

**Minutes
Storm Water Committee Meeting
New Berlin City Hall
3805 S. Casper Drive
Council Chambers
August 10, 2004**

Please note: Minutes are unofficial until approved by the Stormwater Committee at their next regularly scheduled meeting.

Present: Alderman Hopkins, Alderman Hegeman, Alderman Harenda, Mayor Wysocki & City Engineer J.P. Walker

Others Present: Eric Nitschke (Division Engineer), Cathy Schwalbach (Project Engineer), Ray Grzys Director of Utilities and Streets, Mel Corley (Division Engineer), Chuck Trevorrow (Stormwater Supervisor)

Meeting called to order at 4:47 pm by Alderman Harenda and a quorum was declared with all members present.

Item SW 01-04 Approval of the July 13, 2004 minutes

Motion by Mayor Wysocki to approve the July 13, 2004 minutes. Seconded by Alderman Hopkins, and upon voting, the motion passed unanimously.

Item SW 26-03 Kelly Lakes Owner's Association Request (remains tabled)

Item SW 31-03 Approval of Creation of Section 230-13 of the Municipal Code of the City of New Berlin, Maintenance of Public Rights of Way and Public Easements (remains tabled)

Item SW 12-04 Approval of Amendment of Section 210-B of the City of New Berlin Municipal Code Concerning Downspout & Sump Pump Discharge (remains tabled)

Item SW 17-04 Approval of Asphalt Invert Replacement Policy

Cathy Schwalbach stated that the City currently has a policy for concrete invert replacement, but it does not address asphalt. Ms Schwalbach said that the purpose of this policy is to define the qualifications and practices of replacing exiting asphalt invert with concrete invert lining. She continued by saying that staff has drafted a proposed policy for the following reasons:

1. Upgrading to the concrete invert would save maintenance costs to the Utility. The very deteriorated asphalt inverts have been requiring patching and cleaning every two to three years. Those inverts that are beyond patching and cleaning currently require replacement of large sections of asphalt.
2. Upgrading to the concrete invert with this policy will offer residents an improvement in the functionality of the ditch line and easier maintainability of the ditch line, at an affordable cost. At \$1.13 per lineal foot, the property frontage of 100 feet would cost the resident \$113.00 for the upgrade.
3. Upgrading to the concrete invert will bring these ditch lines up to current City standards since asphalt invert has been replaced with concrete invert.

Alderman Harenda asked how much asphalt invert there was in the City that currently is requiring replacement? Ms. Schwalbach answered approximately 250 feet would be involved at this time.

Alderman Hegeman asked for further explanation of the low cost. Ms. Schwalbach responded that the cost difference is the difference between the material costs. The labor cost remains the same because either way

the old asphalt invert needs to be removed. She added that Stormwater Supervisor Chuck Trevorrow worked with her on determining cost.

Alderman Hopkins asked if a resident had a creek running through his property, who would be responsible? Cathy Schwalbach stated that if the creek was in City right of way or easement, the policy would be followed and it would be the City's responsibility, otherwise, if it is on private property, the resident is responsible for the costs.

Mayor Wysocki asked for clarification on those drainage ditches whose entire ditch was covered with asphalt. Mr. Schwalbach responded that this policy only addresses what is in the bottom or invert. Since the Stormwater Committee is evaluating a City-wide ditching policy, the practice of lining the slopes of a ditch line would be covered under that policy.

JP Walker asked if there is a 2-foot invert and a 3-foot footprint is needed, what is done? Mr. Nitschke answered that it is based on the same costs, but multiplied on the size and volume of invert replaced. Mr. Walker replied that in the rationale statement, a change might be needed to make a distinction where a wider invert is required and what formula is used to determine cost.

Alderman Harenda asked staff to tweak the policy and bring it back to the Committee at the next meeting. Eric Nitschke said that by upgrading from asphalt to concrete, the City gets a higher quality product with less upkeep and maintenance.

Motion to table by Mayor Wysocki. Seconded by Alderman Hegeman and upon voting the motion passed unanimously.

Item SW 18-04 Buena Park Stormwater Project Review

Alderman Harenda asked staff for a review of this project. Eric Nitschke read a memorandum about the historical review as follows:

The Buena Park Subdivision storm water problems were initially defined as being two-fold. The first problem was identified to be flooding from 100-year storm events. The second problem in the subdivision was identified to be nuisance flooding in the ditches from storm events equal to or less than a 10-year storm. The nuisance flooding was identified in the Storm Water Management Master Plan (Appendix A). Staff originally took the approach of addressing the 100-year storm event flooding in Buena Park Subdivision.

The City completed a Stormwater Management Plan in 1993 (referred to as "the Plan") for the Deer Creek Watershed. The Plan recommended the creation of a series of pond detention areas for improving water quality and flood control in the Deer Creek Watershed. Two of the highest priority pond detention areas were identified by the Plan as Basin CP-5 and NP-1. The areas served by these Basins were the Industrial Park and the Buena Park Subdivision, respectively. Bonestroo was hired in late Fall of 2002 to work on the analysis and design of CP-5 and NP-1 for flooding and water quality control in the Industrial Park and Buena Park Subdivision.

It became apparent early on that CP-5 and NP-1 would not be constructed in the location or manner that was originally laid out in the Plan. The Plan located CP-5 on a parcel that was up for sale in 2003. The asking price for the land was over 1 million dollars. Also, the location for pond NP-1 was determined to be in a floodplain, in wetlands, and online with Deer Creek. These three criteria were not an issue in 1993, whereas in 2003 they left NP-1 non-permittable by DNR standards. Because of the regulatory requirements and cost of land acquisition the scope of the project was changed.

Instead of focusing on flood control, attention was re-directed to the conveyance systems in the Buena Park Subdivision. Bonestroo shifted their efforts to re-designing the system according to City Standard and Policies. The newly approved (Spring 2003) concrete invert policy was a driving force in the design. (Attachment B) Plans were completed in early 2004 following a public information meeting. Comments and concerns from the informational meeting were incorporated into the final construction plan set. A great deal of effort was made to keep the interests of the residents in mind.

Construction work in Buena Park Subdivision started in April of 2004. The project experienced delays due to an unusually wet spring and the Gas Company relocating over 8,000 feet of gas main. Despite the delays, the contractor is still on schedule to finish the single-family portion of the subdivision by August 27, 2004. Many changes have been made to incorporate requests and concerns of the residents as they have been brought to Staff's attention. Culverts have been lengthened, trees saved, retaining walls added to reduce side slopes, restoration completed with sod to provide immediate cover in ditches (Attachment C), and storm sewer installed and upsized to increase the level of protection for storm events.

The conveyance system in the Buena Park Subdivision has had the unique opportunity to be tested by two, 25-year storm events this year. During both events, the constructed areas of the project held up to the runoff rates. There were only minor problems, most dealing with floating sod, in the subdivision. The Buena Park Subdivision project incorporated relocating over 8,000 feet of gas main, reditching for approximately 200 homes, and working in adverse weather conditions for half of the construction period. Ultimately, the goal that the Storm Water Utility had for the project will be achieved. That goal was to increase the level of protection for storm events and improve the drainage throughout the subdivision.

Mr. Nitschke stated that in the multi-family areas, some changes were requested and this construction may extend beyond August 27th. The biggest concern is that curb and gutters are deteriorating; however ditches are adequate.

Mr. Nitschke then read the "Sodded Ditch Report" prepared by Construction Services Engineer Mel Corley. In it, Mr. Corley stated that ditches were constructed per the plans of the consultant, with concrete invert being used where slope was less than 1.5%, with residents that did not have concrete invert requesting it to alleviate wet ditches and difficulty mowing. The report by Mr. Corley added that due to rain in April until July, the only conditions for sod restoration was to place topsoil on muddy ditches and then lay sod. Status at the end of July of the ditches was reported by Mr. Corley to be approximately 1,550 lineal feet of WET ditch.

Mr. Corley further added in his report that sump pumps run a lot in Buena Park due to areas of granular fill on lots that traps water under the lawns, granular fill placed around homes during construction, and septic fields with granular material that were not removed after sewers were installed. Mr. Corley added that several of the wet ditches have slopes greater than 1.5%, but the quantity of sump pump water keeps the ditches wet.

Mr. Corley listed possible remedies for sump pump discharge including: 1) paved concrete inverts; 2) installation of a French drain in the bottom of existing sod ditches; and 3) moving sump discharges from the ditch line and into the lawns.

Mr. Nitschke stated that it was also discussed at Committee level that rain gardens be used. Alderman Harenda asked if it was currently illegal to connect sump pumps to the sanitary sewer and Mr. Nitschke replied yes, that it was illegal, as well as downspouts.

JP Walker said that based on comments from residents with continual wet ditches, if concrete inverts are considered a solution, the dilemma will be if the grade exceeds 1.5% and is less than 4%, and the financial implications to the City.

Alderman Hopkins asked staff to keep after landscapers to ensure the sod is laid properly. Mr. Nitschke stated that the contractor was doing the work in an acceptable manner, however much of the sod that was floating had not been watered, and it takes a good season for the roots to "take". He added that the contractor may need to come back later and that Mel Corley checks their work daily.

JP Walker said that after meeting with the Mayor, it was suggested that a letter be sent to residents in May to invite them to a Public Informational meeting and reinspection to see if any rehab work was needed.

Alderman Gallagher, the 3rd District Alderman stated that he was glad that staff suggested that sump pump discharge be kept out of ditches. He asked that an ordinance be developed to keep sump pump from discharging into ditches and drain onto lawns to alleviate the need to replace some of these ditches with

concrete inverts. He also suggested that staff needs to get people to water the sod and said that he thought there was an ordinance that required citizens to maintain these areas.

Stephanie McAdams of 1615 South 165th St stated that the neighbor across from her had sod floating away and a ditch filled with water, even though she watered sod. She added that the front of her home previously had a concrete ditch, and when algae formed, they bleached it out and maintained it. She continued now that the concrete invert was removed, the water in the ditch does not flow, can't be mowed and breeds mosquitoes. She requested her concrete ditch back, and a better job by the sod contractors. Ms. McAdams stated that between her lawn and the neighbors Mike Watson is a large exposed drainpipe.

Wendy Berman of 1610 South 165th St stated that she watered the sod, but it came off, then when the contractor re-laid the sod, she was told not to water it. She added that no topsoil was put on it. She added that before the last storm, the sod was taking. She also requested her concrete invert back, and stated that even during a severe storm event water flowed.

Mayor Wysocki said that the majority of the residents are happy with the work done, but it may be justified to have concrete invert in certain areas. He suggested that staff waits until Spring as a good test of whether it is working or not, and decide then on remedies to any problems. The Mayor said that it was never anticipated that 8,000 feet of gas line would have to be relocated. Mr. Nitschke added that the subdivision received a facelift that you don't see as an outdated steel gas line was replaced.

Alderman Harenda asked if Mr. Corley was out there daily to check on the contractor's work and fix problems? Mr. Nitschke replied yes, the contractor has been asked to come back if the work is deemed inadequate.

Alderman Hopkins asked if the sod was staked and about residents with private wells having to water. JP Walker said that a letter was handed out to residents asking them to water. Mr. Walker also stated that 15 minutes in the morning and 15 minutes at night was really all the watering that was required to establish the sod.

Further discussion was made about the water quality issue and NR216 requirement. Alderman Harenda asked staff to address immediate concerns and come back with a report in September. Mr. Nitschke asked that the report be given in October so that staff would be able to give a full analysis of the situation. He reminded the Committee that Buena Park is the largest Storm water project the City has had to date (\$1.5 million) and we need to look at the project, make adjusts and fine tune areas that need it.

Motion by Alderman Hopkins to adjourn at 5:53 pm. Seconded by J.P. Walker, and upon voting the motion passed unanimously.