



HOWARD COUNTY PUBLIC WORKS BOARD

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Minutes of the Howard County Public Works Board – Tuesday, June 13, 2017

Members present: Mr. Cory Summerson, Mr. Brandon Robinson, Mr. Pedro Ramirez, and Ms. Abby Glassberg.

Staff present: Jim Irvin, Executive Secretary; Tom Butler, Deputy Director, Department of Public Works; John Seefried, Chief, Construction Inspection Division; Daniel Davis, Chief, Utility Design Division; Silver Chai, Utility Design Division; Thomas Auyeung, Transportation and Special Projects Division; Phyllis Watson, Administrative Analyst, Real Estate Services Division; Lisa Brightwell, Acting Recording Secretary, Department of Public Works; Juakita Rideout, Administrative Aide, Real Estate Services Division.

Mr. Summerson called the meeting to order at approximately 7:30 p.m.

1. **Approval of minutes:** Mr. Summerson indicated that the first item on the agenda was the approval of the minutes of the April 11, 2017 hearing. Mr. Summerson asked if there were any comments or questions. There were no comments or questions from the Board.

Motion: On a motion made by Mr. Robinson and seconded by Ms. Glassberg, the Board unanimously approved the minutes of April 11, 2017.

Mr. Summerson indicated that tonight's meeting agenda would be approached out of sequence.

2. **Scenic Roads Projects:**

(a) Scenic Road Hearing No. 1: W-8327, Old Lawyers Hill Road Water Main Replacement

Ms. Chai explained that tonight's meeting is the first of two public hearings required under Section 18.211 of the Howard County Code for construction affecting scenic roads. When a capital project affects a scenic road, Section 18.211 of the Howard County Code requires preliminary and final design meetings to receive comments on the design from interested individuals.

Capital Project W-8327 was brought before the Public Works Board and approved in January 2014. The project was created to replace the existing cast iron water main in Old Lawyers Hill Road which was constructed in 1956. The total length of pipe replacement is 1,610 LF. Test pits performed on the water main have shown significant corrosion. The replacement of the main is needed to ensure long-

term fire protection and domestic water supply for the residents along Old Lawyers Hill Road and to maintain a vital water supply source from the Baltimore City water system. The project and associated construction will impact Old Lawyers Hill Road which is listed in the inventory of scenic roads of Howard County.

The water main installation will be within the right-of-way of the paved public roadway of Old Lawyers Hill Road. This project will replace the existing 8-inch water main with fusible PVC by pipe bursting, which is a trenchless method of replacing buried pipelines without the need for a traditional construction open trench. Only launching and receiving pits are needed. This installation method minimizes impacts to the residents and the scenic roadway. Temporary water will be provided during the construction. The scenic road features will be preserved and protected. The roadway grades, width, and alignment will remain the same post construction. The existing scenic view will remain the same post construction.

Per the requirements of Section 18.211 of the Howard County Code, interested individuals and residents were notified of tonight's meeting by advertisement in local newspapers for 2 consecutive weeks in advance of the meeting. Copies of the 90% complete water and sewer plans were made available for inspection at the Department of Public Works, Bureau of Engineering, and they are available for review here tonight. A copy of the advertisement is included in tonight's presentation package.

Board Comments: Mr. Summerson asked when the project would start. Ms. Chai replied that the project should begin next summer and that it is in the design phase at this time. Mr. Summerson asked about the length of the project. Ms. Chai replied that it should take two or three months, adding that the project is on hold while a study is conducted with the Bureau of Utilities to ensure the project remains in the right pressure zone. "There was a valve connecting the 550 zone to the 400 zone so there is a valve that is under study now."

Mr. Summerson asked for confirmation that alternate supply of water would be available and Ms. Chai confirmed that "temporary water" would be provided for the duration of the project.

Public Testimony: Ms. Lisa Badart, 6001 Old Lawyers Hill Road, acknowledged her husband and neighbor in the audience as residents of Old Lawyers Hill Road and asked if the "water pipe will be 8-inch PVC." Ms. Chai responded that the pipe "will be fusible 8-inch PVC." Ms. Badart asked if it will be "drinking safe." Ms. Chai noted that the pipe will be "drinking safe."

Motion: None required.

3. Water & Sewer Capital Projects:

(a) S-6698, Montgomery Road Routine Sewer Extension

Mr. Davis explained that the purpose of this presentation was to seek recommendation from the PWB concerning an extension of the public sewer system under Capital Project S-6698, Routine Sewer Extension Program, Montgomery Road Routine Sewer Extension. The project consists of the design and construction of 170 linear feet of 6-inch sewer to serve one property on Montgomery Road at a total estimated cost of \$94,000.00. The project was requested by Mrs. Jill R. Christ, whose property address is 7055 Montgomery Road, Parcel 739 on Tax Map 38. The property is improved, is within the Metropolitan District, and is eligible for public sewer service. The property is 1.32 acres in size and is

zoned R-ED. The proposed extension was evaluated against the criteria for a routine extension and met all requirements. The property abuts the county road. The extension is less than 1,000 feet and there is sufficient capacity in the system to serve the property. Interested property owners were notified of tonight's meeting by letter, by advertisement in the local newspapers, and by a posting in the project area. The user costs associated with the sewer extensions are as follows: (1) A sewer house connection charge of \$4,500 covers the cost of installing a connection from the sewer main to the property line. This is a one-time charge paid by the property owner as part of the connection fees; (2) There is a sewer in-aid-of-construction charge of \$600 per one inch of meter paid by all sewer system users and is a one-time charge that helps cover the cost of construction of the sewage collection system and treatment facilities. The charge is based on the size of the associated water meter; and (3) There is a sewer account charge of \$11.13 per quarter and a sewer usage charge of \$3.10 per 748 gallons used, billed quarterly based on the metered water consumption of one unit equaling the 748 gallons plus the quarterly account user charge, which is all built into the quarterly account. All user costs noted in the presentation are subject to change each July 1.

Mr. Davis provided information on the larger capital project under which the smaller project falls. S-6698 is a routine sewer extension project for the design and construction of routine sewer extensions in the metropolitan district when requested by landowners. The request meets all requirements and the short extensions are justified. A sister project, W-8698, is used for routine water extensions. The plan is to design, construct, and complete the Montgomery Road project in FY18. The capital budget impact for FY17 is as follows: engineering and inspection, \$23,000.00; construction, \$61,000.00; and administrative costs, \$10,000.00; totaling \$94,000.00. A copy of the public notice and a map of the site (Montgomery Road just west of Lawyers Hill Road) were provided to the Board.

Board Comments: Mr. Summerson asked if the site in question is the last parcel in the area that does not have water and sewerage in front of the residence. Mr. Davis responded that it is the last. Mr. Summerson asked when the project is expected to start and finish. Mr. Davis indicated that he hopes to "get this in" by the end of 2017 or beginning of 2018. Mr. Summerson asked how long the project may take and Mr. Davis explained that it should only involve a week or two.

Ms. Glassberg asked for an explanation of the term "R-ED." Mr. Davis said the term is an abbreviation for "Residential-Environmental District."

Mr. Summerson asked if the project will involve directional boring or open trenching. Mr. Davis said that open trenching is expected.

Public Testimony: Ms. Jill Christ explained that the septic failed in August 2016. The County responded with perc testing. The soil failed. The original thought was to replace the septic. The County advised Ms. Christ to pursue an easement through the neighbor's property to hook up to the sewer on Lawyers Hill Road. After multiple discussions with the neighbor, "That didn't work out so well." The County then informed Ms. Christ of the County sewer extension project. Ms. Christ has not applied for the Chesapeake Bay Restoration Fund for partial reimbursement. Ms. Christ said tonight's testimony is her family's last-ditch effort other than "potential non-traditional solutions." Ms. Christ said she was optimistic that the Board would assist and expressed her gratitude. Mr. Summerson stated that hopefully the extension would be completed by the end of the year.

- (a) **Motion:** On a motion made by Ms. Glassberg and seconded by Mr. Ramirez, the Board unanimously recommended that the Director of Public Works approve Capital Project S-6698, Montgomery Road Routine Sewer Extension.

4. Public Works Board Road Acceptance:

- (a) Subdivision: Owings Property - Lot 5, Lot 17 - 22, Non-Buildable Preservation Parcels F, G and Non-Buildable Bulk Parcel H, A Resubdivision of Part of Lot 5 - Harwood Owings Property
R/SW Agreement No. F-06-112
Road Names: Owings Overlook and Winding Stream Lane
Petitioner: SK Homes At Highland Owings, LLC

Staff Presentation: Ms. Watson, Administrative Analyst, Real Estate Services Division, indicated that SK Homes at Highland Owings, LLC, a Maryland limited-liability company, has presented a petition to the Director of Public Works for the acceptance of Owings Overlook, Winding Stream Lane, and Highland Road widening located in Subdivision Record Plat Owings Property, Lot 5, Lot 17-22, Non-Buildable Preservation Parcels F, G, and Non-Buildable Bulk Parcel H, A Resubdivision of Part of Lot 5 – Harwood Owings Property. The Bureau of Engineering has inspected the subdivision and certifies that all public improvements have been constructed in accordance with the approved plans and specifications and meet the criteria for acceptance under Section 18.202 of the Howard County Code. The Bureau of Engineering recommends that the public improvements be accepted into the County’s system of publicly owned and maintained facilities.

Board Comments: Mr. Summerson asked for confirmation that “everything has been completed.” Ms. Watson concurred.

Public Testimony: None.

Motion: On a motion made by Mr. Robinson and seconded by Ms. Glassberg, the Board unanimously recommended that the Director of Public Works accept the public improvements located in Owings Property, Lot 5, Lot 17-22, Non-Buildable Preservation Parcels F, G, and Non-Buildable Bulk Parcel H, A Resubdivision of Part of Lot 5 – Harwood Owings Property into the County’s system of publicly owned and maintained facilities.

- (b) Subdivision: Cherrytree View, Buildable Lots 1 thru 11 and Open Space Lots 12 and 13, (A Resubdivision of Parcel 55)
R/SW Agreement No. F-11-063 W/S Agreement No. 24-4687-D
Road Names: Orndorff Way, Scaggsville Road (widening)
Petitioner: Penn Shop Ventures, LLC

Staff Presentation: Ms. Watson, Administrative Analyst, Real Estate Services Division, indicated that Penn Shop Ventures, LLC, a Maryland limited-liability company, has presented a petition to the Director of Public Works for the acceptance of Orndorff Way and Scaggsville Road widening located in Cherrytree View, Buildable Lots 1 thru 11 and Open Space Lots 12 and 13, (A Resubdivision of Parcel 55). The Bureau of Engineering has inspected the subdivision and certifies that all public improvements have been constructed in accordance with the approved plans and specifications and meet the criteria for acceptance under Section 18.202 of the Howard County Code. The Bureau of Engineering recommends that the public improvements be accepted into the County’s system of publicly owned and maintained facilities.

Board Comments: None.

Public Testimony: None.

Motion: On a motion made by Mr. Ramirez and seconded by Mr. Robinson, the Board unanimously recommended that the Director of Public Works accept the public improvements located in Cherrytree View, Buildable Lots 1 thru 11 and Open Space Lots 12 and 13, (A Resubdivision of Parcel 55) into the County's system of publicly owned and maintained facilities.

(c) **Subdivision:** Park Overlook, Lots 1 thru 27 & Open Space Lots 28-30 and Forest Mitigation Bank, A Resubdivision of North Laurel Park Block 5, Lots 12-30, Block T, Lots 19-25 and Block 8, Lot 35 Recorded as PB, 61 F.470 and P/O 'Area Reserved for Future Dedication' as Recorded on Plat 20483
R/SW Agreement No. F-13-093 W/S Agreement No. 24-4774-D
Road Names: Washington Avenue, Meredith Avenue, Grover Place (widening), Hill Street (widening)
Petitioner: Park Overlook LLC

Staff Presentation: Ms. Watson, Administrative Analyst, Real Estate Services Division indicated that Park Overlook LLC, a Maryland limited-liability company has presented a petition to the Director of Public Works for the acceptance of Grover Place (widening), Hill Street (widening), Meredith Avenue, and Washington Avenue, located in Plat of Resubdivision, Park Overlook, Lots 1 thru 27 & Open Space Lots 28-30 and Forest Mitigation Bank, A Resubdivision of North Laurel Park Block 5, Lots 12-30, Block T, Lots 19-25 and Block 8, Lot 35 Recorded as PB, 61 F.470 and P/O 'Area Reserved for Future Dedication' as Recorded on Plat 20483. The Bureau of Engineering has inspected the subdivision and certifies that all public improvements have been constructed in accordance with the approved plans and specifications and meet the criteria for acceptance under

Section 18.202 of the Howard County Code. The Bureau of Engineering recommends that the public improvements be accepted into the County's system of publicly owned and maintained facilities.

Board Comments: Mr. Summerson questioned a "gap" on the map and was advised by Mr. Irvin that the gap is not part of the subdivision in question.

Public Testimony: None.

Motion: On a motion made by Ms. Glassberg and seconded by Mr. Ramirez, the Board unanimously recommended that the Director of Public Works accept the public improvements located in Plat of Resubdivision, Park Overlook, Lots 1 thru 27 & Open Space Lots 28-30 and Forest Mitigation Bank, A Resubdivision of North Laurel Park Block 5, Lots 12-30, Block T, Lots 19-25 and Block 8, Lot 35 Recorded as PB, 61 F.470 and P/O 'Area Reserved for Future Dedication' as Recorded on Plat 20483 into the County's system of publicly owned and maintained facilities.

5. Revisions/Amendments to Howard County Design Manuals:

(a) Howard County Design Manual, Volume III – Roads and Bridges

Staff Presentation: Mr. Auyeung explained that the manual was last updated in October 2006. The current revision was implemented to comply with current AASHTO (American Association of State Highway and Transportation Officials) practices and to incorporate approved Downtown Columbia guidelines. The guidelines were approved through Howard County Council Resolution 97 in 2010. Revisions include MSE (mechanically stabilized earth) wall design criteria per Whitman, Requardt & Associates. Input for proposed revisions was received from Howard County Department of Public

Works bureaus, Howard County Department of Planning and Zoning, and the Howard County Chapter of the Maryland Building Industry Association. A draft was posted on Bureau of Engineering Web page from March 22 to May 1 for public view and comment. The Office of Transportation is working on complete streets guidelines; thus, the information is unavailable for this revision and may appear, once approved, in the next revision.

Board Comments: Mr. Summerson asked about the typical revision cycle. Mr. Irvin replied that recently passed legislation requires revisions every five years or fewer.

Mr. Summerson asked Mr. Auyeung if he was seeking the Board's opinion regarding any particular components of the revised manual. Mr. Auyeung replied that complete streets are controversial but the topic is not part of the current manual, and that the manual's updates are routine. Mr. Irvin advised the complete streets project starts July 1 and "is funded for the development of those standards, and that will be controversial." Mr. Summerson asked when that information would be released to the public. Mr. Irvin replied, "probably in the fall to winter."

Mr. Robinson stated Downtown Columbia "has an exception to some of the items, marked through – that there was a different specification for Downtown Columbia." Mr. Auyeung responded that those items are being incorporated into the design manual in view of Resolution 97.

Mr. Summerson stated that the Board members only received the manuals "today" and recommended that the Board members review the revisions over the next month and revisit any issues and possible approval at next meeting. Mr. Summerson suggested Board members submit concerns by the end of the month. Mr. Irvin said a special meeting would be called if there were an issue with timing, and that there is a "mountain of legislation that has to go in for the Council next month. There's a debate as to which items are going to be in there." Mr. Summerson indicated a call-in vote would be an option.

Public Testimony: None.

Motion: On a motion made by Mr. Robinson and seconded by Mr. Ramirez, the Board unanimously recommended postponement of approval of the revisions/amendments to Howard County Design Manual, Volume III – Roads and Bridges "until further call, next meeting, or as needed."

(b) Howard County Design Manual, Volume IV – Standard Specifications and Details for Construction

Staff Presentation: Mr. Seefried explained that three volumes within the design manual -- Roads and Bridges, Water and Sewer, and Storm Drainage and Storm Water Management -- culminate into a fourth volume, Standard Specifications and Details for Construction. The back third of the Volume IV book contains construction details that apply to Volumes I, II, and III. The specifications in the middle of the book speak to contract parameters that are helpful for construction in general. Before that are provisions largely for capital projects but also have information useful for developer projects. Volume IV is a 902-page volume, last amended in May 2014, with new details and specs issued as replacement pages. The last comprehensive change to the volume took place in May 2007. Mr. Seefried acknowledged the seven-page draft document that would explain all the recent changes to holders of the manual. The changes were subject to a lengthy process, first going to County agencies. Once a consensus was reached, the changes were offered for review to homebuilders, utility contractors, and the general public. Comments captured in writing are noted so that people can understand how things were handled and with respect to openness and transparency. The writers continue to seek improvement and to track draft changes for revisions that came in after the current draft was finalized in the last month.

Board Comments: Mr. Summerson asked if Volume IV needed to be reviewed every five years. Mr. Irwin nodded in agreement.

Mr. Summerson recommended "the same approach" as the Roads and Bridges motion. Mr. Seefried asked for immediate approval of the draft, explaining that it was circulated for review on the 20th. Mr. Seefried explained that he was seeking the Board's endorsement as opposed to new comments. He added that the process has been open and transparent, with documented changes. Mr. Seefried continued, "Unless there's something fundamentally wrong with our approach, I'd request you consider approving it at this time. If there are comments that you'd like to make that would be future changes, then we would handle them on a future basis. I'm hopeful that we've done everything we can to address any comment we can and done it in a public forum so that if you have any questions I'd like to address them now as opposed to hoping you would digest 902 pages." Mr. Summerson replied that he was "just going to go through some of the changes" and proposed the review method recommended in the Roads and Bridges motion.

Public Testimony: None.

Motion: On a motion made by Mr. Ramirez and seconded by Mr. Robinson, the Board unanimously recommended postponement of approval of the revisions/amendments to Volume IV – Standard Specifications and Details for Construction "until the next meeting or sooner."

6. Water and Sewer Capital Project Estimate Presentation:

Mr. Davis prefaced his presentation with an explanation of the two kinds of projects that are presented to the Public Works Board. The first involves a homeowner coming to a meeting with a problem and requesting a routine extension of less than 1,000 feet, usually because a homeowner has decided to join the metropolitan district or they are already in the metropolitan district and wanting public water or sewer service. The other projects brought before the Board are capital projects, usually toward the end of the year. When a capital project is a routine extension, although such a project may seem expensive and inefficient to provide for just one user, at the end of the day the County has an obligation to its citizens living in the metropolitan district to provide water and sewer service. The County makes every attempt to minimize the cost of a small extension.

Mr. Davis explained that the anatomy of a typical initial budget estimate includes the construction cost, engineering design cost, engineering construction cost, and land acquisition cost. The construction cost estimate considers environmental factors (such as stream or wetlands construction), architectural electrical controls, temporary or bypass utility, utility relocations, atypical paving, sewer depth, traffic control issues, and demolition.

The engineering design cost estimate includes utility locates, Geotech investigation, design, sediment and erosion control, traffic control, preliminary engineering, cathodic protection, surveys, and special needs. The engineering design cost is comprised of the design component plus the engineering construction cost.

The land acquisition cost estimate includes the cost of the easement or fee-simple land, the appraisal cost, the plat and description cost, and other Real Estate Services Division costs.

No audio 8:08:01-8:12:28 as Mr. Davis paused to address technical difficulties with slide presentation.

Mr. Davis introduced various engineering estimating tools, including unit cost summary tables,

estimated land values for capital projects, historic capital budget cost vs. graphs, consultant engineer's estimate, previous/similar work bid tabs, and the cost estimate spreadsheet for water and sewer facilities. He offered several examples of routine sewer extensions, water main loop installations, water main replacements, and sewer installations, with explanations of how the cost estimations were calculated.

Unit cost summary for water and sewer construction: Using spreadsheet of bid tabs for all projects since 2009, increased lowest bid by 25% to represent the lowest 1/3 of all bids received for the affected project. Data from non-typical projects were not included. Mr. Davis gave an example of an 8-inch PVC sewer at \$1.33 per linear foot as a typical cost example. The spreadsheet offers the costs for components such as water, house connections, laterals, meters, manholes of different diameters, valves, tools for special conditions, 6-inch sewer entrenchment (\$783.00 per linear foot), office space, sewer cleaning and lining, and TV inspection.

No audio 8:15:02-8:15:56 as Mr. Davis paused to address technical difficulties with slide presentation.

Estimated land values: Real Estate Services Division provides information regarding the cost per acre in different Howard County towns. To buy an easement, take the cost of the land and apply 50%. A fee-simple purchase involves other factors.

Mr. Davis offered an example of a project the County estimated would cost \$1.8 million, while the incoming bids ranged from \$1.5 million to \$2.8 million to illustrate differing contractor costs. The market dictates the final price.

No audio 8:18:25-8:19:44 as Mr. Davis paused to address technical difficulties with slide presentation.

The cost estimate worksheet/spreadsheet allows the estimator to fill in components, measurements, expenses, and costs to populate and total the estimated project cost.

Mr. Davis explained Examples #1 through #6 in his informational packet, highlighting past capital projects and comparing project cost estimates against the actual costs.

Example #1, Hunting Lane Routine Sewer Extension, 134 linear feet of 8-inch sewer, presented to the Public Works Board in February 2015, requested by the resident, estimated at \$90,500.00 (construction \$35,300.00 and engineering \$55,200.00), completed at \$86,500.00 (construction \$72,300.00 and engineering \$14,206.00). Ms. Glassberg asked why the estimated engineering cost was much higher than expected. Mr. Davis advised that expensive project complications were expected regarding engineering, sewer depth and other factors. A utility pole at the site was an anticipated problem, but the job was simpler than expected.

Mr. Summerson asked how many bidders responded to the project. Mr. Davis explained that this project used a requirements contractor. The project was not circulated for bids in the interest of time and an expectation of little interest in a small project. A money-saving measure is to pair an on-call contractor and an on-call engineer for the exchange of ideas. Mr. Summerson asked if that method would require submission of an estimate, time and materials, or unit cost. Mr. Davis replied that all those approaches are acceptable but that he prefers an estimated lump sum, because it puts ownership of that estimate on the contractor. Mr. Summerson asked if a smaller project typically generates lower estimates because of lesser set-up time and other factors. Mr. Davis replied that a smaller project can cost more because there is one mobilization and the contractor doesn't have the luxury of time that a lengthy project would allow.

Example #2, Ten Mills Road Routine Sewer Extension, 245 linear feet of 8-inch sewer, presented to the Public Works Board in 2014, estimated at \$270,000.00 (construction \$146,000.00 and engineering \$124,000.00) and completed at \$138,400.00 (construction \$95,200.00 and engineering \$43,200.00). Mr. Davis explained, "This is a good example of putting the engineer and the contractor together so they can figure out the best way to get the project done at the cheapest cost. The contractor is glad to get the work. He doesn't have to bid anymore so those costs are different for him. The project only asks for 245 linear feet of sewer but is not a simple project since it crosses Route 108. We weren't going to open cut it. We were going to work with the State with a jack and bore across 108. It was a moderately deep sewer coming into a median island."

Example #3, Saint Paul Street Water Main Extension, 350 linear feet of 8-inch water main, was presented to the Public Works Board in January 2014, estimated at \$175,000.00 (construction \$125,000.00 and engineering \$50,000.00) and completed at \$276,400.00 (construction \$235,200.00 and engineering \$43,000.00). The estimates were off because rock was discovered and had to be approached fairly. Two estimates were created in advance; one if rock didn't exist and one if it did. Construction space is limited on Saint Paul Street. Large equipment had to navigate a small space and the road had to be repaved following construction. A simple trench repair would not have sufficed. Construction hours were limited as a courtesy to residents. Saint Paul Street is in historic Ellicott City where utilities are unpredictable. All these factors contributed to a greater cost than expected.

Mr. Robinson asked if a geotechnical study is typically performed beforehand for this type of project. Mr. Davis explained that a small project such as this one would not involve a geotechnical study.

Example #4, Grace Drive Water Main Loop, 900 linear feet of 12-inch water main, was presented to the Public Works Board in January 2009, estimated at \$370,000.00 (construction \$250,000.00 and engineering \$120,000.00) and completed at \$219,200.00 (construction \$193,000.00 and engineering \$26,200.00). The engineering cost was much lower than expected because the project was simpler than expected. Paving limits were less than estimated, and anticipated difficulties with tie-ins were not encountered.

Example #5, Ilchester Road Water Main Replacement, 5,800 linear feet of 12-inch water main, was presented to the Public Works Board in December 2011, estimated at \$2,250,000.00 (construction \$1,900,000.00 and engineering \$350,000.00) and completed at \$1,627,000.00 (construction \$1,326,000.00 and engineering \$301,000.00). Even with extensive paving restoration, traffic control, and community outreach, the project came in 27% below the estimated cost.

Example #6, Turf Valley Road Sewer, 2,000 linear feet of 8-inch sewer, was presented to the Public Works Board in January 2014, estimated at \$700,000.00 (construction \$540,000.00 and engineering \$160,000.00) and completed at a cost to be determined but estimated at \$653,500.00 for construction and \$101,200.00 for engineering. Difficulties encountered when working with the land made it necessary for the project to be "engineered twice." Seven bids were received in March 2017 with \$653,000.00 as the low and \$1,300,000.00 as the high, resulting in an average bid of \$1,037,325.00. The project involved a jack and bore across Route 40 and a moderately deep sewer. Mr. Robinson asked for the depth and Mr. Davis replied that it was 12 to 14 feet.

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Mr. Davis acknowledged the Metropolitan District on the online Sewer and Water Service Map. The map indicates residences with supplied water and sewer. The map presents a low number of possible routine extensions. The routine extension program serves individual cases vs. developments.

Ms. Glassberg asked if, for example, a 10-acre lot with a home on it would be eligible for the program if other homes were later added to the lot and Mr. Davis confirmed that it would.

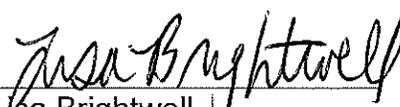
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Mr. Irvin said that those applying for the program are those who need immediate assistance without an immediate health problem. "They are treated differently. But again, we still have the obligation to serve." Ms. Glassberg replied, "Understood."

Mr. Martinez asked if those on septic and wells who ask for the water extension are encouraged to replace their septic tanks, since public water will affect the septic tank. Mr. Davis explained that people usually "want water before they want septic. I haven't had a scenario yet where someone came in and asked for water and sewer and then didn't hook up. Where we begin and end the extension, sometimes there are residents who are not ready." Mr. Irvin added that the County offers a program to subsidize the connection cost "because we get TMDL (Total Maximum Daily Load) credits for that. Septic systems put a lot more nutrients into the ground than public so we have a program and 30 people a year take advantage of that." Mr. Davis added that he has a meeting with Amy Hart next week with Utilities to discuss which areas of the County might best be targeted for the program. He explained that citizens often find it difficult to understand that public sewer increases property value and that it takes much longer to have it installed when it's an immediate need.

There being no further business, the Public Works Board meeting adjourned at approximately 8:41 p.m.


James M. Irvin
Executive Secretary


Lisa Brightwell
Acting Recording Secretary