

ARBORICULTURAL ASSESSMENT IMPACT & TREE PROTECTION REPORT

Cleeves, Limerick

Project Name: Cleeves

Number: TCLE001

REV: B

DATE: 01,10,25

REPORT PREPARED BY

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APPENDIX I TREE SURVEY ANALYSIS

REFERENCE DRAWINGS:

TCLE001-XX-DR-CMK-ARB-101-103

TCLE001-A-DR-CMK-ARB-104-106

Summary

CMK Hort and Arb Ltd. Undertook an assessment of trees within the proposed Cleeves development site on behalf of Limerick Twenty Thirty on the 12th of December 2024. The purpose of the report being to provide the design team with a description of existing trees and their general condition with this information feeding into the design of the site.

A total of 32 trees were assessed as per the recommendations made within BS5837 (2012). Individual tree descriptions are contained within appendix i of this report and shown on drawings TCLE001-XX-DR-CMK-ARB-101-103. The trees are a mixture of self-seeded specimens, primarily sycamore within the Cleeves and Silesians sites, horse chestnut planted along O'Callaghan's Strand and beech along a portion of the northern side of the R527. In addition, one mature holm oak was identified to the southern edge of the Silesians site on the boundary with the North Circular Road. The condition of the trees is mixed with the self-seeded specimens generally poorly developed. The horse chestnuts on O'Callaghan's Strand have been negatively impacted by works to construct planters and paving whilst the beech along the R527 are in good condition generally. The holm oak within the Silesians' lands was not possible to access due to the steep nature of the land and the proximity of buildings.

The proposed development will necessitate the removal of the holm oak and self-seeded trees within the Cleeves and Silesians sites. In addition, all trees identified as very low quality (category U) will be removed in the interests of sound arboricultural management. Two low and very low value (categories C & U) self-seeded trees located adjacent to the southern boundary of the existing car park on the North Circular Road are to be removed. All of the beech trees within the grass verge on the R527 are to be retained as are two horse chestnuts on O'Callaghan's Strand.

Tree protection fencing will be erected and maintained for the duration of the development to ensure retained trees are managed appropriately during the development of the site. A project arborist will be retained to provide advice of tree management as necessary.

The arboricultural impact of the proposed development and the locations of tree protection fencing is shown on drawing TCLE001-A-DR-CMK-ARB-104-106.

1 Client Brief and Methodology

CMK Hort and Arb Ltd. were commissioned by Limerick Twenty Thirty to undertake an assessment of trees at the proposed development site at Cleeves, Limerick. The survey was conducted by Ciaran Keating on the 12th of December 2024. The purpose of the assessment being to provide the design team with a description and evaluation of existing trees to inform the design of the proposed development.

The survey methodology, supporting drawings and documentation follow the recommendations contained within BS 5837 (2012). The analysis of the trees was undertaken using the VTA methodology as developed by Mattheck and Breloer (1994).

2 General description of site & vegetation

The site covers a number of areas where trees are located. These are the former Cleeves factory site, the former Salesian school, a section of O'Callaghan's Strand and a planting adjacent to the R527. The trees are a mixture of self-seeded specimens, older trees incorporated into the street scape, screen plantings and one tree which appear to be associated with the Silesian school / convent.

The self-seeded trees are mainly sycamore (*Acer pseudoplatanus*) and more occasionally ash (*Fraxinus excelsior*) which are located in the more industrial areas where vegetation management has essentially ceased. In a number of instances these trees are in close proximity to boundary walls and other structures and could cause structural issues if left unchecked.

A number of young and mature horse chestnut (*Aesculus hippocastanum*) are located within the street-scape on O'Callaghan's Strand. The younger trees are badly infected by bleeding canker (*Pseudomonas syringae* pv. *Aesculi*) with the older trees exhibiting signs of less advanced stage infection. However, this disease will continue to spread within these trees leading to their eventual decline (image 2). It is likely that works associated with the construction of the planters and paving impacted on the mature trees in particular with surface roots exposed and damaged. Soil compaction is also evident.



Image 2. Horse chestnut at O'Callaghan's Strand

A line of beech trees (*Fagus sylvatica*) have been planted within a wide grass margin on the R572 (image 3). These trees mirror others on the opposite side of the road and have generally developed well. They form a significant feature in this location with good long-term potential if managed appropriately.



Image 3. Beech within margin of R572

A large holm oak (*Quercus ilex*) is located on the edge of a steep embankment between the Silesian lands and the North Circular Road (image 4). This tree is somewhat obscured by vegetation and must have had a prominent place within the lands of the Silesian order in the past. It is currently inaccessible due to the steep nature of the slope and the close proximity of a building. Considered to be a robust species it is unknown what if any impact the construction of the neighbouring building had on the tree and / or its potential roots zone.



Image 5. Holm oak on embankment adjacent to the North Circular Road. Note steep gradient of slope, building to rear and surrounding vegetation.

The trees which have self-seeded within the more industrial and abandoned areas are of mixed quality and in some instances have potential to negatively impact on structures. Many have strong ivy growth which though contributing to windsail is a valuable ecological feature particularly in urban environments where such habitat features can be in short supply (image 5). It is recommended that where possible these trees and their ivy cover are retained at least until their removal is deemed necessary to develop the site, to protect structures and or in the interest of health and safety.



Image 5. Self-seeded trees to the rear of the Silesian buildings. Note very strong ivy growth

3. Arboricultural Impact

3.1 Project description

Limerick City & County Council, in partnership with Limerick Twenty Thirty DAC, intends to seek the approval of An Coimisiún Pleanála in accordance with Section 175 and 177AE of the Planning and Development Act 2000, as amended, for a mixed-use development that seeks the regeneration and adaptive reuse of a strategic brownfield site, as part of the Limerick City and County Council 'World Class Waterfront revitalisation and transformation project'.

The site, known locally as 'Cleeves Riverside Quarter' comprises the former industrial mill complex ('Cleeves') situated on the northern side of the River Shannon, Limerick City and occupies the area between; Stonetown Terrace Road to the northeast; O'Callaghan Strand to the southeast; Condell Road (R527) to the southwest; and, Salesian Primary School and the 'Fernhill' residential estate to the northwest and west respectively - all situated in the townland of Farranshone More in Limerick City. The site is dissected by North Circular Road where it extends between Shelborne Road Lower and O'Callaghan Strand.

The proposed development comprises Phase II, of an overall Masterplan with four phases of development proposed. Phase II will commence subsequent to ongoing emergency stabilisation and repair of the Flaxmill protected structure (Phase I). Phase III is intended to comprise an educational campus, inclusive of the adaptive reuse of the Flaxmill Building as part of that development and will be subject to a future separate application. Phase IV comprising the Shipyard site will be the final phase of development.

Two structures within the site are designated protected structures; the Flaxmill Building (PS Ref no.264 & NIAH No. 21512053) and the octagonal brick chimney (PS Ref no.265 & NIAH No. 21512059), which are to be retained.

The proposed development includes:

A. Demolition of a number of structures to facilitate development including (i) Salesians Secondary School and Fernbank House; (ii) 2 no. houses on North Circular Road; (iii) Residual piers from the basin of the reservoir; (iv) Upper Reservoir on Stonetown Terrace comprising 2 no. concrete water tanks, pump house and liquid storage tank; (v) 1960's lean-to building structures adjoining the Cold Store (former Weaving Mill); (vi) remaining fabric of c20th rear lean-to of the Flaxmill Building; (vii) c.1960s office building adjoining the Packing Store and Cheese Plant on North Circular Road; (viii) Cluster of buildings including altered part of the Linen Store, the former Linen Store, Storage Building, and Office/Lab building at O'Callaghan Strand / Stonetown Terrace with partial retention of existing stone wall; (ix) warehouse on the Shipyard site; and (x) partial removal of stone boundary wall defining the Cleeves site adjoining O'Callaghan Strand / Stonetown Terrace and around the Shipyard site.

B Construction and phased delivery of:

i. Residential Development in 4 development 'zones' within the site ranging in height from 3 – 7 storeys (with screened service plant at roof level) comprising; (a) 234 no. residential units; (b) 270 no. student bedspaces with ancillary resident services at ground floor level; (c) 299sqm of commercial floorspace; and (d) a creche. The specific development details of each proposed development zone comprise the following:

Salesians Zone – 1 no. building with 2 no. blocks extending to 6 and 7 storeys comprising 146 no. apartments (76 no. 1 bed; and 70 no. 2 bed); a creche; semi basement car and bicycle parking; reception area, plant rooms, and refuse storage, with screened external plant and photovoltaic panels at roof level; 20 no. 3 storey 3 bed triplex units with photovoltaic panels at roof level; and 30 no. car parking spaces for the dedicated use of the adjoining Salesians Primary School.

Quarry Zone – 1 no. Purpose Built Student Accommodation (PBSA) building with 3 no. blocks extending to 6 and 7 storeys comprising 270 no. bedspaces with study rooms, shared areas, exercise room, reception area, plant rooms, refuse storage and bicycle parking all at ground floor level and screened external plant and photovoltaic panels at roof level. Provision is

made for telecommunication antennae on the roof top of one block. Consent is also sought for use of the PBSA accommodation, outside of student term time, for short-term letting purposes.

Stonetown Terrace Zone – 1 no. building extending to 4 - 5 storeys comprising 38 no. apartments (6 no. studios; 12 no. 1 beds; and 20 no. 2 beds) with plant rooms and refuse storage at ground level, ancillary infrastructure at basement level at northern end of the block, with screened external plant and photovoltaic panels at roof level; 9 no. 3 storey 3 bed townhouses with photovoltaic panels at roof level; and a dedicated secure bicycle storage facility.

O'Callaghan Strand Zone – 1 no. building extending to 4 / 5 storeys comprising 21 no. apartments (9 no. 1 bed and 12 no. 2 bed) with an open roof structure accommodating communal open space, plant and photovoltaic panels; and 299qm of commercial ground floorspace intended to accommodate Class 1, Class 2 and / or Class 3 uses, with provision for car parking in the undercroft.

ii. Dedicated mobility hub with canopy and photovoltaic panels including double stacker bicycle parking; and EV Charging spaces, within the Shipyard Zone. A dedicated pedestrian/cycle link connects North Circular Road with Condell Road. The remaining area of the zone shall accommodate temporary car parking and a temporary external event space to be used on a periodic basis as the need arises, pending future redevelopment proposals as detailed in the Masterplan (Stage IV).

iii. Extensive provision of Public Realm including creation of the Reservoir/Quarry Park, the Flaxmill Square and the Riverside Corridor. Significant areas of civic and green spaces are provided, incorporating formal and informal play space; nature based SuDs, permeability and access; and a riverside canopy with photovoltaic panels functioning as an outdoor event space and incorporating heritage interpretative panels

iv. 3 no. dedicated bat houses;

v. Telecommunication antennae on roof of Block 2A of the PBSA, including (a) 9 no. Support poles to support 2 no. antennae each; (b) 6 no. microwave dishes affixed to the plant screen; and (c) associated telecommunications equipment and cabinets (effectively screened). To facilitate technologically acceptable locations at the time of delivery, a micro-siting allowance of 3m is proposed on the roof top of Block 2A of the PBSA for the infrastructure.

vi. Provision of vehicular access/egress points including (a) utilisation of existing access points to the Salesians Zone, to the Flaxmill and Quarry Zones and to the Mobility Hub on the Shipyard Site Zone; (ii) reopening an existing (currently blocked) access point off O'Callaghan Strand; (iii) new access points to the proposed undercroft carparking at Salesians from the North Circular Road and at the end of Stonetown Terrace road which provides access to the Stonetown Terrace Zone; and (iv) emergency access only from Stonetown Terrace to the Flaxmill Zone;

vii. Provision of 30 no. dedicated car parking spaces to serve the Salesians Primary School; and

viii. All ancillary site development works including (a) water services, foul and surface water drainage and associated connections across the site and serving each development zone; (b) attenuation proposals; (c) raising the level of North Circular Road between Fernhill and O'Callaghan Strand; (d) refuse collection store (e) car and bicycle parking to serve the development; (f) public lighting; (g) all landscaping works.; and (h) temporary construction measures including (i) construction access to the Quarry site including provision of a temporary access across the reservoir; and (ii) temporary use of onsite mobile crusher.

3.2 Arboricultural impact

The proposed development will necessitate the removal of the holm oak and self-seeded trees within the Cleaves and Salesians sites. In addition, all trees identified as very low quality (category U) will be removed in the interests of sound arboricultural management. Two low and very low value (categories C & U) self-seeded trees located adjacent to the southern boundary of the

existing car park on the North Circular Road are to be removed. All of the beech trees within the grass verge on the R527 are to be retained as are two horse chestnuts on O'Callaghan's Strand. The arboricultural impact of the proposed development is shown on drawings TCLE001-A-DR-CMK-ARB-104-106.

The arboricultural impact of the proposed development is not considered to be significant. The majority of the trees are self-seeded and poorly formed and not suitable for retention within the proposed development. The holm oak tree on the southern boundary of the Silesians lands is a specimen of some arboricultural value however the construction of a building in very close proximity to the tree and its location on a steep embankment are concerning and reduce its arboricultural value overall.

4. Tree Protection

Trees to be retained are located within the grass verge on the R527 and on O'Callaghan Strand. Tree protection fencing will be erected as shown on drawing. It is not envisaged that any work will be undertaken in this area, however a project arboriculturist will be appointed to provide advice on the management of retained trees should there be a need to address issues regarding their management. The locations of tree protection fencing are shown on drawings TCLE001-A-DR-CMK-ARB-104-106.

5. Limitation of Survey

This survey should deal with the current condition as identified during this survey only. Every attempt was made to identify hazardous trees in this report; however, this survey was carried out from the ground and therefore cannot be held to have identified elements of decay, which may be hidden out of sight within the crown or beneath ivy or other obstructions. To counter this limitation in the survey process it is vital that during tree works any additional defects found by the climbing arborist are communicated to the consulting arborist to allow appropriate action to be taken.

The details within this survey are based on the condition of the trees during the survey period only. The findings in this survey cannot be held to be valid after any site disturbance, man-made or natural, which may have an adverse effect on any trees present.

A pre-commencement assessment of the trees will be undertaken to update their condition.

6.Terminology

Tree categories

A Trees of high quality and value due to their size, age, condition, historical/visual merit and/or conservation potential (a minimum of 40 years).

A1 Mainly arboricultural values. Particularly good examples of species, essential components of groups or of formal or semi-formal arboricultural features.

A2 Mainly landscape values. Trees, groups or woodlands which provide a definite screening or softening effects to the locality in relation to views into or out of site, or those of particular visual importance.

A3 Mainly cultural values, including conservation. Trees, groups or woodlands of significant conservation, historical, comparative or other value (e.g. veteran trees or wood-pasture).

B Trees of moderate quality and value (a minimum of 20 years).

B1 Mainly arboricultural values. Trees that might be included in high categories but are downgraded because of impaired condition (e.g. presence of remedial defects including unsympathetic past management and minor storm damage).

B2 Mainly landscape values. Trees present in numbers, usually as groups or woodlands, such that they form distinct landscape features, thereby attracting a higher collective rating than they might as individuals but which are not, individually, essential components of formal or semi-formal features (e.g. trees of moderate quality within an avenue that includes better A category specimens) or trees situated internally to the site, therefore individually having little visual impact on the wider locality.

B3 Mainly cultural values including conservation. Trees with clearly identifiable conservation or other cultural benefits.

C Trees of low quality and value (a minimum of 10 years).

C1 Not qualifying in higher categories.

C2 Trees present in groups or woodlands but without conferring on them greater landscape value and/or trees offering low or only temporary screening benefit.

C3 Trees with very limited conservation or other cultural benefits.

6.Terminology contd.

U Trees in such 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. Trees that are dead, dying or showing immediate and irreversible decline.

Comments: Refers to the tree's condition and suitability for the site.

Common name: Most widely used non-botanical name.

Co-dominant: Two branches assuming the role of leading shoots. When growing close together may form a weak attachment (included bark) at their point of contact. Trees with this defect may be in danger of splitting at this weak attachment.

Crown Spread: Measured in meters north, south, east and west.

Decay fungi: Refers to those species of fungi which degrade living wood and which may, depending on the degree of degradation, render the tree structurally unsound.

Defects: Refers to cracks, storm damage and any other damage mechanical or biological.

Diameter: Diameter of the trunk (millimetres) at 1.5m. M.S. after the measurement refers to the tree being multi-stemmed.

Genus & Species: Refers to the botanical names for the tree.

Height: Measured in meters.

Monitor: Refers to trees which need to be re-surveyed on a yearly basis to assess their condition. This timescale may be sooner where works or adverse weather conditions have impacted negatively on the trees.

Overhaul: A reference to standard tree surgery work which consists of the removal of deadwood, crossing branches and balancing where appropriate.

Recommendations: Indicates surgery work necessary for the retention or, where necessary, removal of the tree.

Tree No. Refers to numbered tag fixed to tree during survey.

7. References

BS 5837 (2012). Trees in Relation to Design Demolition and Construction

Mattheck and Breloer (1994). The body language of trees

TCLE001

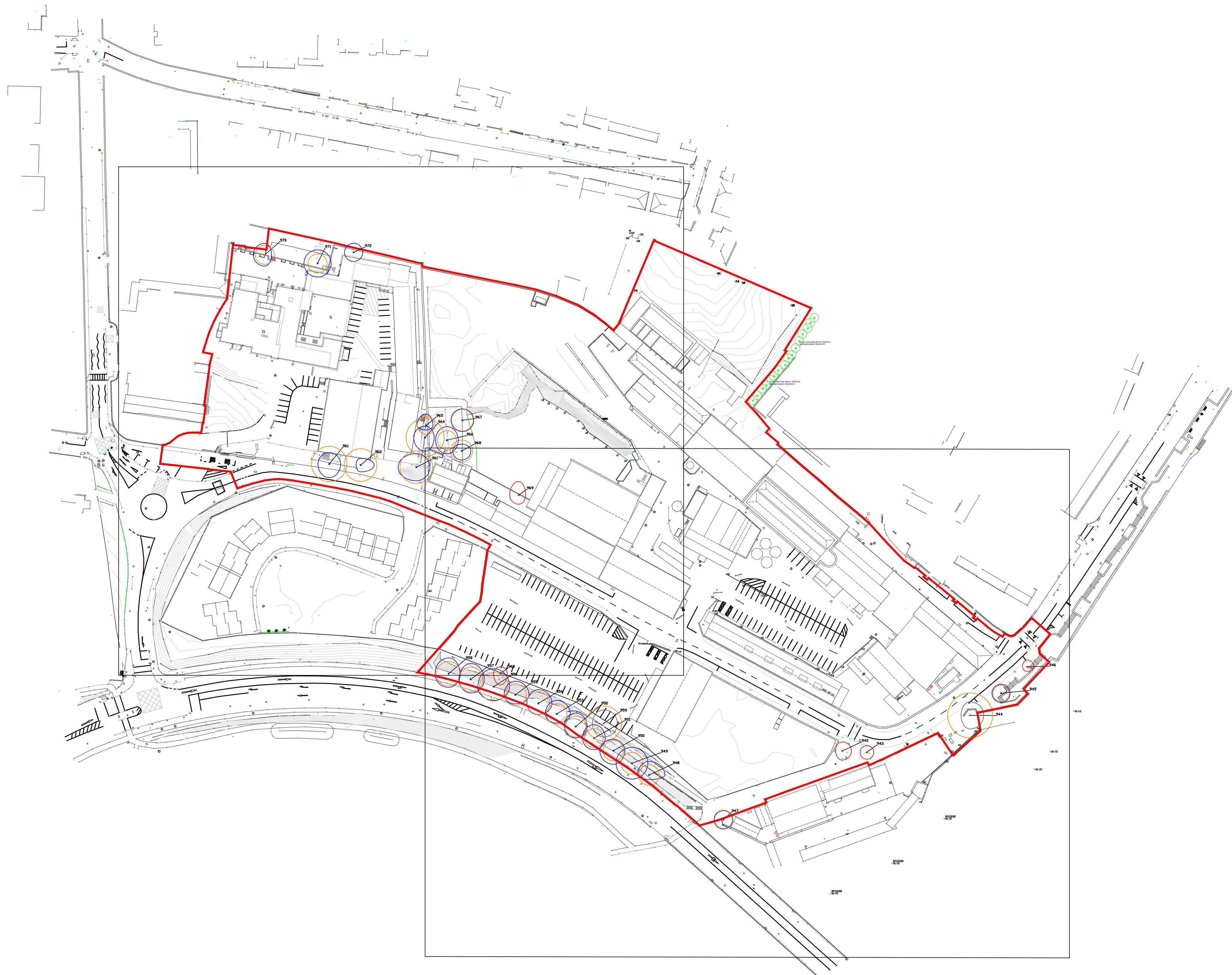
APPENDIX i

CMK HORT & ARB LTD

Tag Number	Species Name	Age Class	Vigour	Comments	Preliminary Recommendations	Final recommendations	Category	Longterm Potential	DBH (mm)	Height (m)	Spread (m) N, E, S, W
942	Horse chestnut Aesculus hippocastanum	Young	Very Poor	In a state of advanced decline due to bleeding canker	Fell	Fell	U	<10	250	5.5	4,4,4,3
943	Horse chestnut Aesculus hippocastanum	Young	Very Poor	In a state of advanced decline due to bleeding canker	Fell	Fell	U	0	210	5.5	3,3,3,3
944	Horse chestnut Aesculus hippocastanum	Mature	Good	A large mature specimen incorporated into a hard landscape scenario. Surface roots exposed with a degree of soil compaction and damage evident. Historic bark damage to trunk to south at 0.5m with associated wood dysfunction. Unlikely to be significant at present. Decay in lower canopy at pruning points could be linked. Significance unknown at present. Early stage bleeding canker visible in terms of staining and minor bark loss. Tree likely topped in the past.	Monitor bleeding canker	Retain & Protect	C2	10-15	830	18	6,6,6,4
945	Horse chestnut Aesculus hippocastanum	Early Mature	Good	A well developed specimen with no evidence of bleeding canker at present. Small areas of bark damage present on trunk potentially site for bacterial infection but unlikely to be significant at present.	No action necessary	Retain & Protect	B2	15-20	310	6	4,4,4,4
946	Horse chestnut Aesculus hippocastanum	Early Mature	Very Poor	In a state of advanced decline due to bleeding canker infection.	Fell	Fell	U	<10	260	4	3,3,2,2
947	Sycamore Acer pseudoplatanus	Mature	Good	A self seeded specimen on river edge. Trunk co dominant from base with a wide union between stems. Upper canopy well developed enough visible defects.	No action necessary	Fell	B2	40	350	10.5	4,4,4,4
948	Beech Fagus sylvatica	Early Mature	Good	A well developed specimen with no visible defects.	No action necessary	Retain & Protect	B2	40	370	16	6,6,2,5
949	Beech Fagus sylvatica	Early Mature	Good	Crown slightly congested with rubbing branches and light suppressed deadwood in canopy.	Overhaul	Retain & Protect	B2	40	400	16	7,7,7,7
950	Beech Fagus sylvatica	Early Mature	Good	Slightly congested canopy but no significant structural issues at present. No visible defects'	No action necessary	Retain & Protect	B2	40	-380	16	5,5,6,6

Tag Number	Species Name	Age Class	Vigour	Comments	Preliminary Recommendations	Final recommendations	Category	Longterm Potential	DBH (mm)	Height (m)	Spread (m) N, E, S, W
951	Beech Fagus sylvatica	Early Mature	Good	A relatively well developed specimen with trunk multi stemmed from 2m. Upper canopy well developed with no visible defects.	No action necessary	Retain & Protect	B2	40	360	16	6,6,5,5
952	Beech Fagus sylvatica	Early Mature	Good	Occluded pruning points in lower trunk below canopy. No associated decay evident. Upper canopy well developed with no visible defects.	No action necessary	Retain & Protect	B2	40	370	16	6,6,5,5
953	Beech Fagus sylvatica	Early Mature	Good	A well developed specimen with no visible defects. Strong ivy growth up trunk obscuring view for assessment.	No action necessary	Retain & Protect	B2	40	380	17	6,6,4,5
954	Beech Fagus sylvatica	Early Mature	Good	Very strong ivy growth up trunk obscuring view for assessment. Canopy well developed with visible defects.	Cut ivy	Retain & Protect	B2	40	420	13	6,6,5,5
955	Beech Fagus sylvatica	Early Mature	Good	Very strong ivy growth up trunk obscuring view for assessment. Canopy well developed with no visible defects.	No action necessary	Retain & Protect	B2	40	390	16	6,6,4,5
956	Beech Fagus sylvatica	Early Mature	Good	Strong ivy growth up trunk obscuring view for assessment. Well developed with no visible defects'	No action necessary	Retain & Protect	B2	40	520	17	8,8,6,7
957	Beech Fagus sylvatica	Early Mature	Good	A well developed specimen with no visible defects.	No action necessary	Retain & Protect	B2	40	450	16	7,7,6,5
958	Beech Fagus sylvatica	Early Mature	Good	Trunk multi stemmed from 2m with strong vertical habit. Strong ivy growth up trunk. No visible defects.	No action necessary	Retain & Protect	B2	40	450	17	7,7,6,6
959	Goat willow Salix caprea	Mature	Good	A well developed multi stemmed specimen. Wide spreading canopy. Potential to impact on boundary wall in near future.	Monitor position relative to boundary wall	Fell	C2	10-15	650	12	6,6,6,5
960	Goat willow Salix caprea	Mature	Good	Growing from base of boundary wall with potential to negatively impact on wall in near future	Fell	Fell	U	<10	350	7.5	3,3,5,3
961	Holm oak Quercus ilex	Mature	Good	Inaccessible. In close proximity relatively recently constructed building with potential for root damage. Very strong ivy growth up trunk obscuring view for assessment. No visible defects.	Cut ivy and re-assess	Fell	B2	40	650	15	5,5,6,5
961	Sycamore Acer pseudoplatanus	Mature	Good	Very strong ivy growth up trunk obscuring view for assessment. Upper canopy well developed with no visible defects.	Cut ivy	Fell	B2	30-40	600	14	6,6,6,8

Tag Number	Species Name	Age Class	Vigour	Comments	Preliminary Recommendations	Final recommendations	Category	Longterm Potential	DBH (mm)	Height (m)	Spread (m) N, E, S, W
962	Sycamore Acer pseudoplatanus	Mature	Good	Inaccessible. Twin stemmed from base with stem to east in close proximity to building. Upper canopy relatively well developed. Clematis up stems obscuring view for assessment.	Cut clematis and reassess	Fell	B2	40	600	17	3,3,3,2
964	Ash Fraxinus excelsior	Mature	Good	A relatively well developed specimen with no visible defects. Three stemmed from base with potential to impact on boundary wall. Strong ivy growth up stems.	No action necessary	Fell	B2	30-40	700	14	5,5,6,5
965	Pedunculate oak Quercus robur	Early Mature	Good	Growing from base of wall. Relatively well developed.	No action necessary	Fell	B2	15-20	320	15	5,5,2,4
966	Sycamore Acer pseudoplatanus	Mature	Good	A relatively well developed specimen. Very strong ivy growth up trunk obscuring view for assessment. No visible defects.	Cut ivy	Fell	B2	30-40	350	12	6,6,6,5
967	Sycamore Acer pseudoplatanus	Mature	Fair	Self seeded on embankment. Impacting on boundary wall. no visible defects	No action necessary	Fell	B2	20-30	400	12	5,5,5,5
968	Sycamore Acer pseudoplatanus	Early Mature	Good	A cluster of stems forming a combined canopy on edge of steep embankment. Impacting on boundary wall. No visible defects.	No action necessary	Fell	B2	20-30	400	8.5	3,3,4,4
969	Sycamore Acer pseudoplatanus	Early Mature	Good	A multi stemmed specimen growing from building. No visible defects but potential to impact on building in near future.	Fell	Fell	U	<10	450	13	6,6,4,4
970	Cherry Prunus avium	Mature	Good	A relatively well developed multi stemmed specimen. No visible defects.	No action necessary	Fell	B2	20-30	350	8	5,5,5,5
971	Pedunculate oak Quercus robur	Early Mature	Good	Twin stemmed from 0.5m. Canopy well developed with no visible defects.	No action necessary	Fell	B2	40	350	9	6,6,6,6
972	Sycamore Acer pseudoplatanus	Early Mature	Good	Growing from base of wall. Long term potential limited as a result	Fell	Fell	B2	<10	250	8	4,4,4,4



LEGEND

TREE CONDITION CATEGORIES

- A TREES OF HIGH VALUE AND QUALITY
- B TREES OF MODERATE VALUE AND QUALITY
- C TREES OF LOW QUALITY AND VALUE
- U TREES TO BE REMOVED IN THE INTERESTS OF SOUND ARBORICULTURAL MANAGEMENT
- TREE CONSTRAINTS

SURVEY BOUNDARY

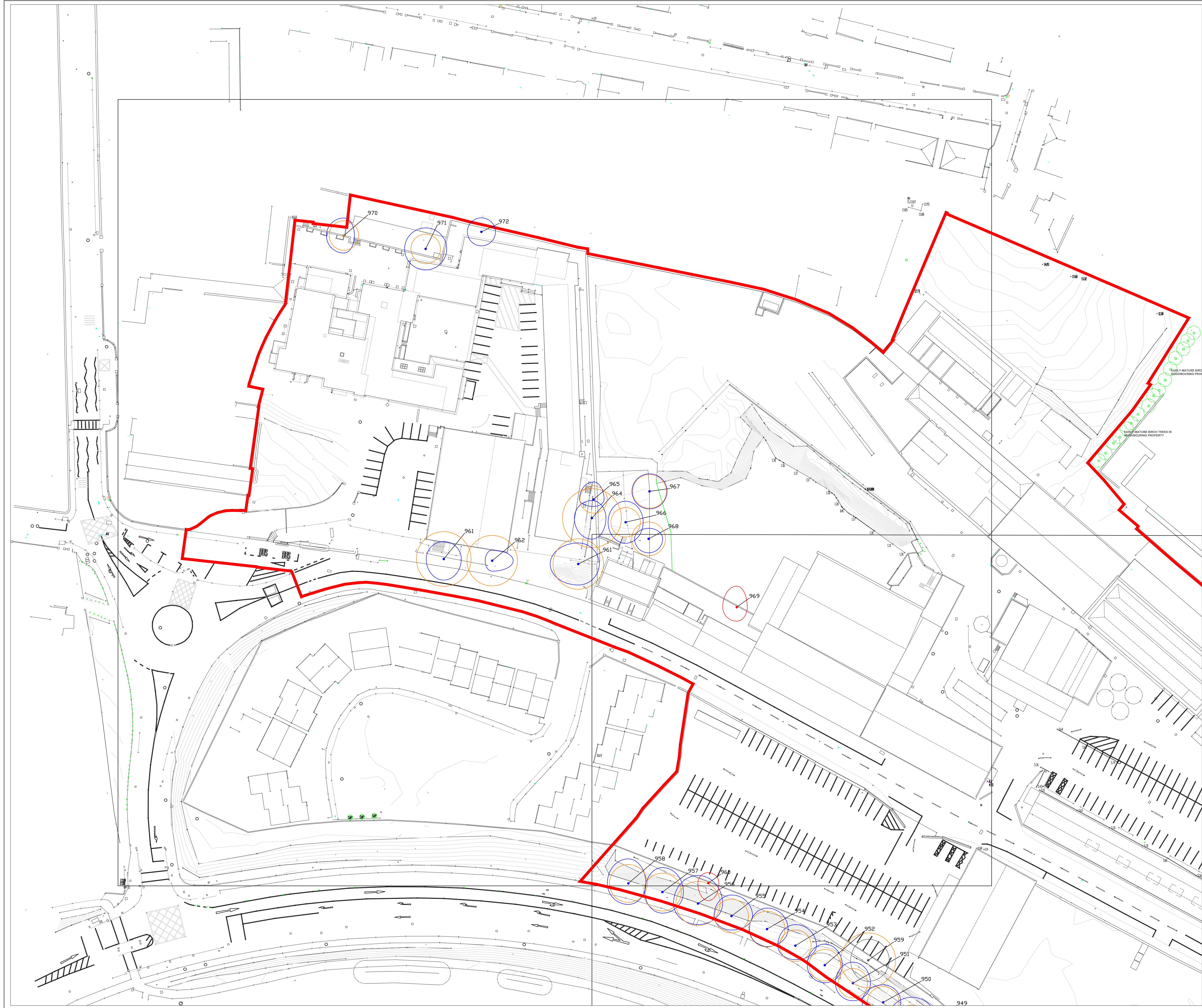
Drawing to be interpreted with reference to the Arboricultural Assessment & Impact document

Tree constraints shown are calculated from guidelines contained within BS5837 (2012) and dimensions contained within Appendix I of the Arboricultural Assessment & Impact document. This outline should not be interpreted as the exact extent of root spread however it is considered the optimal area to be retained free of developmental impacts. Natural and/or man made barriers such as waterlogged soil, roads or buildings may restrict the spread of tree roots. Crown spreads may also prove to be a constraint particularly where crown reduction may not be possible. The constraints lines shown on this drawing are therefore a guide only. An on-site assessment should be undertaken in the event of any developments being planned within the areas shown for retained trees.

REVISIONS		
REV	DATE	DESCRIPTION
	24.03.25	DRAFT ISSUE
PROJECT:		JOB NO.
CLEVELAND ROAD		TELEPH
DRAWING:		SCALE
ARBORICULTURAL ASSESSMENT & IMPACT PLAN		1:100 @ A1
DRAWN BY: DIARMID KEATING		CK
STATUS: PLANNING		INITIALS
DRAWING NO. T1.001-03-25-004-001		

NOTES
Do Not Scale - Use Figure Dimensions Only
Not For Construction - Purpose is for Informational Use Only
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LEGEND

TREE CONDITION CATEGORIES

- A TREES OF HIGH VALUE AND QUALITY
- B TREES OF MODERATE VALUE AND QUALITY
- C TREES OF LOW QUALITY AND VALUE
- U TREES TO BE REMOVED IN THE INTERESTS OF SOUND ARBORICULTURAL MANAGEMENT
- TREE CONSTRAINTS

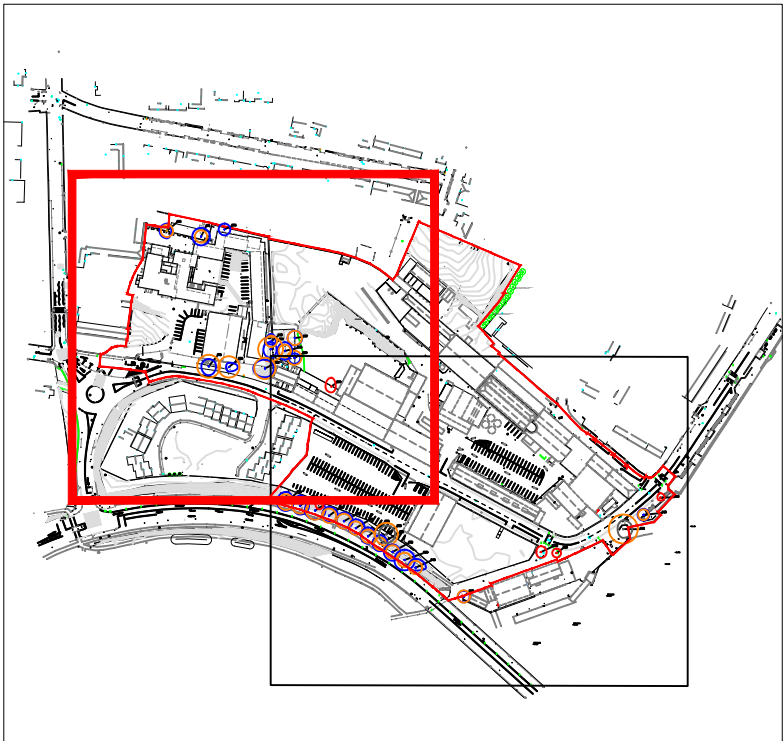
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Drawing to be interpreted with reference to the Arboricultural Assessment & Impact document

Tree constraints shown are calculated from guidelines contained within BS5837 (2012) and dimensions contained within Appendix I of the Arboricultural Assessment & Impact document. This outline should not be interpreted as the exact extent of root spread however it is considered the optimal area to be retained free of developmental impacts.

Natural and/or man made barriers such as waterlogged soil, roads or buildings may restrict the spread of tree roots. Crown spreads may also prove to be a constraint particularly where crown reduction may not be possible.

The constraints lines shown on this drawing are therefore a guide only. An on-site assessment should be undertaken in the event of any developments being planned within the areas shown for retained trees.

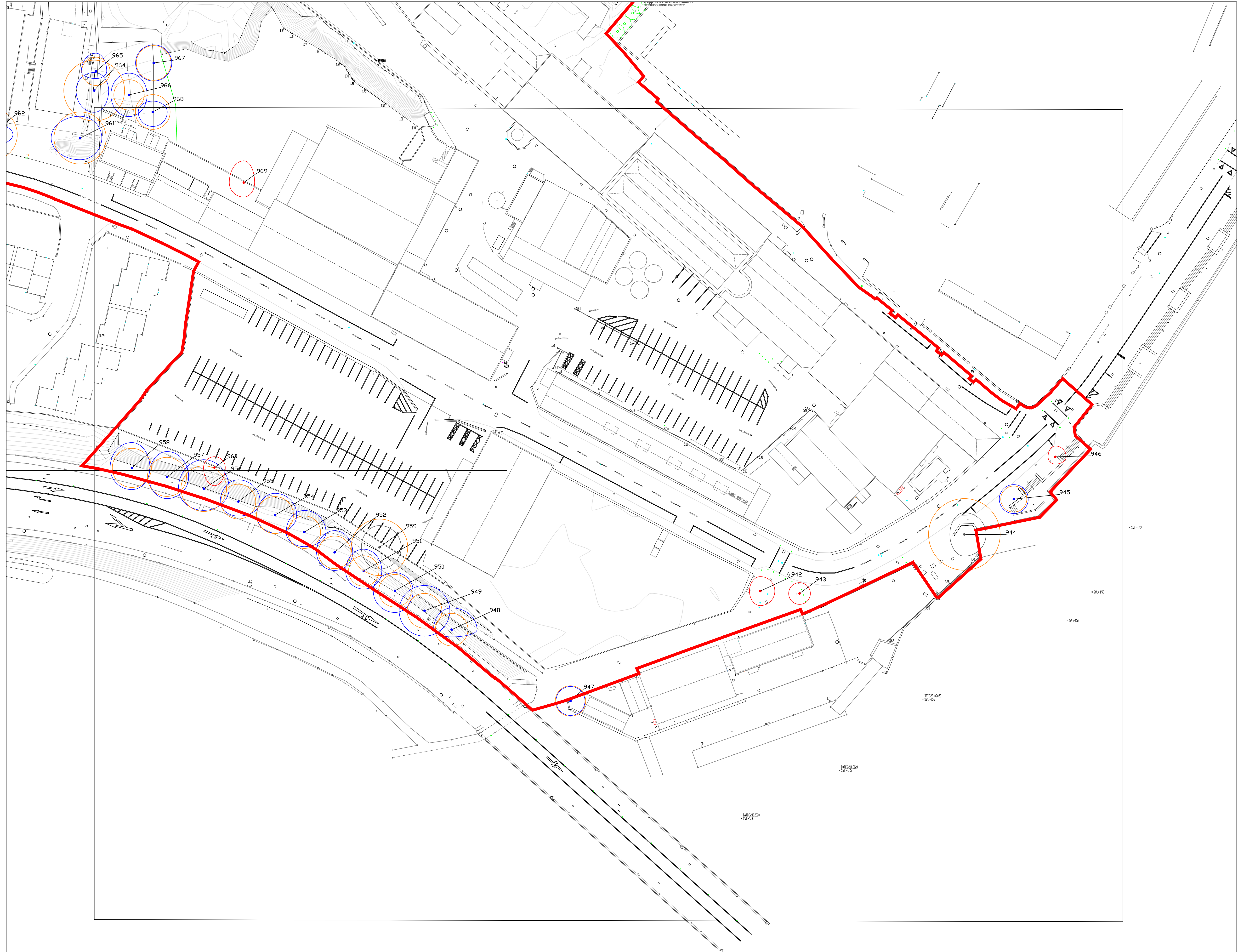


AREA 1. DETAIL

REVISIONS		
REV	DATE	DESCRIPTION
	24.03.25	DRAFT ISSUE
PROJECT:		JOB NO:
CLEVELAND ROAD		TELEPH
DRAWING:		SCALE:
ARBOICULTURAL ASSESSMENT CONSTRAINTS 102		1:500 @ A1
DRAWN BY: CHARMAN KEATING		CK
STATUS: PLANNING		INITIALS
DRAWING NO: T12501-03-25-004-002		

NOTES
This drawing is for information only. It is not to be used for construction purposes without specific approval.
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LEGEND

TREE CONDITION CATEGORIES

- A TREES OF HIGH VALUE AND QUALITY
- B TREES OF MODERATE VALUE AND QUALITY
- C TREES OF LOW QUALITY AND VALUE
- U TREES TO BE REMOVED IN THE INTERESTS OF SOUND ARBORICULTURAL MANAGEMENT
- TREE CONSTRAINTS

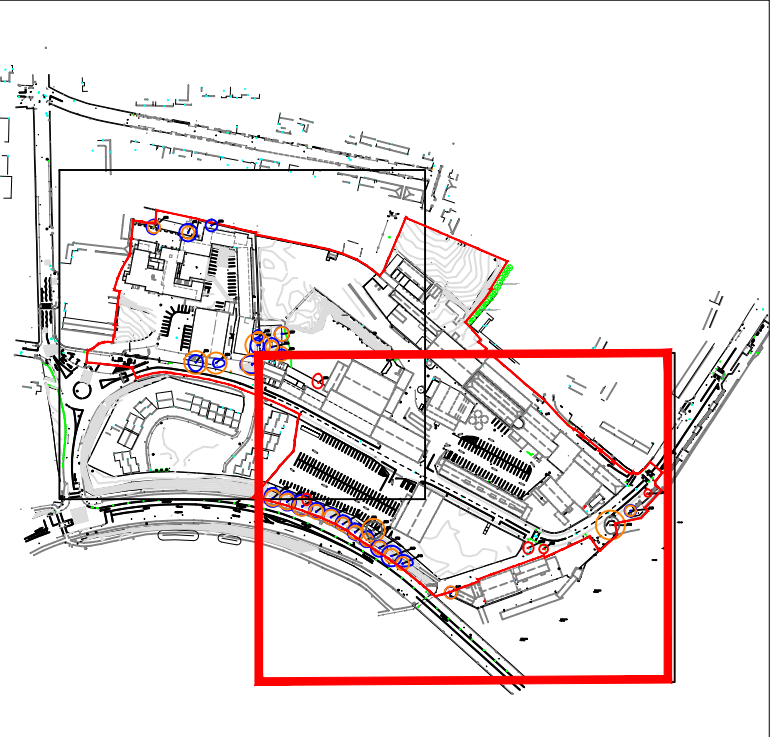
SURVEY BOUNDARY

Drawing to be interpreted with reference to the Arboricultural Assessment & Impact document

Tree constraints shown are calculated from guidelines contained within BS5837 (2012) and dimensions contained within Appendix 1 of the Arboricultural Assessment & Impact document. This outline should not be interpreted as the exact extent of root spread however it is considered the optimal area to be retained free of developmental impacts.

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The constraints lines shown on this drawing are therefore a guide only. An on-site assessment should be undertaken in the event of any developments being planned within the areas shown for retained trees.

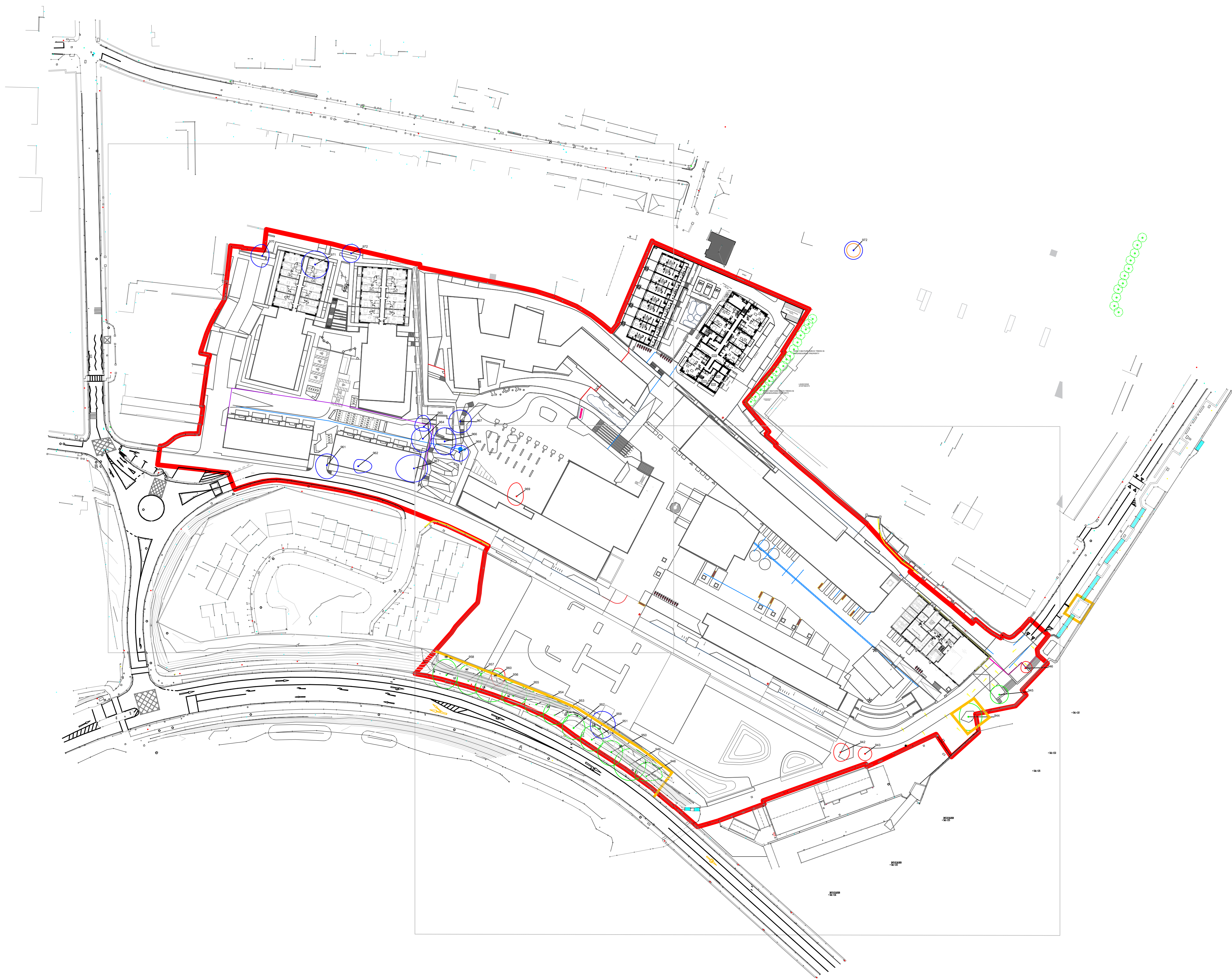


AREA 2. DETAIL

REVISIONS		
REV	DATE	DESCRIPTION
	24.03.25	DRAFT ISSUE
PROJECT:		JOB NO.
CLEVELAND ROAD		TELEPH
DRAWING:		SCALE:
ARBOREAL ASSESSMENT & CONSTRAINTS 101		1:500 @ A1
DRAWN BY: CHARIAN KEATING		CK
STATUS: PLANNING		INITIALS
DRAWING NO. T1.001-03-25-004-001		

NOTES
Do Not Scale - Use Figure Dimensions Only
Not For Construction - Purpose unless Specifically Marked
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LEGEND

ARBORICULTURAL IMPACT & TREE PROTECTION

TREES TO BE RETAINED

TREES TO BE REMOVED TO FACILITATE DEVELOPMENT

TREES TO BE REMOVED IN THE INTERESTS OF SOUND ARBORICULTURAL MANAGEMENT

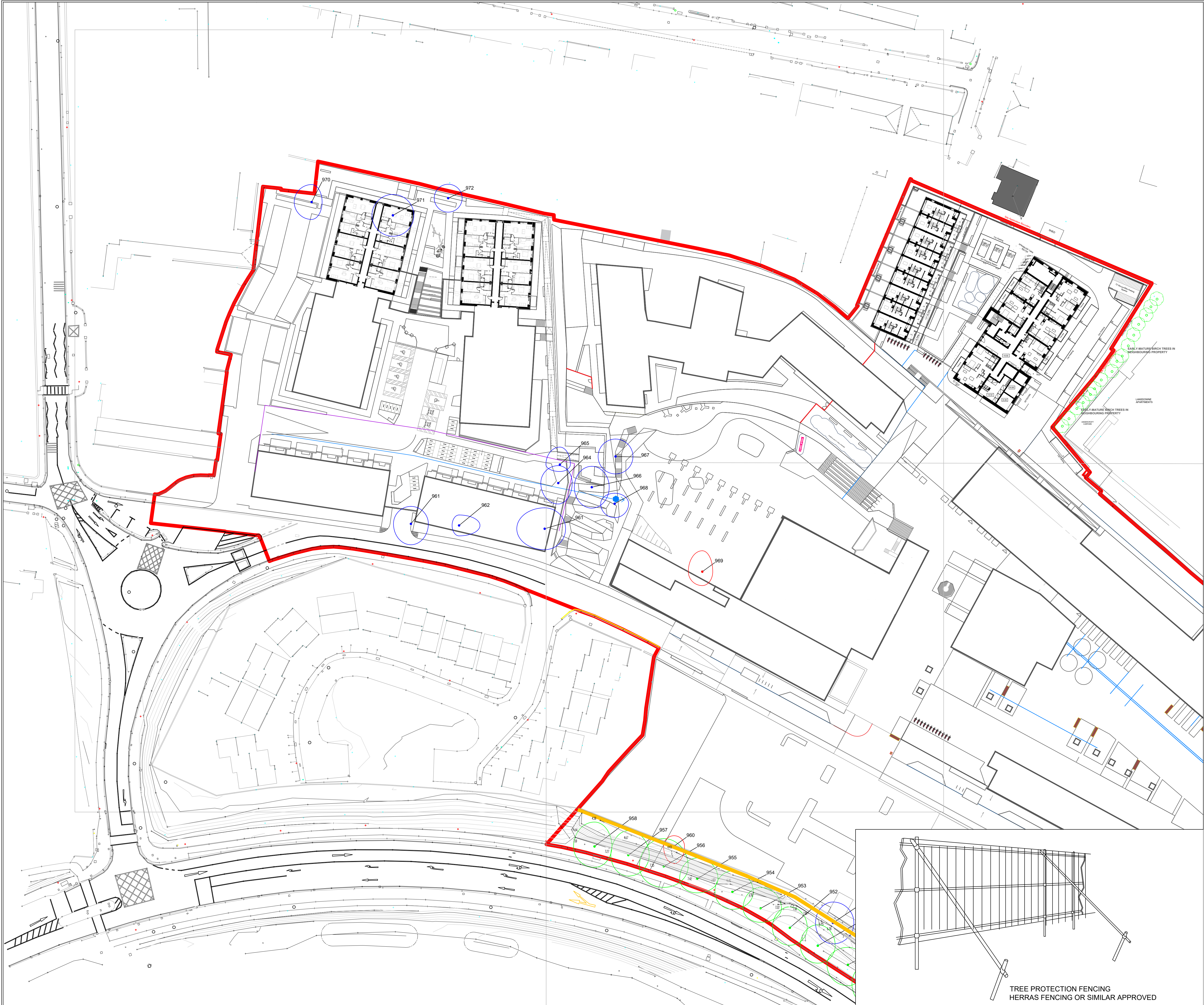
TREE PROTECTION FENCING

SURVEY BOUNDARY

Drawing to be interpreted with reference to the Arboricultural Assessment & Impact document. Tree protection fencing to be erected prior to the mobilisation of plant and site infrastructure and to be maintained for the duration of the development. Works such as paving renewal where tree protection fencing may need to be removed to be undertaken under the guidance of the project arborist.

REVISIONS		
REV	DATE	DESCRIPTION
A	08.09.25	RETENTION OF TREES ON O'CALLAGHAN STRAND
PROJECT: CLEEVES, LIMERICK		JOB NO. TCLE001
DRAWING: ARBORICULTURAL IMPACT TREE PROTECTION KEYPLAN 1:1000 @ A1		SCALE: 1:1000 @ A1
DRAWN BY: CIARAN KEATING		CK INITIALS
STATUS: PLANNING		
DRAWING NO: TCLE001-A-DR-CMK-ARB-104		
NOTES: 1:1000 Scale. Use Figure Dimensions Only. Not for Construction! Prepare under Supervision. © THIS DRAWING IS COPYRIGHT OF CMK HORTICULTURE & ARBORICULTURE LTD.		

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LEGEND

ARBORICULTURAL IMPACT & TREE PROTECTION

TREES TO BE RETAINED

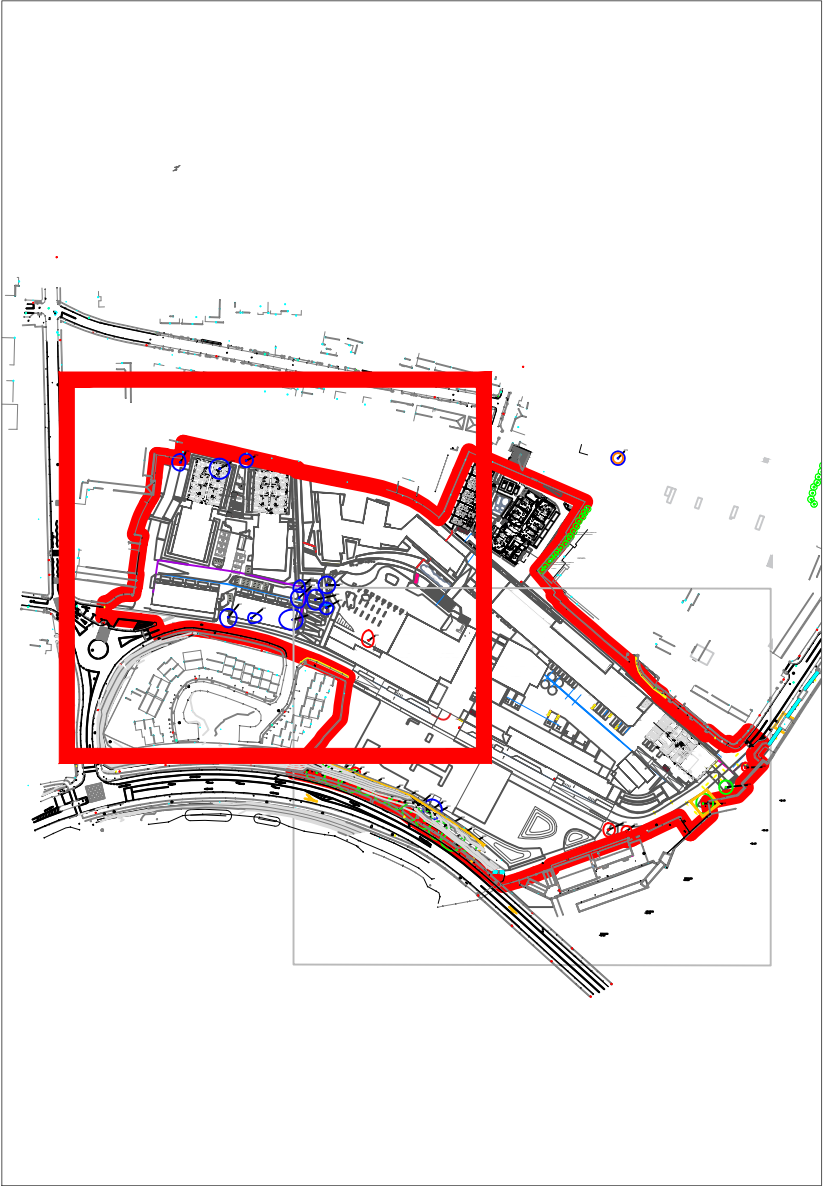
TREES TO BE REMOVED TO FACILITATE DEVELOPMENT

TREES TO BE REMOVED IN THE INTERESTS OF SOUND ARBORICULTURAL MANAGEMENT

TREE PROTECTION FENCING

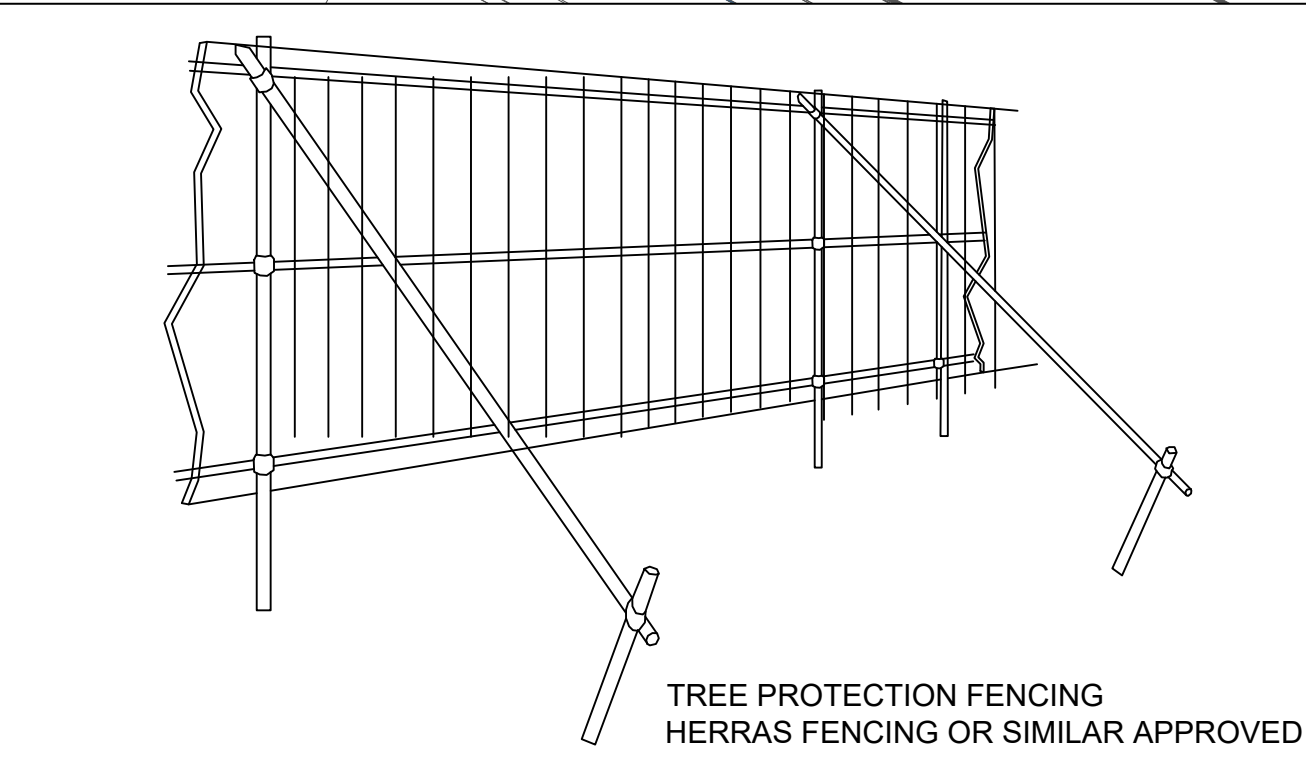
SURVEY BOUNDARY

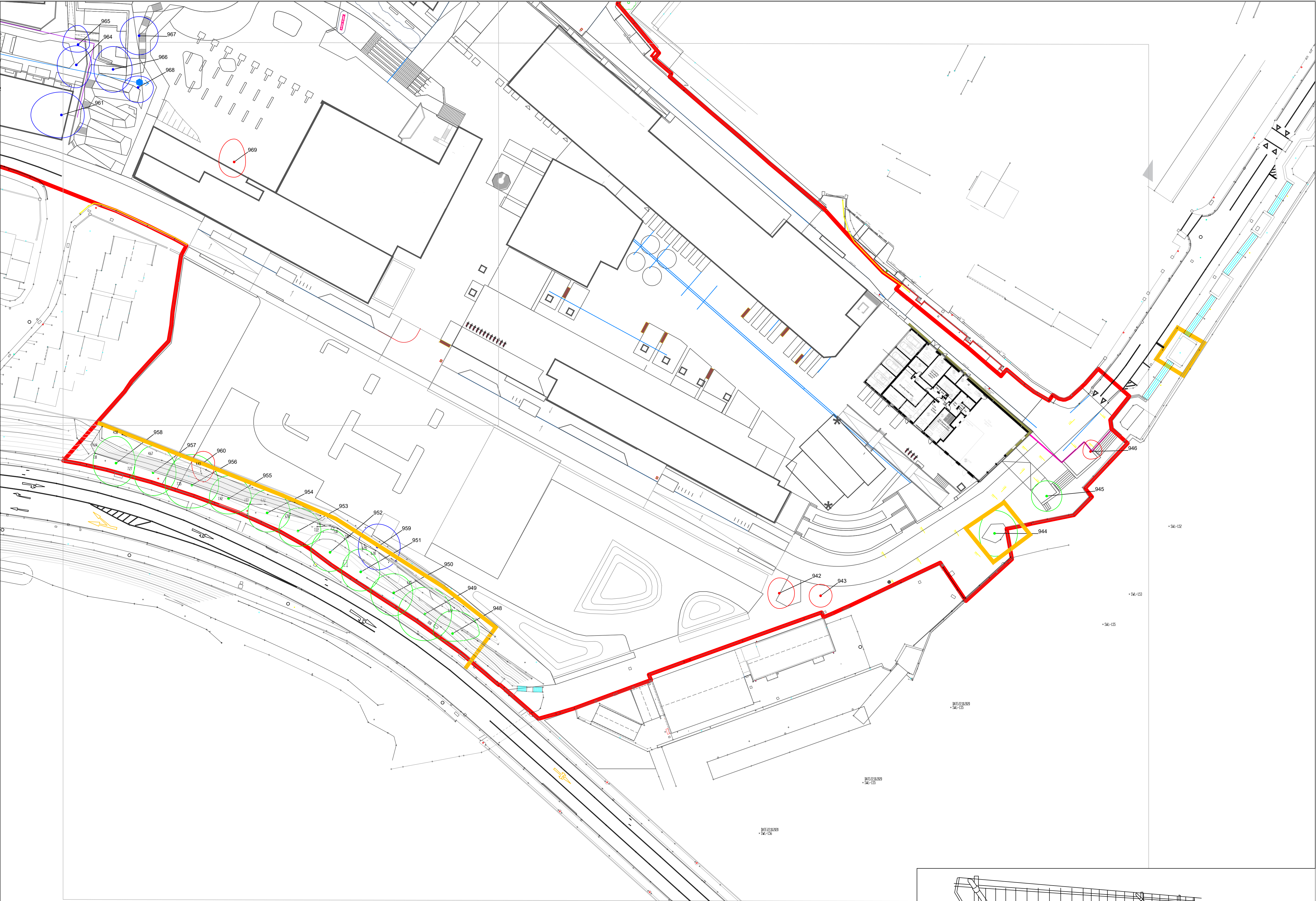
Drawing to be interpreted with reference to the Arboricultural Assessment & Impact document. Tree protection fencing to be erected prior to the mobilisation of plant and site infrastructure and to be maintained for the duration of the development. Works such as paving renewal where tree protection fencing may need to be removed to be undertaken under the guidance of the project arborist.



REVISIONS		
REV	DATE	DESCRIPTION
A	02.09.25	DRAFT ISSUE
	08.09.25	RETENTION OF TREES ON O'CALLAGHAN STRAND
PROJECT: CLEEVES, LIMERICK		JOB NO. TCLE001
DRAWING: ARBORICULTURAL IMPACT & TREE PROTECTION 1 OF 2		SCALE: 1:500 @ A1
DRAWN BY: CIARAN KEATING		CK
STATUS: PLANNING		NT/ALS
DRAWING NO: TCLE001-A-DR-CMK-ARB-105		

NOTES
1. All dimensions are in metres unless otherwise stated.
2. All dimensions are to the centre of the tree unless otherwise stated.
3. This drawing is copyright of CMK Horticulture & Arboriculture Ltd.



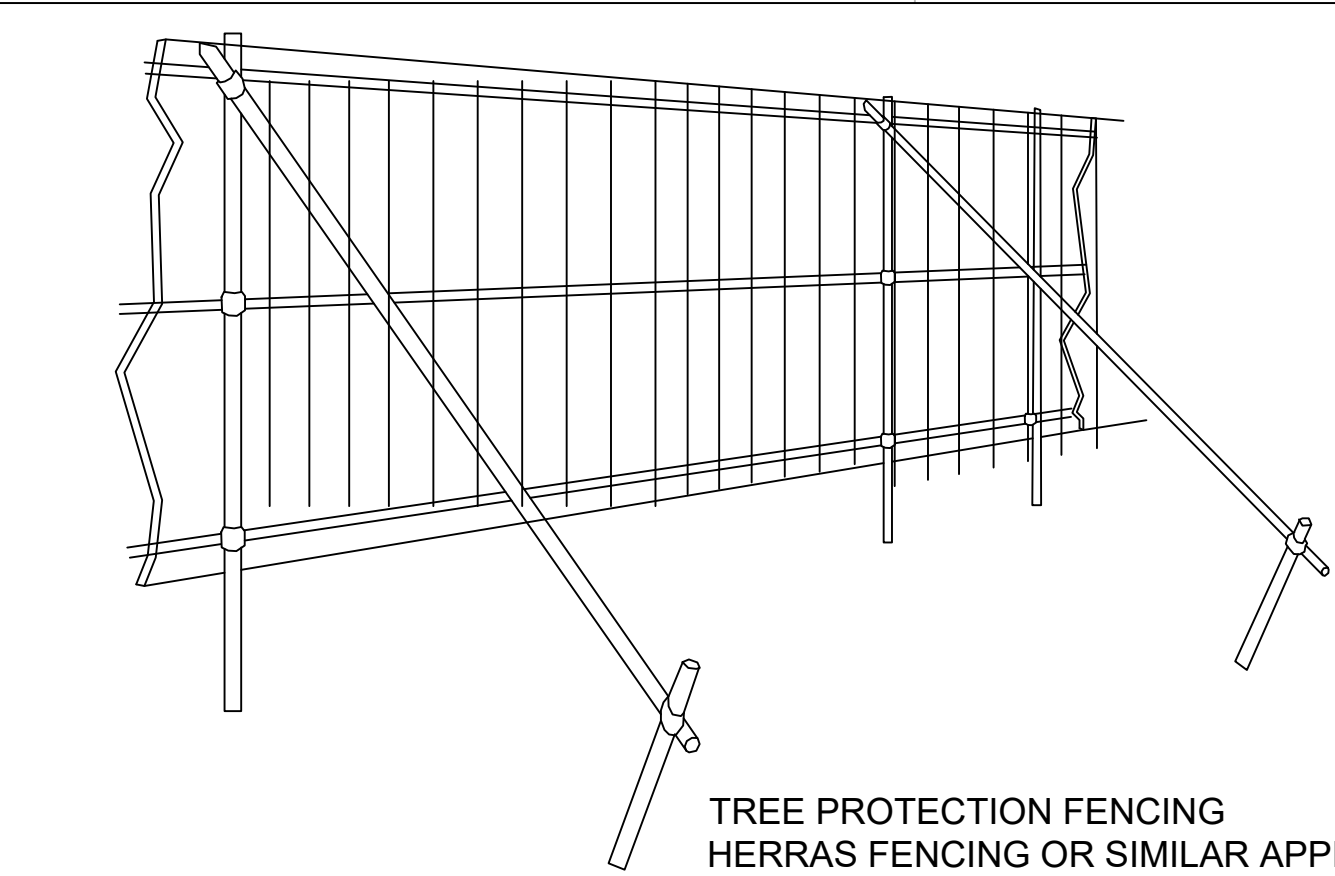


LEGEND

ARBORICULTURAL IMPACT & TREE PROTECTION

- TREES TO BE RETAINED
- TREES TO BE REMOVED TO FACILITATE DEVELOPMENT
- TREES TO BE REMOVED IN THE INTERESTS OF SOUND ARBORICULTURAL MANAGEMENT
- TREE PROTECTION FENCING
- SURVEY BOUNDARY

Drawing to be interpreted with reference to the Arboricultural Assessment & Impact document. Tree protection fencing to be erected prior to the mobilisation of plant and site infrastructure and to be maintained for the duration of the development. Works such as paving renewal where tree protection fencing may need to be removed to be undertaken under the guidance of the project arborist.



REVISIONS		
REV	DATE	DESCRIPTION
A	08.09.25	RETENTION OF TREES ON O'CALLAGHAN STRAND
PROJECT: CLEEVEES, LIMERICK		JOB NO. TCLE001
DRAWING: ARBORICULTURAL IMPACT 2 OF 2		SCALE: 1:500 @ A1
DRAWN BY: CIARAN KEATING		CK INITIALS
STATUS: PLANNING		
DRAWING NO: TCLE001-A-DR-CMK-ARB-105		
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