1 Typical Tree Pit Detail 1 – scale 150
Tree in wider area of soft landscaping (i.e. surrounding hard landscaping is over 2m away from trunk).

Tree irrigation system to consist of 35mm diameter perforated pipe laid horizontally around the rootball and a vertical riser with a metal cap with chain e.g. RootRain Metro by GreenBlue Urban.

All non-perishable materials must be removed and perishable materials removed or cut and peeled back to one-third root-ball height

Planting or grass

Hardwood bark chip mulch, depth 75mm tapering to 25mm over the root-ball and with no filter fabric. Up to 10m dia circle to be provided. Mulch tapered towards the trunk so the flaring base is not buried.

150mm deep horticultural grade sharp sand applied to support the rootball.

Tree planting following preparation:
- Tree pits to be excavated to at least 75mm greater than that of the root system
- Tree to be planted with rootball surface siting slightly proud following settlement to ensure the root flare is not buried.
- Do not break up pit base unless there are drainage problems or compaction occurs during planting. (If break up is required, the base shall be broken up by a further 150mm with the sides well scarified to prevent smearing.)
- Trees are to be placed into the pits and backfilled with excavated topsoil. If soil analysis demostrates requirement, incorporate slow release fertilizer (applied at manufacturers rate) and Tree Planting and Mulching Compost (at a rate of 20litres/m2). Compost should be worked into the top 150mm of soil only.
- Firm trees in well and secure with hessian natural tree ties and spacers.
- Water in all trees at the end of each day of planting to ensure continued success.

Existing subsoil to be retained below the 900mm depth tree pits must be aerated and well drained. If not ameloration / amendments must be made to ensure it provides a suitable subsoil.

2m radius - where feasible

Staking for Extra Heavy Standard to be double staked (as shown). All stakes to be 75mm dia. Stakes should be driven at least 300mm into undisturbed ground before planting the tree and typically be one third the height of the tree stem above the ground. Stakes shall be secured to tree using suitable hessian natural tree ties and spacers

Topsoil to be as per specification for soft landscaping (300mm depth for shrubs and trees, and 150mm depth for grass). For tree planting, the 300mm depth of topsoil (and 600mm depth of suitable subsoil) is to continue for a 1-2m radius from the rootball before gradually tapering to the depths required for grass / shrub planting – extent of radius will depend upon area of landscaping the tree is located within.

Where required a suitable root barrier with root deflecting ribs will be installed. Extent and location to be confirmed by engineer, where trees are in close proximity to services/ built form. Installation of root barriers will endeavour to provide the largest possible area of growing space for the tree.

Beyond the tree pit for shrub and grass areas existing de-compacted subsoil or suitable imported subsoil to be used if required. Subsoil depth to be 600mm for trees (total rooting depth 900mm), 300mm for shrubs (total rooting depth 600mm) and 300mm for grass (total rooting depth 450mm). For tree planting, the 600mm depth of suitable subsoil (and 300mm depth of topsoil) is to continue for a 1-2m radius from the rootball before gradually tapering to the depths required for grass / shrub planting.

600mm depth suitable subsoil to provide a total rooting depth of 900mm for trees.

2 Typical Tree Pit Detail 2 – scale 150
Tree with hard landscape to one side of the tree pit (approximately 2m or less from the tree trunk) with soft landscaping to the other side

All non-perishable materials must be removed and perishable materials removed or cut and peeled back to one-third root-ball height

Tree irrigation system to consist of 35mm diameter perforated pipe laid horizontally around the rootball and a vertical riser with a metal cap with chain e.g. RootRain Metro by GreenBlue Urban.

Staking for Extra Heavy Standard to be double staked (as shown). All stakes to be 75mm dia. Stakes should be driven at least 300mm into undisturbed ground before planting the tree and typically be one third the height of the tree stem above the ground. Stakes shall be secured to tree using suitable proprietary rubber tree ties and spacers

Hardwood bark mulch, depth 50-75mm tapering to 25mm over the root-ball and with no filter fabric. Up to 1m dia circle to be provided. Mulch tapered towards the trunk so the flaring base is not buried.

150mm deep horticultural grade sharp sand applied to support the rootball

Planting or grass

Where required a suitable root barrier with root deflecting ribs will be installed. Extent and location to be confirmed by engineer, where trees are in close proximity to services/ built form. Installation of root barriers will endeavour to provide the largest possible area of growing space for the tree.

1-2m radius - where feasible

Topsoil to be as per specification for soft landscaping (300mm depth for shrubs and trees, and 300mm depth for grass). For tree planting, the 300mm depth of topsoil (and 600mm depth of suitable subsoil) is to continue for a 1-2m radius from the rootball before gradually tapering to the depths required for grass / shrub planting – extent of radius will depend upon area of landscaping the tree is located within.

Tree planting following preparation:
- Tree pits to be excavated to at least 75mm greater than that of the root system
- Tree to be planted with rootball surface siting slightly proud following settlement to ensure the root flare is not buried.
- Do not break up pit base unless there are drainage problems or compaction occurs during planting. (If break up is required, the base shall be broken up by a further 150mm with the sides well scarified to prevent smearing.)
- Trees are to be placed into the pits and backfilled with excavated topsoil. If soil analysis demostrates requirement, incorporate slow release fertilizer (applied at manufacturers rate) and Tree Planting and Mulching Compost (at a rate of 20litres/m2). Compost should be worked into the top 150mm of soil only.
- Firm trees in well and secure with hessian natural tree ties and spacers.
- Water in all trees at the end of each day of planting to ensure continued success.

Beyond the tree pit for shrub and grass areas existing de-compacted subsoil or suitable imported subsoil to be used if required. Subsoil depth to be 600mm for trees (total rooting depth 900mm), 300mm for shrubs (total rooting depth 600mm) and 300mm for grass (total rooting depth 450mm). For tree planting, the 600mm depth of suitable subsoil (and 300mm depth of topsoil) is to continue for a 1-2m radius from the rootball before gradually tapering to the depths required for grass / shrub planting.

Existing subsoil to be retained below the 900mm depth tree pits must be aerated and well drained. If not ameloration / amendments must be made to ensure it provides a suitable subsoil.

600mm depth suitable subsoil to provide a total rooting depth of 900mm for trees.

3 Typical Tree Pit Detail 4 – scale 150
Tree with hard landscape to one side of the tree pit (approximately 2m or less from the tree trunk) with rain garden soft landscaping to the other side

All non-perishable materials must be removed and perishable materials removed or cut and peeled back to one-third root-ball height

Proposed tree (to be staked, with 3 no. 75mm diameter untreated pointed tree stakes with hessian natural ties (with ties used to form spacers) for Extra Heavy Standards, to be set low on stem. Stakes should be driven 300mm into the ground.

75mm stone mulch to be 14-20mm clean stone, grey in colour to be full width of rain garden area. Mulch is to be tapered to 20mm towards the trunk so the flaring base is not buried.

Planting medium for immediate tree pit and rain garden area to be 900mm depth for trees to comprise 300mm layer of suitable topsoil to provide optimum soil for tree establishment. Topsoil depths and widths to extend the full soil volume area for each tree.

Rain garden soil to form 500mm deep sub-soil comprise "Bioretention Soil" by Bourne Amenity or similar alternative to achieve hydraulic conductivity for the immediate tree pit and rain garden area. Sub-soil depths and widths to extend the full soil volume area for each tree.
100mm transition layer of 2-6mm course material
100mm min overlap between interface between geotextile (green line) and polyethylene membrane (pink line)
Drainage layer min 100mm (at edges) of 4-2mm clean stone, note stone depth at to increase to suit designed invert level with min 200mm stone beneath pipe

150-300mm fully perforated pipe

1-2m radius - where feasible

Tree planting following preparation:
- Tree pits to be excavated to at least 75mm greater than that of the root system
- Tree to be planted with rootball surface siting slightly proud following settlement to ensure the root flare is not buried.
- Water in all trees at the end of each day of planting to ensure continued success.

Beyond the immediate tree pit area topsoil to be as per specification for soft landscaping (300mm depth for shrubs and trees, and 150mm depth for grass). For tree planting, the 300mm depth of topsoil (and 600mm depth of suitable subsoil) to continue for a 1-2m radius from the rootball before gradually tapering to the depths required for grass / shrub planting – extent of radius will depend upon area of landscaping the tree is located within.

Beyond the tree pit for shrub and grass areas existing de-compacted subsoil or suitable imported subsoil to be used if required. Subsoil depth to be 600mm for trees (total rooting depth 900mm), 300mm for shrubs (total rooting depth 600mm) and 300mm for grass (total rooting depth 450mm). For tree planting, the 600mm depth of suitable subsoil (and 300mm depth of topsoil) is to continue for a 1-2m radius from the rootball before gradually tapering to the depths required for grass / shrub planting.

2000 gauge polyethylene membrane (pink line)with min. 300mm overlaps where sheets of polyethylene membrane join each other

100mm min overlap of geotextile and polyethylene membrane

Non-woven geotextile 1000gsm (green line)

4 Typical Tree Pit Detail 4 – scale 150
Tree planted in soft landscape highway verge with hard landscape to both side of the tree pit (approximately 2m or less from the tree trunk)

Staking for Extra Heavy Standard to be double staked (as shown). All stakes to be 75mm dia. Stakes should be driven at least 300mm into undisturbed ground before planting the tree and typically be one third the height of the tree stem above the ground. Stakes shall be secured to tree using suitable hessian natural tree ties and spacers.

Tree irrigation system to consist of 35mm diameter perforated pipe laid horizontally around the rootball and a metal cap with chain e.g. RootRain Metro by GreenBlue Urban.

Topsoil to be 300mm deep across width of verge. To be as per specification for soft landscaping

75mm bark mulch in 1 dia from tree trunk. Mulch tapered towards the trunk so the flaring base is not buried

Soft landscape

600mm depth suitable subsoil to provide a total rooting depth of 900mm for trees.

Where required a suitable root barrier with root deflecting ribs will be installed. Extent and location to be confirmed by engineer, where trees are in close proximity to services/ built form. Installation of root barriers will endeavour to provide the largest possible area of growing space for the tree.

Tree planting following preparation:
- Tree pits to be excavated to at least 75mm greater than that of the root system
- Tree to be planted with rootball surface siting slightly proud following settlement to ensure the root flare is not buried.
- Do not break up pit base unless there are drainage problems or compaction occurs during planting. (If break up is required, the base shall be broken up by a further 150mm with the sides well scarified to prevent smearing.)
- Trees are to be placed into the pits and backfilled with excavated topsoil. If soil analysis demostrates requirement, incorporate slow release fertilizer (applied at manufacturers rate) and Tree Planting and Mulching Compost (at a rate of 20litres/m2). Compost should be worked into the top 150mm of soil only.
- Firm trees in well and secure with hessian natural tree ties and spacers.
- Water in all trees at the end of each day of planting to ensure continued success.

150mm deep horticultural grade sharp sand applied to support the rootball.

Existing subsoil to be retained below the 900mm depth tree pits must be aerated and well drained. If not ameloration / amendments must be made to ensure it provides a suitable subsoil.

5 Typical Tree Pit Detail 5 – scale 150
Tree with hard landscape to one side of the tree pit (approximately 2m or less from the tree trunk) with rain garden soft landscaping to the other side

All non-perishable materials must be removed and perishable materials removed or cut and peeled back to one-third root-ball height

Tree planting following preparation:
- Tree pits to be excavated to at least 75mm greater than that of the root system
- Tree to be planted with rootball surface siting slightly proud following settlement to ensure the root flare is not buried.
- Firm trees in well and secure with hessian natural tree ties and spacers.
- Water in all trees at the end of each day of planting to ensure continued success.

Proposed tree (to be staked, with 3 no. 75mm diameter untreated pointed tree stakes with hessian natural ties (with ties used to form spacers) for Extra Heavy Standards, to be set low on stem. Stakes should be driven 300mm into the ground.

75mm stone mulch to be 14-20mm clean stone, grey in colour. Mulch is to be tapered to 20mm towards the trunk so the flaring base is not buried.

Planting medium for immediate tree pit and rain garden area to be 900mm depth for trees to comprise 300mm layer of suitable topsoil to provide optimum soil for tree establishment. Topsoil depths and widths to extend the full soil volume area for each tree.

Watering system to consist of a perforated pipe installed around the rootball - Mona Relief Tree Irrigation by Green-Tech and approved by the LPA. Single inlet aeration/irrigation system. Size of irrigation ring to be selected to match diameter of rootball

Rain garden soil to comprise 'Bioretention Soil' by Bourne Amenity or similar alternative to achieve hydraulic conductivity
100mm transition layer of 2-6mm course material
Drainage layer min 100mm (at edges) of 4-2mm clean stone, note stone depth at to increase to suit designed invert level with min 200mm stone beneath pipe

150-300mm fully perforated pipe

2000 gauge polyethylene membrane with min. 300mm overlaps where needed (pink line)

100mm min overlap of geotextile and polyethylene membrane

Non-woven geotextile 1000gsm (green line)

FOOTPATH | BIORETENTION VERGE | CARRIAGEWAY

N
0   2   5 m

R11 - Phase 2B South Wokingham SDL - Tree Pit Details

PEGASUS GROUP