Water & Sanitary Board Agenda Thursday, December 7, 2023 1:00 p.m. Town Hall 104 N. King St. Shepherdstown, WV 25443 Masks - Optional

- 1. Call to Order
- 2. Review and approval of Draft Water and Sanitary Board Minutes of October 26, 2023
- 3. Visitors
- 4. Finances
 - a. Financial Statements-Enclosure
- 5. Flow and Quality Reports
 - a. (1) Water Reports Information item
 - b. (2) Sewer Reports information item
- 6. Unfinished Business
 - a. Water Plant Improvement Project- Jeff Ekstrom
 - b. Update on Water Distribution Project Jeff Ekstrom
 - c. Bid Information on Water Distribution Project Jeff Ekstrom
- 7. New Business
 - a. Mainline Extension Renewal Terms letter
 - b. Ordinance Revision erosion and stream protection
- 8. Old Business
 - a. Hydrant Report enclosure in packet
- 9. Mayor's Report
- 10. Next meeting date -
- 11. Summarize Action Items from this meeting
- 12. Draft Agenda for next meeting
- 13. Adjournment

DRAFT MINUTES

CORPORATION OF SHEPHERDSTOWN, WEST VIRGINIA

October 26, 2023

ATTENDEES:

Water Board: J. Auxer (Mayor), J. Bresland, S. Kemnitzer, S. Knuppel, C. Stroech

Sanitary Board: J. Auxer, H. Heyser, R. Keller

Town Staff: S. Grove, C. Painter, B. Bennett, C. Coe, K Shipley, F. Welch

Visitors: Hoy Shingleton, L.C., G. Welter

1. CALL TO ORDER

The Water and Sewer Boards meeting was called to order by J. Auxer at 1:00 p.m.

2. MINUTES FROM PRIOR MEETING

The proposed minutes of the September 28, 2023 were reviewed and approved.

3. VISITORS

The Board introduced H. Shingleton and entered into a discussion of the pending PFAS class action lawsuit. H. Shingleton asked if the Board had tested for PFAS. C. Coe noted the state had tested the Potomac River intake and it was below actionable levels. C. Coe also confirmed that the Town had not done our own testing. The only contamination we are aware of in the local area is in Martinsburg from the 3M plant.

If the Board was considering participating in the lawsuit, H. Shingleton recommended speaking with Camden Siegrist or Charles Printz with the Bowles Rice firm, the Town's Bond Counsel firm.

G. Welter listened to presentation made to CTUB. From that he understood, unless you did anything you were included in the class action.

If we run tests, C. Coe recommended tests in three spots. Potomac River intake, Town Run, and one other. H. Shingleton confirmed there is a deadline to opt out of the class action lawsuit by December 11, 2023. There was discussion of a few options for tests that vary from \$70 by Cyclopure and \$1,500 performed by Certified labs. S. Kemnitzer noted a separate group, Potomac Riverkeepers, has done some testing and is willing to share results.

C.Stroech made motion to move forward with the \$70 test for PFAS on Town Run and Potomac River. No second was made on the motion. Motion was not passed. C.Coe recommended that if the Board chose to perform tests, have them done through a certified lab, which are \$1,500 each. S. Knuppel made a motion to perform tests on Town Run and Potomac River intakes utilizing certified lab as recommended by Staff. The motion was seconded by C. Stroech. C.Stroech, J. Bresland, S.Knuppel voted for and

S.Kemnitzer and J. Auxer voted against. C. Coe stated he will order samples and get delivered as soon as possible.

There is another Public Hearing in Charles Town tonight that others plan to listen too online.

4. FINANCES

Financial Statements - Enclosed in packet

- S. Kemnitzer noted that one of the bonds listed needed to have its labeled corrected.
- R. Keller asked what line 536 Other Wastewater Revenue listing for \$34,*** was for. Town Staff noted the revenue is from Toll House Woods income.
- J. Bresland noted that line 461 has calculation error
- J. Auxer directed Staff that when reports have negative values to reflect them in RED.

a. AUDIT REPORT

H. Heyser asked if auditing firm had noted any concerns. J. Auxer responded that none were noted.

5. FLOW AND QUALITY REPORTS

- C. Coe asked if anyone had questions.
- J. Auxer asked if one item would be corrected when plant is finished. C. Coe confirmed it would be.

6. UNFINISHED BUSINESS

S. Kemnitzer noted a stormwater study underway in the town currently and asked who is responsible for getting stormwater to the river. K. Shipley noted that stormwater is handled through the piping system and carried to the Potomac, some of which ends up in Town Run.

a. WATER PLANT IMPROVEMENT PROJECT

Both new filters are online. UV start-up is still pending.

b. WATER DISTRIBUTION PROJECT

The Bid Date is 11/1/23 and has been advertised in paper by J. Eckstrom.

Headers for Water Distribution Plant and need to be corrected to October

c. **SEWER PUMP STATION**

F. Welch noted that we had \$427,000 that was to be used towards the sewer pump station, and that the Town had collected interest on that money. He noted that the majority of the money has been used for the new press. The remainder of the money has been used for necessary repairs (ie. New pump for non-potable water system, replaced steps in pump station, replaced piping). Also, Staff had ordered a few new replacement PLC cards for the computer system. K. Shipley said it will be approximately one year until they are received and can be installed and they are replacing a few but the system has a total of approximately 30 cards.

7. NEW BUSINESS

K. Shipley recommended that generators be installed at new lift/ pump stations for emergency power. They are reviewing the best options for long-term operation and maintenance. At the meeting, we discussed Toll House Woods as well as Maddox Farm because it is a large lift/pump station.

J.Auxer asked for Staff to have J. Eckstrom prepare backup for this request. K. Shipley noted the Town has 11 pump stations currently. H. Heyser made a motion, R. Keller seconded motion and J. Auver, H. Heyser, and R. Keller voted to approve.

Mainline extension agreement. Currently they have to renew their permit every year. But plans have not been updated. K. Shipley recommended we put a limit of three years for plan updates.

K. Shipley recommends after 3 years, plans need to be resubmitted and reviewed by the Engineering team and Staff. C. Stroech asked is it could be added to standard renewal letter, which Staff agreed too.

H. Heyser noted there should be a paragraph added to the renewal letter and add language about an additional fee charged for a new review. R. Keller said it would be a change in the renewal policy

8. HYDRANT REPORT

K.Shipley spoke with Cable Excavating recently. They confirmed that they still do hydrant repair/maintenance work and will reach out in a few weeks to discuss the Towns' needs.

9. NEXT MEETING

The next regular meeting will be December 7, 2023 at 1:00 pm.

10. ADJOURNMENT

Motion to adjourn by H. Heyser, seconded by C. Stroech, and approved by all. Meeting Adjourned at 2:29pm.

Respectfully submitted: S. Knuppel

Shepherdstown Waterworks: Budget to Actual September 2023

		Mont	h of Septemb	er		,	Year to Date			Γ -
			Monthly					% of		% FY 24
In the second se		Actual	Budget	% of Budget		Actual	YTD Budget	Budget	FY 24 Budget	Budget
Income		0.000.00	Male bush							
419 Water Interest Income		8,690.23	7,083.33			24,720.23	21,249.99	116.33%	85,000.00	299
461 Water Metered Revenue		132,363.00	150,000.00		1	437,383.00	450,000.00	97.20%	1,800,000.00	249
474 Other Water Revenues		0.00	7,000.00			385.00	21,000.00	1.83%	84,000.00	0%
Total Income	\$	141,053.23	\$ 164,083.33	85.96%	\$	462,488.23	\$ 492,249.99	93.95%	\$ 1,969,000.00	23%
Expenses										
401.1 Water Billing Expenses		794.72	1,291.67	61.53%		7,806.34	3,875.01	201.45%	14,500.00	549
401.2 Water Administration		2,707.89	4,500.00	Nacroscopica	i i	13,934.80	13,500.00	103.22%	47,000.00	309
401.3 Water Utility Billing		17,352.00	19,166.67			88,438.54	57,500.01	153.81%	233,500.00	5163000
401.4 Water Plant Expenses		6,274.82	30,833.33			14,315.64	92,499.99	15.48%		389
408 Taxes-Other than Income		4,069.26	5,666.67	DATE - MARKETON					370,000.00	49
427 Interest Expense		54,800.47	10,000.00	3215-36079 6000		13,771.04	17,000.01	81.01%	65,000.00	219
· ·			*	0.00000000		59,300.75	30,000.00	197.67%	120,000.00	499
521 Employee Screening		0.00	25.00			0.00	75.00	0.00%	300.00	09
601 Water Salaries & Wages		41,372.95	45,000.00	887. Y-289.00.00.00.00.00.00.00.00.00.00.00.00.00	İ	142,099.12	135,000.00	105.26%	440,000.00	329
604 Employee Pensions & Benefits		11,631.00	11,666.67	550000000000000000000000000000000000000		35,442.50	35,000.01	101.26%	110,000.00	329
615 Purchased Power	- 1	4,733.29	6,250.00	75.73%		17,490.42	18,750.00	93.28%	60,000.00	29%
618 Chemicals		12,600.65	6,250.00	201.61%		24,373.15	18,750.00	129.99%	65,000.00	379
631 Contractual Svc-Engineering		5,325.00	7,916.66	67.26%		32,853.00	23,749.98	138.33%	50,000.00	66%
632 Contractual Svc-Accounting		833.34	2,083.33	40.00%	31	17,277.08	2,083.00	829.43%	25,000.00	69%
633 Contractual Svc-Legal		624.06	416.67	149.77%		3,392.51	1,250.01	271.40%	10,000.00	349
635 Contractual Svc-Testing		425.61	3,750.00	11.35%		2,823.85	11,250.00	25.10%	45,000.00	69
636 Contractual Svc-Other		0.00	2,916.67	0.00%		3,422.64	8,750.01	39.12%	22,000.00	169
650 Transportation Expenses		87.78	3,750.00	2.34%		698.93	11,250.00	6.21%	45,000.00	29
657 Insurance-General Liability		5,395.21	3,666.67	147.14%	1	16,185.63	11,000.01	147.14%	33,000.00	49%
659 Insurance-Other		0.00	750.00	0.00%		0.00	2,250.00	0.00%	9,000.00	09
660 Advertising Expense		177.65	83.33	213.19%		277.15	249.99	110.86%	500.00	55%
675 Administrative Lending Fees		2,723.93	166.67	1634.33%		2,723.93	500.01	544.78%	4,000.00	689
676 Bond Issuance Expense	- 1	0.00	16.67	0.00%		0.00	50.01	0.00%	200.00	09
Total Expenses	\$	171,929.63	\$ 166,166.68	103.47%	\$	496,627.02	\$ 494,333.05		\$ 1,769,000.00	289
Net Operating Income	-\$	30,876.40			-\$	34,138.79	•			
A										
Other Income										
419.5 Capacity Accounts Interest		3,891.06				13,201.52				
474. Other Water Revenue Total Other Income		0.00				40,800.00				
Net Income	\$	3,891.06	-		\$	54,001.52				
Net income	-5	26,985.34			\$	29,835.99				
Bond Expenses										
03-A Water Revenue		2,241.34	2,241.34	100.00%		6,724.02	6,724.02	300.00%	26,896.08	25.00%
3-B Water Revenue		7,187.19	7,187.19	100.00%		21,561.57	21,561.57	100.00%	86,246.28	25.00%
12 Water Revenue		10,462.92	10,462.92	100.00%		31,388.76	31,388.76	100.00%	125,555.04	25.00%
17 Water Revenue		12,819.55	12,819.55	100.00%		38,458.65	38,456.65	100.01%	153,834.60	25.00%
21 Water Revenue		8,292.02	8,292.02	100.00%		24,876.06	24,876.06	100.00%	99,504.24	25.00%
Total Payments	\$	41,003.02	\$ 41,003.02	100.00%	\$	123,009.06		100.00%	- 1000	25.00%
Total Net Income	-\$	67,988.36			-\$	93,173.07				
					-		3-3-1-			
Total Net Minus Restricted	-\$	71,879.42			-\$	157,147.85				

Shepherdstown Waterworks

Balance Sheet

As of September 30, 2023

	TOTAL
ASSETS	
Current Assets	
Bank Accounts	
RESERVED FUNDS BANKING	1,953,695.89
RESTRICTED FUNDS BANKING	2,822,129.42
UNRESTRICTED FUNDS BANKING	-60,188.07
Total Bank Accounts	\$4,715,637.24
Accounts Receivable	
141 A/R, Water Customer Billing	159,334.10
142 Other Receivables	0.00
143 Allow. for Doubtful Accounts	-5,000.00
Total Accounts Receivable	\$154,334.10
Other Current Assets	
142.71 Due to/From Govt Funds	-140,957.02
162 Prepaid Expenses	0.00
253.20 Deferred Inflows	-98,740.50
Due to/from Sewer	-5,060.57
Uncategorized Asset	0.00
Total Other Current Assets	\$ -244,758.09
Total Current Assets	\$4,625,213.25
Fixed Assets	
105 Fixed Asset-Constr. In Progress	2,490,605.45
Fixed Asset Adjustments	-4,207,907.05
Fixed Assets (All Funds)	12,812,000.52
Total Fixed Assets	\$11,094,698.92
TOTAL ASSETS	\$15,719,912.17
LIABILITIES AND EQUITY	
Liabilities	
Current Liabilities	
Accounts Payable	
Accounts Payable	18,451.87
Total Accounts Payable	\$18,451.87
Other Current Liabilities	
221 Bond Payable-Current	0.00
235 Customer Dep/Int PayCash Acct	89,944.42
238 Accrued Interest Payable	35,182.59
241 Misc. Current/Accrued Liab.	73,231.01
Total Other Current Liabilities	\$198,358.02
Total Current Liabilities	\$216,809.89

Shepherdstown Waterworks

Balance Sheet

As of September 30, 2023

	TOTAL
Long-Term Liabilities	
186.20 Deferred Outflows	-32,069.19
221. Bond Payable-Long term	6,855,393.00
Total Long-Term Liabilities	\$6,823,323.81
Total Liabilities	\$7,040,133.70
Equity	
215 Retained Earnings	7,679,669.84
271 Contrib. in aid of Construction	1,069,125.91
Net Income	-69,017.28
Total Equity	\$8,679,778.47
OTAL LIABILITIES AND EQUITY	\$15,719,912.17

Shepherdstown Sewer Budget to Actual September 2023

	N	onth of Septen	nber		Year to Date		FY 20	
	Actual	Budget	% of Budget	Actual	Budget	% of Budget	Budget	% of Budget
Income	demonstration and							
419 Sewer Interest Income	6,052.4	3,583.33	168.91%	16,060.50	10,749.99	149.40%	43,000.00	37.359
522 Metered Sewer Revenue	116,671.00	124,206.42	93.93%	343,487.00	372,619.26	92.18%	1,490,477.00	23.059
536 Other Wastewater Revenues		309.83	0.00%	600.00	929.49	64.55%	3,718.00	16.149
Total Income	\$ 122,723.44	\$ 128,099.58	95.80%	\$ 360,147.50	\$ 384,298.74	93.72%	\$ 1,537,195.00	23,439
Expenses								
401.1 Sewer Billing Expenses	794.72	869.08	91.44%	3,099.22	2,607.24	118.87%	10,429.00	29.729
401.2 Sewer Administration	3,396.68	5,158.25	65.85%	15,315.61	15,474.75	98.97%	61,899.00	24.749
401.3 Sewer Utility Billing	3,629.00	3,075.00	118.02%	3,629.00	9,225.00	39.34%	36,900.00	9.839
401.4 Sewer Plant Maintenance	2,642.32	24,060.66	10.98%	28,811.13	72,181.98	39.91%	288,728.00	9.989
403 Depreciation Expense	29,576.05	31,666.67	93.40%	88,728.15	95,000.01	93.40%	380,000.00	23.359
408 Taxes Other than Income	2,065.00	3,054.17	67.61%	6,889.81		75.20%	36,650.00	18.809
701 Salaries & Wages	27,059.00		85.99%	90,267.61		95.61%	377,633.00	23.909
704 Employee Benefits	7,579.00		132.57%	22,497.32		131.17%	68,606.00	32.799
711 Sludge Removal		3,333.33	0.00%	0.00		0.00%	40,000.00	0.009
715 Purchased Power	12,552.60		99.10%	36,086,72	10 100 November 100 100 100 100 100 100 100 100 100 10	94.97%	152,000.00	23.749
718 Chemicals	1,612.90		13.82%	24,301.62		69.43%		
731 Contractual Svc-Engineering	475.00		114.00%	8,088.70		647.09%	140,000.00	17.369
732 Contractual Svc-Accounting	833.33		55.10%	15,883.55		350.05%	5,000.00	161.779
733 Contractual Svc-legal	289.06		69.37%	2,689.01		215.12%	18,150.00	87.519
735 Contractual Svc-testing	629.10		150.98%	2,146.80			5,000.00	53.789
736 Contracted Services-Other	0.00		0.00%	1,912.04		171.74%	5,000.00	42.949
	87.78		4900-0000000		40 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -	152.96%	5,000.00	38.249
750 Transportation Expenses	\$6500 CURREN		17.56%	279.34		18.62%	6,000.00	4.669
757 Insurance-General Liability	4,074.00		139.68%	12,222.00		139.68%	35,000.00	34.929
760 Advertising	3,592.58		0.00%	0.00		0.00%	2,000.00	0.009
775 Sewer Admin Lending Fees		0 (007)2000	70.000	3,592.58	The state of the s		0.00	-
Total Expenses	\$ 100,888.12		72.32%	\$ 366,440.21	\$ 418,498.83	87.56%	\$ 1,673,995.00	21.899
Net Operating Income	\$ 21,835.32			-\$ 6,292.71				
Other Income								
419.5 Capacity Accounts Interest	3,317.63			6,499.13				
536. Other Wastewater Revenue	44,928.00			47,736.00	min.			
Total Other Income	\$ 48,245.63			\$ 54,235.13				
Other Expenses								
Membrane Transfer Reserve Budget Only	13,100.00			39,300.64				
Total Other Expenses	\$ 13,100.00			\$ 39,300.64				
Net Income	\$ 56,980.95			\$ 8,641.78				
Bond Expenses								
10-A Sewer Revenue	\$18,496.08	\$18,496.08	100.00%	\$55,488.24	\$55,488.24	100.00%	\$221,952.96	25.00%
Total Payments	\$ 18,496.08	\$18,496.08	100.00%	\$55,448.24	\$ 55,488.24	100%	\$ 221,952.96	24.98%
Total Net Income	\$38,484.87			-\$46,806.46				
Total Net Minus Restricted	¢ (0.750.75)							
Total Net Imilias Nestricted	\$ (9,760.76)			\$ (101,041.59)				

Shepherdstown Sewer

Balance Sheet

As of September 30, 2023

	TOTAL
ASSETS	e
Current Assets	
Bank Accounts	
RESERVED FUNDS BANKING	526,212.46
RESTRICTED FUNDS BANKING	2,236,500.73
UNRESTRICTED FUNDS BANKING	96,777.30
Total Bank Accounts	\$2,859,490.49
Accounts Receivable	
Accounts Receivable	126,918.47
Total Accounts Receivable	\$126,918.47
Other Current Assets	
253.20 Deferred Inflows	-69,209.19
Due To/From Govt	-778,593.93
Due To/From Water	5,145.37
Other Current Assets	327.92
Uncategorized Asset	0.00
Total Other Current Assets	\$ -842,329.83
Total Current Assets	\$2,144,079.13
Fixed Assets	
105 Construction in Progress	0.00
Fixed Asset Adjustment	-4,386,886.82
Fixed Assets	13,923,051.67
Total Fixed Assets	\$9,536,164.85
TOTAL ASSETS	\$11,680,243.98
LIABILITIES AND EQUITY	
Liabilities	
Current Liabilities	
Accounts Payable	
Accounts Payable	12,744.10
Total Accounts Payable	\$12,744.10
Other Current Liabilities	
186.20 Deferred Outflows	-12,930.58
221 Bonds Payable-Current	0.00
235 Cust. Dep/Int. Pay-Cash Acct	65,455.89
Current Liabilities	86,627.19
Total Other Current Liabilities	\$139,152.50
Total Current Liabilities	\$151,896.60

Shepherdstown Sewer

Balance Sheet

As of September 30, 2023

	TOTAL
Long-Term Liabilities	
221. Bonds Payable-Long Term	3,883,866.00
Total Long-Term Liabilities	\$3,883,866.00
Total Liabilities	\$4,035,762.60
Equity	
214 Retained Earnings	4,576,836.74
271 Contrib. in Aid of Construction	2,495,029.86
Membrane Transfer Equity Budget Only	563,973.00
Net Income	8,641.78
Total Equity	\$7,644,481.38
OTAL LIABILITIES AND EQUITY	\$11,680,243.98

SHEPHERDSTOWN WATER DEPT. October 2023

Pump time average 16 hour

Gallons pumped average 649,832.

Chemical usage normal

All daily samples in acceptable ranges

All Bacteriological samples were ABSENT.

All 4 violations were rescinded by the state

Both filters complete

Concerns:

- Chemicals usage up due to filter work

October 2023 Monthly Reports

	- ***											Yearly
					Avg.	Max	Avg.	Max	Avg. Lbs.	Max Lbs.		Lbs.
	Avg.		Мах		Allowed	Allowed	Lbs.	Lbs.	Allowed	Allowed	Vearly lhs	<
Flow	0.2847	Mgd	0.3335	Mgd	0.6670	Rot Only	A/N	N/N	N/A	N/A	, in .	
BOD	4.4	Mg/l	4.4	Mg/I	30	09	11.67	+	167	334		
TSS	2.5	Mg/I	2.5	Mg/I	30	09	6.63	+	167	334		
TKN	0.52	Mg/I	0.63	Mg/I	8	9	1.33	1.58	17	33		
		Cnts/100		Cnts/100								
Fecal	<10	Ξ	<10	Ξ	200	400	N/A	Δ/N	Δ/Ν	V/N		
Total N	0.92	Mg/l	0.97	Mg/I	Rpt Only	Rpt Only	N/A	67.73	N/A	507	1022 11	6003
Total P	0.011	Mg/I	0.018	Mg/I	Rot Only	Rot Only	N/A	0.77	V/N	E0 7	22.00	1600
Copper		Mg/I		Mg/I	Rpt Only	Rot Only	N/A	N/N	A/N	N/A	00.00	600
Zinc		Mg/I		Mg/I	Rpt Only	Rot Only	N/A	V/N	V/N	4/2		
Lead		Mg/I		Mg/I	Rpt Only	Rot Only	N/A	N/A	V/N	4/2		
Aluminum		Mg/l		Mg/I	Rpt Only	Rpt Only	N/A	N/A	N/A	A/N		
Chloride	81.2	Mg/l	81.2	Mg/I	196	340	N/A	N/A	N/A	V/N		
Total Hardness		Mg/l		Mg/l	Rpt Only	Rpt Only	N/A	N/A	N/A	N/A		
					Min Allowed	Σ						
ЬН	7.1	S.U.	7.1	S.U.	6.5		N/A	N/A	N/N	N/N		
							1/61	C/2-	W/81	1/2		

Field Name	Applied This Month		Year to Date Applied		Loads	Percent Solide	2 Hr DH	27 Hr Du
Landfill		Tons		Tons				11 11 17
Olcott Field 2		Tons		Tons				
Olcott Field 3		Tons	6.678	Tons				
Olcott Field 4		Tons		Tons				
Olcott Field 6		Tons	9.000	Tons				
Blair-Carter Field 1		Tons	2,496	Tons				
Blair-Carter Field 3		Tons		Tons				
Blair-Carter Field 4		Tons		Tons				
Willard Field 1		Tons	3.004	Tong				
Willard Field 3		Tons		Tone				
Willard Field 4		Tons		Tons				
Colbert Field 3		Tons		Tons				
Colbert Field 4		Tons		Tons				
Oakley Field 2		Tons		Tons				
Putz Field 2		Tons		Tons				
								_

SUMMARY OF WASTE WATER TREATMENT PLANT OPERATIONS

Shepherdstown W.W.T.P.

Plant

Year 2023

October

Month

Kenny Shipley

Operator

Shepherdstown

City

_	Temp (F°) pH Screening (cf)	Flow (mgd) Temp (F°) pH Grit and Screening (cf)	Flow (mgd) Temp (F°) pH Grit and Screening (cf)	BOD ₅ (mg/l) Flow (mgd) Temp (F°) pH Grit and	
72 16000	0.2572				
63 16000	0.2763 160				
16000	0.3180 160	0.3180		56.1 0.3180	0.3180
39 24000	0.2939 240				
47 24000	0.2947				
94 16000	0.2994				
75 16000	0.2675				
16000	0.2660 16				
19 16000	0.2719 16				
15 16000	0.3015 160				
03 16000	0.3103				
26 8 16000		8	8	8	8
35 20000	0.2935 200				
000 20000	0.2402 200				
91 20000	0.2391 200				
35 24000	0.3335 240				
29 24000	0.3229 240				
66 22000	0.3166				
98 22000	0.3198				
77 16000	0.2777				
001 16000	0.2701				
16000	0.2948				
574 8 16000		8	8	8	8
372 16000	0.2872				
16000	0.2881				
331 16000	0.2831 160				
373 20000	0.2873 20				
597 20000	0.2597				
331 20000	0.2931				
9 16000		6	6	6	6
		0.2911	0.2911	0.2911	0.2911
	25	8.8267	8.8267	56.1 8.8267 25	300 56.1 8.8267 25
6.8 8.3		0.2847 8.3	0.2847	56.1 0.2847	6.8 8.3
0 0		0.7.0	0.2391	56,1 0.2391	300 56.1 0.3335 9

MAIL ONE COPY EACH TO:

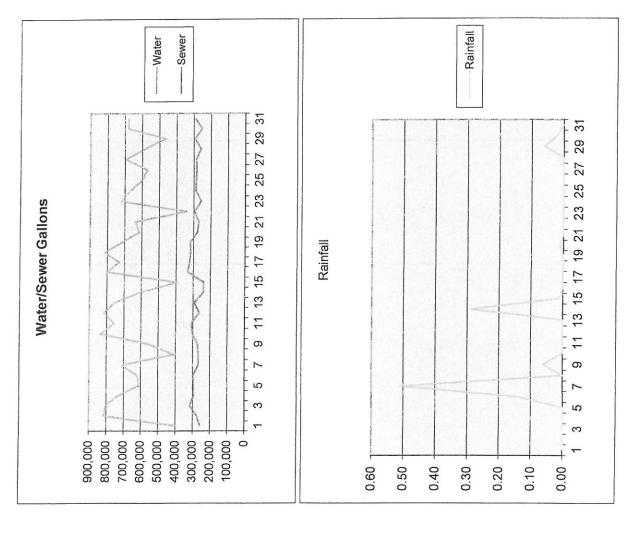
Office of Environmental Health Services Certification & Training Program 350 Capitol Street, Room 313 Charleston WV 25301-1798

Division of Environmental Protection ATTN: Municipal Branch 601- 57th Street Charleston, WV 25304

ES-59 (rev 5/07)

Water/Sewer Flows October 2023

RainFall	0.00	00.00	0.00	0.00	0.00	0.14	0.51	0.00	0.06	0.00	00.0	00.0	00.00	0.29	0.01	00.0	00.0	00.00	0.00	0.01	00.00	00.00	00.00	0.00	00.00	00.00	00.00	00.00	0.06	0.02	0.00	0.04
Sewer	257,200	276,300	318,000	293,900	294,700	299,400	267,500	266,000	271,900	301,500	310,300	262,600	293,500	240,200	239,100	333,500	322,900	316,600	319,800	277,700	270,100	294,800	257,400	287,200	288,100	283,100	287,300	259,700	293,100	252,200	291,100	284,732
Water	402,400	815,100	803,600	732,400	611,300	619,200	710,900	411,700	556,400	836,500	756,900	815,200	755,700	610,200	390,700	797,800	732,900	815,700	715,900	615,100	637,800	344,300	720,300	009'899	598,400	569,100	695,100	584,900	462,400	679,700	678,700	649,835
Date	-	2	က	4	2	9	7	∞	6	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.





Our Friend: The Flushable Wipe

disposable wipes accumume in your sewer system? As erator, they could be called earity for sure. In all serious-disposable wipes are quite a min sewer systems all over end. They often cause block-dispose occur on the residential, ercial and the system side. In systems, the sewer pipes are capable of handling this of waste.

disposable wipes are a great and have a variety of difuses. They are easy to store easy to carry with us. The problem with disposable at least in our business, is many times, they are being ead as "FLUSHABLE." Most will flush very easily. The plem is, many of them do not degrade. This causes them to ain in pipes and other process pment and accumulate.

Mationally, the wipes market is multibillion-dollar industry. It been growing annually over past several years. As stated ther, they are a very good prodhowever, it is estimated that problems they cause wastewarsystems nationwide could be mar the billion dollar a year mark. This is really hard on our industry.

The wipe industry is getting better, but only about 7-10% of wipes are designed to be flushed. The others need to be put in the trash. The wipes industry has been taking steps to encourage wipes manufactures to better label their products as flushable or non-flushable. Most of these products just do not break down enough to safely pass through average sewer pipes or to prevent causing issues at the public sewer system.

The EPA actually urges Americans to not flush the wipes. They would like to see the only paper product that comes into the sewer to be toilet paper. Toilet paper breaks down in the sewer, most of these wipes do not.

One of the big problems is that many manufactures label any product that will make it through a home plumbing system as flushable. The wastewater industry labels flushable as being able to break down and disperse. Wastewater organizations are urging congress to actually come up with a legal definition of the word flushable. They would like this to include that product must be able to break down and disperse. Most wipes are made of plastic fibers, so, when one is flushed, you are adding a plastic

product to the sewer system.

So, what can we do as wastewater professionals to help with this issue? The first step would be to try to educate the public. Things that do not break down such as wipes, cotton swabs, and toiletries should not be flushed. Encourage consumers to educate each other on what can be flushed and the cost it can cause to the utility if it is flushed and causes an issue. In the proper way, it is also good to let them know that the cost is always passed on to the customer. We can also encourage our political leaders to pass laws that would prohibit putting these products in the sewer. Although these laws would be hard to enforce, many people will follow the law. The system might try to put information about the problems flushable wipes cause them on their social media pages such as Facebook and Twitter. Have an article on your website or in your newsletter about how these wipes affect your system. I would mention the problems they could cause the homeowner, also. Just try to educate the public about these products and the problem putting them in the sewer can cause. They are great products. We just need to properly dispose of them.

JOIN WVRWA

CORPORATION OF SHEPHERDSTOWN WATER TREATMENT PLANT IMPROVEMENTS CONTRACT NO. 1 - WATER TREATMENT PLANT IMPROVEMENTS PROJECT SPENDING AS OF 11-29-23

			PRO	PROJECT FUNDING EXPENDED TO DATE	PENDED TO DA	Œ	
	Overall Costs	JSB Loan	American Recovery Plan	WDA Depreciation Fund	I & R Account	Capacity Account	Totals To Date
Project Item Contract No. 1 - Construction	\$ 2,550,535.81	\$ 1,222,500.00	\$ 421,000.00	\$ 488,000.00	\$ 175,000.00	\$ 145,061.80	\$ 2,451,561.80
Construction Contingency for Change Orders	\$ 20,000.00						- \$
Collistiation of the Series of Collistiation of the	\$ 128,000.00					\$ 128,000.00	\$ 128,000.00
Englifeeting Design						\$ 88,200.00	\$ 88,200.00
Diding 8. Nonetiating					\$ 7,500.00	\$ 5,000.00	\$ 12,500.00
DIUUIII & INEGOLIAUII B	\$ 8,000.00					\$ 8,000.00	\$ 8,000.00
Sulvey	\$ 6,000,00					\$ 6,000.00	\$ 6,000.00
Permitting During Design	\$ 10,000,00				\$ 9,000.00		\$ 9,000.00
Record Drawings	\$ 10,000,00				\$ 9,000.00		\$ 9,000.00
UQIN Mallual	\$ 3.850.79					\$ 3,850.79	\$ 3,850.79
Legal - FOC IIIIIB	\$ 1.440.00					\$ 1,440.00	\$ 1,440.00
Legal - Octions	\$ 10.475.00					\$ 10,475.00	\$ 10,475.00
Accountain	\$ 25,000,00	\$ 25.000.00					\$ 25,000.00
Boild Coulise	\$ 3.325.00	. Ş				\$ 825.00	\$ 3,325.00
Froject Contingency TOTALS	2,876	\$ 1,25	\$ 421,000.00 \$	1 1	\$ 200,500.00	488,000.00 \$ 200,500.00 \$ 396,852.59	\$ 2,756,352.59

Amount	
Total Project Fund Allocation Summary	

Alliodill	\$ 1,250,000.00	\$ 421,000.00	\$ 488,000.00	\$ 200,000.00	\$ 517,626.60	\$ 2,876,626.60	
Total Project Fund Allocation Summary	Jefferson Security Bank Loan	American Recovery Plan (ARP)	WDA Depreciation Fund	I & R Account	Capacity Account	Totals	

CORPORATION OF SHEPHERDSTOWN WATER TREATMENT PLANT IMPROVEMENTS CONTRACT NO. 2 - WATER DISTRIBUTION SYSTEM IMPROVEMENTS PROJECT SPENDING AS OF 11-29-23

		PROJECT FI	PROJECT FUNDING EXPENDED TO DATE		
Project Item	Overall Costs	Federal Grant	Capacity Account	Tot	Totals To Date
Contract No. 2 - Construction	\$ 2,051,805.00			Ş	1
Construction Contingency	\$ 103,195.00			ۍ	1
Engineering During Construction	\$ 50,000.00			\$	1
Bidding & Negotiating	\$ 20,000.00		\$ 12,000.00 \$	\$	12,000.00
Permitting During Design	\$ 2,000.00		\$ 2,000.00 \$	\$	2,000.00
Record Drawings	\$ 5,000.00			ς.	1
Legal	\$ 10,000.00			٠	T
Administration	\$ 10,000.00			\$	t
Environmental Reports for ACOE	\$ 51,200.00		\$ 51,200.00 \$	\$	51,200.00
TOTALS	\$ 2,303,200.00	- \$	\$ 65,200.00 \$	\$	65,200.00

Amount	\$ 1,668,000.00	\$ (100,000.00)	\$ 735,200.00	\$ 2,303,200.00
Total Project Fund Allocation Summary	Federal Grant (Army Corps of Engineers)	Army Corps of Engineers Project Costs	Capacity Account	Totals

SHEPHERDSTOWN WATER I	DISTRIBUTIO	N SYSTEM	IMI	PROVEMENT	rs	
	E CONSTRUC					
Mecklenburg Heights - Sheet Nos. 1 thru 5					_	
Description	Quantity	Unit	Т	Unit Cost	Τ	Total Cost
Mobilization/Demobilization	1	LS	\$	65,000.00	\$	65,000.00
Video Taping	1	LS	\$	2,900.00	\$	2,900.00
Erosion & Sediment Control	1	LS	\$	8,200.00	\$	8,200.00
6" PVC C-909 Waterline	8444	LF	\$	64.75	\$	546,749.00
4" PVC C-909 Waterline	600	LF	\$	58.00	\$	34,800.00
2" PVC SDR 17 Waterline	1275	LF	\$	53.50	\$	68,212.50
3/4" PE Service Line	1945	LF	\$	63.75	\$	123,993.75
3/4" PE Service Punch	1115	LF	\$	96.50	\$	107,597.50
6" Gate Valve w/Valve Box	13	EA	\$	1,900.00	\$	24,700.00
4" Gate Valve w/Valve Box	1	EA	\$	1,410.00	\$	1,410.00
2" Gate Valve w/ Valve Box	5	EA	\$	1,000.00	\$	5,000.00
Fire Hydrant Assembly	11	EA	\$	8,105.00	\$	89,155.00
Fire Hydrant Assembly on Exist. Waterline	1	EA	\$	12,425.00	\$	12,425.00
12" Steel Casing (Open Cut)	260	LF	\$	194.00	\$	50,440.00
Service Reconnections	117	EA	\$	1,050.00	\$	122,850.00
Connection Detail No. 1	1	LS	\$	19,775.00	\$	19,775.00
Connection Detail No. 2	1	LS	\$	12,050.00	\$	12,050.00
Connection Detail No. 3	1	LS	\$	4,140.00	\$	4,140.00
Connection Detail No. 4	1	LS	\$	4,655.00	\$	4,655.00
Connection Detail No. 5	1	LS	\$	10,050.00	\$	10,050.00
Connection Detail No. 6	1	LS	\$	7,400.00	\$	7,400.00
Connection Detail No. 7	1	LS	\$	12,300.00	\$	12,300.00
Blow-Off Assembly	6	EA	\$	2,325.00	\$	13,950.00
Type "B" Trench Repair	536	LF	\$	110.00	\$	58,960.00
Asphalt Driveway Restoration	390	LF	\$	122.00	\$	47,580.00
Gravel Driveway Restoration	505	LF	\$	21.00	\$	10,605.00
Concrete Driveway Restoration	30	LF	\$	280.00	\$	8,400.00
Existing Rip Rap Ditch Repair	3	EA	\$	3,100.00	\$	9,300.00
Existing Asphalt Swale Repair	310	LF	\$	70.25	\$	21,777.50
Subtotal					\$	1,504,375.25

Description	Quantity	Unit	Unit Cost	Total Cost
8" PVC C-900 Waterline	925	LF	\$ 84.25	\$ 77,931.25
3/4" Service Line	285	LF	\$ 63.75	\$ 18,168.75
16" Steel Casing, RR Bore & Jack	100	LF	\$ 1,860.00	\$ 186,000.00
16" Steel Casing, Bore & Jack	30	LF	\$ 2,198.00	\$ 65,940.00
8" Gate Valve w/Box	3	EA	\$ 2,700.00	\$ 8,100.00
Fire Hydrant Assembly	3	EA	\$ 8,105.00	\$ 24,315.00
Service Reconnections	16	EA	\$ 1,050.00	\$ 16,800.00
Connection No. 8	1	EA	\$ 10,810.00	\$ 10,810.00

Subtotal				\$ 719,120.00
Concrete Sidewalk/Curb Restoration	125	LF	\$ 61.00	\$ 7,625.00
Concrete Curb Restoration	70	LF	\$ 185.00	\$ 12,950.00
Asphalt Pavement Overlay	3705	SY	\$ 52.00	\$ 192,660.00
Type "B" Trench Repair	791	LF	\$ 110.00	\$ 87,010.00
Connection No. 9	1	EA	\$ 10,810.00	\$ 10,810.00

Mill Street (German St. to Rumsey Park) Including Jones Alley - Sheet Nos. 6 & 7								
Description	Quantity	Unit	_	Unit Cost	Total Cost			
8" PVC C-900 Waterline	465	LF	\$	84.25	\$	39,176.25		
6" PVC C-909 Waterline	818	LF	\$	64.75	\$	52,965.50		
2"PVC SDR 17 Waterline	340	LF	\$	53.50	\$	18,190.00		
3/4" Service Line	275	LF	\$	63.75	\$	17,531.25		
Fire Hydrant Assembly	1	EA	\$	8,105.00	\$	8,105.00		
Blow-Off Assembly	1	EA	\$	2,325.00	\$	2,325.00		
8" Gate Valve w/Box	1	EA	\$	2,700.00	\$	2,700.00		
6" Gate Valve/Box	1	EA	\$	1,900.00	\$	1,900.00		
Service Reconnections	21	EA	\$	1,050.00	\$	22,050.00		
Connection No. 10	1	EA	\$	10,810.00	\$	10,810.00		
Type 'B' Trench Repair	1288	LF	\$	110.00	\$	141,680.00		
Type 'C' Trench Repair	250	LF	\$	48.00	\$	12,000.00		
Asphalt Pavement Overlay	3665	SY	\$	52.00	\$	190,580.00		
Concrete Sidewalk/Curb Restoration	200	LF	\$	61.00	\$	12,200.00		
Subtotal					\$	532,213.00		

Rock Springs Road Development Exten	sion - Sheet No. S	9			
Description	Quantity	Unit	T	Unit Cost	Total Cost
6" PVC C-909 Waterline	1,513	LF	\$	64.75	\$ 97,966.75
2"PVC SDR 17 Waterline	125	LF	\$	53.50	\$ 6,687.50
3/4" Service Line	225	LF	\$	63.75	\$ 14,343.75
3/4" Service Line - Punch	60	LF	\$	96.50	\$ 5,790.00
6" Gate Valve/Box	3	EA	\$	1,900.00	\$ 5,700.00
2" Gate Valve/Box	1	EA	\$	1,000.00	\$ 1,000.00
Fire Hydrant Assembly	3	EA	\$	8,105.00	\$ 24,315.00
Service Reconnections	17	EA	\$	1,050.00	\$ 17,850.00
Connection Detail No. 13	1	LS	\$	7,400.00	\$ 7,400.00
Blow-Off Assembly	1	EA	\$	2,325.00	\$ 2,325.00
Type 'B' Trench Repair	305	LF	\$	110.00	\$ 33,550.00
Type 'C' Trench Repair	535	LF	\$	48.00	\$ 25,680.00
2" Asphalt Pavement Overlay	380	SY	\$	52.00	\$ 19,760.00
Asphalt Driveway Restoration	20	LF	\$	122.00	\$ 2,440.00
Gravel Driveway Restoration	25	LF	\$	21.00	\$ 525.00
Subtotal					\$ 265,333.00

Lynmounth Lane (Beside Bavarian Ini	n) - Sheet No. 8			// Table 1	
Description	Quantity	Unit	Ur	nit Cost	Total Cost
2" PVC SDR 17 Waterline	700	LF	\$	53.50	\$ 37,450.00

Subtotal				\$ 162,482.50
2" Asphalt Pavement Overlay Subtotal	760	SY	\$ 52.00	\$ 39,520.00
Type 'B' Trench Repair	680	LF	\$ 110.00	\$ 74,800.00
Service Reconnections	4	EA	\$ 1,050.00	\$ 4,200.00
Blow-Off Assembly	1	EA	\$ 2,325.00	\$ 2,325.00
2" Gate Valve/Box	1	EA	\$ 1,000.00	\$ 1,000.00
3/4" Service Line	50	LF	\$ 63.75	\$ 3,187.50

TOTAL CONSTRUCTION OF	
TOTAL CONSTRUCTION COST	\$ 3,183,523.75
	7 3,103,323.73



o: 304.343.5300 | f: 304.343.5912 4710 CHIMNEY DRIVE, SUITE A CHARLESTON, WV 25302

CORPORATION OF SHEPHERDSTOWN WATER SYSTEM IMPROVEMENTS PROJECT SUMMARY OF CONSTRUCTION COSTS - OPTION NO. 1

December 1, 2023							
WATERLINE UPGRADES/REPLACEMENT		Total Costs					
Mecklenburg Heights - Sheet Nos. 1 thru 5	\$	1,504,375.25					
High Street (Princess St. to College St.) - Sheet No. 6	\$	719,120.00					
Mill Street (German to Rumsey Park) - Sheet Nos. 6 &7	\$	532,213.00					
Rock Springs Road Development Extension - Sheet No. 9	\$	265,333.00					
Lynmouth Lane (Behind Bavarian Inn) - Sheet No. 8	\$	162,482.50					
TOTAL CONSTRUCTION COST	\$	3,183,523.75					



o: 304.343.5300 | f: 304.343.5912 4710 CHIMNEY DRIVE, SUITE A CHARLESTON, WV 25302

CORPORATION OF SHEPHERDSTOWN WATER SYSTEM IMPROVEMENTS PROJECT SUMMARY OF CONSTRUCTION COSTS - OPTION NO. 2

December 1, 2023	
WATERLINE UPGRADES/REPLACEMENT	Total Costs
Mecklenburg Heights - Sheet Nos. 1 thru 5	\$ 1,504,375.25
High Street (Princess St. to College St.) - Sheet No. 6	\$ 719,120.00
Mill Street (German to Rumsey Park) - Sheet Nos. 6 &7	\$ 532,213.00
TOTAL CONSTRUCTION COST	\$ 2,755,708.25



o: 304.343.5300 | f: 304.343.5912 4710 CHIMNEY DRIVE, SUITE A CHARLESTON, WV 25302

CORPORATION OF SHEPHERDSTOWN WATER SYSTEM IMPROVEMENTS PROJECT SUMMARY OF CONSTRUCTION COSTS - OPTION NO. 3 December 1, 2023 WATERLINE UPGRADES/REPLACEMENT Mecklenburg Heights - Sheet Nos. 1 thru 5 High Street (Princess St. to College St.) - Sheet No. 6 TOTAL CONSTRUCTION COST \$ 2,223,495.25



o: 304.343.5300 | **f:** 304.343.5912 4710 CHIMNEY DRIVE, SUITE A CHARLESTON, WV 25302

CORPORATION OF SHEPHEI	DCTOWAL	
CORPORATION OF SHEPHEI	KD31OWN	
WATER SYSTEM IMPROVEMEN	NTS PROJECT	
SUMMARY OF CONSTRUCTION COS	TS - OPTION NO. 4	
December 1, 2023	B	
WATERLINE UPGRADES/REPLACEMENT		Total Costs
Mecklenburg Heights - Sheet Nos. 1 thru 5	\$	1,504,375.25
TOTAL CONSTRUCTION COST	\$	1,504,375.25



CORPORATION OF SHEPHERDSTOWN WATER DISTRIBUTION SYSTEM IMPROVEMENTS PROJECT PROJECT COSTS - OPTION NO. 1

Item	Amount
Construction	\$ 3,183,523.75
Construction Contingency (5%)	\$ 159,200.00
Engineering During Construction	\$ 77,000.00
Legal	\$ 10,000.00
Administration (Region 9)	\$ 10,000.00
Environmental Reports for ACOE	\$ 51,200.00
Subtotal	\$ 3,490,923.75
Federal Grant (Total)	\$ 1,668,000.00
ACOE Project Costs	\$ 100,000.00
Federal Grant (Available for Project)	\$ 1,568,000.00
Total Sponsor Funds Required	\$ 1,922,923.75



CORPORATION OF SHEPHERDSTOWN WATER DISTRIBUTION SYSTEM IMPROVEMENTS PROJECT PROJECT COSTS - OPTION NO. 2

Item	Amount
Construction	\$ 2,755,708.25
Construction Contingency (5%)	\$ 138,000.00
Engineering During Construction	\$ 77,000.00
Legal	\$ 10,000.00
Administration (Region 9)	\$ 10,000.00
Environmental Reports for ACOE	\$ 51,200.00
Subtotal	\$ 3,041,908.25
Federal Grant (Total)	\$ 1,668,000.00
ACOE Project Costs	\$ 100,000.00
Federal Grant (Available for Project)	\$ 1,568,000.00
Total Sponsor Funds Required	\$ 1,473,908.25



CORPORATION OF SHEPHERDSTOWN WATER DISTRIBUTION SYSTEM IMPROVEMENTS PROJECT PROJECT COSTS - OPTION NO. 3

ltem	Amount
Construction	\$ 2,223,495.25
Construction Contingency (5%)	\$ 111,200.00
Engineering During Construction	\$ 77,000.00
Legal	\$ 10,000.00
Administration (Region 9)	\$ 10,000.00
Environmental Reports for ACOE	\$ 51,200.00
Subtotal	\$ 2,482,895.25
Federal Grant (Total)	\$ 1,668,000.00
ACOE Project Costs	\$ 100,000.00
Federal Grant (Available for Project)	\$ 1,568,000.00
Total Sponsor Funds Required	\$ 914,895.25



CORPORATION OF SHEPHERDSTOWN WATER DISTRIBUTION SYSTEM IMPROVEMENTS PROJECT PROJECT COSTS - OPTION NO. 4

ltem	Amount
Construction	\$ 1,504,375.75
Construction Contingency (5%)	\$ 75,300.00
Engineering During Construction	\$ 77,000.00
Legal	\$ 10,000.00
Administration (Region 9)	\$ 10,000.00
Environmental Reports for ACOE	\$ 51,200.00
Subtotal	\$ 1,727,875.75
Federal Grant (Total)	\$ 1,668,000.00
ACOE Project Costs	\$ 100,000.00
Federal Grant (Available for Project)	\$ 1,568,000.00
Total Sponsor Funds Required	\$ 159,875.75

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Addendum to Mainline Extension Form

1. Applications will only be in effect for a period of three (3) years. After the expiration of that period, a review of the plans and specifications will be performed again, as well as an engineering assessment. Fees that are currently in effect at the time of the review will be charged for all three year reviews.

Water/Sewer Board approval on this date:

§9-215 Proposed Amendment

Section 9-215 Erosion control and stream protection (pursuant to WV State Code §7-1-3u) (added December 2011)

All construction projects requiring disturbance of the earth of more than 400 square feet within the Corporation of Shepherdstown must implement measures designed to preclude erosion of soil from the site both during and after the construction. These measures must be detailed in the Project Permit Application and address the following factors:

- 1. the proximity of the site to streams (as defined in WV §7-1-3u), wetlands, and other ecologically
- 2. the trees and other vegetation to be displaced by the construction phase of the project and how this displacement will be remediated (see Corporation of Shepherdstown Ordinances 11-505 and 9-1413)
- 3. the extent and duration of the earth disturbance
- 4. the topography of the site
- 5. the control and limitation of storm water runoff
- 6. any unusual construction site characteristics including the presence of fill and/or hazardous material, springs, or subsidence's (sink holes)

Construction entrances must be provided for projects requiring the movement of heavy equipment onto and off the project site. Additionally, pollutants associated with construction must be contained and disposed of properly. These include-

- 1. concrete wash from tools and trucks
- 2. sanitary waste and pathogens from porta-potties
- 3. debris from discarded building materials
- 4. oil and grease from equipment and vehicles
- 5. paint, chemicals, and solvents
- 6. litter

For projects within 75 feet of streams requiring disturbance of the earth of more than 100 square feet, a Stream Protection Setback of 25 feet equal to twice the average width of the watercourse channel measuring from the top of one bank to the top of the opposite bank or 50 feet, whichever is less, shall be maintained from the top of the nearest banks of all watercourses. To reduce erosion, natural vegetation shall be maintained in this area. Where natural vegetation does not exist along the watercourse and conditions for replanting are suitable, high priority shall be given to planting vegetation in the setback area to stabilize banks and enhance aquatic resources. [NOTE: For the purposes of this ordinance, the "top of the bank" is considered to be synonymous with "bankfull level" and is delineated by the elevation point of incipient flooding that is indicated by deposits of sand or silt at the active scour mark, break in stream bank slope, perennial vegetation limit, rock discoloration, and root hair exposure.]

Projects causing disturbance of the earth of one acre or more must adhere to storm water drainage practices in accordance with guidance issued by the Jefferson County, West Virginia Planning and Zoning Department and be permitted as required by the West Virginia Department of Environmental Protection.

IOCATION	VA	WAINE	HYDRAN ISSUE WITH UNDBANT	HYDRANT PROJECT WORK LIST			
No.	ZN/X	In Service?		PROPOSED WORK PLAN	STATUS	REPORT	DATE
HYDRANTS OUT OF SERVICE/NEED REPAIRS 388 Starkeys Landing 110 S King	Yes	8 8 8	Hit by vehicle ?	Remove hydrant install blowoff Repair			
HYDRANTS TO BE REMOVED AND RETIRED Corner King & New Streets Corner Church & New Street East High Street (Tommy's Pizza)			4" main, inadequate supply 4" main, inadequate supply 4" main, inadequate supply	Retire hydrant, covered by other hydrants Retire hydrant, covered by other hydrants Retire hydrant, covered by other hydrants			
HYDRANTS IN SERVICE/NEED REPAIRS Willowdale/Martha High Street at Stutzman-Slonaker Hall W. High st/ N. Duke st. 426 Willowdale Dr	Yes Yes ?	Yes Yes Yes	No Drain No Drain Hard to operate too low	Replace hydrant Repair in place Replace hydrant Needs Riser			
Green Pineapple United bank NEW HYDRANTS Tack & Jack's Apartments, Duke St.	Yes Yes	Yes Yes	gets hit /in loading zone No drain Taken out by drunk driver	Install bollards/repair Repair in place Install New Hydrant			
HYDRANTS WITH PROPERTY ISSUES							
DEDICATED HYDRANTS SU Baseball field end of High Street SFD Fire Hall Mecklenburg Heights			Open only w/permission of Water Dept. Open only w/permission of Water Dept. Open only w/permission of Water Dept.	Special tag, alert firefighters Special tag, alert firefighters Special tag, alert firefighters			

36'

NOTES
Minimum clearance for bollards: 36"
Total gallons flushed
"Loop behind Roc's- distribution project