Ecological Advocacy Committee Venues Parks and Arts City of South Bend, Indiana

July 16, 2020

Board of Park Commissioners City of South Bend Venues Parks and Arts 321 East Water Street South Bend, IN 46614

Dear Commissioners,

On July 7, 2020, Mr. Matthew Moyers of Venues Parks and Arts informed the Ecological Advocacy Committee (EAC) that due to the Douglas Road widening project, Ponader Park, a property designated by the EAC as "ecologically sensitive," would be impacted. Following this notification, current and former EAC members visited the site to survey the scope of the impact. On Tuesday, July 14, the EAC held an emergency meeting, which was attended by the legal counsel for St. Joseph County and representatives from DLZ Corporation, the county's hired consultant.

The purpose of this meeting was to allow DLZ to present to the EAC the scope of the project as it pertains to Ponader Park. Members of the EAC, along with VPA staff, were allowed to ask questions and voice their concerns about the potential negative impacts on Ponader Park. This letter serves as formal documentation of the committee's concerns and recommendations.

1. Loss of parkland without remuneration

In the county's proposal, there is no mention of remuneration to the public, VPA, or the City. By granting the request for permanent rights of way, South Bend will be permanently losing ecologically significant property. Because the EAC specifically identified Ponader Park as an area of high ecological value, and one that provides the city's only public access to Juday Creek, this is particularly discouraging.

2. Lift-Station Location

The widening of Douglas Road will displace the existing lift station, and the current plans call for the construction of a new lift station onto land currently occupied by Ponader Park. The EAC feels that the county's consultant did not adequately explain the necessity of relocating the lift-station into city-owned wetlands.

3. Damage from Ecological Disturbances

Portions of Ponader Park, including areas targeted for rights of ways, contain established ecological communities. Disturbances caused by earth-moving equipment and other heavy machinery will result in the loss of native plants and the spread of invasive, exotic vegetation.

a. Invasive Vegetation

Along the eastern edge of the property, near the proposed lift station relocation, lies a substantial monoculture of invasive reed canary grass (*Phalaris arundinacea*). Disturbance to this section of the property is likely to spread the plant to other areas, and cross-contamination could create long-term liability for VPA to manage. The consultant failed to present adequate safety measures to prevent this from happening.

b. Swale

The u-shaped swale on the northwestern side of Ponader Park is an established natural vegetative habitat. The swale, which consists primarily of wetland sedges and forbs, effectively absorbs, filters, and cools stormwater before it enters Juday Creek. The highest-quality area of the swale is within both the permanent and temporary rights of way, thus making it susceptible to compaction, cross-contamination, and destruction. The consultant failed to demonstrate any consideration for the preservation of the swale's existing vegetation.

c. Topsoil

The committee expressed concern that the construction process would negatively impact the topsoil within the temporary right of way. A committee member asked the consultant if the construction process would attempt to retain the existing topsoil or if it would be scooped off and discarded. Another committee member asked the consultant if it was possible to remove and save the soil and the plants within the swale. The consultant was not able to answer those questions.

4. Tree Mitigation: Selection and Placement

St. Joseph County is required to plant trees within the Juday Creek floodplain to mitigate those lost to construction by the Douglas Road expansion project. According to DLZ's landscaping plan, they have targeted Ponader Park to receive "24 trees & 12 understory tree/shrub." Of the trees and shrubs species listed, two are not native to northern Indiana, and most of them are not currently part of the species inventory of Ponader

Park (see attached inventory). The consultant mentioned that there is some flexibility in the species selection. EAC members, along with VPA Facilities and Grounds Director John Martinez, inquired about the post-planting care and maintenance of the trees. What is the warranty period? Who is responsible for the trees during and after the period of the contract? The process is not yet clearly defined.

The EAC expressed concern about the location of one of the mitigation areas within Ponader Park. Because it is situated adjacent to the existing swale, we are concerned that the maturing trees will shade out the existing vegetation, thus degrading the swale's filtering capacity. The committee suggested that other areas of the park might be more appropriate for tree mitigation.

5. Wetland Mitigation Credits

The EAC supports replacing the wetlands lost at Ponader Park at another VPA property or project such as the 35th Street Wetlands. Committee member and wetland biologist Andrew Tucker pointed out the value in focusing these credits towards other efforts within the Juday Creek Watershed to help preserve the quality of the creek.

6. Impact on Juday Creek

The construction requirements specify that Juday Creek's morphology, creekbed, and reconstructed bridge may not be inferior after construction to the current conditions. However, the committee stressed several concerns:

- The morphology of the creek, including the substrate, should be preserved.
- The creekbed should not be adversely affected.
- The replacement bridge should not negatively impact the ability of animals to transverse under the road and should strive to improve terrestrial connectivity.

7. After Construction impacts

Following the completion of the proposed project, VPA will have an increased burden on maintenance operations. The newly planted trees will need care, and the disturbance caused by heavy machinery will inevitably result in an influx of invasive vegetation that will require mitigation.

The EAC suggests some type of obligation upon the County or contractors to warranty the plantings for a reasonable time after the construction process so the entire burden does not fall upon VPA for the first few years.

Conclusion and Recommendations

The Ecological Advocacy Committee recommends that the VPA and the Board of Park Commissioners take the following actions:

- 1. Insist that the county's project engineers and consultants, with input from VPA, thoroughly and carefully evaluate the location of the lift-station.
- 2. Require the county and their consultant to establish strict contractor guidelines to mitigate ecological damage within the rights of way including,
 - a. Protection of the existing swales and topsoil
 - b. Consider using a "save and replace" method, especially in areas near the swales.
 - c. Minimizing the spread of invasive vegetation by requiring thorough washing of construction equipment before and after entering the rights of way zones.
- 3. Require that the City Forester and the EAC approve the species selection and placement of the mitigated trees and shrubs within the temporary easement.
- 4. VPA should stay in close contact with the Indiana Department of Natural Resources for opportunities to use Ponader's wetland mitigation credits for other VPA projects.
- 5. Before implementation, the EAC would like to review and advise on construction design that has the potential of impacting Ponader Park or Juday Creek.
- 6. Require St. Joseph County to warranty the tree and shrub plantings and provide ongoing support with mitigating invasive species brought about by the construction process.
- 7. As soon as possible, VPA and EAC should create a comprehensive, long-term natural resource management plan for Ponader Park.

On behalf of the other members of the Ecological Advocacy Committee, I would like to thank Venues Parks and Arts for allowing us the opportunity to advise on this project. We hope that you find this information useful.

Sincerely,

Steve Sass

Chair

South Bend VPA Ecological Advocacy Committee



Non-native Species: 35(49.3%)

"Our mission is to provide unmatched excellence in technical and creative services to aid in fostering balanaced ecosystems that result in a healthier planet for all its inhabitants."

This survey and report is courtesy of Ecometrid

Biennial: 9 (12.7%)

Survey Name: Ponader Park Permanent Right of Way

| Date and Location | FQA Database | Report Version |
|--|-------------------------------|-------------------------|
| Survey Date(s): July 9-10, 12, 2020 | Chicago Region USACE, 2017 | 2.15 |
| Location: Ponader Park. South Bend, IN | | |
| FQA Database | Conservation-based Metrics | Physiognomy Metrics |
| Chicago Region USACE, 2017 | Total Mean C: 1.2 | Tree: 9 (12.7%) |
| | Native Mean C: 2.3 | Shrub: 8 (11.3%) |
| Details | Total FQI: 10.1 | Vine: 5 (7%) |
| Practicioner: Steve Sass, Rachel Novick | Native FQI: 13.8 | Forb: 41 (57.7%) |
| Weather Notes: Clear and very warm | Adjusted FQI: 16.4 | Grass: 4 (5.6%) |
| Duration: 4.5 hours | % C Value 0: 63.4% | Sedge: 3 (4.2%) |
| Community Type: Riparian | % C Value 1-3: 16.9% | Rush: 1 (1.4%) |
| Notes: Initial survey of land to be ceded | % C Value 4-6: 19.7% | Fern: 0 (0%) |
| Private/Public: Public | % C Value 7-10: 0% | Bryophyte: 0 (0%) |
| | Native Tree Mean C: 2.3 | |
| | Native Shrub Mean C: 3 | |
| | Native Herbaceous Mean C: 2.3 | |
| Species Richness | Species Wetness | Duration Metrics |
| Total Species: 71 | Mean Wetness: .3 | Annual: 2 (2.8%) |
| Native Species: 36 (50.7%) | Native Mean Wetness: -0.2 | Perennial: 60 (84.5%) |

Botanical Species

| Taxonomic Name | Common Name | Family | Native? | С | W | Physiognomy |
|-------------------------|--------------------------|----------------|------------|---|----|-------------|
| Acer negundo | boxelder | Sapindaceae | native | 0 | 0 | tree |
| Acer saccharinum | silver maple | Sapindaceae | native | 1 | -1 | tree |
| Achillea filipendulina | yarrow | Asteraceae | non-native | 0 | 2 | forb |
| Alisma subcordatum | American water plaintain | Alismataceae | native | 3 | -2 | forb |
| Alliaria petiolata | Garlic mustard | Brasicaceae | non-native | 0 | 0 | forb |
| Ambrosia artemisiifolia | annual ragweed | Asteraceae | native | 0 | 1 | forb |
| Anthriscus caucalis | chervil | Apiaceae | non-native | 0 | 2 | forb |
| Arcium minus | lesser burdock | Asteraceae | non-native | 0 | 1 | forb |
| Artemisia vulgaris | mugwort | Asteraceae | non-native | 0 | 2 | forb |
| Asclepias incarnata | swamp milkweed | Asclepiadaceae | native | 3 | -2 | forb |
| Asclepias syriaca | common milkweed | Asclepiadaceae | native | 0 | 1 | forb |
| Carex Iurida | sallow sedge | Cyperaceae | native | 5 | -2 | sedge |
| Carex vulpinoidea | fox brown sedge | Cyperaceae | native | 2 | -1 | sedge |
| Catalpa speciosa | northern catalpa | Bignoniaceae | non-native | 0 | 1 | tree |
| Celastrus orbiculatus | Asian bittersweet | Celastraceae | non-native | 0 | 2 | vine |
| Cichorium intybus | chicory | Asteraceae | non-native | 0 | 1 | forb |
| Circaea canadensis | enchanter's nightshade | Onagraceae | native | 3 | 1 | forb |
| Cirsium arvense | Canada thistle | Asteraceae | non-native | 0 | 1 | forb |
| Cirsium vulgare | bull thistle | Asteraceae | non-native | 0 | 1 | forb |
| Cornus obliqua | silky dogwood | Cornaceae | native | 5 | -1 | shrub |
| Dactylis glomerata | orchard grass | Poaceae | non-native | 0 | 1 | grass |
| Daucus carota | Queen Anne's lace | Apiaceae | non-native | 0 | 2 | forb |
| Erigeron annuus | annual fleabane | Asteraceae | native | 0 | 1 | forb |

| Eupatorium perfoliatum | boneset | Asteraceae | native | 4 | -2 | forb |
|-----------------------------|------------------------|----------------|------------|---|----|-------|
| Frangula alnus | glossy buckthorn | Rhamnaceae | non-native | 0 | -1 | shrub |
| Fraxinus pennslyvanica | green ash | Oleaceae | native | 4 | -1 | tree |
| Galium obtusum | blunt-leaf bedstraw | Rubiaceae | native | 5 | -1 | forb |
| Geum canadense | white avens | Rosaceae | native | 1 | 0 | forb |
| Geum vernum | spring avens | Rosaceae | native | 3 | 1 | forb |
| Hesperis matronalis | dame's rocket | Brasicaceae | non-native | 0 | 1 | forb |
| Iris pseudacorus | yellow flag iris | Iridaceae | non-native | 0 | -2 | forb |
| Juncus tenuis | path rush | Juncaeae | native | 0 | 0 | forb |
| Laportea canadensis | wood nettle | Urticaceae | native | 5 | -1 | forb |
| Leonurus cardiaca | motherwort | Lamiaceae | non-native | 0 | 2 | forb |
| Lonicera sp. | Asian bush honeysuckle | Caprifoliaceae | non-native | 0 | 2 | shrub |
| Ligustrum vulgare | European privet | Oleaceae | non-native | 0 | 1 | shrub |
| Melilotus albus | white sweet closer | Fabaceae | non-native | 0 | 2 | forb |
| Monarda fistulosa | wild bergamot | Lamiaceae | native | 4 | 1 | forb |
| Morus alba | white mulberry | Moraceae | non-native | 0 | 0 | tree |
| Nasturtium officinale | watercress | Brasicaceae | non-native | 0 | -2 | forb |
| Oenothera biennis | evening primrose | Onagraceae | native | 0 | 1 | forb |
| Oxalis stricta | yellow wood sorrel | Oxalidaceae | native | 0 | 1 | forb |
| Parthenocissus quinquefolia | Virginia creeper | Vitaceae | native | 4 | 1 | vine |
| Persicaria pensylvanica | pinkweed | Polygonaceae | native | 0 | -1 | forb |
| Persicaria virginiana | jumpseed | Polygonaceae | native | 4 | 0 | forb |
| Phalaris arundinacea | reed canary grass | Poaceae | non-native | 0 | -1 | grass |
| Phleum pratense | Common timothy | Poaceae | non-native | 0 | 1 | grass |
| Phyla lanceolata | northern frogfruit | Verbenaceae | native | 4 | -2 | forb |
| Phytolacca americana | American pokeweed | Phytolaccaceae | native | 0 | 1 | forb |
| Poa pratensis | Kentucky bluegrass | Poaceae | non-native | 0 | 0 | grass |
| | | | | | | |

| Quercus palustris | pin oak | Fagaceae | native | 5 | -1 | tree |
|----------------------------|------------------------|------------------|------------|---|----|-------|
| Rhus hirta | staghorn sumac | Anacardiaceae | native | 1 | 2 | tree |
| Rosa multiflora | multiflora rose | Rosaceae | non-native | 0 | 1 | shrub |
| Rubus occidentalis | black raspberry | Rosaceae | native | 0 | 2 | shrub |
| Rumex crispus | curly dock | Polygonaceae | non-native | 0 | 0 | forb |
| Sambucus canadensis | elderberry | Caprifoliaceae | native | 4 | -1 | shrub |
| Schoenoplectus fluviatilis | river bulrush | Cyperaceae | native | 4 | -2 | sedge |
| Securigera varia | crown vetch | Fabaceae | non-native | 0 | 2 | forb |
| Solanum caroliniana | Carolina horse-nettle | Solanaceae | native | 0 | 1 | forb |
| Solanum dulcamara | bittersweet nightshade | Solanaceae | non-native | 0 | 0 | forb |
| Soliado altissima | tall goldenrod | Asteraceae | native | 1 | 1 | forb |
| Symphyotrichum pilosum | frost aster | Asteraceae | native | 0 | 1 | forb |
| Taraxacum officinale | common dandelion | Asteraceae | non-native | 0 | 1 | forb |
| Tilia americana | basswood | Tiliaceae | native | 5 | 1 | tree |
| Toxicodendron radicans | eastern poison ivy | Anacardiaceae | native | 2 | 0 | vine |
| Typha x glauca | hybrid cattail | Typhaceae | non-native | 0 | -2 | forb |
| Ulmus americana | American elm | Ulmaceae | native | 3 | -1 | tree |
| Ulmus pumila | Siberian elm | Ulmaceae | non-native | 0 | 2 | tree |
| Verbascum blattaria | white moth mullein | Scrophulariaceae | non-native | 0 | 1 | forb |
| Verbascum thapsus | common mullein | Scrophulariaceae | non-native | 0 | 2 | forb |
| Verbena hastata | blue vervain | Verbenaceae | native | 4 | -1 | forb |
| Verbena urticifolia | white vervain | Verbenaceae | native | 2 | 0 | forb |
| Viburnum dentatum | arrowood viburnum | Caprifoliaceae | non-native | 0 | 0 | shrub |
| Vitis riparis | riverbank grape | Vitaceae | native | 1 | -1 | vine |
| | | | | | | |

Identified only to species: Impatiens sp.

Animal Species

| Taxonomic Name | Common Name | Family |
|---------------------|--------------------------|----------------|
| Aves | | |
| Agelaius phoeniceus | Red-winged Blackbird | Icteridae |
| Aix sponsa | Wood Duck | Anatidae |
| Melospiza melodia | Song sparrow | Passerellidae |
| Turdus migratorius | American Robin | Turdidae |
| Insecta | | |
| Bombus sp. | bumblebee | Apiaceae |
| Calopteryx maculata | ebony jewelwing | Calopterygidae |
| Danaus plexippus | monarch | Nymphalidae |
| Haematopis grataria | chickweed geometer | Geometridae |
| Pieris rapae | cabbage white | Pieridae |
| Sphex ichneumoneus | great golden digger wasp | Hyenoptera |
| | | |