



Appendix C-2 Campus Woody Plant Protection Definitions WMU Landscape Services

Coordinate all plant protection and site work limits through the WMU Project Manager and Landscape Services Department. **Site work may not commence without a pre-construction site walk-thru.**

Definitions:

“Pre-Construction Site Walk-Thru”

A mandatory meeting of contractors with WMU Project Manager and Landscape Services representative to clarify and discuss site limitations and concerns prior to construction.

“Landscape Services Arborist Responsibilities”

- Tie-back of existing trees and shrubs
- Pruning/thinning
- Root pruning and root protection of exposed roots
- Watering of existing trees under stress
- Removal or relocation not specified within construction documents

These measures shall be done only by Landscape Services arborists, unless otherwise arranged, as needed to provide either preventative or remedial care to plants on a construction site.

“Construction Fencing”

NO construction work, parking of vehicles, storage of materials, or related activities shall occur beyond this boundary fencing. Construction fencing shall be as outlined in WMU Design Guideline 01 5000 TEMPORARY FACILITIES AND CONTROLS.

“Memorial Garden or Special Interest Garden Protection Barricades”

Shall be defined as 4-foot minimum height plastic orange snow protection fencing with metal U-channel posts at 6-feet maximum on center. Barricade fencing to meet existing grade and encircle entire area.

“Temporary Path”

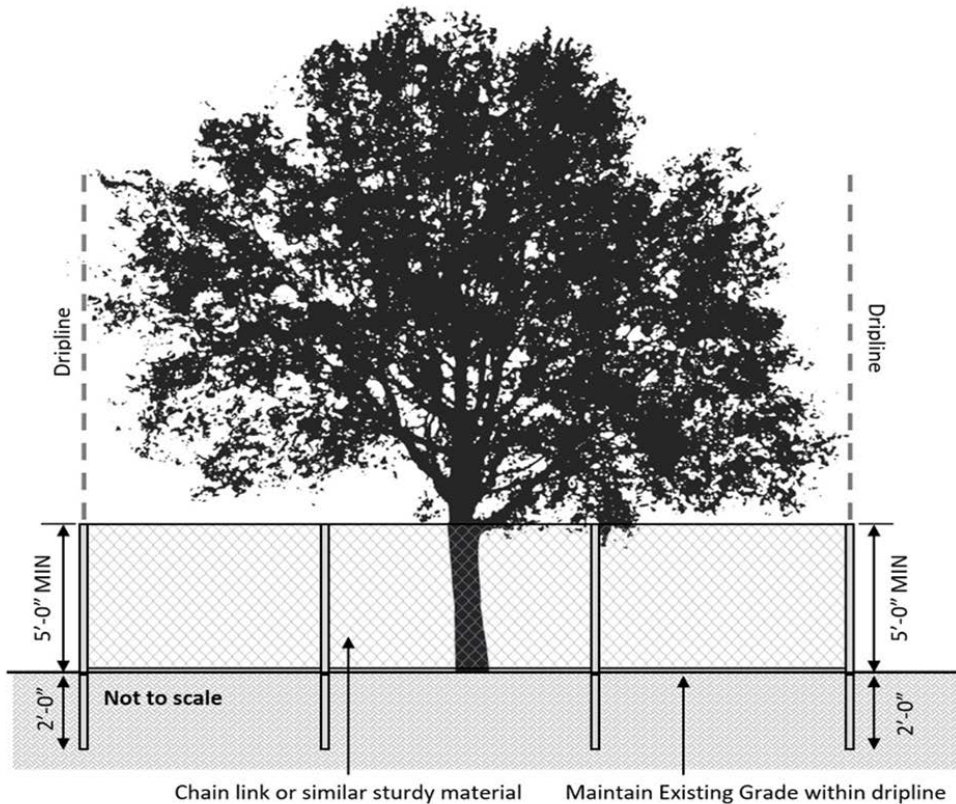
If required, shall be defined as a zone within the specified protected zone of a tree to enable temporary movement of equipment. It shall be eight to ten inches (8-10”) of wood chips as located by the Landscape Services arborist or designated representative. Wood chips shall be removed immediately upon completion of work in an area; soil aeration may be required during site restoration.

“Tree Protection Barricade”

Tree protection fencing materials vary in size, durability and cost. Most types of fencing materials may serve as tree protection fences as long as the material is durable enough to withstand the scope and duration of construction activities. In general, silt fences, orange safety fences, snow fences, or thin gauge welded wire fencing materials are considered too flimsy to reliably protect trees, especially on construction sites with large, heavy equipment. Thicker gauge steel fencing, such as chain link fencing, securely mounted to well-anchored steel posts or footings is recommended.



WMU Design Guidelines



“Prohibited Practices” by Contractor shall include:

- Breaking of branches, scraping of bark, or unauthorized cutting
- Nailing or bolting into plants; use of plants as temporary support (i.e., cables)
- Chaining, bolting, or cabling equipment to trees
- Unauthorized filling, excavating, trenching, or auguring within protected zone
- Compaction/driving over the protected zone
- Storage of any materials or vehicles within the protected zone
- Dumping of construction waste or material (including liquids)
- Unauthorized removal or relocation of woody plants
- Execution or pre-emption of “Landscape Services Arborist Responsibilities”
- Removal of tree protection barricades or construction fencing prior to completion of project

“Protected Zone”

Shall be defined, *at minimum*, as one and a half times the distance of plant crown drip line outward from the trunk along undisturbed grade.

“DBH”

Tree trunk diameter at breast height.



WMU Design Guidelines

“Compaction”

Caused by heavy equipment or concentrated foot traffic which significantly alters the soil conditions present *prior* to construction.

“Damage”

Damages to campus woody plants shall include any of the “prohibited practices” as determined *solely* by the Owner. The Owner shall evaluate damage and establish proportional fines up to 100% of the value regardless of the *current disposition* of the plant. See Appendix C-1 (*Protection of Plantings and Landscape Features in a Construction Zone*) for current value schedule. Replacement values for shrubs, vines, and perennials shall be assessed at three times the current market cost of the plant.

“Alternatives”

Shall refer to any *pre-arranged* WMU-approved variation to working within the protected zone.

Alternatives allow for flexibility of requirements where approved specific measures can be implemented in lieu of the standard protection specifications. Measures may include thinning and root pruning; fertilization; aeration; boring and jacking; hand excavation; care and supervision by campus arborist; and seasonal schedule recommendations. Alternatives would be based on the specific requirements of the plant species in question, as determined by the Landscape Services arborist.

“Maintenance of Protected Zones”

During construction, the existing turf area within the tree protection zones must be maintained by the Contractor until Substantial Completion.

- A six-foot (6') diameter ring around the tree trunk should have a Glyphosate weed removal solution applied for weed control. The Glyphosate should be applied per the quantities and schedule on the manufacturer's written product label.
- The remaining area between the tree protection fencing and the Glyphosate weed controlled area should be mowed and maintained to a 4"-6" height with either a float weed-whip or push mower. Care should be given to not scalp the existing turf too short.

During construction, any protected memorial gardens or “special interest” gardens should be maintained, watered, fertilized and weeded by the Contractor until Substantial Completion. Contractor is required to adopt any additional maintenance plans from WMU staff for individual gardens.

END OF APPENDIX C-2