

  		DEPARTMENT:	POLICY NO.
		SEVICE DELIVERY AND CORE BUSINESS (OPERATIONS)	REVISION :
		POLICY TITLE : TREE MANAGEMENT POLICY	EFFECTIVE DATE:
1. INTRODUCTION	<p>City of Johannesburg’s urban forest represents an invaluable asset to the City, providing ecological, economic, and social benefits such as recreation, aesthetics, education, cultural and religious rituals, storm water reduction, pollution removal values, carbon sequestration and storage, energy savings, steep slope stability, noise pollution, wildlife and biodiversity, economic vitality, asset building, public health effects, neighbourhood liveability, food production, medicine and urban foraging.</p> <p>Johannesburg City Parks and Zoo (JCPZ) is the custodians of the City of Johannesburg’s green heritage and as such is responsible for enhancing and increasing the green canopy of the City. The City’s claim to fame as a man-made urban forest as well as disparities between the Northern and Southern regions and/or the Previously Advantaged Areas and Previously Disadvantaged Areas of the City are key aspects of the silent mandate afforded to Johannesburg City Parks and Zoo.</p> <p>What is done today can have a serious impact on tree management activities for years to come. It is therefore imperative that tree planting be done with care and planning. Planning is critical to ensure that the final product is sustainable and aesthetically pleasing. Trees of similar shape but different species, if carefully selected, will provide the desired effect of tree arch over the streets and other City’s facilities. The mix of species is essential to reduce the chances of insect epidemics, to guard against the spread of disease as trees are trimmed in efficient block treatments, to prevent widespread neighbourhood complaints and to eliminate extensive tree removal programs when single species plantings die.</p> <p>To sustain long-term tree planting in parks and street trees, the City of Johannesburg must a tree management plan in place to encompassing constant reviews and analysis, planning, protection, management, safety and care to improve the quality and quantity of its trees.</p>		
2. LEGISLATION	<p>In adopting this policy, it is recognized that there are specific legislative requirements to be met as well as other municipal or Corporate goals</p> <p>Relevant major legislative requirements are the following:</p> <ul style="list-style-type: none"> • Constitution of the Republic of South Africa, Chapter 2: Bill of Rights. Everyone has the right: <ul style="list-style-type: none"> a. To an environment that is not harmful to their health or well-being; and; b. To have an environment protected, for the benefit of the present and future generations, through reasonable legislative and other measures that: <ul style="list-style-type: none"> i. Prevent pollution and ecological degradation; ii. Promote conservation; and 		

		<p>iii. Secure ecologically justifiable development economic and social development.</p> <ul style="list-style-type: none"> • Water Services Act, 1997 (Act No 108 of 1997) One of the main objectives of this Act is the promotion of effective water resource management and conservation. It is therefore important to promote the planning of indigenous and other drought Resistant plants to ensure the optimum use of our limited water resources. • Environmental Conservation Act, 1989 (Act No 73 of 1989). In Part 4, Section 21 of this Act, provision is made whereby the Minister may identify activities which may have a detrimental effect on the environment. Tree planting could be identified as such an activity that may not be undertaken in a particular area. • National Forest Act, 1998 (Act No 84 of 1998). Under Section 5 of the Forest Act No 72 of 1968, in force by Section 89(4) of Act 122 of 1984, this Act makes provision for the declaration of a particular tree or group of trees belonging to a particular species on any land to be protected. The maintenance of the protected trees on the public land is also subject to the necessary approval of the Minister of Agriculture, Fisheries and Forestry (DAFF) prior to the implementation. • Conservation of Agriculture Resource Act, 1983 (Act No 43 of 1983). Under Section 29, regulations are stipulated in which certain plants are categorised as: Category 1: Plants declared weeds – may not occur on any land. Category 2: Plants declared as invaders – may be cultivated and planted under controlled circumstances. Category 3: Plants declared as invaders – plants already in existence at the time of enforcement of these regulations may be retained, but may not be propagated or planted. • National Environmental Management Act, 1998 (Act No 107 of 1998). Section 2 of this Act sets out principles that need to be considered prior to tree planting projects. These include the avoidance of the disturbance of ecosystems and loss of biological diversity, and that People and their needs must be placed at the forefront of environmental management concerns. Section 24 stipulates that the potential impact of any activities on the environment, socio-economic conditions and cultural heritage must be considered, investigated and assessed prior to implementation. • Land Use Planning Ordinance (No 15) of 1985 In terms of this Ordinance, Section 108 of the zoning scheme specifically protects trees and hedges in declared conservation (heritage) areas. • City Regulatory Frameworks In addition to the national Acts and regulations, several City of Johannesburg policies and strategies have reference for tree provision and management and these needs to be considered
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		<p>when planning and managing trees with the City's context.</p> <p>Local authorities have no power to pass legislation to protect trees on private properties and representation would have to be made to Central Government to pass such legislation. The Council may nevertheless stipulate as a condition of approval when applications for rezoning (including tree planting and care of existing trees) be included with any development plan or building plan.</p> <p>This policy is to implemented in conjunction with other relevant municipal or Corporate Policies and Strategies including the:</p> <ul style="list-style-type: none"> • Environmental Sector Plan. • 2040 Growth and Development Strategy (5 Year Strategic • National Development Plan. • Gauteng Vision 2055 • Urban Agriculture Plan. • Corridor Development Plan. • Non-Motorized Transport Plan. • Back to Basics Strategy.
<p>3. GDS ALIGNMENT</p>		<p>The Tree Management Policy is directly and indirectly aligned to the four outcomes of the City's Growth and Development Strategy:</p> <p>Outcome 1: Improved Quality of Life and development driven resilience for all. Trees will significantly improve human and social development realities, through targeted focus on poverty reduction, food security, improved health and life expectancy.</p> <p>Key Indicators against which to track progress against Outcome 1 are:</p> <ul style="list-style-type: none"> ▪ Human Development Index; ▪ Poverty Rate; ▪ HIV prevalence; ▪ Food Security Index; and ▪ Public Safety Index. <p>Outcomes 2: Provide a resilient, liveable, sustainable urban environment – underpinned by infrastructure supportive of low-carbon economy. Trees will create a landscape that is sustainable and liveable, environmentally resilient, and supportive of low carbon initiatives.</p> <p>Key Indicators against which to track progress against Outcome 2 are:</p> <ul style="list-style-type: none"> ▪ Ecological Footprint; ▪ % share of energy utilised in the City; ▪ % of unaccounted water; ▪ % of water reclaimed; ▪ % waste to landfill as a proportion of waste generated; ▪ % of energy share utilised from waste; ▪ Revenue from waste generated; ▪ Sustainable Human Settlements Index; and ▪ Eco-mobility. <p>Outcomes 3: An inclusive, job-intensive, resilient and competitive economy. Trees will support the creation of green jobs.</p>

Key Indicators against which to track progress against Outcome 3 are:

- GVA growth rates;
- Unemployment;
- Ratio GDP to jobs;
- Gini-co-efficient;
- City Competitive Rankings; and
- Entrepreneurship growth (informal and formal economy).

Outcomes 4: A leading metropolitan government that proactively contributes to and builds a sustainable, social inclusive, local integrated and globally competitive Global City Region. Tree management and maintenance will be proactively managed rather than being reactively management.

Key Indicators against which to track progress against Outcome 4 are:

- Participation Index;
- Customer Satisfaction;
- Quality of Life; and
- Transparency Index.

Hereunder are the City's priorities aligned to the Growth and Development Strategy (GDS):

- **Financial sustainability and resilience** by planting trees that are indigenous, drought resistant and exotic trees that are suitable to the local conditions.
- **Agriculture and food security** by procuring and distributing fruit trees to deprived communities.
- **Sustainable Human Settlements** by bridging the green divide through planting trees in deprived suburbs and also through replacing dead by interplanting in affluent suburbs. Tree maintenance is pro-active and through uniform standards and best arboriculture practices.
- **SMME and entrepreneurial support** through creating green jobs and also supporting other government job creation initiatives.
- **Engaged and Active citizenry** through urban forest dialogues, tree summits and media.
- **Resource resilience** by propagating and planting trees to mitigate against the impacts of climate change and partner with institutions of higher learning and credible research agencies to carry out research on carbon sequestration to trees planted in the City with the aim of claiming carbon credits.
- **Smart City** by ensuring all newly planted trees are recorded and plotted on the GIS system, and the introduction and implementation of an electronic tree management information system for the City. All tree maintenance schedules to be uploaded on JCPZ's website.
- **Investment, attraction, retention and expansion** by promoting tourism by beautifying scenic or iconic routes and thorough-fares to and in the City by the planting of trees.
- **Green economy** by creating green jobs through the management of the green waste.
- **Safer cities** by conduct annual tree risk assessment throughout the City, encouraging the protection of trees and promotion of preventing the removal of street trees.

<p>4. DEFINITIONS</p>		<p>For the purposes of this policy, the following definitions shall apply:</p> <p>“Alien invasive trees”: trees that invade and out compete native trees and resulting in a rapid spread and occupation of a geographical area.</p> <p>“After-care”: means the tree maintenance regime which is implemented once the tree has been planted.</p> <p>“Arboriculture”: means the cultivation, management, and study of trees, shrubs, and any other perennial woody plants. It is both a science and a practice. The science of arboriculture studies how plants grow and respond to cultural practices and to their environment. The culture of arboriculture includes cultural techniques such as selection, planting, training, fertilization, pest and pathogen control, shaping and removal.</p> <p>“Blanking”: means the replacement planting (filling in gaps) where trees have been loss or died.</p> <p>“City”: means the City of Johannesburg.</p> <p>“Endemic trees”: trees that thrive in a specific ecological area.</p> <p>“Exotic trees”: trees/ plants not native to the country.</p> <p>“Indigenous trees”: trees that are of native to the country (of origin to South Africa.</p> <p>“Interplanting”: means the practice of planting fast growing trees in between slow growing trees or planting trees in between stressed, diseased or dead trees.</p> <p>“JCPZ”: means Johannesburg City Parks and Zoo</p> <p>“Preservation Tree Order”: means a tree preservation order (TPO) is set out by the Municipality to protect specific tree species, or a particular area from deliberate damage and destruction. The TPO addresses matters relating to the felling, lopping, topping, uprooting or other tree management related activities</p> <p>“Planting”: means the placing of saplings or seeds in the ground or container in order to grow.</p> <p>“Pot plants”: means trees grown or placed in containers.</p> <p>“Pruning”: means a horticultural and silvicultural practice involving the selective removal of parts of a plant, such as branches, buds, or roots.</p> <p>“Regions”: geographical borders set out by the City of Johannesburg Metropolitan Municipality.</p> <p>“Tree”: means a woody perennial plant, typically having single stem or trunk growing to a considerable height and bearing lateral branches at some distance from the ground.</p> <p>“Tree health”: means all factors (biotic and abiotic) that affect the vigour and productivity of a tree.</p> <p>“Tree Management”: means the protection and maintenance of the existing tree asset base in the City, as well as the planning, planting, and maintenance of future tree provision programmes.</p>
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<p>5. POLICY STATEMENT</p>		<ul style="list-style-type: none"> • To develop a policy framework that establishes Johannesburg City Parks and Zoo (JCPZ) commitment and strategic direction for the procurement, propagation, planting, maintenance, protection and management in designated open spaces and streets. • The City of Johannesburg values the contribution of trees to achieving a high quality urban environment and will seek to plant trees whenever there is an opportunity to do so within the urban design outcomes for the area. Such planting will complement any heritage building facades. • A diverse range of tree species will be used to reinforce street identity, attract a variety of bird life to the City, create visual interest and enhance the amenity of the public realm. • Trees will be planted to form green corridors and/or greenbelts. • Historic trees and avenues will be preserved and replaced in recognition of their cultural significance and benefits to the City. Adjacent future plantings will be placed to preserve the integrity of these trees. • All trees planted in street trees and parks will be managed to maintain them in a healthy state and minimize any adverse impacts of these trees. • While indigenous trees will be the most common group of trees used, every attempt will be made to use exotic, fruit and nut trees to reflect and support the growing diverse nature of the City's community. • While trees will always be selected that have minimal impact on services such as electricity and water, the City of Johannesburg strongly encourages municipal entities and other government agencies to minimize the impact of their operations on the street trees of the City. • Increased urbanisation demands that tree management be carefully considered to ensure acceptable tree survival rates, reduction of potential risks which trees can pose to people, property, infrastructure and the environment in the event of poor selection of planting sites or tree placements and inappropriate species choices. • The need to highlight the importance of trees, not only as the City and environmental assets landscapes of the urban environment is also critical. The need for voice and advocacy to raise awareness regarding the protection and conservation of trees and the biodiversity of the City need to be expounded. • The provision and management within the urban environment is an on-going challenge in that the protection and survival of trees are often at risk due to increasing demand for land for development, changing societal needs and demands resulting in trees being considered a nuisance rather than a benefit, changing environmental laws re-defining how trees are provided and managed.
<p>6. POLICY OUTCOMES</p>		<ul style="list-style-type: none"> • To provide a uniform approach to the management of trees on municipal land within the City of Johannesburg. • To plant and protect urban trees, to help them grow and multiply especially in the more densely built-up central boroughs, to preserve and/or recreate the seamless flow of the forest cover from one City neighbourhood to the next, to support and harmonize the green-based endeavours of the boroughs, and to inform and involve the citizenry in preserving and enhancing these

precious allies of vital and symbolic importance.

- To place trees at the heart of the City of Johannesburg cityscape, the aim being to provide the City with a viable and sustainable future while supporting the identity of the City's landscape and enhancing citizen quality of life.
- To place trees as important components of City of Johannesburg's green heritage, urban trees are not only living beings but also serves as neighbours and allies. It is in the collective interest of everyone including elected officials, municipal employees, citizens, institutional partners, etc. to respect, protect and support the growth and expansion of the urban tree cover.
- The municipal administration is committed to taking all action as required to ensure the on-going development and sustainability of the City's rich arboreal heritage with view to making the City of Johannesburg a truly greener, more pleasant and healthier place to live.
- To create and maintain a balance in the green environment between the developed and previously advantaged areas within the City of Johannesburg, with specific to the planting of trees in previously disadvantaged communities both in the Southern and Northern regions.
- To identify, register and preserve Champion Trees in the City and to ensure these trees become of significant value to the future generations.

New Tree Planting in the City:

- Engagement with all stakeholders and role-players responsible for planting of trees on City land to ensure alignment and integration of tree planting programmes (e.g. way-leave applications).
- Integrated new housing developments inclusive of greening and tree planting programmes.
- JCPZ to develop and implement an Urban Forest Master Plan.
- Prioritised planting of trees in identified areas within the City where the tree canopy is facing some stress, dying and diseased, and newly developed areas or suburbs.
- Regions and other City's departments are encouraged to plant indigenous and other drought resistant trees and shrubs.
- Facilitate and encourage the planting of trees by residents and other stakeholders wherever and whenever possible.
- Encourage the planting of fruit bearing trees in the City to improve security and the quality of life.

A City-Wide Uniform Approach to Tree Maintenance:

- Establishment of uniform development and maintenance standards for tree based on best arboriculture models.
- Management of trees in a professional manner under the guidance of skilled and qualified arboriculture or horticulture professionals.
- Regulation of the protection, planting and removal of trees by ensuring an integrated city-wide approach based on sound arboriculture practices.
- Integrated management frameworks and service level agreements

		<p>between City Departments and Entities in order to prevent unnecessary damage to trees during construction or related activities.</p> <ul style="list-style-type: none"> • Reduce risks related to planned or ad-hoc approaches to tree maintenance by various internal and external role-players. <p>Establishment of the Importance and Value of Trees:</p> <ul style="list-style-type: none"> • Establishment of a single Tree Evaluation Formula for determining tree values and the total value (i.e. conduct tree verification or census every two years). • Compilation of the State of the Urban Forest Reports every two years by credible research bodies or institutions. • Convene a Tree Indaba or Summit with all stakeholders and also encourage dialogues around trees every two years. • City's participation in national and international programmes aimed at creating awareness of the importance of trees (i.e. Arbour City Awards). • Partnerships development with suppliers, property development companies, ratepayers' organisations, environmental groups, government institutions amongst others to promote tree planting and the importance of trees within the urban context.
<p>7. POLICY OBJECTIVES</p>		<p>In order to achieve this balance, the following objectives have been identified:</p> <ul style="list-style-type: none"> ✚ To promote greening and maximize tree planting and maintenance in an integrated city-wide approach in order to secure the multiple environmental and social benefits for the now and future generations of the City of Johannesburg in accordance to best arboriculture practices. ✚ To manage the urban forest (including street trees and trees planted in parks) in a simple yet effective manner in order to secure our urban forest or canopy for the present and future generations to come. ✚ To encourage tree educational awareness through public participation and consultations before, during and after tree planting programmes. ✚ To encourage tree planting in containers where there are insufficient tree planting spaces in the City. ✚ To encourage the planting of fruit bearing trees by improving the quality of life and food security. ✚ To promote the prevention of tree removal in the City unless there are any compelling reasons or circumstances. ✚ To maintain a set standard for the management of street trees and parks trees in the City of Johannesburg. ✚ To ensure integrated planning with other departments, utility companies and state agencies in order to prevent unnecessary damages to trees during constructions (i.e. way-leave application and approval). ✚ To ensure an integrated approach regarding the planning on new suburbs and housing projects. ✚ To promote and encourage mass tree planting in the City active involvement in the Annual Arbour Week or Month programme and also to partake in the annual Arbour City Award Competition. ✚ To promote tourism by beautifying and enhancing the existing urban canopy by beautifying protocol and scenic routes and gateways to and the City by planting trees. ✚ To ensure 95% tree survival rate on newly planted trees through the tree after-care programmes. ✚ To enhance the reputation of the City as a custodian and manager of an expanding man-made urban forest.

		<ul style="list-style-type: none"> ✚ To determine and benchmark the urban forest canopy of CoJ. ✚ To promote the planting of indigenous and drought resistant trees. ✚ To develop and maintain a CoJ urban tree profile via a tree census and GIS mapping. ✚ To encourage the planting of Memorial trees in Cemeteries. ✚ To establish a tree evaluation formula for the loss of existing trees. ✚ To maintain and improve the existing urban forest canopy through the application of sustainable asset management methodologies. ✚ To plant trees in CoJ using the project management methodologies, tools and techniques. ✚ To establish norms, standards and criteria for the planting of indigenous and exotic trees. ✚ To optimize JCPZ tree nurseries as capable suppliers of trees to meet internal planting requirements, as well as for sale externally. ✚ To apply the CoJ policies and by-laws on the protection and removal of trees in the public open spaces and on streets. ✚ To facilitate the removal of alien invasive trees in collaboration with relevant government and non-governmental entities. ✚ To influence and to achieve goals on tree planting and maintenance as per the IDP and Environmental Sector Plan of the CoJ. ✚ To provide tree planting and maintenance services to State and Municipal owned entities. ✚ To provide guidelines on the prescription of tree requirements for development applications. • To establish criteria for the donation of trees for use in non-designated public open space. • To establish internal and external partnerships in the development of Forest Park in each Region of the City. • To establish rules and practices relating to the protection, management and appropriate maintenance of the urban forest, while supporting applied research in the field. • To step up information, publication and awareness initiatives with a view to involving everyone including citizens, municipal employees, institutional and association partners, large land owners, etc. in the effort to protect City of Johannesburg's arboreal heritage. • Increase the number of trees planted based on the principle of planting the right tree in the right location with a view to augmenting the City's arboreal reserve • To develop proficiency training programs for all personnel involved in arboricultural activities and land-use planning.
8.	IMPLEMENTATION STRATEGY (GUIDING PRINCIPLES)	<p>Tree Planting</p> <ul style="list-style-type: none"> • JCPZ shall plan for the planting of new trees. • JCPZ shall be contacted by any of the City's departments and entities prior to any tree planting programme or maintenance programme. • The planting of trees in the City must be promoted through the implementation of sustained planting programmes with community participation. • Depending on the local conditions, preference should be given to the planting of indigenous and drought resistant plants or trees. This does not exclude the use of exotic species, provided that they are non-invasive and more suited to local conditions. • JCPZ will execute the planting of new trees in accordance with a scheduled rolling five year tree planting plan (i.e. Urban Forest Master Plan). • Species selected are of the utmost importance for eliminating

problems associated with the growth characteristics of tree species, for example damage resulting from aggressive root systems and excessive height that might obstruct the views.

- Once the site has been inspected, way-leaves of other relevant departments and entities have been obtained and it has been established that the tree planting is possible, the selection of a tree species will be influenced by the following factors:
 - The existence and success of species that is already present.
 - The presence/absence of overhead and underground services.
 - Width of the pavement.
 - Growth characteristics of tree species that could put people or property at risk.

Replacement (Blanking) Planting

- ❖ Blanking or planting of replacement trees may be done in a planned or ad-hoc manner.
- ❖ Where trees die or are damaged due to vandalism or impact due to human activity, the individual tree can be removed and replaced with a new tree, so to ensure the planned tree planting programme remains in place.
- ❖ Replacement planting can also take place in the event where the existing streetscapes or avenues where trees are ageing, stressed or diseased and new trees are planted in-situ to ensure that as the tree comes to the end of its lifecycle the aesthetic view of the streetscape or avenue is not negatively impacted on.

General Guidelines

- ✓ Application for tree planting on sidewalks must be in writing and addressed to the Managing Director for JCPZ.
- ✓ In the event of the applicant not being able to read and/or write, provision must be made for such applications to be presented verbally at the JCPZ Regional Managers' Offices.
- ✓ Residents requesting individual tree planting must undertake to water the tree for a specified period until it becomes established.
- ✓ Individual and replacement planting will be carried out when required.
- ✓ Trees are to be planted in a manner which allows for unobstructed pedestrian flow.
- ✓ No trees to be planted where prohibited by services such as gas, electricity and telecommunication lines.
- ✓ No planting to be undertaken that would impair visibility or create a traffic hazard.
- ✓ No planting of trees should be considered:
 - Close to a driveway or road intersection where it is likely to impair sight lines of motorists, cyclists or pedestrians;
 - Where it will obstruct sight lines to traffic signs, signals or direction signs; and
 - Where pedestrian paths will be obstructed in such a manner that people have to walk in the street, or which hinders passage by wheelchairs or push carts.
- ✓ In order to prevent root damage to underground services or hardened surfaces, root control systems may be introduced to redirect roots from the protected areas.
- ✓ No planting to be undertaken that will interfere with any electrical stay supports or that is not within the prescribed distance from overhead power lines, as prescribed by the Occupational Health and Safety Act.

		<ul style="list-style-type: none"> ✓ To ensure public safety, existing street lights/lighting must be considered whilst planting takes place. ✓ No private planting on Council-owned land is permitted without prior consultation with the relevant JCPZ Regional Manager with relevant delegation of power in Johannesburg City Parks and Zoo. ✓ The planting distance between trees must be determined by the species selected and services encountered. ✓ Existing trees that are identified as being unsuitable due to various problems may be removed and replaced with suitable species. The replacement trees must be the same size as those removed. ✓ On requests from schools and community greening projects, trees may be donated according to City's policy regarding donations and in accordance with the Municipal Finance Management Act and depending on stock availability in the municipal nurseries. ✓ On pavements not wide enough to accommodate trees, a tree donation for adjacent private property may be provided at the discretion of the Regional Manager or alternatively pot planting may be encouraged. ✓ The regulations under Section 29 of the Conservation of Agricultural Resource Act, 1983 (Act No 43 of 1983) will be adhered to at all times. Plants declared as weeds may not be planted, while others that have been declared as invaders, must be controlled. ✓ JCPZ will plant street trees on sidewalks in accordance with its tree planting programme throughout the year. ✓ All newly planted and replaced trees are recorded and plotted using the GIS system. ✓ New trees will not be planted under the following circumstances: <ul style="list-style-type: none"> ○ If they interfere with existing services, e.g. telecommunication lines, overhead wires, electricity, street lights, waterlines, and sewage. ○ Within 10 to 20 metres of an intersection. ○ Within 3 meters of an existing driveway. ○ If the sidewalk is less than 2.5 metres wide. ○ If the tree is a noxious weed or if, by the nature of its root system, form, characteristics and fruits, it is deemed to be undesirable. ○ If the pavement is not stabilised. <p>Pruning and Removal of Trees</p> <ul style="list-style-type: none"> ❖ Trees can be pruned if they cause an obstruction for pedestrians, traffic, street lights, roads and traffic signs, overhead power lines, satellite receptions. ❖ Trees can be pruned if they are diseased or certain parts of the tree appear to be diseased or vandalised. ❖ Trees can be pruned to expand its lifespan. ❖ Height of the tree prevents proper maintenance. ❖ Roots will be pruned if they cause a safety hazard for pedestrians and occupants, and damage walls, buildings and road kerbs. ❖ No person may prune or remove a tree planted on City land without prior authority from Johannesburg City Parks and Zoo. In the event of a person or persons being guilty of such an act, the City reserves the right to impose the necessary fines or penalties or follow legal action. ❖ The removal of existing trees within the City will only be considered in certain circumstances. ❖ The City may undertake planned tree removals for purposes of legislative compliance and/or public safety. ❖ Trees declared as a protected species in terms of the Forest Act 1984, may not be pruned or removed without the permission from
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		<p>the Minister of Agriculture, Forestry and Fisheries.</p> <ul style="list-style-type: none"> ❖ In order to prevent unnecessary damage to trees during construction work, other City's Departments and Entities should obtain a wayleave from Johannesburg City Parks and Zoo prior to commencing construction work when such work is to be carried out in the close vicinity of a tree or trees. ❖ Pruning or removal of all trees on municipal property shall be done by Johannesburg City Parks and Zoo or its appointed service providers. ❖ Requests for pruning or removal should be directed to Regional Managers for Johannesburg City Parks and Zoo of the specific Region where the tree is located ❖ Pruning or removal of trees on private property where these trees interfere with overhead or underground services is not the responsibility of Johannesburg City Parks and Zoo. ❖ The City shall consider the following factors before pruning" <ul style="list-style-type: none"> ○ Safety (public and property) ○ Legal factors; upon written request for the removal of any offending branches or roots encroaching upon the complainant's property. ○ South Africa Road Safety Manual. ❖ No tree located on Public Open Space or road reserves is to be removed unless it presents a threat to human life or property, or if the tree has died. The exceptions are: <ul style="list-style-type: none"> ○ Trees classified as "declared weeds" in terms of the Conservation of Agriculture Resource Act, 1983 and National Environmental Management: Biodiversity Act, 2004. ○ The tree is more than 75% dead or dying. ○ Trees are diseased beyond recovery. ○ Trees causing a traffic hazard, electrical or health hazards. ○ Trees that interfere with essential services where no other options suitable alternatives can be found. ○ In accordance with a Council or JCPZ's Senior Management resolutions; for example road widening projects where no alternate routes are available. ○ On request of adjacent property owners for vehicle access, subject to the presentation of approved building plans, where no other alternative could be found, the applicant will be held liable for the cost of removal as well as for the aesthetic loss to the environment. This cost to be based the Johannesburg City Parks and Zoo's approved Tree Evaluation Policy or Formula. ○ Trees planted by residents considered being unsuitable for the area or which interfere with other services, affected parties shall be notified in writing prior removals. ○ Where trees need to be removed for reasons mentioned above replacements shall be considered. ❖ While is not denied that in certain instances trees may form a nuisance to a property owner, the pruning or removal of trees will not be considered for the following reasons: <ul style="list-style-type: none"> ○ Shedding of leaves, fruits, seeds or any other plant material. ○ Causing a nuisance in respect of swimming pool. ○ Hampering the growth of other plants. ○ Obscuring private advertising boards and signs. ○ Causing excessive shade. ○ Allergic reactions. ❖ Removal of fallen trees
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		<ul style="list-style-type: none"> ○ In the event of a tree that has fallen due to age, weather conditions or any other reason, Johannesburg City Parks and Zoo operations or emergency teams will ensure the removal of such tree(s). ○ Johannesburg City Parks and Zoo will respond in the event of trees on public land posing a threat or endangering persons or property. Such tree(s) will be removed, if necessary by JCPZ. ○ In an emergency where a tree on private property has fallen, JCPZ may remove the tree in order to ensure the safety of persons and property. This action will be undertaken in conjunction with the City's Disaster Management Department. <p>❖ Removal of trees in private stands or properties</p> <ul style="list-style-type: none"> ○ Trees will be removed in private properties once approval or permission is received through the office of Managing Director of JCPZ in line with the Council's Indigent Policy. <p>Methods and Systems of Pruning</p> <ul style="list-style-type: none"> • Removal of basal branches, diseased or dead growth. • Raising of lower branches to clear the way for pedestrian movements. • Pruning of roadside branches to accommodate traffic. • Removal of branches obstructing road and traffic signs, street lights, etc. • Pruning of branches of trees growing on private property that may be encroaching upon Council property. • Shaping of trees to accommodate overheard power lines. • Root pruning where roots are causing damage to sidewalks or road surfaces. • Reduction of height of trees will be undertaken if, in the opinion of a skilled arboriculturist or horticulturist, the trees have become a danger.
<p>9. INTERNAL CONTROLS AND RISKS</p>		<p>Risks:</p> <ul style="list-style-type: none"> • Lack of skilled and qualified staff to manage and maintain trees in Region and coupled to that is the ageing workforce, • A number of the City's street trees are reaching the end of their useful life cycle, for example trees planted in the Previously Advantaged Areas such as Sandton, Rosebank, Houghton, etc. JCPZ will monitor the health of these trees and replace them accordingly. A strategic programme of tree replacement will be developed in 2014. • Request for street trees are received from residents and these will be considered in relation to any street planting proposals. • Reinforce existing street tree planting by infilling or inter-planting where possible and replacing poor specimen. Most of the trees planted in the Previously Advantaged Areas are pre-dominantly exotic trees; therefore replacing them with indigenous trees will create a short urban canopy and have in impact in the man-made urban forest. • Reliance on municipal water to water the trees. JCPZ to make an application to the Department of Water Affairs to be granted a permission to withdraw water from the rivers. • Monoculture planting practices as in the past five years the only tree species that have been planted are Celtis spp, Combretum spp, Searsia spp. etc. A variety of tree species should be introduced to minimize the risks of one tree species being wiped out by diseases such mealy bug infestations, etc.

- Tree Planting Master Plans or Registers are not supported or accompanied by sketch plans or lay-out plans.
- Inability of the nurseries to propagate and produce the required tree species and their specification.
- Inability to achieve the mission, vision, goals, outcomes and benefits in relation to tree planting in streets and parks.
- Loss of trees due fraud and vandalism of trees planted in street and parks.
- Damages and loss of trees due to service delivery protests and vehicles.
- Non-maintenance of newly planted trees due to lack of resources such as water-tankers, staff, etc.
- Lack of arboricultural skills, knowledge and capabilities in the organisation. Trees not maintained in accordance to the best arboricultural practices.
- Tree maintenance contractors not having the relevant arboricultural expertise, experience and qualifications.
- Damage to trees due to veld-fires.
- Tree or arboricultural maintenance not receiving the same attention as grass cutting or horticultural maintenance. Horticultural maintenance to be synchronized with arboricultural maintenance.
- Incorrect tree species selection and planting in Regions.
- Planting of poisonous or declared invader trees such as Ligustrum lucidum trees planted in Thokoza Park in Soweto to celebrate the Madiba's 90th birthday.
- Tree Planting Register not updated regularly and trees not mapped out in the GIS system.
- Tree Planting Inventory to be regularly updated.
- Third Party Claims due to property damages caused by falling trees and tree roots.
- Tree planting by other municipal entities without informing JCPZ.
- Removal or felling of trees illegally by residents without logging a call through the City' Call Centre.
- Urban Management Inspectors not recognizing the values and benefits on trees in streets. Always chasing targets on logged calls especially on trees.
- Communities not consulted on future tree planting programmes in their wards.
- Damages of trees by Traditional Healers for traditional medicines.
- No Disease Management Programme in place to treat infested or sick trees in parks and street trees.

Internal Controls:

The following measures or instruments shall be utilized in order to manage, gauge progress and success of trees planted:

- Tree Information Management System (i.e. Pro-active tree maintenance).
- Tree Complaints Management System (Track and Trace System).
- Tree audits and tree verification exercises conducted by the Internal Auditors and Internal Service Monitoring.
- Tree Oversight Management System (i.e. Oversight Tours).
- Establishment of a Tree Management Committee.
- Dialogues and Stakeholder Engagements.
- Hire two qualified Arboriculturists for both the North and South quadrants.
- Mapping of trees on GIS System.
- Annual Tree Census and Carbon Sequestration Programme.

		<ul style="list-style-type: none"> • External Audits by Tree Specialists. • Compilation of the State of the Urban Forest Reports every two years. • Incorporate tree management into the JCPZ's Performance Management System. • All newly trees planted with the City must be subjected to a maintenance plan with a particular focus on the first three years of the trees lifecycle, so to ensure the 95% survival of the new planted or replacement trees. • Develop and implement a Tree Maintenance Standards for the City of Johannesburg. • Conduct education and awareness programme to create greater awareness with the importance of trees within the urban context. • As part of the awareness raising, the City will participate in national and international programmes and competitions relating to tree planting and management such as Arbour month, Arbour City Awards, the Greenest City Awards and the Environmental Network Online Tree Planting Programme. • Research and Development Programme (i.e. Customer Satisfaction Surveys on trees, etc.). • Tree Asset Mapping and Valuation to understand the monetary, environmental and social value of its tree asset base, existing trees need to be mapped and valuation method established and accepted. • JCPZ will on annual basis consider the nominations of Champion trees and submit the said nomination to the Department of Agriculture, Forestry and Fisheries (DAFF) for consideration. Nominated trees may be indigenous or non-indigenous and every nomination cycle starts on the 1st of August of each year, and ends at the 31st of July the following year. Selected trees if in compliance with the national criteria will be gazetted as Champion Trees and will then have to be managed and maintained as such.
<p>10. MONITORING AND EVALUATION</p>		<ul style="list-style-type: none"> ✚ The monitoring and evaluation of the policy objectives will be captured within the Service Delivery Business Implementation of JCPZ. ✚ The review of the Policy to take place annually, from the date which the policy is approved. ✚ Successful implementation of the Policy depends on coordination and collaboration between JCPZ, Stakeholders and Civic Organisations, City's Departments and Entities, and the communities and the involvement of all stakeholders from planning process to evaluation through a multi-stakeholder participatory approach. ✚ An impact monitoring system will be established utilising participatory and self-evaluation systems. Action plans will be developed according to the Urban Forest Strategic Agenda or Urban Forest Master Plan and these will be implemented, evaluated and reviewed annually. <p>The following steps, process, tools and instruments shall be used to monitor and evaluate the tree planting policy:</p> <ul style="list-style-type: none"> • Standard Operating Procedures (SOP). • Tree Propagation Reports. • Daily, weekly, monthly and quarterly tree planting reports. • Project Management tools and techniques (Pro-active tree maintenance Gantt Charts). • Plan – Do – Check Approach.

		<ul style="list-style-type: none"> • External and Internal Audit Reports. • Internal Service Monitoring Reports. • Urban Forestry and Nurseries Reports. • Tree Census Reports. • Carbon Sequestration Reports. • Weekly, Monthly and Quarterly Meetings. • Oversight Reports and Presentations. • Performance Management Information and Pre-Determined Objectives. • Feedback Reports from the Regional Service Delivery Forums and Reports (Regional Directors). • Tree Maintenance Standards. • State of the Urban Forest Report. • Champion Trees Reports • Tree Inspection Reports • Tree Evaluation Policy or Formula.
11.	SCOPE AND APPLICATION	<p>The Tree Management Policy guides decision-making and identifies principles, priorities, goals, and strategies that will the City of Johannesburg to propagate, preserve, protect, maintain and restore its urban forest over the next 26 years. The Policy aims to identify actions that will support a healthy and regenerative urban forest across the City of Johannesburg's public and privately owned lands through the combined efforts of Johannesburg City Parks and Zoo, City's Departments and Entities, residents, business and Civic organisations.</p> <p>In addition to providing beauty, and views, the urban forest provides less obvious, but quantifiable, environmental, social and economic benefits. The urban forest saves millions of amounts annually for the City and for residents by reducing energy use, sequestering carbon, removing air pollution. Residents in treed neighbourhood report higher community involvement and lower stress levels as compared to non-treed areas or deprived wards. Through the Corridors of Freedom programme of the City by bridging the green divide, urban forest and greening is steadily gaining priority on the political agenda. Due to the lack of awareness regarding the values and benefits trees, programmes must be introduced to promote tree planting in such areas.</p> <p>The various tree species have different growth characteristics, i.e. shape, growth rate, size when fully grown, wind and drought resistance, vigorous and aggressive root systems, indigenous or exotic, deciduous or evergreen, etc. These characteristics must be considered when tree species lists are prepared for different areas according to local weather and other conditions. It is necessary to apply this Policy to address and provide guidelines regarding our urban forest.</p> <p>This policy applies to all managers, staff and all activities in relation to urban trees in designated public open spaces, including parks, streets and private areas through development applications.</p>
12.	GOVERNING & REPORTING	<p><u>Accountability:</u></p> <p>The Managing Director, as the Accounting Officer of JCPZ, is the principal custodian of the organization's resources and asset; in this case the CoJ trees under management of JCPZ; shall be responsible for ensuring this policy as adhered to.</p>

		<p><u>Responsible:</u></p> <p>The Chief Operations Officer through the General Manager for Ecosystem Enhancement and Open Space Management (EOD) shall be responsible for approving and communicating appropriate procedures and guidelines for the implementation of this policy, including but not limited to:</p> <ul style="list-style-type: none"> • Trees protection, preservation, replacement and removal. • Trees planting and selection. • Trees procurement and propagation. • Trees asset management. • Community consultation, training and awareness. • Trees stipulation through development applications; and • Trees management processes incorporating JCPZ regions. <p><u>Coordination:</u></p> <p>Department of Ecosystem Enhancement and Open Space Management (EOD) is responsible for the development and coordination of the applicable procedures and processes, as well as for the procurement and propagation of trees and the overall trees strategy development.</p> <p><u>Management:</u></p> <ul style="list-style-type: none"> • Department of Regional Maintenance through Regional Managers are responsible for the implementation of all planting, maintenance, replacement, protection and management of trees processes and procedures. • Department of Regional Maintenance through Manager for Cemeteries and Crematoria is responsible for the implementation of all planting, maintenance, replacement, protection and management of trees processes and procedures. • Department of Conservation Management through its Managers is responsible for the implementation of all planting, maintenance, replacement, protection and management of trees processes and procedures. • Department of Academy, Education and Awareness through its Managers is responsible for the implementation of all planting, maintenance, replacement, protection and management of trees processes and procedures. • Department of Capital Investment (CID) through its Managers is responsible for the implementation of all planting, maintenance, replacement, protection and management of trees processes and procedures. <p><u>Asset Recording:</u></p> <p>The Asset Care Centre (ACC) is responsible for ensuring the application of all trees asset management procedures and processes via the Computerized Asset Management System, as well as through the use of the Geographic Information System (GIS).</p>
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13.	RELATED DOCUMENTS	<ul style="list-style-type: none"> • ISA Basic Tree Risk Assessment Form • The Constitution of the Republic of South Africa, 1996. Chapter 2: Bill of Rights • National Forest Act No 84 of 1998. • Society of Municipal Arborists documents. • National Environmental Management Act (No. 107 of 1998). • Water Services Act No 108 of 1997. • South African Heritage and Resources Agency. • Water Services Act (No. 108 of 1997). • Environmental Conservation Act (No. 73 of 1989). • Forest Act (No. 84 of 1998). • Conservation of Agricultural Resource Act (No. 43 of 1983). • Land Use Planning Ordinance (No. 15 of 1985). • Back to Basics Report. • City Regulatory Frameworks. • Gauteng Vision 2055. • 2040 Growth and Development Strategy (including 5 Mayoral Flagship Programmes). • JCPZ 5 Year Strategic and Tactical Report. • JCPZ 5 Year Strategic and Tactical Report. • Johannesburg City Parks' Tree Management Policy. • City of Drakenstein's Tree Management Policy. • City of Cape Town's Tree Planting Policy. • City of Beaverton's Tree Planting and Maintenance Policy. • City of Adelaide's Street Tree Planting Policy. • City of London's Street Tree Planting Policy.
14.	APPENDICES	<ul style="list-style-type: none"> ❖ Tree Evaluation Formula. ❖ Recommended trees for the City of Johannesburg.
15.	APPROVAL	<p>The Board of Directors maintains an oversight and support role in respect of the implementation of this policy.</p>

16.	<u>CONCLUSION:</u>	The Tree Management Policy be approved for implementation at Johannesburg City Parks and Zoo (JCPZ)	
	APPROVAL AND REVIEW DATES	This policy will be reviewed annually from the approval date.	
17.	POLICY OWNER(S)		

DRAFT