STATE OF MICHIGAN

Waterworks Park to Northeast Transmission Main Project

Project Plan, April 11, 2018

The Above Proceedings were taken before me, Glenn G. Miller, Notary Public within and for the County of Oakland, State of Michigan, at 735 Randolph, Fifth Floor, Detroit, Michigan, on Wednesday, April 11, 2018.

PRESENT:

Freeman Hendrix, Chairman GLWA

Brian Baker, Vice Chairman GLWA

Craig Hupy, Director GLWA

Gary Brown, Director GLWA

Abe Munfakh, Board Secretary GLWA

Robert Daddow, Director GLWA

Sue F. McCormick, GLWA CEO

William Wolfson, Chief Administrative and Compliance Officer,

Randal Brown, General Counsel

Jonathan Wheatley, Public Finance Manager

Dennis Prevo, Wade Trim

Page 2 Detroit, Michigan 1 2 Wednesday, April 11, 2018 3 At about 1:00 p.m. 4 MR. HENDRIX: Next item on the agenda is a 5 public hearing. 6 MR. WOLFSON: Mr. Chairman, it is the 7 public hearing on the plans for the revisions to the 8 water conveyance system from Waterworks Park to the 9 Northeast Transmission Main Project, so we ask you call the hearing to order. 10 11 MR. HENDRIX: Thank you for reading that 12 for me, Mr. Wolfson. 13 Are there members of the public who would like to come forward at this time? Call for 14 15 public comment. 16 MR. WOLFSON: We are prepared to offer an 17 overview of the project. Beforehand? 18 MR. HENDRIX: 19 MR. WOLFSON: Yeah, we can do that. 20 MR. HENDRIX: Who do we have? 21 MR. WOLFSON: Mr. Wheatley and Mr. 22 Gartrell. 23 MR. WHEATLEY: Good afternoon. Grant. 24 MR. GARTRELL: Grant Gartrell, Director of 2.5 Engineering for Water Operations, Great Lakes Water

Authority.

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The Waterworks Park to Northeast
Transmission Main Project, GLWA has submitted a loan
application for a Drinking Water Revolving Loan Fund to
the State for a low interest loan to help fund this
project. As part of the loan application, there's a
project plan that's prepared that details the project.
We've engaged consultant Wade Trim to prepare that plan
and a representative from Wade Trim is here today,
Dennis Prevo, and he's going to give an overview of the
project plan.

MR. PREVO: Thank you, Mr. Chairman, and the Board. I'm going to present this project to you on an overview basis. Obviously we don't want to get to much into the detail.

This project is for the Waterworks Park to Northeast Transmission Main. This draft project plan was posted on GLWA's website and on SEMCOG's website on March 9th, meeting the 30 day draft public review time before this site public hearing today.

So the construction of the Waterworks to Northeast Transmission Main is an integral part of the GLWA's Water Master Plan and part of a series of independent projects to align the treatment capacity with the projected system demands while providing system

resiliency and redundancy for the city of Detroit and parts of southern Macomb and Oakland counties.

The current system of the water intake system, Waterworks Park and Northeast are both fed through the Belle Isle raw water intakes. The raw water intake is fed to Waterworks Park and there's a bypass that then feeds raw water to Northeast where treatment occurs.

The recommendation plan calls for delivery capacity of 160 million gallons per day of finished water from the Waterworks Park Water Treatment Plant to the Northeast Water Treatment Plant and discontinuing water treatment operations and converting the Northeast facility to a booster pump station. The Northeast Water Treatment Plant would need extensive capital improvements to maintain water treatment. And the Waterworks Park Water Treatment Plant has the capacity of 240 MGD, but in the current plant's service area daily demand is approximately 80 MGD with peak demands at 130 MGD. You can see the excess capacity there available at Waterworks Park.

GLWA owns and operates five treatment plants and over 800 miles of transmission main. These plants have a design capacity of 1,720 MGD. However, there's approximately 700 MGD excess capacity relative

to projected water demands. Therefore, the 2015 Water Master Plan recommended decommissioning treatment at the Northeast Water Treatment Plant as part of a program to align treatment capacity with system demand.

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The repurposed Northeast facility will operate in the future as a ground level reservoir and booster pump station that receives treated water from Waterworks Park Water Treatment Plant. Finished water will be delivered to the repurposed Northeast booster pump station from the Waterworks Park Water Treatment Plant through a proposed water main between the two facilities. This water main is essentially the project. The design flow rate of the transmission main to the Northeast facility is 160 MGD.

As part of the DWRF's guidance documents, alternatives are analyzed as part of the project plan. There were four alternatives evaluated under this project plan. They're presented in the handout. I won't go over each of those, but essentially it was a new transmission main from Waterworks Park to Northeast and then two of the alternatives involved rehabilitating the costly upgrades at Northeast.

If you look, I'm on Page 3 now, the monetary evaluation - cost effectiveness, if you focus on Alternate 5, that was the selected alternative,

there's capital costs, interest, salvage, 0 & M annual, net change in 0 & M to get to a present worth of the project of \$256,300,000 and the equivalent annual cost of \$13,499,000.

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The estimated project cost, as you see, decreases and there's a reason for that. This project is only part of the Master Plan and repurposing

Northeast. So the overall cost of the project is broke down as follows: The estimated construction cost of \$118,100,000, engineering design cost of \$14,200,000, and GLWA engineering and admin costs of another 1.4 million, to get you a total grant project cost of \$133,700,000.

Also as part of the guidance requirements, environmental evaluations are considered in part of the preparation of the project plan. Some of the key notes there are noted in bullets: The proposed improvements will reduce treatment capacity to better align it with projected system demand; construction is not expected to have lasting adverse effects on the neighborhoods in the project area; the project will not detrimentally affect the water and air quality in the project; implementation of the improvements will also generate construction-related jobs and local contractors will have an opportunity to bid the work.

A further breakdown of the \$133,700,000 for the cost is broke down to an annual cost of the project of 8.1 million and if you divide that over the service area households of 1.136 million you get to roughly \$7.19 per household per year is the cost of the project.

presentation.

At the very end, at the conclusion of my presentation here, is implementation schedule. As I mentioned earlier, we posted a draft of this project plan on March 9th, today is April 11th, we're conducting a public hearing, which is 32 days after the public hearing — the draft public report was advertised, and then the plan is to submit this on or before May 1st to MDEQ.

Getting further into the project schedule, the route analysis and preliminary design will be completed in October of this year and GLWA expects to procure the design-build contractor by January of next year, with the start of construction of August 13th of 2019, and the completion of construction on October 30th, 2023.

Pending any questions, that's my

MR. HENDRIX: Any questions? Mr. Daddow.

MR. DADDOW: My question here is, 133

Page 8 1 million is quite a lot of money to ask for. What is the likelihood of us securing all of that and if we don't 2 3 secure all of it what happens then? 4 MR. WHEATLEY: John Wheatley, Public 5 Finance Manager. 6 To your point, the 133 million is a 7 large dollar amount especially since the Drinking Water 8 Revolving Fund has a smaller funding pool than the State 9 Revolving Fund pool. So they have funded larger projects in the past, and if this is above what they 10 11 anticipate funding, we could also get funding in a 12 subsequent funding year since the construction period would take more than just one fiscal year. 13 To the extent that funds are not 14 available, since this project is in the current CIP, we 15 16 could use existing or new bond proceeds or get an extension of funds to fund the rest of the project. 17 MR. HENDRIX: Mr. Munfakh. 18 19 MR. MUNFAKH: My question is the treatment 20 plant is a service to that area. Is there any cost for 21 that treatment plant not being used? 22 MR. GARTRELL: I'm sorry. What was that? 23 MR. MUNFAKH: The purpose of this is to 24 abandon the use of one treatment water plant and bring

the water from the other plant to there. Why isn't the

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one that's being abandoned used as a better use?

MS. McCORMICK: Let me try and see if I can handle that.

So in the five plants in total we have 1,740 million gallons of water treatment capacity, but in the most recent year that we've had, the most recent history, because there's been such a decline in water use throughout the country, and here as well, our highest year of usage has been less than 800 million gallons. Even when we did the projection for 20 or 30 years, we were looking at if we had growth, given the area that's reasonably served even if we had growth we would be looking at a thousand million gallons a day.

So this plan that we did when we went through the Master Plan said we can do a variety of things. We can re-size all the plants for capacity or we could take a plant out of service. They looked at Northeast, they looked at Southwest as the two most likely plants to take out of service because of minimizing the amount of transmission main that would have to be built in order to move water around effectively and also to look at those facilities that were the most capital need and would be the most expensive to continue to capitalize and maintain.

This plan said we can get the best

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value by taking Northeast out of production, building a little bit of transmission main, downsizing or re-sizing capacity in other facilities, and that's the most cost-effective option. It still gives us flexibility because Lake Huron and Waterworks Park have expansion capability. So in the event we're wrong and in the future we have greater capacity needs, we have the ability to still expand. And the transmission main that's being built allows us, if one of those other four plant comes out of service for whatever might happen, we can still serve average day everywhere in the region with the three remaining facilities. So that's why. The estimation was that we could save over 40 million dollars a year in avoiding capital and operating expenses.

MR. MUNFAKH: The Northeast Plant was chosen because of its age or what?

MS. McCORMICK: Because of its age, because of the need of capital investment and because from its physical location in the system it took the least amount of capital investment in order to be able to allow to get that flexibility in the system.

MR. MUNFAKH: If for some reason one of the other plants is not usable in the future, is there a possibility you could put Northeast into service or is

that going to be mothballed forever?

MS. McCORMICK: At this point in time it's not our intent to ever return Northeast to service because we had expansion capability elsewhere and because, from a reliability standpoint, even if one of the other facilities was rendered inoperable in a short-term basis you could still serve average day. If we were to take a look today at building a treatment plant or making investment in new treatment capacity, that may not be the preferred location.

MR. MUNFAKH: Thanks.

MR. HENDRIX: Anyone else? Mr. Baker.

MR. BAKER: A couple of questions. This might be for John. Are all three of these Treatment Water Revolving Fund Projects in theory in competition with each other? They're all going to be submitted to the State. Right?

MR. WHEATLEY: Yes. In the fact that we're submitting them for all the same fiscal year funding pool, they're technically in competition with each other, but each project is going to be scored by the State based upon their different criteria for evaluating them. Each one brings kind of their own unique benefits and will score differently.

MS. McCORMICK: If I could add just one

Page 12 1 thing to that. When it comes to the state revolving 2 loans fund, there are segregation of those funds for 3 eligibility purposes and there are special set-asides for certain purposes including assisting communities 4 that have affordability constraints. So, well, yes, 5 6 there is some competition, not every project would be 7 competing for the same dollars. 8 MR. BAKER: Alternative 5 on this sheet, I 9 think Page 3, it speaks to we may be applying for a Drinking Water Revolving Fund, for a section of 10 11 Alternative 5. I think is that what that's saying? 12 MR. GARTRELL: Yes. That 36-inch main piece from Rochester to Romeo is the project that we 13 spoke about earlier today. 14 15 MR. BAKER: So that would be in a 16 subsequent year's application? 17 MR. GARTRELL: Yes. 18 MR. BAKER: Thank you. 19 MR. HENDRIX: Anyone else? 20

MR. MUNFAKH: John, for the SRF program

21 when does the priority list come out, October?

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22 MR. WHEATLEY: Yes, that priority list 23 usually comes out around October 1st.

MR. MUNFAKH: If you are going to proceed with them after that -- suppose the project doesn't get

Page 13 1 funded. Is there an alternative to still do it this 2 year or do we have to postpone it till the future? 3 Maybe, Sue, you can answer that. 4 MR. WHEATLEY: I don't know that we've talked about that strategy. 5 6 MS. McCORMICK: Given the early stages of 7 the project are not ones that are in construction and 8 have high dollars, we would likely continue to move 9 forward using existing funds on hand and apply in a subsequent year. One of the other things that we have 10 11 done in prior years, particularly, for instance with 12 RR02, is we actually broke the project into phases and then applied for phases, which is another opportunity if 13 we don't receive full funding in October. 14 15 Thank you. MR. MUNFAKH: 16 MR. HENDRIX: Anyone else? Mr. Wolfson, is this where we move to 17 18 public comment? 19 MR. WOLFSON: Yes, Mr. Chairman. 20 MR. HENDRIX: All right. That being the 21 case, if there is a member of the public that has a 22 comment regarding the Drinking Water Revolving Fund, 23 Lake Huron Water Treatment Plant --

the repurposing of the water main from the Waterworks

MR. WOLFSON: No, Mr. Chairman, this is

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Page 14 1 Park Plant to the Northeast Plant. 2 MR. HENDRIX: I got the wrong one. 3 moving ahead of myself. All right. Regarding the Water 4 Revolving Fund, Northeast Transmission Main Repair 5 Project, public comment. Would anyone like to make a 6 public comment on this site? No one? All right. We'll close the public comment portion of the agenda. Is this 7 an action item, Mr. Wolfson? 8 MR. WOLFSON: It will be under New 9 Business, but at this point, Mr. Chairman, if you would 10 11 call the second public hearing, which is the Lake Huron 12 Treatment Plant Sludge System Improvement Project. 13 14 15 16 17 18 19 20 21 22 23 24 25

Page 15 CERTIFICATE I, Glenn Miller, do hereby certify that I have recorded stenographically the proceedings had and in the above-entitled matter at the time and place hereinbefore set forth, and I do further certify that the foregoing transcript, consisting of fifteen (15) typewritten pages, is a true and correct transcript of my said stenograph notes. -- Glenn-Miller-Glenn Miller Certified Shorthand Reporter (Date)