Arborist Report

for

Southern Grampians Shire Council

Street trees within Hamilton CBD

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Summary

Homewood Consulting Pty Ltd has been engaged to provide a report on street trees within Hamilton Central Business District. Southern Grampians Shire Council have identified revitalising the CBD and enhancing gateways as a key issue for Hamilton. Currently, there are a number of conflicts between the street trees and the built infrastructure.

The development of integrated streetscape designs that support large, healthy trees and manage stormwater is supported by the Municipal Strategic Statement and Planning Scheme, Urban design framework (2011), Climate Change Adaptation Plan (2017-2027) and Sustainability Strategy (2010-2020).

180 street trees and 12 unplanted sites within Hamilton CBD were assessed. The trees were mature and generally in good health and have fair structure. The most common species were *Platanus* x*acerifolia*, *Ulmus procera* and *P. orientalis*. Approximately 40% of the trees had a ULE of greater than 20 years. The current street trees provide good amenity and are an important urban infrastructure asset. Works have been recommended for 132 of the 180 trees assessed. 4 trees have been assigned urgent works that should be undertaken in the next 6 months.

The trees were located in between on-street car parking or in narrow grassed nature strips. Infrastructure conflicts and damage associated with tree growth were observed in road pavement, kerbs, footpaths and some private building assets. Two options for the ongoing management of tree and infrastructure conflicts are discussed.

It is recommended that:

1. Option 2, a proactive approach to addressing tree and infrastructure conflicts is explored by Council. This is the preferred approach for achieving an integrated tree and built infrastructure streetscape that maximises the benefits for the community (Section 9.3)
2. If budgets are limited a more reactive approach to managing the current tree population may be undertaken (refer to Section 9.2). This approach involves renovating localised below ground spaces wherever possible, in addition to root pruning, root barrier installation and reviewing car parking spaces to increase cut out sizes.
3. Arboriculture works recommended are undertaken within the specified timeframes (Section 7)
4. A collaborative, cross disciplinary design team is formed to explore opportunities for new tree planting for future street renovation projects, such as Cox Street. Future tree selection decision making considers vulnerability of species to climate change (Section 10).

Contents

1. Introduction

Homewood Consulting Pty Ltd has been engaged to provide a report on street trees within Hamilton Central Business District. Southern Grampians Shire Council have identified revitalising the CBD and enhancing gateways as a key issue for Hamilton. Currently, there are a number of conflicts between the street trees and the built infrastructure. As part of the revitalisation plans management options to retain and enhance tree benefits and minimise ongoing management costs are required. Street trees will be an important component to ensure the vision for Hamilton outlined in the Municipal Strategic Statement *"to be a liveable, beautiful, progressive, well planned and, sustainable city*" is achieved.

2. Key Objectives

- Identify and record the dimensions of the street trees located in Hamilton CBD.
- Provide an assessment of the tree specimens with regard to their health and structure.
- Identify conflicts between street trees and infrastructure.
- Provide recommendations for managing trees to maintain their health and structure for the long-term.
- Provide options for minimising future conflicts between trees and built infrastructure.

3. Council Strategic Direction for Hamilton

A number of Council's policies, strategies and plans recognise the importance of street trees within Hamilton and the Shire more broadly. These include the Municipal Strategic Statement and Planning Scheme, the Hamilton City Centre Urban Design Framework (2011), the Climate Change Adaptation Plan (2017-2027) and the Sustainability Strategy (2010-2020). Integration of stormwater management with urban tree planting is also an important theme.

3.1 Municipal Strategic Statement and Planning Scheme

Vision : *For Hamilton to be a liveable, beautiful, progressive, well planned and, sustainable city that sits politely within its rich rural surrounds, which provides a full range of services and facilities for residents and businesses of the region, which adds value to agricultural produces and resource of the region, and which is well connected to its regional and wider neighbours.*

The revitalisation of the Central business district and enhancing gateways has been identified as a key issue for Hamilton. The Municipal; Strategic Statement and Planning Scheme state that the tree-lined streets are a key landscape feature of the city and street trees will be an important component to ensure the vision for Hamilton is achieved.

The Local Area Implementation details these values and assets within Hamilton that are relevant to street trees and the CBD area.

Environmental and landscape values:

- Protect existing canopy trees on private and public land when development is proposed, particularly in areas with key landscape character such as the central business district.
- Ensure new development and streetscape works meet minimum standards of water sensitive urban design to increase protection of the Grange Burn.

- Require integration of water sensitive urban design treatments and provision of shade trees within the central business district, including within at grade level private car parks.

Built environment and heritage

- Improve the presentation of and provide a high quality, landscaped presentation along major city entry avenues, gateways, boulevards and tourist-heritage routes, in particular the Ballarat Road entrance and bridge, French Street, Cox Street and Lonsdale Street (Figure 1).

Hamilton Central Business District

- Encourage better utilisation of land and infill development of blocks with multi-level buildings incorporating decked or underground car parking, wherever possible.
- Encourage development within the central business district to be up to 3 storeys in height and built to site boundaries to create more efficient use of underutilised space.

Housing

- Encourage medium density residential development in the central business district including shop top housing on Lonsdale, Gray and Thompson Streets.

Economic development (Commercial – Central Business District)

- Consolidate retail development within the central business district around the key blocks between Cox, French, Thompson and Lonsdale Streets.
- Recognise and require that new development enhances the pivotal role of Gray Street as the core of the retail centre.

Transport

- Prioritise pedestrian and cyclist movement, access, amenity and safety within the central business district particularly by ensuring a safe, attractive and amenable pedestrian setting is provided on key retail pathways.
- Improve traffic management of car parking within the retail core by encouraging decked or basement car parking.
- Support the staged introduction of an alternate heavy vehicle route to the south of the city to reclaim Lonsdale and Cox Streets for local traffic and pedestrian needs.

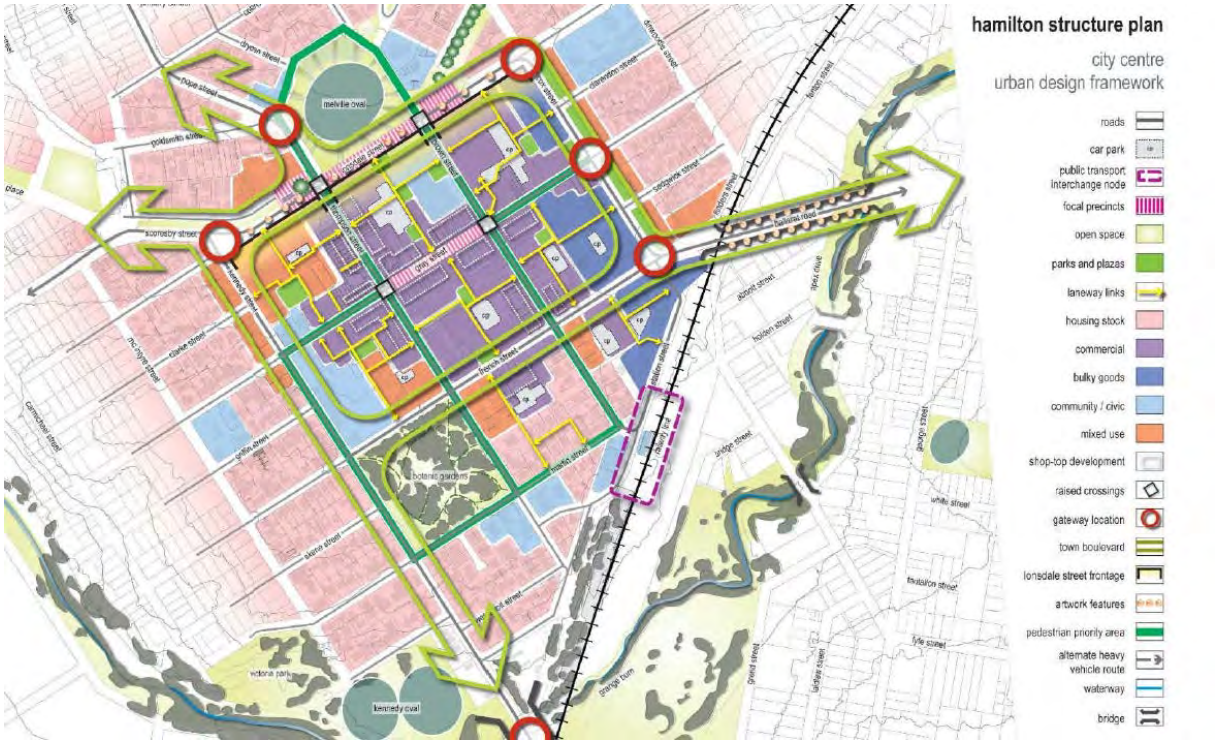


Figure 1: Hamilton Structure Plan

3.2 Hamilton City Centre Urban Design Framework (2011)

The Hamilton City Centre Urban Design Framework translates the broad aims of the MSS and planning schemes, described in the previous section, to a more practical action at the local level. The urban design lists the following vision, key directions and actions in terms of landscape and environmental values that are relevant to the street trees within the Hamilton CBD:

3.2.1 Vision and Key directions

- Establish an alternate heavy vehicle route to reclaim Lonsdale and Cox Streets
- Protect key views to landmarks and landscapes
  - Frame the French and Lonsdale Street corridors to ensure visual links to the Botanic Gardens and Melville Oval
- Establish green links to the botanical gardens from key gateways
  - Recognise the role of French and Thompson Streets as connecting spines to the Botanic Gardens.
  - Establish signage and an ‘arboretum’ to French Street that invites connection to the Gardens

3.2.2 Landscape & Environment

The following landscape and environment strategies are particularly relevant to this report:

- Redefine Cox Street through changes to road treatments and extensive tree planting to its eastern side.

- Create a specific avenue effect extending along Cox and Lonsdale Street as a thoroughfare through the CBD.
- Support a landscape median treatment along Lonsdale and Kennedy Streets with improved footpaths.
- Require integration of water sensitive urban design and provision of shade trees within the city centre.
- Delineate key retain pathways through new paving treatments to Gray, Brown, Lonsdale and Thompsons Streets.
- Ensure appropriate shade, lighting and seating provided along these key retail links
- Replace red brick paving in Gray Street and integrate new landscape treatments and wider footpaths as part of a reorganisation of this space.
- Progressively upgrade other areas identified as 'pedestrian priority' spaces to match the treatments used in Gray Street over time.
- Establish avenues along each streetscape that assist with orientation and identity. Support evergreen trees on east-west streets and deciduous species on north-south streets to ensure good street solar access.
- Celebrate the notable established Eucalypt located adjacent to the Visitor Information Centre on Lonsdale Street, west of Thompson Street and create a small new park by closing off the easternmost portion of this service road.
- Define particular plantings along French Street from the 'gateway' intersection with Cox Street to towards the Botanic Gardens as an arboretum.

3.3 Climate Change Adaptation Plan (2017-2027)

The role of street tree plantings to assist in adaptation to climate change is highlighted in this recently endorsed Plan. The Plan contains an action to develop and urban forest strategy with activities aimed to increase canopy coverage (Table 1). Another relevant action is to develop an integrated water plan. Options for multi-benefit street tree planting pits that integrate stormwater management are described later in this report (Section 8).

Table 1: Climate Change Adaptation Plan actions that relate to street trees

Action	Action activities
2. Develop and deliver an Integrated Water Plan	a. Develop overarching Integrated Water Plan. This will include: Update stormwater management plan
5. Develop an Urban Forest Strategy	a. Develop register of vegetation including street trees. Develop hierarchy of vegetation for supplementary watering under drought conditions b. Develop Street Tree Master Plan for whole Shire with an overarching aim to increase canopy coverage

3.4 Sustainability Strategy (2010-2020)

The Sustainability Strategy has five themes. Of these, the water and liveability themes are relevant to the streetscape planting in Hamilton (Table 2).

Table 2: Sustainability strategy actions that relate to streetscapes

Theme	Action activities
Water	> Water Quality action to manage nutrients and turbidity levels according to ANZ standards in Council managed waterways (egg: Grange Burn) > Action to Enhance Significant Waterways by Council supporting the Glenelg Hopkins CMA to improve waterways condition.
Liveability	>Focus on mechanisms (Transport Strategy, CBD structure plan) to ensure walking and cycling is promoted.

4. Methodology

4.1 Site Inspection

On Wednesday, 31 May and Thursday, 1 June 2017 Liz Denman and Ben Kenyon conducted a site inspection of the street trees within Hamilton CBD. A total of 192 trees and planting sites were assessed.

Data collected for the trees included:

- Botanical Name
- Canopy Dimensions
- Diameter at Breast Height (DBH)
- Health
- Structure
- Useful Life Expectancy (ULE)
- Landscape Contribution
- Individual Significance
- Infrastructure damage

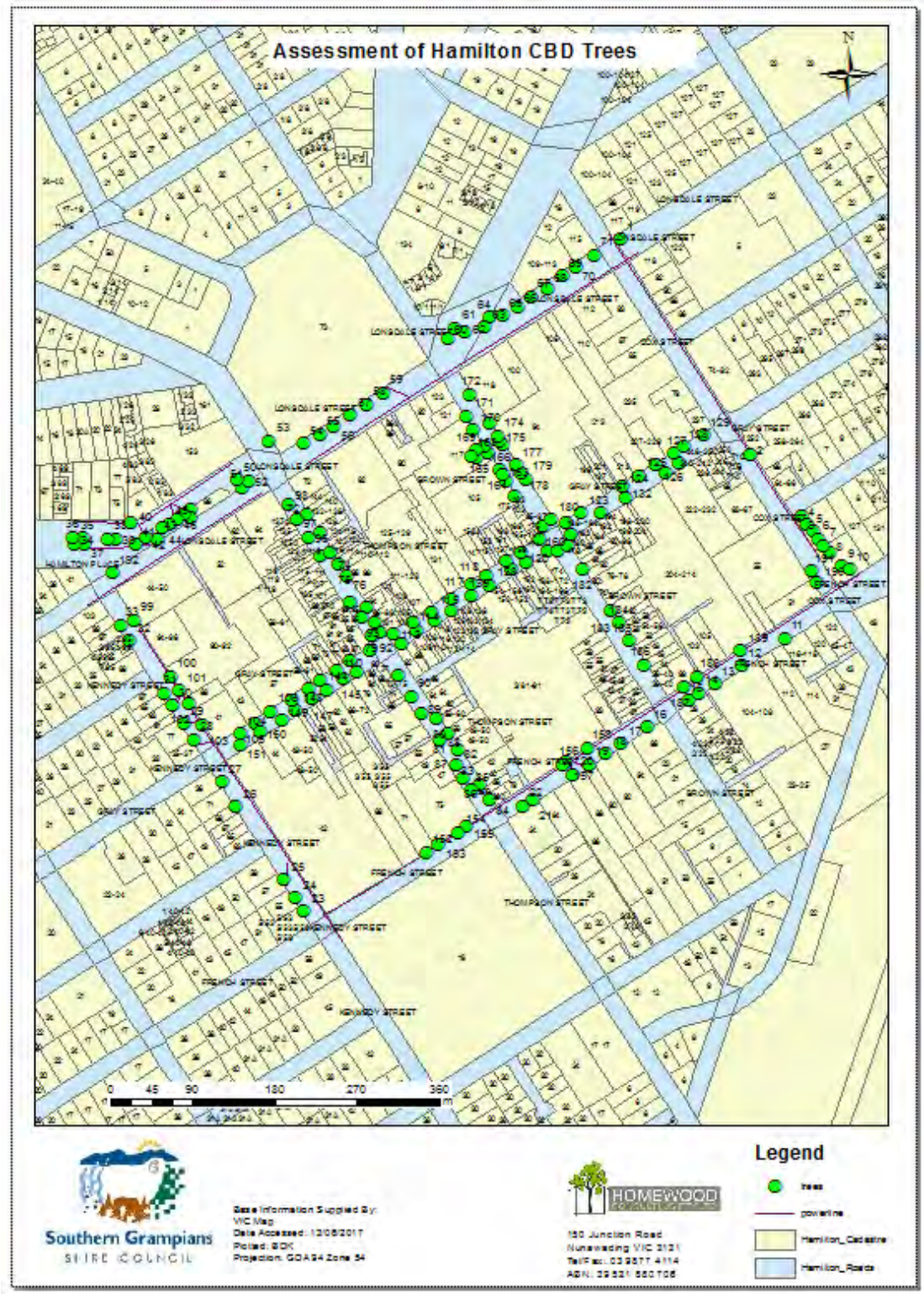
All assessments were conducted from ground level and assessments of decay are qualitative only. Tree height, canopy spread and DBH were estimated. For full details of the information collected see Appendix 1.

Most of the trees have been assessed previously and allocated a unique Asset ID number. The same Asset ID numbers have been used for the trees within this report. 14 trees or planting sites, mainly along Kennedy Street, were not included in the tree data supplied by Southern Grampians Shire Council. These new trees and sites have been numbered from 01 and with the prefix ‘HW’, that is HW_01, HW_02 etc.

For full details of the information collected see Appendix 1.

For individual tree assessments see Appendix 2.

5. Site Map


Assessment of Hamilton CBD Trees
N
LONSDALE STREET
SOUTH LONSDALE STREET
BROWN STREET
GRAY STREET
THOMPSON STREET
FRENCH STREET
KENNEDY STREET
HAMILTON PLACE
0 45 90 180 270 360
m
Southern Grampians
SHIRE COUNCIL
Base Information Supplied By:
VIC Map
Data Accessed: 12/05/2017
Plotted: BOK
Projection: GDA94 Zone 54
HOMEWOOD
150 Junction Road
Nunawading VIC 3131
Tel/Fax: 03 9877 4114
ABN: 39 531 550 705
Legend
trees
powerline
Hamilton_Cadastre
Hamilton_Roads

6. Observations / Discussions

6.1 Site Details

Hamilton is a regional city with a population of approximately 10,000. The Municipal; Strategic Statement and Planning Scheme state that the tree-lined streets are a key landscape feature of the city. The subject site was the streets surrounding the six main blocks that form the central business district of Hamilton. The area was bounded by French Street (south-east), Kennedy Street (south-west), Lonsdale Street (north-west) and Cox Street (north-east). Important landscape and recreational spaces adjoin the site including the Botanic Gardens which are located along French St (Figure 2) and Melville Oval which is located along Lonsdale Street. Lonsdale and Cox Streets form a significant regional traffic route and many trucks travel along these streets (Figure 3). Street trees are typically planted within asphalt cut outs between on-street parking bays (Figure 4) or within grassed nature strips.

Figure 2: The Hamilton Botanic Gardens adjoins the subject site (French Street)

Figure 3: Lonsdale and Cox Streets form part of the main traffic route

Figure 4: Street trees along Gray Street planted between the on-street parking bays are typical of the planting sites with the main retail strips of CBD.

6.2 Tree Details

6.2.1 Species

The tree population consists of mainly exotic, deciduous species. The most common species were *Platanus xacerifolia*, *Ulmus procera* and *Platanus orientalis* (Table 3). There were a small number of Australian native species and no indigenous species.

Table 3: Species composition of the street trees within Hamilton CBD

Botanical Name	Common Name	Origin	Number of trees
Platanus Xacerifolia	London Plane	Exotic	104 (58%)
Ulmus procera	English Elm	Exotic	28 (16%)
Platanus orientalis	Plane	Exotic	25 (14%)
Quercus rubra	Red Oak	Exotic	5 (<5%)
Quercus palustris	Pin Oak	Exotic	4 (<5%)
Phoenix canariensis	Canary Island Date Palm	Exotic	3 (<5%)
Callistemon salignus	Willow Bottle Brush	Australian Native	2 (<5%)
Fraxinus 'Raywood'	Claret Ash	Exotic	2 (<5%)
Other species		Exotic and Australian Natives	7 (<5%)
Total			180

72% of the trees within Hamilton CBD were *Platanus* species. *Platanus* x*acerifolia* was the dominant species along Gray, Brown, Thompson and Kennedy Streets (Figure 5). *Platanus* x*acerifolia* (London Plane) is a broad-crowned, deciduous tree that has a long history of urban cultivation in Australia and worldwide. It is commonly used as an amenity tree in street plantings due in part to its tolerance atmospheric pollution, soil compaction and regular pruning. Regularly reaching heights of up to 20m or more, studies have shown it is far less likely to cause damage to kerbs and footpaths than other species reaching a similar size (Hitchmough 1994).

French Street was planted with *Platanus orientalis* and the dominant species along Lonsdale Street was *Ulmus procera.* Cox Street had limited plantings of various species and lacked a dominant theme.

Figure 5: Distribution of the most common street tree species within Hamilton CBD

6.2.2 Tree Health, Structure and Useful life expectancy (ULE)

The majority of the trees were in good health with full canopies of foliage and good extension growth (Table 4). In contrast, approximately 10% of the trees were in poor or very poor health with sparse foliage and twig dieback. These were generally mature *Ulmus procera* along Lonsdale Street that were in a state of decline.

Figure 6:A *Platanus xacerifolia* in Thompson Street that was in good health (ID 31009)

Figure 7: An *Ulmus procera* in Lonsdale Street that was in very poor health (ID 31784)

The structure of most of the assessed trees was fair (74%). Approximately 20% of the trees had poor or very poor structure (Table 4). Common structural issues included:

- Epicormic shoot growth from previous lopping points
- History of limb failure
- Dieback and deadwood

Table 4: Summary of tree health and structure

	Health	Structure
Good	114 (63%)	11 (6%)
Fair	45 (25%)	133 (74%)
Poor	14 (8%)	26 (14%)
Very Poor	7 (4%)	10 (6%)
Total	180	180

Approximately 40% of the assessed trees have a Useful Life Expectancy of greater than 20 years (Table 5). Useful Life Expectancy (ULE) considers factors relating to species, health and structure and location within the landscape. The estimation of ULE is based on conditions at the time of assessment and if the tree's surrounding environment were to change in the future, so too may the tree's ULE.

Table 5: Summary of useful life expectancy (ULE)

ULE	Count
0 years	5 (3%)
1-5 years	8 (4%)
5-10 years	30 (17%)
10-20 years	67 (37%)
20-40 years	70 (39%)
Total	180

Less than 10% of the trees have a ULE of less than 5 years. The majority of these trees have been recommended for removal due to their poor condition (refer Section 7.1).

The trees along the northern side of French Street have been poorly pruned (lopped) for powerline clearance in the past. They have relatively short ULEs that reflect their poor structure (Figure 8). Specialised pruning works have been recommended to manage and reduce epicormic regrowth from lopping points (refer Section 7.2). If successfully undertaken these works are expected to increase the ULE of these trees.

Many of the trees in the main retail CBD streets (Gray Street, Brown Street and to a degree Thompson Street) have intermediate ULEs of 10-20 years.

Figure 8: Useful Life Expectancy of street trees throughout the Central Business District

6.3 Vacant Site Details

There were 12 vacant sites assessed within Hamilton CBD, mostly to the west of the city (Figure 9 and Figure 10). Of these sites, 3 were recorded as Redundant as they were no longer considered suitable for replanting due to lack of available space (Figure 11). Vacant sites were recorded in gaps amongst the existing street tree plantings. There were no street trees in the following areas within Hamilton CBD and no vacant sites have been recorded for these locations:

- section along French Street that borders the Botanic Gardens.
- sections along Kennedy and French Streets that border the Hamilton Primary School (Figure 12).
- south-west side of Cox Street, between Lonsdale and French Streets (2 trees only).
- north-east side of Cox Street, between Lonsdale and Gray Streets.
- south-west side of Brown Street, between Gray and French Streets.
- south-east side of Lonsdale Street, between Kennedy and Cox Streets.

Any future streetscape renovation works within Cox, Lonsdale and Brown Streets should maximise additional tree planting to increase amenity. Additional tree planting in French and Kennedy Streets may not be appropriate due to the busy nature of the school site and the presence of significant mature trees in the nearby Botanic Gardens.

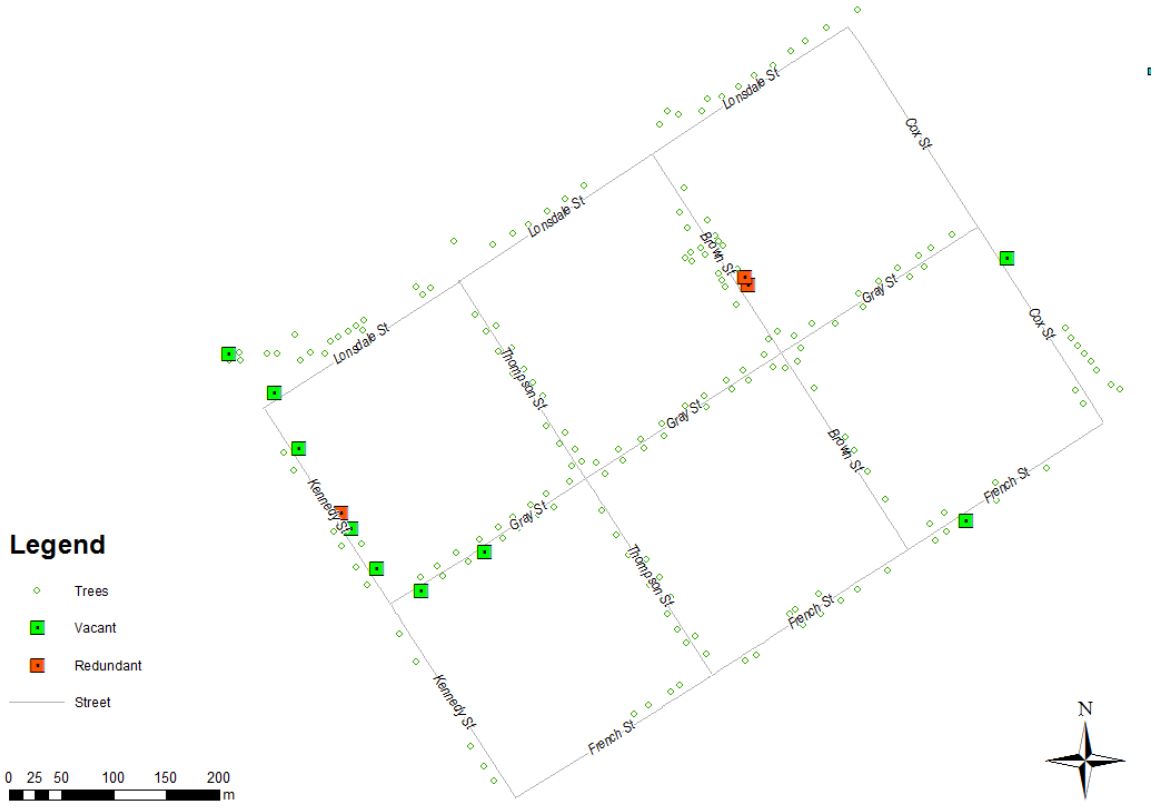


Figure 9: Distribution of vacant sites suitable for replanting (green square) and those previously recorded and now considered unsuitable or redundant (orange square)

Figure 10: Vacant site along Gray Street (ID = 31003)

Figure 11: Vacant site recorded as redundant due to inadequate space (ID = 30795)

Figure 12: Vacant planting sites were not recorded for areas of unplanted nature strips near the school and outside the Botanic Gardens

6.4 Tree and Infrastructure Conflicts

6.4.1 Tree Root Growth

An understanding of tree root biology is important for addressing infrastructure conflicts. Tree roots are usually few and large where they attach to the trunk (Pirone *et al.* 1988). These large roots, often 5-15 in number, tend to rapidly taper and angle downwards into the soil and then branch into rope like strands that can extend many metres (Perry 1982; Day *et al*. 2010). When the roots encounter favourable conditions, it is common for them to branch many times creating a fan to exploit the soil reserves (Coder 1998). Fine tree roots absorb oxygen, water and nutrients from the soil profile. Successful urban tree management is often about encouraging good, healthy root growth where you want roots to grow and avoiding or minimising root growth where you don't. High levels of oxygen, appropriate levels of water and nutrients and low penetrative resistance encourage root growth. Root growth is limited in compacted soils which have low levels of oxygen and high penetrative resistance.

Construction techniques used for footpaths and roads can create favourable conditions for root growth. Concrete footpaths and asphalt pavements tend to warm the soil more than the surrounds during the day. At night the slab cools faster than the soil creating a temperature differential resulting in condensation (Barker 1994, Randrup, McPherson & Costello 2001). The slab also acts as a barrier to moisture loss through evaporation from the soil surface. This warm, moist area can be ideal for young root growth (Coder 1998). As these surface roots grow in diameter they can cause infrastructure damage. Compacted soils underneath footpaths and road pavements tend to limit root growth from occurring deeper in the soil profile.

Often roots growing under footpaths are found to have few laterals (Kopinga 1994). Secondary growth of the root will cause it to enlarge, or thicken (Harris, Clark & Matheny 1999, Kozlowski 1962), eventually applying upward pressure on the slab and causing it to lift over time (Randrup, McPherson & Costello 2001). In order for the tree to cause damage, the weight of the slab or structure must be less than the expansion pressure of the root. As a result, structures that are relatively light are most susceptible to this sort of damage (i.e slabs, small walls and asphalt) (Biddle 1998). If the structure is heavier than the expanding pressure of the root, the root will distort. Distorted roots are common near many built structures and large rocks. The upward pressure of an expanding root is not conclusively known. Measured in units such as 'pounds per square inch', further research into the resistance of concrete to root expansion could provide valuable results (Fergusson 2005).

Research has shown that a correlation exists between tree size and damage potential, with larger trees more likely to cause conflicts (Wagar & Barker 1983). Research has shown that trees usually cause little damage to footpaths until they are at least semi-mature (Kopinga 1994, Randrup, McPherson & Costello 2001). However, city planners and managers alike are keen to maintain and develop streetscapes of large, broad canopy trees to maximise their associated benefits so an integrated solution is required.

6.4.2 Summary of infrastructure damage

Patterns in infrastructure damage were related to the planting spaces and surrounding built infrastructure. The street trees within Hamilton CBD were typically planted in one of two streetscape configurations (Figure 13 and Figure 14). The trees in the central streets were located in asphalt cut outs between parking bays, powerlines were undergrounded and the footpaths were paved with red bricks. The trees in the streets on the outside of the assessment area (Cox, French, Kennedy and Lonsdale Streets) were typically planted in

narrow grassed nature strips with adjacent concrete footpaths and overhead powerlines were present in some locations.

Figure 13: Trees in Gray, Thompson and Brown Streets were typically planted in small cut outs between parking bays. The footpaths in these areas were paved with red bricks.

Figure 14: Trees in French and Kennedy Streets were typically planted in narrow grassed nature strips. The footpaths in these areas were concrete.

Combined levels of infrastructure conflict damage due to trees were highest in Gray, Thompson, Brown and French Streets (Table 6). The least conflict between trees and infrastructure occurred within Cox Street and Hamilton Place where the trees were planted in wider nature strips and built infrastructure was further away. The following infrastructure conflicts were recorded and each is described briefly in the following sections:

- Road, kerb and footpaths
- Building and retaining wall
- Overhead powerlines
- Street lighting

Table 6: Infrastructure and tree conflicts within each street

Street and planting location	Total number of trees	Public Asset (%, no.)			Private Asset (%, no.)		Power-line	No conflict
		Road	Kerb	Footpath	Building	Retaining wall		
Gray Street	46	85% (39)	63% (29)	70% (32)	80% (37)			4% (2)
Thompson Street	27	89% (24)	56% (15)	74% (20)	74% (20)			7% (2)
Brown Street	28	32% (9)	43% (12)	46% (13)	64% (18)			14% (4)
French Street	21	29% (6)	67% (14)	71% (15)	5% (1)	10% (2)	33% (7)	5% (1)
Kennedy Street	13	15% (2)	62% (8)	38% (5)	15% (2)	15% (2)	17% (2)	31% (4)
Lonsdale Street	20	80% (16)		15% (3)				20% (4)

Street and planting location	Total number of trees	Public Asset (%, no.)			Private Asset (%, no.)		Power-line	No conflict
		Road	Kerb	Footpath	Building	Retaining wall		
Hamilton Place	14	43% (6)						50% (7)
Cox Street	10			20% (2)	20% (2)		10% (1)	80% (8)

6.4.3 Road, kerb and footpaths (Public Assets)

Minor to moderate public asset infrastructure damage associated with street trees was regularly observed through the assessment area. Movement and cracking of road pavement typically occurred in the on-street parking bays (Figure 15 and Figure 16). The trees in most streets are planted very close to the kerb and channel and damage to the kerb was observed near the tree trunks. The movement in the kerb and channel has affected drainage in some areas and water was ponding in some areas (Figure 17 and Figure 18).

Figure 15: Asphalt cracking presumably in response to surface tree roots

Figure 16: Asphalt damage adjacent to the small tree cut out

Figure 17: Kerb damage

Figure 18: Kerb and channel not functioning as designed resulting in water ponding

Localised damage was observed in both the concrete and brick paved footpaths. Linear cracks and lifting in the footpath near trees was assumed to be damage caused by surface root growth (Figure 19). Uneven footpath surfaces create potential trip hazards for pedestrians. The Urban Design Framework (2011) recommends that the red brick paving in Gray Street is replaced and in time other pedestrian priority spaces are progressively upgrade to match the treatments used in Gray Street. Replacement with another paving material is supported to alleviate the extent of tripping hazards associated with minor and moderate root growth. Bricks are light weight and susceptible to movement due to expanding root below the paving (Figure 20). Each lifted brick can create a potentially significant trip hazard.

Figure 19: Footpath lifting and asphalt damage presumably in response to root growth

Figure 20: Brick pavement is prone to movement, creating uneven surfaces

6.4.4 Building and retaining wall conflicts (Private Assets)

Minor to moderate private asset infrastructure conflicts or damage associated with street tree growth was also observed. Clearance pruning has been recommended when tree canopies were close to or touching buildings or awnings (Figure 21). A small number of retaining walls on private properties had minor cracking in locations near the street trees (Figure 22).

Figure 21: Tree canopy conflict with shop frontages

Figure 22: Minor cracking of retaining walls

6.4.5 Overhead powerlines

The power lines have been undergrounded in the central streets within Hamilton CBD (Gray, Thompson and Brown Streets) and there is no above ground conflict with the street trees. Overhead power lines were present in French, Kennedy, Lonsdale and Cox Streets and

trees have been pruned for powerline clearance (Figure 23). The trees in French Street have been poorly pruned (lopped) previously, presumably for power line clearance. Refer to Section 7.2 for more details regarding the management of this issue.

Figure 23: Trees to the north of Kennedy Street have been pruned for powerline clearance

6.4.6 Street Lighting

Another above ground infrastructure conflict was tree canopies growing around or close to the street lighting (Figure 24). Street lighting is an important aspect for contributing to a sense of safety for the local community in Hamilton at night time. This was not a widespread issue and can be easily rectified with minor clearance pruning. This pruning will not impact the health or longevity of the street trees.

Figure 24: Street lighting and tree canopy conflict

7. Recommended Arboriculture Works

Works have been recommended for 132 of the 180 trees assessed. Some trees have been recommended for more than one type of work. 48 trees require no works at this time. The most common or significant works recommended were:

- tree removal,
- management of epicormics growth or crown restoration pruning,
- risk reduction pruning,

- canopy lifting,
- asset and property clearance pruning,
- codominant reduction pruning
- deadwood removal and
- branch or stem cable installation.

These recommended works are described in the following section.

7.1 Tree removal

12 trees have been recommended for removal. All except one were in poor to very poor condition and have a Useful Life Expectancy of less than 5 years (Figure 25 and Figure 26). Many of these trees are *Ulmus procera* located along Lonsdale Street or Hamilton Place which runs parallel to the north (Figure 27).

Figure 25: Tree 31787 has been recommended for removal due to its poor condition

Figure 26: Tree 30787 has been recommended for removal due to its poor condition

Figure 27: Trees recommended for removal (red circle) and trees requiring pruning works (green circle)

7.2 Manage epicormic regrowth / Crown restoration pruning

Many of the trees along French Street have been lopped previously and now require ongoing management (Figure 28). These trees have multiple epicormic branches originating from the point of previous lopping (Figure 29). Epicormic growth is produced from dormant buds that lie beneath the bark of a tree. This growth does not form part of the tree's natural structure and, once the resultant branches reach a large size, they can be prone to failure (Shigo 1991). Removal of several of these branches as to leave 1-3 main branches to form a non-crowded, structurally sound and properly formed canopy is necessary. Crown restoration pruning has been recommended for 12 trees.

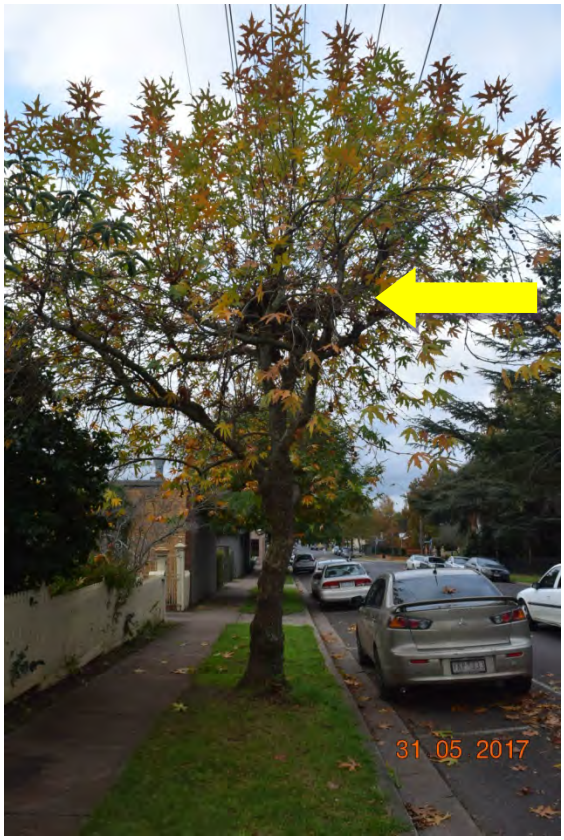


Figure 28: Lopped *Platanus orientalis* that requires epicormic regrowth management

Figure 29: Multiple epicormic shoots originate from the lopping point

Crown restoration pruning involves the selection of sound scaffold branches and thinning of unnecessary branches to create a natural and structurally sound tree form. Crown restoration is usually undertaken over multiple pruning events spread over 3-5 years to minimise the shock of significant pruning within one growing season. It is normally undertaken in conjunction with risk reduction pruning of the remaining epicormic shoots (Lawrence, Norquay and Liffman 1993), however complete removal of smaller diameter shoots is acceptable.

There were a large number of epicormic shoots (approx. 10-15) growing from the lopped point. These will continue to growth in diameter and compete with each other within a confined space. A staged pruning program has been recommended with the aim of retaining a single leader and improving tree structure.

1st pruning

- Complete removal of epicormic shoots so that 6-8 (including the preferred single leader) remain

2nd pruning

- Complete removal of epicormic shoots so that 3-4 (including the preferred single leader) remain
- Undertake this pruning approx. 18-24 months after 1st pruning

3rd pruning

- Complete removal of epicormic shoots so that 1-2 remain

- Undertake this pruning approx. 12-24 months after 2nd pruning

7.3 Risk reduction pruning of large branches over targets

16 trees have been recommended for risk reduction pruning of large branches that overhang targets. Risk reduction pruning of overextended limbs can reduce the possibility of failure. The aim is the selective pruning of long and extended branches back to a shorter, more compact growing point. This reduces the overall weight, length and leverage on the branch union. Long or over-extended branches should be selectively pruned to reduce the 'end' or tip weight. This should start from the ends of branches (3rd order) and work back so as to prevent 'Lion Tailing' (Figure 30). In some cases it may be necessary to additionally remove 2nd order branching to achieve a particular outcome; however, cuts should be limited to a size of no greater than 70mm diameter where possible. These works will require qualified and experienced arborists to complete.

Undertaking a risk reduction pruning program of the upper canopy of a tree reduces the risk of branch and stem failure to a manageable level, and extends the tree's Useful Life Expectancy (ULE). It should be noted that risk reduction pruning only **reduces** the chances of branch and trunk failure. It does not remove the potential for failure entirely.

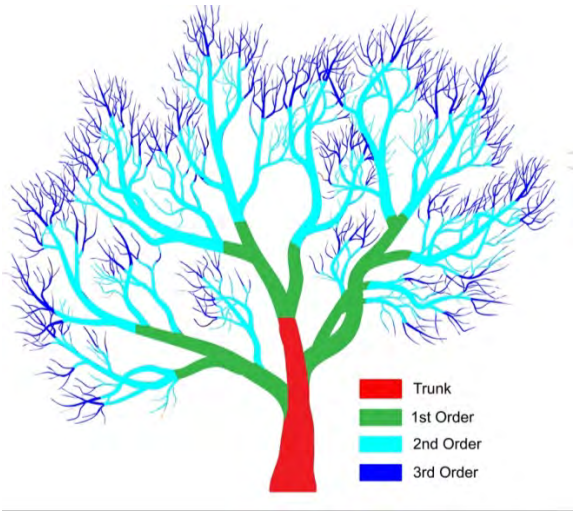


Figure 30: Tree structure representing multiple branching orders.

7.4 Canopy lift

86 trees have been recommended for canopy lift pruning. The lower branches in the canopy of the tree should be reduced or removed to allow clear pedestrian or vehicle access. In general 2.5m clearance over footpaths and 4.5m clearance over roadways is required.

The closer the branches are to the height of the average pedestrian the higher the priority of the canopy lifting required.

These works may be completed by less qualified staff providing the staff have an understanding of basic tree pruning principles and are adequately trained for the required tasks.

7.5 Deadwood

32 trees have been recommended for deadwood removal from the canopy. All dead branches down to 50mm in diameter should be removed from the canopy.

7.6 Install canopy cable

A very large *Eucalyptus globulus* (Blue Gum, ID = 31619) located at the intersection of Lonsdale and Thompsons Streets has a high visual presence in the landscape (Figure 31). However the tree has significant structural issues (Figure 32) and active management or removal of the tree has been recommended. Works have been recommended in this report, including cable installation within the canopy. If these works are undertaken, the ULE of this tree is likely to be 5-10 years.

Figure 31: A very large *Eucalyptus globulus (*Tree 31619) that requires urgent works

Figure 32: Tree 31619 has very poor structure with trunk cavities and heavy trunk decay

7.7 Property/Asset Clearance

The branches in the canopy of the tree should be reduced or removed to ensure clearances from buildings and other assets are maintained. Branches should be kept clear of buildings to ensure a 2.0m clearance over the building is maintained. While ensuring that building clearance is maintained, it should be noted that it is acceptable for branches to overhang a building, provided a vertical clearance of no less than two metres is maintained. Branches should also be reduced or removed to ensure a clear light path or maximum lighting for street and park lighting.

7.8 Codominant reduction and codominant removal

Codominant trunks are a common reason for reducing a tree's structure rating. In normal development, branches attach to the trunk of the tree via a series of interlocking wood fibres.

As the tree grows, fibres from the branch are 'overlaid' by fibres from the trunk and then branch fibres overlay the trunk fibres (Shigo 1991).

Where multiple stems develop from the trunk, the same degree of fibre interlocking is not exhibited leading to a weaker attachment. In many situations where dual-leaders have developed, the wood fibres actually become ingrown. This is known as 'included bark' and can be readily identified in a stem crotch. Codominant trees with included bark have a higher failure potential as they can literally split apart (Shigo 1991). Complete stem failure in trees with large codominant stems is possible and can often be avoided through proactive management.

To reduce the hazard associated with the codominant branch unions, one or more of the codominant stems can either be removed completely or incrementally reduced through a number of pruning events over a period of time. Removal or reduction of the less significant leader allows the remaining stem to gain dominance and continue to grow, improving the structure of the tree and reducing the likelihood of failure.

7.9 Works Priorities and Timeframes

All works have been assigned a priority related to the recommended timeline for their completion (Table 7).

Table 7: Summary of work priorities and associated timeframes.

Priority	Number of trees	Typical Works	Completion Timeframe
Urgent	4	Cabling (*Eucalyptus globulus* , see Section 7.6) Asset clearance (LV or service wires)	Within 6 months
High	61	Tree removal Manage epicormic growth Risk reduction pruning Canopy lift Codominant stem or limb reduction/removal	Within 18 months
Moderate	66	Deadwood removal Canopy lift Property/asset clearance	Within 3 years
Low	1	Manage epicormic growth	Within 5 years
None	48		No works recommended at this time

7.10 Pruning Standards and Qualifications

All pruning works should be carried out or be directly supervised by qualified arborists.

At least one fully qualified arborist must be present on site at all times during pruning operations. The minimum qualification should be;

- An Advanced Certificate of Arboriculture.
- A National Certificate in Horticulture (Arboriculture) AQF Level 3.

All pruning undertaken must conform to the Australian Standard AS-4373 2007: *Pruning of Amenity Trees* (Standards Australia 2007).

8. Value of the street trees

The street trees in the Hamilton CBD provide substantial amenity and contribute to the quality of the experience enjoyed by residents and visitors in the city. They play an important role in providing shaded places for pedestrians and cyclists during Summer months that makes these active forms of travel more appealing.

It is important that street trees are viewed, similarly to roads and footpaths as essential infrastructure. Calculating the monetary value of trees is one way to recognise the value of these infrastructure assets.

A number of different methods are commonly used to calculate monetary values for tree amenity. The City of Melbourne method is a method used by a number of local government areas in Melbourne to calculate compensation for street and park trees that may be removed as a result of development. This method uses the trunk diameter (DBH) to determine the base value, a value that is then adjusted based on the four modifying criteria – species, aesthetics, locality and condition:

Value (V) = Basic Value ($) x Species (S) x Aesthetics (A) x Locality (L) x Condition (C)

Using the City of Melbourne method the amenity value of individual *Platanus* x*acerifolia* and *P. orientalis* trees in Hamilton CBD varies from approximately $4,000 to $34,000, with value increasing with increases in tree trunk diameter (Table 8). The DBH of the trees ranges from 22cm to 58cm and a condition rating of “Fair” was used to calculate these indicative values.

iTree Eco is another valuation tool that calculates the benefits of street trees more broadly. The value of ecosystem services provided by street trees is calculated in addition to the amenity (structural) value. The contribution that street trees provide in terms of air pollution removal, carbon storage and sequestration and avoided stormwater runoff are determined. An iTree Eco analysis has not been undertaken on the Hamilton CBD streets trees.

Table 8: Indicative tree amenity values for *Platanus* specimens of various sizes using the City of Melbourne valuation method

Amenity Value	Base value	Species factor	Aesthetics	Locality	Condition
	($) 2013	S = *Platanus*	A = Street Planting	City Centre Secondary Street	Fair = 0.6
$3,765.54	*20cm DBH:* $3,443.57	0.9	0.9	2.25	0.6
$8,472.48	*30cm DBH:* $7,748.04	0.9	0.9	2.25	0.6
$15,062.19	*40cm DBH:* $13,774.29	0.9	0.9	2.25	0.6
$23,534.67	*50cm DBH:* $21,522.33	0.9	0.9	2.25	0.6
$33,889.93	*60cm DBH:* $30,992.16	0.9	0.9	2.25	0.6

9. Tree management recommendations as part of the CBD Revitalisation Project

Street trees will be an essential component of the successful revitalisation of Hamilton CBD. The existing trees provide shade during Summer and improve the streetscape amenity. Much of the central business district is built infrastructure with buildings, paving and roadways all retaining heat and presumably cause an urban heat island effect. Street trees help to cool the city both by providing shade and through transpiration cooling. This is important for the local community as excessive heat is a risk to public health.

Cooling benefits provided by trees will become increasingly important with the revitalisation project aiming to increase the density of development and also the number of people living in the CBD (Municipal Strategic Statement). Designs that integrate street tree planting and stormwater and rainwater runoff management can offer multiple benefits.

An integral component of the success of street trees as long term landscape components will be managing the conflict with built infrastructure. The trees are planted close to many essential infrastructures within the city including footpaths, roads and on-street parking and have caused low to moderate infrastructure damage. Two options are presented for the ongoing management of the central business district street trees to ensure infrastructure conflicts are manageable and the benefits of the trees are retained. These are to manage tree root growth with minor changes to infrastructure, or to redesign the infrastructure to accommodate the trees and tree growth. Broad scale removal and replacement of the existing trees is not recommended due to the considerable value and benefits the existing tree population provides. Prior to investigating either of the two options presented, it is first recommended that a collaborative, cross-disciplinary team is established.

9.1 Form a collaborative, cross-disciplinary design team

When planting large trees in streetscapes, appropriate planning is required. It is important to form a collaborative and cross disciplinary design team to plan and also manage the integration of the street trees within the city. This approach acknowledges that trees, footpaths and roads are all important public infrastructure assets. The design of new spaces (such as the redevelopment of Cox Streets) should aim to provide sufficient space for tree growth and ensuring surrounding infrastructure is of a quality and design that realises the growth potential of the tree. Securing early and substantial input from a tree specialist is important (Figure 33).

In brief: what needs to be done	Who does it
Have clear policies for the protection, care and planting of trees and commit to their enforcement.	– Planner/policy officer – Design champion/Client representative(s) – Tree officer/specialist – Project manager
Articulate the value of existing and proposed trees in the scheme value assessment.	– Design specialist(s) – Tree officer/specialist – Project manager
Articulate the benefits of existing and proposed trees bring to achieve the project vision and objectives.	– Design specialist(s) – Tree officer/specialist – Project manager
Secure access to the right skills for the team, including, where needed, expertise on soils, veteran trees, young trees, arboriculture, urban forestry.	– Design specialist(s) – Tree officer/specialist – Project manager
Incorporate five years of post-planting care in capital project costs.	– Project manager – Client representative(s)
Take a partnership approach to funding.	– Project manager – Client representative(s)

Figure 33: Design process to ensure integrated design solutions (TDAG 2014)

9.2 Option 1: Manage tree root growth and minor infrastructure changes

9.2.1 Objective

The objective of Option 1 is to manage the trees to reduce infrastructure conflicts while only undertaking minor or moderate localised changes to the existing built infrastructure. Totally removing the problem where root-infrastructure conflict exists may not be achievable although if this approach is taken renovation of soil spaces is recommended wherever possible (Section 9.2.6). In general, a more realistic aim will be to maximise the interval between intervention thresholds being broken and action is required. This approach will require regular ongoing root management and tree growth may be compromised to some extent. Increased infrastructure maintenance budgets may need to be developed for localised footpath repairs and reinstatement however capital expenditure on infrastructure upgrades will be low.

Measures to manage tree root growth and modify existing infrastructure include (Figure 34 and Figure 35):

- Root pruning and root barrier installation

- Localised footpath reinstatement
- Modification of parking configurations and tree cut outs
- Modified kerb reinstatement.
- Renovation of soil spaces below carpark and footpath areas

Figure 34: Option 1 recommended measures – increase tree pit size (yellow), install root barrier (green) and renovate below ground space under pavement

Figure 35: Option 1 recommended measures - install root barrier (green) and renovate below ground space under footpath

9.2.2 Root pruning and root barrier installation

Pruning roots adjacent to the property boundary in areas where private assets are being damaged is recommended (Figure 37). While root pruning wounds the tree and can result in root decay, observations of *Platanus xacerifolia* in urban areas within south-eastern Australia suggest that the species is very tolerant of root pruning (Rogers 2014).

Root pruning is often carried out on trees that have been implicated in causing damage to built infrastructure. Removing the offending root/s should reduce the damage however this is not a permanent fix. One of the consequences of root pruning is that the pruned root will re-shoot, generally near the severed end (

Figure 36B) (Shigo 1991, Watson 1994). Over time the root will often reconstitute approximately the same root as existed prior to pruning (

Figure 36C & D) (Watson 1994).

Similar to pruning the above ground parts of the tree, root pruning should be undertaken using sharp tools (Shigo 1991). The timing of root pruning is important. Root pruning works should be undertaken when trees are deciduous or in advanced stage of leaf drop, generally between May to October (Rogers 2014). The risk of impacting tree health as a result of water deficit stress is unacceptable if major root pruning is undertaken outside of these times.

Root barriers are designed to deflect any new roots away from the private assets. Root barrier should be installed to a depth of 1000-1200mm following root pruning in areas where large root growth is impacting retaining walls or buildings. Careful installation of the barrier is essential to ensure the barrier is not damaged during the reinstatement of the footpath. Only civil contractors with expertise in reinstating infrastructure around root barriers should be engaged to undertake these works. It is important to ensure there are no gaps in the barrier for roots to grow through. The top of the root barrier should be sealed within the concrete to ensure roots don't grow over the top of the barrier.

The efficacy of root barriers is variable. Root barrier is unlikely to provide a permanent fix to infrastructure conflicts but provides a greater likelihood of root growth being prevented in some locations or extending the frequency between maintenance events.

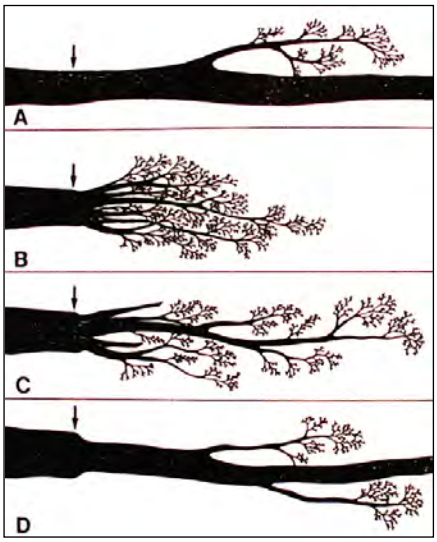


Figure 36: Stages of root growth following pruning (Watson 1994)

Figure 37: Indicative location (arrow) to install root barrier within footpath, close to private assets (Photo source: Chris Sullivan)

9.2.3 Localised footpath reinstatement

The footpaths in French, Kennedy, Lonsdale and Cox Streets are concrete and presumably constructed using standard depths of non reinforced concrete. Standard construction for concrete footpaths uses approximately 75mm crushed rock base with a 75mm concrete cap.

The footpath design and construction method should be reviewed in areas where reinstatement of damaged footpath occurs due to conflicts with root growth. Possible options to strengthen the footpath and/or discourage surfacing rooting include:

- Thicker concrete footpath. Increasing the thickness to 150-250mm would increase the longevity of pavements in proximity to trees (Costello & Jones 2003). Thicker concrete only needs to be installed within the root zone areas.
- Reinforced concrete. Reinforced concrete is commonly used in construction and is known to reduce the instance of cracking (Costello & Jones 2003). Steel reinforced mesh is laid in the concrete layer and allows the concrete slabs to act as a single unit.
- Installation of structural soil below the footpath to a minimum depth of 600mm (and around existing roots).
- Expansion joints are placed at intervals to reduce buckling. The concrete is further strengthened with the inclusion of two to three slip dowels, reducing differential lifting between the concrete slabs (Costello & Jones 2003). The inclusion of dowel bars is recommended for inclusion where tree root conflicts are likely to arise (Sujeeva and Xie nd.).

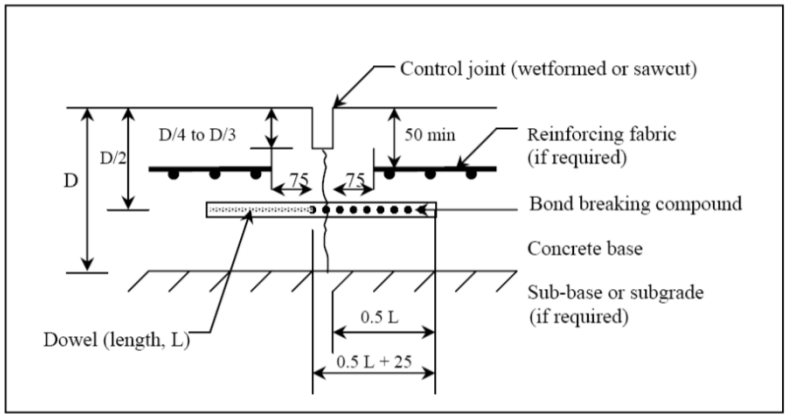


Figure 38: Dowelled control joint. Adapted from Sujeeva and Xie (nd).

Joint site inspections with an engineer and arborist are recommended to identify the best action to manage the different infrastructure conflicts. Ideally both the footpath design and the growing conditions below will be modified where possible to minimise the reoccurrence of footpath damage.

9.2.4 Modify parking configurations

The trees planted within the on-street parking lane were located in very small cut outs with blue stone edging (Figure 39). Large surface roots were visible in many cut outs and the blue stone and asphalt had moved in many instances. *Platanus* x*acerifolia* can form large buttress roots which may in time extend to the edge of the cut outs (Figure 40).

Increasing the size of the cut out will reduce root conflicts with the surrounding infrastructure. A review of the current parking bay layout and requirements is recommended with the aim of increasing the size of the cut outs (see Section 9.3.5). Ideally the area underneath the adjoining carpark spaces will also be renovated to provide deeper growing spaces for tree roots and provide a longer term solution to the infrastructure conflicts (see Section 9.2.6).

Figure 39: A review of parking configurations is recommended to increase the size of the cut outs

9.2.5 Modified kerb reinstatement

Platanus xacerifolia planted in narrow nature strips or small planting cut outs can cause damage to kerbs due to buttress root growth (Figure 40). Pruning these large structural roots to maintain the original kerb design is not recommended. Instead a minor adjustment to the kerb near the buttressing roots is recommended (Figure 41). Asphalt is more malleable than concrete and has been successfully used by Stonnington City Council to construct sections of modified kerb around buttressing roots. The root buttress then acts as a barrier to the stormwater and ensures effective road drainage is maintained.

Figure 40: Large buttress roots forming on a *Platanus* x*acerifolia* in Gray Street, Hamilton

Figure 41: Modified kerb reinstatement method to allow space for buttressing trees roots and maintain effective road drainage (Photo Source: Steve Watt, Stonnington City Council)

9.2.6 Renovation of soil spaces below carpark and footpath areas

Localised renovation of the below ground spaces near the existing mature trees is recommended to minimise ongoing damage caused by surface tree roots. This approach should be explored for carpark and footpath areas around the trees. Existing soil that is likely to be compacted is carefully removed from the tree root zone area using careful water

excavation techniques. Structural soils are then installed to provide well aerated spaces for roots to grow deeper down in the planting space. The City of Stockholm document “Planting beds in the City of Stockholm: A handbook” provides detailed information on how this can be successfully undertaken. This approach could be trialled in a number of locations to confirm it’s success before being adopted more widely. This method provides a great opportunity to retrofit designed root growth spaces around existing street trees and would be best suited to trees in Gray, Brown and Thompson Streets.

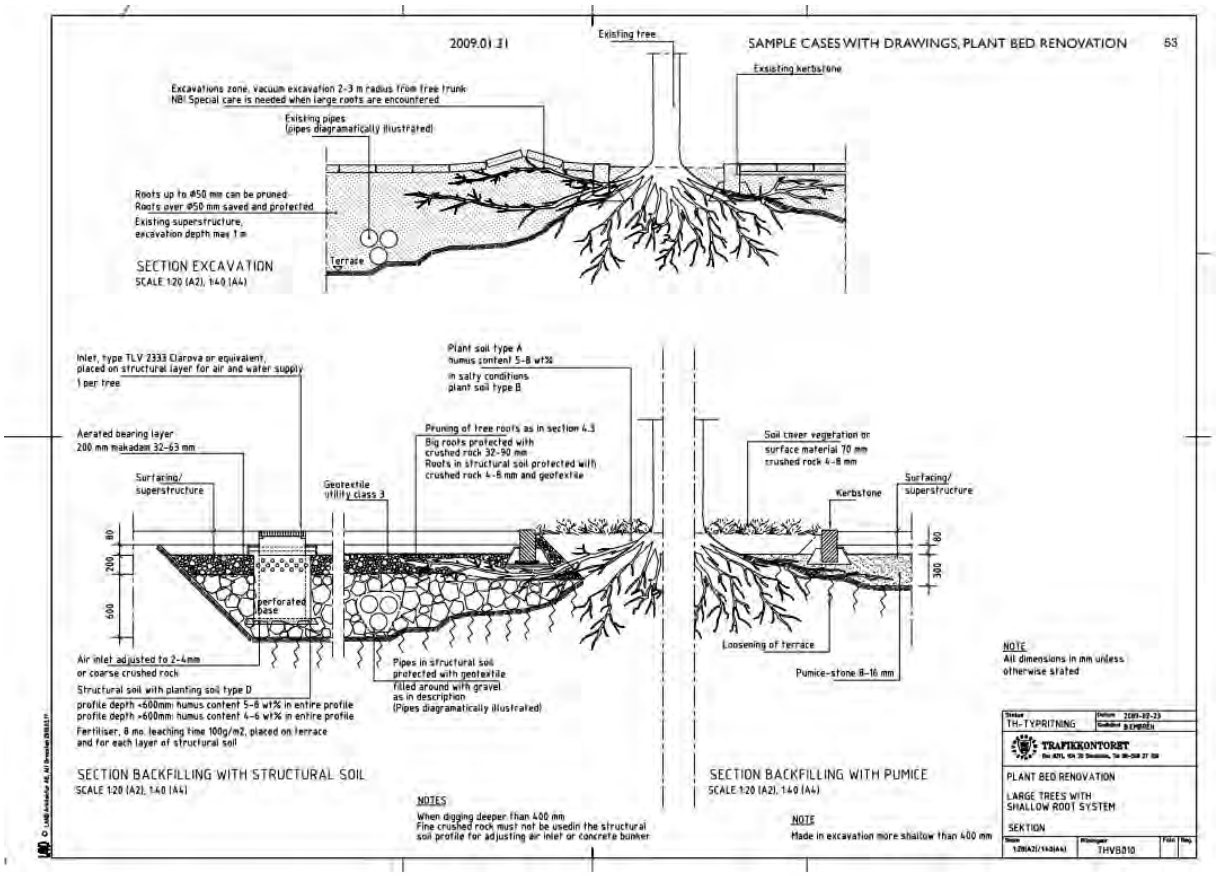


Figure 42: Renovation of planting area around large trees with a shallow root system (City of Stockholm 2009)

9.3 Option 2: Redesign built infrastructure to accommodate trees

9.3.1 Objective

The objective of Option 2 is to design integrated tree and infrastructure streetscapes that reflect best practice and deliver multiple benefits to the community. The streetscapes will be designed to accommodate tree roots. The aim of this approach is to grow healthy trees and to remove conflicts between infrastructure and trees for the life of these important city assets. Planting pits will be designed to encourage deeper tree root growth. Option 2 will mostly apply to whole street renovation scale projects although the designs could be retrofitted in part in the existing streets. Capital expenditure will be higher, but long term maintenance will be lower. Option 2 will ensure that the highest benefits from street trees are delivered for the local community.

Integrated infrastructure designs include:

- Designed rooting volume and appropriate depth
- Load bearing soils *(*Structural Soils and Soil Cells)
- Incorporate water sensitive urban design (stormwater and rainwater runoff management)
- Adequate tree pit openings

9.3.2 Designed rooting volume and appropriate depth

Future street tree planting pits should be designed with adequate underground space for root growth. Ensuring sufficient space for roots will cater for healthy trees and minimise potential infrastructure conflicts. Large and healthy trees are required to maximise the amenity and ecosystem benefits they provide to the local community. Large available soil volumes for trees may assist urban trees to build some resilience to climate change.

Future streetscape renovations designs should:

- Ensure minimum soil volume requirements are set that consider the soil type and access to surrounding native soil. Leake & Haege (2014) and Urban (2008) describe two methods for calculating soil volumes required for tree growth.
- Ensure tree planting sites provide aerated and uncompacted zones to encourage deeper rooting
- Encourage shared spaces between trees (trenches rather than pits)

Figure 43: Tree performance success in highly built up areas requires and integrated approach to design appropriate tree rooting volumes and depth. Large available soil volumes need to be designed with trees in mind.

Designed soil zones are required to deliver successful shared zones that cater for both the built and living infrastructure. Different options for creating load bearing soils that have uncompacted spaces for root growth are described in the following section. Suspended pavements would be another option to achieve this outcome, but this option has not been explored further in this report.

9.3.3 Load bearing soils *(*Structural Soils and Soil Cells)

Conventional pavement construction techniques result in very high levels of soil compaction. Tree roots cannot grow in highly compacted soils. Structural soils and soil cells have been designed to be both load bearing for pavements while also providing uncompacted spaces for tree root growth. Both techniques are being increasingly used in Victoria to provide an integrated approach to trees and infrastructure in urban areas (Figure 44, Figure 45, Figure 46 and Figure 47).

- Structural soils are made up of mixture of crushed rock and soil. The rocks form a load bearing matrix which has many larger voids (approximately 30%). These voids are filled with uncompacted soil, air and water providing a good growing environment for tree roots. The City of Stockholm (Sweden) has been extensively using structural soil systems for street trees in highly urbanised areas for the last 12 years. Their system includes a ventilation chamber which lets carbon dioxide escape from the tree root zone area (Figure 48). This increases the aeration levels in the root zone and their systems typically integrate stormwater management.
- Soil cells are plastic or fibreglass structure that are stacked together and are filled with uncompacted planting soil. The plastic cells are load bearing and provide the structure to support the paving. There are a number of different commercial products available. The relative moisture holding capacity per cubic metre is higher than for structural soils, which consist of rock based matrix.

Figure 44: Structural soil installed under footpath for root growth (Photo Source: Steve Watt, Stonnington City Council)

Figure 45: Modified road cut out and kerb location (Photo Source: Steve Watt, Stonnington City Council)

Figure 46: Trench of soil cells prior to the addition of uncompacted soil (Photo Source: Steve Watt, Stonnington City Council)

Figure 47: New trees planted in soil cell trench (Photo Source: Steve Watt, Stonnington City Council)

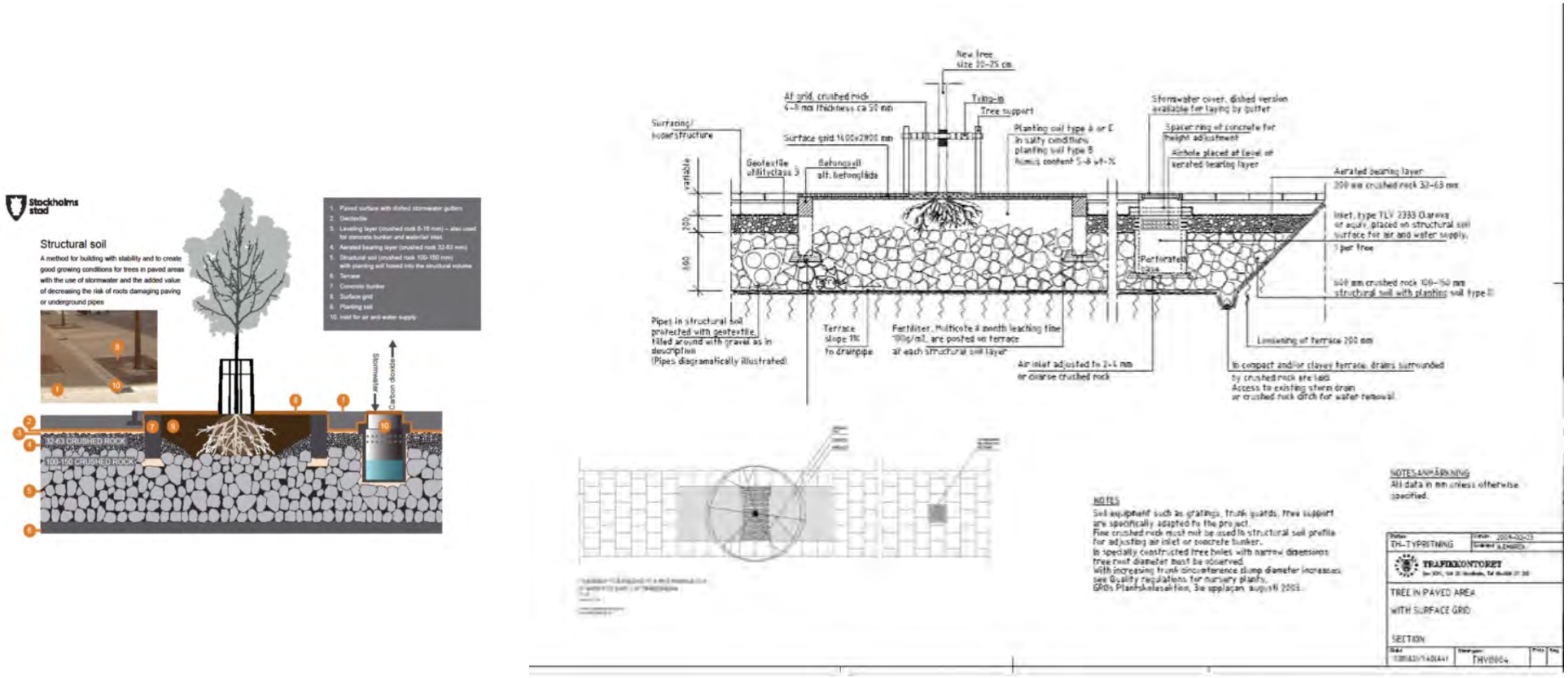


Figure 48: Stockholm structural soil system, an integrated approach to trees and infrastructure (City of Stockholm)

In Stockholm large areas of structural soil are installed under paved surfaces. Trees are planted in concrete boxes that ensure the pavement is held in place (Figure 49). The concrete boxes have gaps at 300mm and below that allow the roots to grow out in to the large areas of structural soils. This discourages surface root growth so that tree and infrastructure conflicts are avoided.

Figure 49: Concrete boxes for tree planting surrounded by the Stockholm structural soil (City of Stockholm)

9.3.4 Incorporate water sensitive urban design (stormwater and rainwater runoff management)

Ensuring new streetscape works meet minimum standards of water sensitive urban design is listed within the Municipal Strategic Statement to address environmental and landscape values. Opportunities exist to incorporate stormwater management as part of the new tree planting pit designs (Figure 50). This will benefit the trees, but also reduce the stormwater runoff volumes and nutrient loads that drain from Hamilton CBD. Therefore, the CBD revitalisation project would also support the waterway nutrient and turbidity management action within the Hamilton Shire Council Sustainability Strategy. An important goal of streetscape design is to achieve multi-functional landscapes. That is each design should deliver multiple urban benefits.

Opportunities also exist to divert rainwater runoff from building roofs to tree root zones rather than draining this water directly to the stormwater system. The redesign of CBD streetscapes could connect down pipes from buildings to tree planting pits, in areas where buildings are constructed to the property boundary.

Figure 50: Future streetscape designs should integrate stormwater drainage and street tree planting pits to achieve multiple benefits

There are many different design approaches to deliver stormwater to the tree root zone. The Living Infrastructure Plan for the Metro Tunnel in Melbourne includes a passive irrigation best practice note which details some considerations in terms of inlet design, overflow drainage and water distribution (MRRA 2017). Some case studies that have successfully integrated water drainage and tree planting in urbanised areas and may be relevant to Hamilton CBD include:

- Tanderrum Way, Broadmeadows (City of Hume), see https://www.clearwater.asn.au/user-data/case-studies/plans-designs/Tanderrum-Way_Print-version.pdf
- Collins Street, Melbourne (City of Melbourne) http://urbanwater.melbourne.vic.gov.au/projects/permeability-infiltration/permeable-bluestone-pavement/
- Stockholm CBD where water from down pipes is frequently drained in to tree planting pits constructed with large rock aggregate, that is the Stockholm Structural Soil (see Figure 51)
- Various locations within the City of Mitcham (Adelaide) where permeable pavers have been installed in carparks and footpaths. Research has shown that porous pavers can successfully improve root growth in conditions where the soil underneath is uncompacted. Soil compaction however appeared to negate the benefit of pavement porosity (Morgenroth 2010).

Figure 51: Rainwater runoff from buildings is directed in to the Stockholm structural soil zones for use by the street trees (City of Stockholm)

Figure 52: Permeable paver carpark surface in Adelaide (City of Mitcham)

9.3.5 Adequate tree pit openings

Tree pit size openings should be at least 500mm wider than tree trunk width at maturity. The existing tree pit sizes are too small for many of the trees and they have not yet reached their mature size. Car parking configurations should be reviewed to determine if the current tree pit openings can be increased to provide more space for the buttress roots.

9.4 Options summary and comparison

Two options for managing future conflicts between street trees and built infrastructure within Hamilton CBD are described and some indicative costings provided in the table below.

Option 1 is a largely reactive approach that focuses more on remedial measures. This approach assumes very limited changes to the built infrastructure layout are possible. This option will have a lower capital cost but will require more ongoing maintenance. Localised and fragmented renovation of below ground spaces near trees is encouraged wherever possible in an attempt to minimise ongoing conflicts in the future.

Option 2 is a proactive approach that aims to re-design the built infrastructure to accommodate trees, particularly their root systems, to minimise or avoid future conflicts. It creates multi-benefit landscapes with water sensitive urban design incorporated in to the tree planting pits. The design and construction may involve skills and techniques that are beyond business as usual. Capital costs of this option will be high and completion timeframes are likely to be longer. It is the preferred option wherever it is feasible.

	Option 1	Option 2
Description	Manage existing trees largely within the current infrastructure configuration (see Section 9.2). Some preventative measures possible, but most actions are more remedial.	Re-design of infrastructure to accommodate trees and minimise future conflicts between trees and infrastructure (see Section 9.3).
Advantages	Lower capital costs Skills and capability exist within the local industry to deliver standard techniques	Proactive approach Focus on preventative measures Optimal tree growth to maximise amenity and shading benefits for pedestrians and cyclists. Canopy coverage maximised Delivers of Council's policy to incorporate WSUD in streetscape designs Low ongoing maintenance costs associated with repairing infrastructure damage Demonstrate leadership in stormwater management
Disadvantages	Reactive approach Mostly remedial actions, greater incidence of tree and infrastructure conflicts than Option 2 Higher ongoing maintenance costs Trees subjected to regular pruning which reduce the overall canopy coverage achieved Limited opportunities to incorporate extensive WSUD	Higher capital costs More innovative approaches that may require staff resources to build capacity and expertise within design and construction teams
Capital Plan	Review car parking layouts within the CBD Renovate below ground spaces to provide deeper planting spaces suitable for root growth Investigate minor modifications to the location and height of kerb near trees	Redesign large spaces under pavement to provide adequate root volume and depth to discourage surface rooting Replace brick paving with a preferred paving material. Integrate stormwater and rainwater runoff within all planting pits Underground power as part of Cox Street upgrade
Capital Cost	Low to Moderate	High Structural soil supply: $\$120/m^3$ Structural cells supply $\$250\text{-}350/m^3$ + gst (more suited to new plantings) Removal and replacement of footpath and parking surfaces Careful soil excavation, specific root pruning and structural soil placement Costs can be reduced if incorporated with street infrastructure upgrade works Power undergrounding (Cox Street)

	Option 1	Option 2
Maintenance Plan	Root barrier installation and root pruning along the edge of the footpath to minimise damage to Private Assets Ongoing localised footpath reinstatement Property asset canopy clearance pruning required	Property asset canopy clearance pruning required
Maintenance Costs	High Root barrier installation: $180 + gst / lm Concrete cutting: $25 + gst / lm Cold pave reinstatement: $25 + gst / lm Soil excavation to 600mm deep and root pruning: $150 + gst / lm *Travel to site not included in prices	Low

9.5 Streetscape renovation priorities

The highest priority streets for renovation works have been highlighted (Table 9). The road reconstruction program was not available for review as part of this project. It is recommended that these priorities are reviewed in terms of the engineering works program to ensure community outcomes are maximised. The engineering and landscape departments should continue to work closely together to ensure capital works programs align across departments.

Cox Street is the first priority for upgrade works within Hamilton CBD. While this street has the least amount of infrastructure conflict damage, the Shire Council has advised that it will be upgraded in the next couple of years to address traffic planning and safety issues. This provides an opportunity to design spaces to accommodate large, healthy trees and improve the amenity of this street (Section 9.2). The current street tree planting is limited.

Lonsdale Street is the second priority for renovation works due to the number of trees that are in decline. Large areas of car parking provide opportunities to incorporate load bearing soils to provide adequate rooting volume and depth for the new trees.

Gray Street is the third priority for renovation works. Tree and infrastructure conflicts are high and this street provides the core of the retail centre. Medium density residental development along this street will be encouraged (as with Lonsdale and Thompson Streets). The Urban Design Framework recommended the replacement of brick paving and reorganisation of space along Gray Street.

Table 9: Highest priority streets for streetscape renovation works

Priority		Comment
1: Cox Street		Planned for renovation in the short to medium term. Set up a cross disciplinary team to ensure an intergrated tree and infrastructure design is developed.
2: Lonsdale Street		Many trees with very low Useful Life Expectancies Set up a cross disciplinary team to ensure an intergrated tree and infrastructure design is developed.

Priority		Comment
3: Gray Street		Significant street in terms of the CBD revitilisation project Explore redesign of space and footpath material to achieve an intergrated approach Higher density urbanisation planned so cooling is a high priority

10. Species selection for future planting

The performances of street trees are likely to be significantly affected by climate change. A study of the distribution of trees around the world found that species distribution was limited by temperature and both mean annual temperature and minimum and maximum extremes were measures that explained this (Kendal & Baumann 2016). The increase densification of Hamilton CBD may also contribute to higher temperatures within the central business district that is an urban heat island effect will be present.

Species from northern areas within North America and Europe have been commonly planted in south-eastern cities within Australia. Many of these are broad leaf deciduous species and are generally well liked by communities. Climate change will result in higher temperatures and species from cooler environments are expected to perform less well under these conditions (Kendal & Baumann 2016). Species to consider limiting or not planting due to concerns with tolerance of future increases in temperature include:

The City of Melbourne have undertaken a study to rate the vulnerability of street trees to increased temperatures. The focus of the study was Melbourne CBD, and while it was not intended that the study findings be translated to the Greater Melbourne area or other cities, there is currently very limited data available to guide species selection for future climates. The annual mean temperature records for Hamilton (Bio01 = 13.5ºC extracted from the Atlas of Living Australia) does show that Hamilton is cooler than Melbourne CBD (16.4 ºC). Therefore, species highlighted as vulnerable to current or future temperatures in Melbourne CBD may still be suitable as street tree species within Hamilton CBD. However, the relative vulnerability of species may be a useful guide to help with future species selection decisions.

Both *Platanus* x*acerifolia* (listed as *Platanus hybrida*) and *Platanus orientalis* currently are planted in cities warmer than Melbourne (Table 10). The two taxa have been rated “green”, that is they are not considered vulnerable, for both the current climate status and severe future climates (Kendal & Baumann 2016). By contrast, *Ulmus procera* is considered vulnerable to the extreme maximum temperatures (44ºC) currently experienced in Melbourne CBD. It is recommended that future selection processes consider replacing the *Ulmus procera* with species from warmer environments.

Table 10: Most common species planted in Hamilton central business district and their temperature vulnerability assessed within the context of the City of Melbourne (Kendal & Baumann 2016).

Botanical Name	Common Name	Temperature vulnerability		Number of trees
		Current Status (mean annual temp of 16.4°C and extreme maximum 44°C)	Moderate Status (current mean annual temp +0.8°C and current extreme maximum temp +0.5°C)	
Platanus xacerifolia (*Platanus hybrid*)	London Plane	Green	Green (Green)	104 (58%)
Ulmus procera	English Elm	Red-max[1]	Red-max (extreme is red)	28 (16%)
Platanus orientalis	Plane	Green	Green (Green)	25 (14%)
Quercus rubra	Red Oak	Red-max	Red-max (extreme is red)	5 (<5%)
Quercus palustris	Pin Oak	Red	Red (Red)	4 (<5%)
Phoenix canariensis	Canary Island Date Palm	Green	Green (green)	3 (<5%)

1 Max – suffix indicates that the rating is due to extreme maximum rather than mean annual temperature

11. Conclusions

Street trees are essential components of achieving Hamilton's vision to be a liveable, beautiful and sustainable city. An assessment of 180 street trees and 12 unplanted sites within Hamilton CBD was undertaken. The trees are mostly mature deciduous specimens. The most common species were *Platanus* x*acerifolia*, *Ulmus procera* and *Platanus orientalis*. The trees were generally in good health and have fair structure. Approximately 40% of the trees had a ULE of greater than 20 years. The current street trees provide good amenity and are an important urban infrastructure asset. The *Platanus* species are not expected to be vulnerable to future rises in temperatures associated with climate change and urban heat island effect. By contrast, *Ulmus procera* grows in cooler environments is expected to be vulnerable to changes in extreme maximum temperatures.

Works have been recommended for 132 of the 180 trees assessed. 4 trees have been assigned urgent works that should be undertaken in the next 6 months.

The trees were located close to a range of built infrastructure elements. Infrastructure conflicts and damage associated with tree growth were observed in road pavement, kerbs, footpaths and some private building assets. Two options for the ongoing management of tree and infrastructure conflicts are discussed. Option 1 is a more reactive approach with lower capital costs and higher ongoing maintenance costs. Option 2 is a proactive approach that creates spaces that accommodate tree growth. The capital cost will be higher and the maintenance costs lower. The proactive option achieves multiple benefits from the one

design and is the preferred approach for achieving an integrated tree and built infrastructure streetscape.

12. Recommendations

Refer to summary

13. References

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Appendix 1. Data Collection Definitions

The information collected on each specimen was based on the assessor's experience and opinion of each of the trees. Included are the descriptions for each of the listed categories. The following information was collected on each tree.

1.1 Botanical name:

The genus, species and common name.

1.2 Canopy dimensions

Height (approximate) and width (measured) of the canopy in metres.

1.3 DBH

Diameter at breast height (measured at 1.3m above ground level).

1.4 Health

Table 11: Health Definition

Term	Definition
Excellent	The tree is demonstrating excellent or exceptional growth. The tree should exhibit a full canopy of foliage and be free of pest and disease problems.
Good	The tree is demonstrating good or exceptional growth. The tree should exhibit a full canopy of foliage, and have only minor pest or diseases problems.
Fair	The tree is in reasonable condition and growing well. The tree should exhibit an adequate canopy of foliage. There may be some deadwood present in the crown. Some grazing by insects or possums may be evident.
Poor	The tree is not growing to its full capacity; extension growth of the laterals is minimal. The canopy may be thinning or sparse. Large amounts of deadwood may be evident throughout the crown. Significant pest and disease problems may be evident or symptoms of stress indicating tree decline.
Very Poor	The tree appears to be in a state of decline. The tree is not growing to its full capacity. The canopy may be very thin and sparse. A significant volume of deadwood may be present in the canopy or pest and disease problems may be causing a severe decline in tree health.
Dead	The tree is dead.

1.5 Structure

Table 12. Structure Definition

Term	Definition
Good	The tree has a well defined and balanced crown. Branch unions appear to be strong, with no defects evident in the trunk or the branches. Major limbs are well defined. The tree is considered a good example of the species.
Fair	The tree has some minor problems in the structure of the crown. The crown may be slightly out of balance, and some branch unions may be exhibiting minor structural faults. If the tree has a single trunk, it may be on a slight lean or exhibiting minor defects.
Poor	The tree may have a poorly structured crown. The crown may be unbalanced or exhibit large gaps. Major limbs may not be well defined. Branches may be rubbing or crossing over. Branch unions may be poor or faulty at the point of attachment. The tree may have suffered root damage.
Very Poor	The tree has a poorly structured crown. The crown is unbalanced or exhibit large gaps with possibly large sections of deadwood. Major limbs may not be well defined. Branches may be rubbing or crossing over. Branch unions may be poor or faulty at the point of attachment. Branches may exhibit large cracks that are likely to fail in the future. The tree may have suffered major root damage.
Failed	The tree has a very poorly structured crown. A section of the tree has failed or is in imminent danger of failure.

1.6 Useful Life Expectancy (ULE) Rating

Useful Life Expectancy is approximately how long a tree can be retained safely and usefully in the landscape.

Table 13. ULE Definition

Term	Definition
Unsafe	The tree is considered dangerous in the location and has no significant amenity value.
Less than 5 years	The tree, under normal circumstances and without extra stresses being imposed on it, should be safe and have value for up to five years, but will need to be replaced. During this period, normal inspections and maintenance will be required. If possible, replacement trees should be planted.
5 – 10 years	The tree, under normal circumstances and without extra stresses being imposed on it, should be safe and of value for up to ten years. During this period, normal inspections and maintenance will be required.
11 – 20 years	The tree, under normal circumstances and without extra stresses being imposed on it, should be safe and of value for up to twenty years. During this period, normal inspections and maintenance will be required.
20 – 40 years	The tree, under normal circumstances and without extra stresses being imposed on it, should be safe and of value for up to forty years. During this period, normal inspections and maintenance will be required.
Greater than 40 years	The tree, under normal circumstances and without extra stresses being imposed on it, should be safe and of value for greater than forty years. During this period, normal inspections and maintenance will be required.

1.7 Tree Origin

Table 14. Tree Origin Definition

Term	Definition
Exotic	The species originates in a country other than Australia.
Native	The species originates within Australia.
Indigenous	The species originates within the local environs.

1.8 Contribution to the Landscape Rating

Table 15. Contribution to the Landscape Rating Definition

Term	Definition
High	The tree may be significant in the landscape, offer shade and other amenities such as screening. The tree may assist with erosion control, offer a windbreak or perform a vital function in the location (Eg: Habitat, shade, flowers or fruit).
Medium	The tree may offer some screening in the landscape or serve a particular function in the location.
Low	The tree offers very little in the way of screening or amenity.

1.9 Tree Significance Rating

This rating system is used to rate the significance of trees in a local area. Some trees identified in local areas may be suitable for National or State registration. Trees that have State or National significance would normally be registered by The National Trust and identified as such. This system of rating and any values expressed represents the opinion of the consultant.

Trees may be considered significant in a local area if they fit into one or more of the following categories.

- Exceptional size
- Rare
- Very old
- Unusual shape or form
- Aboriginal cultural value
- Historic value
- Exceptional example of a species
- Economic, genetic
- Outstanding feature in the landscape
- Habitat value
- Erosion control

Table 16. Tree Significance Rating Definition

Term	Definition
Exceptional	A tree is considered exceptional because several of the preceding categories apply to the specimen. This tree is normally one that creates a profound effect on the local area and has an exceptional impact on the tree surveyor
Outstanding	A tree is considered outstanding because one or several of the preceding categories apply to the specimen. This tree is normally one that attracts attention and has a noticeable impact on the area and the tree surveyor.
Valuable	A tree is considered valuable because at least one of the preceding categories may be applicable or partially to the specimen. This tree is normally one that is a reasonable specimen without any particular outstanding features. It normally has a diameter at breast height over 1000mm and has good to average health and structure.
Moderate	A tree is considered to have moderate value because it may be in reasonable condition but may only partially fulfil any one factor. It generally has a diameter at breast height of less than 1000mm and an average or poor health and structure.
Low value	As an individual specimen, the tree is not considered significant. This may be a small specimen, with poor health or structure and be common in occurrence or possibly a weed species. This tree has no impact on the tree surveyor.
Negligible	As an individual specimen, the tree is not considered significant. This may be a very small specimen with very poor health and structure and may be common in occurrence or a weed species. This tree has no impact on the tree surveyor.

Appendix 2. Individual Tree Assessments

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**26379**
Botanical Name:	*Grevillea robusta*
Common Name:	Silky Oak
Origin:	Native
Age:	Mature
Height x Width (m)	9m x 8m
DBH (cm)	33
Health:	Fair
Structure:	Fair
ULE:	5-10 years
Works:	Canopy lift over signage
Priority:	Moderate
Infrastructure Damage:	Signage
Comments:	

Street Planted: LONSDALE STREET

Latitude / Longitude: -37.739782, 142.025992

Failure Potential:	**4. Low**
Failure Size:	**3. 101-250mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **5000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**27131**
Botanical Name:	*Phoenix canariensis*
Common Name:	Canary Island Date Palm
Origin:	Exotic
Age:	Mature
Height x Width (m)	10m x 8m
DBH (cm)	58
Health:	Good
Structure:	Good
ULE:	20-40 years
Works:	No works
Priority:	None
Infrastructure Damage:	Road
Comments:	

Street Planted: LONSDALE STREET

Latitude / Longitude: -37.742196, 142.021257

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**3. Vehicles, stationary**
Risk of Harm:	1 in **500000000**

Individual Tree Assessment - 2017

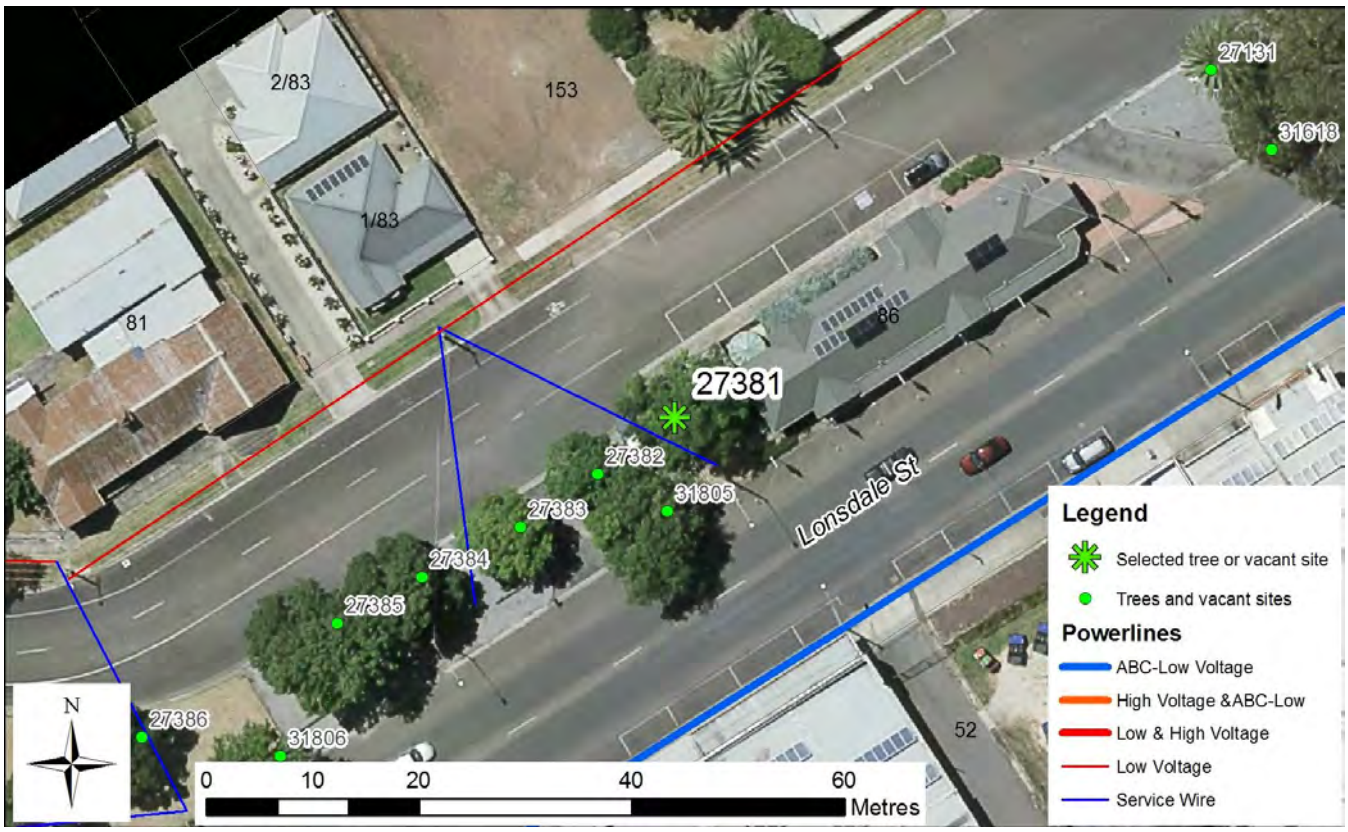
Hamilton CBD

Asset ID:	**27381**
Botanical Name:	*Ulmus procera*
Common Name:	English Elm
Origin:	Exotic
Age:	Mature
Height x Width (m)	14m x 14m
DBH (cm)	47
Health:	Poor
Structure:	Poor
ULE:	5-10 years
Works:	Deadwood removal, reduce large branches over path and carparking
Priority:	High
Infrastructure Damage:	Road
Comments:	

Street Planted: HAMILTON PLACE

Latitude / Longitude: -37.742495, 142.020689

Failure Potential:	**3. Moderate**
Failure Size:	**3. 101-250mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **500000**



Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**27382**
Botanical Name:	*Ulmus procera*
Common Name:	English Elm
Origin:	Exotic
Age:	Mature
Height x Width (m)	9m x 9m
DBH (cm)	54
Health:	Poor
Structure:	Very poor
ULE:	1-5 years
Works:	Removal
Priority:	High
Infrastructure Damage:	Road
Comments:	

Street Planted: HAMILTON PLACE

Latitude / Longitude: -37.742544, 142.020607

Failure Potential:	**2. High**
Failure Size:	**3. 101-250mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **50000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**27383**
Botanical Name:	*Ulmus procera*
Common Name:	English Elm
Origin:	Exotic
Age:	Mature
Height x Width (m)	9m x 9m
DBH (cm)	50
Health:	Poor
Structure:	Very poor
ULE:	1-5 years
Works:	Removal
Priority:	High
Infrastructure Damage:	Road
Comments:	

Street Planted: HAMILTON PLACE

Latitude / Longitude: -37.742589, 142.020526

Failure Potential:	**2. High**
Failure Size:	**3. 101-250mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **50000**

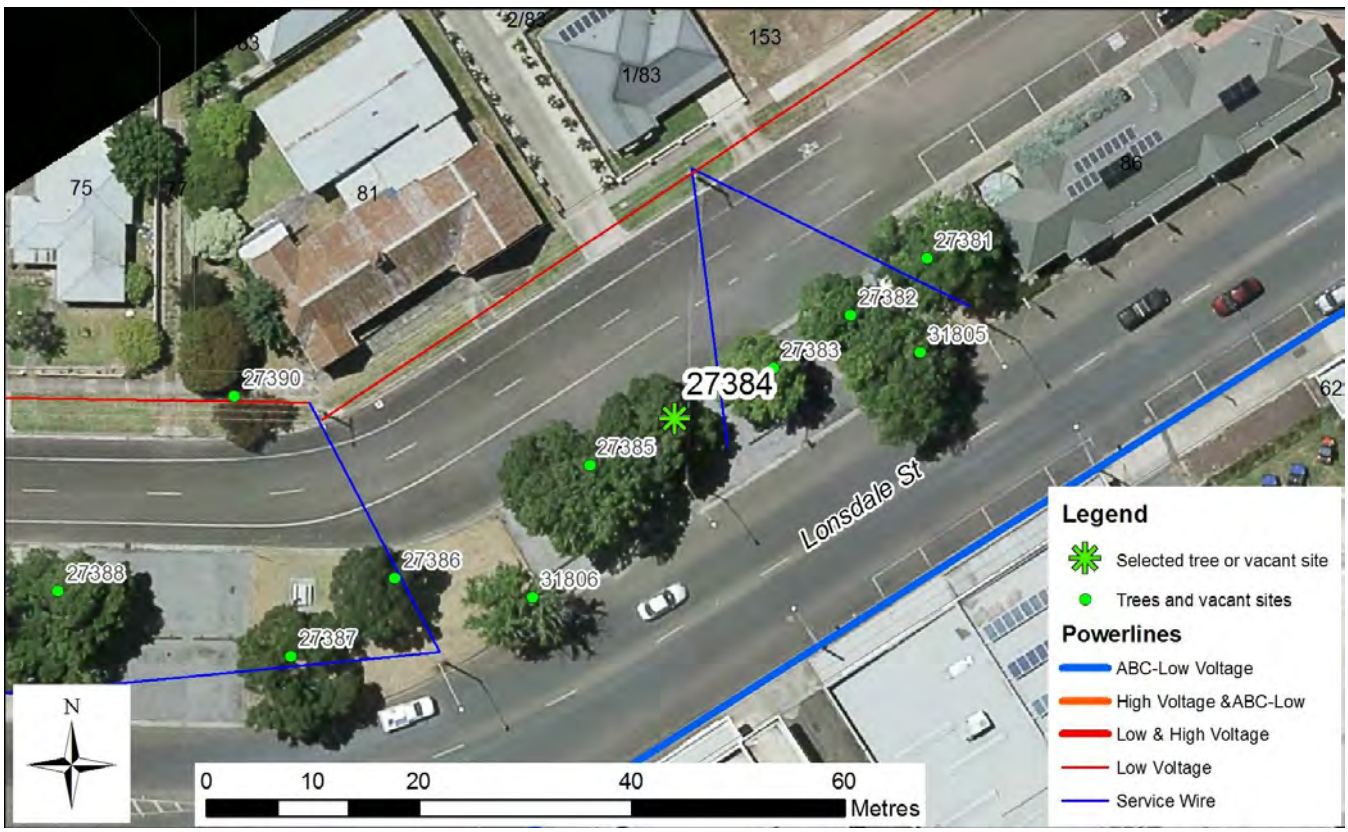
Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**27384**
Botanical Name:	*Ulmus procera*
Common Name:	English Elm
Origin:	Exotic
Age:	Mature
Height x Width (m)	11m x 10m
DBH (cm)	52
Health:	Fair
Structure:	Very poor
ULE:	5-10 years
Works:	Reduce extended branches over road and carparking, Deadwood removal
Priority:	High
Infrastructure Damage:	Road
Comments:	History of small limb failure, decay associated with previous lopping points
Failure Potential:	**3. Moderate**
Failure Size:	**3. 101-250mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **500000**

Street Planted: HAMILTON PLACE

Latitude / Longitude: -37.742632, 142.020421



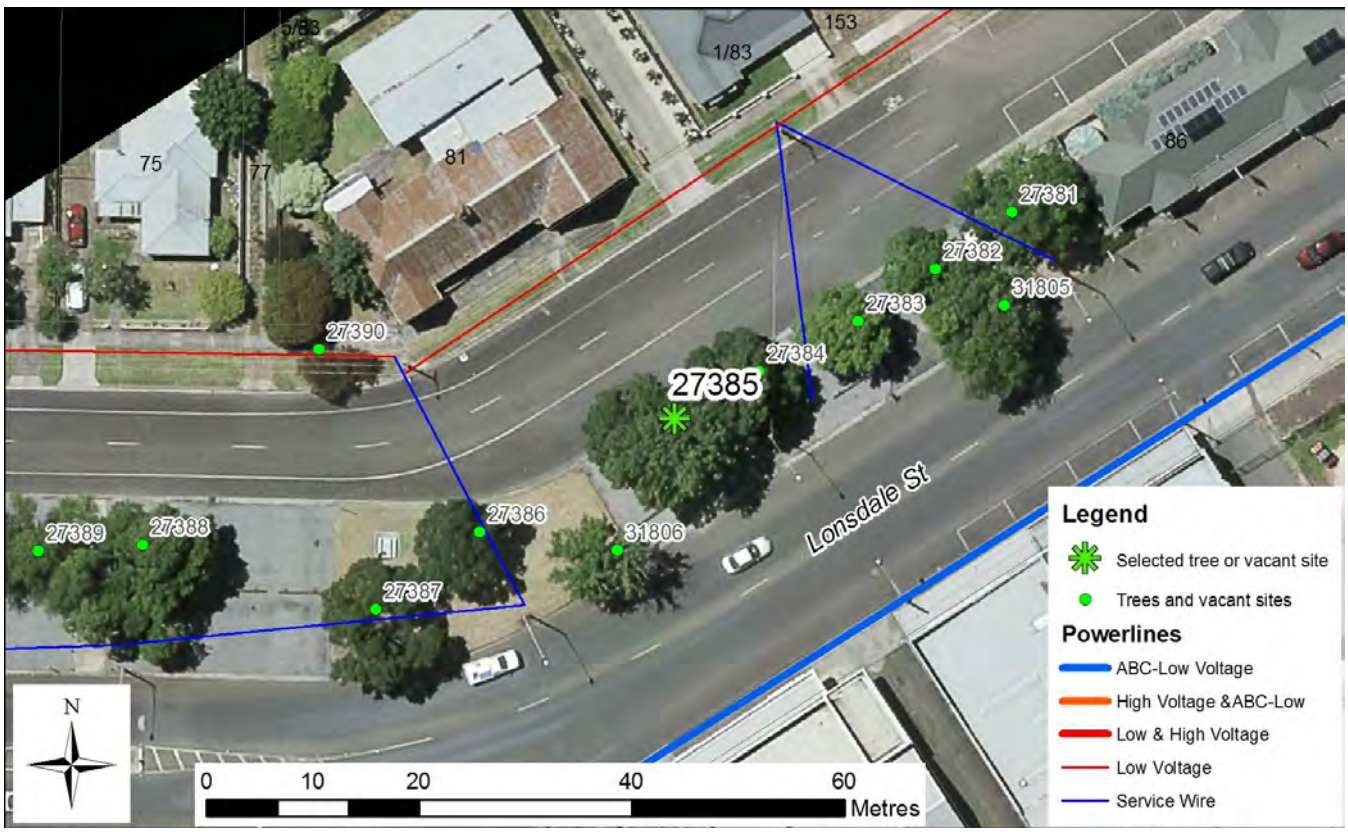
Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**27385**
Botanical Name:	*Ulmus procera*
Common Name:	English Elm
Origin:	Exotic
Age:	Mature
Height x Width (m)	15m x 16m
DBH (cm)	76
Health:	Fair
Structure:	Poor
ULE:	5-10 years
Works:	Reduce extended branches over road and carparking, Deadwood removal
Priority:	High
Infrastructure Damage:	Road
Comments:	History of limb failure, decay associated with previous lopping points
Failure Potential:	**3. Moderate**
Failure Size:	**3. 101-250mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **500000**

Street Planted: HAMILTON PLACE

Latitude / Longitude: -37.742672, 142.020331



Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**27386**
Botanical Name:	*Fraxinus Raywood*
Common Name:	Claret Ash
Origin:	Exotic
Age:	Mature
Height x Width (m)	9m x 10m
DBH (cm)	32
Health:	Good
Structure:	Fair
ULE:	10-20 years
Works:	No works
Priority:	None
Infrastructure Damage:	Service wire above
Comments:	

Street Planted: HAMILTON PLACE

Latitude / Longitude: -37.74277, 142.020124

Failure Potential:	**5. Very Low**
Failure Size:	**3. 101-250mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

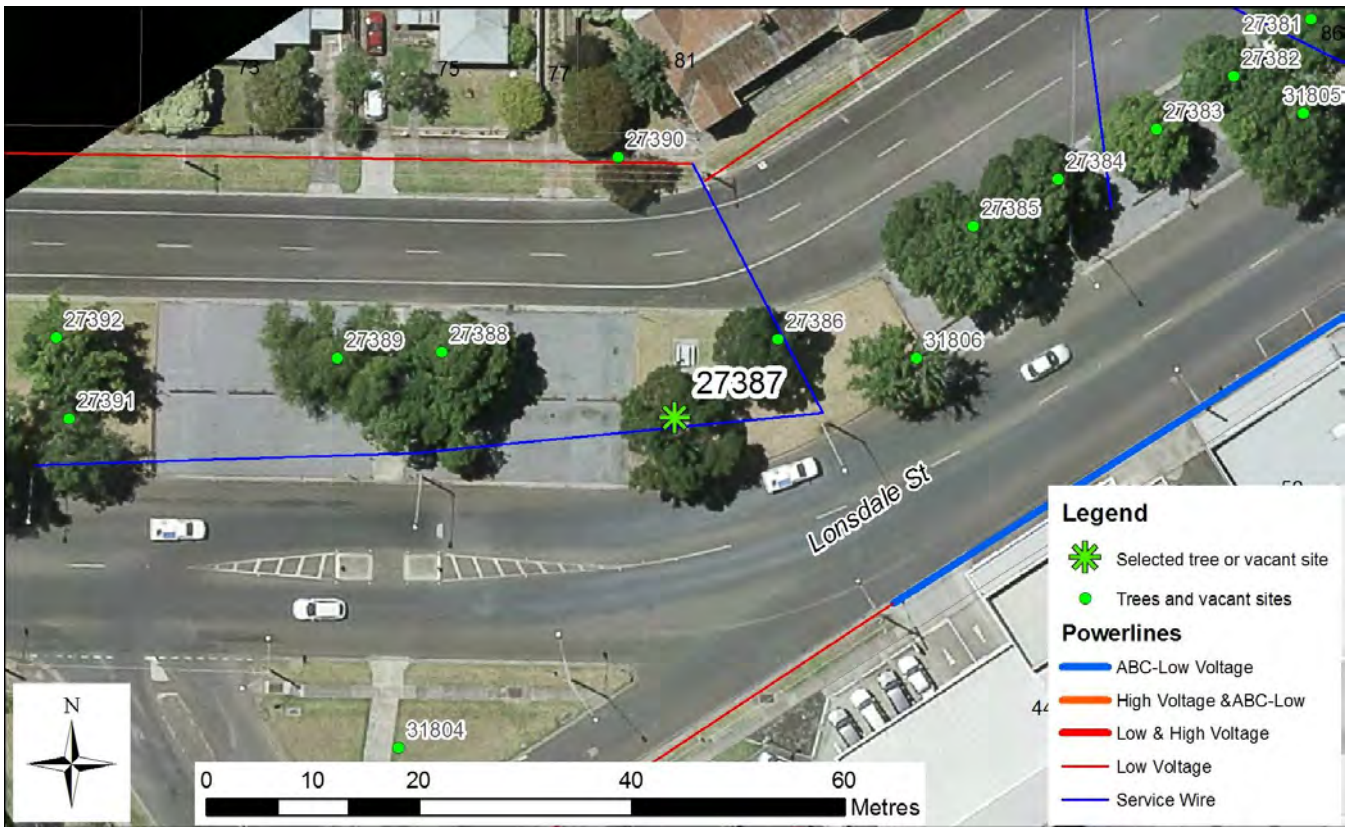
Hamilton CBD

Asset ID:	**27387**
Botanical Name:	*Fraxinus Raywood*
Common Name:	Claret Ash
Origin:	Exotic
Age:	Mature
Height x Width (m)	9m x 15m
DBH (cm)	45
Health:	Poor
Structure:	Fair
ULE:	5-10 years
Works:	Clear from service wire, broken/hanging branch removal
Priority:	Urgent
Infrastructure Damage:	Service wire above
Comments:	

Street Planted: HAMILTON PLACE

Latitude / Longitude: -37.742837, 142.020015

Failure Potential:	**3. Moderate**
Failure Size:	**3. 101-250mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **500000**



Individual Tree Assessment - 2017

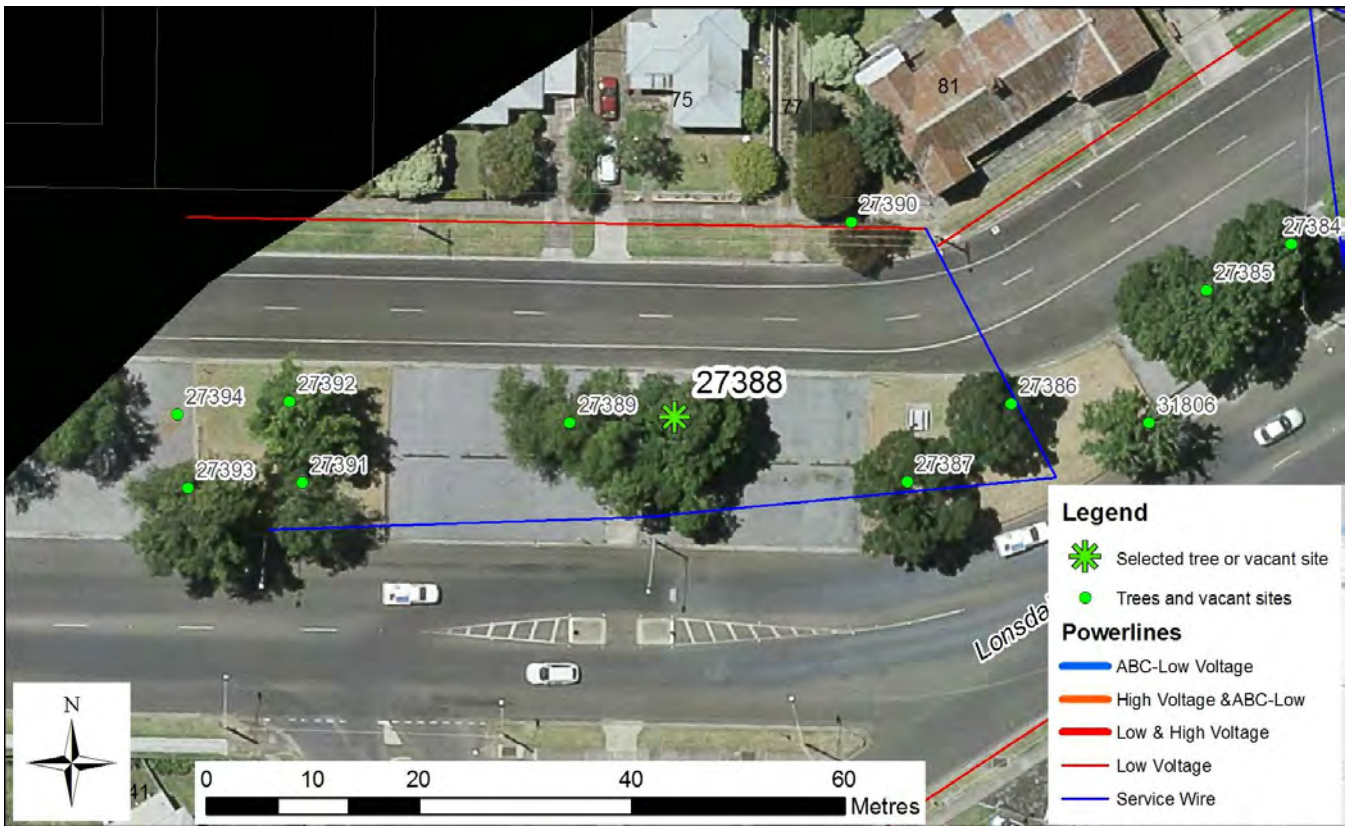
Hamilton CBD

Asset ID:	**27388**
Botanical Name:	*Ulmus procera*
Common Name:	English Elm
Origin:	Exotic
Age:	Mature
Height x Width (m)	15m x 17m
DBH (cm)	73
Health:	Poor
Structure:	Poor
ULE:	1-5 years
Works:	Reduce large branches over footpath by 40% and car parking, deadwood removal
Priority:	High
Infrastructure Damage:	None
Comments:	History of large limb failure, not sustainable in the landscape

Failure Potential:	**2. High**
Failure Size:	**3. 101-250mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **50000**

Street Planted: HAMILTON PLACE

Latitude / Longitude: -37.742784, 142.019766



Individual Tree Assessment - 2017

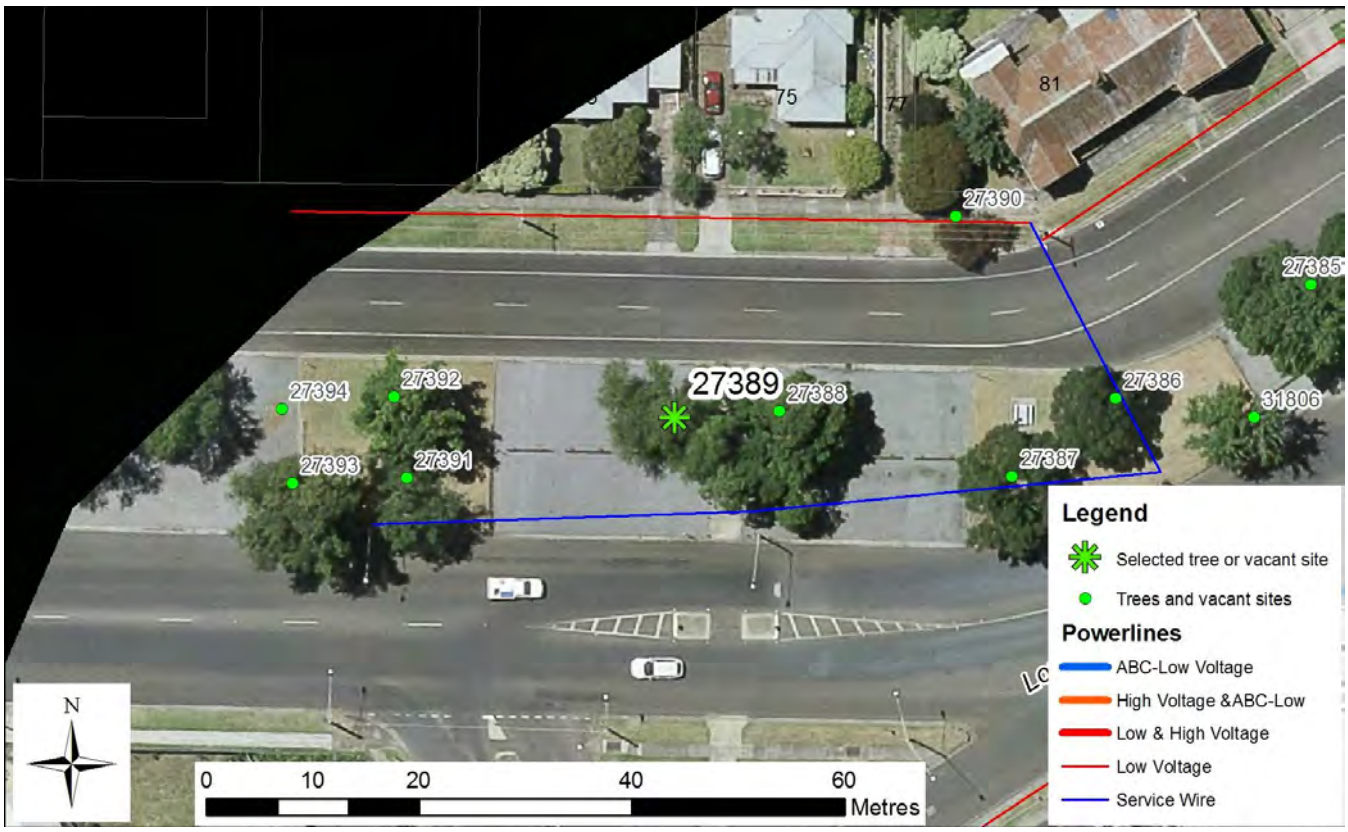
Hamilton CBD

Asset ID:	**27389**
Botanical Name:	*Ulmus procera*
Common Name:	English Elm
Origin:	Exotic
Age:	Mature
Height x Width (m)	15m x 15m
DBH (cm)	58
Health:	Poor
Structure:	Fair
ULE:	5-10 years
Works:	Reduce large branches over road and car parking, deadwood removal
Priority:	High
Infrastructure Damage:	None
Comments:	

Street Planted: HAMILTON PLACE

Latitude / Longitude: -37.74279, 142.019654

Failure Potential:	**3. Moderate**
Failure Size:	**3. 101-250mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **500000**



Individual Tree Assessment - 2017

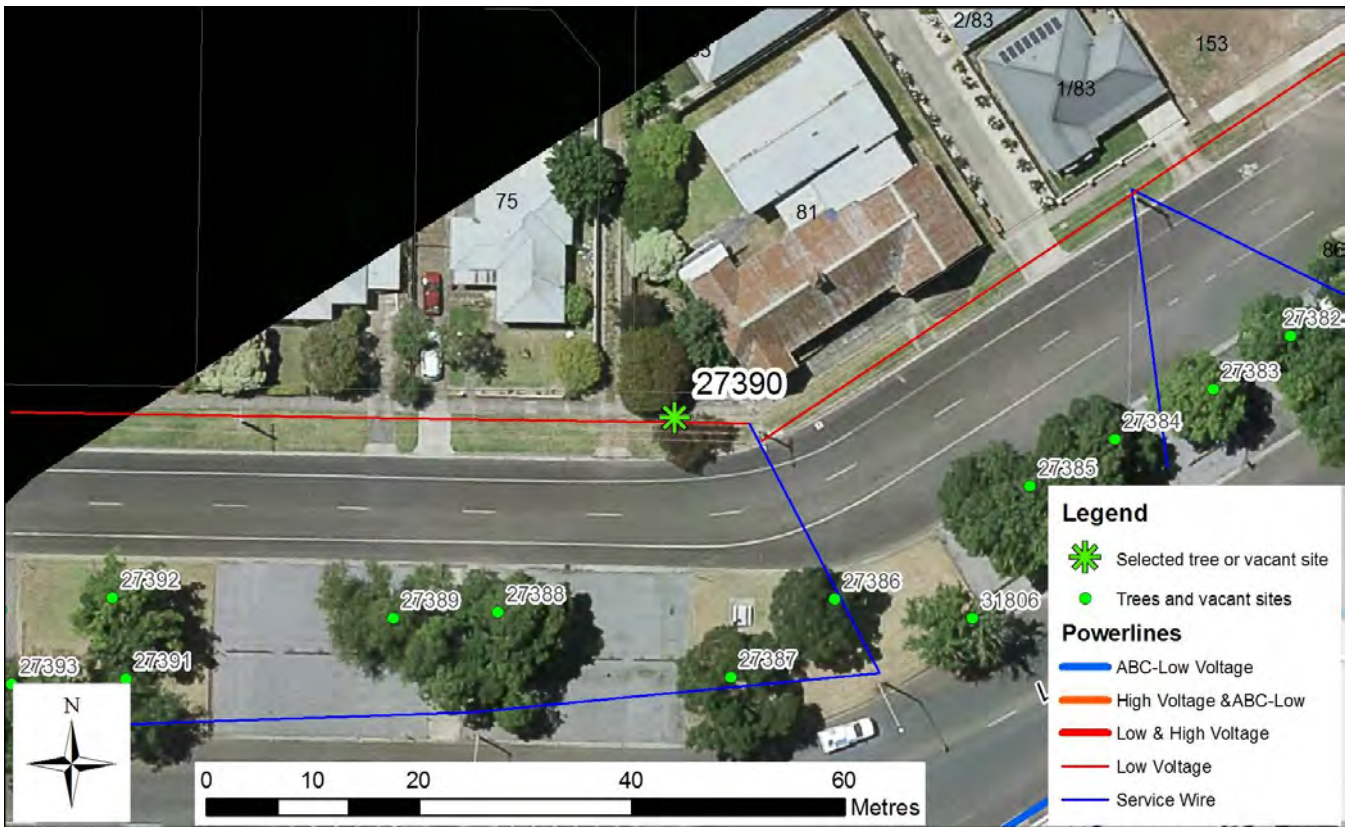
Hamilton CBD

Asset ID:	**27390**
Botanical Name:	*Lagerstroemia indica*
Common Name:	Crepe Myrtle
Origin:	Exotic
Age:	Mature
Height x Width (m)	5m x 5m
DBH (cm)	26
Health:	Good
Structure:	Good
ULE:	20-40 years
Works:	No works
Priority:	None
Infrastructure Damage:	Low voltage powerlines above
Comments:	

Street Planted: Other

Latitude / Longitude: -37.742618, 142.019951

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **500000000**



Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**27391**
Botanical Name:	*Fraxinus angustifolia*
Common Name:	Narrow Leaf Ash
Origin:	Exotic
Age:	Mature
Height x Width (m)	11m x 12m
DBH (cm)	50
Health:	Fair
Structure:	Fair
ULE:	5-10 years
Works:	Removal
Priority:	High
Infrastructure Damage:	None
Comments:	Large cavity at 3m

Street Planted: HAMILTON PLACE

Latitude / Longitude: -37.742844, 142.019369

Failure Potential:	**2. High**
Failure Size:	**3. 101-250mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **50000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**27392**
Botanical Name:	*Ulmus procera*
Common Name:	English Elm
Origin:	Exotic
Age:	Mature
Height x Width (m)	14m x 12m
DBH (cm)	60
Health:	Very Poor
Structure:	Poor
ULE:	1-5 years
Works:	Removal
Priority:	High
Infrastructure Damage:	None
Comments:	Tree is in severe decline

Street Planted: HAMILTON PLACE

Latitude / Longitude: -37.742775, 142.019354

Failure Potential:	**2. High**
Failure Size:	**3. 101-250mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **50000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**27393**
Botanical Name:	*Ulmus procera*
Common Name:	English Elm
Origin:	Exotic
Age:	Mature
Height x Width (m)	16m x 16m
DBH (cm)	80
Health:	Poor
Structure:	Fair
ULE:	5-10 years
Works:	Reduce large branches over road and sitting area, deadwood removal
Priority:	High
Infrastructure Damage:	None
Comments:	

Street Planted: HAMILTON PLACE

Latitude / Longitude: -37.742849, 142.019247

Failure Potential:	**2. High**
Failure Size:	**4. 26-100mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **500000**

Individual Tree Assessment - 2017

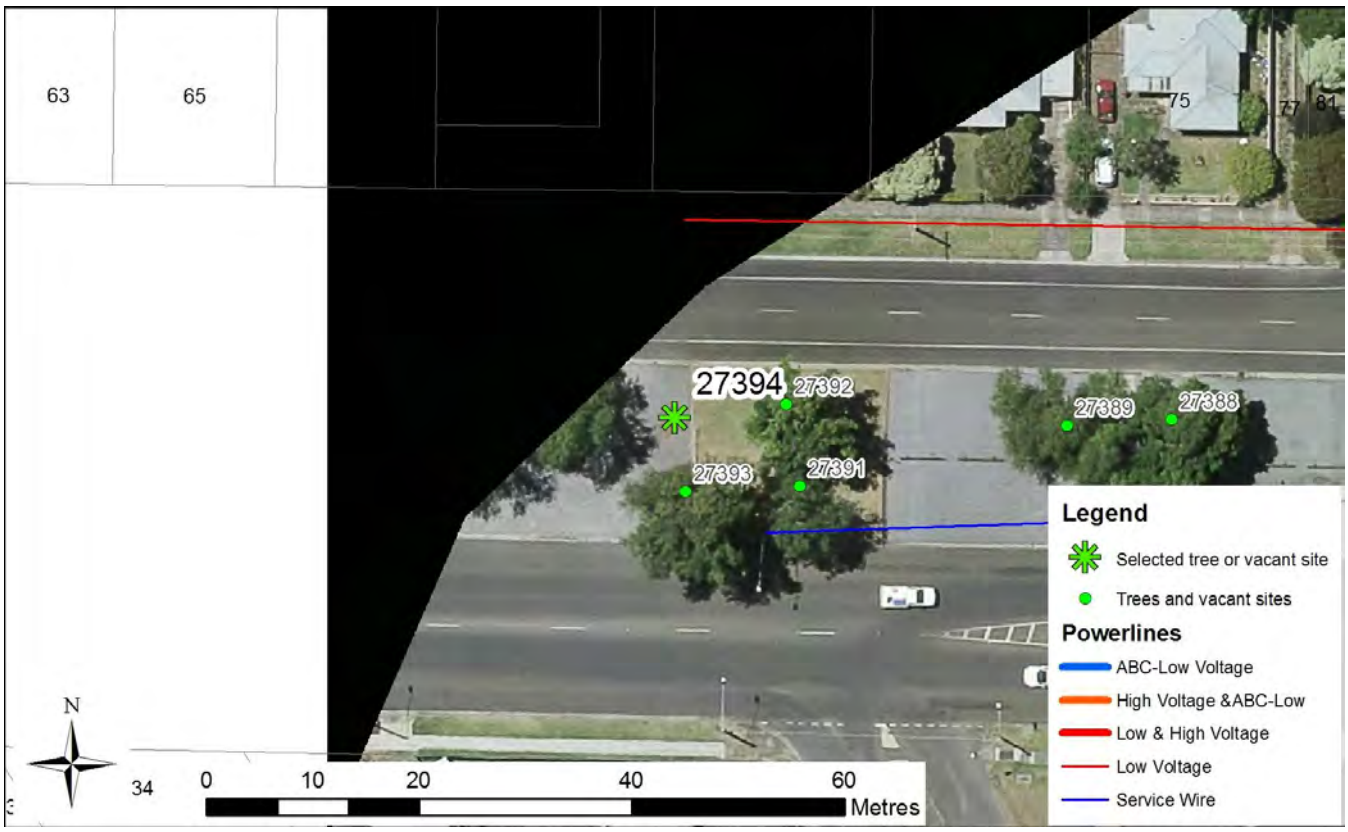
Hamilton CBD

Asset ID:	**27394**
Botanical Name:	*Vacant*
Common Name:	Vacant
Origin:	Vacant
Age:	Vacant
Height x Width (m)	0m x 0m
DBH (cm)	0
Health:	Vacant
Structure:	Vacant
ULE:	50+ years
Works:	No works
Priority:	None
Infrastructure Damage:	None
Comments:	

Street Planted: HAMILTON PLACE

Latitude / Longitude: -37.742787, 142.019235

Failure Potential:	**7. None**
Failure Size:	**4. 26-100mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **60000000000**



Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30784**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	12m x 12m
DBH (cm)	41
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	No works
Priority:	None
Infrastructure Damage:	Kerb
Comments:	

Street Planted: KENNEDY STREET

Latitude / Longitude: -37.74643, 142.022153

Failure Potential:	**4. Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30785**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	11m x 9m
DBH (cm)	28
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	No works
Priority:	None
Infrastructure Damage:	None
Comments:	

Street Planted: KENNEDY STREET

Latitude / Longitude: -37.74631, 142.022043

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **500000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30786**
Botanical Name:	*Platanus orientalis*
Common Name:	Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	12m x 14m
DBH (cm)	50
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	No works
Priority:	None
Infrastructure Damage:	Footpath, Kerb
Comments:	Confirm species is orientalis when tree is in full leaf.

Failure Potential:	**4. Low**
Failure Size:	**3. 101-250mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **5000000**

Street Planted: KENNEDY STREET

Latitude / Longitude: -37.746131, 142.021902

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30787**
Botanical Name:	*Platanus orientalis*
Common Name:	Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	11m x 12m
DBH (cm)	50
Health:	Poor
Structure:	Poor
ULE:	1-5 years
Works:	Removal
Priority:	Moderate
Infrastructure Damage:	Kerb, Road, Private property - retaining wall
Comments:	Tree is in severe decline, footpath has recently been replaced. Confirm species is orientalis when tree is in full leaf.

Failure Potential:	**3. Moderate**
Failure Size:	**3. 101-250mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **500000**

Street Planted: KENNEDY STREET

Latitude / Longitude: -37.745415, 142.021293

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30788**
Botanical Name:	*Platanus orientalis*
Common Name:	Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	12m x 12m
DBH (cm)	43
Health:	Poor
Structure:	Fair
ULE:	10-20 years
Works:	No works
Priority:	None
Infrastructure Damage:	Footpath, Kerb
Comments:	Fine deadwood present throughoput canopy. Confirm species is orientalis when tree is in full leaf.

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **500000000**

Street Planted: KENNEDY STREET

Latitude / Longitude: -37.745176, 142.021109

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30789**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	14m x 15m
DBH (cm)	52
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	Reduce extended branches over house, canopy lift over house and clear away from service wire
Priority:	High
Infrastructure Damage:	Kerb,Private property - retaining wall, Building
Comments:	

Street Planted: KENNEDY STREET

Latitude / Longitude: -37.744609, 142.020634

Failure Potential:	**4. Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30790**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	14m x 15m
DBH (cm)	50
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	Reduce extended branches, clear away from service wire
Priority:	High
Infrastructure Damage:	Road, Footpath
Comments:	

Street Planted: KENNEDY STREET

Latitude / Longitude: -37.744427, 142.020479

Failure Potential:	**4. Low**
Failure Size:	**3. 101-250mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **5000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30791**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	12m x 11m
DBH (cm)	33
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	No works
Priority:	None
Infrastructure Damage:	Footpath
Comments:	Footpath recently replaced

Failure Potential: **4. Low**
Failure Size: **4. 26-100mm**
Target Rating: **3. Pedestrians, 2-7/hr**
Risk of Harm: 1 in **50000000**

Street Planted: KENNEDY STREET

Latitude / Longitude: -37.744306, 142.020392

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30792**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	15m x 15m
DBH (cm)	55
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	No works
Priority:	None
Infrastructure Damage:	Kerb
Comments:	

Street Planted: KENNEDY STREET

Latitude / Longitude: -37.74379, 142.019951

Failure Potential:	**4. Low**
Failure Size:	**3. 101-250mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **5000000**

Individual Tree Assessment - 2017

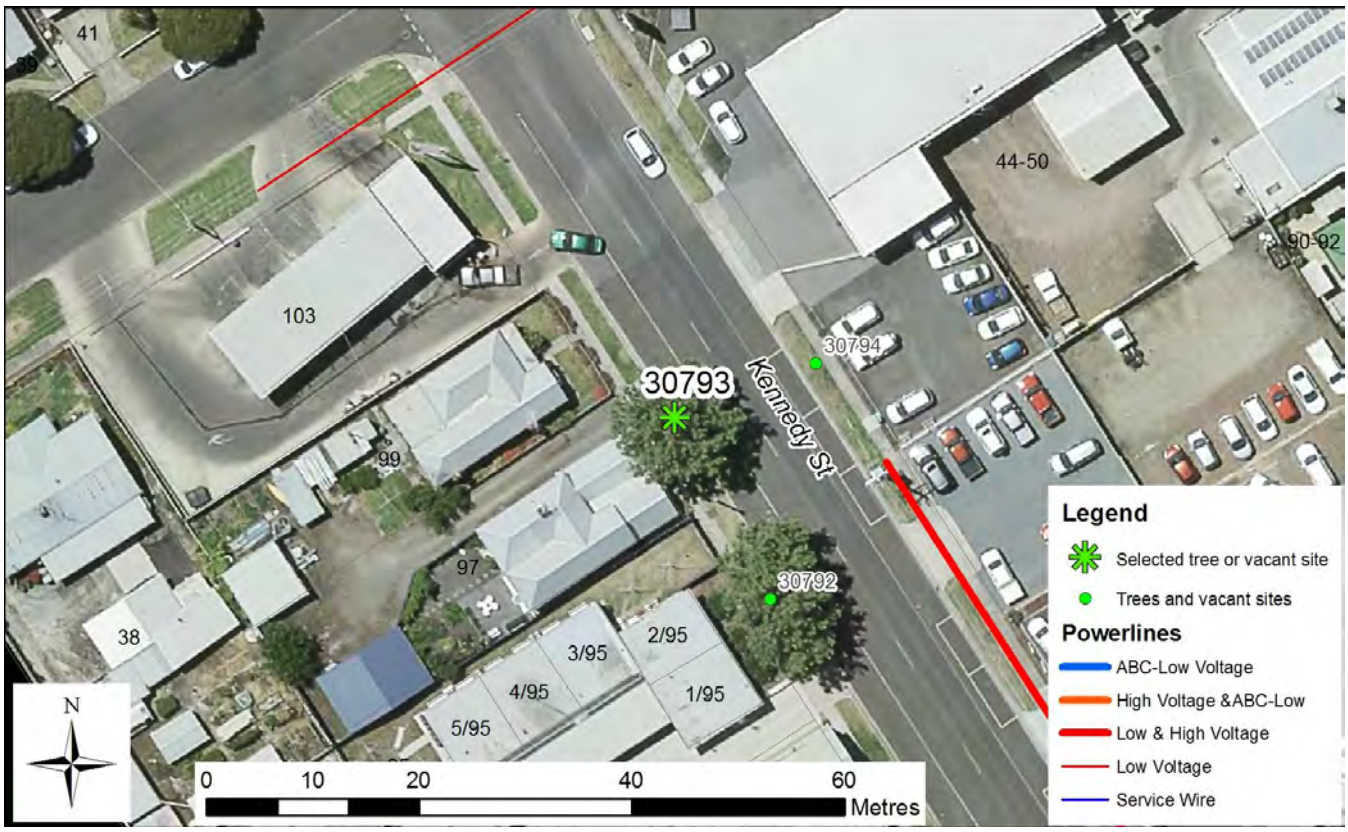
Hamilton CBD

Asset ID:	**30793**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	14m x 12m
DBH (cm)	42
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	No works
Priority:	None
Infrastructure Damage:	Kerb
Comments:	

Street Planted: KENNEDY STREET

Latitude / Longitude: -37.743637, 142.019847

Failure Potential:	**4. Low**
Failure Size:	**3. 101-250mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **5000000**



Individual Tree Assessment - 2017

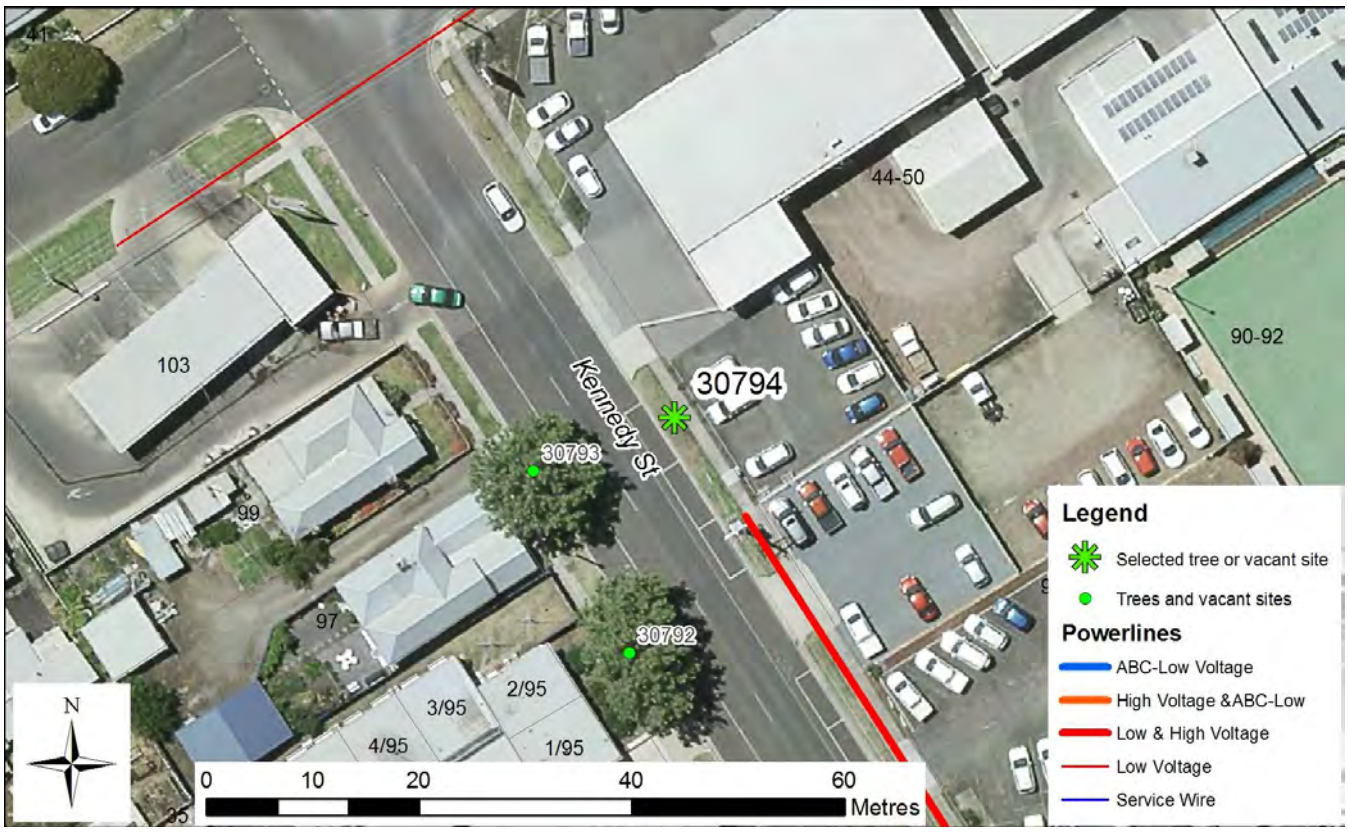
Hamilton CBD

Asset ID:	**30794**
Botanical Name:	*Vacant*
Common Name:	Vacant
Origin:	Vacant
Age:	Vacant
Height x Width (m)	0m x 0m
DBH (cm)	0
Health:	Vacant
Structure:	Vacant
ULE:	50+ years
Works:	No works
Priority:	None
Infrastructure Damage:	None
Comments:	

Street Planted: KENNEDY STREET

Latitude / Longitude: -37.74359, 142.019996

Failure Potential:	**7. None**
Failure Size:	**4. 26-100mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **60000000000**



Individual Tree Assessment - 2017

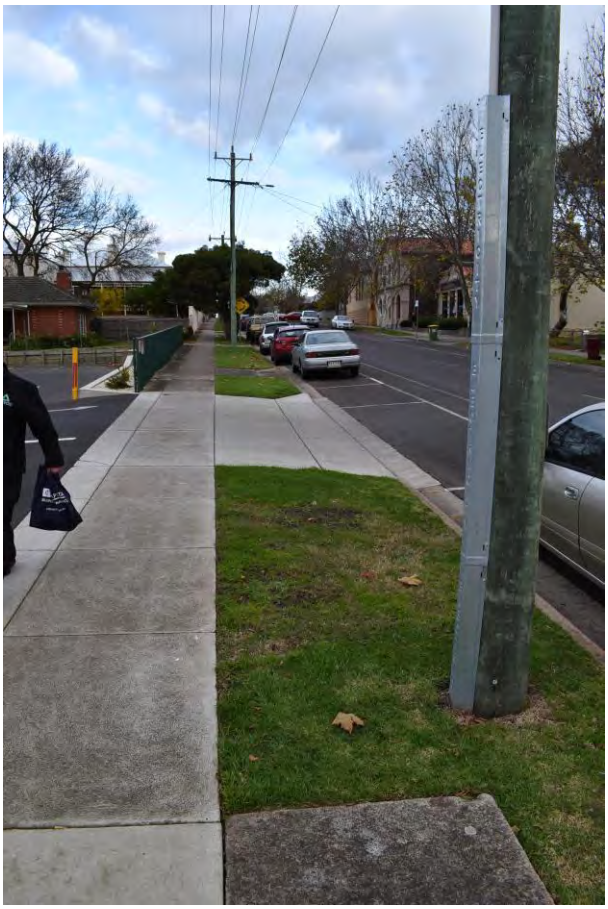
Hamilton CBD

Asset ID:	**30795**
Botanical Name:	*Redundant*
Common Name:	Redundant
Origin:	
Age:	Redundant
Height x Width (m)	0m x 0m
DBH (cm)	0
Health:	Redundant
Structure:	Redundant
ULE:	0 years
Works:	No works
Priority:	None
Infrastructure Damage:	None
Comments:	Inappropriate location, do not replant

Failure Potential:	**7. None**
Failure Size:	**4. 26-100mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **60000000000**

Street Planted: KENNEDY STREET

Latitude / Longitude: -37.744141, 142.02046



Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30796**
Botanical Name:	*Melaleuca linariifolia*
Common Name:	Snow in Summer
Origin:	Native
Age:	Mature
Height x Width (m)	6m x 9m
DBH (cm)	62
Health:	Fair
Structure:	Fair
ULE:	10-20 years
Works:	No works
Priority:	None
Infrastructure Damage:	Powerlines above
Comments:	

Street Planted: KENNEDY STREET

Latitude / Longitude: -37.744404, 142.020691

Failure Potential:	**4. Low**
Failure Size:	**3. 101-250mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **5000000**

Individual Tree Assessment - 2017

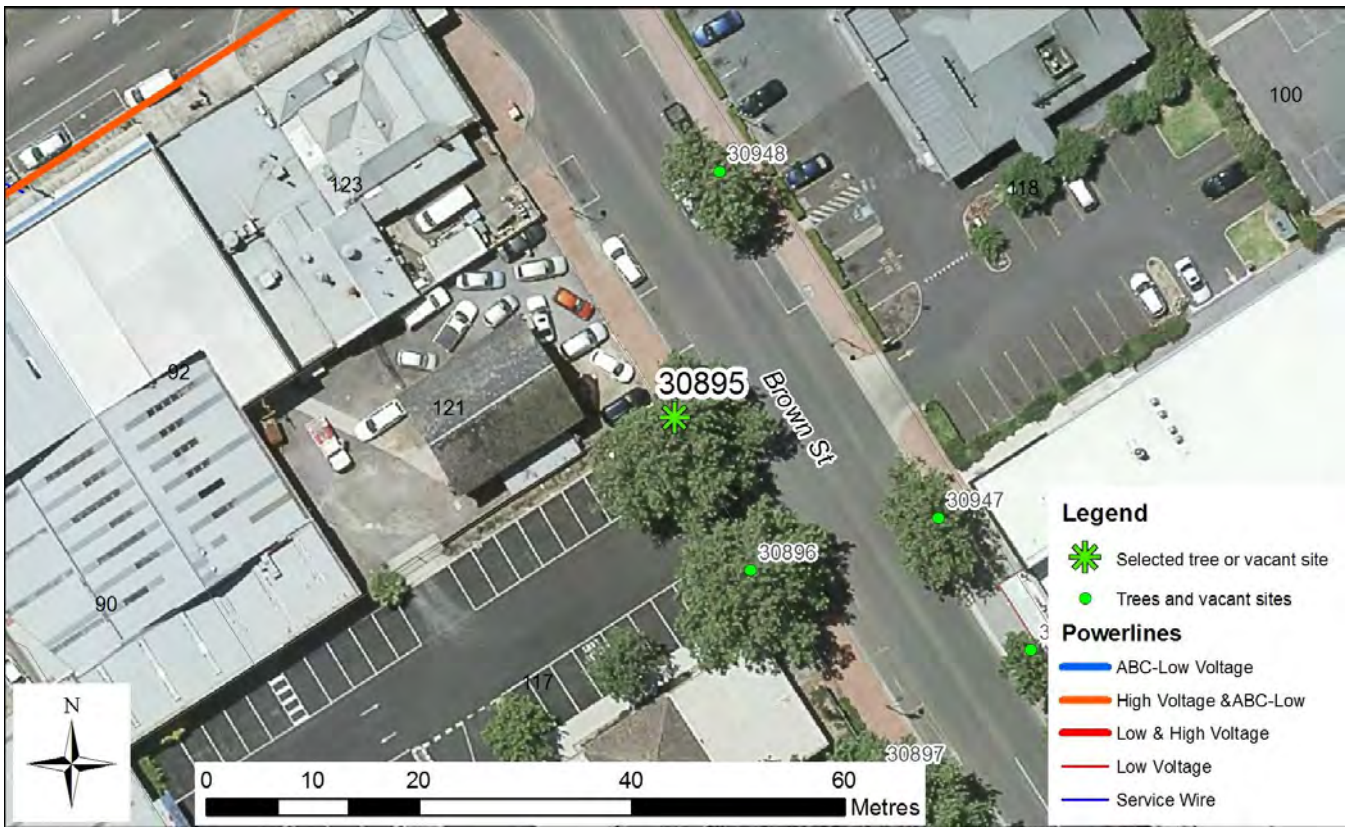
Hamilton CBD

Asset ID:	**30895**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	16m x 16m
DBH (cm)	58
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	Deadwood removal
Priority:	Moderate
Infrastructure Damage:	Kerb, Footpath
Comments:	

Street Planted: BROWN STREET

Latitude / Longitude: -37.74154, 142.024098

Failure Potential:	**3. Moderate**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **500000**



Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30896**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	15m x 15m
DBH (cm)	46
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	Canopy lift over building to provide 2m clearance,Deadwood removal
Priority:	Moderate
Infrastructure Damage:	Footpath, Building
Comments:	

Street Planted: BROWN STREET

Latitude / Longitude: -37.741668, 142.024181

Failure Potential:	**3. Moderate**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **500000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30897**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	15m x 15m
DBH (cm)	45
Health:	Fair
Structure:	Fair
ULE:	10-20 years
Works:	Canopy lift over footpath, deadwood removal
Priority:	Moderate
Infrastructure Damage:	Footpath
Comments:	

Street Planted: BROWN STREET

Latitude / Longitude: -37.741838, 142.024319

Failure Potential:	**3. Moderate**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **500000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30898**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	15m x 16m
DBH (cm)	52
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	Deadwood removal
Priority:	Moderate
Infrastructure Damage:	None
Comments:	

Street Planted: BROWN STREET

Latitude / Longitude: -37.741874, 142.024222

Failure Potential:	**3. Moderate**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **500000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30899**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	15m x 15m
DBH (cm)	43
Health:	Fair
Structure:	Fair
ULE:	10-20 years
Works:	Deadwood removal
Priority:	Moderate
Infrastructure Damage:	None
Comments:	

Street Planted: BROWN STREET

Latitude / Longitude: -37.74193, 142.024155

Failure Potential:	**3. Moderate**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **500000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30900**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	15m x 15m
DBH (cm)	48
Health:	Fair
Structure:	Fair
ULE:	10-20 years
Works:	Deadwood removal, canopy lift over building to provide 2m
Priority:	Moderate
Infrastructure Damage:	Footpath
Comments:	

Street Planted: BROWN STREET

Latitude / Longitude: -37.741957, 142.024225

Failure Potential:	**3. Moderate**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **500000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30901**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	16m x 16m
DBH (cm)	54
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	Deadwood removal, canopy lift over building to provide 2m
Priority:	Moderate
Infrastructure Damage:	Building
Comments:	

Street Planted: BROWN STREET

Latitude / Longitude: -37.741901, 142.024376

Failure Potential:	**3. Moderate**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **500000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30902**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	15m x 14m
DBH (cm)	45
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	Deadwood removal, canopy lift over building to provide 2m
Priority:	Moderate
Infrastructure Damage:	Building, Footpath
Comments:	

Street Planted: BROWN STREET

Latitude / Longitude: -37.742061, 142.024517

Failure Potential:	**3. Moderate**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **500000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30903**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	16m x 18m
DBH (cm)	52
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	Deadwood removal, canopy lift over building to provide 2m
Priority:	Moderate
Infrastructure Damage:	Building, Footpath
Comments:	

Street Planted: BROWN STREET

Latitude / Longitude: -37.742115, 142.024552

Failure Potential:	**3. Moderate**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **500000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30904**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	16m x 18m
DBH (cm)	52
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	Deadwood removal, canopy lift over building to provide 2m
Priority:	Moderate
Infrastructure Damage:	Building, Footpath
Comments:	

Street Planted: BROWN STREET

Latitude / Longitude: -37.742174, 142.024593

Failure Potential:	**3. Moderate**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **500000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30905**
Botanical Name:	*Quercus rubra*
Common Name:	Red Oak
Origin:	Exotic
Age:	Semi mature
Height x Width (m)	7m x 5m
DBH (cm)	15
Health:	Good
Structure:	Good
ULE:	20-40 years
Works:	No works
Priority:	None
Infrastructure Damage:	Footpath
Comments:	

Street Planted: BROWN STREET

Latitude / Longitude: -37.742322, 142.024713

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30906**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	14m x 13m
DBH (cm)	42
Health:	Good
Structure:	Fair
ULE:	10-20 years
Works:	Canopy lift over building to provide 2m clearance and clear from street light
Priority:	Moderate
Infrastructure Damage:	Kerb, Building, Footpath

Comments:

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Street Planted: BROWN STREET

Latitude / Longitude: -37.742618, 142.025068

Individual Tree Assessment - 2017

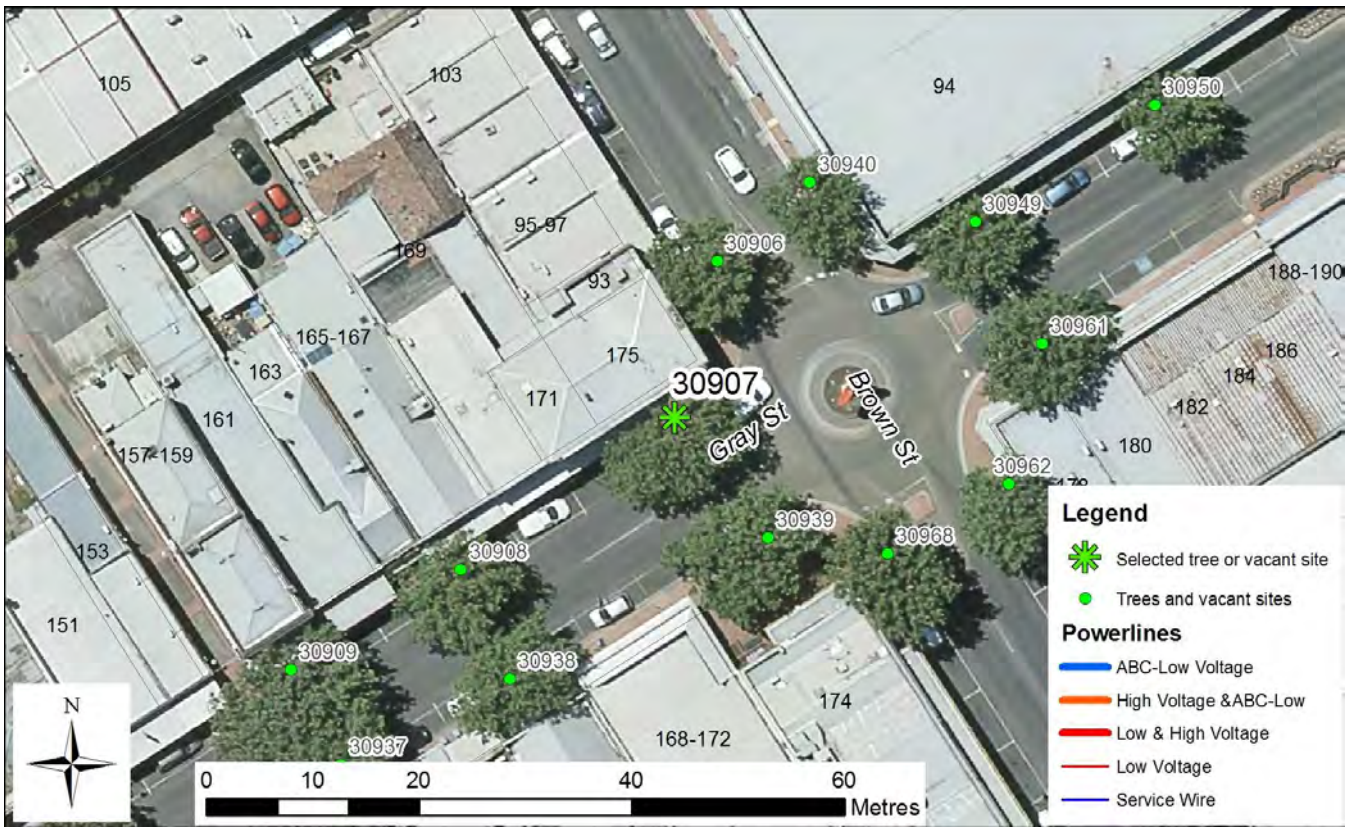
Hamilton CBD

Asset ID:	**30907**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	12m x 14m
DBH (cm)	38
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	Moderate
Infrastructure Damage:	Building, Kerb, Footpath, Road
Comments:	

Street Planted: GRAY STREET

Latitude / Longitude: -37.742751, 142.025025

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**



Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30908**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	11m x 12m
DBH (cm)	32
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	Canopy lift over building to provide 2m clearance and clear from street light
Priority:	Moderate

Infrastructure Damage: Kerb, Footpath, Road

Comments:

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Street Planted: GRAY STREET

Latitude / Longitude: -37.742881, 142.024799

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30909**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	14m x 15m
DBH (cm)	45
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	Moderate
Infrastructure Damage:	Footpath, Building, Road
Comments:	Paving recently repaired

Street Planted: GRAY STREET

Latitude / Longitude: -37.742968, 142.024619

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30910**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	11m x 11m
DBH (cm)	31
Health:	Good
Structure:	Fair
ULE:	10-20 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	Moderate
Infrastructure Damage:	Building, Road
Comments:	

Street Planted: GRAY STREET

Latitude / Longitude: -37.74311, 142.024374

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

Hamilton CBD

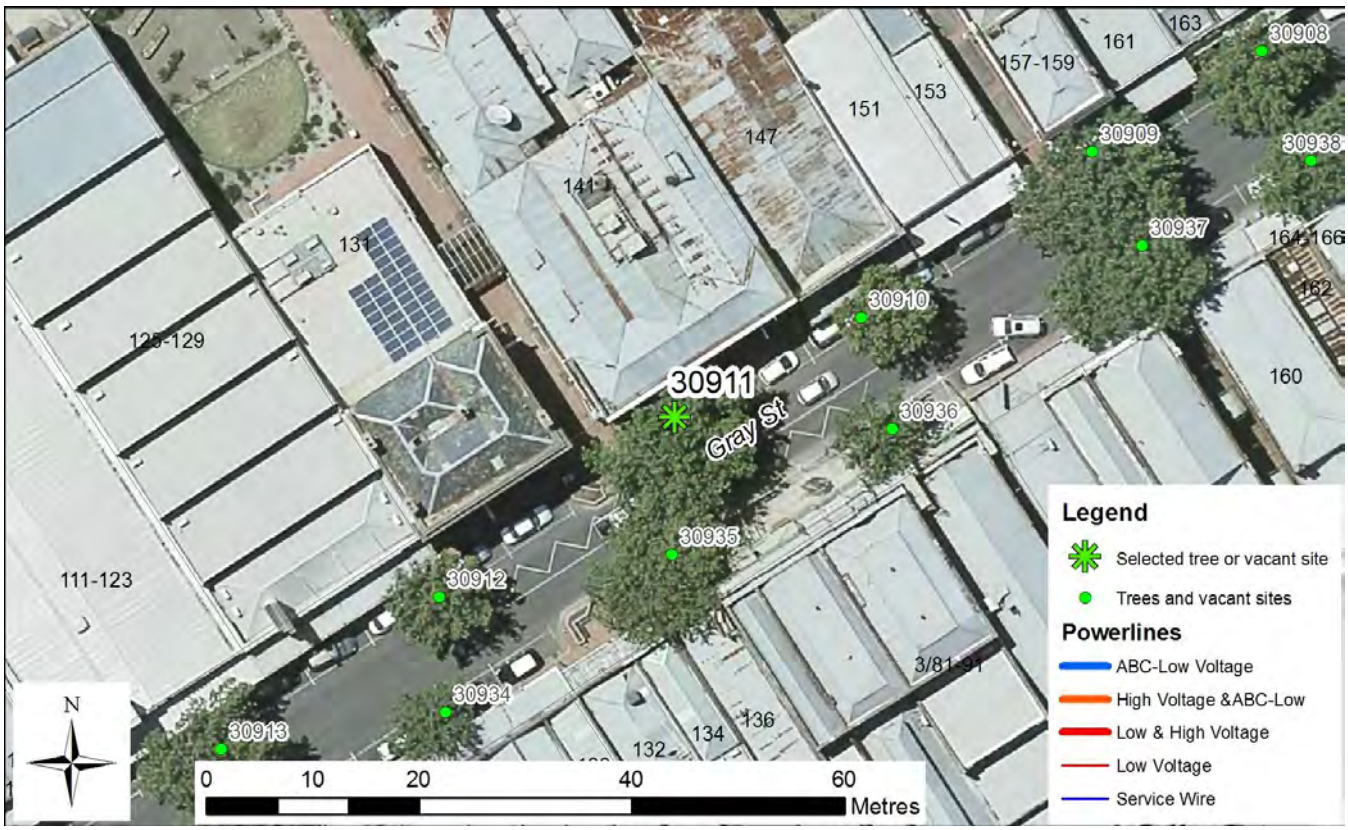
Asset ID:	**30911**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	15m x 17m
DBH (cm)	45
Health:	Good
Structure:	Fair
ULE:	10-20 years
Works:	Canopy lift over building to provide 2m clearance and clear from street light
Priority:	Moderate
Infrastructure Damage:	Building, Footpath, Road

Comments:

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Street Planted: GRAY STREET

Latitude / Longitude: -37.743196, 142.024176



Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30912**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	11m x 11m
DBH (cm)	37
Health:	Good
Structure:	Fair
ULE:	10-20 years
Works:	No works
Priority:	None
Infrastructure Damage:	Footpath, Road
Comments:	

Street Planted: GRAY STREET

Latitude / Longitude: -37.743351, 142.023928

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

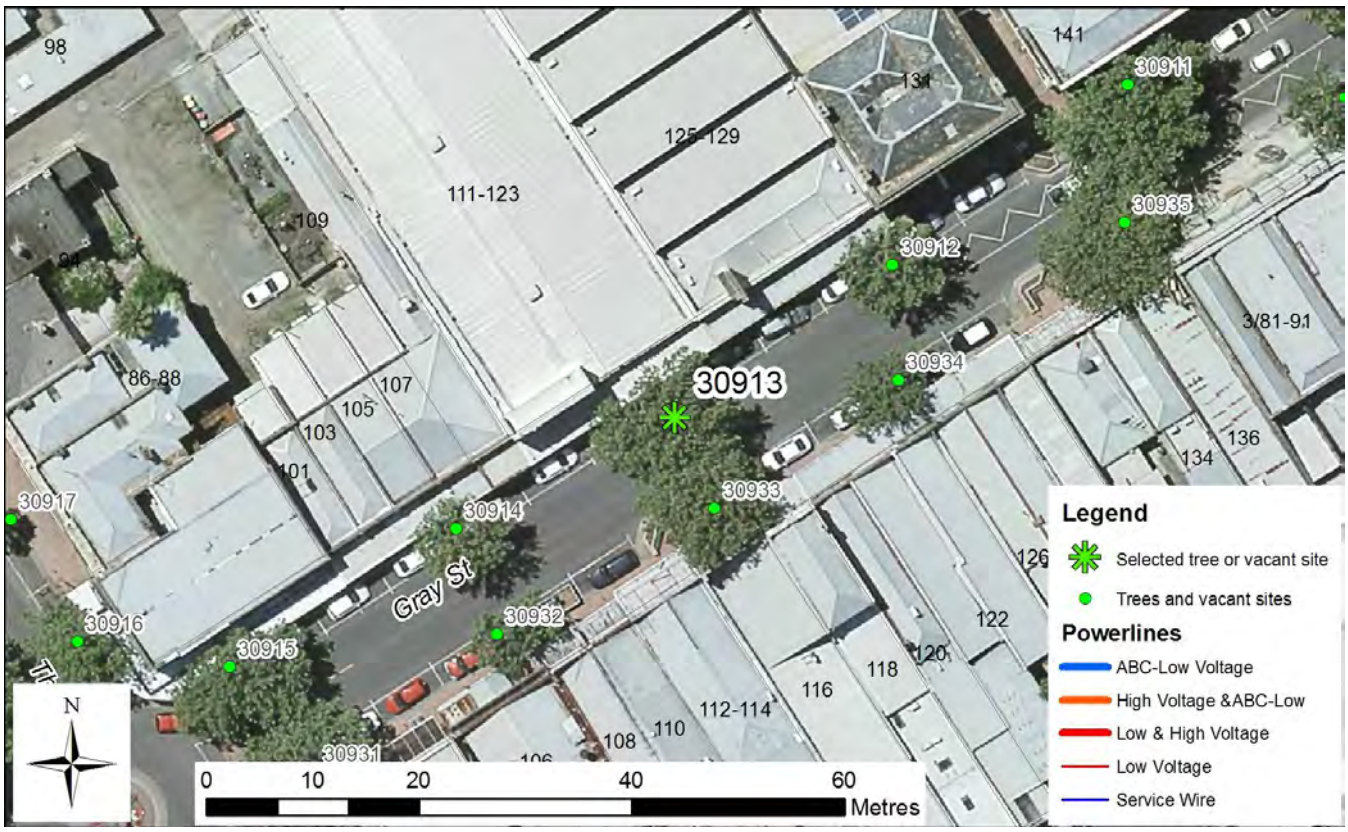
Hamilton CBD

Asset ID:	**30913**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	13m x 15m
DBH (cm)	42
Health:	Good
Structure:	Fair
ULE:	10-20 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	High
Infrastructure Damage:	Building, Footpath
Comments:	Planted in raised garden bed

Street Planted: GRAY STREET

Latitude / Longitude: -37.743482, 142.023697

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**



Individual Tree Assessment - 2017

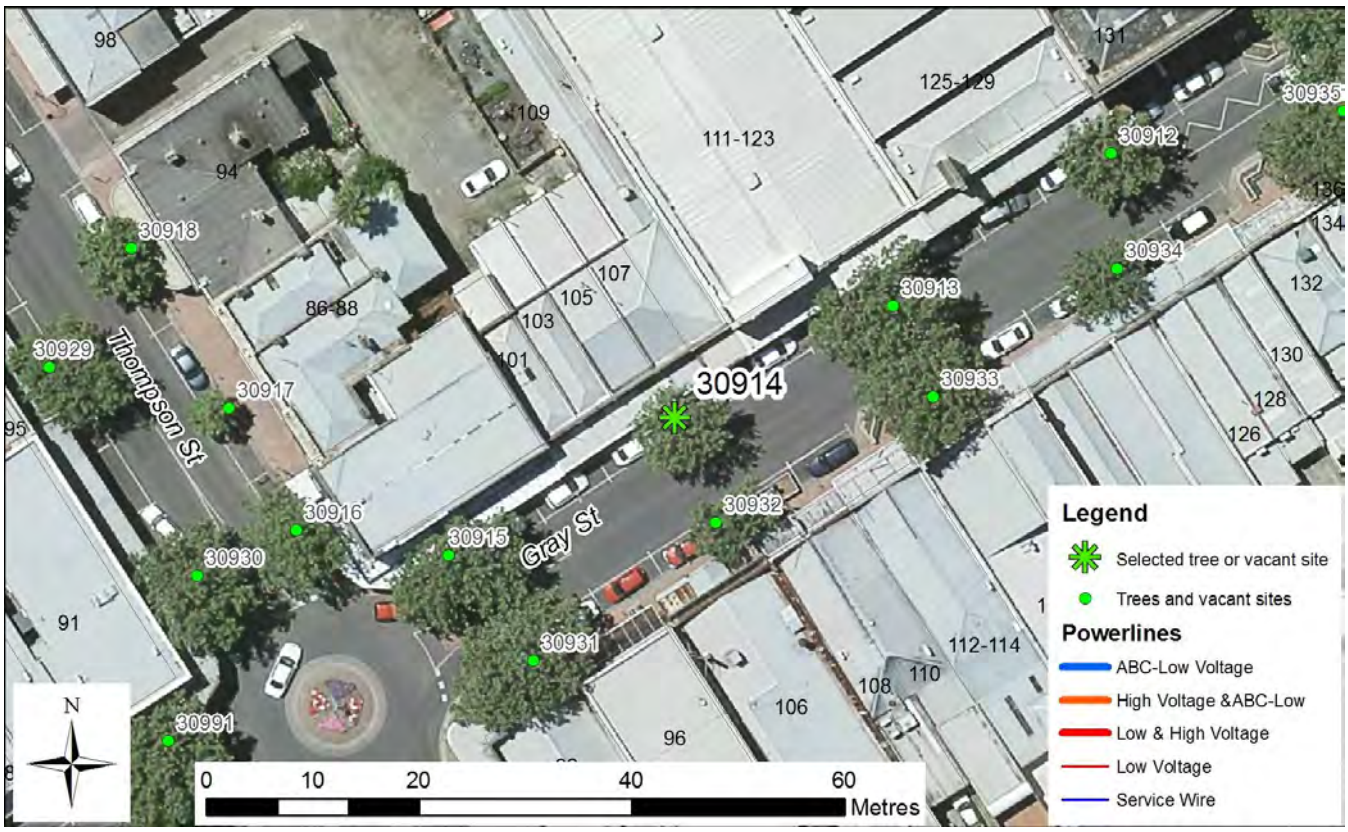
Hamilton CBD

Asset ID:	**30914**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	11m x 10m
DBH (cm)	34
Health:	Good
Structure:	Fair
ULE:	10-20 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	High
Infrastructure Damage:	Building, Road
Comments:	

Street Planted: GRAY STREET

Latitude / Longitude: -37.743578, 142.023465

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**



Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30915**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	13m x 14m
DBH (cm)	36
Health:	Good
Structure:	Fair
ULE:	10-20 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	High
Infrastructure Damage:	Kerb, Footpath, Road, Building
Comments:	

Street Planted: GRAY STREET

Latitude / Longitude: -37.743693, 142.023225

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

Hamilton CBD

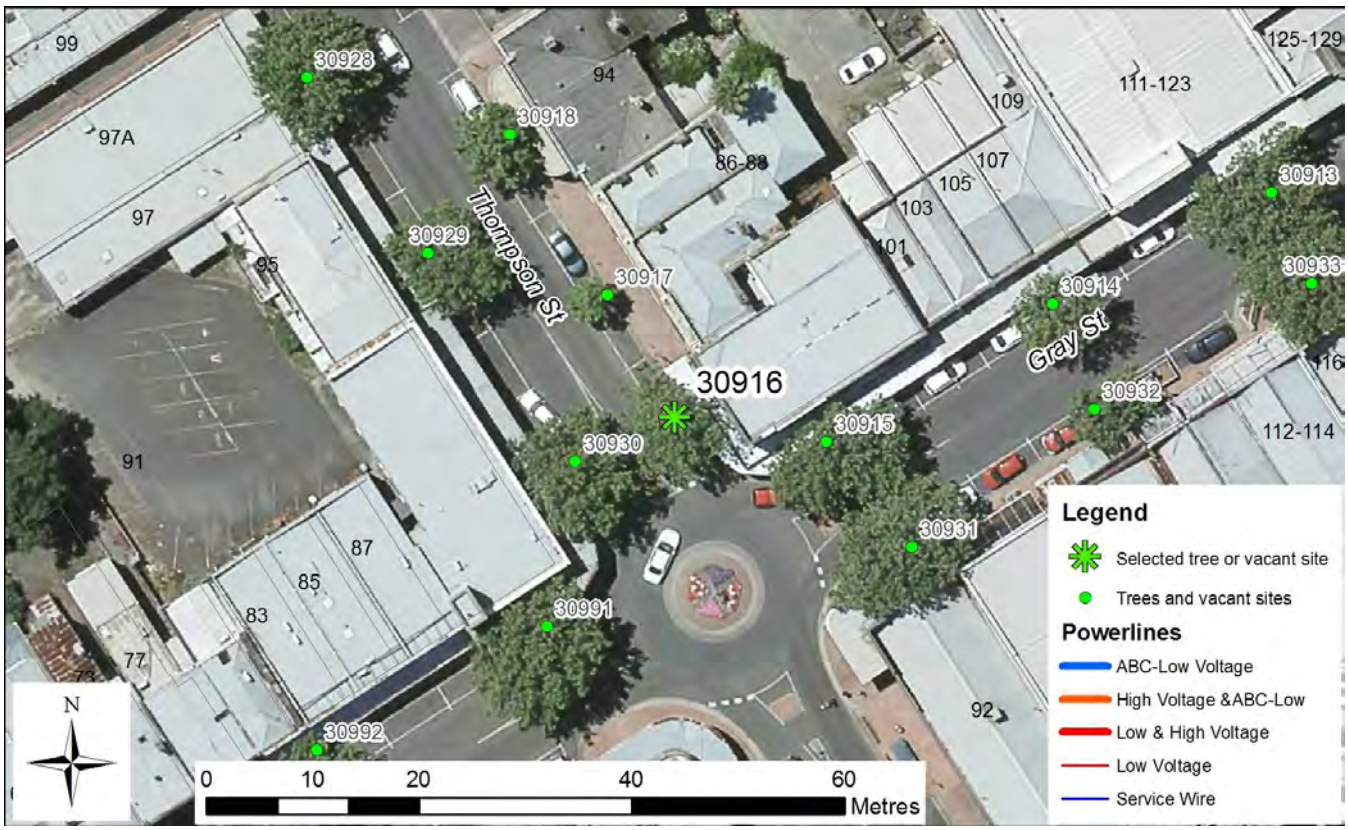
Asset ID:	**30916**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	14m x 11m
DBH (cm)	32
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	Canopy lift over building to provide 2m clearance and clear from street light
Priority:	High
Infrastructure Damage:	Building, Kerb, Footpath

Comments:

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Street Planted: THOMPSON STREET

Latitude / Longitude: -37.743677, 142.023063



Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30917**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Semi mature
Height x Width (m)	8m x 5m
DBH (cm)	15
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	No works
Priority:	None
Infrastructure Damage:	None
Comments:	

Street Planted: THOMPSON STREET

Latitude / Longitude: -37.743574, 142.02299

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30918**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	13m x 10m
DBH (cm)	28
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	Moderate
Infrastructure Damage:	Kerb, Footpath, Road
Comments:	

Street Planted: THOMPSON STREET

Latitude / Longitude: -37.74344, 142.022884

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30919**
Botanical Name:	*Prunus serrulata*
Common Name:	Japanese Flowering Cherry
Origin:	Exotic
Age:	Mature
Height x Width (m)	5m x 6m
DBH (cm)	24
Health:	Fair
Structure:	Fair
ULE:	10-20 years
Works:	No works
Priority:	None
Infrastructure Damage:	None
Comments:	

Street Planted: THOMPSON STREET

Latitude / Longitude: -37.743119, 142.022632

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30920**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	14m x 14m
DBH (cm)	40
Health:	Good
Structure:	Fair
ULE:	10-20 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	High
Infrastructure Damage:	Footpath, Kerb, Road, Building
Comments:	

Street Planted: THOMPSON STREET

Latitude / Longitude: -37.743008, 142.022523

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30921**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	13m x 10m
DBH (cm)	32
Health:	Good
Structure:	Fair
ULE:	10-20 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	High
Infrastructure Damage:	Road, Building
Comments:	

Street Planted: THOMPSON STREET

Latitude / Longitude: -37.742897, 142.022431

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30922**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	11m x 10m
DBH (cm)	28
Health:	Good
Structure:	Fair
ULE:	10-20 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	High
Infrastructure Damage:	Road, Building
Comments:	

Street Planted: THOMPSON STREET

Latitude / Longitude: -37.742712, 142.022292

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30923**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	10m x 10m
DBH (cm)	30
Health:	Good
Structure:	Fair
ULE:	10-20 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	High
Infrastructure Damage:	Road, Building
Comments:	

Street Planted: THOMPSON STREET

Latitude / Longitude: -37.742529, 142.022129

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30924**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	14m x 15m
DBH (cm)	44
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	Canopy lift over building to provide 2m clearance and clear from street light
Priority:	High
Infrastructure Damage:	Building, Footpath, Kerb, Road
Comments:	

Street Planted: THOMPSON STREET

Latitude / Longitude: -37.74243, 142.021897

Failure Potential:	**5. Very Low**
Failure Size:	**3. 101-250mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **5000000**

Individual Tree Assessment - 2017

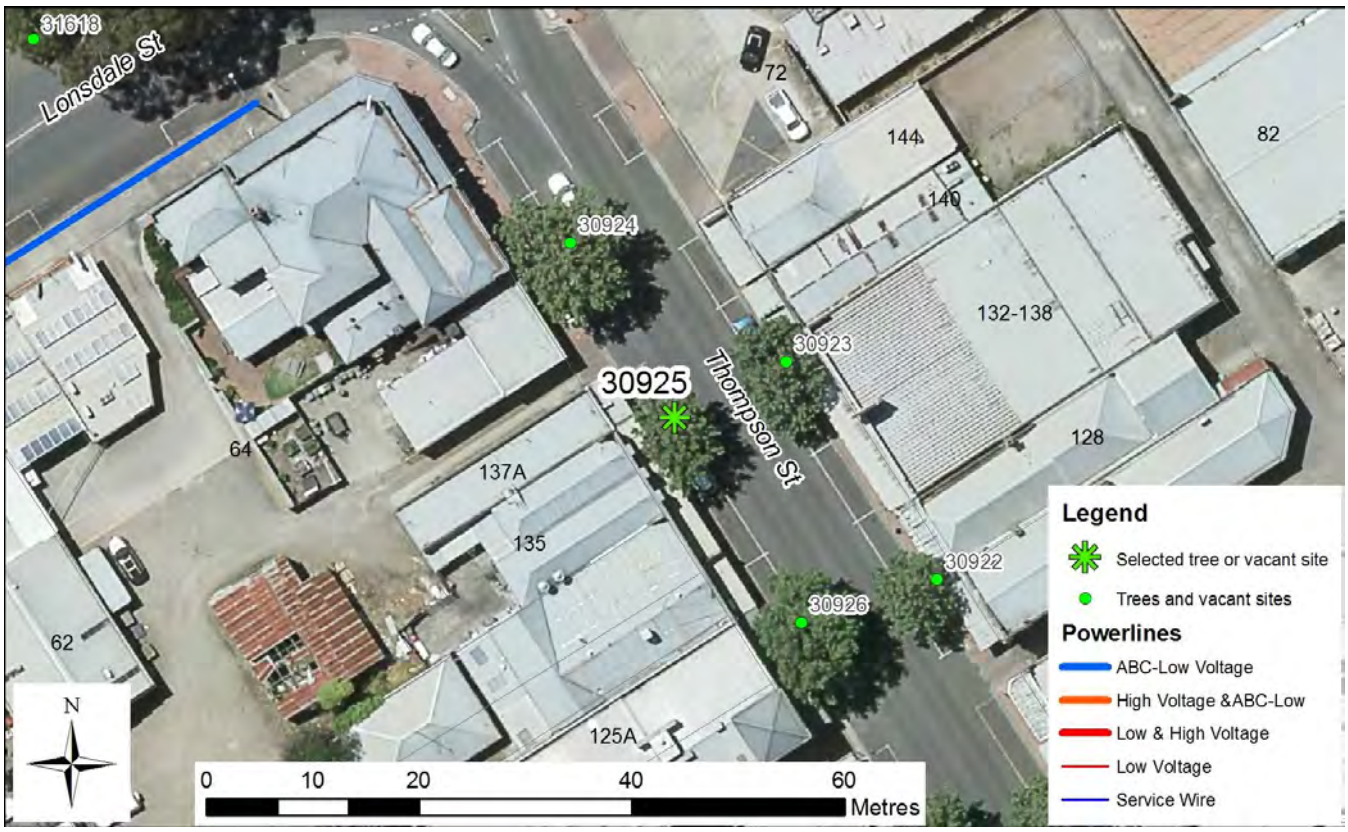
Hamilton CBD

Asset ID:	**30925**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	14m x 12m
DBH (cm)	33
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	High
Infrastructure Damage:	Building, Footpath, Kerb, Road
Comments:	

Street Planted: THOMPSON STREET

Latitude / Longitude: -37.742577, 142.022011

Failure Potential:	**5. Very Low**
Failure Size:	**3. 101-250mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **5000000**



Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30926**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	15m x 12m
DBH (cm)	40
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	High
Infrastructure Damage:	Building, Footpath, Kerb, Road
Comments:	

Street Planted: THOMPSON STREET

Latitude / Longitude: -37.74275, 142.022148

Failure Potential:	**5. Very Low**
Failure Size:	**3. 101-250mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **5000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30927**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	13m x 15m
DBH (cm)	37
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	High
Infrastructure Damage:	Footpath, Building, Kerb, Road
Comments:	

Street Planted: THOMPSON STREET

Latitude / Longitude: -37.742932, 142.022311

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30928**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	15m x 14m
DBH (cm)	42
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	High
Infrastructure Damage:	Kerb, Building, Footpath, Road
Comments:	

Street Planted: THOMPSON STREET

Latitude / Longitude: -37.743384, 142.02268

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30929**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	14m x 14m
DBH (cm)	34
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	Codominant reduction in upper canopy, canopy lift over building to provide 2m clearance
Priority:	High
Infrastructure Damage:	Building, Footpath, Road
Comments:	

Failure Potential:	**2. High**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000**

Street Planted: THOMPSON STREET

Latitude / Longitude: -37.743529, 142.022817

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30930**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	14m x 12m
DBH (cm)	36
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	High
Infrastructure Damage:	Road, Building, Footpath
Comments:	Kerb has been replaced recently

Street Planted: THOMPSON STREET

Latitude / Longitude: -37.743716, 142.022958

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30931**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	15m x 17m
DBH (cm)	46
Health:	Good
Structure:	Fair
ULE:	10-20 years
Works:	Canopy lift over building to provide 2m clearance and clear from street light
Priority:	Moderate
Infrastructure Damage:	Kerb, Footpath, Building
Comments:	

Street Planted: GRAY STREET

Latitude / Longitude: -37.743785, 142.023318

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30932**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	11m x 11m
DBH (cm)	32
Health:	Poor
Structure:	Fair
ULE:	5-10 years
Works:	Deadwood removal, canopy lift over building to provide 2m
Priority:	Moderate
Infrastructure Damage:	Kerb, Footpath, Building
Comments:	

Street Planted: GRAY STREET

Latitude / Longitude: -37.743667, 142.02351

Failure Potential:	**3. Moderate**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **500000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30933**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	14m x 16m
DBH (cm)	43
Health:	Good
Structure:	Fair
ULE:	10-20 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	Moderate
Infrastructure Damage:	Kerb, Footpath, Building
Comments:	

Street Planted: GRAY STREET

Latitude / Longitude: -37.743558, 142.023741

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

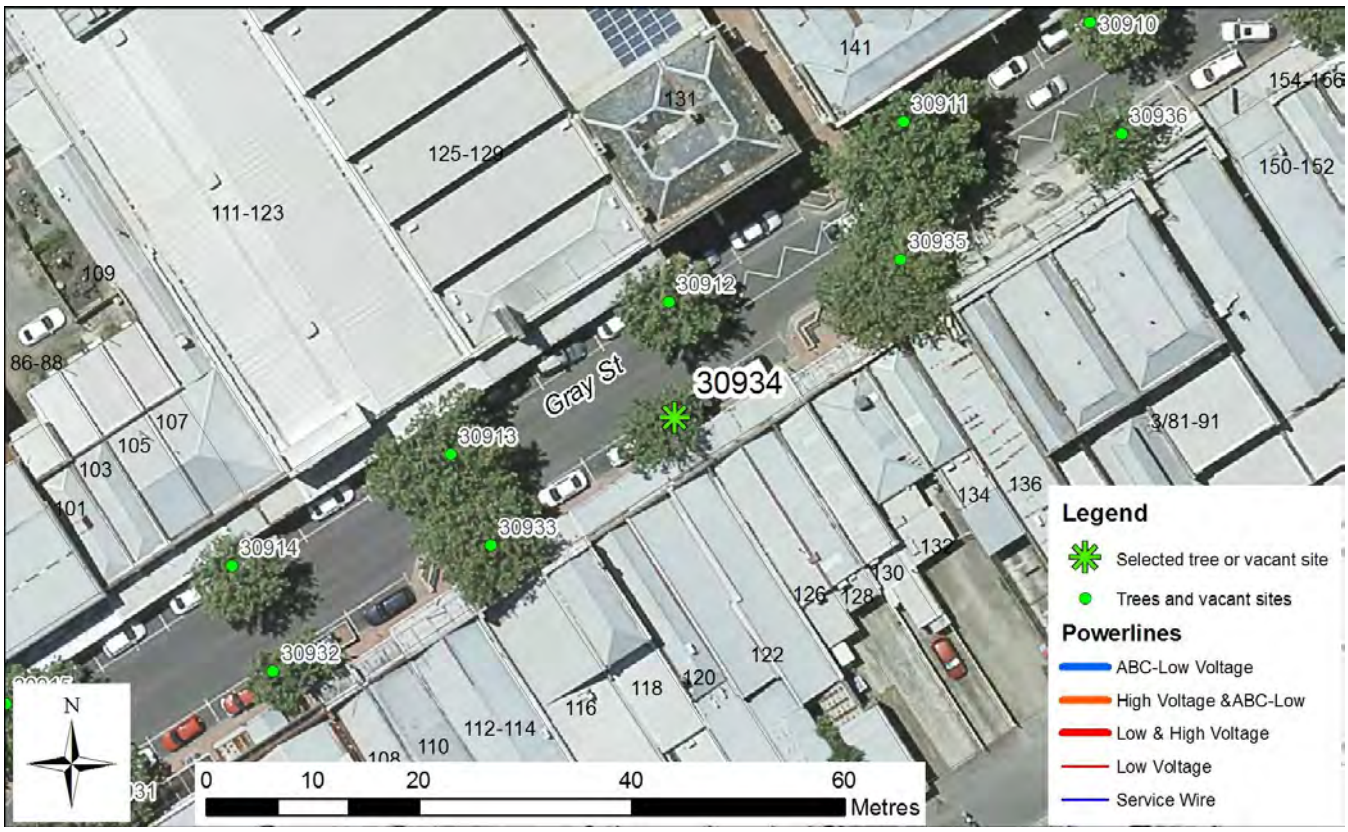
Hamilton CBD

Asset ID:	**30934**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	11m x 11m
DBH (cm)	34
Health:	Poor
Structure:	Fair
ULE:	5-10 years
Works:	Deadwood removal
Priority:	Moderate
Infrastructure Damage:	Road, Footpath, Building
Comments:	

Street Planted: GRAY STREET

Latitude / Longitude: -37.743454, 142.023946

Failure Potential:	**3. Moderate**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **500000**



Individual Tree Assessment - 2017

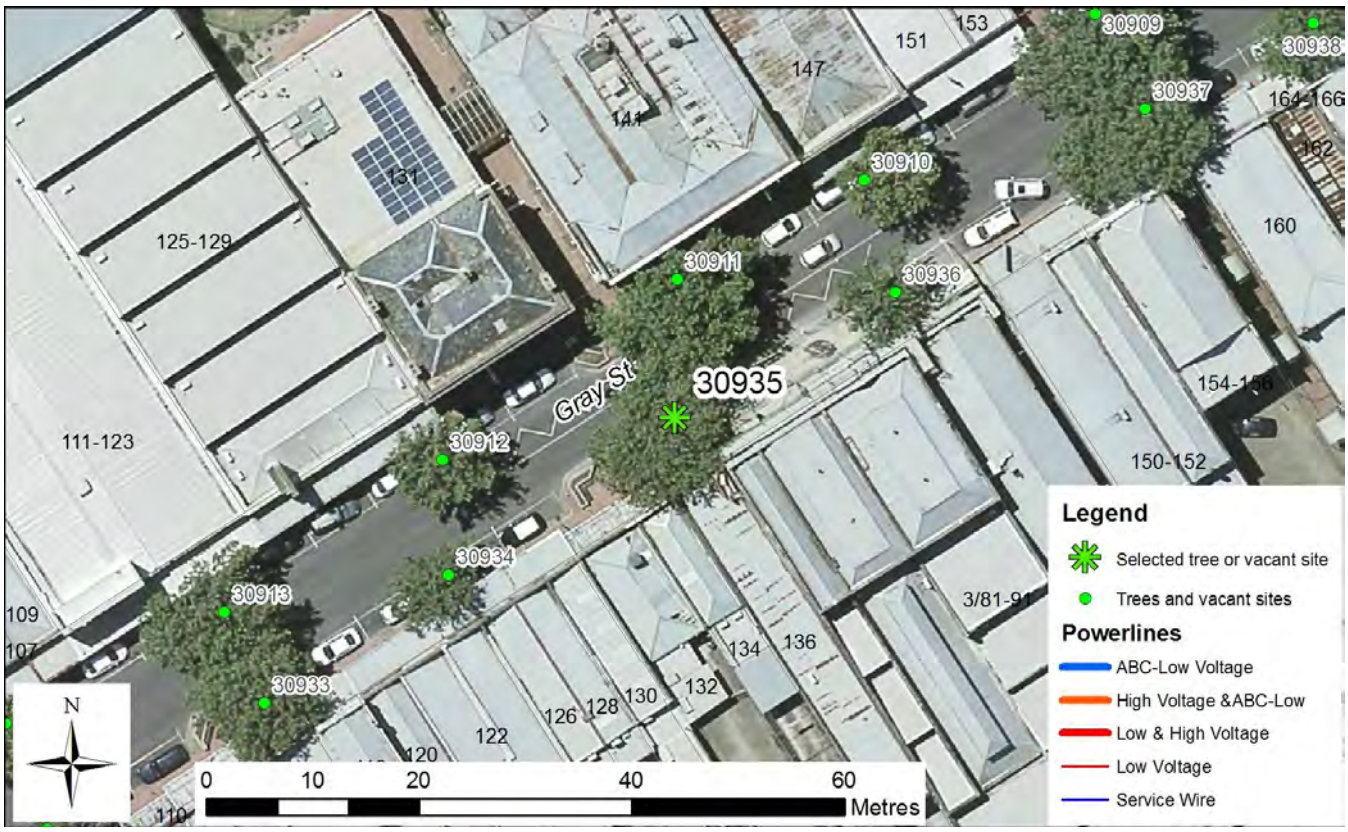
Hamilton CBD

Asset ID:	**30935**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	14m x 14m
DBH (cm)	42
Health:	Good
Structure:	Fair
ULE:	10-20 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	Moderate
Infrastructure Damage:	Footpath, Building
Comments:	

Street Planted: GRAY STREET

Latitude / Longitude: -37.743313, 142.024175

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**



Individual Tree Assessment - 2017

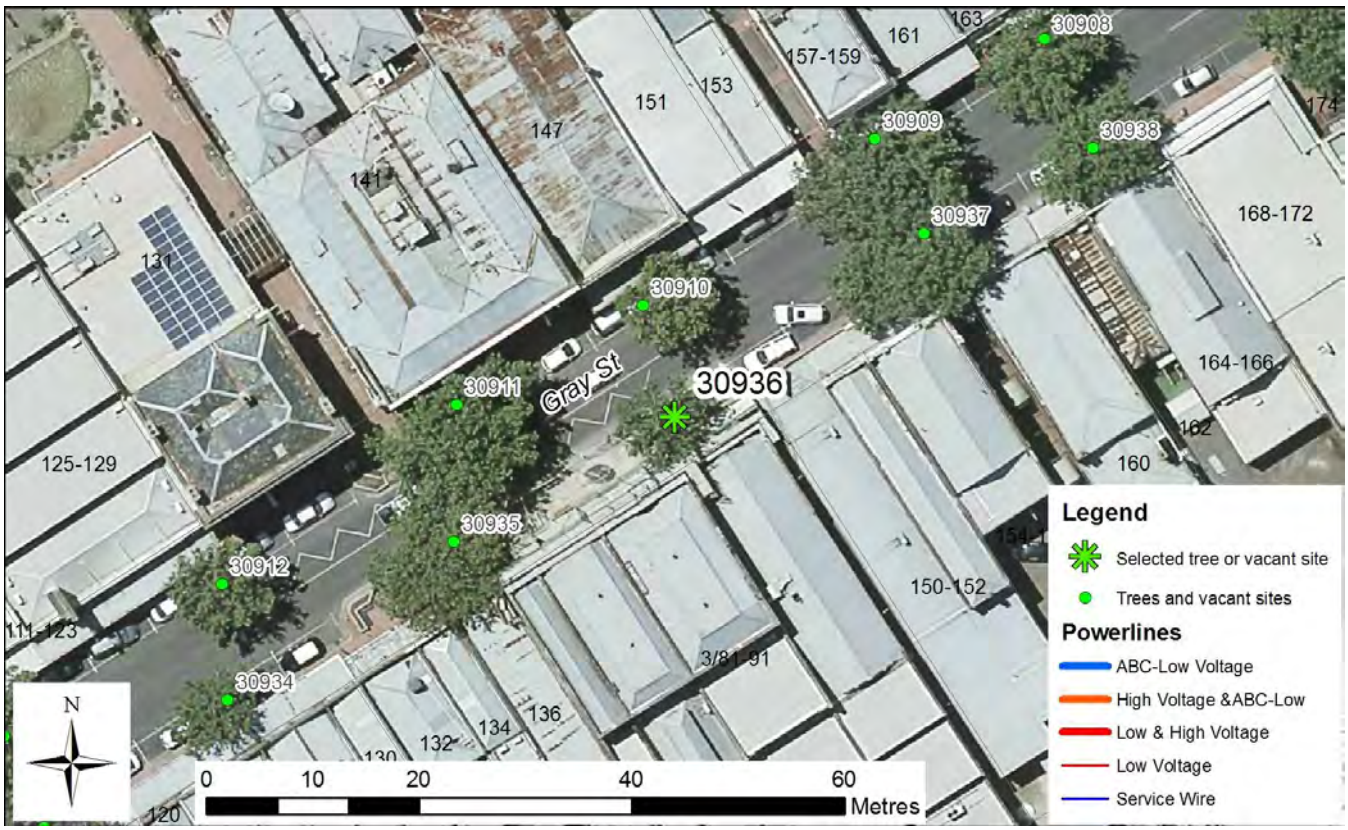
Hamilton CBD

Asset ID:	**30936**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	11m x 11m
DBH (cm)	32
Health:	Good
Structure:	Fair
ULE:	10-20 years
Works:	Canopy lift over building to provide 2m clearance and clear from street light
Priority:	Moderate
Infrastructure Damage:	Road, Building
Comments:	Kerb and footpath recently repaired

Street Planted: GRAY STREET

Latitude / Longitude: -37.743205, 142.024409

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**



Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30937**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	15m x 16m
DBH (cm)	47
Health:	Good
Structure:	Fair
ULE:	10-20 years
Works:	Canopy lift over building to provide 2m clearance and clear from street light
Priority:	Moderate
Infrastructure Damage:	Footpath, Building, Kerb, Road
Comments:	Planted in raised garden bed which is in disrepair

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Street Planted: GRAY STREET

Latitude / Longitude: -37.743047, 142.024673

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30938**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	13m x 15m
DBH (cm)	37
Health:	Good
Structure:	Fair
ULE:	10-20 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	Moderate
Infrastructure Damage:	Footpath, Building, Kerb, Road
Comments:	

Street Planted: GRAY STREET

Latitude / Longitude: -37.742973, 142.024852

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30939**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	12m x 15m
DBH (cm)	38
Health:	Good
Structure:	Fair
ULE:	10-20 years
Works:	Canopy lift over building to provide 2m clearance and clear from street light
Priority:	Moderate
Infrastructure Damage:	Footpath, Building, Kerb, Road

Comments:

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Street Planted: GRAY STREET

Latitude / Longitude: -37.742851, 142.025126

Individual Tree Assessment - 2017

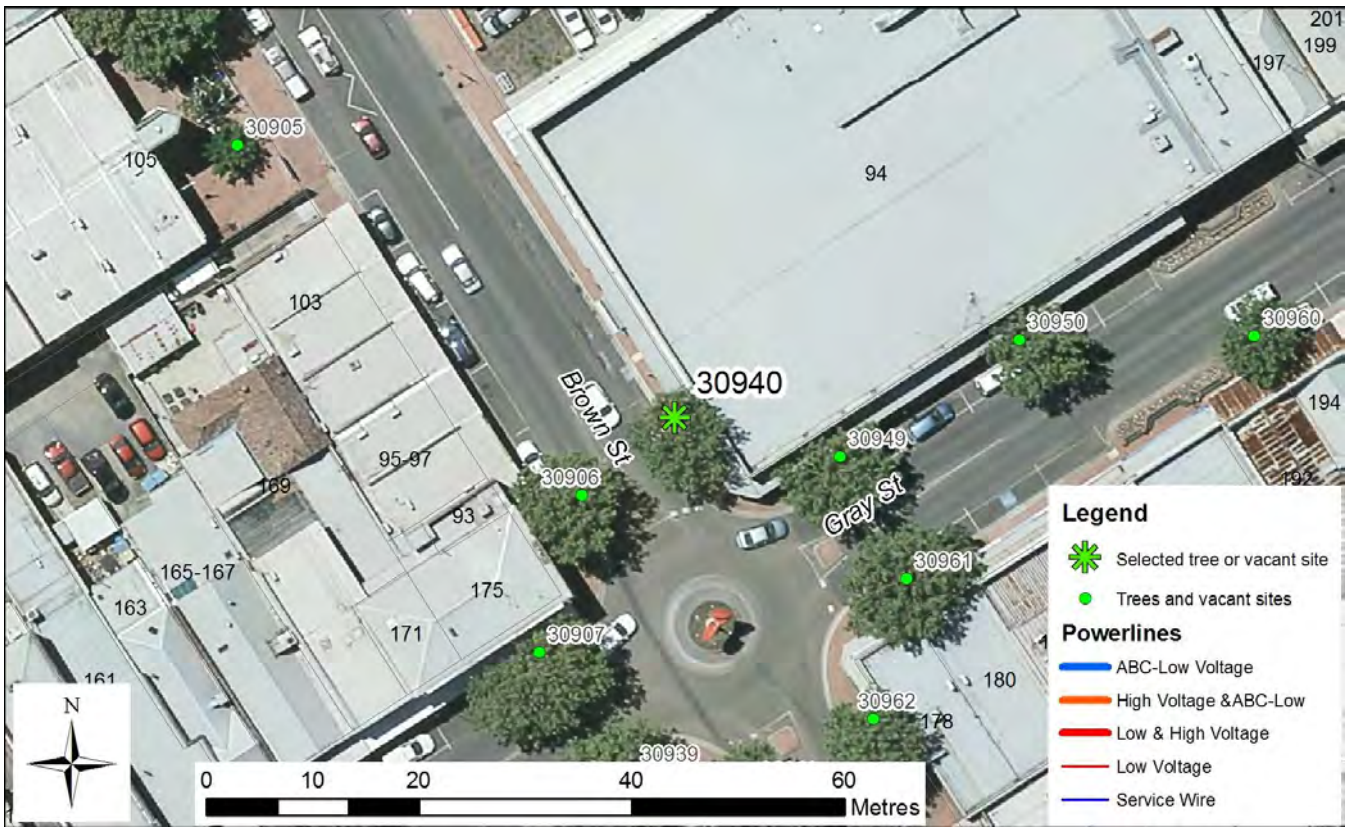
Hamilton CBD

Asset ID:	**30940**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	14m x 13m
DBH (cm)	32
Health:	Good
Structure:	Fair
ULE:	10-20 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	Moderate
Infrastructure Damage:	Road, Footpath, Building, Kerb
Comments:	

Street Planted: BROWN STREET

Latitude / Longitude: -37.742551, 142.025166

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**



Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30941**
Botanical Name:	*Redundant*
Common Name:	Redundant
Origin:	
Age:	Redundant
Height x Width (m)	0m x 0m
DBH (cm)	0
Health:	Redundant
Structure:	Redundant
ULE:	0 years
Works:	No works
Priority:	None
Infrastructure Damage:	None
Comments:	Tree is gone (Gronophyllum ramsayi - previous inventory), cannot replace
Failure Potential:	**7. None**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **6000000000**

Street Planted: BROWN STREET

Latitude / Longitude: -37.742151, 142.024839

Individual Tree Assessment - 2017

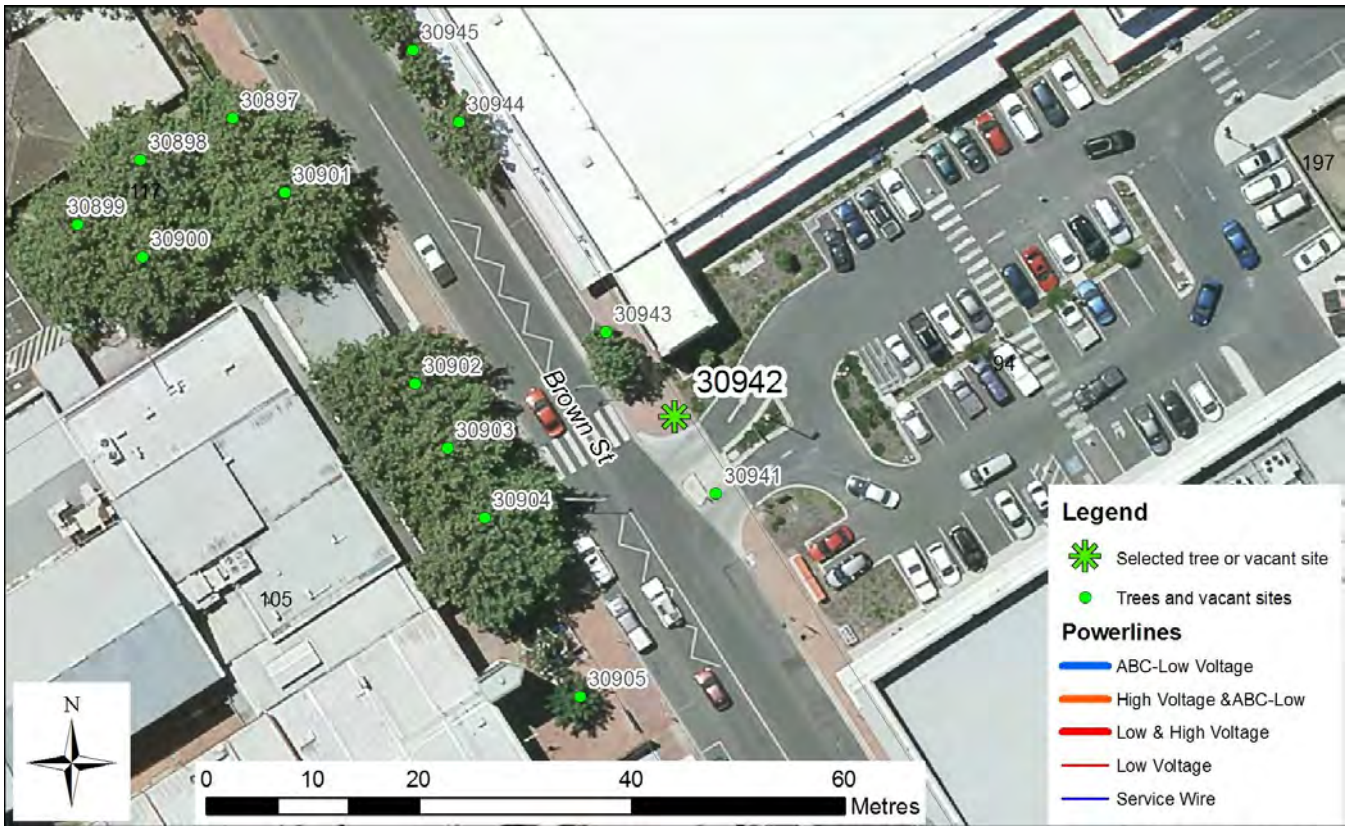
Hamilton CBD

Asset ID:	**30942**
Botanical Name:	*Redundant*
Common Name:	Redundant
Origin:	
Age:	Redundant
Height x Width (m)	0m x 0m
DBH (cm)	0
Health:	Redundant
Structure:	Redundant
ULE:	0 years
Works:	No works
Priority:	None
Infrastructure Damage:	None
Comments:	Tree is gone (Gronophyllum ramsayi - previous inventory), cannot replace

Street Planted: BROWN STREET

Latitude / Longitude: -37.742086, 142.024794

Failure Potential:	**7. None**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **6000000000**



Individual Tree Assessment - 2017

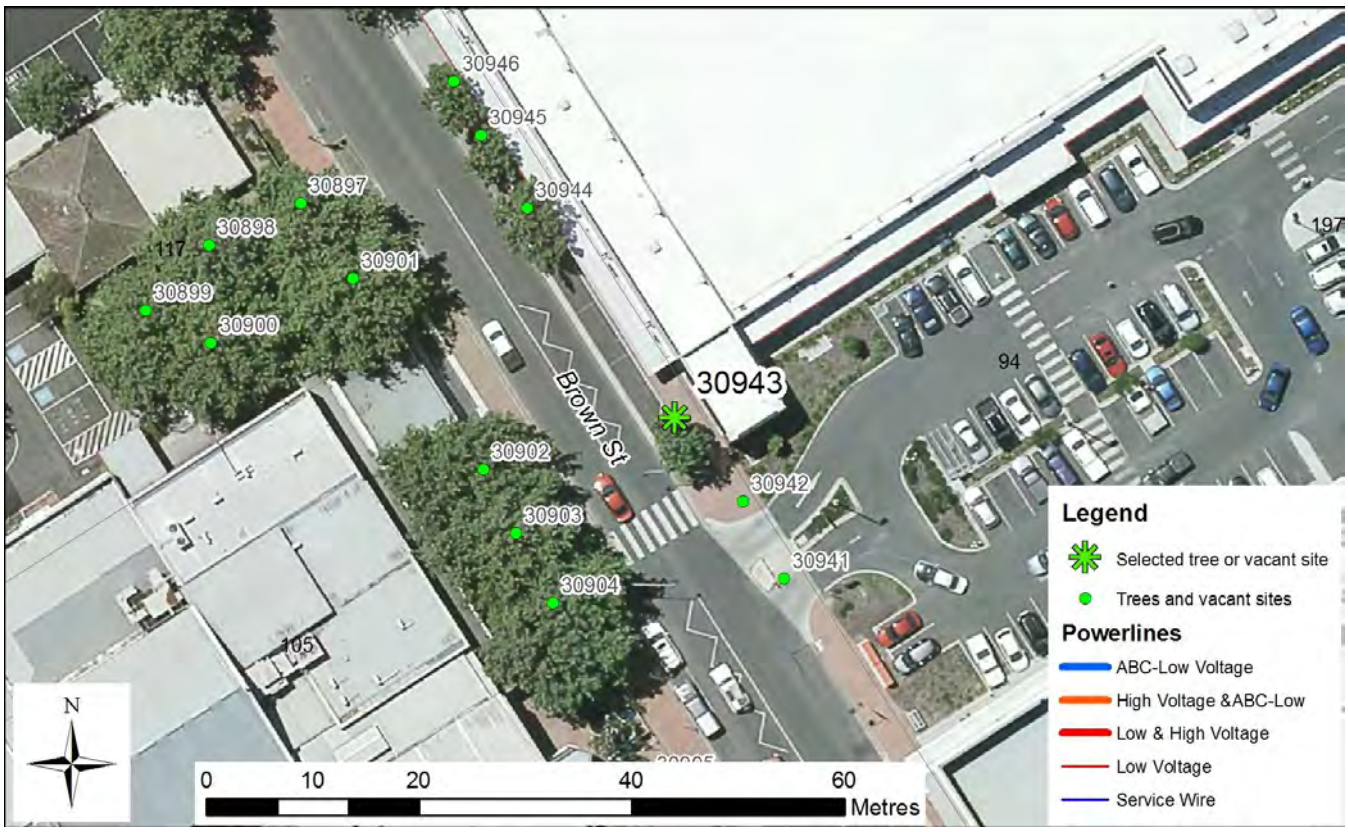
Hamilton CBD

Asset ID:	**30943**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	11m x 11m
DBH (cm)	26
Health:	Good
Structure:	Fair
ULE:	10-20 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	Moderate
Infrastructure Damage:	Building, Kerb
Comments:	

Street Planted: BROWN STREET

Latitude / Longitude: -37.742015, 142.02472

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**



Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30944**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	11m x 11m
DBH (cm)	30
Health:	Good
Structure:	Fair
ULE:	10-20 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	Moderate
Infrastructure Damage:	Building, Kerb
Comments:	

Street Planted: BROWN STREET

Latitude / Longitude: -37.741821, 142.024562

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30945**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	9m x 6m
DBH (cm)	22
Health:	Fair
Structure:	Fair
ULE:	10-20 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	Moderate
Infrastructure Damage:	Building, Kerb
Comments:	

Street Planted: BROWN STREET

Latitude / Longitude: -37.741779, 142.024511

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30946**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	11m x 8m
DBH (cm)	26
Health:	Fair
Structure:	Fair
ULE:	10-20 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	Moderate
Infrastructure Damage:	Building, Kerb
Comments:	

Street Planted: BROWN STREET

Latitude / Longitude: -37.741733, 142.024481

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30947**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	14m x 11m
DBH (cm)	42
Health:	Fair
Structure:	Fair
ULE:	10-20 years
Works:	No works
Priority:	None
Infrastructure Damage:	Road
Comments:	Kerb recently replaced

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Street Planted: BROWN STREET

Latitude / Longitude: -37.7416, 142.024392

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30948**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	13m x 14m
DBH (cm)	37
Health:	Fair
Structure:	Fair
ULE:	10-20 years
Works:	No works
Priority:	None
Infrastructure Damage:	Road
Comments:	

Street Planted: BROWN STREET

Latitude / Longitude: -37.741324, 142.024142

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30949**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	11m x 12m
DBH (cm)	35
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	Moderate
Infrastructure Damage:	Kerb, Footpath, Building
Comments:	

Street Planted: GRAY STREET

Latitude / Longitude: -37.742582, 142.025344

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

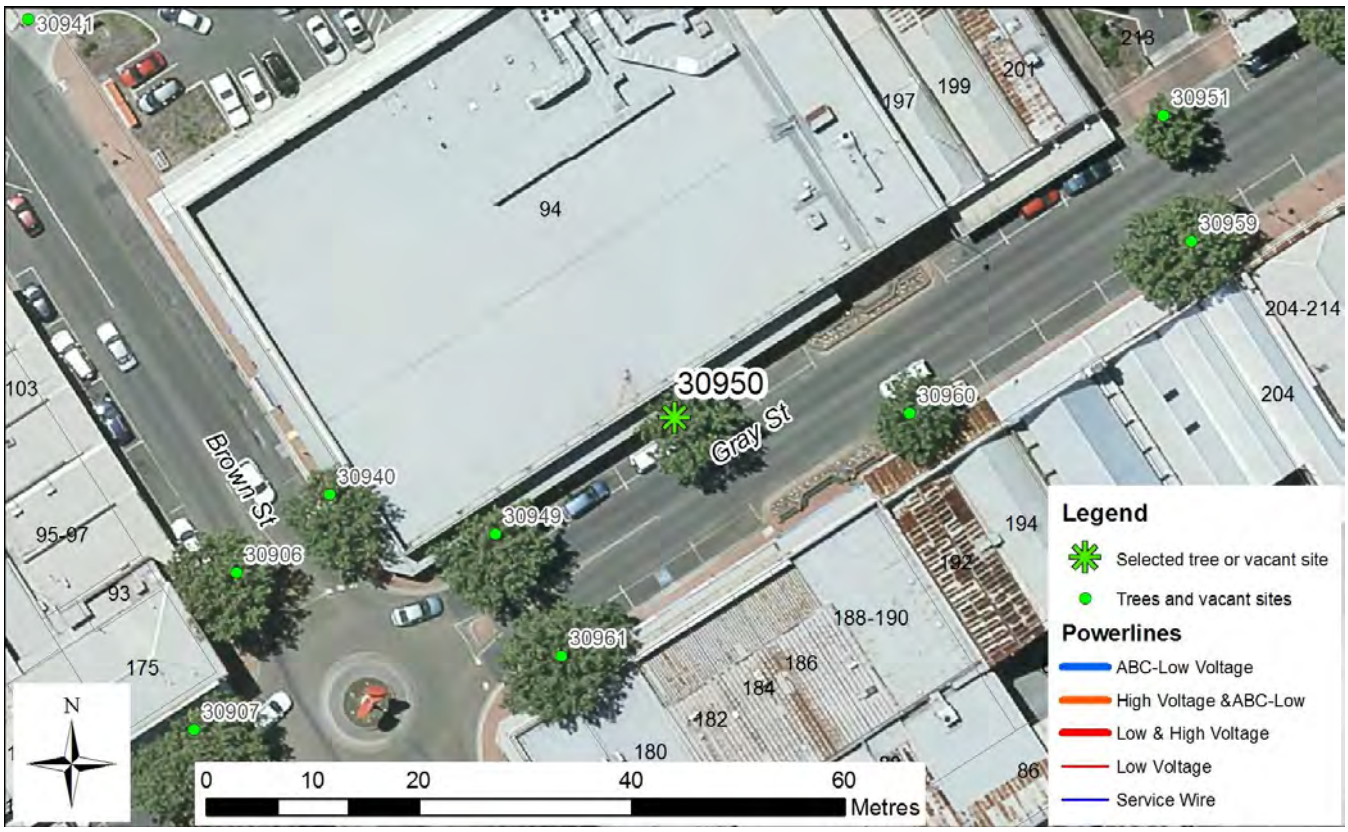
Hamilton CBD

Asset ID:	**30950**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	11m x 11m
DBH (cm)	32
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	Moderate
Infrastructure Damage:	Kerb, Footpath, Building
Comments:	

Street Planted: GRAY STREET

Latitude / Longitude: -37.742482, 142.025533

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**



Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30951**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	9m x 8m
DBH (cm)	24
Health:	Fair
Structure:	Fair
ULE:	10-20 years
Works:	No works
Priority:	None
Infrastructure Damage:	Footpath, Kerb, Road
Comments:	

Street Planted: GRAY STREET

Latitude / Longitude: -37.742212, 142.026041

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30952**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	11m x 12m
DBH (cm)	35
Health:	Fair
Structure:	Fair
ULE:	10-20 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	Moderate
Infrastructure Damage:	Footpath, Building, Road
Comments:	

Street Planted: GRAY STREET

Latitude / Longitude: -37.742109, 142.02625

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

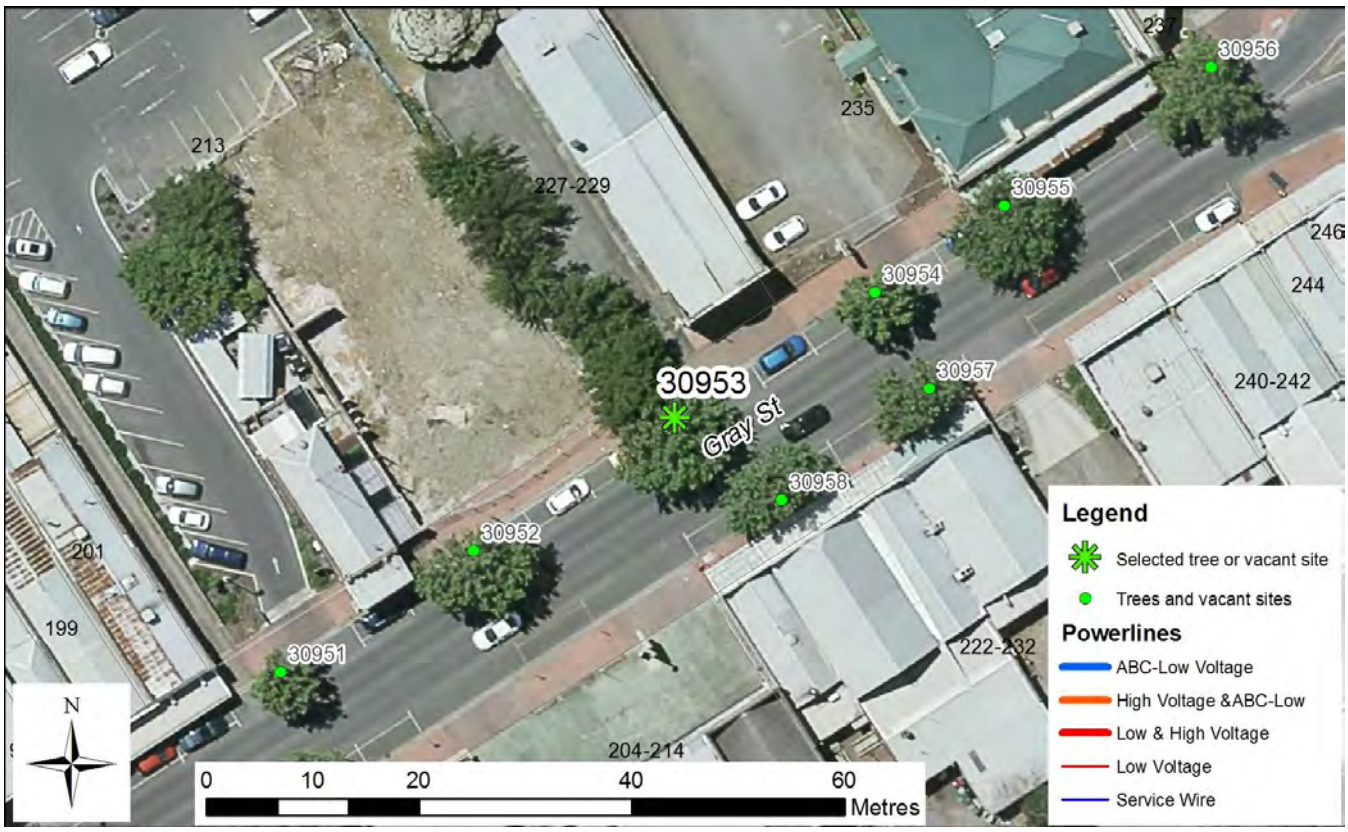
Hamilton CBD

Asset ID:	**30953**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	11m x 12m
DBH (cm)	35
Health:	Fair
Structure:	Fair
ULE:	10-20 years
Works:	No works
Priority:	None
Infrastructure Damage:	Footpath, Kerb, Road
Comments:	

Street Planted: GRAY STREET

Latitude / Longitude: -37.741993, 142.026459

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**



Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30954**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	9m x 8m
DBH (cm)	25
Health:	Fair
Structure:	Fair
ULE:	10-20 years
Works:	No works
Priority:	None
Infrastructure Damage:	Kerb, Road
Comments:	

Street Planted: GRAY STREET

Latitude / Longitude: -37.741885, 142.026676

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30955**
Botanical Name:	*Platanus orientalis*
Common Name:	Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	12m x 12m
DBH (cm)	34
Health:	Good
Structure:	Fair
ULE:	10-20 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	Moderate
Infrastructure Damage:	Building, Kerb, Road
Comments:	Confirm species is orientalis when tree is in full leaf.

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Street Planted: GRAY STREET

Latitude / Longitude: -37.741814, 142.026807

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30956**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	12m x 13m
DBH (cm)	38
Health:	Good
Structure:	Fair
ULE:	10-20 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	Moderate
Infrastructure Damage:	Building, Kerb, Road
Comments:	

Street Planted: GRAY STREET

Latitude / Longitude: -37.741702, 142.027037

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

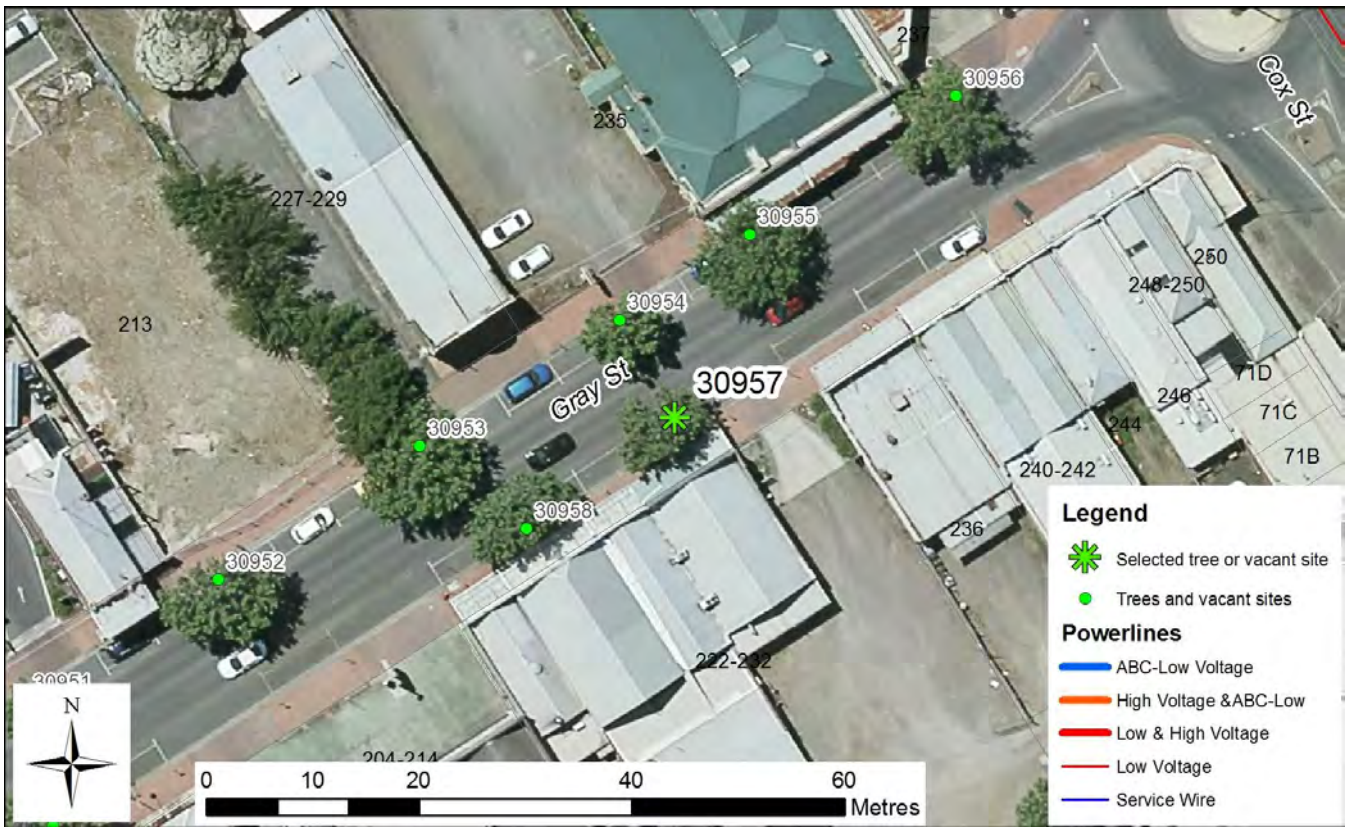
Hamilton CBD

Asset ID:	**30957**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	11m x 10m
DBH (cm)	32
Health:	Good
Structure:	Fair
ULE:	10-20 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	Moderate
Infrastructure Damage:	Footpath, Building, Kerb, Road
Comments:	

Street Planted: GRAY STREET

Latitude / Longitude: -37.741977, 142.026741

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**



Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30958**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	12m x 14m
DBH (cm)	35
Health:	Good
Structure:	Fair
ULE:	10-20 years
Works:	Canopy lift over building to provide 2m clearance and clear from street light
Priority:	Moderate
Infrastructure Damage:	Footpath, Building, Kerb, Road

Comments:

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Street Planted: GRAY STREET

Latitude / Longitude: -37.742072, 142.026584

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30959**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	13m x 14m
DBH (cm)	38
Health:	Good
Structure:	Fair
ULE:	10-20 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	Moderate
Infrastructure Damage:	Footpath, Building, Kerb, Road
Comments:	

Street Planted: GRAY STREET

Latitude / Longitude: -37.742328, 142.026083

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30960**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	11m x 9m
DBH (cm)	28
Health:	Good
Structure:	Fair
ULE:	10-20 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	Moderate
Infrastructure Damage:	Footpath, Building, Kerb, Road
Comments:	

Street Planted: GRAY STREET

Latitude / Longitude: -37.742476, 142.025784

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

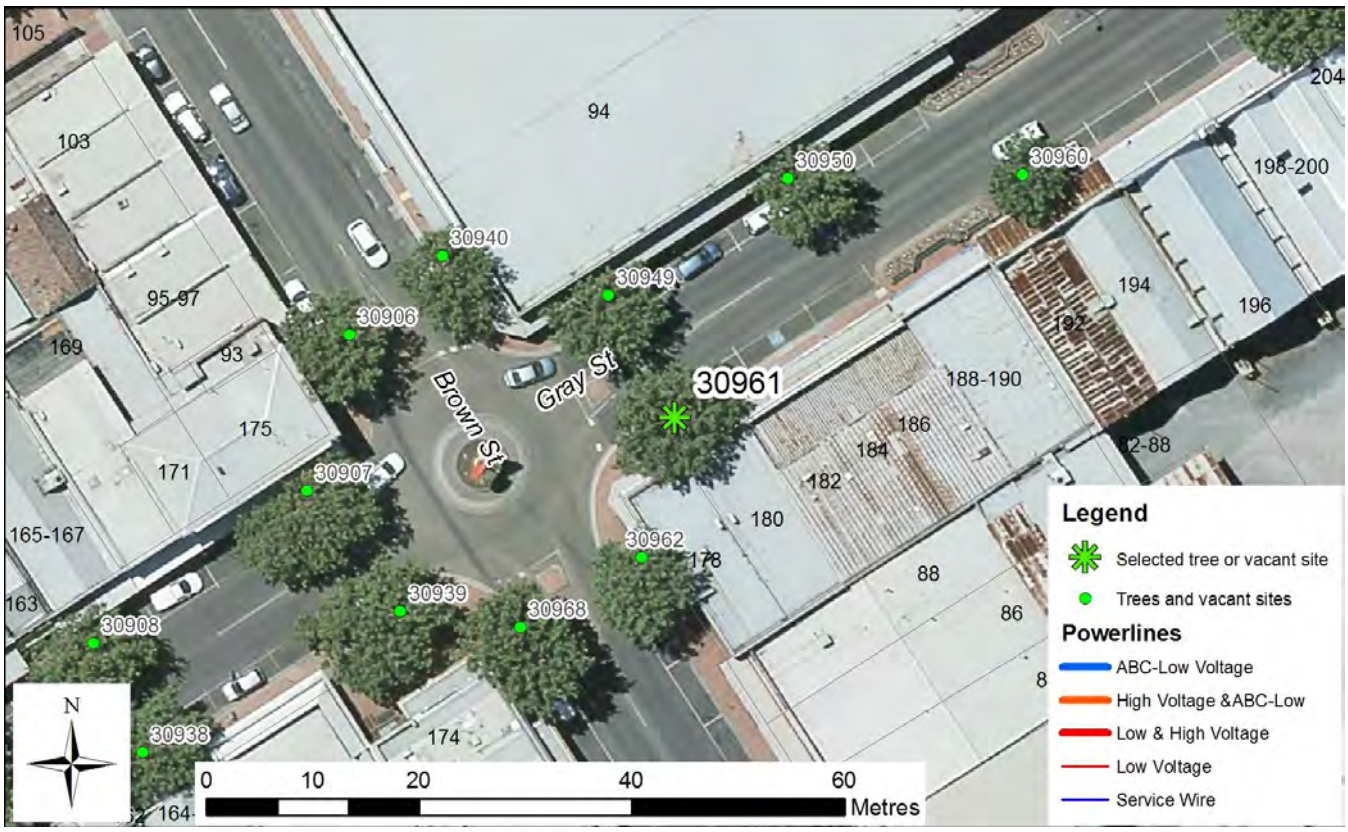
Hamilton CBD

Asset ID:	**30961**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	12m x 12m
DBH (cm)	37
Health:	Good
Structure:	Fair
ULE:	10-20 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	Moderate
Infrastructure Damage:	Footpath, Building, Kerb, Road
Comments:	

Street Planted: GRAY STREET

Latitude / Longitude: -37.742685, 142.025416

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**



Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30962**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	13m x 13m
DBH (cm)	37
Health:	Good
Structure:	Fair
ULE:	10-20 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	Moderate
Infrastructure Damage:	Road, Footpath, Building, Kerb
Comments:	

Street Planted: BROWN STREET

Latitude / Longitude: -37.742804, 142.025382

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

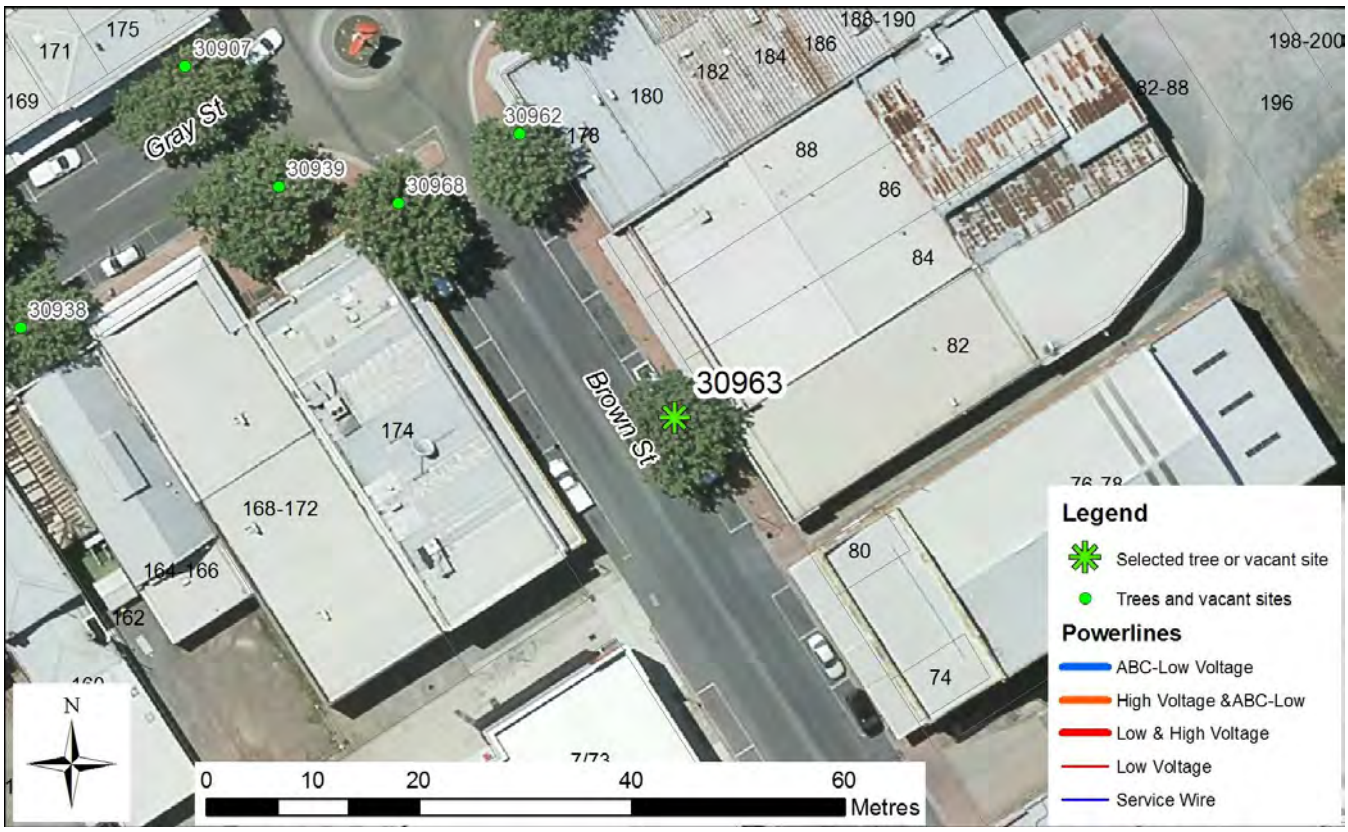
Hamilton CBD

Asset ID:	**30963**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	14m x 14m
DBH (cm)	41
Health:	Good
Structure:	Fair
ULE:	10-20 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	Moderate
Infrastructure Damage:	Road, Footpath, Building, Kerb
Comments:	

Street Planted: BROWN STREET

Latitude / Longitude: -37.743034, 142.02557

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**



Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30964**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	14m x 10m
DBH (cm)	37
Health:	Good
Structure:	Fair
ULE:	10-20 years
Works:	No works
Priority:	None
Infrastructure Damage:	Kerb, Building, Road
Comments:	

Street Planted: BROWN STREET

Latitude / Longitude: -37.743449, 142.025908

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30965**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	11m x 11m
DBH (cm)	36
Health:	Good
Structure:	Fair
ULE:	10-20 years
Works:	No works
Priority:	None
Infrastructure Damage:	Kerb, Building, Road
Comments:	

Street Planted: BROWN STREET

Latitude / Longitude: -37.743562, 142.026011

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30966**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	13m x 11m
DBH (cm)	34
Health:	Good
Structure:	Fair
ULE:	10-20 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	Moderate
Infrastructure Damage:	Kerb, Building, Road
Comments:	

Street Planted: BROWN STREET

Latitude / Longitude: -37.743739, 142.026154

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30967**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	11m x 10m
DBH (cm)	30
Health:	Fair
Structure:	Fair
ULE:	10-20 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	Moderate
Infrastructure Damage:	Road, Building
Comments:	Kerb recently replaced

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Street Planted: BROWN STREET

Latitude / Longitude: -37.743977, 142.026344

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30968**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	13m x 15m
DBH (cm)	43
Health:	Good
Structure:	Fair
ULE:	10-20 years
Works:	No works
Priority:	None
Infrastructure Damage:	Building, Footpath
Comments:	

Street Planted: BROWN STREET

Latitude / Longitude: -37.742864, 142.025253

Failure Potential:	**4. Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **5000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30969**
Botanical Name:	*Platanus orientalis*
Common Name:	Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	12m x 10m
DBH (cm)	30
Health:	Good
Structure:	Poor
ULE:	20-40 years
Works:	Codominant reduction in upper canopy, previous failure and crossing branches
Priority:	High
Infrastructure Damage:	Kerb, Private property - retaining wall

Comments:

Failure Potential:	**3. Moderate**
Failure Size:	**3. 101-250mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **500000**

Street Planted: FRENCH STREET

Latitude / Longitude: -37.745379, 142.024854

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30970**
Botanical Name:	*Platanus orientalis*
Common Name:	Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	12m x 14m
DBH (cm)	42
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	No works
Priority:	None
Infrastructure Damage:	Footpath, Kerb
Comments:	

Street Planted: FRENCH STREET

Latitude / Longitude: -37.745321, 142.02498

Failure Potential:	**4. Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

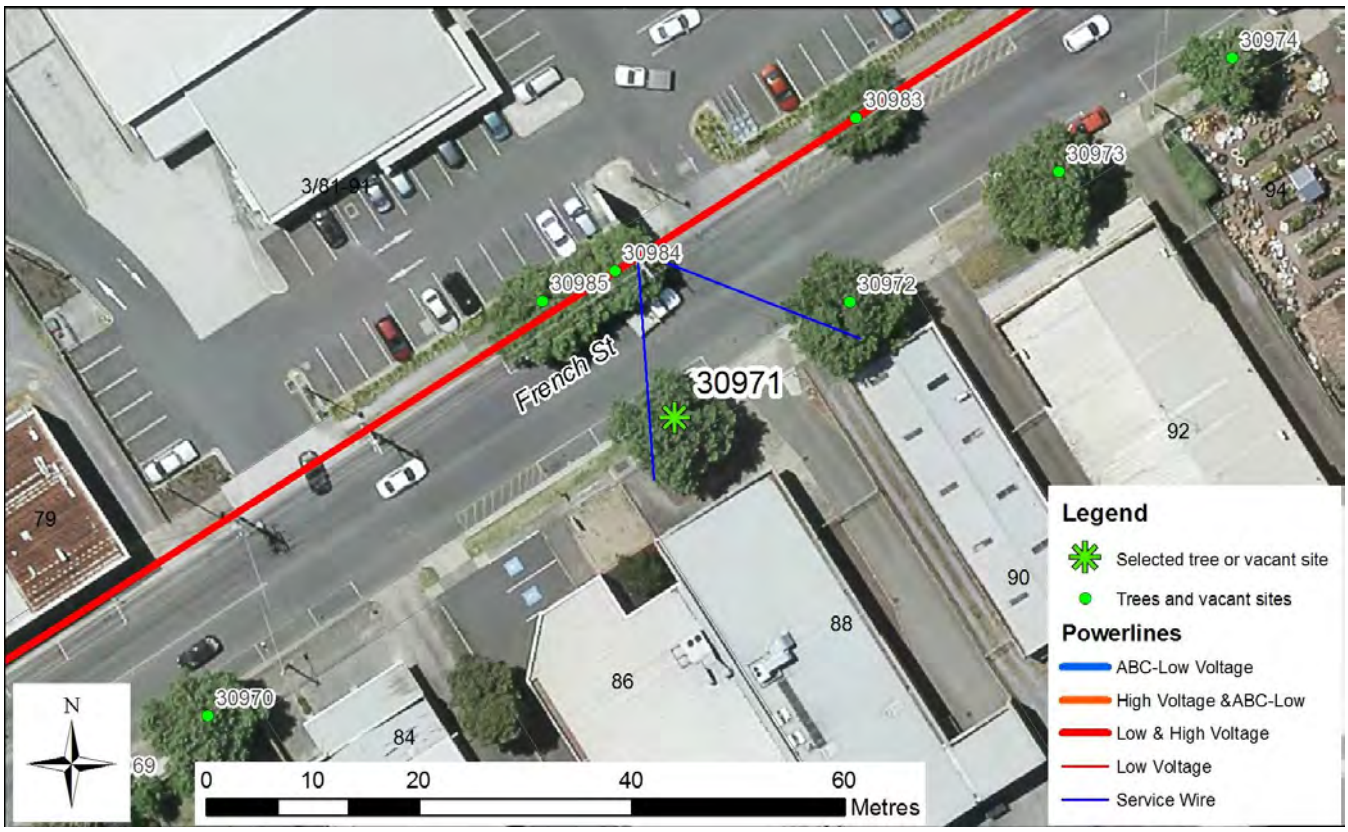
Hamilton CBD

Asset ID:	**30971**
Botanical Name:	*Platanus orientalis*
Common Name:	Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	14m x 12m
DBH (cm)	42
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	No works
Priority:	None
Infrastructure Damage:	Service wire above
Comments:	Kerb and footpath recently replaced

Failure Potential:	**4. Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **50000000**

Street Planted: FRENCH STREET

Latitude / Longitude: -37.745064, 142.025474



Individual Tree Assessment - 2017

Hamilton CBD

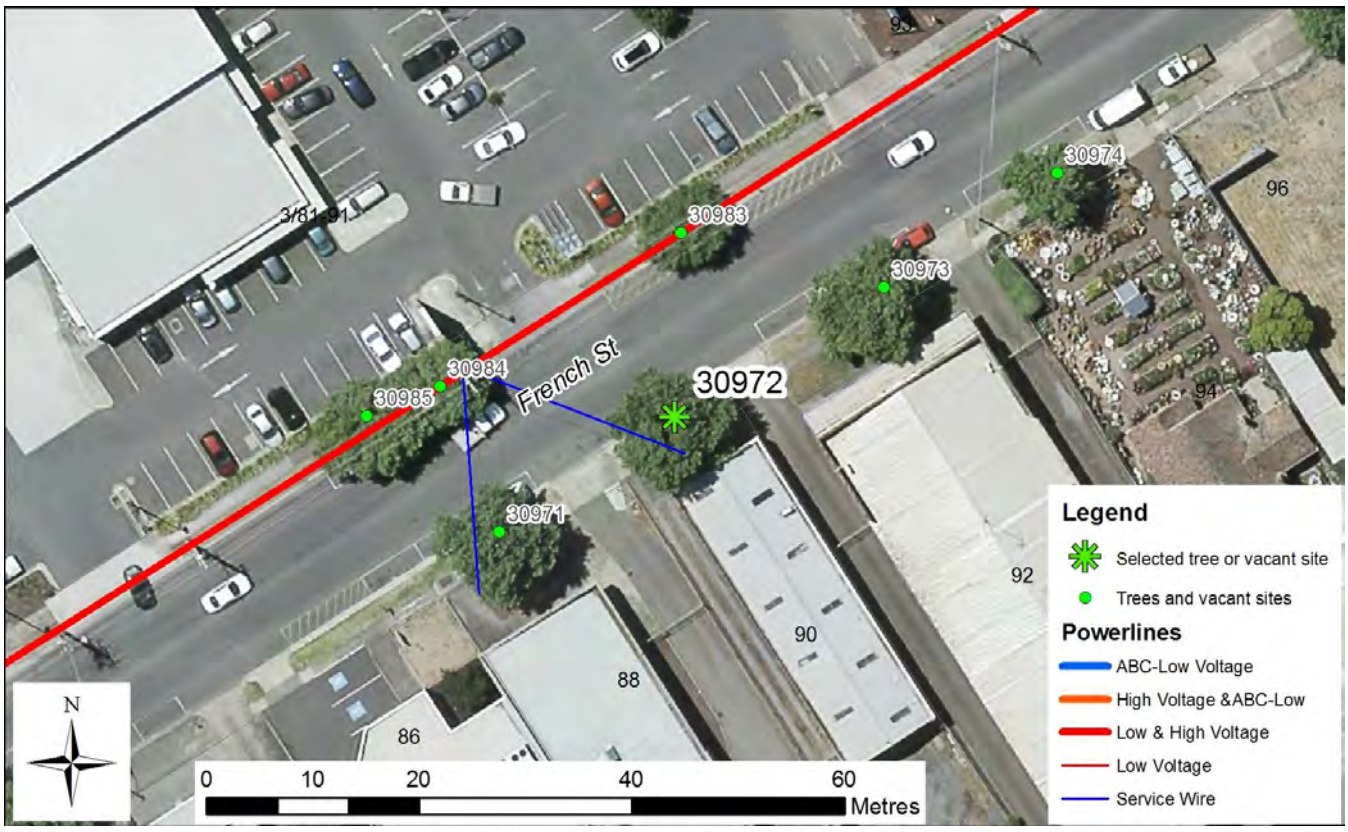
Asset ID:	**30972**
Botanical Name:	*Platanus orientalis*
Common Name:	Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	12m x 15m
DBH (cm)	46
Health:	Good
Structure:	Very poor
ULE:	20-40 years
Works:	Canopy lift over building, remove hanging branch from canopy, clear from service wire
Priority:	Urgent
Infrastructure Damage:	Kerb, Footpath

Comments:

Failure Potential:	**2. High**
Failure Size:	**3. 101-250mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **50000**

Street Planted: FRENCH STREET

Latitude / Longitude: -37.744965, 142.02566



Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30973**
Botanical Name:	*Platanus orientalis*
Common Name:	Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	12m x 14m
DBH (cm)	42
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	No works
Priority:	None
Infrastructure Damage:	Kerb, Footpath
Comments:	

Street Planted: FRENCH STREET

Latitude / Longitude: -37.744853, 142.025881

Failure Potential:	**4. Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

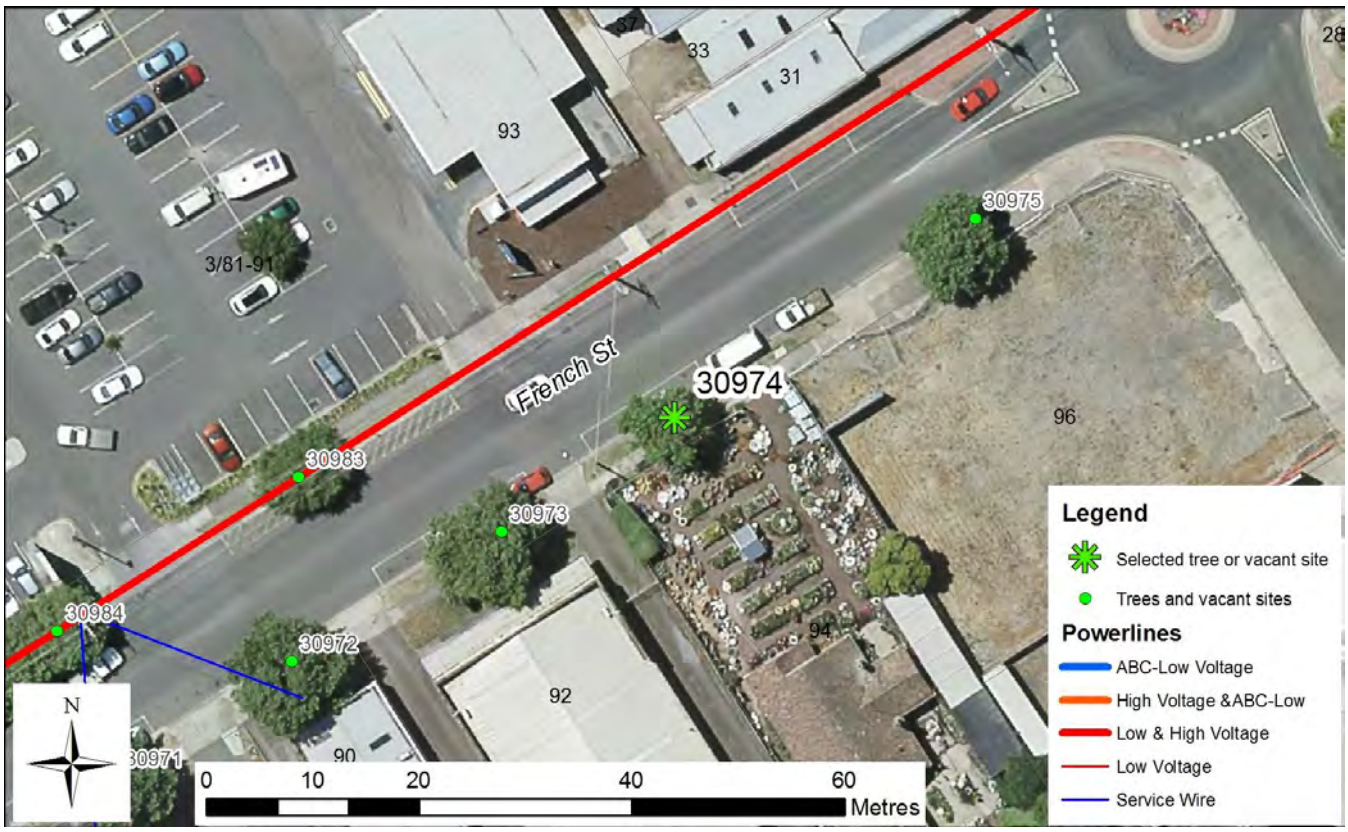
Hamilton CBD

Asset ID:	**30974**
Botanical Name:	*Platanus orientalis*
Common Name:	Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	10m x 9m
DBH (cm)	32
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	No works
Priority:	None
Infrastructure Damage:	Footpath
Comments:	

Street Planted: FRENCH STREET

Latitude / Longitude: -37.744754, 142.026065

Failure Potential:	**4. Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **50000000**



Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30975**
Botanical Name:	*Platanus orientalis*
Common Name:	Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	10m x 11m
DBH (cm)	38
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	No works
Priority:	None
Infrastructure Damage:	Kerb, Footpath
Comments:	

Street Planted: FRENCH STREET

Latitude / Longitude: -37.744584, 142.026383

Failure Potential:	**4. Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

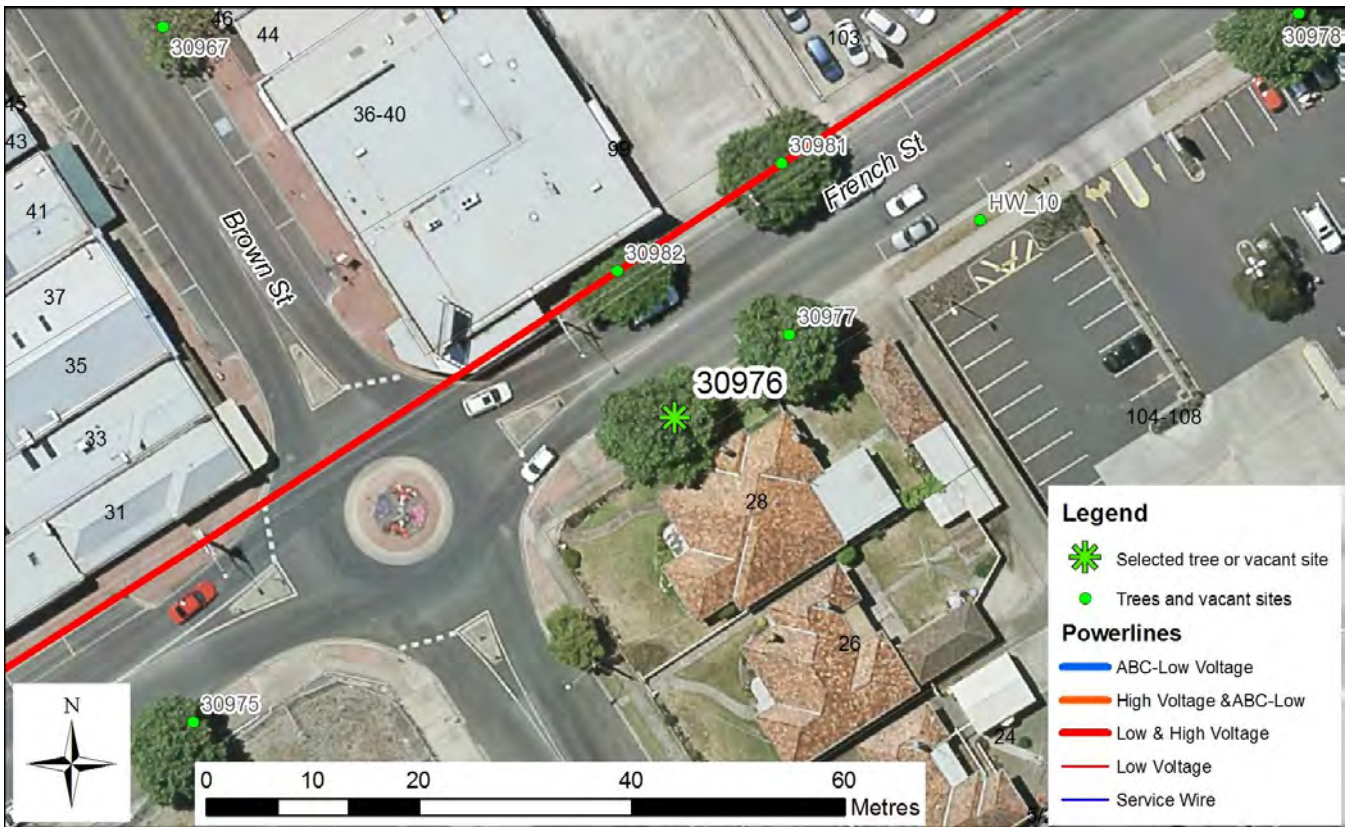
Hamilton CBD

Asset ID:	**30976**
Botanical Name:	*Platanus orientalis*
Common Name:	Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	12m x 12m
DBH (cm)	44
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	No works
Priority:	None
Infrastructure Damage:	Private property - retaining wall, Kerb, Footpath
Comments:	

Street Planted: FRENCH STREET

Latitude / Longitude: -37.744322, 142.026893

Failure Potential:	**4. Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **50000000**



Individual Tree Assessment - 2017

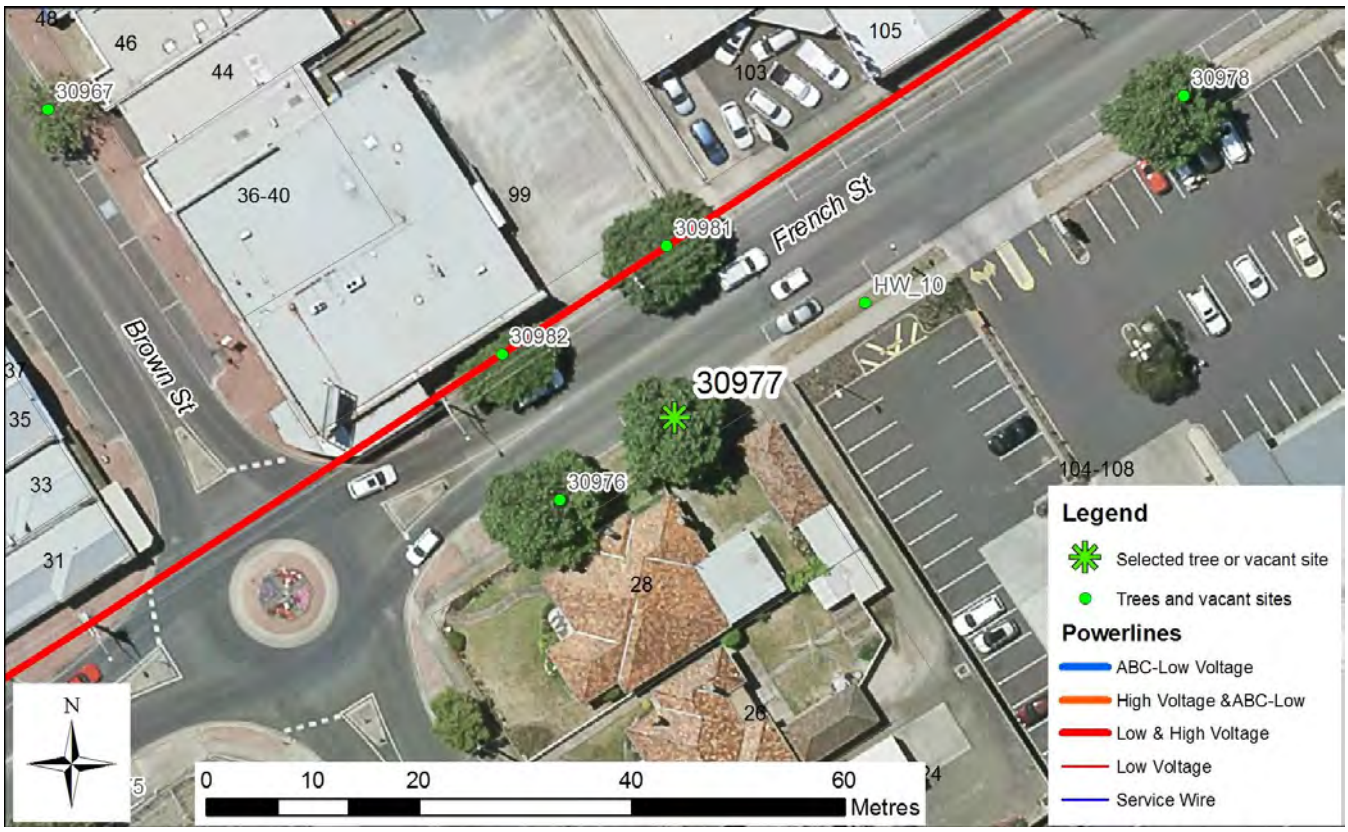
Hamilton CBD

Asset ID:	**30977**
Botanical Name:	*Platanus orientalis*
Common Name:	Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	12m x 12m
DBH (cm)	40
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	No works
Priority:	None
Infrastructure Damage:	Kerb, Footpath
Comments:	

Street Planted: FRENCH STREET

Latitude / Longitude: -37.744251, 142.027015

Failure Potential:	**4. Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **50000000**



Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30978**
Botanical Name:	*Platanus orientalis*
Common Name:	Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	12m x 12m
DBH (cm)	38
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	No works
Priority:	None
Infrastructure Damage:	Kerb, Footpath
Comments:	

Street Planted: FRENCH STREET

Latitude / Longitude: -37.743974, 142.027554

Failure Potential:	**4. Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30979**
Botanical Name:	*Platanus orientalis*
Common Name:	Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	12m x 12m
DBH (cm)	42
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	Canopy lift over road and private property
Priority:	Moderate
Infrastructure Damage:	Kerb, Footpath
Comments:	

Street Planted: FRENCH STREET

Latitude / Longitude: -37.743694, 142.028088

Failure Potential:	**4. Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30980**
Botanical Name:	*Platanus orientalis*
Common Name:	Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	8m x 10m
DBH (cm)	46
Health:	Fair
Structure:	Poor
ULE:	5-10 years
Works:	Manage epicormic regrowth from lopping points, clear from LV wire
Priority:	High
Infrastructure Damage:	Footpath, Road, Kerb
Comments:	

Street Planted: FRENCH STREET

Latitude / Longitude: -37.743822, 142.027537

Failure Potential:	**3. Moderate**
Failure Size:	**4. 26-100mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **5000000**

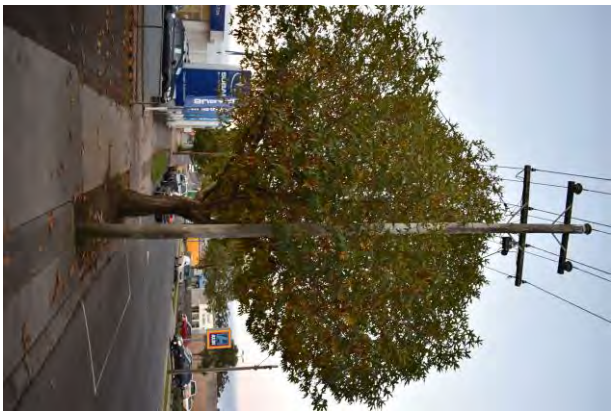
Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30981**
Botanical Name:	*Platanus orientalis*
Common Name:	Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	9m x 12m
DBH (cm)	46
Health:	Fair
Structure:	Poor
ULE:	5-10 years
Works:	Manage epicormic regrowth from lopping points, clear from LV wire
Priority:	High
Infrastructure Damage:	Footpath, Road, Kerb
Comments:	

Street Planted: FRENCH STREET

Latitude / Longitude: -37.744086, 142.02699



Failure Potential:	**3. Moderate**
Failure Size:	**4. 26-100mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **5000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30982**
Botanical Name:	*Platanus orientalis*
Common Name:	Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	9m x 12m
DBH (cm)	43
Health:	Fair
Structure:	Poor
ULE:	5-10 years
Works:	Canopy lift over building to provide 2m clearance, manage epicormic regrowth from lopping points, clear from LV wires
Priority:	High
Infrastructure Damage:	Footpath, Kerb, Building, Road
Comments:	

Street Planted: FRENCH STREET

Latitude / Longitude: -37.744184, 142.026832

Failure Potential:	**3. Moderate**
Failure Size:	**4. 26-100mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **5000000**

Individual Tree Assessment - 2017

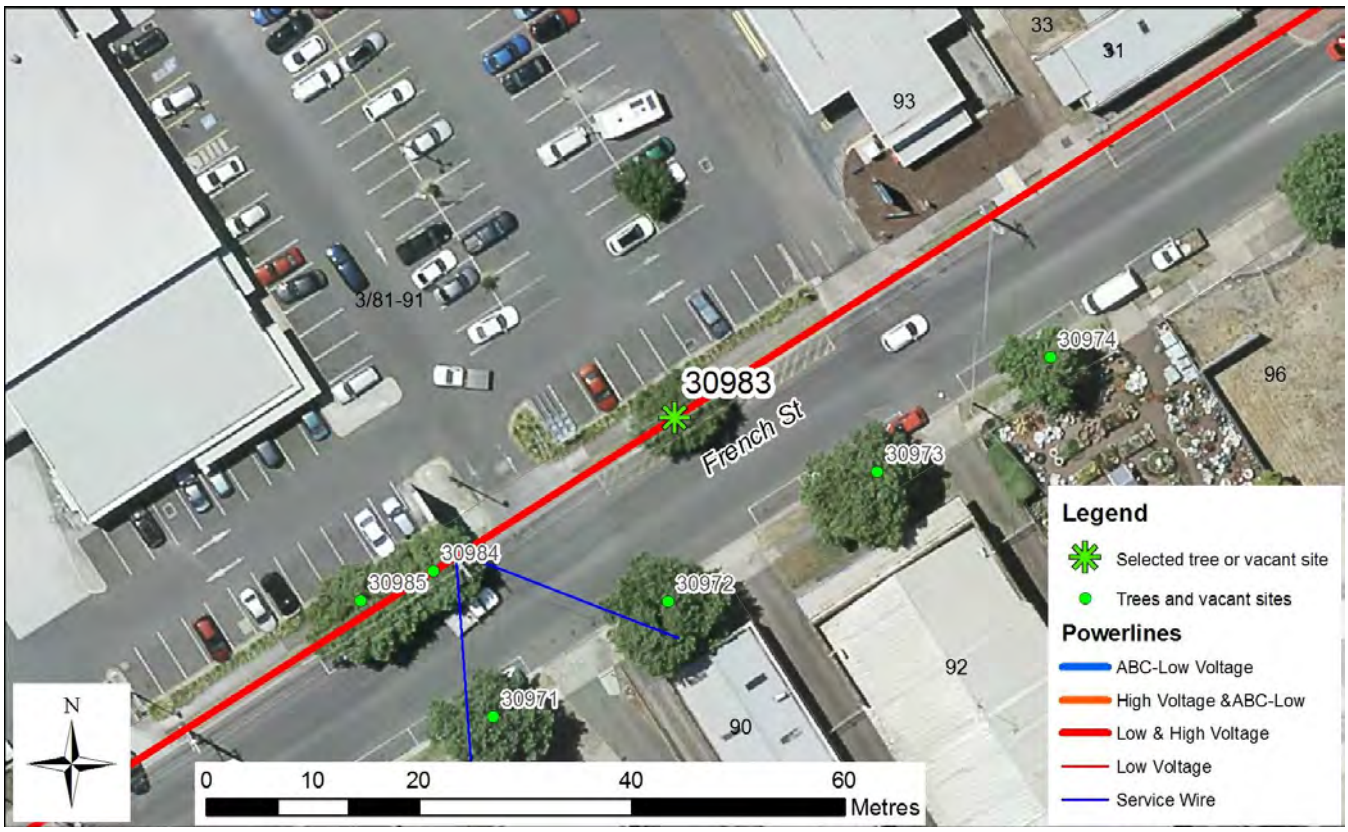
Hamilton CBD

Asset ID:	**30983**
Botanical Name:	*Platanus orientalis*
Common Name:	Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	9m x 8m
DBH (cm)	36
Health:	Fair
Structure:	Poor
ULE:	5-10 years
Works:	Manage epicormic regrowth from lopping points, clear from LV wire
Priority:	High
Infrastructure Damage:	Powerlines above, Footpath, Road
Comments:	

Street Planted: FRENCH STREET

Latitude / Longitude: -37.744797, 142.025642

Failure Potential:	**3. Moderate**
Failure Size:	**4. 26-100mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **5000000**



Individual Tree Assessment - 2017

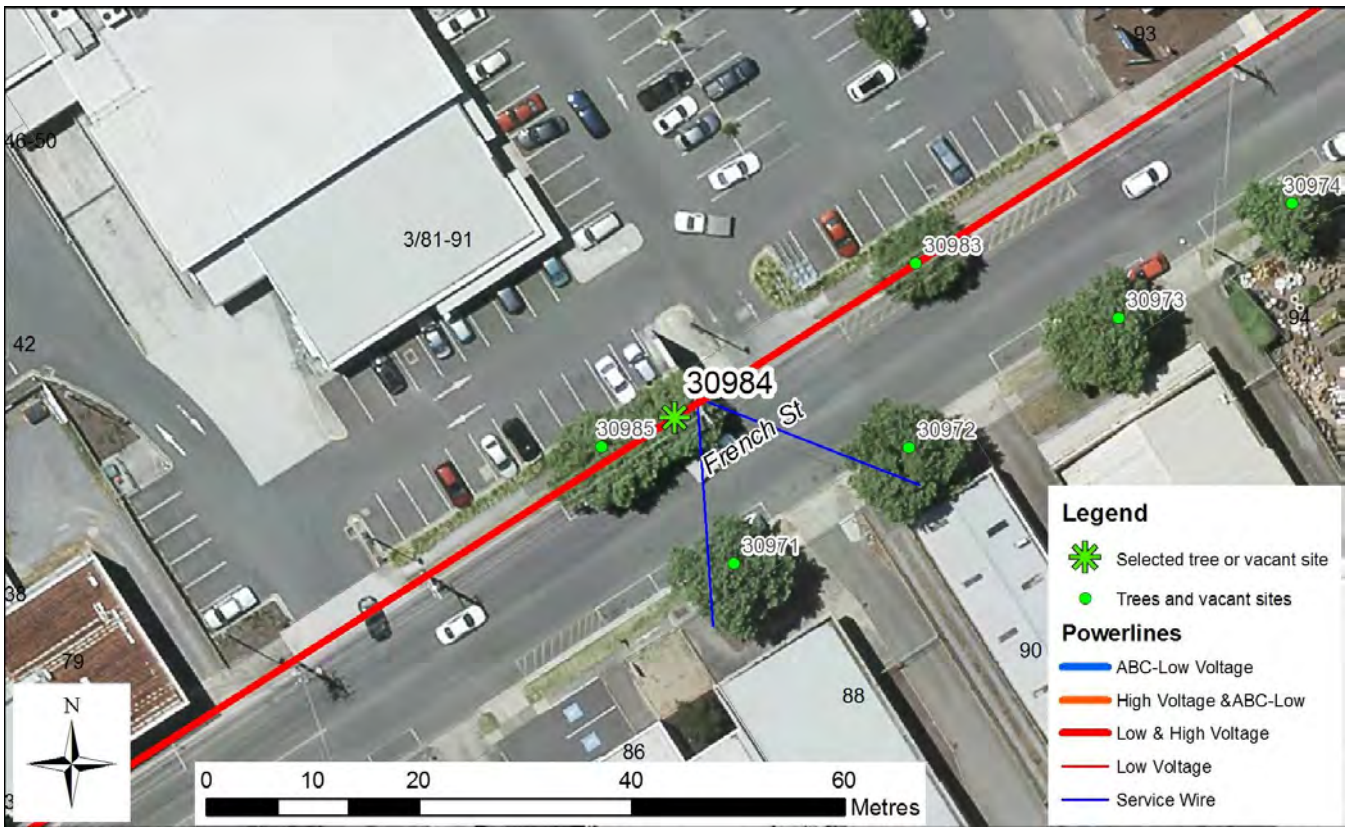
Hamilton CBD

Asset ID:	**30984**
Botanical Name:	*Platanus orientalis*
Common Name:	Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	9m x 8m
DBH (cm)	32
Health:	Fair
Structure:	Poor
ULE:	5-10 years
Works:	Manage epicormic regrowth from lopping points, clear from LV wire
Priority:	High
Infrastructure Damage:	Footpath, Kerb, Road, Powerlines above
Comments:	

Street Planted: FRENCH STREET

Latitude / Longitude: -37.744931, 142.025388

Failure Potential:	**3. Moderate**
Failure Size:	**4. 26-100mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **5000000**



Individual Tree Assessment - 2017

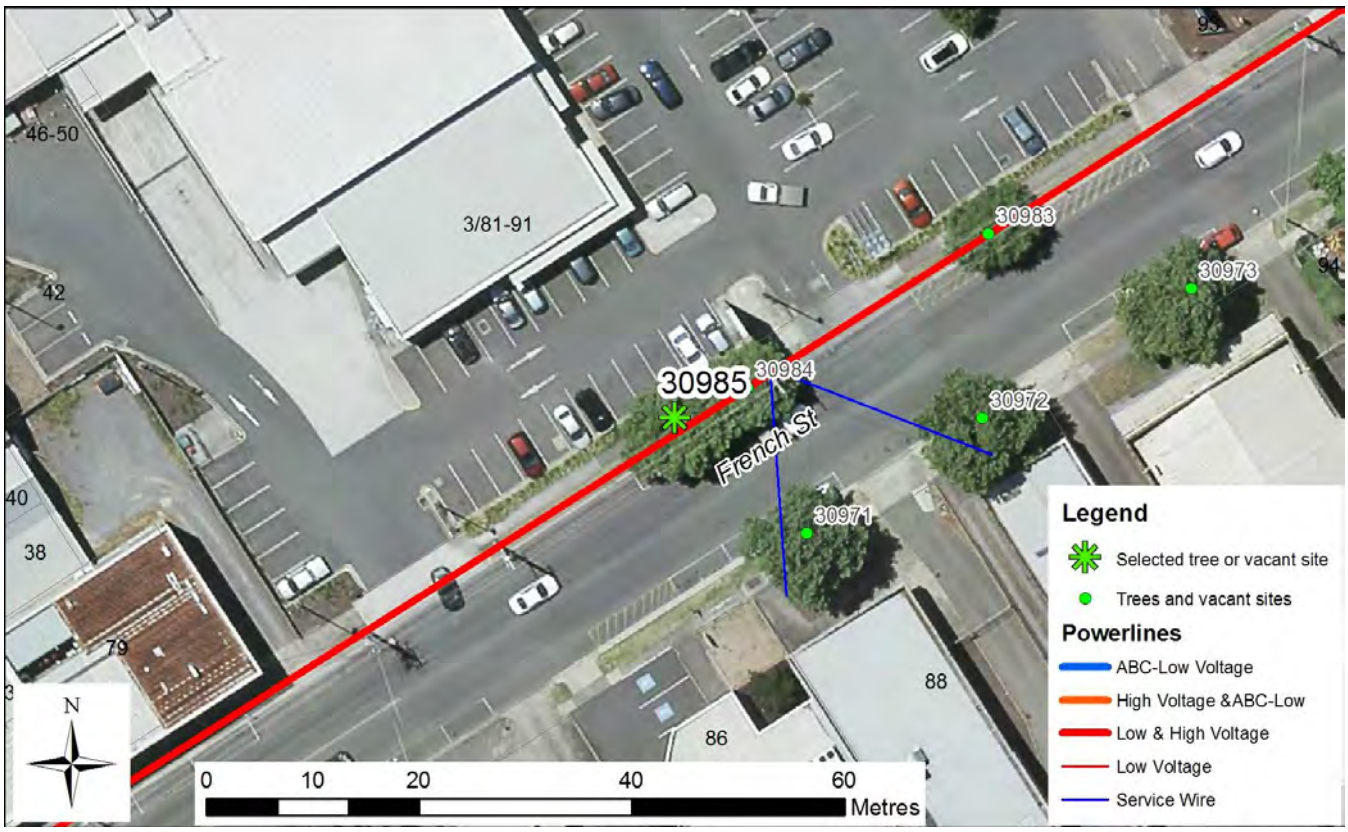
Hamilton CBD

Asset ID:	**30985**
Botanical Name:	*Platanus orientalis*
Common Name:	Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	9m x 14m
DBH (cm)	42
Health:	Fair
Structure:	Poor
ULE:	5-10 years
Works:	Manage epicormic regrowth from lopping points, clear from LV wire
Priority:	Urgent
Infrastructure Damage:	Footpath, Kerb, Road, Powerlines above
Comments:	

Street Planted: FRENCH STREET

Latitude / Longitude: -37.744967, 142.025331

Failure Potential:	**3. Moderate**
Failure Size:	**4. 26-100mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **5000000**



Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30986**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	11m x 12m
DBH (cm)	36
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	Moderate
Infrastructure Damage:	Road, Kerb
Comments:	

Street Planted: THOMPSON STREET

Latitude / Longitude: -37.745323, 142.024438

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30987**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	12m x 10m
DBH (cm)	34
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	Canopy lift over building to provide 2m clearance and clear from street light
Priority:	Moderate
Infrastructure Damage:	Footpath, Kerb, Road, Building

Comments:

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Street Planted: THOMPSON STREET

Latitude / Longitude: -37.745169, 142.02431

Individual Tree Assessment - 2017

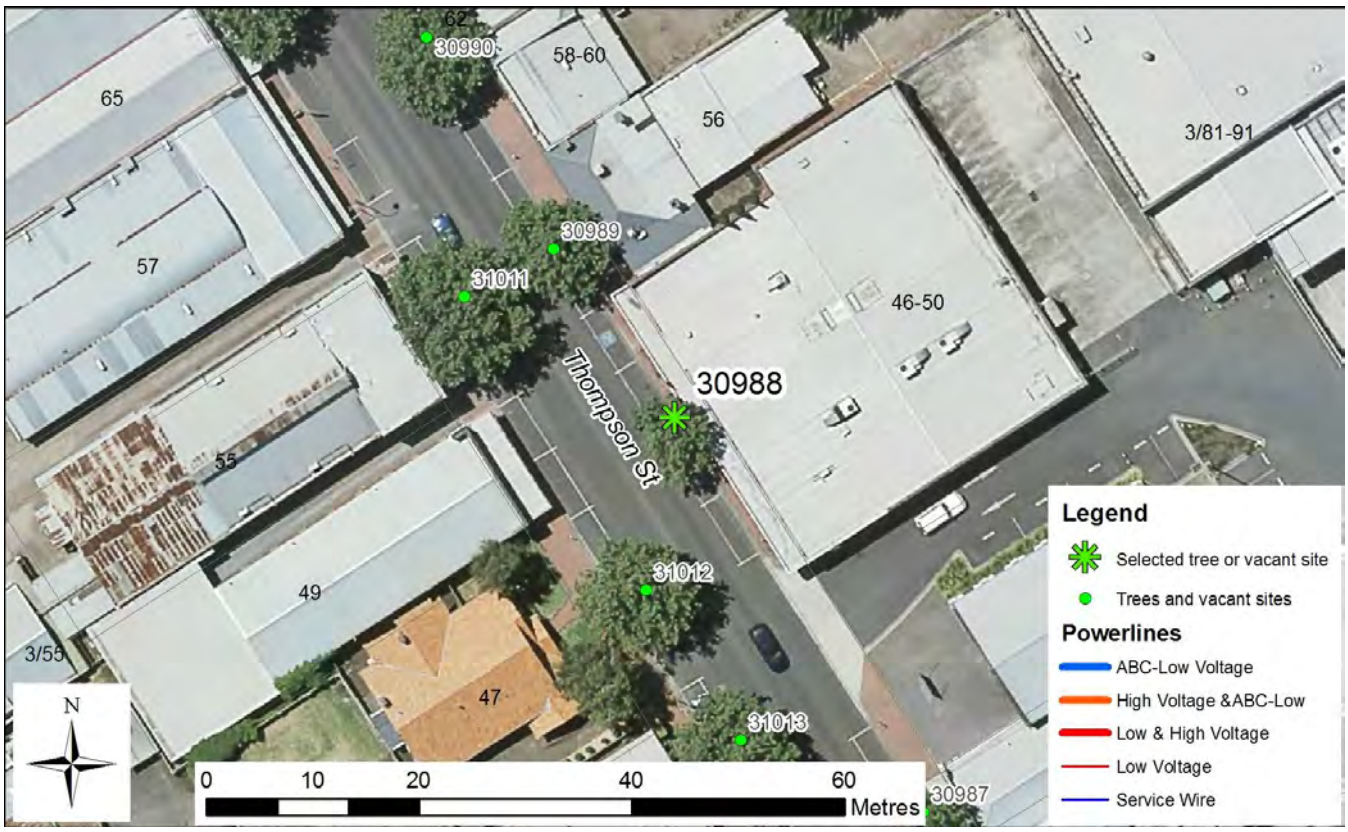
Hamilton CBD

Asset ID:	**30988**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	11m x 10m
DBH (cm)	30
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	Moderate
Infrastructure Damage:	Road, Building
Comments:	

Street Planted: THOMPSON STREET

Latitude / Longitude: -37.744837, 142.02404

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**



Individual Tree Assessment - 2017

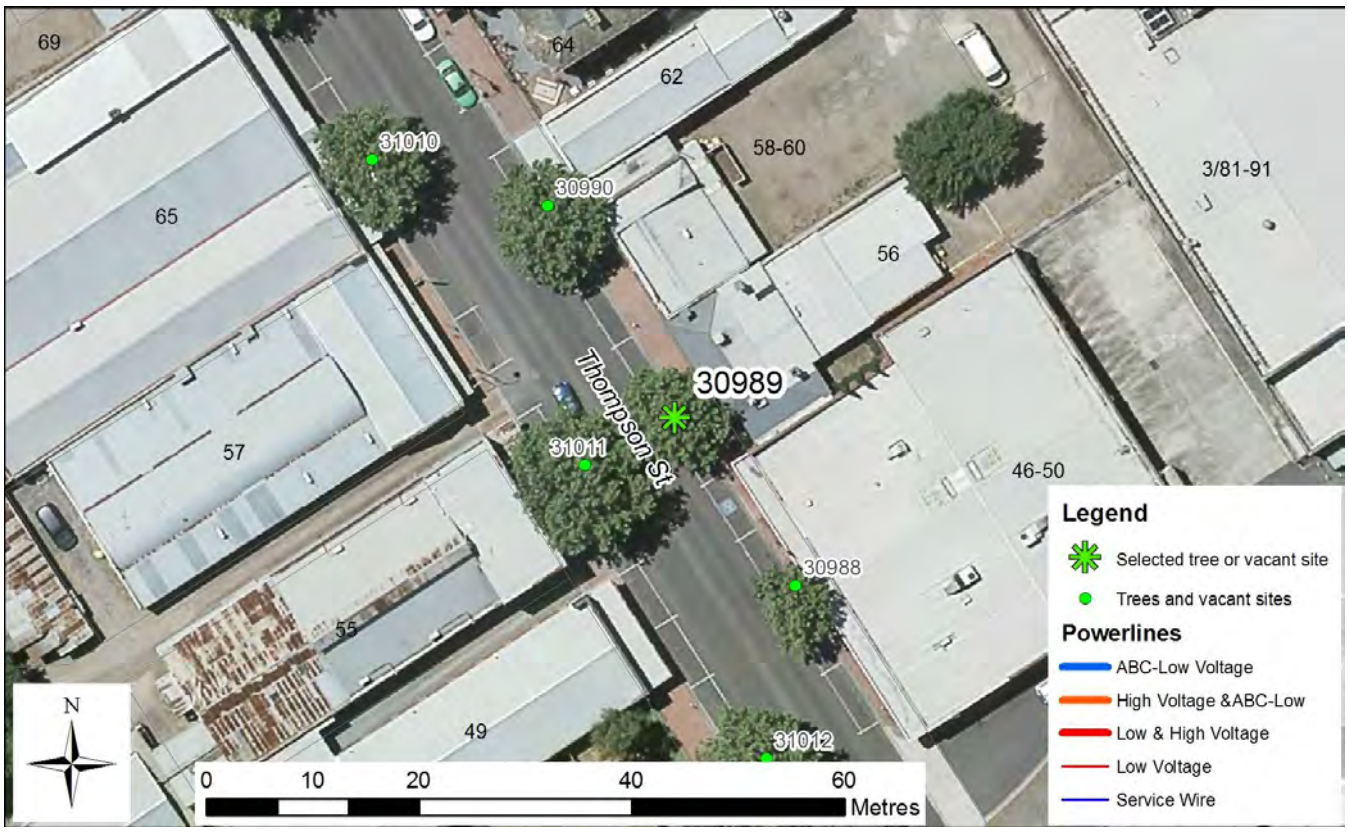
Hamilton CBD

Asset ID:	**30989**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	12m x 10m
DBH (cm)	34
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	Moderate
Infrastructure Damage:	Road, Kerb, Footpath, Building
Comments:	

Street Planted: THOMPSON STREET

Latitude / Longitude: -37.744671, 142.023919

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**



Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30990**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	14m x 14m
DBH (cm)	36
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	Moderate
Infrastructure Damage:	Road, Kerb, Footpath, Building
Comments:	

Street Planted: THOMPSON STREET

Latitude / Longitude: -37.744518, 142.023772

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

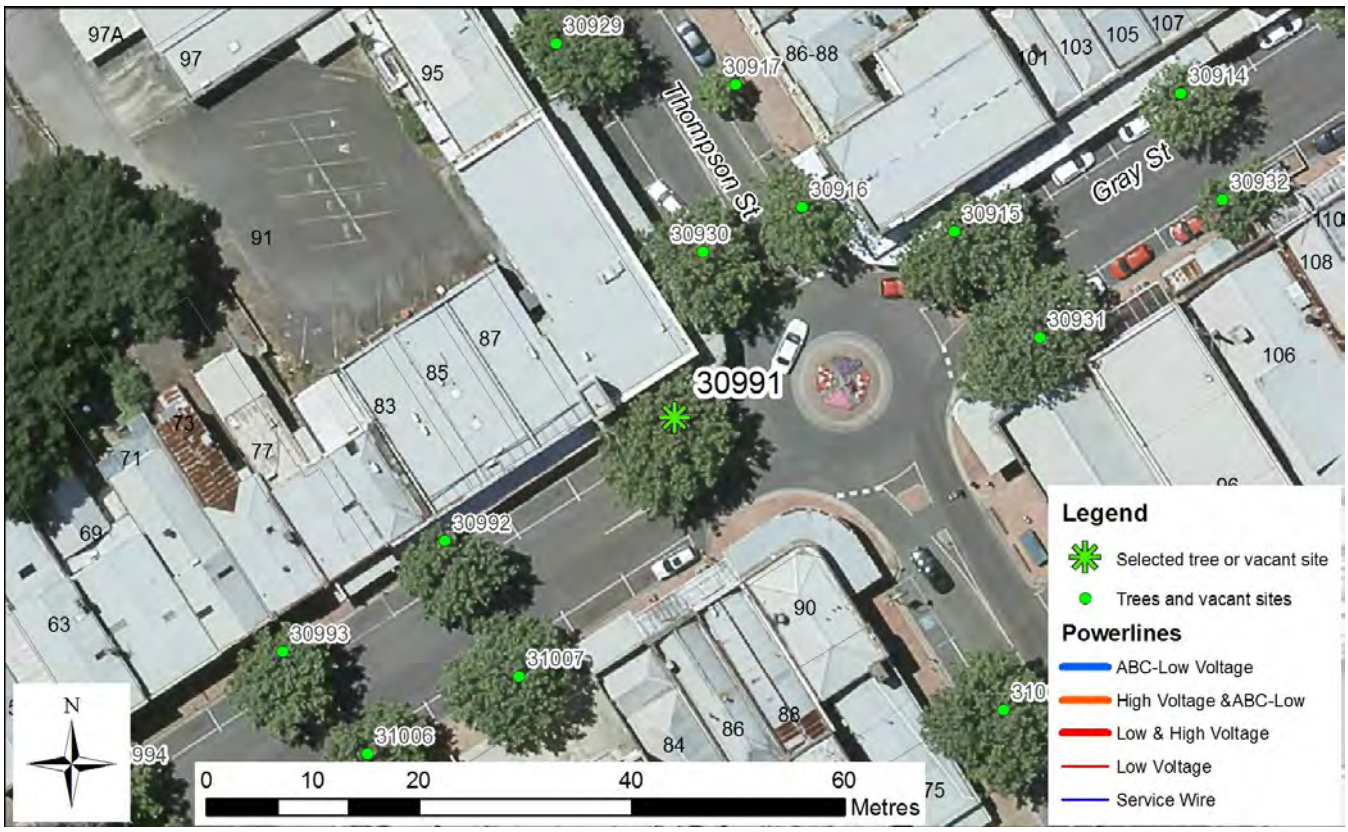
Hamilton CBD

Asset ID:	**30991**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	13m x 14m
DBH (cm)	43
Health:	Good
Structure:	Fair
ULE:	10-20 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	High
Infrastructure Damage:	Kerb, Footpath, Road, Building
Comments:	

Street Planted: GRAY STREET

Latitude / Longitude: -37.743856, 142.022929

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**



Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30992**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	12m x 11m
DBH (cm)	34
Health:	Good
Structure:	Fair
ULE:	10-20 years
Works:	Canopy lift over building to provide 2m clearance and clear from street light
Priority:	High
Infrastructure Damage:	Building, Road

Comments:

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Street Planted: GRAY STREET

Latitude / Longitude: -37.743963, 142.022685

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30993**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	13m x 12m
DBH (cm)	34
Health:	Fair
Structure:	Fair
ULE:	10-20 years
Works:	No works
Priority:	None
Infrastructure Damage:	Road
Comments:	

Street Planted: GRAY STREET

Latitude / Longitude: -37.744058, 142.022513

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30994**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	14m x 14m
DBH (cm)	41
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	Canopy lift over building to provide 2m clearance and clear from street light
Priority:	Moderate
Infrastructure Damage:	Footpath, Kerb, Building, Road

Comments:

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Street Planted: GRAY STREET

Latitude / Longitude: -37.744163, 142.022321

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30995**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	13m x 11m
DBH (cm)	34
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	Moderate
Infrastructure Damage:	Footpath, Kerb, Building, Road
Comments:	

Street Planted: GRAY STREET

Latitude / Longitude: -37.74425, 142.022172

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

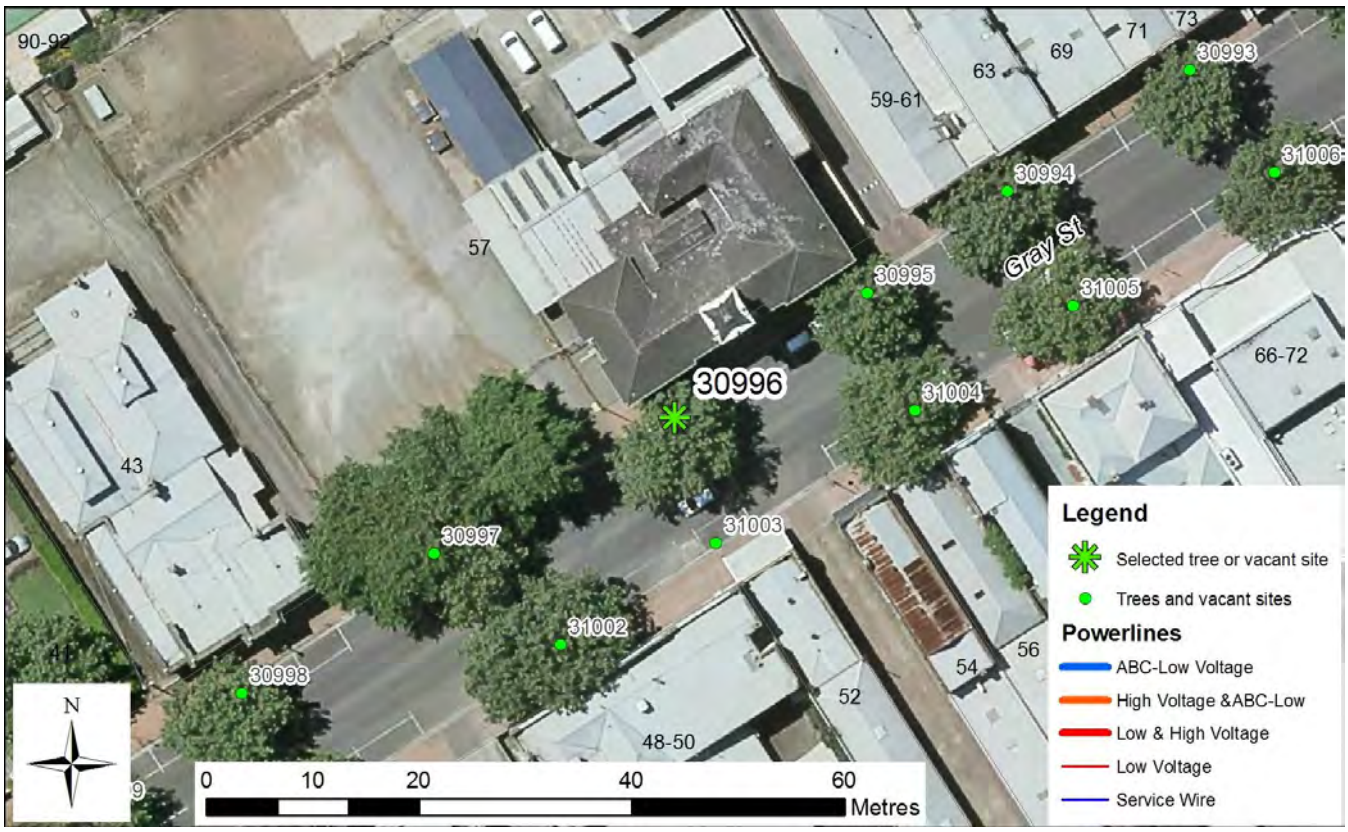
Hamilton CBD

Asset ID:	**30996**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	14m x 14m
DBH (cm)	40
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	Moderate
Infrastructure Damage:	Building, Road
Comments:	

Street Planted: GRAY STREET

Latitude / Longitude: -37.744357, 142.021968

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**



Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30997**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	13m x 9m
DBH (cm)	28
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	No works
Priority:	None
Infrastructure Damage:	Road
Comments:	

Street Planted: GRAY STREET

Latitude / Longitude: -37.744475, 142.021713

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30998**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	13m x 11m
DBH (cm)	34
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	No works
Priority:	None
Infrastructure Damage:	Road, Kerb, Footpath
Comments:	

Street Planted: GRAY STREET

Latitude / Longitude: -37.744594, 142.02151

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**30999**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	14m x 14m
DBH (cm)	44
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	No works
Priority:	None
Infrastructure Damage:	Road, Kerb, Footpath
Comments:	

Street Planted: GRAY STREET

Latitude / Longitude: -37.744693, 142.021336

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**31000**
Botanical Name:	*Vacant*
Common Name:	Vacant
Origin:	Vacant
Age:	Vacant
Height x Width (m)	0m x 0m
DBH (cm)	0
Health:	Vacant
Structure:	Vacant
ULE:	50+ years
Works:	No works
Priority:	None
Infrastructure Damage:	None
Comments:	

Street Planted: GRAY STREET

Latitude / Longitude: -37.744808, 142.021338

Failure Potential:	**7. None**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **6000000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**31001**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	14m x 12m
DBH (cm)	37
Health:	Good
Structure:	Fair
ULE:	10-20 years
Works:	Canopy lift over building to provide 2m clearance and clear from street light
Priority:	Moderate
Infrastructure Damage:	Footpath, Kerb, Building, Road

Comments:

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Street Planted: GRAY STREET

Latitude / Longitude: -37.744677, 142.021578

Individual Tree Assessment - 2017

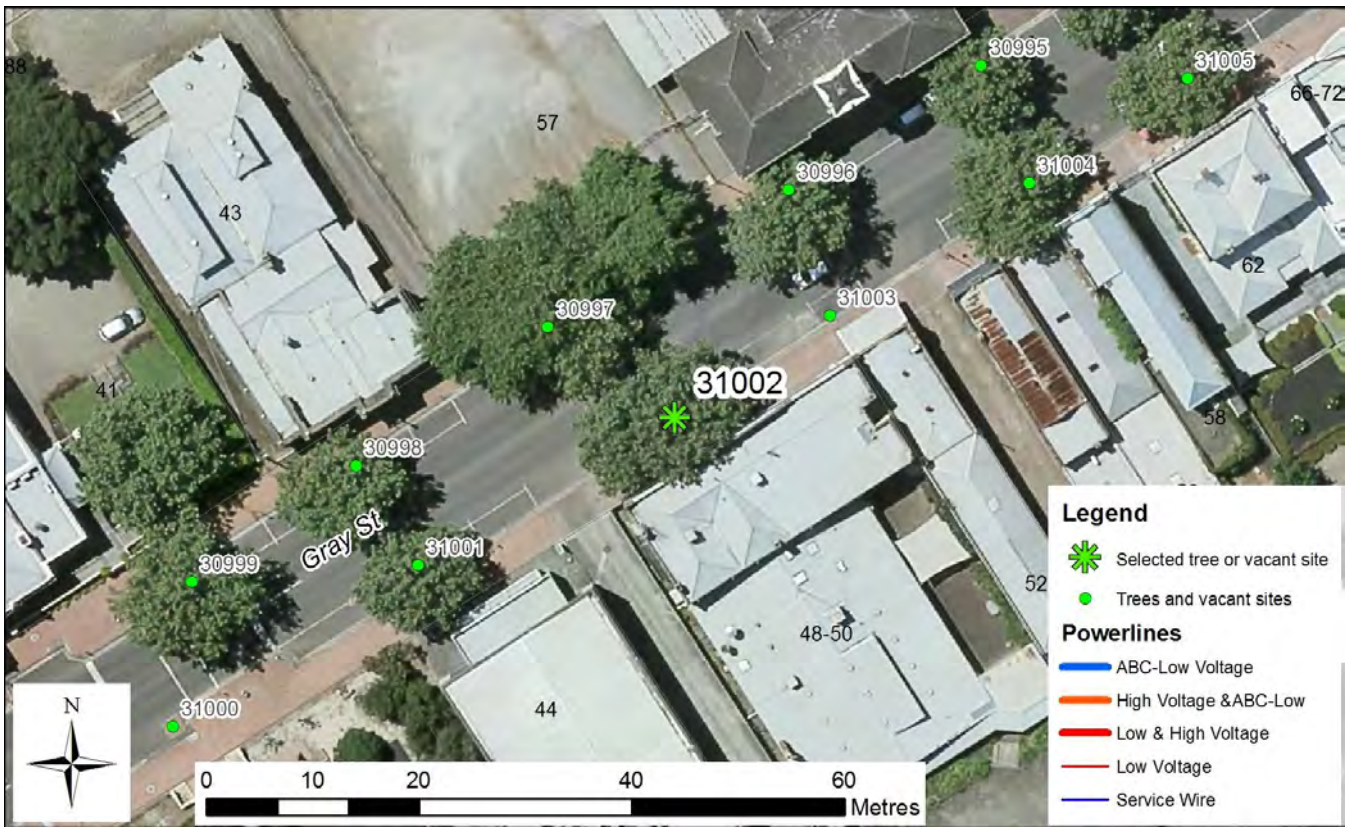
Hamilton CBD

Asset ID:	**31002**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	15m x 16m
DBH (cm)	50
Health:	Good
Structure:	Fair
ULE:	10-20 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	Moderate
Infrastructure Damage:	Footpath, Kerb, Building, Road
Comments:	

Street Planted: GRAY STREET

Latitude / Longitude: -37.74455, 142.021849

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**



Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**31003**
Botanical Name:	*Vacant*
Common Name:	Vacant
Origin:	Vacant
Age:	Vacant
Height x Width (m)	0m x 0m
DBH (cm)	0
Health:	Vacant
Structure:	Vacant
ULE:	50+ years
Works:	No works
Priority:	None
Infrastructure Damage:	None
Comments:	

Street Planted: GRAY STREET

Latitude / Longitude: -37.744463, 142.022014

Failure Potential:	**7. None**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **6000000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**31004**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	15m x 16m
DBH (cm)	40
Health:	Good
Structure:	Fair
ULE:	10-20 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	Moderate
Infrastructure Damage:	Kerb, Building, Road
Comments:	

Street Planted: GRAY STREET

Latitude / Longitude: -37.744348, 142.022224

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

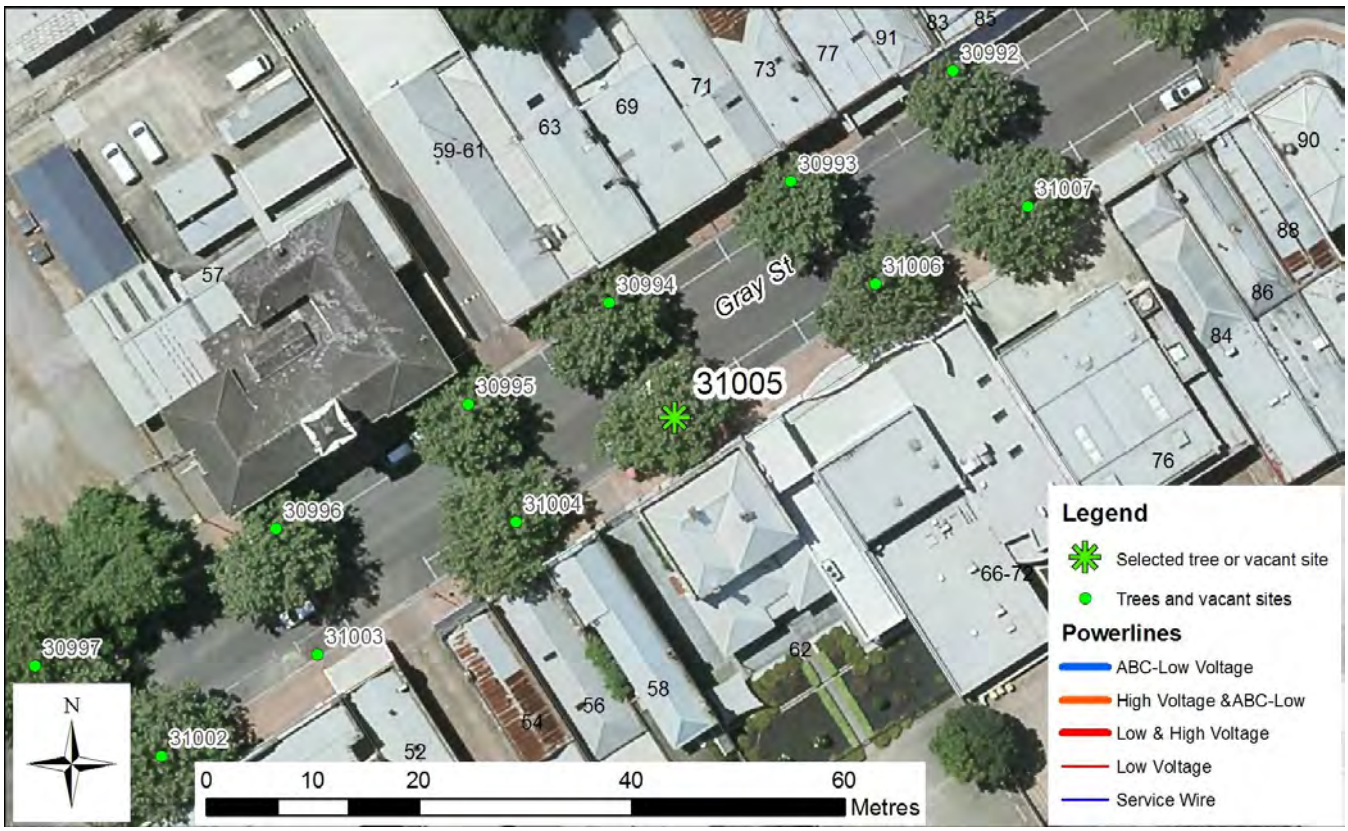
Hamilton CBD

Asset ID:	**31005**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	14m x 14m
DBH (cm)	38
Health:	Good
Structure:	Fair
ULE:	10-20 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	Moderate
Infrastructure Damage:	Building, Road
Comments:	

Street Planted: GRAY STREET

Latitude / Longitude: -37.744259, 142.022392

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**



Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**31006**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	13m x 14m
DBH (cm)	36
Health:	Good
Structure:	Fair
ULE:	10-20 years
Works:	Canopy lift over building to provide 2m clearance and clear from street light
Priority:	Moderate
Infrastructure Damage:	Building, Road

Comments:

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Street Planted: GRAY STREET

Latitude / Longitude: -37.744144, 142.022605

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**31007**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	13m x 15m
DBH (cm)	38
Health:	Good
Structure:	Fair
ULE:	10-20 years
Works:	Canopy lift over footpath to provide 3.5m clearance
Priority:	Moderate
Infrastructure Damage:	Building, Road
Comments:	

Street Planted: GRAY STREET

Latitude / Longitude: -37.744077, 142.022766

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**31008**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	14m x 14m
DBH (cm)	47
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	High
Infrastructure Damage:	Road, Footpath, Kerb, Building
Comments:	

Street Planted: THOMPSON STREET

Latitude / Longitude: -37.744101, 142.023283

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**31009**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	14m x 14m
DBH (cm)	43
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	High
Infrastructure Damage:	Road, Footpath, Kerb, Building
Comments:	

Street Planted: THOMPSON STREET

Latitude / Longitude: -37.744308, 142.023448

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**31010**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	14m x 13m
DBH (cm)	35
Health:	Fair
Structure:	Fair
ULE:	10-20 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	High
Infrastructure Damage:	Footpath, Road, Building
Comments:	

Street Planted: THOMPSON STREET

Latitude / Longitude: -37.744481, 142.023584

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**31011**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	15m x 15m
DBH (cm)	45
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	High
Infrastructure Damage:	Footpath, Road, Building
Comments:	

Street Planted: THOMPSON STREET

Latitude / Longitude: -37.744737, 142.023815

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**31012**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	12m x 14m
DBH (cm)	37
Health:	Fair
Structure:	Fair
ULE:	10-20 years
Works:	No works
Priority:	None
Infrastructure Damage:	Footpath, Road
Comments:	Very fine twiggy deadwood

Failure Potential: **5. Very Low**
Failure Size: **4. 26-100mm**
Target Rating: **2. Pedestrians, 8-72/hr**
Risk of Harm: 1 in **50000000**

Street Planted: THOMPSON STREET

Latitude / Longitude: -37.744984, 142.024012

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**31013**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	12m x 14m
DBH (cm)	40
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	Clear from street light
Priority:	Moderate
Infrastructure Damage:	Kerb, Road, Footpath
Comments:	

Street Planted: THOMPSON STREET

Latitude / Longitude: -37.74511, 142.024115

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

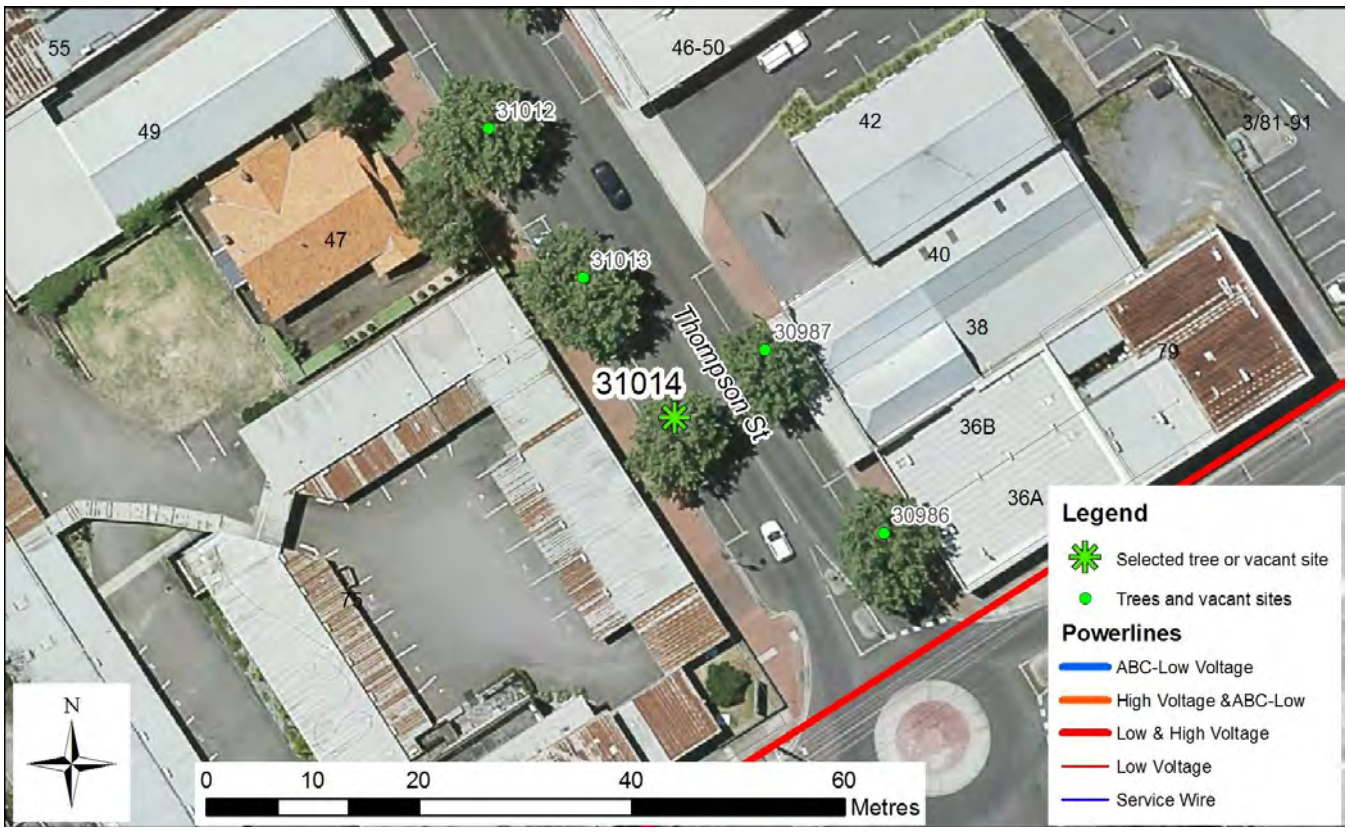
Hamilton CBD

Asset ID:	**31014**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	12m x 12m
DBH (cm)	35
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	No works
Priority:	None
Infrastructure Damage:	Road, Footpath
Comments:	

Street Planted: THOMPSON STREET

Latitude / Longitude: -37.745227, 142.024214

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**2. Pedestrians, 8-72/hr**
Risk of Harm:	1 in **50000000**



Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**31015**
Botanical Name:	*Platanus orientalis*
Common Name:	Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	8m x 10m
DBH (cm)	42
Health:	Fair
Structure:	Poor
ULE:	5-10 years
Works:	Canopy lift over building to provide 2m clearance, manage epicormic regrowth from lopping points
Priority:	High
Infrastructure Damage:	Powerlines above
Comments:	

Street Planted: FRENCH STREET

Latitude / Longitude: -37.745589, 142.024153

Failure Potential:	**3. Moderate**
Failure Size:	**4. 26-100mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **5000000**

Individual Tree Assessment - 2017

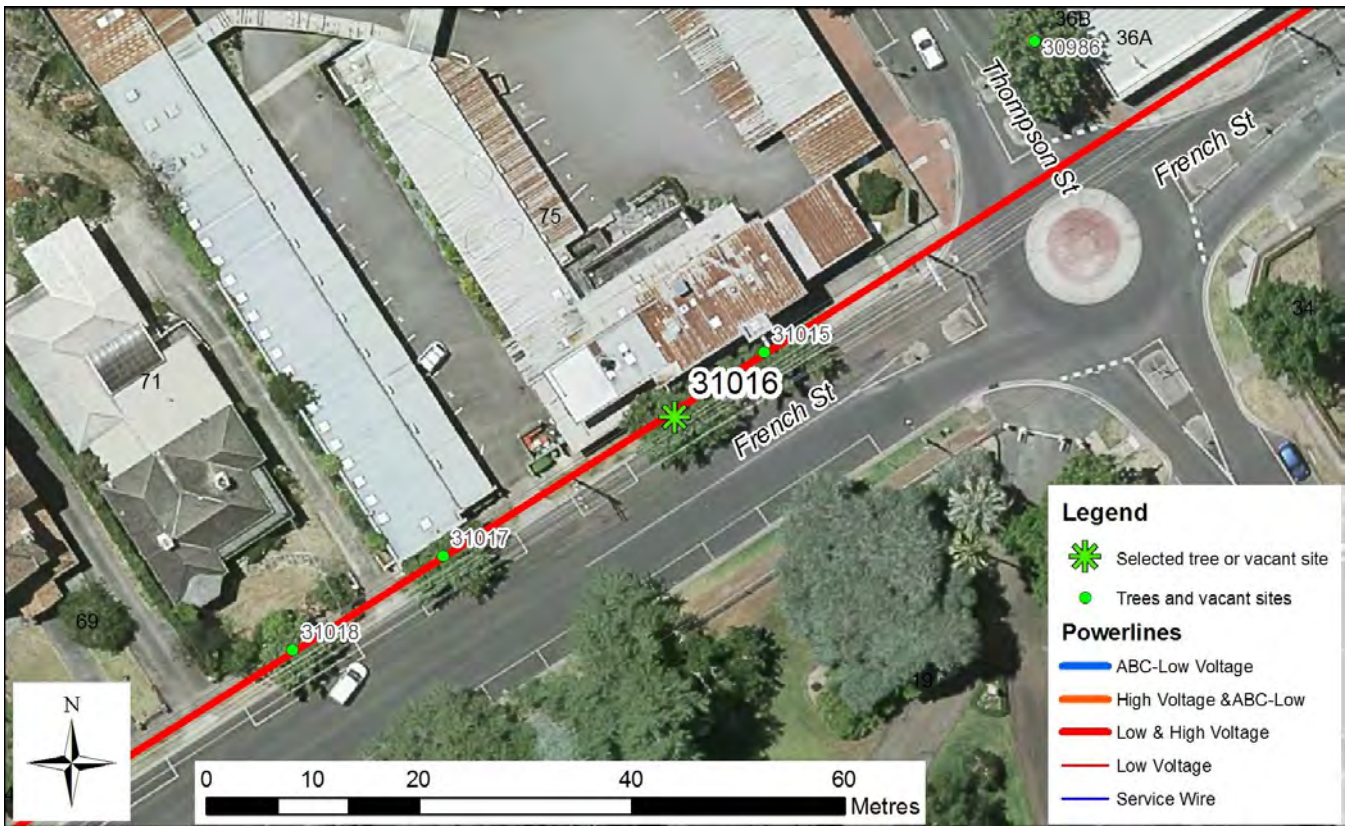
Hamilton CBD

Asset ID:	**31016**
Botanical Name:	*Platanus orientalis*
Common Name:	Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	8m x 10m
DBH (cm)	45
Health:	Fair
Structure:	Poor
ULE:	5-10 years
Works:	Canopy lift over building to provide 2m clearance, manage epicormic regrowth from lopping points
Priority:	High
Infrastructure Damage:	Powerlines above
Comments:	

Street Planted: FRENCH STREET

Latitude / Longitude: -37.745644, 142.024058

Failure Potential:	**3. Moderate**
Failure Size:	**4. 26-100mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **5000000**



Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**31017**
Botanical Name:	*Platanus orientalis*
Common Name:	Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	7m x 8m
DBH (cm)	34
Health:	Fair
Structure:	Poor
ULE:	5-10 years
Works:	Canopy lift over building to provide 2m clearance, manage epicormic regrowth from lopping points
Priority:	High
Infrastructure Damage:	Powerlines above

Comments:

Failure Potential:	**4. Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **50000000**

Street Planted: FRENCH STREET

Latitude / Longitude: -37.745764, 142.023814

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**31018**
Botanical Name:	*Platanus orientalis*
Common Name:	Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	7m x 8m
DBH (cm)	30
Health:	Fair
Structure:	Poor
ULE:	5-10 years
Works:	Manage epicormic regrowth from lopping points
Priority:	Low
Infrastructure Damage:	Powerlines above
Comments:	

Street Planted: FRENCH STREET

Latitude / Longitude: -37.745846, 142.023654

Failure Potential:	**4. Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

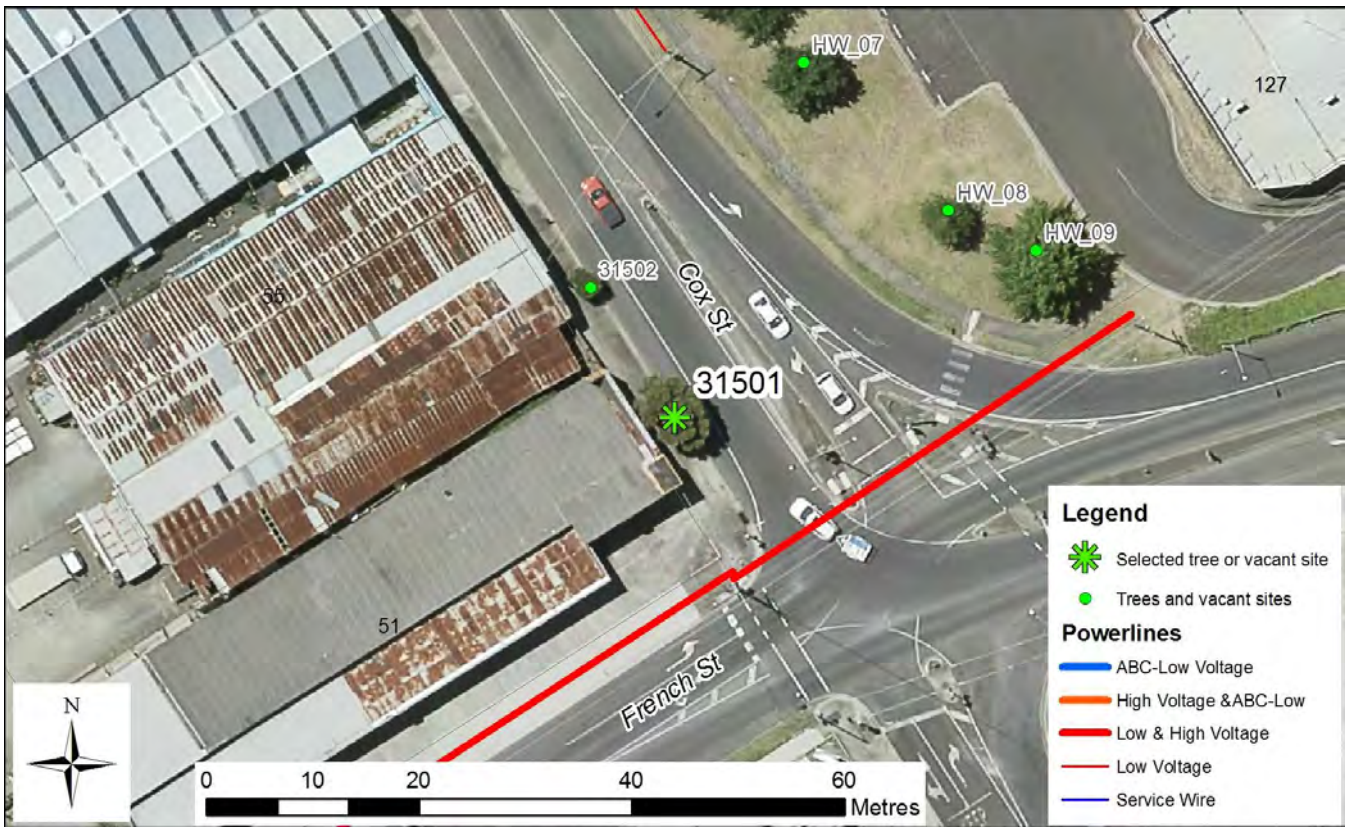
Hamilton CBD

Asset ID:	**31501**
Botanical Name:	*Callistemon salignus*
Common Name:	Willow Bottle Brush
Origin:	Native
Age:	Mature
Height x Width (m)	8m x 8m
DBH (cm)	38
Health:	Fair
Structure:	Fair
ULE:	10-20 years
Works:	Canopy lift over building to provide 2m clearance
Priority:	Moderate
Infrastructure Damage:	Building, Footpath
Comments:	

Street Planted: COX STREET

Latitude / Longitude: -37.743137, 142.028477

Failure Potential:	**4. Low**
Failure Size:	**3. 101-250mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **5000000**



Individual Tree Assessment - 2017

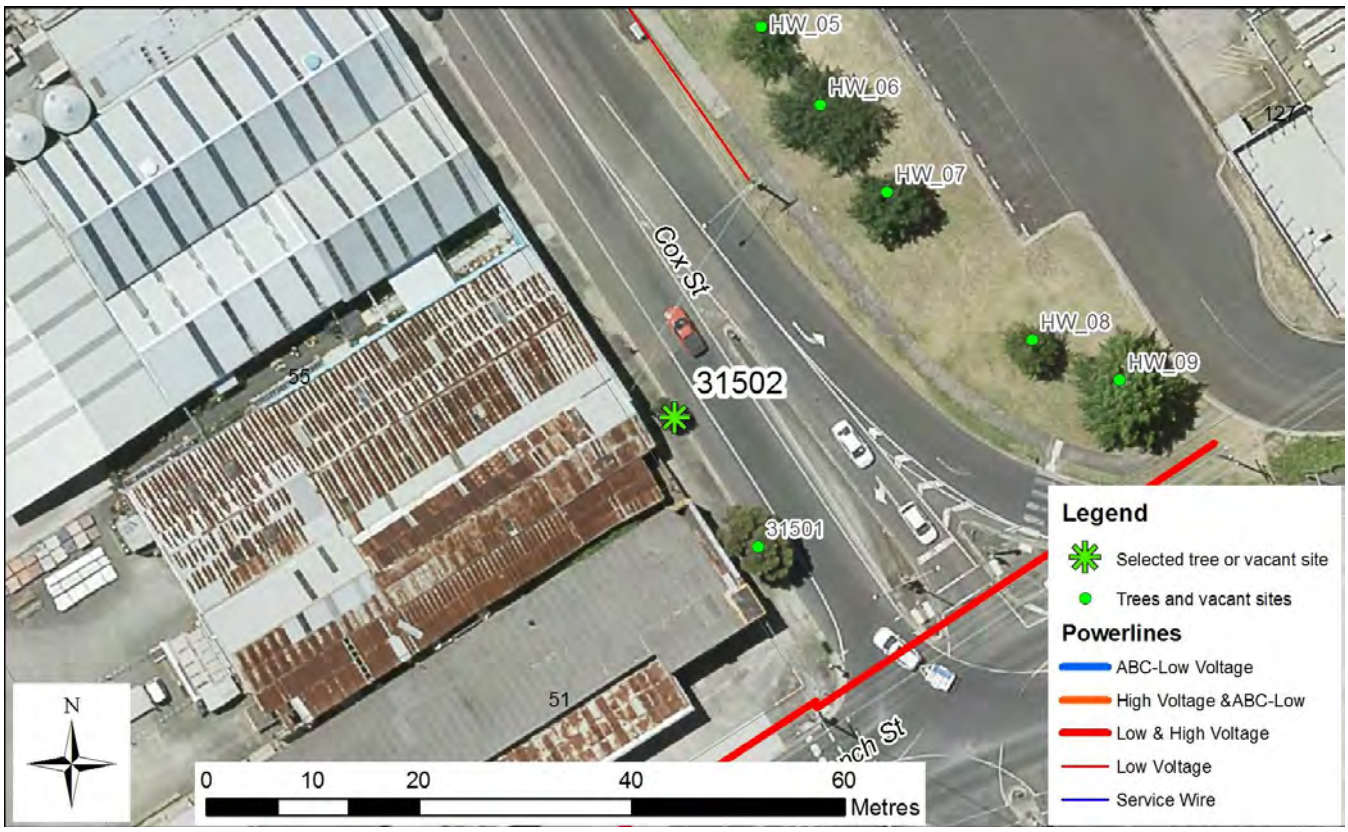
Hamilton CBD

Asset ID:	**31502**
Botanical Name:	*Callistemon salignus*
Common Name:	Willow Bottle Brush
Origin:	Native
Age:	Mature
Height x Width (m)	5m x 5m
DBH (cm)	32
Health:	Poor
Structure:	Poor
ULE:	1-5 years
Works:	Removal
Priority:	Moderate
Infrastructure Damage:	Building, Footpath
Comments:	

Street Planted: COX STREET

Latitude / Longitude: -37.743029, 142.028396

Failure Potential:	**4. Low**
Failure Size:	**3. 101-250mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **5000000**



Individual Tree Assessment - 2017

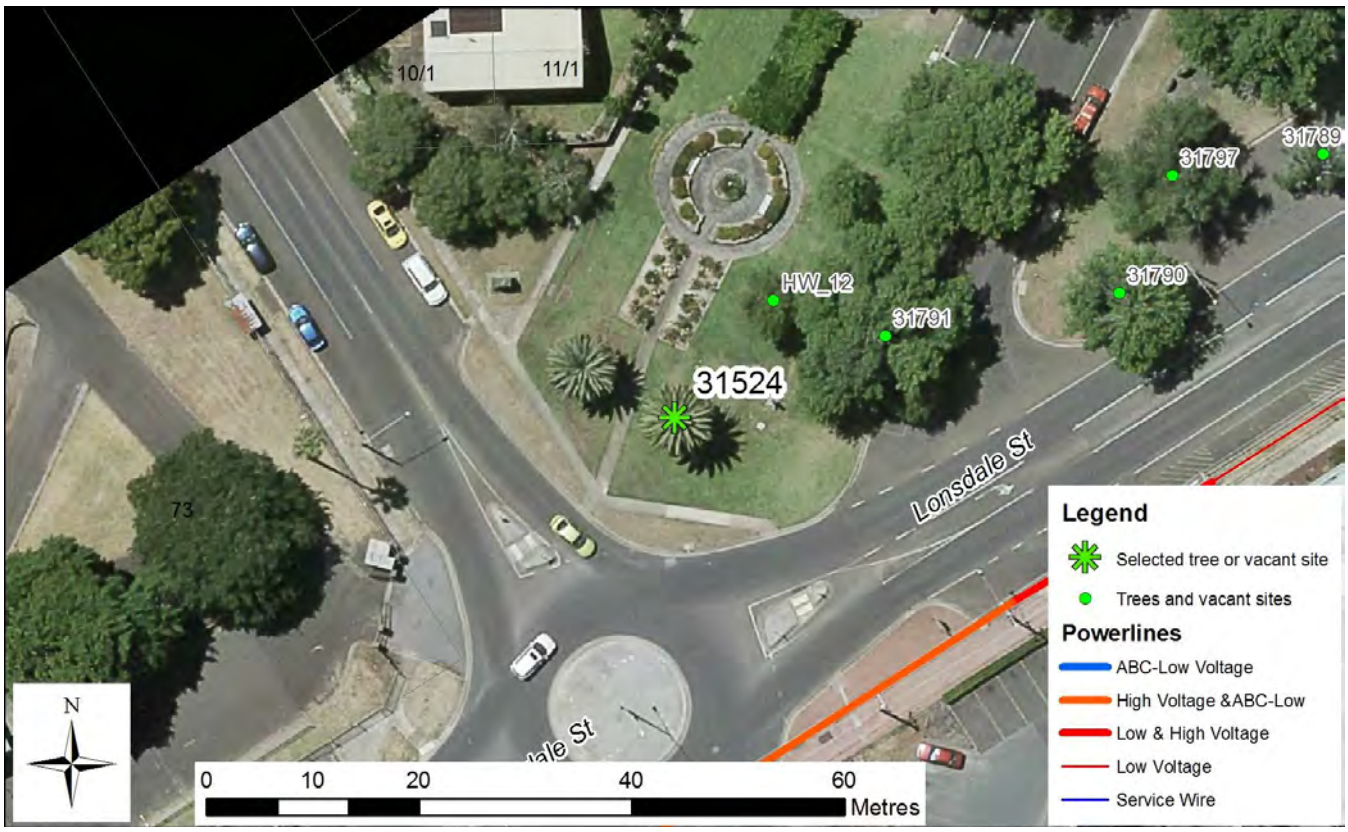
Hamilton CBD

Asset ID:	**31524**
Botanical Name:	*Phoenix canariensis*
Common Name:	Canary Island Date Palm
Origin:	Exotic
Age:	Mature
Height x Width (m)	10m x 10m
DBH (cm)	60
Health:	Good
Structure:	Good
ULE:	10-20 years
Works:	No works
Priority:	None
Infrastructure Damage:	None
Comments:	

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**4. Pedestrians, 3/day to 1/hr**
Risk of Harm:	1 in **5000000000**

Street Planted: Other

Latitude / Longitude: -37.74078, 142.02386



Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**31618**
Botanical Name:	*Phoenix canariensis*
Common Name:	Canary Island Date Palm
Origin:	Exotic
Age:	Mature
Height x Width (m)	10m x 8m
DBH (cm)	58
Health:	Good
Structure:	Good
ULE:	20-40 years
Works:	No works
Priority:	None
Infrastructure Damage:	Road
Comments:	

Street Planted: LONSDALE STREET

Latitude / Longitude: -37.742263, 142.021322

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**3. Vehicles, stationary**
Risk of Harm:	1 in **500000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**31619**
Botanical Name:	*Eucalyptus globulus*
Common Name:	Blue Gum
Origin:	Native
Age:	Mature
Height x Width (m)	18m x 24m
DBH (cm)	165
Health:	Fair
Structure:	Very poor
ULE:	1-5 years
Works:	Install cables, deadwood removal, reduce large branches over road
Priority:	Urgent
Infrastructure Damage:	Road
Comments:	

Street Planted: LONSDALE STREET

Latitude / Longitude: -37.742208, 142.021406

Failure Potential:	**2. High**
Failure Size:	**2. 251-450mm**
Target Rating:	**2. Vehicles, 4700 at 50kph**
Risk of Harm:	1 in **1000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**31624**
Botanical Name:	*Pyrus calleryana*
Common Name:	Callery Pear
Origin:	Exotic
Age:	Mature
Height x Width (m)	8m x 10m
DBH (cm)	30
Health:	Good
Structure:	Fair
ULE:	10-20 years
Works:	No works
Priority:	None
Infrastructure Damage:	Road
Comments:	

Street Planted: Other

Latitude / Longitude: -37.741803, 142.021652

Failure Potential:	**4. Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **50000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**31783**
Botanical Name:	*Ulmus procera*
Common Name:	English Elm
Origin:	Exotic
Age:	Mature
Height x Width (m)	15m x 16m
DBH (cm)	68
Health:	Fair
Structure:	Fair
ULE:	5-10 years
Works:	Deadwood removal, reduce large branches over road and footpath
Priority:	High
Infrastructure Damage:	Footpath, Road
Comments:	

Street Planted: LONSDALE STREET

Latitude / Longitude: -37.739936, 142.025652

Failure Potential:	**3. Moderate**
Failure Size:	**3. 101-250mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **500000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**31784**
Botanical Name:	*Ulmus procera*
Common Name:	English Elm
Origin:	Exotic
Age:	Mature
Height x Width (m)	8m x 8m
DBH (cm)	58
Health:	Very Poor
Structure:	Very poor
ULE:	0 years
Works:	Removal
Priority:	High
Infrastructure Damage:	Road
Comments:	Tree is in severe decline

Failure Potential:	**2. High**
Failure Size:	**3. 101-250mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **50000**

Street Planted: LONSDALE STREET

Latitude / Longitude: -37.740054, 142.02543

Individual Tree Assessment - 2017

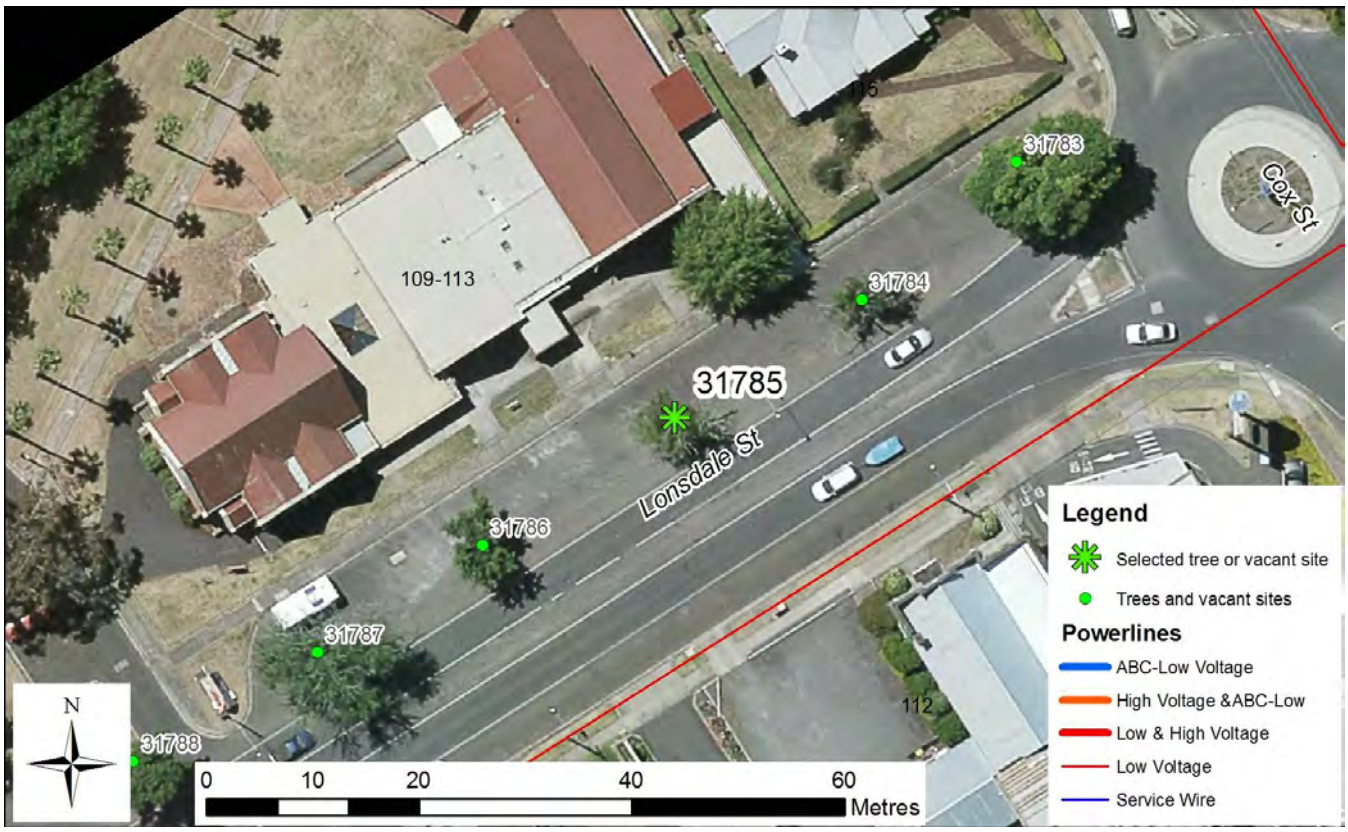
Hamilton CBD

Asset ID:	**31785**
Botanical Name:	*Ulmus procera*
Common Name:	English Elm
Origin:	Exotic
Age:	Mature
Height x Width (m)	11m x 12m
DBH (cm)	66
Health:	Very Poor
Structure:	Very poor
ULE:	0 years
Works:	Removal
Priority:	High
Infrastructure Damage:	Road
Comments:	Tree is in severe decline

Street Planted: LONSDALE STREET

Latitude / Longitude: -37.740142, 142.025276

Failure Potential:	**2. High**
Failure Size:	**3. 101-250mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **50000**



Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**31786**
Botanical Name:	*Ulmus procera*
Common Name:	English Elm
Origin:	Exotic
Age:	Mature
Height x Width (m)	12m x 12m
DBH (cm)	61
Health:	Very Poor
Structure:	Very poor
ULE:	0 years
Works:	Removal
Priority:	High
Infrastructure Damage:	Road
Comments:	Tree is in severe decline

Failure Potential:	**2. High**
Failure Size:	**3. 101-250mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **50000**

Street Planted: LONSDALE STREET

Latitude / Longitude: -37.740265, 142.025087

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**31787**
Botanical Name:	*Ulmus procera*
Common Name:	English Elm
Origin:	Exotic
Age:	Mature
Height x Width (m)	15m x 16m
DBH (cm)	72
Health:	Very Poor
Structure:	Poor
ULE:	1-5 years
Works:	Removal
Priority:	High
Infrastructure Damage:	Road
Comments:	Tree is in severe decline

Street Planted: LONSDALE STREET

Latitude / Longitude: -37.740353, 142.024883

Failure Potential:	**2. High**
Failure Size:	**3. 101-250mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **50000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**31788**
Botanical Name:	*Ulmus procera*
Common Name:	English Elm
Origin:	Exotic
Age:	Mature
Height x Width (m)	15m x 10m
DBH (cm)	68
Health:	Fair
Structure:	Poor
ULE:	5-10 years
Works:	Manage epicormic regrowth from lopping points, deadwood removal
Priority:	High
Infrastructure Damage:	Road
Comments:	

Street Planted: LONSDALE STREET

Latitude / Longitude: -37.740451, 142.024717

Failure Potential:	**3. Moderate**
Failure Size:	**3. 101-250mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **500000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**31789**
Botanical Name:	*Ulmus procera*
Common Name:	English Elm
Origin:	Exotic
Age:	Mature
Height x Width (m)	10m x 9m
DBH (cm)	60
Health:	Very Poor
Structure:	Very poor
ULE:	0 years
Works:	Removal
Priority:	High
Infrastructure Damage:	Road
Comments:	

Street Planted: LONSDALE STREET

Latitude / Longitude: -37.740541, 142.024534

Failure Potential:	**2. High**
Failure Size:	**3. 101-250mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **50000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**31790**
Botanical Name:	*Ulmus procera*
Common Name:	English Elm
Origin:	Exotic
Age:	Mature
Height x Width (m)	12m x 14m
DBH (cm)	60
Health:	Poor
Structure:	Poor
ULE:	5-10 years
Works:	Deadwood removal, reduce large branches over road, manage epicormic regrowth from lopping points
Priority:	High
Infrastructure Damage:	None

Comments:

Failure Potential:	**3. Moderate**
Failure Size:	**3. 101-250mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **500000**

Street Planted: LONSDALE STREET

Latitude / Longitude: -37.740661, 142.024318

Individual Tree Assessment - 2017

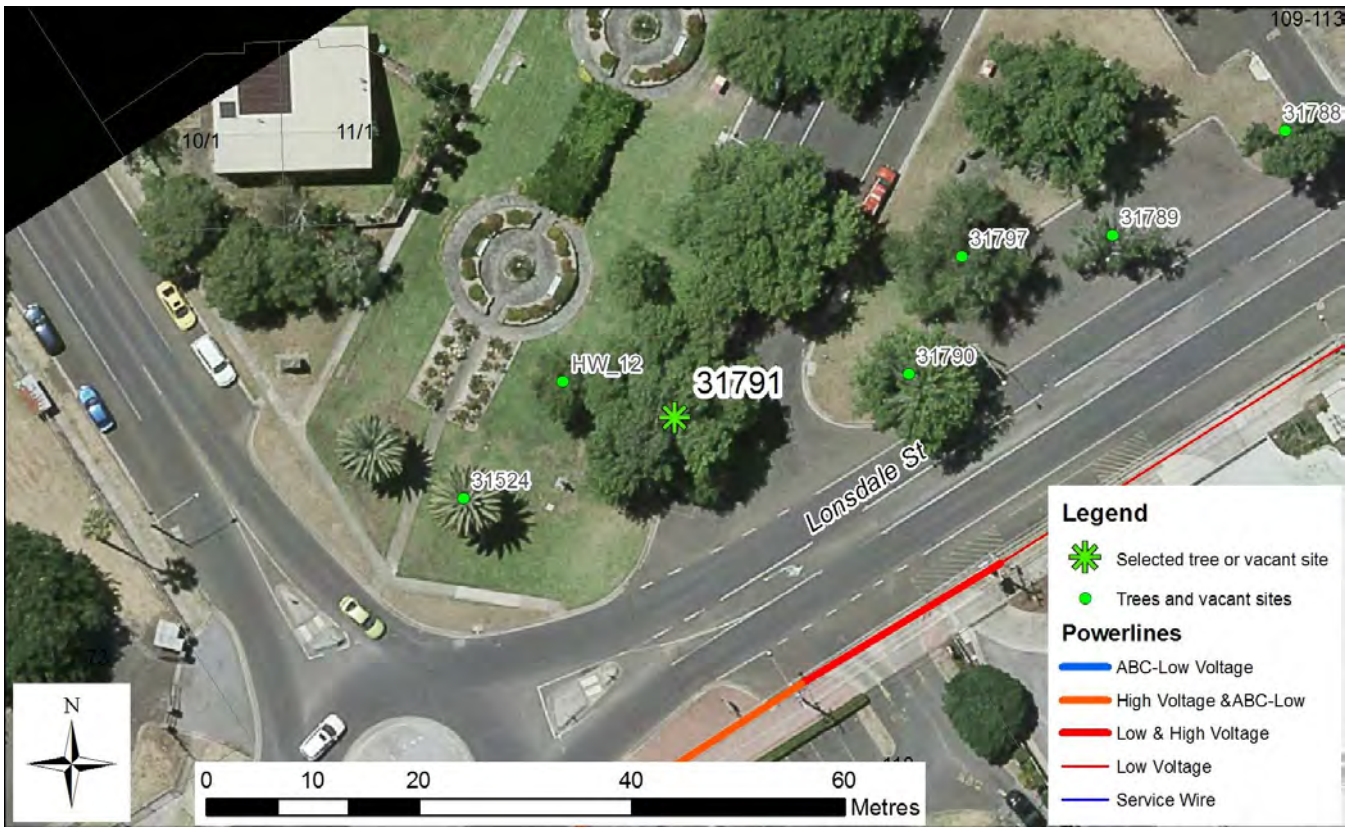
Hamilton CBD

Asset ID:	**31791**
Botanical Name:	*Ulmus procera*
Common Name:	English Elm
Origin:	Exotic
Age:	Mature
Height x Width (m)	16m x 18m
DBH (cm)	72
Health:	Fair
Structure:	Poor
ULE:	10-20 years
Works:	Deadwood removal, reduce large branches over road and seating
Priority:	High
Infrastructure Damage:	None
Comments:	

Street Planted: LONSDALE STREET

Latitude / Longitude: -37.7407, 142.024069

Failure Potential:	**3. Moderate**
Failure Size:	**3. 101-250mm**
Target Rating:	**4. Pedestrians, 3/day to 1/hr**
Risk of Harm:	1 in **5000000**



Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**31797**
Botanical Name:	*Ulmus procera*
Common Name:	English Elm
Origin:	Exotic
Age:	Mature
Height x Width (m)	14m x 16m
DBH (cm)	52
Health:	Fair
Structure:	Fair
ULE:	10-20 years
Works:	Deadwood removal, reduce large branches over road and seating
Priority:	High
Infrastructure Damage:	None
Comments:	Trunk cavity from previous failure

Failure Potential:	**3. Moderate**
Failure Size:	**3. 101-250mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **500000**

Street Planted: LONSDALE STREET

Latitude / Longitude: -37.740561, 142.024374

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**31798**
Botanical Name:	*Ulmus procera*
Common Name:	English Elm
Origin:	Exotic
Age:	Mature
Height x Width (m)	16m x 16m
DBH (cm)	78
Health:	Fair
Structure:	Poor
ULE:	5-10 years
Works:	Deadwood removal, reduce large branches over road and toilets
Priority:	High
Infrastructure Damage:	Footpath, Road
Comments:	History of limb failure, decay associated with previous lopping points

Failure Potential:	**3. Moderate**
Failure Size:	**3. 101-250mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **500000**

Street Planted: LONSDALE STREET

Latitude / Longitude: -37.741316, 142.023057

Individual Tree Assessment - 2017

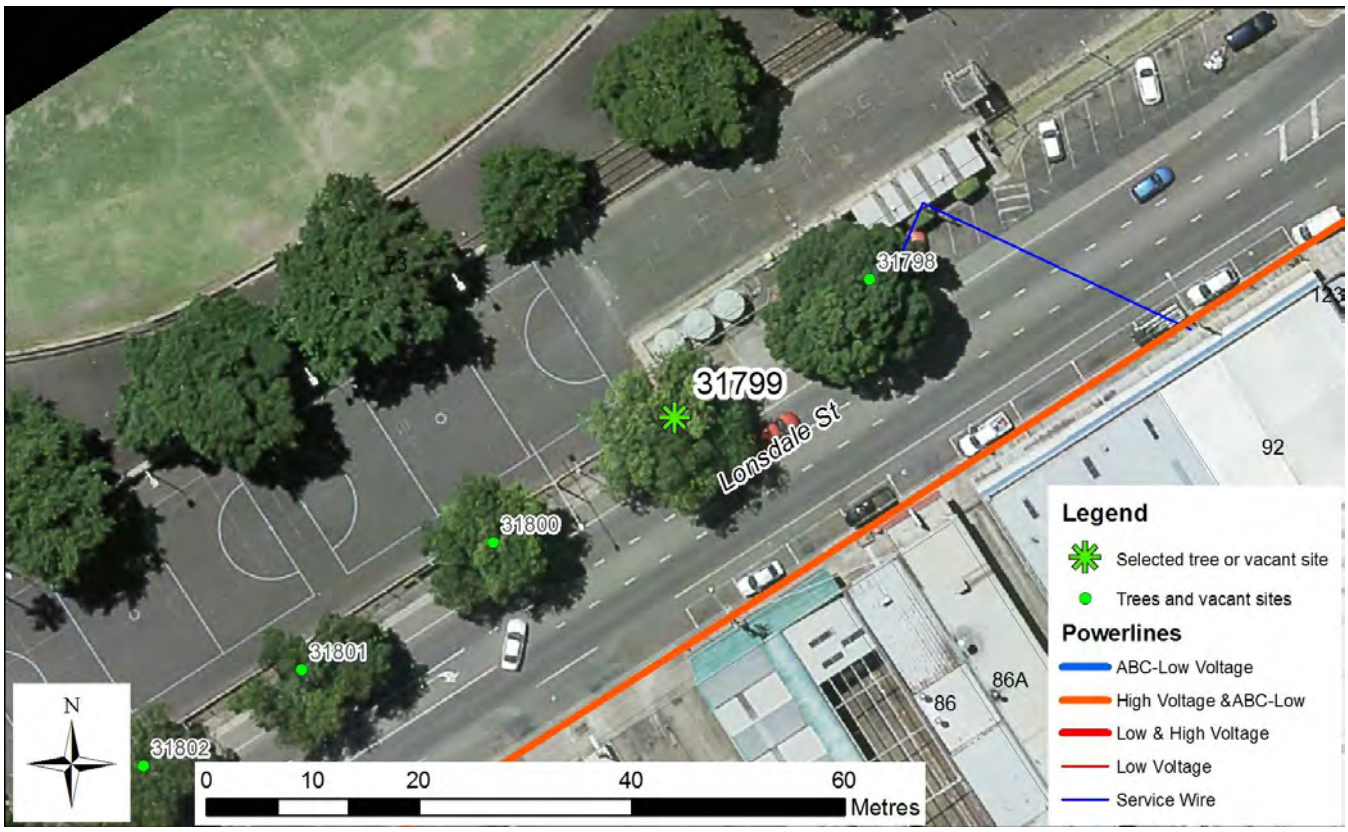
Hamilton CBD

Asset ID:	**31799**
Botanical Name:	*Ulmus procera*
Common Name:	English Elm
Origin:	Exotic
Age:	Mature
Height x Width (m)	15m x 18m
DBH (cm)	65
Health:	Fair
Structure:	Poor
ULE:	5-10 years
Works:	Deadwood removal, reduce large branches over road
Priority:	High
Infrastructure Damage:	Road
Comments:	

Street Planted: LONSDALE STREET

Latitude / Longitude: -37.741434, 142.022851

Failure Potential:	**3. Moderate**
Failure Size:	**3. 101-250mm**
Target Rating:	**3. Vehicles, stationary**
Risk of Harm:	1 in **500000**



Individual Tree Assessment - 2017

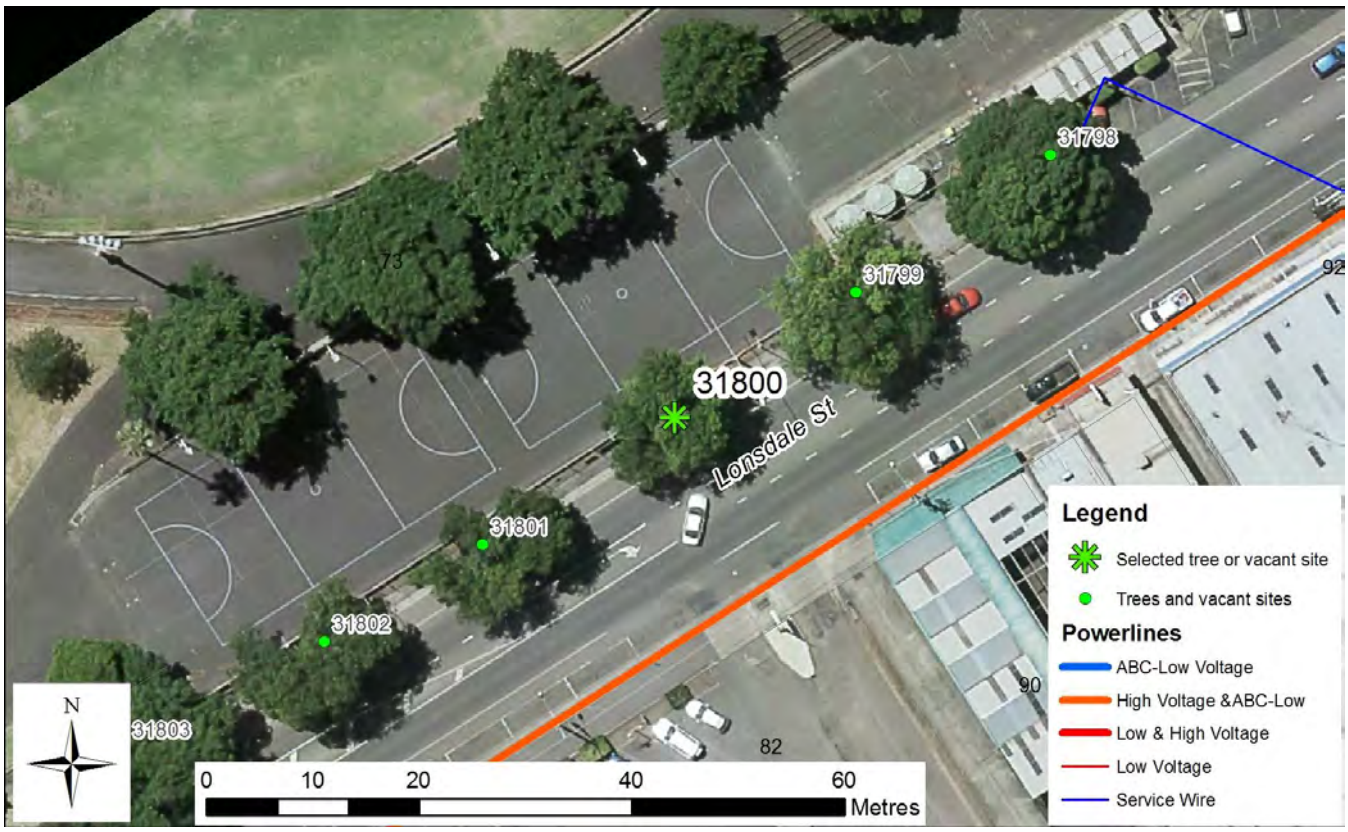
Hamilton CBD

Asset ID:	**31800**
Botanical Name:	*Ulmus procera*
Common Name:	English Elm
Origin:	Exotic
Age:	Mature
Height x Width (m)	15m x 15m
DBH (cm)	62
Health:	Fair
Structure:	Poor
ULE:	5-10 years
Works:	Deadwood removal, reduce large branches over road
Priority:	High
Infrastructure Damage:	Road
Comments:	

Street Planted: LONSDALE STREET

Latitude / Longitude: -37.741542, 142.022659

Failure Potential:	**3. Moderate**
Failure Size:	**3. 101-250mm**
Target Rating:	**3. Vehicles, stationary**
Risk of Harm:	1 in **500000**



Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**31801**
Botanical Name:	*Ulmus procera*
Common Name:	English Elm
Origin:	Exotic
Age:	Mature
Height x Width (m)	15m x 15m
DBH (cm)	60
Health:	Fair
Structure:	Poor
ULE:	5-10 years
Works:	Deadwood removal, reduce large branches over road
Priority:	High
Infrastructure Damage:	Road
Comments:	

Street Planted: LONSDALE STREET

Latitude / Longitude: -37.741652, 142.022456

Failure Potential:	**3. Moderate**
Failure Size:	**3. 101-250mm**
Target Rating:	**3. Vehicles, stationary**
Risk of Harm:	1 in **500000**

Individual Tree Assessment - 2017

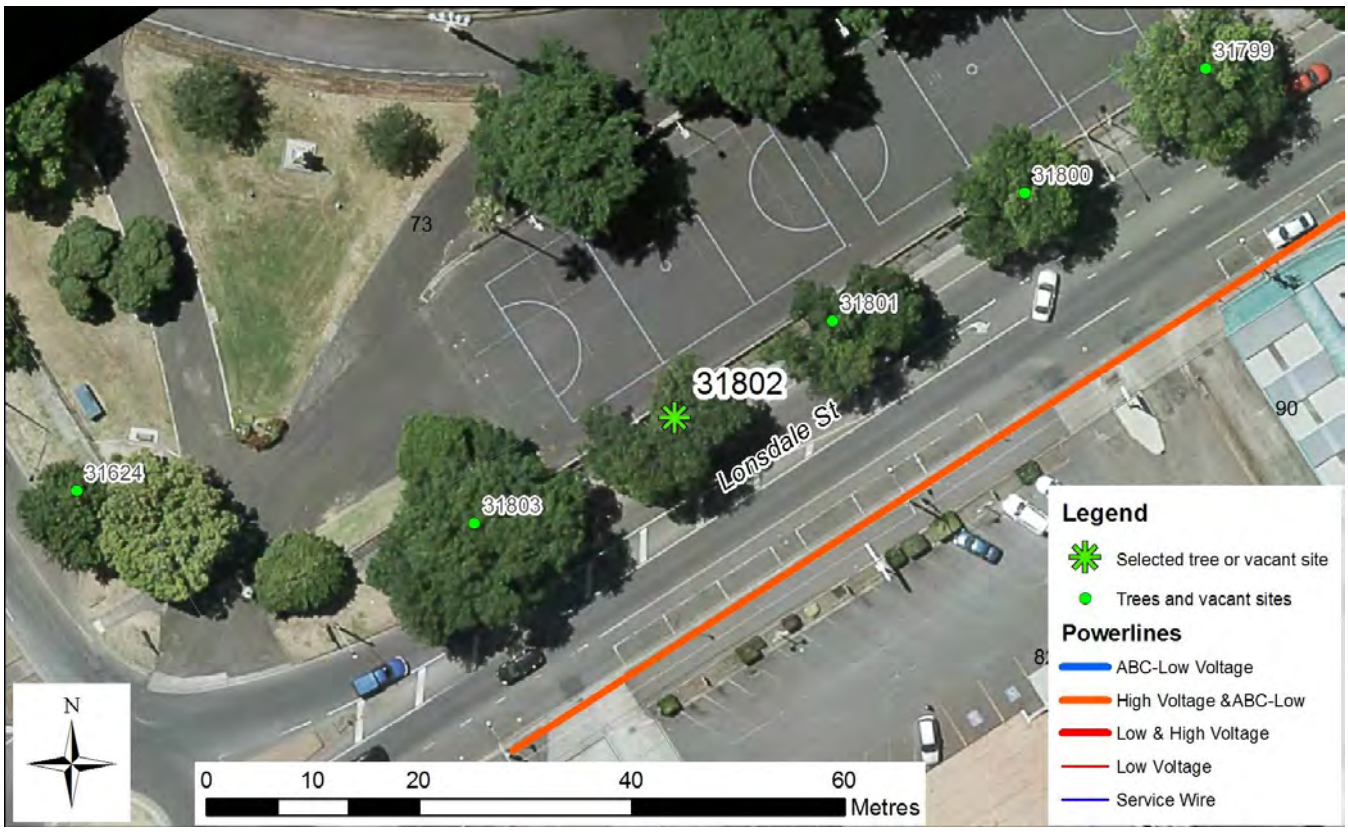
Hamilton CBD

Asset ID:	**31802**
Botanical Name:	*Ulmus procera*
Common Name:	English Elm
Origin:	Exotic
Age:	Mature
Height x Width (m)	15m x 15m
DBH (cm)	60
Health:	Fair
Structure:	Fair
ULE:	5-10 years
Works:	Deadwood removal, reduce large branches over road
Priority:	High
Infrastructure Damage:	Road
Comments:	

Street Planted: LONSDALE STREET

Latitude / Longitude: -37.741735, 142.022289

Failure Potential:	**3. Moderate**
Failure Size:	**3. 101-250mm**
Target Rating:	**3. Vehicles, stationary**
Risk of Harm:	1 in **500000**



Individual Tree Assessment - 2017

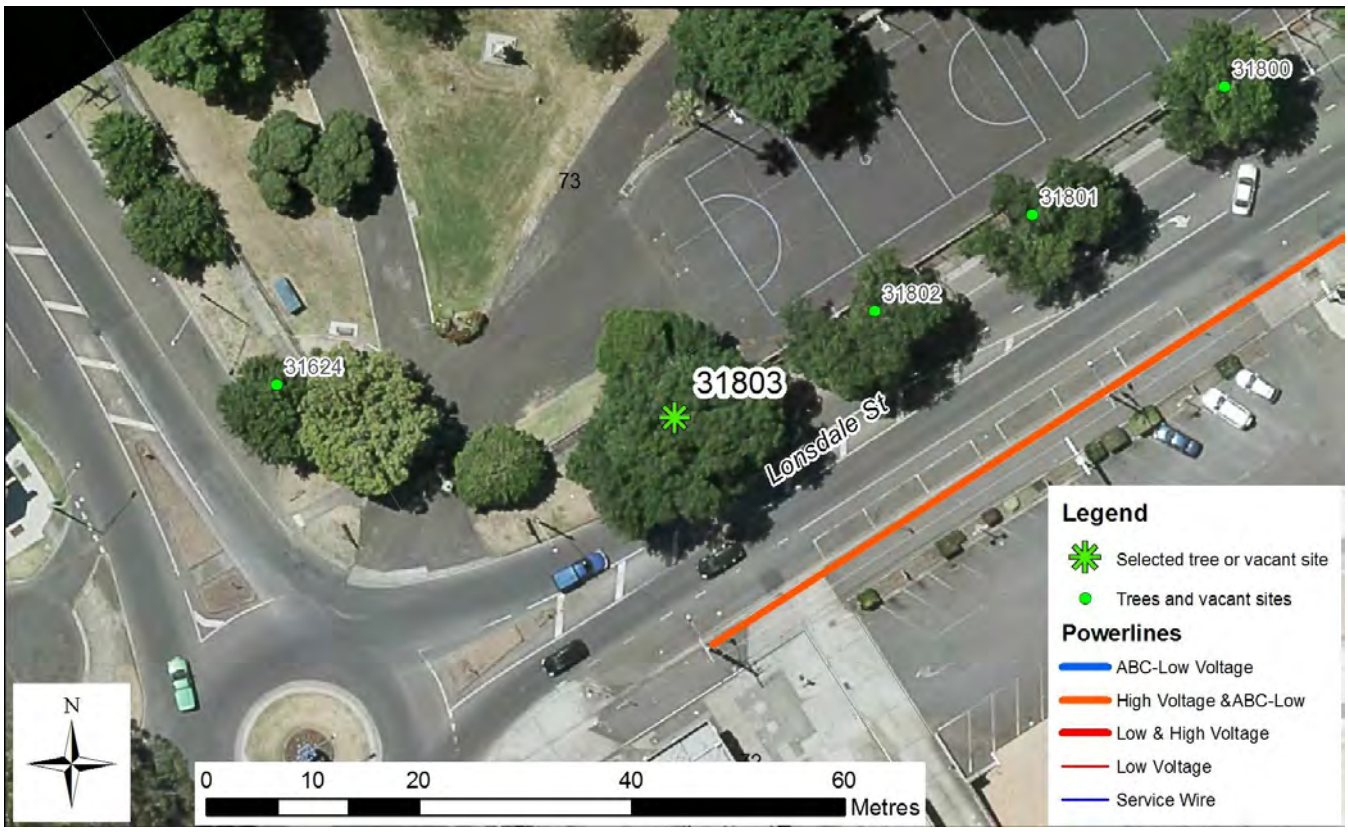
Hamilton CBD

Asset ID:	**31803**
Botanical Name:	*Ulmus procera*
Common Name:	English Elm
Origin:	Exotic
Age:	Mature
Height x Width (m)	15m x 18m
DBH (cm)	72
Health:	Fair
Structure:	Fair
ULE:	10-20 years
Works:	Deadwood removal, reduce large branches over road
Priority:	High
Infrastructure Damage:	Footpath, Road
Comments:	

Street Planted: LONSDALE STREET

Latitude / Longitude: -37.741826, 142.022077

Failure Potential:	**3. Moderate**
Failure Size:	**3. 101-250mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **500000**



Individual Tree Assessment - 2017

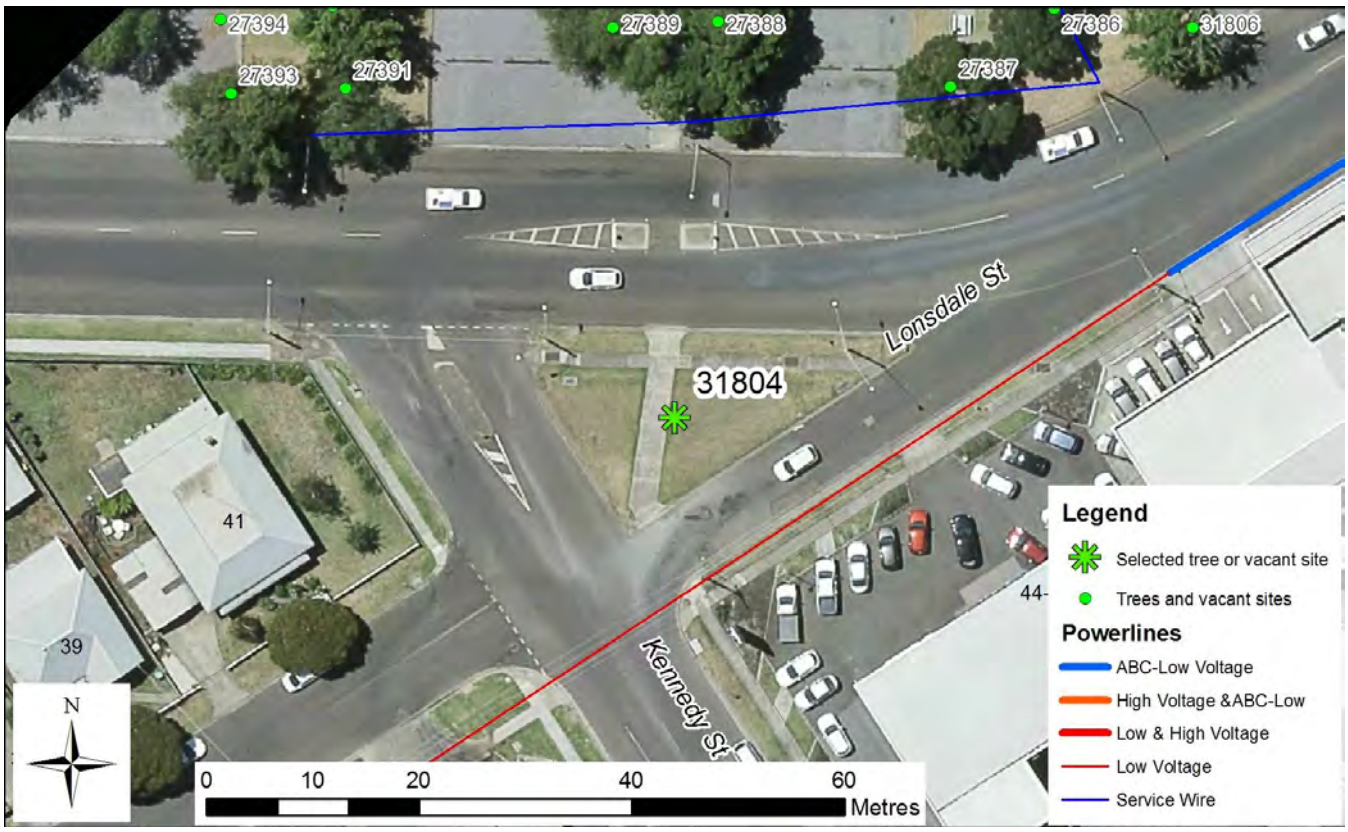
Hamilton CBD

Asset ID:	**31804**
Botanical Name:	*Vacant*
Common Name:	Vacant
Origin:	Vacant
Age:	Vacant
Height x Width (m)	0m x 0m
DBH (cm)	0
Health:	Vacant
Structure:	Vacant
ULE:	50+ years
Works:	No works
Priority:	None
Infrastructure Damage:	None
Comments:	Vacant

Street Planted: LONSDALE STREET

Latitude / Longitude: -37.743119, 142.019724

Failure Potential:	**7. None**
Failure Size:	**4. 26-100mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **60000000000**



Individual Tree Assessment - 2017

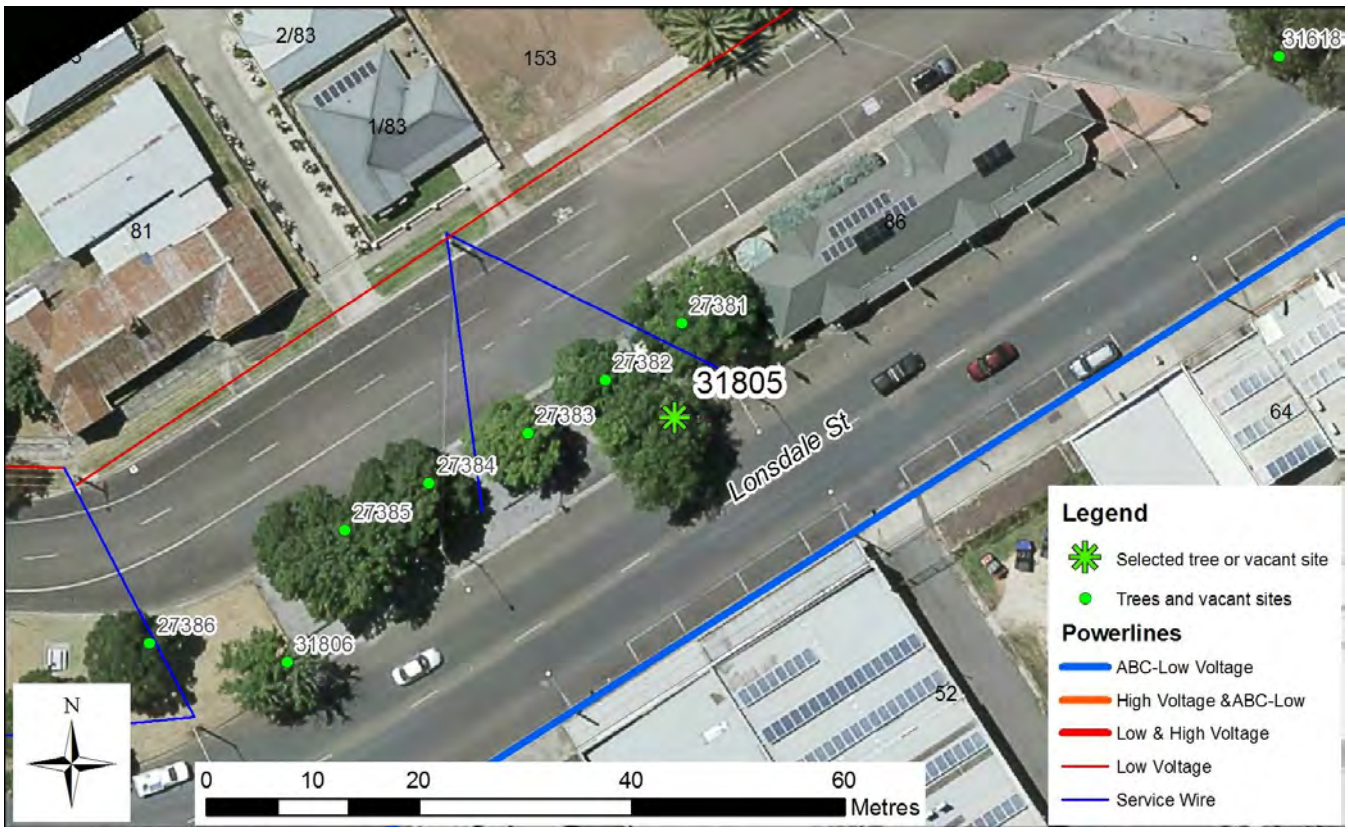
Hamilton CBD

Asset ID:	**31805**
Botanical Name:	*Ulmus procera*
Common Name:	English Elm
Origin:	Exotic
Age:	Mature
Height x Width (m)	11m x 14m
DBH (cm)	52
Health:	Fair
Structure:	Poor
ULE:	5-10 years
Works:	Deadwood removal, reduce large branches over road
Priority:	High
Infrastructure Damage:	Road
Comments:	

Street Planted: HAMILTON PLACE

Latitude / Longitude: -37.742574, 142.020682

Failure Potential:	**3. Moderate**
Failure Size:	**3. 101-250mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **500000**



Individual Tree Assessment - 2017

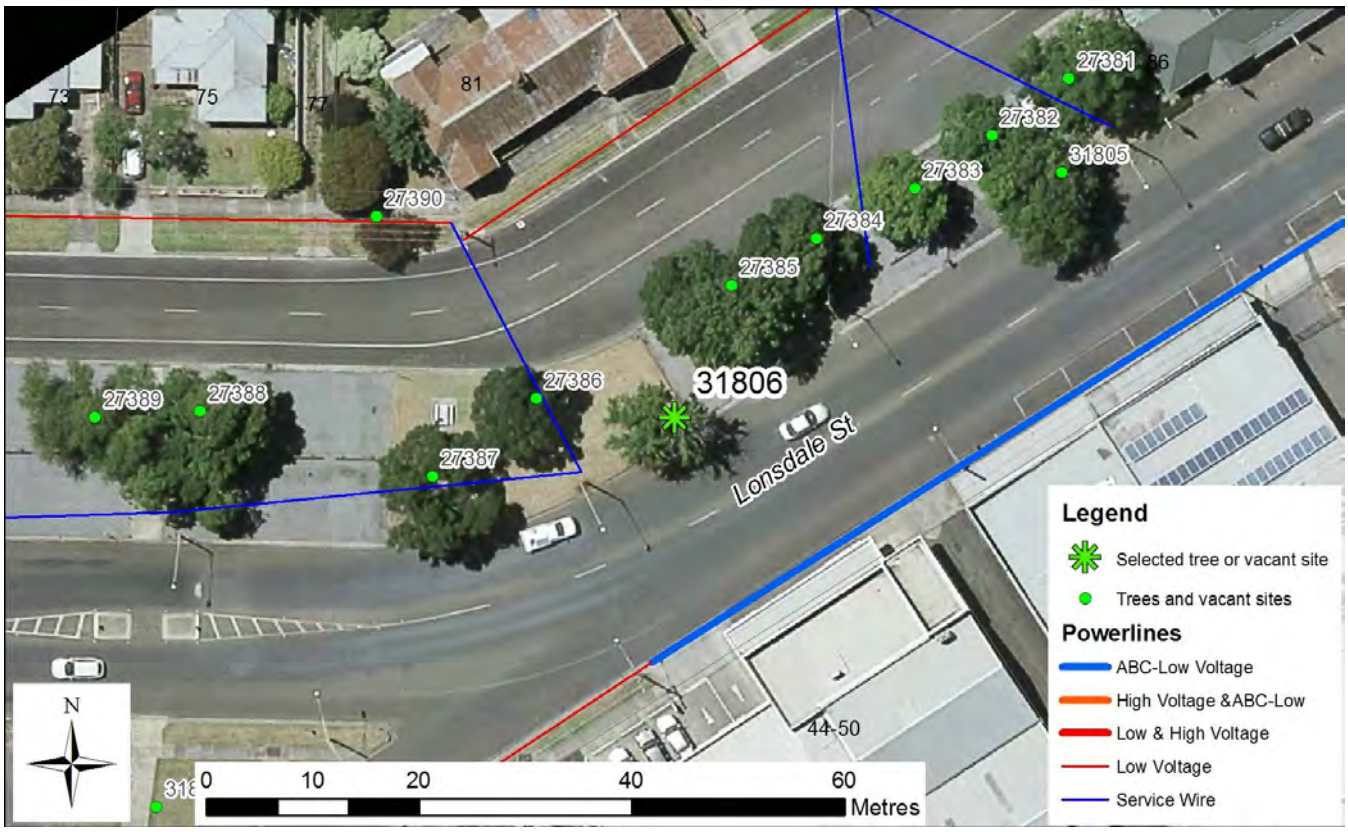
Hamilton CBD

Asset ID:	**31806**
Botanical Name:	*Ulmus procera*
Common Name:	English Elm
Origin:	Exotic
Age:	Mature
Height x Width (m)	12m x 10m
DBH (cm)	46
Health:	Poor
Structure:	Fair
ULE:	5-10 years
Works:	Reduce extended branches over road, deadwood removal
Priority:	Moderate
Infrastructure Damage:	None
Comments:	

Street Planted: HAMILTON PLACE

Latitude / Longitude: -37.742785, 142.020272

Failure Potential:	**3. Moderate**
Failure Size:	**3. 101-250mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **500000**



Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**HW_01**
Botanical Name:	*Vacant*
Common Name:	Vacant
Origin:	Vacant
Age:	Vacant
Height x Width (m)	0m x 0m
DBH (cm)	0
Health:	Vacant
Structure:	Vacant
ULE:	50+ years
Works:	No works
Priority:	None
Infrastructure Damage:	Low voltage powerlines above
Comments:	

Street Planted: COX STREET

Latitude / Longitude: -37.741892, 142.027626

Failure Potential:	**7. None**
Failure Size:	**4. 26-100mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **60000000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**HW_02**
Botanical Name:	*Quercus palustris*
Common Name:	Pin Oak
Origin:	Exotic
Age:	Mature
Height x Width (m)	11m x 8m
DBH (cm)	28
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	No works
Priority:	None
Infrastructure Damage:	None
Comments:	

Street Planted: COX STREET

Latitude / Longitude: -37.742494, 142.028277

Failure Potential:	**4. Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**4. Pedestrians, 3/day to 1/hr**
Risk of Harm:	1 in **500000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**HW_03**
Botanical Name:	*Quercus rubra*
Common Name:	Red Oak
Origin:	Exotic
Age:	Semi mature
Height x Width (m)	6m x 6m
DBH (cm)	18
Health:	Fair
Structure:	Fair
ULE:	20-40 years
Works:	No works
Priority:	None
Infrastructure Damage:	None
Comments:	

Street Planted: COX STREET

Latitude / Longitude: -37.742573, 142.02834

Failure Potential:	**4. Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**4. Pedestrians, 3/day to 1/hr**
Risk of Harm:	1 in **500000000**

Individual Tree Assessment - 2017

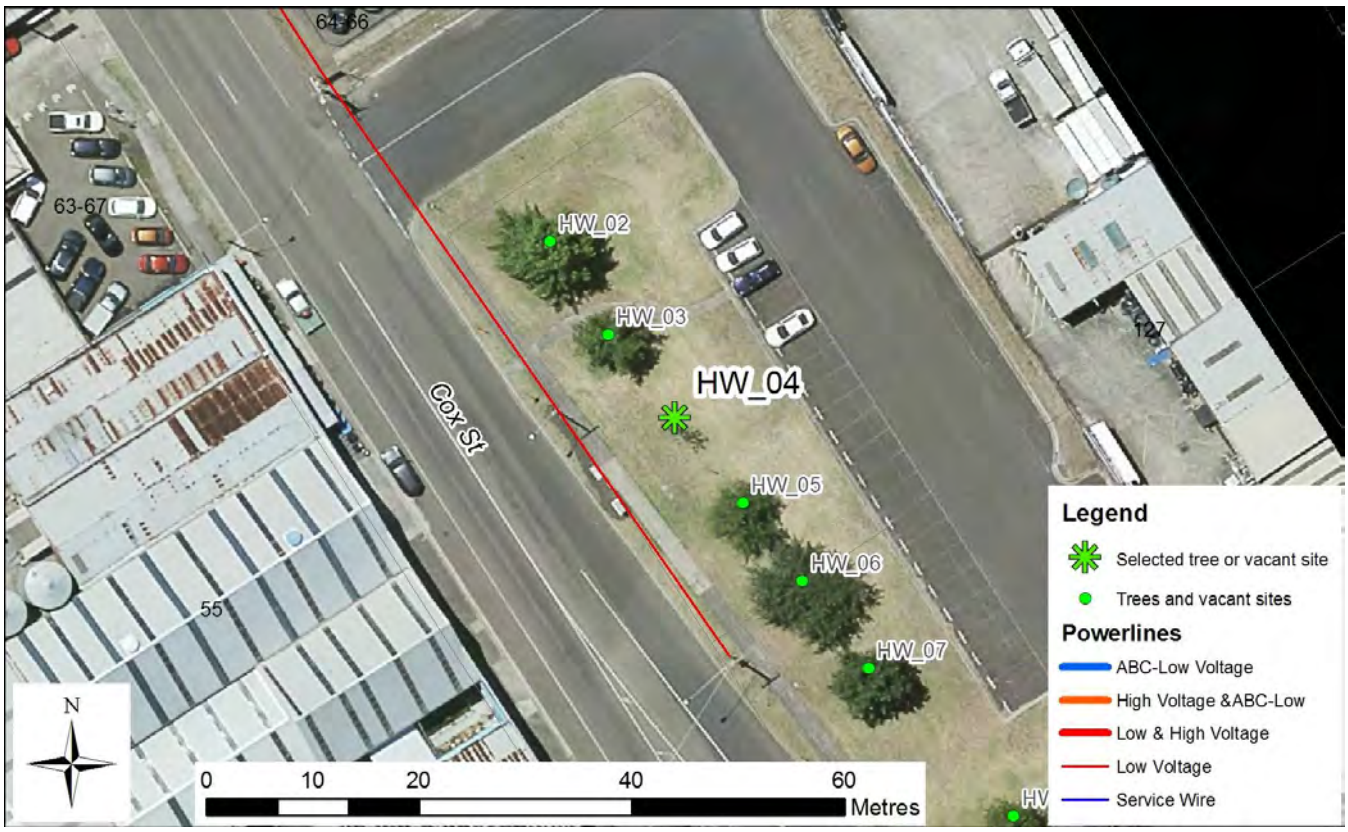
Hamilton CBD

Asset ID:	**HW_04**
Botanical Name:	*Quercus rubra*
Common Name:	Red Oak
Origin:	Exotic
Age:	Semi mature
Height x Width (m)	5m x 4m
DBH (cm)	12
Health:	Very Poor
Structure:	Very poor
ULE:	0 years
Works:	Removal
Priority:	High
Infrastructure Damage:	None
Comments:	Tree is in severe decline

Failure Potential:	**2. High**
Failure Size:	**4. 26-100mm**
Target Rating:	**4. Pedestrians, 3/day to 1/hr**
Risk of Harm:	1 in **5000000**

Street Planted: COX STREET

Latitude / Longitude: -37.742642, 142.028412



Individual Tree Assessment - 2017

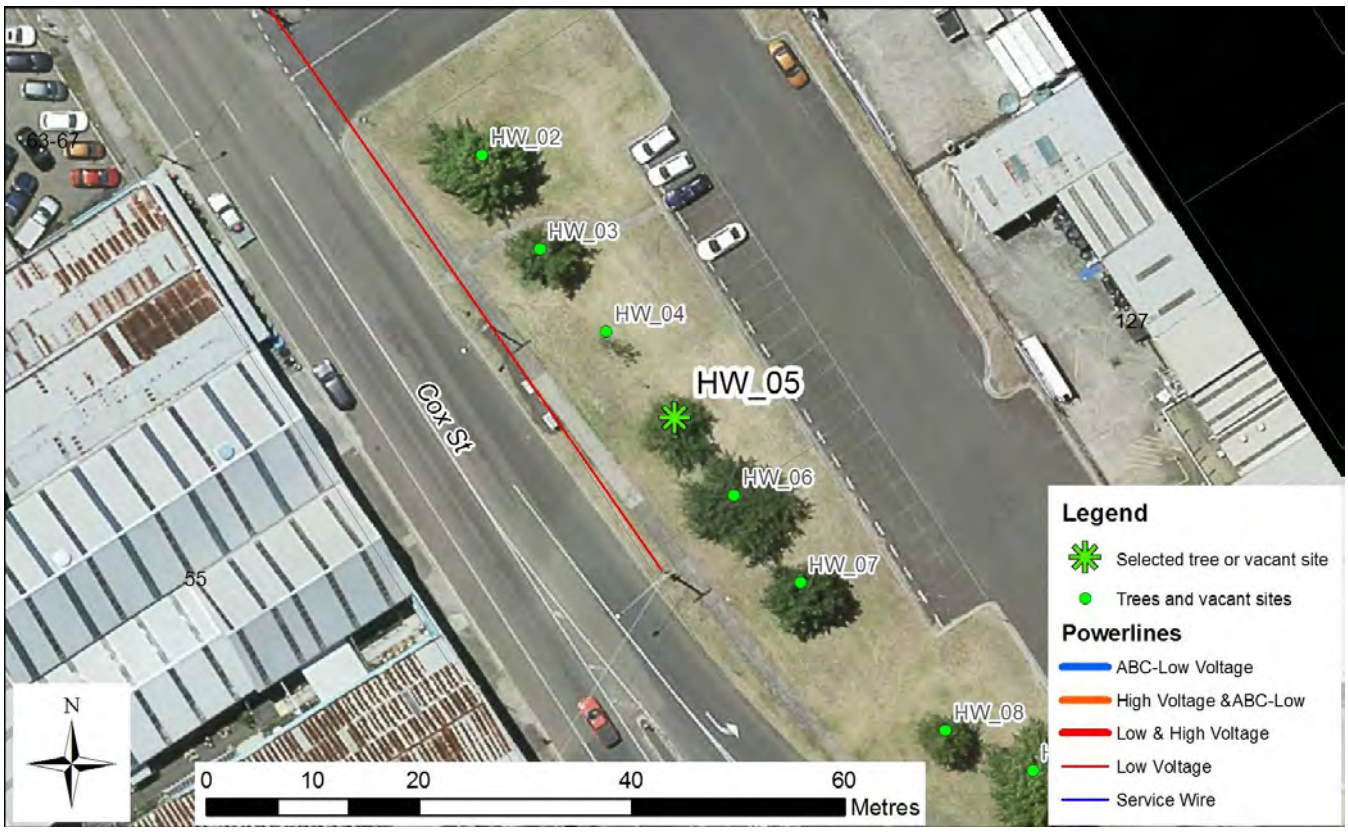
Hamilton CBD

Asset ID:	**HW_05**
Botanical Name:	*Quercus palustris*
Common Name:	Pin Oak
Origin:	Exotic
Age:	Semi mature
Height x Width (m)	6m x 6m
DBH (cm)	22
Health:	Good
Structure:	Good
ULE:	20-40 years
Works:	No works
Priority:	None
Infrastructure Damage:	None
Comments:	

Street Planted: COX STREET

Latitude / Longitude: -37.742714, 142.028486

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**4. Pedestrians, 3/day to 1/hr**
Risk of Harm:	1 in **5000000000**



Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**HW_06**
Botanical Name:	*Quercus rubra*
Common Name:	Red Oak
Origin:	Exotic
Age:	Semi mature
Height x Width (m)	6m x 8m
DBH (cm)	32
Health:	Good
Structure:	Good
ULE:	20-40 years
Works:	No works
Priority:	None
Infrastructure Damage:	None
Comments:	

Street Planted: COX STREET

Latitude / Longitude: -37.742779, 142.02855

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**4. Pedestrians, 3/day to 1/hr**
Risk of Harm:	1 in **5000000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**HW_07**
Botanical Name:	*Quercus rubra*
Common Name:	Red Oak
Origin:	Exotic
Age:	Semi mature
Height x Width (m)	7m x 7m
DBH (cm)	23
Health:	Good
Structure:	Good
ULE:	20-40 years
Works:	No works
Priority:	None
Infrastructure Damage:	None
Comments:	

Street Planted: COX STREET

Latitude / Longitude: -37.742853, 142.028622

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**4. Pedestrians, 3/day to 1/hr**
Risk of Harm:	1 in **5000000000**

Individual Tree Assessment - 2017

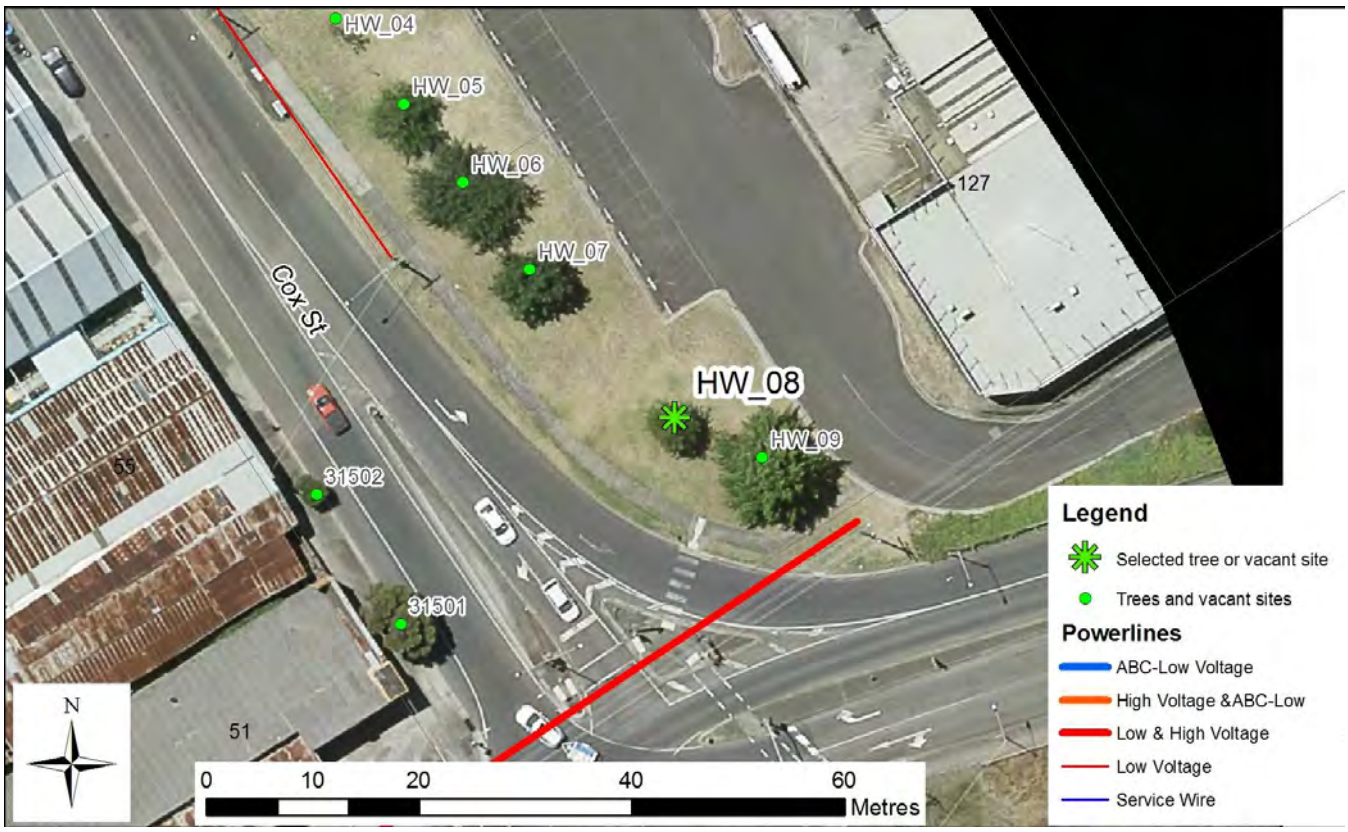
Hamilton CBD

Asset ID:	**HW_08**
Botanical Name:	*Quercus palustris*
Common Name:	Pin Oak
Origin:	Exotic
Age:	Semi mature
Height x Width (m)	6m x 5m
DBH (cm)	16
Health:	Good
Structure:	Good
ULE:	20-40 years
Works:	No works
Priority:	None
Infrastructure Damage:	None
Comments:	

Street Planted: COX STREET

Latitude / Longitude: -37.742976, 142.028778

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**4. Pedestrians, 3/day to 1/hr**
Risk of Harm:	1 in **5000000000**



Individual Tree Assessment - 2017

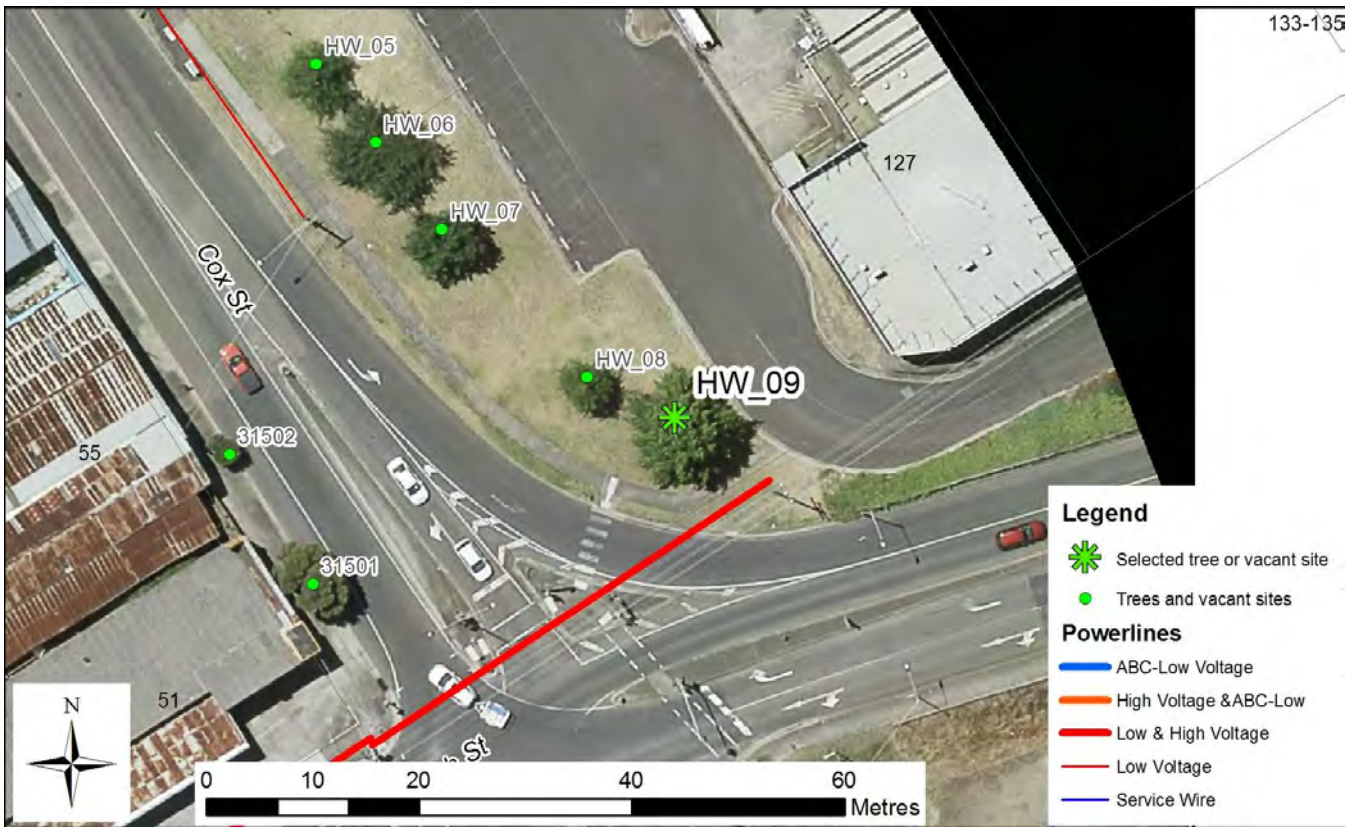
Hamilton CBD

Asset ID:	**HW_09**
Botanical Name:	*Quercus palustris*
Common Name:	Pin Oak
Origin:	Exotic
Age:	Semi mature
Height x Width (m)	11m x 10m
DBH (cm)	32
Health:	Good
Structure:	Good
ULE:	20-40 years
Works:	No works
Priority:	None
Infrastructure Damage:	None
Comments:	

Street Planted: COX STREET

Latitude / Longitude: -37.743009, 142.028872

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**4. Pedestrians, 3/day to 1/hr**
Risk of Harm:	1 in **5000000000**



Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**HW_10**
Botanical Name:	*Vacant*
Common Name:	Vacant
Origin:	Vacant
Age:	Vacant
Height x Width (m)	0m x 0m
DBH (cm)	0
Health:	Vacant
Structure:	Vacant
ULE:	50+ years
Works:	No works
Priority:	None
Infrastructure Damage:	None
Comments:	

Street Planted: FRENCH STREET

Latitude / Longitude: -37.744152, 142.027217

Failure Potential:	**7. None**
Failure Size:	**4. 26-100mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **60000000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**HW_11**
Botanical Name:	*Platanus Xacerifolia*
Common Name:	London Plane
Origin:	Exotic
Age:	Mature
Height x Width (m)	14m x 14m
DBH (cm)	58
Health:	Good
Structure:	Fair
ULE:	20-40 years
Works:	Reduce extended branches over house, canopy lift over house and clear away from service wire pole
Priority:	High
Infrastructure Damage:	Building, Footpath, Kerb

Comments:

Failure Potential:	**4. Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **50000000**

Street Planted: KENNEDY STREET

Latitude / Longitude: -37.744759, 142.020763

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**HW_12**
Botanical Name:	*Ulmus procera*
Common Name:	English Elm
Origin:	Exotic
Age:	Semi mature
Height x Width (m)	9m x 6m
DBH (cm)	18
Health:	Good
Structure:	Good
ULE:	20-40 years
Works:	No works
Priority:	None
Infrastructure Damage:	None
Comments:	

Street Planted: Other

Latitude / Longitude: -37.740671, 142.02395

Failure Potential:	**5. Very Low**
Failure Size:	**4. 26-100mm**
Target Rating:	**4. Pedestrians, 3/day to 1/hr**
Risk of Harm:	1 in **5000000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**HW_13**
Botanical Name:	*Vacant*
Common Name:	Vacant
Origin:	Vacant
Age:	Vacant
Height x Width (m)	0m x 0m
DBH (cm)	0
Health:	Vacant
Structure:	Vacant
ULE:	50+ years
Works:	No works
Priority:	None
Infrastructure Damage:	None
Comments:	

Street Planted: KENNEDY STREET

Latitude / Longitude: -37.744272, 142.020573

Failure Potential:	**7. None**
Failure Size:	**4. 26-100mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **60000000000**

Individual Tree Assessment - 2017

Hamilton CBD

Asset ID:	**HW_14**
Botanical Name:	*Vacant*
Common Name:	Vacant
Origin:	Vacant
Age:	Vacant
Height x Width (m)	0m x 0m
DBH (cm)	0
Health:	Vacant
Structure:	Vacant
ULE:	50+ years
Works:	No works
Priority:	None
Infrastructure Damage:	Powerlines above
Comments:	

Street Planted: KENNEDY STREET

Latitude / Longitude: -37.744614, 142.020858

Failure Potential:	**7. None**
Failure Size:	**4. 26-100mm**
Target Rating:	**3. Pedestrians, 2-7/hr**
Risk of Harm:	1 in **60000000000**