



**SPECIAL PROVISIONS  
FOR  
LANDSCAPE PLANTINGS**

**Marshall County  
NHSN-014-5(78)--2R-64**

**Effective Date  
December 18, 2018**

**THE STANDARD SPECIFICATIONS, SERIES 2015, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE SPECIAL PROVISIONS AND THEY SHALL PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.**

**150465.01 DESCRIPTION.**

**A. Summary.**

This section of specifications shall include all equipment, materials, labor and supervision necessary for the furnishing and installation of landscape plantings, and protection, maintenance, guarantee, and replacement of plants for completed planting work as specified in the contract documents.

**B. Protection of Property.**

1. Take precautions to ensure that equipment, vehicles, and planting operations do not disturb or damage existing grades, berms, walls, drives, pavement, utilities, plants, lawns, lawn irrigation systems, and other facilities. Keep all pavement and work areas clean and orderly during construction, removing all excess materials and trash from site during and following project completion.
2. Verify locations and depths of all underground utilities prior to excavation and report conflicts with new plantings. Contractor shall hand excavate, as required, to avoid conflicts with utilities.
3. Maintain grade and utility stakes set by others until all involved parties are in acceptance of their removal.
4. Any damage to existing plants including branches and root systems shall be repaired and/or pruned by an approved, experienced arborist.
5. Repair, replace, and/or return to original condition any damaged item, without additional compensation.

**C. Submittals.**

1. Contractor shall submit the following items in a format and on a schedule that complies with the contract.
2. Prior to starting work, Contractor shall submit copy of current certification that the landscape contractor is an Iowa Certified Nursery Dealer, Grower or approved equivalent specializing in landscape installation.
3. Submit manufacturer's certification of the inoculants, root stimulator, and/or soil amendment analysis.
4. All plant materials shall comply with State and Federal laws with respect to inspection for plant disease infestation. Inspection certificates and permits required by law to this effect shall accompany each shipment, invoice, or order of stock. File each certificate or permit, upon arrival with the Engineer. All permits and fees shall be provided by the Contractor at no cost to the Contracting Authority.
5. Contractor shall submit plant labels or tags for all plant materials, verifying the materials meet the requirements of the contract documents.
6. Provide certification to Engineer stating that container grown material has been grown in the container for not less than 1 year.
7. Upon Contracting Authority's request, the Contractor will provide material certifications for all materials.
8. Contractor shall submit a sample of the mulch proposed for this project for approval prior to installation.
9. Prior to beginning work, the Contractor shall submit a proposed planting schedule in compliance with the specified planting dates. Any revisions to this schedule must be approved by the Engineer.
10. Contractor to submit content, analysis, and sample of compost and material test reports for imported topsoil used in planting soil mix.

**D. Quality Assurance.**

1. Contractor shall not make substitutions. Contractor shall verify availability of specified plant material prior to submitting their bid. If materials are unavailable, Contractor must submit proof of inability to locate materials and a proposed equivalent for review prior to bidding the project. Failure to locate material prior to bidding without notifying the Contracting Authority shall not result in any additional cost to the Contracting Authority in order to locate and furnish the material.
2. All plant material shall meet the minimum requirements of size and grade in the latest edition of American Standard for Nursery Stock, ANSI Z60.1.
3. In addition, all plant materials will meet the requirements of size, quantity, and variety as required in the contract documents and Materials Schedule. When a variance occurs between these two requirements, the most restrictive will apply.
4. Plant names indicated comply with the latest edition of "Standardized Plant Names" as adopted by the American Joint Committee of Horticultural Nomenclature. Names of varieties not listed conform generally with names accepted by the nursery trade. All plants shall be

true to name and tagged legibly as to name in accordance with nursery standards of practice as recommended by the American Association of Nurserymen. All plants previously approved which begin showing characteristics not true to name during warranty period shall be replaced at no cost to the Contracting Authority.

5. All plants shall be nursery grown under similar climatic conditions as this project for a minimum of 2 years and shall have been transplanted or root pruned in accordance to size and type of plant, ANSI 260.1-2014.
6. All plants shall be normal specimens without objectionable deformities, voids, and open spaces, with well-developed branch and root systems; true to height, shape, and character of growth of the species or varieties. Plants shall show appearance of good health and vigor.
7. All plants shall be free of injurious insects, insect eggs, bores, and all forms of infestation, plant diseases, moldy or dried roots, or damage to branches or root systems. All plants shall be free of defects, disfiguring knots, sunscald injuries, and frost cracks. All plants to be free of rodent damage.
8. Plants may be inspected and approved at the place of growth by the Engineer for compliance with specification requirements for quality, size, and variety. Travel, time, accommodations, and expenses shall be at the expense of the Contractor. Such approval does not waive the right to reject any plant material after it has been delivered to the site and/or installed.
9. All plants shall be inspected by the Engineer prior to planting. All rejected plant materials shall be removed from the site immediately.
10. A planting list of all plants including a schedule with sizes, quantities, and other requirements is shown on the plans. In the event that quantity requirements or material omissions occur in the planting material list, the planting plan shall govern.
11. All plant materials shall bear waterproof tags indicating both common and botanical names and tags shall remain on plants until removal is approved by Engineer.
12. All plant materials designated in the planting schedule as matched shall be of uniform size, color, branching height, form, etc. Plants which do not match will be rejected.
13. Landscape work for this project shall be subcontracted to, or completed by a single landscape firm.

**E. Delivery, Handling, and Storage.**

1. Deliver inoculants, soil amendments, and all other packaged materials to site in original, unopened, and undamaged containers showing weight, analysis, and name of manufacturer. Store in manner to prevent damage and deterioration.
2. Take all precautions customary in good trade practice in preparing plants for delivery to the site to insure arrival of the plants at their destination in good condition for successful growth. Plants with damage will not be accepted.
3. Dig, pack, transport, and handle plants with care to insure protection against injury.
4. Plants shall be handled in such a manner as to ensure adequate protection from any damage such as climatic, seasonal, wind damage, or other damage during transportation or temporary storage.
5. Bare root plant material is not acceptable for this project.

6. All plants shall be fresh and in excellent condition. Plant material should be delivered to the site only after all preparations for planting are completed. All containerized plants shall remain in containers until they are ready to be planted.
7. If planting is delayed more than 6 hours following the arrival of plant material at the site, contractor shall heel-in plants and maintain during temporary storage by providing moist straw, moss, or other suitable material to protect root systems, watering, and protection from excessive sun, wind, and inclement weather conditions; providing a healthy vigorous plant when planted.
8. Temporary Storage: When approved by Engineer, temporary storage of plants on the project site may be permitted. When temporary on-site storage is not approved, the Contractor shall provide such facilities and location without additional compensation.

**F. Plant Material Warranty.**

1. Warrant each plant to remain alive and be in healthy, vigorous condition for a period of 1 year after completion and initial acceptance of the plant material and installation.
2. Warranty shall not include damage or loss of plant material caused by fires, acts of God, acts of vandalism, or negligence on the part of the Contracting Authority.

**G. Warranty Inspection.**

1. Inspection of plants will be made by the Engineer at the expiration of the 1 year warranty period, and following a written request by the Contractor. Contractor shall request inspection a minimum of 7 days prior to proposed inspection date.
2. All plants that are missing or not in a live, healthy growing condition shall be removed from the site by the Contractor. Missing and rejected plant material shall be replaced by the contractor once after the warranty period at no expense to the Contracting Authority and as soon as possible during the specified planting season.
3. Upon notice from the Engineer, the removal from site of rejected plants and the replacement of plant material of the same species and size and installed as originally specified shall be completed by the Contractor with no additional compensation.
4. All replacement plants shall be inspected by the Engineer prior to planting.
5. Maintain replacement plants as specified for original plants until accepted by the Engineer. Contractor shall notify the Engineer when all replacements and repairs are complete, and schedule the inspection 7 days prior to the proposed inspection date.

**150465.02 MATERIALS.**

**A. Plant Materials.**

1. Provide plants typical of their species and variety in a good, healthy condition in accordance with 1.04 Quality Assurance.
2. Plants shall meet the size requirements as indicated on the plans.
3. Plants larger than those specified in the plant list, with corresponding root system, may be used upon approval of the Engineer without additional compensation.
4. Broken plants will be rejected.

5. Plants planted in rows or specified as matched shall be uniform in form, size, branching, height, and color unless specified or indicated otherwise on the plans.
6. All plants which fail to comply with these specifications in any way will be rejected by the Engineer and shall be removed immediately from the project site by the Contractor.
7. Container grown plants shall have been grown in sufficiently sized containers for a minimum of 1 year with a root system to have developed to hold its soil together, firm, whole, and moist when taken from the container. No loose root systems in the container nor root bound nor circling of the root system will be accepted.

**B. Organic Soil Amendments.**

1. Mycorrhizal Fungus Inoculants shall comply with the rules of the Iowa Department of Agriculture.
2. The contents of the mycorrhizal fungus inoculant shall be identified as to percentage and type of endo- and ectomycorrhizal fungus, hydrogel, soil conditioners, etc.
3. All inoculant shall be furnished from an established manufacturer and guaranteed percentage analysis shall be provided by the inoculant supplier on each container with the proper scale weight records.
4. Inoculant shall be a granular or pellet form, uniform in composition, dry and free-flowing without caking or other damage not suitable for use.
5. Upon request of the Contracting Authority, the Contractor shall provide a test of the inoculant for conformance with the required analysis; at no additional compensation.

**C. Planting Soil.**

1. Refer to Special Provisions for Landscape Grading for detailed information on planting soil.
2. Do not use frozen or muddy mixtures for backfilling.

**D. Mulch.**

1. Provide sample for approval by Engineer.
2. Mulch shall consist of premium finely shredded or processed hardwood bark graded to 1/4 inch to 1/2 inch diameter and maximum of 3 inches in length. Green or freshly chipped or shredded mulch will be rejected. Mulch to be free of weeds, weed seed, chaff, diseases, or other foreign material.

**E. Water.**

1. Water shall be free of substances harmful to plant growth. Contractor to provide water, equipment, methods of transportation, water tanker, hoses, sprinklers, and the application of water.
2. Water plants immediately after planting.

**150465.03 CONSTRUCTION.**

**A. Planting Seasons.**

1. Deciduous plants (Container): Planting period shall be from August 15 to November 15 and from April 1 to June 1.
2. At the option and on the full responsibility of the Contractor, planting may be conducted under unseasonable conditions, except in weather below 32°F or above 90°F; without additional compensation nor variance from plant survival guarantee. However, plants will not be initially inspected outside the defined planting seasons.

**B. Preparation.**

1. Provide notice and obtain approval from Engineer 3 days prior to planting operations.
2. Provide barriers or fencing as approved by Engineer to protect the general public from injury when planting installation is within street right-of-way.

**C. Location of Plants.**

1. Contractor shall mark with flags or lathe the location of all plants in accordance with the plans. Stake the outline of bedded plants or groups per the quantity on the plans.
2. The Engineer shall be notified to approve plant location markings by the Contractor, prior to excavation of planting. Contractor shall notify Engineer 7 days prior to the proposed planting date.
3. Make field adjustments to plant locations where underground or overhead obstruction is encountered, or where changes have been made in construction, as approved by the Engineer.

**D. Planting.**

1. Bare root plants will not be accepted for use on this project.
2. Remove any plants, rocks, sod clumps, etc. or other hazardous items from the planting soil. Remove any unacceptable soil and debris from the project site.
3. All container root systems to be moist at time of planting. Remove plant root system carefully from container prior to planting without disturbance to root systems. Place plants centered, erect, and with desired orientation in planting pit with the root crown matching existing grade.

**E. Mulching.**

1. Prior to mulching, grade all beds as shown on plans.
2. Place mulch between the plants at the depth of 3-inches. This will require careful placement to avoid dismembering or covering the plants.
3. Rake mulch to a smooth finish surface. Thoroughly water mulched areas immediately after installation (within 24 hours of placement).
4. After installation of all plants and mulch apply ENVIROHOLD product to lock mulch in place. When applying, avoid spraying on any of the plant material, curb or any other objects other than the mulch itself.

**F. Maintenance.**

1. The plant maintenance and warranty period shall be for 1 year after initial acceptance by the Engineer. Maintenance shall consist of caring for the project as specified herein until the end of the 1 year maintenance and warranty period. The Contractor shall care for all plants until the end of the 1 year maintenance and warranty period as may be necessary to keep plants in a live, healthy growing condition.
  - a. In the Spring of each year during the 1 year maintenance and warranty period, the Contractor shall maintain plantings by pruning, fertilizing, topdressing mulch, and resetting to proper grades of vertical position, as required to establish healthy, viable plantings. Spray or treat as required to keep plants free of insects and disease.
  - b. The Contractor shall pull weeds in the mulched area around the plants three times a year as follows:
    - 1) On or around May 31.
    - 2) Mid-Summer as warranted by weed growth.
    - 3) On or around August 31.
  - c. During the 1 year maintenance and warranty period, the Contractor shall water plants often enough to prevent wilting and to maintain plants in a healthy condition.
2. All plants shall be in a live, healthy, and growing condition at the date of initial acceptance of the project by the Engineer and through the 1 year maintenance and warranty period.
3. Contractor will be responsible for all plant maintenance during installation and for a duration of 1 year following initial acceptance of the project.
4. Contractor shall submit written maintenance instructions to the Contracting Authority recommending procedures for plant maintenance.
5. If the Contractor observes practices detrimental to plant health during the 1 year maintenance and warranty period, the Contracting Authority should be notified immediately.
6. The contractor shall replace any unacceptable plant materials, at the end of the maintenance and warranty period, at no cost to the Contracting Authority.

**G. Cleanup.**

1. Contractor shall keep the work site clean during installation of work and shall leave the worksite clean upon completion of work.
2. Remove from site all excess materials, trimmings, branches, soils, debris, and equipment. Remove all tags and labels from plants following acceptance.
3. Repair any damage resulting from planting operations. Broom clean all paved areas.

**H. Review and Initial Acceptance.**

1. Review and initial acceptance of the plants and installation to determine completion of contract work will be made by the Engineer only after the completion of all work items.
2. Contractor shall provide written notification at least 7 days before requested review date by the Engineer.
3. All plants shall be in a live and healthy condition, of the specified variety and size, and all requirements and maintenance have been complied with. Any plant that is dead or not in a vigorous, thriving condition shall be removed and replaced. Plants that are missing are to be installed during the specified planting season. Mulched areas are to be free of weeds and grasses.

4. After the plant and installation review, a listing of acceptance, deficiencies, incomplete work, and requirements for completion of work will be provided to the Contractor.
5. Plantings will not be initially accepted until deficiencies are corrected and inspected.
6. Contractor shall maintain plants and mulch areas as specified until corrections or completion of work is approved for initial acceptance and throughout the warranty period.
7. Replacement of rejected or missing plants before acceptance shall not be considered fulfillment of the warranty.
8. Contact Engineer prior to planting replacement plants for inspection and approval of plants and to verify location.
9. The warranty period for all plants shall begin upon date of initial acceptance for completed installations.

**150465.04 METHOD OF MEASUREMENT.**

Method of Measurement: The Engineer will measure the number of each ornamental grass and perennial plant furnished and installed, complete.

**150465.05 BASIS OF PAYMENT.**

Basis of Payment: The contractor will be paid the contract unit price per each ornamental grass and perennial plant. All mulch, fertilizer and watering shall be incidental to the unit price. This payment shall be full compensation for furnishing, transporting, and placing the plant material in accordance with the contract documents. Maintenance and warranty during the 1 year maintenance and warranty period, as specified, is incidental to this item.