Planning Officer's Report - LDCA JULY 2022

APPLICATION	**2021/46 –** Annual Tree Maintenance at the Castle Gardens
PERMISSION SOUGHT	Permission in Full
REGISTERED	17th June 2021
APPLICANT	Property Division, TI & SD Portfolio
PARCEL	JT040007
ZONE	Intermediate Zone
CONSERVATION AREA	Jamestown Conservation Area
PUBLICITY	The application was advertised as follows: ▪ Independent Newspaper on 18th June 2021 ▪ A site notice displayed in accordance with Regulations.
EXPIRY	2nd July 2021
REPRESENTATIONS	None Received
DECISION ROUTE	~~Delegated~~ / **LDCA** / ~~EXCO~~

A. CONSULTATION FEEDBACK

Water & Sewerage Division	No Objection
Energy Division	No Objection
St Helena Fire & Rescue	No Response
St Helena Roads Section	No Objection
EMD	No Response
Public Health	No Response
ANRD	The Agent
Crown Estates	The Applicant
St Helena Police Services	Not Consulted
Aerodrome Safe Guarding	Not Consulted
Enterprise St Helena (ESH)	No Response
St Helena National Trust	No Response
Sure SA Ltd	No Objection
Heritage Society	No Response

B. SITE & WORK DESCRIPTION

Diagram 1: Location of Trees

ASSESSMENT OF THE TREES AND PROPOSED MAINTENANCE WORKS *(Extracted from Forestry Officers Assessment)*

Current Condition: Section 1 – Trees No. 1-4 Ficus Macrocarpa and & No. 6 Padocarpus Falcatus.

Overall the trees in the Gardens appears to be in reasonable condition; they appear stable, well anchored and show minimal signs of physical damage on the main trunks, canopies and above ground systems. LDCA approval for tree maintenance works (June 2020) has ensured that all low hanging limbs have been lifted to the extent that from the visual inspection, they do not pose a risk to either pedestrian or vehicular traffic. Although there are now low hanging limbs negatively impacting the Public Library that must be removed. Currently there are no visual signs of pest or disease present on this tree. The leaves appear green in colour, vigorous in growth with no obvious wilting or discolouration that would suggest any type of stress affecting the tree.

Throughout the Gardens on trees of the Ficus genus there are noticeable dark/black staining, which suggests that decay (the type of decal, bacterial or fungal is difficult to determine due to a capacity gap within ANRD) present in the trees, most likely from past pruning cuts that did not heal or water settling into natural fissures within the tree stem. At this stage while visible, there is nothing to suggest that the trunks or limbs are unstable at this point. Future monitoring in relation to growth of the decay is required to ensure public safety.

The tree canopies are less stable in that they are littered with dead and drying limbs of various sizes that have been unable to be removed due to capacity, logistical and mechanic issues, during past maintenance works. This dry mass equals an estimated 60% - 70% of the overall canopy composition.

There are a significantly less new limbs that have developed throughout these canopies than the Ficus growing behind the Public Library and Judicial Services building, for which Planning approval to top had been granted; this is as a result of previous pruning work not extending into these remaining tree canopies.

The canopies of these trees are interwoven with others, making it difficult to determine one from the other, and which will create issues when selecting limbs for pruning and or removal. The height of these trees also makes management now and increasingly in the future more difficult. The current estimation of tree height approximately 60ft + and at those heights are beyond what is accessible by ENR&P current forestry team an mechanical capacity that will allow mitigation measures to be safely undertaken.

Identified Risks:

- Risk of injury to persons using the Gardens or property below the canopies, property in this case refers to all vehicles parked within the Castle Gardens, those parked in designated car parks directly outside of the Gardens and those using the street.
- Minimal tree management going forward from this point. As the tree height is beyond existing capabilities, the capacity to safely manage the trees would diminish to a state whereby in the immediate to medium term future, tree management activities would cease beyond the lifting of low hanging limbs within the trees canopies. The consequence of this increases year on year as the risk outlined above increases.

- Constant building up of tree debris (leaves, seed, fruit etc) as limbs can no longer be safely accessed and removed; through decomposition of this green material deterioration of roofing materials would occur, gutters and drains would

become frequently blocked, to be remediated at a significant annual cost to SHG.

Current Condition Section 2, Trees No. 5 – 12

This section of the assessment refers to trees no. 5: Sea Bean, 7-9: Ficus Macrocarpa, 10: Ficus, 11: Senna accidentails and 12: Terminalia Catappa

The trees are in good condition with no obvious physical defects or signs of pest or diseases in any of the trees. Leaves appear vigorous in growth, true to species, good colour and no signs of wilting that would indicate stress factors within the trees. Minimal dry limbs present within the canopies. There are a small number of limbs impacting the energy and telecommunication lines adjacent to the SAMS building, as well as a number of limbs overhanging the ex PWSD workshop roofs (trees 7-9); trees 10 and 11 are impacting the roof of the SAMS building and Ann's Place respectively through low hanging limbs resting and brushing against the building. But nothing was seen at the time of the assessment to suggest any structural issues within the main body of the trees, canopies or aboveground root system.

Identified Risks:

- Injury to users of the area from small falling dry limbs and or damage to property (Tree 5, 8 & 12)

- Deterioration to roof structures of ex PSWD workshop roofs from decaying matter deposited by trees (Trees 7-9)

- Damage to the roof of SAMS building through abrasion caused by movement of limbs in wind, rain etc (Tree 10)

- Damage to Ann's Place through abrasion caused by movement of limbs in wind, rain etc (Tree 11)

Recommendation:

- **2022 Annual Tree Maintenance Schedule** – Removal of all dry limbs within the trees canopies that exist within trees 1-5 and 7. Remove of all low hanging limbs that may cause an obstruction to all users of the area and those now impacting the street and designated car parks located directly adjacent to the Castle Gardens.

- **2022-2024 Annual Tree Maintenance Schedule** – Topping of trees 1 and 2 only to a management height for future tree maintenance.

- Removal of all dry limbs from all affected canopies.

- Raise of low hanging limbs, where they exist that impact all identified energy and telecommunication lines, roofs and pedestrian traffic.

- **Year 2023-2024** – Topping to a manageable height for future tree management – trees 3 – 5 only.

Diagram 2: Low Hanging Limbs for Removal, Trees 7 – 9

Diagram 3: Low Hanging Limbs for Removal, Tree 5

Diagram 4: Limbs for Removal at SAMS Building, Tree 10

Diagram 5: Dry limbs for Removal Trees 1 & 2

C. PLANNING OFFICER'S STATEMENT & RECOMMENDATION

Trees are significant and important features in Jamestown due to various reasons. For this reason, most trees within Jamestown are subject to the Tree Preservation Order of 2015. The trees in Castle Garden are particularly significant for the overall environment of the historic nature of the garden.

The trees under discussion have been subject to a thorough and comprehensive examination by forestry experts within ANRD. It is important to ensure that the level growth remains manageable and the trees do not become a liability that causes safety concerns for the public and to property, whilst also considering the trees overall health and contribution to the amenity of the area.

The removal of dry limbs on all the affected trees are considered acceptable as there will be no adverse impact on the trees health or appearance.

Topping to a manageable height for future tree management is an ideal solution to mitigate the risks identified, however there is an element of risk involved, where if undertaken could have a negative impact on the tree. Topping is the practice of removing limbs of the tree at any point to reshape and resize the trees canopies, which will be effective in reducing the height and spread of the existing canopies. However this will involve making cuts in a manner that reduces the trees ability to heal and to seal wounds and in doing so the opportunities for pest, disease and decay increases leading to a severely stressed tree that is less tolerant of future surgery works. This practise also encourages the formation of new growth this less strongly attached to the tree, making it more likely that new limbs that from the new growth will eventually pose the same level of safety concern that the topping option hoped to eliminate. It is possible that the new growth can be managed more efficiently than the canopies that currently exist. In reaching this stage with these trees, the level of stress incurred by the tree through this process will most likely cause the tree to die.

In removing the volume of green material the trees ability to photosynthesise will be compromised, which will result in minimal absorption of sunlight that creates energy and food, and can reduce the root formation and food storage capacity thereby greatly increasing the level of stress imposed upon the tree and reducing its chance of survival.

The recommended rate of removal for the amount of total foliage removed at one pruning for mature trees is 10%. This does not include the material that is already dead but refers to actively growing foliage. A consideration in removing more than the recommended 10% is the current age of the trees and the trees ability to regenerate following such as practice. The Ficus trees in Jamestown are estimated to be around 250 years old with regenerative capacity declining as the tree ages.

This option will also allow safe 360 degree access to the tree canopies, as operations to reduce the spread and height of the canopy will start from the outside and methodically work in and around the canopy to facilitate the reduction required.

In conclusion, topping poses an element of risk to the trees health with a severe impact on the trees appearance when first carried out. If the consensus is that we do not want to risk losing the trees due to the possibility that the works may compromise their health, as well as having an adverse impact on the appearance of the trees and their setting, then topping should not be supported.

However it is of the officer's opinion that the Castle Gardens being an area regularly used by the pubic as a popular green space in Town, and in proximity of built development should have trees that are maintained at a manageable height, where they can be shaped and managed to reduce potential risks to property and life. If left unmanaged the associated risks will increase within this public space. The trees are in reasonable condition and there is evidence of successful regrowth after topping on similar trees within the Gardens.