

SCHEDULE 1 – HOURLY EQUIPMENT AND LABOR PRICE SCHEDULE

| Equipment Type – Ref. to Section No. 24.1 of RFB | Hourly Equipment Rate |
|---|-----------------------|
| Bobcat Loader | 85 |
| Bucket Truck w/Operator | 145 |
| Crash Truck w/Impact Attenuator | 85 |
| Dozer, Tracked, D5 or similar | 130 |
| Dozer, Tracked, D6 or similar | 145 |
| Dozer, Tracked, D7 or similar | 160 |
| Dozer, Tracked, D8 or similar | 175 |
| Dump Truck, 18 CY-20 CY | 100 |
| Dump Truck, 21 CY-30 CY | 100 |
| Generator and Lighting | 25 |
| Grader w/12' Blade | 135 |
| Hydraulic Excavator, 1.5 CY | 135 |
| Hydraulic Excavator, 2.5 CY | 135 |
| Knuckleboom Loader | 185 |
| Lowboy Trailer w/Tractor | 115 |
| Mobile Crane (Adequate for hanging limbs/leaning trees) | 225 |
| Pickup Truck, .5 Ton | 50 |
| Truck, Flatbed | 60 |
| Water Truck | 75 |
| Wheel Loader, 2.5 CY, 950 or similar | 135 |
| Wheel Loader, 3.5 – 4.0 CY, 966 or similar | 135 |
| Wheel Loader, 4.5 CY, 980 or similar | 135 |
| Wheel Loader-Backhoe, 1.0 – 1.5 CY | 100 |
| Other – Please List <i>OFFICE TRAILER w/GENERATOR</i> | 40 |

| Labor Category | Hourly Labor Rate |
|---|-------------------|
| Operations Manager w/Cell Phone and Pickup | 75 |
| Crew Foreman w/Cell Phone and Pickup | 60 |
| Tree Climber/Chainsaw | 75 |
| Laborer w/Chain Saw | 45 |
| Laborer w/small tools, traffic control, or flagperson | 40 |

| SCHEDULE 2 - UNIT RATE PRICE SCHEDULE | | | |
|---|-------------------|-----------------------|------------|
| Reference to Section 25 of RFB | | | |
| 25.2 ROW Vegetative Debris Removal (Collect & Haul) Work consists of collection and transport of vegetative debris on the ROW to a City approved DMS of other designated disposal facility. | \$ Per Cubic Yard | Estimated Cubic Yards | Total |
| | 6.84 | 536,000 | 3,666,240 |
| 25.3 ROW C&D Debris Removal (Collect & Haul) Work consists of collection and transport of C&D debris on the ROW to a City approved DMS of other designated disposal facility. | \$ Per Cubic Yard | Estimated Cubic Yards | Total |
| | 7.84 | 80,000 | 627,200 |
| 25.4 Private Property Vegetative Debris Removal Work consists of collection and transport of vegetative debris on the private property to a City approved DMS of other designated disposal facility. | \$ Per Cubic Yard | Estimated Cubic Yards | Total |
| | 6.84 | 60,606 | 414,545.04 |
| 25.5 Private Property C&D Debris Removal Work consists of collection and transport of C&D debris on private property to a City approved DMS of other designated disposal facility. | \$ Per Cubic Yard | Estimated Cubic Yards | Total |
| | 7.84 | 37,600 | 294,184 |
| 25.6 City Parks and Other City Property Vegetative Debris Removal Work consists of collection and transport of vegetative debris in City parks or other City property to a City approved DMS of other designated disposal facility. | \$ Per Cubic Yard | Estimated Cubic Yards | Total |
| | 6.84 | 100,000 | 684,000 |
| 25.7 Removal of Hazardous Leaning Trees and Hanging Limbs in City Parks and Other City Property Work consists of removing hazardous leaning trees or hanging limbs from City parks or other City property. | \$ Per Tree | Estimated Tree Total | Total |
| 6 inch to 11.99 inch diameter | 78 | 300 | 23,400 |
| 12 inch to 23.99 inch diameter | 148 | 200 | 29,600 |
| 24 inch to 35.99 inch diameter | 238 | 100 | 23,800 |
| 36 inch to 47.99 inch diameter | 348 | 20 | 6,960 |
| 48 inch and larger diameter | 438 | 10 | 4,380 |
| | \$ Per Tree | Estimated Tree Total | Total |
| Hangers greater than two (2') inches in diameter | 78 | 2,660 | 207,480 |
| 25.8 Removal of Hazardous Stumps from City Parks and Other Public Property Work consists of removing hazardous stumps and placing them on the ground for haul-off. | \$ Per Unit | Estimated Units | Total |
| 24 inch to 35.99 inch diameter | 125 | 50 | 6,250 |
| 36 inch to 47.99 inch diameter | 225 | 30 | 6,750 |
| 48 inch and larger diameter | 275 | 10 | 2,750 |
| 25.9 DMS Management and Operation Work consists of all labor, equipment, fuel and miscellaneous costs necessary to manage and operate a DMS on an inbound debris basis. | \$ Per Cubic Yard | Estimated Cubic Yards | Total |
| | 1.00 | 536,000 | 536,000 |
| 25.10 Chipping (Reduction of Storm Generated Debris) Work consists of all labor, equipment, fuel and miscellaneous costs necessary to reduce storm generated debris by chipping. | \$ Per Cubic Yard | Estimated Cubic Yards | Total |
| | 2.60 | 653,600 | 1,699,360 |
| 25.11 Haul-out of Reduced Debris to Final Disposal Site Work consists of collection and transport of reduced debris from a DMS to a City approved final disposal facility. | \$ Per Cubic Yard | Estimated Cubic Yards | Total |
| | 3.95 | 130,800 | 516,660 |

| | | | |
|---|-------------------|-----------------------|------------------|
| 25.12 Removal of ROW Hazardous Leaning Trees and Hanging Limbs Work consists of removing hazardous leaning trees or hanging limbs and placing them on the ROW for haul-off. | \$ Per Tree | Estimated Tree Total | Total |
| 6 inch to 11.99 inch diameter | 78 | 500 | 39,000 |
| 12 inch to 23.99 inch diameter | 148 | 300 | 44,400 |
| 24 inch to 35.99 inch diameter | 238 | 200 | 47,600 |
| 36 inch to 47.99 inch diameter | 348 | 10 | 3,480 |
| 48 inch and larger diameter | 438 | 5 | 2,190 |
| | \$ Per Tree | Estimated Tree Total | Total |
| Hangers greater than two (2') inches in diameter | 78 | 23,250 | 1,813,500 |
| 25.13 Removal of Hazardous Stumps from City ROW Work consists of removing hazardous stumps and placing them on the ROW for haul-off. | \$ Per Unit | Estimated Units | Total |
| 24 inch to 35.99 inch diameter | 125 | 50 | 6,250 |
| 36 inch to 47.99 inch diameter | 225 | 30 | 6,750 |
| 48 inch and larger diameter | 275 | 10 | 2,750 |
| 25.14 Household Hazardous Waste Removal Transport and Disposal Work consists of all labor, equipment, fuel and miscellaneous costs necessary for removal, transportation and disposal of HHW. | \$ Per Pound | Estimated Pounds | Total |
| | 3 | 100,000 | 300,000 |
| 25.15 Canals and Waterways Debris Removal (Collect & Haul) Work consists of all labor, equipment, fuel and miscellaneous costs necessary for removal, transportation and disposal of debris from City canals and waterways. | \$ Per Cubic Yard | Estimated Cubic Yards | Total |
| | 20 | 5,000 | 100,000 |
| 25.16 Abandoned Vehicle Removal Work consists of the removal of abandoned vehicles in areas identified and approved by the City and subsequently transported to a City approved staging area. | \$ Per Unit | Estimated Units | Total |
| | 200 | 100 | 20,000 |
| 25.17 Animal Carcass Removal and Disposal Work consists of all labor, equipment, fuel and miscellaneous costs necessary for removal, transportation and disposal of Animal Carcasses. | \$ Per Pound | Estimated Pounds | Total |
| | 1 | 1000 | 1,000 |
| 25.18 ROW White Goods Debris Removal (Collect & Haul) Work consists of all labor, equipment, fuel and miscellaneous costs necessary for removal, transportation and disposal of White Goods. | \$ Per Unit | Estimated Units | Total |
| | 35 | 1000 | 35,000 |
| 25.19 Freon Removal Work Consists of the recovery and disposal of refrigerants from items containing Freon. | \$ Per Unit | Estimated Units | Total |
| | 39 | 750 | 29,250 |
| Total Estimated Contract Price | | | \$ 11,201,329.04 |

**Cradle to grave pricing for vegetative, stump and tree removal and disposal are encouraged and may be included by the Contractor for consideration by the City. If alternative pricing is included, the Contractor must specify which unit rate scope items are included. All estimates are derived using the Norman, Oklahoma Disaster Debris Management Plan. Estimates are calculated using a moderate disaster model and should not be considered actual totals. It is assumed that all portions of the above rate schedule may be necessary during debris removal and clearance operations.

Attachment 1 – FEMA Stump Conversion Table

Stump Conversion Table

Diameter to Volume Capacity

The quantification of the cubic yards of debris for each size of stump in the following table was derived from FEMA field studies conducted throughout the State of Florida during the debris removal operations following Hurricanes Charley, Frances, Ivan and Jeanne. The following formula is used to derive cubic yards:

$$\frac{[(\text{Stump Diameter}^2 \times 0.7854) \times \text{Stump Length}] + [(\text{Root Ball Diameter}^2 \times 0.7854) \times \text{Root Ball Height}]}{46656}$$

0.7854 is one-fourth Pi and is a constant.

46656 is used to convert cubic inches to cubic yards and is a constant

The formula used to calculate the cubic yardage used the following factors, based upon findings in the field:

- Stump diameter measured two feet up from ground
- Stump diameter to root ball diameter ratio of 1:3.6
- Root ball height of 31"

| Stump Diameter (Inches) | Debris Volume (Cubic Yards) | Stump Diameter (Inches) | Debris Volume (Cubic Yards) |
|-------------------------|-----------------------------|-------------------------|-----------------------------|
| 6 | 0.3 | 46 | 15.2 |
| 7 | 0.4 | 47 | 15.8 |
| 8 | 0.5 | 48 | 16.5 |
| 9 | 0.6 | 49 | 17.2 |
| 10 | 0.7 | 50 | 17.9 |
| 11 | 0.9 | 51 | 18.6 |
| 12 | 1 | 52 | 19.4 |
| 13 | 1.2 | 53 | 20.1 |
| 14 | 1.4 | 54 | 20.9 |
| 15 | 1.6 | 55 | 21.7 |
| 16 | 1.8 | 56 | 22.5 |
| 17 | 2.1 | 57 | 23.3 |
| 18 | 2.3 | 58 | 24.1 |
| 19 | 2.6 | 59 | 24.9 |
| 20 | 2.9 | 60 | 25.8 |
| 21 | 3.2 | 61 | 26.7 |
| 22 | 3.5 | 62 | 27.6 |
| 23 | 3.8 | 63 | 28.4 |
| 24 | 4.1 | 64 | 29.4 |
| 25 | 4.5 | 65 | 30.3 |
| 26 | 4.8 | 66 | 31.2 |
| 27 | 5.2 | 67 | 32.2 |
| 28 | 5.6 | 68 | 33.1 |
| 29 | 6 | 69 | 34.1 |
| 30 | 6.5 | 70 | 35.1 |
| 31 | 6.9 | 71 | 36.1 |
| 32 | 7.3 | 72 | 37.2 |
| 33 | 7.8 | 73 | 38.2 |
| 34 | 8.3 | 74 | 39.2 |
| 35 | 8.8 | 75 | 40.3 |
| 36 | 9.3 | 76 | 41.4 |
| 37 | 9.8 | 77 | 42.5 |
| 38 | 10.3 | 78 | 43.6 |
| 39 | 10.9 | 79 | 44.7 |
| 40 | 11.5 | 80 | 45.9 |
| 41 | 12 | 81 | 47 |
| 42 | 12.6 | 82 | 48.2 |
| 43 | 13.3 | 83 | 49.4 |
| 44 | 13.9 | 84 | 50.6 |
| 45 | 14.5 | | |