

NEWTON GRAVEL PIT MINUTES
CITY OF MANITOWOC/DNR
June 23, 2016, 1:00 pm
City Hall 2nd Floor Conference Room

Attendees: Dave Henderson – AECOM
Dan Koski, Kathleen McDaniel, Greg Minikel, Karen Dorow – City of Manitowoc
Tauren Beggs and Liz Heinen – WDNR
Dave Johnson – WDNR - Absent

1. Potable Well Sampling

a. Orchard Lane

❖ This is the garden property. We were not able to get ahold of the property owner for testing. D. Henderson will stop by on his way out of town today to see if there is anyone there.

2. Water main update

a. Update on construction/hookup/Abandonment

❖ All of the hookups have been completed for the properties that were affected. All of the wells have been abandoned except for 2717 CTH CR/4141 Viebahn (Haupt – Landscaping company). The other two property owners decided not to keep their “old” wells. K. Dorow is working with Lakeland Landscaping to complete the landscape restoration.

b. Safe Drinking Water Loan Program – June 30, 2016 Financial Assistance Application Due

❖ Application is due June 30th. Putting finishing touches on it and hoping to get it out by the end of the week.

3. Update on current impacted wells

a. 3504 CTH CR – Priority IAC

❖ K. McDaniel and L. Heinen discussed the release of claims issue. It looks like we are at an impasse unless the property owner changes his mind. Attorney for property owner forwarded the agreement and the addendum he had drafted to L. Heinen. K. McDaniel gave a summary of the release of claims. If they have problems with the new well that are of their own doing, City will not be responsible for them. All standard guarantees for the well and equipment will apply. Discuss release of claims with L. Heinen supervisor about release. Also a release of claims up to the point the new well is installed. Discussion was held and L. Heinen asked property owner’s attorney if everyone could meet in the middle. She requested that he work with his client to facilitate getting this new well in. The property owners attorney understood why it is important that we get the new well in and get rid of the contaminated well. L. Heinen will not get in the middle of the negotiations making them release the City from any liability for the

contamination. K. McDaniel stated she is not comfortable with their language in the addendum under number two and is not sure where we would go from here. L. Heinen suggested that K. McDaniel work with her supervisor and legal counsel over the release of claims and the WDNR's position on well replacement. L. Heinen asked where do we go from here. Discussion was held. L. Heinen said with the geology and the levels of contamination they have, she could not say with certainty they are a conduit for the contamination. Property owner's attorney said he would try to meet in the middle. D. Koski asked about our obligation to replace the well. L. Heinen told us we have to provide clean drinking water. K. McDaniel stated that since 2014 the property owner has asked for an agreement, we provided an agreement. Then he decided he would like a work order, we provided a work order. Then he came back with an attorney drafted addendum that the City is not willing to sign. L. Heinen has informed property owner's attorney on why this is so important to get the well replaced and he stated he would work with his client to come to some middle ground. D. Koski said based on the conversation we are having, we have lived up to our end by providing property owner with bottled water for the last two and a half years and this is not a residence, it is a business. The question is the potential for the conduit and L. Heinen said that it's not that bad, so do we need to cap it or not? L. Heinen will leave to hydrogeologist to make that determination. D. Henderson recapped the detects. There was a regulator exceedance of an ES that comes and goes, but it is not a no contact (flush only) exceedance so they could continue to use the water in the house with safe drinking water provided. D. Henderson feels that if it is a typically constructed well it's a conduit. T. Beggs stated that because there was an exceedance, even though it is fluctuating, we can't safely say they can drink the water. D. Koski said to that end, the City has lived up to their end by providing them with safe drinking water and asked if we continue to provide them Water Care (i.e. bottled water) are we obligated to replace the well? L. Heinen said there are two questions here. First, does it need to be replaced and is the City under an obligation to replace it and second, is it acting as a conduit. A map was reviewed for the depth of the well. T. Beggs, D. Henderson and D. Koski agree that with the depth of the well into top of bedrock that it could be a conduit. L. Heinen asked if we get rid of well will it make a difference in contamination in this area. Both T. Beggs and D. Henderson feel it is a conduit and should be capped. L. Heinen feels that if the attorneys could come to some agreement for well replacement that would potentially take less time than it would for the DNR to process the abandonment order. K. McDaniel will call their attorney to see if they can reach some type of agreement. She will let him know that from a regulatory standpoint the well needs to be replaced and the DNR does not want to get in the middle of the agreement process. She will update the group next week on how things are going. If they are not making any progress then the DNR may need to step in with an abandonment order. K. Dorow asked if there was a timeframe given from the time they are told to abandon the well to expected completion. L. Heinen said generally speaking the time frame given to abandon a well is two years from time they are told to abandon. K. McDaniel will give an update next week on whether they are making progress or not. T. Beggs had about a 45 minute conversation with the property owner's attorney and gave him a good background about the site and why well needs to be abandoned so maybe that will help. T. Beggs will discuss internally with R&R Program staff regarding well replacement.

b. 4002 Thunder Ridge Road

❖ Replacement well has been completed and the "old" well has been abandoned. Well has been tested twice and clean both times. D. Henderson will be testing today for the third time

and then it will fall in the regular replacement well testing rotation. Landscape restoration has been done so this property is complete.

c. 3303 Hecker Road

❖ Property owner wanted us to install, then wanted us to wait and now wants the well installed. Groundsource is scheduled three weeks out so they will work it into their schedule and get back to K. Dorow. Estimating that this well will be installed in the next month or two. City met with property owner and Groundsource earlier this year and the property owner was unsure about what he was going to do with the property and was going to let us know. He talked about looking into building a new house. He called K. McDaniel and was upset because nothing had been done with the replacement well so now we are moving forward. L. Heinen would like notification on when it will be drilled so she can visit the site during the drilling.

4. March 2016 Sampling Report

❖ D. Henderson is working on the report and will have it completed soon.

5. Update and review conceptual drawings for the pond and the cap

❖ D. Henderson showed conceptual drawings for the proposed pond and cap, gave an update on pond, revisited phased construction and revisited the general question of the pathway we do for this fall.

Update on the pond. Alternative one, pond is kept east of hill. Pond originally was cut into the hill which would cost more because of the hill cut. After discussions with D. Johnson regarding sand aquifer, horizontal flow and capture zone they got more comfortable with moving it out of the hill a little bit and straightening it out a little bit. Base is 10 feet wide, it has a safety shelf and the water level is at 685. D. Henderson has been working with the US Forestry Service, did a site tour and they are very excited about the site. It is not on their 2016 work, but will be on their 2017 work, which will be better since we will not be in each other's way while we are building the pond. D. Henderson has taken some of the things he has said and incorporated them into the plans. Tentatively planning on making a table 20 feet on the west side of the pond between the pond and the hill for trees. Discussed willows all the way around the pond on the west bank. Will plant everything downgradient tentatively in poplar between the pond, creek and south property line. There was discussion about serpentine channel to the creek that would drain and have phytoremediation. Reality is this probably is not an option. Averaged 20 years of groundwater data from the monitoring wells at 685 elevation. The variation between the 20 year low and the 20 year high is about two feet, with 685 being right in the middle so the design is based on 685. Silver Creek is at 682.5 so there is very little elevation to play with. We also need to draw down the pond to create the sink. So when all is said and done with the 300 feet to get to the creek and only a foot drop that would be approximately 0.3% slope to get water to the creek. City Surveyor came back for a second time to confirm because we were within 6 inches of not making it. So the Hydraulic grade line doesn't work for the meandering creek, but will work doing a channel and a pipe. Making room and using the phytoremediation west of the pond should increase the draw down into the pond. By adjusting the pond location and reducing the cut and fill, costs came down on the pond from last time we talked. Now that we are tightening up the budgets, we may be able to do the pond this year. Last time we met, J. Maletzke, AECOM, threw out a question, if the pond works, and cuts off groundwater and

treats it, why do we have to treat the source area? We understand that there is a federal rule that says if we are leaving PCB's in place we need to do some things, which includes capping. So capping aside, if we put the pond in is there discussion about SVE and free product recovery or mass reduction that D. Henderson and T. Beggs would talk about? T. Beggs stated that free product removal has nothing to do with the pond because that is for the mass removal. It is mostly VOC's with some PCB's. D. Henderson discussed tightening of the budget – what are we going to build this fall along with the philosophical question, if we put in the pond to treat the water, do we need to do the SVE system and free product recovery system or do we have this phased construction possibility to evaluate that? Looking at the fiduciary responsibility, SVE treatment, electrical and free product removal, building estimated at approximately \$220,000 - \$230,000 plus maintenance. If the pond works, do we need to spend this \$220,000 +/-? If we look at phased construction - look at building the pond in year one to treat the groundwater, aerator (mixer) and cap in year two along with installing additional monitoring points to monitor the pond, and then step back for five years and see if pond works. Look at results to determine whether the pond is cutting off the contamination and then evaluate if we need SVE and mass removal. Originally, we did request to put in the SVE and free product recovery system this year because before budgets were tightened up that was all that could be done. Since then budget numbers have come in better than estimated, we would request the switch to do the pond first and then evaluate as stated above. T. Beggs stated that his preference was to put in the pond first to begin treating groundwater. D. Koski said that we are working to find a way to put in the pond this year and aerator and cap next year and begin monitoring its effectiveness. Is there a possibility that we would not have to do the SVE and free product recovery if the pond is effective? We are not asking for a guarantee we are wondering if it is a possibility. T. Beggs stated that in regulatory code you have to have mass removal. It is a requirement. He said there may be a possibility that with the remediation elsewhere (pond and cap) there is a potential to figure out if regulatory requirement would be satisfied.

D. Henderson is working on the RAOR. We all understand the phased construction. So in summary, we think we can do pond this year. He thinks the design is pretty good, solved some issues. We will need to get through the WPDES Permitting process. When he is writing the RAOR he will find verbiage that is approvable by the DNR on where we are going. T. Beggs checked into the fence question we had. There are some instances when a fence is not required around a cap but there is a certain process we would have to follow. D. Henderson stated that we would like to work through the WDNR and the WDNR would get the approval from the EPA. He will integrate the request into the RAOR.

In summary, plan on bidding the pond this year. Construction Phase II mixer and cap next year along with the monitoring wells. Discharge to the creek will not begin until we have a monitoring plan and WPDES permit. We are hoping to build a discharge weir with a pipe discharge. It will have a valve to hold water initially and when we are ready we can discharge. Pond effectiveness will be evaluated. Pond effectiveness should determine whether SVE and free product recovery is needed. D. Henderson plans on proceeding with the phased construction approach in the RAOR.

D. Henderson reported that the U.S. Forest Service sent an update this week. He will send a Memorandum of Understanding (MOU) to the City for next year. Phytoremediation would be planned for next year after the pond is constructed.

Tentative timeline for the RAOR – 2 weeks. DNR has 60 days to review. Report done and City a proposal. DNR can give conditional approvals.

6. Continued discussion on SVE / Free Product Removal based on effectiveness of pond

❖ See number 5.

7. Phased construction proposal

❖ See number 5.

8. RAOR Update

❖ See number 5.

❖ T. Beggs asked about the timeline for the RAOR. Team worked out a tentative timeline.

RAOR submittal 7-15-16
DNR conditional approval by the end of August
DNR formal response by 9-15-16
Bid Opening 9-7-16
Council Meeting 9-19-16
Signed contract to begin construction 10/3/16

WPDS permit will need to be worked on.

9. Other topics

❖ Open House – Should we have one? Mail a newsletter update instead of the open house? Team decided to have at least one more open house and then talk about maybe next year doing a newsletter update. Open House will be December 3, 2016.

10. Schedule next meeting – August 25, 2016

❖ August 25 there will not really be an update. Schedule meeting for September 8 2016.
K. Dorow will set up meeting notice – 10AM.