

# Functional Replacement Method Trunk Formula Technique

Client name \_\_\_\_\_ Date 9/12/20 Case # 1

Phone \_\_\_\_\_ E-mail \_\_\_\_\_

Address Ahern project site: 205 NW 12 Avenue, Pompano Beach, Florida

**Subject tree**

Species Queen Palm

1. Trunk diameter\* (D) 13CT 17OA @ 10" DBH
2. Cross-sectional area (line 1)<sup>2</sup> × 0.7854 = n/a in<sup>2</sup>
3. Condition rating 30 %  
 Health Poor  
 Structure Sparse crown, abnormal taper  
 Form \_\_\_\_\_
4. Functional limitations Poor soil, mediocre species 70 %
5. External limitations none 100 %

**Functional replacement tree**

Utility or benefit to be replaced \_\_\_\_\_

Replacement plan \_\_\_\_\_

Species \_\_\_\_\_

6. Size (specify diameter or height) 13CT feet height
7. If diameter, cross-sectional area (line 6)<sup>2</sup> × 0.7854 = \_\_\_\_\_ in<sup>2</sup>
8. Functional replacement tree cost Source: \_\_\_\_\_ \$ 175

**Calculations** Palms were not depreciated for this appraisal

9. Unit tree cost (line 8 / line 7 or RPAC) \$ \_\_\_\_\_
10. Basic functional replacement cost (line 2 × line 9) \$ \_\_\_\_\_
11. Depreciated functional replacement cost (line 10 × line 3 × line 4 × line 5)  
(where depreciation is appropriate) \$ \_\_\_\_\_

**Additional costs**

- Cleanup \_\_\_\_\_ \$ \_\_\_\_\_
- Replacement tree installation \_\_\_\_\_ \$ \_\_\_\_\_
- Aftercare \_\_\_\_\_ \$ \_\_\_\_\_
- Hardscape (specify) \_\_\_\_\_ \$ \_\_\_\_\_
12. Total additional costs \$ 175
  13. Total functional replacement cost (line 11 + line 12) \$ 350
  14. Rounded \$ 350

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PZ20-12000038  
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# Functional Replacement Method Trunk Formula Technique

Client name \_\_\_\_\_ Date 9/12/20 Case # 2

Phone \_\_\_\_\_ E-mail \_\_\_\_\_

Address Ahern project site: 205 NW 12 Avenue, Pompano Beach, Florida

**Subject tree**

Species Queen Palm

- |  |                            |
|--|----------------------------|
| 1. Trunk diameter* (D) <u>13CT 180A @ 12" DBH</u>        |                            |
| 2. Cross-sectional area (line 1) <sup>2</sup> × 0.7854 = | <u>n/a</u> in <sup>2</sup> |
| 3. Condition rating                                      | <u>40</u> %                |
| Health _____   |                            |
| Structure <u>Sparse crown</u>                            |                            |
| Form _____   |                            |
| 4. Functional limitations <u>Poor soil</u>               | <u>70</u> %                |
| 5. External limitations <u>none</u>                      | <u>100</u> %               |

**Functional replacement tree**

Utility or benefit to be replaced \_\_\_\_\_

Replacement plan \_\_\_\_\_

Species \_\_\_\_\_

- |   |                       |
|---|-----------------------|
| 6. Size (specify diameter or height) <u>13CT feet height</u>          |                       |
| 7. If diameter, cross-sectional area (line 6) <sup>2</sup> × 0.7854 = | _____ in <sup>2</sup> |
| 8. Functional replacement tree cost Source: _____                     | \$ <u>175</u>         |

**Calculations** Palms were not depreciated for this appraisal

- |   |          |
|---|----------|
| 9. Unit tree cost (line 8 / line 7 or RPAC)   | \$ _____ |
| 10. Basic functional replacement cost (line 2 × line 9)   | \$ _____ |
| 11. Depreciated functional replacement cost (line 10 × line 3 × line 4 × line 5)<br>(where depreciation is appropriate) | \$ _____ |

**Additional costs**

- |   |               |
|---|---------------|
| Cleanup _____   | \$ _____      |
| Replacement tree installation _____                       | \$ _____      |
| Aftercare _____   | \$ _____      |
| Hardscape (specify) _____                                 | \$ _____      |
| 12. Total additional costs                                | \$ <u>175</u> |
| 13. Total functional replacement cost (line 11 + line 12) | \$ <u>350</u> |
| 14. Rounded   | \$ <u>350</u> |

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PZ20-12000038  
11/4/2020

# Functional Replacement Method Trunk Formula Technique

Client name \_\_\_\_\_ Date 9/12/20 Case # 3

Phone \_\_\_\_\_ E-mail \_\_\_\_\_

Address Ahern project site: 205 NW 12 Avenue, Pompano Beach, Florida

**Subject tree**

Species Slash Pine

- |  |                           |
|--|---------------------------|
| 1. Trunk diameter* (D) <u>10"</u> @ <u>DBH</u>           |                           |
| 2. Cross-sectional area (line 1) <sup>2</sup> × 0.7854 = | <u>79</u> in <sup>2</sup> |
| 3. Condition rating                                      | <u>60</u> %               |
| Health _____   |                           |
| Structure <u>Topped off</u>                              |                           |
| Form _____   |                           |
| 4. Functional limitations <u>Poor soil</u>               | <u>80</u> %               |
| 5. External limitations <u>none</u>                      | <u>100</u> %              |

**Functional replacement tree**

Utility or benefit to be replaced \_\_\_\_\_

Replacement plan \_\_\_\_\_

Species \_\_\_\_\_

- |   |                          |
|---|--------------------------|
| 6. Size (specify diameter or height) <u>Diameter - 3" cal</u>         |                          |
| 7. If diameter, cross-sectional area (line 6) <sup>2</sup> × 0.7854 = | <u>7</u> in <sup>2</sup> |
| 8. Functional replacement tree cost Source: _____                     | \$ <u>250</u>            |

**Calculations**

- |   |                    |
|---|--------------------|
| 9. Unit tree cost (line 8 / line 7 or RPAC)   | \$ <u>35.37</u>    |
| 10. Basic functional replacement cost (line 2 × line 9)   | \$ <u>2,777.78</u> |
| 11. Depreciated functional replacement cost (line 10 × line 3 × line 4 × line 5)<br>(where depreciation is appropriate) | \$ <u>1,333.33</u> |

**Additional costs**

- |   |                    |
|---|--------------------|
| Cleanup _____   | \$ _____           |
| Replacement tree installation _____                       | \$ _____           |
| Aftercare _____   | \$ _____           |
| Hardscape (specify) _____                                 | \$ _____           |
| 12. Total additional costs                                | \$ <u>250</u>      |
| 13. Total functional replacement cost (line 11 + line 12) | \$ <u>1,583.33</u> |
| 14. Rounded   | \$ <u>1,580</u>    |

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11/4/2020

# Functional Replacement Method Trunk Formula Technique

Client name \_\_\_\_\_ Date 9/12/20 Case # 4

Phone \_\_\_\_\_ E-mail \_\_\_\_\_

Address Ahern project site: 205 NW 12 Avenue, Pompano Beach, Florida

### Subject tree

Species Red Maple

- |   |                           |
|---|---------------------------|
| 1. Trunk diameter* (D) <u>11</u> @ <u>Lowest scaffold emergence</u> |                           |
| 2. Cross-sectional area (line 1) <sup>2</sup> × 0.7854 =            | <u>95</u> in <sup>2</sup> |
| 3. Condition rating   | <u>60</u> %               |
| Health <u>Small tip dieback</u>                                     |                           |
| Structure <u>Codominant stems</u>                                   |                           |
| Form _____  |                           |
| 4. Functional limitations <u>poor soil, species issues</u>          | <u>30</u> %               |
| 5. External limitations <u>none</u>                                 | <u>100</u> %              |

### Functional replacement tree

Utility or benefit to be replaced \_\_\_\_\_

Replacement plan \_\_\_\_\_

Species \_\_\_\_\_

- |   |                          |
|---|--------------------------|
| 6. Size (specify diameter or height) <u>Diameter - 3" cal</u>         |                          |
| 7. If diameter, cross-sectional area (line 6) <sup>2</sup> × 0.7854 = | <u>7</u> in <sup>2</sup> |
| 8. Functional replacement tree cost Source: _____                     | \$ <u>375</u>            |

### Calculations

- |   |                    |
|---|--------------------|
| 9. Unit tree cost (line 8 / line 7 or RPAC)   | \$ <u>53.05</u>    |
| 10. Basic functional replacement cost (line 2 × line 9)   | \$ <u>5,041.67</u> |
| 11. Depreciated functional replacement cost (line 10 × line 3 × line 4 × line 5)<br>(where depreciation is appropriate) | \$ <u>907.50</u>   |

### Additional costs

- |   |                    |
|---|--------------------|
| Cleanup _____   | \$ _____           |
| Replacement tree installation _____                       | \$ _____           |
| Aftercare _____   | \$ _____           |
| Hardscape (specify) _____                                 | \$ _____           |
| 12. Total additional costs                                | \$ <u>375</u>      |
| 13. Total functional replacement cost (line 11 + line 12) | \$ <u>1,282.50</u> |
| 14. Rounded   | \$ <u>1,280</u>    |

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# Functional Replacement Method Trunk Formula Technique

Client name \_\_\_\_\_ Date 9/12/20 Case # 5  
Phone \_\_\_\_\_ E-mail \_\_\_\_\_  
Address Ahern project site: 205 NW 12 Avenue, Pompano Beach, Florida

## Subject tree

Species Mahogany

1. Trunk diameter\* (D) 24 @ DBH

2. Cross-sectional area  $(\text{line } 1)^2 \times 0.7854 =$  452 in<sup>2</sup>

3. Condition rating 50 %

Health Significant trunk wound healing, surface root damage

Structure Codominant stems, weak connections, severely limited root zone

Form \_\_\_\_\_

4. Functional limitations poor soil, limited root zone 30 %

5. External limitations none 100 %

## Functional replacement tree

Utility or benefit to be replaced \_\_\_\_\_

Replacement plan \_\_\_\_\_

Species \_\_\_\_\_

6. Size (specify diameter or height) Diameter - 4" cal

7. If diameter, cross-sectional area  $(\text{line } 6)^2 \times 0.7854 =$  13 in<sup>2</sup>

8. Functional replacement tree cost Source: \_\_\_\_\_ \$ 484

## Calculations

9. Unit tree cost (line 8 / line 7 or RPAC) \$ 38.49

10. Basic functional replacement cost (line 2 × line 9) \$ 17,412

11. Depreciated functional replacement cost (line 10 × line 3 × line 4 × line 5)  
(where depreciation is appropriate) \$ 2,611.80

## Additional costs

Cleanup \_\_\_\_\_ \$ \_\_\_\_\_

Replacement tree installation \_\_\_\_\_ \$ \_\_\_\_\_

Aftercare \_\_\_\_\_ \$ \_\_\_\_\_

Hardscape (specify) \_\_\_\_\_ \$ \_\_\_\_\_

12. Total additional costs \$ 483.67

13. Total functional replacement cost (line 11 + line 12) \$ 3,095.47

14. Rounded \$ 3,100

**DRC**

PZ20-12000038  
11/4/2020

# Functional Replacement Method Trunk Formula Technique

Client name \_\_\_\_\_ Date 9/12/20 Case # 7

Phone \_\_\_\_\_ E-mail \_\_\_\_\_

Address Ahern project site: 205 NW 12 Avenue, Pompano Beach, Florida

**Subject tree**

Species Live Oak

- |  |                           |
|--|---------------------------|
| 1. Trunk diameter* (D) <u>10"</u> @ <u>DBH</u>           |                           |
| 2. Cross-sectional area (line 1) <sup>2</sup> × 0.7854 = | <u>79</u> in <sup>2</sup> |
| 3. Condition rating                                      | <u>60</u> %               |
| Health _____   |                           |
| Structure <u>Mediocreroot and scaffold structure</u>     |                           |
| Form _____   |                           |
| 4. Functional limitations <u>poor soil</u>               | <u>60</u> %               |
| 5. External limitations <u>none</u>                      | <u>100</u> %              |

**Functional replacement tree**

Utility or benefit to be replaced \_\_\_\_\_

Replacement plan \_\_\_\_\_

Species \_\_\_\_\_

- |   |                          |
|---|--------------------------|
| 6. Size (specify diameter or height) <u>Diameter - 3" cal</u>         |                          |
| 7. If diameter, cross-sectional area (line 6) <sup>2</sup> × 0.7854 = | <u>7</u> in <sup>2</sup> |
| 8. Functional replacement tree cost Source: _____                     | \$ <u>475</u>            |

**Calculations**

- |   |                    |
|---|--------------------|
| 9. Unit tree cost (line 8 / line 7 or RPAC)   | \$ <u>67.20</u>    |
| 10. Basic functional replacement cost (line 2 × line 9)   | \$ <u>5,277.78</u> |
| 11. Depreciated functional replacement cost (line 10 × line 3 × line 4 × line 5)<br>(where depreciation is appropriate) | \$ <u>1,900</u>    |

**Additional costs**

- |   |                 |
|---|-----------------|
| Cleanup _____   | \$ _____        |
| Replacement tree installation _____                       | \$ _____        |
| Aftercare _____   | \$ _____        |
| Hardscape (specify) _____                                 | \$ _____        |
| 12. Total additional costs                                | \$ <u>475</u>   |
| 13. Total functional replacement cost (line 11 + line 12) | \$ <u>2,375</u> |
| 14. Rounded   | \$ <u>2,380</u> |

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PZ20-12000038  
11/4/2020

# Functional Replacement Method Trunk Formula Technique

Client name \_\_\_\_\_ Date 9/12/20 Case # 8

Phone \_\_\_\_\_ E-mail \_\_\_\_\_

Address Ahern project site: 205 NW 12 Avenue, Pompano Beach, Florida

**Subject tree**

Species Gumbo Limbo

- 1. Trunk diameter\* (D) 11" @ DBH
- 2. Cross-sectional area (line 1)<sup>2</sup> × 0.7854 = 95 in<sup>2</sup>
- 3. Condition rating 40 %  
 Health \_\_\_\_\_  
 Structure Codominant stems with weak connections, root lifting  
 Form \_\_\_\_\_
- 4. Functional limitations Poor soil 70 %
- 5. External limitations none 100 %

**Functional replacement tree**

Utility or benefit to be replaced \_\_\_\_\_

Replacement plan \_\_\_\_\_

Species \_\_\_\_\_

- 6. Size (specify diameter or height) Diameter - 3"
- 7. If diameter, cross-sectional area (line 6)<sup>2</sup> × 0.7854 = 7 in<sup>2</sup>
- 8. Functional replacement tree cost Source: \_\_\_\_\_ \$ 342

**Calculations**

- 9. Unit tree cost (line 8 / line 7 or RPAC) \$ 48.34
- 10. Basic functional replacement cost (line 2 × line 9) \$ 4,593.52
- 11. Depreciated functional replacement cost (line 10 × line 3 × line 4 × line 5)  
(where depreciation is appropriate) \$ 1,286.19

**Additional costs**

- Cleanup \_\_\_\_\_ \$ \_\_\_\_\_
- Replacement tree installation \_\_\_\_\_ \$ \_\_\_\_\_
- Aftercare \_\_\_\_\_ \$ \_\_\_\_\_
- Hardscape (specify) \_\_\_\_\_ \$ \_\_\_\_\_
- 12. Total additional costs \$ 341.67
- 13. Total functional replacement cost (line 11 + line 12) \$ 1,627.85
- 14. Rounded \$ 1,630

DRC

PZ20-12000038

11/4/2020

# Functional Replacement Method Trunk Formula Technique

Client name \_\_\_\_\_ Date 9/12/20 Case # 10  
 Phone \_\_\_\_\_ E-mail \_\_\_\_\_  
 Address Ahern project site: 205 NW 12 Avenue, Pompano Beach, Florida

### Subject tree

Species Mahogany

1. Trunk diameter\* (D) 14" @ DBH
2. Cross-sectional area (line 1)<sup>2</sup> × 0.7854 = 154 in<sup>2</sup>
3. Condition rating 50 %  
 Health \_\_\_\_\_  
 Structure Codominant stems, severely limited root zone  
 Form \_\_\_\_\_
4. Functional limitations Severely limited root zone, roots lifting pavement 30 %
5. External limitations none 100 %

### Functional replacement tree

Utility or benefit to be replaced \_\_\_\_\_  
 Replacement plan \_\_\_\_\_  
 Species \_\_\_\_\_

6. Size (specify diameter or height) Diameter - 4" cal
7. If diameter, cross-sectional area (line 6)<sup>2</sup> × 0.7854 = 13 in<sup>2</sup>
8. Functional replacement tree cost Source: \_\_\_\_\_ \$ 484

### Calculations

9. Unit tree cost (line 8 / line 7 or RPAC) \$ 38.49
10. Basic functional replacement cost (line 2 × line 9) \$ 5,924.92
11. Depreciated functional replacement cost (line 10 × line 3 × line 4 × line 5)  
(where depreciation is appropriate) \$ 888.74

### Additional costs

Cleanup \_\_\_\_\_ \$ \_\_\_\_\_  
 Replacement tree installation \_\_\_\_\_ \$ \_\_\_\_\_  
 Aftercare \_\_\_\_\_ \$ \_\_\_\_\_  
 Hardscape (specify) \_\_\_\_\_ \$ \_\_\_\_\_

12. Total additional costs \$ 483.67
13. Total functional replacement cost (line 11 + line 12) \$ 1,372.40
14. Rounded \$ 1,380

# DRC

**PZ20-12000038**  
**11/4/2020**

# Functional Replacement Method Trunk Formula Technique

Client name \_\_\_\_\_ Date 9/12/20 Case # 11  
 Phone \_\_\_\_\_ E-mail \_\_\_\_\_  
 Address Ahern project site: 205 NW 12 Avenue, Pompano Beach, Florida

### Subject tree

Species Mahogany

1. Trunk diameter\* (D) 14" @ DBH
2. Cross-sectional area  $(\text{line } 1)^2 \times 0.7854 =$  154 in<sup>2</sup>
3. Condition rating 50 %  
 Health Scaffold damage on two stems, surface root damage  
 Structure Codominant stems, limited root zone  
 Form \_\_\_\_\_
4. Functional limitations Limited root zone 30 %
5. External limitations none 100 %

### Functional replacement tree

Utility or benefit to be replaced \_\_\_\_\_  
 Replacement plan \_\_\_\_\_  
 Species \_\_\_\_\_

6. Size (specify diameter or height) Diameter - 4" cal
7. If diameter, cross-sectional area  $(\text{line } 6)^2 \times 0.7854 =$  13 in<sup>2</sup>
8. Functional replacement tree cost Source: \_\_\_\_\_ \$ 484

### Calculations

9. Unit tree cost (line 8 / line 7 or RPAC) \$ 38.49
10. Basic functional replacement cost (line 2 × line 9) \$ 5,924.92
11. Depreciated functional replacement cost (line 10 × line 3 × line 4 × line 5)  
(where depreciation is appropriate) \$ 888.74

### Additional costs

Cleanup \_\_\_\_\_ \$ \_\_\_\_\_  
 Replacement tree installation \_\_\_\_\_ \$ \_\_\_\_\_  
 Aftercare \_\_\_\_\_ \$ \_\_\_\_\_  
 Hardscape (specify) \_\_\_\_\_ \$ \_\_\_\_\_

12. Total additional costs \$ 483.67
13. Total functional replacement cost (line 11 + line 12) \$ 1,372.40
14. Rounded \$ 1,380

# DRC

**PZ20-12000038  
11/4/2020**

# Functional Replacement Method Trunk Formula Technique

Client name \_\_\_\_\_ Date 1/14/20 Case # 12  
 Phone \_\_\_\_\_ E-mail \_\_\_\_\_  
 Address Ahern project site: 205 NW 12 Avenue, Pompano Beach, Florida

**Subject tree**

Species Mahogany

1. Trunk diameter\* (D) 14" @ DBH

2. Cross-sectional area  $(\text{line } 1)^2 \times 0.7854 =$  154 in<sup>2</sup>

3. Condition rating 45 %  
 Health Loss of multiple scaffolds  
 Structure Poor canopy balance, significant voids, poor root structure  
 Form \_\_\_\_\_

4. Functional limitations poor soil, limited root zone 30 %

5. External limitations none 100 %

**Functional replacement tree**

Utility or benefit to be replaced \_\_\_\_\_

Replacement plan \_\_\_\_\_

Species \_\_\_\_\_

6. Size (specify diameter or height) Diameter - 4" cal

7. If diameter, cross-sectional area  $(\text{line } 6)^2 \times 0.7854 =$  13 in<sup>2</sup>

8. Functional replacement tree cost Source: \_\_\_\_\_ \$ 484

**Calculations**

9. Unit tree cost (line 8 / line 7 or RPAC) \$ 38.49

10. Basic functional replacement cost (line 2 × line 9) \$ 5,924.92

11. Depreciated functional replacement cost (line 10 × line 3 × line 4 × line 5)  
 (where depreciation is appropriate) \$ 799.86

**Additional costs**

Cleanup \_\_\_\_\_ \$ \_\_\_\_\_

Replacement tree installation \_\_\_\_\_ \$ \_\_\_\_\_

Aftercare \_\_\_\_\_ \$ \_\_\_\_\_

Hardscape (specify) \_\_\_\_\_ \$ \_\_\_\_\_

12. Total additional costs \$ 483.67

13. Total functional replacement cost (line 11 + line 12) \$ 1,283.53

14. Rounded \_\_\_\_\_



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11/4/2020

# Functional Replacement Method Trunk Formula Technique

Client name \_\_\_\_\_ Date 1/14/20 Case # 13

Phone \_\_\_\_\_ E-mail \_\_\_\_\_

Address Ahern project site: 205 NW 12 Avenue, Pompano Beach, Florida

**Subject tree**

Species Mahogany

- 1. Trunk diameter\* (D) 14" @ DBH
- 2. Cross-sectional area (line 1)<sup>2</sup> × 0.7854 = 154 in<sup>2</sup>
- 3. Condition rating 50 %  
 Health \_\_\_\_\_  
 Structure Codominance, poor root structure  
 Form \_\_\_\_\_
- 4. Functional limitations Roots lifting pavement, severely limited root zone 30 %
- 5. External limitations none 100 %

**Functional replacement tree**

Utility or benefit to be replaced \_\_\_\_\_

Replacement plan \_\_\_\_\_

Species \_\_\_\_\_

- 6. Size (specify diameter or height) Diameter - 4" cal
- 7. If diameter, cross-sectional area (line 6)<sup>2</sup> × 0.7854 = 13 in<sup>2</sup>
- 8. Functional replacement tree cost Source: \_\_\_\_\_ \$ 484

**Calculations**

- 9. Unit tree cost (line 8 / line 7 or RPAC) \$ 38.49
- 10. Basic functional replacement cost (line 2 × line 9) \$ 5,924.92
- 11. Depreciated functional replacement cost (line 10 × line 3 × line 4 × line 5)  
(where depreciation is appropriate) \$ 888.74

**Additional costs**

- Cleanup \_\_\_\_\_ \$ \_\_\_\_\_
- Replacement tree installation \_\_\_\_\_ \$ \_\_\_\_\_
- Aftercare \_\_\_\_\_ \$ \_\_\_\_\_
- Hardscape (specify) \_\_\_\_\_ \$ \_\_\_\_\_
- 12. Total additional costs \$ 483.67
- 13. Total functional replacement cost (line 11 + line 12) \$ 1,372.40
- 14. Rounded \$ 1,380

DRC

PZ20-12000038  
11/4/2020

# Functional Replacement Method Trunk Formula Technique

Client name \_\_\_\_\_ Date 1/14/20 Case # 14

Phone \_\_\_\_\_ E-mail \_\_\_\_\_

Address Ahern project site: 205 NW 12 Avenue, Pompano Beach, Florida

## Subject tree

Species Mahogany

1. Trunk diameter\* (D) 26" @ DBH
2. Cross-sectional area (line 1)<sup>2</sup> × 0.7854 = 531 in<sup>2</sup>
3. Condition rating 50 %  
Health Bark inclusion  
Structure Codominance, weak connections, poor root structure  
Form \_\_\_\_\_
4. Functional limitations poor soil, severely limited root zone 30 %
5. External limitations none 100 %

## Functional replacement tree

Utility or benefit to be replaced \_\_\_\_\_

Replacement plan \_\_\_\_\_

Species \_\_\_\_\_

6. Size (specify diameter or height) Diameter - 4" cal
7. If diameter, cross-sectional area (line 6)<sup>2</sup> × 0.7854 = 13 in<sup>2</sup>
8. Functional replacement tree cost Source: \_\_\_\_\_ \$ 484

## Calculations

9. Unit tree cost (line 8 / line 7 or RPAC) \$ 38.49
10. Basic functional replacement cost (line 2 × line 9) \$ 20,434.92
11. Depreciated functional replacement cost (line 10 × line 3 × line 4 × line 5)  
(where depreciation is appropriate) \$ 3,065.24

## Additional costs

Cleanup \_\_\_\_\_ \$ \_\_\_\_\_

Replacement tree installation \_\_\_\_\_ \$ \_\_\_\_\_

Aftercare \_\_\_\_\_ \$ \_\_\_\_\_

Hardscape (specify) \_\_\_\_\_ \$ \_\_\_\_\_

12. Total additional costs \$ 483.67

13. Total functional replacement cost (line 11 + line 12) \$ 3,548.90

14. Rounded \$ 3,550

# DRC

PZ20-12000038

11/4/2020

# Functional Replacement Method Trunk Formula Technique

Client name \_\_\_\_\_ Date 9/12/20 Case # 15

Phone \_\_\_\_\_ E-mail \_\_\_\_\_

Address Ahern project site: 205 NW 12 Avenue, Pompano Beach, Florida

**Subject tree**

Species Red Maple

- |  |                           |
|--|---------------------------|
| 1. Trunk diameter* (D) <u>8"</u> @ <u>DBH</u>              |                           |
| 2. Cross-sectional area (line 1) <sup>2</sup> × 0.7854 =   | <u>50</u> in <sup>2</sup> |
| 3. Condition rating  | <u>25</u> %               |
| Health <u>Cavity and decay at failed scaffold</u>          |                           |
| Structure <u>Tip dieback</u>                               |                           |
| Form _____   |                           |
| 4. Functional limitations <u>Poor soil, species issues</u> | <u>30</u> %               |
| 5. External limitations <u>none</u>                        | <u>100</u> %              |

**Functional replacement tree**

Utility or benefit to be replaced \_\_\_\_\_

Replacement plan \_\_\_\_\_

Species \_\_\_\_\_

- |   |                          |
|---|--------------------------|
| 6. Size (specify diameter or height) <u>Diameter - 3" cal</u>         |                          |
| 7. If diameter, cross-sectional area (line 6) <sup>2</sup> × 0.7854 = | <u>7</u> in <sup>2</sup> |
| 8. Functional replacement tree cost Source: _____                     | \$ <u>375</u>            |

**Calculations**

- |   |                    |
|---|--------------------|
| 9. Unit tree cost (line 8 / line 7 or RPAC)   | \$ <u>53.05</u>    |
| 10. Basic functional replacement cost (line 2 × line 9)   | \$ <u>2,666.67</u> |
| 11. Depreciated functional replacement cost (line 10 × line 3 × line 4 × line 5)<br>(where depreciation is appropriate) | \$ <u>200</u>      |

**Additional costs**

- |   |               |
|---|---------------|
| Cleanup _____   | \$ _____      |
| Replacement tree installation _____                       | \$ _____      |
| Aftercare _____   | \$ _____      |
| Hardscape (specify) _____                                 | \$ _____      |
| 12. Total additional costs                                | \$ <u>375</u> |
| 13. Total functional replacement cost (line 11 + line 12) | \$ <u>575</u> |
| 14. Rounded   | \$ <u>580</u> |

DRC

PZ20-12000038  
11/4/2020

# Functional Replacement Method Trunk Formula Technique

Client name \_\_\_\_\_ Date 9/12/20 Case # 16

Phone \_\_\_\_\_ E-mail \_\_\_\_\_

Address Ahern project site: 205 NW 12 Avenue, Pompano Beach, Florida

**Subject tree**

Species Mahogany

- 1. Trunk diameter\* (D) 30" @ DBH
- 2. Cross-sectional area (line 1)<sup>2</sup> × 0.7854 = 707 in<sup>2</sup>
- 3. Condition rating 50 %  
 Health Sap seepage at multiple wound sites  
 Structure Severe codominance, weak connections, poor root structure  
 Form \_\_\_\_\_
- 4. Functional limitations Surface root damage, severely limited root zone 30 %
- 5. External limitations none 100 %

**Functional replacement tree**

Utility or benefit to be replaced \_\_\_\_\_

Replacement plan \_\_\_\_\_

Species \_\_\_\_\_

- 6. Size (specify diameter or height) Diameter - 4"
- 7. If diameter, cross-sectional area (line 6)<sup>2</sup> × 0.7854 = 13 in<sup>2</sup>
- 8. Functional replacement tree cost Source: \_\_\_\_\_ \$ 484

**Calculations**

- 9. Unit tree cost (line 8 / line 7 or RPAC) \$ 38.49
- 10. Basic functional replacement cost (line 2 × line 9) \$ 27,206.25
- 11. Depreciated functional replacement cost (line 10 × line 3 × line 4 × line 5)  
(where depreciation is appropriate) \$ 4,080.94

**Additional costs**

- Cleanup \_\_\_\_\_ \$ \_\_\_\_\_
- Replacement tree installation \_\_\_\_\_ \$ \_\_\_\_\_
- Aftercare \_\_\_\_\_ \$ \_\_\_\_\_
- Hardscape (specify) \_\_\_\_\_ \$ \_\_\_\_\_
- 12. Total additional costs \$ 483.67
- 13. Total functional replacement cost (line 11 + line 12) \$ 4,564.60
- 14. Rounded \$ 4,560

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# Functional Replacement Method Trunk Formula Technique

Client name \_\_\_\_\_ Date 9/12/20 Case # 19

Phone \_\_\_\_\_ E-mail \_\_\_\_\_

Address Ahern project site: 205 NW 12 Avenue, Pompano Beach, Florida

**Subject tree**

Species Slash Pine

- |  |                           |
|--|---------------------------|
| 1. Trunk diameter* (D) <u>4"</u> @ <u>DBH</u>                |                           |
| 2. Cross-sectional area (line 1) <sup>2</sup> × 0.7854 =     | <u>13</u> in <sup>2</sup> |
| 3. Condition rating  | <u>50</u> %               |
| Health _____   |                           |
| Structure <u>Poor root structure, high center of gravity</u> |                           |
| Form _____   |                           |
| 4. Functional limitations <u>Poor soil</u>                   | <u>90</u> %               |
| 5. External limitations <u>none</u>                          | <u>100</u> %              |

**Functional replacement tree**

Utility or benefit to be replaced \_\_\_\_\_

Replacement plan \_\_\_\_\_

Species \_\_\_\_\_

- |   |                          |
|---|--------------------------|
| 6. Size (specify diameter or height) <u>Diameter - 3" cal</u>         |                          |
| 7. If diameter, cross-sectional area (line 6) <sup>2</sup> × 0.7854 = | <u>7</u> in <sup>2</sup> |
| 8. Functional replacement tree cost Source: _____                     | \$ <u>250</u>            |

**Calculations**

- |   |                  |
|---|------------------|
| 9. Unit tree cost (line 8 / line 7 or RPAC)   | \$ <u>35.37</u>  |
| 10. Basic functional replacement cost (line 2 × line 9)   | \$ <u>444.44</u> |
| 11. Depreciated functional replacement cost (line 10 × line 3 × line 4 × line 5)<br>(where depreciation is appropriate) | \$ <u>200</u>    |

**Additional costs**

- |   |               |
|---|---------------|
| Cleanup _____   | \$ _____      |
| Replacement tree installation _____                       | \$ _____      |
| Aftercare _____   | \$ _____      |
| Hardscape (specify) _____                                 | \$ _____      |
| 12. Total additional costs                                | \$ <u>250</u> |
| 13. Total functional replacement cost (line 11 + line 12) | \$ <u>450</u> |
| 14. Rounded   | \$ <u>450</u> |

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# Functional Replacement Method Trunk Formula Technique

Client name \_\_\_\_\_ Date 9/12/20 Case # 20  
 Phone \_\_\_\_\_ E-mail \_\_\_\_\_  
 Address Ahern project site: 205 NW 12 Avenue, Pompano Beach, Florida

**Subject tree**

Species Sabal Palm

1. Trunk diameter\* (D) 12CT 180A @ 12" DBH
2. Cross-sectional area (line 1)<sup>2</sup> × 0.7854 = n/a in<sup>2</sup>
3. Condition rating 75 %  
 Health \_\_\_\_\_  
 Structure \_\_\_\_\_  
 Form \_\_\_\_\_
4. Functional limitations none 100 %
5. External limitations none 100 %

**Functional replacement tree**

Utility or benefit to be replaced \_\_\_\_\_  
 Replacement plan \_\_\_\_\_  
 Species \_\_\_\_\_

6. Size (specify diameter or height) 12CT feet height
7. If diameter, cross-sectional area (line 6)<sup>2</sup> × 0.7854 = \_\_\_\_\_ in<sup>2</sup>
8. Functional replacement tree cost Source: \_\_\_\_\_ \$ 138

**Calculations** Palms were not depreciated for this appraisal

9. Unit tree cost (line 8 / line 7 or RPAC) \$ \_\_\_\_\_
10. Basic functional replacement cost (line 2 × line 9) \$ \_\_\_\_\_
11. Depreciated functional replacement cost (line 10 × line 3 × line 4 × line 5)  
 (where depreciation is appropriate) \$ \_\_\_\_\_

**Additional costs**

Cleanup \_\_\_\_\_ \$ \_\_\_\_\_  
 Replacement tree installation \_\_\_\_\_ \$ \_\_\_\_\_  
 Aftercare \_\_\_\_\_ \$ \_\_\_\_\_  
 Hardscape (specify) \_\_\_\_\_ \$ \_\_\_\_\_

12. Total additional costs \$ 138.33
13. Total functional replacement cost (line 11 + line 12) \$ 276.67
14. Rounded \$ 280

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# Functional Replacement Method Trunk Formula Technique

Client name \_\_\_\_\_ Date 1/14/20 Case # 21  
 Phone \_\_\_\_\_ E-mail \_\_\_\_\_  
 Address Ahern project site: 205 NW 12 Avenue, Pompano Beach, Florida

**Subject tree**

Species Sabal Palm

1. Trunk diameter\* (D) 12CT 18OA @ 12" DBH

2. Cross-sectional area  $(\text{line } 1)^2 \times 0.7854 =$  n/a in<sup>2</sup>

3. Condition rating 60 %

Health \_\_\_\_\_  
 Structure Abnormal trunk taper  
 Form \_\_\_\_\_

4. Functional limitations none 100 %

5. External limitations none 100 %

**Functional replacement tree**

Utility or benefit to be replaced \_\_\_\_\_

Replacement plan \_\_\_\_\_

Species \_\_\_\_\_

6. Size (specify diameter or height) 12CT feet height

7. If diameter, cross-sectional area  $(\text{line } 6)^2 \times 0.7854 =$  \_\_\_\_\_ in<sup>2</sup>

8. Functional replacement tree cost Source: \_\_\_\_\_ \$ 138

**Calculations** Palms were not depreciated for this appraisal

9. Unit tree cost (line 8 / line 7 or RPAC) \$ \_\_\_\_\_

10. Basic functional replacement cost (line 2 × line 9) \$ \_\_\_\_\_

11. Depreciated functional replacement cost (line 10 × line 3 × line 4 × line 5)  
(where depreciation is appropriate) \$ \_\_\_\_\_

**Additional costs**

Cleanup \_\_\_\_\_ \$ \_\_\_\_\_

Replacement tree installation \_\_\_\_\_ \$ \_\_\_\_\_

Aftercare \_\_\_\_\_ \$ \_\_\_\_\_

Hardscape (specify) \_\_\_\_\_ \$ \_\_\_\_\_

12. Total additional costs \$ 138.33

13. Total functional replacement cost (line 11 + line 12) \$ 276.67

14. Rounded \_\_\_\_\_

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# Functional Replacement Method Trunk Formula Technique

Client name \_\_\_\_\_ Date 1/14/20 Case # 22  
 Phone \_\_\_\_\_ E-mail \_\_\_\_\_  
 Address Ahern project site: 205 NW 12 Avenue, Pompano Beach, Florida

**Subject tree**

Species Sabal Palm

1. Trunk diameter* (D) <u>16CT 23OA @ 12" DBH</u>	
2. Cross-sectional area (line 1) <sup>2</sup> × 0.7854 =	<u>n/a</u> in <sup>2</sup>
3. Condition rating	<u>80</u> %
Health _____	
Structure _____	
Form _____	
4. Functional limitations <u>none</u>	<u>100</u> %
5. External limitations <u>none</u>	<u>100</u> %

**Functional replacement tree**

Utility or benefit to be replaced \_\_\_\_\_  
 Replacement plan \_\_\_\_\_  
 Species \_\_\_\_\_

6. Size (specify diameter or height) <u>16CT feet height</u>	
7. If diameter, cross-sectional area (line 6) <sup>2</sup> × 0.7854 =	_____ in <sup>2</sup>
8. Functional replacement tree cost Source: _____	\$ <u>138</u>

**Calculations**

Palms were not depreciated for this appraisal

9. Unit tree cost (line 8 / line 7 or RPAC)	\$ _____
10. Basic functional replacement cost (line 2 × line 9)	\$ _____
11. Depreciated functional replacement cost (line 10 × line 3 × line 4 × line 5) (where depreciation is appropriate)	\$ _____

**Additional costs**

Cleanup _____	\$ _____
Replacement tree installation _____	\$ _____
Aftercare _____	\$ _____
Hardscape (specify) _____	\$ _____
12. Total additional costs	\$ <u>138.33</u>
13. Total functional replacement cost (line 11 + line 12)	\$ <u>276.67</u>
14. Rounded	\$ <u>280</u>

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# Functional Replacement Method Trunk Formula Technique

Client name \_\_\_\_\_ Date 1/14/20 Case # 23

Phone \_\_\_\_\_ E-mail \_\_\_\_\_

Address Ahern project site: 205 NW 12 Avenue, Pompano Beach, Florida

### Subject tree

Species Red Maple

- |  |                           |
|--|---------------------------|
| 1. Trunk diameter* (D) <u>7"</u> @ <u>DBH</u>              |                           |
| 2. Cross-sectional area (line 1) <sup>2</sup> × 0.7854 =   | <u>38</u> in <sup>2</sup> |
| 3. Condition rating  | <u>30</u> %               |
| Health <u>Trunk wound</u>                                  |                           |
| Structure <u>Poor structure, significant dieback</u>       |                           |
| Form _____   |                           |
| 4. Functional limitations <u>poor soil, species issues</u> | <u>30</u> %               |
| 5. External limitations <u>none</u>                        | <u>100</u> %              |

### Functional replacement tree

Utility or benefit to be replaced \_\_\_\_\_

Replacement plan \_\_\_\_\_

Species \_\_\_\_\_

- |   |                          |
|---|--------------------------|
| 6. Size (specify diameter or height) <u>Diameter - 3" cal</u>         |                          |
| 7. If diameter, cross-sectional area (line 6) <sup>2</sup> × 0.7854 = | <u>7</u> in <sup>2</sup> |
| 8. Functional replacement tree cost Source: _____                     | \$ <u>375</u>            |

### Calculations

- |   |                    |
|---|--------------------|
| 9. Unit tree cost (line 8 / line 7 or RPAC)   | \$ <u>53.05</u>    |
| 10. Basic functional replacement cost (line 2 × line 9)   | \$ <u>2,041.67</u> |
| 11. Depreciated functional replacement cost (line 10 × line 3 × line 4 × line 5)<br>(where depreciation is appropriate) | \$ <u>183.75</u>   |

### Additional costs

- |   |                  |
|---|------------------|
| Cleanup _____   | \$ _____         |
| Replacement tree installation _____                       | \$ _____         |
| Aftercare _____   | \$ _____         |
| Hardscape (specify) _____                                 | \$ _____         |
| 12. Total additional costs                                | \$ <u>375</u>    |
| 13. Total functional replacement cost (line 11 + line 12) | \$ <u>558.75</u> |
| 14. Rounded   | \$ <u>560</u>    |

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# Functional Replacement Method Trunk Formula Technique

Client name \_\_\_\_\_ Date 9/12/20 Case # 28  
 Phone \_\_\_\_\_ E-mail \_\_\_\_\_  
 Address Ahern project site: 205 NW 12 Avenue, Pompano Beach, Florida

**Subject tree**

Species Queen Palm

1. Trunk diameter\* (D) 23CT 30OA @ 12" DBH
2. Cross-sectional area (line 1)<sup>2</sup> × 0.7854 = n/a in<sup>2</sup>
3. Condition rating 75 %  
 Health \_\_\_\_\_  
 Structure \_\_\_\_\_  
 Form \_\_\_\_\_
4. Functional limitations poor soil 50 %
5. External limitations none 100 %

**Functional replacement tree**

Utility or benefit to be replaced \_\_\_\_\_  
 Replacement plan \_\_\_\_\_  
 Species \_\_\_\_\_

6. Size (specify diameter or height) 23CT feet height
7. If diameter, cross-sectional area (line 6)<sup>2</sup> × 0.7854 = 7 in<sup>2</sup>
8. Functional replacement tree cost Source: \_\_\_\_\_ \$ 175

**Calculations** Palms were not depreciated for this appraisal

9. Unit tree cost (line 8 / line 7 or RPAC) \$ \_\_\_\_\_
10. Basic functional replacement cost (line 2 × line 9) \$ \_\_\_\_\_
11. Depreciated functional replacement cost (line 10 × line 3 × line 4 × line 5)  
(where depreciation is appropriate) \$ \_\_\_\_\_

**Additional costs**

Cleanup \_\_\_\_\_ \$ \_\_\_\_\_  
 Replacement tree installation \_\_\_\_\_ \$ \_\_\_\_\_  
 Aftercare \_\_\_\_\_ \$ \_\_\_\_\_  
 Hardscape (specify) \_\_\_\_\_ \$ \_\_\_\_\_

12. Total additional costs \$ 175
13. Total functional replacement cost (line 11 + line 12) \$ 350
14. Rounded \$ 350

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# Functional Replacement Method Trunk Formula Technique

Client name \_\_\_\_\_ Date 1/14/20 Case # 29  
Phone \_\_\_\_\_ E-mail \_\_\_\_\_  
Address Ahern project site: 205 NW 12 Avenue, Pompano Beach, Florida

## Subject tree

Species Queen Palm

1. Trunk diameter\* (D) 22CT 28OA @ 10" DBH
2. Cross-sectional area  $(\text{line } 1)^2 \times 0.7854 =$  n/a in<sup>2</sup>
3. Condition rating 65 %  
Health \_\_\_\_\_  
Structure \_\_\_\_\_  
Form \_\_\_\_\_
4. Functional limitations poor soil 50 %
5. External limitations none 100 %

## Functional replacement tree

Utility or benefit to be replaced \_\_\_\_\_  
Replacement plan \_\_\_\_\_  
Species \_\_\_\_\_

6. Size (specify diameter or height) 22CT feet height
7. If diameter, cross-sectional area  $(\text{line } 6)^2 \times 0.7854 =$  \_\_\_\_\_ in<sup>2</sup>
8. Functional replacement tree cost Source: \_\_\_\_\_ \$ 175

## Calculations Palms were not depreciated for this appraisal

9. Unit tree cost (line 8 / line 7 or RPAC) \$ \_\_\_\_\_
10. Basic functional replacement cost (line 2 × line 9) \$ \_\_\_\_\_
11. Depreciated functional replacement cost (line 10 × line 3 × line 4 × line 5)  
(where depreciation is appropriate) \$ \_\_\_\_\_

## Additional costs

Cleanup \_\_\_\_\_ \$ \_\_\_\_\_  
Replacement tree installation \_\_\_\_\_ \$ \_\_\_\_\_  
Aftercare \_\_\_\_\_ \$ \_\_\_\_\_  
Hardscape (specify) \_\_\_\_\_ \$ \_\_\_\_\_

12. Total additional costs \$ 175
13. Total functional replacement cost (line 11 + line 12) \$ 350
14. Rounded \_\_\_\_\_ \$ 350

# DRC

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