

BOONSBORO KEEDYSVILLE WATER ADVISORY BOARD
MEETING MINUTES
Wednesday, August 9th, 2023

Voting members present Austin Abraham, Chairperson; Tony Nally (B), Howard Long(B), Matt Hull (K), Brandon Sweeney (K)

Others present Public Works Superintendent Greg Huntsberry, Lisa Riner (K Town Administrator) Eric Kitchen (B-Alt), Ken Lord (K-Alt), BMUC Member Colin Shanaberger and Yvette May, Recording Secretary. The meeting convened at 6:30 PM at Boonsboro Town Hall.

- I. **Approval of Minutes:** May 10th meeting. Board Member Howard Long motions and second by Board Member Matt Hull to approve Minutes. Motion carried unanimously.
- II. **FY24 Keedysville cost-sharing projection (Austin)** – The proposed projected cost-sharing and estimated payments from Keedysville to Boonsboro for FY24 are based on the following:

	<u>Budget</u>
Total applicable operating expense	\$795,689
Capital	\$170,000
Percent of water used	15.5%
Billing and customer accounting	\$13,693
Daily operations of tank and booster station	\$7,549

Shared capital includes \$150,000 for the new Park Well and \$20,000 for the new billing software that is a part of the advanced metering system. Keedysville’s portion of the advanced metering system has not yet been determined.

(Note: The Park Well project was originally budgeted in FY23. Because the project is now in FY24, a reduction of capital expense is expected in the true-up for FY23.)

Boonsboro’s budgeted contingency is adjusted down to \$20,000 based on past experience. Keedysville’s projected percentage of total water produced is lowered from 16% to 15.5% based on the recent uptick in water pumped to Boonsboro due to an increase in water loss. The cause of the additional water loss is unknown at this time.

The projected FY24 annual payment from Keedysville to Boonsboro is \$110,578 (~~\$27,644 per quarter~~). While shared operating expenses have increased, this amount is only slightly higher than the FY23 projected cost due to lower projected capital expense and a reduced percentage of water projected to be provided to Keedysville.

The FY24 projected annual payment by Keedysville to Boonsboro will be trued-up to actual costs in December of 2024 following completion of Boonsboro’s FY24 audited financial statement. Board Member Tony Nally motions and second by Board Member Brandon Sweeney to present the FY24 Cost-sharing projection to each Council. Motion carried unanimously 5-0.

III. Status of Boonsboro capital projects

- A. **Park Well Replacement** – Supervisor Greg Huntsberry informed the Board that a flow test has not been completed. No other updates.
- B. **Advanced Radio Read Project** – The Town’s meter vendor, Core & Main / Neptune, conducted both physical and computer model testing to determine how many towers are needed and any residential meter replacements. Currently, Whitman Requardt & Associates (WRA) have no new updates. It has not been determined how this cost will be shared.

- C. Boonsboro Reservoir Replacement – Whitman Requardt & Associates (WRA) have completed approximately 90% of design. There are several grants supporting this project, totaling \$8.1 Million. The Town is waiting for an approved \$5 million dollar earmark grant to now be appropriated and added to the Federal FY24 Budget. Divers will be entering the Reservoir, Monday, August 14th to check the sandbags for leaks due to the increased water loss per the Master usage chart.
 - D. Shafer Park& Keedysville Water Treatment Plant Solar- This project has been cancelled.
- IV. Review quarterly usage report and metering between the Towns (Austin)** – Austin reviewed FY22-FY23 usage and compared it to the previous quarters. Losses were higher in Boonsboro over the past few quarters. The quarterly gallons lost for Boonsboro went from 25 % in the first quarter to 38% in the fourth quarter and gallons billed to customers stayed constant.
- V. Review available capacity allocation (Austin)** Reliable Capacity is at 515,200 GPD with a 350,685 GPD daily withdrawal leaving unused reliable capacity at 164,515 GPD or 658 EDUs. As of now, there are 45 committed EDUs for existing development leaving a 613 surplus in EDUs. Austin reviewed the different scenarios if water loss is reduced and how that would affect this amount. He also noted that if Shafer Park Well is at full capacity, it will add 147 EDUs. Austin reviewed with the Board the Production and delivery of each town. Overall total production came down due to Keedysville’s delivery decreasing.
- VI. Draft new consolidated agreement between the Towns (Austin)**
- A. King Road Agreement – Nally informed the Board there are no updates on King Road and Boonsboro is still working on meeting with the Developers to determine their plans and maybe draft a new agreement. Information on the 554 planned EDUs is vital in the calculation of water production capacity and availability of EDU’s for the Towns. Nally stated that he does have contact information for Steve Oder and Susan Fant.
 - B. Review by attorney of agreements with King Rd Associates – Nally and Long had no new updates or recent communications with the lawyer about the situation.
- VII. Old business**
- A. Water resources/asset management study by Army Corps of Engineers – Nally informed the Board that there were no new updates, and that Engineers were still working on reports.
 - B. Crestview High Pressure Bypass Project - Using the Water Model and pressure data from the field, Whitman Requardt & Associates (WRA) identified a solution involving the installation of a parallel line around Crestview and pressure reducing valves lowering pressures entering the neighborhood. Nally informed the Board that WRA finalized a an Engineering Report and have informed the Town of Boonsboro that the project needs to be completed at the same time as the Reservoir due to the elevations.
 - C. Discontinuance of water fluoridation – Superintendent Pete Shumaker has discontinued fluoridation. MDE has questions about reporting. Pete has addressed the issue. The Board discussed how and if the public was informed. Town Administrator Lisa Riner wants to make sure the Towns inform the public simultaneously.
 - D. Keedysville tank cleaning – Pete informed the Board that he had successfully tested how to run water from Boonsboro to Keedysville using the clay valves. Lisa Riner stated that Keedysville is now waiting to get onto the cleaner’s schedule.
 - E. Resident John Burtner’s concern regarding bridge collecting debris - Lisa Riner notified the Board that MDE told Mr. Burtner that he would have to pay for a geo study pertaining to the drying of the stream running through his property. Lisa also informed the Board that Washington County is not interested in

moving the road back to the original path and the Town of Keedysville has decided not to replace the bridge so that debris would not get caught under the bridge.

VIII. New business

- A. Selection of new chair effective January 1, 2024 – The Board discussed BKWAB Chair Candidate Jean Holloway’s qualifications and compensation. Board Member Howard Long motions and second by Board Member Matt Hull to appoint Jean Holloway to the Chair position in January 2024. Motion carried unanimously 4-0.
- B. Keedysville questions about customer turn-on/off for service work – Lisa Riner asked about the process for Keedysville residents requesting after hours help with water issues. Superintendent Greg Huntsberry stated that Keedysville needs to add the Public Works Department emergency number to the Town of Keedysville website.
- C. December Meeting date – After a brief discussion the BKWAB decided to change the December meeting date to second Wednesday in December. The next BKWAB Meeting has been set for December 13th at Keedysville Town Hall.

IX. System operator’s report Public Works Supervisor Greg Huntsberry informed the Board that there were no major leaks or issues.

X. Public Comment - None

There were no additional discussions, Chairperson Abraham adjourned the meeting at 7:41 pm. The next regularly scheduled meeting is Wednesday, December 13th Keedysville Town Hall.

Submitted by Yvette May Administrative Assistant Town of Boonsboro

Water Production Capacity and Available EDU's
Projected for FY24 based on FY23 4Q results (1 year after reservoir leaks sandbagged)

332,000

1	Water Appropriation Permits	Permitted Daily Avg Flow GPD	Production Capacity		Available Capacity GPD	Reliable Capacity GPD
			GPM	GPD		
	Schafer Park & Well #8	332,000	140 + 65 GPM	295,200	295,200	295,200
	Keedysville Spring	220,000	170 GPM	244,800	220,000	220,000
	Warrenfeltz Spring	130,000	120 GPM	172,800	130,000	0
		682,000			645,200	515,200

with new well

2	Total water withdrawn	
	FY23 Q4 x 4	153,608,000
	Number of days	365
	Average daily withdrawal	420,844

3	Unused reliable capacity GPD	94,356
	Unused reliable capacity in EDU's @ 250 GPD/EDU	377

4	EDU's planned for or committed to others by Boonsboro:	Planned	Committed
	King Road Associates (656)	554**	
	TT&K (360)		18
	Easterday (153)		8
	Dean 8486 LLC (Fletcher's Grove)		19
	Misc. commitments		0
	EDU's planned for or committed to others by Keedysville:	3	45
	EDU Surplus/(Deficit)		332

6	EDU's reserved for Keedysville per draft new agreement:	
		-60
		272

5	Reliable capacity held in reserve per draft new agreement:		
		515,200	-221
	Reserve 10%	51,520	-206
	EDU Surplus/(Deficit)		66

7	Additional EDU capacity if Boonsboro reduces unaccounted-for water to 15%:	
		161
	EDU Surplus/(Deficit)	227

** In the 1/5/2009 First Amendment to the Annexation Agreement between Boonsboro and King Rd Associates, only sewer taps are 'reserved' for the Land Owner (section 2b), and the Town further ...represents and warrants...sufficient sewer capacity to issue the sewer taps to the Land Owner (section 7). But provision of related water taps is qualified "...to the extent the Town may be authorized to make such water capacity available to the Land Owner under applicable State law, regulations and policies" (section 7). "The terms of this Agreement are intended to ensure concurrency of development and infrastructure..." (section 6). While it is Boonsboro's intent to provide water taps in connection to these sewer taps, additional water system capacity may be required at the time water connections are requested for which the Land Owner may be required to contribute. As such, available water capacity is not currently encumbered.

Note: Does not include a) EDU's Boonsboro previously designated for municipal purposes or infill.

Updated: July 28, 2023 A. Abraham

Dec. 6, 2023

360

**Boonsboro/Keedysville Regional Water System
FY23/24 Quarterly Usage Report**

Month	Fin - Utility		Production		Raw Water Metered		Total		Monthly Usage Received Per Town				Qtrly Gallons Billed to Customers						
	Keedysville	Well #8	Well #6	Warrentfeltz & Park Well	Warrentfeltz	& Park Well	Boonsboro	Keedysville	%	Keedysville	%	Boonsboro	Keedysville	Keedysville	Keedysville	Keedysville	Keedysville	Keedysville	Keedysville
Jul 23	5,538,067	2,245,000	2,245,000	701,000	4,569,000	4,569,000	11,045,540	2,007,527	0.846	2,007,527	0.154								
Aug 23	5,704,633	2,567,000	2,567,000	351,000	4,548,000	4,548,000	11,341,250	1,829,383	0.861	1,829,383	0.139								
Sep 23	5,597,770	2,461,000	2,461,000	1,232,000	4,242,000	4,242,000	11,729,120	1,803,650	0.867	1,803,650	0.133								
1st Qtr	16,840,470	7,273,000	7,273,000	2,284,000	13,359,000	13,359,000	34,115,910	5,640,560	0.858	5,640,560	0.142	20,909,150	4,960,865	38.7%	4,960,865	12.1%	-679,695		
Oct 23	5,872,000	2,486,000	2,486,000	1,821,000	4,354,000	4,354,000	12,608,367	1,924,633	0.868	1,924,633	0.132								
Nov 23	6,021,000	1,674,000	1,674,000	1,887,000	4,508,000	4,508,000	12,280,775	1,809,225	0.872	1,809,225	0.128								
Dec 23	11,893,000	4,160,000	4,160,000	3,708,000	8,862,000	8,862,000	28,623,000	3,733,858	#VALUE!	3,733,858	#VALUE!								
2nd Qtr																			
Jan 24				0			#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!								
Feb 24				0			#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!								
Mar 24				0			#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!								
3rd Qtr				0	0	0	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!								
Apr 24							#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!								
May 24							#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!								
Jun 24							#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!								
4th Qtr				0	0	0	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!								
Total 23/24	28,733,470	11,433,000	11,433,000	5,992,000	22,221,000	22,221,000	68,379,470	9,374,418	0.137	9,374,418	0.137	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!

Last test result:																			
Adjustment %																			
Adj K gals	0																		
Adj B gals	0			0	0	0	0	0	0.000	0	#DIV/0!	0	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	#DIV/0!

NON REVENUE WATER WATER LOSS

	NON REVENUE WATER				WATER LOSS			
	MILL POINT	VALLEY VIEW	MT LAUREL	FIRE	LEAKS	Hydrants	Testing	Total
National Night								
8/1/2023 Out Mist								
8/9/2023 Ace Flushing								
Boonsboro Mountain Rd								
8/10/2023 leak	10,226			100,000	10,000	65,000		185,226
8/26/2023 Fire								
8/14/2023 Fire								
Lanafield								
10/16/2023 Circle Leak								
10/18/2023 tower testing								
11/14/2023 Tower Testing								
TOTAL	10,226	0	0	100,000	415,000	65,000	210,000	590,226

**BYLAWS OF THE
BOONSBORO KEEDYSVILLE WATER ADVISORY BOARD**

ARTICLE 1

AUTHORITY

The Boonsboro Keedysville Water Advisory Board (Board) is established by the Amendment #1, dated May 15, 1998, to the Water Service Agreement, dated October 6, 1958, between the Towns of Boonsboro and Keedysville.

ARTICLE 2

MEMBERS

Section 1. General Membership. The members of the Board are those set forth in the authorizing document (See Article 1) as amended from time to time. As of the signing of these bylaws the Board is comprised of two representatives from Boonsboro as shall from time to time be appointed by the Mayor and Council of Boonsboro and two representatives from Keedysville as shall from time to time be appointed by the Mayor and Council of Keedysville and a fifth member appointed by, and serving at the will of, a majority of the then existing Board members representing the Towns.

Section 2. Chairperson. The Chairperson shall be the fifth member of the Board, being that member appointed by the representatives duly appointed by each Town. The Chairperson presides over meetings of the Board, implements policies as determined by the Board, and administers the affairs of the Board.

Section 3. Alternates. Each Town may appoint up to three alternates to serve for its respective Board members in the absence of a member. Alternates must be appointed in the same manner as members, and the Chairperson shall receive formal notification of the appointment of alternates. An alternate, when serving in the absence of a member, shall have the full duties, responsibilities and authority of the member they are serving for. There can be no alternate for the Chairperson.

Section 4. Recording Secretary. The Chairperson, with the approval of the Board, may appoint a recording secretary, who need not be a member of the Board, to keep written minutes of the Board proceedings and assist with other record-keeping of the Board.

ARTICLE 3

BOARD MEETING, QUORUM, VOTING

Section 1. Meetings. Meetings may be called by the Chairperson, the request of 2 members, or by the Mayor and Council of either Town.

Section 2. Notice of Meetings. The Chairperson must provide notice to each member by phone, in writing, or in person at least 48 hours before a meeting of the Board unless the Chairperson deems the meeting to be emergency in nature. The presence of all members of the Board shall be sufficient to determine proper notice was given for a non-emergency meeting even if less than 48 hour notice is provided.

Section 3. Quorum. A quorum exists when 4 members, including alternates serving for absent members, are present at a meeting of the Board. A quorum also exists when 3 members, including alternates serving for absent members, are present at a Board meeting provided at least one member or alternate is present from each Town and the Chairperson is present. If a quorum does not exist, the voting members or alternates present may adjourn the meeting and reconvene on another date. Notice of the reconvened meeting shall be given in accordance with the notice provisions contained in Section 2.

Section 4. Conduct of Meetings. Board meetings shall be open to the public. Any member of the public may attend any meeting of the Board, but shall not participate in any discussions unless requested to participate by the Chairperson or by a majority of the members who are present. Alternates are considered members of the public unless serving for an absent member.

Section 5. Voting. Each member is entitled to one vote. Alternates are entitled to one vote but only when serving for an absent member. Approval by a majority of the votes cast by its members present at a meeting of the Board, duly called and at which a quorum is present, shall be sufficient to approve any matter which is properly before the meeting.

Section 6. Minutes. The Chairperson, or the Recording Secretary if one is appointed, or a designee of the Chairperson in the absence of the Recording Secretary, shall keep written minutes of Board proceedings. Minutes, after review and approval by the Board, shall be open to inspection by the public. Approved minutes shall be forwarded to each Mayor and Council.

ARTICLE 4

AMENDMENT OF BYLAWS

These Bylaws may be amended, repealed, or new Bylaws may be made and adopted, at any meeting of the Board called for that purpose, by votes or written assent of a majority of the members of the Board.

The foregoing are certified as the Bylaws of the Board adopted by the Board on June 17, 1999 and amended March 13, 2013.


Chairperson

BOONSBORO KEEDYSVILLE WATER ADVISORY BOARD
Wednesday August 9, 2023 6:30 PM
Boonsboro Town Hall

AGENDA

Rules of procedure: Members of the Water Advisory Board, alternates and town staff or others involved with the operation of the joint water system are welcome to sit at the table during our meetings provided there is sufficient room. Discussion is open but with priority given to members of the Board. The Chair reserves the right to limit discussion to Board members at his/her discretion in accordance with the Board's Bylaws. Voting is restricted to the 5 members of the Board or alternates serving in the place of a Board member.

- I. Approval of minutes: May 10, 2023 regular meeting
- II. FY24 Keedysville cost-sharing projection (Austin)
- III. Status of Boonsboro capital projects (Jared, Tony)
 - A. Park Well replacement
 - B. Advanced meter reading
 - C. Boonsboro reservoir replacement
 - D. Solar arrays at treatment plant
- IV. Review quarterly usage report and metering between the Towns (Austin)
- V. Review available capacity allocation (Austin)
- VI. Draft new consolidated agreement between the Towns
 - A. Update from King Rd Associates (Tony)
 - B. Review by attorney of agreements with King Rd Associates (Tony, Jared)
- VII. Old business
 - A. Water resources/asset management study by Army Corps of Engineers
 - B. Funding for WRA solution to high pressure north of booster station
 - C. Discontinuance of water fluoridation
 - D. Keedysville tank cleaning
 - E. John Burtner's concern regarding bridge collecting debris
- VIII. New business
 - A. Selection of new Chair effective January 1, 2024
 - B. Keedysville questions about customer turn-on/off for service work (Lisa)
 - C. December meeting date
- IX. System operator's report (Pete)
- X. Public comment

NEXT SCHEDULED MEETING: Wed. December 13, 2023 6:30 PM at Keedysville
(Regular meetings are 2nd Wednesday of Feb, May and Aug and 2nd Wednesday after Thanksgiving)

Standard Agenda Schedule:

February

- Review of current year CIP projects
- Review of proposed CIP projects for coming year
- Review of water rates for each town

May

- Review of current year CIP projects
- Review of proposed CIP projects for coming year

August

- Projected costs for Keedysville for current year
- Update of current year CIP projects
- Review available capacity allocation

December

- True-up of prior year costs for Keedysville
- Review of current year CIP projects (included in projected costs for current year)
- Review of proposed CIP projects for coming fiscal year

BOONSBORO KEEDYSVILLE WATER ADVISORY BOARD
PROPOSED KEEDYSVILLE COST-SHARING PROJECTIONS FOR FY24

Prepared by: Austin Abraham, Chair

Presented: August 9, 2023

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Annual Recap FY11 – FY24 9

Boonsboro Keedysville Water Service
Narrative of the Keedysville Cost-Sharing Projection for FY24

The proposed projected cost-sharing and estimated payments from Keedysville to Boonsboro for FY24 are based on the following:

	<u>Budget</u>
Total applicable operating expense	\$795,689
Capital	\$170,000
Percent of water used	15.5%
Billing and customer accounting	\$13,693
Daily operations of tank and booster station	\$7,549

Shared capital includes \$150,000 for the new Park Well and \$20,000 for the new billing software that is a part of the advanced metering system. Keedysville's portion of the advanced metering system has not yet been determined.

(Note: The Park Well project was originally budgeted in FY23. Because the project is now in FY24, a reduction of capital expense is expected in the true-up for FY23.)

Boonsboro's budgeted contingency is adjusted down to \$20,000 based on past experience. Keedysville's projected percent of total water produced is lowered from 16% to 15.5% based on the recent uptick in water pumped to Boonsboro due to an increase in water loss. The cause of the additional water loss is unknown at this time.

The projected FY24 annual payment from Keedysville to Boonsboro is \$110,578 (*\$27,644 per quarter*). While shared operating expenses have increased, this amount is only slightly higher than the FY23 projected cost due to lower projected capital expense and a reduced percentage of water projected to be provided to Keedysville.

The FY24 projected annual payment by Keedysville to Boonsboro will be trued-up to actual costs in December of 2024 following completion of Boonsboro's FY24 audited financial statement.

Prepared by: Austin Abraham July 28, 2023

Ln#	Line # from rate formula	Description	FY21/22			FY22/23			FY23/24		
			Budget	Actual	Difference	Budget	Actual	Difference	Budget	Actual	Difference
1	3a-b	Boonsboro Operating Expenses	\$798,768	\$792,782		\$5,906,918			\$8,109,338		
2		Adjustment #3 - Less budgeted contingency	(1,447)	NA		(193,670)			(33,983)		
3		Adjustment #3A - Add back contingency	20,000	NA		20,000			20,000		
4		Adjustment #4 - Less reimb'd engineering fees	-	-		-			-		
5		Adjustment #5 - Less capital expense	(96,500)	(140,377)		(4,998,000)			(7,257,020)		
6		Adjustment #5A - Less debt-service+interest	(48,492)	NA		(21,404)			(21,404)		
7		Adjustment #6 - Less direct pay by K to B									
8		Customer billing	(11,844)	(12,144)		(13,319)			(13,693)		
10		Daily operations labor for tank + booster station	(6,574)	(6,664)		(7,080)			(7,549)		
11		Total applicable operating expenses	\$653,911	\$633,597	(\$20,314)	\$693,445	\$0	\$0	\$795,689	\$0	\$0
12	3c	Less 50% for the estimated cost of operation, maintenance & repair to B. distribution system	(326,956)	(316,799)		(346,722)	-	-	(397,845)	-	-
13		Sub-total operational expense to be shared	\$326,956	\$316,799	(\$10,157)	\$346,722	\$0	\$0	\$397,845	\$0	\$0
14	3d	Plus cash cost of any capital improvement serving both Towns	80,000	46,359	(33,641)	198,000			170,000		
15	3e	Plus debt-service on any financed improvements serving both town	-	-		-			-		
16	3f	Total	\$406,956	\$363,158	(\$43,798)	\$544,722	\$0	\$0	\$567,845	\$0	\$0
17	2	Keedysville % of total water pumped	16.0%	16.2%	0.2%	16.0%			15.5%		
18	3g	Keedysville annual cost water service	\$65,113	\$58,832	-\$6,281	\$87,156	\$0	\$0	\$88,016	\$0	\$0
19		ADD: K portion of customer billing expense	11,844	12,144	300	13,319			13,693		
20		ADD: Daily operations labor for tank + booster station	6,574	6,664	90	7,080			7,549		
21		ADJUST: Billing related capital to K % of water accounts				1,044			1,320		
22		Keedysville total annual expense	\$83,531	\$77,639	-\$5,892	\$108,599	\$0	\$0	\$110,578	\$0	\$0

23	Payments:	Estimated quarterly cost	20,883	27,150	27,644
24		First quarter billed	20,883		
25		Second quarter billed	20,883		
26		Third quarter billed	20,883		
27		Fourth quarter billed	20,883		
28			83,532		
29		True-up due to B/(due from B)	<u><u>(\$5,893)</u></u>	<u><u>\$0</u></u>	<u><u>\$0</u></u>

NOTES:
Prepared by: Austin Abraham July 25, 2023

TOWN OF BOONSBORO, MARYLAND
WATER FUND

OPERATING REVENUES

Budget FY2024

Budget FY2023

Water Charges	768,000	650,000
Charges for Debt Services	23,768	23,768
Charges for Administration	100,000	72,000
Connection fees & User fees	9,550	9,550
Other Income	1,000	5,500
Hydrants	0	0
TOTAL OPERATING REVENUES	842,318	760,818
Grant Income	7,003,020	4,992,000
Interest Income	136,000	3,500
Prior Year Reserves		
Keedysville Contributions for Capital Projects	128,000	150,600
American Rescue Plan	0	0
TOTAL REVENUES:	8,109,338	5,906,918
OPERATING EXPENSES:		
ADMINISTRATIVE:		
Salaries	95,000	90,000
Payroll Taxes	9,000	8,100
Insurance: Health	42,000	30,000
Insurance: Workers Compensation	500	132
Retirement/Pension	7,000	5,730
Total Administrative Salary Expense:	153,500	133,962
Communications/Phone	6,000	6,000
Postage	4,500	3,000
Office Supplies	15,000	10,000
Professional Svcs (Legal/Audit)	12,000	11,000
Professional Engineering Services	7,000	7,000
Meetings	1,200	1,200
Training/Certification	1,000	1,000
Insurance: Property & Vehicles	8,000	8,000
Advertising	1,000	1,000
Misc. Expense (BKWB Expense)	2,500	
TOTAL ADMINISTRATIVE EXPENSES	211,700	182,162
OPERATIONS:		
Salaries	223,650	213,000
Payroll Taxes	20,130	18,750
Insurance: Health	77,976	68,400
Workers Compensation	5,000	8,400
Pension	16,000	14,700
Total Operations Salary Expense:	342,756	323,250
Testing	4,000	4,000
Chemicals	21,600	18,000
Vehicle Expense	15,000	20,000
Electricity	70,000	60,000
Heating	0	0
Maintenance & Repairs	40,000	40,000
Major Repair Expense	30,000	30,000
Supplies	4,000	6,000
Telephones		
Uniforms	1,500	3,000
Equipment Expense	43,375	6,000
Connections - water meters	13,000	
Miscellaneous	0	0
TOTAL MAINTENANCE	242,475	186,000
TOTAL OPERATING EXPENSES:	796,931	691,412

DEBT SERVICE:			
Long Term Debt		4,390	5,150
MDE Alt 40 Waterline		15,465	14,214
Loan Interest		760	0
Loan Interest - MDE Alt 40		789	2,040
TOTAL DEBT SERVICE:		21,404	21,404
Capital Outlay - Reservoir grants		6,100,000	5,000,432
Shafer Park Well Replacement grants + match +		250,000	
Advanced Meter Infrastructure & Billing Software		650,000	
Alt. 40 Waterline Looping - grant		200,000	
WTP Solar Arrays		57,020	
Chief Loan Weir Wall Renapment		0	0
TOTAL CPI:		7,257,020	
Contingency Fund		33,983	193,670
Reservoir Engineering Design Study			
Water Study			
TOTAL EXPENSES:		8,109,338	5,996,918
NET INCOME (LOSS)		0	0

**Boonsboro/Keedysville Regional Water System
FY22/23 Quarterly Usage Report**

Month	Fin - Utility		Production		Raw Water Metered		Total		Monthly Usage Received Per Town				Qtrly Gallons Billed to Customers			
	Keedysville	Well #8	Warrenfeltz	& Park Well	Boonsboro	%	Keedysville	%	Boonsboro	Keedysville	%	Boonsboro	Keedysville	Keedysville	Keedysville	Lost
Jul 22	5,901,000	340,000	290,000	4,444,000	9,371,730	0.854	1,603,270	0.146								
Aug 22	5,667,000	445,000	400,000	4,084,000	8,811,470	0.832	1,784,530	0.168								
Sep 22	5,064,840	824,000	5,000	4,268,000	8,686,300	0.855	1,475,540	0.145								
1st Qtr	16,632,840	1,609,000	695,000	12,796,000	26,869,500	0.847	4,863,340	0.153						4,494,919		7.6%
							FALSE									-368,421
Oct 22	5,154,700	935,000	0	4,365,000	8,704,410	0.833	1,750,290	0.167								
Nov 22	5,032,221	1,259,000	8,000	4,214,000	8,843,900	0.841	1,669,321	0.159								
Dec 22	5,331,000	1,241,000	0	4,430,000	9,324,481	0.848	1,677,519	0.152								
2nd Qtr	15,517,921	3,435,000	8,000	13,009,000	26,872,791	0.841	5,097,130	0.159						4,457,809		12.5%
																-639,321
Jan 23	5,787,925	1,583,000	0	4,430,000	9,978,400	0.846	1,822,525	0.154								
Feb 23	5,259,000	2,084,000	0	4,108,000	9,887,464	0.863	1,563,536	0.137								
Mar 23	5,725,000	2,458,000	0	4,283,000	10,794,624	0.866	1,671,376	0.134								
3rd Qtr	16,771,925	6,125,000	0	12,821,000	30,660,488	0.858	5,057,437	0.142						4,594,476		9.2%
																-462,961
Apr 23	5,426,000	2,501,000	406,000	4,429,000	11,092,687	0.869	1,669,313	0.131								
May 23	5,447,000	2,187,000	1,803,000	3,608,000	11,267,060	0.864	1,777,940	0.136								
Jun 23	5,249,000	2,497,000	1,212,000	3,637,000	10,737,179	0.852	1,857,821	0.148								
4th Qtr	16,122,000	7,185,000	3,421,000	11,674,000	33,096,926	0.862	5,305,074	0.138						4,843,698		8.7%
																-461,376
Total 22/23	65,044,686	18,354,000	4,124,000	50,300,000	117,499,705	0.853	20,322,981	0.147						18,390,902		9.5%

Cost of Daily Operations Labor at Keedysville Tank and Booster Station FY24

By agreement between the Towns Keedysville is charged for 1/2 hour per day of water operator time for routine inspection and daily operations of the water tank and booster station in Keedysville.

Regular Time		Shumaker	DeGrange	Hill	Morton	
Hourly rate		\$35.94	\$21.26	\$25.89	\$18.90	
Salary for fiscal year		\$74,755	\$44,221	\$53,851	\$39,312	
FICA + Medicare @7.65%	0.0765	0	0	0	0	
Health Ins (Annual)		8,822	8,822	20,693	20,693	
Life Ins (Annual)		104	86	104	104	
Short term disability (Annual)		245	152	135	140	
Unemployment @.021 x \$8500		179	179	179	179	
Workers Compensation	0.03	2,243	1,327	1,616	1,179	
Pension	0.07	5,233	3,095	3,770	2,752	
Total wage and benefit		\$91,580	\$57,881	\$80,347	\$64,359	\$294,167
Regular work hours/week		40	40	40	40	
Weeks employed		52	52	52	52	
Annual hours paid		2,080	2,080	2,080	2,080	
Less:						
Personal leave		240	200	160	120	
Total on job hours		1,840	1,880	1,920	1,960	7,600
Billing hourly rate		\$49.77	\$30.79	\$41.85	\$32.84	
Average rate for all 4						\$38.71

Overtime Rate Saturday x1.5		\$53.91	\$31.89	\$38.84	\$28.35	
FICA + Medicare @7.65%	0.0765	0.00	0.00	0.00	0.00	
Pension 7% of all wages	0.07	4.12	2.44	2.97	2.17	
Total direct cost per hour		\$58.03	\$34.33	\$41.81	\$30.52	
Average of 4 employees						\$41.17

Overtime Rate Sunday x2.0		\$71.88	\$42.52	\$51.78	\$37.80	
FICA + Medicare @7.65%	0.0765	0.00	0.00	0.00	0.00	
Pension 7% of all wages	0.07	5.50	3.25	3.96	2.89	
Total direct cost per hour		\$77.38	\$45.77	\$55.74	\$40.69	
Average of 4 employees						\$54.90

Day of the week
Monday - Friday
Saturday
Sunday
TOTAL

Days in Yr	Hrs per Day		Total
261	0.5	\$38.71	\$5,051.16
52	0.5	\$41.17	\$1,070.47
52	0.5	\$54.90	\$1,427.30
365			\$7,548.93

Prepared: B staff and Austin July 20, 2023

**Boonsboro Billing and Customer Accounting for Keedysville Accounts
FY24**

Contracted Services and Supplies		
Contracted Billing Service:		
HBP printing and mailing costs		\$4,750
Other		0
Total contracted services and supplies		\$4,750

Administrative Asst/Water & Sewer

		Rate	Amount
Annual wages	2,080	23.47	\$48,818
FICA		0.0765	3,735
Health Insurance			20,693
Life Insurance			86
Short Term Disability			180
Unemployment (first \$8,500)	\$8,500	0.021	179
Workers Compensation		0.01	488
Pension		0.07	3,417
Total wage and benefits			\$77,595
Work hours	40	52	2080
LESS: Personal Leave			-120
Total on job hours			1,960
Billing rate per hour			\$39.59
% time Administrative Asst on water and sewer			85.0%
	Total	Water Only	
B water accounts	1,440	1,440	
B sewer accounts	1,352		
K water accounts	409	409	
Total accounts	3,201	1,849	
% K+B water accounts of total accounts			57.8%
% K accounts of total water accounts			22.1%
Annual hours for Keedysville			225.9
			\$8,943

Total Billing and Customer Accounting	\$13,693
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Prepared: B staff and Austin July 20, 2023

Keedysville Annual Usage and Costs Recap FY11 - FY24

	Total Gallons Pumped to K	% System Total Pumped to K	K Total Annual Cost	\$/1,000 Gal Pumped to K	Gallons Metered to K Customers	\$/1,000 Gal. Metered to K Customers	Total Shared Capital B + K combined	Billing Fees (incl.)
FY11	31,025,000	18.6%	\$39,264	\$1.27	20,933,330	\$1.88	\$0	\$2,564
FY12	26,296,000	15.8%	\$40,908	\$1.56	19,519,970	\$2.10	\$20,257	\$2,616
FY13	23,012,000	14.5%	\$38,102	\$1.66	19,687,738	\$1.94	\$13,553	\$2,808
FY14	23,473,000	14.8%	\$47,993	\$2.04	18,819,588	\$2.55	\$71,327	\$2,628
FY15	23,379,000	14.1%	\$46,440	\$1.99	19,227,111	\$2.42	\$14,737	\$2,886
FY16	22,847,500	14.5%	\$63,203	\$2.77	18,678,173	\$3.38	\$50,867	\$5,653
FY17	23,409,500	14.2%	\$66,205	\$2.83	19,013,756	\$3.48	\$109,335	\$5,465
FY18	22,496,900	14.4%	\$52,300	\$2.32	19,189,694	\$2.73	\$16,160	\$4,836
FY19	23,564,867	16.1%	\$59,714	\$2.53	19,476,957	\$3.07	\$14,031	\$5,132
FY20	23,206,313	16.4%	\$56,545	\$2.44	19,370,629	\$2.92	\$13,600	\$7,016
FY21	22,175,833	15.8%	\$60,530	\$2.73	19,106,451	\$3.17	\$13,602	\$9,794
FY22	22,373,202	16.2%	\$77,639	\$3.47	19,114,256	\$4.06	\$46,359	\$12,144
FY23 (projected)	20,322,981	14.7%	\$108,599	\$5.34	18,390,902	\$5.91	\$198,000	\$13,319
FY24 (projected)	20,500,000	15.5%	\$110,578	\$5.39	19,000,000	\$5.82	\$170,000	\$13,693

Prepared: Austin Abraham July 28, 2023

Boonsboro/Keedysville Regional Water System
FY22/23 Quarterly Usage Report

Month	Fin - Utility		Production		Raw Water Metered		Total		Monthly Usage Received Per Town				Qtrly Gallons Billed to Customers			
	Keedysville	Well #8	Well #8	Warrenfeltz & Park Well	Warrenfeltz	& Park Well	Boonsboro	Keedysville	%	Keedysville	%	Boonsboro	Keedysville	Lost	Keedysville	Lost
Jul 22	5,901,000	340,000	290,000	4,444,000	290,000	4,444,000	9,371,730	1,603,270	0.854	1,603,270	0.146					
Aug 22	5,667,000	445,000	400,000	4,084,000	400,000	4,084,000	8,811,470	1,784,530	0.832	1,784,530	0.168					
Sep 22	5,064,840	824,000	5,000	4,268,000	5,000	4,268,000	8,686,300	1,475,540	0.855	1,475,540	0.145					
1st Qtr	16,632,840	1,609,000	695,000	12,796,000	695,000	12,796,000	26,869,500	4,863,340	0.847	4,863,340	0.153	20,133,932	4,494,919	25.1%	4,494,919	7.6%
								FALSE						-6,735,568		-368,421
Oct 22	5,154,700	935,000	0	4,365,000	0	4,365,000	8,704,410	1,750,290	0.833	1,750,290	0.167					
Nov 22	5,032,221	1,259,000	8,000	4,214,000	8,000	4,214,000	8,843,900	1,669,321	0.841	1,669,321	0.159					
Dec 22	5,331,000	1,241,000	0	4,430,000	0	4,430,000	9,324,481	1,677,519	0.848	1,677,519	0.152					
2nd Qtr	15,517,921	3,435,000	8,000	13,009,000	8,000	13,009,000	26,872,791	5,097,130	0.841	5,097,130	0.159	19,282,421	4,457,809	28.2%	4,457,809	12.5%
								31,969,921						-7,590,370		-639,321
Jan 23	5,787,925	1,583,000	0	4,430,000	0	4,430,000	9,978,400	1,822,525	0.846	1,822,525	0.154					
Feb 23	5,259,000	2,084,000	0	4,108,000	0	4,108,000	9,887,464	1,563,536	0.863	1,563,536	0.137					
Mar 23	5,725,000	2,458,000	0	4,283,000	0	4,283,000	10,794,624	1,671,376	0.866	1,671,376	0.134					
3rd Qtr	16,771,925	6,125,000	0	12,821,000	0	12,821,000	30,660,488	5,057,437	0.858	5,057,437	0.142	20,019,222	4,594,476	34.7%	4,594,476	9.2%
								35,717,925						-10,641,266		-462,961
Apr 23	5,426,000	2,501,000	406,000	4,429,000	406,000	4,429,000	11,092,687	1,669,313	0.869	1,669,313	0.131					
May 23	5,447,000	2,187,000	1,803,000	3,608,000	1,803,000	3,608,000	11,267,060	1,777,940	0.864	1,777,940	0.136					
Jun 23	5,249,000	2,497,000	1,212,000	3,637,000	1,212,000	3,637,000	10,737,179	1,857,821	0.852	1,857,821	0.148					
4th Qtr	16,122,000	7,185,000	3,421,000	11,674,000	3,421,000	11,674,000	33,096,926	5,305,074	0.862	5,305,074	0.138	20,227,517	4,843,698	38.9%	4,843,698	8.7%
								0						-12,869,409		-461,376
Total 22/23	65,044,686	18,354,000	4,124,000	50,300,000	4,124,000	50,300,000	117,499,705	20,322,981	0.853	20,322,981	0.147	79,663,092	18,390,902	32.2%	18,390,902	9.5%

NON REVENUE WATER

WATER LOSS

MILL POINT	VALLEY VIEW	MT LAUREL	FIRE	LEAKS	HYDRANTS	LOCATION	TOTAL
410550				150,000		King rd/Eimcrest	560550
635625						Valve top blew 4/26/2023Con estoga/Chiefia n	635625
167640			3,500	500,000		BHS 5/18/2023	667640
1213815	0	0	3500	654500	110212	110212	118212
TOTAL	0	0	3500	654500	110212	110212	1982027

Water Production Capacity and Available EDU's
Projected for FY23 based on Q1+Q2 results (reservoir leaks sandbagged)

1	Water Appropriation Permits		Permitted	Production		Available	Reliable
			Daily Avg Flow	Capacity		Capacity	Capacity
			GPD	GPM	GPD	GPD	GPD
	Schafer Park & Well #8	WA1988G006(03)	332,000	140 + 65 GPM	295,200	295,200	295,200
	Keedysville Spring	WA1979G012(05)	220,000	170 GPM	244,800	220,000	220,000
	Warrenfeltz Spring	WA1979G013(06)	130,000	120 GPM	172,800	130,000	0
			<u>682,000</u>			<u>645,200</u>	<u>515,200</u>

2	Total water withdrawn						128,000,000
	FY23 (Q1+Q2) x 2						365
	Number of days						<u>350,685</u>
	Average daily withdrawal						

3	Unused reliable capacity GPD						164,515
	Unused reliable capacity in EDU's @ 250 GPD/EDU						658

4	EDU's planned for or committed to others by Boonsboro:		Planned	Committed
	King Road Associates (656)	[not paid]	554**	
	TT&K (360)	[paid, no connection yet]		18
	Easterday (153)	[paid, no connection yet]		8
	Dean 8486 LLC (Fletcher's Grove)	[paid, no connection yet]		19
	Misc. commitments			0
	EDU's planned for or committed to others by Keedysville:		3	<u>45</u>
	EDU Surplus/(Deficit)			613

6	EDU's reserved for Keedysville per draft new agreement:			
				<u>-60</u>
				553

5	Reliable capacity held in reserve per draft new agreement:			
		Reserve	10%	515,200
	EDU Surplus/(Deficit)			<u>-206</u>
				347

7	Additional EDU capacity if Boonsboro reduces unaccounted-for water to 15%:			
	EDU Surplus/(Deficit)			<u>161</u>
				508

*** In the 1/5/2009 First Amendment to the Annexation Agreement between Boonsboro and King Rd Associates, only sewer taps are 'reserved' for the Land Owner (section 2b), and the Town further ...'represents and warrants...sufficient sewer capacity to issue the sewer taps to the Land Owner (section 7). But provision of related water taps is qualified "...to the extent the Town may be authorized to make such water capacity available to the Land Owner under applicable State law, regulations and policies" (section 7). "The terms of this Agreement are intended to ensure concurrency of development and infrastructure..." (section 6). While it is Boonsboro's intent to provide water taps in connection to these sewer taps, additional water system capacity may be required at the time water connections are requested for which the Land Owner may be required to contribute. As such, available water capacity is not currently encumbered.*

Note: Does not include a) EDU's Boonsboro previously designated for municipal purposes or infill.
 Updated: March 27, 2023 A. Abraham

Water Production Capacity and Available EDU's
Projected for FY24 based on FY23 4Q results (1 year after reservoir leaks sandbagged)

1	Water Appropriation Permits	Permitted Daily Avg Flow	Production Capacity		Available Capacity	Reliable Capacity
			GPD	GPM		
	Schafer Park & Well #8	WA1988G006(03)	332,000	140 + 65 GPM	295,200	295,200
	Keedysville Spring	WA1979G012(05)	220,000	170 GPM	244,800	220,000
	Warrenfeltz Spring	WA1979G013(06)	130,000	120 GPM	172,800	0
			682,000		645,200	515,200

2	Total water withdrawn					
	FY23 Q4 x 4			+25,608,000		153,608,000
	Number of days					365
	Average daily withdrawal					420,844

3	Unused reliable capacity GPD					94,356
	Unused reliable capacity in EDU's @ 250 GPD/EDU					377

4	EDU's planned for or committed to others by Boonsboro:			Planned	Committed
	King Road Associates (656)	[not paid]		554**	
	TT&K (360)	[paid, no connection yet]			18
	Easterday (153)	[paid, no connection yet]			8
	Dean 8486 LLC (Fletcher's Grove)	[paid, no connection yet]			19
	Misc. commitments				0
	EDU's planned for or committed to others by Keedysville:			3	45
	EDU Surplus/(Deficit)				332

6	EDU's reserved for Keedysville per draft new agreement:					-60
						272

5	Reliable capacity held in reserve per draft new agreement:					515,200
			Reserve	10%		51,520
	EDU Surplus/(Deficit)					-206
						66

7	Additional EDU capacity if Boonsboro reduces unaccounted-for water to 15%:					161
	EDU Surplus/(Deficit)					227

** In the 1/5/2009 First Amendment to the Annexation Agreement between Boonsboro and King Rd Associates, only sewer taps are 'reserved' for the Land Owner (section 2b), and the Town further ...'represents and warrants...sufficient sewer capacity to issue the sewer taps to the Land Owner (section 7). But provision of related water taps is qualified "...to the extent the Town may be authorized to make such water capacity available to the Land Owner under applicable State law, regulations and policies" (section 7). "The terms of this Agreement are intended to ensure concurrency of development and infrastructure..." (section 6). While it is Boonsboro's intent to provide water taps in connection to these sewer taps, additional water system capacity may be required at the time water connections are requested for which the Land Owner may be required to contribute. As such, available water capacity is not currently encumbered.

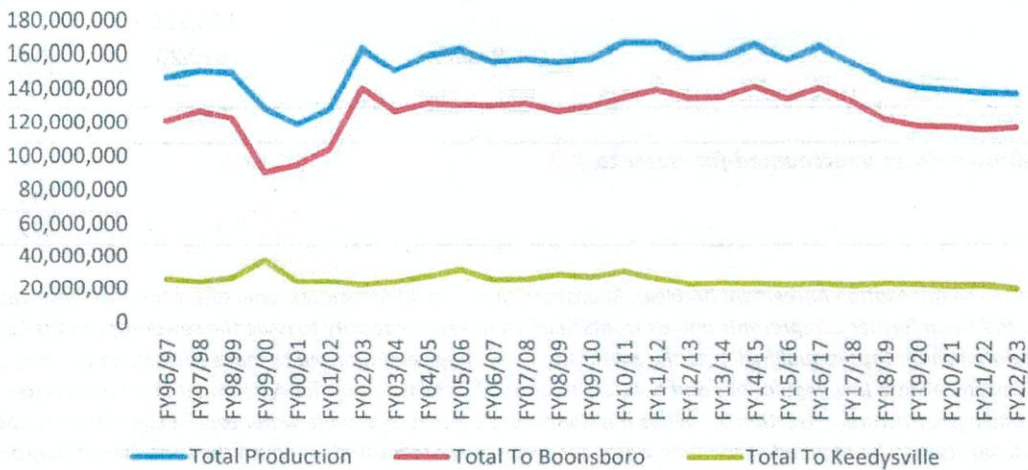
Note: Does not include a) EDU's Boonsboro previously designated for municipal purposes or infill.

Updated: July 28, 2023 A. Abraham

Note: Schafer Park well at full capacity will add +147 EDU's.

**Boonsboro Keedysville Water System
Production and Delivery to Each Town**

	Total Production	To Boonsboro	To Keedysville	
FY96/97	146,443,700	120,845,500	25,598,200	0
FY97/98	150,338,800	126,685,400	23,653,400	0
FY98/99	149,228,000	122,616,400	26,611,600	0
FY99/00	128,536,400	90,832,500	37,703,900	0 Metering questionable
FY00/01	118,785,000	94,746,000	24,039,000	0 Metering questionable
FY01/02	128,049,000	103,853,800	24,195,200	0 Metering questionable
FY02/03	162,901,000	140,528,500	22,371,500	-1,000
FY03/04	150,705,000	126,780,500	23,924,500	0
FY04/05	159,360,000	131,667,000	27,693,000	0
FY05/06	162,638,000	130,727,500	31,930,500	20,000
FY06/07	156,059,000	130,532,000	25,527,000	0
FY07/08	157,584,000	131,788,500	25,795,500	0
FY08/09	156,109,000	127,180,500	28,928,500	0
FY09/10	157,827,000	130,243,000	27,584,000	0
FY10/11	166,478,000	135,453,500	31,024,500	0
FY11/12	166,269,000	139,964,300	26,295,700	-9,000
FY12/13	158,255,000	135,242,900	23,012,100	0
FY13/14	159,038,000	135,564,700	23,473,300	0
FY14/15	165,364,000	141,985,000	23,379,000	0
FY15/16	157,535,000	134,687,500	22,847,500	0
FY16/17	164,398,000	140,988,500	23,409,500	0
FY17/18	155,695,000	133,198,100	22,496,900	0
FY18/19	146,099,965	122,535,098	23,564,867	0
FY19/20	141,690,300	118,483,987	23,206,313	0
FY20/21	140,006,035	117,830,202	22,175,833	0
FY21/22	138,461,190	116,087,988	22,373,202	0
FY22/23	137,822,686	117,499,705	20,322,981	0



Prepared: August 1, 2023 A. Abraham



August 1, 2023

Mr. Anthony Nally
Assistant Mayor, Treasurer
Town of Boonsboro
21 North Main Street
Boonsboro, Maryland 21713

Re: Proposal - Design Engineering Services for CCTV Upgrades

Dear Mr. Nally:

Whitman, Requardt and Associates, LLP (WRA) is pleased to present our proposal for Design Engineering Services for the Security Upgrade and CCTV camera additions.

SCOPE OF WORK

The Town of Boonsboro owns and operates several facilities throughout their water/wastewater distribution and treatment system. In Spring 2023, WRA documented the Town's desired security requirements at select facilities and presented recommendations for the installation and configuration of new CCTV monitoring equipment suitable for the Town's needs.

Upon presentation of the CCTV recommendations and study, the Town requested that WRA provide design services for the security upgrades proposed.

Whitman, Requardt and Associates, LLP (WRA) will provide engineering services for the design of facility security upgrades for the seven (7) sites investigated during the Security Upgrades Study. The design will utilize the key components presented during the Security Workshop #2 and Town feedback.

The project will include design services for CCTV upgrades to facilities as follows:

Boonsboro Reservoir

- Specification of one (1) pole mounted camera overlooking the vehicle entry gate and one (1) wall mounted camera overlooking the exterior of the new Process/Equipment Room
- Specification of onsite CCTV video storage recorder(s) and cellular communications equipment
- Specification/design of electrical wiring/conduit and modifications to existing electrical panelboard(s) for support of power to new CCTV equipment
- Development/documentation of CCTV equipment configuration parameters and setup, as well as wireless cellular network equipment for establishing remote access communications to video recordings.

Keedysville Booster Pump Station

- Specification of (1) wall mounted camera overlooking the exterior of the existing Booster Pump Station
- Specification of onsite CCTV video storage recorder(s) and cellular communications equipment
- Specification of electrical wiring/conduit and modifications to existing electrical panelboard(s) for support of power to new CCTV equipment

- Development/documentation of CCTV equipment configuration parameters and setup, as well as wireless cellular network equipment for establishing remote access communications to video recordings.

Keedysville Water Treatment Plant (WTP)

- Specification of (1) wall mounted interior camera overlooking the Water Treatment Plant Chlorine Room
- Specification of (2) wall mounted exterior camera overlooking the Water Treatment Plant entryways
- Specification of (1) wall mounted interior camera overlooking the Spring House and connecting of a wireless bridge for communications back to the WTP CCTV equipment
- Specification of onsite CCTV video storage recorder(s) and cellular communications equipment
- Specification/design of electrical wiring/conduit and modifications to existing electrical panelboard(s) for support of power to new CCTV equipment, both at the WTP and Spring House
- Development/documentation of CCTV equipment configuration parameters and setup, as well as wireless cellular network equipment for establishing remote access communications to video recordings.

Shafer Park Water Treatment Plant (WTP)

- Specification of (1) wall mounted interior camera overlooking the Water Treatment Plant Chlorine Room
- Specification of (1) wall mounted exterior camera overlooking the Water Treatment Plant entryways
- Specification of (1) wall mounted exterior camera overlooking the Weir Pool
- Specification of onsite CCTV video storage recorder(s) and cellular communications equipment
- Specification/design of electrical wiring/conduit and modifications to existing electrical panelboard(s) for support of power to new CCTV equipment
- Development/documentation of CCTV equipment configuration parameters and setup, as well as wireless cellular network equipment for establishing remote access communications to video recordings.

Warrenfeltz Spring and Pump House

- Specification of (1) wall mounted exterior camera overlooking the Pump House door entry and well hatch
- Specification of onsite CCTV video storage recorder(s) and cellular communications equipment
- Installation of electrical wiring/conduit and modifications to existing electrical panelboard(s) for support of power to new CCTV equipment
- Development/documentation of CCTV equipment configuration parameters and setup, as well as wireless cellular network equipment for establishing remote access communications to video recordings.

Potable Well No. 8 Well Pump Station

- Specification of (1) wall mounted exterior camera overlooking the building door entry and road
- Installation of onsite CCTV video storage recorder(s) and cellular communications equipment
- Specification of electrical wiring/conduit and modifications to existing electrical panelboard(s) for support of power to new CCTV equipment
- Development/documentation of CCTV equipment configuration parameters and setup, as well as wireless cellular network equipment for establishing remote access communications to video recordings.

Boonsboro Wastewater Treatment Plant (WWTP)

- Three (3) separate wireless routers and CCTV video recorder enclosures will be installed at this location, with support for eleven (11) total CCTV cameras. Final locations and interconnections will be determined during the design phase.
- Blower Building

- One (1) camera wall mounted next to West Doors for coverage of blower room and electrical room.
- One (1) camera wall mounted next to East Doors for coverage of chemical storage and dosing area.
- One (1) camera inside of the chemical storage area
- Specification of electrical wiring/conduit and modifications to existing electrical panelboard(s) for support of power to new CCTV equipment
- Filter Building
 - Specify four (4) cameras on each side of the building
 - Observation of the East side of the building
 - Observation of the North side of the building and chlorine contact structure
 - Observation of West side of the building and generator and transformer area
 - Observation of the North End of Headworks Building
 - Specification of electrical wiring/conduit and modifications to existing electrical panelboard(s) for support of power to new CCTV equipment
- Headworks Building
 - One (1) camera at the South door
 - One (1) camera at the East door
 - One (1) camera at the West door
 - Specification of electrical wiring/conduit and modifications to existing electrical panelboard(s) for support of power to new CCTV equipment
- Front Gate
 - One (1) pole mounted camera for general entry surveillance
 - Specification of electrical wiring/conduit and modifications to existing electrical panelboard(s) for support of power to new CCTV equipment
- Development/documentation of CCTV equipment configuration parameters and setup, as well as wireless cellular network equipment for establishing remote access communications to video recordings.

Police Department Building

- Specification of CCTV monitoring hardware and equipment.
- Development/documentation of CCTV equipment configuration. Design for connection of remote access communications to video recording capability.

Detailed Description of Work

Based on our project understanding, the engineering services to be provided include the following tasks:

TASK 1 – BACKGROUND INVESTIGATIONS & EVALUATIONS

- 101 Attend a project kickoff meeting with the Town to discuss the elements of the project and define project objectives.
- 102 Review existing facility drawings including power and instrumentation plans.
- 103 Perform onsite evaluations and investigation of existing facility conditions.

TASK 2 – 60% DESIGN

This task involves the development of 60% contract documents (plans and specifications) and preparation of an associated cost estimate. The contract documents will be prepared assuming a single prime General contract – General. Specific sub-tasks include:

- 201 Develop 60% contract documents including:
 - a. Drawings, including title sheet, drawing index, preliminary electrical and CCTV drawings.
 - b. Draft technical specifications for all major equipment
- 202 Prepare 60% level cost estimate.
- 203 Submit 60% design package to Town for review.
- 204 Attend a project workshop to discuss Town comments on 60% design.

TASK 3 – 90% DESIGN

This task involves the development of 90% contract documents (plans and specifications) and preparation of an associated cost estimate. Specific sub-tasks include:

- 301 Incorporate Town 60% Design review comments and develop 90% contract documents including:
 - a. Drawings developed to 90% level including electrical design, electrical details, CCTV design, CCTV interconnection diagrams, and CCTV details.
 - b. Draft technical specifications developed to 90% level.
- 302 Prepare 90% level cost estimate.
- 303 Submit 90% design package to Town for review.
- 304 Attend a project workshop to discuss Town comments on 90% design.

TASK 4 – FINAL DESIGN (BID READY DOCUMENTS)

This task involves the development of Final Bid-Ready contract documents (plans and specifications) and preparation of an associated cost estimate. Specific sub-tasks include:

- 401 Incorporate Town 90% Design review comments and develop Final contract documents including:
 - a. Incorporation of Town Front-end Documents
 - b. Final Signed/Sealed Drawings
 - c. Final Specifications
- 402 Prepare Final Bid-Ready cost estimate.

GENERAL

- G-1 Title Sheet and Sheet Index
- G-2 Vicinity Map, Legend and Abbreviations

ELECTRICAL & SECURITY SYSTEM / CCTV

- E-1 Security Legends, Abbreviations, and General Notes
- E-2 CCTV Interconnect Diagrams, Schedules, and Details (1 of 3)
- E-3 CCTV Interconnect Diagrams, Schedules, and Details (2 of 3)
- E-4 CCTV Interconnect Diagrams, Schedules, and Details (3 of 3)
- E-5 Site Plan – Boonsboro Reservoir
- E-6 Site Plan – Keedysville Booster Pump Station
- E-7 Site Plan – Keedysville Water Treatment Plant
- E-8 Site Plan – Shafer Park Water Treatment Plant
- E-9 Site Plan – Warrenfeltz Spring & Pump House
- E-10 Site Plan – Potable Well No.8 Well Pump Station
- E-11 Site Plan – Boonsboro WWTP, Blower Room
- E-12 Site Plan – Boonsboro WWTP, Filter Building
- E-13 Site Plan – Boonsboro WWTP, Headworks and Influent Pump Station
- E-14 Site Plan – Boonsboro WWTP, Front Gate
- E-15 CCTV Plan and Details – Police Department Building

The following assumptions were considered in the development of this cost proposal:

1. Preparation and submission of applications for permits necessary for the construction of the work are excluded. It is assumed that no permits will be required for the work under this Contract.
2. Sufficient electric power is available onsite for the project. Existing electric power source will be identified through a site visit and discussions with plant staff.
3. WRA will provide summary notes for meetings attended.
4. Design of CCTV camera systems is limited to the quantities identified in the Security Upgrade Study. Additional cameras, monitoring systems, etc. are not considered a part of the scope of work.
5. CCTV design is limited to the sites listed herein.
6. Bid phase and construction engineering services are not included.
7. Drawings will be developed using 30x42 sheets. Plan submittals will include 12 sets of half-size plans and specifications will be bound and double-sided specifications. Construction ready submittal will be one (1) set of full-size PDF plans and double-sided specifications. Scans of drawings and specifications will also be made available in electronic PDF format.
8. Town review period for all submittals is assumed to be two (2) weeks.
9. All meetings will be held virtually via Microsoft Teams or another virtual meeting service.
10. Programming of the security system is the responsibility of the contract in coordination with the Owner. The development of system testing and/or programming procedures is not included in the scope of work.

SCHEDULE

The proposal assumes that all work will be completed by January 2024 with Notice to Proceed on July 1, 2023; however, WRA will not be liable for delays beyond its reasonable control.

Milestone		Duration
1	60% Documents	12 weeks after Notice to Proceed
2	90% Documents	8 weeks after receiving comments
3	Bid Documents	6 weeks after receiving comments

COMPENSATION

We will perform the Scope of Services on a time and material basis. The estimated cost for the Scope of Services is included below. This fee will not be exceeded without your authorization.

Invoices will be rendered every four weeks for the actual services performed during the previous four-week period and are due within 30 days of receipt.

Scope Item	Cost
A. Background Investigations and Evaluations	\$8,032
B. 60% Design	\$29,464
C. 90% Design	\$20,428
D. Final Design (Bid Ready Documents)	\$10,000
Total	\$67,924



MANHOUR ESTIMATE AND COST BREAKDOWN

A detailed Manhour Estimate and Cost Breakdown by task is included as Attachment A.

TERMS AND CONDITIONS

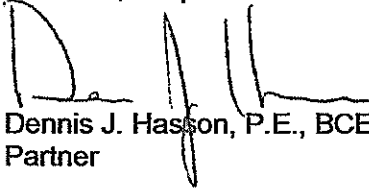
This work will be completed in accordance with our October 2018 Water System Contract as amended on September 27, 2021.

If this proposal is acceptable to you, please sign in the appropriate location below and return a copy for our files.

Thank you for the opportunity to present our Proposal. We look forward to working with you on this project.

Very truly yours,

Whitman, Requardt and Associates, LLP



Dennis J. Hasson, P.E., BCEE
Partner

Enclosures

cc: File
P. Andrew Cooper, P.E., BCEE
Gregory Horn, P.E.

PROJECT NAME: TOWN OF BOONSBORO - SECURITY UPGRADE PROJECT

TASK	CLIENT: Town of Boonsboro										MEMORIAL DATE BY/DOER	Subcontractor Fees	Subcontractor Payroll	Subcontractor Expenses	Use Item Totals	
	Project Manager	Senior Consultant / QM/QC	Inst. Assoc. / Proj. Eng.	Inst. Engineer	Inst. Designer / CAD	Elect. Assoc. / Proj. Eng.	Elect. Engineer	Elect. Designer / CAD	Security Assoc. / Proj. Eng.	Security Engineer						Security Designer
Total Budgeted Manpower Expenditure																
Unlabeled Contract Items for Year 2012																
101 Planned Production Meeting	4	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
104 Review Existing Facility Drawings and Site Investigations					16											
109 Perform On-Site Evaluations			8		20											
TASK 1 SUB-TOTALS *	4	0	2	0	16	0	0	0	0	0	0	0	0	0	0	0
TASK 1 SUB-TOTAL DOLLARS *	\$724	\$0	\$1,448	\$0	\$7,232	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TASK 1 SUB-TOTAL DOLLARS **	\$724	\$0	\$1,448	\$0	\$7,232	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Budgeted Manpower Expenditure																
Unlabeled Contract Items for Year 2013																
201 Develop 60% Concept Documents	8	0	8	0	120	16	2	0	0	0	0	0	0	0	0	0
202 Prepare 60% Cost Estimate					4	2										
203 Submit 60% Design to Town					2											
204 Conduct Project Visiting to Discuss 60% Design			2		4											
TASK 2 SUB-TOTALS *	8	0	10	0	130	18	2	0	0	0	0	0	0	0	0	0
TASK 2 SUB-TOTAL DOLLARS *	\$1,448	\$0	\$2,896	\$0	\$17,136	\$1,638	\$2	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TASK 2 SUB-TOTAL DOLLARS **	\$1,448	\$0	\$2,896	\$0	\$17,136	\$1,638	\$2	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Budgeted Manpower Expenditure																
Unlabeled Contract Items for Year 2013																
301 Prepare 90% Concept Documents	8	0	8	0	60	8	0	0	0	0	0	0	0	0	0	0
302 Prepare 90% Cost Estimate					4	0										
303 Submit 90% Design Package to Town					2											
304 Conduct Project Review/Visiting to Town			2		4											
TASK 3 SUB-TOTALS *	8	0	10	0	68	8	0	0	0	0	0	0	0	0	0	0
TASK 3 SUB-TOTAL DOLLARS *	\$1,448	\$0	\$2,896	\$0	\$10,112	\$1,638	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TASK 3 SUB-TOTAL DOLLARS **	\$1,448	\$0	\$2,896	\$0	\$10,112	\$1,638	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Budgeted Manpower Expenditure																
Unlabeled Contract Items for Year 2013																
401 Prepare Final Concept Documents	8	0	8	0	40	2	0	0	0	0	0	0	0	0	0	0
402 Prepare Final Cost Estimate					2											
TASK 4 SUB-TOTALS *	8	0	10	0	42	2	0	0	0	0	0	0	0	0	0	0
TASK 4 SUB-TOTAL DOLLARS *	\$1,448	\$0	\$2,896	\$0	\$17,640	\$1,638	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TASK 4 SUB-TOTAL DOLLARS **	\$1,448	\$0	\$2,896	\$0	\$17,640	\$1,638	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Budgeted Manpower Expenditure																
Unlabeled Contract Items for Year 2013																
501 Prepare Final Concept Documents	8	0	8	0	40	2	0	0	0	0	0	0	0	0	0	0
502 Prepare Final Cost Estimate					2											
TASK 5 SUB-TOTALS *	8	0	10	0	42	2	0	0	0	0	0	0	0	0	0	0
TASK 5 SUB-TOTAL DOLLARS *	\$1,448	\$0	\$2,896	\$0	\$17,640	\$1,638	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TASK 5 SUB-TOTAL DOLLARS **	\$1,448	\$0	\$2,896	\$0	\$17,640	\$1,638	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

TASK	CLIENT: Town of Boonsboro										MEMORIAL DATE BY/DOER	Subcontractor Fees	Subcontractor Payroll	Subcontractor Expenses	Use Item Totals	
	Project Manager	Senior Consultant / QM/QC	Inst. Assoc. / Proj. Eng.	Inst. Engineer	Inst. Designer / CAD	Elect. Assoc. / Proj. Eng.	Elect. Engineer	Elect. Designer / CAD	Security Assoc. / Proj. Eng.	Security Engineer						Security Designer
Total Budgeted Manpower Expenditure																
Unlabeled Contract Items for Year 2013																
601 Prepare Final Concept Documents	8	0	8	0	40	2	0	0	0	0	0	0	0	0	0	0
602 Prepare Final Cost Estimate					2											
TASK 6 SUB-TOTALS *	8	0	10	0	42	2	0	0	0	0	0	0	0	0	0	0
TASK 6 SUB-TOTAL DOLLARS *	\$1,448	\$0	\$2,896	\$0	\$17,640	\$1,638	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TASK 6 SUB-TOTAL DOLLARS **	\$1,448	\$0	\$2,896	\$0	\$17,640	\$1,638	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Budgeted Manpower Expenditure																
Unlabeled Contract Items for Year 2013																
701 Prepare Final Concept Documents	8	0	8	0	40	2	0	0	0	0	0	0	0	0	0	0
702 Prepare Final Cost Estimate					2											
TASK 7 SUB-TOTALS *	8	0	10	0	42	2	0	0	0	0	0	0	0	0	0	0
TASK 7 SUB-TOTAL DOLLARS *	\$1,448	\$0	\$2,896	\$0	\$17,640	\$1,638	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TASK 7 SUB-TOTAL DOLLARS **	\$1,448	\$0	\$2,896	\$0	\$17,640	\$1,638	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

TASK	CLIENT: Town of Boonsboro										MEMORIAL DATE BY/DOER	Subcontractor Fees	Subcontractor Payroll	Subcontractor Expenses	Use Item Totals	
	Project Manager	Senior Consultant / QM/QC	Inst. Assoc. / Proj. Eng.	Inst. Engineer	Inst. Designer / CAD	Elect. Assoc. / Proj. Eng.	Elect. Engineer	Elect. Designer / CAD	Security Assoc. / Proj. Eng.	Security Engineer						Security Designer
Total Budgeted Manpower Expenditure																
Unlabeled Contract Items for Year 2013																
801 Prepare Final Concept Documents	8	0	8	0	40	2	0	0	0	0	0	0	0	0	0	0
802 Prepare Final Cost Estimate					2											
TASK 8 SUB-TOTALS *	8	0	10	0	42	2	0	0	0	0	0	0	0	0	0	0
TASK 8 SUB-TOTAL DOLLARS *	\$1,448	\$0	\$2,896	\$0	\$17,640	\$1,638	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TASK 8 SUB-TOTAL DOLLARS **	\$1,448	\$0	\$2,896	\$0	\$17,640	\$1,638	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

