

1.0 SCOPE OF SERVICES

Project Purpose:

The Century Farms Neighborhood Association in Naperville would like to remedy the serious safety and aesthetic challenges involved with Pond Number 3, one of the stormwater detention ponds. V3 Companies Ltd. (V3) made a site visit to Pond 3 on September 10th in order to provide recommendations on what can be done to abate the hazard and minimize the algae blooms and foul odors. V3 is providing the following: evaluation results, describe the potential project scope options, proposed cost estimates, and staffing experience resumes. Ed Belmonte of V3 is available to attend the September 30th Century Farms Neighborhood Association meeting to present our proposed services.

Project Tasks:

This proposed scope of services should be considered a draft concept that is subject to revision after the award of the contract, based on discussion with the Century Farms Neighborhood Association with regard to options and the cost-effectiveness of these proposed services. V3 has measured the pond to be 1.27 acres from aerials, however, the information provided to be states that the pond is 1.9 acres. These disparities will be ironed out during the design portion of the project. Pond Number 3 currently possesses two water circulators, which V3 feels are unnecessary and should be converted into fountains or aerators. The scope has been organized into the following tasks.

Task 1: Creating a Design for Pond Number 3:

V3 proposes to create a design for modifications to Pond Number 3 that will be reviewed by Century Farms Neighborhood Association to accommodate the association's desired product. The final design will be at a level for internal coordination of V3 staffing as the "Design-Build" contractor. The final design will not include design specifications for bidding the project competitively. Design will include erosion control measures for west shoreline, ten-foot wide safety shelf planting plan, dredging plan, disposal area plan and erosion control plan.

Task 2: DuPage County Stormwater Ordinance Permitting:

V3 proposes to identify the DuPage County and City of Naperville stormwater permit requirements and acquire all necessary project related permits.

Task 3: Dredging Activities:

V3 projects that approximately 6,000 cubic yards of sediment will be removed from Pond #3. V3 has estimated the pond excavation area to be 0.97 acres, assuming a ten foot wide safety shelf along the entire shoreline and a 4to1 slope extending from the safety shelf to a maximum depth of seven feet. The approximate volume of sediment removed is projected to cost \$14 per cubic yard. No field depth of sediment investigation has been performed. Sediment quantities and associated costs may vary based on more accurate field verification or implementation, a cost savings may be achieved if this estimated volume of sediment is less than our current estimate.



Task 4: Placement of Dredge Spoil, Seeding and Blanketing:

V3 proposes to create a six foot tall berm to contain the approximate one acre area for spreading the 6,000 cubic yards of removed sediment. V3 will spread the sediment and seed/blanket the area, anticipated to be up to two acres. V3, at this time, recommends seeding with fescue and/or a type of “no-mow” turf. V3 will repair access disturbances to lawns, shoreline and Pond Number 3 from heavy machinery used during Task 2 and 3.

Task 5: Emergent Zone Planting of Safety Shelf:

V3 proposes to plant 1,280 plugs within the 0.32 acre planting shelf, this area is shown on the attached figure. The planting list will be provided to Century Farms Neighborhood Association for approval before installation will begin. Enclosures will be installed in an attempt to protect newly planted vulnerable plugs from waterfowl foraging. Planting enclosures will be removed at the end of the first growing season.

Task 6: Installation of Shoreline Stabilization Measures along West Shore:

V3 proposes to install appropriate shoreline stabilization measures along the eroding west shore of Pond Number 3. The measures will be reviewed and approved by Century Farms Neighborhood Association prior to implementation. Potential methods include but are not limited to: A-Jacks, coir logs, soil lifts, et al.



View of Pond Number 3

2.0 COST ESTIMATE


The Pond Number 3 Modification Project for Century Farms Neighborhood Association is estimated to cost \$118,620.00. The listed cost estimates include salaries, overhead, fees and direct expenses.

Project Task		Cost
1	Design of Pond #3	\$ 3,000.00
2	Stormwater Ordinance Permitting	\$ 6,000.00
3	Dredging Activities	\$ 84,000.00
4	Placement of Dredge Spoil, Seeding and Blanketing	\$ 15,000.00
5	Emergent Zone Planting of Safety Shelf	\$ 6,620.00
6	Installation of Shoreline Stabilization Measures	\$ 10,000.00
Proposed Project Cost-Estimate		\$ 124,620.00



View of Potential Sediment Disposal Area



 <p>V3 Companies 7325 Janes Avenue Woodridge, IL 60517 630.724.9200 phone 630.724.9202 fax www.v3co.com</p>	<p>TITLE:</p> <p style="text-align: center;">Pond Planting Area</p>	<p>PROJECT AND SITE LOCATION:</p> <p style="text-align: center;">Century Farms - Pond</p>		
	<p>BASE LAYER:</p> <p style="text-align: center;">AirPhotoUSA - 2006</p>	<p>PROJECT No.</p>	<p>FIGURE:</p>	<p>SHEET: 1 OF: 1</p>
	<p>CLIENT:</p> <p style="text-align: center;">Century Farms Neighborhood Assosiation</p>	<p>QUADRANGLE:</p>	<p>DATE:</p> <p style="text-align: center;">09-19-08</p>	<p>SCALE:</p> <p style="text-align: center;">See Scale Bar</p>

Similar Project Experience



Before



During



After



ED BELMONTE

SENIOR ECOLOGIST/PROJECT MANAGER

Education

Bachelor of Science
Water Resources
University of Wisconsin
Stevens Point

Continuing Education

Certified Wetland Specialist,
Lake County Stormwater
Management Commission:
Illinois, C-036 (2002-2007)

Qualified Wetland Review
Specialist, Kane County
Stormwater Management
Committee: Illinois, W-053
(2006-07)

Certificate of Training, Corp
Wetland Delineation Manual
Institute for Wetland &
Environmental Education &
Research (1999)

Instream Flow Incremental
Methodologies 305 Field Survey
Techniques, Colorado State
University and U.S.G.S. (1997)

Publications

Holistic Site Development
with Floodplain, Stream
Habitat and Wetlands, by
Wolterstorff, Gray, Milner
and Belmonte. Proceedings
of the World Water &
Environmental Resources
Congress, 2003.

Mr. Belmonte is a Senior Ecologist and Project Manager with V3 and has over seventeen years of experience in a variety of water quality, fishery and aquatic resource projects. His areas of expertise include wetlands, water quality, aquatic ecology, aquatic invertebrates, downstream fish passage, and bioassessments. He manages all of V3's archaeological investigations. He has experience in the licensing, re-licensing and permitting process with various federal, state and county agencies.

Project Experience

Center Lake Diagnostic Study, Warsaw, Indiana – Project Manager for the evaluation of this 9,611-acre watershed. The Center Lake Conservation Association, Inc. in cooperation with the Indiana Department of Natural Resources, Division of Soil Conservation and V3 Consultants performed a Lake and River Enhancement (LARE) program study on the conditions of Center Lake and the Center Lake watershed. Historical information on land use, waterway connections and pertinent information on climate, geologic history and topography were researched. Water quality, biological and habitat conditions of the lake and surrounding features of the watershed, which includes macroinvertebrate communities has been evaluated. Center Lake's shoreline condition, streambank and channelbank erosion, and sedimentation were analyzed. The conclusions of this study assisted with the recommendations for watershed improvements to allow for an improved water quality to Center Lake. Mr. Belmonte performed public presentations on the findings of this study.

Lake Maxinkuckee Emergent Vegetation Restoration Design-Build Project, Marshall County, Indiana – Project Manager and field ecologist for re-establishing native aquatic vegetation along 80 feet of the northwest shoreline of Lake Maxinkuckee. Performed site evaluation and design, provided permitting assistance, construction and installation, staking, wave breaks, waterfowl protection, and vegetation management and monitoring. Installed over 1,200 rootstocks, plugs, tubers and containers of plants. Re-established four eco-zones including: shoreline; shallow emergent; deep emergent; and floating aquatic.

Aquatic Plant Management Plans, Elkhart, Fulton, Kosciusko, Marshall, Pulaski & Starke Counties, Indiana – Project Manager and field ecologist performing aquatic vegetation surveys to identify species distribution and abundance using IDNR Tier I and II methodology. Developed Aquatic Plant Management Plans to keep Eurasian watermilfoil under control or potentially eradicated. Presented results locally at public meetings and received approval for recommendations at IDNR meeting with LARE staff and district fisheries biologists. Mr. Belmonte performed studies, wrote plans, and presented results for Bass Lake, Center Lake, Heaton Lake, Lake Bruce, Lake Maxinkuckee, Lake Wawasee and Winona Lake.



ED BELMONTE

SENIOR ECOLOGIST/PROJECT MANAGER

Pape Island Shoreline Stabilization Project, Fox Lake, Illinois – Project Manager for the bioengineered stabilization of 2,000 lineal feet of shoreline on Pape Island. This island is located on Pistakee Lake, Fox Chain O'Lakes, Lake County, Illinois. This project is being performed for the Fox Waterway Agency and the Illinois Department of Natural Resources - Office of Water Resources. The project is incorporating various bioengineering techniques for shoreline stabilization. Mr. Belmonte coordinated with the permitting agencies that include U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, Illinois Department of Natural Resources, Lake County Stormwater Management Commission and McHenry County Department of Planning and Development. Several round table discussion groups were held with multiple agencies to incorporate a wide range of special designs into the bioengineered stabilization methods. Five different methods were implemented in the stabilization of the island.

Anderson River Watershed Diagnostic Study, Perry-Spencer-Dubois-Crawford Counties, Indiana – Project Manager for the 257 square mile watershed that has over one-third of it's watershed within the Hoosier National Forest. The two major land uses include Undeveloped Forest (55%) and Agricultural Uses (44%). Benthic macroinvertebrate communities, instream and riparian habitat and water quality were evaluated at 25 stations within the watershed to prioritize locations for land use best management conservation practices. Subwatershed were identified as priority for biological community degradation, lacking quality instream and riparian habitat, excessive spring nitrogen levels, high bacteria concentrations, and most significant loading sources for sediment and phosphorus.

Pigeon Creek Watershed Management Plan, Steuben County, Indiana – Project Manager for this 124 square mile watershed plan. Clients for this project included the Steuben County Soil and Water Conservation District and the City of Angola. Researched available data and performed watershed's data analysis in creating a watershed management plan. Coordinated GIS watershed mapping. Participated in nine steering committee stakeholder discussion groups and held four public meetings to discuss the watershed management plan.

Barr Creek Post Construction Monitoring, Vanderburgh County, Indiana – The Vanderburgh County Soil and Water Conservation District and the Indiana Department of Natural Resources retained V3 to perform a LARE program post-construction monitoring study. Mr. Belmonte is the Project Manager and lead technical ecologist for this project. The study includes an analysis of historical trends in land use and how it corresponds to water quality changes, an evaluation of land and water conservation practices, analysis of water chemistry, analysis of benthic macroinvertebrate communities, and an evaluation of habitat. A statistical analysis will predict the relationships between physical, chemical and habitat factors as they compare to biological quality. Streams surveyed included Barr, Big and Rush Creeks.

Lost River Water Quality Analysis, Orange County, Indiana – The Orange County Soil and Water Conservation District and the Indiana Department of Natural Resources retained V3 to perform a LARE program water quality analysis. Study tasks include an analysis of historic trends in land use as it relates to water quality; an evaluation of current and past land and water conservation practices; chemical analysis of water quality; macroinvertebrate community analysis; survey of riparian habitat; and a statistical analysis to predict the relationships between physical, chemical and habitat factors compared to the biological quality. Mr. Belmonte is the Project Manager and the lead technical ecologist for this project.

Kokomo Creek Final Water Quality Monitoring Study, Howard County, Indiana – The Howard County Soil and Water Conservation District and the Indiana Department of Natural Resources retained V3 to perform a LARE program watershed study. The Final Water Quality Monitoring Study compared water quality, habitat and macroinvertebrate data from 2004 to data that had been collected during the 1999 and 2000 Rapid Bioassessment Study of Kokomo Creek. Mr. Belmonte is the Project Manager and lead technical ecologist for this project. The survey included Kokomo and Little Deer Creeks.