DESCRIPTION – This work is providing maintenance care of plant material planted under this contract for a period of 12 months (365 days) from the documented date of acceptance of the entire project by the Department. This work includes planting and seeding operations including watering, fertilizing, insect and disease control, pruning, plant replacement, mulch replacement, stake and guy maintenance, litter removal, protection from wildlife, and re-seeding. All materials and work shall be furnished in accordance with Publication 408.

MATERIAL –
Water - Section 720.2
Replacement Mulch - Section 805.2(a)
Replacement Plants - Section 808.2(a) for the Specified Species and applicable Special Provision for the Specified Species
Re-Seeding and Soil Supplements - Section 804.2 and applicable special provision for the specified formulas
Commercial Fertilizer - Section 804.2
Bracing Material - Section 808.2(i)
Organic Pesticides and Fungicides- As approved

CONSTRUCTION – In accordance with Section 808.3 and as follows:

(a) General – The period of establishment and replacement will begin from the documented date of acceptance of the entire project by the Department. Obtain written concurrence on the verified date of planting completion from the Resident Engineer.

Submit for approval to PENNDOT a monthly maintenance inspection report and operational maintenance schedule for work to be performed.

Monitor the condition of the plants and initiate all horticultural practices necessary to maintain the plants in a healthy condition during the period of establishment. Protect plants from wildlife depredation.

(b) Watering. Apply water by open-end hose supplied by gravity or low pressure pump(pressure not to exceed 10 psi). Apply water at a rate so that the water does not completely run-off and will thoroughly soak and percolate into the soil in the planting pit. Perform watering within 1 calendar day if site conditions require water to save the health of the plants. Commercial tree watering bags or other containers that will allow a slow dispensing of water over a period of time equal to the desired amount of water to be provided at each plant can be submitted for use and approval for this operation.

Water each shrub (plant size 3-1/2 ft. or less in height) with approximately 10-gallons of water per application. Shrubs larger than 3-1/2 ft. in height will be treated as a tree. Water each tree with approximately 30-gallons of water per application. A 10-gallon amount can be estimated for application purposes at approximately 3-minutes of water run out of a 5/8-inch diameter hose at the desired water pressure. Some plant pit mulch conditions may require a small portion of the mulch to be loosened or cleared from the pit to allow the water to percolate through the mulch and into the plant pit soil.

Water smaller type perennial or herbaceous plants such as bulbs, tubers, rhizomes, plugs, starter plants, seedlings and small transplants with 2-gallons of water per plant per watering cycle.

Water the plants on a 7 to 10 day cycle based on a natural rainfall condition of less than 1-inch of rainfall per week, or when temperatures and humidity remain greater than 90 degrees for a period of one week. Do not water if soil conditions are determined to be saturated. Do not water at or onto the trunk or stems of the plant.
Provide a watering schedule, source of water, and list of watering equipment to be used for approval prior to commencing this operation. Furnish measurements and capacities of water tanks used in this operation.

(c) Fertilization. Fertilize trees and shrubs during late March following the initial planting season. Apply fertilizer on soil surface by evenly scattering material beneath and slightly beyond the plant’s foliage mass and incorporate into the top 1-inch of soil. Apply approximately one cup of fertilizer (8 fl. oz.) per plant except for seedling plants. Apply 1/4 cup (2 fl. oz.) of fertilizer per seedling.

(d) Pruning. Prune periodically to remove dead, damaged, or diseased branches. Cut back damaged branches to live growth. Properly dispose of pruned material. Prune in accordance with 808.3(e) and the ANSI A300 Pruning Standard.

(e) Insect/Fungus Disease Control. Monitor health of plants. Provide insect and disease control as necessary with appropriate approved pesticide or fungicide applications. Submit application schedules and materials to be used for approval prior to application.

(f) Plant Replacement. Replace in accordance with the drawings and specifications, plants that are dead, missing or, in the opinion of the Inspector, are in an unhealthy condition as detailed in Section 808.2(a)9, and/or have lost their natural shape due to dead branches. Replace with plants of the same species, size and root system as specified in the contract unless a substitute species has been approved. Remove all unsatisfactory plants upon notification and replace within 10 calendar days if within the designated planting dates of Section 808.3(g). Replace any other plants at least 30 days prior to the end of the 12 month plant establishment period.

(g) Grass Establishment. Reseed areas not exhibiting acceptable grass establishment as directed with the indicated seed formula in accordance with the applicable specification. Seed within the appropriate seeding dates for the seed type specified.

(h) Mulch Replacement. Reapply mulch of the type indicated when necessary to maintain the desired 3-inch depth in accordance with Section 805.3.

(i) Litter Disposal. Keep all plant areas free of litter and debris. Dispose of all litter off the project and in an approved disposal location.

(j) Weeding. Perform weed removal at all plant bed areas as necessary to prevent competition for existing nutrients, water and sunlight, as well as to remove any volunteer vegetation not originally designed in the plans. Dispose of all weeds and volunteer vegetation at an approved disposal area.

(k) Stake and Guy Removal. Remove all tree bracing material at the end of the establishment period and prior to final inspection.

PENNDOT may conduct independent inspections of all landscape items at any time during the establishment period. Any landscape items failing to meet the minimum standards of the department as specified in the contract or the American Standard for Nursery Stock, must be replaced or the defective items repaired at no additional cost to the Department.

Correct all deficiencies within 10 calendar days after notification by the Department. PennDOT reserves the right to verify all work performed under this work to ensure quality and conformance to these requirements.

MEASUREMENT AND PAYMENT – Lump Sum

Payment will be made every three months for 25% of this item during the 1 year period of plant establishment.