

Minutes
Borough Public Meeting – 3rd Street Dam
August 3, 2011

A special public meeting was held in the Borough Council chambers on the above date regarding the design of the 3rd Street Bridge and Dam. The following members of Media Borough Council were present: Mayor Robert McMahon, President Peter Alyanakian, Vice-President Monica Rehoric, Councilwoman Dawn Roe, and Councilmen James Cunningham, Edward Stein and Peter Williamson.

Also in attendance were: John Harrison, Schnabel Engineering (dam design); Quentin Rissler, Larson Design Group (roadway and bridge design); Richard Reisinger, PA Department of Environmental Protection (DEP) Dam Safety; and Sidney New, Gannett Fleming (PennDOT's project manager).

Borough Council President Pete Alyanakian opened the meeting by introducing Pennsylvania Senator Dominic Pileggi. Senator Pileggi announced that the project would receive a \$650,000 grant in Redevelopment Capital Assistance Funding from the state. Mr. Alyanakian noted that between this grant and the PennDOT funding, the construction of the project would be 100% funded.

John Harrison (Schnabel Engineering) presented background information related to the project. He noted the two main reasons for the project were dam safety and transportation safety. The dam needed to be upgraded to meet PADEP spillway capacity criteria. The current spillway can only pass approximately 14% of the probable maximum flood (PMF); the required spillway capacity is 50% of the PMF. In addition, the existing slope is very steep and does not meet current stability standards. Regarding transportation safety, the roadway surface failed approximately 15 years ago prompting closure of the road. In addition, the bridge is in poor condition and needs to be replaced.

Mr. Harrison noted that the dam is classified by the state as a small, high hazard dam, meaning if it were to fail, it could potentially kill someone downstream. The term "high hazard" does not refer to the condition of the dam; however, Mr. Harrison noted that the condition of the dam is poor.

Mr. Harrison presented conceptual images of the rehabilitated dam. As part of the repairs, the slope would be flattened and covered with grass. The spillway would consist of a drop inlet leading to a box culvert beneath the dam, which in turn would empty into a stilling basin. A steel trash rack would cover the drop inlet at the lake, and fencing would be located around the stilling basin to address the fall hazard. Photos of Martins Dam in Upper Merion Township were presented to illustrate a similar project.

Quentin Rissler (Larson Design Group) presented the road and culvert design aspects of the project.

- The current design could include sidewalks and parking
 - Sidewalk must be connected to adjacent path or sidewalk
 - Bike lane must be connected to adjacent bike path
 - Guide rail would not be needed if there are parking and sidewalk
 - Utilities will be supported through construction

Mr. Harrison presented status of submissions:

- The TS&L (type, size and location) report was submitted and approved by PennDOT approximately 10 years ago. Aspects of the TS&L may need revisions.
- The Hydrology and Hydraulics Report for spillway design was submitted and approved by PADEP also about 10 years ago.

- The Foundation Submission report was submitted to PennDOT and will need to be updated with the new wall design.
- The Safety Review Submission was submitted and has received comments from PennDOT.
- The Drainage Report (storm runoff on the roadway) has been submitted and is under review.

Rich Reisinger (PADEP – Dam Safety Section) presented a brief overview of the dam from PADEP's perspective:

- The dam was inspected in 1980 as part of the US Army Phase I Inspection Program ordered by President Jimmy Carter following the failure of several large dams in the late 1970s. The Phase I Report for 3rd Street Dam deemed it to be in unsafe condition.
- Mr. Reisinger noted the question of ownership has impeded DEP's efforts to get the dam restored to safe condition.
- 3rd Street Dam (Broomalls Dam) is one of 780 high hazard dams in PA, and the PADEP considers this dam to be in the top ten structurally deficient dams in the state.
- Mr. Reisinger noted that PADEP will need to review Environmental and Dam Safety permitting.

Sidney New (Gannett Fleming, PennDOT's Consultant for Management of Local Bridge Program) presented PennDOT's involvement in the project. He noted the following:

- The construction is 80% funded by PennDOT, and because of this funding the design must go through the PennDOT process.
- This current public meeting is required as part of the permitting process.

Public Comment

The meeting was opened to the meeting attendees for questions and comments. The following questions and responses are paraphrased. Initials identify responders: JH-John Harrison; PA-Pete Alyanakian; JC-James Cunningham; SN-Sidney New; PW-Peter Williamson; RR-Richard Reisinger.

1. Was consideration given to the aesthetics of the dam? (Paul Inderf)

JH: Aesthetics were considered to the extent funding would be provided by PennDOT; however, there is a limit to what PennDOT will pay for.

2. Can trees be on the berm? (Paul Inderf)

JH: All of the trees would need to be removed from the slope. It is a requirement of PADEP (and standard engineering practice) that trees not be allowed on earthen dams due to the formation of potential seepage paths along the root systems, and the potential creation of large voids in the dam if a tree were to be uprooted.

3. Can a sidewalk be included in the project even though Upper Providence has no sidewalks? (James Zegelhoffer)

JH: PennDOT will provide funding to the end of the project limits. The remainder of the sidewalk/path must receive funding elsewhere. There must be a commitment that a sidewalk will be constructed within a year after the project is completed. Mr. Harrison noted that a sidewalk would be funded by PennDOT if it connected to a path into the park on the other side. Later, Mr. New clarified the concept and noted that the path in the park would need to be a concrete sidewalk.

4. How will project impact access to the park along 3rd Street during construction? (Trip Carroll)

*JH: Access to park along 3rd Street will be closed during construction.
PA: Confirmed access would be closed.*

5. Has a traffic control study been performed, and has there been consideration for the amount of traffic into and out of Media? (Scott Layne)

PA: No traffic study has been performed since last study 13 years ago. Traffic concerns throughout the rest of the Borough due to closed 3rd Street should be alleviated with re-opening of the road.

6. Were other designs considered to be more aesthetically pleasing? (Stephanie Gaboriault – Friends of Glen Providence Park)

JH: Other options were considered in the 1998 Study which will be posted on the Borough website, along with historic study. Keeping the existing structure was considered, but since that structure had insufficient spillway capacity (1/2 PMF), a secondary spillway (similar to the proposed structure) would be needed alongside of the existing spillway. The proposed design was considered the most economical.

7. Can the conduit be stepped for a “waterfall” look? Were alternative designs considered? (Stephanie Gaboriault – Friends of Glen Providence Park).

JH: The total drop between the lake and the creek was split into two drops: one at the spillway, and one at the stilling basin. To make the drop into the stilling basin higher (i.e., waterfall effect), the side walls would need to be raised and the length of the stilling basin would need to be lengthened to contain the flow trajectory during flood events. Splitting the two drops was estimated to be more economical. Other alternative dam designs were considered in the 1998 Report which should be posted on line in the next few days. Also, historical studies had been done in the 2000s, and these additional documents should also be posted shortly.

8. Could a covered bridge be an option? (Stephanie Gaboriault – Friends of Glen Providence Park)

JH: PennDOT would only fund a covered bridge if it were replacing an existing covered bridge.

9. Is there any legal reason why the road could not be a single lane or one-way? (Rumsey)

SN: PennDOT will allow a one-way road if approved by the Borough. If the road is one way, it can be a single lane. If the road is two way, there must be two lanes.

10. Concern was expressed that the bridge be reopened to allow people in the vicinity to get to the hospital more quickly in an emergency. Also, how will dam affect the pond?

JH: The lake may be temporarily drained during construction. Dredging of sediment or other improvements to the pond are not included in the project; however, they could be performed by the Swim Club concurrently with the project.

PA: Much of the sedimentation in the pond is from the development in Media.

11. Concern was expressed regarding the effect of the proposed project on wildlife in the park. (Marcia Tate)

JH: No rare, threatened, or endangered species have been identified at the site. Construction fencing will surround work areas.

12. Concern was expressed that the gradual slope of the 3rd Street access path to the park be restored as part of construction. (Robert Ferry)

JH: The access path will be restored with a gradual slope.

13. Have Media residents weighed in on the rehabilitation? Will residents be able to vote on final plans? (Lisa Vaccarelli)

PA: The purpose of tonight's meeting is to inform the public of the status of the design process. The roadway over the dam is the aspect of the project over which the Borough has most influence.

SN: Borough can choose type of roadway (one-way or two-way).

JC: Upper Providence must concur with Borough since it is connected to the roadway.

14. Is leaving bridge closed an option?

JH: PennDOT will not fund rehabilitation of the dam without replacement of the bridge and road. In addition, DEP will not allow dam to stay in its current state. In similar cases where a dam is left in disrepair, the state has breached the dam and back-charged the owners. The state has not done so in the case of the 3rd Street Dam because of the difficulties of having the utilities running through the dam. He said that if the Borough decided to make it a pedestrian pathway, there would be no funding for that.

PA: If road not replaced, 100% of the cost will fall to County, Borough and Broomall's Lake Swim Club. Breaching the dam would cost on the order of \$1 Million.

15. Could a concrete dam be considered if the road were one way? (Susan Garrison)

JH: Concrete dam would require the additional expense of a large cofferdam, in essence building two dams, in order to remove the existing dam and build a concrete one in its place. This would create a much more expensive project.

16. Will sidewalk be included in the design? (Michael Kinsley – Planning Commission)

PA: The Borough would like to have sidewalk, but will need concurrence from Upper Providence. The Borough will approach Upper Providence regarding this issue.

SN: PennDOT will pay for sidewalks within the project boundaries. However, a sidewalk will only be approved if it connects to other sidewalks at each end of the project. This is a legal requirement for the disabled.

17. The inclusion of a grassy meadow on the downstream slope was presented as an option. (Jane Fury)

JH: PADEP has requirements regarding vegetation on the earth embankment slope. Grass must be sufficiently short to allow visual inspection of the dam for problems.

18. Has there been consideration given to stamped or architectural concrete? (Stuart Rose)

SN: Architectural concrete can be done as long as it does not hinder the function or safety of the project.

19. Will questions from the Friends of Glen Providence Park receive written answers? (Stephanie Gaboriault – Friends of Glen Providence Park)

PA/JH: Questions will be responded to in writing.

20. Concern was expressed regarding upkeep of the slope of the dam, and that it not become an eyesore and overgrown with weeds. (Kathy O'Brien)

PA: The County has difficulty maintaining the park due to the steep slopes and lack of access for vehicles.

21. What can/will be done for safety after re-opening the road? (Harry Morgan)

SN: Project will go through a PennDOT safety review.

22. What was outcome of lawsuit regarding ownership of the project? (Kent Davidson)

PW: The settlement with the County and Broomalls Lake did not address ownership; rather, responsibilities going forward were addressed. After the bridge is restored, Broomall's Lake Swim Club and Delaware County will have responsibility for maintenance of the dam. Media Borough is responsible for maintenance of the cartway.

23. Is downstream stormwater runoff going to be addressed with this design? (Ed Filipkiski)

JH: The amount of stormwater from the dam will remain unchanged.

RR: DEP may have surveyed downstream of the dam for an inundation analysis. But it is not the intent of the project to address flood protection.