



Randy Barry
Driftwood Heights Association
PMB 219
Camano Island, WA 98282

10/10/23

Re: Water System Loan Repayment Costs for Options A and B

Randy:

Attached are two options with cost projections to borrow from the Drinking Water State Revolving Fund (DWSRF) loan program. Per our discussion we have assumed that 113.5 capital assessments are available to repay the loan. The specific improvements for each option are as follows.

Option A – \$120.79/Mo for 20 Years Loan Payment Per Capital Assessment

Option A replaces all of the existing distribution pipes and adds fire protection to the entire system. The specifics include the following:

- Pumphouse improvements
- Addition of a 500-gpm diesel fire pump
- Replacement of the entire distribution system with HDPE plastic pipe. The pipe system will consist of 2", 6", and 8" pipes.
- Twelve fire hydrants will be added so that each home in the system will be within 450' of a hydrant. Each hydrant will be capable of at least 500-gpm to fight a fire.

This option does not include any work to the existing storage tanks. They are assumed to be adequate size and condition for many years to come.

Option B - \$76.19/Mo for 20 Years Loan Payment Per Capital Assessment

Option B was developed to provide a lower-cost alternative to Option A. This option includes the following improvements.

- Replacement of the pipes in Terry Ann, S. Vesper, S. Vesper Way, The North part of Patricia Ann Drive, and Lehman Drive. It does not replace any pipe in Hawthorn, Margie Ann, or the South part of Patricia Ann Drive.
- Addition of a 500-gpm diesel fire pump
- A total of eight fire hydrants will be installed along the new pipeline.

This option also does not include any work to the existing storage tanks.

Recommendations, Provisos, and Conclusions

Garrison Engineering recommends Option A if the association feels it is affordable. If not, we recommend Option B. Please see the attached spreadsheet pages for the cost projections of each option.

Please note that the loan repayment fee does not include the operation and maintenance fees necessary to run the system from day to day. Please also note this cost projection includes contingency and estimated finance charges. The actual costs will vary.

There is no guarantee that the DWSRF loan program will finance all or part of the project.

If you have any questions or would like additional information, please contact me anytime.

Best regards,



Carl Garrison, PE
President
Attachments



Date Signed: 10/10/2023

Driftwood Heights Water System

Option A - Entire Distribution System Replacement

DWSRF Loan Cost Projection

10/10/2023

By: Carl Garrison, PE - Garrison Engineering

Cost projection for Pipe Replacement				
		Quantity	Rate	Cost
Planning and Consulting				
SWSMP		1	\$ 30,000.00	\$ 30,000.00
Consulting, coordination with agencies, meetings, etc		1	\$ 25,000.00	\$ 25,000.00
Design of pipe replacement with project report		1	\$ 40,000.00	\$ 40,000.00
Surveying using LIDAR Topo		1	\$ 35,000.00	\$ 35,000.00
DWSRF Loan and Grant Assistance		1	\$ 15,000.00	\$ 15,000.00
Inspection and Project Closeout		1	\$ 15,000.00	\$ 15,000.00
DOH Review Fees		1	\$ 2,500.00	\$ 2,500.00
Electrical Engineering		1	\$ 50,000.00	\$ 50,000.00
Contingency		1	\$ 35,000.00	\$ 35,000.00
Legal and audit		1	\$ 10,000.00	\$ 10,000.00
Planning and Consulting Subtotal				\$ 257,500.00
Out of pocket estimate to contribute to project				\$185,000
Total of planning and consulting less out of pocket				\$ 72,500.00

Construction

Task Description	Quantity	Rate	unit	Cost
8" Pipeline from Tanks to Highway along E. Terry Ann	1275	115	\$/lf	\$ 146,625.00
8" Pipeline - Lehman	1530	115	\$/lf	\$ 175,950.00
8" Bore under E. Camano Dr	100	350	\$/lf	\$ 35,000.00
8" Pipeline - S. Vesper	1640	115	\$/lf	\$ 188,600.00
2" Pipeline - S. Vesper Way	500	40	\$/lf	\$ 20,000.00
6" Pipeline - S. Patricia Ann	1230	95	\$/lf	\$ 116,850.00
6" S. Margie Ann	1375	95	\$/lf	\$ 130,625.00
6" Loop to connect SMA to SPA	300	95	\$/lf	\$ 28,500.00
8" Hawthorne Ln	2055	115	\$/lf	\$ 236,325.00
2" Patricia Ann Spur	400	40	\$/lf	\$ 16,000.00
2" Valves	1	1500	\$/each	\$ 1,500.00
6" Valves	2	2000	\$/each	\$ 4,000.00
8" Valve	3	3000	\$/each	\$ 9,000.00
Hot tap, new meter, and service line from main to meter	65	1500	\$/Each	\$ 97,500.00
Fire Hydrants (Every 600') - Lehman	3	11000	\$/each	\$ 33,000.00
Fire Hydrants S. Vesper	3	11000	\$/each	\$ 33,000.00
Fire Hydrants S. Patricia Ann	2	11000	\$/each	\$ 22,000.00
Fire Hydrants E Terry Ann	0	11000	\$/each	\$ -
Fire Hydrants S. Margie Ann	1	11000	\$/each	\$ 11,000.00
Fire Hydrants Hawthorne Ln	3	11000	\$/each	\$ 33,000.00
Extra for 2" Road Bore	1	5000	\$/each	\$ 5,000.00
Extra for 6" Road Bores	0	15000	\$/each	\$ -
Extra for 8" Road Bores	3	20000	\$/each	\$ 60,000.00
Building modifications to remove pressure tank, add cooling ventilation, and make space for diesel fire pump	119	200	\$/SF	\$ 23,800.00
Electrical equipment and install	1	Lump sum	\$ 125,000.00	\$ 125,000.00
2 New 5 Hp pumps VFD's	2	Each	\$ 15,000.00	\$ 30,000.00
VFD for existing 5 hp vertical pump	1	Each	\$ 4,000.00	\$ 4,000.00
New piping header, pressure tanks, and fittings inside buildings	1	Lump sum	\$ 10,000.00	\$ 10,000.00
Diesel Fire Pump	1	\$	\$ 125,000.00	\$ 125,000.00
Misc.	1	\$	\$ 30,000.00	\$ 30,000.00
Construction Subtotal				\$ 1,751,275.00
Mobilization @ 8%				\$ 140,102.00
Construction and Mobilization				\$ 1,891,377.00
Subtotal of Planning, Consulting and Construction				\$ 1,963,877.00
Loan fee at 1% for DWSRF				\$ 19,638.77
Tax on construction	0.079			\$ 152,360.93
Contingency	0.2			\$ 392,775.40
Total ROM Costs				\$ 2,528,652.10

Driftwood Heights Water System

Option B - Partial System Replacement

DWSRF Loan Cost Projection

10/10/2023

By: Carl Garrison, PE - Garrison Engineering

Cost projection for Pipe Replacement				
	Quantity	Rate	Cost	
Planning and Consulting				
SWSMP	1	\$ 30,000.00	\$ 30,000.00	
Consulting, coordination with agencies, meetings, etc	1	\$ 20,000.00	\$ 20,000.00	
Design of pipe replacement with project report	1	\$ 30,000.00	\$ 30,000.00	
Surveying using LIDAR Topo	1	\$ 25,000.00	\$ 25,000.00	
DWSRF Loan and Grant Assistance	1	\$ 15,000.00	\$ 15,000.00	
Inspection and Project Closeout	1	\$ 12,000.00	\$ 12,000.00	
DOH Review Fees	1	\$ 2,500.00	\$ 2,500.00	
Electrical Engineering	1	\$ 50,000.00	\$ 50,000.00	
Contingency	1	\$ 25,000.00	\$ 25,000.00	
Legal and audit	1	\$ 10,000.00	\$ 10,000.00	
Planning and Consulting Subtotal			\$ 219,500.00	
Out of pocket estimate to contribute to project			\$185,000	
Total of planning and consulting less out of pocket			\$ 34,500.00	

Construction

Task Description	Quantity	Rate	unit	Cost
8" Pipeline from Tanks to Highway along E. Terry Ann	1275	115	\$/lf	\$ 146,625.00
8" Pipeline - Lehman	1530	115	\$/lf	\$ 175,950.00
8" Bore under E. Camano Dr	100	350	\$/lf	\$ 35,000.00
8" Pipeline - S. Vesper	1640	115	\$/lf	\$ 188,600.00
2" in Vesper Way	500	40	\$/lf	\$ 20,000.00
6" Pipeline - S. Patricia Ann	0	95	\$/lf	\$ -
6" S. Margie Ann	0	95	\$/lf	\$ -
6" Loop to connect SMA to SPA	0	95	\$/lf	\$ -
8" Hawthorne Ln	0	115	\$/lf	\$ -
2" Patricia Ann Spur	0	40	\$/lf	\$ -
2" Valves	1	1500	\$/each	\$ 1,500.00
6" Valves	2	2000	\$/each	\$ 4,000.00
8" Valve	3	3000	\$/each	\$ 9,000.00
Hot tap, new meter, and service line from main to meter	22	1500	\$/Each	\$ 33,000.00
Fire Hydrants (Every 600') - Lehman	3	11000	\$/each	\$ 33,000.00
Fire Hydrants S. Vesper	3	11000	\$/each	\$ 33,000.00
Fire Hydrants S. Patricia Ann	1	11000	\$/each	\$ 11,000.00
Fire Hydrants E Terry Ann	0	11000	\$/each	\$ -
Fire Hydrants S. Margie Ann	0	11000	\$/each	\$ -
Fire Hydrants Hawthorne Ln	1	11000	\$/each	\$ 11,000.00
Extra for 2" Road Bore	1	5000	\$/each	\$ 5,000.00
Extra for 6" Road Bores	0	15000	\$/each	\$ -
Extra for 8" Road Bores	3	20000	\$/each	\$ 60,000.00
Building modifications to remove pressure tank, add cooling ventilation, and make space for diesel fire pump	119	200	\$/SF	\$ 23,800.00
Electrical equipment and install	1	Lump sum	\$ 125,000.00	\$ 125,000.00
2 New 5 Hp pumps VFD's	2	Each	\$ 15,000.00	\$ 30,000.00
VFD for existing 5 hp vertical pump	1	Each	\$ 4,000.00	\$ 4,000.00
New piping header, pressure tanks, and fittings inside buildings	1	Lump sum	\$ 10,000.00	\$ 10,000.00
Diesel Fire Pump	1	\$ 125,000.00	\$ 125,000.00	\$ 125,000.00
Misc.	1	\$ 30,000.00	\$ 30,000.00	\$ 30,000.00
Construction Subtotal				\$ 1,114,475.00
Mobilization				\$ 89,158.00
Construction and Mobilization				\$ 1,203,633.00
Subtotal of Planning, Consulting and Construction				\$ 1,238,133.00
Loan fee at 1% for DWSRF				\$ 12,381.33
Tax on construction	0.079			\$ 96,959.33
Contingency	0.2			\$ 247,626.60
Total ROM Costs				\$ 1,595,100.26

Driftwood Heights

DWSRF Loan Costs Per Residence Per Month

10/10/23

By: Carl Garrison, PE of Garrison Engineering

Cost per connection for 113.5 Assessments

DWSRF-Option A	Term (Years)	20	240	Months
	Interest*	2.75%		
DWSRF-Option B	Term (Years)	20	240	Months
	Interest*	2.75%		

	Cost	Cap Assessments	Cost per lot in total	Cost per lot per month
DWSRF Option A	\$ 2,528,652.10	113.5	\$ 22,278.87	\$120.79
DWSRF Option B	\$ 1,595,100.26	113.5	\$ 14,053.75	\$76.19

*The actual interest rates may vary

122 Connections	122
Capital Assessments	113.5
Customers	111
Lots	111