

Minutes
Water Resource Management Utility Meeting
(Formerly Stormwater Utility)
October 13, 2009

Please note: Minutes are unofficial until approved by the Water Resource Management Utility (formerly Stormwater Committee) at their next regularly scheduled meeting.

Present: Alderman Ken Harenda, Alderman Bill Moore, Alderman John Hopkins, Commissioner Jim Kern, Mayor Jack Chiovatero

Others Present: Nicole Hewitt (Division Engineer), Cathy Schwalbach (Project Engineer), Chuck Trevorrow (WRM Supervisor), JP Walker (City Engineer), Alderman Ted Wysocki, and Sue Hanley (Administrative Supervisor Utilities & Streets)

Meeting called to order at 4:48 pm by Alderman Harenda. Roll call and declared a quorum with all members present except for Mayor Chiovatero who was expected.

Old Business

SW 01-09 Minutes from September 8, 2009 Meeting

Motion by Alderman Moore to approve the minutes from the September 8th Water Resource Management Committee meeting. Seconded by Alderman Hopkins and upon voting the motion passed unanimously.

NEW BUSINESS

SW 16-09 Approval of Resolution 09-30 Reallocation of Funds from Open Water Resource Management Utility CIP Accounts to the Underwood Creek CIP Account #04251171 61714 C2003

Mayor Chiovatero arrived at 4:50 p.m.

Hewitt: The Coldspring Road Detention facility has been completed and these are the remaining funds and these would be transferred to the Underwood Creek project which is the only open CIP project.

Harenda: What specifically would this amount be used for?

Hewitt: The permitted project includes erosion control, stream bank stabilization and possibly pipe relocation and work in Prospect Park.

Moore: Are there any funds for the retention facility?

Hewitt: No. This is for the permitted project.

Kern: The rest of the project would be funded in 2010?

Hewitt: The permitted project had a lot of amenities in Prospect Park – plantings and a path, with a cost of about a million dollars. We are going to get everything done that we can complete. There is a structure in Prospect Park that will go in under this project depending on the bids. We will have alternative bids, so that based on the amounts we can add on additional items up to our budget. Work in Prospect Park may not be done in 2010. Everything but possibly the work in Prospect park will be done under this project.

Motion by Commissioner Kern to recommend to Common Council to approve the transfer of CIP funds between WRM Utility Accounts 04251171.61713.C2003 Cold Spring Road Retention Facility \$116,541.00 to 04251170.61714.C2003 Underwood Creek via Resolution Number 09-30 to cover the costs associated with completing the Underwood Creek Rehabilitation project. Seconded by Alderman Hopkins and upon voting the motion passed unanimously.

SW 17-09 Discussion of Underwood Creek Flooding – Results of analysis of underground Storage in Prospect Park

Hewitt: We have been looking into the potential to do underground storage on city property. The maximum amount of storage that we were able to get in that area was 10 acre feet. The original model that was run showed that we could make an impact, but there was an error in the modeling that caused some false readings and the storage in the park would not have a significant impact. To reduce the flows of 100 year storms to 10 year storms we would need 52 ½ acre feet.

Harenda: Is the error on our side or the consultant?

Hewitt: They did the original Underwood Creek rehab project and had the current models. They input data into the existing model, but the data did not act in reality to mimic the function of the stream.

Harenda: You listed several other options with cost estimates. I am looking at the 2nd scenario. We have acquired properties before for stormwater issues, but it is a timing process.

Hewitt: I did some rough calculations based on existing tax information for Waukesha county and used average prices and sizes for properties in the Underwood creek area and included the cost of demolishing the structures on the property and constructing a storage structure for a total of \$6,318,000. I looked at putting storage in a specific location and looked at 12 properties, including the price for acquisition demolition and the storage facility, \$5,012,500. Then I looked at the structures in the database with frequent flooding on their property and included all of the property and structures east of Conrad Place because that is the whole area impacted when the box structure overflows. Not necessarily all of the structures have flooding; we would have to investigate which ones have frequent flooding. The total cost to buy out the properties and demolishing the structures was \$7,378,700.

Hopkins: I think most of the flooded properties are east of Conrad.

Hewitt: I included every property east of Conrad and some upstream at Elm Grove Road and Arcadian Drive which has over the road flooding. I got some information on the detention facility that is part of Brookfield's stormwater management master plan, the acquisition of the site and cost for construction of the facility and pipes, which was \$4,300,000.

Hopkins: That property is still available?

Hewitt: Yes. It is open land. Several are agricultural sites, so I estimated the cost per acre. I could not find the future land use for the area. All of the development per their map did not include any structures.

Harenda: Would the Brookfield facility do the same thing we proposed to do in the park area?

Hewitt: Yes. It will be pulling off a different pipe but there are two – 60" pipes coming into the structure at Sunny Slope Road; this only has one – 60" pipe. I don't know how the system flows through there so I am not positive on the total impact it would have. They identify it as a 51 acre dry detention facility and 4 ½ acre feet so I am assuming that means 55 ½ acre feet.

Harenda: Is this similar to the Tess Corners design?

Hewitt: No. I think it is just a big dry detention basin.

Moore: Do all of the existing properties upstream have homes on them?

Hewitt: The ones that have currently have flooding issues, yes. All of the properties along the creek have structures on them.

Moore: The storage facility would be put on the property and all of the properties would have to be destroyed.

Hewitt: There is no area there to provide adequate storage without taking down the houses.

Moore: Will we get this information in a report?

Hewitt: I can send it to you, but I haven't looked at the possibility if we can even construct these facilities.

Harenda: I asked Nicole to put together some options and she put this together in a couple of days.

Hewitt: This is very preliminary. I haven't looked at the design of the Brookfield structure or if we had the fall required to get 5 acre feet on these sites. It is not going to be an easy task because of the pitch of the stream being so steep; on one site there is a 7 foot drop in the stream across the property. We will need a whole area to work with.

Moore: What about getting help from West Allis?

Hewitt: The issues we have on Underwood Creek. They don't believe it backs up into our properties. There is a drop structure on 124th Street where the flows don't back up to that capacity at that location. The only backup they have on their end is Greenfield Avenue and other locations in West Allis. I don't see the stormwater flow backing up into our system.

Moore: If we buy up properties, wouldn't it help West Allis? That is what I mean about getting monetary help.

Hewitt: Yes. We are working together on other things, but I don't see them going along with it. I will also talk to MMSD and other organizations.

Moore: Do they have significant flooding for it to be a help?

Hewitt: No.

Hopkins: You do raise a good question. Nicole, I would like you and I to go down there in a good rain. It floods at 117th and Greenfield and it is backed up to 124th Street. It is backing up into our area and floods heavily there.

Hewitt: I believe the drop structure at 124th is six feet to the point that this passage is not allowable, that's how high it is, so the water could back up 4 feet and still not affect our flows. The problem east on Meadow Lane is from the debris clogging the grates, flooding the properties and backing up. As far as the West Allis side, they wouldn't see it impacting our flows.

Hopkins: I would ask them to go through the park when it is flooding and watch it. That parkway is not cleaned out.

Moore: The underground structure is out at this point?

Hewitt: It is not cost effective.

Hopkins: This won't get done all at once, but if we can do it in incremental stages, anything will help. I don't want the neighbors to think that we are going to buy up everything east of Elm Grove Road. That will cause panic.

Hewitt: There are a lot of people on Meadow Lane that don't have flooding because they are higher than the other properties. I am looking at a bunch of things to make small, incremental impact quickly. I am looking at the existing storm systems and ponds. There is one on Highland Memorial Park cemetery if we could do some retrofitting that may help.

Hopkins: It might not help on the 500 year or 100 year storm, but if we stop the flooding on the 25 and 50 year storm, it would help. I would like to see some stages of this.

Hewitt: We are scheduling sewer televising to look at pipes in the system and look at retrofitting at 124th and Meadow, possibly with some trench drains or inlets to go into the storm system.

Hopkins: I may ask for another neighborhood meeting once the budget stuff is done. Any information that we can get out on the website would be helpful. Keep us apprised each meeting.

Hewitt: I will be posting an excerpt from the memo after today's meeting. Incrementally we would be looking at low spots where we could restrict the flow, allow the water to pool a bit longer before going into an inlet. I am looking at simple quick fixes to make little improvements.

Harenda: Can you quantify those changes in the step improvements? We put a lot of money in this part of town. Some of the other scenarios are significantly high and the money is not available. Is there anyway that you can bring information back to the next meeting or so to lay out what we can do in 2010 and if we have to discuss potential borrowing going into next year is that where we want to utilize some of our resources? The residents there and Alderman Hopkins are facing significant issues. Nicole can fine tune some of the numbers and look at working with some of our neighboring communities.

Hewitt: We will be doing a joint permit with West Allis to clean out a culvert at 124th Street south of Cleveland. We are co-applicants on that and it will come out of our contracted services account.

Harenda: Are there some specific properties that would want to be purchased as a buy out and take the structures down or are there so many that they are all in the same boat?

Hewitt: I think there are so many that had 2 feet of water coming up against the house during storms. The problem is that the area that gets the worse flooding, if we put storage in that area, it would have no impact to the residents.

SW 18-09 Culvert Replacements with Road Work

Walker: We evaluated the 2009 Paser ratings for the city and there are a significant amount of roads rated 30 and 40, even 20. We are scheduling those roads to be rehabilitated into the future. When you look at culverts that need to be replaced on the road, our street department cannot get to all of them. To rehabilitate the road, we have to replace the culvert if it is bad and that has been paid for by the road rehabilitation CIP budget. The culvert replacement for roads rated 30 and 40 is \$650,000, which is equivalent to rehabilitating 2 miles of roadway. Since culverts are an asset of the Water Resource Management Utility, should utility funds be used to replace the culverts instead of CIP Roadway funds? That is why I brought it to the Committee to discuss.

Harenda: It is the same discussion we had over the last 7 years regarding ownership of infrastructure in road projects when they are rehabilitated. The total is approximately \$361,000?

Walker: For the culverts totally rusted out yes. For the ones including those close to being rusted out, the amount is \$654,000. By the time we get to the projects for roadway rehabilitation, they may be rusted out also.

Harenda: Our budget does not have the ability to absorb this significant dollar amount.

Kern: Would it be any benefit to the utility to absorb it?

Walker: It would be an updating of their asset.

Hopkins: The money is not there for it today and not for many years to come with all the work to be done.

Harenda: If we shift all storm related assets to this utility, we would have to double or triple the budget and raise the rates. The benefit to the utility is that we are able to send utility bills to tax-exempt properties, where on the city side; they aren't paying a portion of that asset.

Moore: Maybe we need a more written discussion of the pluses and minuses.

Harenda: If we shift one thing from one budget to another like the roadway maintenance from operating budget to CIP there should be a reduction overall. When the utility was created there should have been a reduction on the street side for some of the work they did in the past from what they are doing now? Have we done a comparison?

Walker: If it was done, I don't recall seeing analysis.

Harenda: Eric Nitschke had laid out step increases for the utility budget for the rates, based on needs.

Wysocki: Before the stormwater utility, when roadwork was done, anything to do with drainage was done. When we created the stormwater utility, we made the whole policy discussion in the original study and it was determined that the stormwater utility would only pay for common projects with roads for major conveyance systems, larger

diameter pipes, I greater than 24". Major crossovers would be the only responsibility of the stormwater utility and they would absorb the costs of culverts and ditches associated with those types of roads. That was the policy decision made when we came up with our stormwater management project descriptions, overall master plan and funding, and took that into consideration when we established the rates to fund the stormwater master projects. The policy decision was for the stormwater to pay for only on the main type of culvert carriers, other than that it would stay with the normal budgets relative to the roads that were in place before the utility was established. When Eric did the background information, we estimated about 20% of the stormwater facilities would be the responsibility of the stormwater plan, and these were used to determine cost factors and what we needed in our budget.

Chiovero: I think Ted is correct. This only became an issue when we put in curb and gutter and storm sewers which are an asset to the utility. For example Coldspring Road. There was a lot of discussion of whether or not the utility should absorb the cost of the storm conveyance system and curb and gutter. Realignment of ditches and culverts were supposed to come under road rehab. We aren't going to rehab the road without replacing the culvert. Right now the utility can't afford what they have to do and can't take on additional costs. I am not sure if a cross culvert is an asset to the utility.

Harenda: JP can you check to see how Mike is classifying that? The City Engineer was trying to spur discussion and because our resources are being strained further and further, he is proposing potential options.

Walker: The reason why I brought this to this committee is that it is a topic of discussion at the Board of Public Works and I would like to be able to interject the committee's feelings and thoughts on this issue. It is a cost item and infrastructure, so the question is whose asset is it? That is why I want the weigh in by this committee.

Harenda: At this point, it is not something that the utility wants to absorb and it should be part of the road based projects. If the Board of Public Works sees otherwise and they want us to look at it, we will.

Kern: We are staying consistent with what the policy has always been.

SW 19-09 Discussion of Drainage Priority Ranking System

Cathy Schwalbach discussed the priority ranking system.

A1 – Highest priority, yard flooding and property damage. Extreme problems.

A2 - System is not operating the way it should and needs repair, but it is not causing flooding or damage.

Streets could be flooding.

B – Lowest priority. Nuisance, water standing, etc.

Schwalbach: When a drainage issue comes in, I look at the situation and use the ranking system to determine the priority.

Harenda: I would prefer to see the occupied properties take precedence before vacant lands, but I would like to check with the city attorney that if we do this, we are not putting ourselves in jeopardy.

Moore: If water is coming onto farmland from a property that has impervious surface, is that priority 1 or 2?

Schwalbach: If the farmer contacted us that would currently classify as an A2. A1 would only be a yard or a structure. We have not had any that have crop damage. We have had some that are getting excess water and we look at it and see that the ditch line needs to be more defined to prevent this. On the drainage list there are 4 properties in construction that have issues.

Moore: If a farmer normally had no flooding but upstream construction and impervious surface occurred and because of that he had flooding and damaged crops, that should be the highest priority, but just flooding on farmland that would normally occur anyway, I would not see that as highest priority.

Hewitt: That is 2 different things. If it was caused by development and it was increase in flow, it would probably not be a drainage list item. Drainage list items are things in the right of way where ditches are broken down or need to be dug out deeper, but if a development went in and there was an issue with that and they have more flow, that will not be a drainage issue because we would not be able to solve that issue within our right of ways. It would be a drainage issue outside of that, not one of these categories.

Harenda: Some of these agricultural areas especially in the southern part of the city have big feeds to them and during big storms they fill into lakes. It isn't always because of new construction, it is just how the water flows.

Moore: Would we have anything to do to solve that problem or would it be a court case?

Schwalbach: If we received a call, it would go into our list as only an investigation not as construction for our crews. Was there something wrong with the development put in, did they comply with their requirements, and are things functioning properly. There would be an evaluation from staff and if there was something we needed to do we would move forward separately from the construction area of the drainage list, document what was found and closed out.

Hopkins: I agree with what Bill has just said. I went over the 4 examples and can't fault you. I agree with what Alderman Harenda said. I suggest that if this flooding on that type of land is causing road flooding and interfering with traffic, it should be given a priority.

Schwalbach: That is how we look at if there is an issue causing upstream flooding, some blockage causing damage or flooding to a person with a structure on their property. Sometimes it is hard to see, but we look at who is affected. Is it a structure? If it is water standing in a ditch that is a B level priority. A farm field wouldn't be an A1 because there couldn't be structural damage.

Kern: On the vacant land or farmland, do we differentiate based on the economic impact to the owner, such as a farmer who cannot farm because of stormwater issues. Does that take on a different priority level?

Schwalbach: Currently it would make it an A2. The priorities are not specific to include crops or loss of business.

Kern: Maybe we should have something to address this. If someone says they cannot make a living because of this, then it becomes a higher priority.

Harenda: Staff investigates it, but it would be subjective. For example, just southeast of the putting range on Moorland Road where they proposed to put one of those golf domes a few years ago it is a low lying area which sometimes turns into a big lake. If they put structure like that in, how would it affect the flow in that area? Some of these low lying areas are just naturally contoured. I don't believe we have agricultural fields in the area that are being flooded to put farming in jeopardy. Some are catch basins.

Schwalbach: Sometimes there is water coming onto the property. It may be a small part of the crops they might lose, a large part or they aren't farming right now. It is hard to determine how we set the priority.

Harenda: What type of action are you looking for?

Schwalbach: What kind of change you want to see or an affirmation that it is acceptable.

Harenda: I think there should be a priority with occupied properties first, unless we are significantly damaging these agricultural areas. Alderman Hopkins pointed out that if the water is cascading out of the right of way onto the road and creating a traffic problem, then we need to deal with them. If you classify these with sub-priorities and Commissioner Kern mentioned the financial aspect, and from a legal aspect if we skip one, I don't want to put ourselves in legal jeopardy.

Hopkins: I think what you laid out for us is well thought out and I wouldn't make any changes.

Kern: In the vast majority of issues, the resident's issue would supersede any of these, but we need to use good judgment if there is someone is having a devastating economic impact as a result of it, deal with it appropriately.

Schwalbach: I suggest that as we use the priority system we do consider property damage as being damage to crops if a farmer would say he is experiencing loss, and we would consider that an A1.

Hopkins: Directly attributable to that problem or situation, not just a heavy rain.

Schwalbach: We don't need to change the priority but in practice we will consider property damage being damage to business for a farmer if that is acceptable. If it is just undeveloped land, it ends up being priority B.

Harenda: I don't understand the Windsor Drive Park land example. That is City owned property correct?

Schwalbach: The utility would only handle what is in the ROW. The Park Department would handle the park.

Harenda: I am tired of getting calls from individuals about doing ditching for unoccupied lands. That is why I suggested coming up with separate rankings. Some of these properties will be developed in the near future, but if development is going to occur their stormwater plans will have to be addressed.

OLD BUSINESS

SW 13-09 Approval of 2010 Operating Budget for Water Resource Management Utility

Hewitt: Here are the changes in the budget from the last meeting.

- Public Operating Revenue increased from \$77,683 to \$99,500
- Minor changes to Engineering and Utility Charges
- No change to Street Labor
- Decrease \$7,000 to Inspection Admin (different insurance election)
- Minor change to DCD - \$400
- Spoils Disposal adjusted to \$10,000 (dropped from \$17,500) to reflect billings received to date

Moore: The income is almost \$200,000 more than the expenses. Since you are behind on the drainage list would it not be appropriate to put another person on staff to deal with the problems?

Hewitt: Currently any additional funds are applied to reduce our CIP debt. I don't have that figure with me.

Moore: You would have a planned expense line to apply to the CIP debt.

Hewitt: In previous budgets there was a projection spreadsheet that outlined what is coming out every year until 2012 where we don't have that line item in our operating budget.

Moore: Is there a requirement to pay off a specific amount per year?

Hewitt: Not that I am aware of. I can distribute the spreadsheet to you to include in the budget.

Moore: We need to be aware that it is there and we need to do something about it.

Harenda: What is the surplus available in the utility?

Hewitt: I don't have the figure available, it is on the spreadsheet.

Harenda: The issue for years is that we were spending more than we received and eating away our surplus put in there besides what is put in the account for principle and interest each year. I would like to see what the surplus would be not to add more staff but perhaps pulling an extra \$200,000 that is not going to put any of our principle and interest payments and closing our past debt, it is trying to shift some of the money to the drainage list and try to bid out some of the work. We don't want to put the surplus at risk. That creates our operating capital.

Hewitt: I think the surplus is under a million.

Harenda: If we can get a spreadsheet on that and include it on this budget. If there is extra revenue that we can potentially use, my suggestion would be the drainage list to stay ahead of the game.

Hewitt: I will send that out as an addendum or memo.

SW 14-09 Approval of 2010 CIP Budget for Water Resource Management Utility

Harenda: I know we were looking at the underground detention facility as a potential CIP item. Is there any way to give us an analysis on what is available for potential borrowing for the stormwater utility?

Hewitt: That is the item that this request addressed, but there are other potential projects but we need to develop the cost estimates.

Harenda: If there are rankings of higher priority projects, let's deal with those first. The way I understood it that we didn't believe we were able to borrow until 2012 within the utility. We may be premature, but if we have the ability, let's see what we can do with it.

Hewitt: We talked about the intern carrying over until 2010, but I did not include that in the operating budget. I borrowed an intern from another department and it worked out well. I have not received any response from any of the universities.

Hopkins: You may want to try Carroll College.

SW 07-09 Stormwater Management Plan Update

Moore: What is the plan for the 40% reduction suspended solids by 2013.

Hewitt: The intern will be compiling information on the existing systems. Through the stormwater management plan update they did an analysis of what projects we could do for low cost to get us closer to the 40% by that date. With their analysis we received 38.7% or higher. Right now we are at 31.7%, but the numbers may change with the new models and it will have to be updated. I have heard it may make things better, others say it may make things worse. They changed how they are modeling their swales, which we have a lot of. SP2 and our street sweeping were applied for the 2008 20% goal.

Harenda: Once a specific model is chosen we just plug in our existing information and see where we are at.

Hewitt: We have the option of any of the ponds that have development agreements or stormwater maintenance agreements that were in place or under construction prior to 2004, can be applied. That is part of the work that the intern will be doing. Some were accounted for in the existing model, but some were not.

Harenda: Do you have any indication on the number of homeowner association owned facilities and how much impact this is. Eventually we will have to give them direction and have them clean them up, what is the cost and how many are there.

Hewitt: The list originally was 40; I found another list of 180.

Harenda: That will be a PR issue.

Motion to adjourn at 6:04 p.m. by Alderman Hopkins. Seconded by Alderman Moore and upon voting the motion passed unanimously

*Please Note: Minutes are not official until approved by the Committee
Respectfully submitted by Sue Hanley, Administrative Supervisor Utilities & Streets*