

Preliminary Design Meeting Minutes North Winnequah Park Lagoon Improvements City of Monona, Wisconsin October 23, 2017, 9 A.M.

Invitee	Representing	Present Absent
Dan Stephany	City of Monona (City)	
Brad Bruun	City of Monona	
Jacob Anderson	City of Monona	
Josh Straka	Strand Associates, Inc.® (Strand)	
Jon Lindert	Strand Associates, Inc.®	
Luke Hellermann	Strand Associates, Inc. ®	

1. Sediment Sampling

Collected three samples in the northwestern portion of the project site.

2. <u>Topographic Survey</u>

- a. Completed on June 14, 2017 (augments previous survey).
- b. Surveyed cross sections every 25 feet over approximately 600 feet consisting of top of sediment and bottom of sediment shots.
- c. Surveyed cross sections every 25 feet over approximately 1,417 feet consisting of overbank land shots.

3. <u>Preliminary Engineering Drawings</u>: See Attachment A of the draft deliverable letter.

The City would like to proceed with final design and bidding of both the Phase 1 (required to be removed by Wisconsin Department of Natural Resources (WDNR)) and Phase 2 (as part of the larger Winnequah Park Master Plan) dredging extents shown on the drawings. Jake is working with Blake at Ayres Associates to complete a master plan for Winnequah Park in 2018 (likely including paths, bridge, native restoration along lagoon, and fishing pier(s)). Jake likes the City of Madison's Tenney Park Lagoon shoreline restoration look with stone steps and native restoration with coir fiber logs. Jake envisioned Strand would design the Winnequah Park improvements coming out of the Ayres Associates Master Plan. Jake said if the augmentative riprap is used, then he would like to see a 3-foot native prairie buffer upslope of the riprap (to help with aesthetics and goose control) as well as a management plan for the riprap area. Detail 2/5 in the drawings should be modified to show the native buffer and the cost updated to include the native buffer. The City may choose a different restoration technique after discussing this as part of the Winnequah Park Master Plan. Use of a coir fiber log and turf reinforcement mat is proposed in the channel coming into the lagoon. Use of the coir fiber log technique would require cutting back of the slopes around much of the pond to lay them back to a more reasonable slope.

Dan and Brad requested Strand run calculations of how much legacy phosphorus would be removed from the lagoon upon dredging using sediment sampling phosphorus concentrations and include this information in the letter.

4. <u>Preliminary Technical Specifications</u>: See Attachment B of the draft deliverable letter.

The City would like a pre- and post-construction survey of the lagoon. The pre-survey would be to quantify the top and bottom of sediment elevations. The post-survey would be to survey the final bottom elevation after dredging. Dan would like these surveys to be completed by Strand (potentially with contractor rodperson) to have the contractor vested in the survey. Dan would also like a pre-bid meeting and possibly pre-qualification of bidders. Dan said the City's current construction manual has verbiage related to quantities that should be include in the specifications.

It was discussed fish should be removed from the pond prior to construction commencement. It was discussed watertight trucks should be a requirement in the specifications.



5. <u>Preliminary Opinion of Probable Construction Cost:</u> See Attachment C of the draft deliverable letter.

Phase 1 Spreadsheet—The "for Phase 2 Sediments" reference at the bottom of the spreadsheet should be changed to "for Phase 1 Sediments." The Phase 1 spreadsheet should delete Item 9, as this will likely have to be landfilled because materials will be intermixed with the polychlorinated biphenyl (PCB)-contaminated materials during dredging operations. The City is fine with the limits of Phase 1 extending to 33+10. In Item 10, Station 33+60 should be 32+60. Renumber items after deleting Item 9. Modify restoration quantities and costs to account for native buffer upslope of augmentative riprap treatment. Delete the beneficial reuse costs at bottom of spreadsheet.

Phase 1 and 2 Spreadsheet—This spreadsheet needs to change the 33+60 station to 32+60 in Items 9 and 10. The "for Phase 2 Sediments" reference in the bottom of the spreadsheet should be changed to "for Phase 1 and 2 Sediments." Add TRM for above boulder revetment and 3-foot native buffer. Show buffer on boulder revetment detail. Modify quantities and costs accordingly.

6. Sediment Sampling Results: See Attachment D of the draft deliverable letter.

Luke said the red area polygon on Figure 2 of Strand's report to Mike Schmoller of the WDNR is the area the WDNR has indicated should be removed to obtain site closure. That sediment will require landfill disposal because of PCB and polycyclic aromatic hydrocarbon (PAH) contamination. Removal, followed by a site closure request will resolve the PCB issue in the North Winnequah Park Lagoon. All other sediments in the North Winnequah Park Lagoon could stay in place, but if removed, it would need to be landfilled or re-used/placed at an appropriate commercial/industrial site. There are elevated PAHs throughout the sediment sampled.

7. <u>Anticipated Permitting Requirements</u>: See Attachment E of the draft deliverable letter.

Permitting Meeting with Regulatory Agencies–Pending–Strand will set up a meeting with the WDNR to discuss permitting requirements for this project.

8. Tentative Project Schedule: See Attachment F of the draft deliverable letter.

The City may consider winter construction. The City requested Strand contact Homburg Contractors and RG Huston about this project with its thoughts on how it might approach construction of the project and whether winter construction would be feasible. Jake said he will seek Winnequah Park Master Plan concepts from Ayres Associates in January/February 2018, so Strand can design the lagoon improvements and any other park components by mid-fall 2018 to bid out such that construction could start in January/February 2019. Attachment F contemplates an extended schedule should bidding not take place until January 2019 with a construction start of spring 2019.

Dan said he would like Strand to prepare the Lake Planning Grant for the Final Design of the North Winnequah Park Lagoon Improvements (both Phase 1 and 2 extents). Design of park components coming out of the Winnequah Park Master Plan would be a separate task order between Strand and the City.

Milestone	<u>Tentative Date</u>
A/E Contract Signed	April 11, 2017
Sediment Sampling and Topographic Survey	June 14, 2017
A/E Amendment Contract Signed	June 21, 2017
Preliminary Design (Draft)–Complete	October 10, 2017
Progress Meeting	October 23, 2017
Preliminary Design (Final)–Complete	November 15, 2017
Future Schedule	See Attachment F



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9. Reach 64 TMDL Stormwater Plan (Continued Discussion from October 12, 2017)

For the 2018 Task Order for this work, Strand is to delete the traffic calming bumpout/bioreention basin at the single intersection and add a wet detention pond at the City-owned abandoned right of way between McKenna Road and Midmoor Road, east of Kelly Place (coupled with a stormwater treatment chamber downstream at Winnequah), including the purchase of a home along Midmoor Road (north of the right-of-way along Midmoor Road).

Dan would like to be prepared to present an option to Council/Public Works Committee that considers not fully achieving the required 40 percent total suspended solids (TSS) and 27 percent total phosphorus (TP) reduction, but doing the City's part in protecting the environment (Lake Monona and Squaw Bay) by constructing the more cost effective alternatives or those that provide synergies with other planned projects (i.e., Stonebridge Park or Winnequah Park improvements). In this scenario, the following alternatives may likely be pursued: Stonebridge Park regenerative stormwater conveyance (RSC)/stormwater treatment device treating a portion of Basin 3, Maywood Park RSC/grass swale or small wet pond treating Basin 7 upstream of the existing stormwater treatment device, wet pond upstream of Winnequah Road/Maywood Road intersection and stormwater treatment device at Winnequah treating Basin 8, increased street sweeping in targeted commercial/industrial areas in Reach 64. If these projects do not fully achieve the 40 percent TSS and 27 percent TP reductions in Reach 64, then Dan would like to purchase the remaining reductions from Yahara WINs even though this would not be consistent with the Yahara WINs Intergovernmental Agreement (IGA). In this regard, approval would need to be granted from Yahara WINs that the City of Monona has done the maximum extent practical (MEP) though there is no provision form MEP in the Yahara WINs IGA.

It should be noted projects in both Basin 7 and Basin 8 are eligible for 75 percent funding (with no cap on funding) through Dane County's Urban Water Quality Grant program and become more cost-effective for that reason. The Stonebridge project would also be eligible for County funding but at a 50 percent funding rate, up to \$100,000. All Best Management Practice (BMP) projects would also be eligible for the WDNR Urban Nonpoint Source and Stormwater Construction grant that provides 50 percent funding up to \$150,000. A Yahara WINs grant may also be a possibility (\$20,000 per project), but Yahara WINs may want to claim credit for the pollutant reduction or at least for the portion of the pollutant reduction that its monetary contribution would be helping to fund.

Dan understands there are other options out there such as chemical treatment of wet ponds, porous pavement retrofits, and green roofs, but that these have their own drawbacks and should not be analyzed at this time.

Dan is interested in Strand helping to do a "Stormwater Management 101" for Council/Public Works Committee to make sure they understand the intricacies of MS4, TMDL, and Yahara WINs compliance.

The slope intercept of the RSC system at Stonebridge Park should be shown in plain view on the conceptual drawings.

Prepared and respectfully submitted by Jon H. Lindert.

c: All Participants

Jerry Hutzler, Strand Associates, Inc.®