914-M-070 ROADSIDE DEVELOPMENT MATERIALS

(Revised 10-15-26)

The Standard Specifications are revised as follows:

SECTION 914, BEGIN LINE 29, DELETE AND INSERT AS FOLLOWS:

914.04 Grass, Legume, and Forb Seed

Grass, legume, and ~~F~~*f*orb seed in the quantities and varieties required shall be furnished full-tagged and delivered in properly designated packages or bags as directed. Seeds shall be in accordance with the following requirements.

Native grass and forb seed shall be purchased from lots for which ~~test results are~~*a Report of Analysis is* provided *containing results for germination, noxious, and purity*. Testing will not be required for aquatic species. ~~When normal germination testing is not practical for forb species, a tetrazolium test shall be conducted to determine seed viability.~~

Seeds shall contain ~~none of the prohibited noxious weeds listed in 360 IAC 1-1-5 or any that are listed in the Acts of the General Assembly of the State. Restricted noxious weed seed listed in 360 IAC 1-1-6 shall not exceed 0.25% by weight in accordance with IC 15-15-1-32~~*no regulated species listed or addressed in any Federal or State laws, local laws, ordinances, rules, regulations, orders, or decrees from bodies or tribunals having any jurisdiction or authority over the project*. Clover shall be free from dodder with no tolerance allowed.

Requirements noted above are minimum and trade allowances will not be allowed.

Seed shall be purchased from sources of supply that ~~have been accepted and reported by~~*hold an approved and accepted Indiana State Seed Permit from* the State Seed Commissioner, Purdue University, West Lafayette, Indiana~~, and found to be satisfactory~~.

~~Seed of native grasses~~*All seed lots* shall be tested by ~~the State Seed Commissioner or by an independent laboratory~~*a United States Department of Agriculture accredited seed laboratory or the Indiana State Seed Laboratory*. ~~Seed of forbs shall be tested by an independent laboratory.~~ Test results ~~by independent laboratories~~ shall be signed by *a Certified Seed Analyst or* a Registered Seed Technologist ~~and shall be submitted to the State Seed Commissioner~~. ~~This report is required before seed is installed.~~

Seed will be considered expired 15 months after the date it was tested. Expired seed shall not be installed. *If more than 15 months have elapsed since the seed was last tested, the Contractor may have the seed retested. If the seed is retested, the new germ date will be used, the 15-month window will be reset, and the germ date and germ percentage shall be updated on the label.* Each bag or container of seed shall have a printed tag or label providing all the information required by IC 15-15-1-32. Seed from bags with no labels, illegible labels, or with labels not providing all the required information will not be accepted.

The seed supplier shall provide an Other type certification in accordance with 916 that lists the seed lots used in the mixture and shall indicate that the seed mixture supplied meets the contract requirements for the specific contract that the particular seed mixture is

supplied. ~~Also, as part of the certification, the seed supplier shall provide a copy of the State Seed Commissioner's letter for the seed mixture that shows that each seed lot has been tested and found to be satisfactory.~~ The specific test results for each seed lot shall also be attached to the certification. *Seed mixtures do not need to be submitted to the State Seed Commissioner's office for approval.*

SECTION 914, BEGIN LINE 97, DELETE AND INSERT AS FOLLOWS:

~~For all other seed indicated to be used but not shown in the charts above, that s~~Seed shall be placed ~~at the indicated rate and be 100%~~ *to achieve the prescribed* pure live seed *planting rate which may necessitate a greater bulk planting rate to be used.*

914.05 Mulch

(a) Mulch for Seeding

Mulch for seeding may consist of straw, excelsior mulch, wood cellulose fiber mulch, excelsior blanket, paper mat, or straw mat. ~~All mulch shall be reasonably free from primary noxious weeds in accordance with 914.04~~*Mulch materials shall contain no viable plant propagules.*

SECTION 914, BEGIN LINE 114, DELETE AND INSERT AS FOLLOWS:

2. Wood Cellulose Fiber

Wood cellulose fiber mulch shall be made from wood chip particles manufactured particularly for discharging uniformly on the ground surface when ~~disbursed~~*dispersed* by a hydraulic water sprayer. It shall remain in uniform suspension in water under agitation and blend with ~~grass~~ seed, and fertilizer when allowed, to form a homogeneous slurry. The mulch fibers shall intertwine physically to form a strong moisture holding mat on the ground surface. The mulch shall be heat processed to prevent germination or growth inhibiting factors. It shall be non-toxic and colored green. The percent of moisture content shall be determined in accordance with 621.14(c), except material containing more than 15% will be rejected. The ash content shall not exceed 1.5%. One hundred grams of oven dried material saturated in water, drained, and weighed shall hold a minimum of 1,000 grams of water.

SECTION 914, AFTER LINE 179, INSERT AS FOLLOWS:

7. Biodegradable Net Free Erosion Control Blanket

The materials used in the biodegradable net free erosion control blanket, BNFECB, shall be 100% biodegradable. Both the top and bottom nets shall consist of a leno weave. The maximum functional longevity shall be 12 months. A functional longevity of 3 months may be used in areas to be mowed soon after installation.

The minimum areal density shall be 0.5 lbs/sq yd in accordance with ASTM D6475. The minimum tensile strength shall be 140 lbs/ft in accordance with ASTM D6818. The biomass improvement shall be 400% or greater in accordance with ASTM D7322 or Erosion Control Technology Council Method 4 Germination. The test shall be performed using Fescue seed. A Type C certification in accordance with 916 shall be provided for the biodegradable net free erosion control blanket.

The BNFECB shall be supplied in rolls, a minimum 6 ft in width, and shall be packaged with suitable protection for outdoor storage at a construction site in a manner which protects them from biodegradation prior to use.

SECTION 914, BEGIN LINE 194, DELETE AND INSERT AS FOLLOWS:

914.07 Sod

Sod shall consist of fibrous, well rooted, bluegrass, fescue, or other approved grass cut to a height of 2 to 3 in. Edges of sod shall be cut cleanly, either by hand or machine, to a uniform minimum thickness of 3/4 in. or more. The roots shall be exposed in the sod strip to allow the sod to be handled without undue tearing or breaking. The sod strip shall be of a uniform width of no less than 16 in. and no less than 2 ft in length. Sod shall be free from all ~~primary~~ noxious weeds in accordance with 914.04. Acceptance in the field before cutting shall not preclude rejection when delivered to the ~~work~~*project* if such contamination is found.

SECTION 914, BEGIN LINE 210, DELETE AND INSERT AS FOLLOWS:

914.08 Plant Materials

Nursery stock in accordance with IC 14-8-2-184 shall be provided from an IDNR-licensed nursery or nursery dealer located in the State of Indiana. The nursery or nursery dealer shall have an active nursery dealer license.

If ~~the plant material~~*a pay item* is shown on the Schedule of Pay Items as plant *or seedling*, the Contractor shall submit *a list indicating* its source of supply for each *of these* plant material*s* for approval prior to delivery to the project site. This ~~plant~~ list shall *include the name of the plant,* include the name of the source of supply*,* and the location where the plants were grown. A certification that the plants are available at this source, that the plants were grown at the prescribed location, and that there is a firm commitment for their purchase at the time of certification shall be provided. These procedures shall be followed for approval of alternate sources when the originally approved source is unable to furnish plants at the time when needed. Plants shall be in accordance with the requirements set out herein. Unless otherwise specified, all plant material shall be acquired from zones ~~4, 5, or 6~~*5b, 6a, 6b, 7a, or 7b*. However, plant material shall be acquired from zones no further than ~~1/2~~*one* zone south of the zone in which the project is located.

Hardiness zones shall be determined from the *United States Department of Agriculture's* Plant Hardiness Zone Map~~, Miscellaneous Publications No. 1475, Agricultural Research Service, United States Department of Agriculture, published by the U. S. Government Printing Office, Washington, D.C~~. The Contractor shall have a copy of this map.

~~If the plant material is shown on the Schedule of Pay Items as seedlings, the Contractor shall choose a source which is shown on the QPL of Seeding Sources. The QPL will specify the sources that are currently on an immediate use basis. If the source is not on the QPL, then the same procedure shall be followed as stated above for plants to obtain approval.~~

(a) Quality of Plant Material

All plants shall be first class and representative of the normal species or varieties, true to type, and standard form. Unless otherwise specified, all plants shall be nursery grown stock that had been transplanted or ~~rootpruned~~*root pruned* two or more times according to the kind and size of plant. The root system shall be vigorous and well developed. The branch system shall be *normally* developed ~~normally~~. All plants shall be free from disfiguring knots, sun-scald, injuries, abrasions of the bark, dead or dry wood,

broken terminal growth, or other objectionable disfigurements.

(b) Plant Names

Plants shall be true to name, following standard botanical and common nomenclature as ~~adopted by the American Joint Committee on Horticultural Nomenclature given in the current edition of Standardized Plant Names~~*listed in the United States Department of Agriculture's Plants Database*. All trees delivered shall be ~~tagged~~*labeled* legibly *in accordance* with ~~the names and sizes of the trees~~*312 IAC 18*.

SECTION 914, BEGIN LINE 263, DELETE AND INSERT AS FOLLOWS:

(d) Grading Standards

Grading of plants shall be in accordance with the American ~~Association of~~ Nursery ~~Horticultural Standards of the current ASNS,~~*& Landscape Association's American Standard for Nursery Stock,* ANSI Z-60.1*,* as revised herein and on the plans.

SECTION 914, BEGIN LINE 328, DELETE AS FOLLOWS:

Nursery stock may be inspected at the nursery before digging or shipping ~~and sealed with Department seals~~. If not inspected and sealed at the nursery, it shall be ~~done~~*accomplished* at a final collecting point at or adjacent to the project and prior to planting, unless otherwise specified in writing. Notification shall be made a minimum of three days in advance of delivery of unsealed plants. Large quantities of small plant material such as shrubs, seedlings, vines, and groundcovers shall be sealed in a satisfactory manner. Sealing of plants shall not be considered as final acceptance and shall not waive the responsibility to furnish, plant, and maintain material that complies with the specifications.

SECTION 914, BEGIN LINE 382, DELETE AND INSERT AS FOLLOWS:

(c) ~~Tree Wound Dressing~~*Blank*

~~Dressing for treating tree wounds or cuts shall be either:~~

~~1. an approved black asphaltum base antiseptic paint;~~

~~2. an approved black paint consisting of Bordeaux Mixture, raw linseed oil, and lampblack; or~~

~~3. an approved black paint consisting of zinc oxide, raw linseed oil, and lampblack.~~

SECTION 914, BEGIN LINE 434, INSERT AS FOLLOWS:

No viable plant propagules shall be present in the filler material.

Filler particle size shall not be greater than 3 *in.* by 1/2 *in.* by 1/2 in. and shall be capable of staying within the sock.