

1st Preference

Liquidambar

Liquidambar styraciflua



tree



detail

pros

- Frequently used as car park and street tree
- Reasonably fast Growing
- Good seasonal shade tree
- Has attractive autumn colour
- Can be readily underpruned to lift canopy
- Generally considered to be a very reliable deciduous tree

cons

- Larger leaves may be problematic as leaf drop
- Can grow into a large tree - generally considered less of an issue especially when growing in less favourable situations, eg streets
- Fruit are similar in size to that of the Plane Tree and as such may be considered a nuisance

Examples: Murray Street Perth CBD (Freeway to William St)

Montage of Napoleon Street - *Liquidambar styraciflua*



2nd Preference Chinese Elm

Ulmus parvifolia



tree



detail

pros

- Used as street tree
- Reasonably fast Growing
- Small to medium tree-suitable in scale to the street
- Good shade tree
- Attractive bark-flaking red and grey
- Can be underpruned to lift canopy

cons

- Semi deciduous in WA -generally holding most of it's leaves long into winter
- Can drop sticky sap

Examples: Forrest Place Perth CBD

Montage of Napoleon Street - *Ulmus parvifolia*



3rd Preference

Liquidambar

Liquidambar styraciflua
Rotundiloba '



tree



detail

pros

- Frequently used as car park and street tree
- Reasonably fast Growing
- Good seasonal shade tree
- May have attractive autumn colour
- Can be underpruned to lift canopy
- Generally considered to be a very reliable deciduous tree
- This sterile variety does not bear fruit so fruit drop is not a problem

cons

- Larger leaves may be problematic as leaf drop
- Can grow into a large tree - generally considered less of an issue especially when growing in less favourable situations, eg streets
- This cultivar is relatively new to Perth and as such is somewhat 'untested'

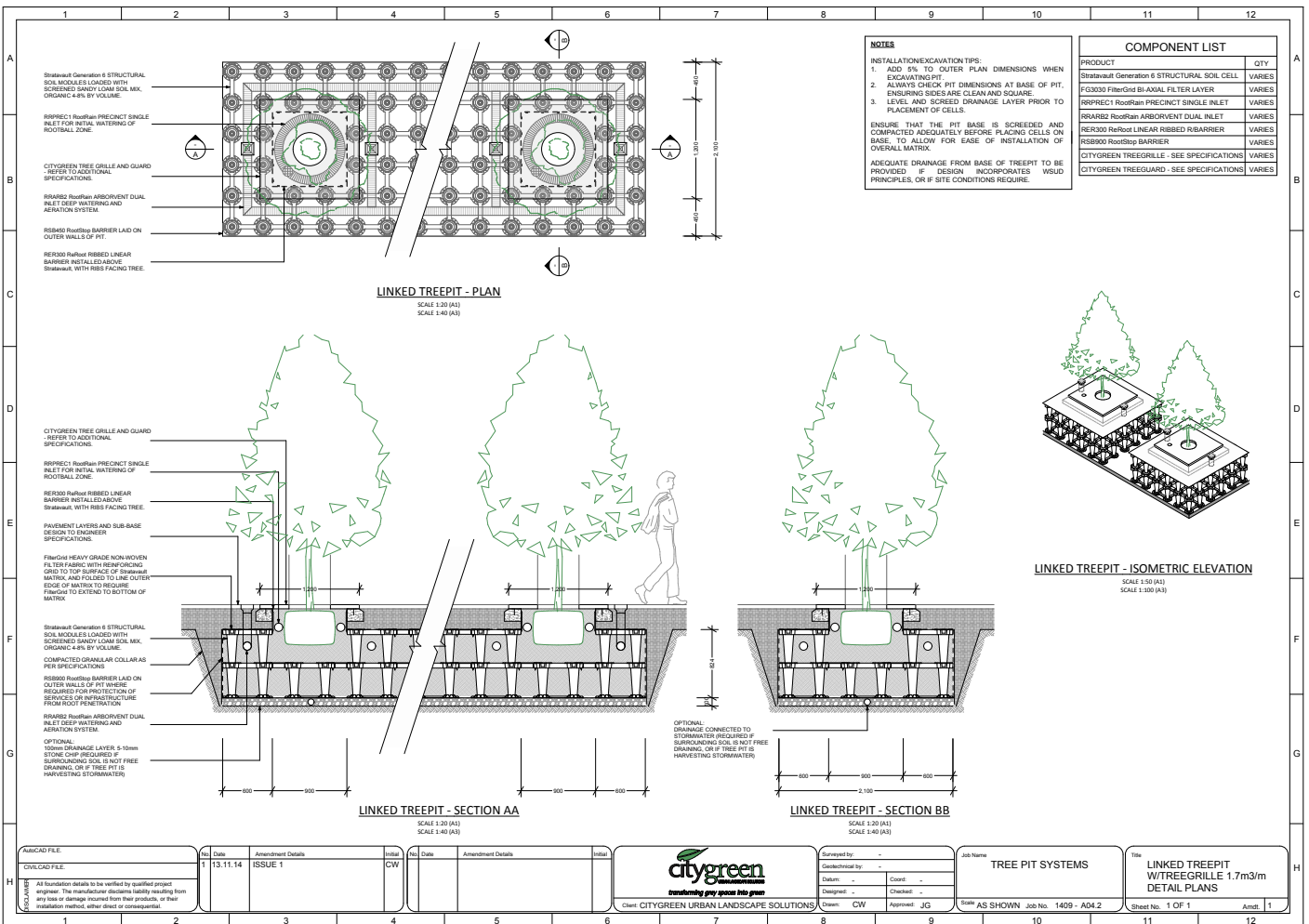
Examples: nature playground East Victoria Park

Photo source: Oregon State University
<https://oregonstate.edu/dept/ldplants/listr1.htm>

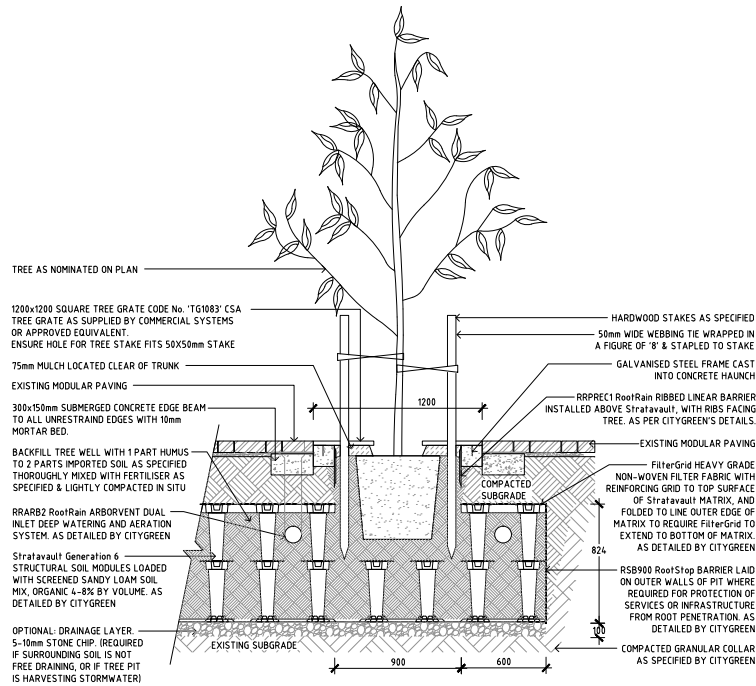
Montage of Napoleon Street - *Liquidambar styraciflua* 'Rotundiloba'



Manufacturer's typical tree planting detail

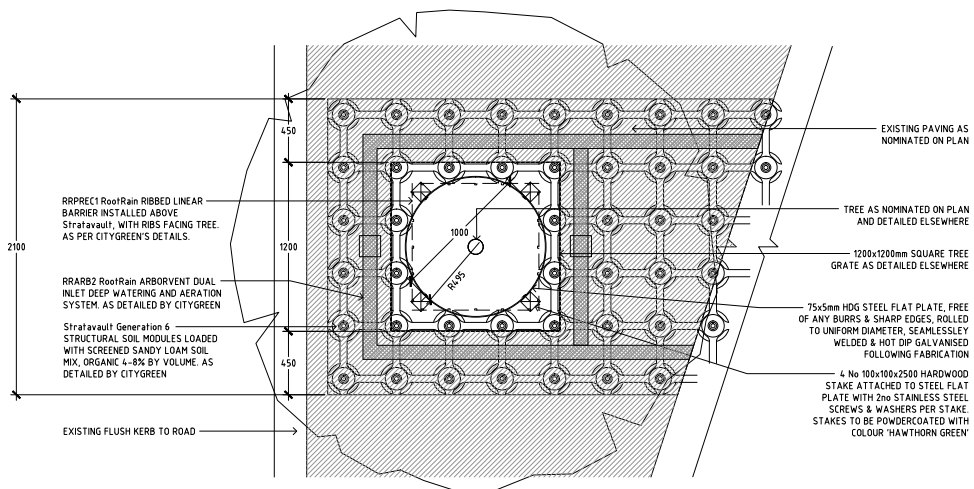


Indicative Napoleon St tree planting detail



NOTE: REFER TO CITYGREEN'S DETAILS AND SPECIFICATIONS FOR STRATAVAULT STRUCTURAL SYSTEM

02 TREE IN PAVING WITH STRUCTURED SOIL SYSTEM
 L3.01 TYPICAL SECTION SCALE 1:20 @ A1



NOTE: REFER TO CITYGREEN'S DETAILS AND SPECIFICATIONS FOR STRATAVAULT STRUCTURAL SYSTEM

03 TREE IN PAVING WITH STRUCTURED SOIL SYSTEM
 L3.01 TYPICAL PLAN SCALE 1:20 @ A1

Indicative opinion of probable costs

NAPOLEON STREET TREE REPLACEMENT OPINION OF PROBABLE COST

31/7/17

NAPOLEON STREET TREE REPLACEMENT				
DESCRIPTION	UNIT	QTY	RATE	AMOUNT
General, Earthworks, Demolition				
Mobilisation and Demobilisation (5% of total cost)	item		\$0.05	\$750.00
Removal of existing tree incl all roots and removal of existing subgrade within tree well. Incl prep, excavation and detailed siteworks for new tree. Incl protection of existing below ground ground services	per tree	1	\$600.00	\$600.00
Removal of existing concrete root barriers and other below ground material	per tree	1	\$50.00	\$50.00
Removal and storage of existing pavers. *Allow for 25% of wastage	sq m	10	\$15.00	\$150.00
Sub Total				\$1,550.00
Sub-Surface Structured Soil System				
Supply & install sub-surface structured soil system. (This cost allows for a 5.0m x 0.6m system per tree)	m3	12	\$830.00	\$9,960.00
Preparation of tree well for structured system	m3	12	\$30.00	\$360.00
Sub Total				\$10,320.00
Hardworks, Softworks, Furniture				
Supply & install 200L tree	each	1	\$600.00	\$600.00
Supply & install imported soil media/conditioner	m3	12	\$80.00	\$960.00
Supply & install 1200x1200mm galv tree grate	each	1	\$1,600.00	\$1,600.00
Supply & install tree guard	each	1	\$2,000.00	\$2,000.00
Install/re-lay stockpiled pavers to match existing	sq m	8	\$50.00	\$400.00
Supply & install new trafficable pavers to match existing (25% of new pavers)	sq m	2	\$80.00	\$160.00
Sub Total				\$5,720.00
Irrigation				
Supply & install new bubbler to tree. (No further irrigation work included)	per tree	1	\$80.00	\$80.00
Sub Total				\$80.00
SUB TOTAL (EXC GST)				\$17,670.00
GST				\$1,767.00
TOTAL (INCL GST)				\$19,437.00

*Note: The above costs are per tree. Total cost is for one tree only. Costs exclude any irrigation pipework or other irrigation costs except new bubbler. Excludes maintenance and contingencies.

