LEA BRIDGE GASWORKS

TREE SURVEY & IMPACT ASSESSMENT

SEPTEMBER 2025

St William
Designed for life

Tree Survey and Impact Assessment

for land at

Lea Bridge Gas Works
Leyton
E10 7LX

Client

Berkeley Homes (Central London) Limited

September 2025

2148-KC-XX-YTREE-TreeSurvey-and-ImpactAssessment-RevA

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CAVEATS

This report has been prepared for planning purposes only. It is not intended for the detailed design of foundations that requires a much finer level of detail to ensure a cost-effective scheme of foundations.

This report considers the health and safety of the trees in their context at the time of survey. Trees are natural organisms subject to change and a range of weather conditions. This report can only be relied on for a period of twelve months or immediately prior to detailed designing of site layout (if phased) to ensure hazards posed by trees can be identified and resolved.

We rely on Council and Government websites for factual information in respect of sites. Experience reveals these are not always reliable. Further checks should be made in advance of undertaking any work to trees.

Keen Consultants accept no responsibility or liability for any use that is made of this document other than by the client for the purpose for which it was commissioned and prepared.

Document history

Revision	Issue Status	Details	Approved/Date
Rev0	Final	Initial combined Tree Survey and Impact Assessment	JK / 25 September 2023
RevA	Final	Updated Tree Survey and Impact Assessment	JK / 25 September 2025

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1.0 Introduction

1.1 This report sets out the information about trees to inform the planning process about the quality of trees on site. Following the tree survey the information is extended to consider the impact to them from the proposed development and how construction may proceed whilst ensuring trees are successfully retained.

1.2 In this report we consider the revised (S73) proposals for development of the site. We consider those proposals in relation to the survey of trees we conducted as part of the site analysis. The S73 planning application proposes the following amendments:

- 770 homes (an increase of 127 homes)
- Minor mix changes to approved plans
- Minor floorspace changes to the non-residential floorspace
- Amendments to the building footprint of Block C, D, E, F, G, J
- Increase in building heights up to 26 storeys
- Design Amendments to meet current Fire Safety Regulations (BS9991:2024)
- Removal of Block H
- Relocation of Nursery from Block G to Block J
- Relocation of Healthcare Centre from Block C to Block G
- Relocation of Energy Centre from Block B to Block I
- Additional Residents Concierge introduced to Block C
- Energy Strategy amendments including the removal of gas from the site heat network serving Blocks C-J, improving CO2 reductions over the consented strategy.
- 35 resident blue badge car parking spaces (4.5%), as well as 2 car club spaces, and 1 commercial (NHS unit) blue badge car parking space.
- 1,329 resident cycle spaces and 19 visitor cycle spaces.
- Biodiversity Net Gain (BNG): +142.17% (an increase of +55.07%), far exceeding the 10% figure set out in the Environment Act 2021.
- Urban Greening Factor: 0.424 (an increase of 0.024).

1.3 The former gas holder site is located south of Lea Bridge Road and to the east of Orient Way, is close to Lea Bridge railway station. The site is of irregular shape comprising the remnants of a number disused gas holders and gas control station.

1.4 The main site access is through the northern boundary that it shares with residential properties along Clementina Way. Along the western boundary there are industrial units. The eastern boundary runs alongside a school playing field and a public open space. To the south of the site is a fenced corridor that connects to Orient Way. A new road junction has been created here.

1.5 The site itself is essentially devoid of trees as is typical for a utility apparatus site. The trees recorded in the survey are principally located off-site, around the boundaries, and in general terms provide screening.

1.6 Many of the trees are poplar species which are inherently brittle and many are of an age where their long term retention should be considered, particularly where there is new development nearby and it may be appropriate to take a longer term strategic view on the wider landscape beyond the site. Overall the site is level and predominantly hard surfaced.

1.7 We have checked online for statutory protection of trees applicable to the site:

- The online portal of Waltham Forest Council does not hold records of Tree Preservation Orders or Conservation Areas. Therefore a formal enquiry was made with Waltham Forest Council.
- It was confirm that the site is not within a Conservation Area.
- It was confirmed that no trees on the site are protected by Tree Preservation Order. An email confirming this is attached at Appendix 4.

1.8 Nationally adopted guidance has been followed in the preparation of this report. *BS5837:2012: Trees in relation to design, demolition and construction – Recommendations* sets out a structure approach to considering trees during the development process. Guidance is given on the surveying of trees, the protected space that should be allocated to trees, what elements may give rise to harm to trees and what techniques can be deployed to minimise harm.

1.9 Sustainable development requires the coordination between disciplines throughout the project, accordingly the package of arboricultural information supports the design process and follows through to construction ensuring effective tree protection. We recognise the need to integrate with other disciplines to achieve a balanced approach to development proposals.

1.10 We set out how our key elements interact with others at Appendix 1 of this report. The appendix provides comprehensive information about the stages of providing tree information within the planning process.

1.11 Further explanatory notes about tree survey information are given in Appendix 2.

2.0 Tree survey

2.1 The objective of this tree survey is to assess the significant trees and woody vegetation on the site to obtain dimensions, assess their quality and evaluate their condition to provide sufficient information to enable decisions to be made on planning aspects of the site and its potential development.

2.2 The tree survey:

2.2.1 was conducted on the 12 June 2023 by Jago Keen, MSc, Dip.Arb., MArborA, MICFor from ground level, in accordance with the guidance in British Standard *BS5837:2012 Trees in relation to design, demolition and construction – Recommendations*;

2.2.2 is intended for planning purposes only;

2.2.3 is not intended for the detailed design of foundations (further information upon vegetation can be provided upon request);

2.2.4 is not a detailed health and safety condition survey of trees;

2.2.5 recommends only preliminary works. Tree works required to achieve the scheme of development will be considered as part of the Impact Assessment and detailed on the Tree Protection Plan;

2.2.6 places reliance on the topographical survey.

2.3 Details of each tree are recorded in the Schedule of Trees at Appendix 3.

2.4 Site soil investigations have not been conducted. The (online) 'Geology of Britain Viewer' that contains British Geological Survey materials © NERC [2018] reveals the following soil information:

2.4.1 Bedrock geology: Lambeth Group - Clay, Silt And Sand

2.4.2 Superficial deposits: Alluvium - Clay, Silt, Sand And Peat

2.5 Survey information is used to prepare the constraints posed by trees on development. These constraints are shown on the Tree Constraints Plan. The Plan shows root protection areas prescribed by the guidance within BS5837 paragraph 4.6.2 and adjusted where appropriate as recommended in subsequent paragraph 4.6.3. The root protection area (RPA) is the minimum extent of rooting required to sustain the tree.

3.0 Application of survey information

3.1 Trees place constraints on sites but they also provide opportunities.

In order to achieve optimum use of the site and location of built structures. This is set out below:

Avoid

The starting point of site layout design should be to avoid the RPA. Ideally, structures should be outside the root protection area to provide working space for construction however protection measures can be taken if such clearance, in isolated cases, is not achievable.

Mitigate

Where intrusion within the RPA is unavoidable then its impact on the tree can be mitigated by specialist measures:

a) Foundations that avoid trenching e.g. screw piles, suspended floor slabs or casting at ground level for lightweight structures such as bin and cycle stores.

b) Limited use may be made for parking, drives or hard surfaces within the root protection areas, subject to advice from a qualified arboriculturist. Cellular confinement systems that enable hard surfaces to be built above existing soil levels are acceptable methods.

c) Service runs that cannot be routed outside the root protection area(s) can be installed by, for example, thrust boring, directional drilling, air excavation or hand digging. These operations often require supervision by the project arboriculturist.

Compensate

Replacement planting can ensure the continuity of tree cover where tree removal is unavoidable. Offsite provision may be considered in some circumstances but this will require negotiation with the local planning authority.

4.0 Assessment of impact upon trees

4.1 This assessment will consider the impact upon trees of implementing the proposals shown on the drawings listed below:

Table 1 - List of drawings referred to in the impact assessment

Originator	Drg No	Title
Gillespies	P21210-00-001-GIL-101 Rev P06	Ground Floor General Arrangement Plan
Keen Consultants	2148-KC-XX-YTREE-TCP01Rev0	Tree Constraints Plan
Keen Consultants	2148-KC-XX-YTREE-TPP01RevA	Tree Protection Plan

4.2 Site proposals considered in this application include:

4.2.1 Residential dwellings

4.2.2 Roads, footpaths, cycleways, parking and other hard surfaces

4.2.3 Utilities and services

4.2.4 New and replacement tree planting

4.3 The proposals are considered with reference to the following guidance documents referred to in this report:

Table 2 - List of documents used to inform the impact assessment

Originator	Title/Reference
British Standards Institute	*BS5837:2012 Trees in relation to design, demolition and construction – Recommendations*
Trees and Design Action Group	*Trees in the townscape: A guide for decision makers*
Department for Communities and Local Government	*National Planning Policy Framework (NPPF)*

4.4 In summary, the proposals will remove the few small trees within the site. New tree planting will secure long term coverage within the site.

Impact of site remediation

4.5 In order to bring the site forward for residential accommodation it is essential to remediate the site as part of the conversion from a gas storage site to a residential site. These works will include site remediation to address contamination issues. These works are likely to include the removal of top soil and replacement with a capping layer. Further detail on this can be found in the Ground Conditions chapter of the Environmental Statement.

4.6 Remediation works will require the decontamination and removal of existing structures. Works are likely to include the stripping of existing topsoil and introduction of a replacement capping layer. This will be conducted as part of the levels reduction across the site. Remediation will need to be considered, with appropriate action taken, across the full extent of the site to the boundaries.

4.7 The works to prepare the site therefore requires the loss of all trees within the site. None of these trees are of any particular merit being smaller, pioneer species. Their loss is offset by the planting of new trees as part of the site-wide landscape scheme brought by the new development.

4.8 St William have a statutory obligation to remediate the whole site prior to any residential occupation. Remediation will include the removal of topsoil across the site, which has the potential to impact on root protection areas associated with the poplar trees around the site boundary.

4.9 St William will undertake localised soil assessments in the relevant root protection areas to establish whether there is a need to remove topsoil in those areas. St William will submit an Arboricultural Method Statement should any works be required within a root protection area, with a view to agreeing a safe and appropriate strategy with the Council.

Impact of buildings and hard surfaces

4.10 The proposed layout of buildings and hard surfaces within the site results in no additional impact to that that arises from the remediation works.

4.11 Remediation measures have been minimised where possible to avoid impact on offsite trees. For instance, measures are reduced near trees 2 to 7 and 25 hence the area of ground adjoining the trees is protected by temporary tree protection barriers. Where full remediation is extended to the site boundary, for instance, proximate to tree group 30, the site boundary will act as the protection for the offsite trees.

4.12 Localised pruning of trees 3, 4, 25, and 30 will be required to provide separation from the proposed residential blocks. Pruning of these trees was part of the prior, consented, scheme of development. The pruning work required will reduce the crown spread of those trees that overhang the site from the adjoining school grounds/park. The extent of pruning now required will be more than that approved as part of the prior scheme. The outcome is not materially changed with amenity provided by the trees remaining as consented with the pruned sections of tree concealed by the proposed buildings. It should be borne in mind, that these pruned trees, all poplars, are relatively short lived due to their brittle nature. As the trees mature so they tend to shed large sections. Such trees, whilst quick to establish, are not suited to retention in areas, such as schools and public parks, where there is frequent occupation often of long duration. Pruning works, to control their size, is prudent, irrespective of these proposals.

4.13 Future works to the trees will be controlled by the management company and by the Park who will need to give authority for works on their side of the boundary. The Park may decide to undertake further work to manage the natural risk from these trees, irrespective of these proposals.

4.14 There will be a need to repeat these pruning works. Such repeat pruning is common practice, particularly in urban areas; it is often necessary to undertake regular maintenance of trees to provide for a better relationship with buildings and other structures. Examples of this are notable in the street tree population immediately north of the site. Trees in streets such as Clementina Road, Kettlebaston Road, Morieux Road, and others, are regularly pruned. It is a necessary practice if we are to enjoy the many benefits of trees in the urban environment.

Impact of drainage and services

4.15 The proposed drainage and services remain subject of design work but, given the extent of site remediation/preparation works, there is unlikely to be any further impact on the trees.

4.16 If services do need to be installed within root protection areas then specialist techniques for their installation will be needed. Such specialist techniques include moling, thrust-boring, broken trench or excavation by AirSpade.

4.17 No other installations, including mechanical and electrical equipment, are proposed in an area that would be of detriment to trees.

5.0 New and replacement tree planting

5.1 The development proposals bring forward opportunity to plant a selection of trees throughout the development.

5.2 The proposed site layout has scope to incorporate areas of new tree planting, particularly at the boundaries, to ensure long term tree cover is achieved by the redevelopment. The species to be planted can include those that are large at maturity to ensure large canopied trees are provided. The mix of tree species can include both natives and exotics in accordance with good practice to ensure sustainable tree cover in the face of many novel threats to trees. Species such as oak, lime, maple and plane are long-lived trees that will outlive those pioneer species of tree that were once on the site.

5.3 Retaining existing trees, such as those at the boundaries, and introducing new trees ensures a resource of trees in places where residents and visitors alike will enjoy multiple benefits provided by the tree stock. In so doing the tree stock will be able to withstand climate change, protecting and enhancing the resources of soil, air, water, landscape, amenity value, culture and biodiversity, and increasing the contribution that trees make to the quality of life. In that respect the proposals are in line with the very latest guidance, in terms of integrating trees with built form, contained in *Trees in the townscape: A guide for decision makers* produced by the Trees and Design Action Group.

5.4 Those multiple benefits of this new tree planting, as part of the site's green infrastructure, include contribution to open space, enhancement of sustainable drainage systems, and enhancement of biodiversity. In addition, as those new trees develop, so they will further contribute to local climatic regulation and, where they stand within the sun path of proposed buildings or surfaces within the re-development, they will minimise solar gain during summer months, and provide an accessible choice of shade and shelter.

6.0 Protection of trees during construction

6.1 To ensure the retained trees are safeguarded a tree protection plan has been prepared to show the location of protective measures. These measures need to be implemented in advance of construction and maintained until such time as soft landscape proposals require their removal.

6.2 In some instances specialist construction techniques or approaches are indicated on the protection plan. These shall be implemented in accordance with site progress.

6.3 In order to ensure the protective and specialist measures are understood, implemented and maintained a scheme of monitoring and supervision shall be put in place.

6.4 A scheme of supervision/monitoring shall typically include:

- a pre-commencement meeting;
- a site visit by an arboriculturist at no more than one month intervals;
- a report to be prepared after each site visit and presented to the Council within 7 days of the visit.

7.0 Summary of impact assessment

7.1 The proposed development requires essential site preparation works that result in the loss of small trees within the site. The impact to trees will be offset by replacement planting.

7.2 Pruning of trees is required to accommodate the proposed residential blocks. The effect of the pruning will not materially detract from the amenity the trees provide. Such pruning is commonplace in urban areas and can be seen in the streets north of the application site.

7.3 Services and utility installation are unlikely to result in further harm to trees beyond that caused by remediation. If services and utilities do need to be located within root protection areas specialist measures can be deployed for their installation to minimise harm to retained trees.

7.4 New and replacement tree planting is provided as part of these development proposals. This new cohort of trees can provide a diverse portfolio of tree cover to ensure sustainability of green infrastructure in the future.

Appendix 1

Introduction to key elements of tree information

Sustainable development requires the coordination between disciplines throughout the project, accordingly the package of arboricultural information supports the design process and follows through to construction ensuring effective tree protection.

Keen Consultants break the process down to coordinate with the key elements within both the RIBA Plan of Work (2013) and '*British Standard 5837:2012 Trees in relation to design, demolition and construction – Recommendations'*, this is set out in the table and explained below.

Figure 1 - Keen Consultants co-ordinated approach with cross references to key guidance.

Keen Consultants Tree Information	RIBA Stage	BS5837
Tree Survey	Concept	Feasibility
Impact Assessment	Developed design	Proposals
Method Statement	Technical design	Technical Design
Site Monitoring	Construction	Demolition and construction

This cross referenced approach ensures trees are a material consideration and those to be retained will be safeguarded.

Tree Survey and Tree Constraints Plan

To inform the design and layout of the proposed development a tree survey has been undertaken to identify the size and quality of trees both within the site and immediately offsite. We have then used this information to prepare the Tree Constraints Plan drawing that shows the location of each tree, its size and the area around each tree that needs to be considered during the design process. Once prepared this information has been provided to the design team so that they know what constraints the trees pose.

Impact Assessment and Tree Protection Plan

During the design process the design team has consulted with the arboriculturist to ascertain if constraints may be breached, consider options emerging from the design and what spaces for new trees are needed.

Once the design was finalised an impact assessment has been prepared to accompany the planning application. The impact assessment demonstrates the proposals meet national and local planning policy and guidance. It demonstrates the benefits of the retained trees and incorporates new tree planting.

Another essential element of any application is the Tree Protection Plan.

Method Statement

This statement sets out in words how each element of work is undertaken in relation to the trees. It dictates when activities occur and the method that will be used to achieve them. It will also set out a scheme of monitoring and supervision.

Site Monitoring

Following the receipt of planning consent, it is a requirement that the installation of the protective barriers and ground protection are supervised, together with operations such as excavations or surfacing close to trees.

This varies according to the intensity of development near trees, the process is set out to ensure what is planned for in the Tree Protection Plan and method statement is delivered.

Appendix 2

Tree Survey Explanatory Notes

The survey of trees has been carried out in accordance with the criteria set out in Chapter 4 of *British Standard 5837:2012 Trees in relation to design, demolition and construction-Recommendations* (BS5837). The survey has been undertaken by the qualified and experienced arboriculturist detailed at Table 1 of this report and they recorded information relating to all those trees within the site and those immediately adjacent to the site which may be of influence to any proposals.

The results are recorded in the Schedule of Trees at Appendix 3.

Schedule of trees

Appendix 3 presents details of the individual trees, groups and hedgerows including heights, diameters at breast height, crown spread (given as a radial measurement of cardinal points from the stem), age class, comments as to the overall condition at the time of inspection, BS5837 category of quality and suitability for retention, and the root protection area information.

General observations particularly of structural and physiological condition for example the presence of any decay and physical defect and preliminary management recommendations have also been recorded where appropriate.

Details of the individual trees, groups and hedgerows

All trees were assessed for their quality and benefits within the context of proposed development in a transparent, understandable and systematic way.

Individuals

The default position is to record each tree as an individual for its unique contribution to the landscape

Groups and woodlands

Trees have been assessed as groups where it has been determined appropriate by the surveyor. The term group has been applied where trees form cohesive arboricultural features either aerodynamically, visually or culturally.

Hedges and shrub masses

We consider a hedgerow to typically comprise a line of trees or shrubs that currently is subject to, or has undergone, a pruning regime to contain its dimensions.

For the tree survey hedgerows and substantial internal or boundary hedges (including evergreen screens) have either been recorded in the Tree Schedule, including lateral spread, height and stem diameter(s), or indicated on the Tree Constraints Plan.

A tree survey in accordance with BS5837 does not assess hedgerows against *The Hedgerow Regulations 1997* or specifically from an ecological perspective, as such would be outside the scope of the British Standard assessment.

Shrub masses are collectives of woody plants, rather than trees, and are recorded where they are a significant feature of the site. They have either been recorded in the Tree Schedule or indicated on the Tree Constraints Plan.

Individual trees within groups, woodlands and hedges

An assessment of individual trees within the groups has been made where there has been a clear need to differentiate between them for example, in order to highlight significant variation between attributes including physiological or structural condition or where a potential conflict may arise.

BS5837 Categorisation

Trees have been divided into one of four categories based on Table 1 of BS5837, 'Cascade chart for tree quality assessment'. For a tree to qualify under any given category it should fall within the scope of that category's definition (see below).

Category U trees are those which would be lost in the short term for reasons connected with their physiology or structural condition. They are, for this reason not considered in the planning process on arboricultural grounds. Categories A, B & C are applied to trees that should be of material considerations in the development process. Each category also having one of three further sub-categories (i, ii, iii) which are intended to reflect arboricultural, landscape and cultural or conservation values accordingly.

Category (U)

Trees that have a serious irremediable structural defect such that their early loss is expected due to collapse and includes trees that will become unviable after removal of other category U trees.

Trees that are dead or are showing signs of significant, immediate or irreversible overall decline.

Trees that are infected with pathogens of significance to the health and/ or safety of other nearby trees or are very low quality trees suppressing adjacent trees of better quality.

Certain category U trees can have existing or potential conservation value which may make it desirable to preserve.

Category (A)

Shown green on Tree Constraints Plan: Trees that are considered for retention and are of high quality with an estimated remaining life expectancy of at least 40 years and with potential to make a lasting contribution. Such trees may comprise:

Sub categories

1) trees that are particularly good examples of their species, especially if rare or unusual, or are essential components of groups such as formal or semi-formal arboricultural features for example the dominant and/or principal trees within an avenue.

2) trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features.

3) trees, groups or woodlands of significant conservation, historical, commemorative or other value for example veteran or wood pasture.

Category (B)

Shown blue on Tree Constraints Plan: Trees that are considered for retention and are of moderate quality with an estimated remaining life expectancy of at least 20 years and with potential to make a significant contribution. Such trees may comprise:

Sub categories

1) trees that might be included in category A but are downgraded because of impaired condition for example the presence of significant though remediable defects, including unsympathetic past management and storm damage.
2) trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals or trees occurring as collectives but situated so as to make little visual contribution to the wider locality.
3) trees with material conservation or other cultural value.

Category (C)

Shown grey on Tree Constraints Plan: Trees that are considered for retention and are of low quality with an estimated remaining life expectancy of at least 10 years or young trees with a stem diameter below 150mm. Such trees may comprise:

Sub categories

1) unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories.
2) trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value or trees offering low or only temporary/transient screening benefits.
3) trees with no material conservation or other cultural value.

Devising BS5837 root protection areas

Default situation

The root protection area is a function of the stem diameter, it is multiplied by 12 to give a radius. For multi-stemmed trees the stems are combined to provide an effective diameter figure which is then multiplied.

Initially the root protection area should be plotted as a circle, and in many situation it remains a circle.

Influenced situation

Adjustments to the root protection area are made where pre-existing site conditions that would influence root distribution are present. Typically this will be buildings and retaining walls, lighter structures such as hard surfacing, sheds and garages generally do not have the same influence.

Ponds, rivers and watercourses will also influence root distribution as waterlogged soils are not conducive to root growth. Rainwater attenuation and ditches are likely to have a lesser impact if they are dry for significant periods.

Appendix 3

Schedule of Trees

for land at

Lea Bridge Gas Works
Leyton
E10 7LX

Key to Tree Schedule

Column Heading	Explanation
Tree No.	Unique number corresponding with number on plan
Species	English names
Ht (m)	Height in metres
Branch Spread	Crown radius in metres to cardinal points of the compass
Stem diameters (cm)	All measurements conform to Annex C of BS 5837:2012 Single stem - Stem diameter in centimetres measured at 1.5m above ground level. Multi-stemmed tree with 2 to 5 stems – Diameter of each stem Multi-stemmed tree with more than 5 stems – Average stem diameter and number of stems
Height of crown clearance	Height in metres between the ground and underside of canopy
Height of first major branch and direction of growth	Height from ground level to base of first major branch and the approximate direction of growth
Abbreviations as suffix to a dimension	*Suffix 'e' denotes an estimated dimension.* *Suffix 'av' denotes an average dimension*
Age class	Age Class definitions: Y = Young S = Semi-mature E = Early mature M = Mature O = Over mature
Category grading (see Appendix A2 for detailed explanation) and Estimated remaining contribution (yrs)	Summary of BS 5837: 2012 categorisation: 1. Trees that do not warrant consideration for retention: U = those in such a condition that any existing value would be lost within 10 years and which should, in the current context, be removed for reasons of sound arboricultural management. 2. Trees to be considered for retention: A1, 2 or 3 = trees of high quality and value (substantial contribution >40 yrs) B1, 2 or 3 = trees of moderate quality and value (significant Contribution >20 yrs) C1, 2 or 3 = trees of low quality and value (but adequate, ie >10 yrs or young trees – until new planting can be established)
Estimated remaining contribution	Useful estimated remaining contribution of the tree or tree group
Condition	Brief description including physiological and structural defects
Preliminary management recommendations	Describes current arboricultural requirement for the tree in its current context and should be undertaken as soon as reasonably practicable.
Root protection radius	Radius of minimum root protection area in metres calculated from section 4.6 and Annex D of BS5837:2012
Root protection area	Total area of minimum root protection area extrapolated from root protection radius

Survey of trees at Lea Bridge Gas Works, Leyton E10 7LX

Tree No.	Species	Ht (m)	Branch Spread (m)				Stem diameters (cm)								Height of crown clearance (m)	Height of first branch (m) and direction (compass point)	Age class	Category grading	Estimated remaining contribution (yrs)	Condition Physiological / Structural	Tree Works to BS3998	Root protection radius (m)	Root protection area sq.m
			N	E	S	W	Single Stem	2-5 stems					More than 5 stems										
								Stem 1	Stem 2	Stem 3	Stem 4	Stem 5	Mean dia	No. stems									
1	Whitebeam	10	3	3	3	3	35								3	2S	M	B2	>20	Reasonable formed condition despite heavy pruning in the past that has nevertheless resulted in a reasonable specimen. Broken branch hanging in crown.		4.20	55
2	Lombardy poplar	20	4	5	6	6	100e								3	3S	M	B1	>20	Prominent tree in local landscape in reasonable condition located within school playing field.		12.00	452
3	Hybrid black poplar	19	8	7	8	8	80e								3	5E	M	B1	>20	Prominent tree located off site within adjacent school playing field. Prone to fragility as they mature.	Prune to provide 4m clearance from proposed building.	9.60	290
4	Hybrid black poplar	19	7	7	8	9	70e								2	4N	M	B2	>20	Component part of leaning screen in reasonable condition with the main stem dividing into 3 at approximately 6m. Prone to fragility as they mature.	Prune to provide 4m clearance from proposed building.	8.40	222
5	Lombardy poplar	19	3	3	5	3	70e								2	3S	M	B2	>20	Reasonable condition and prominent in the local landscape.		8.40	222
6	Lombardy poplar	19	4av				65e								2	4N	M	B2	>20	Reasonable condition and component part of linear group.		7.80	191
7	Lombardy poplar	19	4av				75e								2	2S	M	B2	>20	Reasonable formed condition and located in adjacent school playing field.		9.00	255
8	Hybrid black poplars	18	7av				75e								2	0	M	B2	>20	Prominent group located within adjacent playing field immediately south of residential properties. Group comprises 3 trees with conjoined crowns. Prone to fragility as they mature.		9.00	255
9	Sycamore	11	3	3	3	3	25e								0	-	S	C1	>10	Small tree growing beyond fenceline.		3.00	28
10	Hawthorne	8	2	2	2	2	20e*								0	-	S	C2	>10	Small tree growing beyond fenceline. Smothered in ivy.		2.40	18
11	Group of aspen	14	6av				<35								2	-	S	B2	>20	Prominent group providing visual separation between the road and industrial units.		4.20	55

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Survey of trees at Lea Bridge Gas Works, Leyton E10 7LX

Tree No.	Species	Ht (m)	Branch Spread (m)				Stem diameters (cm)								Height of crown clearance (m)	Height of first branch (m) and direction (compass point)	Age class	Category grading	Estimated remaining contribution (yrs)	Condition Physiological / Structural	Tree Works to BS3998	Root protection radius (m)	Root protection area sq.m
			N	E	S	W	Single Stem	2-5 stems					More than 5 stems										
								Stem 1	Stem 2	Stem 3	Stem 4	Stem 5	Mean dia	No. stems									
12	Group of field maples	10av	3av				<25								3	-	S	B2	>20	Group of trees continuing roadside greening.		3.00	28
13	Group of aspen	13av	5av				<35								2	-	S	B2	>20	Prominent roadside group providing separation between the road and the park.		4.20	55
14	Group of mixed broadleaves	<13m	5av				25av								0	-	S	C2	>10	Mix of species including larger ones such as aspen with more hedge like vegetation comprising hawthorn, hazel, ash and dog rose beneath.		3.00	28
15	Group of hybrid black poplar	10av	3av				15av								0	-	S	C2	>10	Group of small trees growing just beyond boundary of site.		1.80	10
16	Hybrid black poplar	19	7	8	6	8	65e								2	4E	M	B2	>20	Off site tree located in adjacent playing field in good overall condition. Prone to fragility as they mature.		7.80	191
17	Hybrid black poplar	13	3	2	3	3	15e								0	-	S	C1	>10	Small tree growing just beyond boundary of site. Prone to fragility as they mature.		1.80	10
18	Lombardy poplar	15	2	3	3	2	42								2	2E	E	B2	>20	Component part of linear group.		5.04	80
19	Hybrid black poplar	17	5	5	6	7	57								4	4SW	E	B2	>20	Good overall condition with fastigiate form. Prone to fragility as they mature.		6.84	147
20	Pair of lombardy poplar	15av	3av				25av								0	-	S	C2	>10	Pair of small tree growing beyond boundary of site.		3.00	28
21	Lombardy poplar	20	2	3	3	2	55e								2	1S	E	B2	>20	Satisfactory condition and located off site.		6.60	137
22	Pair of hybrid black poplars	15av	9av				<50e								0	-	E	C2	>10	Pair of poorly formed trees westerly tree leaning in to site. Prone to fragility as they mature.		6.00	113
23	Hybrid black polar	22	12	7	8	11	77								3	3S	M	B1	>20	Prominent tree located close to boundary and within adjacent park. Prone to fragility as they mature.		9.24	268

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Survey of trees at Lea Bridge Gas Works, Leyton E10 7LX

Tree No.	Species	Ht (m)	Branch Spread (m)				Stem diameters (cm)								Height of crown clearance (m)	Height of first branch (m) and direction (compass point)	Age class	Category grading	Estimated remaining contribution (yrs)	Condition Physiological / Structural	Tree Works to BS3998	Root protection radius (m)	Root protection area sq.m
			N	E	S	W	Single Stem	2-5 stems					More than 5 stems										
								Stem 1	Stem 2	Stem 3	Stem 4	Stem 5	Mean dia	No. stems									
24	Hybrid black poplar	13	4	3	2	3	27								2	2.5W	S	C2	>10	Smaller tree within a group in self servient specimen. Prone to fragility as they mature.		3.24	33
25	Group of hybrid black poplar	24av	10av				<75								2	-	M	B2	>20	Prominent group located just of off site within adjacent playing field. Fragile. Prone to fragility as they mature.	Prune to provide 4m clearance from proposed building.	9.00	255
26	Rowan	<8m	4av				<30								1	-	M	C2	>10	Boundary group in poor condition declining.		3.60	41
27	Group of sycamore	14	2	7	9	6	48								2	3S	E	B2	>20	Atropurpureum variety in reasonable condition despite crown asymmetry it still provides back drop screening to the playing field.		5.76	104
28	Hybrid black poplar	22av	7av				75av								2	-	E	B2	>20	Prominent group of 3 trees located off site within playing field. Westerly tree has been cut back. Prone to fragility as they mature.		9.00	255
29	Group of rowans	9av	4av				25ave								2	-	E	C2	>10	Pair of trees reasonable condition providing low level screening.		3.00	28
30	Hybrid black poplars	22av	9av				75av								2	-	M	B2	>20	Prominent group in a satisfactory condition. Prone to fragility as they mature.	Prune to provide 4m clearance from proposed building.	9.00	255

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Appendix 4

Email from London Borough of Waltham Forest

Jane@KeenConsultants

From: Alan Palmer <Alan.Palmer02@walthamforest.gov.uk>
Sent: 29 August 2018 14:31
To: Jane@KeenConsultants
Cc: Mike Punchard
Subject: Gas Holders Site E10
Attachments: TPO Register Excerpt - Gas Holder Site Clementina Road E10.bmp

Dear Jane,

Further to our telephone conversation earlier today regarding the Gas Holders Site, Clementina Road E10, I write to confirm that, according to the register, there are currently no trees protected by Preservation Order at the this site, nor is it currently situated in a designated Conservation Area. For reference, I have attached an excerpt from the TPO Register for the area.

As discussed, the playing fields adjacent to the site are designated as Metropolitan Open Land. Further designations for the area can be found online at the following link.
https://www.walthamforest.gov.uk/content/local-plan

1. Please note if the intention is to complete tree work between the 1st March and the end of August, a due diligence check for nesting birds must be completed before work starts in order to comply with the Wildlife & Countryside Act 1981. Arborists should record such checks in their site specific Risk assessment. If active nests are found work should not take place until the young have fledged. I bring your attention to the link below which explains in more detail.

https://www.trees.org.uk/Help-Advice/Public/When-is-the-bird-nest-season
http://www.trees.org.uk/Help-for-Arborists/Treeworks-and-nesting-birds
https://www.trees.org.uk/Help-Advice/Public/So-what-actions-can-contractors-take-to-ensure-com
https://www.trees.org.uk/Help-Advice/Public/So-what-can-we-expect-if-we-find-ourselves-in-brea

2. A due diligence check for bats and likely habitats (see attached link) must be completed before work starts in order to comply with the Wildlife & Countryside Act 1981. Arborists should carry out and record such checks in line with BS8596:2015 Surveying for bats in trees and woodland in their site specific risk assessment. If bats or potential roosting features are found work must not start until an appropriately licenced bat handler has been engaged. Please refer to the link below which explains in more detail.

http://www.bats.org.uk/data/files/publications/1404/Bats_Trees.pdf

Kind regards,
Alan

Alan Palmer
Planning Technician
London Borough of Waltham Forest | Magistrates Court | Town Hall Complex | Forest Road | London E17 4JF
Email address: alan.palmer02@walthamforest.gov.uk Tel: 020 8496 6724
Twitter: @wfcouncil Website: www.walthamforest.gov.uk

Our ambition is that everybody in Waltham Forest enjoys a quality life.

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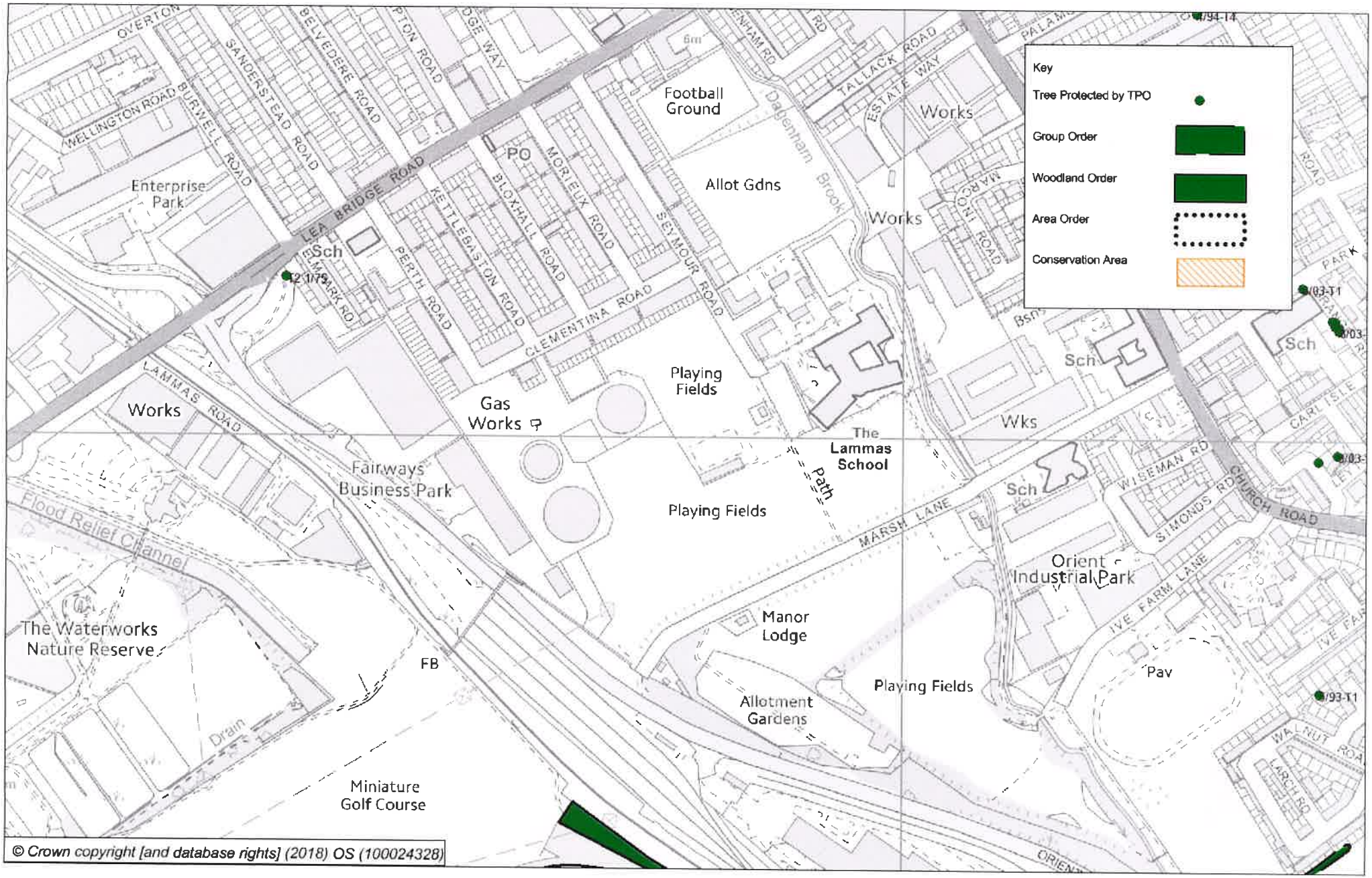
Key
Tree Protected by TPO
Group Order
Woodland Order
Area Order
Conservation Area
Football Ground
Allot Gdns
Enterprise Park
Works
Gas Works
Playing Fields
Fairways Business Park
The Lammas School
Sch
Wks
Orient Industrial Park
Pav
The Waterworks Nature Reserve
Manor Lodge
Allotment Gardens
Miniature Golf Course
Flood Relief Channel
Drain
FB
Path
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