Functional Replacement Method
Trunk Formula Technique

Client name _____ Date _____ Case # _____

Phone _____ E-mail _____

Address _____

Subject tree

Species _____

1. Trunk diameter* (D) _____ in. @ _____

2. Condition rating _____ %

   Health _____ _____

   Structure _____ _____

   Form _____ _____

3. Functional limitations _____ _____ %

4. External limitations _____ _____ %

Functional replacement tree

Utility or benefit to be replaced_____

Replacement plan _____

5. Trunk diameter* (D) _____ in. @ _____

6. Cross-sectional area (line 5)^2 × 0.7854 = _____ in^2

Replacement nursery tree

7. Trunk diameter* (D) _____ in. @ _____

8. Cross-sectional area (line 7)^2 × 0.7854 = _____ in^2

9. Nursery tree cost   Source: _____ $_____

Calculations

10. Unit nursery tree cost (line 9 ÷ line 8 or from RPAC) $_____ /in^2

11. Basic functional replacement cost (line 6 × line 10) $_____

12. Depreciated basic cost^ (line 11 × line 2 × line 3 × line 4) $_____

Additional costs

Cleanup _____ $_____

Nursery tree installation _____ $_____

Aftercare_____ $_____

Hardscape_____ $_____

Other_____ $_____

13. Total additional costs^ (sum additional costs) $_____

Total functional replacement cost (line 11 or 12 + line 13) $_____

Rounded $_____

* Diameter and cross-sectional area may be replaced with plant area, volume, or height as appropriate.

^ Apply depreciation and add additional costs if appropriate for the assignment.