE - ARBORICULTURAL METHOD STATEMENT

Introduction

This document sets out the methodology for all proposed works that affect trees on and adjacent to the site. Compliance with this method statement will be a requirement of all relevant contractors associated with the development proposals. Copies of this document will be available for inspection on site. The developer will inform the local planning authority within twenty-four hours if the arboricultural consultant is replaced.

The contractor shall take all precautions to ensure that any trees, which are to be retained, shall remain undisturbed and undamaged.

All works to trees and all operations adjacent to trees should be undertaken in accordance with the Method Statement. The contractor shall undertake no works to trees unless instructed by the Contract Administrator. All works within or close to the protected tree zones are to be supervised by the appointed Consultant Arboriculturalist. Two working days notice of intention to undertake such works to be given prior to any works commencing.

Root Protection Area

In accordance with the Method statement and as per the issued drawings protective fences shall be erected before the commencement of building works any works on site (other than remedial tree works and erection of the boundary fence). The area within the tree fencing should be clearly identified with signage as the 'Protected Tree Zone'. The local planning authority will be notified in writing once the fencing is in place. Strictly no access should be permitted to this zone unless instructed by the CA. The appointed Consultant Arboriculturalist should be notified of any works or access to this zone. The fencing will remain in place until completion of the main construction phase and then only removed with the consent of the local planning authority to permit completion of the scheme.

Other than works detailed within this method statement or approved in writing by the local planning authority, no works including storage or dumping of materials shall take place within the exclusion zones defined by the protective fencing. No fires should be lit close to or within 20 metres of the trunk of any tree that is to be retained. No materials that are likely to have an adverse effect on tree health such as oil, bitumen or cement will be stored or discharged within 10 metres of the trunk of a tree that is to be retained.

Code of Practice for the preservation of trees

The following code of practice is intended for the preservation of existing trees. These guidelines will help sustain vigour and minimise adverse growing conditions, for trees set out for retention.

This code will be brought to the attention of all site personnel including Main Contractor, sub-contractors and engineering specialists associated with the project. As appropriate this method statement should be translated. All operations are to be in accordance with BS 5837: 2012, Trees in relation to design, demolition and construction. The main contractor should purchase and make available on site a copy of the above.

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Prior Notice and Tree removal

All necessary tree works are to be undertaken prior to the commencement of any other works on site. Trees must only be removed with the necessary licenses (*Forestry Act 2014*)¹ or permits. All necessary licenses and permits should be inspected by the appointed Consultant Arboriculturalist prior to commencement of works.

The Arboricultural Consultant will:

- Liaise with the relevant authorities during the project.
- Constantly monitor the project with regard to tree health to ensure that no damage is caused to the subject trees during the operational works.
- Report any negligent damage to trees, which will prejudice their health.
- Monitor works carried out by the Arboricultural Contractor and Main Contractor within the 'Root Protection Area'.

Construction access

In areas where there is site access (scaffolding), permanent car parking and access for construction of xxx near trees, the ground shall be covered with Fibertex or similar geo textile fabric and a three dimensional cellular confinement system such as geoweb should be laid over the fabric. Where access is required within the root protection area of trees a cellular confinement system shall be put in place prior to use of the area. See construction detail attached.



Soft Landscaping within Exclusion Zones

Preparation of ground in these areas will be carried out under the supervision of the arboricultural consultant.



¹ Note that under the Forestry Act 2014, no felling licence will be required on receipt of planning permission. JM MCCONVILLE + ASSOCIATES

Guidelines for Root Pruning:

- Roots smaller than 25mm diameter may be pruned back, roots with a diameter greater should only be cut following consultation with an arboriculturist.
- Roots should be cut cleanly after excavation to promote callus formation and wound closure.
- Exposed roots to be protected where an area of work is to be left open, particularly along the face of the excavation for the underground car parking. In winter, exposed roots are to be wrapped with dry sacking overnight.
- In summer, exposed roots are to be covered with damp sacking at all times. A suitable irrigation / drip feed system should be installed to keep sacking wet at all times.
- Back filling materials used around roots are to be of a fine granular material with no toxins and not susceptible to frost heave.

Offences and Penalties

Any damage whatsoever, caused to the protected trees shall be notified to JM McConville + Associates, so that the damage can be assessed and rectified and the main contractor subject to financial penalty as per the Conditions of Contract. Value of damaged tree will be assessed using the 'Helliwell System'.

Supervision and Monitoring

The arboricultural consultant will be responsible for monitoring of all arboricultural works and issuing a certificate of practical completion.

In addition, the arboricultural consultant will inspect the protective fencing and monitor any works within exclusion zones.

A record of site visits will be maintained for inspection on site and copies forwarded to the developer / agent and to the local planning authority. The Contractor shall not fell any trees under any circumstances. All works within the protected tree zones are to be supervised by the arboricultural consultant.

Tree Protection Barrier Fencing

No Tree protection barriers are planned as the retained trees are within the existing Berm, which a public amenity.



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July 2024

