

Street Tree Planting Design Master Plan: Option 2

Function? →	Diversity? →	Design? →	Species? →	Support? →	Placement?
What functions should the street trees perform? ↓	What practical degree of tree species diversity ? ↓	What factors to consider when arranging species? ↓	Which species should be planted? ↓	Test public support for tree planting ↓	Where should the trees be located? ↓
<p style="color: red; text-align: center;">Define Function Category</p> <ul style="list-style-type: none"> •Architectural •Aesthetic •Engineering •Climatic <p style="text-align: center;">Trees in a given locality may perform a single function, any combination of functions or all potential functions</p> <p style="text-align: center;">↓</p>	<p style="color: red; text-align: center;">Select Species to Match</p> <ul style="list-style-type: none"> •Replace same or similar •Proven adaptability and suitability •Availability •Fulfilment of design functions <p style="text-align: center;">↓</p>	<p style="color: red; text-align: center;">Design Principles</p> <ul style="list-style-type: none"> •Repetition Duplicated / repeated identical or similar units •Sequence Consecutive / successive interchange of differing modules •Balance Equal distribution / symmetrical placement on a centre line •Scale Complementary relationship between size of trees and surroundings / users •Accentuation Extreme difference for effect 	<p style="color: red; text-align: center;">Function?</p> <p style="text-align: center;">↓</p> <p style="color: red; text-align: center;">Diversity of Population?</p> <p style="text-align: center;">↓</p> <p style="color: red; text-align: center;">Design?</p> <p style="text-align: center;">↓</p> <p style="color: red; text-align: center;">Species?</p> <p style="text-align: center;">↓</p>	<p style="color: red; text-align: center;">Personal Preference Survey</p> <p style="text-align: center;">Ask residents and business owners their preference for tree planting</p> <p style="text-align: center;">↓</p>	<p style="color: red; text-align: center;">Placement Rules</p> <ul style="list-style-type: none"> •Achieve minimum offsets from intrusive elements •Achieve minimum highway 'site lines' •Generally opposite planting, but consider alternate for narrow streets •Plant at final spacing reflecting mature crown spread •Expected mature crown spread should not exceed one-half the distance between trunk and adjacent building •Re-use existing tree pit excepting some design compromise <p style="text-align: center;">↓</p>
↓	<p style="color: red; text-align: center;">Diversity 'rule of thumb'</p> <p>30% one Family 20% one Genus 10% one Species</p> <p style="text-align: center;">↓</p>	<p style="color: red; text-align: center;">Design 'rule of thumb'</p> <ul style="list-style-type: none"> •Two or more species designs should be visually compatible •Repetition for short streets •Sequential for long streets •Use graduation sparingly 	<p style="color: red; text-align: center;">Species selection rule</p> <ul style="list-style-type: none"> •Don't select unsuitable species to achieve Function, Diversity and Design criteria 		↓
<p style="color: red; text-align: center;">Select Species by Function</p> <p>Select tree species that perform functions from approved list</p>	<p style="color: red; text-align: center;">Select Species by Diversity</p> <p>Select tree species that perform required diversity from within function group</p>	<p style="color: red; text-align: center;">Select Planting Design</p>	<p style="color: red; text-align: center;">Select Tree Species</p>	<p style="color: red; text-align: center;">Critical Review of Support</p> <p>Progress planting Abandon planting</p>	<p style="color: red; text-align: center;">Select Planting Location</p>