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Item 6Cii.
BCWMC 2-21-19

February 11, 2019

Laura Jester, Watershed Administrator

Bassett Creek Watershed Management
Commission
16145 Hillcrest Lane
Eden Prairie, MN 55346

Re: Bassett Creek Valley - Floodplain and Stormwater Management Study

Dear Ms. Jester:

Wenck Associates, Inc. (Wenck) is pleased to present this proposal to perform a Floodplain and Stormwater Management Study for the Bassett Creek Valley Development area in Minneapolis, MN. The objective of this study is to evaluate options to unlock the potential in natural resources, recreation, and redevelopment by integrating floodplain and stormwater management into a regional solution for the area.

It is our understanding that the Bassett Creek Valley (BCV) development area is bound by Cedar Lake Road on the west, I-94 on the east, Heritage Park redevelopment area on the north and I-394 on the south and is approximately 230 acres. The area of focus for the floodplain mitigation options may be within the same north and south BCV boundary but extended further to the west to Glenwood Ave and east to the tunnel. These areas are collectively known as the corridor. See attached Figure for BCV boundary area and Floodplain Study area. Our proposed project tasks and costs are described below.

Scope of Work

Task 1 – Establish Guiding Principles

It is understood the technical analysis of this study will be around floodplain management and stormwater treatment, however as options are developed and evaluated establishment of guiding principles will be critical to providing recommendations to move forward.

The outcome of this task will be to establish guiding principles in evaluating alternatives, i.e. maximizing connectivity to the corridor, increase flood resiliency, improve stormwater management, facilitate redevelopment. Written documentation of these principles for all partners to build around will help further guide analysis in the subsequent tasks.

It is recommended that this task be started through email. If a common consensus cannot be obtained through emails, a meeting is then recommended.

Task 2 – Data Acquisition and Review

Wenck will compile and integrate relevant data for the BCV around the guiding principles. This includes the following items:

- ▲ XP-SWMM and P8 models and supporting files (GIS, LiDAR, Storm sewer, Pipesheds, etc.)
 - Bassett Creek WMC models for regional floodplain and water quality analysis
 - City of Minneapolis models for BCV stormwater drainage area analysis and water quality analysis
- ▲ City of Minneapolis’s 2040 Plans for area of interest along with CPED’s area specific plans
- ▲ Bassett Creek Watershed Management Commission Watershed Management Plan and associated implementation projects and strategies
- ▲ Minneapolis Park and Recreation Board North Service Area Master Plan
- ▲ Parcel Ownership in the corridor (current and potential changes)
- ▲ Any potential redevelopment opportunities within corridor
- ▲ Existing BMPs not in the model
- ▲ Draft of Blue Line and Green Line Light Rail plans

Assumption:

We assume if survey data is needed as a part of this study the City of Minneapolis will be able to provide the data.

Task 3 – Quantify Floodplain Impacts and Stormwater Treatment

XP-SWMM models, P8 models and land-use information provided by partners in Task 2 will be used to determine the floodplain volumes and stormwater treatment needs within the BCV Development area and upstream corridor.

The management options for floodplain will be determined with the creation and removal of storage within the XP-SWMM model. A sensitivity analysis will be performed to determine how far upstream the creation of floodplain storage will have an impact on floodplain within the BCV area.

Wenck will identify ten to fifteen storage locations in or adjacent to the corridor that will maximize best use of parkland, transportation corridors and development within the Bassett Creek Valley Development. Wenck will also review potential influences of floodplain storage on adjacent parcels and existing stormsewer systems to ensure no adverse impacts.

The BCWMC’s P8 model will be used to determine the stormwater treatment provided by the proposed floodplain storage options. The City’s P8 model will be leveraged to compare the results of the BCWMC P8 model for stormwater treatment levels on the BCV’s local drainage area.

Stormwater treatment needs will be identified to ensure improvement of water quality entering Bassett Creek and old Bassett Creek Tunnel. Current and future land use identified in the 2040 Plan will be used to determine stormwater needs in the direct drainage area. Identifying the stormwater treatment capacity of the identified floodplain storage locations will promote more flexibility in a regional design within the development corridor.

Bassett Creek WMC and City of Minneapolis requirements for water quality, rate control and volume retention will be used as a basis for the analysis. The current assumption is that infiltration will not be utilized on site due to soil and groundwater contamination.

The outcome of this task will be to identify necessary floodplain storage volumes needed to influence floodplain boundaries in the BCV along with stormwater treatment requirements necessary to best achieve the guiding principles for the BCV.

Assumption:

A one-hour meeting will be held with the partners half way through Task 3 to ensure project direction and deliverables are in line with the guiding principles.

A review of the revised draft BCWMC models by BCWMC will be required prior to Task 4. It is assumed the review by BCMWC will be completed within 1 week of receiving the models.

The revised draft City models by the City will be required prior to Task 4. It is assumed the review by the City will be completed within 1 week of receiving the models.

Task 4 – Siting Analysis

Wenck will identify corridor parcels with the potential to reduce floodplain impacts and improve stormwater treatment based on the needs identified in Task 3. The parcels of interest in the corridor are assumed to have the following ownership: City of Minneapolis, Minneapolis Park & Recreation Board, Canadian Pacific Railroad, and other parcels known to be identified for redevelopment. Additional parcels in the surrounding area may be reviewed if deemed to have a potentially significant role in floodplain storage.

The outcome of this task will be the identification of parcels which provide the ability to align with the guiding principles of the corridor and serve as the basis of material to be presented in Task 5 Design Team Charette. A technical memo and/or figures will be provided to the partners prior to Task 5 charette.

Task 5 – Design Team Charette

After the completion of the initial analysis partners will be brought together to evaluate alternatives through a concept charette. The charette is intended to:

- ▲ Provide a summary of the technical analysis completed to date in memo form and figures
- ▲ Garner partner insight in advantages and tradeoffs of identified parcels.
- ▲ Identify hurdles to implementation (public support, regulatory, property ownership, soil contamination, construction timing).
- ▲ Cost estimates (high, middle, low ranking).
- ▲ Create alignment around guiding principles with potential solutions.

The outcome of the meeting will be a matrix of potential solutions and associated tradeoffs to be further evaluated and quantified.

Assumption:

The Design Team Charette is proposed to be four hours in length.

Task 6 – Alternative Assessments

Of the ten to fifteen storage options presented in Task 3, it is assumed that top eight options determined in Task 5 will be incorporated in the XP-SWMM and P8 models to determine impacts on the corridor (floodplain storage (ac-ft), stormwater treatment (TP, TSS, rate), area removed from floodplain (ac)).

Conceptual designs, cost estimates, regulatory requirements and implementation timelines will be determined for the eight alternatives along with identified tradeoffs necessary to implement. Providing clarity around these criteria is aimed at addressing potential timing needs as redevelopment occurs in BCV.

The outcome of this task will be the material to be presented in Task 7 Concept Meeting. A technical memo and/or figures will be provided to the partners prior to Task 7 meeting.

Assumption:

A one-hour meeting will be held with the partners half way through Task 6 to ensure project direction and deliverables are in line with the guiding principles.

A review of the revised BCWMC models by BCWMC will be required prior to Task 7. It is assumed the review by BCMWC will be completed within 1 week.

The revised draft City models by the City will be required prior to Task 7. It is assumed the review by the City will be completed within 1 week of receiving the models.

Task 7 – Corridor Alternative Refinement

Results from Tasks 1 – 6 will be reviewed and discussed with interested parties in a four-hour concept meeting. The meeting objective is to ensure alternatives are consistent with the City's, MPRB, Watershed and developers long term goals and guiding principles for the Development area. The items to be reviewed and discussed include:

- ▲ Provide a summary of the technical analysis completed to date.
- ▲ Summary of floodplain benefits and water quality benefits
- ▲ Timing needs between installation of alternatives and redevelopment.
- ▲ Concept renderings of various management options integrated into current Master Plans and focused on:
 - Connectivity potential of people, places and natural resources
 - Redevelopment flexibility through regional development approach
 - Overall natural resource enhancements and educational benefits
 - Achievement of guiding principles
- ▲ Conceptual cost estimates

Task 8 – Summary Memorandum

Through the feedback from Task 7 – Concept Meeting, Wenck will deliver a final technical memo which will summarize identified solutions and their capabilities of maximizing the guiding principles of the Bassett Creek Valley redevelopment. The memo will also identify potential funding options.

Assumption:

The BCV partners will be provided a draft of the Summary Memorandum for comments prior to finalizing the Memo. It is assumed the review by BCMWC will be completed within 1 week.

Task 9 – Presentation to the Bassett Creek Watershed Management Organization Board

A summary presentation of the study results will be presented at a regular meeting of the Bassett Creek WMC.

Schedule and Cost Estimate

It is assumed the start date for the project will be March 1, 2019 and the final memorandum will be completed by June 14, 2019. See the table for additional task completion dates.

Wenck will complete Tasks 1 – 9 discussed above for the fee listed in the table below.

TASK	TASK NAME	ESTIMATED COMPLETION DATE	ESTIMATED FEE
1	Establish Guiding Principles	3/15/19	\$2,820
2	Data Acquisition and Review	3/15/19	\$8,450
3	Quantify Floodplain Impacts and Stormwater Treatment	4/19/19	\$25,920
	1-Hr Meeting During Task 3*	4/5/19	Included in Task 3
4	Siting Analysis	4/19/19	\$6,810
5	Design Team Charette* (4-Hr)	4/26/19	\$10,160
6	Alternative Assessments	5/10/19	\$27,850
	1-Hr Meeting During Task 6*	5/3/19	Included in Task 6
7	Corridor Alternative Refinement* (4-Hr)	5/17/19	\$6,070
8	Summary Memorandum	6/21/19	\$7,250
9	Final Presentation to BCWMO Board	7/18/19	\$1,840
ESTIMATED TOTAL			\$97,170

* Meeting with interested parties will take place week of date listed

Bassett Creek Valley Development
February 11, 2019



Thank you for the opportunity to assist with this project. This is an exciting opportunity to transform and unlock the potential within the Bassett Creek Valley and we are excited to be a part of the project team. If you have any questions about our proposal, please contact me at 763-252-6844

Sincerely,

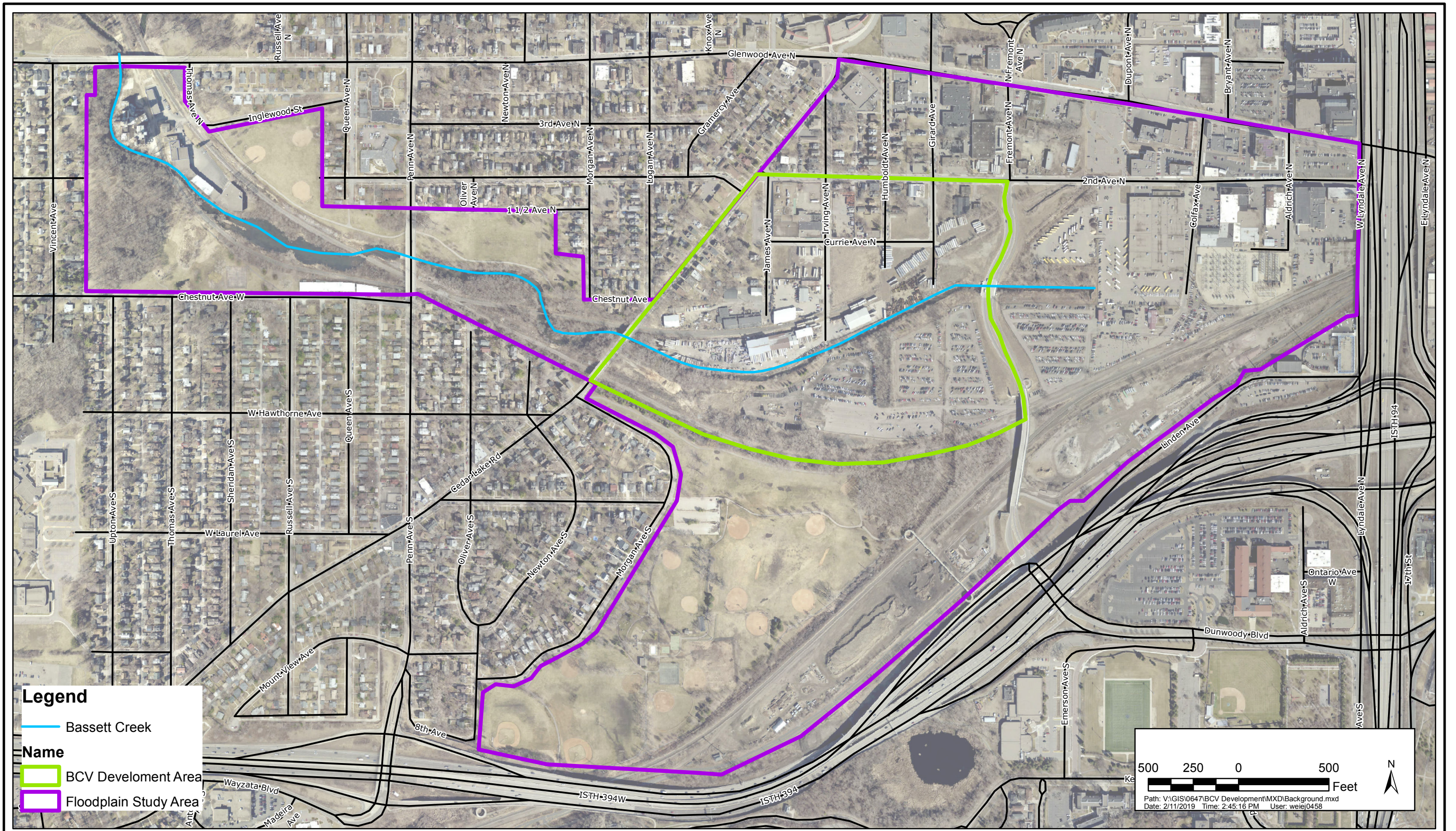
Wenck Associates, Inc.

A handwritten signature in blue ink, appearing to read 'CJM', written over a light blue horizontal line.

Chris Meehan, PE, CFM
Wenck Associates, Inc.

A handwritten signature in blue ink, appearing to read 'Eileen Weigel', written over a light blue horizontal line.

Eileen Weigel, PE
Wenck Associates, Inc.



BASSETT CREEK VALLEY DEVELOPMENT

Study Area



FEB 2019

Figure 1