

West Swanzey Water DW 10-159 Step Adjustment

Financing and Step Increase

Attachment A
Schedule 1

Preliminary Calculation of Revenue Requirement

	Total Actual Costs
Plant Additions/Retirements:	
Plant Additions	
Wells	\$12,529
Pumping Equipment	<u>27,827</u>
Total	\$40,356
Less: Accumulated Depreciation	<u>1,600</u>
Net Plant	<u>\$38,756</u>
Contribution in Aid of Construction	
Well	\$3,105
Pumping Equipment	<u>6,895</u>
Total	\$10,000
Less: Accumulated Amortization of CIAC	<u>396</u>
Net Contribution in Aid of Construction	<u>\$9,604</u>
Plus: Working Capital	<u>(\$172)</u>
Total Additional Rate Base	\$28,981
Rate of Return	<u>3.472%</u>
Additional Net Operating Income Required	<u>\$1,006</u>
Increase in Purchased Power Expenses	(\$902)
Increase in Insurance Expenses	\$67
Increase in Depreciation Expense	3,200
Increase in Amortization of CIAC	(793)
Increase in Taxes other than Income - State	230
Increase in Taxes other than Income - Town	<u>995</u>
Total Increase in Operating Expenses	<u>\$2,797</u>
Total Additional Revenue Required	\$3,803
2012 Total Water Sales	<u>\$66,682</u>
Total Revenue Required	<u>\$70,485</u>
Percentage Increase Required	<u>5.70%</u>

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Schedule 2

Plant / Accumulated Depreciation / Depreciation Expenses

PUC Acct. No.	Description	<u>Cost</u>	Depr. <u>Rate</u>	Annual <u>Cost</u>	Accum <u>Depr.</u>
307	Wells	\$12,529	3.33%	\$417	\$209
311	Pumping Equipment	<u>27,827</u>	10.00%	<u>2,783</u>	<u>1,391</u>
	TOTAL	<u>\$40,356</u>		<u>\$3,200</u>	<u>\$1,600</u>

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Schedule 3

CIAC / Accumulated Amortization of CIAC / Amortization of CIAC

PUC Acct. No.	Description	Cost	Depr. Rate	Annual Cost	Accum Amort
307	Wells	\$3,105	3.33%	\$103	\$52
311	Pumping Equipment	<u>6,895</u>	10.00%	<u>690</u>	<u>345</u>
	TOTAL	<u>\$10,000</u>		<u>\$793</u>	<u>\$396</u>

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Schedule 4

Rate of Return

	<u>Amount</u>	<u>Interest Rate</u>	<u>Annual Interest</u>	<u>Annual Amortization</u>	<u>Total Annual Cost of Debt</u>	<u>Cost Rate</u>
Long-term Debt:						
SRF	\$40,422	2.720%	\$1,099	\$ 304	\$1,403	3.472%

Note: At 12/31/12 Unamortized Debt Expense amounts to \$6,079.17. The annual amortization is \$304 (\$6,079.17 / 20 years).

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Schedule 5

Taxes

State Property Taxes

Costs

Total Project Costs					\$40,356
Accumulated Depreciation					<u>1,600</u>
Net Plant					<u>\$38,756</u>
Thousand Dollars of Assessed Value					<u>\$39</u>
Adjusted \$000 of Assessed Value	207,151	230,718	89.79%		\$35
Property Tax Rate					<u>6.60</u>
State Property Taxes					<u>\$230</u>

Local Property Taxes

Total Project Costs					\$40,356
Accumulated Depreciation					<u>1,600</u>
Net Plant					<u>\$38,756</u>
Thousand Dollars of Assessed Value					<u>\$39</u>
Adjusted \$000 of Assessed Value	267,000	230,718	115.73%		\$45
Property Tax Rate					<u>22.19</u>
Local Property Taxes					<u>\$995</u>
Combined Property Tax Expense					<u>\$1,225</u>

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Allocation of Costs to Well & Pump

Attachment A
Schedule 6

	<u>Total</u>	<u>Well</u>	<u>Pump</u>
3/5/2012 The Keene Sentiel	\$ 135.48	\$ 42.06	\$ 93.42
3/31/2012 Union Leader	342.55	106.35	236.20
7/112012 Bradley & Faulkner, P. C.	1,000.00	310.46	689.54
8/27/2012 Bradley & Faulkner, P. C.	24.65	7.65	17.00
9/12/2012 D&E Tree Company	1,250.00	388.07	861.93
Gordon Services	100.00	31.05	68.95
2/5/2013 Barrie Miller's Well & Pump Service	<u>37,503.00</u>	<u>11,643.00</u>	<u>25,860.00</u>
Total	<u>\$ 40,355.68</u>	<u>\$12,528.63</u>	<u>\$27,827.05</u>

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Summary of Costs

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Schedule 7

3/5/2012	The Keene Sentinel	Public Notice	\$ 135.48
3/31/2012	Union Leader	Public Notice	342.55
7/11/2012	Bradley & Faulkner, P. C.	Legal	1,000.00
8/27/2012	Bradley & Faulkner, P. C.	Legal	24.65
9/12/2012	D&E Tree Company	Tree removal	1,250.00
	Gordon Services	Plowing	100.00
2/5/2013	Barrie Miller's Well & Pump Service	Redevelopment of well & pump	<u>37,503.00</u>
	Total		<u>\$ 40,355.68</u>

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classified@keenesentinel.com
60 West Street
P.O. Box 546
Keene, NH 03431

Classified (603) 352-1234
Fax: (603) 352-9733

Name:	WEST SWANZEY WATER CO.	Run dates:	03/07/12 to 03/07/12
Company:	20 SO. WINCHESTER ST.	Class:	10
Address:	PO BOX 10	Ad ID:	477134
	WEST SWANZEY, NH 03469	Ad Taker:	DFARMER
Account ID:	1113210	Sales Person:	19
Account #:		Inserts:	2
Telephone:	(603) 352-0770	Billable Lines:	185.0
Fax:		Columns:	1
E-mail:		Depth (Inches):	20.542
Publications:	Keene Sentinel		

Payments:	Method	Card Type	Name on Card	Last 4 Digits	Expire Date	Check Number	Amount Paid
	CC	VISA	SARAH G. BROWN	0990	01/14		\$135.48

Gross: \$135.48

Paid Amount: - \$135.48

Amount Due: \$0.00

I. WATER SYSTEM NAME
The West Swansey Water Company, Inc.
ADDRESS
2 South Winchester Street,
PO Box 10
West Swansey, NH 03469
PROJECT TITLE
Redeveloping and
Reconditioning of Pump #2
and Well #2
WATER SYSTEM EPA
ID 2301023

II. INTRODUCTION
The West Swansey Water Company, Inc. has applied for funds through the State of New Hampshire Department of Environmental Services Drinking Water State Revolving Loan Fund (DWSRLF), in accordance with Chapter Brw Dwi 1100. This document addresses the requirements of Brw Dwi 1107 Environmental Review.

III. BACKGROUND.
The West Swansey Water Company serves water to approximately 200 people through 76 service connections. The average water use for 2010 was approximately 36,704 gallons per day. The water sources include two gravel-packed wells, with approximate pumping rates of 250 gpm for Well #1, and 250 gpm for Well #2. The pumps alternate, filling an atmospheric tank. Pump #2 and Well #2 take twice as long to fill the

tank. A study by PSNH and GOS Associates, engineers and Consultants, and a study done by Barry Miller Well and Pump Service indicate that it can save 25% of our electricity use.

IV. PURPOSE and NEED
The original water system infrastructure was installed in the early 1960s as part of the Homestead Wooden Mill. The West Swansey Water Company was established in the late 1960s. Most of the system was updated in 2004 but one major area is in need of replacement. Our energy bills have increased during the last few years. It has been discovered that Pump #2 is taking twice as long to fill our atmospheric tank, using twice the amount of electricity to pump the same amount of water. Pump #1 and well #1 were cleaned and reconditioned in 2004. Sanitary surveys by the NHDES have cited leaking around the shaft on Well #2.

V. DETAILS OF PROJECT
This project will include the redeveloping and reconditioning of Well #2 and the replacement of Pump #2 with an energy efficient 25HP electric motor and a new pump bowl, column and drive shaft and the reconditioning of the existing dis-

charge head and packing box.

The estimated cost of the overall project is \$32,852.50. The West Swansey Water Company has applied to borrow up to \$36,137.75 to finance the project.

VI. ENVIRONMENTAL CONCERNS and MITIGATION

The following areas of environmental concern summarize the possible impacts from this project. The primary impacts are short-term and will affect the area only during the period of construction.

Air: Impacts will be limited to dust and diesel or other fuel exhaust created during the construction of the project. There are no anticipated long-term air impacts.

Noise: From heavy construction machinery are the only noise impacts anticipated.

Surface water, groundwater and wetlands: no significant wetlands, surface or groundwater impacts are anticipated. Erosion will be minimized by using erosion control methods such as hay bales, silt fences and rapid re-seeding of affected areas. Groundwater Discharge Permits, NHDES Construction General or Dewatering

Permits, and Wetlands permits may be required. Best management practices will be employed in this effort. All appropriate permits shall be obtained from local, state and federal agencies as necessary.

Wildlife: No impacts to wildlife are anticipated from this project.

Social and Economic: The social and economic impacts from the project are favorable. Water customers will benefit from improved water quality and quantity from the infrastructure upgrades. The financial impact on the ratepayer will be reduced through the use of low interest rates through the Drinking Water State Revolving Loan Fund.

Recreation and Historic: No impacts to recreational or historic sites are anticipated. Indirect impacts: There are no indirect impacts anticipated from this project.

Whereas this project constitutes only a minor project and no significant environmental impacts are anticipated, a finding of No Significant Impact (FNI) is proposed.

VII. PUBLIC REVIEW
Board of Directors voted to authorize funding in the amount of \$36,137.75 for

UNION LEADER CORPORATIONP O BOX 9513
MANCHESTER NH 03108-9513

(603) 668-4321

Fax(603) 314-0132

FED ID#02-0212933

Advertising Invoice and Statement

1 Billing Period		2 Advertiser/Client Name	
03/2012		WEST SWANZEY WATER COMPANY	
23 Total Amount Due		3 Terms of Payment	
342.55			
21 Current Net Amount Due		22 30 Days	
342.55		.00	
		60 Days	
		.00	
		Over 90 Days	
		.00	
4 Page Number		5 Billing Date	
1		03/31/12 LG L	
		6 Billed Account Number	
		158106 LEGAL.	
		7 Advertiser/Client Number	
		158106	

8 Billed Account Name and Address	
WEST SWANZEY WATER COMPANY PO BOX 10 WEST SWANZEY NH 03469	

PLEASE PAY PROMPTLY. ACCOUNTS OVER 90 DAYS WILL AUTOMATICALLY BE SENT TO COLLECTION.

10 Date	11 Newspaper Reference	12 13 14 Description-Other Comments/Charges	15 SAU Size 16 Billed Units	17 Times Run 18 Rate	19 Gross Amount	20 Net Amount
03/08/12	592103 LEGL	REDEVELOPING/RECONDITI PUMP 2 & WELL 2 UL 2301020	1X 13.00 13.00	1 26.35	342.55	342.55

Please Return Lower Portion With Payment

BRADLEY & FAULKNER, P.C.

50 Washington Street
P. O. Box 666
Keene, New Hampshire 03431
Telephone (603) 352-2030
Fax (603) 357-9334

July 11, 2012

West Swanzey Water Co., Inc.
Attn.: Ms. Sally Brown
P. O. Box 181
Keene, NH 03431

Invoice# 46338 HSB
Our file# 012216 00000
Billing through 07/08/2012

RE: Water Well Lease

PROFESSIONAL SERVICES

05/29/2012	HSB	Office conference with Sally regarding West Swanzey Water; call to David Howe.	0.25 hrs.	62.50
06/01/2012	HSB	Title search with respect to West Swanzey Water Company.	2.00 hrs.	500.00
06/02/2012	HSB	Preparation of Title opinion letter to David Howe for West Swanzey Water Co., Inc.	1.00 hrs.	250.00
06/26/2012	HSB	Record mortgage and up-dated title report.	0.75 hrs.	187.50
				\$1,000.00

Billing Summary

Total professional services	\$1,000.00

Total of new charges for this invoice	\$1,000.00

Total balance now due	\$1,000.00

BRADLEY & FAULKNER, P.C.

50 Washington Street
P. O. Box 666
Keene, New Hampshire 03431
Telephone (603) 352-2030
Fax (603) 357-9334

August 27, 2012

West Swanzey Water Co., Inc.
Attn.: Ms. Sally Brown
P. O. Box 181
Keene, NH 03431

Invoice# 46639 HSB
Our file# 012216 00000
Billing through 08/19/2012

RE: Water Well Lease

Balance forward as of invoice dated July 11, 2012	\$1,000.00
Payments received since last invoice	1,000.00

Accounts receivable balance carried forward	\$0.00

EXPENSES

06/25/2012	Cheshire County Registry of Deeds - Mortgage Recording Fee(plus postage)	24.65
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\$24.65

Billing Summary

Total expenses incurred	\$24.65
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Total of new charges for this invoice	----- \$24.65
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Total balance now due	----- \$24.65
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D&E TREE COMPANY, INC.

77 Coolidge Highway

Guilford, VT 05301

(802) 257-5669 or (603) 355-1100

STATEMENT FOR:

Name West Swazzy Water Company

Address 2 South Winchester, RI 01890

Telephone _____ Date 9/12/12 No. _____

[illegible]

TERMS: PAYMENT APPRECIATED WITHIN 7 DAYS.

Barrie Miller's Well & Pump Service, Inc.

PO Box 23
Hillsborough, NH 03244-0023

Invoice

Date	Invoice #
2/5/2013	030213

Bill To
W. Swanzey Water Co. PO Box 10, 2 So. Winchester St. West Swanzey, NH 03469

P.O. No.	Terms	Project
Contract	Net 30	

Quantity	Description	Rate	Amount
1	Well & pump repairs per the attached Billing Detail- Well #2	37,503.00	37,503.00
FEIN 02-0523613		Total	\$37,503.00

July 9, 2012

**BARRIE MILLER'S WELL & PUMP SERVICE, INC.
ESTIMATE FOR WELL & PUMP REPAIRS FOR
WEST SWANZEY WATER COMPANY
WELL #2 REDEVELOPMENT & PUMP REPAIRS**

WORK DESCRIPTION	ESTIMATE	UNIT COST	EXTENSION
Preparation, mobilization/ demobilization/ lump sum	1	\$2,340.00	\$2,340.00
Conduct flow test on wells & pumps/lump sum each	2	\$600.00	\$1,200.00 1/2
Remove & reinstall pump/ hour	20	\$198.00	\$3,960.00
Set & pull well cleaning tools/ lump sum	1	\$1,440.00	\$1,440.00
Well redevelopment/ hour	22	\$198.00	\$4,356.00
Television inspection/ lump sum each	2	\$300.00	\$600.00
Disassemble, clean, repair & paint head, etc/ hour	22	\$96.00	\$2,112.00
Calcium hypochlorite/ pound	5	\$3.60	\$18.00
Sodium metabisulfite/ pound	5	\$1.80	\$9.00
New pump bowl, column, shaft & motor/ lump sum	1	\$21,300.00	\$21,300.00
High PSI jetting of screen/ lump sum	0	\$1,500.00	\$0.00

TOTAL ESTIMATED COST :

\$37,335.00

AUTHORIZATION TO PROCEED

AUTHORIZED SIGNATURE: _____

DATE: _____

Well
Pump
Total

\$ 11,643
25,860
\$ 37,503

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Attachment A
Schedule 8

Calculation of Customer Rates Revenue Requirement

		Present Rates	% Increase	Proposed Rates	Quantity	Total Revenue
Fixed Charge:						
5/8"	Meter	\$ 18.00	5.70%	\$ 19.03	59 a	\$ 1,123
3/4"	Meter	\$ 19.80	5.70%	\$ 20.93	-	-
1"	Meter	\$ 25.20	5.70%	\$ 26.64	12 a	320
1 1/2"	Meter	\$ 32.40	5.70%	\$ 34.25	-	-
2"	Meter	\$ 52.20	5.70%	\$ 55.18	4 a	221
3"	Meter	\$ 198.00	5.70%	\$ 209.29	-	-
4"	Meter	\$ 252.00	5.70%	\$ 266.36	-	-
6"	Meter	\$ 378.00	5.70%	\$ 399.55	-	-
8"	Meter	\$ 522.00	5.70%	\$ 551.75	-	-
					<u>75</u> a	<u>\$ 1,663</u>
Total Annual Fixed Charge Revenue						x <u>4</u> Quarters
						<u>\$ 6,651</u>
Consumption Charge (per 100 Gallons):						
		\$ 0.601	5.05%	\$ 0.631	83,614 b	<u>\$ 52,789</u>
Private Fire Protection:						
1"	Service	\$ 28.39	5.70%	\$ 30.01	-	\$ -
2"	Service	\$ 56.79	5.70%	\$ 60.03	-	-
4"	Service	\$ 170.36	5.70%	\$ 180.07	-	-
6"	Service	\$ 340.72	5.70%	\$ 360.14	1 a	360
8"	Service	\$ 567.87	5.70%	\$ 600.24	4 a	2,401
					<u>5</u> a	<u>\$ 2,761</u>
Total Annual Private Fire Protection Revenue						x <u>4</u> Quarters
						<u>\$ 11,044</u>
Total Proposed Annual Revenues (Sch 1)						<u>\$ 70,485</u>

a = Number of Customers

b = 100 Gallons Sold

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