ITEM 9000-0005 TREE PIT

DESCRIPTION – This work is the furnishing, installation and preparation of a tree pit situated within a public sidewalk. This item does not include the tree/sapling/etc. to be planted in the pit.

MATERIAL –

- **Topsoil.** For use in soil mixtures and backfilling of tree pits. Shall be fertile, friable loam or clay loam, typical of the Pittsburgh Region and shall meet the following requirements:
    a) Have an acidity range of pH 6.0 to 7.0 and a clay content of not more than 30%.
    b) Contain not less than 3% organic matter as determined by loss of ignition of moisture free samples dried at 100 degrees centigrade.
    c) Be without admixture of subsoil or slag and be free of all stones, lumps, plants, roots, sticks, brick and other extraneous matter.
    d) Have been run through a soil shredder.
    e) Form a ball when squeezed with the hand, but shall crumble shortly after being released.
        - Prior to delivery of topsoil, submit samples for approval.
        - No topsoil shall be used until it has been approved by WPC or its designees.
        - No topsoil shall be used while in a frozen or muddy condition.
- **Fertilizer.** Must meet the requirements of Pennsylvania Soil Conditioner and Plant Growth Substance Law Act of December 1, 1977, P.L. 28, No. 86 (3P.S.68.2) as amended and dry formulations 10-20-20, or as directed.
- **Lime.** Pulverized agricultural limestone conforming to requirements of Pennsylvania Agricultural Lime Materials Act of 1978, P.L. 15, No. 9, as amended. Raw, ground limestone of agricultural grade, containing more that 90% calcium carbonates, effective neutralizing power 64, and having a physical analysis with 40% passing 100 mesh and 98% passing 20 mesh.
- **Sand.** Fine aggregate natural sand meeting the requirements of ASTM C33.
- Compacted 2A Crushed Stone Backfill. Sand and gravel coarse aggregate mix of natural stone size 1A, modified, In accordance with PennDOT Publication 408, Section 703 and ASTM C33.
- **Peat Moss.** Pulverized horticultural grade sphagnum moss, free from extraneous material. Moisten peat moss thoroughly, prior to, and at time of use.
- **Mulch.** In accordance with PennDOT Publication 408, Section 805.2.
- **Wetting Agent.** Particle-size dry wetting agent.
- **Wood Planting Box.** Constructed of untreated 2”x 4” and 2” x 6” wood boards, fastened with galvanized 10d nails. (Finished size: 3’W x 10’L x 3’-8” D).

CONSTRUCTION –

Inspection. Make available all materials for inspection and approval by the owner's representative.

Submittals.

- **Samples.** Submit three samples of each of the following types of material. Amounts to be approved, except where noted.
    a) Topsoil
    b) Fertilizer
    c) Sand
    d) Compacted 1A Crushed Stone Backfill
    e) Wetting agent
- **Certified Reports.** Submit completed certified reports, attesting that materials being used comply with Special Provision requirements in all respects. Furnish a sample of materials when delivered for compliance testing. If any sample fails to meet the specified requirements, any former approval of such materials will be withdrawn and replacement of such material with satisfactory material will be required.
- **Storage.** Keep lime and fertilizer in dry storage away from contaminants.
- **Preparation.** Observe precautionary measures to protect all existing facilities, roads, curbs and utilities against damage during the planting box installation.
- **Planting Box.**
    a) Pre-assemble box to meet the shape as indicated. Secure posts to side members with galvanized nails.
    b) In areas of existing ground or aggregate backfill, excavate to a depth 6" below the planting box and install box to align with the curb to the depth 4" below the grade of the sidewalk/curb and plumb. Align center of box to center of tree location as indicated.
- **Box Backfill.**
    a) Soil Mixture. Per 1 cubic yard of topsoil add the following: 1 cubic foot of peat moss, 2 pounds of fertilizer, and 1 pound of wetting agent.
    b) Place and compact soil mixture inside of the planting box in 8"lifts to a relative compaction of 70% as determined by the ASTM tentative method of test for "Relative Density of Cohesionless Soils", ASTM D4254.
    c) Place mulch over soil mixture so that it is even with adjacent sidewalk and curb (approximate 4" depth).
- **Fertilizer and Lime.**
    a) Top-dress all planting box backfill with fertilizer, formula 10-20-20 at a rate of 2 pounds per 100 square feet of area.
    b) Apply lime at a rate of 1 pound per 100 square feet of area.

MEASUREMENT AND PAYMENT – Each.

END OF SPECIAL PROVISION