APPENDIX E-4

Wayne County Parks Division
Permit Guidelines for Site Restoration

Revised July 2015
Wayne County Parks
Site Restoration Guidelines
Revised: 1 July 2015

Wayne County Department of Public Services
Parks Division

Permit Guidelines for Site Restoration
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General Guidelines:
1. The Contractor shall be responsible at no expense to the Owner, for any damage to Park property, including but not limited to; athletic fields, boardwalks, bridges, comfort stations, fences, lawns, paved pathways, picnic shelters, planting material, playground structures, signs and site furnishings.
2. The Contractor shall provide and maintain a safe and adequate travel route at all times for Park visitors throughout the duration of the Project. All equipment shall be stored in a manner that is safe to Park visitors and approved by the Wayne County Parks Design Staff.
3. The Contractor shall be responsible for contacting and coordinating with all pertinent utility companies at least 72 hours in advance of any digging to familiarize themselves with all underground utilities, pipes and structures. The Contractor shall assume sole responsibility for any cost incurred due to damage of any utilities.
4. The Contractor shall not willfully proceed with the construction as designed when it is obvious that unknown obstructions and/or grade differences exist. Such conditions shall be immediately brought to the attention of the Wayne County Parks Design Staff. The Contractor shall assume full responsibility for all necessary revisions due to failure to give proper notification.
5. Any discrepancies between dimensioned layout and actual field conditions shall be immediately brought to the attention of the Wayne County Parks Design Staff. The Contractor shall assume full responsibility for all necessary revisions due to failure to give proper notification.
6. The Contractor shall be responsible for any coordination with subcontractors as required to accomplish installation operations.
7. The Contractor shall provide and maintain positive surface drainage.

Lawn Restoration
1. All lawn that is disturbed due to construction activities shall be restored to its original state by the Contractor at no expense to the Owner.
2. Remove diseased or unsatisfactory lawn growth. Do not bury into soil. Remove topsoil containing foreign materials, including oil drippings, stone, gravel, and construction materials.
3. All disturbed areas shall be rough graded to meet the existing adjoining grades and any extraneous materials, i.e. rocks, wood, construction debris or equipment shall be removed and disposed of in a legal manner.
4. After rough grade is met, all disturbed lawn areas shall receive a minimum of 4” of clean, fertile, friable, topsoil of sandy loam character, free of any extraneous material. It will be the Contractor’s responsibility to supplement any salvaged topsoil supply to meet the minimum 4” depth.

5. Following the installation of topsoil, the approval of final grade by the Wayne County Parks Design Staff shall be required prior to reseeding of disturbed areas.

6. Apply a starter fertilizer (15-30-15) at a rate of 5lbs. per 1,000 sf thoroughly and evenly via a mechanical rotary or drop type spreader.

7. Perform seeding operations immediately after preparation of disturbed areas and when soil is dry and winds do not exceed 5 m.p.h. Apply recommended seed via a mechanical rotary or drop type spreader. After seeding, rake or drag surface of soil lightly to incorporate seed into top of soil. Areas that are identified to be seeded prior to construction shall be designated on drawings. The following seed mix is recommended, however alternates can be submitted Wayne County Parks Design Staff for review.

<table>
<thead>
<tr>
<th>Seed</th>
<th>Purity</th>
<th>Germination</th>
<th>Mixture %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kentucky Bluegrass</td>
<td>99%</td>
<td>85%</td>
<td>10%</td>
</tr>
<tr>
<td>Turf-Type Perennial Ryegrass</td>
<td>99%</td>
<td>85%</td>
<td>15%</td>
</tr>
<tr>
<td>Creeping Red Fescue</td>
<td>98%</td>
<td>85%</td>
<td>20%</td>
</tr>
<tr>
<td>Hard Fescue</td>
<td>97%</td>
<td>85%</td>
<td>20%</td>
</tr>
<tr>
<td>Turf-Type Tall Fescue</td>
<td>98%</td>
<td>85%</td>
<td>35%</td>
</tr>
</tbody>
</table>

Seeding application rate: 7lbs. per 1,000 sf.

8. Immediately following seeding operations, the Contractor shall install straw mulch in a uniform manner with continuous coverage over all seeded areas. Anchor straw by mechanical means or with a liquid tackifier at a rate of 60 gals. per acre.

9. Hydroseeding applications may be utilized for establishing new lawns using a mixture of specified fertilizer, tackifier at a rate of 60 gals. per acre, wood cellulose fiber mulch at a rate of 2,000 lbs. per acre and specified seed mix.

10. Water newly seeded areas. The Contractor shall maintain adequate soil moisture until new grass is established.

**Grow Zones Restoration**

1. All “Grow Zones” that are disturbed due to construction activities shall be restored to their original state.

2. “Grow Zones” shall be located in the field prior to construction by the Contractor and the Wayne County Parks Design Staff.

3. The Contractor shall consult with the Wayne County Parks Design Staff prior to restoration for the recommended Seed Mix and application method(s).

**Tree Inventory Plan**

1. Any person wishing to perform land clearing or grubbing activities, remove or transplant trees of any D.B.H. within Park Property of Wayne County shall not do so until they have received approval from the Permits office.

2. Applicant shall submit a Tree Inventory Plan that is performed by a registered land surveyor or certified arborist and includes the following:
   a. Topographic information delineating both existing and proposed contours.
b. Existing and proposed structures, utilities and pavement.
c. Property lines, R.O.W. and easements that are applicable.
d. The location and approximate drip line of all existing deciduous trees 6” D.B.H. or
greater and existing evergreen trees 10’ height or greater.
i. These trees shall be tagged in the field by identifying numbers using non-
corrosive metal tags and shown on the plan with their respective number.
e. All existing deciduous trees 6” D.B.H. or greater and existing evergreen trees 10’
height or greater shall also be identified on a list using both their common and
botanical names with their corresponding number. Please also indicate size and
condition. Those trees that meet the Landmark Tree Requirements below shall also
be identified.
f. Identify clearly all existing deciduous trees 6” D.B.H. or greater, existing evergreen
trees 10’ height or greater and any Landmark Trees that are proposed to be
removed.
g. The location of all replacement trees according to the Tree Replacement Standards
below. Applicant shall also furnish a plant list that includes quantities, common and
botanical names, size, root type and spacing.
h. A table including the total number of deciduous trees 6” D.B.H. or greater, evergreen
trees 10’ height or greater on site, landmark trees, total number of trees proposed to
be removed and the total number of replacement trees required.
i. The location of tree protection fence and associated details per Wayne County Parks
Standards shall also be included on the plan.

3. Landmark Trees are any existing tree in good condition that are 24” D.B.H. or greater or is
of a type and D.B.H. equal to or greater than those shown on the list below.

<table>
<thead>
<tr>
<th>Botanical Name</th>
<th>Common Name</th>
<th>Landmark D.B.H. (inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abies species</td>
<td>Fir</td>
<td>18</td>
</tr>
<tr>
<td>Acer species</td>
<td>Maple</td>
<td>18</td>
</tr>
<tr>
<td>Aesculus carnea</td>
<td>Horse Chestnut</td>
<td>18</td>
</tr>
<tr>
<td>Aesculus glabra</td>
<td>Buckeye</td>
<td>18</td>
</tr>
<tr>
<td>Alnus glutinosa</td>
<td>Black Alder</td>
<td>12</td>
</tr>
<tr>
<td>Asimina triloba</td>
<td>Pawpaw</td>
<td>8</td>
</tr>
<tr>
<td>Betula species</td>
<td>Birch</td>
<td>18</td>
</tr>
<tr>
<td>Carpinus species</td>
<td>Hornbeam</td>
<td>8</td>
</tr>
<tr>
<td>Carya species</td>
<td>Hickory</td>
<td>18</td>
</tr>
<tr>
<td>Castanea dentata</td>
<td>American Chestnut</td>
<td>8</td>
</tr>
<tr>
<td>Catalpa species</td>
<td>Catalpa</td>
<td>18</td>
</tr>
<tr>
<td>Cercis canadensis</td>
<td>Redbud</td>
<td>8</td>
</tr>
<tr>
<td>Cladrastis lutea</td>
<td>Yellowwood</td>
<td>12</td>
</tr>
<tr>
<td>Cornus florida</td>
<td>Flowering Dogwood</td>
<td>8</td>
</tr>
<tr>
<td>Crataegus species</td>
<td>Hawthorn</td>
<td>12</td>
</tr>
<tr>
<td>Diospyros virginiana</td>
<td>Persimmon</td>
<td>12</td>
</tr>
<tr>
<td>Fagus grandifolia</td>
<td>American Beech</td>
<td>18</td>
</tr>
<tr>
<td>Ginkgo biloba</td>
<td>Ginkgo</td>
<td>12</td>
</tr>
<tr>
<td>Gymnocladus dioicus</td>
<td>Kentucky Coffeetree</td>
<td>16</td>
</tr>
<tr>
<td>Juglans nigra</td>
<td>Black Walnut</td>
<td>18</td>
</tr>
<tr>
<td>Juniperus species</td>
<td>Cedar</td>
<td>12</td>
</tr>
<tr>
<td>Larix laricina</td>
<td>Larch/Tamarack</td>
<td>12</td>
</tr>
<tr>
<td>Liquidambar styraciflua</td>
<td>Sweetgum</td>
<td>12</td>
</tr>
<tr>
<td>Liriodendron tulipifera</td>
<td>Tuliptree</td>
<td>12</td>
</tr>
</tbody>
</table>
### Botanical Name | Common Name | Landmark D.B.H. (inches)
--- | --- | ---
Malus species | Crabapple | 12
Metasequoia glyptostroboides | Dawn Redwood | 16
Nyssa sylvatica | Blackgum | 16
Ostrya virginiana | Ironwood | 8
Picea species | Spruce | 18
Pinus species | Pine | 18
Platanus species | London Plane/Sycamore | 18
Prunus species | Cherry | 18
Pseudotsuga menziesii | Douglas Fir | 18
Quercus species | Oak | 16
Sassafras albidum | Sassafras | 14
Taxodium distichum | Bald Cypress | 12
Tilia americana | Basswood | 18
Tsuga canadensis | Eastern Hemlock | 12
Ulmus americana | American Elm | 18

### Tree Replacement

1. Any person wishing to remove trees that are in good condition shall do so in accordance with the following schedule:

<table>
<thead>
<tr>
<th>Size of Removed Tree</th>
<th>Number of replacement trees to removed tree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deciduous Tree 6” D.B.H. or greater =</td>
<td>3:1 (minimum 2.5” caliper)</td>
</tr>
<tr>
<td>Evergreen Tree 10’ height or greater =</td>
<td>3:1 (minimum 8’ height)</td>
</tr>
<tr>
<td>Landmark Tree (see list) =</td>
<td>1:1 (number of caliper inches = D.B.H. inches)</td>
</tr>
</tbody>
</table>

2. All replacement trees shall be of similar species to those being removed. Replacement trees shall be nursery grown and comply with ANSI Z60. Species, proposed size and any substitutions must be approved by the Wayne County Parks Design Staff prior to shipment or installation. Installation shall be per Wayne County Parks Standards. The suggested plant list is indicated below.

### Replacement Plant suggestions:

#### Canopy Trees

- Acer rubrum – Red Maple
- Acer saccharum – Sugar Maple
- Carya ovata – Shagbark Hickory
- Fagus grandifolia – American Beech
- Lirodendron tulipfera – Tulip Tree
- Nyssa sylvatica – Black Gum
- Ostrya virginiana – Ironwood
- Platanus occidentalis – Sycamore
- Quercus bicolor – Swamp White Oak
- Quercus imbricaria – Shingle Oak
- Quercus macrocarpa – Bur Oak
- Quercus rubra – Red Oak
- Tilia americana - Basswood

#### Evergreen Trees

- Abies concolor – White Fir
- Picea glauca – White Spruce
- Picea pungens – Colorado Spruce
- Pinus Strobus – White Pine
- Taxodium distichum – Bald Cypress
- Tsuga Canadensis – Eastern Hemlock

#### Flowering Trees

- Amelanchier canadensis – Serviceberry
- Cercis canadensis – Eastern Redbud
- Cornus florida – Flowering Dogwood
- Crataegus crus-galli inermis ‘Crusader’
- Malus species – Crab Apple
Bike Paths
1. All County Bike Paths within or in close proximity of construction limits shall be adequately barricaded for the duration of construction. Appropriate signage shall be installed where necessary to adequately inform visitors of the construction zone and directions for an alternative route.
2. All Bike Paths removed or damaged as a result of construction shall be replaced with 3.5” depth bituminous pavement. The section of pavement shall include an 8” depth 21AA aggregate base compacted per current MDOT standards, 2” depth 13A leveling course, tack coat and a 1.5” depth 36A wearing course. The bituminous pavement shall be installed per current MDOT installation methods.

Road Shoulders
1. All Road shoulders shall be restored with 4” of topsoil and seeded as specified. No gravel will be allowed beyond the asphalt shoulder. Shoulder restoration shall meet all current MDOT standards.

Park Drives
1. All Park Drives that are within or in close proximity to construction limits shall be replaced and restored to their original state. Construction applications shall meet all current MDOT standards and project specifics should be taken into consideration prior to commencement of restoration.
2. All construction equipment and materials remaining on site following construction period shall be removed and disposed of off site.

Through the Permits Office, the Wayne County Parks Design Staff shall review all construction permits within or in close proximity to Park property prior to issuance of a permit.

Please contact: Elizabeth Iszler, Chief of Planning and Design: (734) 261-4312
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