



Draft 11-17-14

Table 1 summarizes the committed allocations for water services which have not yet been connected. This information was obtained from the Town officials.

**Table 1
Unconnected Committed
Water Allocated Flows - 2014**

Applicant	Unconnected Committed Water Allocated Flows (gpd)
Creamery (32 accts x 450 gpd)	14,400
Four Residences (4 accts x 450 gpd)	1,800
Total Unconnected Committed Water Allocations	16,200

Table 2 summarizes the water system uncommitted capacity.

**Table 2
Estimated Water Capacity Analysis - 2014**

Description	Capacity/Flow
New Potable Water Reservoir Capacity	760,000 Gal
- Present Average Daily Flow	80,000 gpd
- Unconnected Committed Water Allocated Flows	16,200 gpd
Net New Water Reservoir Capacity (including fire protection)	663,800

**Table 3
Estimated Study Area Water System Existing Demand***

Phase/ Address	Use Description	User Type	Quantity	Flow Basis	Average Daily Flow (gpd)
Phase 1					
840 W Main	Commercial	Reap Office Building/ Employees	42	15 gpd/staff	630
Subtotal Phase 1					630
Phase 2					
878 W Main	Residential	Single Family Home	1	450 gpd/Unit	450
920 W Main	Res./Commercial	Single Family Home/Tow Business	1	450 gpd/Unit	450
932 W Main	Res./Commercial	Single Family Home/ Home Business	1	450 gpd/Unit	450
978 W Main	Residential	Single Family Home	1	450 gpd/Unit	450
1010-1014 W Main	Residential	Duplex	2	450 gpd/Unit	900
1008-1012 W Main	Residential	Duplex	2	450 gpd/Unit	900
1070 W Main	Commercial	Office Building/Employees	20	15 gpd/staff	300
1108 W Main	Commercial	Dog Day Care Employees Kennels Grooming Station	8 40 1	15 gpd/staff 25 gpd/kennel 400 gpd/station	120 1,000 400
920 W Main	Res./Commercial	Residence Chiropractor Office	1 3 16	450 gpd/Unit 35 gpd/staff 10 gpd/patient	450 105 160
-	Vacant	Hay barn	-	-	-
-	Vacant	Field South Side	-	-	-
-	Vacant	Empty Lot	-	-	-
Subtotal Phase 2					6,135
Subtotal Phase 1 and 2					6,765
Phase 3					
1436 W Main	Commercial - Gas Station	1 st Pump Set Additional Pump Sets Employees	1 3 6	500 gpd/Pump 300 gpd/Pump 15 gpd/staff	500 900 90
9 Gov. Peck	Commercial -Fuel	Employees	8	15 gpd/staff	120
116 River Rd	Commercial- Fuel	Employees	10	15 gpd/staff	150
Rt 117	Mobile Home Park	Mobile Home	150	160 gpd/MH**	24,000
Subtotal Phase 3					25,760
Subtotal Phase 1, 2 and 3					32,525

*Based on current uses - 2014

**Based on metered flows

**Table 4
Estimated Study Area Water System Future Flows**

Phase/ Address	Use Description	User Type	Quantity**	Flow* Basis	Average Daily Flow (gpd)
Phase 1					
840 W Main				Existing Flow	630
		New Office Building	51	15 gpd/employee	765
		Preschool/Day Care	30	15 gpd/staff & Child	450
		Barn Conversion	1	Set Aside	800
Subtotal Phase 1					2,645
Phase 2					
				Existing Flow	6,135
878 W Main	Res./Commercial	Residential	2	405 gpd/Unit	810
		Commercial	2	300 gpd/Unit	600
920 W Main	Res./Commercial	Residential	2	405 gpd/Unit	810
		Commercial	2	300 gpd/Unit	600
932 W Main	Res./Commercial	Residential	3	405 gpd/Unit	1,215
		Commercial	3	300 gpd/Unit	900
978 W Main	Res./Commercial	Residential	2	405 gpd/Unit	810
		Commercial	2	300 gpd/Unit	600
1010-1014 W Main	Res./Commercial	Residential	2	405 gpd/Unit	810
		Commercial	2	300 gpd/Unit	600
1008-1012 W Main	Res./Commercial	Residential	2	405 gpd/Unit	810
		Commercial	2	300 gpd/Unit	600
1070 W Main	Res./Commercial	Residential	2	405 gpd/Unit	810
		Commercial	2	300 gpd/Unit	600
1108 W Main	Res./Commercial	Residential	1	405 gpd/Unit	405
		Commercial	1	300 gpd/Unit	300
1151 W Main	Res./Commercial	Residential	1	405 gpd/Unit	405
		Commercial	1	300 gpd/Unit	300
-	Vacant- Residential	Hay barn- Residential	1	405 gpd/Unit	405
-	Vacant- Residential	Field South Side- Residential	1	405 gpd/Unit	405
-	Vacant- Comm/Res	Empty Lot			
		Residential	2	405 gpd/Unit	810
		Commercial	2	300 gpd/Unit	600
Subtotal Phase 2					20,340
Subtotal Phase 1 and 2					22,985
Phase 3					
				Existing Flow	33,260
Rt 117	Mobile Home Park	Mobile Home	100	160 gpd/MH	16,000
Subtotal Phase 3					49,260
Subtotal Phase 1, 2 and 3					72,245

***Based on State of VT “book flows” for a 3 bedroom residential unit and 20 employees for a commercial unit.**

**** Approximate “Build out”**

Table 5
Estimated Future Water Reservoir Capacity Analysis

Description	Existing	Full Build-Out
Available* Reservoir Capacity (including fire protection)	663,800	663,800
Phase 1 Flows	630	2,645
Remaining Capacity (including fire protection)	663,170	661,155
Phase 2 Flows	6,135	20,340
Remaining Capacity (including fire protection)	657,035	640,815
Phase 3 Flows	25,760	49,260
Remaining Capacity (including fire protection)	631,275	591,555

***See Table 2**

Table 8 summarizes the committed allocations for sewer connections which have not yet been connected. This information was obtained from the Town officials.

Table 8
Estimated Unconnected Committed
Sewer Allocated Flows

Applicant	Unconnected Committed Sewer Allocated Flows (gpd)
Creamery (32 accts x 210 gpd)	6,720
Four Residences (4 accts x 210 gpd)	840
Total Unconnected Committed Sewer Allocations	7,560

Table 9 summarizes the WWTF uncommitted sewer capacity allocation.

Table 9
Estimated Sewer Uncommitted Reserve Capacity

Description	Flow (gpd)
WWTF Permitted Capacity	222,000
80% of WWTF Permitted Capacity	176,000
- 12-Month Annual Average Daily Flow	70,167
- Unconnected Committed Sewer Allocated Flows	7,560
= WWTF Uncommitted Reserve Capacity	98,273

Table 10
Estimated Existing Wastewater Flow Demand

Phase/ Address	Use Description	User Type	Quantity	Flow* Basis	Average Daily Flow (gpd)
Phase 1					
840 W Main	Commercial	Reap Office Building/ Employees	42	15 gpd/staff	630
Subtotal Phase 1					630
Phase 2					
878 W Main	Residential	Single Family Home	1	210 gpd/Unit	210
920 W Main	Res./Commercial	Single Family Home/Tow Business	1	210 gpd/Unit	210
932 W Main	Residential	Single Family Home/Home Business	1	210 gpd/Unit	210
978 W Main	Residential	Single Family Home	1	210 gpd/Unit	210
1010-1014 W Main	Residential	Duplex	2	210 gpd/Unit	420
1008-1012 W Main	Residential	Duplex	2	210 gpd/Unit	420
1070 W Main	Commercial	Office Bldg/Employees	20	15 gpd/staff	300
1108 W Main	Commercial	Dog Day Care Employees Kennels Grooming Station	8 40 1	15 gpd/staff 25 gpd/kennel 400 gpd/Sta	120 1,000 400
1151 W Main	Res./Commercial	Residence Chiropractor Office	1 3 16	210 gpd/Unit 35 gpd/staff 10 gpd/patient	210 105 160
-	Vacant	Hay barn	-	-	-
-	Vacant	Field South Side	-	-	-
-	Vacant	Empty Lot	-	-	-
Subtotal Phase 2					3,975
Subtotal Phase 1 and 2					4,605
Phase 3					
1436 W Main	Commercial	1 st Pump Set Additional Pump Sets Employees	1 3 6	500 gpd/Pump 300 gpd/Pump 15 gpd/staff	500 900 90
9 Gov. Peck	Commercial	Employees	8	15 gpd/staff	120
116 River Rd	Commercial	Employees	10	15 gpd/staff	150
Rt 117	Mobile Home Park	Mobile Homes	150	160 gpd/MH	24,000
Subtotal Phase 3					25,760
Subtotal Phase 1, 2 and 3					30,365

*Based on State "book flows" or existing State Permits except for Mobile Home Park which is Metered Flow

**Table 11
Estimated Study Area Wastewater Future System Flows**

Phase/ Address	Use Description	User Type	Quantity	Flow* Basis	Average Daily Flow (gpd)
Phase 1					
840 W Main				Existing Flow	630
		New Office Building	51	15 gpd/employee	765
		Preschool/Day Care	30	15 gpd/staff & Child	450
		Barn Conversion	1	Set Aside	800
Subtotal Phase 1					2,645
Phase 2					
Existing Flow					3,765
878 W Main	Res./Commercial	Residential	2	210 gpd/Unit	420
		Commercial	2	300 gpd/Unit	600
920 W Main	Res./Commercial	Residential	2	210 gpd/Unit	420
		Commercial	2	300 gpd/Unit	600
932 W Main	Res./Commercial	Residential	3	210 gpd/Unit	630
		Commercial	3	300 gpd/Unit	900
978 W Main	Res./Commercial	Residential	2	210 gpd/Unit	420
		Commercial	2	300 gpd/Unit	600
1010-1014 W Main	Res./Commercial	Residential	2	210 gpd/Unit	420
		Commercial	2	300 gpd/Unit	600
1008-1012 W Main	Res./Commercial	Residential	2	210 gpd/Unit	420
		Commercial	2	300 gpd/Unit	600
1070 W Main	Res./Commercial	Residential	2	210 gpd/Unit	420
		Commercial	2	300 gpd/Unit	600
1108 W Main	Res./Commercial	Residential	1	210 gpd/Unit	210
		Commercial	1	300 gpd/Unit	300
1151 W Main	Res./Commercial	Residential	1	210 gpd/Unit	210
		Commercial	1	300 gpd/Unit	300
-	Vacant- Residential	Hay barn- Residential	1	210 gpd/Unit	210
-	Vacant- Residential	Field South Side- Residential	1	210 gpd/Unit	210
-	Vacant- Comm/Res	Empty Lot			
		Residential	2	210 gpd/Unit	420
		Commercial	2	300 gpd/Unit	600
Subtotal Phase 2					13,875
Subtotal Phase 1 and 2					16,520
Phase 3					
Existing Flow					25,760
Rt 117	Mobile Home Park	Mobile Home	100	160 gpd/MH	16,000
Subtotal Phase 3					41,760
Subtotal Phase 1, 2 and 3					58,280

***Residential based on average of 3 people and Commercial based on 20 employees.**

MH Park based on metered flows.

Table 12
Estimated Wastewater Capacity Analysis

Description	Existing	Full Build-Out
Available Capacity	98,273	98,273
Phase 1 Flows	630	2,645
Remaining Capacity	97,643	95,628
% Remaining of Available Capacity	99%	97%
Phase 2 Flows	3,975	13,875
Remaining Capacity	93,668	81,753
% Remaining of Available Capacity	95%	83%
Phase 3 Flows	25,760	41,760
Remaining Capacity	67,908	39,933
% Remaining of Available Capacity	69%	41%

Table 16
Opinion of Probable Total Project Cost Summary

Project	Construction Cost Estimate			
	ENR 9750 2014	ENR 9800 2015	ENR 10000 2016	ENR 10200 2017
School Emergency Access Road				
Construction	\$1,083,000	\$1,089,000	\$1,111,000	\$1,133,000
Final Design	\$73,000	\$74,000	\$75,000	\$76,000
Construction Engineering	<u>\$134,000</u>	<u>\$135,000</u>	<u>\$136,000</u>	<u>\$137,000</u>
Total	\$1,290,000	\$1,298,000	\$1,322,000	\$1,346,000
8" Waterline Extension				
Ph1: School to 840 West Main Street (Reap Property)				
Preliminary Engineering	\$4,000	\$4,000	\$4,000	\$4,000
Construction	\$191,000	\$192,000	\$195,000	\$199,000
Final Design	\$15,000	\$15,000	\$16,000	\$16,000
Construction Engineering	<u>\$28,000</u>	<u>\$28,000</u>	<u>\$29,000</u>	<u>\$29,000</u>
Phase 1 Subtotal	\$238,000	\$239,000	\$244,000	\$248,000
Ph2: 840 West Main (Reap Property) to 920 West Main - Chiropractor Office				
Construction	\$289,000	\$290,000	\$296,000	\$302,000
Final Design	\$22,000	\$22,000	\$23,000	\$23,000
Construction Engineering	<u>\$40,000</u>	<u>\$40,000</u>	<u>\$41,000</u>	<u>\$41,000</u>
Phase 2 Subtotal	\$351,000	\$352,000	\$360,000	\$366,000
Phase 1 and 2 Total	\$589,000	\$591,000	\$604,000	\$614,000
Ph3: 920 West Main - Chiropractor Office to Mobile Home Park				
Construction	\$670,000	\$673,000	\$687,000	\$700,000
Final Design	\$48,000	\$48,000	\$49,000	\$50,000
Construction Engineering	<u>\$88,000</u>	<u>\$89,000</u>	<u>\$91,000</u>	<u>\$92,000</u>
Phase 3 Subtotal	\$806,000	\$810,000	\$827,000	\$842,000
Phase 1, 2 and 3 Total	\$1,395,000	\$1,401,000	\$1,431,000	\$1,456,000
Sewer Extension Alternatives				
Alternative No. 2: 3" Low Pressure Sewer Grinder Pump Forcemain				
Ph1: School to 840 West Main Street (Reap Property)				
Preliminary Engineering	\$4,000	\$4,000	\$4,000	\$4,000
Construction	\$170,000	\$171,000	\$174,000	\$178,000
Final Design	\$14,000	\$14,000	\$14,000	\$14,000
Construction Engineering	<u>\$25,000</u>	<u>\$25,000</u>	<u>\$25,000</u>	<u>\$26,000</u>
Phase 1 Subtotal	\$213,000	\$214,000	\$217,000	\$222,000
Ph2: 840 West Main (Reap Property) to 920 West Main - Chiropractor Office				
Construction	\$139,000	\$140,000	\$143,000	\$146,000
Final Design	\$12,000	\$12,000	\$12,000	\$12,000
Construction Engineering	<u>\$21,000</u>	<u>\$21,000</u>	<u>\$22,000</u>	<u>\$22,000</u>
Phase 2 Subtotal	\$172,000	\$173,000	\$177,000	\$180,000
Phase 1 and 2 Total	\$385,000	\$387,000	\$394,000	\$402,000
Ph3: 920 West Main - Chiropractor Office to Mobile Home Park				
Construction	\$524,000	\$527,000	\$537,000	\$548,000
Final Design	\$38,000	\$38,000	\$39,000	\$40,000
Construction Engineering	<u>\$70,000</u>	<u>\$71,000</u>	<u>\$72,000</u>	<u>\$73,000</u>
Subtotal	\$632,000	\$636,000	\$648,000	\$661,000
Phase 1, 2 and 3 Total	\$1,017,000	\$1,023,000	\$1,042,000	\$1,063,000

Estimated Future Water Demand and Fire Flow Volume based on WWTF Capacity

Description	Flow/Volume
WWTF Available Capacity @ 80%	98,273 gpd*
Available Water in New Reservoir	663,800 gal**
- Future ADF to match available capacity above:	
(98,273* gal / 210gpd [sewer] x 405gpd [water]***	189,526 gpd
= Available future fire flow volume	474,274 gal

*From Table 9

** From Table 2

*** State “book” flows

Table 17
Estimated Existing Water Revenue

Phase/ Address	Use Description	User Type	Quantity	Unit Cost	Annual Revenue
Phase 1					
840 W Main	Commercial	Reap Office Building/ Employees	4 229,950	\$381.00/unit \$9.77/1,000 gal	\$1,524 \$2,247
Subtotal Phase 1					\$3,771
Phase 2					
878 W Main	Residential	Single Family Home	1 76,650	\$130.64/unit \$10.43/1,000 gal	\$130.64 \$799
920 W Main	Res./ Commercial	Single Family Home/Tow Business	1 76,650	\$130.64/unit \$10.43/1,000 gal	\$130.64 \$799
932 W Main	Residential	Single Family Home/ Home Business	1 76,650	\$130.64/unit \$10.43/1,000 gal	\$130.64 \$799
978 W Main	Residential	Single Family Home	1 76,650	\$130.64/unit \$10.43/1,000 gal	\$130.64 \$799
1010- 1014 W Main	Residential	Duplex	2 153,300	\$130.64/unit \$10.43/1,000 gal	\$261.28 \$1,598
1008- 1012 W Main	Residential	Duplex	2 153,300	\$130.64/unit \$10.43/1,000 gal	\$261.28 \$1,598
1070 W Main	Commercial	Office Building/Employees	4 109,500	\$381.00/unit \$9.77/1,000 gal	\$1,524 \$1,070
1108 W Main	Commercial	Dog Day Care	1 554,800	\$381.00/unit \$9.77/1,000 gal	\$381 \$5,420
1151 W Main	Res./ Commercial	Residence Chiropractor Office	1 173,375	\$130.64/unit \$10.43/1,000 gal	\$130.64 \$1,808
Subtotal Phase 2					\$17,771
Subtotal Phase 1 and 2					\$21,542
Phase 3					
1436 W Main	Commercial	Gas Station	1 543,850	\$381.00/unit \$9.77/1,000 gal	\$381 \$5,313
9 Gov. Peck	Commercial	Employees	1 31,285	\$381.00/unit \$9.77/1,000 gal	\$381 \$306
116 River Rd	Commercial	Employees	1 39,107	\$381.00/unit \$9.77/1,000 gal	\$381 \$382
Rt 117	Mobile Home Park	Mobile Homes	150 8,760,000	\$130.64/unit \$10.43/1,000 gal	\$19,596 \$91,367
Subtotal Phase 3					\$118,107
Subtotal Phase 1, 2 and 3					\$139,649

Table 18
Estimated Existing Wastewater Revenue

Phase/ Address	Use Description	User Type	Quantity	Unit Cost	Annual Revenue
Phase 1					
840 W Main	Commercial	Reap Office Building/ Employees	4 229,950	\$519.98/unit \$13.00/1,000 gal	\$2,080 \$2,990
Subtotal Phase 1					\$5,070
Phase 2					
878 W Main	Residential	Single Family Home	1 76,650	\$174.55/unit \$14.13/1,000 gal	\$174.55 \$1,083
920 W Main	Res./Commercial	Single Family Home/Tow Business	1 76,650	\$174.55/unit \$14.13/1,000 gal	\$174.55 \$1,083
932 W Main	Residential	Single Family Home/ Home Business	1 76,650	\$174.55/unit \$14.13/1,000 gal	\$174.55 \$1,083
978 W Main	Residential	Single Family Home	1 76,650	\$174.55/unit \$14.13/1,000 gal	\$174.55 \$1,083
1010- 1014 W Main	Residential	Duplex	2 153,300	\$174.55/unit \$14.13/1,000 gal	\$349.10 \$2,166
1008- 1012 W Main	Residential	Duplex	2 153,300	\$174.55/unit \$14.13/1,000 gal	\$349.10 \$2,166
1070 W Main	Commercial	Office Building/Employees	4 109,500	\$519.98/unit \$13.00/1,000 gal	\$2,080 \$1,424
1108 W Main	Commercial	Dog Day Care	1 554,800	\$519.98/unit \$13.00/1,000 gal	\$519.98 \$7,212
1151 W Main	Res./ Commercial	Residence Chiropractor Office	1 173,375	\$174.55/unit \$14.13/1,000 gal	\$174.55 \$2,550
Subtotal Phase 2					\$24,021
Subtotal Phase 1 and 2					\$29,091
Phase 3					
1436 W Main	Commercial	Gas Station	1 543,850	\$519.98/unit \$13.00/1,000 gal	\$519.98 \$7,070
9 Gov. Peck	Commercial	Employees	1 31,285	\$519.98/unit \$13.00/1,000 gal	\$519.98 \$407
116 River Rd	Commercial	Employees	1 39,107	\$519.98/unit \$13.00/1,000 gal	\$519.98 \$508
Rt 117	Mobile Home Park	Mobile Homes	150 8,760,000	\$174.55/unit \$14.13/1,000 gal	\$26,183 \$123,080
Subtotal Phase 3					\$158,808
Subtotal Phase 1, 2 and 3					\$187,899

Richmond Water/Sewer Expansion: Gateway 'study area'

Rate Impact/Analysis 11.14.2014

Phase I Only

\$239,000	Estimated Phase I Water Total Project Cost (ENR 9800, 2015)
\$214,000	Estimated Phase I Sewer Total Project Cost (ENR 9800, 2015)
\$453,000	Estimated Phase I Water/Sewer Total Project Cost (ENR 9800, 2015)

\$1,341	Water Hookup Fees (\$150 inspection fee + \$1.89 /gal= \$150 + \$1.89(630) = \$1,340.70)
\$2,928	Sewer Hookup Fees (\$150 inspection fee + \$4.41 /gal= \$150 + \$4.41(630) = \$2,928.30)
\$172,500	Estimated Water Capital Contributions (Developer(s), Town and/or others)
\$172,500	Estimated Sewer Capital Contributions (Developer(s), Town and/or others)
\$65,159	Balance of Estimated Water Total Project Cost
\$38,572	Balance of Estimated Sewer Total Project Cost
\$103,731	= Balance of Estimated Water/Sewer Total Project Cost
\$3,769	<i>Est. Annual Water Loan Payments: 4% for 30 years or \$57.84 per year per \$1000</i>
\$2,357	<i>Est. Annual Sewer Loan Payments: CWSRF 2% for 20 years or \$61.10 per year per \$1000</i>
\$6,126	Estimated total new annual water/sewer loan payments
\$6,130	- Estimated new annual revenue from new users
(\$4)	= Estimated total rate increase/decrease for all current users
(\$0.01)	= Estimated average annual rate w+s increase/decrease per current user (<20 years) <i>current number users = 474</i>

Notes

1. Does not include or address cost of new road from school
2. Estimates are for existing users only and does not include any additional hook-up fees or revenues from development.
3. Developer \$ contributions and details tbd; may need legal advice/direction
4. Does not include cost for work on private property (i.e. water services/water meters/sewer service and grinder pumps). Average cost for water work on private property is approximately \$4,000. Costs for sewer work on private property cost range from \$7,000 to \$14,000 depending on property specifics.

Richmond Water/Sewer Expansion: Gateway 'study area'

Rate Impact/Analysis 11.14.2014

Phase I and Phase II Complete

\$591,000	Estimated Phase I and II Water Total Project Cost (ENR 9800, 2015)
\$387,000	Estimated Phase I and II Sewer Total Project Cost (ENR 9800, 2015)
\$978,000	Estimated Phase I and II Water/Sewer Total Project Cost (ENR 9800, 2015)

\$14,286	Water Hookup Fees (\$150 inspection fee + \$1.89 /gal= \$150 (10) + \$1.89(6,765) = \$14,286)
\$21,808	Sewer Hookup Fees (\$150 inspection fee + \$4.41 /gal= \$150 (10) + \$4.41(4,605) = \$21,808)
\$42,350	Estimated Water Capital Contributions (Developer(s), Town and/or others)
\$42,350	Estimated Sewer Capital Contributions (Developer(s), Town and/or others)

\$534,364	Balance of Estimated Water Total Project Cost
\$322,842	Balance of Estimated Sewer Total Project Cost
\$857,206	= Balance of Estimated Water/Sewer Total Project Cost

\$30,908	<i>Est. Annual Water Loan Payments: 4% for 30 years or \$57.84 per year per \$1000</i>
\$19,726	<i>Est. Annual Sewer Loan Payments: CWSRF 2% for 20 years or \$61.10 per year per \$1000</i>
\$50,633	Estimated total new annual water/sewer loan payments
\$50,633	- Estimated new annual revenue from new users

\$0	= Estimated total rate increase/decrease for all current users
\$0.00	= Estimated average annual rate w+s increase/decrease per current user (<20 years) <i>current number users = 491</i>

Notes

1. Does not include or address cost of new road from school
2. Estimates are for existing users only and does not include any additional hook-up fees or revenues from development.
3. Developer \$ contributions and details tbd; may need legal advice/direction
4. Does not include cost for work on private property (i.e. water services/water meters/sewer service and grinder pumps). Average cost for water work on private property is approximately \$4,000. Costs for sewer work on private property cost range from \$7,000 to \$14,000 depending on property specifics.

Richmond Water/Sewer Expansion: Gateway 'study area'

Rate Impact/Analysis 11.17.2014

Phase I, II and III Water & Sewer Complete

\$1,401,000	Estimated Phase I, and II Water Total Project Cost (ENR 9800, 2015)
\$1,023,000	Estimated Phase I, II and III Sewer Total Project Cost (ENR 9800, 2015)
\$2,424,000	Estimated Phase I and II Water/Sewer Total Project Cost (ENR 9800, 2015)

\$63,572	Water Hookup Fees (\$150 inspection fee + \$1.89 /gal= \$150 (14) + \$1.89(32,525) = \$63,572)
\$169,085	Sewer Hookup Fees (\$150 inspection fee + \$4.41 /gal= \$150 (14) + \$4.41(37,865) = \$169,085)
\$0	Estimated Water Capital Contributions (Developer(s), Town and/or others)
\$0	Estimated Sewer Capital Contributions (Developer(s), Town and/or others)
\$1,337,428	Balance of Estimated Water Total Project Cost
\$853,915	Balance of Estimated Sewer Total Project Cost
\$2,191,343	= Balance of Estimated Water/Sewer Total Project Cost
\$77,357	<i>Est. Annual Water Loan Payments: 4% for 30 years or \$57.84 per year per \$1000</i>
\$52,174	<i>Est. Annual Sewer Loan Payments: CWSRF 2% for 20 years or \$61.10 per year per \$1000</i>
\$129,531	Estimated total new annual water/sewer loan payments
\$139,649	Estimated new annual water revenue from new users
\$5,100	Estimated Additional Water O&M Cost
\$187,899	Estimated new annual sewer revenue from new users
\$327,548	- Estimated total new annual revenue from new users
\$17,800	Estimated Additional Sewer O&M Cost
(\$57,192)	Estimated total Average water rate increase/decrease for ALL USERS
(\$88.81)	Estimated average annual water rate w+s increase/decrease for ALL USERS (<30 years)
(\$117,925)	Estimated total Average sewer rate increase/decrease for ALL USERS
(\$183.11)	Estimated average annual sewer rate w+s increase/decrease for ALL USERS (<20 years)
	<i>Estimated Total Number Water Users = 644</i>
	<i>Estimated Total Number Sewer Users = 644</i>

Notes

1. Does not include or address cost of new road from school
2. Estimates are for existing users only and does not include any additional hook-up fees or revenues from development.
3. Developer \$ contributions and details tbd; may need legal advice/direction
4. Does not include cost for work on private property (i.e. water services/water meters/sewer service and grinder pumps). Average cost for water work on private property is approximately \$4,000. Costs for sewer work on private property cost range from \$7,000 to \$14,000 depending on property specifics. Mobile home park may be higher.