

a. CRITICAL ROOT ZONE (CRZ) – The CRZ of a tree is established based on trunk diameter measured at 4.5-feet from grade (DBH). The CRZ is a generalized circular area which has a radius of 12-inches to every inch trunk diameter. Root systems will vary both in depth and spread depending on size of tree, soils, water table, species and other factors. However, this CRZ description is generally accepted in the tree industry. Protecting this entire is area optimum and should, in theory, result in no adverse impact to a tree.

The CRZ can be further differentiated into the 'Perimeter' and 'Interior' CRZs to help evaluate potential impacts and required post-care.

- b. PERIMETER CRITICAL ROOT ZONE (PCRZ) the full PCRZ is generally considered the optimum amount of root protection for a tree. The further one encroaches into the PCRZ (but not into the ICRZ) the greater post-care treatments the tree will require to remain alive and stable.
- c. INTERIOR CRITICAL ROOT ZONE (ICRZ) The absolute maximum disturbance allowed for a tree should leave the 'Interior' CRZ undisturbed if the tree is to have any chance of long-term survival. The ICRZ is half the radius of the full CRZ/PCRZ. Disturbance into the ICRZ could destabilize or cause the tree to decline. The ICRZ approximately equals the size of a root-ball needed to transplant this tree, which in turn would require extensive post-care treatments and possibly guying or propping to stabilize the tree. Post Care Treatment includes but may not be limited to; regular irrigation, misting, root treatment with special root hormones, mulching, guying and monitoring during construction and for several years following impacts.



CRITICAL ROOT ZONE (CRZ) EXPLANATION

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Not to scale

CRZ - 01