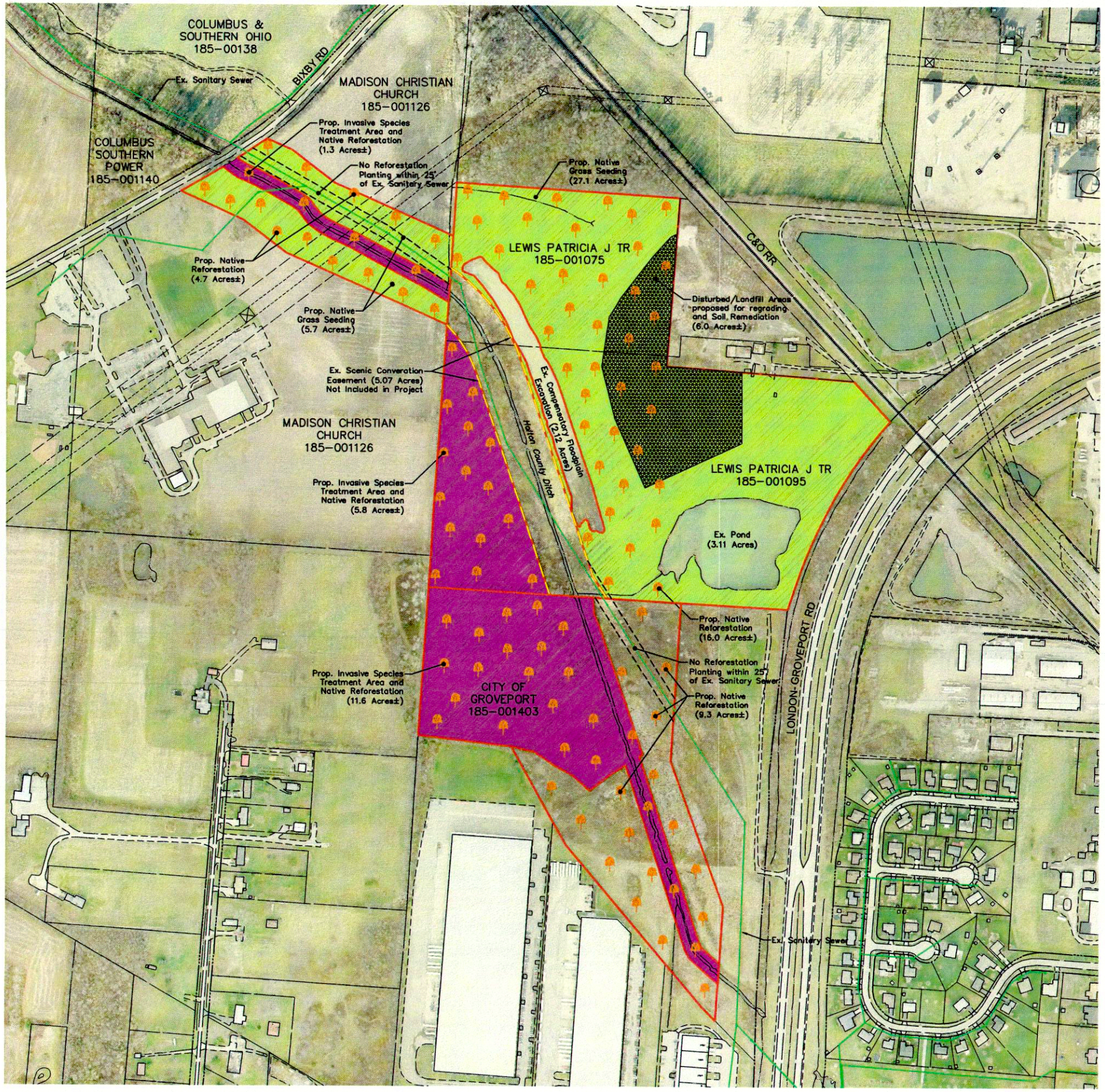

NATIVE GRASS SEEDING TABLE			
TYPE		APPLICATION RATES	APPLICATION DATES
OVER SEED:			
Annual Rye (Grain) or	*(Lolium multiflorum)*	40 lbs/acre	March – October
Winter Rye (Grain) or	*(Secale cereale)*	40 lbs/acre	October – February
Oats (Grain)	*(Avena sativa)*	15 lbs/acre	March – October
PERMANENT SEED: ERNMX-177 (Eastern Ecotype Native Grass Mix)			
Common Name	*Scientific Name* / *Percentage*	10 lbs/acre	October 1st – Nov 15th or April 15th – May 15th
Little bluestem	*Angropogon scoparius*		
Big bluestem	*Angropogon gerardii*		
Virginia wild rye	*Elymus virginicus*		
Indian grass	*Sorghastrum nutans*		
Switchgrass	*Panicum virgatum*		

Over seed shall be applied with the permanent seed to quickly stabilize the site.
This is required because the permanent seed takes much longer to germinate than the over seed.

NATIVE REFORESTATION PLANTING TABLE			
ZONE	MATERIAL	SPECIES MINIMUM	QUANTITY PER ACRE
Reforestation within Invasive Removal Area – Lewis Property 5.8Ac. – Groveport Property 11.6Ac. – Madison Church Property 1.3Ac.	3 Gal. Shrubs 3 Gal. Trees	7 7	40 40
Reforestation – Lewis Property 16.0Ac. – Madison Church 4.7Ac. – Groveport Property 9.3Ac.	3 Gal. Shrubs 3 Gal. Trees 1 Gal. Trees	7 7 7	40 40 70

The species column designates the minimum number of species that shall be selected from each planting list.

SPECIFICATIONS FOR CUT-STUMP TREATMENT OF INVASIVE SHRUBS AND TREES

All invasive bush honeysuckle (Lonicera spp.), Tree-of-Heaven (Ailanthus altissima), autumn olive (Elaeagnus umbellata), buckthorn (Rhamnus spp.) or other woody invasive species within the treatment area will be cut near to the ground by hand, leaving a low stump (1-2 inches high). Hand loppers, hand saws or chainsaws will be used to remove the invasive plants; no mechanized clearing or grubbing shall occur.

Oil-based garlon 4 herbicide shall be applied to the entire cut surface and along all exposed sides of the stump and all exposed roots immediately after cutting. Herbicide shall be applied following specifications given on the product label. Herbicide shall be applied with hand-held or backpack sprayers. Herbicide will be mixed with a red or blue dye to ensure complete application of all stumps. Care must be taken not to apply herbicide to adjacent native vegetation.

Timing: Cut-stump treatment of woody invasive plants shall occur during the growing season. (March – August)

HONEYSUCKLE REMOVAL

If there is any resprouting in the 2nd year or season after treatment, a second application of herbicide shall be applied until 95% eradication is achieved.

ITEM 202 SOIL REMEDIATION

Existing landfill material located on-site shall be regraded, as directed by the Engineer, to a reasonably smooth surface suitable for receiving topsoil supplement (amendment). Material shall be suitably blended and seeding bed shall be prepared. Soil supplement shall utilize Com-Til Plus (or equivalent). Com-Til Plus is a soil conditioner made from the residual bio-solids from the City of Columbus wastewater treatment plants, yard waste and wood chips. The product is produced by the City of Columbus. Locations where Com-Til Plus can be purchased are listed on the website: www.com-til.org. Two (2) inches of Com-Til Plus shall be spread over the work area and disked into the top six (6) inches of existing soil.

ITEM SPEC. TREE PLANTING

Tree Planting shall occur in the areas designated as such and shown on the planting plan view. This area shall be planted with a variety of native, cold-hardy species in accordance with the species list. The area shall be planted according to the densities listed using a random or scattered method for a more natural aesthetic look. Final species selection will be based on availability and must be approved by the Engineer and Owner prior to ordering the plants.

ITEM SPEC. SHRUB PLANTING

Shrub Planting shall occur in the areas designated as such and shown on the planting plan view. This area shall be planted with a variety of native, cold-hardy species in accordance with the species list. The area shall be planted according to the densities listed using a random or scattered method for a more natural aesthetic look. Material will be planted within open spaces created through invasive species removal. Exact placement will be at the landscapers discretion. Final species selection will be based on availability and must be approved by the Engineer and Owner prior to ordering the plants.

ITEM SPEC., POST-CONSTRUCTION CULTURAL CARE

Inspection – During construction and warranty period inspection of plant materials and invasive species re-growth shall be performed by qualified biologist or environmental consultant during late spring or early summer for the two years following start of construction.

Invasive removal – Continued removal of invasive species to be done each summer for the two years following the start of construction.

Trees and Shrubs – Landscaper shall warranty at least 85% survivability of all #1 and #3 containerized plants for one year.

Native grasses – All native grass areas shall be mowed with a flail mower set at a deck height of no less than 6" a minimum of 4 times during the first growing season and 1 time at the beginning of the second growing season. If a rotary or sickle blade mower is used, mowing frequency must increase to minimize the size of cuttings left on the ground. Mowing shall be timed to occur when weeds reach approximately 10" to prevent weeds from shading native grass seedlings and from setting seed.

NATIVE REFORESTATION SPECIES

Shrubs

Botanical Name	*Common Name*
Aronia melanocarpa	*Black chokeberry*
Cornus amomum	*Silky dogwood*
Cornus drummondii	*Rough leaf dogwood*
Cornus racemosa	*Gray dogwood*
Cornus sericea	*Red-osier dogwood*
Hamamelis virginiana	*Witchhazel*
Salix discolor	*Pussy willow*
Salix nigra	*Black willow*
Salix sericea	*Silky willow*
Viburnum dentatum	*Southern arrowwood*
Viburnum prunifolium	*Blackhaw*
Viburnum lentago	*Nannyberry*

Trees

Botanical Name	*Common Name*
Acer rubrum	*Red maple*
Acer saccharum	*Sugar maple*
Carya spp	*Hickory (s)*
Celtis occidentalis	*Common hackberry*
Cercis canadensis	*Eastern redbud*
Crataegus crus-galli	*Cockspur hawthorn*
Fagus grandifolia	*Beech*
Liriodendron tulipifera	*Tulip tree*
Nyssa sylvatica	*Black gum*
Platanus occidentalis	*Sycamore*
Populus deltoides	*Eastern cottonwood*
Quercus spp	*Oak (s)*
Ulmus rubra	*Slippery elm*

LEGEND

- Ex. Parcels
- Ex. Right of Way
- Ex. Hydrography
- Ex. Pavement
- Ex. Drive
- Ex. Railroad
- Ex. Sanitary Sewer
- Ex. Electric Utility
- Ex. Easement
- Ex. Scenic Conservation Esmt.
- Limits of Project
- Prop. Native Grass Seeding
- Proposed Invasive Species Treatment Area
- Disturbed/Landfill Areas Proposed for regrading and Soil Remediation
- Prop. Native Reforestation

CITY OF GROVEPORT, FRANKLIN COUNTY, OHIO
FRANKLIN COUNTY DRAINAGE ENGINEER
CLEAN OHIO CONSERVATION FUND
GRANT APPLICATION
CONCEPTUAL SITE IMPROVEMENT PLAN
EXHIBIT 2

200 100 0 200

EMHT
Evans, Mechwart, Hambleton & Tilton, Inc.
Engineers • Surveyors • Planners • Scientists
5500 New Albany Road, Columbus, OH 43054
Phone: 614.775.4500 Fax: 614.775.4800
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Date:	November, 2012
Scale:	1" = 200'
Job No:	2012-1631
Sheet:	1 of 1

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