51: Trees planted within or near the carriageway need good support and protection. Here four stakes support the tree and iron rails prevent damage by vehicles. A water channel giving direct water access to the root system makes watering quicker and improves growth (note concrete gulley giving access to water channel). Aachen, Germany. (Photo: T. Pharoah)

52: Kerbing is needed to prevent oil-polluted water from entering the plant bed, but extra protection should be provided where damage from vehicles is possible. Herne, Germany. (Photo: T. Pharoah)

3.23 PLANTING/GREENERY

OBJECTIVES

- To limit forward views (see 3.8)
- To reduce physical and optical width (see 3.9 and 3.15)
- To define street spaces and activities
- To improve street appearance and the environment, including micro climate, noise and dust absorption

DESIGN FEATURES

Planting may be within footway and other pedestrian areas (low kerbs or grilles may be required), or within former carriageway areas (high kerbs or other means to prevent vehicle overrun required). Planted areas within the carriageway may stand clear of the kerb to allow existing surface drainage to be retained. Carriageway surface water should not drain into planted areas and such areas have to be checked for the location of underground pipes and cables. Newly planted trees should be semi-mature and supported with three or





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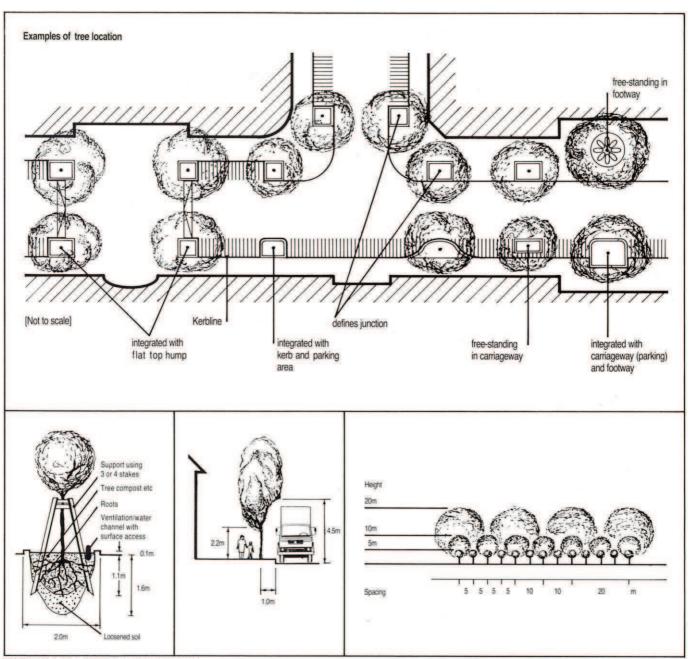


DIAGRAM 3.23.1 TREES IN THE STREET

53: Plant bed created within area of former carriageway. The bed in the foreground has been adopted by the frontage property owner, and is now adorned with a fine display of flowers. (Photo: T. Pharoah)

54: Movable planters can be a useful temporary solution, as in this street outside a site due for redevelopment. Aachen, Germany.

(Photo: T. Pharoah)



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four substantial poles. These support structures not only protect the tree from wind and vandalism, but also contribute to the desired optical effect until the tree has matured. The type of tree, the reduced optical effect when trees are without leaves and the implications of leaf fall should all be taken into account.

Tree planting can be complemented by low shrubs or ground cover plants within the same area. This reduces weed growth and also contributes to the optical effect. Some areas may be suitable only for shrubs and ground cover plants, for example where the depth is limited or where visibility must not be impaired. Planter boxes have the advantage that they can be easily moved and are particularly useful for temporary and experimental schemes.

Where planting is provided as part of a new development, the developer should be made responsible for the maintenance of the planted areas for a number of years until they are established. In the case of existing sites, the contract for planting may need to include maintenance for a given period of time. In any case liaison will be required with the District Council.

APPLICATION

Planting, and especially tree planting, is an essential ingredient of most traffic calming and environmental enhancement schemes. It may be limited by considerations of townscape character in some circumstances, and sometimes by soil and climate (e.g. in exposed coastal areas), but otherwise it is universally applicable. The advice of a landscape specialist should be sought to ensure that suitable species are specified.

DIMENSIONS

Shrubs and planters should not exceed 0.75m in height where they are likely to obscure the view of drivers or pedestrians. Trees should if possible be located in a planting area of at least 2 sq m. If planted adjacent to the carriageway, the trunk when fully grown should be at least 0.5m from the kerb. Varieties with a clean stem of about 1.5m do not obstruct drivers' vision. The

location and variety of tree have to be chosen to ensure adequate clearance above the carriageway.

SUPPORTING MEASURES

Kerbs need to be used to prevent surface water from the carriageway entering planted areas. Substantial hoops, rails or posts may be necessary to prevent damage by vehicles. Grilles can be used in footway areas as an alternative to kerbed areas. Tree supports have to be provided.

POSITIVE FACTORS

 Planting makes a major contribution to the required change of street character in traffic calming schemes, whilst at the same time improving the street scene and micro climate

- Trees provide vertical features at relatively low cost
- Frontagers may be encouraged to contribute to the creation and/or the maintenance of planted areas
- Planting can engender pride in the traffic calming scheme and in the street generally

NEGATIVE FACTORS

 May increase maintenance costs unless sponsored or adopted by frontagers or other bodies 55: Planters, mature trees and hanging baskets greatly improve the environment in Exeter High Street. (Photo: Devon County Council)



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