

# **SOUTH RIVER ENVIRONMENTAL**

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February 2, 2021

Weymouth Conservation Commission  
75 Middle Street  
Weymouth, MA 02190

Subject: Notice of Intent – DEP File No. SE081-1265  
Metrovision, LLC  
Mitigation Plan  
609 & 611 Pleasant Street

Dear Commissioners:

On behalf of Metrovision, LLC (the applicant), South River Environmental is providing a mitigation plan to compensate for the decrease in functional value of a bordering vegetated wetland and associated 100-foot buffer zone associated with vegetation management activities. The activities approved under the Notice of Intent includes the cutting and removal of vegetation to allow for continued visibility of an existing billboard that will be lowered by approximately 20 to 25 feet in response to concerns raised by residents to the west of State Route 3. The approval of the project by the Weymouth Conservation Commission (Commission) included a condition to submit a mitigation plan for review and approval by the Commission prior to the commencement of vegetation management activities. The following provides the applicant's proposed mitigation plan.

The primary interest of the Wetlands Protection Act and Weymouth Wetlands Bylaw that will be affected by the proposed vegetation management is wildlife habitat. The hydrological functions of the systems will be maintained as there is no work proposed that will impact the existing surface or subsurface conditions. The habitat modification associated with the project will be due to the change in the forest canopy and the density of woody vegetation present within the wetland. Habitat significance will be compensated by the supplemental planting of predominantly woody species that provide basic habitat requirements such as food and cover. Overall, the proposed mitigation will allow the BVW to maintain its current function in a manner that protects the interests of the Act and the Bylaw.

**Design Constraints:** There are no known significant design constraints that are anticipated to adversely affect the ability to implement the proposed mitigation plan. While there are rock outcrops present adjacent to the wetland, bedrock depths are anticipated to be well below the grade required to install the plantings.

**Oversight:** A wetland scientist, arborist or other qualified professional shall monitor the mitigation activities to ensure compliance with this plan and to make adjustments when appropriate to meet the plan objectives. To ensure that larger diameter stems function to provide wildlife habitat subsequent to the vegetation management activities, all stems with a diameter at breast height of 8 inches or more will remain a minimum of 20 feet in height to allow for sprouting and/or development of cavities.

**Timing:** The approved vegetation management activities will likely occur prior to April 15, 2021 contingent upon receipt of all required approvals / clearances. The proposed mitigation activities shall be initiated immediately subsequent to the completion of the vegetation management activities within areas subject to jurisdiction of the Conservation Commission and completed prior May 15, 2021. Should the vegetation management be completed prior to the start of the 2021 growing season, the mitigation plantings shall not commence until the risk of sub-freezing temperatures has passed.

### Planting Plan

A variety of plantings and herbaceous species are proposed to improve wildlife habitat within the wetland / buffer zone and to ensure the presence of a diverse native plant community. If at the time of final grading soil temperature and site conditions are not appropriate for transplantation and seed germination, the replacement area will be stabilized with 2 to 4 inches of straw mulch and subsequently planted at an appropriate time. Plantings will be accomplished through the use of plant stocks chosen for their compatibility with the local environment as well as the various hydrologic regimes within the wetland and buffer zone. Commercially available plants and seeds will be utilized to accomplish this goal. The planting plan has been designed to provide a variety of native plant species to promote species richness, enhance wildlife habitat, and improve the aesthetics of the on-site wetland system.

The table at the end of this section provides the composition of the proposed wetland seed mix that is to be applied within BVW. Only plant materials native and indigenous to the region will be used. Species not specified in the replacement plan will not be used without written approval from the Conservation Commission. No cultivars of native species such as *Acer rubrum* shall be used. The following notes further clarify the proposed planting program:

1. A wetland seed mix will be hand broadcast, mechanically broadcast or hydro-seeded at appropriate rates throughout appropriate areas of the wetland replacement area to create an herbaceous groundcover layer. A New England Erosion Control / Restoration for Dry Sites seed mix will be distributed along the upland peripheries of the replacement area, where the slopes grade into the natural surroundings. Acceptable wetland seed mixes include New England Wet Mix (New England Wetland Plants, Amherst, MA), whose components are listed in the attached table. Comparable alternative sources may be approved by the wetland scientist.
2. In addition to the seed mixes referenced above, woody plantings are proposed in the wetland and throughout the upland buffer zone bordering the limits of the vegetation management. If necessary, mulch will be used around woody plantings in an 18" diameter circle approximately 2" deep. These plantings are shown on the attached table. Final placement of the plantings will be determined in the field by the wetland scientist / arborist.
3. The applicant will be required to maintain adequate moisture in the wetland replacement area for the first two growing seasons following planting to support the plantings (or until >75% survival is achieved).

To ensure the success of the proposed replacement plan, a wetland scientist, arborist or other qualified professional will make certain that the necessary planting conditions are present and that the benefits of the proposed plan are maximized. During planting, a qualified professional may relocate the plantings as necessary to ensure proper growing conditions and maximize wildlife habitat benefit. The plantings will be relocated to locations with suitable hydrology and soils and where appropriate structural context with other planting cells can be maintained.

**COMMON PLANT SPECIES IN PROPOSED WETLAND SEED MIX**

Seed Mix	Common Name	Scientific name
New England Wet Mix from New England Wetland Plants, Inc.	Fox Sedge	<i>Carex vulpinoidea</i>
	Hop Sedge	<i>Carex lupulina</i>
	Water Plantain	<i>Alisma plantagoaquatica</i>
	Nodding Bur-marigold	<i>Bidens cerua</i>
	Lurid Sedge	<i>Carex lurida</i>
	Soft Rush	<i>Juncus effusus</i>
	Grass-leaved Goldenrod	<i>Solidago graminifolia</i>
	Beared Sedge	<i>Carex comosa</i>
	Fringed Sedge	<i>Carex crinita</i>
	Boneset	<i>Eupatorium perfoliatum</i>
	Flat-top Aster	<i>Aster umbellatus</i>
	Hardstem Bulrush	<i>Scirpus acutus</i>
	Green Bulrush	<i>Scirpus atrovirens</i>
	Woolgrass	<i>Scirpus cyperinus</i>
	Spotted Joe-pye Weed	<i>Eupatorium maculatum</i>
	Blue Vervain	<i>Verbana hastata</i>
	Ditch Stonecrop	<i>Penthorum sedoides</i>

**WETLAND ENHANCEMENT - PLANT SPECIES LIST**

SPECIES	SIZE	CONDITION	NOTES	QUANT.
<b>Shrub Species</b>				
SWEET PEPPERBUSH ( <i>CLETHRA ALNIFOLA</i> )	2 Gallon	CONTAINER	SHRUB	15
PUSSY WILLOW ( <i>SALIX DISCOLOR</i> )	2-3' Height	CONTAINER	SHRUB	10
SILKY DOGWOOD ( <i>CORNUS AMOMUM</i> )	2-3' Height	CONTAINER	SHRUB	15
SPECKLED ALDER ( <i>ALNUS RUGOSA</i> )	2-3' Height	CONTAINER	SHRUB	10
<b>Subtotal</b>				<b>50</b>
<b>Tree Species</b>				
RED MAPLE ( <i>ACER RUBRUM</i> )	4' – 6' Height	5-GALLON CONTAINER	TREE	10
GRAY BIRCH ( <i>BETULA POPULIFOLIA</i> )	4' – 6' Height	5-GALLON CONTAINER	TREE	5
<b>Subtotal</b>				<b>15</b>
<b>TOTAL</b>				<b>65</b>

**COMMON PLANT SPECIES IN PROPOSED CONSERVATION / WILDLIFE SEED MIX**

<b>Seed Mix</b>	<b>Common Name</b>	<b>Scientific name</b>
New England Conservation / Wildlife Seed Mix from New England Wetland Plants, Inc.	Big Bluestem	<i>Andropogon gerardii</i>
	Common Milkweed	<i>Asclepias syriaca</i>
	New England Aster	<i>Aster novae-angliae</i>
	Partridge Pea	<i>Chamaecrista fasciculata</i> (Cassia f.)
	Showy Tick Trefoil	<i>Desmodium canadense</i>
	Virginia Wild Rye	<i>Elymus virginicus</i>
	Grass Leaved Goldenrod	<i>Euthamia graminifolia</i> (Solidago g.)
	Switch Grass	<i>Panicum virgatum</i>
	Tall/Green Headed Coneflower	<i>Rudbeckia laciniata</i>
	Little Bluestem	<i>Schizachyrium scoparium</i>
	Early Goldenrod	<i>Solidago juncea</i>
	Indian Grass	<i>Sorghastrum nutans</i>

- Application Rate: 25 lbs per acre in disturbed areas to be permanently restored and protected subsequent to site development

**TABLE 2**  
**BUFFER ZONE ENHANCEMENT - PLANT SPECIES LIST**

<b><u>SPECIES</u></b> <b>COMMON NAME</b> <b>(SCIENTIFIC NAME)</b>	<b>PLANT TYPE</b>	<b>SIZE</b>	<b>CONDITION</b>	<b>QUANTITY<sup>a</sup></b>
Quaking Aspen ( <i>Populus tremuloides</i> )	Tree	4' – 6'	Ball / Burlap	5
White Pine ( <i>Pinus strobus</i> )	Tree	4' – 6'	Ball / Burlap	5
Sweet Pepperbush ( <i>Clethra alnifolia</i> )	Shrub	18" – 24"	Container	20
Lowbush Blueberry ( <i>Vaccinium angustifolium</i> )	Shrub	18" – 24"	Container	20
Highbush Blueberry ( <i>Vaccinium corymbosum</i> )	Shrub	18" – 24"	Container	20
<b>TOTAL</b>				<b>70</b>

a – Quantities based on spacing of one plant per 50 square feet

#### Coarse Woody Debris and Other Features

If necessary, a supply of dead and dying woody debris shall be placed within the wetland / buffer zone to cover at least 5% of the ground. There is currently a significant amount of cut vegetation from the normal maintenance of vegetation along State Route 3 as conducted by the MA Department of Transportation. These materials shall not include any invasive species. The on-site wetland scientist will direct the contractor to distribute appropriate parts of this woody material (e.g., treetops and selected tree boles) and rocks throughout the replacement area.

#### Erosion Controls

Implementation of erosion control measures will be initiated in compliance with the Order of Conditions and at the direction of the consulting wetland scientist / arborist. The anticipated ground disturbance associated with the vegetation management activities and mitigation activities are anticipated to be minimal. Extra erosion control materials will be kept on-site to be used for any maintenance of the installed erosion control barriers. These devices will be disassembled and properly disposed of upon receipt of a Certificate of Compliance or other written approval by the Conservation Commission. Sediment collected by these devices will be removed and placed within an upland area in a manner that prevents its erosion and transport to a waterway or wetland.

#### Invasive Species Management

The buffer zone along the western edge of Pleasant Street has a population of *Phragmites* (*Phragmites australis*) present. As part of the mitigation effort, the plants will be excavated out and disposed of at a landfill or similar facility not located within an area subject to the Conservation Commission's jurisdiction. Clean topsoil will be imported and hydroseeded with the Conservation Mix to establish herbaceous cover. The area will also be densely planted with shrubs in an attempt to minimize the potential for recolonization.

In addition, the interior of the wetland and buffer contain additional stems of invasive / opportunistic species such as glossy buckthorn (*Rhamnus frangula*) and multiflora rose (*Rosa multiflora*). During the vegetation management activity, the consulting wetland scientist or arborist will mark invasive plants which will then be removed by hand. Root systems will be removed to the extent possible so long as removal would not result in significant ground disturbance.

A qualified wetland scientist or other qualified individual will inspect the mitigation area for invasive species for the first two growing seasons. If significant populations of invasive species are found, the necessary control measures will be developed and implemented in accordance with approval from the Conservation Commission. Regardless, an effective treatment plan will be tailored to address problems identified during the inspections and implemented.

#### Monitoring Plan

Within 60 Days of completion of the mitigation work, the proponent will submit a signed letter to the Conservation Commission specifying the date of completion of the mitigation. The proponent will monitor the plantings for a period of two growing seasons to ensure a minimum of 75% survival of the plants. Observations will occur at the middle to end of the growing season to allow for replacement of plants if necessary. Each annual monitoring report shall be submitted to the Conservation Commission no later than December 15 of the year being monitored.

The following Items shall be addressed in the monitoring report:

- Highlighted summary of problems which need immediate attention (e.g., problem with hydrology, severe invasive species problem, serious erosion, major losses from herbivory, etc.). This should be at the beginning of the report.
- Describe the monitoring inspections that occurred since the last report.
- Concisely describe remedial actions done during the monitoring year to meet the success standards – actions such as removing debris, replanting, controlling invasive plant species (with biological, herbicidal, or mechanical methods), applying additional topsoil or soil amendments, etc. Also describe any other remedial actions done at each site.
- Report the status of all erosion control measures. Are they in place and functioning? If temporary measures are no longer needed, have they been removed?
- By species planted, describe the general health and vigor of the surviving plants, the prognosis for their future survival and a diagnosis of the cause(s) of morbidity or mortality.

On behalf of Metrovision, LLC, South River Environmental respectfully requests review and approval of this mitigation plan by the Commission. Should you have any questions regarding this mitigation plan or would like to conduct a secondary field review of the property prior to its implementation, please do not hesitate to contact me at (978) 697-0854. Thank you in advance for your consideration.

Sincerely,

**South River Environmental**



John Zimmer  
Wetland Scientist

Cc: Metrovision LLC