

MEETING DATE: August 25, 2016

TITLE: Approval of Memorandum of Agreement with the City of Edina and authorization of consultant contracts to develop an integrated concept plan for Arden Park

RESOLUTION NUMBER: 16-071

PREPARED BY: Renae Clark

E-MAIL: rclark@minnehahacreek.org

TELEPHONE: 952-641-4510

REVIEWED BY: Administrator Counsel Program Mgr. (Name): _____
 Board Committee Engineer Other

WORKSHOP ACTION:

Advance to Board mtg. Consent Agenda. Advance to Board meeting for discussion prior to action.
 Refer to a future workshop (date): _____ Refer to taskforce or committee (date): _____
 Return to staff for additional work. No further action requested.
 Other (specify): FINAL ACTION

PURPOSE or ACTION REQUESTED:

1. Authorization to enter into a Memorandum of Agreement with the City of Edina to collaborate in the development of a concept plan for Arden Park which integrates creek restoration, natural resource improvements and broader community goals for the park. The Agreement obligates the City to contribute \$25,000 toward the conceptual park plan
2. Authorization to contract with Hart Howerton for the amount of \$101,500 to lead the concept design for Arden Park with subconsultant Inter-Fluve providing a 30% design for elements related to creek restoration
3. Authorization to contract with Wenck Associates for the amount of \$12,900 for site survey, tree survey and wetland delineation services.

PROJECT/PROGRAM LOCATION:

Minnehaha Creek at West 54th St. in Edina

PROJECT TIMELINE:

2016 – Concept design and public engagement process

Arden Park Concept Design Schedule			
	Meetings	Project Development and Process	Schedule
Design Meetings, schedule	Technical Mtg #1	Site visit and prep mtg for community Mtg	September
	Community Mtg #1		
	Kayak Mtg		
	Technical Mtg #2	Review two draft concepts	

	Community Mtg #2	present two draft concepts	October - November
	City Council Briefing	Present alternatives, summary of input and recommendation	
	MCWD Briefing of alternatives and recommended alternative	Present alternatives, summary of input and recommendation	
	Technical Mtg #3	Assess input and generate final direction	
	Community Mtg #3	Present final concept	December - January
	City Approval of Concept		
	MCWD Approval of Concept and Order Project		

2017 – Design

2018 – Construction

PROJECT/PROGRAM COST:

Fund name and number: 54th St Fish Bypass, 3147
 Current budget: \$94,579
 City contribution: \$25,000
 Expenditures to date: \$0
 Requested amount of funding: \$119,400

PAST BOARD ACTIONS:

October 10, 2013 Res. 13-101: Authorization to investigate feasibility of removing the 54th St. grade control structure in Minnehaha Creek, while maintaining recreational functionality
 March 13, 2014 Res. 14-020: Authorization to work with the City of Edina to incorporate fish passage into the 54th St. road reconstruction project
 May 22, 2014 Public hearing (No action required)
 September 25, 2014 Res. 14-075: Ordering of the 54th St. Bypass Channel Project in the amount of \$118,750
 January 29, 2015 RES. 15-009: Authorization to pursue restoration of Reach 15 in lieu of bypass channel project

SUMMARY:

The Arden Park stream restoration project aligns with the Minnehaha Creek Watershed District’s long term vision to restore the ditched and straightened creek corridor after years of urbanization have neglected its natural resource, recreation, and community values. The project expands on downstream restoration restoring native creek buffers on private properties along Minnehaha Creek and will incorporate planned repairs resulting from the 2014 high water which the District has received FEMA funding to support.

The proposed restoration approach will be developed through a public engagement process. The concept plan and project design will address City goals identified in its Strategic Parks Plan of safety, natural resource restoration and recreation, in addition to District goals to improve aquatic habitat and creek corridor restoration, integrating our work into the broader community goals achieving maximum public benefit.

The requested Board action is to approve a Memorandum of Agreement (MOA) with the City of Edina which aligns our goals and responsibilities for project development and to approve a contract with Hart Howerton to develop the concept design. The Hart Howerton contract includes subcontracts from Inter-Fluve which completed project feasibility analysis and John Anderson who was identified as an instream recreation consultant. Edina City Council approved the MOA on August 16, 2016. The terms of the MOA, in general,

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provide for a jointly lead public participation process organized by the District to develop a concept plan for Arden Park. The Agreement provides for approximately 50% cost share of the overall park concept plan (\$25,000) with MCWD funding 100% of the stream restoration design component which will be incorporated into the overall concept park plan. The needed MCWD funds for 2016 work are available in the current project budget. The fees included in the scope of services are summarized as follows:

Hart Howerton	\$53,300
Inter-Fluve	\$45,700
John Anderson	\$2,500
Total	\$101,500
Inter-Fluve Additional Service	\$6,000
Wenck (project survey and wetland delineation)	\$12,900

The concept plan is tentatively scheduled to be complete and approved in January. Design is scheduled for 2017 and construction in 2018.

Background

In October 2013, the Board authorized staff to investigate alternatives for the West 54th St. grade control structure in Edina in coordination with the City’s proposed street reconstruction. The structure was recommended for removal in the District’s 2003 Stream Assessment because it is a barrier to fish passage and creates an impoundment causing accumulation of sediment, degrading upstream aquatic habitat.

Minnehaha Creek is impaired for both fish and macroinvertebrate index of biotic integrity (IBI). While there are a number of stressors affecting fish IBI in Minnehaha Creek, habitat and connectivity are critical components.

The public engagement process implemented by the City of Edina and MCWD revealed that the grade control structure caused a standing wave to form at the downstream end that was a regional attraction for whitewater paddlers and the Board directed that project alternatives maintain the existing recreational functionality. For this reason, staff recommended a bypass channel alternative that would allow for fish passage but would leave the structure intact. The Board ordered the project on September 25, 2014, and the pipe portion of the bypass channel was incorporated into the City’s bid package for W. 54th St.

The street reconstruction project was delayed due to bid prices and it was subsequently discovered that, following the record flooding of 2014, the wave is no longer forming and there has been further deterioration of the spillway presenting potential entrapment hazards for paddlers. Given the loss of the recreational feature, staff recommended that the District revisit removal of the structure and restoration of the creek and the Board authorized this direction in Resolution 15-009 on January 29, 2015. A larger-scale stream restoration effort incorporating recreational amenities, improving safety, and enhancing riparian vegetation throughout the Park has been supported by the City of Edina in a letter of support. In addition, the Rapids Riders Club has provided written support to remove the grade control and encourages the incorporation of new whitewater features in tandem with meeting ecological goals. The group organized a subcommittee “Friends of the Wave” to participate in the design of the project.

ATTACHMENTS:

1. Memorandum of Agreement
2. Hart Howerton and subconsultant scopes of services
3. Wenck scope of services

RESOLUTION

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- WHEREAS, the WMP capital improvement program includes a Minnehaha Creek Stream Restoration Project that encompasses stream restoration work to enhance riparian corridor vegetation; stabilize streambanks through bioengineering; add fish and macroinvertebrate habitat; create pool-riffle complexes; incorporate woody debris; remove select grade controls; and enhance educational and recreational opportunities; and
- WHEREAS, Minnehaha Creek is on the State's Impaired Waters List for both fish and macroinvertebrate index of biotic integrity; and
- WHEREAS, there is a grade control structure in Minnehaha Creek at the West 54th St. bridge in Edina that was recommended for removal in the 2003 Stream Assessment because it is a barrier to fish passage and creates an impoundment causing accumulation of sediment and degradation of aquatic habitat upstream; and
- WHEREAS, in October 2013, the Board authorized staff to investigate alternatives for the West 54th St. grade control structure in coordination with the City of Edina's proposed street reconstruction; and
- WHEREAS, a standing wave formed at the downstream end of the grade control structure that was a regional attraction for whitewater paddlers, and the Board directed that any alternatives maintain the existing recreational functionality; and
- WHEREAS, staff recommended a bypass channel alternative that would allow for fish passage but would leave the structure intact, and the Board ordered the project on September 25, 2014; and
- WHEREAS, it was subsequently discovered that, following the record flooding of 2014, the standing wave is no longer forming and there has been further deterioration of the spillway presenting potential entrapment hazards for paddlers; and
- WHEREAS, given the loss of the wave, the Board authorized staff to pursue plans to remove the grade control structure and restore the upstream reach throughout Arden Park; and
- WHEREAS, representatives of the Rapids Riders paddling group have expressed their support for this approach; and
- WHEREAS, staff has negotiated a Memorandum of Agreement with the City of Edina to coordinate in the development of a concept plan for Arden Park which incorporates stream restoration and further community goals as identified in the City's 2015 Strategic Parks Plan including natural resources restoration, recreation, safety and access; and
- WHEREAS, Board governance policy states that the Administrator may not retain professional services in an amount in excess of \$25,000 without obtaining competitive quotes or bids, or utilizing a Qualification Based Selection process;

WHEREAS, however, staff has solicited a single proposal from Hart Howerton and subconsultant Interfluve and asks that the Board accordingly concur in the non-competitive selection, due to their unique experience of integrated water resources and park planning for the District on Cottageville Park and Minnehaha Preserve and their familiarity with the proposed project through previous feasibility analysis, to engage the public and produce a concept plan for Arden Park that integrates stream restoration and natural resource improvements with park improvements and public amenities such as creek access, recreation and safety;

WHEREAS, staff proposes that the District engineer also be authorized to provide services necessary to support the concept plan development, including site survey, tree survey and wetland delineation services;

NOW, THEREFORE, BE IT RESOLVED the Minnehaha Creek Watershed District Board of Managers hereby approves a Memorandum of Agreement with the City of Edina providing for the coordination of a concept design for Arden Park integrating creek restoration and authorizes the Board President to execute the agreement;

BE IT FURTHER RESOLVED the Board of Managers hereby authorizes the District Administrator, on advice of Counsel, to execute the project concept design contract with Hart Howerton, that will include Hart Howerton subcontracts with Interfluve and John Anderson, in the amount of \$101,500 and to task Wenck Associates in an amount up to \$12,900.

BE IT FURTHER RESOLVED the Board of Managers establishes a total project budget of \$119,400 and authorizes the Program Director, in his judgement and on the recommendation of staff, to authorize contract amendments obligating the District up to that amount.

Resolution Number 16-071 was moved by Manager _____, seconded by Manager _____.
Motion to adopt the resolution ___ ayes, ___ nays, ___ abstentions. Date: August 25, 2016.

Secretary Date: _____

MEMORANDUM OF AGREEMENT

This Memorandum of Agreement (MOA) is made between the City of Edina, a Minnesota municipal corporation (“City”), and the Minnehaha Creek Watershed District, a watershed district and political subdivision with powers at Minnesota Statutes Chapters 103B and 103D (“District”).

Recitals and Statement of Purpose

A. The Minnehaha Creek corridor has sustained impacts related to its water quality, channel stability, habitat and public use opportunities as the result of development, stormwater discharges and adjacent urban land uses;

B. The District and the City have worked together on several initiatives, and with other public and private stakeholders, for each party to achieve its goals and purposes in a manner that enhances and integrates the environmental, social, and economic value along the corridor;

C. In 2014, the District and City signed a memorandum of understanding (MOU) identifying areas of collaboration within the realms of land use planning, transportation, stormwater management, economic development, flood mitigation, parks and public land management, greenway development and water resource improvements.

D. Under the 2014 MOU, the District and City examined options for an existing grade control structure associated with the 54th Street bridge crossing of Minnehaha Creek, which is a barrier to fish passage, creates an impoundment that accumulates sediments, and degrades aquatic habitat upstream. The structure previously was a recreational amenity but now may be removed without diminishing recreational use of the channel.

E. The stream reach in which this crossing is located flows through Arden Park, a City park and recreational property. Channel habitat improvement must involve the City so that it supports current and future public use of Arden Park, is consistent with the goals of the City’s strategic plan for parks, recreation and trails, and integrates the riparian environment into the public use experience.

F. Since 2014, the City and the District individually and together have significantly engaged the neighborhood and a broader set of interested parties in potential channel, riparian and park improvements. It is important that this continuing engagement be reflected in the design for District resource improvements and City park improvements.

G. This MOA establishes a cooperative framework within which a Concept Arden Park Restoration Plan for channel (hydraulic), natural resource and park improvements may be developed jointly, and is intended by the parties to be legally binding.

Terms

1. The parties will initiate a planning process that identifies potential improvements to Arden Park with enhancements to the hydraulic channel, riparian water resource, , natural resource, soil stability, and drainage consistent with the following project goals:
 - Restoration of natural stream function and fish passage by actions including removing the grade control structure;
 - Water resource and riparian habitat improvements which will enhance creek access and draw attention to the role of natural elements in visual composition of the park;
 - Natural resources, surface water, soils stability and drainage improvements which will provide opportunities to enhance existing and future park recreation value.
 - Public safety.
2. The District will develop a Concept Arden Park Restoration Plan development process that incorporates public engagement, and will transmit it to the City for review and concurrence. The parties expect that the process generally will follow the steps and schedule of Attachment A hereto.
3. The District will coordinate outreach and engagement of the neighborhood and the broader interested public in development of the Concept Plan, and will be responsible for process facilitation including public notice, meeting space and similar administrative matters. The parties will co-lead public sessions and the City will coordinate and assist the District in this effort.
4. The District will develop a Concept Arden Park Restoration Plan for improvements based on the above project goals and community input, and with the assistance of engineering and design consultants as it may retain. The City will timely advise the District and its consultants, and timely supply relevant information, as to recreational park improvements and programming, treatment of existing and potential park structures, and City interests with respect to the integration of park uses with channel and riparian improvements. In addition to the engineering and design consultants that the District will retain, each party will provide for the capacity necessary to support its participation in the process. Each party will timely inform and consult with the other during the Concept Arden Park Restoration Plan development process. Concerning channel and riparian improvements, the concept design may extend beyond the boundaries of Arden Park as it may be defined.
5. The intent of the parties is that the planning process will potentially lead to a partnered project incorporating water resource and park improvements. However, neither party has yet determined that it will proceed with design or construction of a project. Therefore, it is the parties' intent that the Concept Arden Park Restoration Plan allow for either party to proceed with design and construction within its realm of interest even if the other party has determined not to do so, or the parties determine to proceed on different schedules.

6. District and City staff will cooperate to present the final Concept Arden Park Restoration Plan to the City Council and the District Board of Managers, and to gain the support of each for that plan.

7. The Concept Arden Park Restoration Plan is intended to establish a framework within which a subsequent designer can proceed with relative confidence that, pending details, the design will be acceptable to the City Council, the District Board of Managers and interested members of the community. The Concept Plan development process, therefore, is intended to identify and integrate relevant policy judgments of the Council and Board of Managers and resolve basic questions of use, space and form on which design will rest.

8. The Concept Plan components are expected to have interrelated water resource and park improvement elements. The City will consider incorporating into its capital improvement program, so as to be eligible for progressing to construction, interrelated park improvement sufficient for the District to proceed with its water resource improvements even if the City determines not to proceed to full implementation of potential park improvements.

9. The parties will work cooperatively to solicit grant funds that may be available to fund improvements identified in the Concept Plan.

10. If the parties elect to proceed with design, they will cooperate to prepare and execute a subsequent agreement to establish roles, responsibilities and financial obligations for that activity.

11. The following individuals will be the primary District and City contacts for matters concerning this MOA. Either party may change the designated contact by notifying the other party:

City

Ross Bintner, Engineer
City of Edina
7450 Metro Blvd.
Edina MN 55439
952-903-5713
rbintner@edinamn.gov

MCWD

Rena Clark, Planner-Project
MCWD
15320 Minnetonka Blvd.
Minnetonka MN 55345
952-641-4510
rclark@minnehahacreek.org

10. The City will reimburse the District for 50 percent, not to exceed \$25,000, of planning consultant fees as referenced in paragraph 4 above, excluding fees for subtasks concerning engineering design of District channel and riparian improvements as will be separately identified in the planning scope of work. Otherwise, each party will bear the costs of its participation in the activities described herein.

11. Either party may terminate this MOA on thirty (30) days advance written notice to the other party.

CITY OF EDINA

**MINNEHAHA CREEK
WATERSHED DISTRICT**

By: _____
Scott Neal, City Manager

By: _____
Lars Erdahl, District Administrator

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ATTACHMENT A
Tentative Process and Schedule for Concept Plan Development

1. Gather information and develop ideas (September 2016)
 - a. Public meeting 1: Design principles and programming assessment
 - b. Technical Advisory Team* meeting 1: review design principles, programming and public input
 - c. Produce design alternatives based on stakeholder and technical input

2. Design alternatives assessment (Early October 2016)
 - a. Public meeting 2: Review and solicit input on two design alternatives
 - b. Technical Advisory Team meeting 2: review public input on design alternatives
 - c. Revise design alternatives and select preferred alternative based on public and technical input to create a Concept Plan that includes a schematic design and a preliminary itemized cost opinion

3. Concept Plan review (October 2016)
 - a. Public meeting 3: Review Concept Plan
 - b. Technical Advisory Team meeting 3: Review public comments on Concept Plan and provide direction
 - c. Finalize Concept Plan

4. Concept Master Plan approval (December 2016)
 - a. Public meeting 4: Present final Concept Plan
 - b. Present Concept Plan to City Council and District Board of Managers

*Technical Advisory Team: District and City staff and consultants

Tentative Schedule for District Channel and Riparian Improvements

Concept Development: September - December 2016

Design Development: February - April 2017

Solicit bids for construction: 2017

Construction: January – July 2018

Robert L. Hart, AIA, AICP
David P. Howerton, FASLA, AICP
Craig Roberts
A. James Tinson, AIA

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August 8, 2016

Renaë Clark
Project Manager
Minnehaha Creek Watershed District
15320 Minnetonka Blvd
Minnetonka, MN 55345

Re: Proposal for Preliminary Design Services for the Arden Park Restoration Plan

Dear Renaë:

We are pleased to submit a proposal for Preliminary Design Services for the restoration of Arden Park in Edina, MN. It is our understanding that the Minnehaha Creek Watershed District and the City of Edina are interested in collaborating to plan a joint restoration project for Arden Park. Minnehaha Creek runs thru Arden Park and needs serious attention on a number of levels including hydraulic, fluvial, natural resource and park amenity upgrades. Two clear options for hydraulic and fluvial upgrades to the Minnehaha Creek have been proposed in preliminary studies by Inter-Fluve that not only has implications on how the creek moves thru the Park, but opens up opportunities for how a redesigned Park responds to a revitalized Creek design. The goal, therefore, is to develop two detailed fluvial concept designs focused on the renovation of Minnehaha Creek and subsequently integrate possible park amenities to create two respective designs for Arden Park. The process to develop park designs that not only respond to the respective Creek designs, but will include engagement of the park and creek users, the public and local residents through a set of public workshops implemented to inform and evaluate improvement scenarios, and develop a consensus vision and recommended Park Restoration Plan for Arden Park

As part of this exercise, you have asked Hart Howerton (HH) to incorporate Inter-Fluve and Kayak expert, John Anderson, into our proposal and have Hart Howerton oversee the entire Preliminary Design process as defined above.

THE TEAM

The composition of this design team and their roles we propose as follows:

- **MCWD** – The Minnehaha Creek Watershed District is the client and is responsible for overseeing the entire project, providing the necessary survey information, collecting all past surveys and information, interaction and agreements with the City of Edina, setting up the public meetings as well as the Technical Advisory meetings, permitting strategy and oversight and providing clarity and direction for the project. Renaë Clark will be the Planner in Charge and the point person for all communications.

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- **The City of Edina** – The City will be a partner with the MCWD in overseeing the project and will work with the MCWD to provide background materials, surveys and information and will be a key player in setting up the public meetings, assessing the various design approaches to the project and providing direction for the team.
- **Hart Howerton** – We will be the prime contractor for the project and will oversee the work of the team members as well as coordination with the MCWD and the City of Edina. Hart Howerton will also be the master planners of Arden Park and oversee the generation of the graphics and presentation materials for the various workshops. Roland Aberg will be the Principal in Charge.
- **Inter-Fluve** – Inter Fluve will be the fluvial engineers for the redesign of Minnehaha Creek and will be in charge of any and all elements that pertain to the creek redesign, cost opinion of improvements, graphic work that portrays the creek design alternatives, representation of any and all fluvial engineering, permitting process and modeling. Jonathan Kusa will manage staff and tasks. Marty Melchior will be the project fluvial engineer.
- **John Anderson** – John will be the whitewater/kayak consultant responsible for understanding the goals of the residents, the City, the MCWD and the team in terms of opportunities and constraints. John Anderson will be the Principal in Charge and will be the point person for all work and public interaction.
- **Technical Advisory Team** – The Technical Advisory Team will consist of Renae Clark (MCWD, select staff members from the City of Edina and City of Edina Park Board, Roland Aberg (HH) and Marty Melchior (IF). John Anderson (Whitewater Architect and Jonathan Kusa (IF) will attend for special sessions identified in the proposal.

COMMUNICATIONS

All communications between the team, the City and the MCWD will go thru or be copied to Renae Clark of the MCWD. Renae will be responsible for disseminating relevant information and keeping files of that information and those communications. She will also set up a project site where all information will be stored for the team. The City of Edina staff and the MCWD will establish a relationship and communication system to insure that both parties are in coordination. Roland Aberg of Hart Howerton will be the point person for all communications between either the MCWD or the City of Edina and the Hart Howerton team (Hart Howerton, Interfluve and John Anderson). At the outset of the project Hart Howerton will generate a roster of all the team members and firm staff members connected with the project and distribute contact information to everyone involved with the project.

Related to meeting notes, public workshop summaries and other information relevant to the team, Hart Howerton will work with Renae Clark (MCWD) to set up the communal files and storage website and inform all the relevant parties periodically as to the content on the website.

APPROACH

We have outlined a series of steps and deliverables for how this process could evolve as well as a set of fees specifically for Hart Howerton that would be appropriate to meet all of the goals and scope that has been requested. For clarification, the proposed fee shown with each Step is for Hart Howerton only. This approach works in conjunction with the scope tasks and fees proposed by Inter-Fluve and John Anderson which you will find in Attachments A and B.

Step One – Base Map Generation and Background Information Research – HH Fee: \$3,450 (See Attached Proposal for IF and JA Detail Scopes and Fees)

- MCWD / City of Edina will provide the team with an accurate site survey in both pdf and electronic format including topo at a minimum of 2 foot contour interval including all structures, pavements, existing utilities, improvements, creek edges and details, trees of 6 inch caliber or greater, property lines, easements or any other element that would have impact on developing design for the park. This would also include available 1-ft LiDAR data encompassing Arden Park as well as 500 ft. upstream and downstream of the park property and as-built information of the 54th Street Bridge.
- MCWD / City of Edina will also provide an aerial photo of the site at the same scale as the base survey and provide digital exhibits of just the aerial photo and one of the survey superimposed on the aerial. .
- HH will then generate base maps with title blocks for the team for the entire Park area and a specific base map for IF focused on the creek design work. . MCWD and the City of Edina will provide all other background information that pertains to Arden Park to HH including available information such as public surveys to date, list of park events and activities currently supported by the existing park, utility information and location, architectural drawings of existing facilities, irrigation system and any other information that would have impact on the park design. . HH will collect this information and review with Interfluve.

Deliverables:

- Base map at an approximate scale of 1" = 100' showing Arden Park and Creek with surrounding City and street system.
- Base Map at an approximate scale of 1" = 30 feet of the study area.
- Aerial photo of Arden Park and surrounding areas with labels
- Aerial photo of Arden Park study area.
- Enlarged base maps of the Creek relevant to the engineering detail for the fluvial design work.

**Step Two – Site Visit and Team Start-Up Meeting On-Site – HH Fee \$2,900
(See Attached Proposal for IF and JA Detail Scopes and Fees)**

- HH, Interfluve, City staff and the MCWD will meet on site for a detailed site visit. Interfluve and MCWD will present issues, concept ideas for creek enhancement, background understanding of the site, and potential opportunities that have been generated to date. City staff will present background information relevant to the park from their perspective. HH will look at the entire site and relationship of the community to the Park and assess the current status of vegetation and other built elements on the site.

Deliverables:

- Attendance for site visit will include Roland Aberg and John Larson (HH) as well as Marty Melchior, Jonathan Kusa (IF), Renae Clark (MCWD) and City of Edina staff.
- HH will produce an updated base map of Arden Park with notes and key observations of existing landscape, existing facilities and other criteria relevant to the design process.
- See Task 2 (2.2) in Attachment A related to field visit by Inter-Fluve related to Hydrologic and Geomorphic Assessment of the Creek.
- Photo summary of site conditions usable by the team, for public presentations and for development of the perspective sketches.

Step Three – Technical Advisory Team Meeting 1 – Fee \$1,700 - (See Attached Proposal for IF and JA Detail Scopes and Fees)

- Based on all of the above information, the Technical Advisory Team would meet to review design principles, programming and public input to date. Outcome would also determine the agenda for the Public Meeting and what information would be important to gain from the public.
- HH and MCWD team to develop an understanding of how the Public Meeting is to be conducted and how questions and information will be portrayed. HH would look at the existing exhibits to be used by the City for the upcoming Public Meeting and help determine any adjustments or other materials that might be needed for the Meeting.

Deliverables:

- Attendance at the Team Meeting would include Roland Aberg (HH), Marty Melchior (IF), John Anderson (JH – Call in) and City.
- Generation of an aerial photo exhibit of Arden Park in color copy and digital format with notes.
- Generation of a larger city wide aerial photo exhibit showing the context of the Park within the City.

Step Four – Public Meeting 1 – Fee: \$1,260

- HH would attend the public meeting to hear the issues, public concerns and ideas
- Public meeting set up would be by others. Based on input from the Public Meeting, City staff, the MCWD and HH would work together to form a clear program for the park that responds to public comments and represents agreed on team goals. This would be the basis for development of the park restoration plan alternatives by HH and Inter-Fluve.
- The MCWD, City of Edina staff and HH would set up a separate virtual meeting to allow John Anderson to receive input from kayaker stakeholders and to discuss opinions and desired outcomes. See JA proposal in the Attachments.

Deliverables:

- Attendance at the Public Meeting would include Roland Aberg (HH), Renae (MCWD) and City staff.
- Review of meeting notes from City and MCWD with edits
- HH would develop a summary report of the goals and direction for the project to move into design phase
- Virtual Meeting with kayaker stakeholders.

Step Five – Development of Conceptual Design for Two Alternatives – Fee: \$19,050

- HH and Inter-Fluve would have a work session to go thru all of the background materials and begin generating concept ideas for two alternatives.
- HH would generate concept ideas in a series of sketch plans, proposing a variety of opportunities while testing these with Inter-Fluve. HH would also pull a variety of images from other places to help the team to visualize concept ideas.
- Once we felt that we had some promising ideas, we would meet with the MCWD and City staff to discuss the plans. Based on that meeting we would do adjustments and other edits and create a more presentable set of plan solutions suitable to take to the public and other stake holders. See Attachment for process, deliverables and fees related to Inter-Fluve hydrologic and hydraulic Modeling, related concept plans, opinion of probable construction cost for fluvial system changes and technical memorandum.
- Coordinated with design work being developed by Inter-Fluve, HH would develop a preliminary cost opinion for upland and edge condition areas of the park adjacent to the creek that would be affected by the revised fluvial creek improvements. This cost estimate would be limited only to suggested improvements adjacent to the creek and would not include the entire Arden Park, even if other improvements to the park are depicted in the alternative restoration plan alternatives.

Deliverables:

- Concept level drawings at approximately 1" = 30' on trace overlays for each of the two alternatives.
- Meeting with MCWD and City staff to review strategy and design of the concepts
- Final color rendered concept plan for two alternatives at 1"= 30' suitable for presentation to the public
- Hydrologic, hydraulic modeling and related concept plans and opinion of probable cost and technical memorandum by Inter-Fluve as outlined in the Attachments
- Opinion of probable cost for park restoration adjacent to creek upland areas affected by stream improvements.
- Technical Memorandum by John Anderson related to kayak opportunities. See Attachments for details.

Step Six – Technical Advisory Team Meeting 2 – Fee: \$4,120

- The Technical Advisory Team would meet to review the alternatives and discuss the impacts and implications of each proposed solution.
- Clear input and direction would evolve from this meeting based on decisions from the Technical Advisory Team.
- The Advisory Team would determine the exhibits to be prepared for Public Meeting 2. HH would prepare the exhibits for electronic presentation and hard copies for wall presentation.

Deliverables:

- Attendance at the Advisory Team Meeting would include Roland Aberg (HH), Marty Melchior (IF), Jonathan Kusa (IF), Renae Clark (MCWD), City staff and Katherine.
- Summary document of comments from the meeting
- Minor adjustments to the drawing exhibits such as notes, etc.

Step Seven – Public Meeting 2 – Review and Solicit Input on Design Alternatives – Fee: \$1,140

- Generation of a Power Point Presentation including site photos, existing conditions aerial photo, two proposed alternative plans in plan format only, blowups from the plan alternatives, support drawings from HH and IF that might add clarity to the presentation, summary of goals, and any other support documents such as survey information and summary of public input to date.
- HH would attend the Public Meeting and do a Presentation to the Public.
- MCWD and City Staff would record the outcome of the meeting including comments

Deliverables:

- Power Point presentation including both alternative approaches, site photos, relevant images and/or clarification exhibits and summary clarification drawings as appropriate.
- Attendance at the public meeting would include Roland Aberg (HH), Marty Melchior (IF), Renae Clark (MCWD) and City staff.
- Wall exhibits would include the aerial photo and the two alternative plans.

Step Eight – Technical Advisory Team Meeting 3 – Fee: \$900

- Based on the results of the public workshop, the Team would assess all of the input and generate a final program for the Park including a selection of one alternative to move to a more developed Park Restoration Plan Level.
- Team would discuss final plan graphic, perspective support drawing and any other deliverable. Cost Opinion is not included in this proposal. Should the City require a cost opinion, this would be considered Additional Services.

Deliverables:

- Attendance at the workshop would include Roland Aberg (HH), Marty Melchior (IF), Renae Clark (MCWD) and City staff.
- Summary of the outcome of the session and goals for producing the final Park Restoration Plan

Step Nine – Development of Final Preliminary Park Restoration Plan – Fee: \$14,620

- Working with Inter-Fluve, the final selected alternative plan would then be developed to a much higher level of design with scaled areas of land uses, detail description of elements including recommendations for landscape zones, proposed creek edge conditions, pavement types, potential lighting and other improvements. This would be done in as a color rendered mater plan graphic at a scale no smaller than 1” = 50’.
- A color rendered perspective would also be generated that would take a vantage view point suitable for presentation that would help to “sell” the project concept as well as portray the vision for the park.
- Hart Howerton will also provide an annotated plan describing the preliminary approach to plant material including additions, preservation or deletions in a plan format compatible with Inter-Fluve’s creek restoration work.
- HH will provide an Opinion of Probable Cost for the final Park Restoration Plan limited to the upland areas immediately adjacent to the fluvial improvements being proposed for Minnehaha Creek and /or impacted by the proposed creek restoration. This does not include the overall Arden Park restoration even though other park improvements may be represented in the complete Arden Park

Restoration drawings. HH will work closely with Inter-Fluve to coordinate their Opinion of Probable Cost to insure completeness while not incurring redundancies.

- See Inter-Fluve process, deliverables and fees for 30% Preliminary Design in the Attachments.

Deliverables:

- Development of a more detailed park restoration plan
- Generation of a color rendered final plan with labels suitable for public presentation
- Generation of a color rendered perspective of the final plan
- Summary document describing the elements of the proposed plan.
- Opinion of Probable Cost limited to the Upland Areas immediately adjacent to the creek corridor.
- 30 % Preliminary Creek Design by Inter-Fluve as per Attachment

Step Ten – Public Meeting 3 – Presentation of the Final Preliminary Park Restoration Plan – Fee: \$4,160

- HH would develop an electronic Power Point presentation for the Public Meeting including the final Park Restoration Plan rendering with blow up areas, images of other places that would provide imagery for the design, the perspective rendering with blowup areas, other detail explanatory drawings from Interfluve, existing site photos, results of the past surveys and goals lists and any other item that would support explanation of the final design alternative.
- Hard copies of plans deemed appropriate would also be available to put onto the walls.
- HH would present the design concepts with the MCWD staff and City.

Deliverables:

- Power Point presentation
- Color prints of the plan and perspective
- Attendance at the Public Meeting would include Roland Aberg (HH), Renae Clark (MCWD) and City staff.

Note Related to Deliverables for all Steps and Tasks:

Hart Howerton deliverables will be provided in electronic format primarily in pdf format. Where color prints or other hard copies are required, they will be printed and delivered in size and quality relevant to the particular need. Inter-Fluve maps and other deliverables will also be in electronic format as pdf's and in CAD where suitable. Hard copies will be delivered as requested. All printing and board mounting are not included in the base fee and are part of reimbursable expenses.

SCHEDULE

The actual timing for the project and the specific components of the deliverables is not clear at this point but is anticipated to begin in July 2016. A final project schedule will be determined with further consultation between the MCWD and the team and be available at the outset of the project work.

FEES

Hart Howerton will work on an hourly time basis plus reimbursable expenses. Hart Howerton fees for this work is a fixed fee of **\$ 53,300**. Reimbursable expenses are additional. Should additional services be required such as extra meetings, presentations or expanded cost opinion approach, we would perform these services on an hourly basis as per our normal fee range. We will bill you on a monthly basis including consultant fees and reimbursable expenses.

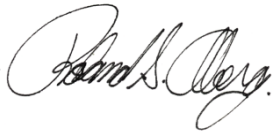
Full team summary of fees is listed below. Please refer to Attachments A and B to understand how specific sub-consultant tasks and fees are allocated for Inter-Fluve and John Anderson

Hart Howerton	\$53,300
Inter-Fluve	\$45,700
John Anderson (allowance)	\$2,500
Total	\$101,500
Inter-Fluve Additional Service	\$6,000

Reimbursable expenses relate to reproduction, travel, delivery and shipping. You should assume an allowance of approximately \$900 to cover these expenses especially if board mounted color prints are required for the public presentations.

Thank you for the opportunity to work with you, the MCWD and the City of Edina. We are very excited about such an important public space and look forward to the development of a special design outcome. Please feel free to call me with any questions.

Best regards,



Roland S. Aberg
Principal

Encl: **Attachment A: Inter-Fluve proposal**
Attachment B: John Anderson proposal

PROPOSAL TO HART HOWERTON TO PROVIDE CONCEPT AND PRELIMINARY DESIGN PLANS

MINNEHAHA CREEK - ARDEN PARK RESTORATION PROJECT

Project Summary: The City of Edina (City) and Minnehaha Creek Watershed District (MCWD) desire to collaborate and have the Hart Howerton team initiate a planning process that identifies potential improvements to Arden Park with enhancements to the hydraulic channel, riparian water resource, natural resource, soil stability, and drainage consistent with the following project goals:

- Restoration of natural stream function and fish passage by actions including removing the 54th Street grade control structure;
- Water resource and riparian habitat improvements will enhance creek access and draw attention to the role of natural elements in visual composition of the park;
- Natural resources, surface water, soils stability and drainage improvements will provide opportunities to enhance existing and future park recreation value; and,
- Public safety.

Stream reconstruction design included in this contract are anticipated to be limited to the upstream extents of the Park property and approximately 200-feet downstream of the 54th Street road crossing.

COMMUNICATIONS

As requested, Inter-Fluve, Inc. (Inter-Fluve) will only communicate regarding the Arden Park project through Hart Howerton. All communication and direction for Inter-Fluve from the clients, comments and direction regarding work product, or technical questions will be directed to Inter-Fluve through Hart Howerton.

PROJECT TASKS AND WORK PRODUCTS

Task 1000. PROJECT MANAGEMENT AND MEETINGS

- 1.1. *General project management* – Jonathon Kusa, PE will manage staff and tasks to ensure timely completion of deliverables. Jonathon will be assisted by Dan Mielke, PE.
- 1.2. *Project Meetings* – Inter-Fluve has budgeted time to organize and participate in the following meetings:
 - *Kick-off Meeting*- Inter-Fluve will meet with MCWD and Hart Howerton in the field and in office to review field conditions, discuss design goals and elements, schedule and deliverables. Design goals specific to in-stream processes and habitat creation will be outlined and used for the basis of further design (assume Mielke in-person, Melchior and Kusa via phone).
 - *Technical Advisory Meetings* – Subtask includes three meeting with the project team including staff from MCWD, City of Edina, and Hart Howerton to discuss progress, schedule, technical items, information gaps, project findings and the message and content needed for a select public meeting. The timing of the meetings shall be directed and scheduled by Hart Howerton (assumes Melchior by phone for three meetings, attendance by Kusa by phone for one meeting).

- *Public Meeting 1* – Public meeting organized and facilitated by MCWD and/or City to discuss project’s programmatic goals and understand resident desires, issues and concerns for project. Inter-Fluve staff will be not be in attendance to provide technical support to MCWD and City staff. Time to develop project meeting content for facilitating the meeting is not included.
- *Kayaker Stakeholder Meeting* – Meeting organized and facilitated by MCWD and/or City to discuss project’s programmatic goals and recreational desires by kayak community. Inter-Fluve staff will be in attendance by phone to provide technical support to MCWD and City staff. No time is included to develop project meeting content. (Assumes Mielke attending by phone)
- *Public Meeting 2* – Public meeting organized and facilitated by MCWD and/or City to discuss two concepts designs developed by the project team. The goal of the meeting will be to allow public feedback on the two proposed concepts and have the public comment on the preferred alternative. Inter-Fluve staff will be in attendance to provide technical support to MCWD and City staff. Project meeting content to be developed by Hart Howerton. (Assumes Kusa attending in person)
- *Public Meeting 3* – Public meeting organized and facilitated by MCWD and/or City to discuss elements of the 30% design and Arden Park Restoration Plan. Inter-Fluve staff will not be in attendance to provide technical support to MCWD and City staff. Project meeting content to be developed by Hart Howerton.

Deliverables

- Participation in meetings as described above.

Schedule

- To be determined with further consultation with Hart Howerton

Conditions

- No compilation of meeting notes or distribution of meeting notes is included.
- Additional meetings can be added as needed on a time-and-materials basis using our standard billing rates
- Project meeting content to be developed by Hart Howerton.

Task 2. CONCEPT DESIGN

2.1. *Data Acquisition and Basemap Creation* – Inter-Fluve staff will review existing electronic data pertinent to the modifications of the stream reach. Hart Howerton will create a basemap used for development of content for meetings, concept design and the preliminary design plan. Electronic Data (GIS or AutoCAD format preferred) to be provided by MCWD and or the City for this phase to include:

- Available 1-ft LiDAR data and stream bathymetry encompassing Arden Park as well as 500-ft upstream and downstream of the park property.
- Parcel Boundaries with address attribute data
- Alignment of Existing Utilities
- Available tree survey information
- Available building footprint or infrastructure information.

- As-built information of 54th Street Bridge
- 2.2. *Hydrologic and Geomorphic Assessment* – Inter-Fluve staff will complete a field visit comparing existing geomorphic conditions to conditions reported in 2003 and 2012 considering the sustained flooding event in the summer of 2014. A longitudinal profile within the project reach will be field surveyed. Two cross sections reflective of a typical section within the reach, one cross section downstream of the project within Reach 14 and the ordinary high water mark at the 54th Street bridge will be field surveyed to identify and calculate existing bankfull discharge. The calculate discharge will be compared to recorded USGS gage data information to determine the most applicable channel forming flow used for further design.
- 2.3. *Hydrologic and Hydraulic Modeling* – For conceptual design purposes, an existing condition U.S. Army Corps of Engineers (USACE) HEC-RAS 1-D model will be created based on previous work completed associated with the 54th Street Fish Bypass, with additional information from updated cross sectional data and any updated stream flow values from MCWD’s XPSWMM model. Statistical flow values to be provided by MCWD or MCWD’s Engineer. Additional incremental flow values and the determined channel forming flow from Task 2.2 will also be included in the model. Proposed alternatives will be based in part on manipulating the existing condition model to determine the conceptual hydraulic cross sectional area for the restored channel, general bed material size and hydraulic conditions through the 54th Street Bridge.
- 2.4. *Concept Plans* –Design analysis will include a qualitative assessment of feasibility given the potential stream slope and anticipated stream geometry based on regional analogs, cursory hydrologic and hydraulic modeling and geomorphic assessment. For each alternative, a plan view drawing and a cross section rendering will be provided. The rendering will be graphical enhanced by Hart Howerton and integrated into public meeting material for Public Meeting #2.
- Alternative 1: This alternative includes removal of the 54th Street grade control structure, and no realignment of the channel upstream within the park. This alternative includes a narrowed stream width through the park to mimic upstream and downstream conditions and allow for the construction of naturalized banks and wetland complexes.
 - Alternative 2: This alternative includes removal of the 54th Street grade control structure and stream realignment within Arden Park.
- The task includes 6 hours of revisions or updates based on review and comment by MCWD and City staff. Concept plans will be a stand-alone document.
- 2.5. *Opinion of Probable Construction Cost* – An opinion of probable cost on a conceptual level will be developed for each Alternative. Both costs will include a 50% contingency.
- 2.6. *Technical Memo* – A technical memo will be developed to summarize the anticipated in-stream advantages and disadvantages of each alternative with respect to the defined project goals. No recommendations will be included.

Deliverables

- Concept Designs in electronic format. Drawings will be provided in PDF 11” x 17” format
- Concept Design Technical Memorandum outlining the basis for design, the advantages and

disadvantages of each alternative, and order of magnitude cost estimates for construction.

Schedule

- To be determined with further consultation with Hart Howerton

Task 3. 30% PRELIMINARY DESIGN

- 3.1. *Field Survey* – Inter-Fluve to provide field guidance for survey effort completed by others. Anticipated survey scope includes channel bathymetry within project extents, floodplain topography, tree locations with species and size identified, utilities and park infrastructure including trails, roads and buildings. The field survey should also be coordinated with the wetland delineation to capture location of wetland boundaries. An existing topographic surface will be generated by others, which will include available LiDAR data and new surveyed data. Inter-Fluve to provide 2 hours of field assistance to guide survey effort. Submittal of survey information by others to be in AutoCAD format. Task includes review and limited post-processing of submitted survey data.
- 3.2. *Hydrologic and Hydraulic Modeling* – For preliminary design purposes, an existing and proposed condition USACE HEC-RAS 1-D model will be created based on using field survey data collected from Task 3.1 and flow data from Task 2.3. Generated existing and proposed water surface elevations from the created models will be compared but limited to the relative comparison of the models created under this Task. No comparison to FEMA’s effective HEC-2 model or MCWD’s XPSWMM model is included. Potential changes to the floodplain based on changes between existing and proposed HEC_RAS models will be documented and mapped. In addition, scour calculations are not included. Model results will guide the preliminary design of the channel providing detail on the required hydraulic cross sectional area, stream profile and suitable bank treatment and stream bed material.
- 3.3. *30% Plans* – Based on the Alternative selected by MCWD and the City, preliminary design plans (30% complete) will be generated including:
 - Cover (1 page)
 - Existing conditions plan view (1 page)
 - Proposed schematic grading plan and profile (2 pages)
 - Cross sections (1 page)
 - Typical sections (2 pages)

Designed in-stream elements will take into account general park design and stormwater elements defined upfront by others in a Technical Advisory Meeting but will be a stand-alone plan set. MCWD will provide the locations, volume and loading of stormwater that discharges to Arden Park and suggest techniques for stormwater treatment. 30% Plans will be submitted prior to Public Meeting 3 allowing review and comment by MCWD and the City.

- 3.4. *Opinion of Probable Costs* – An opinion of probable cost on a preliminary level will be developed for the selected alternative. Costs will include a 30% contingency and include estimated construction costs for removal of the grade control structure, stream bank treatments, earthwork, and re-vegetation. The costs will be based on a preliminary estimate of cut and fill quantities and be limited to in-stream improvements only. Maintenance costs will be included.

- 3.5. *Permit Coordination* – Inter-Fluve will provide Hart Howerton the proposed project data. It is assumed that MCWD will conduct permit coordination meeting with the Minnesota Department of Natural Resources (MNDNR), United States Army Corps of Engineers (USACE), the City of Edina, and the Minnesota Pollution Control Agency (MPCA). Inter-Fluve will provide 4-hrs of assistance to MCWD and the City of Edina under this task with meetings being facilitated and attended by MCWD and others. Some testing of the impounded sediments are included in this phase of work to clarify permitting needs and potential construction cost implications. Based on recent similar projects, the following permit submittals are anticipated:
1. City of Edina:
 - a. Environmental Assessment Worksheet (EAW) – If the existing creek alignment is altered for more than 500 feet, a mandatory EAW will be required. We recommend coordinating with the City of Edina to determine their anticipated duration for an EAW, as they will be the Regulatory Governmental Unit (RGU). Based on similar previous efforts, a 9-month process is anticipated, consequently, we recommend initiating the EAW process in early fall.
 - b. No Rise Determination – MCWD will be provided the initial HEC RAS modeling results and the associated floodplain impacts to initiate a discussion with the City of Edina.
 - c. Conditional use Permit – Dependent upon scale of project, coordination with the City is required to determine if applicable.
 2. USACE
 - a. 404 permit – impact to navigable waters and jurisdictional wetlands.
 - b. Cultural assessment and collaboration with SHPO
 - c. 401 permit
 3. DNR
 - a. Working within public waters permit
 - b. Endangered species and plant review
 - c. Dewatering Permit
 4. MCWD
 - a. Wetland Conservation Act (WCA) permit. Preliminary delineation of wetland and assessment of potential affects (change in type). Inter-Fluve recommends conducting a full wetland delineation and report this summer to capture the wetland types and boundaries. Based on the anticipated project timeline, the wetland data will be needed for a permit submittal this winter. It is anticipated that this task will be completed by others under separate contract.
 5. MPCA
 - a. Testing of impounded sediments completed under concept design phase. Coordination with MPCA relative to results of sampling completed will be the responsibility of MCWD.
- 3.6. *Technical Memo* – A technical memo will be developed to outline the design criteria and basis for design elements, assess recreational opportunities through the rock riffle, outline the permitting process, provide a relative comparison of existing and proposed water surface elevations, and order of magnitude cost estimates for construction.

3.7. *Client Review and Updates* – One review session by MCWD and the City is included. Updates will be based on compiled review comments submitted to Inter-Fluve through Hart Howerton prior to Public Meeting 3. Updates to the plan set will be completed prior to Public Meeting 3.

Deliverables

- 30% Preliminary Plans in electronic format. Drawings will be provided in PDF 11” x 17” format.
- 30% Technical Memo
- 30% Opinion of Probable Construction Cost

Schedule

- To be determined with further consultation with Hart Howerton

Conditions

- Task 3 will commence upon Notice to Proceed provided by Hart Howerton . Delivery of 30% plans is anticipated to require six (6) weeks.
- One comment and review period prior to Public Meeting 3
- No structural design of project elements is included in the 30% design scope

ESTIMATED PROJECT COSTS

	Cost
Task 1 - Project Management and Meetings	\$6,020
Task 2 – Concept Design	\$17,100
Task 3 – 30% Preliminary Design	\$22,580
Project Total	\$45,700

ADDITIONAL SERVICES

Impounded Sediment Sampling – Based on our experience on over 75 dam removals as well as our history of projects on Minnehaha Creek, sediment testing of impounded material is required to determine accurate construction cost estimates. Inter-Fluve will coordinate with Hart Howerton, MCWD, and MPCA to determine the appropriate sampling plan to characterize the sediments impounded by the existing drop structure. Sediment sampling and testing during the conceptual design phase will help determine what cost impacts might be associated with sediments. A sediment management plan will be required if constituents of concern are identified, but can be completed as a part of the 60% design process.

Sample collection and testing review - IFI labor fee: \$4,000

Laboratory testing and analysis Fee: ~\$2,000 / sample

J O H N A N D E R S O N

ARCHITECT L.L.C.

July 8, 2016

Roland S. Aberg, Principal
Hart Howerton
13911 Ridgedale Drive, Suite 220
Minnetonka, MN 55305

REF. Whitewater Features at Arden Park, Minnehaha Creek, Edina, MN

Dear Roland,

John Anderson Architect (Consultant) is pleased to provide pre-design services to MCWD, City of Edina staff and Hart Howerton related to whitewater recreation at Arden Park. With your acceptance I will be authorized to perform the work as described.

Background

The dam on Minnehaha Creek at Arden Park was a popular whitewater destination until it was damaged by a flood. The dam remnant is to be removed in order to re-create a more natural stream function and ecology with consideration of historic uses, such as kayaking. The City has invited the kayaking stakeholder group to participate in the re-visioning, so MCWD, City of Edina staff and Hart Howerton desires Consultant's specialized knowledge of whitewater recreation elements.

Scope of Work for Pre-Design Services of Whitewater Recreation Elements

The following scope of work is to be performed at a level of effort consistent with proposed fees.

Base Services

1. Review hydrology of the creek and dam releases
2. Cursory review of existing mapping, hydraulic modeling results, headwater/tailwater relationship, site photos and video (very important)
3. Upon completion of items 1 and 2 above, participate in a virtual meeting hosted by MCWD, City of Edina staff and Hart Howerton with kayaker stakeholder group to solicit their opinions and desired outcomes for the project.
4. Assist MCWD, City of Edina staff and Hart Howerton in developing project criteria for the whitewater feature(s) that is consistent with 1) realistic stakeholder desires, 2) the overall project objective of stream restoration and 3) the nature and capacity of the resource.
5. Review graphics and narrative prepared by the consultant team, suggest edits if needed.
6. Participate by phone in MCWD, City of Edina staff and Hart Howerton's internal team coordination meetings.

Deliverable: Summary technical memorandum on items 1 to 4 above.

Fees: Time and expenses not to exceed \$2,500 billed at a rate of \$165 per hour.

Optional Additional Service

At the request of MCWD or the City of Adina, Consultant shall travel to Edina for an in-person public meeting with stakeholder groups in lieu of Task 3 above, for a fixed fee of \$1,650 plus travel expenses. Travel expenses are estimated to be between \$500 to \$900, depending on prevailing rates for airfare, lodging, rental cars, etc. at the time the Additional Services are provided. The proposed fee takes into account savings from omitting Task 3 of the Basic Services.

Assumptions

1. All mapping and data collection shall be performed by Hart Howerton and provided electronically to Consultant in a timely manner consistent with Hart Howerton's schedule and prior to kayaker-stakeholder meetings.
2. Conceptual design of features is not included.
3. Artistic renderings or models are not included.
4. Consideration of, or opinions related to, hazard waste or site contamination is not included.
5. It is understood and agreed that all documents and imagery produced by Consultant under this agreement are instruments of service who shall be deemed author of the data and shall retain all common law, statutory, and other rights. In delivering such documents and imagery Consultant grants permission to The MCWD, the City of Edina, Hart Howerton and InterFluve to use, copy, reproduce, and disseminate information contained therein without restriction provided that such use is directly related to the Project.

Terms

Consultant shall not exceed the allowed fee without prior written authorization. Consultant shall use his best effort to budget his time to address all tasks in the Scope of Work at an appropriate level within the allowed fee. Consultant shall notify Hart Howerton if the level of detail being requested on any particular task would jeopardize the available time for the remaining tasks.

Invoices shall be submitted to Hart Howerton monthly by the 5th day of the following month and shall be payable to Consultant within five days of Hart Howerton having received payment for the same.

Communications: Roland Aberg of Hart Howerton shall be the sole point of contact for communications to the client, stakeholders and other parties. Consultant shall not communicate with any party unless so directed in writing by Roland Aberg.

Thank you and I look forward to working with you and InterFluve.



John Anderson, RA

Accepted, Hart Howerton

Proposal



Responsive partner.
Exceptional outcomes.

To: Renae Clark, Project Manager and Planner, Minnehaha Creek Watershed District

From: Chris Meehan, P.E., CFM, Wenck Associates, Inc.

Date: August 22, 2016

Subject: Arden Park Wetland Delineation, Site and Tree Survey Scope of Services

This proposal is to provide services in support of development of a 30% plan for the planning and ecological enhancement of Arden Park in Edina. The scope of services is to complete a wetland delineation, site and tree survey that will serve as baseline data for park development. The outcome of these services will be:

1. An approved wetland delineation with attached report, supporting shapefile data and digital drawings
2. Site survey which outlines existing topography and site characteristics and provide a CAD, PDF and digital point file information.
3. Tree survey with species, diameter at breast height and location with associated shapefile and excel worksheet with data.

A summary of the scope of services, budget and schedule are outlined below. Enhancement activities above the completion of baseline activities are provide as optional services.

SCOPE OF SERVICES

1. WETLAND DELINEATION

Wenck Associates, Inc. (Wenck) will conduct an investigation on the subject property to delineate wetlands and other aquatic resources following the on-site methodology set forth in the 1987 U.S. Army Corps of Engineers (COE) Wetlands Delineation Manual (1987 Manual) and the 2010 U.S. Army Corps of Engineers Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Regional Supplement.

Potential wetland areas will be examined and wetland boundaries determined through analysis of the vegetation, soils, and hydrology. If wetlands or other aquatic resources are identified, boundaries will be sequentially marked with neon flagging and recorded by Wenck with a GPS unit.

Wenck will complete a Report of Findings in accordance with the 1987 Army Corps of Engineers (USACE) Wetland Delineation Manual. The report will be signed by a Certified Wetland Delineator as certified by the State of Minnesota and submitted to the Local Government Unit (LGU) and USACE for formal agency approval.

Wenck will follow-up with the LGU to facilitate the approval of the delineation. If necessary, Wenck will attend one site visit with the regulatory agencies to review the delineated wetland boundaries.

2. SITE SURVEY

Wenck will conduct a site survey for park which supplements existing 2-ft LIDAR for the park. Wenck staff would look to provide 1-foot accuracy around critical components of the park which are likely to need more detailed information as part of the 30% design (i.e. the stream corridor and around the existing concrete structure). This approach was taken based on the conceptual nature of the project at this point and would set up a baseline for additional information to be collected at a later point once the project would go into detailed design.

A summary of information which will be collected as part of this survey include:

- 5 cross sections – at locations determined by Inter-Fluve along with depth to resistance
- 54th Ave. bridge opening as-builts
- Concrete weir structure detail
- Built Structures in the park (warming house trails, play equipment, etc.)
- Determine park property and adjacent private property boundaries
- Utilities and easements (storm sewer, etc.)

The development of this baseline information will be provided in CAD and PDF format along with supporting point files for use by the design team.

Optional Services – additional optional services would include:

- A. Full site 1-foot survey – this would be a detailed 1 foot site survey for the entire property.
- B. Detail information on adjacent properties and utilities outside of the park boundaries
- C. Sonar detail of the channel along with depth to resistance information at 100-foot intervals along the centerline of the channel through the park property

3. TREE SURVEY

Wenck Natural Resources staff will conduct a survey of trees with the Arden Park boundaries. Uniquely-numbered aluminum tags will be applied to any trees meeting or exceeding eight inches diameter at breast height (dbh). For each tagged tree, the tag number, species and dbh will be recorded. The crew will locate each tagged tree using a gps system (+/- 10ft accuracy). Wenck crews will closely coordinate to ensure no trees are missed.

Wenck will look to survey trees within 100 feet of each side of the channel (200 foot corridor) along with collecting critical trees within the open portion of the park.

Deliverables will include a spreadsheet indicating the unique tag identification number, species, and dbh of each tagged tree. A shapefile of the location of each tagged tree will also be delivered along with associated point shapefile data.

Ms. Renae Clark
 Project Manager and Planner
 Minnehaha Creek Watershed District
 August 22, 2016



Optional Services – additional optional services would include:

- A. Survey all trees in the park – this would survey all trees within the 15+ acre park.
- B. Survey in each tree – this would put the trees within 2-ft of actual center of the tree location
 - a. Whole park
 - b. 200-foot creek corridor

A budget for each of the scopes of services is provided below.

Table 1. Arden Park Wetland Delineation, Site and Tree Survey Services

Scope of Work – Base Line	Fee estimate
1. Wetland Delineation	\$3,000
2. Site Survey	\$7,350
3. Tree Survey	\$2,550
TOTAL =	\$12,900

Scope of Work – <i>Optional Tasks</i>	Fee estimate
2. Site Survey	
2a. Site Survey – Full 1-foot site survey	\$10,500
2b. Site Survey – Detail adjacent property information	\$2,000
2c. Channel Sonar and depth to resistance	\$3,000
3. Tree Survey	
3a. Whole Park	\$1,000
3b. Tree Survey – Survey Grade	
3b-a - Whole Park	\$8,000
3b-b – 200ft corridor	\$5,000

Each task includes the expected minimum level of effort using the most efficient discounted hourly rates that are currently used by MCWD along with direct expenses covering mileage, survey equipment, etc. It is anticipated the scope of work could be completed within 1 month of authorization assuming MCWD authorization on August 25th.

Wenck appreciates the opportunity to provide you with our proposal. If you have any questions or comments regarding this proposal, please call me at (763) 252-6844.

Sincerely,

WENCK ASSOCIATES, INC.

Chris Meehan, P.E., CFM
Project Manager