LILY PAD SECTION B

DECK AT CHRYSLIS Loading Dock
TREE PRESERVATION APPROACH
MERIWETHER PARK

TREES PRESERVED DURING CONSTRUCTION REQUIRE AN INTEGRATED APPROACH THAT RECOGNIZES BOTH THE INHERENT BIOLOGICAL LIMITATIONS OF MATURE TREES AND THE PHYSICAL DEMANDS THAT HUMAN INFRASTRUCTURE PLACED UPON THE LANDSCAPE. THE FOLLOWING DESCRIBES THE INTEGRATIVE TREE PRETECTION METHODOLOGY THAT WILL BE EMPLOYED TO ENSURE THE HIGHEST POTENTIAL FOR MAINTAINING TREE HEALTH.

AVOIDING THE CRITICAL ROOT ZONE

The critical root zone (CRZ) is the area around the base of the tree that contains a vast majority of small, absorbing roots. As opposed to the large, structural support roots, the absorbing roots are primarily responsible for the uptake of both water and essential elements. They require adequate oxygen in order to survive. As such, they are located close to the surface (in the top 10' to 16' of soil). They are also more vulnerable to soil compaction and the accompanying reduction in oxygen-containing pore spaces between soil particles. The primary strategy to be employed in preserving the valuable trees in Meriwether Park will be to avoid and mitigate soil compaction, root disturbance, and other activities that may threaten the root zone. A CRZ is defined as the area extending 7 feet radially from the tree stem plus 1 foot of soil from the stem. For a tree with a DBH of 10 inches or more, the critical root zone is 10 feet from the trunk. The plan will involve two complementary techniques to avoid unneeded tree loss during the construction process:

A) AVOID THE CRITICAL ROOT ZONE OF TREES SELECTED FOR PRESERVATION
B) MODIFY CONSTRUCTION ACTIVITIES WHEN IT IS NECESSARY TO OPERATE WITHIN THE CRITICAL ROOT ZONE

1. IDENTIFY TREES FOR RETENTION

A tree inventory was performed in 2015. Dominant canopy level trees within the targeted construction zone will be re-evaluated within the context of the planned infrastructure expansion, and to then delineate the critical root zones for these plants.

2. CRZ LOCATIONS

BASED ON EVALUATION, CRZ LOCATIONS WILL BE REFINED FROM PREVIOUS TREE INVENTORY.

3. INTEGRATE TREE DATA INTO DESIGN PROCESS

TO DATE, THE DESIGN HAS BEEN DONE TO GREAT LENGTHS TO AVOID CRZ OF EXISTING TREES. BASED ON MORE DEFINED INFORMATION COLLECTED ABOVE, MAJOR MODIFICATIONS MAY BE NEEDED TO LIMIT TREES AND TO MAXIMIZE THE OPPORTUNITY FOR PREVISING THE TREE CANOPY AND FOREST INTEGRITY. ALL DESIGN SUBMISSIONS WILL INCLUDE A REVIEW AND COMMENTARY BY A QUALIFIED ARBORSPECIALIST, EXPERIENCED IN TREE PRETECTION TECHNIQUES.

4. FIELD DELINEATE INDIVIDUAL CRZ LOCATIONS

PRIOR TO CONSTRUCTION ACTIVITIES, INDIVIDUAL TREE CRZ ZONES WITHIN DISTURBANCE ZONES WILL BE MARKED WITH FLAGGING AND/OR GROUND PAINT BY AN ARBOREAL PROFESSIONAL, LICENSED BY THE STATE OF MARYLAND AND QUALIFIED IN THE FIELD OF TREE PRESERVATION.

5. DEVELOP INDIVIDUAL TREE PROTECTION PLANS

INDIVIDUAL TREE PROTECTION PLANS WILL BE CREATED TO ADDRESS ARBOREAL INTERVENTIONS AND CONSTRUCTION PRACTICES REQUIRED FOR THE TARGETED TREES. THESE MAY INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING:

- TREE PROTECTION FENCING
- TREE PROTECTION SIGNAGE
- MILLION DOLLAR FENCING
- CONSTRUCTION MAT SPECIFICATIONS
- SOIL MOISTURE MONITORING STANDARDS
- SUPPLEMENTAL IRRIGATION STANDARDS
- SOIL MODIFICATION PERTURBATION, AIR SPACING, ETC.
- TRENCHING, DIRECTIONAL DRILLING RECOMMENDATIONS
- ROOT PRUNING RECOMMENDATIONS
- ACCESS TO LOCATIONS
- TREE REMOVAL AND STUMP REDUCTION SPECIFICATIONS
- TREE-HAZARD REDUCTION RECOMMENDATIONS

6. CONSTRUCTION MONITORING

A TRAINED AND QUALIFIED ARBOREAL PROFESSIONAL DURING CRITICAL CONSTRUCTION PHASES WILL BE PRESENT ON SITE TO ENSURE TREE PRESERVATION PLAN IS ABIDED.