APPENDIX A

WATER FACILITIES FORMS

Washington State Department of Health
Division of Environmental Health
Office of Drinking Water

WATER FACILITIES INVENTORY (WFI) FORM

ONE FORM PER SYSTEM

Quarter: 2
Updated: 04/13/2017
Printed: 8/31/2017
WFI Printed For: On-Demand
Submission Reason: SMA Update

RETURN TO: Central Services - WFI, PO Box 47822, Olympia, WA, 98504-7822

1. SYSTEM ID NO.	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
26450 8	FREELAND WATER AND SEWER DISTRICT	ISLAND	A	Comm

6. PRIMARY CONTACT NAME & MAILING ADDRESS

ANDY M. CAMPBELL [MANAGER]
PO BOX 1202
FREELAND, WA 98249

7. OWNER NAME & MAILING ADDRESS

FREELAND WATER & SEWER DISTRICT
TERRY D. CAMPBELL COMMISSIONER
PO BOX 222
FREELAND, WA 98249

8. OWNER NUMBER: 002049

STREET ADDRESS IF DIFFERENT FROM ABOVE

ATTN
ADDRESS
CITY STATE ZIP

STREET ADDRESS IF DIFFERENT FROM ABOVE

ATTN
ADDRESS 5421 WOODARD AVE
CITY FREELAND STATE WA ZIP 98249

9. 24 HOUR PRIMARY CONTACT INFORMATION

Primary Contact Daytime Phone: (360) 579-1956
Primary Contact Mobile/Cell Phone: (425) 335-9396
Primary Contact Evening Phone:
Fax: (360) 579-2058 E-mail: xxxxxxxxxxxxxxxxxxx

10. OWNER CONTACT INFORMATION

Owner Daytime Phone: (360) 331-5566
Owner Mobile/Cell Phone:
Owner Evening Phone: (xxx)-xxx-xxxx
Fax: (360) 331-7525 E-mail: xxxxxxxxxxxxxxxxxxx

WAC 246-290-420(9) requires that water systems provide 24-hour contact information for emergencies.

11. SATELLITE MANAGEMENT AGENCY - SMA (check only one)

- [x] Not applicable (Skip to #12)
- [ ] Owned and Managed
- [ ] Managed Only
- [ ] Owned Only

SMA NAME: _____ SMA Number:

12. WATER SYSTEM CHARACTERISTICS (mark all that apply)

- [ ] Agricultural
- [x] Commercial / Business
- [ ] Day Care
- [x] Food Service/Food Permit
- [ ] 1,000 or more person event for 2 or more days per year
- [x] Hospital/Clinic
- [x] Industrial
- [x] Licensed Residential Facility
- [x] Lodging
- [x] Recreational / RV Park
- [x] Residential
- [ ] School
- [ ] Temporary Farm Worker
- [x] Other (church, fire station, etc.): _____

13. WATER SYSTEM OWNERSHIP (mark only one)

- [ ] Association
- [ ] City / Town
- [ ] County
- [ ] Federal
- [ ] Investor
- [ ] Private
- [x] Special District
- [ ] State

14. STORAGE CAPACITY (gallons)

400,000

15	16	17	18 SOURCE CATEGORY										19 USE			20	21 TREATMENT						22	23	24 SOURCE LOCATION			
Source Number	SOURCE NAME LIST UTILITY'S NAME FOR SOURCE AND WELL TAG ID NUMBER. Example: WELL #1 XYZ456 IF SOURCE IS PURCHASED OR INTERTIED, LIST SELLER'S NAME Example: SEATTLE	INTERTIE SYSTEM ID NUMBER	WELL	WELL FIELD	WELL IN A WELL FIELD	SPRING	SPRING FIELD	SPRING IN SPRINGFIELD	SEA WATER	SURFACE WATER	RANNEY / INF. GALLERY	OTHER	PERMANENT	SEASONAL	EMERGENCY	SOURCE METERED	NONE	CHLORINATION	FILTRATION	FLUORIDATION	IRRADIATION (UV)	OTHER	DEPTH TO FIRST OPEN INTERVAL IN FEET	CAPACITY (GALLONS PER MINUTE)	1/4, 1/4 SECTION	SECTION NUMBER	TOWNSHIP	RANGE
S01	AGA907 Well A				X								X			Y		X				X	240	140	SW NW	14	29N	02E
S02	AGA908 Well B				X								X			Y		X				X	200	130	SW NW	14	29N	02E
S03	Wells A & B			X									X			Y		X				X	200	251	SW NW	14	29N	02E
S04	Well #3 AFJ868		X										X			Y		X	X				357	135	NE SW	14	29N	02E
S05	Harbor Hills CC/33860	33860 V													X		X							500			00N	00E

WATER FACILITIES INVENTORY (WFI) FORM - Continued

1. SYSTEM ID NO.	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
26450 8	FREELAND WATER AND SEWER DISTRICT	ISLAND	A	Comm

	ACTIVE SERVICE CONNECTIONS	DOH USE ONLY! CALCULATED ACTIVE CONNECTIONS	DOH USE ONLY! APPROVED CONNECTIONS
25. SINGLE FAMILY RESIDENCES (How many of the following do you have?)		508	869
A. Full Time Single Family Residences (Occupied 180 days or more per year)	370		
B. Part Time Single Family Residences (Occupied less than 180 days per year)	0		
26. MULTI-FAMILY RESIDENTIAL BUILDINGS (How many of the following do you have?)			
A. Apartment Buildings, condos, duplexes, barracks, dorms	7		
B. Full Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied more than 180 days/year	138		
C. Part Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied less than 180 days/year	0		
27. NON-RESIDENTIAL CONNECTIONS (How many of the following do you have?)			
A. Recreational Services and/or Transient Accommodations (Campsites, RV sites, hotel/motel/overnight units)	0	0	0
B. Institutional, Commercial/Business, School, Day Care, Industrial Services, etc.	101	101	0
28. TOTAL SERVICE CONNECTIONS		609	869

29. FULL-TIME RESIDENTIAL POPULATION

A. How many residents are served by this system 180 or more days per year? 1252

30. PART-TIME RESIDENTIAL POPULATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many part-time residents are present each month?												
B. How many days per month are they present?												

31. TEMPORARY & TRANSIENT USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many total visitors, attendees, travelers, campers, patients or customers have access to the water system each month?	350	350	350	350	350	350	350	350	350	350	350	350
B. How many days per month is water accessible to the public?	31	28	31	30	31	30	31	31	30	31	30	31

32. REGULAR NON-RESIDENTIAL USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. If you have schools, daycares, or businesses connected to your water system, how many students daycare children and/or employees are present each month?												
B. How many days per month are they present?												

33. ROUTINE COLIFORM SCHEDULE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
* Requirement is exception from WAC 246-290	2	2	2	2	2	2	2	2	2	2	2	2

34. NITRATE SCHEDULE	QUARTERLY	ANNUALLY	ONCE EVERY 3 YEARS
(One Sample per source by time period)			

35. Reason for Submitting WFI:

☐ Update - Change ☐ Update - No Change ☐ Inactivate ☐ Re-Activate ☐ Name Change ☐ New System ☐ Other _____

36. I certify that the information stated on this WFI form is correct to the best of my knowledge.

SIGNATURE: _____ **DATE:** _____

PRINT NAME: _____ **TITLE:** _____

Washington State Department of Health
Division of Environmental Health
Office of Drinking Water

WATER FACILITIES INVENTORY (WFI) FORM

ONE FORM PER SYSTEM

Quarter: 2
Updated: 04/13/2017
Printed: 8/31/2017
WFI Printed For: On-Demand
Submission Reason: SMA Update

RETURN TO: Central Services - WFI, PO Box 47822, Olympia, WA, 98504-7822

1. SYSTEM ID NO.	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
33860 V	HARBOR HILLS COMMUNITY WATER SYSTEM	ISLAND	A	Comm

6. PRIMARY CONTACT NAME & MAILING ADDRESS

ANDY M. CAMPBELL [MANAGER]
PO BOX 1202
FREELAND, WA 98249

7. OWNER NAME & MAILING ADDRESS

FREELAND WATER & SEWER DISTRICT
TERRY D. CAMPBELL COMMISSIONER
PO BOX 222
FREELAND, WA 98249

8. OWNER NUMBER: 002049

STREET ADDRESS IF DIFFERENT FROM ABOVE

ATTN
ADDRESS
CITY STATE ZIP

STREET ADDRESS IF DIFFERENT FROM ABOVE

ATTN
ADDRESS 5421 WOODARD AVE
CITY FREELAND STATE WA ZIP 98249

9. 24 HOUR PRIMARY CONTACT INFORMATION

Primary Contact Daytime Phone: (360) 579-1956
Primary Contact Mobile/Cell Phone: (425) 335-9396
Primary Contact Evening Phone:
Fax: (360) 579-2058 E-mail: xxxxxxxxxxxxxxxxxxx

10. OWNER CONTACT INFORMATION

Owner Daytime Phone: (360) 331-5566
Owner Mobile/Cell Phone:
Owner Evening Phone: (xxx)-xxx-xxxx
Fax: (360) 331-7525 E-mail: xxxxxxxxxxxxxxxxxxx

WAC 246-290-420(9) requires that water systems provide 24-hour contact information for emergencies.

11. SATELLITE MANAGEMENT AGENCY - SMA (check only one)

- [x] Not applicable (Skip to #12)
- [ ] Owned and Managed
- [ ] Managed Only
- [ ] Owned Only

SMA NAME: _____ SMA Number:

12. WATER SYSTEM CHARACTERISTICS (mark all that apply)

- [ ] Agricultural
- [ ] Commercial / Business
- [ ] Day Care
- [ ] Food Service/Food Permit
- [ ] 1,000 or more person event for 2 or more days per year
- [ ] Hospital/Clinic
- [ ] Industrial
- [ ] Licensed Residential Facility
- [ ] Lodging
- [ ] Recreational / RV Park
- [x] Residential
- [ ] School
- [ ] Temporary Farm Worker
- [ ] Other (church, fire station, etc.): _____

13. WATER SYSTEM OWNERSHIP (mark only one)

- [ ] Association
- [ ] City / Town
- [ ] County
- [ ] Federal
- [ ] Investor
- [ ] Private
- [x] Special District
- [ ] State

14. STORAGE CAPACITY (gallons)

270,000

15	16	17	18 SOURCE CATEGORY										19 USE			20	21 TREATMENT						22	23	24 SOURCE LOCATION			
Source Number	SOURCE NAME LIST UTILITY'S NAME FOR SOURCE AND WELL TAG ID NUMBER. Example: WELL #1 XYZ456 IF SOURCE IS PURCHASED OR INTERTIED, LIST SELLER'S NAME Example: SEATTLE	INTERTIE SYSTEM ID NUMBER	WELL	WELL FIELD	WELL IN A WELL FIELD	SPRING	SPRING FIELD	SPRING IN SPRINGFIELD	SEA WATER	SURFACE WATER	RANNEY / INF. GALLERY	OTHER	PERMANENT	SEASONAL	EMERGENCY	SOURCE METERED	NONE	CHLORINATION	FILTRATION	FLUORIDATION	IRRADIATION (UV)	OTHER	DEPTH TO FIRST OPEN INTERVAL IN FEET	CAPACITY (GALLONS PER MINUTE)	1/4, 1/4 SECTION	SECTION NUMBER	TOWNSHIP	RANGE
S01	Well #1 AGA918		X												X			X					252	70	NE SW	03	29N	02E
S02	Well #2 AGA673		X												X			X	X				317	88	NE NW	03	29N	02E
S03	Well #3 AGA818		X										X			Y		X	X				287	160	SW NW	03	29N	02E
S04	Well #4 (Tel#2)		X												X		X						332	52	SE SW	34	30N	02E

WATER FACILITIES INVENTORY (WFI) FORM - Continued

1. SYSTEM ID NO.	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
33860 V	HARBOR HILLS COMMUNITY WATER SYSTEM	ISLAND	A	Comm

	ACTIVE SERVICE CONNECTIONS	DOH USE ONLY! CALCULATED ACTIVE CONNECTIONS	DOH USE ONLY! APPROVED CONNECTIONS
25. SINGLE FAMILY RESIDENCES (How many of the following do you have?)		409	550
A. Full Time Single Family Residences (Occupied 180 days or more per year)	409		
B. Part Time Single Family Residences (Occupied less than 180 days per year)	0		
26. MULTI-FAMILY RESIDENTIAL BUILDINGS (How many of the following do you have?)			
A. Apartment Buildings, condos, duplexes, barracks, dorms	0		
B. Full Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied more than 180 days/year	0		
C. Part Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied less than 180 days/year	0		
27. NON-RESIDENTIAL CONNECTIONS (How many of the following do you have?)			
A. Recreational Services and/or Transient Accommodations (Campsites, RV sites, hotel/motel/overnight units)	0	0	0
B. Institutional, Commercial/Business, School, Day Care, Industrial Services, etc.	2	2	0
28. TOTAL SERVICE CONNECTIONS		411	550

29. FULL-TIME RESIDENTIAL POPULATION

A. How many residents are served by this system 180 or more days per year? 925

30. PART-TIME RESIDENTIAL POPULATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many part-time residents are present each month?												
B. How many days per month are they present?												

31. TEMPORARY & TRANSIENT USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many total visitors, attendees, travelers, campers, patients or customers have access to the water system each month?												
B. How many days per month is water accessible to the public?												

32. REGULAR NON-RESIDENTIAL USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. If you have schools, daycares, or businesses connected to your water system, how many students daycare children and/or employees are present each month?												
B. How many days per month are they present?												

33. ROUTINE COLIFORM SCHEDULE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
* Requirement is exception from WAC 246-290	1	1	1	1	1	1	1	1	1	1	1	1

34. NITRATE SCHEDULE	QUARTERLY	ANNUALLY	ONCE EVERY 3 YEARS
(One Sample per source by time period)			

35. Reason for Submitting WFI:

☐ Update - Change ☐ Update - No Change ☐ Inactivate ☐ Re-Activate ☐ Name Change ☐ New System ☐ Other _____

36. I certify that the information stated on this WFI form is correct to the best of my knowledge.

SIGNATURE: _____ **DATE:** _____

PRINT NAME: _____ **TITLE:** _____

Washington State Department of Health
Division of Environmental Health
Office of Drinking Water

WATER FACILITIES INVENTORY (WFI) FORM

ONE FORM PER SYSTEM

Quarter: 2
Updated: 04/13/2017
Printed: 8/31/2017
WFI Printed For: On-Demand
Submission Reason: SMA Update

RETURN TO: Central Services - WFI, PO Box 47822, Olympia, WA, 98504-7822

1. SYSTEM ID NO.	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
31003 P	HARBOR HILL	ISLAND	A	Comm

6. PRIMARY CONTACT NAME & MAILING ADDRESS

ANDY M. CAMPBELL [MANAGER]
PO BOX 1202
FREELAND, WA 98249

7. OWNER NAME & MAILING ADDRESS

HARBOR HILL COMMUNITY ASSOC.
DENISE LORENZ OWNER
WHIDBEY WATER SERVICES
5421 WOODARD AVE
FREELAND, WA 98249

8. OWNER NUMBER: 017225

STREET ADDRESS IF DIFFERENT FROM ABOVE

ATTN
ADDRESS
CITY STATE ZIP

STREET ADDRESS IF DIFFERENT FROM ABOVE

ATTN DENISE LORENZ
ADDRESS 1787 DUSTY LANE
CITY FREELAND STATE WA ZIP 98249

9. 24 HOUR PRIMARY CONTACT INFORMATION

Primary Contact Daytime Phone: (360) 579-1956
Primary Contact Mobile/Cell Phone: (425) 335-9396
Primary Contact Evening Phone:
Fax: (360) 579-2058 E-mail: xxxxxxxxxxxxxxxxxxx

10. OWNER CONTACT INFORMATION

Owner Daytime Phone: (360) 579-1956
Owner Mobile/Cell Phone:
Owner Evening Phone:
Fax: E-mail: xxxxxxxxxxxxxxxxxxx

WAC 246-290-420(9) requires that water systems provide 24-hour contact information for emergencies.

11. SATELLITE MANAGEMENT AGENCY - SMA (check only one)

- [x] Not applicable (Skip to #12)
- [ ] Owned and Managed
- [ ] Managed Only
- [ ] Owned Only

SMA NAME: _____ SMA Number:

12. WATER SYSTEM CHARACTERISTICS (mark all that apply)

- [ ] Agricultural
- [ ] Commercial / Business
- [ ] Day Care
- [ ] Food Service/Food Permit
- [ ] 1,000 or more person event for 2 or more days per year
- [ ] Hospital/Clinic
- [ ] Industrial
- [ ] Licensed Residential Facility
- [ ] Lodging
- [ ] Recreational / RV Park
- [x] Residential
- [ ] School
- [ ] Temporary Farm Worker
- [ ] Other (church, fire station, etc.): _____

13. WATER SYSTEM OWNERSHIP (mark only one)

- [x] Association
- [ ] City / Town
- [ ] County
- [ ] Federal
- [ ] Investor
- [ ] Private
- [ ] Special District
- [ ] State

14. STORAGE CAPACITY (gallons)

15	16	17	18 SOURCE CATEGORY										19 USE			20	21 TREATMENT						22	23	24 SOURCE LOCATION			
Source Number	LIST UTILITY'S NAME FOR SOURCE AND WELL TAG ID NUMBER. Example: WELL #1 XYZ456 IF SOURCE IS PURCHASED OR INTERTIED, LIST SELLER'S NAME Example: SEATTLE	INTERTIE SYSTEM ID NUMBER	WELL	WELL FIELD	WELL IN A WELL FIELD	SPRING	SPRING FIELD	SPRING IN SPRINGFIELD	SEA WATER	SURFACE WATER	RANNEY / INF. GALLERY	OTHER	PERMANENT	SEASONAL	EMERGENCY	SOURCE METERED	NONE	CHLORINATION	FILTRATION	FLUORIDATION	IRRADIATION (UV)	OTHER	DEPTH TO FIRST OPEN INTERVAL IN FEET	CAPACITY (GALLONS PER MINUTE)	1/4, 1/4 SECTION	SECTION NUMBER	TOWNSHIP	RANGE
S01	AGA860 Well 1		X										X			Y	X						203	24		14	29N	02E

WATER FACILITIES INVENTORY (WFI) FORM - Continued

1. SYSTEM ID NO.	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
31003 P	HARBOR HILL	ISLAND	A	Comm

	ACTIVE SERVICE CONNECTIONS	DOH USE ONLY! CALCULATED ACTIVE CONNECTIONS	DOH USE ONLY! APPROVED CONNECTIONS
25. SINGLE FAMILY RESIDENCES (How many of the following do you have?)		15	Unapproved
A. Full Time Single Family Residences (Occupied 180 days or more per year)	15		
B. Part Time Single Family Residences (Occupied less than 180 days per year)	0		
26. MULTI-FAMILY RESIDENTIAL BUILDINGS (How many of the following do you have?)			
A. Apartment Buildings, condos, duplexes, barracks, dorms	0		
B. Full Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied more than 180 days/year	0		
C. Part Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied less than 180 days/year	0		
27. NON-RESIDENTIAL CONNECTIONS (How many of the following do you have?)			
A. Recreational Services and/or Transient Accommodations (Campsites, RV sites, hotel/motel/overnight units)	0	0	
B. Institutional, Commercial/Business, School, Day Care, Industrial Services, etc.	0	0	
28. TOTAL SERVICE CONNECTIONS		15	

29. FULL-TIME RESIDENTIAL POPULATION

A. How many residents are served by this system 180 or more days per year? 43

30. PART-TIME RESIDENTIAL POPULATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many part-time residents are present each month?												
B. How many days per month are they present?												

31. TEMPORARY & TRANSIENT USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many total visitors, attendees, travelers, campers, patients or customers have access to the water system each month?												
B. How many days per month is water accessible to the public?												

32. REGULAR NON-RESIDENTIAL USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. If you have schools, daycares, or businesses connected to your water system, how many students daycare children and/or employees are present each month?												
B. How many days per month are they present?												

33. ROUTINE COLIFORM SCHEDULE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
* Requirement is exception from WAC 246-290	1	1	1	1	1	1	1	1	1	1	1	1

34. NITRATE SCHEDULE	QUARTERLY	ANNUALLY	ONCE EVERY 3 YEARS
(One Sample per source by time period)			

35. Reason for Submitting WFI:

☐ Update - Change ☐ Update - No Change ☐ Inactivate ☐ Re-Activate ☐ Name Change ☐ New System ☐ Other _____

36. I certify that the information stated on this WFI form is correct to the best of my knowledge.

SIGNATURE: _____ **DATE:** _____

PRINT NAME: _____ **TITLE:** _____

Washington State Department of Health
Division of Environmental Health
Office of Drinking Water

WATER FACILITIES INVENTORY (WFI) FORM

ONE FORM PER SYSTEM

Quarter: 0
Updated: 05/11/2017
Printed: 8/31/2017
WFI Printed For: On-Demand
Submission Reason: Pop/Connect Update

RETURN TO: Central Services - WFI, PO Box 47822, Olympia, WA, 98504-7822

1. SYSTEM ID NO.	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
01072 W	SUNNY VIEW FARMS WATER SYSTEM	ISLAND	B	

6. PRIMARY CONTACT NAME & MAILING ADDRESS

ANDY M. CAMPBELL [MANAGER]
PO BOX 1202
FREELAND, WA 98249

7. OWNER NAME & MAILING ADDRESS — **8. OWNER NUMBER: 002049**

FREELAND WATER & SEWER DISTRICT
TERRY D. CAMPBELL COMMISSIONER
PO BOX 222
FREELAND, WA 98249

STREET ADDRESS IF DIFFERENT FROM ABOVE

ATTN
ADDRESS
CITY STATE ZIP

STREET ADDRESS IF DIFFERENT FROM ABOVE

ATTN
ADDRESS 5421 WOODARD AVE
CITY FREELAND STATE WA ZIP 98249

9. 24 HOUR PRIMARY CONTACT INFORMATION

Primary Contact Daytime Phone: (360) 579-1956
Primary Contact Mobile/Cell Phone: (425) 335-9396
Primary Contact Evening Phone:
Fax: (360) 579-2058 E-mail: xxxxxxxxxxxxxxxxxxx

10. OWNER CONTACT INFORMATION

Owner Daytime Phone: (360) 331-5566
Owner Mobile/Cell Phone:
Owner Evening Phone: (xxx)-xxx-xxxx
Fax: (360) 331-7525 E-mail: xxxxxxxxxxxxxxxxxxx

WAC 246-290-420(9) requires that water systems provide 24-hour contact information for emergencies.

11. SATELLITE MANAGEMENT AGENCY - SMA (check only one)

- [x] Not applicable (Skip to #12)
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- [ ] Managed Only
- [ ] Owned Only

SMA NAME: _____ SMA Number:

12. WATER SYSTEM CHARACTERISTICS (mark all that apply)

- [ ] Agricultural
- [ ] Commercial / Business
- [ ] Day Care
- [ ] Food Service/Food Permit
- [ ] 1,000 or more person event for 2 or more days per year
- [ ] Hospital/Clinic
- [ ] Industrial
- [ ] Licensed Residential Facility
- [ ] Lodging
- [ ] Recreational / RV Park
- [x] Residential
- [ ] School
- [ ] Temporary Farm Worker
- [ ] Other (church, fire station, etc.): _____

13. WATER SYSTEM OWNERSHIP (mark only one)

- [ ] Association
- [ ] City / Town
- [ ] County
- [ ] Federal
- [ ] Investor
- [ ] Private
- [x] Special District
- [ ] State

14. STORAGE CAPACITY (gallons)

700

15	16	17	18 SOURCE CATEGORY										19 USE			20	21 TREATMENT						22	23	24 SOURCE LOCATION			
Source Number	SOURCE NAME LIST UTILITY'S NAME FOR SOURCE AND WELL TAG ID NUMBER. Example: WELL #1 XYZ456 IF SOURCE IS PURCHASED OR INTERTIED, LIST SELLER'S NAME Example: SEATTLE	INTERTIE SYSTEM ID NUMBER	WELL	WELL FIELD	WELL IN A WELL FIELD	SPRING	SPRING FIELD	SPRING IN SPRINGFIELD	SEA WATER	SURFACE WATER	RANNEY / INF. GALLERY	OTHER	PERMANENT	SEASONAL	EMERGENCY	SOURCE METERED	NONE	CHLORINATION	FILTRATION	FLUORIDATION	IRRADIATION (UV)	OTHER	DEPTH TO FIRST OPEN INTERVAL IN FEET	CAPACITY (GALLONS PER MINUTE)	1/4, 1/4 SECTION	SECTION NUMBER	TOWNSHIP	RANGE
S01	WELL #1 ALQ382		X										X			Y	X						220	40	NW NE	13	29N	02E

WATER FACILITIES INVENTORY (WFI) FORM - Continued

1. SYSTEM ID NO.	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
01072 W	SUNNY VIEW FARMS WATER SYSTEM	ISLAND	B	

	ACTIVE SERVICE CONNECTIONS	DOH USE ONLY! CALCULATED ACTIVE CONNECTIONS	DOH USE ONLY! APPROVED CONNECTIONS
25. SINGLE FAMILY RESIDENCES (How many of the following do you have?)		6	6
A. Full Time Single Family Residences (Occupied 180 days or more per year)	6		
B. Part Time Single Family Residences (Occupied less than 180 days per year)	0		
26. MULTI-FAMILY RESIDENTIAL BUILDINGS (How many of the following do you have?)			
A. Apartment Buildings, condos, duplexes, barracks, dorms	0		
B. Full Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied more than 180 days/year	0		
C. Part Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied less than 180 days/year	0		
27. NON-RESIDENTIAL CONNECTIONS (How many of the following do you have?)			
A. Recreational Services and/or Transient Accommodations (Campsites, RV sites, hotel/motel/overnight units)	0	0	0
B. Institutional, Commercial/Business, School, Day Care, Industrial Services, etc.	0	0	0
28. TOTAL SERVICE CONNECTIONS		6	6

29. FULL-TIME RESIDENTIAL POPULATION

A. How many residents are served by this system 180 or more days per year? 9

30. PART-TIME RESIDENTIAL POPULATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many part-time residents are present each month?												
B. How many days per month are they present?												

31. TEMPORARY & TRANSIENT USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many total visitors, attendees, travelers, campers, patients or customers have access to the water system each month?												
B. How many days per month is water accessible to the public?												

32. REGULAR NON-RESIDENTIAL USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. If you have schools, daycares, or businesses connected to your water system, how many students daycare children and/or employees are present each month?												
B. How many days per month are they present?												

33. ROUTINE COLIFORM SCHEDULE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
* Requirement is exception from WAC 246-290	1	0	0	0	0	0	0	0	0	0	0	0

34. NITRATE SCHEDULE	QUARTERLY	ANNUALLY	ONCE EVERY 3 YEARS
(One Sample per source by time period)			

35. Reason for Submitting WFI:

☐ Update - Change ☐ Update - No Change ☐ Inactivate ☐ Re-Activate ☐ Name Change ☐ New System ☐ Other _____

36. I certify that the information stated on this WFI form is correct to the best of my knowledge.

SIGNATURE: _____ **DATE:** _____

PRINT NAME: _____ **TITLE:** _____

Washington State Department of Health
Division of Environmental Health
Office of Drinking Water

WATER FACILITIES INVENTORY (WFI) FORM

ONE FORM PER SYSTEM

Quarter: 3
Updated: 05/25/2016
Printed: 9/21/2017
WFI Printed For: On-Demand
Submission Reason: Contact Update

RETURN TO: Central Services - WFI, PO Box 47822, Olympia, WA, 98504-7822

1. SYSTEM ID NO.	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
00912 E	WHIDBEY ISLAND EAGLES #3418	ISLAND	A	TNC

6. PRIMARY CONTACT NAME & MAILING ADDRESS	7. OWNER NAME & MAILING ADDRESS	8. OWNER NUMBER: 015513
JEANNE SEILER [WATER MANAGER] PO BOX 925 FREELAND, WA 98249	WHIDBEY ISLAND EAGLES #3418 JEANNE SEILER MANAGER PO BOX 925 FREELAND, WA 98249	
STREET ADDRESS IF DIFFERENT FROM ABOVE	**STREET ADDRESS IF DIFFERENT FROM ABOVE**	
ATTN JEANNE SEILER ADDRESS 16691 SR 525 CITY FREELAND STATE WA ZIP 98249	ATTN ADDRESS 16691 SR 525 CITY FREELAND STATE WA ZIP 98249	

9. 24 HOUR PRIMARY CONTACT INFORMATION		10. OWNER CONTACT INFORMATION	
Primary Contact Daytime Phone: (360) 321-5636		Owner Daytime Phone: (360) 321-5636	
Primary Contact Mobile/Cell Phone: (360) 977-9374		Owner Mobile/Cell Phone:	
Primary Contact Evening Phone: (xxx)-xxx-xxxx		Owner Evening Phone:	
Fax:	E-mail: xxxxxxxxxxxxxxxxxxxx	Fax:	E-mail: xxxxxxxxxxxxxxxxxxxx

WAC 246-290-420(9) requires that water systems provide 24-hour contact information for emergencies.

11. SATELLITE MANAGEMENT AGENCY - SMA (check only one)

- [x] Not applicable (Skip to #12)
- [ ] Owned and Managed
- [ ] Managed Only
- [ ] Owned Only

SMA NAME: _____ SMA Number:

12. WATER SYSTEM CHARACTERISTICS (mark all that apply)

- [ ] Agricultural
- [ ] Commercial / Business
- [ ] Day Care
- [x] Food Service/Food Permit
- [ ] 1,000 or more person event for 2 or more days per year
- [ ] Hospital/Clinic
- [ ] Industrial
- [ ] Licensed Residential Facility
- [ ] Lodging
- [x] Recreational / RV Park
- [ ] Residential
- [ ] School
- [ ] Temporary Farm Worker
- [ ] Other (church, fire station, etc.): _____

13. WATER SYSTEM OWNERSHIP (mark only one)

- [ ] Association
- [ ] City / Town
- [ ] County
- [ ] Federal
- [ ] Investor
- [x] Private
- [ ] Special District
- [ ] State

14. STORAGE CAPACITY (gallons)

15	16	17	18 SOURCE CATEGORY										19 USE			20	21 TREATMENT						22	23	24 SOURCE LOCATION			
Source Number	LIST UTILITY'S NAME FOR SOURCE AND WELL TAG ID NUMBER. Example: WELL #1 XYZ456 IF SOURCE IS PURCHASED OR INTERTIED, LIST SELLER'S NAME Example: SEATTLE	INTERTIE SYSTEM ID NUMBER	WELL	WELL FIELD	WELL IN A WELL FIELD	SPRING	SPRING FIELD	SPRING IN SPRINGFIELD	SEA WATER	SURFACE WATER	RANNEY / INF. GALLERY	OTHER	PERMANENT	SEASONAL	EMERGENCY	SOURCE METERED	NONE	CHLORINATION	FILTRATION	FLUORIDATION	IRRADIATION (UV)	OTHER	DEPTH TO FIRST OPEN INTERVAL IN FEET	CAPACITY (GALLONS PER MINUTE)	1/4, 1/4 SECTION	SECTION NUMBER	TOWNSHIP	RANGE
S01	AGA513 WELL		X										X			Y	X						135	15	NE NW	13	29N	02E

WATER FACILITIES INVENTORY (WFI) FORM - Continued

1. SYSTEM ID NO.	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
00912 E	WHIDBEY ISLAND EAGLES #3418	ISLAND	A	TNC

	ACTIVE SERVICE CONNECTIONS	DOH USE ONLY! CALCULATED ACTIVE CONNECTIONS	DOH USE ONLY! APPROVED CONNECTIONS
25. SINGLE FAMILY RESIDENCES (How many of the following do you have?)		0	Undetermined
A. Full Time Single Family Residences (Occupied 180 days or more per year)	0		
B. Part Time Single Family Residences (Occupied less than 180 days per year)	0		
26. MULTI-FAMILY RESIDENTIAL BUILDINGS (How many of the following do you have?)			
A. Apartment Buildings, condos, duplexes, barracks, dorms	0		
B. Full Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied more than 180 days/year	0		
C. Part Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied less than 180 days/year	0		
27. NON-RESIDENTIAL CONNECTIONS (How many of the following do you have?)			
A. Recreational Services and/or Transient Accommodations (Campsites, RV sites, hotel/motel/overnight units)	4	4	
B. Institutional, Commercial/Business, School, Day Care, Industrial Services, etc.	1	1	
28. TOTAL SERVICE CONNECTIONS		5	

29. FULL-TIME RESIDENTIAL POPULATION

A. How many residents are served by this system 180 or more days per year? 0

30. PART-TIME RESIDENTIAL POPULATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many part-time residents are present each month?						2	2	2	2			
B. How many days per month are they present?						8	8	8	8			

31. TEMPORARY & TRANSIENT USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many total visitors, attendees, travelers, campers, patients or customers have access to the water system each month?	1240	1120	1240	1200	1240	1200	1240	1240	1200	1240	1240	1240
B. How many days per month is water accessible to the public?	31	28	31	30	31	30	31	31	30	31	30	31

32. REGULAR NON-RESIDENTIAL USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. If you have schools, daycares, or businesses connected to your water system, how many students daycare children and/or employees are present each month?	3	3	3	3	4	4	4	4	4	4	4	4
B. How many days per month are they present?	31	28	31	30	31	30	31	31	30	31	30	31

33. ROUTINE COLIFORM SCHEDULE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
* Requirement is exception from WAC 246-290	1	1	1	1	1	1	1	1	1	1	1	1

34. NITRATE SCHEDULE	QUARTERLY	ANNUALLY	ONCE EVERY 3 YEARS
(One Sample per source by time period)		S01	

35. Reason for Submitting WFI:

☐ Update - Change ☐ Update - No Change ☐ Inactivate ☐ Re-Activate ☐ Name Change ☐ New System ☐ Other _____

36. I certify that the information stated on this WFI form is correct to the best of my knowledge.

SIGNATURE: _____ **DATE:** _____

PRINT NAME: _____ **TITLE:** _____

Washington State Department of Health
Division of Environmental Health
Office of Drinking Water

WATER FACILITIES INVENTORY (WFI) FORM

ONE FORM PER SYSTEM

Quarter: 2
Updated: 04/13/2017
Printed: 9/21/2017
WFI Printed For: On-Demand
Submission Reason: SMA Update

RETURN TO: Central Services - WFI, PO Box 47822, Olympia, WA, 98504-7822

1. SYSTEM ID NO.	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
05535 A	BAYVIEW BEACH WATER DISTRICT	ISLAND	A	Comm

6. PRIMARY CONTACT NAME & MAILING ADDRESS

ANDY M. CAMPBELL [MANAGER]
PO BOX 1202
FREELAND, WA 98249

7. OWNER NAME & MAILING ADDRESS

BAYVIEW BEACH WATER DIST
SANDY DUNCAN DISTRICT CLERK
PO BOX 667
FREELAND, WA 98249

8. OWNER NUMBER: 010437

STREET ADDRESS IF DIFFERENT FROM ABOVE

ATTN
ADDRESS
CITY STATE ZIP

STREET ADDRESS IF DIFFERENT FROM ABOVE

ATTN ATTN SANDY DUNCAN
ADDRESS 5492 S HARBOR AVE
CITY FREELAND STATE WA ZIP 98249

9. 24 HOUR PRIMARY CONTACT INFORMATION

Primary Contact Daytime Phone: (360) 579-1956
Primary Contact Mobile/Cell Phone: (425) 335-9396
Primary Contact Evening Phone:
Fax: (360) 579-2058 E-mail: xxxxxxxxxxxxxxxxxxx

10. OWNER CONTACT INFORMATION

Owner Daytime Phone: (360) 331-4522
Owner Mobile/Cell Phone:
Owner Evening Phone:
Fax: (360) 331-7525 E-mail: xxxxxxxxxxxxxxxxxxx

WAC 246-290-420(9) requires that water systems provide 24-hour contact information for emergencies.

11. SATELLITE MANAGEMENT AGENCY - SMA (check only one)

- [x] Not applicable (Skip to #12)
- [ ] Owned and Managed
- [ ] Managed Only
- [ ] Owned Only

SMA NAME: _____ SMA Number:

12. WATER SYSTEM CHARACTERISTICS (mark all that apply)

- [ ] Agricultural
- [ ] Commercial / Business
- [ ] Day Care
- [ ] Food Service/Food Permit
- [ ] 1,000 or more person event for 2 or more days per year
- [ ] Hospital/Clinic
- [ ] Industrial
- [ ] Licensed Residential Facility
- [ ] Lodging
- [ ] Recreational / RV Park
- [x] Residential
- [ ] School
- [ ] Temporary Farm Worker
- [ ] Other (church, fire station, etc.): _____

13. WATER SYSTEM OWNERSHIP (mark only one)

- [ ] Association
- [ ] City / Town
- [ ] County
- [ ] Federal
- [ ] Investor
- [ ] Private
- [x] Special District
- [ ] State

14. STORAGE CAPACITY (gallons)

420,700

15	16	17	18 SOURCE CATEGORY										19 USE			20	21 TREATMENT						22	23	24 SOURCE LOCATION			
Source Number	SOURCE NAME LIST UTILITY'S NAME FOR SOURCE AND WELL TAG ID NUMBER. Example: WELL #1 XYZ456 IF SOURCE IS PURCHASED OR INTERTIED, LIST SELLER'S NAME Example: SEATTLE	INTERTIE SYSTEM ID NUMBER	WELL	WELL FIELD	WELL IN A WELL FIELD	SPRING	SPRING FIELD	SPRING IN SPRINGFIELD	SEA WATER	SURFACE WATER	RANNEY / INF. GALLERY	OTHER	PERMANENT	SEASONAL	EMERGENCY	SOURCE METERED	NONE	CHLORINATION	FILTRATION	FLUORIDATION	IRRADIATION (UV)	OTHER	DEPTH TO FIRST OPEN INTERVAL IN FEET	CAPACITY (GALLONS PER MINUTE)	1/4, 1/4 SECTION	SECTION NUMBER	TOWNSHIP	RANGE
S01	Well 1		X										X			Y		X	X				123	93	NW SE	23	29N	02E
S02	AGA902 Well 2				X								X			Y		X	X				156	164	NW NW	18	29N	03E
S03	AGA911 Well 3				X								X			Y		X	X				149	155	NW NW	18	29N	03E
S04	Wells 2 & 3			X									X			Y		X	X				164	319	NW NW	18	29N	03E
S05	InAct 11/25/1996 AGA825 Well 4		X												X	Y	X						166	0	SW SE	23	29N	02E

WATER FACILITIES INVENTORY (WFI) FORM - Continued

1. SYSTEM ID NO.	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
05535 A	BAYVIEW BEACH WATER DISTRICT	ISLAND	A	Comm

	ACTIVE SERVICE CONNECTIONS	DOH USE ONLY! CALCULATED ACTIVE CONNECTIONS	DOH USE ONLY! APPROVED CONNECTIONS
25. SINGLE FAMILY RESIDENCES (How many of the following do you have?)		444	550
A. Full Time Single Family Residences (Occupied 180 days or more per year)	340		
B. Part Time Single Family Residences (Occupied less than 180 days per year)	80		
26. MULTI-FAMILY RESIDENTIAL BUILDINGS (How many of the following do you have?)			
A. Apartment Buildings, condos, duplexes, barracks, dorms	2		
B. Full Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied more than 180 days/year	21		
C. Part Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied less than 180 days/year	3		
27. NON-RESIDENTIAL CONNECTIONS (How many of the following do you have?)			
A. Recreational Services and/or Transient Accommodations (Campsites, RV sites, hotel/motel/overnight units)	5	5	0
B. Institutional, Commercial/Business, School, Day Care, Industrial Services, etc.	2	2	0
28. TOTAL SERVICE CONNECTIONS		451	550

29. FULL-TIME RESIDENTIAL POPULATION

A. How many residents are served by this system 180 or more days per year? 950

30. PART-TIME RESIDENTIAL POPULATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many part-time residents are present each month?				80	80	80	80	80	80			
B. How many days per month are they present?				8	8	30	30	30	30			

31. TEMPORARY & TRANSIENT USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many total visitors, attendees, travelers, campers, patients or customers have access to the water system each month?												
B. How many days per month is water accessible to the public?												

32. REGULAR NON-RESIDENTIAL USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. If you have schools, daycares, or businesses connected to your water system, how many students daycare children and/or employees are present each month?												
B. How many days per month are they present?												

33. ROUTINE COLIFORM SCHEDULE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
* Requirement is exception from WAC 246-290	1	1	1	1	1	2	2	2	2	1	1	1

34. NITRATE SCHEDULE	QUARTERLY	ANNUALLY	ONCE EVERY 3 YEARS
(One Sample per source by time period)			

35. Reason for Submitting WFI:

☐ Update - Change ☐ Update - No Change ☐ Inactivate ☐ Re-Activate ☐ Name Change ☐ New System ☐ Other _____

36. I certify that the information stated on this WFI form is correct to the best of my knowledge.

SIGNATURE: _____ **DATE:** _____

PRINT NAME: _____ **TITLE:** _____

Washington State Department of Health
Division of Environmental Health
Office of Drinking Water

WATER FACILITIES INVENTORY (WFI) FORM

ONE FORM PER SYSTEM

Quarter: 3
Updated: 10/24/2016
Printed: 9/21/2017
WFI Printed For: On-Demand
Submission Reason: Contact Update

RETURN TO: Central Services - WFI, PO Box 47822, Olympia, WA, 98504-7822

1. SYSTEM ID NO.	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
08123 P	BRADSHAW ADDITION WATER SYSTEM	ISLAND	A	TNC

6. PRIMARY CONTACT NAME & MAILING ADDRESS

SANDRA V. BODAMER [CONTACT]
KING WATER CO
PO BOX 2243
OAK HARBOR, WA 98277

7. OWNER NAME & MAILING ADDRESS

BRADSHAW ADDITION WS OWNERS
BOB CASALE
ATTN: KING WATER CO
PO BOX 2243
OAK HARBOR, WA 98277

OWNER CONTACT

8. OWNER NUMBER: 000610

STREET ADDRESS IF DIFFERENT FROM ABOVE

ATTN KING WATER CO.
ADDRESS 107 SOUTH MAIN ST.
CITY COUPEVILLE STATE WA ZIP 98239

STREET ADDRESS IF DIFFERENT FROM ABOVE

ATTN
ADDRESS
CITY STATE ZIP

9. 24 HOUR PRIMARY CONTACT INFORMATION

Primary Contact Daytime Phone: (360) 678-5336
Primary Contact Mobile/Cell Phone: (360) 969-1019
Primary Contact Evening Phone: (xxx)-xxx-xxxx
Fax: (360) 678-8302
E-mail: xxxxxxxxxxxxxxxxxxx

10. OWNER CONTACT INFORMATION

Owner Daytime Phone: (206) 799-8267
Owner Mobile/Cell Phone:
Owner Evening Phone:
Fax:
E-mail: xxxxxxxxxxxxxxxxxxx

WAC 246-290-420(9) requires that water systems provide 24-hour contact information for emergencies.

11. SATELLITE MANAGEMENT AGENCY - SMA (check only one)

- ☐ Not applicable (Skip to #12)
- ☐ Owned and Managed
- ☒ Managed Only
- ☐ Owned Only

SMA NAME: KING WATER COMPANY SMA Number: 128

12. WATER SYSTEM CHARACTERISTICS (mark all that apply)

- ☐ Agricultural
- ☐ Commercial / Business
- ☐ Day Care
- ☐ Food Service/Food Permit
- ☐ 1,000 or more person event for 2 or more days per year
- ☐ Hospital/Clinic
- ☐ Industrial
- ☐ Licensed Residential Facility
- ☐ Lodging
- ☐ Recreational / RV Park
- ☒ Residential
- ☐ School
- ☐ Temporary Farm Worker
- ☐ Other (church, fire station, etc.):

13. WATER SYSTEM OWNERSHIP (mark only one)

- ☒ Association
- ☐ City / Town
- ☐ County
- ☐ Federal
- ☐ Investor
- ☐ Private
- ☐ Special District
- ☐ State

14. STORAGE CAPACITY (gallons)

15	16	17	18 SOURCE CATEGORY										19 USE			20	21 TREATMENT						22	23	24 SOURCE LOCATION			
Source Number	SOURCE NAME LIST UTILITY'S NAME FOR SOURCE AND WELL TAG ID NUMBER. Example: WELL #1 XYZ456 IF SOURCE IS PURCHASED OR INTERTIED, LIST SELLER'S NAME Example: SEATTLE	INTERTIE SYSTEM ID NUMBER	WELL	WELL FIELD	WELL IN A WELL FIELD	SPRING	SPRING FIELD	SPRING IN SPRINGFIELD	SEA WATER	SURFACE WATER	RANNEY / INF. GALLERY	OTHER	PERMANENT	SEASONAL	EMERGENCY	SOURCE METERED	NONE	CHLORINATION	FILTRATION	FLUORIDATION	IRRADIATION (UV)	OTHER	DEPTH TO FIRST OPEN INTERVAL IN FEET	CAPACITY (GALLONS PER MINUTE)	1/4, 1/4 SECTION	SECTION NUMBER	TOWNSHIP	RANGE
S01	WELL #1 APR766		X										X			Y	X						370	25	SW NE	03	29N	02E

WATER FACILITIES INVENTORY (WFI) FORM - Continued

1. SYSTEM ID NO.	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
08123 P	BRADSHAW ADDITION WATER SYSTEM	ISLAND	A	TNC

	ACTIVE SERVICE CONNECTIONS	DOH USE ONLY! CALCULATED ACTIVE CONNECTIONS	DOH USE ONLY! APPROVED CONNECTIONS
25. SINGLE FAMILY RESIDENCES (How many of the following do you have?)		15	Undetermined
A. Full Time Single Family Residences (Occupied 180 days or more per year)	10		
B. Part Time Single Family Residences (Occupied less than 180 days per year)	5		
26. MULTI-FAMILY RESIDENTIAL BUILDINGS (How many of the following do you have?)			
A. Apartment Buildings, condos, duplexes, barracks, dorms	0		
B. Full Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied more than 180 days/year	0		
C. Part Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied less than 180 days/year	0		
27. NON-RESIDENTIAL CONNECTIONS (How many of the following do you have?)			
A. Recreational Services and/or Transient Accommodations (Campsites, RV sites, hotel/motel/overnight units)	0	0	
B. Institutional, Commercial/Business, School, Day Care, Industrial Services, etc.	0	0	
28. TOTAL SERVICE CONNECTIONS		15	

29. FULL-TIME RESIDENTIAL POPULATION

A. How many residents are served by this system 180 or more days per year? 10

30. PART-TIME RESIDENTIAL POPULATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many part-time residents are present each month?												
B. How many days per month are they present?												

31. TEMPORARY & TRANSIENT USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many total visitors, attendees, travelers, campers, patients or customers have access to the water system each month?	4	4	4	4	4	4	4	4	4	4	4	4
B. How many days per month is water accessible to the public?	1	1	1	1	1	1	1	1	1	1	1	1

32. REGULAR NON-RESIDENTIAL USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. If you have schools, daycares, or businesses connected to your water system, how many students daycare children and/or employees are present each month?												
B. How many days per month are they present?												

33. ROUTINE COLIFORM SCHEDULE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
* Requirement is exception from WAC 246-290	1	0	0	1	0	0	1	0	0	1	0	0

34. NITRATE SCHEDULE	QUARTERLY	ANNUALLY	ONCE EVERY 3 YEARS
(One Sample per source by time period)		S01	

35. Reason for Submitting WFI:

☐ Update - Change ☐ Update - No Change ☐ Inactivate ☐ Re-Activate ☐ Name Change ☐ New System ☐ Other _____

36. I certify that the information stated on this WFI form is correct to the best of my knowledge.

SIGNATURE: _____ **DATE:** _____

PRINT NAME: _____ **TITLE:** _____

Washington State Department of Health
Division of Environmental Health
Office of Drinking Water

WATER FACILITIES INVENTORY (WFI) FORM

ONE FORM PER SYSTEM

Quarter: 2
Updated: 07/05/2016
Printed: 9/21/2017
WFI Printed For: On-Demand
Submission Reason: No Change

RETURN TO: Central Services - WFI, PO Box 47822, Olympia, WA, 98504-7822

1. SYSTEM ID NO.	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
18575 K	DEL BAY	ISLAND	A	Comm

6. PRIMARY CONTACT NAME & MAILING ADDRESS

SANDRA V. BODAMER [CONTACT]
KING WATER CO
PO BOX 2243
OAK HARBOR, WA 98277

7. OWNER NAME & MAILING ADDRESS

DEL BAY INC
ROY BENSON PRESIDENT
5553 MUTINY SANDS DR
FREELAND, WA 98249

8. OWNER NUMBER: 001463

STREET ADDRESS IF DIFFERENT FROM ABOVE

ATTN KING WATER CO.
ADDRESS 107 SOUTH MAIN ST.
CITY COUPEVILLE STATE WA ZIP 98239

STREET ADDRESS IF DIFFERENT FROM ABOVE

ATTN
ADDRESS
CITY STATE ZIP

9. 24 HOUR PRIMARY CONTACT INFORMATION

Primary Contact Daytime Phone: (360) 678-5336
Primary Contact Mobile/Cell Phone: (360) 969-1019
Primary Contact Evening Phone: (xxx)-xxx-xxxx
Fax: (360) 678-8302 E-mail: xxxxxxxxxxxxxxxxxxx

10. OWNER CONTACT INFORMATION

Owner Daytime Phone: (360) 331-3173
Owner Mobile/Cell Phone:
Owner Evening Phone:
Fax: E-mail: xxxxxxxxxxxxxxxxxxx

WAC 246-290-420(9) requires that water systems provide 24-hour contact information for emergencies.

11. SATELLITE MANAGEMENT AGENCY - SMA (check only one)

- ☐ Not applicable (Skip to #12)
- ☐ Owned and Managed
- ☒ Managed Only
- ☐ Owned Only

SMA NAME: KING WATER COMPANY SMA Number: 128

12. WATER SYSTEM CHARACTERISTICS (mark all that apply)

- ☐ Agricultural
- ☐ Commercial / Business
- ☐ Day Care
- ☐ Food Service/Food Permit
- ☐ 1,000 or more person event for 2 or more days per year
- ☐ Hospital/Clinic
- ☐ Industrial
- ☐ Licensed Residential Facility
- ☐ Lodging
- ☐ Recreational / RV Park
- ☒ Residential
- ☐ School
- ☐ Temporary Farm Worker
- ☐ Other (church, fire station, etc.):

13. WATER SYSTEM OWNERSHIP (mark only one)

- ☒ Association
- ☐ City / Town
- ☐ County
- ☐ Federal
- ☐ Investor
- ☐ Private
- ☐ Special District
- ☐ State

14. STORAGE CAPACITY (gallons)

68,000

15	16	17	18 SOURCE CATEGORY										19 USE			20	21 TREATMENT						22	23	24 SOURCE LOCATION			
Source Number	SOURCE NAME LIST UTILITY'S NAME FOR SOURCE AND WELL TAG ID NUMBER. Example: WELL #1 XYZ456 IF SOURCE IS PURCHASED OR INTERTIED, LIST SELLER'S NAME Example: SEATTLE	INTERTIE SYSTEM ID NUMBER	WELL	WELL FIELD	WELL IN A WELL FIELD	SPRING	SPRING FIELD	SPRING IN SPRINGFIELD	SEA WATER	SURFACE WATER	RANNEY / INF. GALLERY	OTHER	PERMANENT	SEASONAL	EMERGENCY	SOURCE METERED	NONE	CHLORINATION	FILTRATION	FLUORIDATION	IRRADIATION (UV)	OTHER	DEPTH TO FIRST OPEN INTERVAL IN FEET	CAPACITY (GALLONS PER MINUTE)	1/4, 1/4 SECTION	SECTION NUMBER	TOWNSHIP	RANGE
S01	AGA812 WELL 1		X										X			Y		X					214	38	NW SE	09	29N	02E

WATER FACILITIES INVENTORY (WFI) FORM - Continued

1. SYSTEM ID NO.	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
18575 K	DEL BAY	ISLAND	A	Comm

	ACTIVE SERVICE CONNECTIONS	DOH USE ONLY! CALCULATED ACTIVE CONNECTIONS	DOH USE ONLY! APPROVED CONNECTIONS
25. SINGLE FAMILY RESIDENCES (How many of the following do you have?)		36	43
A. Full Time Single Family Residences (Occupied 180 days or more per year)	36		
B. Part Time Single Family Residences (Occupied less than 180 days per year)	0		
26. MULTI-FAMILY RESIDENTIAL BUILDINGS (How many of the following do you have?)			
A. Apartment Buildings, condos, duplexes, barracks, dorms	0		
B. Full Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied more than 180 days/year	0		
C. Part Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied less than 180 days/year	0		
27. NON-RESIDENTIAL CONNECTIONS (How many of the following do you have?)			
A. Recreational Services and/or Transient Accommodations (Campsites, RV sites, hotel/motel/overnight units)	0	0	0
B. Institutional, Commercial/Business, School, Day Care, Industrial Services, etc.	0	0	0
28. TOTAL SERVICE CONNECTIONS		36	43

29. FULL-TIME RESIDENTIAL POPULATION

A. How many residents are served by this system 180 or more days per year? 50

30. PART-TIME RESIDENTIAL POPULATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many part-time residents are present each month?												
B. How many days per month are they present?												

31. TEMPORARY & TRANSIENT USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many total visitors, attendees, travelers, campers, patients or customers have access to the water system each month?												
B. How many days per month is water accessible to the public?												

32. REGULAR NON-RESIDENTIAL USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. If you have schools, daycares, or businesses connected to your water system, how many students daycare children and/or employees are present each month?												
B. How many days per month are they present?												

33. ROUTINE COLIFORM SCHEDULE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
* Requirement is exception from WAC 246-290	1	1	1	1	1	1	1	1	1	1	1	1

34. NITRATE SCHEDULE	QUARTERLY	ANNUALLY	ONCE EVERY 3 YEARS
(One Sample per source by time period)			

35. Reason for Submitting WFI:

☐ Update - Change ☐ Update - No Change ☐ Inactivate ☐ Re-Activate ☐ Name Change ☐ New System ☐ Other _____

36. I certify that the information stated on this WFI form is correct to the best of my knowledge.

SIGNATURE: _____ **DATE:** _____

PRINT NAME: _____ **TITLE:** _____

Washington State Department of Health
Division of Environmental Health
Office of Drinking Water

WATER FACILITIES INVENTORY (WFI) FORM

ONE FORM PER SYSTEM

Quarter: 2
Updated: 02/14/2014
Printed: 9/21/2017
WFI Printed For: On-Demand
Submission Reason: No Change

RETURN TO: Central Services - WFI, PO Box 47822, Olympia, WA, 98504-7822

1. SYSTEM ID NO.	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
34005 X	HONEYMOON LAKE	ISLAND	A	Comm

6. PRIMARY CONTACT NAME & MAILING ADDRESS

TERRY E. LEHMAN [CERTIFIED OPERATOR]
PO BOX 549
FREELAND, WA 98249

7. OWNER NAME & MAILING ADDRESS

HONEYMOON LAKE COMMUNITY CLUB
LEE MILES PRESIDENT
PO BOX 611
FREELAND, WA 98249

8. OWNER NUMBER: 002627

STREET ADDRESS IF DIFFERENT FROM ABOVE

ATTN
ADDRESS 4364 WALDEN LOOP
CITY GREENBANK STATE WA ZIP 98253

STREET ADDRESS IF DIFFERENT FROM ABOVE

ATTN
ADDRESS 4343 HONEYMOON BAY RD
CITY GREENBANK STATE WA ZIP 98253

9. 24 HOUR PRIMARY CONTACT INFORMATION

Primary Contact Daytime Phone: (360) 331-4016
Primary Contact Mobile/Cell Phone: (360) 661-2248
Primary Contact Evening Phone: (360) 331-7163
Fax: (360) 331-2374
E-mail: xxxxxxxxxxxxxxxxxxx

10. OWNER CONTACT INFORMATION

Owner Daytime Phone: (360) 331-7956
Owner Mobile/Cell Phone:
Owner Evening Phone: (xxx)-xxx-xxxx
Fax:
E-mail: xxxxxxxxxxxxxxxxxxx

WAC 246-290-420(9) requires that water systems provide 24-hour contact information for emergencies.

11. SATELLITE MANAGEMENT AGENCY - SMA (check only one)

- [x] Not applicable (Skip to #12)
- [ ] Owned and Managed
- [ ] Managed Only
- [ ] Owned Only

SMA NAME: _____ SMA Number:

12. WATER SYSTEM CHARACTERISTICS (mark all that apply)

- [ ] Agricultural
- [ ] Commercial / Business
- [ ] Day Care
- [ ] Food Service/Food Permit
- [ ] 1,000 or more person event for 2 or more days per year
- [ ] Hospital/Clinic
- [ ] Industrial
- [ ] Licensed Residential Facility
- [ ] Lodging
- [ ] Recreational / RV Park
- [x] Residential
- [ ] School
- [ ] Temporary Farm Worker
- [ ] Other (church, fire station, etc.): _____

13. WATER SYSTEM OWNERSHIP (mark only one)

- [x] Association
- [ ] City / Town
- [ ] County
- [ ] Federal
- [ ] Investor
- [ ] Private
- [ ] Special District
- [ ] State

14. STORAGE CAPACITY (gallons)

150,000

15	16	17	18 SOURCE CATEGORY										19 USE			20	21 TREATMENT						22	23	24 SOURCE LOCATION			
Source Number	SOURCE NAME LIST UTILITY'S NAME FOR SOURCE AND WELL TAG ID NUMBER. Example: WELL #1 XYZ456 IF SOURCE IS PURCHASED OR INTERTIED, LIST SELLER'S NAME Example: SEATTLE	INTERTIE SYSTEM ID NUMBER	WELL	WELL FIELD	WELL IN A WELL FIELD	SPRING	SPRING FIELD	SPRING IN SPRINGFIELD	SEA WATER	SURFACE WATER	RANNEY / INF. GALLERY	OTHER	PERMANENT	SEASONAL	EMERGENCY	SOURCE METERED	NONE	CHLORINATION	FILTRATION	FLUORIDATION	IRRADIATION (UV)	OTHER	DEPTH TO FIRST OPEN INTERVAL IN FEET	CAPACITY (GALLONS PER MINUTE)	1/4, 1/4 SECTION	SECTION NUMBER	TOWNSHIP	RANGE
S01	(AGA949) WELL #1		X										X			Y	X						131	120	SW SE	33	30N	02E

WATER FACILITIES INVENTORY (WFI) FORM - Continued

1. SYSTEM ID NO.	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
34005 X	HONEYMOON LAKE	ISLAND	A	Comm

	ACTIVE SERVICE CONNECTIONS	DOH USE ONLY! CALCULATED ACTIVE CONNECTIONS	DOH USE ONLY! APPROVED CONNECTIONS
25. SINGLE FAMILY RESIDENCES (How many of the following do you have?)		82	151
A. Full Time Single Family Residences (Occupied 180 days or more per year)	82		
B. Part Time Single Family Residences (Occupied less than 180 days per year)	0		
26. MULTI-FAMILY RESIDENTIAL BUILDINGS (How many of the following do you have?)			
A. Apartment Buildings, condos, duplexes, barracks, dorms	0		
B. Full Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied more than 180 days/year	0		
C. Part Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied less than 180 days/year	0		
27. NON-RESIDENTIAL CONNECTIONS (How many of the following do you have?)			
A. Recreational Services and/or Transient Accommodations (Campsites, RV sites, hotel/motel/overnight units)	0	0	0
B. Institutional, Commercial/Business, School, Day Care, Industrial Services, etc.	1	1	0
28. TOTAL SERVICE CONNECTIONS		83	151

29. FULL-TIME RESIDENTIAL POPULATION

A. How many residents are served by this system 180 or more days per year? 180

30. PART-TIME RESIDENTIAL POPULATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many part-time residents are present each month?												
B. How many days per month are they present?												

31. TEMPORARY & TRANSIENT USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many total visitors, attendees, travelers, campers, patients or customers have access to the water system each month?	40	40	40	40	60	100	100	100	100	40	40	40
B. How many days per month is water accessible to the public?	4	4	4	4	4	20	30	30	30	4	4	4

32. REGULAR NON-RESIDENTIAL USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. If you have schools, daycares, or businesses connected to your water system, how many students daycare children and/or employees are present each month?												
B. How many days per month are they present?												

33. ROUTINE COLIFORM SCHEDULE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
* Requirement is exception from WAC 246-290	1	1	1	1	1	1	1	1	1	1	1	1

34. NITRATE SCHEDULE	QUARTERLY	ANNUALLY	ONCE EVERY 3 YEARS
(One Sample per source by time period)			

35. Reason for Submitting WFI:

☐ Update - Change ☐ Update - No Change ☐ Inactivate ☐ Re-Activate ☐ Name Change ☐ New System ☐ Other _____

36. I certify that the information stated on this WFI form is correct to the best of my knowledge.

SIGNATURE: _____ **DATE:** _____

PRINT NAME: _____ **TITLE:** _____

Washington State Department of Health
Division of Environmental Health
Office of Drinking Water

WATER FACILITIES INVENTORY (WFI) FORM

ONE FORM PER SYSTEM

Quarter: 2
Updated: 02/27/2017
Printed: 9/21/2017
WFI Printed For: On-Demand
Submission Reason: No Change

RETURN TO: Central Services - WFI, PO Box 47822, Olympia, WA, 98504-7822

1. SYSTEM ID NO.	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
57740 J	MUTINY BAY PARK WATER ASSOCIATION	ISLAND	A	Comm

6. PRIMARY CONTACT NAME & MAILING ADDRESS

SANDRA V. BODAMER [CONTACT]
KING WATER CO
PO BOX 2243
OAK HARBOR, WA 98277

7. OWNER NAME & MAILING ADDRESS

MUTINY BAY PARK WATER ASSOC.
NANCY PARKER PRESIDENT
PO BOX 963
FREELAND, WA 98249

8. OWNER NUMBER: 003971

STREET ADDRESS IF DIFFERENT FROM ABOVE

ATTN KING WATER CO.
ADDRESS 107 SOUTH MAIN ST.
CITY COUPEVILLE STATE WA ZIP 98239

STREET ADDRESS IF DIFFERENT FROM ABOVE

ATTN
ADDRESS 5262 BOUNTY LOOP
CITY FREELAND STATE WA ZIP 98249

9. 24 HOUR PRIMARY CONTACT INFORMATION

Primary Contact Daytime Phone: (360) 678-5336
Primary Contact Mobile/Cell Phone: (360) 969-1019
Primary Contact Evening Phone: (xxx)-xxx-xxxx
Fax: (360) 678-8302 E-mail: xxxxxxxxxxxxxxxxxxx

10. OWNER CONTACT INFORMATION

Owner Daytime Phone: (360) 331-3994
Owner Mobile/Cell Phone:
Owner Evening Phone:
Fax: E-mail: xxxxxxxxxxxxxxxxxxx

WAC 246-290-420(9) requires that water systems provide 24-hour contact information for emergencies.

11. SATELLITE MANAGEMENT AGENCY - SMA (check only one)

- ☐ Not applicable (Skip to #12)
- ☐ Owned and Managed
- ☒ Managed Only
- ☐ Owned Only

SMA NAME: KING WATER COMPANY SMA Number: 128

12. WATER SYSTEM CHARACTERISTICS (mark all that apply)

- ☐ Agricultural
- ☐ Commercial / Business
- ☐ Day Care
- ☐ Food Service/Food Permit
- ☐ 1,000 or more person event for 2 or more days per year
- ☐ Hospital/Clinic
- ☐ Industrial
- ☐ Licensed Residential Facility
- ☐ Lodging
- ☐ Recreational / RV Park
- ☒ Residential
- ☐ School
- ☐ Temporary Farm Worker
- ☒ Other (church, fire station, etc.):

13. WATER SYSTEM OWNERSHIP (mark only one)

- ☐ Association
- ☐ City / Town
- ☐ County
- ☐ Federal
- ☐ Investor
- ☒ Private
- ☐ Special District
- ☐ State

14. STORAGE CAPACITY (gallons)

36,000

15	16	17	18 SOURCE CATEGORY										19 USE			20	21 TREATMENT						22	23	24 SOURCE LOCATION			
Source Number	SOURCE NAME LIST UTILITY'S NAME FOR SOURCE AND WELL TAG ID NUMBER. Example: WELL #1 XYZ456 IF SOURCE IS PURCHASED OR INTERTIED, LIST SELLER'S NAME Example: SEATTLE	INTERTIE SYSTEM ID NUMBER	WELL	WELL FIELD	WELL IN A WELL FIELD	SPRING	SPRING FIELD	SPRING IN SPRINGFIELD	SEA WATER	SURFACE WATER	RANNEY / INF. GALLERY	OTHER	PERMANENT	SEASONAL	EMERGENCY	SOURCE METERED	NONE	CHLORINATION	FILTRATION	FLUORIDATION	IRRADIATION (UV)	OTHER	DEPTH TO FIRST OPEN INTERVAL IN FEET	CAPACITY (GALLONS PER MINUTE)	1/4, 1/4 SECTION	SECTION NUMBER	TOWNSHIP	RANGE
S01	WELL 1 AGA587		X										X			Y	X						157	45	SE NW	04	29N	02E

WATER FACILITIES INVENTORY (WFI) FORM - Continued

1. SYSTEM ID NO.	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
57740 J	MUTINY BAY PARK WATER ASSOCIATION	ISLAND	A	Comm

	ACTIVE SERVICE CONNECTIONS	DOH USE ONLY! CALCULATED ACTIVE CONNECTIONS	DOH USE ONLY! APPROVED CONNECTIONS
25. SINGLE FAMILY RESIDENCES (How many of the following do you have?)		40	43
A. Full Time Single Family Residences (Occupied 180 days or more per year)	40		
B. Part Time Single Family Residences (Occupied less than 180 days per year)	0		
26. MULTI-FAMILY RESIDENTIAL BUILDINGS (How many of the following do you have?)			
A. Apartment Buildings, condos, duplexes, barracks, dorms	0		
B. Full Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied more than 180 days/year	0		
C. Part Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied less than 180 days/year	0		
27. NON-RESIDENTIAL CONNECTIONS (How many of the following do you have?)			
A. Recreational Services and/or Transient Accommodations (Campsites, RV sites, hotel/motel/overnight units)	0	0	0
B. Institutional, Commercial/Business, School, Day Care, Industrial Services, etc.	1	1	0
28. TOTAL SERVICE CONNECTIONS		41	43

29. FULL-TIME RESIDENTIAL POPULATION

A. How many residents are served by this system 180 or more days per year? 76

30. PART-TIME RESIDENTIAL POPULATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many part-time residents are present each month?												
B. How many days per month are they present?												

31. TEMPORARY & TRANSIENT USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many total visitors, attendees, travelers, campers, patients or customers have access to the water system each month?	400	400	400	400	400	400	400	400	400	400	400	400
B. How many days per month is water accessible to the public?	5	5	5	5	5	5	5	5	5	5	5	5

32. REGULAR NON-RESIDENTIAL USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. If you have schools, daycares, or businesses connected to your water system, how many students daycare children and/or employees are present each month?												
B. How many days per month are they present?												

33. ROUTINE COLIFORM SCHEDULE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
* Requirement is exception from WAC 246-290	1	1	1	1	1	1	1	1	1	1	1	1

34. NITRATE SCHEDULE	QUARTERLY	ANNUALLY	ONCE EVERY 3 YEARS
(One Sample per source by time period)			

35. Reason for Submitting WFI:

☐ Update - Change ☐ Update - No Change ☐ Inactivate ☐ Re-Activate ☐ Name Change ☐ New System ☐ Other _____

36. I certify that the information stated on this WFI form is correct to the best of my knowledge.

SIGNATURE: _____ **DATE:** _____

PRINT NAME: _____ **TITLE:** _____

Washington State Department of Health
Division of Environmental Health
Office of Drinking Water

WATER FACILITIES INVENTORY (WFI) FORM

ONE FORM PER SYSTEM

Quarter: 3
Updated: 08/29/2014
Printed: 9/21/2017
WFI Printed For: On-Demand
Submission Reason: No Change

RETURN TO: Central Services - WFI, PO Box 47822, Olympia, WA, 98504-7822

1. SYSTEM ID NO.	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
57775 W	MUTINY BAY RIVIERA	ISLAND	A	TNC

6. PRIMARY CONTACT NAME & MAILING ADDRESS

SANDRA V. BODAMER [MANAGER]
KING WATER CO
PO BOX 2243
OAK HARBOR, WA 98277

7. OWNER NAME & MAILING ADDRESS | **8. OWNER NUMBER: 003973**

MUTINY BAY HOME OWNERS ASSOC
KEVIN HANCHETT PRESIDENT
ACORN PROPERTIES (MANAGEMENT)
32800 SR 20 SUITE 20
OAK HARBOR, WA 98277

STREET ADDRESS IF DIFFERENT FROM ABOVE

ATTN KING WATER CO.
ADDRESS 107 SOUTH MAIN ST.
CITY COUPEVILLE STATE WA ZIP 98239

STREET ADDRESS IF DIFFERENT FROM ABOVE

ATTN
ADDRESS
CITY STATE ZIP

9. 24 HOUR PRIMARY CONTACT INFORMATION

Primary Contact Daytime Phone: (360) 678-5336
Primary Contact Mobile/Cell Phone: (360) 969-1019
Primary Contact Evening Phone: (xxx)-xxx-xxxx
Fax: (360) 678-8302 E-mail: xxxxxxxxxxxxxxxxxxx

10. OWNER CONTACT INFORMATION

Owner Daytime Phone: (425) 771-9438
Owner Mobile/Cell Phone:
Owner Evening Phone:
Fax: E-mail: xxxxxxxxxxxxxxxxxxx

WAC 246-290-420(9) requires that water systems provide 24-hour contact information for emergencies.

11. SATELLITE MANAGEMENT AGENCY - SMA (check only one)

- ☐ Not applicable (Skip to #12)
- ☐ Owned and Managed
- ☒ Managed Only
- ☐ Owned Only

SMA NAME: KING WATER COMPANY SMA Number: 128

12. WATER SYSTEM CHARACTERISTICS (mark all that apply)

- ☐ Agricultural
- ☐ Commercial / Business
- ☐ Day Care
- ☐ Food Service/Food Permit
- ☐ 1,000 or more person event for 2 or more days per year
- ☐ Hospital/Clinic
- ☐ Industrial
- ☐ Licensed Residential Facility
- ☐ Lodging
- ☒ Recreational / RV Park
- ☐ Residential
- ☐ School
- ☐ Temporary Farm Worker
- ☐ Other (church, fire station, etc.):

13. WATER SYSTEM OWNERSHIP (mark only one)

- ☒ Association
- ☐ City / Town
- ☐ County
- ☐ Federal
- ☐ Investor
- ☐ Private
- ☐ Special District
- ☐ State

14. STORAGE CAPACITY (gallons)

30,000

15	16	17	18 SOURCE CATEGORY										19 USE			20	21 TREATMENT						22	23	24 SOURCE LOCATION			
Source Number	SOURCE NAME LIST UTILITY'S NAME FOR SOURCE AND WELL TAG ID NUMBER. Example: WELL #1 XYZ456 IF SOURCE IS PURCHASED OR INTERTIED, LIST SELLER'S NAME Example: SEATTLE	INTERTIE SYSTEM ID NUMBER	WELL	WELL FIELD	WELL IN A WELL FIELD	SPRING	SPRING FIELD	SPRING IN SPRINGFIELD	SEA WATER	SURFACE WATER	RANNEY / INF. GALLERY	OTHER	PERMANENT	SEASONAL	EMERGENCY	SOURCE METERED	NONE	CHLORINATION	FILTRATION	FLUORIDATION	IRRADIATION (UV)	OTHER	DEPTH TO FIRST OPEN INTERVAL IN FEET	CAPACITY (GALLONS PER MINUTE)	1/4, 1/4 SECTION	SECTION NUMBER	TOWNSHIP	RANGE
S01	InAct 03/03/1999 AGA782 WELL 1 Monit		X										X			N	X						112	6	SW SW	09	29N	02E
S02	AGA783 WELL 2		X										X			Y	X						126	12	SW SW	09	29N	02E
S03	InAct 03/03/1999 WELLS #1 & #2			X									X				X						103	18	SW SW	09	29N	02E

WATER FACILITIES INVENTORY (WFI) FORM - Continued

1. SYSTEM ID NO.	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
57775 W	MUTINY BAY RIVIERA	ISLAND	A	TNC

	ACTIVE SERVICE CONNECTIONS	DOH USE ONLY! CALCULATED ACTIVE CONNECTIONS	DOH USE ONLY! APPROVED CONNECTIONS
25. SINGLE FAMILY RESIDENCES (How many of the following do you have?)		29	33
A. Full Time Single Family Residences (Occupied 180 days or more per year)	0		
B. Part Time Single Family Residences (Occupied less than 180 days per year)	0		
26. MULTI-FAMILY RESIDENTIAL BUILDINGS (How many of the following do you have?)			
A. Apartment Buildings, condos, duplexes, barracks, dorms	3		
B. Full Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied more than 180 days/year	9		
C. Part Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied less than 180 days/year	20		
27. NON-RESIDENTIAL CONNECTIONS (How many of the following do you have?)			
A. Recreational Services and/or Transient Accommodations (Campsites, RV sites, hotel/motel/overnight units)	0	0	0
B. Institutional, Commercial/Business, School, Day Care, Industrial Services, etc.	1	1	0
28. TOTAL SERVICE CONNECTIONS		30	33

29. FULL-TIME RESIDENTIAL POPULATION

A. How many residents are served by this system 180 or more days per year? 8

30. PART-TIME RESIDENTIAL POPULATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many part-time residents are present each month?												
B. How many days per month are they present?												

31. TEMPORARY & TRANSIENT USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many total visitors, attendees, travelers, campers, patients or customers have access to the water system each month?	186	168	186	180	465	450	465	465	450	186	186	186
B. How many days per month is water accessible to the public?	31	28	31	30	31	30	31	31	30	31	31	31

32. REGULAR NON-RESIDENTIAL USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. If you have schools, daycares, or businesses connected to your water system, how many students daycare children and/or employees are present each month?												
B. How many days per month are they present?												

33. ROUTINE COLIFORM SCHEDULE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
* Requirement is exception from WAC 246-290	1	0	0	1	0	0	1	0	0	1	0	0

34. NITRATE SCHEDULE	QUARTERLY	ANNUALLY	ONCE EVERY 3 YEARS
(One Sample per source by time period)		S02	

35. Reason for Submitting WFI:

☐ Update - Change ☐ Update - No Change ☐ Inactivate ☐ Re-Activate ☐ Name Change ☐ New System ☐ Other _____

36. I certify that the information stated on this WFI form is correct to the best of my knowledge.

SIGNATURE: _____ **DATE:** _____

PRINT NAME: _____ **TITLE:** _____

Washington State Department of Health
Division of Environmental Health
Office of Drinking Water

WATER FACILITIES INVENTORY (WFI) FORM

ONE FORM PER SYSTEM

Quarter: 3
Updated: 04/14/2017
Printed: 9/21/2017
WFI Printed For: On-Demand
Submission Reason: SMA Update

RETURN TO: Central Services - WFI, PO Box 47822, Olympia, WA, 98504-7822

1. SYSTEM ID NO.	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
57900 R	MUTINY SANDS CLUB	ISLAND	A	TNC

6. PRIMARY CONTACT NAME & MAILING ADDRESS

ANDY M. CAMPBELL [MANAGER]
PO BOX 1202
FREELAND, WA 98249

7. OWNER NAME & MAILING ADDRESS

MUTINY SANDS CLUB
NICK PEALY PROPERTY MANAGER
PO BOX 941
FREELAND, WA 98249

8. OWNER NUMBER: 003977

STREET ADDRESS IF DIFFERENT FROM ABOVE

ATTN
ADDRESS
CITY STATE ZIP

STREET ADDRESS IF DIFFERENT FROM ABOVE

ATTN
ADDRESS 971 MOONRAKER DR
CITY FREELAND STATE WA ZIP 98249

9. 24 HOUR PRIMARY CONTACT INFORMATION

Primary Contact Daytime Phone: (360) 579-1956
Primary Contact Mobile/Cell Phone: (425) 335-9396
Primary Contact Evening Phone:
Fax: (360) 579-2058 E-mail: xxxxxxxxxxxxxxxxxxx

10. OWNER CONTACT INFORMATION

Owner Daytime Phone:
Owner Mobile/Cell Phone: (206) 852-9790
Owner Evening Phone:
Fax: E-mail: xxxxxxxxxxxxxxxxxxx

WAC 246-290-420(9) requires that water systems provide 24-hour contact information for emergencies.

11. SATELLITE MANAGEMENT AGENCY - SMA (check only one)

- [x] Not applicable (Skip to #12)
- [ ] Owned and Managed
- [ ] Managed Only
- [ ] Owned Only

SMA NAME: SMA Number:

12. WATER SYSTEM CHARACTERISTICS (mark all that apply)

- [ ] Agricultural
- [ ] Commercial / Business
- [ ] Day Care
- [ ] Food Service/Food Permit
- [ ] 1,000 or more person event for 2 or more days per year
- [ ] Hospital/Clinic
- [ ] Industrial
- [ ] Licensed Residential Facility
- [ ] Lodging
- [ ] Recreational / RV Park
- [x] Residential
- [ ] School
- [ ] Temporary Farm Worker
- [ ] Other (church, fire station, etc.):

13. WATER SYSTEM OWNERSHIP (mark only one)

- [x] Association
- [ ] City / Town
- [ ] County
- [ ] Federal
- [ ] Investor
- [ ] Private
- [ ] Special District
- [ ] State

14. STORAGE CAPACITY (gallons)

65,000

15	16	17	18 SOURCE CATEGORY										19 USE			20	21 TREATMENT						22	23	24 SOURCE LOCATION			
Source Number	SOURCE NAME LIST UTILITY'S NAME FOR SOURCE AND WELL TAG ID NUMBER. Example: WELL #1 XYZ456 IF SOURCE IS PURCHASED OR INTERTIED, LIST SELLER'S NAME Example: SEATTLE	INTERTIE SYSTEM ID NUMBER	WELL	WELL FIELD	WELL IN A WELL FIELD	SPRING	SPRING FIELD	SPRING IN SPRINGFIELD	SEA WATER	SURFACE WATER	RANNEY / INF. GALLERY	OTHER	PERMANENT	SEASONAL	EMERGENCY	SOURCE METERED	NONE	CHLORINATION	FILTRATION	FLUORIDATION	IRRADIATION (UV)	OTHER	DEPTH TO FIRST OPEN INTERVAL IN FEET	CAPACITY (GALLONS PER MINUTE)	1/4, 1/4 SECTION	SECTION NUMBER	TOWNSHIP	RANGE
S01	AGA813 WELL 1		X										X			Y			X			X	230	250	SW SE	09	29N	02E

WATER FACILITIES INVENTORY (WFI) FORM - Continued

1. SYSTEM ID NO.	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
57900 R	MUTINY SANDS CLUB	ISLAND	A	TNC

	ACTIVE SERVICE CONNECTIONS	DOH USE ONLY! CALCULATED ACTIVE CONNECTIONS	DOH USE ONLY! APPROVED CONNECTIONS
25. SINGLE FAMILY RESIDENCES (How many of the following do you have?)		64	78
A. Full Time Single Family Residences (Occupied 180 days or more per year)	14		
B. Part Time Single Family Residences (Occupied less than 180 days per year)	50		
26. MULTI-FAMILY RESIDENTIAL BUILDINGS (How many of the following do you have?)			
A. Apartment Buildings, condos, duplexes, barracks, dorms	0		
B. Full Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied more than 180 days/year	0		
C. Part Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied less than 180 days/year	0		
27. NON-RESIDENTIAL CONNECTIONS (How many of the following do you have?)			
A. Recreational Services and/or Transient Accommodations (Campsites, RV sites, hotel/motel/overnight units)	0	0	0
B. Institutional, Commercial/Business, School, Day Care, Industrial Services, etc.	1	1	0
28. TOTAL SERVICE CONNECTIONS		65	78

29. FULL-TIME RESIDENTIAL POPULATION

A. How many residents are served by this system 180 or more days per year? 14

30. PART-TIME RESIDENTIAL POPULATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many part-time residents are present each month?	5	8	8	10	15	19	23	25	10	4	3	4
B. How many days per month are they present?	2	2	2	2	2	3	3	4	2	2	2	2

31. TEMPORARY & TRANSIENT USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many total visitors, attendees, travelers, campers, patients or customers have access to the water system each month?												
B. How many days per month is water accessible to the public?												

32. REGULAR NON-RESIDENTIAL USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. If you have schools, daycares, or businesses connected to your water system, how many students daycare children and/or employees are present each month?												
B. How many days per month are they present?												

33. ROUTINE COLIFORM SCHEDULE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
* Requirement is exception from WAC 246-290	1	0	0	1	0	0	1	0	0	1	0	0

34. NITRATE SCHEDULE	QUARTERLY	ANNUALLY	ONCE EVERY 3 YEARS
(One Sample per source by time period)		S01	

35. Reason for Submitting WFI:

☐ Update - Change ☐ Update - No Change ☐ Inactivate ☐ Re-Activate ☐ Name Change ☐ New System ☐ Other _____

36. I certify that the information stated on this WFI form is correct to the best of my knowledge.

SIGNATURE: _____ **DATE:** _____

PRINT NAME: _____ **TITLE:** _____

Washington State Department of Health
Division of Environmental Health
Office of Drinking Water

WATER FACILITIES INVENTORY (WFI) FORM

ONE FORM PER SYSTEM

Quarter: 2
Updated: 04/14/2017
Printed: 9/21/2017
WFI Printed For: On-Demand
Submission Reason: SMA Update

RETURN TO: Central Services - WFI, PO Box 47822, Olympia, WA, 98504-7822

1. SYSTEM ID NO.	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
57930 J	MUTINY VIEW MANOR COMMUNITY CLUB	ISLAND	A	Comm

6. PRIMARY CONTACT NAME & MAILING ADDRESS

ANDY M. CAMPBELL [MANAGER]
PO BOX 1202
FREELAND, WA 98249

7. OWNER NAME & MAILING ADDRESS

MUTINY VIEW MANOR COMMUNITY CLUB
SUSAN BENNETT DIRECTOR
PO BOX 331
FREELAND, WA 98249

8. OWNER NUMBER: 003978

STREET ADDRESS IF DIFFERENT FROM ABOVE

ATTN
ADDRESS
CITY STATE ZIP

STREET ADDRESS IF DIFFERENT FROM ABOVE

ATTN
ADDRESS
CITY STATE ZIP

9. 24 HOUR PRIMARY CONTACT INFORMATION

Primary Contact Daytime Phone: (360) 579-1956
Primary Contact Mobile/Cell Phone: (425) 335-9396
Primary Contact Evening Phone:
Fax: (360) 579-2058 E-mail: xxxxxxxxxxxxxxxxxxx

10. OWNER CONTACT INFORMATION

Owner Daytime Phone: (360) 320-1818
Owner Mobile/Cell Phone:
Owner Evening Phone:
Fax: E-mail: xxxxxxxxxxxxxxxxxxx

WAC 246-290-420(9) requires that water systems provide 24-hour contact information for emergencies.

11. SATELLITE MANAGEMENT AGENCY - SMA (check only one)

- [x] Not applicable (Skip to #12)
- [ ] Owned and Managed
- [ ] Managed Only
- [ ] Owned Only

SMA NAME: _____ SMA Number:

12. WATER SYSTEM CHARACTERISTICS (mark all that apply)

- [ ] Agricultural
- [ ] Commercial / Business
- [ ] Day Care
- [ ] Food Service/Food Permit
- [ ] 1,000 or more person event for 2 or more days per year
- [ ] Hospital/Clinic
- [ ] Industrial
- [ ] Licensed Residential Facility
- [ ] Lodging
- [ ] Recreational / RV Park
- [x] Residential
- [ ] School
- [ ] Temporary Farm Worker
- [ ] Other (church, fire station, etc.): _____

13. WATER SYSTEM OWNERSHIP (mark only one)

- [ ] Association
- [ ] City / Town
- [ ] County
- [ ] Federal
- [ ] Investor
- [x] Private
- [ ] Special District
- [ ] State

14. STORAGE CAPACITY (gallons)

85,000

15	16 SOURCE NAME	17 INTERTIE	18 SOURCE CATEGORY									19 USE			20	21 TREATMENT						22	23	24 SOURCE LOCATION			
Source Number	LIST UTILITY'S NAME FOR SOURCE AND WELL TAG ID NUMBER. Example: WELL #1 XYZ456 IF SOURCE IS PURCHASED OR INTERTIED, LIST SELLER'S NAME Example: SEATTLE	INTERTIE SYSTEM ID NUMBER	WELL	WELL FIELD	WELL IN A WELL FIELD	SPRING	SPRING FIELD	SPRING IN SPRINGFIELD	SEA WATER	SURFACE WATER	RANNEY / INF. GALLERY	OTHER	PERMANENT	SEASONAL	EMERGENCY	SOURCE METERED	NONE	CHLORINATION	FILTRATION	FLUORIDATION	IRRADIATION (UV)	OTHER	DEPTH TO FIRST OPEN INTERVAL IN FEET	CAPACITY (GALLONS PER MINUTE)	1/4, 1/4 SECTION	SECTION NUMBER	TOWNSHIP	RANGE
S01	AGA863 Well 1				X								X			Y		X	X			X	140	60	SW SE	15	29N	02E
S02	AGA862 Well 2				X								X			Y		X	X			X	159	60	SW SE	15	29N	02E
S03	Wells 1 & 2			X									X			Y		X	X			X	140	120	SW SE	15	29N	02E

WATER FACILITIES INVENTORY (WFI) FORM - Continued

1. SYSTEM ID NO.	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
57930 J	MUTINY VIEW MANOR COMMUNITY CLUB	ISLAND	A	Comm

	ACTIVE SERVICE CONNECTIONS	DOH USE ONLY! CALCULATED ACTIVE CONNECTIONS	DOH USE ONLY! APPROVED CONNECTIONS
25. SINGLE FAMILY RESIDENCES (How many of the following do you have?)		74	99
A. Full Time Single Family Residences (Occupied 180 days or more per year)	74		
B. Part Time Single Family Residences (Occupied less than 180 days per year)	0		
26. MULTI-FAMILY RESIDENTIAL BUILDINGS (How many of the following do you have?)			
A. Apartment Buildings, condos, duplexes, barracks, dorms	0		
B. Full Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied more than 180 days/year	0		
C. Part Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied less than 180 days/year	0		
27. NON-RESIDENTIAL CONNECTIONS (How many of the following do you have?)			
A. Recreational Services and/or Transient Accommodations (Campsites, RV sites, hotel/motel/overnight units)	0	0	0
B. Institutional, Commercial/Business, School, Day Care, Industrial Services, etc.	0	0	0
28. TOTAL SERVICE CONNECTIONS		74	99

29. FULL-TIME RESIDENTIAL POPULATION

A. How many residents are served by this system 180 or more days per year? 173

30. PART-TIME RESIDENTIAL POPULATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many part-time residents are present each month?												
B. How many days per month are they present?												

31. TEMPORARY & TRANSIENT USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many total visitors, attendees, travelers, campers, patients or customers have access to the water system each month?												
B. How many days per month is water accessible to the public?												

32. REGULAR NON-RESIDENTIAL USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. If you have schools, daycares, or businesses connected to your water system, how many students daycare children and/or employees are present each month?												
B. How many days per month are they present?												

33. ROUTINE COLIFORM SCHEDULE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
* Requirement is exception from WAC 246-290	1	1	1	1	1	1	1	1	1	1	1	1

34. NITRATE SCHEDULE	QUARTERLY	ANNUALLY	ONCE EVERY 3 YEARS
(One Sample per source by time period)			

35. Reason for Submitting WFI:

☐ Update - Change ☐ Update - No Change ☐ Inactivate ☐ Re-Activate ☐ Name Change ☐ New System ☐ Other _____

36. I certify that the information stated on this WFI form is correct to the best of my knowledge.

SIGNATURE: _____ **DATE:** _____

PRINT NAME: _____ **TITLE:** _____

Washington State Department of Health
Division of Environmental Health
Office of Drinking Water

WATER FACILITIES INVENTORY (WFI) FORM

ONE FORM PER SYSTEM

Quarter: 3
Updated: 08/29/2014
Printed: 9/21/2017
WFI Printed For: On-Demand
Submission Reason: No Change

RETURN TO: Central Services - WFI, PO Box 47822, Olympia, WA, 98504-7822

1. SYSTEM ID NO.	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
96000 N	SHIPS PASS WATER ASSOCIATION	ISLAND	A	TNC

6. PRIMARY CONTACT NAME & MAILING ADDRESS

SANDRA V. BODAMER [MANAGER]
KING WATER CO
PO BOX 2243
OAK HARBOR, WA 98277

7. OWNER NAME & MAILING ADDRESS

SHIPS PASS WATER ASSOCIATION
SANDY STENVIK SEC/TREAS
5909 S FISH RD
FREELAND, WA 98249

8. OWNER NUMBER: 006578

STREET ADDRESS IF DIFFERENT FROM ABOVE

ATTN KING WATER CO.
ADDRESS 107 SOUTH MAIN ST.
CITY COUPEVILLE STATE WA ZIP 98239

STREET ADDRESS IF DIFFERENT FROM ABOVE

ATTN
ADDRESS 5805 PIRATE LANE
CITY FREELAND STATE WA ZIP 98249

9. 24 HOUR PRIMARY CONTACT INFORMATION

Primary Contact Daytime Phone: (360) 678-5336
Primary Contact Mobile/Cell Phone: (360) 969-1019
Primary Contact Evening Phone: (xxx)-xxx-xxxx
Fax: (360) 678-8302 E-mail: xxxxxxxxxxxxxxxxxxx

10. OWNER CONTACT INFORMATION

Owner Daytime Phone: (360) 331-1956
Owner Mobile/Cell Phone:
Owner Evening Phone: (xxx)-xxx-xxxx
Fax: E-mail: xxxxxxxxxxxxxxxxxxx

WAC 246-290-420(9) requires that water systems provide 24-hour contact information for emergencies.

11. SATELLITE MANAGEMENT AGENCY - SMA (check only one)

- ☐ Not applicable (Skip to #12)
- ☐ Owned and Managed
- ☒ Managed Only
- ☐ Owned Only

SMA NAME: KING WATER COMPANY SMA Number: 128

12. WATER SYSTEM CHARACTERISTICS (mark all that apply)

- ☐ Agricultural
- ☐ Commercial / Business
- ☐ Day Care
- ☐ Food Service/Food Permit
- ☐ 1,000 or more person event for 2 or more days per year
- ☐ Hospital/Clinic
- ☐ Industrial
- ☐ Licensed Residential Facility
- ☐ Lodging
- ☐ Recreational / RV Park
- ☒ Residential
- ☐ School
- ☐ Temporary Farm Worker
- ☐ Other (church, fire station, etc.): _____

13. WATER SYSTEM OWNERSHIP (mark only one)

- ☒ Association
- ☐ City / Town
- ☐ County
- ☐ Federal
- ☐ Investor
- ☐ Private
- ☐ Special District
- ☐ State

14. STORAGE CAPACITY (gallons)

15	16	17	18 SOURCE CATEGORY										19 USE			20	21 TREATMENT						22	23	24 SOURCE LOCATION			
Source Number	SOURCE NAME LIST UTILITY'S NAME FOR SOURCE AND WELL TAG ID NUMBER. Example: WELL #1 XYZ456 IF SOURCE IS PURCHASED OR INTERTIED, LIST SELLER'S NAME Example: SEATTLE	INTERTIE SYSTEM ID NUMBER	WELL	WELL FIELD	WELL IN A WELL FIELD	SPRING	SPRING FIELD	SPRING IN SPRINGFIELD	SEA WATER	SURFACE WATER	RANNEY / INF. GALLERY	OTHER	PERMANENT	SEASONAL	EMERGENCY	SOURCE METERED	NONE	CHLORINATION	FILTRATION	FLUORIDATION	IRRADIATION (UV)	OTHER	DEPTH TO FIRST OPEN INTERVAL IN FEET	CAPACITY (GALLONS PER MINUTE)	1/4, 1/4 SECTION	SECTION NUMBER	TOWNSHIP	RANGE
S01	AGA509 WELL 1		X										X			Y	X						195	16	SE SW	15	29N	02E

WATER FACILITIES INVENTORY (WFI) FORM - Continued

1. SYSTEM ID NO.	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
96000 N	SHIPS PASS WATER ASSOCIATION	ISLAND	A	TNC

	ACTIVE SERVICE CONNECTIONS	DOH USE ONLY! CALCULATED ACTIVE CONNECTIONS	DOH USE ONLY! APPROVED CONNECTIONS
25. SINGLE FAMILY RESIDENCES (How many of the following do you have?)		18	Unapproved
A. Full Time Single Family Residences (Occupied 180 days or more per year)	12		
B. Part Time Single Family Residences (Occupied less than 180 days per year)	6		
26. MULTI-FAMILY RESIDENTIAL BUILDINGS (How many of the following do you have?)			
A. Apartment Buildings, condos, duplexes, barracks, dorms	0		
B. Full Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied more than 180 days/year	0		
C. Part Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied less than 180 days/year	0		
27. NON-RESIDENTIAL CONNECTIONS (How many of the following do you have?)			
A. Recreational Services and/or Transient Accommodations (Campsites, RV sites, hotel/motel/overnight units)	0	0	
B. Institutional, Commercial/Business, School, Day Care, Industrial Services, etc.	1	1	
28. TOTAL SERVICE CONNECTIONS		19	

29. FULL-TIME RESIDENTIAL POPULATION

A. How many residents are served by this system 180 or more days per year? 20

30. PART-TIME RESIDENTIAL POPULATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many part-time residents are present each month?						2	2	2	2	2		
B. How many days per month are they present?						30	31	31	30	31		

31. TEMPORARY & TRANSIENT USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many total visitors, attendees, travelers, campers, patients or customers have access to the water system each month?												
B. How many days per month is water accessible to the public?												

32. REGULAR NON-RESIDENTIAL USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. If you have schools, daycares, or businesses connected to your water system, how many students daycare children and/or employees are present each month?												
B. How many days per month are they present?												

33. ROUTINE COLIFORM SCHEDULE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
* Requirement is exception from WAC 246-290	1	0	0	1	0	0	1	0	0	1	0	0

34. NITRATE SCHEDULE	QUARTERLY	ANNUALLY	ONCE EVERY 3 YEARS
(One Sample per source by time period)		S01	

35. Reason for Submitting WFI:

☐ Update - Change ☐ Update - No Change ☐ Inactivate ☐ Re-Activate ☐ Name Change ☐ New System ☐ Other _____

36. I certify that the information stated on this WFI form is correct to the best of my knowledge.

SIGNATURE: _____ **DATE:** _____

PRINT NAME: _____ **TITLE:** _____

Washington State Department of Health
Division of Environmental Health
Office of Drinking Water

WATER FACILITIES INVENTORY (WFI) FORM

ONE FORM PER SYSTEM

Quarter: 3
Updated: 09/28/2015
Printed: 9/21/2017
WFI Printed For: On-Demand
Submission Reason: No Change

RETURN TO: Central Services - WFI, PO Box 47822, Olympia, WA, 98504-7822

1. SYSTEM ID NO.	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
17985 9	BLUEBERRY HILL	ISLAND	A	TNC

6. PRIMARY CONTACT NAME & MAILING ADDRESS

SARAH M. BELLIN [OPERATOR]
WHIDBEY WATER MANAGEMENT
PO BOX 766
CLINTON, WA 98236

7. OWNER NAME & MAILING ADDRESS | **8. OWNER NUMBER: 031474**

HOLMES HARBOR PROPERTIES, LLC
VICTOR HANSEN MANAGER
2877 CEDAR SPRING LN
CLINTON, WA 98236

STREET ADDRESS IF DIFFERENT FROM ABOVE

ATTN
ADDRESS
CITY STATE ZIP

STREET ADDRESS IF DIFFERENT FROM ABOVE

ATTN
ADDRESS
CITY STATE ZIP

9. 24 HOUR PRIMARY CONTACT INFORMATION

Primary Contact Daytime Phone: (360) 929-6555
Primary Contact Mobile/Cell Phone: (360) 929-6555
Primary Contact Evening Phone: (xxx)-xxx-xxxx
Fax: (360) 321-1920 E-mail: xxxxxxxxxxxxxxxxxxx

10. OWNER CONTACT INFORMATION

Owner Daytime Phone: (360) 321-3200
Owner Mobile/Cell Phone: (360) 661-1049
Owner Evening Phone:
Fax: E-mail: xxxxxxxxxxxxxxxxxxx

WAC 246-290-420(9) requires that water systems provide 24-hour contact information for emergencies.

11. SATELLITE MANAGEMENT AGENCY - SMA (check only one)

- [x] Not applicable (Skip to #12)
- [ ] Owned and Managed
- [ ] Managed Only
- [ ] Owned Only

SMA NAME: _____ SMA Number:

12. WATER SYSTEM CHARACTERISTICS (mark all that apply)

- [ ] Agricultural
- [x] Commercial / Business
- [ ] Day Care
- [x] Food Service/Food Permit
- [ ] 1,000 or more person event for 2 or more days per year
- [ ] Hospital/Clinic
- [ ] Industrial
- [ ] Licensed Residential Facility
- [ ] Lodging
- [ ] Recreational / RV Park
- [ ] Residential
- [ ] School
- [ ] Temporary Farm Worker
- [ ] Other (church, fire station, etc.): _____

13. WATER SYSTEM OWNERSHIP (mark only one)

- [ ] Association
- [ ] City / Town
- [ ] County
- [ ] Federal
- [x] Investor
- [ ] Private
- [ ] Special District
- [ ] State

14. STORAGE CAPACITY (gallons)

15	16	17	18 SOURCE CATEGORY										19 USE			20	21 TREATMENT						22	23	24 SOURCE LOCATION			
Source Number	LIST UTILITY'S NAME FOR SOURCE AND WELL TAG ID NUMBER. Example: WELL #1 XYZ456 IF SOURCE IS PURCHASED OR INTERTIED, LIST SELLER'S NAME Example: SEATTLE	INTERTIE SYSTEM ID NUMBER	WELL	WELL FIELD	WELL IN A WELL FIELD	SPRING	SPRING FIELD	SPRING IN SPRINGFIELD	SEA WATER	SURFACE WATER	RANNEY / INF. GALLERY	OTHER	PERMANENT	SEASONAL	EMERGENCY	SOURCE METERED	NONE	CHLORINATION	FILTRATION	FLUORIDATION	IRRADIATION (UV)	OTHER	DEPTH TO FIRST OPEN INTERVAL IN FEET	CAPACITY (GALLONS PER MINUTE)	1/4, 1/4 SECTION	SECTION NUMBER	TOWNSHIP	RANGE
S01	Well ALT197		X										X			Y	X						70	20	NW SE	10	29N	02E

WATER FACILITIES INVENTORY (WFI) FORM - Continued

1. SYSTEM ID NO.	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
17985 9	BLUEBERRY HILL	ISLAND	A	TNC

	ACTIVE SERVICE CONNECTIONS	DOH USE ONLY! CALCULATED ACTIVE CONNECTIONS	DOH USE ONLY! APPROVED CONNECTIONS
25. SINGLE FAMILY RESIDENCES (How many of the following do you have?)		0	0
A. Full Time Single Family Residences (Occupied 180 days or more per year)	0		
B. Part Time Single Family Residences (Occupied less than 180 days per year)	0		
26. MULTI-FAMILY RESIDENTIAL BUILDINGS (How many of the following do you have?)			
A. Apartment Buildings, condos, duplexes, barracks, dorms	0		
B. Full Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied more than 180 days/year	0		
C. Part Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied less than 180 days/year	0		
27. NON-RESIDENTIAL CONNECTIONS (How many of the following do you have?)			
A. Recreational Services and/or Transient Accommodations (Campsites, RV sites, hotel/motel/overnight units)	0	0	0
B. Institutional, Commercial/Business, School, Day Care, Industrial Services, etc.	1	1	1
28. TOTAL SERVICE CONNECTIONS		1	1

29. FULL-TIME RESIDENTIAL POPULATION

A. How many residents are served by this system 180 or more days per year? 0

30. PART-TIME RESIDENTIAL POPULATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many part-time residents are present each month?												
B. How many days per month are they present?												

31. TEMPORARY & TRANSIENT USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many total visitors, attendees, travelers, campers, patients or customers have access to the water system each month?	1680	1680	1680	1680	1680	1680	1680	1680	1680	1680	1680	1680
B. How many days per month is water accessible to the public?	30	30	30	30	30	30	30	30	30	30	30	30

32. REGULAR NON-RESIDENTIAL USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. If you have schools, daycares, or businesses connected to your water system, how many students daycare children and/or employees are present each month?												
B. How many days per month are they present?												

33. ROUTINE COLIFORM SCHEDULE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
* Requirement is exception from WAC 246-290	1	1	1	1	1	1	1	1	1	1	1	1

34. NITRATE SCHEDULE	QUARTERLY	ANNUALLY	ONCE EVERY 3 YEARS
(One Sample per source by time period)		S01	

35. Reason for Submitting WFI:

☐ Update - Change ☐ Update - No Change ☐ Inactivate ☐ Re-Activate ☐ Name Change ☐ New System ☐ Other _____

36. I certify that the information stated on this WFI form is correct to the best of my knowledge.

SIGNATURE: _____ **DATE:** _____

PRINT NAME: _____ **TITLE:** _____

Washington State Department of Health
Division of Environmental Health
Office of Drinking Water

WATER FACILITIES INVENTORY (WFI) FORM

ONE FORM PER SYSTEM

Quarter: 2
Updated: 04/11/2017
Printed: 9/21/2017
WFI Printed For: On-Demand
Submission Reason: SMA Update

RETURN TO: Central Services - WFI, PO Box 47822, Olympia, WA, 98504-7822

1. SYSTEM ID NO.	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
27849 7	BAYVIEW MEADOWS WATER SYSTEM	ISLAND	A	Comm

6. PRIMARY CONTACT NAME & MAILING ADDRESS

SANDRA V. BODAMER [OPERATOR]
KING WATER CO
PO BOX 2243
OAK HARBOR, WA 98277

7. OWNER NAME & MAILING ADDRESS

BAYVIEW MEADOWS COMMUNITY ASSOC.
CLYDE WILSON — OWNER ORG - PRIMARY
CONWELL & ASSOCIATES
1242 STATE AVE STE 1263
MARYSVILLE, WA 98270

8. OWNER NUMBER: 011144

STREET ADDRESS IF DIFFERENT FROM ABOVE

ATTN KING WATER CO.
ADDRESS 107 SOUTH MAIN ST.
CITY COUPEVILLE STATE WA ZIP 98239

STREET ADDRESS IF DIFFERENT FROM ABOVE

ATTN
ADDRESS
CITY STATE ZIP

9. 24 HOUR PRIMARY CONTACT INFORMATION

Primary Contact Daytime Phone: (360) 678-5336
Primary Contact Mobile/Cell Phone: (360) 969-1019
Primary Contact Evening Phone: (xxx)-xxx-xxxx
Fax: (360) 678-8302 E-mail: xxxxxxxxxxxxxxxxxxx

10. OWNER CONTACT INFORMATION

Owner Daytime Phone: (360) 331-7338
Owner Mobile/Cell Phone:
Owner Evening Phone:
Fax: E-mail: xxxxxxxxxxxxxxxxxxx

WAC 246-290-420(9) requires that water systems provide 24-hour contact information for emergencies.

11. SATELLITE MANAGEMENT AGENCY - SMA (check only one)

- ☐ Not applicable (Skip to #12)
- ☐ Owned and Managed
- ☒ Managed Only
- ☐ Owned Only

SMA NAME: KING WATER COMPANY SMA Number: 128

12. WATER SYSTEM CHARACTERISTICS (mark all that apply)

- ☐ Agricultural
- ☐ Commercial / Business
- ☐ Day Care
- ☐ Food Service/Food Permit
- ☐ 1,000 or more person event for 2 or more days per year
- ☐ Hospital/Clinic
- ☐ Industrial
- ☐ Licensed Residential Facility
- ☐ Lodging
- ☐ Recreational / RV Park
- ☒ Residential
- ☐ School
- ☐ Temporary Farm Worker
- ☐ Other (church, fire station, etc.): _____

13. WATER SYSTEM OWNERSHIP (mark only one)

- ☒ Association
- ☐ City / Town
- ☐ County
- ☐ Federal
- ☐ Investor
- ☐ Private
- ☐ Special District
- ☐ State

14. STORAGE CAPACITY (gallons)

22,000

15	16	17	18 SOURCE CATEGORY										19 USE			20	21 TREATMENT						22	23	24 SOURCE LOCATION			
Source Number	SOURCE NAME LIST UTILITY'S NAME FOR SOURCE AND WELL TAG ID NUMBER. Example: WELL #1 XYZ456 IF SOURCE IS PURCHASED OR INTERTIED, LIST SELLER'S NAME Example: SEATTLE	INTERTIE SYSTEM ID NUMBER	WELL	WELL FIELD	WELL IN A WELL FIELD	SPRING	SPRING FIELD	SPRING IN SPRINGFIELD	SEA WATER	SURFACE WATER	RANNEY / INF. GALLERY	OTHER	PERMANENT	SEASONAL	EMERGENCY	SOURCE METERED	NONE	CHLORINATION	FILTRATION	FLUORIDATION	IRRADIATION (UV)	OTHER	DEPTH TO FIRST OPEN INTERVAL IN FEET	CAPACITY (GALLONS PER MINUTE)	1/4, 1/4 SECTION	SECTION NUMBER	TOWNSHIP	RANGE
S01	ALT171 WELL 1		X										X			Y		X					190	35	SE SE	14	29N	02E

WATER FACILITIES INVENTORY (WFI) FORM - Continued

1. SYSTEM ID NO.	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
27849 7	BAYVIEW MEADOWS WATER SYSTEM	ISLAND	A	Comm

	ACTIVE SERVICE CONNECTIONS	DOH USE ONLY! CALCULATED ACTIVE CONNECTIONS	DOH USE ONLY! APPROVED CONNECTIONS
25. SINGLE FAMILY RESIDENCES (How many of the following do you have?)		14	16
A. Full Time Single Family Residences (Occupied 180 days or more per year)	14		
B. Part Time Single Family Residences (Occupied less than 180 days per year)	0		
26. MULTI-FAMILY RESIDENTIAL BUILDINGS (How many of the following do you have?)			
A. Apartment Buildings, condos, duplexes, barracks, dorms	0		
B. Full Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied more than 180 days/year	0		
C. Part Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied less than 180 days/year	0		
27. NON-RESIDENTIAL CONNECTIONS (How many of the following do you have?)			
A. Recreational Services and/or Transient Accommodations (Campsites, RV sites, hotel/motel/overnight units)	0	0	0
B. Institutional, Commercial/Business, School, Day Care, Industrial Services, etc.	0	0	0
28. TOTAL SERVICE CONNECTIONS		14	16

29. FULL-TIME RESIDENTIAL POPULATION

A. How many residents are served by this system 180 or more days per year? 31

30. PART-TIME RESIDENTIAL POPULATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many part-time residents are present each month?												
B. How many days per month are they present?												

31. TEMPORARY & TRANSIENT USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many total visitors, attendees, travelers, campers, patients or customers have access to the water system each month?												
B. How many days per month is water accessible to the public?												

32. REGULAR NON-RESIDENTIAL USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. If you have schools, daycares, or businesses connected to your water system, how many students daycare children and/or employees are present each month?												
B. How many days per month are they present?												

33. ROUTINE COLIFORM SCHEDULE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
* Requirement is exception from WAC 246-290	1	1	1	1	1	1	1	1	1	1	1	1

34. NITRATE SCHEDULE	QUARTERLY	ANNUALLY	ONCE EVERY 3 YEARS
(One Sample per source by time period)			

35. Reason for Submitting WFI:

☐ Update - Change ☐ Update - No Change ☐ Inactivate ☐ Re-Activate ☐ Name Change ☐ New System ☐ Other _____

36. I certify that the information stated on this WFI form is correct to the best of my knowledge.

SIGNATURE: _____ **DATE:** _____

PRINT NAME: _____ **TITLE:** _____

Washington State Department of Health
Division of Environmental Health
Office of Drinking Water

WATER FACILITIES INVENTORY (WFI) FORM

ONE FORM PER SYSTEM

Quarter: 2
Updated: 09/11/2017
Printed: 9/21/2017
WFI Printed For: On-Demand
Submission Reason: Pop/Connect Update

RETURN TO: Central Services - WFI, PO Box 47822, Olympia, WA, 98504-7822

1. SYSTEM ID NO.	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
46670 3	W&B WATERWORKS 1	ISLAND	A	Comm

6. PRIMARY CONTACT NAME & MAILING ADDRESS

TERRY E. LEHMAN [OWNER]
PO BOX 549
FREELAND, WA 98249

7. OWNER NAME & MAILING ADDRESS

LEHMAN ENTERPRISES, INC.
TERRY E. LEHMAN OWNER
PO BOX 549
FREELAND, WA 98249

8. OWNER NUMBER: 029200

STREET ADDRESS IF DIFFERENT FROM ABOVE

ATTN
ADDRESS 18181 SR 525, STE A
CITY FREELAND STATE WA ZIP 98249

STREET ADDRESS IF DIFFERENT FROM ABOVE

ATTN
ADDRESS 18181 SR 525
CITY FREELAND STATE WA ZIP 98249

9. 24 HOUR PRIMARY CONTACT INFORMATION

Primary Contact Daytime Phone: (360) 331-7388
Primary Contact Mobile/Cell Phone: (360) 661-2248
Primary Contact Evening Phone: (xxx)-xxx-xxxx
Fax: (360) 331-2374 E-mail: xxxxxxxxxxxxxxxxxxx

10. OWNER CONTACT INFORMATION

Owner Daytime Phone: (360) 331-7388
Owner Mobile/Cell Phone: (360) 661-2248
Owner Evening Phone: (xxx)-xxx-xxxx
Fax: (360) 331-2374 E-mail: xxxxxxxxxxxxxxxxxxx

WAC 246-290-420(9) requires that water systems provide 24-hour contact information for emergencies.

11. SATELLITE MANAGEMENT AGENCY - SMA (check only one)

- [x] Not applicable (Skip to #12)
- [ ] Owned and Managed
- [ ] Managed Only
- [ ] Owned Only

SMA NAME: _____ SMA Number:

12. WATER SYSTEM CHARACTERISTICS (mark all that apply)

- [ ] Agricultural
- [ ] Commercial / Business
- [ ] Day Care
- [ ] Food Service/Food Permit
- [ ] 1,000 or more person event for 2 or more days per year
- [ ] Hospital/Clinic
- [ ] Industrial
- [ ] Licensed Residential Facility
- [ ] Lodging
- [ ] Recreational / RV Park
- [x] Residential
- [ ] School
- [ ] Temporary Farm Worker
- [ ] Other (church, fire station, etc.): _____

13. WATER SYSTEM OWNERSHIP (mark only one)

- [ ] Association
- [ ] City / Town
- [ ] County
- [ ] Federal
- [x] Investor
- [ ] Private
- [ ] Special District
- [ ] State

14. STORAGE CAPACITY (gallons)

100,000

15	16	17	18 SOURCE CATEGORY										19 USE			20	21 TREATMENT						22	23	24 SOURCE LOCATION			
Source Number	SOURCE NAME LIST UTILITY'S NAME FOR SOURCE AND WELL TAG ID NUMBER. Example: WELL #1 XYZ456 IF SOURCE IS PURCHASED OR INTERTIED, LIST SELLER'S NAME Example: SEATTLE	INTERTIE SYSTEM ID NUMBER	WELL	WELL FIELD	WELL IN A WELL FIELD	SPRING	SPRING FIELD	SPRING IN SPRINGFIELD	SEA WATER	SURFACE WATER	RANNEY / INF. GALLERY	OTHER	PERMANENT	SEASONAL	EMERGENCY	SOURCE METERED	NONE	CHLORINATION	FILTRATION	FLUORIDATION	IRRADIATION (UV)	OTHER	DEPTH TO FIRST OPEN INTERVAL IN FEET	CAPACITY (GALLONS PER MINUTE)	1/4, 1/4 SECTION	SECTION NUMBER	TOWNSHIP	RANGE
S01	AGA932 WELL 1				X								X			Y	X						300	50	SE NE	22	29N	02E
S02	AGA931 WELL 2				X									X		Y	X						291	75	SE NE	22	29N	02E
S03	AGA930 WELL 3				X								X			Y	X						270	75	SE NE	22	29N	02E
S04	AGA929 WELL 4				X									X		Y	X						307	75	SE NE	22	29N	02E
S05	Wells 1,2,3,4			X									X			N	X							225	SE NE	22	29N	02E

WATER FACILITIES INVENTORY (WFI) FORM - Continued

1. SYSTEM ID NO.	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
46670 3	W&B WATERWORKS 1	ISLAND	A	Comm

	ACTIVE SERVICE CONNECTIONS	DOH USE ONLY! CALCULATED ACTIVE CONNECTIONS	DOH USE ONLY! APPROVED CONNECTIONS
25. SINGLE FAMILY RESIDENCES (How many of the following do you have?)		442	451
A. Full Time Single Family Residences (Occupied 180 days or more per year)	442		
B. Part Time Single Family Residences (Occupied less than 180 days per year)	0		
26. MULTI-FAMILY RESIDENTIAL BUILDINGS (How many of the following do you have?)			
A. Apartment Buildings, condos, duplexes, barracks, dorms	0		
B. Full Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied more than 180 days/year	0		
C. Part Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied less than 180 days/year	0		
27. NON-RESIDENTIAL CONNECTIONS (How many of the following do you have?)			
A. Recreational Services and/or Transient Accommodations (Campsites, RV sites, hotel/motel/overnight units)	0	0	0
B. Institutional, Commercial/Business, School, Day Care, Industrial Services, etc.	0	0	0
28. TOTAL SERVICE CONNECTIONS		442	451

29. FULL-TIME RESIDENTIAL POPULATION

A. How many residents are served by this system 180 or more days per year? 1048

30. PART-TIME RESIDENTIAL POPULATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many part-time residents are present each month?												
B. How many days per month are they present?												

31. TEMPORARY & TRANSIENT USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many total visitors, attendees, travelers, campers, patients or customers have access to the water system each month?												
B. How many days per month is water accessible to the public?												

32. REGULAR NON-RESIDENTIAL USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. If you have schools, daycares, or businesses connected to your water system, how many students daycare children and/or employees are present each month?												
B. How many days per month are they present?												

33. ROUTINE COLIFORM SCHEDULE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
* Requirement is exception from WAC 246-290	2	2	2	2	2	2	2	2	2	2	2	2

34. NITRATE SCHEDULE	QUARTERLY	ANNUALLY	ONCE EVERY 3 YEARS
(One Sample per source by time period)			

35. Reason for Submitting WFI:

☐ Update - Change ☐ Update - No Change ☐ Inactivate ☐ Re-Activate ☐ Name Change ☐ New System ☐ Other _____

36. I certify that the information stated on this WFI form is correct to the best of my knowledge.

SIGNATURE: _____ **DATE:** _____

PRINT NAME: _____ **TITLE:** _____

Washington State Department of Health
Division of Environmental Health
Office of Drinking Water

WATER FACILITIES INVENTORY (WFI) FORM

ONE FORM PER SYSTEM

Quarter: 2
Updated: 04/13/2017
Printed: 9/21/2017
WFI Printed For: On-Demand
Submission Reason: SMA Update

RETURN TO: Central Services - WFI, PO Box 47822, Olympia, WA, 98504-7822

1. SYSTEM ID NO.	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
51115 6	MAPLE GLEN COMMUNITY ASSOCIATION	ISLAND	A	Comm

6. PRIMARY CONTACT NAME & MAILING ADDRESS

ANDY M. CAMPBELL [MANAGER]
PO BOX 1202
FREELAND, WA 98249

7. OWNER NAME & MAILING ADDRESS

MAPLE GLEN COMMUNITY ASSOC.
JOHN G. LUTCH MANAGER
PO BOX 363
FREELAND, WA 98249

8. OWNER NUMBER: 003577

STREET ADDRESS IF DIFFERENT FROM ABOVE

ATTN
ADDRESS
CITY STATE ZIP

STREET ADDRESS IF DIFFERENT FROM ABOVE

ATTN
ADDRESS 5177 BLACKTAIL LANE
CITY LANGLEY STATE WA ZIP 98260

9. 24 HOUR PRIMARY CONTACT INFORMATION

Primary Contact Daytime Phone: (360) 579-1956
Primary Contact Mobile/Cell Phone: (425) 335-9396
Primary Contact Evening Phone:
Fax: (360) 579-2058 E-mail: xxxxxxxxxxxxxxxxxxx

10. OWNER CONTACT INFORMATION

Owner Daytime Phone: (360) 321-1582
Owner Mobile/Cell Phone:
Owner Evening Phone: (xxx)-xxx-xxxx
Fax: E-mail: xxxxxxxxxxxxxxxxxxx

WAC 246-290-420(9) requires that water systems provide 24-hour contact information for emergencies.

11. SATELLITE MANAGEMENT AGENCY - SMA (check only one)

- [x] Not applicable (Skip to #12)
- [ ] Owned and Managed
- [ ] Managed Only
- [ ] Owned Only

SMA NAME: _____ SMA Number:

12. WATER SYSTEM CHARACTERISTICS (mark all that apply)

- [ ] Agricultural
- [ ] Commercial / Business
- [ ] Day Care
- [ ] Food Service/Food Permit
- [ ] 1,000 or more person event for 2 or more days per year
- [ ] Hospital/Clinic
- [ ] Industrial
- [ ] Licensed Residential Facility
- [ ] Lodging
- [ ] Recreational / RV Park
- [x] Residential
- [ ] School
- [ ] Temporary Farm Worker
- [ ] Other (church, fire station, etc.): _____

13. WATER SYSTEM OWNERSHIP (mark only one)

- [x] Association
- [ ] City / Town
- [ ] County
- [ ] Federal
- [ ] Investor
- [ ] Private
- [ ] Special District
- [ ] State

14. STORAGE CAPACITY (gallons)

40,000

15	16	17	18 SOURCE CATEGORY										19 USE			20	21 TREATMENT						22	23	24 SOURCE LOCATION			
Source Number	SOURCE NAME LIST UTILITY'S NAME FOR SOURCE AND WELL TAG ID NUMBER. Example: WELL #1 XYZ456 IF SOURCE IS PURCHASED OR INTERTIED, LIST SELLER'S NAME Example: SEATTLE	INTERTIE SYSTEM ID NUMBER	WELL	WELL FIELD	WELL IN A WELL FIELD	SPRING	SPRING FIELD	SPRING IN SPRINGFIELD	SEA WATER	SURFACE WATER	RANNEY / INF. GALLERY	OTHER	PERMANENT	SEASONAL	EMERGENCY	SOURCE METERED	NONE	CHLORINATION	FILTRATION	FLUORIDATION	IRRADIATION (UV)	OTHER	DEPTH TO FIRST OPEN INTERVAL IN FEET	CAPACITY (GALLONS PER MINUTE)	1/4, 1/4 SECTION	SECTION NUMBER	TOWNSHIP	RANGE
S01	AGA864 Well 1		X										X			Y	X						140	32	SW NW	12	29N	02E
S02	AGA959 Well 2		X										X			Y	X						120	28	SW NW	12	29N	02E

WATER FACILITIES INVENTORY (WFI) FORM - Continued

1. SYSTEM ID NO.	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
51115 6	MAPLE GLEN COMMUNITY ASSOCIATION	ISLAND	A	Comm

	ACTIVE SERVICE CONNECTIONS	DOH USE ONLY! CALCULATED ACTIVE CONNECTIONS	DOH USE ONLY! APPROVED CONNECTIONS
25. SINGLE FAMILY RESIDENCES (How many of the following do you have?)		56	75
A. Full Time Single Family Residences (Occupied 180 days or more per year)	56		
B. Part Time Single Family Residences (Occupied less than 180 days per year)	0		
26. MULTI-FAMILY RESIDENTIAL BUILDINGS (How many of the following do you have?)			
A. Apartment Buildings, condos, duplexes, barracks, dorms	0		
B. Full Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied more than 180 days/year	0		
C. Part Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied less than 180 days/year	0		
27. NON-RESIDENTIAL CONNECTIONS (How many of the following do you have?)			
A. Recreational Services and/or Transient Accommodations (Campsites, RV sites, hotel/motel/overnight units)	0	0	0
B. Institutional, Commercial/Business, School, Day Care, Industrial Services, etc.	0	0	0
28. TOTAL SERVICE CONNECTIONS		56	75

29. FULL-TIME RESIDENTIAL POPULATION

A. How many residents are served by this system 180 or more days per year? 130

30. PART-TIME RESIDENTIAL POPULATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many part-time residents are present each month?												
B. How many days per month are they present?												

31. TEMPORARY & TRANSIENT USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many total visitors, attendees, travelers, campers, patients or customers have access to the water system each month?												
B. How many days per month is water accessible to the public?												

32. REGULAR NON-RESIDENTIAL USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. If you have schools, daycares, or businesses connected to your water system, how many students daycare children and/or employees are present each month?												
B. How many days per month are they present?												

33. ROUTINE COLIFORM SCHEDULE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
* Requirement is exception from WAC 246-290	1	1	1	1	1	1	1	1	1	1	1	1

34. NITRATE SCHEDULE	QUARTERLY	ANNUALLY	ONCE EVERY 3 YEARS
(One Sample per source by time period)			

35. Reason for Submitting WFI:

☐ Update - Change ☐ Update - No Change ☐ Inactivate ☐ Re-Activate ☐ Name Change ☐ New System ☐ Other _____

36. I certify that the information stated on this WFI form is correct to the best of my knowledge.

SIGNATURE: _____ **DATE:** _____

PRINT NAME: _____ **TITLE:** _____

APPENDIX B

WELL CONSTRUCTION RECORDS

Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report.

CERT - 5825
Appli 7797
Permit 7499

STATE OF WASHINGTON
DEPARTMENT OF CONSERVATION AND DEVELOPMENT

WELL LOG No /

Date October 5, 1967

Record by Driller

Source Driller's record

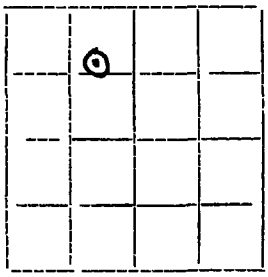


Diagram of Section

Location State of WASHINGTON

County Island

Area

Map

NE ¼ NW ¼ sec 14 T 29N R 2E E W

Drilling Co Alton L Nelson

Address Route 2, Box 492, Oak Harbor, Wash

Method of Drilling Driven Date Dec 15 1965

Owner Freeland Water District

Address Freeland, Washington

Land surface, datum ft above below Dims 8" x 257'

SWL 243' 12-15-65

CORRELATION	MATERIAL	THICKNESS (feet)	DEPTH (feet)
	(Transcribe driller s terminology literally but paraphrase as necessary in parentheses If material water bearing so state and record static level if reported Give depths in feet below land surface datum unless otherw se indicated Correlate with stratigraphic column if feasible Following log of materials list all casings perforations screens etc)		
	Municipal		
	Sand, Dirty	0	42
	Clay, Sandy, brown	42	47
	Clay, sandy, blue	47	58
	Clay, blue	58	92
	Clay, sandy, blue	92	106
	Sand, dirty	106	118
	Clay	118	127
	Clay, sandy	127	156
	Sand, dry	156	233
	Sand, clean	233	260
	Clay, gravelly	260	
	Casing 10" from 0' to 50'		
	8" from 50' to 250'		
	Surface seal 0' to 10'		
	concrete		

Turn up Sheet of sheets

WELL LOG —Continued No / -

CORRELATION	MATERIAL	THICKNESS (feet)	DEPTH (feet)
	Depth forward	———	
	screens from 242' to 252'		
	Yield 300 gpm with 14'DD after 4 hrs		
	Pump 20 h p Line Shaft Turbine		
	Peerless		

S F No 7449—OS—6 61—2M

of Ecology does NOT Warranty the Data and/or the Information on this Well Report.

The Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report.

STATE OF WASHINGTON

Ellisido

Permit No.

(1) OWNER: Name [illegible] Address [illegible]

(2) LOCATION OF WELL: County [illegible] NE ¼ NW ¼ Sec. 1 T. 20 N., R. 28 E. W.M.

ing and distance from section or subdivision corner 100' N & 100' W of SW cor Lot 6 of Sunny Dist Tracts

(3) PROPOSED USE: Domestic ☐ Industrial ☐ Municipal ☒
Irrigation ☐ Test Well ☐ Other ☐

(4) TYPE OF WORK: Owner's number of well (if more than one) .....
New well ☐ Method: Dug ☐ Bored ☐
Deepened ☐ Cable ☐ Driven ☒
Reconditioned ☐ Rotary ☐ Jetted ☐

(5) DIMENSIONS: Diameter of well ..... 8 inches.
Drilled 260 ft. Depth of completed well 257 ft.

(6) CONSTRUCTION DETAILS:

Casing installed: 10 " Diam. from ..... ft. to 30 ft.
Threaded ☐ 8 " Diam. from ..... ft. to 250 ft.
Welded ☒ ..... " Diam. from ..... ft. to ..... ft.

Perforations: Yes ☐ No ☒
Type of perforator used .....
SIZE of perforations ..... in. by ..... in.
..... perforations from ..... ft. to ..... ft.
..... perforations from ..... ft to ..... ft.
..... perforations from ..... ft. to ..... ft.

Screens: Yes ☒ No ☐
Manufacturer's Name .....
Type Stainless Steel Model No. .....
Diam. 8 Slot size 40/30 from 242 ft. to 252 ft.
Diam. ..... Slot size ..... from ..... ft. to ..... ft.

Gravel packed: Yes ☐ No ☒ Size of gravel: .....
Gravel placed from ..... ft. to ..... ft.

Surface seal: Yes ☒ No ☐ To what depth? 10 ft.
Material used in seal Concrete
Did any strata contain unusable water? Yes ☐ No ☐
Type of water? ..... Depth of strata .....
Method of sealing strata off .....

(7) PUMP: Manufacturer's Name .....
Type: Line Shaft H.P. 30

(8) WATER LEVELS: Land-surface elevation above mean sea level .....
Static level ..... ft. below top of well Date .....
Artesian pressure ..... lbs. per square inch Date .....
Artesian water is controlled by ..... (Cap, valve, etc.)

(9) WELL TESTS: Drawdown is amount water level is lowered below static level
Was a pump test made? Yes ☐ No ☐ If yes, by whom? .....
..... gal/min. with ..... ft. drawdown after ..... hrs.

Recovery data (time taken as zero when pump turned off) (water level measured from well top to water level)

Time	Water Level	Time	Water Level	Time	Water Level
[illegible]	233	11:00	247	12:00	247
[illegible]	247	12:00	247	[illegible]	[illegible]
[illegible]	247	12:30	247	[illegible]	[illegible]

Date of test 12/15/65
Bailer test ..... gal/min. with ..... ft. drawdown after ..... hrs.
Airlift test 500 gal/min. with ..... ft. drawdown after ..... hrs.
Temperature of water ..... Was a chemical analysis made? Yes ☐ No ☐

(10) WELL LOG:

Formation: *Describe by color, character, size of material and structure, and show thickness of aquifers and the kind and nature of the material in each stratum penetrated, with at least one entry for each change of formation.*

MATERIAL	FROM	TO
Dirty Sand	0	[illegible]
Sandy Brown Clay	[illegible]	47
Sandy Blue Clay	47	58
Blue Clay	58	93
Sandy Blue Clay	93	112
Dirty Sand	112	119
Clay	119	156
Sandy Clay	156	236
Dry Sand	236	253
Clean Sand	253	260
Gravelly Clay	260	[illegible]

Amended

ID. 480018122311001

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
NAME [illegible] (Person, firm, or corporation) (Type or print)
Address [illegible]
Signed [illegible] Well Driller
License No. [illegible] Date [illegible]

(USE ADDITIONAL SHEETS IF NECESSARY)

ECY No. 7-36—(Rev 2-86)—2-06—5M/4810

WASHINGTON STATE DEPARTMENT OF ECOLOGY

Well Tagging Form

Unique Well Tag No: AGA907

RECORD VERIFICATION (check ✓ one)

- ☐ Well Report available *(please attach this form to the well report and submit it to the Ecology Regional Office near you)*
- ☐ Verification inconclusive
- ☐ Well Report not available

SEC 1

WELL OWNERSHIP, IF DIFFERENT FROM WELL REPORT

First Name: FREELAND W. DIST Last Name:

Street Address: 26450-8

City: State:

LOCATION OF WELL, IF DIFFERENT FROM WELL REPORT

Well Address: NEXT TO 1687 SCENIC DRIVE

City: County:

T. N. R. W.M. Sec. 1/4 of the

FOR AGENCY USE ONLY

Latitude

Longitude

- ☐ GPS
- ☐ Topographic Map
- ☐ Survey
- ☐ Computer generated

Elevation at land surface feet/meters *(circle one)*

- ☐ Digital Altimeter
- ☐ Topographic Map
- ☐ Other

Additional information, if available:

- ☐ Location marked on topographic map *(please attach)*
- ☐ Location marked on air photo *(please attach)*

State Dept. of Health

The Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report.

The Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report.

FOR AGENCY USE ONLY

WELL CHARACTERISTICS

/sical Description of well (size of casing, type of well, housing, etc.)

10" CASING SURROUNDED BY CONCRETE (PASSES HEAD BY 1" ABOVE RIM)

NSIDE CINDER BLOCK HOUSE WITH FLAT ROOF. ONE RES. IS COVERED

VITH WOOD THE OTHER OF CONCRETE, CHAIN LINK FENCED IN AREA

UP HILL FROM SRC #2

:ation of Well identification Tag:

~~CASING~~ PIPES GOING INTO HEAD

s supplemental tag needed for ease of identifying well? ☐ Yes ☒ No

s, where was tag placed?

D	C	B	A
E	F	G	H
M	L	K	J
N	P	Q	R

Scale 1:24,000 (1"=2,000')

Indicate the location of the well within the Section by drawing a dot at that point.

SECTION

MMENTS:

FOR ECOLOGY WATER RESOURCES PROGRAM ONLY

r Right #

Date Issued

e One: Application Permit Certificate Claim Exempt

29-2E-14C

WATER WELL REPORT

Original & 1st copy – Ecology, 2nd copy – owner, 3rd copy – driller

Construction/Decommission *("x" in circle)*

○ Construction

○ Decommission *ORIGINAL INSTALLATION Notice of Intent Number* _____

CURRENT
Notice of Intent No. _____

Unique Ecology Well ID Tag No. AGA 907

Water Right Permit No. Cert. 5825

Property Owner Name FREELAND WATER District

Well Street Address 1687 Scenic Avenue

City FREELAND County Island

Location NE /4-1/4 NW /4 Sec 14 Twn 29 R 2 (EWM or WWM) circle one

Lat/Long (s, t, r Still **REQUIRED**) Lat Deg _____ Lat Min/Sec _____ Long Deg _____ Long Min/Sec _____

Tax Parcel No. S 8245 - 00 - 00004 - 0

PROPOSED USE: ☐ Domestic ☐ Industrial ☒ Municipal ☐ DeWater ☐ Irrigation ☐ Test Well ☐ Other _____

TYPE OF WORK: Owner's number of well (if more than one) 1

☐ New well ☒ Reconditioned ☐ Deepened *Method:* ☐ Dug ☐ Bored ☐ Driven ☒ Cable ☐ Rotary ☐ Jetted

DIMENSIONS: Diameter of well 8" inches, drilled _____ ft.
Depth of completed well 261 ft.

CONSTRUCTION DETAILS

Casing Installed: ☒ Welded 8" Diam. from +1 ft. to 251 ft.
☐ Liner installed _____" Diam. from _____ ft. to _____ ft.
☐ Threaded _____" Diam. from _____ ft. to _____ ft.

Perforations: ☐ Yes ☒ No
Type of perforator used _____
SIZE of perfs _____ in. by _____ in. and no. of perfs _____ from _____ ft. to _____ ft.

Screens: ☒ Yes ☐ No ☐ K-Pac Location _____
Manufacturer's Name —
Type STAINLESS STEEL Model No. —
Diam. 8" Slot size _____ from 251 ft. to 256 ft.
Diam. 8" Slot size _____ from 256 ft. to 261 ft.

Gravel/Filter packed: ☐ Yes ☐ No ☐ Size of gravel/sand _____
Materials placed from _____ ft. to _____ ft.

Surface Seal: ☐ Yes ☐ No To what depth? _____ ft.
Material used in seal _____
Did any strata contain unusable water? ☐ Yes ☐ No
Type of water? _____ Depth of strata _____
Method of sealing strata off _____

PUMP: Manufacturer's Name Flint & Walling
Type: Submersible H.P. 20

WATER LEVELS: Land-surface elevation above mean sea level Approx 260'
Static level 233 ft. below top of well Date 12-4-2009
Artesian pressure _____ lbs. per square inch Date _____
Artesian water is controlled by _____ (cap, valve, etc.)

WELL TESTS: Drawdown is amount water level is lowered below static level
Was a pump test made? ☒ Yes ☐ No If yes, by whom? Hydrogeologist
Yield: 180 gal./min. with 122 ft. drawdown after 1 hrs.
Yield: _____ gal./min. with _____ ft. drawdown after _____ hrs.
Yield: _____ gal./min. with _____ ft. drawdown after _____ hrs.

Recovery data (time taken as zero when pump turned off) (water level measured from well top to water level)

Time	Water Level	Time	Water Level	Time	Water Level

Date of test 12-11-2009
Bailer test _____ gal./min. with _____ ft. drawdown after _____ hrs.
Airtest _____ gal./min. with stem set at _____ ft. for _____ hrs.
Artesian flow _____ g.p.m. Date _____
Temperature of water _____ Was a chemical analysis made? ☐ Yes ☒ No

CONSTRUCTION OR DECOMMISSION PROCEDURE

Formation: Describe by color, character, size of material and structure, and the kind and nature of the material in each stratum penetrated, with at least one entry for each change of information. (USE ADDITIONAL SHEETS IF NECESSARY.)

MATERIAL	FROM	TO
Construction information corrected and up dated from Video Camera Inspection (12-4-2009)		

RECEIVED
DEPARTMENT OF ECOLOGY
APR 29 2010
WATER RESOURCES PROGRAM
NWRO

Start Date 11-24-2009 Completed Date 12-11-2009

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

☒ Driller ☐ Engineer ☐ Trainee Name (print) JAMES M.E. LEHMAN
Driller/Engineer/Trainee Signature _____
Driller or trainee License No. # 0263

Drilling Company B & W Pump Co.
Address P.O. Box 55
City, State, Zip FREELAND WA. 98249
Contractor's Registration No. BWPUMC*941R6 Date 4-23-2010

If TRAINEE,
Driller's Licensed No. _____
Driller's Signature _____

Ecology is an Equal Opportunity Employer.

ECY 050-1-20 (Rev 3/05) **The Department of Ecology does NOT warranty the Data and/or Information on this Well Report.**

The Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report.

The Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report.

project _____ project no. _____

by _____ date 4/27/10 sheet _____ of _____ checked by _____

Arlene,

Enclosed is the original and 1st Copy of a corrected water Well Report for Freeland Water & Sewer District's Well 1 (AGA907). During a video inspection, we discovered that the well screen was 10 feet deeper than reported on previous versions of the well log. Also, the lower 5 feet of the screen is a smaller diameter.

Therefore, the drilling company that was conducting the rehabilitation work completed this form.

Thank you.

RECEIVED
DEPARTMENT OF ECOLOGY
APR 29 2010
WATER RESOURCES PROGRAM
NWRO
GeoEngineers
Earth Science + Technology

Seawater Intrusion Rating 'Low' Risk

WATER WELL REPORT

State of Washington

IC Site ID: 1RF Unique Well ID

Start Card:

Water Right: G1-07797

(1) OWNER: Name: Freeland Water District Address: Freeland WA, 98249

(2) LOCATION OF WELL: County: Island Township/Range-Section: 29N/02E-14C Parcel Number: S8245-00-00006 0

(2a) Well Address: 100' N & 100' W of SW Cor Lot 6 of PWS-ID: 264508 Source: 1 PWS-Name: FREELAND WATER DISTRICT

(3) PROPOSED USE: Municipal Supply

(4) TYPE OF WORK: Owner's Well Number (if more than one): 1
Method: Driven

(5) DIMENSIONS: Diameter of Well: 8 inches.
Drilled: 260 feet. Depth of Completed Well: 257 ft.

(6) CONSTRUCTION DETAILS:

Casing Installed:

Diam. (in)	from	to (ft)
10	0	50
8	50	250

Screens:

Type	Zone	Diam	Slot	from	to (ft)
Stainless Steel	1	8	0.4	242	252

Surface seal:
Material: Cement Grout To depth: 10 ft.

(7) PUMP:
Type: Turbine Horsepower: 20

(8) WATER LEVELS: 1 Land-surface elevation (MSL): 250 ft.
AvgWL Elevation: -41 Calc'd Elev: 202 ft.
Highest Level: 243.00 ft. below toc Date: 12/15/1965
Lastest Level: 243.00 ft. below toc Date: 12/15/1965
Average Level: 243.00 ft. below toc Average Date: 12/15/1965

(9) WELL TESTS:

Type	Yield		Drawdown		After		Date
Pump	300	gpm	14	feet	4	hours	12/15/1965
Bailer	300	gpm	14	feet	4	hours	12/15/1965

(10) WELL LOG DESCRIPTION:

Material	From BGS	From MSL	Thick
Dirty Sand	0	202	42
Sandy Brown Clay	42	160	5
Sandy Blue Clay	47	155	11
Blue Clay	58	144	34
Sandy Blue Clay	92	110	14
Dirty Sand	106	96	12
Clay	118	84	9
Sandy Clay	127	75	29
Dry Sand	156	46	77
Clean Sand	233	-31	24
TD	257	-55	
Gravelly Clay	260	-58	0

Work Completed: 12/15/1965 TD Elev: -55 ft. MSL

WELL CONSTRUCTOR CERTIFICATION:

Name: Al Nelson

Address: Oak Harbor, WA 98277

Contractor's Registration Number:

Remarks:

Location Source: Parcel S8245-00-00006 0 North: 371262 East: 1587073 Latitd: 48° 00' 19" Longit: 122° 31' 12"

Max CL: 21 Max NO3: 3.1

Generated by the Island County Hydrogeologic Database: 12/12/2000

Disclaimer: Data presented has been collected from a variety of sources. Island County makes no guarantee as to the validity or accuracy of this data. Please report any errors to the Island County Hydrogeologist

FREELAND WATER DIST.

al and First Copy with
ent of Ecology
Copy — Owner's Copy
Copy — Driller's Copy

WELL #2

WATER WELL REPORT

STATE OF WASHINGTON

RECEIVED
DEC 8 1982
DEPT OF ECOLOGY

Location No. .....

Permit No. 1991

(1) OWNER: Name H. W. STONERIDGE Address R.O. BOX 88 FREELAND, WASH.

(2) LOCATION OF WELL: County ISLAND NW¼ NW¼ Sec. 14 T. 29 N., R. 2E W.M.

Bearing and distance from section or subdivision corner 1250' EAST AND 1200' South of N.W. CORNER SEC. 14

(3) PROPOSED USE: Domestic ☐ Industrial ☐ Municipal ☒
Irrigation ☐ Test Well ☐ Other ☐

(4) TYPE OF WORK: Owner's number of well (if more than one)....
New well ☒ Method: Dug ☐ Bored ☐
Deepened ☐ Cable ☐ Driven ☐
Reconditioned ☐ Rotary ☒ Jetted ☐

(5) DIMENSIONS: Diameter of well 8" inches
Drilled 200' ft. Depth of completed well 200' ft.

(6) CONSTRUCTION DETAILS:
Casing installed: 8" Diam. from 0 ft. to 200 ft.
Threaded ☐ " Diam. from ft. to ft.
Welded ☒ " Diam. from ft. to ft.

Perforations: Yes ☐ No ☒
Type of perforator used
SIZE of perforations in. by in.
perforations from ft. to ft.
perforations from ft. to ft.
perforations from ft. to ft.

Screens: Yes ☒ No ☐
Manufacturer's Name COOK
Type STAINLESS STEEL Model No.
Diam. 8" Slot size 10 from 185 ft. to 200 ft.
Diam. Slot size from ft. to ft.

Gravel packed: Yes ☐ No ☒ Size of gravel:
Gravel placed from ft. to ft.

Surface seal: Yes ☒ No ☐ To what depth? 20' ft.
Material used in seal BENTONITE
Did any strata contain unusable water? Yes ☐ No ☒
Type of water? Depth of strata
Method of sealing strata off

(7) PUMP: Manufacturer's Name NONE
Type: H.P.

(8) WATER LEVELS: Land-surface elevation above mean sea level 200' ft.
Static level 164' ft. below top of well Date 12/4/80
Artesian pressure lbs. per square inch Date
Artesian water is controlled by (Cap, valve, etc.)

(9) WELL TESTS: Drawdown is amount water level is lowered below static level
Was a pump test made? Yes ☒ No ☐ If yes, by whom? Driller
Yield: 42 gal./min. with 3' ft. drawdown after 4 hrs.
" " " "
" " " "

Recovery data (time taken as zero when pump turned off) (water level measured from well top to water level)

Time	Water Level	Time	Water Level	Time	Water Level

Date of test
Bailer test gal./min. with ft. drawdown after hrs.
Artesian flow g.p.m. Date
Temperature of water Was a chemical analysis made? Yes ☒ No ☐

(10) WELL LOG:

Formation: Describe by color, character, size of material and structure, and show thickness of aquifers and the kind and nature of the material in each stratum penetrated, with at least one entry for each change of formation.

MATERIAL	FROM	TO
CLAY + SAND BROWN	0'	5'
CLAY GRAY	5'	52'
SAND GRAY	52'	65'
CLAY BLUE GRAY	65'	94'
SAND BROWN	94'	160'
SAND W.W.	160'	200'

Work started 11/24, 19 82 Completed 12/3, 19 82

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME G + W WELL DRILLING CO.
(Person, firm, or corporation) (Type or print)

Address P.O. BOX 55 FREELAND WA. 98249

[Signed] (Well Driller)

License No. 264 Date 12/4, 19 82

The Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report.

29/12-17 D

File Original and First Copy with Department of Ecology
Second Copy — Owner's Co
Third Copy — Driller's Cop

WATER WELL REPORT

STATE OF WASHINGTON

Application No. G1-24199

Permit No. .....

Freeland WSD Well 2

(1) OWNER: Name H. W. STONEBRIDGE Address P.O. Box 88 FREELAND, WASH.

(2) LOCATION OF WELL: County ISLAND — NW ¼ NW ¼ Sec. 17 T. 29 N., R. 2E W.M.

Bearing and distance from section or subdivision corner 1250' EAST AND 1200' South of N.W. CORNER SEC. 17

(3) PROPOSED USE: Domestic ☐ Industrial ☐ Municipal ☒
Irrigation ☐ Test Well ☐ Other ☐

(4) TYPE OF WORK: Owner's number of well (if more than one) .....
New well ☒ Method: Dug ☐ Bored ☐
Deepened ☐ Cable ☐ Driven ☐
Reconditioned ☐ Rotary ☒ Jetted ☐

(5) DIMENSIONS: Diameter of well 8" inches.
Drilled 200' ft. Depth of completed well 200' ft.

(6) CONSTRUCTION DETAILS:

Casing installed: 8" Diam. from 0 ft. to 200' ft.
Threaded ☐ ..." Diam. from ... ft. to ... ft.
Welded ☒ ..." Diam. from ... ft. to ... ft.

Perforations: Yes ☐ No ☒
Type of perforator used .....
SIZE of perforations ... in. by ... in.
... perforations from ... ft. to ... ft.
... perforations from ... ft. to ... ft.
... perforations from ... ft. to ... ft.

Screens: Yes ☒ No ☐
Manufacturer's Name COOK
Type STAINLESS STEEL Model No. .....
Diam. 8" Slot size 10 from 185 ft. to 200 ft.
Diam. ... Slot size ... from ... ft. to ... ft.

Gravel packed: Yes ☐ No ☒ Size of gravel: .....
Gravel placed from ... ft. to ... ft.

Surface seal: Yes ☒ No ☐ To what depth? 20' ft.
Material used in seal BENTONITE
Did any strata contain unusable water? Yes ☐ No ☒
Type of water? ... Depth of strata ...
Method of sealing strata off .....

(7) PUMP: Manufacturer's Name NONE
Type: ... H.P. ...

(8) WATER LEVELS: Land-surface elevation above mean sea level .... 200' ft.
Static level 164' ft. below top of well Date 12/4/80
Artesian pressure ... lbs. per square inch Date ...
Artesian water is controlled by ... (Cap, valve, etc.)

(9) WELL TESTS: Drawdown is amount water level is lowered below static level
Was a pump test made? Yes ☒ No ☐ If yes, by whom? Driller
Yield: 42 gal./min. with 3'1" ft. drawdown after 4 hrs.
" " " "
" " " "

Recovery data (time taken as zero when pump turned off) (water level measured from well top to water level)

Time	Water Level	Time	Water Level	Time	Water Level

Date of test .....
Bailer test ... gal./min. with ... ft. drawdown after ... hrs.
Artesian flow ... g.p.m. Date ...
Temperature of water ... Was a chemical analysis made? Yes ☒ No ☐

(10) WELL LOG:

Formation: *Describe by color, character, size of material and structure, and show thickness of aquifers and the kind and nature of the material in each stratum penetrated, with at least one entry for each change of formation.*

MATERIAL	FROM	TO
CLAY + SAND BROWN	0'	5'
CLAY GRAY	5'	50'
SAND GRAY	50'	65'
CLAY BLUE GRAY	65'	94'
SAND BROWN	94'	160'
SAND W.W.	160'	200'

Work started 11/24, 19 80 Completed 12/3, 19 80

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME B+W WELL DRILLING Co.
(Person, firm, or corporation) (Type or print)

Address P.O. BOX 55 FREELAND WA. 98249

[Signed] Jerry M Lehman
(Well Driller)

License No. 264 Date 12/4, 19 80

(USE ADDITIONAL SHEETS IF NECESSARY)

ECY 050-1-20

The Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report.

The Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report.

WASHINGTON STATE DEPARTMENT OF ECOLOGY

Well Tagging Form

Unique Well Tag No: AGA 908

RECORD VERIFICATION (check/ one)

- ☐ Well Report available *(please attach this form to the well report and submit it to the Ecology Regional Office near you)*
- ☐ Verification inconclusive
- ☐ Well Report not available

Sec 2

WELL OWNERSHIP, IF DIFFERENT FROM WELL REPORT

First Name: FREELAND WATER DIST. Last Name:

Street Address:

City: State:

LOCATION OF WELL, IF DIFFERENT FROM WELL REPORT

Well Address:

City: County:

T. _____ N. R. _____ W.M. Sec. _____ 1/4 of the _____

FOR AGENCY USE ONLY

Latitude _____ _____ _____ _____

Longitude _____ _____ _____ _____

- ☐ GPS
- ☐ Topographic Map
- ☐ Survey
- ☐ Computer generated

Elevation at land surface _____ feet/meters *(circle one)*

- ☐ Digital Altimeter
- ☐ Topographic Map
- ☐ Other _____

Additional information, if available:

- ☐ Location marked on topographic map *(please attach)*
- ☐ Location marked on air photo *(please attach)*

State Dept of Health

The Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report.

FOR AGENCY USE ONLY

WELL CHARACTERISTICS

ysical Description of well (size of casing, type of well, housing, etc.)

8" CASING PAINTED YELLOW - INSIDE CINDER BLOCK HOUSE W/ GABLED ROOF, PAINTED OFF WHITE. SITE IS FENCED IN (CHAINLINK) YND IS DOWNHILL FROM SRL #1

cation of Well Identification Tag:

CASING

as supplemental tag needed for ease of identifying well? ☐ Yes ☑ No

es, where was tag placed?

D	C	B	A
E	F	G	H
M	L	K	J
N	P	Q	R

Scale 1:24,000 (1"=2,000')

Indicate the location of the well within the Section by drawing a dot at that point

SECTION

MMENTS:

FOR ECOLOGY WATER RESOURCES PROGRAM ONLY

r Right #

Date Issued

le One: Application Permit Certificate Claim Exempt

File Original and First Copy with Department of Ecology
Second Copy—Owner's Copy
Third Copy—Driller's Copy

WATER WELL REPORT

STATE OF WASHINGTON

Start Card No. W125577

7762 - JOB #

AFJ 868

Freeland WSD Well 3

(1) OWNER: Name MCCLELLAN, DAVID Address PO BOX 716, LANGLEY, WA 98260

(2) LOCATION OF WELL: County Island NE ¼ NW ¼ Sec 14 T 29 N R 2E W.M.

(2a) STREET ADDRESS OF WELL (or nearest address) 1780 SCENIC AVE, FREELAND, WA 29-2E-14C

(3) PROPOSED USE: ☒ Domestic ☐ Industrial ☐ Municipal ☐ ☐ Irrigation ☐ Test Well ☐ Other ☐ ☐ DeWater

(4) TYPE OF WORK: Owner's number of well (if more than one) 1

Abandoned ☐ New well ☒ Method: Dug ☐ Bored ☐ Deepened* ☐ Cable ☐ Driven ☐ Reconditioned ☐ Rotary ☒ Jetted ☐

(5) DIMENSIONS: Diameter of well 6 inches. Drilled 380 feet. Depth of completed well 368 ft.

(6) CONSTRUCTION DETAILS:

Casing installed: 6" Diam. from +2 ft. to 361 ft.
Welded ☒ Liner installed ☐ Threaded ☐ 8" Diam. from +.66 ft. to 255 ft.

Perforations: Yes ☐ No ☒
Type of perforator used
SIZE of perforations in. by in.
perforations from ft. to ft.
perforations from ft. to ft.
perforations from ft. to ft.

Screens: Yes ☒ No ☐
Manufacturer's Name COOK
Type STAINLESS Model No.
Diam. 6 Slot size 30 from 357 ft. to 368 ft.
Diam. Slot size from ft. to ft.

Gravel packed: Yes ☐ No ☐ Size of gravel
Gravel placed from ft. to ft.

Surface seal: Yes ☒ No ☐ To what depth? 18 ft.
Material used in seal BENTONITE
Did any strata contain unusable water? Yes ☐ No ☒
Type of water? Depth of strata
Method of sealing strata off

(7) PUMP: Manufacturer's Name
Type: H.P.

(8) WATER LEVELS: Land-surface elevation above mean sea level ft.
Static level 321.5 ft. below top of well Date 8/11/00
Artesian pressure lbs. per square inch Date
Artesian water is controlled by (Cap, valve, etc.)

(9) WELL TESTS: Drawdown is amount water level is lowered below static level
Was a pump test made? Yes ☒ No ☐ If yes, by whom? HDI
Yield: 90 gal./min. with 13 ft. drawdown after 4 hrs.
Recovery data (time taken as zero when pump turned off) (water level measured from well top to water level)

Time	Water Level	Time	Water Level	Time	Water Level

Date of test
Bailer test 2 gal./min. with .16 ft. drawdown after .5 hrs.
Airtest 20 gal./min. with stem set at 355 ft. for 1.5 hrs.
Artesian flow g.p.m. Date
Temperature of water Was a chemical analysis made? Yes ☐ No ☐

(10) WELL LOG or ABANDONMENT PROCEDURE DESCRIPTION

Formation: Describe by color, character, size of material and structure, and show thickness of aquifers and the kind and nature of the material in each stratum penetrated, with at least one entry for each change of information.

Material	From	To
TOPSOIL	0	1
BROWN SAND & SILT	1	6
GRAY SAND & SILT & GRAVEL	6	30
BROWN SAND & SILT	30	60
BROWN SAND & SILT & GRAVEL	60	80
BROWN SILT & SAND	80	90
BROWN SAND & SILT & GRAVEL	90	113
GRAY CLAY & SILT & SAND	113	255
GRAY SAND & WATER	255	271
GRAY SAND & SILT	271	290
GRAY CLAY	290	291
GRAY SAND & SILT & CLAY	291	355
GRAY SAND & GRAVEL & WATER	355	369
GRAY SAND & CLAY	369	

RECEIVED AUG 23 2000 AUG 31 2000 DEPARTMENT OF ECOLOGY WELL DRILLING UNIT

Work started 07/19/00 19 Completed 07/31/00 19

WELL CONSTRUCTOR CERTIFICATION:

I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

NAME HAYES DRILLING (Person, Firm or Corporation) (Type or Print)
Address 5696 ERSHIG ROAD, BOW WA 98232
(Signed) [signature] License No. 2189 (Well Drilling)
Contractor's Registration No. HAYESDI806J5 Date 8/24/00 19

(USE ADDITIONAL SHEETS IF NECESSARY) 7092-WL#

DOE 1-88 (10/97) ...

Well site meets all sighting criteria under I.C.C. 8.09 based on information supplied by the owner or owner's authorized representative.

The Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report.

The Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report.

AL 0382

Sunny View Farms Well

Appendix 1

File Original and First Copy with Department of Ecology
Second Copy—Owner's Copy
Third Copy—Driller's Copy

WATER WELL REPORT

STATE OF WASHINGTON

Start Card No. W 021 86

58245-CO-00091-0

WELL I.D. 455

Water Right Permit No.

(1) OWNER: Name STEVE ARNOLD Address 26342 BARKER RD E. SUMNER WA 98390

(2) LOCATION OF WELL: County ISLAND NW ¼ NE ¼ Sec. 14 T. 29 N., R. 2 E W.M.

(2a) STREET ADDRESS OF WELL (or nearest address)

(3) PROPOSED USE: ☐ Domestic ☐ Industrial ☐ Municipal ☑ ☐ Irrigation ☐ DeWater ☐ Test Well ☐ Other ☐

(4) TYPE OF WORK: Owner's number of well (if more than one)

Abandoned ☐ New well ☑ Method: Dug ☐ Bored ☐ Deepened ☐ Cable ☑ Driven ☐ Reconditioned ☐ Rotary ☐ Jetted ☐

(5) DIMENSIONS: Diameter of well 6 inches. Drilled 235 feet. Depth of completed well 225 ft.

(6) CONSTRUCTION DETAILS:

Casing installed: 6" Diam. from 0 ft. to 220 ft.
Welded ☐ Liner installed ☐ Threaded ☐ " Diam. from ft. to ft.
" Diam. from ft. to ft.

Perforations: Yes ☐ No ☐
Type of perforator used
SIZE of perforations in. by in.
perforations from ft. to ft.
perforations from ft. to ft.
perforations from ft. to ft.

Screens: Yes ☑ No ☐
Manufacturer's Name SMITH
Type SS WELD Model No.
Diam. 6" Slot size .020 from 220 ft. to 235 ft.
Diam. Slot size from ft. to ft.

Gravel packed: Yes ☐ No ☐ Size of gravel
Gravel placed from ft. to ft.

Surface seal: Yes ☑ No ☐ To what depth? 25 ft.
Material used in seal BENTONITE PUDDLED
Did any strata contain unusable water? Yes ☐ No ☐
Type of water? Depth of strata
Method of sealing strata off

(7) PUMP: Manufacturer's Name
Type: H.P.

(8) WATER LEVELS: Land-surface elevation above mean sea level 200 ft.
Static level 203 ft. below top of well Date
Artesian pressure lbs. per square inch Date
Artesian water is controlled by (Cap, valve, etc.)

(9) WELL TESTS: Drawdown is amount water level is lowered below static level
Was a pump test made? Yes ☐ No ☐ If yes, by whom?
Yield: gal./min. with ft. drawdown after hrs.

Recovery data (time taken as zero when pump turned off) (water level measured from well top to water level)

Time	Water Level	Time	Water Level	Time	Water Level

Date of test
Bailer test 10 gal./min. with 2 ft. drawdown after 2 1/2 hrs.
Airtest gal./min. with stem set at ft. for hrs.
Artesian flow g.p.m. Date
Temperature of water Was a chemical analysis made? Yes ☐ No ☐

(10) WELL LOG or ABANDONMENT PROCEDURE DESCRIPTION

Formation: Describe by color, character, size of material and structure, and show thickness of aquifers and the kind and nature of the material in each stratum penetrated, with at least one entry for each change of information.

MATERIAL	FROM	TO
TOP SOIL	0	1
CLAY BR	1	12
CLAY GRAY	12	96
CLAY + SAND GRAY	96	114
SILT GRAY	114	118
LAYER SAND & CLAY	118	190
SAND GR	190	200
SAND WH GR	200	235

RECEIVED
DEPARTMENT OF ECOLOGY
MAY 23 2012
WATER RESOURCES PROGRAM
NWRO

Work started 7/20 19 74 Completed 7/26 19 74

WELL CONSTRUCTOR CERTIFICATION:

I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

NAME MARCHAND (PERSON, FIRM, OR CORPORATION) (TYPE OR PRINT)

Address 2869 E. Valley Hwy. Sumner, Wa. 98390

(Signed) (WELL DRILLER) License No. 0284

Contractor's Registration No. MARCH*742NF Date 19

(USE ADDITIONAL SHEETS IF NECESSARY)

ECY 050-1-20 (10/87) -1329 3

The Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report.

Well tag id: AGA560

WELL DRILLING
ADVISORY SERVICE
WELL TESTING

JAMES L. BELL
WATER WELL
DRILLING
FORMERLY JAMES J. BELL & SON EST. 1936

5116 FOURTH AVENUE S
SEATTLE 8, WASH.
OFFICE:
PA 3-2466
RESIDENCE:
CH 2-8271

Island County
WATER WELL REPORT

29N-02E-14C

October 13, 1967

#1

Ideal Investments, Inc.
Box 223
Clinton, Washington 98236

Well Log

0	-	8	Fill
8	-	30	Brown clay and sand
30	-	61	Blue clay and silt
61	-	171	Brown clay and sand
171	-	185	Brown sand
185	-	208	Coarse brown sand and gravel, water bearing

5' of 6" No. 16 slot Johnson Everdur screen with 4" bail-down fittings. 6' of 5" pipe on top with figure K packer.

Total depth of well 208'
Static water level 178' pumping 15 G.P.M.
Draw-down of 3'

RECEIVED
APR 0 1 2008
DEPT. OF ECOLOGY

The Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report.

WASHINGTON STATE DEPARTMENT OF ECOLOGY

Well Tagging Form

Unique Well Tag No: AGA 860

RECORD VERIFICATION (check ✓one)

[✓] Well Report available (please attach this form to the well report and submit it to the Ecology Regional Office near you).

If a well report is not available, please complete a "Water Well Report for an Existing Well" form. This form is available at Ecology's headquarters office. **Do not use this form for wells that do not have a Water Well Report.**

WELL OWNERSHIP, IF DIFFERENT FROM WELL REPORT

First Name: Harbor Hill Community Association Last Name:

Street Address: PO Box 874

City: Freeland State: WA 98249

LOCATION OF WELL, IF DIFFERENT FROM WELL REPORT

Well Address: Parcel S7875-00-00005-4, Dusty Lane & Osprey Lane, Freeland

City: Freeland County: Island

T. 29 N. R. 2 E W.M. Sec. 14 NE ¼ of the NW

Latitude 48 ° 0 ' .426874 "

Longitude 122 ° 31 ' .13526 "

Elevation at land surface 180 feet/meters *(circle one)*

SEE BACK SIDE OF PAGE...

RECEIVED
OCT 28 2011
WATER RESOURCES - NWRO

The Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report.

WELL CHARACTERISTICS

Location of Well identification Tag:
strapped to well casing in cinder-block enclsure south of pump house of well

D	C	B	A
E	F	G	H
M	L	K	J
N	P	Q	R

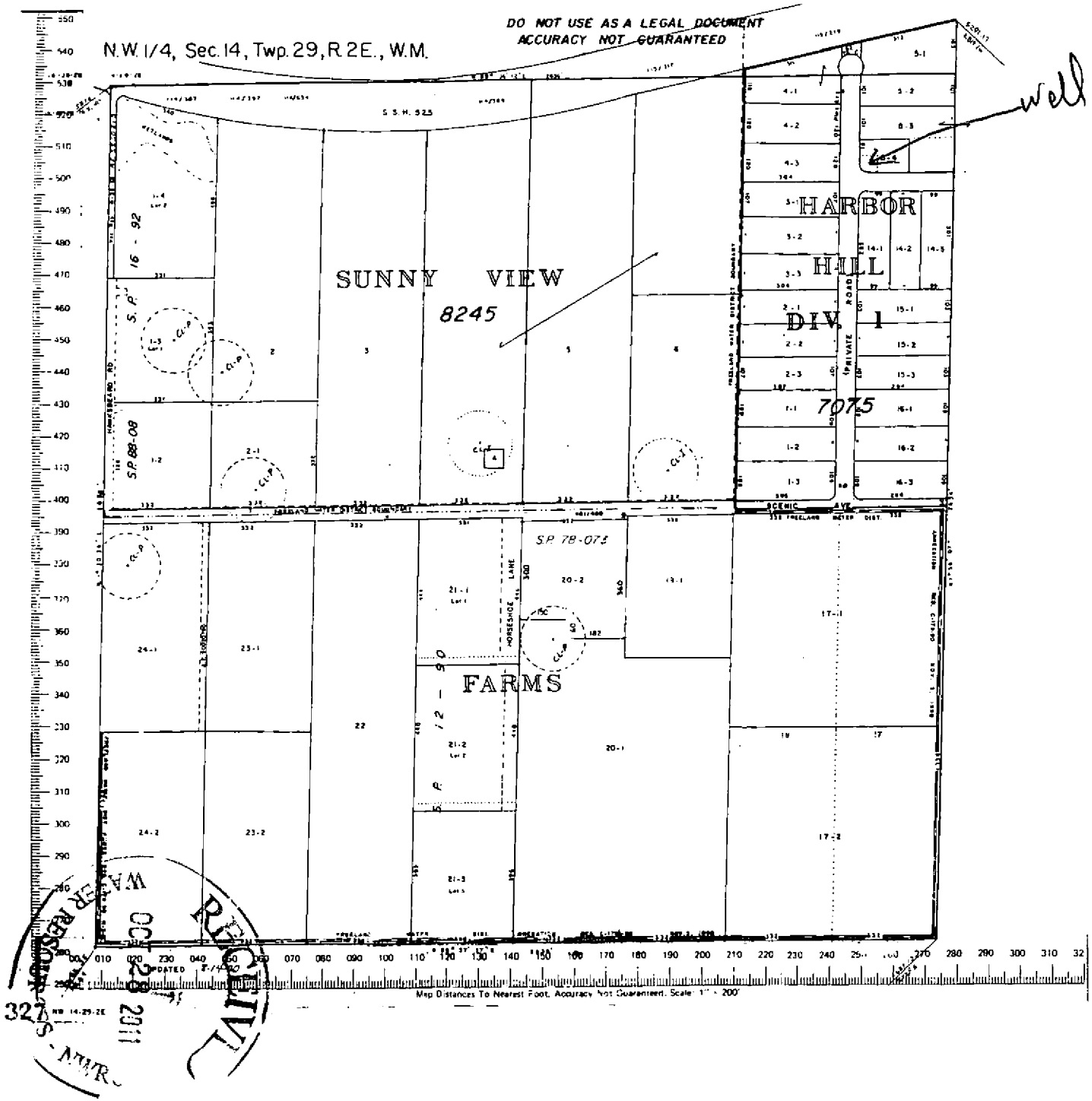
Scale 1:24,000 (1" = 2,000')

Indicate the location of the well within the Section by drawing a dot at that point

SECTION 14

COMMENTS:
Note the unique well identification tag number on this well head is AGA860 (NOT AGA560)

The Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report.



APPENDIX C

WATER RIGHTS DOCUMENTS

Water Right Self-Assessment Form for Water System Plan

Mouse-over any link for more information. Click on any link for more detailed instructions.

Water Right Permit, Certificate, or Claim # *If water right is interruptible, identify limitation in yellow section below	WFI Source # If a source has multiple water rights, list each water right on separate line	Existing Water Rights Qi= Instantaneous Flow Rate Allowed (GPM or CFS) Qa= Annual Volume Allowed (Acre-Feet/Year) This includes wholesale water sold				Current Source Production – Most Recent Calendar Year Qi = Max Instantaneous Flow Rate Withdrawn (GPM or CFS) Qa = Annual Volume Withdrawn (Acre-Feet/Year) This includes wholesale water sold				10-Year Forecasted Source Production (determined from WSP) This includes wholesale water sold				20-Year Forecasted Source Production (determined from WSP) This includes wholesale water sold			
		Primary Qi Maximum Rate Allowed	Non-Additive Qi Maximum Rate Allowed	Primary Qa Maximum Volume Allowed	Non-Additive Qa Maximum Volume Allowed	Total Qi Maximum Instantaneous Flow Rate Withdrawn	Current Excess or (Deficiency) Qi	Total Qa Maximum Annual Volume Withdrawn	Current Excess or (Deficiency) Qa	Total Qi Maximum Instantaneous Flow Rate in 10 Years	10-Year Forecasted Excess or (Deficiency) Qi	Total Qa Maximum Annual Volume in 10 Years	10-Year Forecasted Excess or (Deficiency) Qa	Total Qi Maximum Instantaneous Flow Rate in 20 Years	20-Year Forecasted Excess or (Deficiency) Qi	Total Qa Maximum Annual Volume in 20 Years	20-Year Forecasted Excess or (Deficiency) Qa
1. 5825-A	S01, S02	250 gpm		168		211 gpm	39 gpm	67.90	100.10	211 gpm	39 gpm	71.50	96.50	211 gpm	39 gpm	74.23	93.77
2. G1-28039	S01, S02, S03, SVF Well	285 gpm		262		260 gpm	25 gpm	105.89	156.11	260 gpm	25 gpm	111.50	150.50	260 gpm	25 gpm	115.77	146.23
3.																	
4.																	
5.																	
6.																	
	TOTALS =	535 gpm		430		471 gpm	64 gpm	173.79	256.21	511 gpm	124 gpm	183	247	511 gpm	124 gpm	190	240
Column Identifiers for Calculations:		A		B		C	=A-C	D	=B-D	E	= A-E	F	=B-F	G	=A-G	H	=B-H

PENDING WATER RIGHT APPLICATIONS: Identify any water right applications that have been submitted to Ecology.

Application Number	New or Change Application?	Date Submitted	Quantities Requested			
			Primary Qi	Non-Additive Qi	Primary Qa	Non-Additive Qa

INTERTIES: Systems receiving wholesale water complete this section. Wholesaling systems must include water sold through intertie in the current and forecasted source production columns above.

Name of Wholesaling System Providing Water	Quantities Allowed In Contract		Expiration Date of Contract	Currently Purchased Current quantity purchased through intertie				10-Year Forecasted Purchase Forecasted quantity purchased through intertie				20-Year Forecasted Purchase Forecasted quantity purchased through intertie			
	Maximum Qi Instantaneous Flow Rate	Maximum Qa Annual Volume		Maximum Qi Instantaneous Flow Rate	Current Excess or (Deficiency) Qi	Maximum Qa Annual Volume	Current Excess or (Deficiency) Qa	Maximum Qi 10-Year Forecast	Future Excess or (Deficiency) Qi	Maximum Qa 10-Year Forecast	Future Excess or (Deficiency) Qa	Maximum Qi 20-Year Forecast	Future Excess or (Deficiency) Qi	Maximum Qa 20-Year Forecast	Future Excess or (Deficiency) Qa
1															
2															
3															
TOTALS =															
Column Identifiers for Calculations:	A	B		C	=A-C	D	=B-D	E	=A-E	F	=B-F	G	=A-G	H	=B-H

INTERRUPTIBLE WATER RIGHTS: Identify limitations on any water rights listed above that are interruptible.

Water Right #	Conditions of Interruption	Time Period of Interruption
1		
2		
3		

ADDITIONAL COMMENTS:

S. F. No. 7361—OS—6-67.

CERTIFICATE RECORD NO. 12 PAGE NO. 5825-A

STATE OF WASHINGTON, COUNTY OF Island

Certificate of Ground Water Right

Issued in accordance with the provisions of Chapter 263, Laws of Washington for 1945, and amendments thereto, and the rules and regulations of the Department of Water Resources thereunder.

THIS IS TO CERTIFY *That* FREELAND WATER DISTRICT

of Freeland, Washington, *has made proof to the satisfaction of the Department of Water Resources of Washington, of a right to the use of the ground waters of a* well

located within Lot 6, Plat of Sunny View Farms

Sec. 14, *Twp.* 29 *N., R.* 2 E. *W.M.,*

for the purpose of municipal supply

under and subject to provisions contained in Ground Water Permit No. 7499 *issued by the Department of Water Resources and that said right to the use of said ground waters has been perfected in accordance with the laws of Washington, and is hereby confirmed by the Department of Water Resources of Washington and entered of record in Volume* 12 *at page* 5825-A; *that the right hereby confirmed dates from* September 20, 1965; *that the quantity of ground water under the right hereby confirmed for the purposes aforesaid, is limited to an amount actually beneficially used for said purposes, and shall not exceed* 250 gallons per minute; 168 acre-feet per year, to supply the Town of Freeland.

Special provisions required by the Department of Water Resources:

A description of the lands to which such ground water right is appurtenant:

Town of Freeland

The right to the use of the water aforesaid hereby confirmed is restricted to the lands or place of use herein described, except as provided in Sections 6 and 7, Chapter 122, Laws of 1929.

This certificate of ground water right is specifically subject to relinquishment for nonuse of water as provided in Section 18, Chapter 233, Laws of 1967.

WITNESS the seal and signature of the Assistant Director, Division of Water Management, Department of Water Resources affixed this 20th *day of* September, *19* 67

Assistant Director
Division of Water Management
Department of Water Resources

DATA

Ground Water Permit No......

CERTIFICATE OF GROUND WATER RIGHT

Recorded in the Department of Water Resources, Olympia, Washington, in Book No......*of Ground Water Right Certificates, on page*....., *on the*.....*day of*.....*19*.....

STATE OF WASHINGTON,
County of ..... } *ss.*

I certify that the within was received and duly recorded by me in Volume..... *of Book of Water Right Certificates, at page*....., *on the*.....*day of*....., *19*.....

.....

STATE PRINTING PLANT OLYMPIA, WASH.

update
GW Cert 5825

CERTIFICATE OF CHANGE
TO ADD AN ADDITIONAL POINT OF WITHDRAWAL OF GROUND WATERS

THIS IS TO CERTIFY THAT Freeland Water District, Freeland, Washington, has complied with the requirements of the Revised Code of Washington, 90.03 and 90.44, and is hereby granted a change for the addition of a well (No. 2) for the withdrawal of ground water as granted in Ground Water Right Certificate 5825-A.

That the original point of withdrawal (No. 1) was and is located about 600 feet east and 1150 feet south from the northwest corner of Section 14; and the second point of withdrawal (No. 2) is located about 1200 feet east and 1150 feet south from the northwest corner of Section 14, all in T. 29N., R. 2E.,W.M., Island County.

That the instantaneous withdrawal rate, beneficial use, annual quantity and place of use remain unchanged. That the right is 250 gpm, 168 acre-feet per year, to supply the Town of Freeland, with a priority date of September 20, 1965.

Given under my hand and seal of this office, Department of Ecology, Northwest Region, this 10th day of December, 1985.

Department of Ecology
Andrea Beatty Riniker

By Joan K Thomas
Joan K. Thomas
Northwest Regional Manager

RECORDED:

Certificate of Change
Vol. 1, page 60
O.K.

Box 745
86-7-791

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

PERMIT
TO APPROPRIATE PUBLIC WATERS OF THE STATE OF WASHINGTON

☐ Surface Water (Issued in accordance with the provisions of Chapter 117, Laws of Washington for 1917, and amendments thereto, and the rules and regulations of the Department of Ecology.)

☒ Ground Water (Issued in accordance with the provisions of Chapter 263, Laws of Washington for 1945, and amendments thereto, and the rules and regulations of the Department of Ecology.)

PRIORITY DATE	APPLICATION NUMBER	PERMIT NUMBER	CERTIFICATE NUMBER
May 4, 1994	G1-27463	G1-27463P	

NAME
Freeland Water & Sewer District

ADDRESS (STREET)	(CITY)	(STATE)	(ZIP CODE)
PO Box 222	Freeland	WA	98249

The applicant is hereby granted a permit to appropriate the following public waters of the State of Washington, subject to existing rights and to the limitations and provisions set herein.

PUBLIC WATERS TO BE APPROPRIATED

SOURCE
Well

TRIBUTARY OF (IF SURFACE WATERS)

MAXIMUM CUBIC FEET PER SECOND	MAXIMUM GALLONS PER MINUTE	MAXIMUM ACRE FEET PER YEAR
	100	80

QUANTITY, TYPE OF USE, PERIOD OF USE

80.00 acre-feet, Municipal, Year round as needed

LOCATION OF DIVERSION/WITHDRAWAL

APPROXIMATE LOCATION OF DIVERSION--WITHDRAWAL

1475 west and 900 south of the northeast corner of Section 14, Township 29N Range 2E W.M. Island County

SOURCE	QTR/QTR	SECTION	TOWNSHIP N.	RANGE, (E. OR W.) W.M.	W.R.I.A.	COUNTY
Well Freeland Water & Sewer Dist	NW1/4 NE1/4	14	29N	02E	6	Island

RECORDED PLATTED PROPERTY

LOT	BLOCK	OF (GIVE NAME OF PLAT OR ADDITION)

LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS TO BE USED

The place of use (POU) of this water right is the service area described in the most recent Water System Plan/Small Water System Management Program approved by the Washington State Department of Health, so long as **Freeland Water & Sewer Dist** is and remains in compliance with the criteria in RCW 90.03.386(2). RCW 90.03.386 may have the effect of revising the place of use of this water right.

DESCRIPTION OF PROPOSED WORKS

Freeland currently operates multiple wells with municipal-scale works. See current water system plan for details.

DEVELOPMENT SCHEDULE

BEGIN PROJECT BY THIS DATE:	COMPLETE PROJECT BY THIS DATE:	WATER PUT TO FULL USE BY THIS DATE:
Begun	December 31, 2029	December 31, 2029

PROVISIONS

STANDARD PROVISIONS

1. **Measurements, Monitoring, Metering and Reporting**
   1.1. An approved measuring device shall be installed and maintained for each of the sources identified by this water right in accordance with the rule "Requirements for Measuring and Reporting Water Use", WAC 173-173.

   1.2. Reported water use data shall be submitted via the Internet. To set up an Internet reporting account, access https://fortress.wa.gov/ecy/wrx/wrx/Meteringx/. If you do not have Internet access, contact the Northwest Region Office for forms to submit your data.

1.3. WAC 173-173 describes the requirements for data accuracy, device installation and operation, and information reporting. It also allows a water user to petition the Department of Ecology for modifications to some of the requirements. Installation, operation and maintenance requirements are contained in the document entitled "Water Measurement Device Installation and Operation Requirements". http://www.ecy.wa.gov/programs/wr/measuring/measuringhome.html

1.4. In order to maintain a sustainable supply of water, pumping must be managed so that static water levels do not progressively decline from year to year. Water levels shall be measured and recorded monthly, using a consistent methodology. The length of the pumping period or recovery period prior to each measurement shall be constant, and shall be included in the record. Data for the previous year shall be submitted by January 31 to the Department of Ecology.

Static water levels data shall be submitted in digital format and shall include the following elements:

1. Unique Well ID Number
2. Measurement date and time
3. Measurement method (air line, electric tape, pressure transducer, etc.)
4. Well status (pumping, recently pumped, etc.)
5. Water level accuracy (to nearest foot, tenth of foot, etc.)
6. Description of the measuring point (top of casing, sounding tube, etc.)
7. Measuring point elevation above or below land surface to the nearest 0.1 foot
8. Land surface elevation at the well head to the nearest foot.
9. Static water level below measuring point to the nearest 0.1 foot.

2. **Department of Health Requirements**
Prior to any new construction or alterations of a public water supply system, the State Board of Health rules require public water supply owners to obtain written approval from the Office of Drinking Water of the Washington State Department of Health. Please contact the Office of Drinking Water at Northwest Drinking Water Operations, 20435 72nd Avenue S, Suite 200, K17-12, Kent, WA 98032-2358, (253) 396-6750, prior to beginning (or modifying) your project.

3. **Municipal Place of Use**
If the criteria in RCW 90.03.386(2) are not met and a Water System Plan/Small Water System Management Program was approved after September 9, 2003, the place of use of this water right reverts to the service area described in that document. If the criteria in RCW 90.03.386(2) are not met and no Water System Plan/Small Water System Management Program has been approved after September 9, 2003, the place of use reverts to the last place of use described by The Department of Ecology in a water right authorization

4. **Chloride Monitoring**
In November of each year, the following information shall be submitted in writing to the Department of Ecology, Northwest Region Office, Bellevue, Washington.

April and September measurements from the subject well(s) of:

- Chloride and conductivity (the chemical analysis shall be performed by a state-accredited laboratory)
- Depth to static water level (with pump off long enough to allow for stabilization)
- The chloride/conductivity sampling and the static water level measurement shall be conducted concurrently.

This data collection will assist the applicant and Ecology in determining if actions are necessary to prevent an increasing trend in chloride concentrations (an indicator of seawater intrusion). Preventative actions may include – reducing the instantaneous pumping rate, reducing the annual volume pumped, scheduling pumping to coincide with low tides, raising the pump intake, and/or limiting the number of service connections.

5. **Easement and Right-of-Way**
The water source and/or water transmission facilities are not wholly located upon land owned by the applicant. Issuance of a water right change authorization by this department does not convey a right of access to, or other right to use, land which the applicant does not legally possess. Obtaining such a right is a private matter between applicant and owner of that land.

6. **Water Use Efficiency**
Use of water under this authorization shall be contingent upon the water right holder's maintenance of efficient water delivery systems and use of up-to-date water conservation practices consistent with established regulation requirements and facility capabilities.

7. **Schedule and Inspections**
Department of Ecology personnel, upon presentation of proper credentials, shall have access at reasonable times, to the project location, and to inspect at reasonable times, records of water use, wells, diversions, measuring devices and associated distribution systems for compliance with water law.

This permit shall be subject to cancellation should the permittee fail to comply with the above development schedule and/or fail to give notice to the Department of Ecology on forms provided by that Department documenting such compliance.

Given under my hand and the seal of this office at Bellevue, Washington, this 1ST *day of* DECEMBER *2009.*

REVIEWED BY
OKAY

Department of Ecology

By
Andrew B. Dunn, LG, LHG, Section Supervisor, Water Resources

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

PERMIT
TO APPROPRIATE PUBLIC WATERS OF THE STATE OF WASHINGTON

☐ Surface Water (Issued in accordance with the provisions of Chapter 117, Laws of Washington for 1917, and amendments thereto, and the rules and regulations of the Department of Ecology.)

☒ Ground Water (Issued in accordance with the provisions of Chapter 263, Laws of Washington for 1945, and amendments thereto, and the rules and regulations of the Department of Ecology.)

PRIORITY DATE	APPLICATION NUMBER	PERMIT NUMBER	CERTIFICATE NUMBER
June 10, 1999	G1-28039	G1-28039P	

NAME
Freeland Water & Sewer District

ADDRESS (STREET)	(CITY)	(STATE)	(ZIP CODE)
PO Box 222	Freeland	WA	98249-0222

The applicant is hereby granted a permit to appropriate the following public waters of the State of Washington, subject to existing rights and to the limitations and provisions set herein.

PUBLIC WATERS TO BE APPROPRIATED

SOURCE
4 Wells

TRIBUTARY OF (IF SURFACE WATERS)

MAXIMUM CUBIC FEET PER SECOND	MAXIMUM GALLONS PER MINUTE	MAXIMUM ACRE FEET PER YEAR
	285	262

QUANTITY, TYPE OF USE, PERIOD OF USE

Municipal Supply

LOCATION OF DIVERSION/WITHDRAWAL

APPROXIMATE LOCATION OF DIVERSION--WITHDRAWAL

Well 1 – Parcel S8245-00-00006-0
Well 2 – Parcel S8245-00-00004-0
Well 3 – Parcel S8245-00-00017-3
Well 4 – Parcel R22914-450-4380

LOCATED WITHIN (SMALLEST LEGAL SUBDIVISION)	SECTION	TOWNSHIP N.	RANGE, (E. OR W.) W.M.	W.R.I.A.	COUNTY
Well 1 - NW1/4 NW1/4	14	29N	2E	6	Island
Well 2- NE1/4 NW1/4	14	29N	2E	6	Island
Well 3 - SE1/4 NW1/4	14	29N	2E	6	Island
Well 4 - NW1/4 NE1/4	14	29N	2E	6	Island

RECORDED PLATTED PROPERTY

LOT	BLOCK	OF (GIVE NAME OF PLAT OR ADDITION)

LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS TO BE USED

The place of use (POU) of this water right is the service area described in the most recent Water System Plan approved by the Washington State Department of Health, so long as the Freeland Water District is and remains in compliance with the criteria in RCW 90.03.386(2). RCW 90.03.386 may have the effect of revising the place of use of this water right.

DESCRIPTION OF PROPOSED WORKS

Four existing wells, Well 1 is 210-feet deep, Well 2 is 200-feet deep, Well 3 is 369-feet deep and Well 4 is 235 feet.

DEVELOPMENT SCHEDULE

BEGIN PROJECT BY THIS DATE:	COMPLETE PROJECT BY THIS DATE:	WATER PUT TO FULL USE BY THIS DATE:
Started	Completed	September 1, 2030

PROVISIONS

Measurements, Monitoring, Metering and Reporting
An approved measuring device shall be installed and maintained for each of the sources identified by this water right in accordance with the rule "Requirements for Measuring and Reporting Water Use", WAC 173-173, which describes the requirements for data accuracy, device installation and operation, and information reporting. It also allows a water user to petition the Department of Ecology for modifications to some of the requirements.

Recorded water use data shall be submitted via the Internet. To set up an Internet reporting account, contact the Northwest Regional Office. If you do not have Internet access, you can still submit hard copies by contacting the Northwest Regional Office for forms to submit your water use data.

Water Use Efficiency
Use of water under this authorization shall be contingent upon the water right holder's maintenance of efficient water delivery systems and use of up-to-date water conservation practices consistent with established regulation requirements and facility capabilities.

Proof of Appropriation
The water right holder shall file the notice of Proof of Appropriation of water (under which the certificate of water right is issued) when the permanent distribution system has been constructed and the quantity of water required by the project has been put to full beneficial use. The certificate will reflect the extent of the project perfected within the limitations of the permit. Elements of a proof inspection may include, as appropriate, the source(s), system instantaneous capacity, beneficial use(s), annual quantity, place of use, and satisfaction of provisions.

Schedule and Inspections
Department of Ecology personnel, upon presentation of proper credentials, shall have access at reasonable times, to the project location, and to inspect at reasonable times, records of water use, wells, diversions, measuring devices and associated distribution systems for compliance with water law.

This permit shall be subject to cancellation should the permittee fail to comply with the above development schedule and/or fail to give notice to the Department of Ecology on forms provided by that Department documenting such compliance.

Given under my hand and the seal of this office at Bellevue, Washington, this 24th *day of* May, *2012.*

REVIEWED BY
OKAY DS

Department of Ecology

By _____
Jaequeline Klug, Section Manager, Water Resources

APPENDIX D

SIGNED SERVICE AREA AGREEMENTS

ISLAND COUNTY
PLANNING & COMMUNITY DEVELOPMENT

Robert H. Pederson, AICP
Director

PHONE: (360) 679-7339 ■ from Camano (360) 629-4522 ■ from S. Whidbey (360) 321-5111
FAX: (360) 679-7306 ■ P. O. Box 5000, Coupeville, WA 98239-5000
Internet Home Page: http://www.islandcounty.net/planning/

December 20, 2010

Sandy Duncan, District Administrator
PO Box 222
Freeland, WA 98249

Re: Resolution No. C-88-10
File 113/10 WSR – Freeland Water District

Dear Ms. Duncan:

The Island County Board of Commissioners signed Resolution C-88-10 on November 22, 2010 adopting the revised Freeland Water District Boundaries which included the Fletcher Family Ventures LLC properties. The resolution is enclosed with this letter.

If you have any questions, please feel free to contact me at (360) 678-7822 or by e-mail at brandons@co.island.wa.us.

Sincerely,

Brandon Sweezea
Associate Land Use Planner

Attch: Resolution C-88-10

CC: Vin Sherman
Erika Lindsey – WA State Dept. of Health
Planning – GIS Overlay

BEFORE THE BOARD OF COUNTY COMMISSIONERS
OF ISLAND COUNTY, WASHINGTON

IN THE MATTER OF EXPANDING THE FREELAND WATER DISTRICT SERVICE AREA AND INCORPORATING THE REVISED SERVICE AREA BOUNDARY INTO THE ISLAND COUNTY COORDINATED WATER SYSTEM PLAN

RESOLUTION NO. C- 88 -10
PLG-008-10

WHEREAS, the Board of Island County Commissioners adopted the Island County Coordinated Water System Plan under Ordinance C-78-90 on May 14, 1990; and

WHEREAS, the Freeland Water District received a Petition for Annexation from Fletcher Family Ventures, LLC on July 6, 2010 to serve eight parcels totaling approximately 186 acres; and

WHEREAS, all of the proposed parcels are located with the Freeland Future Growth Planning Area (FGPA) and only one of the proposed parcels is located within the Freeland Non-Municipal Urban Growth Area (NMUGA); and

WHEREAS, Island County records indicate that the proposed modifications to the water district service area are consistent with the underlying zoning designations; and

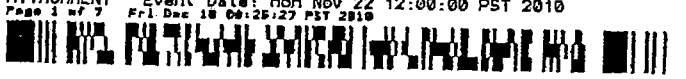
WHEREAS, three of the eight parcels included in this application are located within the W&B Waterworks No. 1 water system; and

WHEREAS, on September 20, 2010, staff received a water service availability form from Terry Lehman, head of the W&B Waterworks No. 1 water system, citing that the W&B system is not willing or able to provide service; and

WHEREAS, Freeland Water District is required to receive approval from the Washington State Department of Public Health for any modifications to the Group A Water System and any other applicable state and federal agencies; and

WHEREAS, Planning and Community Development has reviewed the request and determined that the expansion is consistent with the policies of the Island County Coordinated Water System Plan; and

ATTACHMENT Event Date: Mon Nov 22 12:00:00 PST 2010
Page 1 of 7 Fri Dec 10 09:25:27 PST 2010



WHEREAS, the applicants prepared and issued a SEPA Mitigated Determination of Non Significance (MDNS) pursuant to WAC 197-11, attached hereto as Exhibit A; **NOW, THEREFORE,**

IT IS HEREBY RESOLVED that the Board of Island County Commissioners hereby approves the amended service area boundary for the Freeland Water District, attached hereto as Exhibit B, and incorporates the amended service area into the Island County Coordinated Water System Plan.

ADOPTED this 22 day of NOVEMBER, 2010 following a public hearing.

BOARD OF COUNTY COMMISSIONERS
ISLAND COUNTY, WASHINGTON

Helen Price Johnson, Chairman

Angie Homola, Member

John Dean, Member

ATTEST:

Elaine Marlow
Clerk of the Board

ATTACHMENT Event Date: Mon Nov 22 12:00:00 PST 2010
Page 2 of 7 Fri Dec 10 08:25:27 PST 2010

EXHIBIT A

Freeland Water District SEPA: Mitigated Determination of Non Significance (MDNS)

FREELAND WATER AND SEWER DISTRICT

MITIGATED DETERMINATION OF NONSIGNIFICANCE (MDNS)

Application Type:	**Applicant (Petitioner):**
Nonproject Action	Fletcher Family Ventures LLC

Assessor's Parcel Numbers:	**Location:**
S8290-00-00062-0, R22909-197-4240, R22909-197-4800, R22909-101-4610, R22910-185-0090, R22910-020-0820, R22910-030-1460, and R22916-513-4360	The parcels lie within Sections 9, 10, and 16, Township 29 North, Range 2 E. in unincorporated Island County lying southwest of SR 525, in the vicinity of the unincorporated community of Freeland on South Whidbey Island Washington.

Proposal: Petition for Annexation into the Freeland Water and Sewer District by the Fletcher Family Ventures LLC. The combined properties consist of approximately 186 acres of property lying within unincorporated Island County. With the exception of Assessor's parcel R22910-030-1460, the property does not lie within the boundary of the designated Nonmunicipal Urban Growth Area (NMUGA) of Freeland but does lie within the Future Growth Planning Area of the NMUGA.

Lead Agency: Freeland Water and Sewer District

As lead agency under the State Environmental Policy Act (SEPA) Rules [Chapter 197-11, Washington Administrative Code (WAC)], the Freeland Water and Sewer District must determine if there are possible significant adverse environmental impacts associated with this non project action. The options include the following:

- DS = Determination of Significance (The impacts cannot be mitigated through conditions of approval and, therefore, requiring the preparation of an Environmental Impact Statement (EIS).
- MDNS = Mitigated Determination of Non-Significance (The impacts can be addressed through conditions of approval), or;
- DNS = Determination of Non-Significance (The impacts can be addressed by applying the Island County Code, adopted County-Wide Planning Polices, and the statutory controls under RCW 36.70.A.- The Growth Management Act)

Threshold Determination: Mitigated Determination of Non-Significance. (Non-project Action)	
Date of Issuance:	April 14, 2010

ATTACHMENT Page 3 of 7 Event Date: Mon Nov 22 12:00:00 PST 2010 Filed Dec 18 08:25:27 PST 2010

Comment Deadline:	April 28, 2010

Condition(s):
The procedural requirements for SEPA review of a nonproject proposal are basically the same as a project proposal: Environmental review starts as early in the process as possible when there is sufficient information to analyze the probable environmental impacts of the proposal. Review of a nonproject proposal should include a consideration of other existing regulations and plans, and any under development. Pursuant to WAC 197-11-350 and WAC 197-11-660(1) (b), the lead agency for this proposal has determined that it will not have a probable significant impact on the environment and that an environmental impact statement is not required under RCW 43.21.030(2) (C), only if the certain conditions are met. While the Responsible Official is of the opinion that the impacts of this nonproject action could be addressed by applying the Island County Code, the adopted County-Wide Planning Polices, Growth Management Hearings Board decisions, and the statutory controls under RCW 36.70.A. - The Growth Management Act, it is nevertheless important to reinforce same by the issuance of the MDNS.

This Threshold Determination (MDNS) imposes the following condition conditionally prohibiting sewer service:

Sewer service to that portion of the Petitioner's property lying outside the boundary of the NMUGA property at this time would contravene the purposes of the Growth Management Act and expand urban governmental services into rural areas. (Note Assessor's parcel R22910-030-1460 lies within the NMUGA.) With the exception of sewer service to a future waste water treatment plant (an essential public facility), sewer service to the annexation territory is to be prohibited, unless shown to be necessary to protect basic public health and safety and the environment and when such services are financially supportable at rural densities and do not permit urban development or sprawl.

This condition is locally reinforced in the adopted County-wide Planning Policies and the County Capital Facilities Plan, which both adopt policies for promotion of contiguous and orderly development and adopt provision governing urban services to such development.

RCW 36.70A.210(3)(a), the Washington State Growth Management Act of 1990, as amended requires that adoption of County-wide Planning Policies (CWPP). Under the current CWPP the following policy is stated:

Provide new municipal public works facilities only within, and not beyond Urban Growth Areas. Such facilities include:

a. Streets, bridges, and sidewalks built to municipal standards;
b. Water storage, transmission, and treatment facilities;
c. Sanitary sewer collection and treatment facilities; and
d. Storm sewer collection and treatment facilities.

Two exceptions are contemplated:

1. The provision of municipal water service by "Purveyors" whether municipal or private, throughout the unincorporated County as needed to implement the County's

Coordinated Water System Plan, and Groundwater Management Plan; and
The siting of essential public facilities such as a municipal waste water treatment plant.

These conclusions were made after review of a completed environmental checklist and other information as referenced in the SEPA checklist.

☐ There is no comment period for this MDNS.

☒ This MDNS is issued under 197-11-350 RCW and the SEPA Procedures adopted by the Freeland Water and Sewer District; the lead agency will not act on this proposal for 14 days from the date shown below. Comments must be submitted by April 28, 2010.

The decision will become final at the expiration of the comment period. Pursuant to the procedures adopted by the Freeland Water and Sewer District, no administrative appeal of the SEPA threshold determination is provided. The SEPA threshold determination may be appealed to the Island County Superior Court under RCW 43.21.C.075 after the Freeland Water and Sewer District's final action on the petition for annexation. SEPA Comments should be addressed to the Freeland Water and Sewer District – Attention Responsible Official and submitted within 14 days of issuance of the SEPA determination.

Responsible Official:	Larry Kwarsick
Position/Title:	Consultant Planner for the District and Designated SEPA Responsible Official
Phone:	360-331-5566
Address:	P.O. Box 222/ 5492 S. Harbor Ave Freeland, WA 98249
Date: April 14, 2010	Signature

ATTACHMENT Event Date: Mon Nov 22 12:00:00 PST 2010
Page 5 of 7 Fri Dec 10 08:25:27 PST 2010

EXHIBIT B

Proposed Freeland Water District System Area Boundaries

ATTACHMENT Event Date: Mon Nov 22 12:00:00 PST 2010
Page 6 of 7 Fri Dec 10 08:25:27 PST 2010

RECD EE MAR 19 1990

AGREEMENT FOR ESTABLISHING WATER UTILITY SERVICE AREA BOUNDARIES IN THE ISLAND COUNTY CRITICAL WATER SUPPLY SERVICE AREA

Pursuant to the Public Water System Coordination Act (Chapter 70.116 RCW) and related action of the Board of Island County Commissioners (BICC Resolution No. PD-85-07), a Coordinated Water System Plan (CWSP) is being developed for Island County. As a part of this Plan, Section 70.116.070 requires that service area boundaries of public water systems be established. The purpose of this Agreement is to comply with the provisions of this Act with respect to the water service area boundaries of the undersigned utility.

Whereas, authority for this Agreement is granted by the Public Water System Coordination Act of 1977, Chapter 70.116 RCW.

WHEREAS, such an Agreement is required in WAC 248-56-730, Service Area Agreements-Requirement, of the Public Water System Coordination Act;

WHEREAS, designation of water service areas, together with the cooperation of utilities, will help assure that time, effort, and money are best used by avoiding unnecessary duplication of service;

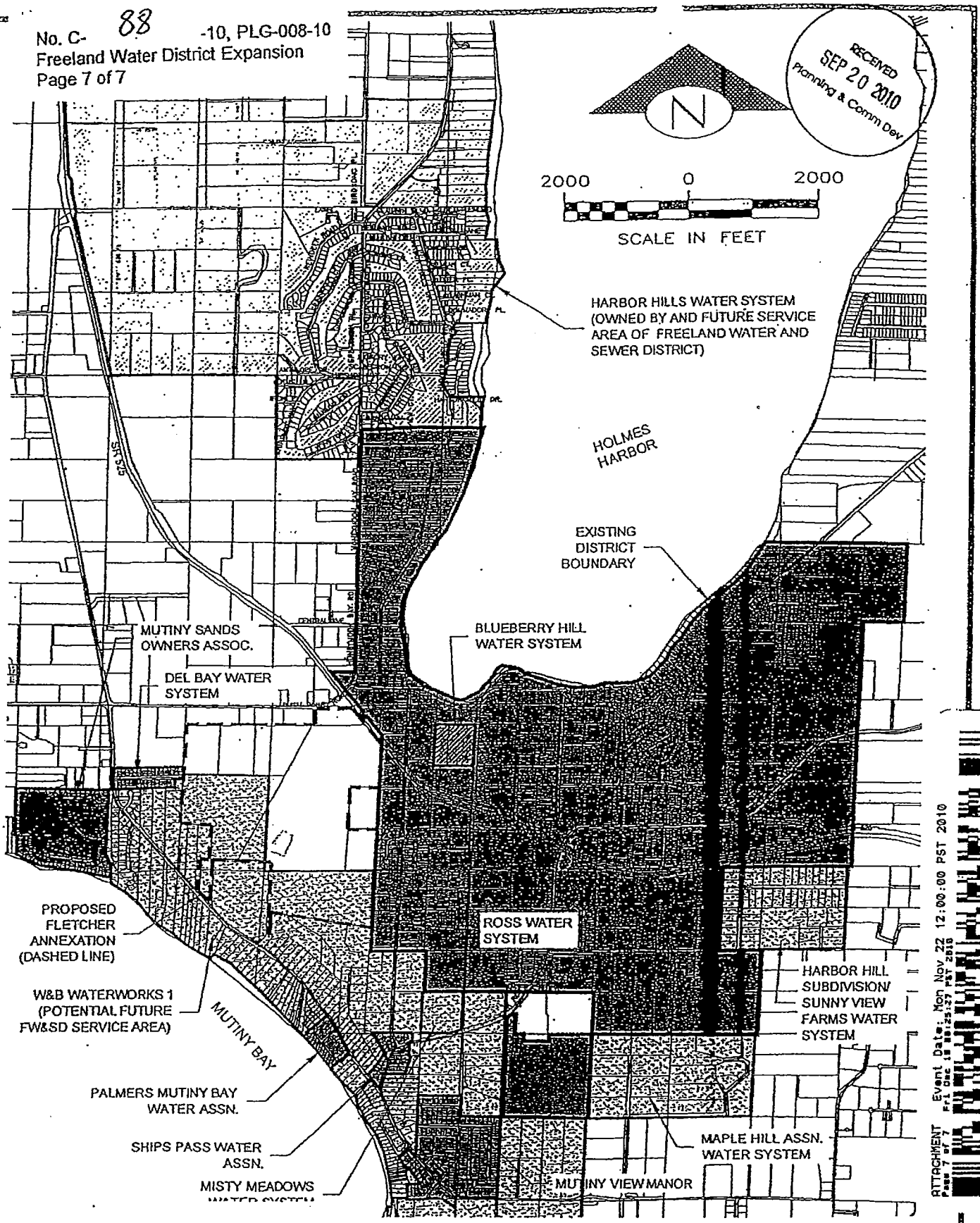
WHEREAS, definite future service areas will facilitate efficient planning for, and provision of, water system improvements within Island County as growth occurs; and

WHEREAS, definite water utility planning areas will help assure that water reserved for public water supply purposes will be utilized in the future in an efficiently planned manner.

NOW, THEREFORE, the undersigned utility, having entered into this Agreement by signature of its authorized representative(s), concurs with and will abide by the following provisions:

1. Service Area Boundaries. The undersigned utility acknowledges that the portion of the Island County Master Service Area Map, as of the date of this Agreement, accurately identifies the water system's service area, including planned-for expansion. This signed Agreement verifies that a good faith effort has been made by the undersigned to identify future service areas of near and adjacent water systems and that no service area conflicts are known.

RECEIVED
SEP 20 2010
Planning & Comm Dev.



FREELAND WATER AND SEWER DISTRICT

WATER SERVICE AREA MAP

SEPTEMBER 2010

ATTACHMENT
Page 7 of 7
Event Date: Mon Nov 22 12:00:00 PST 2010

2. Boundary Adjustments. If, at some time in the future, it is in the best interest of the County and the undersigned utility to make service area boundary adjustments, such modifications must have the written concurrence of any other utilities whose boundaries are affected by the modification, and proper legislative authority(ies), and must be noted and filed with the County and DSHS.

This Agreement shall become effective once this document is approved, as specified in WAC 248-56-730.

IN WITNESS WHEREOF, the undersigned utility has executed this Agreement as of 3-16-90.

FREELAND WATER DISTRICT
Water Utility

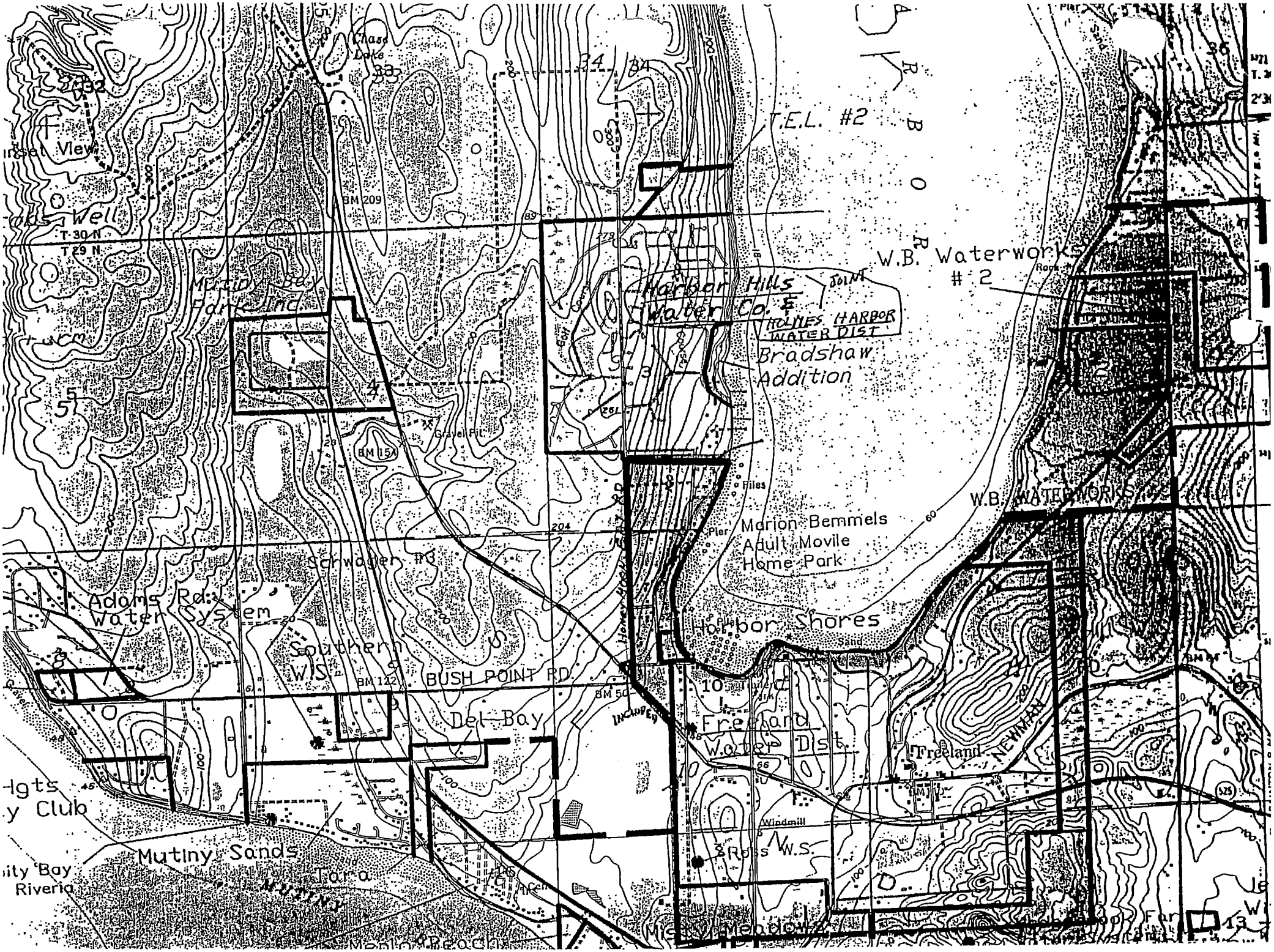
Representative R. A. Peterson

Title Commissioner

Receipt Acknowledged:

Island County Planning Department

4/20/90
Date


T.E.L. #2
W.B. Waterworks #2
Harbor Hills Water Co.
HOLMES HARBOR WATER DIST
Bradshaw Addition
Marion Bemmels Adult Movile Home Park
W.B. WATERWORKS
Harbor Shores
Schwager #3
Adams Rd. Water System
Southern WIS
BUSH POINT RD.
Del Bay
Freeland Water Dist.
Freeland
NEWMAN
Mutiny Sands
Tara
Windmill
Ross W.S.
Chase Lake
Gravel Pit
BM 209
BM 154
BM 122
BM 50
Well
T 30 N
T 29 N
Inset View
Meridian Bay Park Inc.
Riveria
Club

BEFORE THE BOARD OF ISLAND COUNTY COMMISSIONERS
OF ISLAND COUNTY, WASHINGTON

IN THE MATTER OF ESTABLISHING A SERVICE AREA FOR THE HARBOR HILL COMMUNITY ASSOCIATION IN THE COORDINATED WATER SYSTEM PLAN	)))))	RESOLUTION C-87-99 PLG-021-99

WHEREAS, the Harbor Hill Water system has submitted a proposal to establish a water service area in the Island County Coordinated Water System Plan (CWSP) adopted pursuant to RCW 70.116, and WAC 248-56; and

WHEREAS, the proposed addition of a Harbor Hill Water System water service area has been reviewed for consistency with the Island County Comprehensive Plan, the Island County Coordinated Water System Plan, and other applicable State and local codes and regulations; and

WHEREAS, the proposal does not meet the goals of the Island County Coordinated Water System Plan; and

WHEREAS, the area proposed to be served by the Harbor Hill Water System is designated as the future service area for the Sunny View Farms Water Company adopted as part of the CWSP on September 19, 1994; and

WHEREAS, RCW 70.116.060(3)(b) and the Coordinated Water System Plan do not allow any other purveyor to provide water service to an area previously approved by the legislative authority and incorporated into the Coordinated Water System Plan unless it is determined that the existing purveyor is unable to provide service in a timely and reasonable manner; and

WHEREAS, Harbor Hill Water System has not claimed that Sunny View Farms Water Company cannot provide timely and reasonable service as opposed to the service proposed by the Harbor Hill Water system; and

WHEREAS, Sunny View Farm Water Company is not willing to agree to a service area reduction adjustment pursuant to Section VI(1)(A)(4) of the Coordinated Water System Plan; NOW, THEREFORE,

BE IT HEREBY RESOLVED by the Board of Island County Commissioners that the proposed new water service area for the Harbor Hill Water System to be designated in the Island County Coordinated Water System Plan is denied.

ADOPTED this 12th day of July, 1999.

BOARD OF COUNTY COMMISSIONERS
ISLAND COUNTY WASHINGTON
Mike Shelton, Chairman
Wm. L. McDowell, Member
William F. Thorn, Member

ATTEST: Margaret Rosenkranz, Clerk of the Board

BICC 99-404

Preliminary SPR 419/98, Michael & Susan Murphy - Construction and Operation of Wildlife Rehabilitation Center on a 10.98 acre Site Zoned Rural Residential, Camano Island

The matter of Preliminary SPR 419/98, by Michael & Susan Murphy for construction and operation of Wildlife Rehabilitation Center on a 10.98 acre Site Zoned Rural Residential, Parcel #R23101-100-3150, Camano Island, was presented by Stacy Tucker, Planner, Island County Planning Department. The Hearing Examiner recommended approval with conditions, and waiver of final site plan approval, as stated in File No. SPR 419/98 Findings of Fact, Conclusions of Law and Recommendation, signed by the Hearing Examiner on June 14, 1999. Applicantswere present at the time the matter was presented to the Board.

The Board, on unanimous motion, accepted the recommendation of the Island County Hearing Examiner and approved Preliminary SPR 419/98 by Michael & Susan Murphy for construction and operation of Wildlife Rehabilitation Center with conditions and waiver of final site plan approval.

[Approval sheet signed by the Board for SPR 419/98 placed on file with the Clerk of the Board]

Resolution #C-87-99 Establishing Service Area for Harbor Hill Community Association in the Coordinated Water System Plan

Resolution #C-87-99 [PLG-021-99] Establishing Service Area for Harbor Hill Community Association in the Coordinated Water System Plan; with staff recommending denial. Approximately 12 people were in the audience at the time the matter was considered.

Phil Bakke, Planning Manager, presented a Resolution for the Board's approval denying the request by Harbor Hills. He recalled that a request had been received from Harbor Hill Community Water Association to establish a water utility service area boundary to be included in the CWSP for Island County. Summarizing from his memo to the Board dated June 28, 1999, Mr. Bakke explained that the area proposed for the Harbor Hill Water System is within the future service area of the Sunny View Farms Water System. Sunny View Farms Water system service area and future service area was incorporated into the CWSP on September 19, 1994. The approved description of lots to be served included two lots located in the Plat of Harbor Hill and all the remaining lots of Harbor Hill that were not served with water as of the date of the approval of that WSR. The Coordinated Water System Plan prohibits the County from assigning a future water service area to a second entity because the first water company was given the authority to provide water. Therefore, under the CWSP the County cannot now assign an existing or future service area to a second water company unless the first water company decided not to go through with their plans. A letter dated August 5, 1998 from Sunny View Farms was received expressing great interest in completing the Sunny View Farm project and serving the future service area included in the Harbor Hills plat. R.C.W. 70.116.060(3)(b) states: "No other purveyor shall establish a public water system within the area covered by the plan, unless the local legislative authority determines that existing purveyors are unable to provide the service in a timely and reasonable manner...".

As far as timely and reasonable, based on the information available from the State, Mr. Bakke

stated that Sunny View Farm was about one year ahead of Harbor Hill in attaining a water right.

As far as cost associated with determining "in a reasonable manner", he was not aware that the issue of economics had ever been brought up.

Although this matter was being addressed during public meeting and not a public hearing, the Chairman allowed public comments on the proposed action.

Ray Styrk, President, Harbor Hill Community, spoke on behalf of the community, and asked for

an additional two weeks' or more before the Board took action, based on what he felt was short notice of today's meeting, and the fact their attorney was unable to attend due to conflicting schedules. He reported that Harbor Hills had been in existence since 1967 and the well put in and service initiated at that time. There has been multiple contact with the State and County Departments of Health and Natural Resources, both recognizing Harbor Hill Community, and

Harbor Hills complied with all requests from those departments. Rejecting the Harbor Hill application would be inconsistent with the historical relationship the community has had with both the State and with the County, would be damaging to the Harbor Hill Community itself, as well as individual owners within the subdivisions.

Steve Arnold, owner of Sunny View Farms Water System, South Whidbey, addressed his original platting done near Harbor Hill which at the time in 1992, no water service was available in Harbor Hills. He owns 3 lots there currently, and was looking for a way to service that area with water because it was in existence since the Sixties and nothing had been done to provide water. He applied for a water right in 1994, and he believed that Harbor Hills applied for a water right in 1998, so he is at least 4 years ahead of Harbor Hills on obtaining a water right from the State. He mentioned he had a document the County Commissioners signed granting him the service area for the remaining lots not built on in Harbor Hills.

Mr. Styrk noted for the record he thought there was a conflict in the signing of the Resolution of 1994 providing Sunny View Farms with their water boundary.

By unanimous motion, the Board concurred with staff recommendation and approved Resolution #C-87-99 PLG-021-99 in the matter of establishing a service area for the Harbor Hill Community Association in the Coordinated Water System Plan denying request.

BEFORE THE BOARD OF ISLAND COUNTY COMMISSIONERS

OF ISLAND COUNTY, WASHINGTON

IN THE MATTER OF ESTABLISHING A SERVICE AREA
FOR THE HARBOR HILL COMMUNITY ASSOCIATION IN
THE COORDINATED WATER SYSTEM PLAN)

)) RESOLUTION C-87-99

) PLG-021-99

)

WHEREAS, the Harbor Hill Water system has submitted a proposal to establish a water service area in the Island County Coordinated Water System Plan (CWSP) adopted pursuant to RCW 70.116, and WAC 248-56; and

WHEREAS, the proposed addition of a Harbor Hill Water System water service area has been reviewed for consistency with the Island County Comprehensive Plan, the Island County Coordinated Water System Plan, and other applicable State and local codes and regulations; and

WHEREAS, the proposal does not meet the goals of the Island County Coordinated Water System Plan; and

WHEREAS, the area proposed to be served by the Harbor Hill Water System is designated as the future service area for the Sunny View Farms Water Company adopted as part of the CWSP on September 19, 1994; and

WHEREAS, RCW 70.116.060(3)(b) and the Coordinated Water System Plan do not allow any other purveyor to provide water service to an area previously approved by the legislative authority and incorporated into the Coordinated Water System Plan unless it is determined that the existing purveyor is unable to provide service in a timely and reasonable manner; and

WHEREAS, Harbor Hill Water System has not claimed that Sunny View Farms Water Company cannot provide timely and reasonable service as opposed to the service proposed by the Harbor Hill Water system; and

WHEREAS, Sunny View Farm Water Company is not willing to agree to a service area reduction adjustment pursuant to Section VI(1)(A)(4) of the Coordinated Water System Plan; NOW, THEREFORE,

BE IT HEREBY RESOLVED by the Board of Island County Commissioners that the proposed new water service area for the Harbor Hill Water System to be designated in the Island County Coordinated Water System Plan is denied.

ADOPTED this 12th day of July, 1999.

BOARD OF COUNTY COMMISSIONERS

ISLAND COUNTY
WASHINGTON

Mike Shelton, Chairman

Wm. L. McDowell, Member

William F. Thorn, Member

ATTEST: Margaret Rosenkranz, Clerk of the Board

BICC 99-404

HEARING HELD; GMA ORDINANCES

Chairman Shelton opened a public hearing beginning at 1:30 p.m., as scheduled and advertised *[legal notice GMA Doc.# 4307]*, to consider revision of the Island County Comprehensive and Use Element and Capital Facilities Element; amendments to the Island County Adequacy Ordinance, Chapter 11.05 ICC, and amendments to the Island County Critical Area Ordinance, Chapter 17.02 ICC.

The amendments, as presented in the following ordinances presented on June 21, 1999, and scheduled for this date and time, are proposed to clarify County standards in a manner consistent with the Legislative Intent [copies of ordinances available at hearing] :

C-75-99 PLG-014-99 In the matter of Amending Chapter 17.03 ICC, to comply with the order of the WesternWashington Growth Management Hearings Board Relating to the Rural Zone *[GMA Doc. #4308]*

C-76-99 PLG-015-99 In the Matter of Amending Chapter 17.03 ICC, to comply with the order of the WesternWashington Growth Management Hearings Board relating to the Rural Agricultural Zone *[GMA Doc.#4309]*

C-77-99 PLG-016-99 In the Matter of Amending Chapter 17.02 ICC to comply with the order of the Western Washington Growth Management Hearings Board relating to the Critical Areas Exemption for Existing and ongoing agriculture [*GMA Doc.# 4310]*

C-78-99 PW-37-99 In the Matter of Amending the Land Use and Capital Facilities Element of the Island County Comprehensive Plan and Chapters 11.05 and 17.02 ICC to incorporate certain stipulated amendments] *[GMA Doc. #4311]*

Approximately ten citizens attended the hearing; Attendance Sheet placed on file. [*GMA Document No. 4434]*

Ordinance #C-75-99 [PLG-014-99] Amending Chapter 17.03 ICC to comply with the order of the Western Washington Growth Management Hearings Board relating to the Rural Zone

Keith Dearborn, Special Legal Counsel, advised that the Growth Board in its July 2nd Final Decision required the County adopt an interim ordinance converting the R5 zone minimum lot size which is five acres, to ten acres by August 10th and if not, the Growth Board would invalidate the Rural zone minimum lot size. The proposed ordinance does what the Growth Board directed, and is proposed to be adopted as an measure to continue for six months, and at the end of six months, if the County has not adopted permanent regulations changing the minimum lot size in the Rural zone, the second "Be it Further Ordinance" paragraph declares intent the ordinance remain in effect until the permanent regulation is adopted. The County has until November 30th to comply with the Growth Board's Order on the question of rural density. The only other changes are consistency changes so language matches the change from five acres to ten acres.

APPENDIX E

COUNTY PLANNING MAPS

ISLAND COUNTY
PLANNING & COMMUNITY DEVELOPMENT

PHONE: 360.679.7339 ■ Camano: 360.629.4522, Ext.7339 ■ S. Whidbey 360.321.5111, Ext. 7339 FAX: 360.679.7306 ■ 1 NE 6th Street, P. O. Box 5000, Coupeville, WA 98239-5000
Internet Home Page: http://www.islandcountywa.gov/planning

~ MEMORANDUM ~

TO: **Island County Board of Commissioners**

FROM: **Island County Planning & Community Development**

DATE: **December 28, 2020**

SUBJECT: **Freeland Water & Sewer District and Harbor Hills Water System Plans**

Island County Planning and Community Development received a copy of the Freeland Water & Sewer District and Harbor Hills updated water system plans on December 16, 2020. After review of the updated plans, Island County Planning staff offer the following comments.

Freeland Water and Sewer District

On June 18, 2019 the Board of Island County Commissioners adopted the implementing development regulations and zoning for the Freeland Subarea Plan. Staff request that the Zoning and Future Land Use section on pages 18 and 19, and Map 2 of Appendix E of the water system plan be updated to reflect the new zoning. A Freeland zoning map has been attached for reference.

Planning & Community Development has no objections to approval of the Freeland Water & Sewer District water system plan, provided the above item is addressed.

Harbor Hills Water System

Planning & Community Development has no objections to approval of the Harbor Hills water system plan as proposed.

Meredith Penny

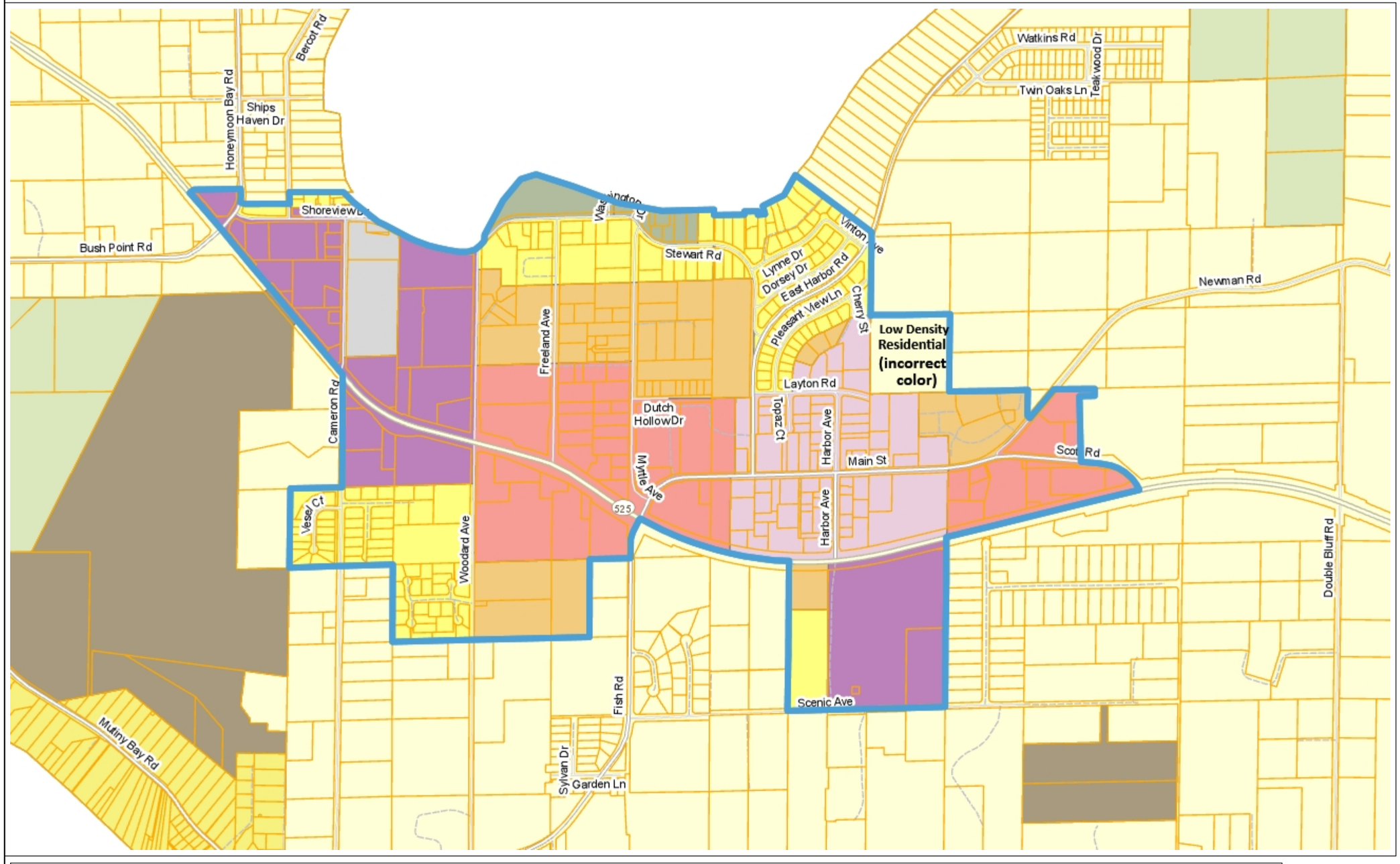
Principal Planner
Island County Planning & Community Development
360.678.7807
m.penny@islandcountywa.gov

Attachment:

- Freeland Non-Municipal Urban Growth Area Zoning Map

ICGeoMap





Legend

- Parcels
- Roads
  - Highway
  - Collector and Arterial
  - Local
  - Private
- Zoning
  - Airport
  - Business General
  - Business Village
  - Camano Gateway Village
  - Commercial Agriculture
  - Federal
  - Light Industrial
  - Light Manufacturing
  - Low Density Residential
  - Medium Density Residential
  - Municipality/NMUGA
  - Non-Residential Mixed Use
  - Oak Harbor - Highway Service Center
  - Oak Harbor - Industrial
  - Oak Harbor - Planned Business Park
  - Oak Harbor - Planned Industrial Park
  - Oak Harbor - Residential
  - Parks
  - Rural
  - Rural Agriculture
  - Rural Center
  - Rural Forest
  - Rural Residential
  - Rural Service
  - Rural Village
  - Special Review District
  - Urban Growth Area - Langley
  - Water

1: 10,174

1,695.7 0 847.85 1,695.7 Feet

WGS_1984_Web_Mercator_Auxiliary_Sphere

© Latitude Geographics Group Ltd.

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

DO NOT USE AS A LEGAL DOCUMENT. ACCURACY IS NOT GUARANTEED.

Notes

APPENDIX F

FWSD RESOLUTIONS AND POLICIES

THE FREELAND WATER & SEWER DISTRICT

TITLE

RESOLUTION NO. 09-03

AMENDING AND RE-ADOPTING DISTRICT RULES

A RESOLUTION amending and replacing the Rules and Regulations of the Freeland Water & Sewer District previously adopted under Resolution No. 08-08, relating to the municipal water supply system, regulating the use of water therefrom, fixing service rates, connection and other charges; establishing requirements for construction of line service connections, U.L.I.D. and private water, systems, setting enforcement provisions, providing a lien against premises for delinquent accounts; and adopting general specifications for water main extensions.

RECITALS

WHEREAS on October 27, 2008, The Freeland Water & Sewer District did adopt Resolution 08-08 as the new "rules and regulations" of the DISTRICT, governing modifications to the water system of the DISTRICT and establishing rates and fees for connection thereto and subsequent water consumption/use rates and technical specifications, which said Resolution took effect on October 27, 2008 and was subject to additions adopted in resolution no. 08-08.

WHEREAS The Freeland Water & Sewer District now wishes to further amend, re-adopt, and codify said "Rules and Regulations" of the DISTRICT as a consolidated single document;

NOW THEREFORE The Board of Commissioners of the FREELAND WATER & SEWER DISTRICT does hereby resolve as follows:

STATEMENT OF INTENT

1. These rules, regulations, specifications and policies apply to all existing, new, and additional services and system facility development or expansion, and water main extensions within the service area of the Freeland Water & Sewer District. This code is not exclusive and is now and may hereafter be, supplemented by other rules, codes, or resolutions of the DISTRICT. This Resolution will replace and supersede prior resolution 08-08.

EFFECTIVE DATE

This Resolution shall take effect as of the 21 day of September 2009

FREELAND WATER & SEWER DISTRICT - Board of Commissioners
Adopted this 21 day of September, 2009

Nolen A Knickerbocker, President/Commissioner

Eric Hansen, Secretary/Commissioner

Chuck Maddox, Commissioner

EXHIBIT - A

FREELAND WATER & SEWER DISTRICT
RULES AND REGULATIONS

Per DISTRICT adopted Resolutions 08-08

ARTICLE - I : GENERAL

SECTION 1.01 - DEFINITIONS

As used herein, the following terms shall be defined as follows:

"Application for Water" shall refer to a standard form to be provided by the DISTRICT to summarize necessary information about the person(s) applying for water service and to relay pertinent information to said applicant regarding terms and conditions of service.

"Approving Authority" shall mean the approving authority for the several requirements of this code and shall be the DISTRICT.

"Code" shall mean this Water System Code or Rules of the Freeland Water & Sewer District as last amended.

"Connection Charges" are those charges or assessments applicable to property fronting on or benefiting from an existing water main of the DISTRICT, but which said property did not in any way previously pay a fair "pro-rata share" towards the construction of said water main constructed by the DISTRICT, or which said property is subject to an existing "recovery contract" between the DISTRICT and a DEVELOPER/OWNER who paid for the construction of said main, or, which said property was a non-participating or excluded property which benefited from a ULID which financed the construction of said main.

"Commercial and Industrial property" shall include, but not necessarily be limited to, retail and wholesale stores, offices and office buildings, medical or dental clinics, mixed use structures, warehouses, service stations, manufacturing facilities, garages, theaters, hotels, motels, restaurants, bars and taverns, banks, showrooms, barber and beauty shops, and any and all other structures or facilities not exclusively used for residential purposes.

"District" shall mean the Freeland Water & Sewer District, Freeland, Washington governed by an elected Board of Commissioners.

"District Water System" shall mean the water system belonging to and/or managed by the Freeland Water & Sewer District.

"Developer Extension" shall mean the development, extension, or expansion of water or sewer facilities, mains, or improvements, initiated, paid for, and completed, by a developer or owner, or any party, benefiting therefrom under the supervision of the DISTRICT.

"District Engineer" shall mean the Licensed Professional Engineer duly appointed or employed by the Freeland Water & Sewer District to provide professional engineering design, review, or management, services to the DISTRICT, or its designees.

"Equivalent Residential Unit (ERU) " Shall mean the number of connection units represented by the actual or anticipated average daily water consumption rate of a project or use divided by the average daily consumption rate of single family residences within the DISTRICT over the past five year period.

"Local fire protection authority", or "Fire Department" shall mean the fire district, directly responsible for the fire protection within the boundaries of the Freeland Water & Sewer District.

"Fire-flow" Means the rate of water delivery needed for the purpose of fighting fires in addition to requirements for normal domestic maximum instantaneous demand as referenced in those rules or guidelines published by the State Department of Health entitled "Design standards for public water supplies."

"Hook-Up Fee": See "Service Installation Fee"

"Institutional Property" shall include, but are not necessarily limited to, places of worship, private schools, parochial schools, institutions of higher learning, public and private hospitals, nursing homes, lodges and fraternal orders, etc., unless the structure contains a function of a commercial or industrial nature.

"Living Unit" or "dwelling Unit" shall mean a single family living area including a single family residence, an apartment, motel or hotel unit or a trailer or Mobile or Manufactured home site.

"Multiple Unit Commercial Property" shall refer to a single structure constructed under one continuous roof and equipped for occupancy by more than one COMMERCIAL AND/OR INDUSTRIAL PROPERTY.

"Multiple Unit Residential Property" shall refer to a single structure constructed under one continuous roof and equipped for occupancy by more than one LIVING UNIT and shall be synonymous with multi-family dwelling, high density dwelling, duplex, triplex, apartments, etc.

"Owner" shall mean the person, partnership or corporation owning the particular PREMISES to which water is being or is to be furnished.

"Parcel" shall mean an existing or proposed lot, tract, or property of record. Existing Parcels are those contained in the Assessor's plat of Island County which have been assigned descriptions, and numbers for tax purposes by the Island County Assessor. Proposed Parcels are those shown delineated or described in any proposed Plat, Short Plat, Site Plan, Planned Residential Development, or other form of subdivision, in process of being created.

"Premises" is defined as the land and one building under one continuous roof together with such other service buildings as are used only by the occupants of the principal building, including rent-free guest houses occupied less than three months of the year EXCEPT that "Premises" may be otherwise defined in writing in a special contract between the OWNER and the DISTRICT for the furnishing of water to such PREMISES through a Water meter.

"Private service lines" are defined as all water lines extending from a DISTRICT main which have not been formally conveyed to or accepted by the DISTRICT, or which are not located in public rights-of way nor in easements dedicated to the use of the Freeland Water & Sewer District.

"Project Engineer" shall mean a professional engineer, licensed in and by the State of Washington who is engaged to provide professional engineering design, review, or management, testing, and certification services related to a specific water and/or sewer project. The project engineer may or may not also be the "DISTRICT Engineer".

"Public Hydrant" shall mean a public fire hydrant so situated and maintained as to provide water for fire fighting purposes without restriction as to use. The location being such that it is accessible for immediate use of the FIRE DEPARTMENT.

"Public Property" shall include civic buildings, public schools, playgrounds, public parks and appurtenances.

"Residential Property" shall refer to those properties or premises intended for human habitation.

"Service Installation Fee" is the base Hook-up fee charged by the DISTRICT for all new service connections to existing water mains owned and/or operated by the DISTRICT. It is the fee charged after all other obligations have been met and an OWNER wishes to have meter, meter box, and valve installed in order to commence the drawing of water from said main. The Fee does not include any of the costs of labor, parts or materials needed to effectuate a connection.

"Service Connection Charges" - This is the sum total of all charges and fees and costs to which a particular parcel or property or premises is subject prior to being assured a supply of domestic water from the DISTRICT'S system.

SECTION 1.02 - SPECIFICATIONS

All construction specifically covered under this CODE and any related construction which occurs as a part of or as a result of the work covered under this CODE, shall be performed in accordance with all applicable State and County codes and with the "Standard Specifications for Municipal Public Works Construction", as prepared by the Washington State Chapter of the American Public Works Association, current edition or as otherwise revised or superseded, and with the "General Specifications for Water Main Extensions" of the Freeland Water & Sewer District.

SECTION 1.03 - APPLICATION FOR WATER SERVICE

All parties wishing to connect to water and/or sewer facilities or systems of the DISTRICT shall make application for such connection on such forms and under such agreements as prescribed by the DISTRICT. Such forms may include, but are not limited to, the DISTRICT'S "Water Service Agreement", "Preliminary Services Agreement", "Developer Extension Agreement", "Interlocal Agreement" - between municipal agencies, "Recovery Contract", "Easement and Facility Conveyance Agreement", "Cross Connection Control Agreement" and/or such other forms as may be required by the DISTRICT. Minimally all applicants shall execute a "Water Service Agreement" and at that time, pay all connection charges, fees, surcharges, or assessments required by the DISTRICT or the provisions of this code.

Additionally, owners of any rental property connected, or to be connected, to the DISTRICT WATER SYSTEM, shall agree to have their name appear on all billings for that property by the DISTRICT and such billings shall be mailed to said OWNERS and shall become delinquent if not paid within sixty days of the day indicated on the billing. Owners of rental properties may arrange to have billings made to their respective tenants if the rented units are separately metered and the owners agree to assume underlying responsibilities for payment in the event of tenant delinquency.

SECTION 1.04 - STATE AND COUNTY RULES

All design, construction, maintenance and operation shall be in accordance with the requirements of WAC 246-290, "Rules and Regulations of the State Board of Health regarding Public Water Supplies", as now existing or hereafter amended, and also with Chapter 13.03A of the Island County Code, as now existing or hereafter amended.

SECTION 1.05 - LIMITS OF DISTRICT RESPONSIBILITY

At no time shall it be the responsibility of the DISTRICT to enter upon private property to work on or do anything to mains, service lines or appurtenances which are not an accepted part of the DISTRICT WATER SYSTEM and/or are not located within public rights-of-way or easements dedicated to public utility purposes or easements to which the DISTRICT is a named beneficiary for the purpose of installing, operating, and/or maintaining the DISTRICT WATER SYSTEM.

ARTICLE - II : CONSTRUCTION REQUIREMENTS

SECTION 2.01 EXTENSION OF MAINS

OWNERS of property who desire to have the DISTRICT WATER SYSTEM extended to provide service to said property may have such extensions constructed by any of the following methods as may be determined appropriate and approved by the DISTRICT at it's sole discretion:

1. **ULID**: The formation of Utility Local Improvement District. Under this method the proposed improvements are financed by the DISTRICT with the security that the costs will be paid through the enactment and approval of tax assessments to be levied against the properties specifically benefited by said improvements. ULID formation may occur either by petition of the owners of 60 per cent of the total designated benefiting land area, or by resolution of the DISTRICT Commissioners where said ULID is not protested by owners of at least 40 per cent of the land area within the ULID boundaries thus proposed.

   All ULID financed projects or improvements shall be conducted under terms and methods prescribed by the Washington State Law and the DISTRICT.

   Methods of calculating assessments relative to benefit under the ULID process may be based on Area, Assessed Value (per records of the Island County Tax Assessor), or relative, adjusted, or actual front footage along or parallel to streets or water mains, or any combination of such methods, or an alternate method, that results most closely, in the Judgment of the DISTRICT, in the apportionment of costs relative to benefit.

   All benefiting properties excluded from a ULID may be subject to future "fair pro-rata share" assessments, fees, or surcharges by the DISTRICT at such time in the future that service from improvements thus financed is sought for such properties.

2. **DEVELOPER/OWNER EXTENSION:**

   Under this method all costs associated with the proposed extension are paid directly by the OWNER(S) OR DEVELOPER(S) of all or some of the property to be benefited by the proposed improvements. Such private development projects are conducted pursuant to the requirements and agreements of the DISTRICT. Upon final approval and acceptance of said improvements, and the conveyance thereof together with any easements required by the DISTRICT. The DISTRICT will assume ownership thereof.

   All properties benefiting from but not participating in improvements thus financed may be subject to future "pro-rata share" assessments, fees, or surcharges by the DISTRICT per a "Recovery Contract" between the DEVELOPER(S) or

OWNER(S) and the DISTRICT.

3. CASH CONTRIBUTION:

Under this method a number of individual OWNERS may request the DISTRICT to act in their behalf to plan, design, and supervise construction of improvements necessary to serve their properties. This method is similar to the above described "DEVELOPER/OWNER EXTENSION" method, except that the project will be conducted directly by the DISTRICT, as a DISTRICT project. Under this method all of the estimated costs of the project shall be paid in advance to the DISTRICT by any or all of the benefiting participating owner(s) and all actual cost shall be paid by said owners prior to any connection to said improvements thus financed. .

All properties benefiting from but not participating in improvements thus financed may be subject to future "pro-rata share" assessments, fees, or surcharges by the DISTRICT either independently or per a "Recovery Contract" between the contributing OWNER(S) and the DISTRICT.

The DISTRICT will, upon request, provide information about any of the management or financing methods available for water main extensions.

Nothing in these rules or in this CODE shall be construed to mean or imply that the DISTRICT has any obligation to pursue or accept proposals for the extension of its water mains or water system to properties not currently served by the DISTRICT'S existing system regardless of which method of financing is proposed.

The DISTRICT shall have no obligation to serve any properties within or outside its boundaries until such time as all applicable Service Connection Charge(s) or Fee(s) have been paid for each proposed connection including the "Service Installation (hook-up) Fee" per each connection (or equivalent) required by the DISTRICT.

In the case of any proposed main extension the DISTRICT shall have the option and right to include in the cost there of a "Future Source and/or Plant development contribution" which is reflective of the ratio between the number of service connections the DISTRICT'S system can currently serve and the number of new service connections or equivalents that can be reasonably expected in the foreseeable future to result from the main extension being proposed. The ratio(s) thus derived may then be applied to the costs associated or specified in the DISTRICT'S then current Comprehensive Water System Plan for proposed or recommended Capital Improvements, including but not limited to, the acquisition or development of new well(s), well sites, tank(s), tank sites, or new water main extensions.

A. INITIATION OF PROJECT

1. ULID: Projects to be financed by Utility Local Improvement District (U.L.I.D.) method of financing may be initiated either by resolution of the DISTRICT Board

of Commissioners, or by Petition of the property owners representing at least 51 % of the land within a proposed service area. All ULID projects shall be conducted and costs apportioned in such fashion as prescribed or permitted by State Law applicable thereto.

2. **DEVELOPER EXTENSIONS**: Formal initiation of a project to be constructed privately by the OWNER(S) via a "Developer Extension" consists of filing a letter of application (and/or developer extension Agreement) together with preliminary plans and drawings, in such form and content prescribed by the DISTRICT. The DISTRICT may, upon review of any DEVELOPER EXTENSION proposal, elect to adopt said proposal as a Project of the DISTRICT and require same to be pursued through either the "CASH CONTRIBUTION" or "ULID" methods of financing. Prior to project initiation, a DEVELOPER EXTENSION Agreement shall be executed by the parties.

3. **CASH CONTRIBUTION:** Formal initiation of a project to be constructed through the CASH CONTRIBUTION method of financing consists of filing a letter of application or petition, together with preliminary plans and drawings, in form and content prescribed by the DISTRICT. The DISTRICT may, upon review of such proposals, elect to have them pursued as a ULID or Developer Extension".

It is recommended that any proposed project be reviewed with the DISTRICT as early as possible on the basis of preliminary plans prior to the preparation of detailed application drawings and design engineering.

B. Project Requirements:

In order to qualify for DISTRICT approval, the proposed project must satisfy all requirements of this CODE and applicable State and County Codes (including but not limited to WAC 246-290), relating to pipe size, public hydrant spacing and minimum property frontage. If the proposed extension is to serve property being platted, the project shall include construction of mains to the land being platted and across the full frontage of the lots in the plat, unless such mains are already in existence. "Frontage of the plat" shall include frontage of small tracts lying between a portion of the plat and such roads or streets, commonly identified as "exceptions".

C. Connection and other Charges:

Prior to Final commitment from the DISTRICT to serve new properties or developments, the DEVELOPER/OWNER shall pay to the DISTRICT the amount of any applicable connection charges, including but not limited to any charges pursuant to any applicable recovery contract or charges applicable to benefiting properties which did not participate in a prior ULID or CASH CONTRIBUTION project for the frontage of the property on

existing mains, less any waivers granted by the DISTRICT.

D. Water Availability notices or letters:

The DISTRICT, may, at its option, issue letters (or forms) of water availability to other parties or applicable reviewing agencies indicating the availability of adequate potable water supply to a parcel or development project on the day or date the notice or letter is written and until such time as may otherwise be specified therein.
Such Water Availability notifications do not, by themselves, constitute final commitment of the DISTRICT, nor do they constitute contractual obligations to serve. The DISTRICT'S obligation to provide water commences only upon payment of Service installation fees and actual metered connection to the DISTRICT'S main.

E. Permits and approvals:

For all new service connections and for all mains or line extensions, the DEVELOPER and/or OWNER shall be responsible for obtaining all permits or approvals associated with the proposed improvements including but not limited to State and County approval of Plans and Specifications and applicable construction permits required for performing work in State or County rights-of-way. The DEVELOPER/OWNER shall pay all fees associated or levied by agencies for the review of said permits or applications.

F. Application Procedure:

The DEVELOPER/OWNER requesting permission to develop or extend the mains of DISTRICT water or sewer system shall first execute a "Preliminary Services Agreement" provided by the DISTRICT, in which terms, process and procedure for pursuing the project will be disclosed. At this time or soon thereafter the DISTRICTS "Owner/Developer/Main Extension Agreement" shall be completed and submitted together with four sets of preliminary plans, specifications, drawings, reports, and analyses, prepared by a Professional Engineer licensed in the State of Washington. Prior to project initiation, the parties, including the project's contractor, shall execute a "Developer Extension Agreement".

1. Plans & Specifications:

Plans, specifications and Engineer's Report shall be in such form and content as prescribed by the DISTRICT and be in such forms suitable for submission to the State of Washington Department of Health (DOH) for review and approval, and shall meet said State requirements for plans, specifications and reports. In all cases where plans and specifications, and/or final "as-builts" and certifications, etc. must be submitted to other federal, state, and/or local government agencies, the DEVELOPER/OWNER shall be responsible for such submission and all associated costs. When applicable, the DISTRICT will cooperate in furnishing such additional information as may be available in the DISTRICT public record files.

Unless otherwise agreed in advance, all submission of plans and specifications and final "as-builts" to the DISTRICT by the DEVELOPER, or DEVELOPER'S project engineer, shall also be provided in electronic media form such as CAD drawing files and/or word processor documents, as acceptable to the DISTRICT.

2. Variances:
All applications shall include any accompanying letters requesting any needed variance or waiver requests from this or other applicable codes.

3. Plan Check:
Plans and specifications shall be checked by the DISTRICT, in a reasonable and timely manner, in order to determine their consistency with the DISTRICT'S Comprehensive Plan, this code, and their suitability for submittal to the State of Washington Department of Health (DOH).

4. Corrections:
Any corrections or additions deemed necessary by the DISTRICT will be made known to the applicant via editing of the plans or by written correspondence. Then one copy of the edited plans and specifications will be returned to the DEVELOPER/OWNER. Upon receipt of four sets of the corrected plans and specifications, the DISTRICT will sign or initial same as approved and return one working set to the OWNER/DEVELOPER or designated agent. At any stage where filing or pre-approval of plans by other agencies is required, the DEVELOPER/OWNER shall be responsible for making such submissions (after DISTRICT approval) with copies of submittals being provided to the DISTRICT.

5. DISTRICT project management and/or administration:
In all cases of system development, expansion, or extension, the DISTRICT shall establish a "project account" and all costs and expenses incurred by the DISTRICT including, but not limited to, design, design review, project management and administration, supervision, inspection(s), other agency review, fees, etc. shall be assigned to the Project account and billed to the DEVELOPER/OWNER. All such billings and associated penalties, late charges, etc., must be paid in full prior to final approval and acceptance of the project by the DISTRICT. All regular project billings of the DISTRICT shall minimally be payable on terms of 30 days/net/18% compounded thereafter.

6. Construction Inspection & Testing:
Both during and upon completion of the construction, the improvements shall be inspected by the DISTRICT, as well as the Project Engineer, and upon completion, undergo flushing and testing as required by the DISTRICT, applicable code, and/or the project's engineering specifications.

7. Grading of roads:

DEVELOPER shall grade all roads to the design subgrade elevation prior to the start of construction and shall advice the DISTRICT in writing during construction of any changes, which may be contemplated. If the DEVELOPER changes the subgrade elevation of the road after completion of the water main construction, or any part thereof, DEVELOPER agrees to raise or lower the water main and/or water services as required by the new subgrade elevation at no cost to the DISTRICT. This obligation shall remain in full force and must be satisfied prior to Final acceptance of the project by the DISTRICT.

8. Connection to Existing Mains:

Not less than 48 hours prior to the time that said extension is partially or fully completed and connection to the DISTRICT'S water system is desired, application for permission to make the actual connection to the DISTRICT'S system in a specified time shall be made by DEVELOPER or his/her contractor to the DISTRICT. All connections to the existing system and all testing of the new line must be with the authorization of and in the presence of the authorized representative of the DISTRICT. Opening of valves and use of water from the DISTRICT'S system will be done by the DISTRICT and/or its authorized representative. The DISTRICT reserves the right to require that connections be made by line tap where disruption of water service would, in the opinion of the DISTRICT, be unduly detrimental.

G. Project Certification and "As-Built: Drawings:

All responsibility for providing line and grade and measuring for the "as-built" drawings and for providing final Project construction reports and certification shall rest with the OWNER/DEVELOPER either directly or through the Project Engineer.

As-built drawings of the completed installation together with final certification and construction report(s) of the OWNER'S Project Engineer shall be submitted to the State Department of Health (DOH) by the project engineer with a simultaneous copy to the DISTRICT for review and approval before the improvements are considered for acceptance by the DISTRICT. All estimations or projections of a project's potential for additional future service connections shall be provided to and be approved by the DISTRICT prior to submittal to any other parties or agencies.

Two printed copies of the final "As-Built" drawings "to scale" shall be submitted to the DISTRICT. Unless otherwise permitted by the DISTRICT, they shall be drawn to scale with permanent ink on reproducible mylar. Drawings must show lot, street/alley and easement dimensions. They must also show the location of all mains, valves, hydrants, standpipes, etc. as per the detailed project design approved by the DISTRICT.

Unless otherwise approved in advance by the DISTRICT, all final "As-Built" drawings shall also be provided in Computer Aided Design (CAD) drawing formats on 5.25 inch

CD, or other electronic/magnetic media means of transmission, acceptable to the DISTRICT. All such submittals shall be provided to the DISTRICT'S office after consultation as to form and format.

H. Conveyance to DISTRICT:

Upon completion of the project improvements and approval of "as-built" drawings, and final engineer's certification/construction report, the title to the improvement(s) shall be conveyed to the DISTRICT by the OWNER/DEVELOPER via appropriate document(s) (Bill of Sale or conveyance, Quit Claim Deed, etc. as required by the DISTRICT). The DISTRICT may require that said conveyance be accompanied by a written statement or affidavit of the OWNER/DEVELOPER that there are no unsatisfied claims or liens of any kind applicable to any of the improvements being conveyed. All easements required for the DISTRICT to operate and maintain the constructed facilities shall also be established prior to final acceptance. The above may be satisfied by a single "Easement and Facilities Conveyance" document prepared or provided by the DISTRICT.

I. Acceptance:

When all the stipulations and requirements as set forth in this CODE and the DISTRICT'S Cross Connection Control Program, have been fulfilled, by the OWNER/DEVELOPER, and applicable franchises, permits, easements, etc. are in place, the DISTRICT will accept title to the improvements.

J. Recovery Contract(s):

Within 90 days of the DISTRICT'S final acceptance and conveyance and approval of a project the OWNER/DEVELOPER may submit a proposed "Recovery Contract" to the DISTRICT consistent with the provisions of ARTICLE V, Section 5.01.A. herein below. In the event a "Recovery Contract" is not proposed, no recovery will be available.

SECTION 2.02 - PIPE SIZE, TYPE AND LOCATION

Every new water main served by the DISTRICT WATER SYSTEM and located in public rights-of-way, shall be at least 8 inches in diameter, except that 6 inch pipe may be installed as a connecting line-between two larger existing dead-end mains for the purpose of improving circulation in the system; also except that 4-inch pipe extending not more than 300 feet beyond a public hydrant may be installed in a dead-end street, provided that no public hydrant is likely to be required thereon in the future by applicable fire flow regulations or requirements, and provided that the there is no foreseeable need for extending said water main to additional services or to connect to mains in adjacent property for mutual improvement of water service.

In all cases, the size of supply and transmission lines shall be determined by the DISTRICT. If an OWNER/DEVELOPER is required to oversize a portion of a supply or transmission main, beyond that otherwise required by applicable laws, codes, or ordinances or beyond that which

may be required to mitigate impacts to system capacity caused by the development project that triggers the need for main extensions or expansion of facilities, the DISTRICT will, upon application thereto, agree to provide reimbursement for the additional costs of such over-sizing at such time that funds are available. For the purpose of determining over-sizing, the size of the smallest standard main shall be 8-inches. The developer shall submit a plan and request for such reimbursement, including specific over-sizing costs, for approval by the DISTRICT Commissioners, prior to the beginning of construction, or forfeit any further claim to such reimbursement.

All projects shall be constructed in accordance with plans and specifications approved by the DISTRICT. All work within Island County right-of-way shall meet all applicable requirements and standards of the Island County Engineer for work performed in said right-of-way.

SECTION 2.03 - FIRE HYDRANTS, TEES, GATE VALVES, BLOW-OFF VALVES AND APPURTENANCES

A. **Fire Hydrants:**

1. **PUBLIC HYDRANTS**: when required, shall be installed on all extensions of the DISTRICT water system at the time such extensions are constructed. Hydrants shall, whenever feasible, be installed at intersections of a street or public road and/or at such intermediate points as will result in spacing between public hydrants in single family residential areas (i.e. zoned for 3 (three) dwelling units per acre or less) of distances not to exceed 600 feet, measured along road centerlines. Hydrant spacing in high density (i.e. zoned for greater than 3 (three) dwelling units per acre) Multi-Family Residential, Commercial or Industrial areas or zones shall not exceed 300 feet.

   In any case hydrant spacing requirements along public streets or roads of County and/or State codes shall minimally be required unless modified or waived by the agencies with respective jurisdiction.

2. Public Hydrants installed at the ends of dead end lines which are more than 300 feet in length may later be moved to conform to standard spacing requirements if the main is extended.

3. All Public Hydrants shall stand plumb. The lowest outlet shall be no less than 18 inches above grade and shall have no less than 36 inches of clear area around the hydrant for clearance of the hydrant wrench on any outlet and the control valve. The pumper port shall face the street. Where the street cannot be clearly defined or recognized, the pumper port shall face the most likely location of the fire truck while pumping.

4. In general, and where practical, Public Hydrants shall be located 6 feet from the right-of-way line in streets where the right-of-way or easement is 50 ft. wide or

greater, and 1 foot from the right-of-way line in streets where the right-of-way or easement is less than 50 ft. wide.

5. Hydrants shall when possible meet DISTRICT and Fire Department standards to ensure compatibility with local fire equipment, procedures and maintenance.

B. Blow-Off Valves:

Blow-off valves shall minimally be installed at the end of all dead-end lines except where there is a Public Hydrant on the end of said line. Additional blow-off valves or assemblies shall be installed as may be required by the DISTRICT, the Project Engineer, and/or applicable codes, design guidelines, or other specifications.

C. Gate or Water Control Valves:

Generally, Gate Valves shall be placed on all branches from feeder mains, between mains and Public Hydrnats, between mains and reservoirs, and between mains and pumps. In line Gate Valves shall be installed at a spacing of no more than 1000 feet unless waived or modified by the DISTRICT. An in-line gate valve shall be located at the end of all dead-end lines to permit shut-off prior to future extension as determined by the DISTRICT.

D. Tees and Crosses:

Tees and crosses shall be provided at all locations where future extensions, in the judgment of the DISTRICT, may occur.

E. Pressure Reducing Valves

1. Main line pressure reducing stations, shall be built according to the DISTRICT specifications and approved as to size by the DISTRICT, and shall be installed where required, to limit a maximum line pressure of 150 psi, or as otherwise required or permitted by the DISTRICT.

2. Individual pressure reducing valves are the responsibility of the OWNER for all services on mains with a pressure of more than 80 psi and should be located according to DISTRICT specifications.

SECTION 2.04 - EASEMENT REQUIREMENTS FOR WATER MAIN INSTALLATION

All easements necessary for the construction, and operation of any mains or water/sewer lines or facilities proposed for acceptance and ownership by the DISTRICT, shall be obtained or provided by the OWNER/DEVELOPER and shall designate the Freeland Water & Sewer District as a beneficiary. Mains shall be located in easements only when it is not possible or feasible to

locate them in existing public rights-of-way, or when they are located in an area or on a path preferred by the DISTRICT.

ARTICLE - III: REQUIREMENTS FOR SERVICE CONNECTIONS

SECTION 3.01 - FRONTAGE AND REQUIREMENTS FOR PERMANENT CONNECTIONS

Any OWNER desiring a permanent connection to a main served by the DISTRICT Water System must have, by ownership or easement rights, at least 15 feet of frontage on a street, public right-of-way, or easement in which the main is located. If requested by the DISTRICT, Said OWNER must provide a legal description and map of the property to be served, together with sufficient evidence of ownership thereof, to the DISTRICT.

Water mains served by the DISTRICT Water System shall extend across the full frontage of the parcel whose OWNER desires a permanent connection and/or across the full frontage of any property that may lie between said parcel to be served and the street, or road, or easement, in which the main lies. If the property to be served is part of a recorded plat, the water mains serving or about to serve the plat must be laid across the full frontage of all lots before any water service connections will be made to any of the lots. On dead-end streets, the DISTRICT Water System must extend all the way to the curb line at the street's end before any property at the end of said street may be connected to water mains. The DISTRICT may waive, at its discretion, the requirement for full frontage coverage for proposals that involve only one single family residence on one parcel or in any case where, in the DISTRICT'S judgement there is definitely no likelihood of future main extension beyond the subject property, nor any likelihood for future development of more than one single family residence on the subject parcel.

For the purposes of this Article III the term parcel shall mean an existing or proposed lot, tract, or property of record. Existing parcels are those contained in the Assessor's plat of Island County, which have been assigned descriptions, and numbers for tax purposes by the Island County Assessor. Proposed parcels are those shown delineated or described in any proposed Plat, Short Plat, Binding Site Plan, or other approved form of subdivision. Parcels may not be unilaterally described by an owner as a portion of an existing parcel.

SECTION 3.02 - TEMPORARY CONNECTIONS ON PROPERTY ABUTTING AN EXISTING MAIN

Temporary connections may be approved, at the sole discretion of the DISTRICT, for existing parcels upon which no more than one (1) Single Family Residence (SFR) connection is proposed, and which do not meet the requirements of Section 3.01 as to frontage. For such temporary connections under this section, the OWNER shall make payment to the DISTRICT an amount equal to $75.00 per foot of "equivalent frontage", in addition to the established charges for service connections, and shall convey to the DISTRICT by easement such rights-of-way, or easements as the DISTRICT may require. The DISTRICT shall determine which of the

following methods or combinations thereof, will be used to find the "equivalent frontage", or apply such other formula, as the DISTRICT deems fair and reasonable.

A. The average width of the tract measured parallel to the water main to which connection is desired.

B. The actual frontage on another street or road right-of-way in which no water main exists, but where the construction of such main is planned or may be reasonably anticipated.

C. The actual frontage on a proposed street or road for which the OWNER shall convey a right-of-way or easement to the DISTRICT for utility purposes, or to Island County for road and utility purposes. The width of any such granted right-of-way or easement being as determined by the recipient or beneficiary thereof.

Upon payment by an OWNER of the above-specified Temporary Connection Fee, receipt, thereof, shall be given by the DISTRICT, describing the property for which payment has been made. In the future, if a new main is constructed by the DISTRICT from which service can be taken, the OWNER may connect to it by installing a new service line to a new meter location determined by the DISTRICT and by giving a written request to the DISTRICT for the change in meter location.

In the alternative the DISTRICT, may unilaterally re-locate said meter and connection to the new main once it is installed. There shall be no additional "service installation fee" or connection charge for the relocation of the meter or connection by the OWNER or the DISTRICT. The OWNER, however, shall be responsible for any cost of construction associated with said meter re-location if initiated by the OWNER. Upon re-location of a temporary service, the old temporary service shall be disconnected. No refund shall be made to the OWNER if the OWNER'S fair share of the cost of constructing said new main is less than the payment to the DISTRICT. If the actual main extension cost to the DISTRICT exceeds the above temporary cost neither shall the DISTRICT claim any additional amount due.

SECTION 3.02A TEMPORARY CONNECTIONS FOR A PARCEL THAT DOES NOT ABUT A PUBLIC ROAD OR ROAD EASEMENT

Temporary connections may be approved, at the sole discretion of the DISTRICT, for existing parcels upon which no more than one (1) Single Family Residence (SFR) connection is proposed, and which do not meet the requirements of Section 3.01 as to frontage or section 3.02. For such temporary connections under this section, the OWNER shall make payment to the DISTRICT an amount equal to $25.00 per foot of "equivalent frontage", in addition to the established charges for service connections. The owners of the parcel shall be required to provide to the DISTRICT a signed No Protest agreement against the parcel for any DISTRICT main extension that passes their parcel for a term of twenty (20) years to be a recorded lien against the parcel by the DISTRICT. In addition the owner agrees to pay an additional amount per foot on the cost on the extension at the time of a main extension less the $25.00 per foot already paid.

SECTION 3.03 - METER AND SERVICE CONNECTION SIZES

The size of a service connection and meter shall be determined by the number of dwelling units to be served and shall not be less than the following:

Number of Dwelling Units	Meter Size	Rated Capacity
1 to 2	3/4"	30 GPM
3 to 6	1"	50 GPM
7 to 20	1-1/2" – 2"	100 GPM

MULTIPLE UNIT RESIDENTIAL
&
COMMERCIAL PROPERTIES OR PROJECTS

Multi-Family housing projects and new Commercial projects shall minimally be served by one metered connection per existing or proposed lot or parcel of record. Within any one Parcel new Commercial or new Multi-Family projects may be serviced by metered connections only in such manner as determined and approved by the DISTRICT. Options available to the DISTRICT include, but are not limited to, the following:

1. One metered connection per each detached building; or

2. One meter for each dwelling unit or each commercial business unit; or

3. Such number of meters, above the minimum of one per building, as determined by the DISTRICT.

The pipe size for a service connection shall be not less than the size of the meter as set forth in the Application for Water. At the discretion of the DISTRICT, larger pipes may be required to be installed to provide water to more than one meter from a single connection.

The DISTRICT, at its sole discretion, may require additional Installation fees in lieu of separate physical metered connections where such fees more proportionately reflect a project's anticipated consumption impacts to DISTRICT facilities as expressed in terms of Equivalent Residential Units (ERUs).

A separate Service Installation Fee shall be required for each metered connection. Additional service installation fees may be charged or applied to a project in excess of the number of actual physical metered connections required to reflect a project's consumption demand upon the DISTRICT system.

The maximum allowable distance from the water main to the meter shall be 60 feet. Any service connection of greater length shall be approved by the DISTRICT prior to installation.

SECTION 3.04 - WATER METER LOCATIONS

A. All water meters shall be placed in service in the public right-of-way or easement in which the mains of the DISTRICT water system are situated. In the opinion of the DISTRICT it would be mutually benefiting to the DISTRICT and the OWNER to locate the meter on private property. In the event that a meter is located on private property, the OWNER shall provide such easement(s) and/or other documentation deemed necessary by the DISTRICT clearly establishing that the DISTRICT has the right of entry to read, service or remove the meter or to open or close the service valve at any time. At no time shall access to the meter be obstructed. It shall be the responsibility of the OWNER to protect the meter from damage, and to keep access to meter area clear at all times.

Where a meter is located on private property, the DISTRICT may at its discretion and, at the OWNER'S expense, install a valve at the property line. Unless governed by a written agreement stating otherwise, maintenance and repair of lines and facilities on private property by the DISTRICT shall be billed to the OWNER.

B. All water meters to be serviced and read by the DISTRICT shall be purchased through the DISTRICT to insure compliance with standard specifications regarding accuracy, connectors and inter-changeability. Such purchase may be made directly from the DISTRICT or from a source approved by the DISTRICT.

SECTION 3.05 - DEVELOPER-INSTALLED SERVICE CONNECTIONS

A. Developers of new subdivisions, or multi-family or commercial developments, who desire connection to the DISTRICT'S water main shall be required to install all service connection lines and meter boxes (excluding meters) prior to construction and/or paving of streets or roads.

B. If not installed at the time of main development, meters approved by the DISTRICT shall, at the DISTRICT'S discretion either be supplied to the DISTRICT for later installation or the Developer shall pay to the DISTRICT such amount as needed to buy and install such meters when actually needed for building development.

C. Developers shall, with DISTRICT approval, install and test all service connections, including meters and meter boxes. Said service connections shall be shown on final project drawings, and be included in the DEVELOPERS' conveyance to the DISTRICT. All service connections shall be made with a corp stop at the DISTRICT main, and with a gate valve at the dwelling. All Service connections shall be made in accordance with DISTRICT Specifications unless otherwise approved by the DISTRICT. The DISTRICT

may, at its discretion, accept delivery of, or payment for, approved non-installed meters, in lieu of actual installation thereof.

D. Upon building a home on a lot, the standard "Service Installation (hook-up) Fee" shall be paid when APPLICATION FOR WATER is made.

ARTICLE - IV: REQUIREMENTS FOR UTILITY LOCAL IMPROVEMENT DISTRICTS (ULID) & INCORPORATION OF PRIVATE WATER SYSTEMS

SECTION 4.01 - UTILITY LOCAL IMPROVEMENT DISTRICTS (ULID)

Any ULID set up for the constructing of a water main which is to become a part of the DISTRICT water system shall meet all the requirements as set forth under this CODE and the DISTRICT'S Specifications for constructions and materials, and applicable Federal, State and County Laws.

SECTION 4.02 - EXISTING PRIVATE WATER OR SEWER SYSTEMS

Any OWNER wishing to connect a private water system to the DISTRICT water system, or wishing to have the DISTRICT adopt or accept any existing water, sewer, or other utility system, shall, if such proposal is approved by the DISTRICT, convey to the DISTRICT all right and title to said water/sewer system, together with any associated, or necessary Groundwater Rights, licenses, permits, plans, specifications, "as-builts", and approvals. The DISTRICT'S acceptance of such system shall be at the DISTRICTS sole discretion, and may include, but not be limited to, the following conditions:

A. That written Certification be provided by the OWNER that the construction and all materials used to construct said system meet or exceed current Federal, State, Local, and DISTRICT standards and specifications;

B. That an accurate and full set of "as-built" drawings of said system together with complete and current satisfactory facility and water quality testing results be submitted to and approved by the DISTRICT;

C. That written approval and verification of all applicable Federal, State and Local Agencies with jurisdiction as to the suitability of the system for public use be obtained and submitted to the DISTRICT;

D. That such engineering or other professional certifications and assurances as deemed necessary by the DISTRICT be provided regarding the system's design and construction and its consistency with all applicable Federal, State and Local plans, standards and laws.

The DISTRICT may require existing private systems to be upgraded to meet all current requirements before conveyance of said system will be accepted by the DISTRICT. The DISTRICT shall be allowed free access for detailed inspection of all facilities proposed for conveyance to the DISTRICT. The DISTRICT may accept cash in lieu of upgrade in an amount equal to or exceeding the estimated cost of such upgrading as such cost is determined by the DISTRICT upon review of existing system plans.

The OWNER(s/GRANTOR(s)) shall agree to pay all costs incurred by the DISTRICT in the administration, review, verification and certifications involved in determining the suitability of the system for acceptance or adoption by the DISTRICT. OWNER(s)/GRANTOR(s) shall also pay any and all legal or administrative costs involved in negotiating and perfecting the transaction including, but not limited to the preparation of all conveyance documents and title reports and insurance.

ARTICLE - V: RATES AND CHARGES

SECTION 5.01 - CONNECTION CHARGES

In addition to the charges for installing connection and meter, "Service Installation (hook-up) Fee", an OWNER of property fronting on a main for which the said property has neither been assessed nor otherwise paid its "pro-rata share" of the cost of said main shall be required to pay said pro-rata share to the DISTRICT as a condition to the right to connect to said main. Said charges may be collected either for the benefit of the DISTRICT or for private persons who have paid the cost of constructing said main and have entered into a "recovery contract" with the DISTRICT.

A. Recovery Contract

After the DISTRICT has accepted title to an OWNER developed water main, the DEVELOPER/OWNER has 90 days to present an acceptable recovery contract to the DISTRICT, in which the DISTRICT agrees to collect the therein specified "pro-rata cost share" and/or "surcharge" of this newly constructed water main from the owner of any benefiting property, who did not contribute to the original cost of the improvement and who desires to connect to the main during a period of time consisting of no more than 15 years.

This 15-year period of time shall begin on the date the contract has been executed by the DISTRICT and the DEVELOPER/OWNER, and final acceptance of work by the DISTRICT, and the original thereof is filed with the DISTRICT, and/or is recorded with the Island County Auditor. If the document is recorded with the County Auditor by the DISTRICT, then the date of such recording is the date said 15 years commences. In any case, any statutory limits on the duration of such recovery contracts in effect at the time shall over-ride those specified herein.

Monies collected by the DISTRICT pursuant to recovery contract provisions shall be paid to the original DEVELOPER/OWNERS of said water main, their personal representative(s), designees, or assigns as may be specified in the said recovery contract, within (60) sixty working days after each collection.

There shall be a minimum additional charge of 10% by the DISTRICT for making each collection, which additional charge shall be paid by the DEVELOPER/OWNER and shall belong to the DISTRICT. Said 10% collection charge will be taken by the DISTRICT from the moneys collected before forwarding same to the applicable DEVELOPER/OWNERS, their heirs, successors, or assigns.

Upon acceptance by the DISTRICT of the title to the subject improvements, the DISTRICT will notify, by delivery of a copy of these rules or other means, to the DEVELOPER/OWNER thereof, of the above right to enter into a recovery agreement with the DISTRICT. If no action is taken by the developer within the 90 days provided for above, the right to enter into a recovery agreement shall be forfeited. Each Recovery Contract is subject to the following conditions:

1. OWNERS requesting the DISTRICT to make the above cited collections on their behalf shall submit to the DISTRICT for acceptance a contract to be known as a "Recovery Contract". The contract shall describe the improvements made and stipulate, by legal description, those non-participating and benefiting properties which shall thereafter be required to pay the applicable and stated "fair pro-rata cost share" or "surcharge" to be collected by the DISTRICT. The contract shall also specify, by legal description, as applicable, those properties by legal description and/or OWNERS thereof to whom payment of collected charges shall be made.

2. The "fair pro-rata cost share" for recovery contracts and the formula for computation thereof shall be specified in or otherwise be a part of the recovery contract between the DISTRICT and the DEVELOPER/OWNER of the improvements in question.

   If "Front Footage" is the basis of such formula "Fair pro-rata cost share" is defined as the total actual cost of the improvements including, but not limited to, design, permits, fees, construction, engineering, administration, legal fees, finance costs, etc. related to construction and to conveyance of the mains to the DISTRICT, divided by the number of feet of frontage of all property along or parallel to the main which may reasonably be expected to benefit by a connection thereto for water service (including the participating properties). If any other formula or combination of formulas are to be applied, they, and their justification, shall be specifically described in the contract and specifically applied to the specified non-participating properties.

3. In addition to the submission of the Recovery Contract, it shall be the responsibility of the DEVELOPER/OWNER requesting such contract to show on the "as-built" drawings for the system those frontages and/or properties which are considered to have participated in said project and are not subject to future connection charges, as well as those which are. If any of the tracts subject to recovery are corner lots or irregularly shaped so as to make determination of benefiting frontage or area difficult, a fair "equivalent frontage" or other formula and resultant amount shall be specified in the contract.

   In the computations of "fair pro-rata cost" share this equivalent figure shall be used and shall be shown on the drawings.

4. Each recovery contract shall be reviewed and approved by the DISTRICT which process may include review by the DISTRICT'S Attorney, Certified Operator, Administrator, and/or Engineer, all at the expense of the DEVELOPER/OWNER. For this purpose, the DEVELOPER/OWNER shall submit all necessary documenting data on the actual cost of construction, as well as the costs of conveyance and any statement/affidavit required by Section 2.01 (H). The DISTRICT shall request such changes in the contract, as it deems necessary, or required by law and principals of equity, and shall accept and/or execute such contract only after such changes, if any, have been made.

5. Every recovery contract shall include language which indemnifies the DISTRICT and holds it harmless from any legal challenge to the sufficiency, fairness, or enforceability of said contract, and which specifies that any and all costs associated with the defense of any such legal challenge and any and all awards or judgments arising therefrom, shall be the responsibility of the DEVELOPER/OWNER seeking to protect the recovery therein established.

6. Every contract shall specify any and all exemptions from recovery as per Section B below.

7. Every contract shall include a provision requiring that every two years from the date the contract is executed, the DEVELOPER/OWNER entitled to reimbursement shall provide the DISTRICT with information regarding the current contract name, address, and telephone number of the person, company, or partnership that originally entered into the contract.

B. Enforcement of Recovery Contract Collections

The DISTRICT shall not waive any collections required by a recovery contract and shall exercise reasonable vigilance to assure that payment of fair shares is not evaded. In general, unless exempted hereinbelow or by operation of law recovery contracts shall be applicable to all new service connections made directly to the mains which are subject to the recovery contract. The following circumstances, projects, and activities shall be

exempt from recovery contract provisions.

1. The connection in any manner or direction of additional mains to the mains otherwise subject to a recovery contract if said additional mains are constructed in a public right-of-way or easement of the DISTRICT, existing at the date of acceptance of the recovery contract; or

2. Any improvements or additions to or extensions of the Subject Mains conducted, authorized, or required by the DISTRICT, which in the opinion of the DISTRICT provides benefits to the overall operations to the DISTRICT water system.

If, as a result of the existence of two or more mains under separate recovery contracts, any property may be reasonably served from more than one main, the DISTRICT shall first determine from which main service is to be supplied based on proximity, topography, natural features, ease of future service, meter location, and other such reasonable factors. All other factors being equal, including distance, the OWNER of the property may choose to be connected to a particular main and the pro-rata share will be collected under that contract only.

E. Connection Charge for Partial Water Line Extensions

Under special circumstances, such as at pressure zone separations, the DISTRICT may permit only a portion of a water main extension to be constructed. In such cases, the DEVELOPER/OWNER(s) shall deposit a sum of money calculated by the DISTRICT per approved plans, for the portion of frontage not covered by the extension but required to be covered under Sections 2.01B and 3.01 of this CODE. Said sum shall be used by the DISTRICT to pay the developer's portion of a future extension past the frontage not covered by the partial extension.

No refund shall be made if the OWNER's future fair share of the cost is less than the payment to the DISTRICT neither shall the DISTRICT claim any additional amount due if it incurs a greater cost for such future extension construction.

SECTION 5.02 - SERVICE INSTALLATION ("HOOK-UP") FEES

Service Installation (hook-up) Fees are funds collected by the DISTRICT to help defray past and future capital improvement costs of the DISTRICT. As population within the DISTRICT service area grows, so do the DISTRICT'S obligations to provide potable water supply. The Freeland Water & Sewer District has elected to serve its constituents and users by keeping monthly rates as affordable as possible to current landowners and system users. Towards this end Service Installation Fees were and are instituted as part of the DISTRICT'S "pay as you go" method of financing past and future capital improvement needs of the DISTRICT. The Service Installation Fee system is one part of a strategy to defray past and future planned capital improvement investments, provide infrastructure concurrent with new development as mandated by the State

Growth Management Act and other statutes, and to regulate and help minimize the pre-mature development of vacant lands within the DISTRICT. The following provisions are applicable:

A. No service installation fee shall the levied against any building to which there is an existing water service, including meter and meter box, which was legally installed prior to December 31, 1996 by a developer or other agency and was formally accepted by the DISTRICT, and meets the requirements of this CODE as to location and materials used.

For all Parcels or buildings for which there is no water service, service installation fees shall be as follows:

1. The Basic Hook-up Fees or Connection Charges per installed meter are as follows:

2.

3/4 inch service:	$4,350 + Costs	1 inch service:	$4,500 + Costs
2 inch service:	$4,600 + Costs	3 inch service:	$4,700 + Costs
4 inch service:	$4,800 + Costs	6 inch service:	$4,900 + Costs
8 inch service:	$5,000 + Costs.		

Note: Any fractional part of a meter size will be charged at the next higher meter size rate; e.g. The charge for a 1 ½ inch meter service shall be as stated for a 2" service

3. The DISTRICT shall accept an "Application and Agreement for Water Service" on the condition that the customer will start construction of a dwelling unit within one (1) year. The customer shall submit with the "Application and Agreement for Water Service" a check or money order for the connection charges established by the DISTRICT. If the customer fails to start construction within the prescribed period, the application will be voided and the DISTRICT will refund the amount of the service installation charge to the customer without interest. Where circumstances presented to the DISTRICT commissioners in writing, an extension to the "Application and Agreement for Water Service" may be granted for a period up to six (6) months.

4. Service installation (Hook-Up) fees do not include any of the costs of labor, parts or materials of making the necessary installation nor is the cost of the applicable meter or meter box included in these fees. All installation costs of connection shall be additionally billed to the owner/applicant. Such "billable" costs include but are not limited to, excavation, tapping the main line, installing meter box, meter, fittings, and valves, pipe and laying pipe, inspections and testing, etc. Generally, an applicant will hire the services of a licensed contractor to perform all such work under the inspection of the DISTRICT.

The service installation fee shall also not include pressure reducer(s) or check valve(s) if required or ordered, nor shall it include connections requiring the

laying of pipe beyond a property the meter location.

5. In all cases a shut-off valve for incoming water shall be installed at each building or residence.

6. Upon final approval of a service installation and payment of associated "hook-up fees", actual physical metered connection to the DISTRICT water system must be completed and installed by the owner/applicant within 90 days after application approval. Unless other arrangements are approved by the DISTRICT in writing, failure to so promptly perfect any service installation and metered connection shall result in the DISTRICT'S rescission of the approved application and refund of the base hook-up fee paid. Any such rescission by the DISTRICT shall not preclude the affected owner/applicant from re-submitting a new application at any time thereafter under the rules and regulations then in effect.

B. If any property or parcel, regardless of zoning, is not within the DISTRICT'S legally established boundaries, then an additional Capitol Improvement Fee (or "surcharge") of $3,000 is required above the normal "Service Installation (hook-up) Fee" for each service connection. This surcharge is established in recognition of the fact that properties outside the DISTRICT boundaries are not subject to the ordinary taxing authority of the DISTRICT for financing past or future Capital Improvements. Harbor Hills Water System is exempt from paying this fee until June 30, 2009, however in the event annexation does not occur by June 30, 2009 this fee will be imposed effective July 1, 2009.

SECTION 5.03 - WATER EXTENSION ADMINISTRATION, REVIEW, AND INSPECTION CHARGES

All persons who extend the DISTRICT water system shall pay for inspection thereof at no cost thereof to the DISTRICT. All DISTRICT related or incurred costs or fees associated with water main extensions or connections shall be paid prior to final acceptance of the mains by the DISTRICT and/or prior to use.

SECTION 5.04 - WATER USE RATES

The consumption and use of all water taken from the DISTRICT water system shall be metered at every connection to said water system. All water taken from the system at any point or from any hydrant on temporary or permanent basis shall also be metered.

Rates or charges for water use shall be based on the quantity consumed during each billing period as hereinafter defined, plus bi-monthly size of service charge. The minimum charge for any billing period shall not be less than the amounts set forth in the table of "Minimum Charges" specified herein, or as hereafter changed by the DISTRICT Board of Commissioners meeting in public session, or as otherwise required by law.

In some instances the DISTRICT is unable to determine the exact amount of water usage a customer will use and thus cannot determine the exact number of ERUs (Equivalent Residential Units) that a customer should be assessed. Each ERU is based on the current approved Comprehensive Plan gallons per day usage. For new customers, the DISTRICT will make a tentative determination of the ERUs to be assessed. After the first year or part thereof, the Freeland Water and Sewer District will in January of each year review all accounts of its customers to determine whether their water usage exceeds the current approved Comprehensive Plan gallons per day for each ERU (Equivalent Residential Unit) assessed. If it is found that a customer's water usage exceeds the current approved Comprehensive Plan gallons per day for each ERU, the customer's assessment will be adjusted to reflect the appropriate number of ERUs which a customer should be assessed.

In addition, the monthly or periodic regular use charges for new service to properties outside the DISTRICT boundaries shall be three times the amount applicable to properties within the boundaries of the DISTRICT. Any service to properties outside the boundaries of the DISTRICT shall be at the sole discretion of the DISTRICT and may only be approved by the DISTRICT Board of Commissioners at a public meeting upon finding that a) a water quality emergency exists and connection to the DISTRICT system is the only viable alternative; or b) the lot or parcel is too small to host an on-site well or cannot reasonably be served by another existing approved water system; or c) said property is a part of a water system owned by the DISTRICT. In all such cases the owners of the applicable properties shall submit a signed annexation petition and/or agreement in such form as acceptable to the DISTRICT and allowed by Law for annexation.

Existing Service connections outside the DISTRICT boundaries as of March 14, 2002 shall continue to pay only twice the normal usage charges.

The above additional charges and fees shall cease to be collected by the DISTRICT upon successful annexation of such parcels or lands into the DISTRICT, however, past extra fees or charges paid, prior to annexation, shall not be subject to a refund.

A. Billing Period

The normal billing period shall be <u>two</u> months. Size of service charges for periods of less than two months shall be pro-rated both as to minimum charge and as to consumption.

B. Billing Increments

Charges for water used shall be computed on the nearest cubic foot of consumption.

C. Rates

All water used for domestic and commercial purposes shall be supplied by meter only. The rates for metered water supplied to premises shall be in accordance with the following schedule:

FREELAND WATER & SEWER DISTRICT
MINIMUM CONSUMPTION CHARGES
IN ADDITION TO METER FEES BELOW

Quantity Allowed		Bi-Monthly Charge
0-1000 cubic feet	=	$1.10 per 100 cubic ft.
1001-2000 cubic feet	=	$1.35 per 100 cubic ft.
2001-3000 cubic feet	=	$1.60 per 100 cubic ft.
3001-4000 cubic feet	=	$1.85 per 100 cubic ft.
Greater than 4000 cubic feet	=	$2.00 per 100 cubic ft.

ADDITIONAL "SIZE OF SERVICE"
BI-MONTHLY RATE

Meter Size/Type	Bi-Monthly Charge
3/4" meter	$ 16.80
1" meter	$ 30.00
1 1/2" meter	$ 45.00
2" meter	$ 60.00
3" meter	$ 90.00
4" meter	$ 120.00
6" meter	$ 180.00
8" meter	$ 220.00

MINIMUM CONSUMPTION CHARGES IN ADDITION TO FIXED FEE FOR CUSTOMERS OF HARBOR HILLS WATER

Quantity Allowed	Bi-Monthly Consumption Charge
0-10,000 gallons	$1.50 per 1,000 gallons
10,001-20,000 gallons	$2.50 per 1,000 gallons
Over 30,000 gallons	$3.50 per 1,000 gallons

ADDITIONAL FIXED BI-MONTHLY RATE

Residential	$51.00
Residential-Capital Improvement Fund	$17.00

READY TO SERVE – 6 MONTH FEE

Ready to Serve-Capital Imp Fund billed every 6-month	$ 51.00
Ready to Serve- Base Rate billed every 6 months	$ 30.00

SUNNY VIEW FARM FIXED RATE

Bi-monthly rate (non-metered)	$56.00

ARTICLE - VI: ENFORCEMENT

SECTION 6.01 - FAILURE TO REPAIR OR REPLACE PRIVATE WATER LINES OR FIRE PROTECTION LINES THAT ARE NOT METERED

If any repair or replacement of a private water line is not made within 30 days after official notice has been given to make such corrections, the DISTRICT may forthwith cause the same to be disconnected.

Owners of property connected to the DISTRICT'S water mains are responsible for the maintenance and repair of all water lines on their properties, which have not been formally conveyed (together with associated easements and/or agreements) to the DISTRICT in accordance with these rules. This responsibility commences at the property line or right-of-way/easement boundary regardless of meter location.

One-Time Exception: Customers may submit requests for a one time only 50% consideration on a water bill caused by leakage on the Customer's side of the property line or meter box as the case may be. The customer must submit a written request to the Board of Commissioners regarding water usage during any given billing period caused by a leak. To be considered, the DISTRICT requires that the leak be repaired within a reasonable time. The DISTRICT Commissioners will review any letter for consideration at their next held regular monthly meeting. If the requested consideration is granted it will be noted on the customer's billing file as a one time only lifetime credit due to leak. The DISTRICT will respond with a letter to the Customer and post the credit accordingly in the bill program.

SECTION 6.02 - GENERAL CHARGES

Any future changes or additions to DISTRICT WATER SYSTEM, whether inside or outside the legal limits of the DISTRICT, must conform to the Comprehensive Water System Plan established by the DISTRICT Board of Commissioners.

SECTION 6.03 - DISCONTINUANCE OF SERVICE

The DISTRICT may refuse or may discontinue service to any customer for violation of any provision of this CODE, or for failure to pay bills when due. The DISTRICT may limit, refuse or discontinue service to any customer who requires or uses such volume of water that water service to any other customer may be thereby impaired.

The DISTRICT shall discontinue service to any customer who makes an unauthorized connection to the DISTRICT'S water line, bypasses a DISTRICT water meter or in any other way, misappropriates DISTRICT water, or fails to comply with DISTRICT water conservation actions or orders. An illegal connection fee of $1,000.00 will be paid in addition to the hook up charge on any illegal connection.

Discontinuance of service for any cause stated in this CODE shall not release the customer from his obligation to the DISTRICT for payment of bills or charges. Whenever service is discontinued, as provided above, the customer shall be charged for the discontinuance.

Restoration of service, at the customer's request and after payment of all bills due, shall be done at the convenience of the DISTRICT, and an additional charge shall be made for this service.

Restoration of service, at any time other than regular business hours shall be charged at actual costs, but in no case shall the charge be less than $50. A customer who wishes to terminate water service shall give at least three days notice to the DISTRICT. No charge will be made for shutting off the supply. A customer who terminates water service and then later requests restoration of service at the location, shall be charged $50 for such restoration of service.

The DISTRICT will also notify Island County Health Department when service is disconnected and or reconnected.

SECTION 6.04 - ACCOUNTS - DISCONTINUING SERVICE WHERE ACCOUNT DELINQUENT

It shall be the duty of the DISTRICT to keep accounts with all consumers of water; to enter on such accounts all charges and penalties. The DISTRICT shall provide for proper accounts with all consumers of water, and every sixty days or less, compile a statement of the names and property of such consumers as are delinquent, and shall forthwith cause that service of these consumers to be discontinued.

Delinquent accounts interest rate shall be in accordance with RCW 57.08-081(3) in addition to late fees on the unpaid balance.

NSF fee shall be subject to current rate charged by Whidbey Island Bank.

An account shall be deemed delinquent if not paid within thirty (30) days following the date of billing. There shall be a further ten percent (10%) service charge for a Water Shut off Notice. Water connections shall be cut off thirty days after an account becomes delinquent and remains unpaid. A shut off charge of $50.00 will be added

SECTION 6.05 - WATER RATES LIEN AGAINST PREMISES

All water rates will be charged against the PREMISES for which the service was installed. All charges for water, when the same become delinquent and unpaid, shall be a lien against the premises to which water service has been furnished.

The DISTRICT will certify such delinquencies to the Treasurer, Island County, Washington, to fix a lien against the property affected for the amount of the rates or other charges unpaid plus lien fees and penalty of an additional 12 percent of such other charges unpaid plus interest at the rate of 12 percent per Annum from the date of each delinquency which shall be a lien against the property on which the service is received, subject only to lien for general taxes.

The foregoing provisions shall be in addition to the authority provided by law, to bring suit for foreclosure where rates and charges for water supplied and penalties are delinquent for a period of 60 days, which shall include judgment for costs and attorney's fees as provided in RCW 57.08.090.

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APPENDIX A STANDARD PLANS

THE FREELAND WATER & SEWER DISTRICT
TITLE
RESOLUTION NUMBER 2013-02-008
AMENDING AND RE-ADOPTING DISTRICT RULES

A RESOLUTION amending and replacing the Rules and Regulations of the Freeland Water & Sewer District previously adopted under Resolution No. 12-01, relating to the municipal water supply system, regulating the use of water therefrom, fixing service rates, connection and other charges; establishing requirements for construction of line service connections, U.L.I.D. and private water, systems, setting enforcement provisions, providing a lien against premises for delinquent accounts; and adopting general specifications for water main extensions.

RECITALS

WHEREAS on February 13, 2012, The Freeland Water & Sewer District did adopt Resolution 12-01 as the new "rules and regulations" of the DISTRICT, governing modifications to the water system of the DISTRICT and establishing rates and fees for connection thereto and subsequent water consumption/use rates and technical specifications, which said Resolution took effect on January 10, 2011 and was subject to additions adopted in resolution nos. 11-04, 11-06, and 11-07.

WHEREAS The Freeland Water & Sewer District now wishes to further amend, re-adopt, and codify said "Rules and Regulations" of the DISTRICT as a consolidated single document;

NOW THEREFORE the Board of Commissioners of the FREELAND WATER & SEWER DISTRICT does hereby resolve as follows:

STATEMENT OF INTENT

These rules, regulations, specifications and policies apply to all existing, new, and additional services and system facility development or expansion, and water main extensions within the service area of the Freeland Water & Sewer District. This code is not exclusive and is now and may hereafter be, supplemented by other rules, codes, or resolutions of the DISTRICT. This Resolution will replace and supersede prior resolutions 11-04, 11-06, 11-07, 12-1 and 2013-02-007

EFFECTIVE DATE

This Resolution shall take effect as of the 1stth day of January, 2013

FREELAND WATER & SEWER DISTRICT - Board of Commissioners
Adopted this 11th day of February, 2013

_____
Eric Hansen, President

_____
Lou Malzone, Vice President

_____
Marilynn Abrahamson, Secretary/Treasurer

EXHIBIT - A

FREELAND WATER and SEWER DISTRICT
RULES AND REGULATIONS

Per District adopted Resolutions 11-04, 11-06, 11-07, 12-01 and 2013-02-007

ARTICLE - I: GENERAL

SECTION 1.01 - DEFINITIONS

As used herein, the following terms shall be defined as follows:

"Application for Water" shall refer to a standard form to be provided by the District to summarize necessary information about the owner(s) applying for water service and to relay pertinent information to applicant regarding terms and conditions of service.

"Approving Authority" shall mean the approving authority for the several requirements of this regulation and shall be the District.

"**Board**" shall mean the Board of Commissioners of the Freeland Water and Sewer District.

"General Facilities Charge" is the base Hook-up fee charged by the District for all new service connections to existing water mains owned and/or operated by the District. It is the fee charged after all other obligations have been met and an owner wishes to have meter, meter box, and valve installed in order to commence the drawing of water from said main. The fee does not include any of the costs of labor, parts or materials needed to complete a connection.

"Commercial and Industrial property" shall include, but not necessarily be limited to, retail and wholesale stores, offices and office buildings, medical or dental clinics, mixed use structures, warehouses, service stations, manufacturing facilities, garages, theaters, hotels, motels, restaurants, bars and taverns, banks, showrooms, barber and beauty shops, and any and all other structures or facilities not exclusively used for residential purposes.

"District" shall mean the Freeland Water and Sewer District, Freeland, Washington, governed by an elected Board.

"District Water System" shall mean all water systems belonging to or managed by the Freeland Water and Sewer District.

"District Boundaries" shall mean the area in which the District is approved to provide water service.

"Developer Extension" shall mean the development, extension, or expansion of water or sewer facilities, mains, or improvements, initiated, paid for, and completed, by a developer or owner, or any party, benefiting therefrom under the supervision of the District.

"District Engineer" shall mean the Licensed Professional Engineer duly appointed or employed by the Freeland Water and Sewer District to provide professional engineering design, review, or management, services to the District, or its designees.

"Dwelling Unit" shall mean a single family living area including a single family residence, an apartment, motel or hotel unit or a trailer or Mobile or Manufactured home site.

"Equivalent Residential Unit (ERU) " Shall mean the number of connection units represented by the actual or anticipated average daily water consumption rate of a project or use divided by the average daily consumption rate of single family residences within the District over the past five year period.

"Front Footage" shall be determined by the District as the portion of the parcel that is adjacent to the existing or proposed water main in front of the parcel connecting to the District water system.

"Local Facilities Charges and Recovery Fees" are those charges and assessments applicable to property fronting on or benefiting from an existing water main of the District, but which said property did not in any way previously pay a fair "pro-rata share" towards the construction of said water main constructed by the District, or which said property is subject to an existing "recovery contract" between the District and a Developer/Owner who paid for the construction of said main, or, which said property was a non-participating or excluded property which benefited from a ULID which financed the construction of said main.

"Local fire protection authority" or "Fire Department" shall mean the fire district, directly responsible for the fire protection within the boundaries of the Freeland Water and Sewer District.

"Multiple Unit Commercial Property" shall refer to a single structure constructed under one continuous roof and equipped for occupancy by more than one Commercial or Industrial Property.

"Multiple Unit Residential Property" shall refer to an area for Trailers, Mobile or Manufactured Home sites or a single structure constructed under one continuous roof and equipped for occupancy by more than one Dwelling Unit and shall be synonymous with multi-family dwelling, high density dwelling, duplex, triplex, apartments, etc.

"Fire-flow" Means the rate of water delivery needed for the purpose of fighting fires in addition to requirements for normal domestic maximum instantaneous demand as referenced in those rules or guidelines published by the State Department of Health entitled "Design Standards for Public Water Supplies.

"Owner" shall mean the person, partnership or corporation owning the particular premises to which water is being or is to be furnished.

"Parcel" shall mean an existing or proposed lot, tract, or property of record. Existing Parcels are those contained in the Assessor's plat of Island County, which have been assigned descriptions and numbers for tax purposes by the Island County Assessor. Proposed Parcels are those shown delineated or described in any proposed Plat, Short Plat, Site Plan, Planned Residential Development, or other form of subdivision, in process of being created.

"Premises" is defined as the land and one building under one continuous roof together with such other service buildings as are used only by the occupants of the principal building, including rent-free guest houses occupied less than three months of the year except that "Premises" may be otherwise defined in writing in a special contract between the Owner and the District for the furnishing of water to such premises through a water meter.

"Private service lines" are defined as all water lines extending from a District main which have not been formally conveyed to or accepted by the District, or which are not located in public rights-of way nor in easements dedicated to the use of the Freeland Water and Sewer District.

"Project Engineer" shall mean a professional engineer, licensed in and by the State of Washington who is engaged to provide professional engineering design, review, or management, testing, and certification services related to a specific water and/or sewer project. The project engineer may or may not also be the "District Engineer".

"Public Property" shall include street right of ways, civic buildings, public schools, playgrounds, public parks and appurtenances.

"Residential Property" shall refer to those properties or premises intended for human habitation.

"Service Connection Charges" - This is the sum total of all charges and fees and costs to which a particular parcel or property or premises is subject prior to being assured a supply of domestic water from the District water system.

SECTION 1.02 - SPECIFICATIONS

All construction specifically covered under this Regulation and any related construction which occurs as a part of or as a result of the work covered under this Regulation, shall be performed in accordance with all applicable State and County codes and with the "Standard Specifications for Municipal Public Works Construction", as prepared by the Washington State Chapter of the American Public Works Association, current edition or as otherwise revised or superseded, and with the "General Specifications for Water Main Extensions" of the Freeland Water and Sewer District.

SECTION 1.03 - APPLICATION FOR WATER SERVICE

All parties wishing to connect to water or sewer facilities or systems of the District shall make application for such connection on such forms and under such agreements as prescribed by the District. Such forms may include, but are not limited to, the District Water Service Agreement, Preliminary Services Agreement, Developer Extension Agreement, Inter- local Agreement between municipal agencies, Recovery Contract, Easement and Facility Conveyance Agreement, Cross Connection Control Agreement or such other forms as may be required by the District. Minimally all applicants shall execute a Water Service Agreement and at that time, pay all connection charges, fees, surcharges, or assessments required by the District or the provisions of this Regulation.

Additionally, owners of any rental property connected, or to be connected, to the District water system, shall agree to have their name appear on all billings for that property by the District and such billings shall be mailed to Owners and shall become delinquent if not paid within sixty days of the day indicated on the billing.

SECTION 1.04 - STATE AND COUNTY RULES

All design, construction, maintenance and operation shall be in accordance with the requirements of WAC 246-290, "Rules and Regulations of the State Board of Health regarding Public Water Supplies", as now existing or hereafter amended, and also with Chapter 13.03A of the Island County Code, as now existing or hereafter amended.

SECTION 1.05 - LIMITS OF DISTRICT RESPONSIBILITY

At no time shall it be the responsibility of the District to enter upon private property to work on or do anything to mains, service lines or appurtenances which are not an accepted part of the District water system or are not located within public rights-of-way or easements dedicated to public utility purposes or easements to which the District is a named beneficiary for the purpose of installing, operating, and/or maintaining the District water system.

ARTICLE - II : CONSTRUCTION REQUIREMENTS

SECTION 2.01 EXTENSION OF MAINS

Owners of property who desire to have the District water system extended to provide service to said their property may have such extensions constructed by any of the following methods as may be determined appropriate and approved by the District at the District's sole discretion

1. **ULID**: The formation of Utility Local Improvement District. Under this method the proposed improvements are financed by the District with the security that the costs will be paid through the enactment and approval of tax assessments to be levied against the properties specifically benefited by said improvements. ULID

formation may occur either by petition of the owners of 60 per cent of the total designated benefiting land area, or by resolution of the District Commissioners where said ULID is not protested by owners of at least 40 per cent of the land area within the ULID boundaries thus proposed.

All ULID financed projects or improvements shall be conducted under terms and methods prescribed by the Washington State Law and the District.

Methods of calculating assessments relative to benefit under the ULID process may be based on Area, Assessed Value (per records of the Island County Tax Assessor), or relative, adjusted, or actual front footage along or parallel to streets or water mains, or any combination of such methods, or an alternate method, that results most closely, in the Judgment of the District, in the apportionment of costs relative to benefit.

All benefiting properties excluded from a ULID may be subject to future "fair pro-rata share" assessments, fees, or surcharges by the District at such time in the future that service from improvements thus financed is sought for such properties.

2. DEVELOPER/OWNER EXTENSION:

Under this method all costs associated with the proposed extension are paid directly by the Owner(s) or Developer(s) of all or some of the property to be benefited by the proposed improvements. Such private development projects are conducted pursuant to the requirements and agreements of the District. Upon final approval and acceptance of said improvements, and the conveyance thereof together with any easements required by the District. The District will assume ownership thereof.

All properties benefiting from but not participating in improvements thus financed may be subject to future "pro-rata share" including any Local Facilities Charges, assessments, fees, or surcharges by the District per a Recovery Contract between the Developer(s) or Owner(s) and the District.

3. CASH CONTRIBUTION:

Under this method a number of individual Owners may request the District to act in their behalf to plan, design, and supervise construction of improvements necessary to serve their properties. This method is similar to the above described Developer/Owner Extension method, except that the project will be conducted directly by the District, as a District project. Under this method all of the estimated costs of the project shall be paid in advance to the District by any or all of the benefiting participating owner(s) and all actual cost shall be paid by said owners prior to any connection to said improvements thus financed. .

All properties benefiting from but not participating in improvements thus financed

may be subject to future "pro-rata share" including Local Facilities Charges, assessments, fees, or surcharges by the District either independently or per a Recovery Contract between the contributing Owner(s) and the District.

The District will, upon request, provide information about any of the management or financing methods available for water main extensions.

Nothing in these Regulations shall be construed to mean or imply that the District has any obligation to pursue or accept proposals for the extension of its water mains or water system to properties not currently served by the District's existing system regardless of which method of financing is proposed.

The District shall have no obligation to serve any properties within or outside its boundaries until such time as all applicable Service Connection Charge(s) or fee(s) have been paid for each proposed connection including the Capital Facilities Charges for each connection (or equivalent) required by the District.

In the case of any proposed main extension the District shall have the option and right to include in the cost there of a future source or plant development contribution which is reflective of the ratio between the number of service connections the District's system can currently serve and the number of new service connections or equivalents that can be reasonably expected in the foreseeable future to result from the main extension being proposed. The ratio(s) thus derived may then be applied to the costs associated or specified in the District's current Comprehensive Water System Plan for proposed or recommended Capital Improvements, including but not limited to, the acquisition or development of new well(s), well sites, tank(s), tank sites, or new water main extensions.

A. INITIATION OF PROJECT

1. **ULID**: Projects to be financed by Utility Local Improvement District (U.L.I.D.) method of financing may be initiated either by resolution of the District Board, or by Petition of the property owners representing at least 51 % of the land within a proposed service area. All ULID projects shall be conducted and costs apportioned in such fashion as prescribed or permitted by State Law applicable thereto.

2. **DEVELOPER EXTENSIONS**: Formal initiation of a project to be constructed privately by the Owner(s) via a Developer Extension consists of filing a Preliminary Developer Extension Agreement together with preliminary plans and drawings, in such form and content prescribed by the District. The District may, upon review of any Developer Extension proposal, elect to adopt said proposal as a Project of the District and require same to be pursued through either the Cash Contribution or ULID methods of financing. Prior to project initiation, a Developer Extension Agreement shall be executed by the parties.

3. **CASH CONTRIBUTION:** Formal initiation of a project to be constructed through the Cash Contribution method of financing consists of filing a letter of application or petition, together with preliminary plans and drawings, in form and content prescribed by the District. The District may, upon review of such proposals, elect to have them pursued as a ULID or Developer Extension.

It is recommended that any proposed project be reviewed with the District as early as possible on the basis of preliminary plans prior to the preparation of detailed application drawings and design engineering.

B. Project Requirements:

In order to qualify for District approval, the proposed project must satisfy all requirements of this Regulation and applicable State and County Codes (including but not limited to WAC 246-290), relating to pipe size, public hydrant spacing and minimum property frontage. If the proposed extension is to serve property being platted, the project shall include construction of mains to the land being platted and across the full frontage of the lots in the plat, unless such mains are already in existence. "Frontage of the plat" shall include frontage of small tracts lying between a portion of the plat and such roads or streets, commonly identified as "exceptions".

C. Connection and other Charges:

Prior to Final commitment from the District to serve new properties or developments, the Developer/Owner shall pay to the District the amount of any applicable service connection charges, including but not limited to any charges pursuant to any applicable recovery contract or charges applicable to benefiting properties which did not participate in a prior ULID or Cash Contribution project for the frontage of the property on existing mains, less any waivers granted by the District.

D. Water Availability notices or letters:

The District, may, at its option, issue letters (or forms) of water availability to other parties or applicable reviewing agencies indicating the availability of adequate potable water supply to a parcel or development project on the day or date the notice or letter is written and until such time as may otherwise be specified therein.
Such Water Availability notifications do not, by themselves, constitute final commitment of the District, nor do they constitute contractual obligations to serve. The District's obligation to provide water commences only upon acceptance of Application for Water and payment of Service Connection Charges and installation of a metered connection to the District main.

E. Permits and approvals:

For all new service connections and for all mains or line extensions, the Developer /Owner shall be responsible for obtaining all permits or approvals associated with the

proposed improvements including but not limited to State and County approval of Plans and Specifications and applicable construction permits required for performing work in State or County rights-of-way. The Developer /Owner shall pay all fees associated or levied by agencies for the review of said permits or applications.

F. Application Procedure:

The Developer/Owner requesting permission to develop or extend the mains of District water system shall first execute a Preliminary Developer Extension Agreement provided by the District, in which terms, process and procedure for pursuing the project will be disclosed. The District Preliminary Developer Extension Agreement shall be completed and submitted together with four sets of preliminary plans, specifications, drawings, reports, and analyses, prepared by a Professional Engineer licensed in the State of Washington. Prior to project initiation, the parties, including the project's contractor, shall execute a Developer Extension Agreement.

1. Plans & Specifications:

Plans, specifications and Engineer's Report shall be in such form and content as prescribed by the District and be in such forms suitable for submission to the State of Washington Department of Health (DOH) for review and approval, and shall meet said State requirements for plans, specifications and reports. In all cases where plans and specifications, and/or final "as-builts" and certifications, etc. must be submitted to other federal, state, and/or local government agencies, the Developer /Owner shall be responsible for such submission and all associated costs. When applicable, the District will cooperate in furnishing such additional information as may be available in the District public record files.

Unless otherwise agreed in advance, all submission of plans and specifications and final "as-builts" to the District by the Developer /Owner or their project engineer, shall also be provided in electronic media form such as "CAD" drawing files and "Word" documents, as acceptable to the District.

2. Variances:

All applications shall include any accompanying letters requesting any needed variance or waiver requests from this or other applicable codes.

3. Plan Check:

Plans and specifications shall be checked by the District, in a reasonable and timely manner, in order to determine their consistency with the District Comprehensive Plan, this Regulation, and their suitability for submittal to the State of Washington Department of Health (DOH).

4. Corrections:

Any corrections or additions deemed necessary by the District will be made known to the applicant via editing of the plans or by written correspondence. Then one copy of the edited plans and specifications will be returned to the

Developer /Owner. Upon receipt of four sets of the corrected plans and specifications, the District will sign or initial same as approved and return one working set to the Developer /Owner or designated agent. At any stage where filing or pre-approval of plans by other agencies is required, the Developer /Owner shall be responsible for making such submissions (after District approval) with copies of submittals being provided to the District.

5. District project management and/or administration:

In all cases of system development, expansion, or extension, the District shall establish a project account and all costs and expenses incurred by the District including, but not limited to, design, design review, project management and administration, supervision, inspection(s), other agency review, fees, etc. shall be assigned to the Project account and billed to the Developer /Owner. All such billings and associated penalties, late charges, etc., must be paid in full prior to final approval and acceptance of the project by the District. All regular project billings of the District shall minimally be payable on terms of *30 days/net/18%* compounded thereafter.

6. Construction Inspection & Testing:

Both during and upon completion of the construction, the improvements shall be inspected by the District, as well as the Project Engineer, and upon completion, undergo flushing and testing as required by the District, applicable Regulation, and/or the project's engineering specifications.

7. Grading of roads:

Developer shall grade all roads to the design subgrade elevation prior to the start of construction and shall advise the District in writing during construction of any changes, which may be contemplated. If the Developer changes the subgrade elevation of the road after completion of the water main construction, or any part thereof, Developer agrees to raise or lower the water main and/or water services as required by the new subgrade elevation at no cost to the District. This obligation shall remain in full force and must be satisfied prior to Final acceptance of the project by the District.

8. Connection to Existing Mains:

Not less than 48 hours prior to the time that said extension is partially or fully completed and connection to the District water system is desired, application for permission to make the actual connection to the District water system in a specified time shall be made by Developer or his/her contractor to the District. All connections to the existing system and all testing of the new line must be with the authorization of and in the presence of the authorized representative of the District. Opening of valves and use of water from the District water system will be done by the District and/or its authorized representative. The District reserves the right to require that connections be made by "Hot Tap" where disruption of water service would, in the opinion of the District, be unduly detrimental.

G. Project Certification and "As-Built: Drawings:

All responsibility for providing line and grade and measuring for the "as-built" drawings and for providing final Project construction reports and certification shall rest with the Developer/Owner either directly or through the Project Engineer.

As-built drawings of the completed installation together with final certification and construction report(s) of the Developer/Owner's Project Engineer shall be submitted to the State Department of Health (DOH) by the project engineer with a simultaneous copy to the District for review and approval before the improvements are considered for acceptance by the District. All estimations or projections of a project's potential for additional future service connections shall be provided to and be approved by the District prior to submittal to any other parties or agencies.

Two printed copies of the final "As-Built" drawings "to scale" shall be submitted to the District. Unless otherwise permitted by the District, they shall be drawn to scale with permanent ink on reproducible Mylar. Drawings must show lot, street/alley and easement dimensions. They must also show the location of all mains, valves, hydrants, standpipes, etc. as per the detailed project design approved by the District.

Unless otherwise approved in advance by the District, all final "As-Built" drawings shall also be provided in Computer Aided Design (CAD) drawing formats on CD, or other electronic/magnetic media means of transmission, acceptable to the District. All such submittals shall be provided to the District office after consultation as to form and format.

H. Conveyance to District:

Upon completion of the project improvements and approval of "as-built" drawings, and final engineer's certification/construction report, the title to the improvement(s) shall be conveyed to the District by the Developer/Owner via appropriate document(s) (Bill of Sale or conveyance, Quit Claim Deed, etc. as required by the District). The District may require that said conveyance be accompanied by a written statement or affidavit of the Developer/Owner that there are no unsatisfied claims or liens of any kind applicable to any of the improvements being conveyed. All easements required for the District to operate and maintain the constructed facilities shall also be established prior to final acceptance. The above may be satisfied by a single Easement and Facilities Conveyance document prepared or provided by the District.

I. Acceptance:

When all the stipulations and requirements as set forth in these regulations and the District Cross Connection Control Program, have been fulfilled, by the Developer/Owner, and applicable franchises, permits, easements, etc. are in place, the District will accept title to the improvements.

J. Recovery Contract(s):

Within 90 days of the District's final acceptance and conveyance and approval of a project the Developer/Owner may submit a proposed Recovery Contract to the District consistent with the provisions of ARTICLE V, Section 5.01.A. herein below. In the event a Recovery Contract is not proposed, no recovery will be available.

SECTION 2.02 - PIPE SIZE, TYPE AND LOCATION

Every new water main served by the District water system and located in public rights-of-way, shall be at least 8 inches in diameter, except that 6 inch pipe may be installed as a connecting line-between two larger existing dead-end mains for the purpose of improving circulation in the system; also except that 4-inch pipe extending not more than 300 feet beyond a public hydrant may be installed in a dead-end street, provided that no public hydrant is likely to be required thereon in the future by applicable fire flow regulations or requirements, and provided that the there is no foreseeable need for extending said water main to additional services or to connect to mains in adjacent property for mutual improvement of water service.

In all cases, the size of supply and transmission lines shall be determined by the District. If a Developer/Owner is required to oversize a portion of a supply or transmission main, beyond that otherwise required by applicable laws, codes, or ordinances or beyond that which may be required to mitigate impacts to system capacity caused by the development project that triggers the need for main extensions or expansion of facilities, the District will, upon application thereto, agree to provide reimbursement for the additional costs of such over-sizing at such time that funds are available. For the purpose of determining over-sizing, the size of the smallest standard main shall be 8-inches. The developer shall submit a plan and request for such reimbursement, including specific over-sizing costs, for approval by the District, prior to the beginning of construction, or forfeit any further claim to such reimbursement.

All projects shall be constructed in accordance with plans and specifications approved by the District. All work within Island County right-of-way shall meet all applicable requirements and standards of the Island County Engineer for work performed in said right-of-way.

SECTION 2.03 - FIRE HYDRANTS, TEES, GATE VALVES, BLOW-OFF VALVES AND APPURTENANCES

A. **Fire Hydrants:**

1. Public Hydrants, when required, shall be installed on all extensions of the District water system at the time such extensions are constructed. Hydrants shall, whenever feasible, be installed at intersections of a street or public road and/or at such intermediate points as will result in spacing between public hydrants in single family residential areas (i.e. zoned for 3 (three) dwelling units per acre or less) of distances not to exceed 600 feet, measured along road centerlines. Hydrant spacing in high density (i.e. zoned for greater than 3 (three) dwelling units per acre) Multi-Family Residential, Commercial or Industrial areas or zones

shall not exceed 300 feet.

2. Public Hydrants installed at the ends of dead end lines which are more than 300 feet in length may later be moved to conform to standard spacing requirements if the main is extended.

3. All Public Hydrants shall stand plumb. The lowest outlet shall be no less than 18 inches above grade and shall have no less than 36 inches of clear area around the hydrant for clearance of the hydrant wrench on any outlet and the control valve. The pumper port shall face the street. Where the street cannot be clearly defined or recognized, the pumper port shall face the most likely location of the fire truck while pumping.

4. In general and where practical, Public Hydrants shall be located 6 feet from the right-of-way line in streets where the right-of-way or easement is 50 ft. wide or greater, and 1 foot from the right-of-way line in streets where the right-of-way or easement is less than 50 ft. wide.

5. Hydrants shall when possible meet District and Fire Department standards to ensure compatibility with local fire equipment, procedures and maintenance.

B. Blow-Off Valves:

Blow-off valves shall minimally be installed at the end of all dead-end lines except where there is a Public Hydrant on the end of said line. Additional blow-off valves or assemblies shall be installed as may be required by the District, the Project Engineer, and/or applicable codes, design guidelines, or other specifications.

C. Gate or Water Control Valves:

Generally, Gate Valves shall be placed on all branches from feeder mains, between mains and Public Hydrants, between mains and reservoirs, and between mains and pumps. In line Gate Valves shall be installed at a spacing of no more than 1000 feet unless waived or modified by the District. An in-line gate valve shall be located at the end of all dead-end lines to permit shut-off prior to future extension as determined by the District.

D. Tees and Crosses:

Tees and crosses shall be provided at all locations where future extensions, in the judgment of the District, may occur.

E. Pressure Reducing Valves

1. Main line pressure reducing stations shall be built according to the District specifications and approved as to size by the District, and shall be installed where

required, to limit a maximum line pressure of 150 psi, or as otherwise required or permitted by the District.

2. Individual pressure reducing valves are the responsibility of the Owner for all services on mains with a pressure of more than 80 psi and should be located according to District specifications.

SECTION 2.04 - EASEMENT REQUIREMENTS FOR WATER MAIN INSTALLATION

All easements necessary for the construction, and operation of any mains or water/sewer lines or facilities proposed for acceptance and ownership by the District, shall be obtained or provided by the Developer/Owner and shall designate the Freeland Water and Sewer District as a beneficiary. Mains shall be located in easements only when it is not possible or feasible to locate them in existing public rights-of-way, or when they are located in an area or on a path preferred by the District.

ARTICLE - III: REQUIREMENTS FOR SERVICE CONNECTIONS

SECTION 3.01 - FRONTAGE AND REQUIREMENTS FOR PERMANENT CONNECTIONS

Any Owner desiring a permanent connection to a main served by the District Water System must have, by ownership or easement rights, at least 15 feet of frontage on a street, public right-of-way, or easement in which the main is located. If requested by the District, Said Owner must provide a legal description and map of the property to be served, together with sufficient evidence of ownership thereof, to the District.

Water mains served by the District Water System shall extend across the full frontage of the parcel whose Owner desires a permanent connection and/or across the full frontage of any property that may lie between said parcel to be served and the street, or road, or easement, in which the main lies. If the property to be served is part of a recorded plat, the water mains serving or about to serve the plat must be laid across the full frontage of all lots before any water service connections will be made to any of the lots. On dead-end streets, the District Water System must extend all the way to the curb line at the street's end before any property at the end of said street may be connected to water mains. The District may waive, at its discretion, the requirement for full frontage coverage for proposals that involve only one single family residence on one parcel or in any case where, in the District’s judgment there is definitely no likelihood of future main extension beyond the subject property, nor any likelihood for future development of more than one single family residence on the subject parcel.

For the purposes of this Article III the term parcel shall mean an existing or proposed lot, tract, or property of record. Existing parcels are those contained in the Assessor's plat of Island County, which have been assigned descriptions and numbers for tax purposes by the Island County Assessor. Proposed parcels are those shown delineated or described in any proposed Plat,

Short Plat, Binding Site Plan, or other approved form of subdivision. Parcels may not be unilaterally described by an owner as a portion of an existing parcel.

SECTION 3.02 - TEMPORARY CONNECTIONS ON PROPERTY ABUTTING AN EXISTING MAIN

Temporary connections may be approved, at the sole discretion of the District, for existing parcels upon which no more than one (1) Single Family Residence (SFR) connection is proposed, and which do not meet the requirements of Section 3.01 as to frontage. For such temporary connections under this section, the Owner shall make payment to the District an amount equal to $75.00 per foot of "equivalent frontage", in addition to the established for Service Connection Charge's, and shall convey to the District by easement such rights-of-way, or easements as the District may require. The District shall determine which of the following methods or combinations thereof will be used to find the Front Footage, or apply such other formula, as the District deems fair and reasonable.

A. The average width of the tract measured parallel to the water main to which connection is desired.

B. The actual frontage on another street or road right-of-way in which no water main exists, but where the construction of such main is planned or may be reasonably anticipated.

C. The actual frontage on a proposed street or road for which the Owner shall convey a right-of-way or easement to the District for utility purposes or to Island County for road and utility purposes. The width of any such granted right-of-way or easement being as determined by the recipient or beneficiary thereof.

Upon payment by an Owner of the above-specified Temporary Connection Fee, receipt, thereof, shall be given by the District, describing the property for which payment has been made. In the future, if a new main is constructed by the District from which service can be taken, the Owner may connect to it by installing a new service line to a new meter location determined by the District and by giving a written request to the District for the change in meter location.

In the alternative the District, may unilaterally re-locate said meter and connection to the new main once it is installed. There shall be no additional Service Connection Charges for the relocation of the meter or connection by the Owner or the District. The Owner, however, shall be responsible for any cost of construction associated with said meter re-location if initiated by the Owner. Upon re-location of a temporary service, the old temporary service shall be disconnected. No refund shall be made to the Owner if the Owner's fair share of the cost of constructing said new main is less than the payment to the District. If the actual main extension cost to the District exceeds the above temporary cost neither shall the District claim any additional amount due.

SECTION 3.02A TEMPORARY CONNECTIONS FOR A PARCEL THAT DOES NOT ABUT A PUBLIC ROAD OR ROAD EASEMENT

Temporary connections may be approved, at the sole discretion of the District, for existing parcels upon which no more than one (1) Single Family Residence (SFR) connection is proposed, and which do not meet the requirements of Section 3.01 as to frontage or section 3.02. For such temporary connections under this section, the Owner shall make payment to the District an amount equal to $75.00 per foot of "equivalent frontage", in addition to the established charges for service connections. The owners of the parcel shall be required to provide to the District a signed No Protest agreement against the parcel for any District main extension that passes their parcel for a term of twenty (20) years to be a recorded lien against the parcel by the District. In addition the owner agrees to pay an additional amount per foot of the cost of the extension at the time of a main extension less the $75.00 per foot already paid.

SECTION 3.03 - METER AND SERVICE CONNECTION SIZES

The size of a service connection and meter shall be determined by the flow rate needed to adequately service the project

MULTIPLE UNIT RESIDENTIAL & COMMERCIAL PROPERTIES OR PROJECTS

Multi-Family housing projects and new Commercial projects shall minimally be served by one metered connection per existing or proposed lot or parcel of record. Within any one Parcel new Commercial or new Multi-Family projects may be serviced by metered connections only in such manner as determined and approved by the District. Options available to the District include, but are not limited to, the following:

1. One metered connection per each detached building; or

2. One meter for each dwelling unit or each commercial business unit; or

3. Such number of meters, above the minimum of one per building, as determined by the District.

The pipe size for a service connection shall be not less than the size of the meter as set forth in the Application for Water. At the discretion of the District, larger pipes may be required to be installed to provide water to more than one meter from a single connection.

A separate General Facilities Charge shall be required for each metered connection.
The maximum allowable distance from the water main to the meter shall be 60 feet. Any service connection of greater length shall be approved by the District prior to installation.

SECTION 3.04 - WATER METER LOCATIONS

A. All water meters shall be placed in service in the public right-of-way or easement in which the mains of the District water system are situated. In the opinion of the District it would be mutually benefiting to the District and the Owner to locate the meter on private property. In the event that a meter is located on private property, the Owner shall provide such easement(s) or other documentation deemed necessary by the District clearly establishing that the District has the right of entry to inspect, service or remove the meter or to open or close the service valve at any time. At no time shall access to the meter be obstructed. It shall be the responsibility of the Owner to protect the meter from damage, and to keep access to meter area clear at all times.

Where a meter is located on private property, the District may at its discretion and, at the Owner's expense, install a valve at the property line. Unless governed by a written agreement stating otherwise, maintenance and repair of lines and facilities on private property by the District shall be billed to the Owner.

B. All water meters to be serviced and read by the District shall be purchased through the District to insure compliance with standard specifications regarding accuracy, connectors and inter-changeability. Such purchase may be made directly from the District or from a source approved by the District.

SECTION 3.05 - DEVELOPER-INSTALLED SERVICE CONNECTIONS

A. Developers of new subdivisions, or multi-family or commercial developments, who desire connection to the District water system shall be required to install all service connection lines and meter boxes (excluding meters) prior to construction and/or paving of streets or roads.

B. If not installed at the time of main development, meters approved by the District shall, at the District's discretion either be supplied to the District for later installation or the Developer shall pay to the District such amount as needed to buy and install such meters when actually needed for building development.

C. Developers shall, with District approval, install and test all service connections, including meters and meter boxes. Said service connections shall be shown on final project drawings, and be included in the Developer/Owner's conveyance to the District. All service connections shall be made with a corporation stop at the District main. All Service connections shall be made in accordance with District Specifications unless otherwise approved by the District. The District may, at its discretion, accept delivery of, or payment for, approved non-installed meters, in lieu of actual installation thereof.

D. The General Facilities Charge shall be paid when Application for Water is made.

ARTICLE - IV: REQUIREMENTS FOR UTILITY LOCAL IMPROVEMENT DISTRICTS (ULID) & INCORPORATION OF PRIVATE WATER SYSTEMS

SECTION 4.01 - UTILITY LOCAL IMPROVEMENT DISTRICTS (ULID)

Any ULID set up for the constructing of a water main which is to become a part of the District water system shall meet all the requirements as set forth under this Regulation and the District's Specifications for constructions and materials, and applicable Federal, State and County Laws.

SECTION 4.02 - EXISTING PRIVATE WATER OR SEWER SYSTEMS

Any Owner wishing to connect a private water system to the District water system, or wishing to have the District adopt or accept any existing water, sewer, or other utility system, shall, if such proposal is approved by the District, convey to the District all right and title to said water/sewer system, together with any associated, or necessary Groundwater Rights, licenses, permits, plans, specifications, "as-builts", and approvals. The District's acceptance of such system shall be at the District's sole discretion, and may include, but not be limited to, the following conditions:

A. That written Certification be provided by the Owner that the construction and all materials used to construct said system meet or exceed current Federal, State, Local, and District standards and specifications;

B. That an accurate and full set of "as-built" drawings of said system together with complete and current satisfactory facility and water quality testing results be submitted to and approved by the District;

C. That written approval and verification of all applicable Federal, State and Local Agencies with jurisdiction as to the suitability of the system for public use be obtained and submitted to the District;

D. That such engineering or other professional certifications and assurances as deemed necessary by the District be provided regarding the system's design and construction and its consistency with all applicable Federal, State and Local plans, standards and laws.

The District may require existing private systems to be upgraded to meet all current requirements before conveyance of said system will be accepted by the District. The District shall be allowed free access for detailed inspection of all facilities proposed for conveyance to the District. The District may accept cash in lieu of upgrade in an amount equal to or exceeding the estimated cost of such upgrading as such cost is determined by the District upon review of existing system plans.

The Owner(s) shall agree to pay all costs incurred by the District in the administration, review, verification and certifications involved in determining the suitability of the system for acceptance or adoption by the District. Owner(s)) shall also pay any and all legal or administrative costs

involved in negotiating and perfecting the transaction including, but not limited to the preparation of all conveyance documents and title reports and insurance.

ARTICLE - V: RATES AND CHARGES

SECTION 5.01 - CONNECTION CHARGES

In addition to the General Facilities Charges and Service Connection Charges, an Owner of property fronting on a main for which the said property has neither been assessed nor otherwise paid its "pro-rata share" of the cost of said main may be required to pay a Local Facilities Charge to the District as a condition to the right to connect to said main. Said charges may be collected either for the benefit of the District or for private persons who have paid the cost of constructing said main and have entered into a recovery contract with the District.

A. Recovery Contract

After the District has accepted title to an Owner developed water main, the Developer/Owner has 90 days to present an acceptable recovery contract to the District, in which the District agrees to collect the therein specified "pro-rata cost share" or Local Facilities Charge of this newly constructed water main from the owner of any benefiting property, who did not contribute to the original cost of the improvement and who desires to connect to the main during a period of time consisting of no more than 15 years.

This 15-year period of time shall begin on the date the contract has been executed by the District and the Developer/Owner, and final acceptance of work by the District, and the original thereof is filed with the District, and/or is recorded with the Island County Auditor. If the document is recorded with the County Auditor by the District, then the date of such recording is the date said 15 years commences. In any case, any statutory limits on the duration of such recovery contracts in effect at the time shall over-ride those specified herein.

Monies collected by the District pursuant to recovery contract provisions shall be paid to the original Developer/Owner of said water main, their personal representative(s), designees, or assigns as may be specified in the said recovery contract, within (60) sixty working days after each collection.

There shall be a minimum additional charge of 10% by the District for making each collection, which additional charge shall be paid by the Developer/Owner and shall belong to the District. Said 10% collection charge will be taken by the District from the moneys collected before forwarding same to the applicable Developer/Owner's, their heirs, successors, or assigns.

Upon acceptance by the District of the title to the subject improvements, the District will notify, by delivery of a copy of these rules or other means, to the Developer/Owner thereof, of the above right to enter into a recovery agreement with the District. If no action is taken by the developer within the 90 days provided for above, the right to enter

into a recovery agreement shall be forfeited. Each Recovery Contract is subject to the following conditions:

1. Owners requesting the District to make the above cited collections on their behalf shall submit to the District for acceptance a contract to be known as a Recovery Contract. The contract shall describe the improvements made and stipulate, by legal description, those non-participating and benefiting properties which shall thereafter be required to pay the applicable and stated "fair pro-rata cost share" or "surcharge" to be collected by the District The contract shall also specify, by legal description, as applicable, those properties by legal description and/or Owners thereof to whom payment of collected charges shall be made.

2. The "fair pro-rata cost share" for recovery contracts and the formula for computation thereof shall be specified in or otherwise be a part of the recovery contract between the District and the Developer/Owner of the improvements in question.

   If Front Footage is the basis of such formula "Fair pro-rata cost share" is defined as the total actual cost of the improvements including, but not limited to, design, permits, fees, construction, engineering, administration, legal fees, finance costs, etc. related to construction and to conveyance of the mains to the District, divided by the number of feet of frontage of all property along or parallel to the main which may reasonably be expected to benefit by a connection thereto for water service (including the participating properties). If any other formula or formulas are to be applied, they, and their justification, shall be specifically described in the contract and specifically applied to the specified non-participating properties.

3. In addition to the submission of the Recovery Contract, it shall be the responsibility of the Developer/Owner requesting such contract to show on the "as-built" drawings for the system those frontages and/or properties which are considered to have participated in said project and are not subject to future connection charges, as well as those which are. If any of the tracts subject to recovery are corner lots or irregularly shaped so as to make determination of benefiting frontage or area difficult, a fair "equivalent frontage" or other formula and resultant amount shall be specified in the contract.

   In the computations of "fair pro-rata cost" share this equivalent figure shall be used and shall be shown on the drawings.

4. Each recovery contract shall be reviewed and approved by the District which process may include review by the District's Attorney, Certified Operator, Administrator, and Engineer, all at the expense of the Developer/Owner. For this purpose, the Developer/Owner shall submit all necessary documenting data on the actual cost of construction, as well as the costs of conveyance and any statement/affidavit required by Section 2.01 (H). The District shall request such changes in the contract, as it deems necessary, or required by law and principals

of equity, and shall accept and/or execute such contract only after such changes, if any, have been made.

5. Every recovery contract shall include language which indemnifies the District and holds it harmless from any legal challenge to the sufficiency, fairness, or enforceability of said contract, and which specifies that any and all costs associated with the defense of any such legal challenge and any and all awards or judgments arising therefrom, shall be the responsibility of the Developer/Owner seeking to protect the recovery therein established.

6. Every contract shall specify any and all exemptions from recovery as per Section B below.

7. Every contract shall include a provision requiring that every two years from the date the contract is executed, the Developer/Owner entitled to reimbursement shall provide the District with information regarding the current contract name, address, and telephone number of the person, company, or partnership that originally entered into the contract.

B. Enforcement of Recovery Contract Collections

The District shall not waive any collections required by a recovery contract and shall exercise reasonable vigilance to assure that payment of fair shares is not evaded. In general, unless exempted herein below or by operation of law recovery contracts shall be applicable to all new service connections made directly to the mains which are subject to the recovery contract. The following circumstances, projects, and activities shall be exempt from recovery contract provisions.

1. The connection in any manner or direction of additional mains to the mains otherwise subject to a recovery contract if said additional mains are constructed in a public right-of-way or easement of the District, existing at the date of acceptance of the recovery contract; or

2. Any improvements or additions to or extensions of the Subject Mains conducted, authorized, or required by the District, which in the opinion of the District provides benefits to the overall operations to the District water system.

If, as a result of the existence of two or more mains under separate recovery contracts, any property may be reasonably served from more than one main, the District shall first determine from which main service is to be supplied based on proximity, topography, natural features, ease of future service, meter location, and other such reasonable factors. All other factors being equal, including distance, the Owner of the property may choose to be connected to a particular main and the pro-rata share will be collected under that contract only.

E. Connection Charge for Partial Water Line Extensions

Under special circumstances, such as at pressure zone separations, the District may permit only a portion of a water main extension to be constructed. In such cases, the Developer/Owner(s) shall deposit a sum of money calculated by the District per approved plans, for the portion of frontage not covered by the extension but required to be covered under Sections 2.01B and 3.01 of this Regulation. Said sum shall be used by the District to pay the developer's portion of a future extension past the frontage not covered by the partial extension.

No refund shall be made if the Owner's future fair share of the cost is less than the payment to the District, neither shall the District claim any additional amount due if it incurs a greater cost for such future extension construction.

SECTION 5.02 - GENERAL FACILITIES CHARGES

For all Parcels where there is no water service, General Facilities Charges shall be as follows:

General Facilities Charge, by water meter size

Meter size	factor	Charge
5/8 x 3/4 inch	1.0	$7,140
1 inch	2.5	$17,850
1 1/2 Inch	5.0	$35,700
2 inch	8.0	$57,120
3 inch	16.0	$114,240
4 inch	25.0	$178,500

If the customer needs to increase the meter size they will be required to pay a prorated General Facilities charge. There will be no refund made to customers who reduce the meter size.

1. The District shall accept an Application for Water on the condition that the owner will start construction within one year. The owner shall submit with the Application for Water a check or money order for the Service Connection Charges established by the Board. If the customer fails to start construction within the prescribed period, the application will be voided and the District will refund the amount paid by the owner, less any costs incurred by the District, to the Owner without interest. Where circumstances presented to the District Board in writing, an extension to the Application for Water may be granted for a period up to six months.

2. General Facilities Charges do not include any of the costs of labor, parts or materials of making the necessary installation nor is the cost of the applicable meter or meter box included in these fees. The Owner shall be responsible for all installation costs. Such billable costs include but are not limited to, excavation, tapping the main line, installing meter box, meter, fittings, and valves, pipe and laying pipe, inspections and testing, pressure reducer(s), backflow prevention devices or check valve(s) if required or ordered, nor shall it include connections requiring the laying of pipe beyond a property line from the main.

Generally, an applicant will hire the services of a licensed contractor to perform all such work under the inspection of the District.

If any property or parcel, regardless of zoning, is not within the District Boundaries, then an additional General Facilities Charge of $3,000 is required above the normal General Facilities Charge for each service connection.

SECTION 5.03 - WATER EXTENSION ADMINISTRATION, REVIEW, AND INSPECTION CHARGES

All persons who extend the District water system shall pay for inspection thereof at no cost thereof to the District. All District related or incurred costs or fees associated with water main extensions or connections shall be paid prior to final acceptance of the mains by the District and prior to use.

SECTION 5.04 - WATER USE Rates or charges for water use shall be based on a fixed Base Rate for each billing period and on the quantity consumed during each billing period as hereinafter defined.

The Base Rate will increase annually based on the December Consumer Price Index (CPI-U) for the Seattle-Tacoma-Bremerton Washington area for All Urban Consumers and will be effective January 1st of each year. In the event the CPI should go down, no increase or decrease will occur until such time the CPI goes back up.

The consumption and use of all water taken from the District water system shall be metered at every connection to said water system. All water taken from the system at any point or from any hydrant on temporary or permanent basis shall also be measured.

In addition, the monthly or periodic regular base rate and consumption charges for new service to properties outside the District Boundaries shall be three times the amount applicable to properties within the boundaries of the District. Any service to properties outside the boundaries of the District shall be a the sole discretion of the District and may only be approved by the District Board at a public meeting. In all such cases the owners of the applicable properties shall submit a signed annexation petition and/or agreement in such form as acceptable to the District.

Service connections to parcels outside the District boundaries that were in effect as of March 14, 2002 shall continue to pay only twice the usage charges.

A. Billing Period

The billing period for single and multi- family residential customers within the District's Freeland service area shall be three months and the Harbor Hills, Sunnyview Farms, Freeland commercial and multi-family billing period will be two months.

B. Billing Increments

Charges for water used shall be computed based on consumption.

C. Rates

FREELAND WATER AND SEWER DISTRICT

QUARTERLY RESIDENTIAL METERED WATER CONSUMPTION RATE

Consumption		Quarterly Rate
0-1500 cubic feet	=	$1.35 per 100 cubic ft.
1501-3000 cubic feet	=	$1.70 per 100 cubic ft.
3001-4500 cubic feet	=	$2.05 per 100 cubic ft.
4501-6000 cubic feet	=	$2.45 per 100 cubic ft.
Greater than 6000 cubic feet	=	$2.85 per 100 cubic ft.

QUARTERLY RESIDENTAIL BASE RATE PER UNIT

Quarterly Charge	$ 38.36

Multi-family residential units in existence as of June 14, 2010 that are served by a single meter shall be subject to a quarterly base rate equal to the number of dwelling units served by that meter times the single family quarterly base rate. To determine water consumption charges, the total consumption shall be divided by the number of units in the multifamily dwelling and that average consumption shall be applied to the consumption rate table above. Example: If four units are served by a single meter, the quarterly charge would be four times $38.36 (the single family base rate as of January 1st, 2013), or $150. If that multifamily dwelling unit consumed 7000 cubic feet in a three month period, the first 6000 cubic feet would be charged at the rate for 0-1500 cubic feet of water consumption and the remaining 1000 cubic feet would be charged at the next highest rate.

FREELAND WATER AND SEWER DISTRICT

BI-MONTHLY COMERCIAL WATER CONSUMPTION RATE

Consumption		Bi-Monthly Rate
0-1000 cubic feet	=	$1.35 per 100 cubic ft.
1001-2000 cubic feet	=	$1.70 per 100 cubic ft.
2001-3000 cubic feet	=	$2.05 per 100 cubic ft.
3001-4000 cubic feet	=	$2.45 per 100 cubic ft.
Greater than 4000 cubic feet	=	$2.85 per 100 cubic ft.

BI-MONTHLY COMMERCIAL BASE RATE

Meter Size/Type	Bi-Monthly Charge
¾ or 1" meter	$ 63.94
1 1/2" meter	$ 127.87
2" meter	$ 204.60
3" meter	$ 409.20
4" meter	$ 639.37
6" meter	$1,278.75
8" meter	$2,046.00

The base rate penalties for all Commercial customers exceeding 1 ERU shall be calculated on $63.94 per each additional ERU.
EXAMPLE: A 2" meter with 8 ERU's, the base rate would be $652.18 – Base of $204.60 plus 7 ERU's at $63.94 = $447.58 for a total base of $652.18.

HARBOR HILLS WATER BI-MONTHLY RESIDENTIAL METERED WATER CONSUMPTION CHARGES

BI-MONTHLY CONSUMPTION RATE

0-10,000 gallons	$2.10 per 1,000 gallons
10,001-20,000 gallons	$3.50 per 1,000 gallons
20,001-30,000 gallons	$3.80 per 1,000 gallons
30,001-40,000 gallons	$4.55 per 1, 000 gallons
Over 40,000 gallons	$4.90 per 1,000 gallons

ADDITIONAL FIXED BI-MONTHLY RATE

Residential-Base Rate	$71.61
Residential Capital Improvement Fund	$17.00

SUNNY VIEW FARM FIXED RATE

Bi-monthly rate (non-metered) $66.49

ARTICLE - VI: ENFORCEMENT

SECTION 6.01 - FAILURE TO REPAIR OR REPLACE PRIVATE WATER LINES OR FIRE PROTECTION LINES THAT ARE NOT METERED

If any repair or replacement of a private water service is not made within 30 days after official notice has been given to make such corrections, the District may cause the water service to be disconnected.

Owners of property connected to the District water system are responsible for the maintenance and repair of all water lines on their properties, including the area around their water meter, which have not been formally conveyed (together with associated easements and/or agreements) to the District in accordance with these rules. This responsibility commences at the property line or right-of-way/easement boundary regardless of meter location.

One-Time Exception: Customers may submit requests for a one time only 50% consideration on a water bill caused by leakage on the Customer's side of the property line or meter box as the case may be. The customer must submit a written request to the Board regarding water usage during any given billing period caused by a leak. To be considered, the District requires that the leak be repaired within a reasonable time. The District Board will review any letter for consideration at their next held regular monthly meeting. If the requested consideration is granted, it will be noted on the customer's billing file as a one-time only lifetime credit due to leak. The District will respond with a letter to the customer and post the credit accordingly to the customer account.

SECTION 6.02 - GENERAL CHARGES

Any future changes or additions to District water system, whether inside or outside the legal limits of the District, must conform to the Comprehensive Water System Plan established by the District Board.

SECTION 6.03 - DISCONTINUANCE OF SERVICE

The District may refuse or may discontinue service to any customer for violation of any provision of this Regulation, or for failure to pay bills when due. The District may limit, refuse or discontinue service to any customer who requires or uses such volume of water that water service to any other customer may be thereby impaired.

The District shall discontinue service to any customer who makes an unauthorized connection to the District water line, bypasses a District water meter or in any other way, misappropriates District water, or fails to comply with District water conservation actions or orders. An illegal

connection fee of $1,000.00 will be paid in addition to the Service Connection Charges on any illegal connection.

Discontinuance of service for any cause stated in this Regulation shall not release the customer from his obligation to the District for payment of bills or charges. Whenever service is discontinued, as provided above, the customer shall be charged for the discontinuance.

Restoration of service, at the customer's request and after payment of all bills due, shall be done at the convenience of the District, and an additional charge shall be made for this service.

Restoration of service, at any time other than regular business hours shall be charged at actual costs, but in no case shall the charge be less than $50. A customer who wishes to shut off water service shall give at least three days' notice to the District. No charge will be made for shutting off the supply. A customer, who shuts off water service and then later requests restoration of service at the location, shall be charged $50 for such restoration of service.

Any customer who permanently terminates water service will have to re-apply by submitting an Application for Water and paying any Service Connection Charges as determined by the District.

SECTION 6.04 - ACCOUNTS - DISCONTINUING SERVICE WHERE ACCOUNT DELINQUENT

It shall be the duty of the District to keep accounts with all consumers of water; to enter on such accounts all charges and penalties. The District shall provide for proper accounts with all consumers of water, and every sixty days or less, compile a statement of the names and property of such consumers as are delinquent, and shall forthwith cause that service of these consumers to be discontinued.

Delinquent accounts interest rate shall be in accordance with RCW 57.08-081(3) in addition to late fees on the unpaid balance. NSF fee shall be subject to current rate charged by Whidbey Island Bank.

An account shall be deemed delinquent if not paid within thirty (30) days following the date of billing. There shall be a further ten percent (10%) service charge for a Water Shut off Notice. Water connections shall be cut off thirty days after an account becomes delinquent and remains unpaid. A shut off charge of $50.00 will be added

SECTION 6.05 - WATER RATES LIEN AGAINST PREMISES

All water rates will be charged against the premises for which the service was installed. All charges for water, when the same become delinquent and unpaid, shall be a lien against the premises to which water service has been furnished.

The District will certify such delinquencies to the Treasurer, Island County, Washington, to fix a lien against the property affected for the amount of the rates or other charges unpaid plus lien

fees and penalty of an additional 12 percent of such other charges unpaid plus interest at the rate of 12 percent per Annum from the date of each delinquency which shall be a lien against the property on which the service is received, subject only to lien for general taxes.

The foregoing provisions shall be in addition to the authority provided by law, to bring suit for foreclosure where rates and charges for water supplied and penalties are delinquent for a period of 60 days, which shall include judgment for costs and attorney's fees as provided in RCW 57.08.090.

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APPENDIX A STANDARD PLANS

FREELAND WATER and SEWER DISTRICT

PO Box 222
Freeland, Washington 98249
Phone: (360) 331-5566

APPLICATION FOR WATER

NAME OF APPLICANT: _____

ADDRESS _____

CITY_____STATE_____ZIP_____

PHONE: (HOME)_____WORK_____

NAME OF PROPERTY OWNER
(If different than applicant) _____

ADDRESS_____

CITY_____STATE_____ZIP_____

PHONE: (HOME)_____WORK_____

SERVICE ADDRESS: _____

ASSESSOR'S TAX PARCEL NO _____

PLAT INFORMATION (If applicable) PLAT OF _____

LOT #_____BLOCK #_____DIVISION #_____

**********CHARGES**********

CAPITAL FACILITIES CHARGE: $_____

SERVICE INSTALLATION COST ESTIMATE $_____

LOCAL FACILITIES OR RECOVERY CHARGES (If applicable) $_____

TEMPORARY CONNECTION CHARGE (If applicable) $_____

OTHER CHARGES: $_____

TOTAL SERVICE CONNECTION CHARGES $_____

_____ Date_____
Signature of Property Owner

_____ Date_____
Signature of Applicant

FWSD rev2-12-2013ac

Water service for each individually metered dwelling unit, household, or commercial building shall require a separate Application for Water and Service Installation Charges. General Facilities Charges are to be paid at the time of Application for Water. This application is applicable only to one metered service connection to an existing water main owned and operated by the Freeland Water and Sewer District. This agreement does not assure or imply any obligation of the District to provide service to any future development or subdivision of the property herein described.

**********FOR DISTRICT USE ONLY**********

Application accepted by:_____ Date_____

Account No _____

Meter Size_____Make_____Meter No._____

Install Date_____ Reading_____

Meter Location_____

Site Inspection by_____ Date_____

As-Built Prepared By_____ Date_____

**********AGREEMENT**********

This agreement is made and entered on the year and date herein stated by and between the Applicant and Owner(s) of the herein above described or identified property or premises, hereinafter referred to as the "Owner" and the Freeland Water and Sewer District, herein after referred to as the " District".

The District shall accept an Application for Water on the condition that the Owner will start construction within one year. The Owner shall submit with the Application for Water a check or money order for the Service Connection Charges established by the Board. If the Owner fails to start construction within the prescribed period, the application will be voided and the District will refund the amount paid by the Owner, less any costs incurred by the District, to the Owner without interest. Where circumstances presented to the Board in writing, an extension to the Application for Water may be granted for a period up to six months.

The Owner herein agrees and understands that all rates and charges to the described property shall be paid in accordance with existing rules, resolutions, ordinances and/or regulations of the District.

The customer hereby acknowledges the right of the District to charge and collect the rates and enforce the penalties provided, and to change said rates and charges at any time without notice to the Owner.

The signing of this Application for Water by the Owner and the acceptance thereof together with all applicable fees, charges assessments and/or recovery contract charges, by the District shall constitute a binding contract between the parties.

This Agreement may be unilaterally terminated and water service discontinued at any time by the District upon finding that payments made by the Owner at the time of signing and acceptance were insufficient to satisfy all outstanding legally established obligations applicable to the property or premises herein above described, provided that upon such finding the Owner be provided notice of any such outstanding obligations with the opportunity to settle same within 30 days of notice in a manner satisfactory to the District.

The Owner agrees that the District shall not be held liable or responsible for any and all damages by water, water pressure, or other causes relating from any water lines, facilities, plumbing, or appliances not owned and operated by the District, and further that the District shall not be held liable or responsible for any and all damages which may result from any interruption or failure, in the supply of water for any reason to the premises of the Owner, nor shall any such interruption or failure be held to constitute a breach of this contract on the part of the District, or in any way relieve the Owner from performing the obligations of this contract.

The Owner agrees to bear all responsibility, and liability for the proper maintenance, repair, and of all water lines, pressure reducing valves, fixtures, equipment and/or appurtenances extending from the District water meter assigned to the premises of the Owner.

The Owner shall not extend service from said meter or water lines extending therefrom to any other parties or properties than those specifically herein above described or identified unless specifically reviewed and approved in writing by the District, Provided that any such approval by the District is valid only to the extent that it conforms to applicable Rules and Regulations of the District, Island County and the State of Washington.

The Owner agrees that all charges for water, if not paid prior to delinquency, shall constitute lien against the above described property and/or premises which may be enforced as provided by law.

The responsibilities of the District to supply water adequate for normal domestic use per applicable State Standards for minimum pressure, quantity, and quality, ends at the meter from which service is supplied to the herein above described or identified premises.

The Owner understands and agrees that at certain times in the future the District may need to take measures to conserve or restrict water usage for protection of the system from source overuse, and that, when such is deemed necessary by the District, The Owner will cooperate in implementing all conservation practices or any water shortage response plans or actions by the District. Failure of Owner to do so will constitute authorization to the District too immediately, and without notice, shut off the supply of water to the property or premises of the Owner.

Further, the Owner agrees not to make any claim against the District or its agents or employees for damages or loss of production, sales or service, in case of water pressure variations, or the disruption of the water supply for water system repair, routine maintenance, power outages, and other conditions normally expected in the operations of a water system.

The responsibilities of the Owner pursuant to this agreement shall, run with the land, properties, and or premises herein above described or identified and shall be binding on all parties having or acquiring any right, title, or interest in said property or premises or any part thereof, and shall transfer to each owner thereof.

The responsibilities of the District pursuant to this agreement shall, not run with the land, properties, and or premises herein above described or identified. The District's responsibilities

and/or obligations pursuant to this agreement are not transferable to other parties having or acquiring any right, title, or interest in said property or premises or any part thereof unless and until the District is notified as to the identity of the Owner, assuming responsibilities under the terms of the agreement and all outstanding obligations applicable to the property have been met.

The District herein may disconnect, discontinue, or interrupt service to the herein above described property or premises for failure to comply with or abide by the terms of this agreement including but not limited to failure to pay applicable assessments, charges, rates, or fees, or failure to cooperate in conservation and secure protection measures implemented by the District, or any failure to comply with applicable laws, regulations, or rules of the State of Washington, Island County, or the District pertaining to water supplies and systems.

Additional enforcement of this agreement may be by proceedings at or in equity against any person violating or attempting to violate any of the terms, either to restrain such violation or to recover damages therefrom, and may be brought by the District. The prevailing party as determined by the applicable court of jurisdiction shall be entitled to reasonable attorney's fees and all costs incurred in prosecuting or defending such action.

If any provision or provisions or terms of this agreement or its application to any person or circumstances is held invalid by a court of competent jurisdiction, the remainder of said provisions or terms or the application of the provision(s) or terms to other persons or circumstances shall not be affected. The invalidation of any of these provisions or terms shall in no way affect any of the other provisions or terms which shall remain in full force and effect upon the parties and properties herein described.

_____ Date_____
Owner signature

_____ Date_____
Owner signature

_____ Date_____
Owner signature

_____ Date_____
Owner signature

DEFINITIONS

As used herein, the following terms shall be defined as follows:

"Application for Water" shall refer to a standard form to be provided by the District to summarize necessary information about the owner(s) applying for water service and to relay pertinent information to applicant regarding terms and conditions of service.

"**Board**" shall mean the Board of Commissioners of the Freeland Water and Sewer District.

"General Facilities Charge" is the base Hook-up fee charged by the District for all new service connections to existing water mains owned and/or operated by the District. It is the fee charged after all other obligations have been met and an owner wishes to have meter, meter box, and valve installed in order to commence the drawing of water from said main. The fee does not include any of the costs of labor, parts or materials needed to complete a connection.

"District" shall mean the Freeland Water and Sewer District, Freeland, Washington, governed by an elected Board.

"Local Facilities Charges and Recovery Fees" are those charges and assessments applicable to property fronting on or benefiting from an existing water main of the District, but which said property did not in any way previously pay a fair "pro-rata share" towards the construction of said water main constructed by the District, or which said property is subject to an existing "recovery contract" between the District and a Developer/Owner who paid for the construction of said main, or, which said property was a non-participating or excluded property which benefited from a ULID which financed the construction of said main.

"Owner" shall mean the person, partnership or corporation owning the particular premises to which water is being or is to be furnished.

"Service Connection Charges" - This is the sum total of all charges and fees and costs to which a particular parcel or property or premises is subject prior to being assured a supply of domestic water from the District water system.

See also Resolution No. 01-1, Cross-Connection Control Program, located in Appendix N, Cross Connection Control Materials.

APPENDIX G

FWSD CONSTRUCTION STANDARDS

EXHIBIT - C

FREELAND WATER DISTRICT

TECHNICAL SPECIFICATIONS

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1. GENERAL

These Technical specifications do not cover the contractual relationship between the District and the Developer or Contractor; such contractual relationships and general responsibilities are covered in the District's General Provisions.

1.1 Specifications Adopted by Reference

Except as provided in these Technical specifications, the District's Standard Plans, approved project-specific plans and specifications, or by waiver granted in writing by the District, selection of materials and construction of District water system facilities shall conform to the following:

1. "Standard Specifications for Road, Bridge, and Municipal Construction," Washington State Department of Transportation/ American Public Works Association (WSDOT/APWA), latest edition, (herein referred to as "WSDOT Standard Specifications");
2. Standards of the American Water Works Association (AWWA);
3. Island County Code, including but not limited to Title XIII "Roads and Bridges" and Section 13.03A "Water System and Fire Flow Standards";
4. Recommendations of the individual manufacturer of materials or equipment.

In case of a conflict, the Island County Code shall supercede all other specifications.

1.2 Standard Plans

All work shall be completed in accordance to the District's Standard Plans attached in APPENDIX A. In case of a conflict, these Technical specifications shall supercede the Standard Plans.

1.3 Pre-construction Meeting

The Contractor shall be required to schedule and attend a pre-construction conference in accordance with the General Provisions.

2. MATERIALS

Unless otherwise approved in writing by the District, all materials shall be new. All materials shall conform to the ANSI/NSF Standard 61.

2.1 Water Main

Allowable water main materials for mains smaller than 10 inches in diameter include Ductile Iron, Polyvinyl Chloride (PVC), or High Density Polyethylene (HDPE) pipe meeting the requirements of this section. Water mains 10 inches and larger shall be Ductile Iron meeting the requirements of this section.

All pipe shall be clearly marked with the manufacturer's name, type, class, and thickness as applicable. Lettering shall be legible and permanent under normal conditions of handling and storage.

2.1.1 Ductile Iron Pipe

Ductile iron pipe shall be centrifugally cast and meet the requirements of AWWA C151. Ductile iron pipe shall have a cement-mortar lining meeting the requirements of AWWA C104. Ductile iron pipe in hydrant laterals and ductile iron pipe to be joined using bolted flanged joints shall be Standard Thickness Class 52. All other ductile iron pipe shall be Standard Thickness Class 50.

Nonrestrained joints shall be rubber gasket, push-on type, or mechanical type meeting the requirements of AWWA C111.

Restrained joints shall be as specified in Section 2.3.

2.1.2 Polyvinyl Chloride (PVC) Pipe

Polyvinyl Chloride (PVC) pipe shall meet the requirements of AWWA C900. PVC pipe shall have the same outside dimensions as ductile iron pipe. PVC pipe shall be listed by Underwriters' Laboratories, Inc.

PVC pipe joints shall meet the requirements of ASTM D 3139 using a restrained rubber gasket conforming to ASTM F 477. Solvent welded pipe joints are not permitted.

2.1.3 High Density Polyethylene (HDPE) Pipe

High Density Polyethylene (HDPE) pipe shall be black polyethylene (PE) 3408 meeting the requirements of ASTM D 3350 cell classification 345464C, ASTM F714, AWWA C901, and AWWA C906. HDPE pipe shall be made from new polyethylene resins; post consumer recycled (PCR) materials in HDPE pipe will not be allowed. HDPE pipe shall have the same outside dimension as ductile iron pipe and a minimum wall thickness of SDR 9. The HDPE pipe manufacturer shall be a member in good standing of the Plastics Pipe Institute.

2.2 Fittings

Water main fittings shall be ductile iron meeting the requirements of AWWA C153. Joints shall meet the requirements of AWWA C111. Fittings shall be cement mortar lined, meeting the requirements of AWWA C104. Gaskets for flat faced or raised faced flanges shall be 1/8-inch thick neoprene having a durometer of 60 plus or minus 5 or 1/16-cloth inserted. The type, material, and identification mark for bolts and nuts shall be provided.

Bolts, nuts, and washers used for securing fittings shall be of similar materials. Steel bolts shall meet the requirements of ASTM A 307 or ASTM F 568 for carbon steel or ASTM F 593 or ASTM F 738 for stainless steel. Nuts shall meet the requirements of ASTM A 563 or ASTM A 563 for carbon steel or ASTM F 594 or ASTM F 836 for stainless steel. Iron bolts and nuts shall meet the requirements of ASTM A 536, grade 65-45-12.

2.3 Restrained Joints in Pipe Segments

Restrained joints in ductile iron pipe segments, where required by the District, shall be a boltless design which is flexible after assembly and can be disassembled without special tools, such as TR Flex Restrained Joint Pipe as manufactured by U.S. Pipe Co., or approved equal, and shall meet the following criteria:

1. The restrained joint shall have a positive metal to metal contact locking system without the use of gripping teeth.
2. The locking system shall allow the same joint deflection, after assembly, and shall weigh no more than twice the weight of the TR Flex restraint system.

2.4 Restrained Joints for Fittings and Hydrant Assemblies

All fitting joints shall be restrained.

Restraint devices for fittings and ductile iron pipe shall be Megalug® Series 1100 or equal consisting of multiple gripping wedges incorporated into a follower gland meeting the applicable requirements of ANSI/AWWA C110/A21.10. The devices shall have a working pressure rating of 350 psi for 3-16 inch and 250 psi for 18-48 inch. Ratings are for water pressure and must include a minimum safety factor of 2 to 1 in all sizes. Gland body, wedges and wedge actuating components shall be cast from grade 65-45-12 ductile iron material in accordance with ASTM A536.Ductile iron gripping wedges shall be heat treated within a range of 370 to 470 BHN. Three (3) test bars shall be incrementally poured per production shift as per Underwriter's Laboratory (U.L.) specifications and ASTM A536. Testing for tensile, yield and elongation shall be done in accordance with ASTM E8. Chemical and nodularity tests shall be performed as recommended by the Ductile Iron Society, on a per ladle basis.

Restraint devices for fittings and PVC pipe shall be Uni-Flange® Series 1500 "Circle Lock" or equal consisting of ring segments with full circle contact and support of the pipe actuated by "Auto-Tork" bolts with heads that twist off at the exact required torque. The restraint device shall have a safety stop built into the bolt and gland casting, insuring that no bolts can ever be over tightened and provide a visual indicator of correct installation.

Fittings for HDPE pipe shall be either heat fusion welded to the pipe, electro-fusion connected, or flange-end fittings connected to a flange adapter heat fusion welded to the pipe end. Electro-fusion connections shall be at least as strong as normal butt-end head fusion welding. All HDPE fittings shall meet the same requirements as HDPE pipe per Section 2.1.3.

2.4.1 Bolted, Sleeve-Type Couplings for Plain End Pipe

Bolted, sleeve-type couplings, reducing or transition couplings, and flanged coupling adapters used to join plain-end pipe shall meet the requirements of AWWA C219. Buried couplings to connect ductile iron, gray cast iron, PVC, or HDPE pipe shall be ductile iron.

2.5 Valves

Valves shall be iron-body-brass mounted resilient-seat gate valves meeting the requirements of AWWA C509. Valves shall be nonrising stem type, open counterclockwise, and be equipped with an O-ring stuffing box. The valves shall have a standard 2-inch operating nut.

Valves with an operating nut more than 4 feet below grade shall have a valve stem extension to raise the operating nut to within 36 inches of the ground surface. Valve stem extensions shall have a 2-inch square operating nut and self-centering rockplate support.

The valves shall be standard pattern of a manufacturer whose products are approved by the District and shall have the name or mark of the manufacturer, year valve casting was made, size and working pressure plainly cast in raised letters on the valve body. The valve bodies shall be cast iron, ductile iron, or other approved material mounted with approved noncorrosive metals. All wearing surfaces shall be bronze or other approved noncorrosive material, and there shall be no moving bearing or contact surfaces of iron in contact with iron. Contact surfaces shall be machined and finished in the best workmanlike manner, and all wearing surfaces shall be easily renewable.

2.5.1 Valve Boxes

Valve boxes shall be installed on all buried valves. The box shall be of cast iron, two-piece slip type, 5-1/4 inch shaft, with a base corresponding to the size of the valve. The cover shall have the word "WATER" cast in it. The valve box shall be Tyler Pipe 6855 series or equal approved by the District. The cover shall be a Tyler Pipe standard drop lid 145325 or equal approved by the District.

2.5.2 Valve Marker Posts

Posts shall have a 4-inch minimum square section and a minimum length of 42 inches, with beveled edges and shall contain at least one No. 3 bar reinforcing steel. The exposed portion of the marker posts shall be coated with two coats of AWWA water blue concrete paint. The size of the valve and the distance in meters to the valve shall be stenciled on the face of the post, using permanent white paint and a stencil which will produce letters 1 inch high.

2.6 Combination Air Release/Air Vacuum Valves

Combination air release/air vacuum valves shall be manufactured by Valve-Matic, Elmhurst, Illinois, Model 22 or District approved equal, designed to operate with potable water under pressure to automatically permit discharging a surge of air from an empty line when filling and relieve the vacuum when draining the system. The valves shall also automatically release an accumulation of air when the system is under pressure. This shall be accomplished in a single valve body designed to withstand 300 psi. The body and cover shall be cast iron conforming to ASTM A 48, Class 30. Floats shall be stainless steel conforming to ASTM A 240 and designed to withstand 1,000 psi. Seats shall be Buna N rubber. Internal parts shall be stainless steel or bronze. Unless otherwise required by the District, the combination air-release and vacuum valves shall be 1 inch in diameter.

All air release valves shall be vented above ground to prevent backflow of groundwater.

2.7 Tapping Sleeve and Valve Assembly

Tapping valves shall meet the requirements of Section 2.5 with a flanged inlet end connections and a mechanical outlet with a large flange outside the hub for attaching a drilling machine. The seat opening of the valve must permit a diameter cut no less than 1/2 inch smaller than the valve size. Tapping sleeves shall be stainless steel.

2.8 Hydrants

Fire hydrants shall be dry-barrel, Clow Model F2500 or equal approved by the District, conforming to AWWA C502. The hydrant shall have a valve opening of 5-1/4 inches with two 2-1/2-inch hose connections and one 4-1/2-inch pumper connections. Caps shall be threaded to fit the corresponding connections and shall be fitted with suitable neoprene gaskets of positive water tightness under test pressures. The direction of hydrant valve opening shall be counterclockwise and shall be clearly marked on the operating nut or hydrant top. Hydrants shall be with O-ring stem seals. After installation, all exposed surfaces of hydrant, including the sidewalk flange, shall receive two coats of oil based gloss enamel paint (Kelly-Moore Luxlite or approve equal) in OSHA safety yellow.

2.8.1 Tee and Auxiliary Valve

The hydrant tee shall have a flanged 6-inch branch and meet the requirements of Section 2.2. The auxiliary valve shall be a gate valve meeting the requirements of Section 2.5 with a flange end to connect to the tee and a mechanical joint end for the hydrant connection pipe.

2.8.2 Hydrant Connection Pipe

Hydrant connection pipe (also know as the hydrant "lateral") shall be 6-inch ductile iron Standard Thickness Class 52. The connections shall be restrained joints at the auxiliary valve and hydrant meeting the requirements of Section 2.4. If the connection pipe is longer than one continuous length of pipe, the pipe joints shall be restrained in accordance with Section 2.3.

2.8.3 Hydrant Extensions

Hydrant extensions shall have a 6-inch minimum inside diameter and shall be gray cast iron or ductile iron and shall conform to the AWWA Standards for such castings. The drillings of the connecting flanges on the extensions shall match the drillings of the flanges on the hydrant. Hydrant extensions shall also include the necessary hydrant operating stem extensions.

2.8.4 Traffic Flange

Hydrants shall be provided with a traffic flange and shall be equipped with breaking devices at the traffic flange which will allow the hydrant barrel to separate at this point with a minimum breakage of hydrant parts in case of damage. There shall also be provided at this point, a safety stem coupling on the operating stem that will shear at the time of impact.

2.8.5 Guard Posts

Guard posts for hydrants shall be provided in areas designated by the District. Guard posts shall be reinforced concrete having a compressive strength of 2,500 psi and shall be 6 feet in length by 9 inches in diameter. Reinforcing shall consist of a minimum of five No. 3 deformed steel bars. All exposed surfaces of the guard posts shall receive two coats of oil based gloss enamel paint (Kelly-Moore Luxlite or approve equal) in OSHA safety yellow.

2.9 Water Service Connections (2 Inches and Smaller)

2.9.1 Saddles

Saddles shall be bronze, brass alloy, ductile iron, or stainless steel meeting the requirements of AWWA C800. The saddles shall have a Buna-N rubber gasket meeting the requirements of ASTM D2000. Saddles used on PVC or HDPE pipe shall have a flat stainless steel strap conformed to the circumference of the pipe to prevent pressure

points on the pipe. The outlet threads shall be AWWA tapered thread or female iron pipe thread matching the corporation stop threading.

2.9.2 Corporation Stops

Corporation stops shall be made of bronze alloy and meet the requirements of AWWA C800. Corporation stops for direct tapping shall have AWWA tapered thread inlet and outlet connections compatible with polyethylene tubing. Thread patterns for the saddle outlet and corporation stop inlet shall be the same.

2.9.3 Curb stops

Service curb stops shall be o-ring type as manufactured by Mueller, Decatur, Illinois, series Mark II Oriseal c/w tee head, or District approved equal.

2.9.4 Service Pipes

Service pipes shall be polyethylene tubing meeting the requirements of AWWA C901. Tubing shall be high molecular mass with a minimum 200 psi rating. Services shall be 1 inch minimum and shall be SDR 7 iron pipe size. Tubing used for 1-1/2 inches and 2 inches shall be SDR 7 iron pipe size.

2.9.5 Service Fittings

Fittings used for service connections shall be made of bronze alloy or brass meeting the requirements of AWWA C800. Service fittings shall be compression style with stainless steel stiffeners.

Bronze threaded nipples and fittings shall meet the requirements of ANSI B-16.15, ASA 125 pound class.

2.9.6 Meter Setters

Meter setters shall be meet the requirements of AWWA C800. Meter setters shall have an angle meter stop with drilled padlock wing, an angle check valve, measure 12 inches in height, and shall have an inlet and outlet threads compatible with fittings connecting to service pipes.

2.9.7 Meter Boxes

Meter boxes and covers located in the nontraffic areas shall be constructed of either reinforced concrete or high density polyethylene. High density polyethylene meter boxes and covers shall have a tensile strength conforming to ASTM D 638.

Meter boxes located in traffic areas shall be constructed of reinforced concrete with traffic covers constructed of either aluminum, steel, cast iron, or ductile iron. Meter boxes and covers shall be designed for H-20 loading.

All meter box covers shall include a reading lid.

2.9.8 Meters

Water meters 2 inches and smaller shall be cold-water displacement meters with bronze main cases and a dry reader head reading in cubic feet units meeting the requirements of AWWA C700.

2.10 Backflow Prevention Devices

Backflow prevention devices where required by the District, shall comply with the District's Cross-Connection Control Program.

2.11 Foundation, Trench Backfill, and Surfacing Materials

2.11.1 Foundation Material Class A and Class B

Foundation material Class A and Class B shall conform to the following gradations:

Sieve Size	Percent Passing Class A	Class B
2-1/2" square	98-100	95-100
2" square	92-100	75-100
1-1/2" square	72-87	30-60
1-1/4" square	58-75	0-15
3/4" square	27-47	0-1
3/8" square	3-14	---
U.S. No. 4	0-1	---

All percentages are by weight.

2.11.2 Foundation Material Class C

Foundation material Class C shall consist of clean bank run sand and gravel, free from dirt, roots, topsoil, and debris and contain not less than 35 percent retained on a U.S. No. 4 sieve and with all stones larger than 2 inches in the longest dimension removed.

2.11.3 Bank Run Gravel for Trench Backfill

Trench backfill material shall consist of aggregate for gravel base, as specified in Section 2.11.4, excepting however, that 100 percent of the material shall pass a 2-1/2 inch opening.

2.11.4 Aggregate for Gravel Base

Gravel base shall consist of granular material, either naturally occurring or processed. It shall be essentially free from various types of wood waste or other extraneous or objectionable materials. It shall have such characteristics of size and shape that it will compact readily and shall meet the following test requirements:

Stabilometer "R" Value 72 min.
Swell pressure 0.3 psi max.

The maximum particle size shall not exceed 2/3 of the depth of the layer being placed.

Gravel base shall meet the following requirements for grading and quality when placed in hauling vehicles for delivery to the roadway or during manufacture and placement into a temporary stockpile. The exact point of acceptance will be determined by the District.

Sieve Size		Percent Passing
2" square		75-100
U.S. No. 4		22-100
U.S. No. 200		0-10
Dust Ratio:	% Passing U.S. No. 200 / % Passing U.S. No. 40	2/3 max.
Sand Equivalent		27 min.

All percentages are by weight.

Gravel base material retained on a U.S. No. 4 sieve shall contain not more than 0.20 percent by weight of wood waste.

2.11.5 Crushed Surfacing

Crushed surfacing shall be manufactured from ledge rock, talus, or gravel. The materials shall be uniform in quality and substantially free from wood, roots, bark, and other extraneous material and shall meet the following test requirements:

Los Angeles Wear, 500 Rev.	35% max.
Degradation Factor — Top Course	25 min.
Degradation Factor — Base Course	15 min.

Crushed surfacing of the various classes shall meet the following requirements for grading and quality when placed in hauling vehicles for delivery to the roadway, or during manufacture and placement into a temporary stockpile. The exact point of acceptance will be determined by the District.

Sieve Size	Base Course Percent Passing	Top Course and Keystone Percent Passing
1-1/4" square	100	
1" square	80-100	
3/4" square		100
5/8" square	50-80	
1/2" square		90-100
U.S. No. 4	25-45	46-66
U.S. No. 40	3-18	8-24
U.S. No. 200	7.5 max.	10.0 max.
% Fracture	75 min.	75 min.
Sand Equivalent	32 min.	32 min.

2.12 Concrete Thrust Blocking

Concrete for thrust blocking shall have a minimum compressive strength at 28 days of 2500 psi in accordance with AASHTO T 22.

2.13 Detectable Marking Tape

Detectable marking tape for PVC and HDPE mains, and polyethylene services shall be of the detectable type with metallic foil laminate with plastic jacket, 6-inch wide, AWWA water blue color with the wording "WATER LINE", as manufactured by Calpico, San Francisco, CA or District approved equal.

2.14 Tracer Wire and Splices

Pipe tracer wire shall be copper electrical wire, AWG No. 14 minimum size, blue coated Type USE Chemically Cross Linked Polyethylene or Thermoplastic, and Type UF.

Splices in tracer wire shall be water proof using a wire nut inserted into a dielectric silicon sealant cartridge such as Spears DS-500 Dri-Splice wire connector or equal.

2.15 Asphalt

Asphalt for pavement restoration shall be Class B meeting the requirements of the WSDOT Standard Specifications.

3. CONSTRUCTION

3.1 Trench Excavation, Bedding, and Backfill for Water Mains

The work covered in this Section includes excavating, bedding, and backfilling water mains and appurtenances. Water mains shall be constructed at the locations in plans approved by the District. Where grading is required, such

grading as excavation and embankment shall conform to the requirements of the WSDOT Standard Specifications Section 2-03, and rough grading shall be completed before excavating for the water main trench.

3.1.1 General Construction Requirements

All trench excavation required for the installation of water mains and appurtenances shall be unclassified. All material excavated from trenches and piled adjacent to the trench or in a roadway or public thoroughfare shall be piled and maintained so that the toe of the slope of the spoil material is at least 2 feet from the edge of the trench. It shall be piled in a manner to prevent surface water from flowing into the excavation and in a manner that will cause a minimum of inconvenience to public travel. Free access shall be provided to all fire hydrants, water valves, and meters; and clearance shall be left to enable the free flow of storm water in all gutters, conduits, and natural watercourses.

3.1.2 Ungraded Alignments

On ungraded pipe alignments where the finished grade will remain the same as existing grade or lower, the depth of trench excavation shall be as such to provide a minimum cover of 36 inches over the top of the pipe after finish grading.
On ungraded pipe alignments where the finished grade will be higher than the existing grade, the area shall be cleared and grubbed, then an embankment fill shall be made and compacted to finish grade, and then the water main trench shall be excavated therein.

3.1.3 Removal of Existing Pavement

The Contractor shall use one of the following two options to remove existing pavement from trench areas.

A. The Contractor shall make clean vertical cuts along all trench edges in pavement areas using a jackhammer or wheel cut. The vertical cuts shall be made at a distance offset from the center line of the pipe alignment equaling one half the trench width specified in Section 3.1.6. The asphalt within the trench area shall then be removed and disposed of by the Contractor; OR
B. The Contractor shall use grinding equipment to grind the full pavement depth within the trench width specified in Section 3.1.6. If all of the ground pavement passes through an 1-1/2" sieve then the grindings can be used in trench backfill material, otherwise, the grindings shall be removed and disposed of by the

Stockpiling of waste materials along the trench will not be allowed.

3.1.4 Grade and Alignment

The Contractor shall verify the locations and establish the depth of the existing water mains at the points where connections are to be made prior to trenching for the pipelines. The profile shall be adjusted so neither a high spot or a low spot is created adjacent to the connection to the existing water mains.

The depth of trenching for water mains shall be such as to give a minimum cover of 36 inches over the top of the pipe unless otherwise required by the District. Deeper excavation may be required due to localized breaks in grade, or to install the new main under existing culverts or other utilities where necessary. Where the profile of the pipeline and the ground surface is shown plans approved by the District, the pipeline shall be laid to the elevation shown regardless of depth. The excavation shall be to such depth that the minimum cover over the valve nuts shall be 1 foot.

3.1.5 Existing Utilities

The District assumes no responsibility for improper locations or failure to show utility locations in the Plans. The Contractor shall be responsible for protecting existing utilities as specified in Section 1-07.17 of the WSDOT Standard Specifications and shall be responsible for any damage as specified in Section 1-07.18 of the WSDOT Standard Specifications.

When utility services occupy the same space as the new water main, the Contractor shall do all necessary excavation to fully expose such services. The Contractor shall protect said services, and work around them during excavating

and pipe laying operations. Any damages to services resulting from the Contractor's operation shall be reported to the appropriate utility. Such damage shall be repaired at the Contractor's expense.

3.1.6 Trench Excavation

All excavations shall be made by open cut except in crossing public roads or unless otherwise required by the District. All trenches shall be excavated to true and smooth bottom grades and in accordance with the lines approved by the District. The trench bottom shall provide uniform bearing and support for each length of pipe.

Bell holes shall be excavated to the extent necessary to permit accurate work in making and inspecting the joints. The banks of the trenches shall be kept as nearly vertical as soil conditions will permit, and where required to control trench width or to protect adjacent structures, the trench shall be sheeted and braced. Trench widths to 1 foot above the top of the pipe shall not exceed 30 inches maximum or 1-1/2 times the outside diameter of the pipe plus 18 inches whichever is greater. Standard excavating equipment shall be adjusted so as to excavate the narrowest trench possible.

Trench excavation shall be not more than 400 feet ahead of the pipe laying operation and all trenches shall be closed up at the end of the day.

The Contractor shall exercise sound engineering and construction practices in excavating the trench and maintaining it so that no damage will occur to any foundation, structure, pole line, pipe line, or other facility because of slough or slopes, or from any other cause. If, as a result of the excavation, there is disturbance of the ground which may endanger other property, the Contractor shall immediately take remedial action at no expense to the District. No act, representation, or instruction of the District shall in any way relieve the Contractor from liability for damages or costs that result from trench excavation.

Care shall be taken not to excavate below the depth specified. Excavation below that depth shall be backfilled with select backfill material and compacted as specified herein.

If workers enter any trench or other excavation 4 feet or more in depth that does not meet the open pit requirements of WSDOT Standard Specifications Section 2-09.3(3)B, it shall be shored. The Contractor alone shall be responsible for worker safety, and the District assumes no responsibility.

The Contractor shall submit six sets of shoring plans for approval in accordance with Section 2-09.3(3)D. Excavation and shoring shall not proceed until the shoring plans have been approved by the District. Upon completing the work, the Contractor shall remove all shoring unless the Plans or the District direct otherwise.

3.1.7 Extra Trench Excavation

Changes in grades of the water main from those shown in the Plans, or as provided in the Special Provisions, may be necessary because of unplotted utilities, or for other reasons. If, in the opinion of the District, it is necessary to adjust, correct, relocate, or in any way change the line and grade, such changes shall be made by the Contractor at no cost to the District.

Whenever in excavating the trench for water mains, the bottom of the trench exposes peat, soft clay, quicksand, or other unsuitable foundation material; such material shall be removed to the depth directed by the District and backfilled with foundation material. When determined by the District that silty soils or fine sandy soils are encountered, Class C foundation material will be required. Silty soils or fine sandy soils usually flow in the presence of a stream of water. When determined by the District that clays, peats, or other soft materials are encountered that become saturated with water, but do not break down into fine particles and flow, Class A or Class B foundation material will be required.

Material removed from the trench that is unsuitable for backfill shall be removed and hauled to a waste site. If material is not available within the limits of the project for backfilling the trench, the Contractor shall furnish suitable material meeting the requirements of Section 2.11.3. All unsuitable material shall be loaded directly into

trucks and hauled to a waste site obtained by the Contractor. Stockpiling of unsuitable material at the project site will not be allowed.

3.1.8 Trench Over Excavation

If the contractor over excavates a trench beyond the required depth in soils meeting suitable foundation material, the contractor shall place and compact foundation material in the trench to bring the trench grade to the required depth prior to placement of the pipe. The class of foundation material shall be as directed by the District.

3.1.9 Rock Excavation

Rock excavation shall cover the removal and disposal of rock that requires systematic drilling and blasting for its removal, and also boulders exceeding 1/2 cubic yard. Ledge rock, boulders, or stones shall be removed to provide a minimum clearance of 4 inches under the pipe. Hardpan, hard clay, glacial till, sandstone, siltstone, shale, or other sedimentary rocks which are soft, weathered, or extensively fissured will not be classified as rock excavation. Materials removed shall be replaced with material meeting the requirements of Section 2.11.3 or selected native materials if approved by the District.

3.2 Bedding the Pipe

Bedding material shall be select granular material free from wood waste, organic material, and other extraneous or objectionable materials and shall have a maximum dimension of 1-1/2 inches. Material shall be placed to a minimum depth of 4 inches under the pipe and 6 inches over the top of the pipe. The bedding material shall be rammed and tamped around the pipe to 95 percent of maximum density by approved hand-held tools, so as to provide firm and uniform support for the full length of the pipe, valves, and fittings. Care shall be taken to prevent any damage to the pipe or its protective coating.

3.3 Backfilling Trenches

Backfill materials include all materials placed above the bedding up to the underside of the pavement or surfacing materials. Trench backfill shall be bankrun gravel meeting the requirements of Section 2.11.3 or selected native materials if approved by the District.

Prior to backfilling, all form lumber and debris shall be removed from the trench. Sheeting used by the Contractor shall be removed just ahead of the backfilling. Backfill up to 12 inches over the top of the pipe shall be evenly and carefully placed. Materials capable of damaging the pipe or its coating shall be removed from the backfill material. The remainder of the material shall be placed by dumping into the trench by any method at the option of the Contractor, and shall be compacted as specified hereinafter.

3.3.1 Compaction of Backfill

Backfill shall be compacted to at least 95 percent of maximum density (Modified Procter). At locations where paved streets, roadway shoulders, driveways, or sidewalks will be constructed or reconstructed over the trench, the backfill shall be spread in layers and be compacted by mechanical tampers. In such cases, the backfill material shall be placed in successive layers not exceeding 6 inches in loose thickness, and each layer shall be compacted with mechanical tampers to the density specified herein. Mechanical tampers shall be of the impact type as approved by the District.

3.3.2 Trench Patch in Asphalt Pavement

Trenches in asphalt shall be patched in accordance with this section. Trench patching in asphalt-paved roads shall comply with Island County requirements and the Island County requirements shall supercede these specifications. Unless otherwise required by Island County, pavement patches in road crossings shall consist of 4 inches compacted depth asphalt concrete Class B over Control Density Fill trench backfill. Trench patching in other asphalt areas shall consist of 4 inches compacted depth asphalt concrete Class B over 6 inches compacted depth crushed surfacing top course over compacted trench backfill material meeting the requirements of these specifications. Asphalt Class B shall meet the requirements of Section 2.15 and crushed surfacing top course shall meet the requirements of Section 2.11.5.

The Contractor shall first sawcut the asphalt six inches outside of the edges of asphalt previously cut for trenching and remove and dispose of the loose asphalt pieces. After the crushed surfacing has been compacted, the Contractor shall place and compact the asphalt, and seal the patch seams with liquid asphalt. Asphalt shall be placed in 2" maximum lifts. The asphalt and crushed surfacing shall be compacted to 95% maximum density (Modified Proctor).

3.3.3 Trench Surfacing in Gravel Areas

Trench surfacing in gravel shoulders or gravel roads shall consist of 6 inches compacted depth crushed surfacing top course. The crushed surfacing shall be compacted to 95% maximum density (Modified Proctor).

3.3.4 Trench Surfacing in Landscaped Areas

Trench surfacing in landscaped areas shall consist of 6 inches compacted depth top soil. The top soil shall be compacted to 85% maximum density (Modified Proctor). The topsoil shall either be hydroseeded or planted to match existing surrounding landscaping.

3.4 Pipe Installation for Water Mains

Pipe shall be installed in accordance with the manufacturer's printed specifications and instructions, and to the standards of the AWWA for installing the type of pipe used. The Contractor shall provide all tools and equipment, including any special tools required for installing each particular type of pipe used. Short lengths of pipe supplied by the manufacturer shall be used whenever possible to provide the proper spacing of valves, tees, or special fittings.

3.4.1 Dewatering of Trench

Where water is encountered in the trench, it shall be removed during pipe-laying operations and the trench so maintained until the ends of the pipe are sealed and provisions are made to prevent floating of the pipe. Trench water or other deleterious materials shall not be allowed to enter the pipe at any time.

3.4.2 Handling of Pipe

Pipe shall be handled in a manner that will prevent damage to the pipe, pipe lining, or coating. Pipe and fittings shall be loaded and unloaded using hoists and slings in a manner to avoid shock or damage, and under no circumstances shall they be dropped, skidded, or rolled against other pipe. If any part of the coating or lining is damaged, repair thereof shall be made by the Contractor at no expense to the District and in a manner satisfactory to the District. Damaged pipe will be rejected, and the Contractor shall immediately place all damaged pipe apart from the undamaged and shall remove the damaged pipe from the site within 24 hours. Threaded pipe ends shall be protected by couplings or other means until laid. The pipe and fittings shall be inspected for defects. Dirt or other foreign material shall be prevented from entering the pipe or pipe joint during handling or laying operations, and any pipe or fitting that has been installed with dirt or foreign material in it shall be removed, cleaned, and re-laid. At times when pipe laying is not in progress and with stockpiled pipe, the open ends of the pipe shall be closed by a watertight plug or by other means approved by the District to ensure cleanliness inside the pipe.

3.4.3 Cutting Pipe

Whenever it becomes necessary to cut a length of pipe, the cut shall be made by abrasive saw or by a special pipe cutter. All pipe ends shall be square with the longitudinal axis of the pipe and shall be reamed and otherwise smoothed so that good connections can be made. Pipe ends installed into pipe bells shall be beveled per manufacturer's recommendations. Pipe ends installed into fittings shall be cut square to maximize the gasket sealing area and prevent rolling of the gasket. Oxyacetylene torch cutting of ductile iron pipe shall not be allowed.

3.4.4 Laying of Pipe on Curves

Laying of pipe on curves will not be allowed unless approved by the District. Fittings shall be used to make horizontal and vertical alignment changes. If the District allows laying of pipe on curves the laying of pipe on curves shall comply with the more stringent of the WSDOT Standard Specifications, AWWA standards, or the pipe manufacturer's recommendations.

3.4.5 Chlorinating Pipe

The preferred method of disinfecting new pipe is by placing dry calcium hypochlorite in accordance with Section 4.2.4.

3.4.6 Cleaning and Assembling Joint

All parts of the pipe ends, couplings, fittings, and appurtenances shall be cleaned to remove oil, grit, or other foreign matter from the joint. Care shall be taken to keep the joint from contacting the ground. Pipe not furnished with a depth mark shall be marked before assembly to ensure visual observation of the work.

3.4.7 Laying Ductile Iron Pipe with Polyethylene Encasement

Where required by the District, the Contractor shall lay ductile iron pipe with a polyethylene encasement. Pipe and polyethylene encasement shall be installed in accordance with AWWA C105.

3.4.8 Connections to Existing Mains

All pipe, fittings, valves, and appurtenances used in the connection to existing mains shall be pre-chlorinated in accordance with Section 4.2.13.

Connections to existing water mains shall be completed after pressure testing and disinfection of the new main and making the necessary arrangements with the District in advance. Work shall not be started until all the materials, equipment, and labor necessary to properly complete the work are assembled on the site. The Contractor may be required to perform the connection during times other than normal working hours. The Contractor shall not operate any valves on the existing system without specific permission of the District. When work is once started on a connection, it shall proceed continuously without interruption, and as rapidly as possible until completed. No shutoff of mains will be permitted overnight, over weekends, or on holidays. If the connection to the existing system involves turning off the water, the Contractor shall be responsible for notifying the residents affected by the shutoff. The District will advise which property owners are to be notified.

Connections to existing mains shall be completed using a hot tap meeting the requirements of Section 2.7 unless otherwise approved by the District.

The Contractor may request a cut-in connection to an existing main and if the District allows the cut-in connection, the Contractor shall furnish a detailed sketch and construction sequence for District approval not less than two weeks prior to the expected construction. After the District has approved the connection sketch and construction sequence and has shut down the existing main, the Contractor shall remove the portions of pipe to provide for the installation of the required fittings at the points of connection. All damage caused by the Contractor's operations to existing joints in piping to remain in-service shall be repaired by the Contractor at no expense to the District. The Contractor shall determine the exact length of the existing water main that must be removed. The exterior of the existing pipe end shall be cleaned to a sound, smooth finish before installation of the coupling.

3.4.9 Maintaining Service

Where existing services are to be transferred from old to new mains, the Contractor shall plan and coordinate its work with that of the District so that service will be resumed with the least possible inconvenience to customers. To supply customers with water during the construction of a water main project where any Section of the pipe has passed satisfactory hydrostatic and bacteriological tests, the Utility reserves the right to tap corporation cocks into the Section of new pipe and install service connections at such locations as the Utility may elect. The installation of any such service connections by the Utility shall not be construed by the Contractor as an acceptance by the District of any part of the work required under the Contract.

3.4.10 Water Main Casing at Road Crossings

In accordance with Island County standards all water mains crossing County roadways (for mains 4-inches and larger) using the open cut method of installation, shall be encased in a PVC ASTM D3034 carrier pipe, extending through the pavement limits, and shall be backfilled with controlled density fill (CDF) unless otherwise approved by Island County representatives.

3.4.11 Detectable Marking Tape and Tracer Wire

Detectable marking tape and tracer wire shall be installed over all nonmetallic water lines including services lines. Detectable marking tape shall meet the requirements of Section 2.13 and tracer wire shall meet the requirements of 2.14.The tape and wire shall be placed approximately 1 foot above the top of the line and shall extend its full length. The tracer wire shall be installed to all valve boxes and be accessible without interfering with the valve operation. All connections and splices in the tracer wire shall be water tight meeting the requirements of Section 2.14. The District may require the Contractor to test the tracer wire to confirm the continuity of the wire.

3.4.12 Steep Slope Measures

On slopes equal to or greater than 20%, the Contractor shall install restrained-joint ductile iron pipe meeting the requirements of Sections 2.1.1 and 2.3 or HDPE pipe meeting the requirements of Section 2.1.3 and install pipe anchors per the District's standard plan.

3.5 Valves for Water Mains

All valves shall be inspected upon delivery in the field to ensure proper working order before installation. They shall be set and jointed to the pipe in the manner as set forth in the AWWA Standards for the type of connecting ends furnished. The valves shall also be carefully inspected for injury to the outer protective coatings. At all places where the coating has been ruptured or scraped off, the damaged area shall be cleaned to expose the iron base installation, and the cleaned area shall then be recoated with two or more field coats of approved protective coating. Upon delivery at the work site, all valves shall be opened to prevent the collection of water in the valve. Valves shall have the interiors cleaned of all foreign matter and shall be inspected both in open and closed position prior to installation. Valves and valve boxes shall be set plumb and valve boxes shall be placed over the valve or valve operator in a manner that the valve box does not transmit shock or stress to the valve. The lower casting of the unit is installed first, in a manner as to be supported by a minimum backfill or by a Styrofoam collar not less than 2 inches in thickness. The casting shall not rest directly upon the body of the valve or upon the water main. Backfill shall be carefully tamped around the valve box to a distance of 3 feet on all sides or to the undisturbed face of the trench if it is closer. The cast iron valve box cover shall be set flush with the roadbed or finished paved surface with the valve box cover tabs aligned with the direction of the main.

Where required, a valve marker post shall be furnished and installed with each valve. Valve marker posts shall be placed at the edge of the right-of-way opposite the valve and be set with 18 inches of the post exposed above grade. The exposed portion of the valve marker posts shall be painted with two coats of AWWA water blue concrete paint, and then the size of the valve and the distance in meters to the valve shall be stenciled with white paint on the face of the post, using a stencil which will produce letters 1 inch high.

3.6 Combination air release/air vacuum valves

The combination air release/air vacuum valves shall be installed at high points shown on the plans and/or as required by the District. All piping shall be sloped to permit escape of any entrapped air. Backfilling and compaction shall be as specified in these specifications. After installation, all valves shall be subjected to field testing and disinfected as outlined in these specifications. Should any defects in design, materials, or workmanship appear during these tests, the Contractor shall correct such defects with the least possible delay and to the satisfaction of the District.

3.7 HYDRANTS

This Section covers the installation of dry-barrel fire hydrants intended for ordinary water works service.

3.7.1 Setting Hydrants

Where shown in the Plans, hydrants shall be installed in accordance with the Standard Plans. In addition, a minimum 3-foot radius unobstructed working area shall be provided around all hydrants. The sidewalk flange shall be set 2 inches above finished grade. All hydrants shall be set on concrete blocks as shown in the Standard Plans. The hydrant barrel drain shall waste into a pit of porous gravel material situated at the base of the hydrant as shown in the Standard Plans.

All hydrants shall be inspected upon delivery in the field to ensure proper working order. After installation, fire hydrants, auxiliary gate valves, and other appurtenances thereto shall be subjected to a hydrostatic test and disinfection procedures as specified in Section 4.2. After all installation and testing is complete, the exposed portion of the hydrant shall be painted with two field coats of oil based gloss enamel paint (Kelly-Moore Luxlite or approve equal) in AWWA safety yellow. Any hydrant not in service shall be identified by covering with a burlap or plastic bag properly secured.

3.7.2 Hydrant Connections

Hydrant laterals shall consist of one continuous section of 6-inch ductile iron pipe from the main to the hydrant and shall include an auxiliary gate valve set vertically and placed in accordance with the Standard Plan. If more than one full length of pipe is necessary for the hydrant connection, the ductile iron pipe shall be restrained joint meeting the requirements of Section 2.3.

3.7.3 Hydrant Restraints

The thrust created in the hydrant lateral shall be restrained with Megalug® restraints meeting the requirements of Section 2.4.

3.7.4 Auxiliary Gate Valves and Valve Boxes

Auxiliary gate valves and valve boxes shall be installed in accordance with Section 3.5.

3.7.5 Hydrant Guard Posts

Hydrant guard posts shall be constructed at the locations shown in the Plans or as required by the District. The guard posts shall meet the requirements of Section 2.8.5.

3.7.6 Resetting Existing Hydrants

Where existing hydrants are shown in the Plans for adjustments to conform to a new street alignment or grade or both, the hydrant shall be relocated without disturbing the location of the hydrant lateral tee at the main. The method for thrust restraint for the hydrant lateral shall be determined by the conditions found in the field and shall be constructed as directed by the District. This work shall conform to Section 3.7.1.

3.7.7 Moving Existing Hydrants

Existing hydrants shall be moved where shown in the Plans. The existing hydrant and any appurtenances shall be disinfected in accordance with Section 4.2.13. When the existing hydrant lateral tee does not accommodate a new hydrant location, a new hydrant lateral tee shall be installed in the main. The existing hydrant lateral tee shall be removed from the main (if said main is to remain active), and a new section of pipe inserted into the water main in place of the existing hydrant lateral tee. Where the existing main to which the existing hydrant lateral tee is connected, and is to be abandoned or temporarily activated after the existing hydrant is moved, the open end of the hydrant lateral pipeline shall be plugged (and temporary thrust restrain provided if temporarily reactivated). All work shall meet the requirements of Section 3.7.1.

3.7.8 Reconnecting Existing Hydrants

Existing hydrants shall be reconnected where shown in the Plans. The location and elevation of the existing hydrant shall remain unchanged, but the existing hydrant connection is changed to connect with a new hydrant tee provided in a new main. Where existing hydrants were not shackled to the old main, the new connection shall be shackled with steel rods as shown in the Standard Plans, or by such other shackling method as may be directed by the District. Hydrant reconnections shall meet the requirements of Sections 3.7.1 and 3.7.2.

3.7.9 Hydrant Extensions

The Contractor shall furnish and install hydrant extensions where required. The hydrant extensions, operating stems for the hydrant main valves, and sidewalk flanges shall conform to AWWA C502. After installation, the extended fire hydrant shall be subjected to a hydrostatic pressure test and disinfection procedure as specified in Section 4.

3.8 Service Connections

This work consists of installing the service connections from the main to the water meter for the premises served. Service connections for commercial premises as well as residential premises are included.

After installation, the service connection shall be flushed prior to connecting the meter.

All service connections to water mains shall be made using saddles as specified and be of the size and type suitable for use with the pipe being installed.

Service taps and pipelines shall be installed perpendicular to the main, unless shown otherwise in the Plans. The depth of trenching for service connection piping shall provide a minimum of 3 feet of cover over the top of the pipe. Particular care shall be exercised to ensure that the main is not damaged by the work undertaken to install the service.

Excavating and backfilling for service connections shall be as specified in Section 3.1, except that the service pipeline shall be installed under pavement, curbs, and sidewalks by boring methods approved by the Island County.

Service pipes shall be cut using a tool or tools specifically designed to leave a smooth, even, and square end on the piping material to be cut. Cut ends shall be reamed to the full inside diameter of the pipe. Pipe ends to be connected using couplings which seal to the outside surface of the pipe shall be cleaned to a sound, smooth finish before the couplings are installed.

Service pipes with visible external damage will not be accepted.

The meter box shall be adjusted to the finished grade after the surface has been acceptably restored.

Where shown in the Plans, existing service connections shall be reconnected to the new mains. The location of existing service connections shall be verified in the field by the Contractor. The Contractor shall notify affected customers of the service interruption at least 24 hours prior to service interruption.

Pipe materials used to extend or replace existing service connections beyond the meter box shall be copper or polyethylene pipe. Insulating couplings shall be used at any connection between galvanized steel or iron pipe and copper pipe. All fittings, appurtenances, and other miscellaneous materials on the sections of existing pipe which have been removed shall become the property of the District unless otherwise specified by the District.

3.9 Concrete Thrust Blocking

Concrete thrust blocking, as detailed in the Plans, shall be placed at bends, tees, dead ends, and crosses. Blocking shall be concrete meeting the requirements of Section 2.12 poured in place. Concrete blocking shall bear against solid undisturbed earth at the sides and bottom of the trench excavation and shall be shaped so as not to obstruct access to the joints of the pipe or fittings. Plastic sheeting shall be installed to protect fittings, bolts, and the pipe. No concrete shall come in direct contact with the pipe.

3.10 Blowoff Assemblies

Blowoff assemblies shall be constructed at the locations shown in the Plans and in accordance with the Standard Plans.

4. TESTING

4.1 Hydrostatic Pressure Test

All water mains, hydrants, services, and appurtenances shall be tested in sections of convenient length under a minimum hydrostatic pressure of 225 psi.

All pumps, gauges, plugs, saddles, corporation stops, miscellaneous hose and piping, and measuring equipment necessary for performing the test shall be furnished and operated by the Contractor.

The pipeline shall be backfilled sufficiently to prevent movement of the pipe under pressure. All thrust blocks shall be in place and time allowed for the concrete to cure before testing. Where permanent blocking is not required, the Contractor shall furnish and install temporary blocking and remove it after testing.

The mains shall be filled with water and allowed to stand under pressure a sufficient length of time to allow the escape of air and allow the lining of the pipe to absorb water. The District will furnish the water necessary to fill the pipelines for testing purposes at a time of day when sufficient quantities of water are available for normal system operation. The Contractor shall be responsible for conveying and/or transporting of the District's water to the test location.

A clean container shall be used for holding water for pumping up pressure on the main being tested. This makeup water shall be sterilized by the addition of chlorine to a concentration of 50 mg/l.

The quantity of water required to restore the pressure shall be accurately determined by pumping through a positive displacement water meter. The meter shall be approved by the District.

Acceptability of the test will be determined as follows:

a) The quantity of water lost from the main shall not exceed the number of gallons per hour as determined by the formula:

$$L = \frac{ND\sqrt{P}}{7400}$$

in which

L = allowable leakage, gallons/hour
N = number of joints in the length of pipeline tested
D = nominal diameter of the pipe in inches
P = average test pressure during the leakage test, psi

b) The test pressure shall be maintained for a minimum of two hours and during the two hour test period the main can be re-pressurized to maintain the test pressure except there shall be a period of 15 minutes with no re-pressurizing and no appreciable loss.

The District may check the gages for accuracy and may require the Contractor to provide certifications of accuracy from a laboratory approved by the District.

Any visible leakage detected shall be corrected by the Contractor regardless of the allowable leakage specified above. Should the tested section fail to meet the pressure test successfully as specified, the Contractor shall, at no expense to the District, locate and repair the defects and then retest the pipeline.

All tests shall be made with the hydrant auxiliary gate valves open and pressure against the hydrant valve. After the test has been completed, each gate valve shall be tested by closing each in turn and relieving the pressure beyond. This test of the gate valve will be acceptable if there is no immediate loss of pressure on the gauge when the pressure comes against the valve being checked. The Contractor shall verify that the pressure differential across the valve does not exceed the rated working pressure of the valve.

Sections to be tested shall normally be limited to 1,500 feet. The District may require that the first Section of pipe installed by the Contractor be tested in order to qualify the crew and the material. Pipe laying shall not be continued more than an additional 400 feet until the first section has been tested successfully.

Prior to calling out the District to witness the pressure test, the Contractor shall have all equipment set up completely ready for operation and shall have successfully performed the test to ensure that the pipe is in a satisfactory condition. The Contractor shall notify the District a minimum of 24 hours prior to pressurizing of mains.

Defective materials or workmanship, discovered as a result of hydrostatic field test, shall be replaced by the Contractor at no expense to the District. Whenever it is necessary to replace defective material or correct the workmanship, the hydrostatic test shall be re-run at the Contractor's expense until a satisfactory test is obtained.

The District may require removal, cleaning, and/or replacement of water main and appurtenances contaminated as a result of defective materials or workmanship.

4.1.1 Testing Section with Hydrants Installed

When hydrants are included with the section of main pipe to be tested, the Contractor shall be prepared to test the hydrants and hydrant auxiliary gate valve as follows:

Test No. 1 —Hydrant auxiliary gate valves open, with the hydrant operating stem valves closed and hose ports open.

Test No. 2 —Hydrant auxiliary gate valve closed, with the hydrant operating the stem valves open and hose ports wide open.

4.1.2 Testing Hydrants Installed on Existing Mains

For hydrants installed and connected to an existing main, the hydrant connection including hydrant tee, connection pipe, and auxiliary gate valves, shall be installed with pre-tested materials.

Before the hydrant connection is made to the existing main, the hydrant installation shall be subjected to the hydrostatic Test No. 3 as specified in Section 4.1.1. Hydrants installed and connected to an existing main shall have a satisfactory bacteriological sample obtained following the hydrostatic test.

4.2 Disinfection of Water Mains

Before being placed in service, all new water mains and repaired portions of, or extensions to, existing mains shall be chlorinated and a satisfactory bacteriological report obtained.

4.2.1 Flushing

No flushing will be allowed prior to pressure testing. The Contractor shall notify the District a minimum of 24 hours prior to flushing. Flushing shall include all mains, services, hydrants, air-n-vac valves, blow-offs, and any other appurtenances.

Sections of pipe to be disinfected shall first be flushed to remove any solids or contaminated material that may have become lodged in the pipe. If no hydrant is installed at the end of the main, then a tap shall be provided large enough to develop a velocity of at least 2.5 fps in the main.

Taps required by the Contractor for temporary or permanent release of air, chlorination or flushing purposes shall be provided by the Contractor as a part of the construction of water mains.

Where dry calcium hypochlorite is used for disinfection of the pipe, flushing shall be done after disinfection.

The Contractor shall be responsible for disposal of treated water flushed from mains and shall neutralize the waste water for protection of aquatic life in the receiving water before disposal into any natural drainage channel in accordance with EPA regulations.

4.2.2 Requirement of Chlorine

Before being placed into service, all new mains and repaired portions of, or extensions to, existing mains shall be chlorinated so that a chlorine residual of not less than 25 mg/ 1 remains in the water after standing 24 hours in the pipe. The initial chlorine content of the water shall be not less than 50 mg/l. The District may check the chlorine content to verify the chlorine residual.

4.2.3 Form of Applied Chlorine

Chlorine shall be applied by one of the methods which follow, to give a dosage of not less than 50 mg/l of available chlorine.

4.2.4 Dry Calcium Hypochlorite

As each length of pipe is laid, sufficient high test calcium hypochlorite (65-70% chlorine) shall be placed in the pipe to yield a dosage of not less than 50 mg/l available chlorine, calculated on the volume of the water which the pipe and appurtenances will contain. The number of grams of 65% test calcium hypochlorite required for a 20-foot length of pipe equals

$$0.008431 \times d^2,$$

in which "d" is the diameter in inches.

4.2.5 Liquid Chlorine

A chlorine gas-water mixture shall be applied by means of a solution-feed chlorinating device, or the dry gas may be fed directly through proper devices for regulating the rate of flow and providing effective diffusion of the gas into the water within the pipe being treated.

Chlorinating devices for feeding solutions of the chlorine gas, or the gas itself, must provide means for preventing the backflow of water into the chlorine.

4.2.6 Chlorine-Bearing Compounds in Water

A mixture of water and high-test calcium hypochlorite (65-70% Cl) may be substituted for the chlorine gas-water mixture. The dry powder shall first be mixed as a paste and then thinned to a 1 percent chlorine solution by adding water to give a total quantity of 7.5 gallons of water per pound of dry powder. This solution shall be injected in one end of the Section of main to be disinfected while filling the main with water.

4.2.7 Sodium Hypochlorite

Sodium hypochlorite, commercial grade (12.5% Cl) or in the form of liquid household bleach (5-6% Cl), may be substituted for the chlorine gas-water mixture. This liquid chlorine compound may be used full strength or diluted with water and injected into the main in correct proportion to the fill water so that dosage applied to the water will be at least 50 mg/l.

4.2.8 Point of Application

The preferred point of application of the chlorinating agent is at the beginning of the pipeline extension or any valved section of it, and through a corporation stop inserted in the horizontal axis of the pipe. The water injector for delivering the chlorine-bearing water into the pipe should be supplied from a tap on the pressure side of the gate valve controlling the flow into the pipeline extension. Alternate points of applications may be used when approved by the District.

4.2.9 Rate of Application

Water from the existing distribution system, or other source of supply, shall be controlled to flow very slowly into the newly-laid pipeline during application of the chlorine. The rate of chlorine gas-water mixture or dry gas feed shall be in such proportion to the rate of water entering the newly-laid pipe that the dosage applied to the water will be at least 50 mg/l.

4.2.10 Preventing Reverse Flow

No connections shall be made between the existing distribution system and pipelines not disinfected that are constructed under this Contract without a State Department of Health approved backflow preventer installed in the connecting line.

4.2.11 Retention Period

Treated water shall be retained in the pipe at least 24 hours. After this period, the chlorine residual at pipe extremities and at other representative points shall be at least 25 mg/l.

4.2.12 Chlorinating Valves, Hydrants, Services, and Appurtenances

In the process of chlorinating newly-laid pipe, all valves, hydrants, services, and other appurtenances shall be operated while the pipeline is filled with the chlorinating agent and under normal operating pressure.

4.2.13 Chlorinating Connections to Existing Water Mains

The chlorinating procedure to be followed shall be as specified in Section 9 of AWWA Standard C651. All closure fittings shall be swabbed with a very strong chlorine solution at least as strong as liquid household bleach (5-6% Cl).

4.3 Final Flushing and Bacteriological Testing

Following chlorination, all treated water shall be flushed from the newly-laid pipe until the replacement water throughout its length shows, upon test, the absence of chlorine. In the event chlorine is normally used in the source of supply, then the tests shall show a residual not in excess of that carried in the system. A sample tap shall be located ahead of the flushing hose for convenience and for sanitary sampling.

Before placing the lines into service, a satisfactory report shall be received from the local or State health department on samples collected from representative points in the new system. Samples will be collected and bacteriological tests obtained by the District at least 24 hours after the final flushing.

4.4 Repetition of Flushing and Testing

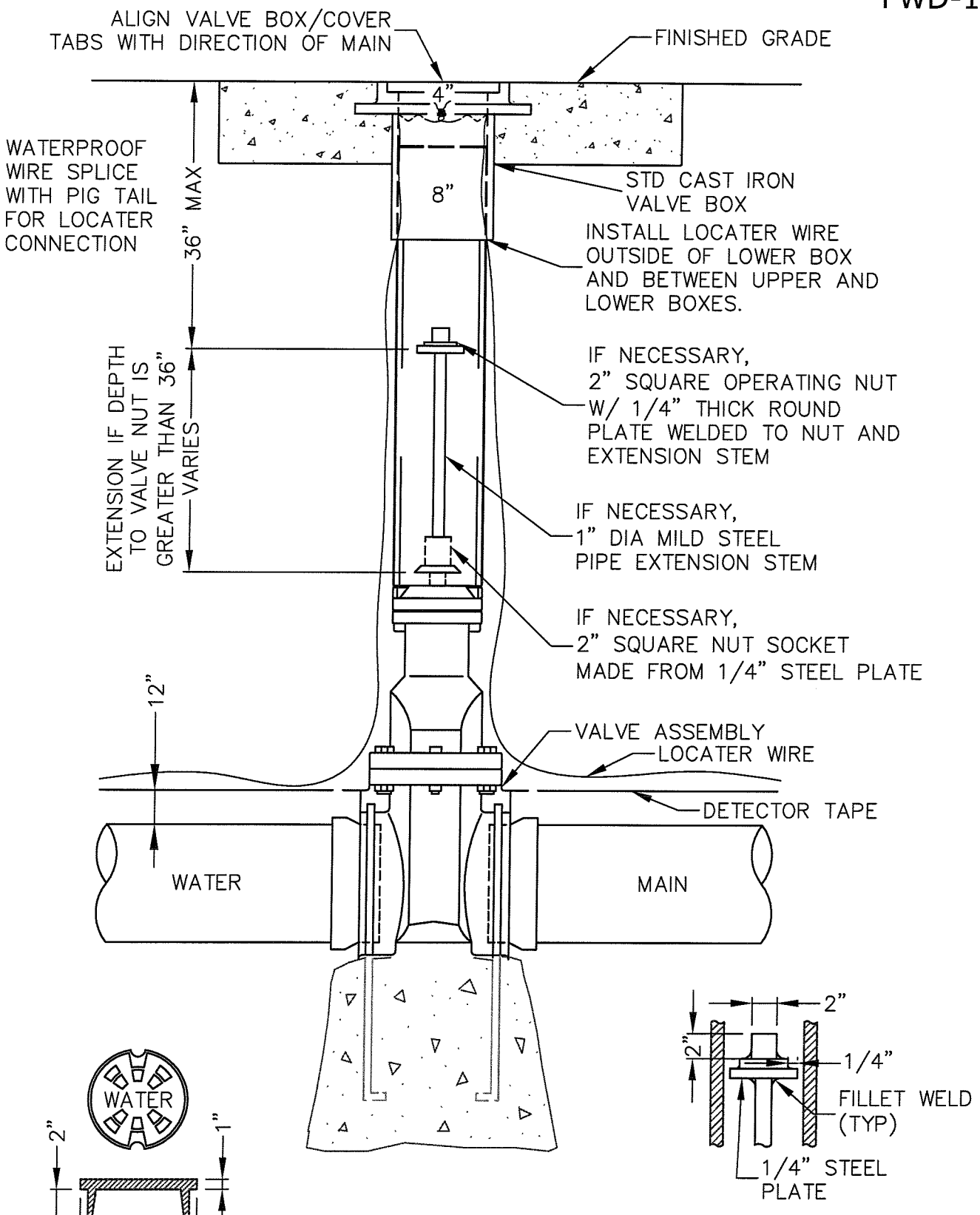
Should the initial treatment result in an unsatisfactory bacteriological test, the original chlorination procedure shall be repeated by the Contractor until satisfactory results are obtained. Failure to get a satisfactory test shall be considered as failure of the Contractor to keep the pipe clean during construction, or to properly chlorinate the main.

APPENDIX A Standard Plans

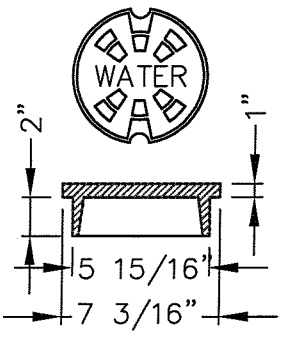
Num	Title
FWD_101	WATER VALVE, BOX, AND EXTENSION
FWD_201A	WATER MAIN THRUST BLOCKS
FWD_201B	WATER MAIN THRUST BLOCK TABLE
FWD_202	CONCRETE SLOPE ANCHOR
FWD_301	FIRE HYDRANT ASSEMBLY
FWD_302	HYDRANT LOCATION IN CUT & FILL
FWD_303	HYDRANT PROTECTION & VALVE MARKER POST
FWD_401	1" AIR & VACUUM RELEASE VALVE ASSEMBLY
FWD_402	2" BLOWOFF ASSEMBLY VERSION 2
FWD_501	3/4 & 1" WATER METER SERVICE INSTALLATION
FWD_502	1-1/2 & 2" WATER METER SERVICE INSTALLATION
	INDIVIDUAL PRESSURE REDUCING VALVE ASSEMBLY
FWD_503	RESIDENTIAL
FWD_601	TRENCH SECTION NON-PAVEMENT
FWD_602	TRENCH SECTION PAVED
FWD_701	FILLING NEW WATER MAINS

APPENDIX A Standard Plans

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FWD_602	TRENCH SECTION PAVED
FWD_701	FILLING NEW WATER MAINS

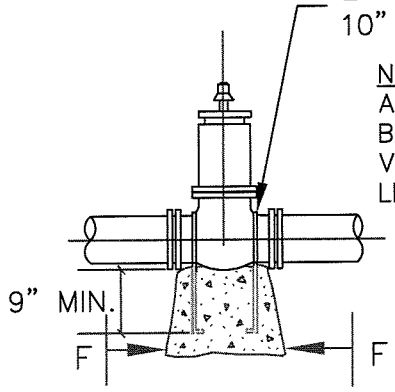


EXTENSION DETAIL

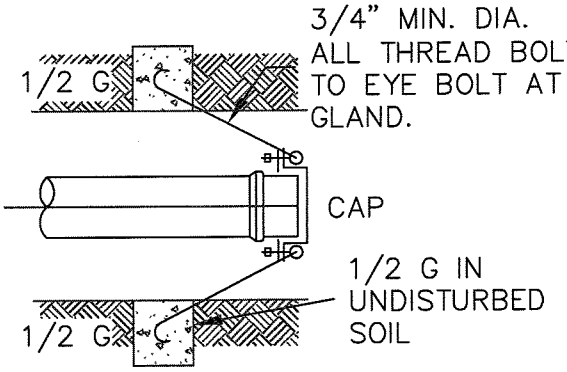


TYLER PIPE RIM & LID SN 145325 OR EQUAL WITH "WATER" SCRIBED.

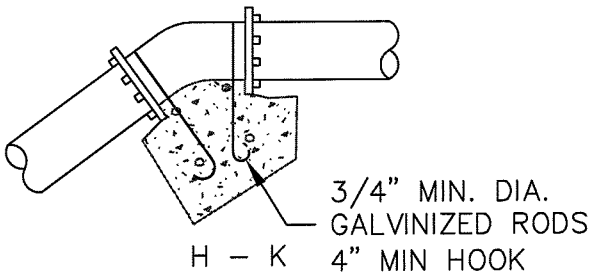
WATER VALVE, BOX & EXTENSION	FWD-101
UPDATED: 11/18/2003	FREELAND WATER DISTRICT STANDARD PLAN

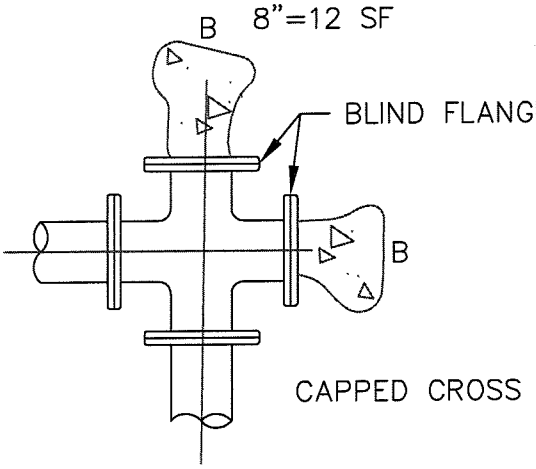


GATE VALVE

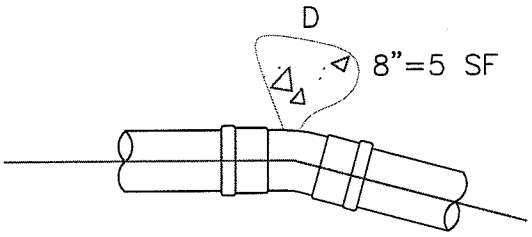


REVERTED THRUST BLOCK

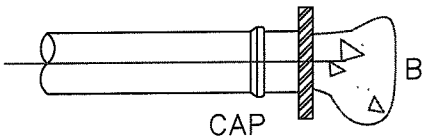




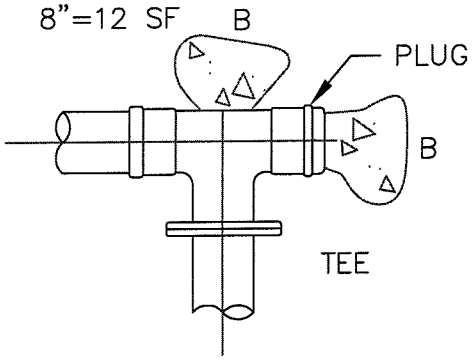
CAPPED CROSS



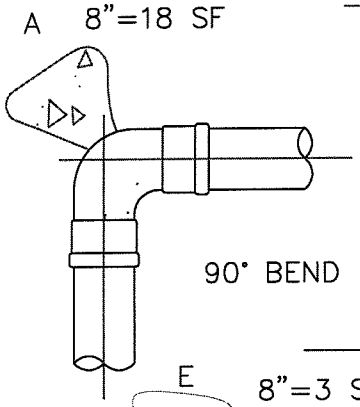
22 1/2" BEND



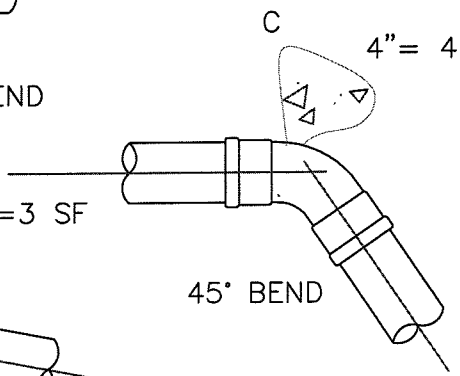
8"=10 SF

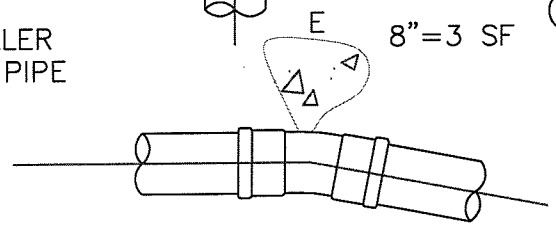


TEE

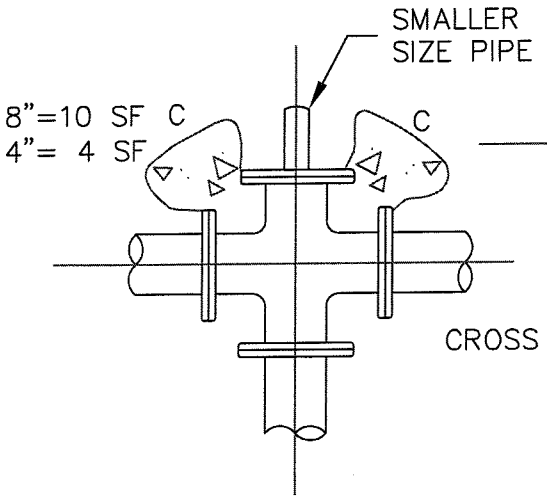


90° BEND





11 1/4" BEND



CROSS

WATER MAIN THRUST BLOCKING	FWD-201A
UPDATED: 11/18/2003	FREELAND WATER DISTRICT STANDARD PLAN

2000 PSI CONCRETE
THRUST BLOCK – TABLE

MIN. BEARING AREA AGAINST UNDISTURBED SOIL SQUARE FEET (SF)							REV. TB	VERTICAL THRUST BLOCKING			
PIPE SIZE	A – 90° (SF)	B – TEE (SF)	C – 45° (SF)	D – 22.5° (SF)	E – 11.25° (SF)	F – GV (SF)	G (SF)	H – 90° (CY)	I – 45° (CY)	J – 22.5° (CY)	K – 11.25° (CY)
4"	4	4	4	4	4	–	6	–	–	–	–
6"	10	7	6	3	2	–	13	2	–	–	–
8"	18	12	10	5	3	3	22	4	2	–	–
10"	24	22	14	8	5	4	34	6	3	–	–

NOTES:

1. BEARING AREA OF CONC. THRUST–BLOCK BASED ON 250 PSI PRESSURE AND SAFE SOIL BEARING LOAD OF 1,000 POUNDS PER SQUARE FOOT.
2. AREAS MUST BE ADJUSTED FOR OTHER PIPE SIZES, PRESSURES AND SOIL CONDITIONS.
3. CONCRETE BLOCKING SHALL BE CAST IN PLACE AND HAVE A MINIMUM OF 36 SQ. INCHES BEARING AGAINST THE FITTING.
4. BLOCK SHALL BEAR AGAINST FITTINGS ONLY AND SHALL BE CLEAR OF JOINTS TO PERMIT TAKING UP OR DISMANTLING OF JOINT.
5. CONTRACTORS SHALL INSTALL BLOCKING ADEQUATE TO WITHSTAND FULL TEST PRESSURE AS WELL AS TO CONTINUOUSLY WITHSTAND OPERATION PRESSURE UNDER ALL CONDITIONS OF SERVICE. TEST AT 250 PSI AT LOWEST POINT.
6. PROVIDE PLASTIC SHEETING TO COVER FITTINGS, VALVES, AND FOR DISMANTLING.

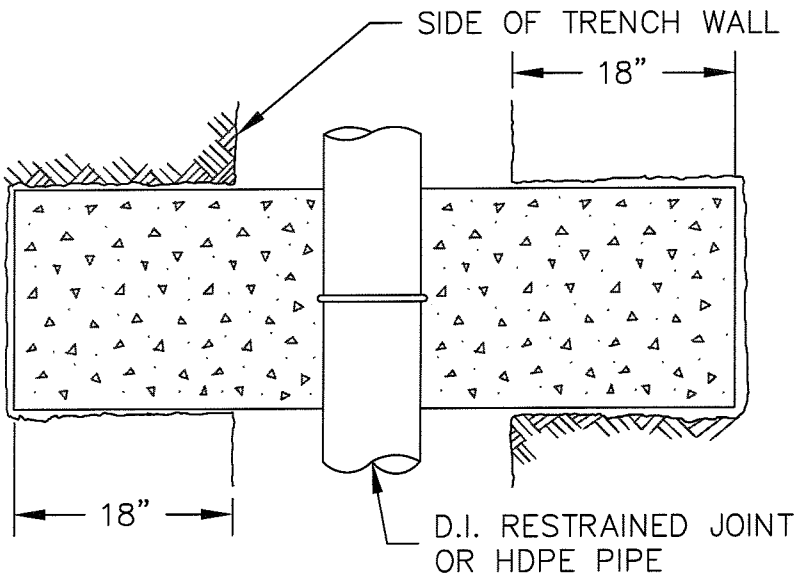
WATER MAIN
THRUST BLOCKING

UPDATED: 11/18/2003

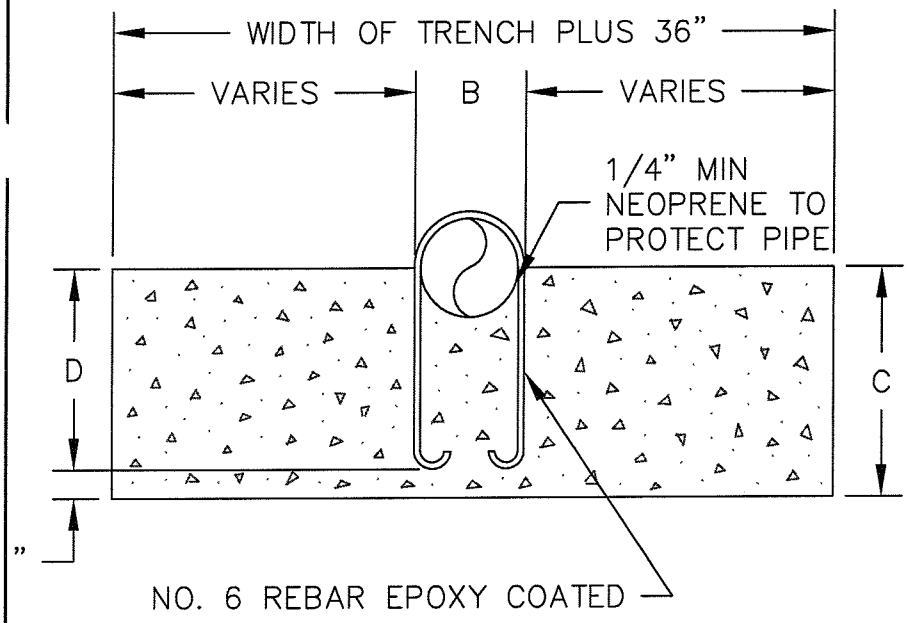
FREELAND
WATER DISTRICT
STANDARD PLAN

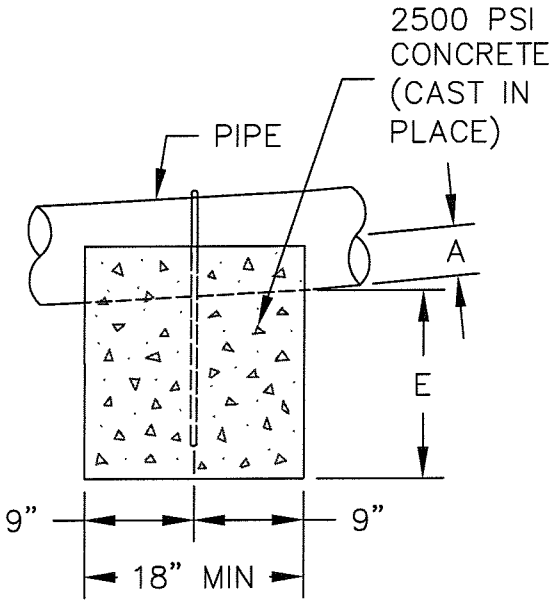
FWD-201B

FWD-201B



PIPE SIZE	DIMENSIONS (INCHES)				
	A	B	C	D	E
4"	2.4	4.8	17	13	14.6
6"	3.5	6.9	18	14	14.5
8"	4.5	9.1	19	15	14.5
10"	5.6	11.1	20	16	14.4
12"	6.6	13.2	21	17	14.4
14"	7.7	15.3	22	18	14.3
16"	8.7	17.4	23	19	14.3
18"	9.8	19.5	24	20	14.2



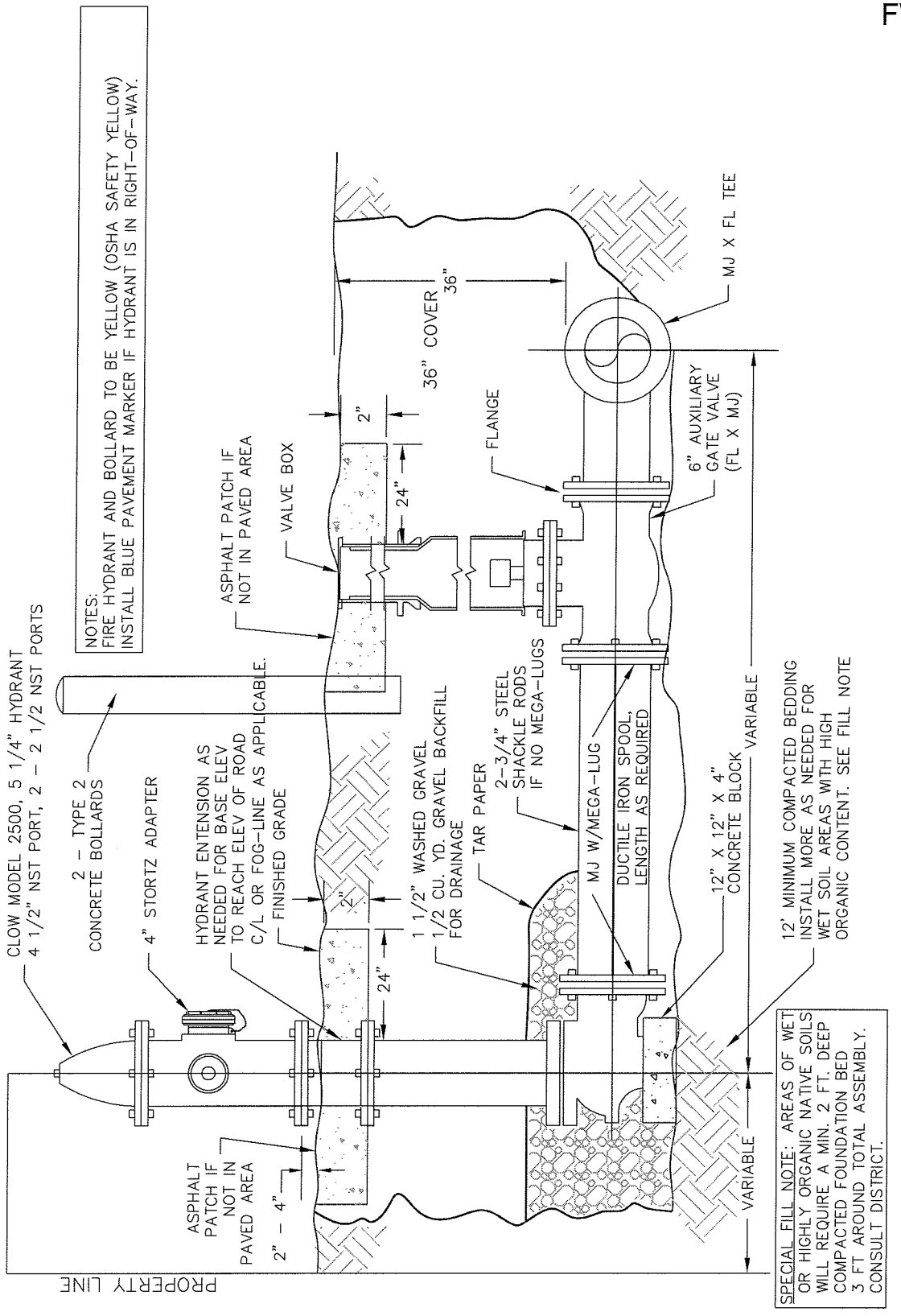


NOTES:

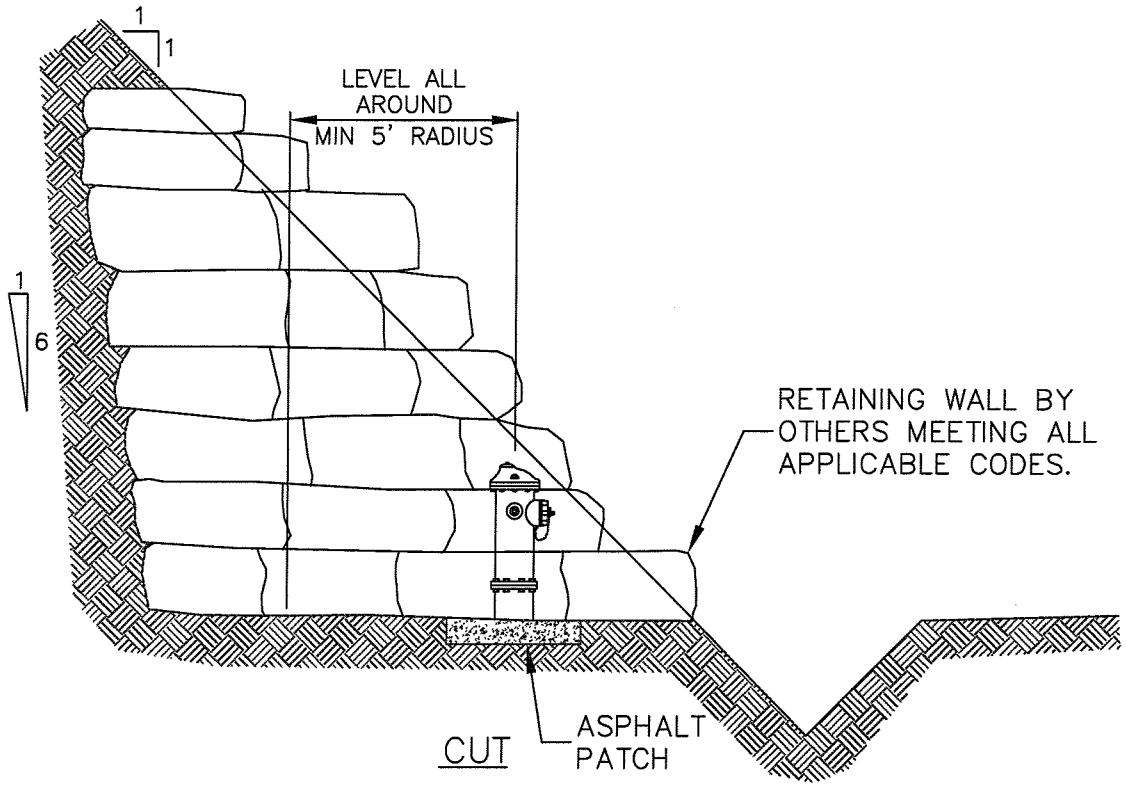
1. THIS DETAIL APPLIES TO PIPES INSTALLED ON SLOPES GREATER THAN OR EQUAL TO 20%.

2. ANCHORS SHALL BE SPACED 20' ON CENTER.

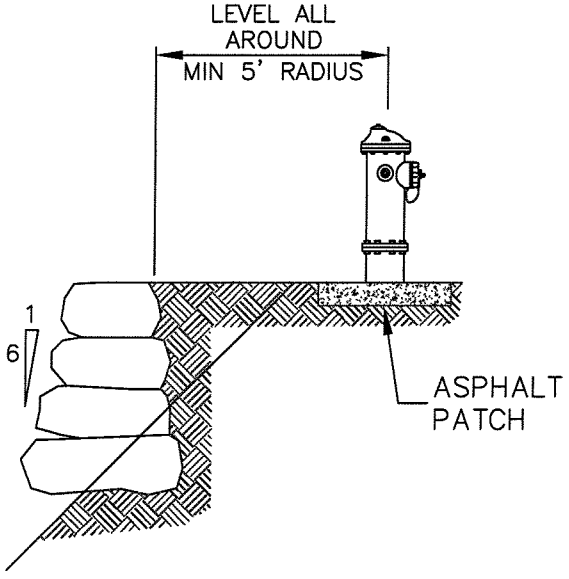
STEEP SLOPE PIPE ANCHOR	FWD-202
UPDATED: 11/18/2003	FREELAND WATER DISTRICT STANDARD PLAN



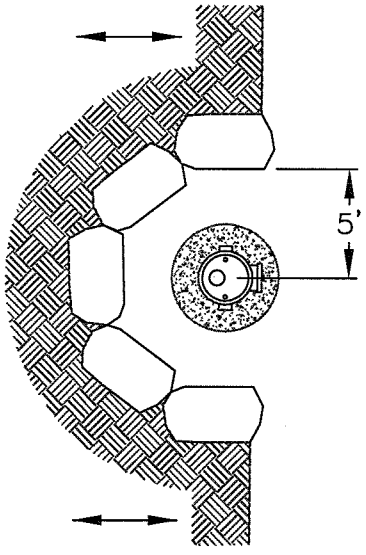
FIRE HYDRANT ASSEMBLY	FWD-301
UPDATED: 11/18/2003	FREELAND WATER DISTRICT STANDARD PLAN



CUT

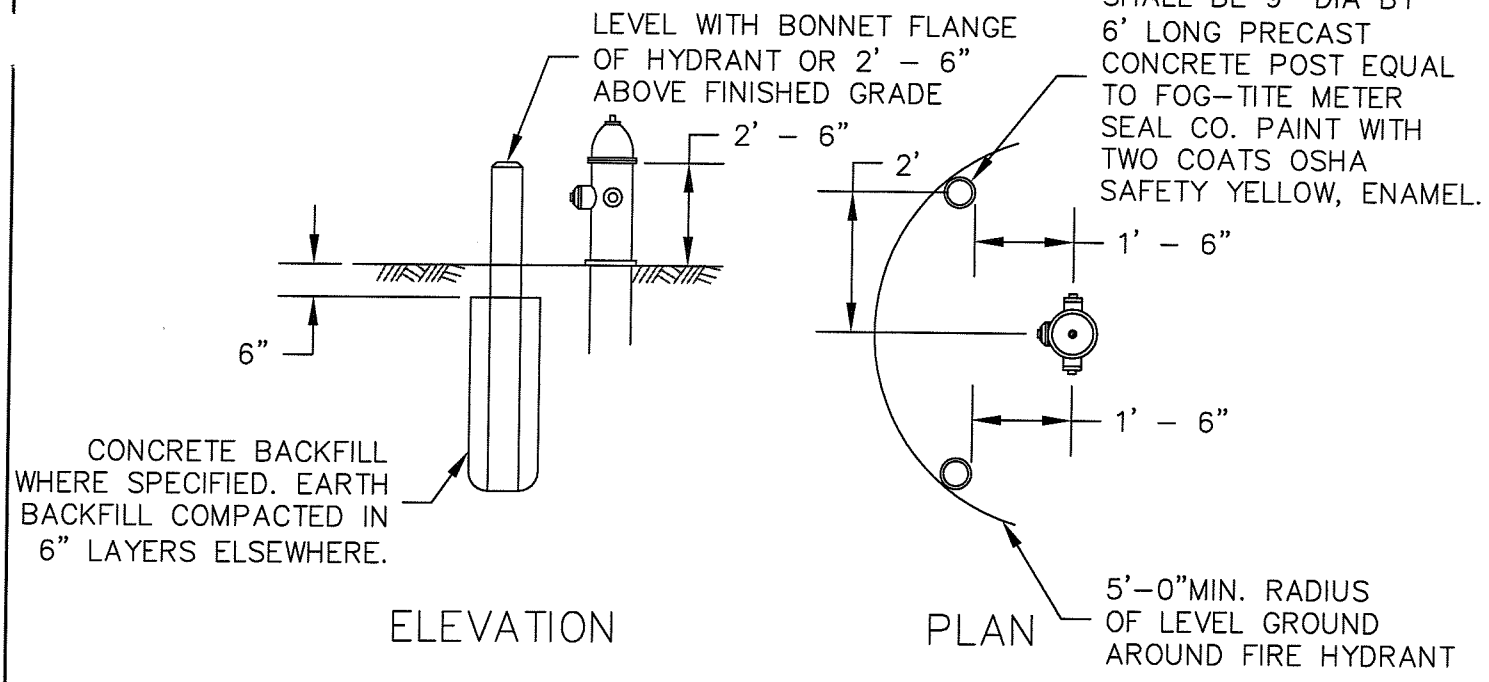


FILL

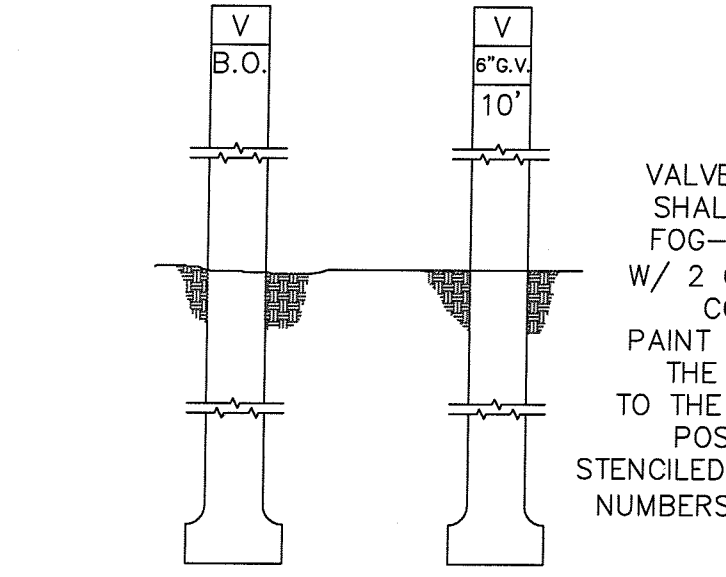


PLAN VIEW CUT OR FILL

HYDRANT LOCATION IN CUT & FILL	FWD-302
UPDATED: 11/18/2003	FREELAND WATER DISTRICT STANDARD PLAN



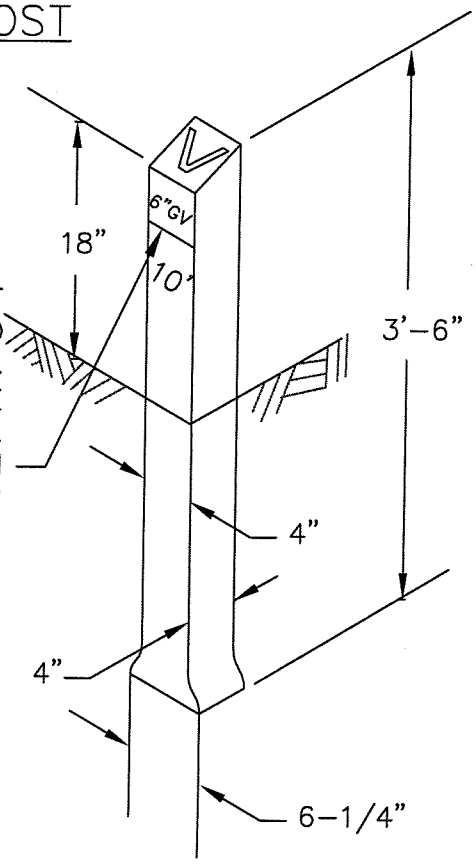
FIRE HYDRANT GUARD POST



FRONT VIEW (FOR BLOW–OFF ASSEMBLY)

FRONT VIEW (FOR GATE VALVE)

VALVE MARKER POST SHALL BE EQUAL TO FOG–TITE METER CO. W/ 2 COATS OF BLUE CONCRETE PAINT. PAINT DISTANCE FROM THE VALVE MARKER TO THE VALVE ON THE POST WITH NEATLY STENCILED WHITE ENAMEL NUMBERS, 1" IN HEIGHT.

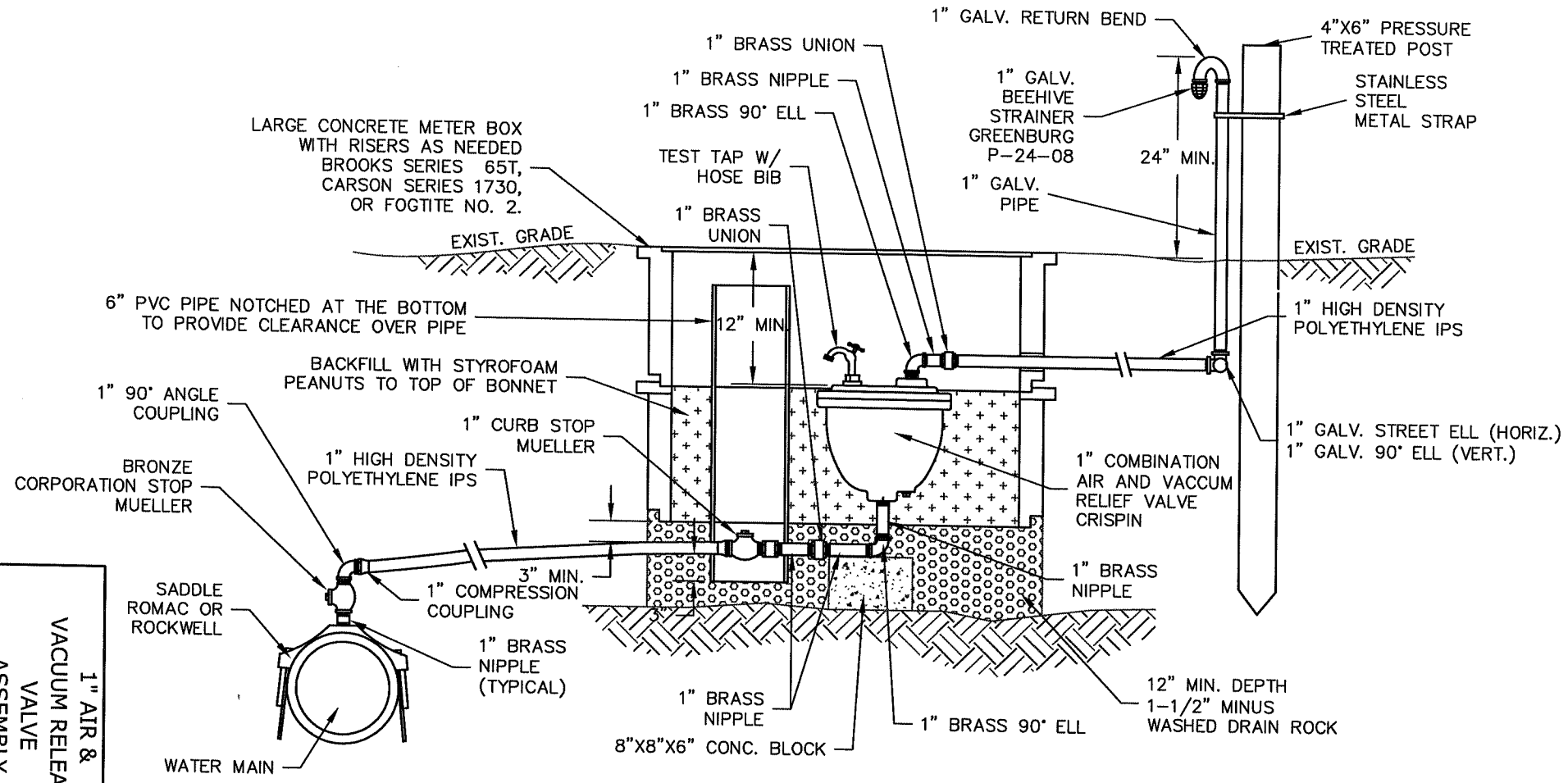


VALVE MARKER POST

NOTES:

1. GUARD POSTS TO BE INSTALLED ONLY AS DIRECTED BY THE DISTRICT.
2. VALVE MARKERS TO BE USED FOR BLOW OFF AND MAINLINE VALVES OUTSIDE PAVED AREAS.

HYDRANT PROTECTION & VALVE MARKER POST	FWD-303
UPDATED: 11/18/2003	FREELAND WATER DISTRICT STANDARD PLAN



NOTES:

A. AIR-N-VAC UNIT AND BOX SHALL BE INSTALLED IN A NON-TRAFFIC AREA.

B. SADDLE FOR AIR-N-VAC UNIT SHALL BE INSTALLED AT THE HIGH POINT OF THE LINE. IF HIGH POINT FALLS IN LOCATION WHERE ASSEMBLY CANNOT BE INSTALED, INSTALL WATER MAIN TO CREATE A HIGH POINT WHERE AIR-N-VAC CAN BE LOCATED.

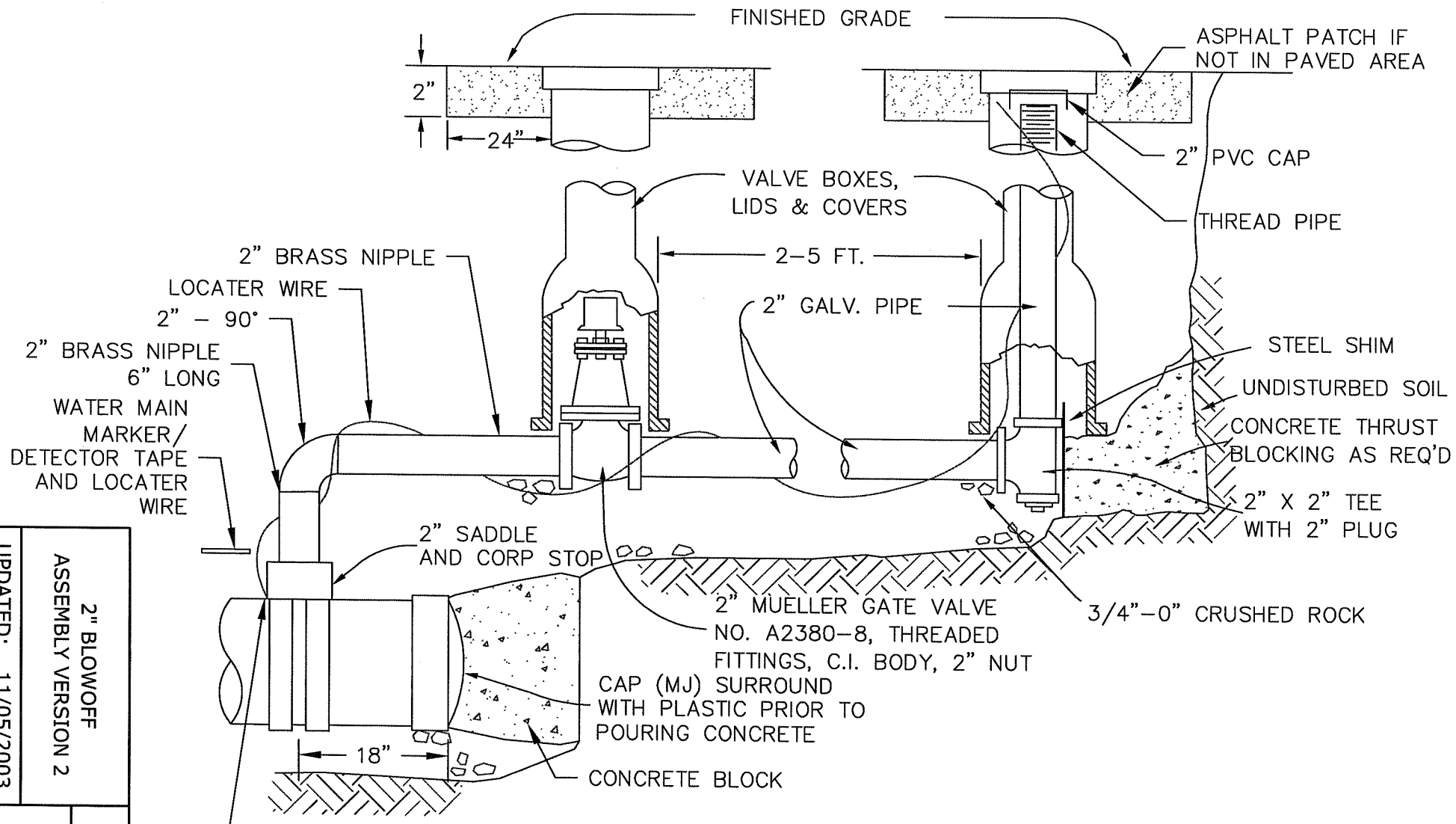
C. ALL PIPE AND FITTINGS SHALL BE MINIMUM PRESSURE CLASS 200 PSI, IPS SIZE. ALL FITTINGS BETWEEN MAIN AND AIR-N-VAC SHALL BE BRASS AND ALL FITTINGS ON THE AIR-N-VAC DISCHARGE SHALL BE GALVANIZED.

D. CONCRETE METER BOX PENETRATIONS SHALL BE GROUTED.

E. AIR-N-VAC RISER SHALL BE PAINTED AS DIRECTED BY THE DISTRICT.

FWD-401	1" AIR & VACUUM RELEASE VALVE ASSEMBLY	UPDATED: 11/18/2003
FREELAND WATER DISTRICT STANDARD PLAN		

FWD-401



NOTES:

1. LOCATER WIRES SHALL BE BLUE COATED 14 GAGE COPPER WIRE CONTINUOUS TO ABOVE GROUND ACCESS POINTS (METERS & HYDRANTS) SPLICES IN WIRE, IF NEEDED, SHALL BE MADE WITH WATERPROOF SPLICE KITS.

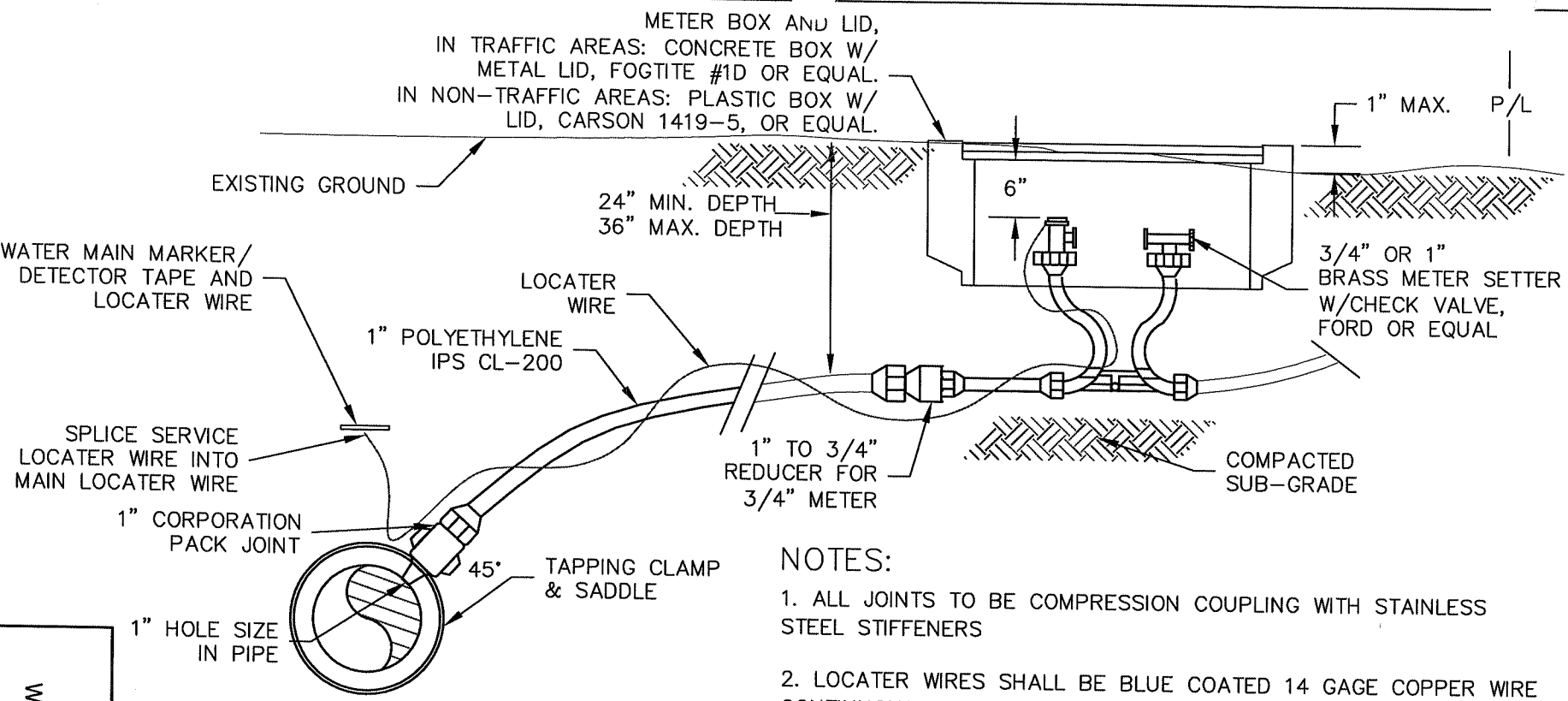
FREELAND WATER DISTRICT STANDARD PLAN

FWD-402

2" BLOWOFF ASSEMBLY VERSION 2

UPDATED: 11/05/2003

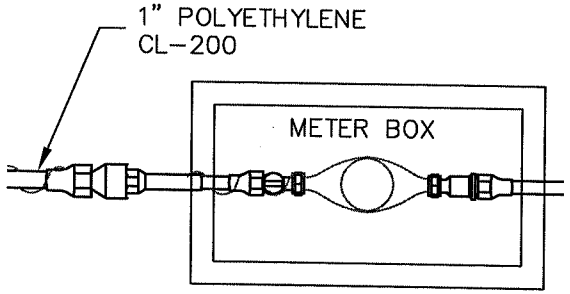
FWD-402



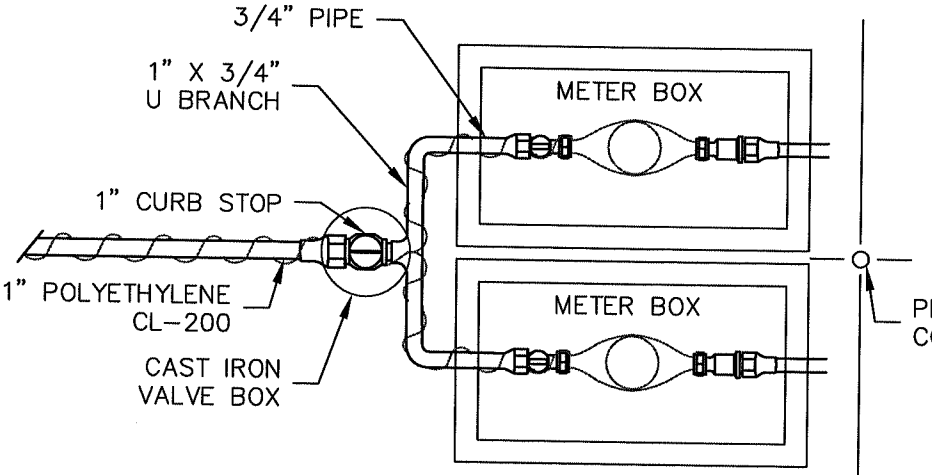
NOTES:

1. ALL JOINTS TO BE COMPRESSION COUPLING WITH STAINLESS STEEL STIFFENERS

2. LOCATER WIRES SHALL BE BLUE COATED 14 GAGE COPPER WIRE CONTINUOUS TO ABOVE GROUND ACCESS POINTS (METERS & HYDRANTS) SPLICES IN WIRE, IF NEEDED, SHALL BE MADE WITH WATERPROOF SPLICE KITS.



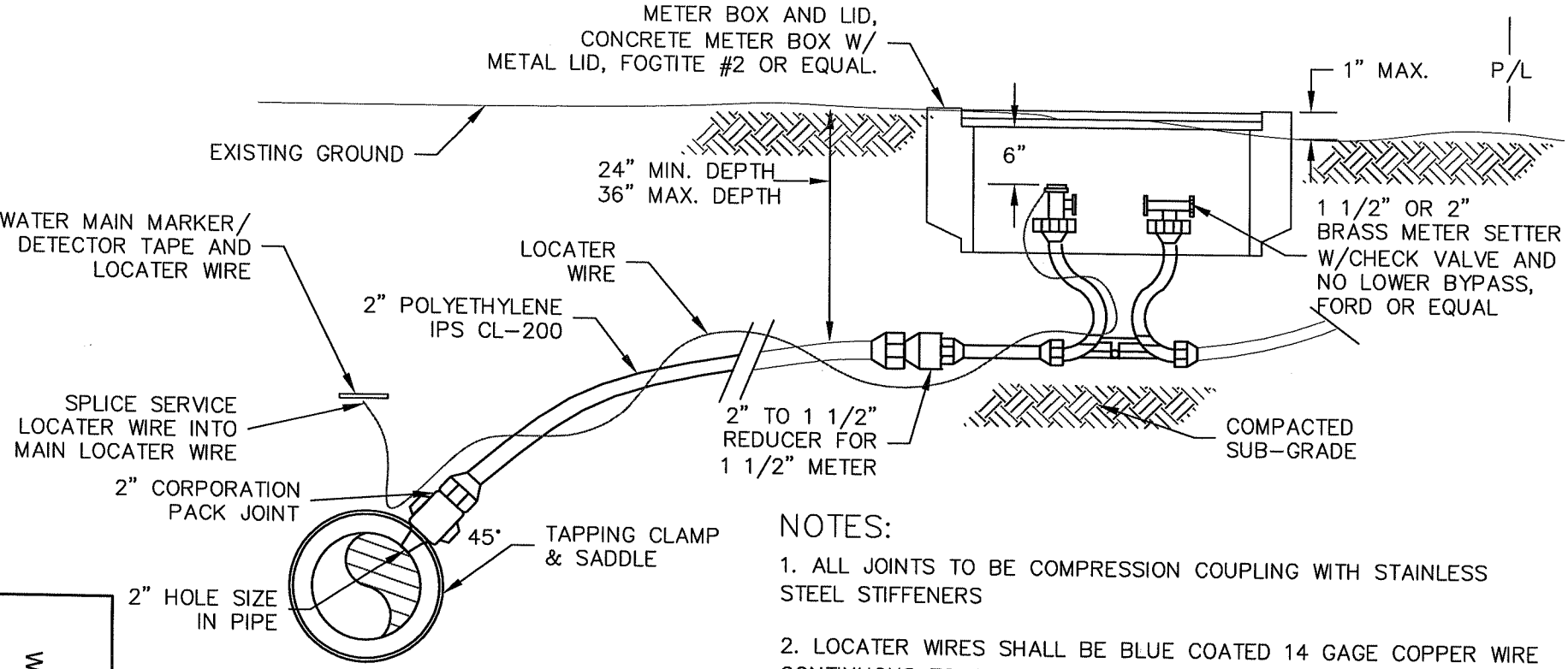
SINGLE SERVICE PLAN



DOUBLE SERVICE PLAN

3/4" & 1" WATER SERVICES	FWD-501
UPDATED: 11/18/2003	FREELAND WATER DISTRICT STANDARD PLAN

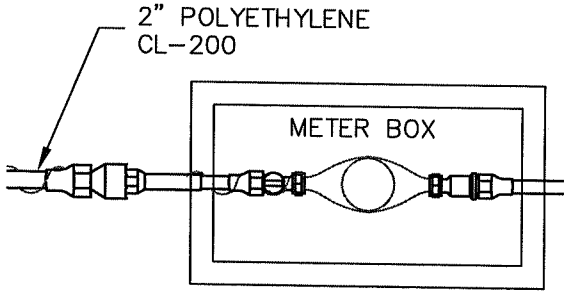
FWD-501



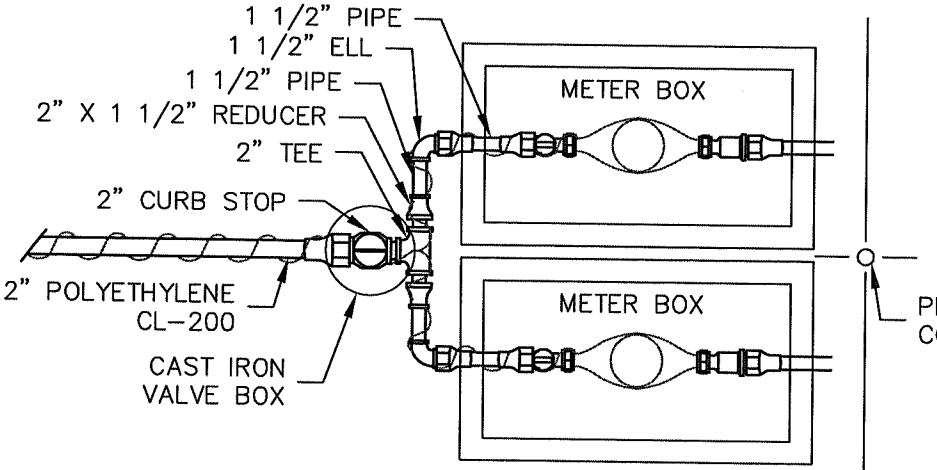
NOTES:

1. ALL JOINTS TO BE COMPRESSION COUPLING WITH STAINLESS STEEL STIFFENERS

2. LOCATER WIRES SHALL BE BLUE COATED 14 GAGE COPPER WIRE CONTINUOUS TO ABOVE GROUND ACCESS POINTS (METERS & HYDRANTS) SPLICES IN WIRE, IF NEEDED, SHALL BE MADE WITH WATERPROOF SPLICE KITS.



SINGLE SERVICE PLAN



DOUBLE SERVICE PLAN

1 1/2" & 2" WATER SERVICES

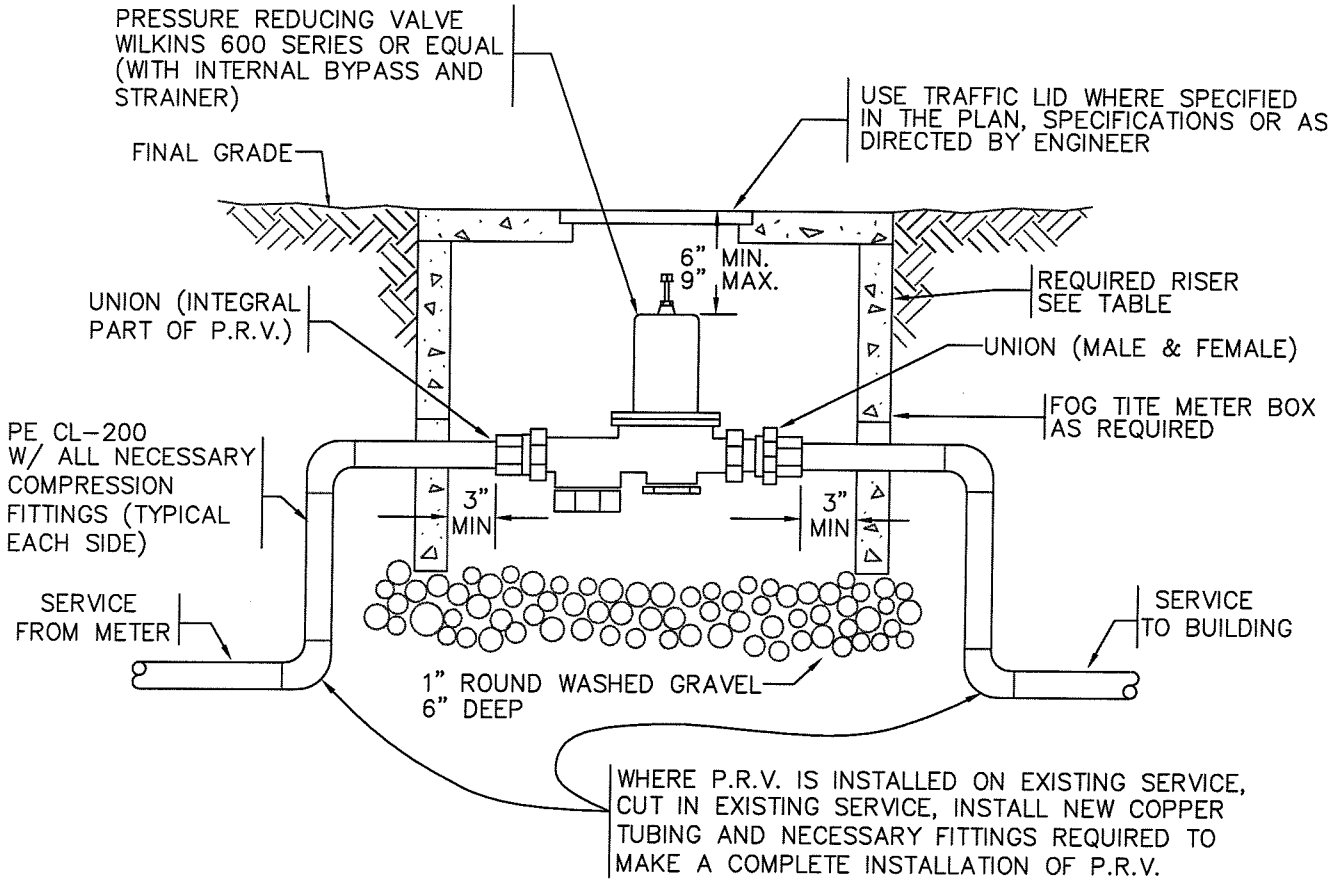
UPDATED: 11/18/2003

FREELAND WATER DISTRICT STANDARD PLAN

FWD-502

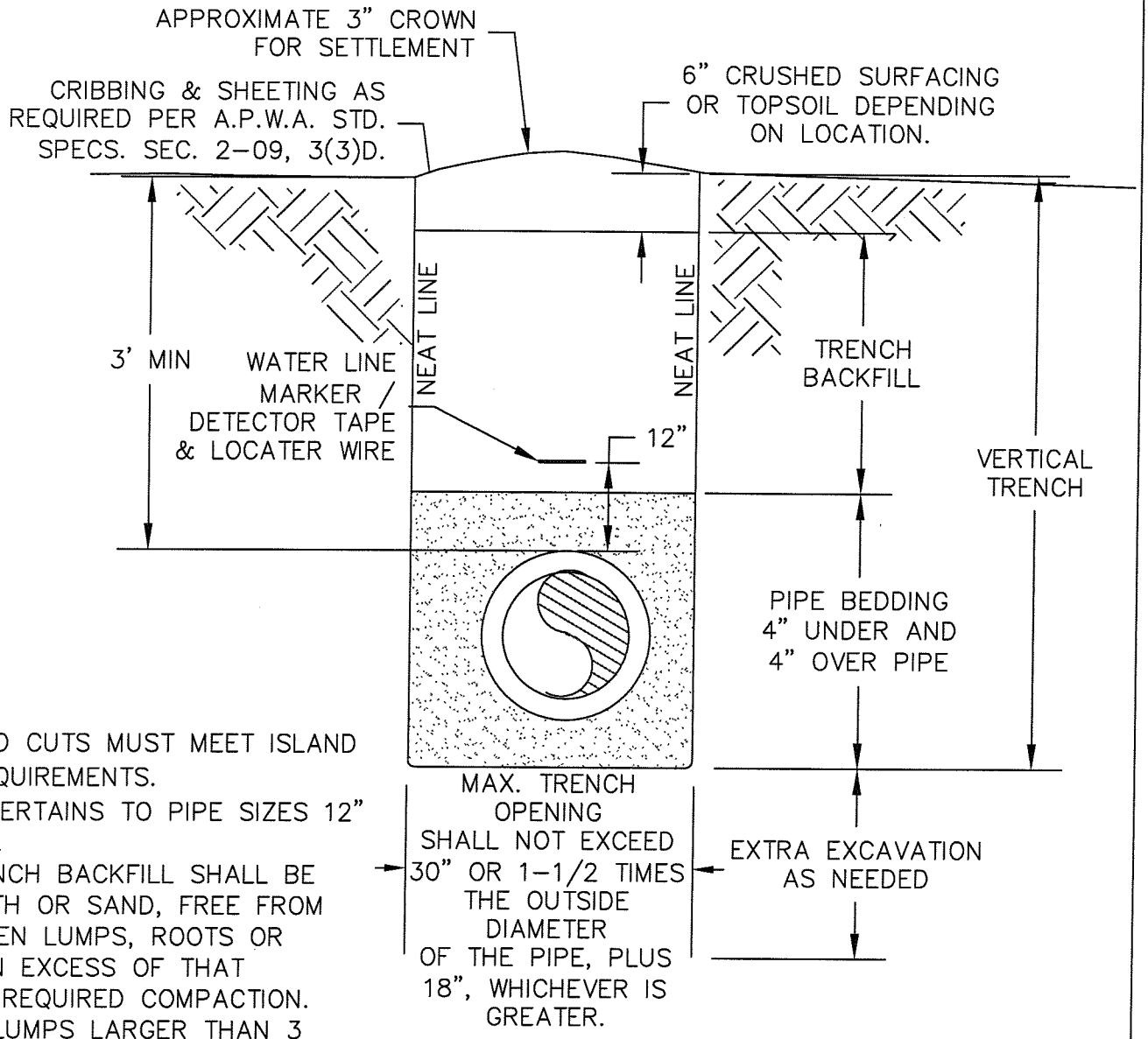
FWD-502

P.R.V. SHALL HAVE AN INTEGRAL BYPASS



P.R.V. SIZE	FOG TITE METER BOX NO.	RISER REQUIRED
2"	2	12"
1 1/2"	2	12"
1 1/4"	1	6"
1"	1	6"
3/4"	1	4"
1/2"	1	4"

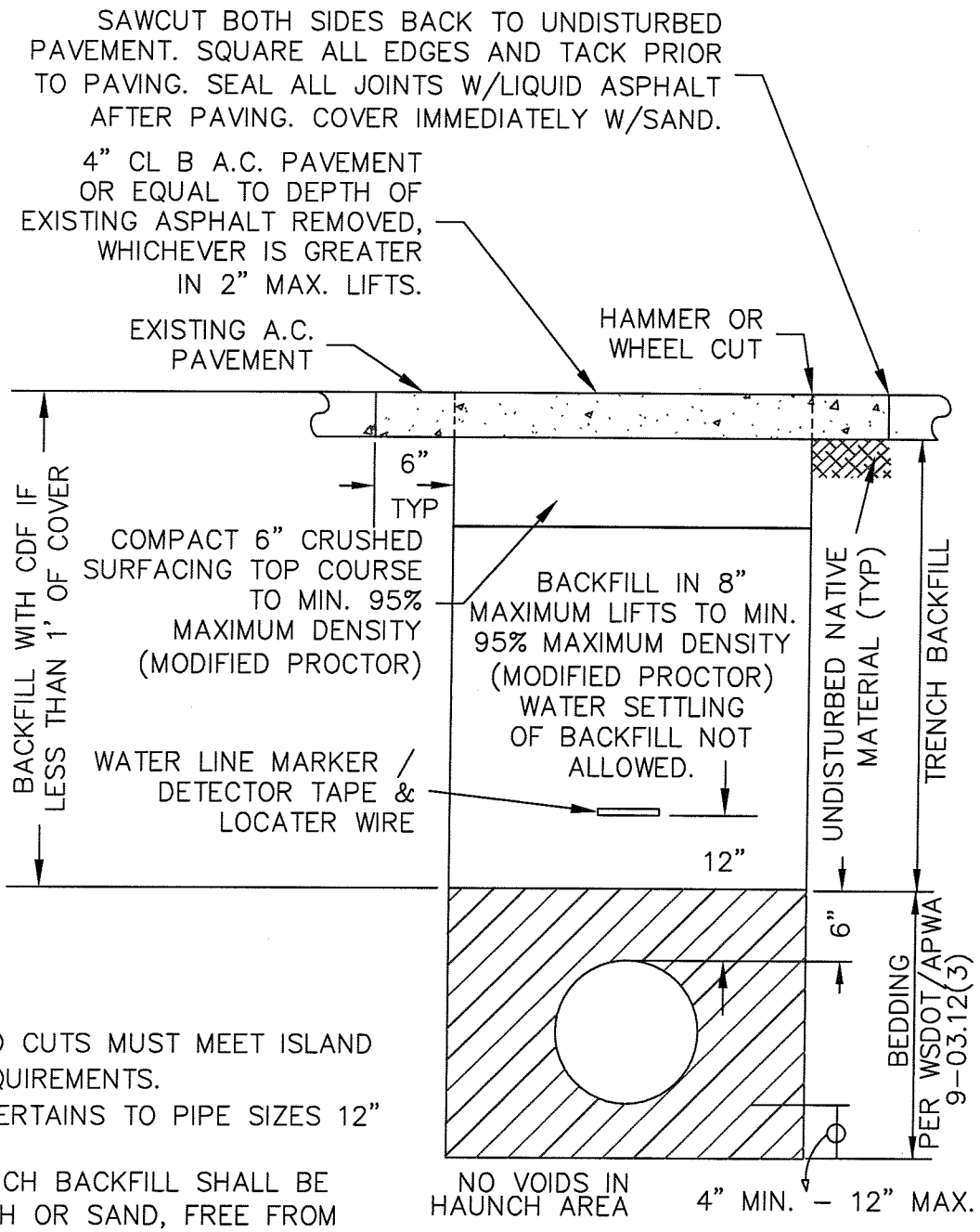
INDIVIDUAL PRESSURE REDUCING VALVE ASSEMBLY RESIDENTIAL	FWD-503
UPDATED: 11/05/2003	FREELAND WATER DISTRICT STANDARD PLAN



NOTES:

1. ALL ROAD CUTS MUST MEET ISLAND COUNTY REQUIREMENTS.
2. DETAIL PERTAINS TO PIPE SIZES 12" AND UNDER.
3. ALL TRENCH BACKFILL SHALL BE CLEAN EARTH OR SAND, FREE FROM CLAY, FROZEN LUMPS, ROOTS OR MOISTURE IN EXCESS OF THAT PERMITTING REQUIRED COMPACTION. ROCKS OR LUMPS LARGER THAN 3 INCHES MAXIMUM SHALL NOT BE USED FOR PIPE ZONE BACKFILL.
4. PIPE ZONE BEDDING PER WSDOT/APWA.
5. USE OF NATIVE MATERIAL FOR BACKFILL MAY BE APPROVED BY THE DISTRICT.
6. LOCATER WIRES SHALL BE BLUE COATED 14 GAGE COPPER WIRE CONTINUOUS TO ABOVE GROUND ACCESS POINTS (METERS & VALVES) SPLICES IN WIRE, IF NEEDED, SHALL BE MADE WITH WATERPROOF SPLICE KITS.

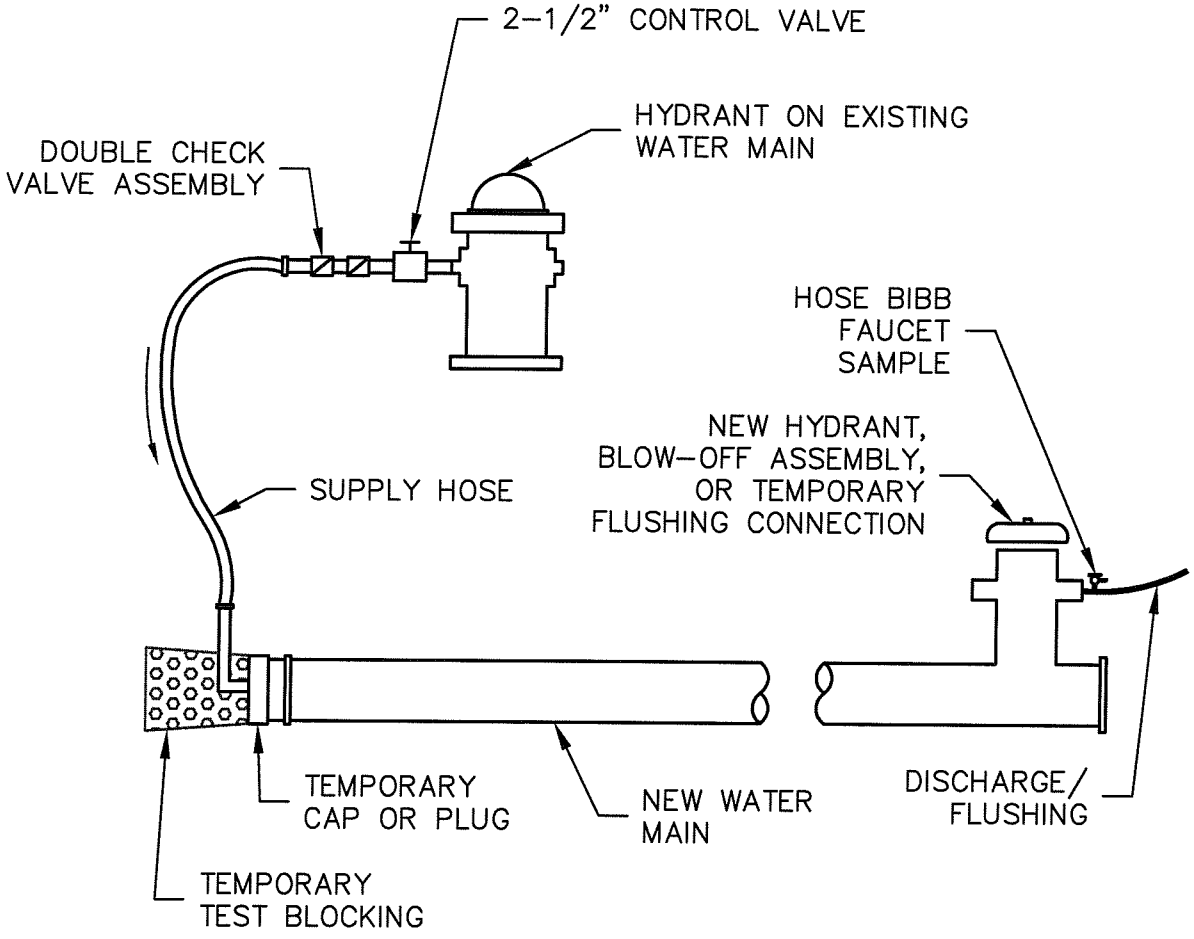
TRENCH SECTION NON-PAVEMENT	FWD-601
UPDATED: 11/18/2003	FREELAND WATER DISTRICT STANDARD PLAN



NOTES:

1. ALL ROAD CUTS MUST MEET ISLAND COUNTY REQUIREMENTS.
2. DETAIL PERTAINS TO PIPE SIZES 12" AND UNDER.
3. ALL TRENCH BACKFILL SHALL BE CLEAN EARTH OR SAND, FREE FROM CLAY, FROZEN LUMPS, ROOTS OR MOISTURE IN EXCESS OF THAT PERMITTING REQUIRED COMPACTION. ROCKS OR LUMPS LARGER THAN 3 INCHES MAXIMUM SHALL NOT BE USED FOR PIPE ZONE BACKFILL.
4. PIPE ZONE BEDDING PER WSDOT/APWA.
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TRENCH SECTION ASPHALT	FWD-602
UPDATED: 11/18/2003	FREELAND WATER DISTRICT STANDARD PLAN



NOTES:

1 THE FILLING OF MAINS SHALL BE DONE ONLY UNDER THE SUPERVISION OF THE DISTRICT.

2 AN APPROVED BACKFLOW PREVENTION ASSEMBLY SHALL BE INSTALLED BETWEEN THE EXISTING AND NEW WATER LINES DURING DISINFECTION AND FLUSHING OF NEW WATERMAIN.

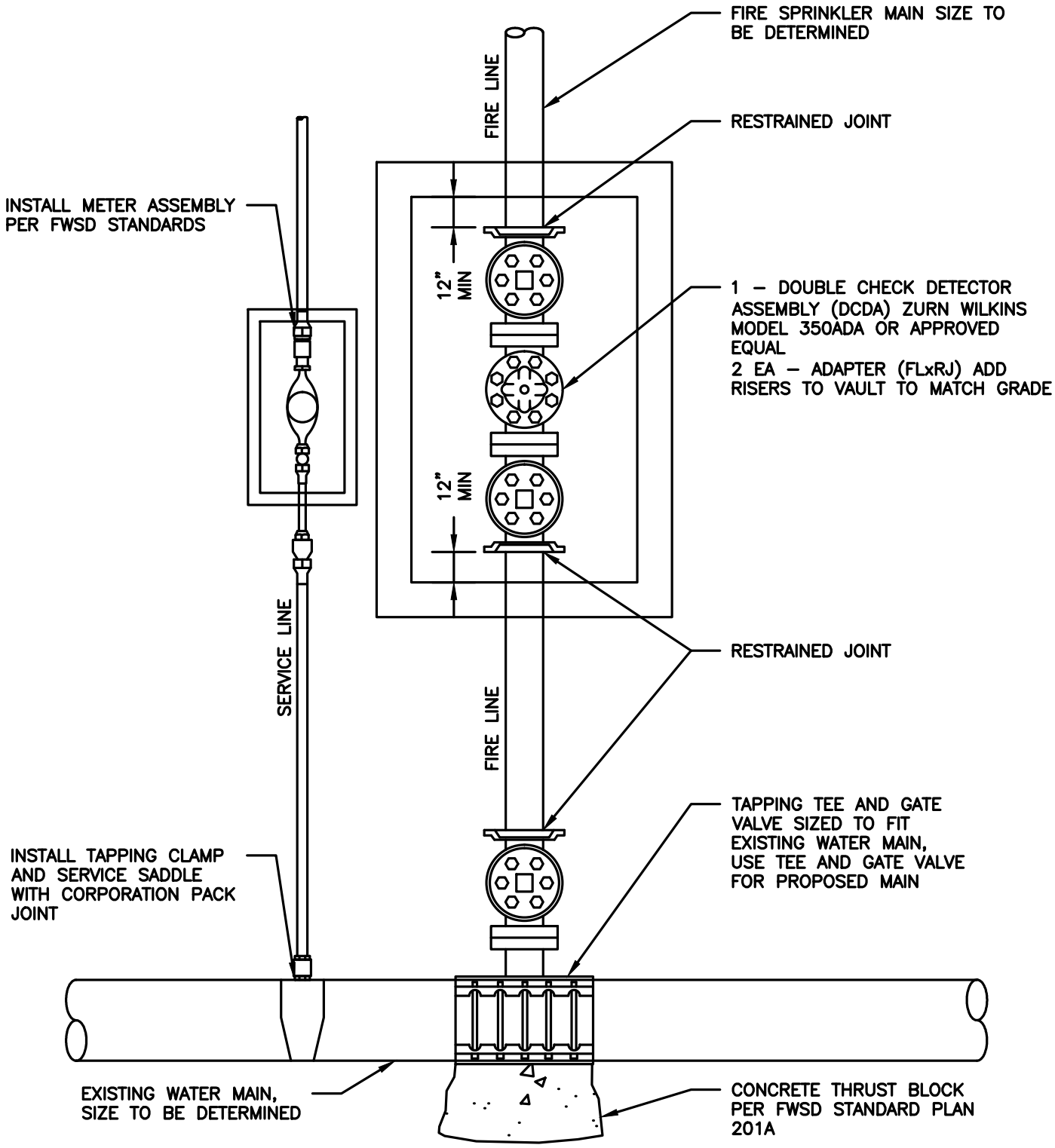
3 THE BACKFLOW PREVENTION ASSEMBLY AND SUPPLY HOSE MUST BE DISCONNECTED DURING HYDROSTATIC PRESSURE TESTING OF THE NEW MAIN.

4 THE NEW WATERMAIN SHALL BE CONNECTED TO THE EXISTING SYSTEM ONLY AFTER NEW MAIN IS FLUSHED, DISINFECTED AND SATISFACTORY BACTERIOLOGICAL SAMPLE RESULTS ARE OBTAINED.

5 THE INTERIORS OF ALL PIPES AND FITTINGS TO BE USED IN FINAL CONNECTION MUST BE SWABBED OR SPRAYED WITH A 5% AVAILABLE CHLORINE SOLUTION.

6 ALL BEING FLUSHED CONTAINING CHLORINE SHALL BE DE-CHLORINATED PER EPA REQUIREMENTS.

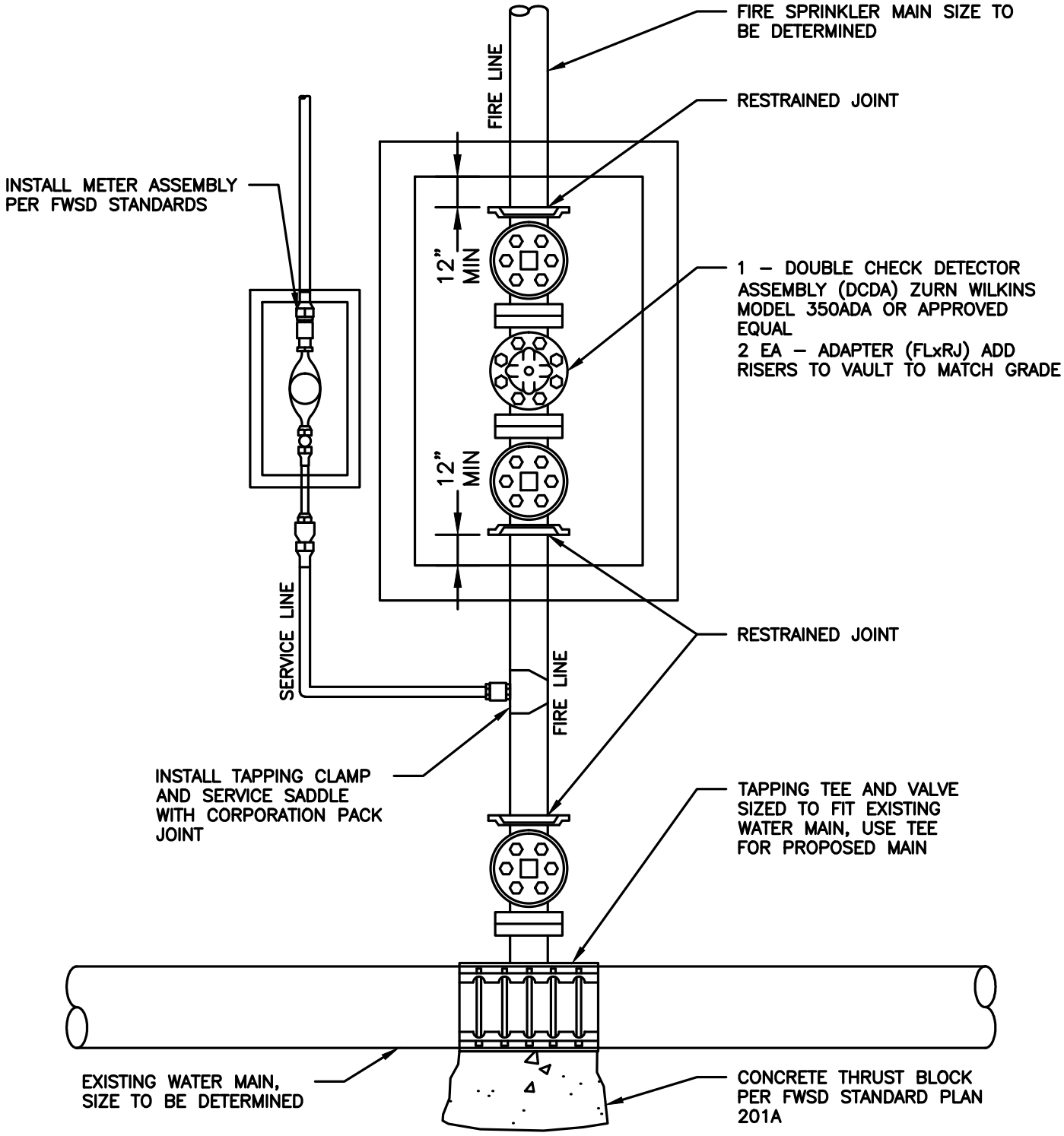
FILLING NEW WATER MAINS	FWD-701
UPDATED: 11/18/2003	FREELAND WATER DISTRICT STANDARD PLAN



NOTES:

1. PROVIDE STEP/LADDER IF MORE THAN 3 FEET DEEP.
2. PROVIDE DRAIN TO DAYLIGHT.
3. PROVIDE PIPE STANTIONS – ADJUSTABLE, BOLTED TO FLOOR. 12" MIN CLEARANCE TO FLOOR REQUIRED.
4. SELECT VAULT TO FIT ASSEMBLY.

FIRE SPRINKLER MAIN DOUBLE CHECK DETECTOR ASSEMBLY	FWSD-801A
UPDATED: 2/12/2015	FREELAND WATER DISTRICT STANDARD PLAN



NOTES:

1. PROVIDE STEP/LADDER IF MORE THAN 3 FEET DEEP.
2. PROVIDE DRAIN TO DAYLIGHT.
3. PROVIDE PIPE STANTIONS – ADJUSTABLE, BOLTED TO FLOOR. 12" MIN DISTANCE TO FLOOR REQUIRED.
4. SELECT VAULT TO FIT ASSEMBLY.
5. THIS CONFIGURATION IS ALLOWED ONLY WITH DISTRICT APPROVAL

FIRE SPRINKLER MAIN DOUBLE CHECK DETECTOR ASSEMBLY W/ POTABLE WATER BYPASS	FWSD-801B
UPDATED: 2/12/2015	FREELAND WATER DISTRICT STANDARD PLAN

THE FREELAND WATER AND SEWER DISTRICT
PRELIMINARY SERVICES AGREEMENT
Owner/Developer Extension

PREFACE: It is the policy of the Freeland Water and Sewer District(District) that new development projects within the District that require new water main extensions be conducted without cost or expense to the Districts' current subscribers and customers who do not directly benefit from such water main extensions. Basically, the District's time and expense incurred servicing such projects are to be paid by the Owner/Developer who benefits from it and whose project requires it.

The undersigned Owner/Developer hereby makes application to the District, to commence the process of installing an Owner/Developer Water Main Extension within the District. This application is made with the following agreements and understandings between the parties:

1. COST RESPONSIBILITY: The Owner/Developer shall be responsible for payment of all costs associated with the subject water main extension project, including, but not limited to, design, permitting, and development and all costs incurred or paid by the District for services provided in the furtherance of the project.

2. District's Certified Operator can be reached by phone at 360-331-5566.
3. DISTRICT BILLINGS: The District shall bill to the Owner/Developer, who herein agrees to pay, all costs incurred by the District related to the subject project, including but not limited to,

    a. Application review and processing, including the preparation and provision of relevant documents, maps, etc.
    b. Review of project's plans, & specifications prepared by a Professional Civil Engineer.
    c. Administration, billing and accounting,
    d. Project management, inspection, testing, certification, etc.
    e. Professional and legal consultation, (if necessary)
    f. Preparation and/or review of all associated project documents such as easements, conveyances, recovery contracts, etc., and
    g. All other costs, fees, and expenses associated with the project that may be incurred by the District.

    Billings from the District to the Owner/Developer will generally be on a monthly basis. Billings will be detailed and disclose the full extent of services, time, expenses and materials involved.

    EXPOSITORY NOTE: The District has engaged in such projects in the past with other parties. Depending on the degree of services requested by Owner/Developer, the total billings of the District throughout said processes for all services by all District personnel at the end of the process have ranged from a low of $1500.00 to a high of $4,500.00 depending on the scale of the project. This is provided for information purposes only recognizing that each situation may vary based on the needs of different Owner/Developers.

4. CONSULTATIONS SUBJECT TO BILLING: All consultations between the Owner/Developer and personnel or consultants of the District whether by telephone, electronic media, or in person are subject to billing by the District as described above, for these purposes, the term Owner/Developer means and includes, Owner/Developer's consultants, engineers, architects, contractors, and/or any agents or employees of Owner/Developer, or parties engaged by the Owner/Developer.

5. AGREEMENT AND/OR CONVEYANCE DOCUMENTS: Any Easements, and/or documents of conveyance or Recovery Contracts, in such form as approved by the District, shall be obtained and/or provided by the

Owner/Developer at his/her sole cost and expense; and a true copy of such documents shall be delivered to the district upon satisfactory completion of the project.

In the interests of time and efficiency, review and exchange of documents throughout this process shall be via electronic media (E-mail and/or E-mail Attachments).

Owner may request preparation of such documents by the District with cost billable to Owner/Developer.

6. DISTRICT CONTACT AND AUTHORIZED AGENT: The District will be represented in throughout this process at:

Freeland Water District
5421 Woodard Ave
PO Box 222
Freeland, WA 98249.

phone: 360-331-5566
fax: 360-579-2058
E-mail: info@freelandwsd.com

The District's agent shall work cooperatively with Owner/Developer in providing relevant requested services, information, plans, and data within reasonable timeframes as requested by Owner/Developer.

7. OWNER/DEVELOPER AUTHORIZED AGENTS AND PARTIES: Owner/Developer shall at all times keep the District aware of all parties with authority to negotiate for and on behalf of the Owner/Developer commencing with such listing herein below:

Owner/Developer Full Name: _____
Owner/Developer Address: _____
_____
_____

PROJECT/PARCEL Identification: Plat/Development Name – _____
Assessor's Parcel Nos. _____
_____

Witness my/our hands in agreement on the date(S) indicated.

SIGNATURE: _____
Date
Owner/Developer (Print name and title): _____

SIGNATURE: _____
Date
Owner/Developer (Print name and title): _____

APPROVAL: Freeland Water and Sewer District:

_____
By: Title: Date

WHEN RECORDED RETURN TO:
The Freeland Water and Sewer District
P. O. Box 222
Freeland, WA, 98249

THE FREELAND WATER AND SEWER DISTRICT
DEVELOPER EXTENSION AGREEMENT

The undersigned, _____

_____

(hereafter referred to as "Developer"), hereby makes application to Freeland Water and Sewer District, Island County, Washington, (Hereafter referred to as the District), for permission to construct and install an extension in the public right-of-way and/or on easements which are subject to the approval of the District, and to connect the same to the District's water distribution systems, and makes the following representations and agreements, to wit:

1. LOCATION OF EXTENSION:

The proposed extension will be installed in public road rights-of-way and/or easements and/or on other approved rights-of way which may now exist or be hereafter created, and shall be for the use and benefit of the property hereafter described and, upon acceptance thereof, the District, which property is owned by the Developer and/or other owners who are contributing to the costs of said extension; said other owners join in this application and are referred to as "additional owners". That subject property is described as follows:

DESCRIPTION OF PROPERTY
[Insert or attach Legal Descriptions with County Assessor Parcel Nos.]

Assessor's Parcel No.: more specifically described as: _____

Legal Description: (Insert here or say: " See Attached Exhibit A" and attach.)

_____
_____
_____
_____
_____

All Situate in the County of Island State of Washington.

2. DESCRIPTION OF EXTENSION or IMPROVEMENT PROJECT: The proposed extension will consist of approximately _____ lineal feet of water pipe and appurtenances and shall be installed in accordance with plans and specification provided by the District, and in accordance with the standards, specifications, and conditions for construction of extensions to the water system adopted by the District, the terms and conditions of which are, by this reference, made a part hereof as though set forth in full herein.

3. COST RESPONSIBILITY: The Developer shall be responsible for payment of all costs associated with the Project including, but not limited to, design, permitting, and development of the subject Project.

4. DISTRICT BILLINGS: The District shall bill to the Developer all costs incurred by the District for services, including but not limited to application review and processing, project design, administration, review and amendment of project plans and specifications, project management, inspection, testing, certification, professional and legal consultation, preparation and/or review of all associated documents such as easements, conveyances, recovery contracts, etc., and all other costs, fees, and expenses associated with the Project incurred by the District. Billings from the District to the Developer shall generally be on a monthly basis, and failure of the Developer to pay such billings shall be grounds for project cessation, and/or refusal of the District to approve or accept the completed project.

5. CONSULTATIONS SUBJECT TO BILLING: Developer agrees and is hereby notified that all consultations between Developer and personnel or consultants of the District whether by telephone, electronic media, or in person are subject to the Billing by the District as described above. For these purposes, the term Developer means and includes Developer's Project Engineer, Contractor, and/or any agents or employees of Developer, Project Engineer, or contractor.

6. DEVELOPER'S ENGINEER: Developer is responsible for engaging the services of a professional engineer, licensed and certified in the state of Washington, to design the proposed main extension or improvement, manage and supervise its construction, and certify to the District's satisfaction that the system improvements have been installed according to approved plans and specifications and meet or exceed all applicable testing requirements of the District.

7. DISTRICT RULES APPLY: This Agreement and the Total Project shall be governed by all Rules, Regulations Specifications, and Codes of the District, copies of which shall be supplied to the Developer upon request or at the time of Application approval.

8. EVIDENCE OF INSURANCE : Developer and/or Developer's Agent(s), contractor(s), or Consultant(s) shall, upon request of the District, provide the District with written evidence of insurance covering public liability and property damage to third parties, in which the District and its agents, whether employed or contracted by the District shall be named insured. Failure of the District to require such evidence of insurance shall in no way constitute a waiver of any right of the District to do so in any other projects.

9. INDEMNIFICATION & HOLD HARMLESS: Developer hereby saves and holds the District harmless from and shall indemnify the District against any and all claims, demands, actions or liabilities arising out of or in connection with Developer's conduct, work, and execution, throughout the course of the Project, and from any acts or omissions of the District, its agents, consultants, employees, or subcontractors, regardless of when and where such occur.

   Developer shall indemnify the District in those cases where damages have been caused by the concurrent negligence of the Developer and the District, their agents, subcontractors or employees. In those cases, the liability of Developer for indemnification shall be limited to that portion of the damages caused by the negligence of Developer, its agents, engineer(s), contractors, subcontractors or employees.

   In all other cases (except those cases where the damages were caused by the sole negligence of the District), Developer shall totally indemnify the District whether or not Developer was solely responsible for the damages. The Developer has no duty to indemnify the District where damages were caused by the sole negligence of the District.

   Developer hereby expressly waives its immunity under RCW Title 51 (Industrial Insurance) with reference to its duties to the District arising under this indemnity Agreement. This waiver was mutually negotiated by the parties.

10. DAMAGE: Any expenses incurred by the District due to damage caused to the existing water system by the Developer shall be billed to the Developer on an actual time and materials basis. Developer is responsible for prompt payment of said billings.

11. EASEMENTS AND CONVEYANCE: Any required easements and/or documents of conveyance in such form as approved by the District, shall be obtained and/or provided by the Developer at his/her sole cost and expense; and a true copy of such easement and conveyance documents shall be delivered to the district upon completion of construction and prior to acceptance of said extension by the District in accordance with the provisions hereof, the original easement shall be delivered to the District. The Developers shall provide all necessary easements at their sole cost regardless of changes in the contract plans. The District at its sole option may require a warranty or evidence of title and a title insurance policy, establishing and insuring clear title being conveyed to the District.

12. PERMITS: All necessary permits from any governmental agency with jurisdiction shall be obtained by Developer.

13. CONTRACTORS, SUBCONTRACTORS, LABOR, AND MATERIAL : The District has a substantial interest in determining that the extension is to be constructed and connected to the existing system of the District in good workmanlike manner, and therefore, the Developer and/or additional owners agree to submit the name of all contractors, subcontractors, material workers and suppliers, or in the event that the owner or additional owners are contractors, then a statement that said Developer or additional owners will perform said improvement, and the District reserves the right to approve or disapprove of the same, which approval the District will not unreasonably withhold; however, in determining whether said Developer, additional owner, contractor, subcontractor, material workers, or laborers are or are not satisfactory, the District can take into consideration said improvement, available resources, financial ability, prior work performed by said party for or on behalf of the District, and the recommendation of the District. Said name shall be with respect to said real property described in this agreement and, if said party is not acceptable to the District, the District will so notify the Developer within 15 days after notification is given to the District of the name of said party whereupon the developer and/or additional owner shall resubmit alternate and said alternates shall likewise be subject to the same approval, upon the same criteria as the original party submitted, and notification will be given by the District within the same period of time specified. Project contractors shall warranty the workmanship and materials of the Project for a period of at least 1 year from acceptance by the District, or a longer period if specified by the District.

14. GRADING OF ROADS: Developer shall grade all roads to the design subgrade elevation prior to the start of construction and shall advise the District in writing during construction of any changes which may be contemplated. If the Developer changes the subgrade elevation or the road after completion of the water main construction, or any part thereof, Developer agrees to raise or lower the water main and/or water services as required by the new subgrade elevation at no cost to the District. This obligation shall remain in full force until the District or other municipality releases the right-of-way or road construction bond or bond of other description relating the Developer's obligation to the District or County in respect to the completion of roads within the area.

15. CONNECTION TO THE DISTRICT'S WATER SYSTEM: Upon completion of the water main extension project Developer shall notify the District and request approval to connect said new mains to the existing mains of the District to facilitate final testing and proceed to final approval and acceptance of the improvements by the District. All connections to the existing system and all testing of the new lines must be with the authorization of and in the presence of the applicable authorized representatives of the District. Once the extension mains of the project are connected to the District Water system the opening of valves and use of water from the District's system will be done only by the District and/or its authorized representatives or such parties approved by the District. The District reserves the right to require that connections be made by line tap where disruption of water service to other users would, in the opinion of the District, to be unduly detrimental.

16. CONDITION PRECEDENT: Compliance with all the terms and conditions of this Developer Extension Agreement and the adopted Rules of the District shall be a condition precedent to the District's acceptance of the completed project. The District shall be under no obligation to allow connections to the water system of any portion of the real property described in this application until all applicable fees, billings, and charges due the District have been paid. This includes any Recovery Contract charges that may be applicable to the subject property, any Service installation (hook-up) fees, surcharges, or other payments arising from this agreement or required by the adopted Rules and regulations of the District.

    The District shall not be obligated to provide water service to the property herein described nor any other properties from said improvements if construction by third parties of facilities to be deeded by the District have not been completed and title accepted by the District; if said third party facilities are necessary to provide water service to the herein described property.

17. LIMITATION OF PERIOD OF ACCEPTANCE: Upon Project completion and acceptance by the District, The District will accept title to the system. Acceptance of title to said extension shall be made in writing by the Board, of the District, or its designee e.g. "Project Manager". Prior to such acceptance, a completed executed Bill of Sale, Deed, or other document of conveyance deemed suitable by the District that transfers title to said extension, shall be delivered to the District together with all necessary easements and/or covenants. Acceptance of title by the District shall cause said extension to be subject to the control, use and operation of the District and make applicable all rules regulations and conditions of service and charges therein specified.
Projects may be conducted, completed and accepted by the District in a phased manner as may be deemed appropriate by the District at its discretion.

18. BONDING AND/OR WARRANTY: Acceptance by the District shall not relieve the Developer of the obligations to correct defects in labor and/or materials. Prior to or after acceptance of title by the District, the District may require that the Developer, furnish a maintenance bond, or other surety acceptable to the District, for warranty purposes or for corrective measures to be taken. Any such bond or surety shall continue in force from the date of acceptance of said extension for a period of at least two (2) years. The bond/surety shall require the Developer and/or the surety agent to correct any defects in labor and materials which arise in said system for a period of at least two (2) years from the date of acceptance of the system and transfer of title. Said surety shall be in an amount equal to ten percent (10%) of the total actual costs of the water main extension project, unless otherwise agreed by the District.

19. LIMITATION OF PERIOD OF ACCEPTANCE: The extension or improvement project shall be completed and accepted by the District within three years of date of acceptance and approval of this application by the District. If the project is not completed and accepted within said three years the Developer's rights under this agreement shall cease and no additional water services shall be connected to such extension unless and until Developer makes a new application or the District consents to the renewal of the existing application. The Developer shall pay all additional costs associated with any new or renewed application as determined by the District.

20. WARRANTY OF AUTHORITY: The undersigned Developer and additional owners warrant that they constitute the owners of all of the real property that is the subject matter of this agreement and, upon request of the District, agree to provide title insurance or preliminary title report at the District's option, establishing to the satisfaction of the District that the parties executing this application constitute the owners of all the real property described and have the authority to execute this agreement with respect to said real property.

21. COMMITMENT TO SERVICE AFTER ACCEPTANCE: This document does not, by itself, constitute a final commitment to provide service to individual lots, or units on the subject property of the Developer. Specific commitment by the District to individual lot or unit service is not perfected until such time as all applicable Service Installation Charges, General Facilities Charges, Local Facilities Charges and Recovery Contract Charges and other applicable provisions in the Rules and Regulations of the District have been satisfied.

22. DEVELOPER/OWNER/CONTRACTOR PERFORMANCE WARRANTY AND GUARANTEE: The undersigned Developer(s), Owner(s), and Contractor(s), do hereby warrant and guarantee the quality and

condition of all workmanship, and materials associated with this project for a period of two (2) years from the date of final approval and acceptance by the Freeland Water and Sewer District.

Developer/Owners herein further warrant the installation of all other utilities and improvements to the extent that water facilities may be affected.

23. CONTRACT DOCUMENTS:

Attached hereto and by this reference incorporated herein are (as applicable) the following:

a. ☐ Rules, regulations, general specifications, and codes of the Freeland Water and Sewer District.
b. ☐ Detail drawings and written instructions
c. ☐ Addenda & Exhibits
d. ☐ Plans & Specifications
e. ☐ General Conditions
f. ☐ Special Provisions

24. APPLICABLE CHARGES, AND OTHER REPRESENTATIONS:

a. Local Facilities Charges:
To be paid after completion of improvements by Owner and approval and acceptance of the new main extension by the District. _____

b. General Facilities Charges and/or ERU Surcharges: _____

c. Recovery Contract charges: _____

d. TOTAL CHARGES associated with this agreement at this time: _____

25. IDENTIFICATION OF APPLICANT PARTIES: Applicants herein consist collectively of the Developer, Owner, and the project Contractor and applicable contact information for each is provided below.

26. PROJECT COMPLETION CHECKLIST: The following is/are needed prior to final completion and acceptance by the District:

a. ☐ Engineer's Certification of project completion in accordance with approved plans.
b. ☐ Engineer's "as-built" drawings and construction Report.
c. ☐ Engineer's Certification of all system testing and compliance; including Pressure & Bacteria testing.
d. ☐ All necessary Easements and conveyances.
e. ☐ Payment of all outstanding project charges and billings.
f. ☐ Cross Connection Control Plan and signed agreement

Developer/Owner Full Legal Name: _____
Responsible Billing Address: _____
and Accounts Payable Contact _____

Other Owners Information (if Different) _____

Contractor Name and contact information _____

Witness my/our hands in agreement on the dates so indicated.

Developer/Owner: _____ Title Date

Additional Owner: _____ Title Date

Contractor: _____ Title Date

Upon compliance with all terms and conditions of this agreement and all rules of the District, the Freeland Water and Sewer District will accept said extension for service, maintenance, and operation.

Acceptance Freeland Water and Sewer District, P. O. Box 222, Freeland, Washington 98249

By: Title:

ACKNOWLEDGMENT:

STATE OF WASHINGTON)
) SS
County of _____)

On this _____ day of _____, 20___, before me, the undersigned, a Notary public in and for the State Of Washington, Duly Commissioned and Sworn, personally appeared _____and _____ To me known and shown to be the parties who executed the foregoing instrument, and acknowledged that _____ signed said instrument as _____ free and voluntary act and deed for the uses and purposes therein mentioned.

Witness my hand and official seal hereto affixed the day and year in this certificate above written.

_____
Notary Public in and for the State of Washington.
Residing at _____.
My Commission Expires on _____.

ACKNOWLEDGMENT:

STATE OF WASHINGTON)
) SS
County of _____)

On this _____ day of _____, 20___, before me, the undersigned, a Notary public in and for the State Of Washington, Duly Commissioned and Sworn, personally appeared _____and _____ To me known and shown to be the parties who executed the foregoing instrument, and acknowledged that _____ signed said instrument as _____ free and voluntary act and deed for the uses and purposes therein mentioned.

Witness my hand and official seal hereto affixed the day and year in this certificate above written.

_____
Notary Public in and for the State of Washington.
Residing at _____.
My Commission Expires on _____.

ACKNOWLEDGMENT:

STATE OF WASHINGTON)
) SS
County of _____)

On this _____day of _____, 20___, before me, the undersigned, a Notary public in and for the State of Washington, Duly Commissioned and Sworn, personally appeared _____, to me known to be the _____ of The Freeland Water and Sewer District, the Washington State Municipal Corporation which executed the foregoing instrument, and acknowledged said instrument to be the free and voluntary act of said Water District for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument for said Water District.

Witness my hand and official seal hereto affixed the day and year in this certificate above written.

_____
Notary Public in and for the State of Washington.
Residing at _____.
My Commission Expires on _____.

When Recorded Return To:
Freeland Water and Sewer District
Po Box 222
Freeland, WA., 98249-0222

EASEMENT
And
WATER FACILITY CONVEYANCE & ACCEPTANCE

Grantor(s):_____

_____

Grantee: Freeland Water and Sewer District, a municipal corporation of the State of Washington.
Abbreviated legal Description: (Section, Township & Range)_____

_____

_____

Complete Legal Descriptions: See Attached Exhibit "A"
Assessor's Parcel Number(s)_____
Related Parcels:_____
Reference Numbers of Documents Assigned or Released:_____

This agreement is made on the dates herein below acknowledged by and between Grantors, _____

_____

And Grantee, Freeland Water and Sewer District, a municipal corporation of the State of Washington.

Recitals:

Whereas, Grantors herein are the owners of the following described property, to wit: See attached Exhibit "A" Legal Description of property Attached.

WHEREAS, Said above described Exhibit "A" and the adjacent County Right of Way known as _____contain certain water distribution lines and associated fixtures, valves, hydrants, and other facilities, all hereinafter referred to as the "Water Facilities" constructed by the Grantor to service its development of said parcel; and

Whereas, said "Water Facilities" have been installed, tested, and certified in accordance with the rules, regulations and specifications of the Grantee, Freeland Water and Sewer District; and

Whereas, The Grantors now wish to convey said "Water Facilities" together with appurtenant easements to the Grantee in order to have Grantee assume responsibilities for maintenance and operation of said Water Facilities; and

Whereas, The Grantee, Freeland Water and Sewer District, does accept by virtue of this agreement, full conveyance, ownership, and maintenance responsibilities of said "Water Facilities" and Easement(s) under its sole jurisdiction:

Now Therefore, The Grantors herein for and in consideration of Grantee's acceptance of said "Water Facilities" and assumption of future maintenance and operations responsibilities, and other valuable consideration, receipt of which is hereby acknowledged, declare, grant, warrant and convey the "Water Facilities: and Easement(s) described herein and agree as follows:

1. FACILITIES CONVEYANCE: The Grantors hereby grant and convey to the Grantee, full title and interests in said "Water Facilities: including among other things, some _____ lineal feet of ___ inch _____water mains, with fire hydrant assembly, blow-off assembly, valves, fittings, meter boxes, and other associated parts located within the county road right-of-way and the Easement herein conveyed.

2. EASEMENT CONVEYANCE AND DESCRIPTION: Grantors do hereby establish, and convey a non-exclusive Easement for ingress, egress, and utilities over, under, and upon that area lying 10 feet on either side of and around the water main and fire hydrant assembly as such are physically located on said Exhibit "A". In the event of any conflicting descriptions, such physical location shall govern the extent of area encompassed by this easement including the location of the Fire Hydrant Assembly located beyond the _____ _____ Right-of Way margin, and specifically describes as follows: That area lying 10 feet on either side of the following described centerline: See Exhibit "B" Legal description of easement attached.

3. DURATION: said Easement shall run in perpetuity with the land upon which it is located and provide Grantees all rights to install, operate, and maintain, water utility pipes and facilities as may now or in the future exist.

4. GRANTOR'S USE OF EASEMENT: The Grantors herein, their heirs, successors or assigns, shall not interfere with, impede, or obstruct the use of said easement for its intended purposes by the Grantees. Grantors may make no use of the water facilities within said easements not in any way alter, re-locate, or replace said facilities except with the express permission of the Grantee. Grantors may otherwise use said easement area jointly with Grantees for ingress, egress, and utilities.

5. GRANTOR'S CONNECTION: This conveyance of easement and water facilities confers no rights to Grantors to connect to or make use of said water facilities

and/or water of the Freeland Water and Sewer District except in accordance with the District's adopted rules and regulations as generally applicable to other lands within the District.

6. GRANTOR'S WARRANTY OF OWNERSHIP: Grantors warrant that they are owners of the land herein described with full rights to convey the easement described above. Grantors also warrant their "free and clear" ownership of the Water Facilities being conveyed and that there are no present or potential claims, liens, or judgments related to said facilities or their construction. Grantors hold Grantee harmless and indemnify Grantee against any such claims.

7. GRANTORS' WARRANTY OF WORKMANSHIP & MATERIALS: The Grantors, as "developers" of the water facilities being conveyed, do hereby warrant and guarantee the quality, conditions, and operational capacity of said water facilities for a period of two (2) years from the effective date of this acceptance agreement.

8. EFFECTIVE DATE: This conveyance of easement and facilities shall take effect as of the date this document is recorded with the Auditor of Island County, Washington.

9. JOINT USE OF EASEMENT: In exercising the rights herein granted, the Grantees And Grantors herein, their heirs, successors, and assigns, may pass and repass over said easement, and may conduct such construction practices necessary to make, maintain, operate, and use, said Easement for its intended purposes.

10. GRANTEE EXEMPT FROM ROAD MAINTENANCE: The Grantee herein is not responsible for any maintenance, operation or repairs of any roadways or other utilities or facilities which may also lie within the easement area herein conveyed, except for such repairs as may be needed resulting from work of the Grantee on its water facilities.

11. CONTINUITY: This Easement and covenants, and these provisions, shall in their entirety, run with the land and shall be appurtenant thereto, and shall be binding on all parties having or acquiring any right, title, or interest in the land described herein and all legal subdivisions thereof or any part thereof, and shall inure to the benefit of each owner thereof and be binding thereto.

12. SEVERABILITY: In the event that any part of this Easement and Conveyance document and/or included covenants shall be found invalid or inapplicable by a court of competent jurisdiction, such finding shall in no way effect any other parts or remainder of same.
13. COUNTERPARTS: This document may be signed in counterparts and the original assembled as a single document with duplicate pages where necessary, prior to recording.

Witness my/our hand(s) on the dates herein below acknowledged.

SIGNATURES GRANTOR: _____

_____ _____

By: _____ By: _____

Title: _____ Title: _____

_____ _____

By: _____ By: _____

Title: _____ Title: _____

FINAL ACCEPTANCE:

All requirements of the Freeland Water & Sewer District for acceptance of easements and facilities for incorporation into the water system of the District having been met, final approval and acceptance of the facilities constructed by _____

_____

is hereby granted.

GRANTEE'S ACCEPTANCE: The Freeland Water and Sewer District

_____ _____

By: _____ By: _____

Title: _____ Title: _____

_____

By: _____

Title: _____

ACKNOWLEDGEMENT:

STATE OF WASHINGTON)
)
County of ISLAND)

On this _____ day of _____, 20____, before me, the undersigned, a Notary public in and for the State of Washington, Duly Commissioned and Sworn, personally appeared _____ _____and _____ _____, the _____ and _____ of _____ a Washington Corporation which executed the foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation for the uses and purposes therein mentioned, and on oath stated that they were authorized to execute said instrument for said Corporation.

Witness my hand and official seal hereto affixed the day and year in this certificate above written.

_____
Notary Public in and for the State of Washington
Residing at _____
My Commission expires on _____

ACKNOWLEDGEMENT:

STATE OF WASHINGTON)
)
County of ISLAND)

On this _____ day of _____, 20____, before me, the undersigned, a Notary public in and for the State of Washington, Duly Commissioned and Sworn, personally appeared _____ _____and _____ _____and_____ the _____ _____, _____ and _____ of Freeland Water & Sewer District, the Washington Corporation which executed the foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation for the uses and purposes therein mentioned, and on oath stated that they were authorized to execute said instrument for said Corporation.

Witness my hand and official seal hereto affixed the day and year in this certificate above written.

_____
Notary Public in and for the State of Washington
Residing at _____
My Commission expires on _____

Construction Completion Report

In accordance with WAC 246-290-120(5), a ***Construction Completion Report*** is required for all approved construction projects. Purveyors **must** submit a Construction Completion Report to the Department of Health (DOH) within sixty (60) days of completion and before use of any water system facility. This includes any source, water quality treatment, storage tanks, booster pump facilities, and distribution projects.

Please type or print legibly in ink:

Freeland Water & Sewer District _____ DOH System ID No.: 064508 _____
Name of Water System

_____ DOH Project No.: _____
Name of Purveyor (Owner or System Contact) (if applicable)

_____ Date Construction Documents
Mailing Address PO Box 222 Approved by DOH _____

Freeland WA 98249 (if applicable)
City State Zip

Project Name and Descriptive Title:

Check one:

☐ Entire Project Completed. ☐ Description of Portions Completed.

Complete (Attach additional sheets as needed):

Professional Engineer's Acknowledgment

The undersigned professional engineer (PE), or their authorized agent, has inspected the above-described project which, as to layout, size and type of pipe, valves and materials, reservoir and other designed physical facilities, has been constructed and is substantially completed in accordance with construction documents reviewed by the purveyor's engineer or approved by the DOH. In the opinion of the undersigned engineer, the installation, physical testing procedures, water quality tests, and disinfection practices were carried out in accordance with state regulations and principles of standard engineering practice.

I have reviewed the disinfection procedures ☐ , pressure test results ☐ , and results of the bacteriological test(s) ☐ for this project and certify that they comply with the requirements of the construction standards/specifications approved by the DOH. (Check all boxes that apply that are consistent with the nature of the project.)

This project changes the physical capacity of the system to serve consumers. The system is now able to serve _____ equivalent residential units (ERUs.) ☐ Not applicable

_____
Date Signed

_____
Name of Engineering Firm

PE's Seal

_____
Name of PE Acknowledging Construction

_____
Mailing Address

_____
City State Zip

_____
Engineer's Signature

_____
State/Federal Funding Type (if any)

Please return completed form to DOH regional office checked below.

☐ **NWRO Drinking Water**
Department of Health
20435 - 72nd Ave S., Suite 200
Kent, WA 98032
(253) 395-6750

☐ **SWRO Drinking Water**
Department of Health
PO Box 47823
Olympia, WA 98504-7823
(360) 664-0768

☐ **ERO Drinking Water**
Department of Health
1500 W. Fourth Ave, Suite 305
Spokane, WA 99204
(509) 456-3115

The purveyor must attach a completed Water Facilities Inventory (WFI) form in accordance with WAC 246-290-120(6), if applicable. Contact the regional office in your area for WFI forms or additional Construction Completion Report forms.

DOH 331-121 (3/00)

Freeland Water and Sewer District Recovery Contract

WHEN RECORDED RETURN TO:
Freeland Water & Sewer District
P. O. Box 222
Freeland, WA 98249

WASHINGTON STATE COUNTY AUDITOR/RECORDER'S INDEXING FORM

Please Print or type information

Document Title(s) (Or transactions contained therein)

1. **RECOVERY CONTRACT –** applicable to benefiting non-participating parcels.

Grantor(s) (Last name first, then first name and initials)

1. _____
2. Additional names on Page ___ of document.

Grantee(s) (Last name first, then first name and initials)

1. _____
2. Additional names on Page ___ of document.

Legal Description (abbreviated: i.e. lot, block, plat or section, township, range)

1. Lot No,_____In the_____1/4 of Section_____, Township____North, Range__, E.W.M. -- Island County, Washington.

Additional legal descriptions are on Page(s) _____ of document.

Assessor's Property Tax Parcel or Account Number of "Subject Parcel(s)":_____
_____
_____

Reference Number(s) of Documents assigned or released: **N/A**

FREELAND WATER and SEWER DISTRICT -- ISLAND COUNTY, WASHINGTON

RECOVERY CONTRACT NO. _____

IN RE: Developer main Extension By _____, ET. Al.
INCLUDING WATER SYSTEM IMPROVEMENT CONVEYANCE

AFFECTING: Island County Assessor's Parcel No. _____ -- Lot _____, Plat of _____ -- In the _____1/4 of Section _____, Township _____ North, Range _, E.W.M. -- Island County, Washington.

More Legal Descriptions on Pages 2 through 5

THIS AGREEMENT, entered into by and between the GRANTOR, The Freeland Water and Sewer District, a Washington municipal corporation, hereinafter referred to as "District", and the GRANTEE**,** _____, hereinafter referred to as "Developer".

TOTAL BENEFIT AREA DESCRIPTION: The area specifically benefited by the installation of water main facilities developed by the Developer consists of all the following properties which form the basis for total area calculation and hence the calculation of funds to be collected from owners of the benefiting yet non-participating parcels described as follows:

PARCEL-A - "SUBJECT PARCEL –1" Owners: _____:

Assessor's Parcel No. _____**,**(as now existing or hereafter re-configured or divided) and specifically described as follows:

[insert legal description] – or ["SEE EXHIBIT-A ATTACHED"]

PARCEL-B - "SUBJECT PARCEL –1" Owners: _____:

Assessor's Parcel No. _____**,**(as now existing or hereafter re-configured or divided) and specifically described as follows:

[insert legal description] – or ["SEE EXHIBIT-A ATTACHED"]

PARCEL-C - "SUBJECT PARCEL –1" Owners: _____:

Assessor's Parcel No. _____**,**(as now existing or hereafter re-configured or divided) and specifically described as follows:

[insert legal description] – or ["SEE EXHIBIT-A ATTACHED"]

RECITALS

WHEREAS, Developer has constructed and installed a water system extension including water mains, hydrant assemblies, valves, meters, and other appurtenances described as follows:

Beginning at _____ the District's existing main located at _____
thence running along _____ Road some _____ lineal feet, to the end of said

water main extension at _____. Said improvements may include _____fire hydrant assemblies, _____ gate valves, and all other appurtenant, fixtures, joints, and other work and materials installed within the county road right-of-way etc. along _____Rd.

And

WHEREAS, The District has approved and does, by virtue of this agreement, accept the conveyance, ownership, and maintenance responsibilities of said water system main extension under its sole jurisdiction; and

WHEREAS, The parties desire to enter into a contract pursuant to Chapter 35.91 RCW providing for reimbursement to the Developer for its construction and installation costs by owners of benefiting lands who did not participate in its original cost of development; and

WHEREAS, the total area of all parcels benefiting from said improvements comprised _____ acres, more or less per the maps of the District; and the total area of the benefiting parcel whose owners did not participate is _____ acres, more or less per the maps of the District; and

WHEREAS, the total cost of said extension was **$ _____.** This sum, when divided by "total benefiting acreage" of _____acres, yields an acreage-based project cost of **$ _____** per acre;

NOW THEREFORE, in consideration of the covenants bargained for and given in exchange, and other valuable consideration, receipt of which is hereby acknowledged, the parties mutually agree as follows:

1. **CONVEYANCE:** Developer has furnished the District with "as-built" drawings of the installed improvements together with evidence showing that all associated charges and expenses have been paid. The improvements and facilities described are hereby conveyed to the District by the undersigned Developer and warranted to be free and clear of any outstanding liens, claims, or encumbrances.

2. **PROJECT COST:** The original cost to the developer of the system installation project covered by this recovery contract was **$_____** .

3. **SUBJECT PARCEL:** The properties subject to recovery charges under this contract for non-participation in the original costs of water main extension is specified hereinabove "Subject Parcel(s)" and are described per deeds and Records of Island County, State of Washington as follows:

   Assessor's Parcel Nos. _____(as now existing or hereafter re-configured or divided) and specifically described as follows:

   _____

   _____

   _____.

4. **CONTRACT TERM:** This contract shall extend for a period not to exceed **15 years** from the date of this contract's execution by the parties and recording with the Office of

the Island County Auditor, the District agrees to require the owners of the above described Subject Parcel, their heirs, successors or assigns, who hereafter connect to the above described system extension to pay a fair pro-rata share of the cost of the original construction.

5. **LIMITS OF APPLICABILITY:** Recovery under this contract shall not be applicable to any additional main extensions added to the terminus of the new main constructed by the Developer herein. Recovery shall be applicable only to new service and/or main connections intersecting the subject main between its start point and its terminus. In no case shall the terms of this contract be applicable to the District or any of its projects to improve the overall system of the District. In any case, only the owners of the property labeled and described hereinabove as Subject Parcel, their heirs, successors, or assigns are liable for charges pursuant to the terms of this contract.

6. **PRO-RATA SHARE:** The total fair pro-rata share to be collected from the Subject Parcel is a total of **$_____**.

7. **METHODOLOGY:** Given the inequitable distribution of front footage among the benefiting lands along _____ Rd., and the uniformity of zoning among the benefiting properties, the "area method" of calculating relative benefit of the improvements is applied in this case, to determine the pro-rata share charge applicable to the Subject Parcel.

   Said charge was calculated by dividing the total project cost by the total number of benefiting acres yielding a charge of **$_____** per acre. Said per acre charge was then multiplied by the _____ acres comprising the Subject Parcel.

   The resulting total charge of **$_____** shall be additional to any other fees or costs charged or levied by the District in association with hereafter providing water service to the Subject Parcel. Said charge is final and determinative for the purposes of this contract and shall not be subject to any re-calculation based on actual or alleged "new information". The charge shall not be "negotiable" nor subject to any re-calculation of areas, rates, or methods of applicability.

8. **RECOVERY LIMIT:** The maximum amount recoverable by the Developer under this contract is **$_____.**

9. **APPLICATION:** Said charge shall be applicable to the lands hereinabove described as Subject Parcel(s) and shall be paid by the owners of said properties, their heirs, successors, or assigns, prior to any connection to or extension from that water main extension installed by the Developer herein. The Subject Parcel(s) shall not receive service from the District until said charge is paid in full.

10. **DELIVERY:** The funds collected by the District pursuant to this contract - less no more than 10% to cover the actual cost of collection and the administration of this contract - shall be disbursed to the Developer, its heirs, successor's or assigns, at such address as provided by the Developer, or as may be changed by the Developer upon written notice to

the District. The Developer herein may assign or convey her rights to collection of said funds to other parties upon written notice to the District. The District shall be provided with a signed copy of such assignment by the Developer. The initial address of Developer for delivery shall be:

_____

_____

11. **Until otherwise notified, the District shall make checks payable to "_____ _____" who hereby assumes sole responsibility for any and all subsequent distribution of funds to other participating owners.**

12. **ADMINISTRATIVE COSTS:** the District may reduce the amount paid to the Developer by amounts equaling no more than ten percent (10%) of the collected funds to cover the District costs of collection and/or the general administration of this contract.

13. **INABILITY TO DELIVER, CAUSE FOR FORFEIT:** In the event that the District, after collecting said recovery amount, and after due and diligent efforts to deliver said fund(s) to the Developer, her heirs, successors, or assigns, for a period not to exceed one year in duration, finds that it is unable to deliver said funds to the developer, her heirs, successors, or assigns, the rights of the Developer to collect said funds shall will be forfeit, and shall terminate ninety (90) days after publication in a local newspaper of record for two consecutive issues of said paper of a Public Notice advising that the funds are available and will be forfeited upon a date specified if not claimed.

14. **FUTURE USE:** No owner(s) of the Subject Parcel(s) shall be granted permission, or be otherwise authorized by the District to connect to or use the above described water main extension during the said 15-year period without first paying the above specified charge to the District in addition to any and all other costs and charges made or assessed for such connection or use. Present or future owners of the Subject Parcel, under this contract agreement, shall not be permitted by the District to indirectly access through, private easements, any other water mains of the District. All future main extensions into the Subject Parcel(s) shall be subject to this contract.

15. **PAYMENT DUE DATE:** All amounts received by the District pursuant to this recovery agreement, less reasonable collection costs, shall be paid (mailed) to the Developer, her heirs, successors, or assigns within 60 working days after receipt thereof by the District.

16. **TERMINATION:** At the end of the 15 year period, this agreement shall automatically terminate and be null and void. Any funds or charges collected by the District over and above the amount due to Developer or any such funds collected by the District after said 15 year period expires shall belong to the District.

17. **DURATION:** As it pertains to the responsibility of the owners of the Subject Parcel(s) hereinabove described, their heirs, successors, or assigns, the terms of this contract shall run with the land and shall be binding on all parties having or acquiring any right, title, or

interest in the Subject Parcel(s) or any part thereof. As it pertains to the Developer herein, the rights of collection under this contract shall not run with the land and shall inure solely to the person of the Developer, her heirs, successors, or assigns as may be designated or disclosed to the District.

18. **INDEMNIFICATION:** Developer herein agrees to indemnify and hold the District harmless in any legal challenge to the sufficiency, fairness, timeliness, or enforceability of this contract. Any and all costs associated with any defense of or challenge to this contract or any parts thereof shall be at the sole cost and expense of Developer, its heirs, successors or assigns seeking to protect the recovery herein specified. The above indemnification and hold harmless clause shall apply to the District and any of its employees, agents, or officials individually and severally.

19. SEVERABILITY: In the event that any part of this contract shall be found invalid or inapplicable by a court of competent jurisdiction, such finding shall in no way affect any other parts or remainder thereof.

PROJECT COST SUMMARY

1.	Engineering_____ (Name of Firm)	$ _____
2.	District (billed invoices)	$ _____
3.	District (incurred; not yet billed) - additional professional services and recording fees	$ _____
4.	Construction labor & materials, including taxes: _____ (Name of Contractor)	$ _____
6.	Lab fees:	$ _____
8.	Developer's, miscellaneous expenses: finance costs, administrative time efforts and out of pocket expenses:	$ _____
	TOTAL PROJECT COST =	$ _____

Dated this _____ day, of _____ , 20 __.

Freeland Water and Sewer District:

By: _____
Commissioner:

By: _____
Commissioner:

By: _____
Commissioner:

Owner: _____
By (print name):

Owner: _____
By (print name):

ACKNOWLEDGEMENT:

STATE OF **WASHINGTON**)
) SS
County of **ISLAND**)

On this _____ day of _____ , 20__, before me, the undersigned, a Notary public in and for the State Of Washington, Duly Commissioned and Sworn, personally appeared _____, to me known to be the _____ of the _____ _____, the Washington municipal corporation which executed the foregoing instrument and acknowledged the execution of said instrument to be the free and voluntary act of said corporation for the uses and purposes therein mentioned, and on oath stated that _____ were/was authorized to execute said instrument for said corporation and that the seal affixed (if any) is the seal of said corporation.

Witness my hand and official seal hereto affixed the day and year in this certificate above written.

_____
Notary Public in and for the State of Washington.

Residing at _____ .
My commission expires on _____ .

ACKNOWLEDGEMENT:

STATE OF **WASHINGTON**)
) SS
County of **ISLAND**)

On this _____ day of _____ , 20__, before me, the undersigned, a Notary public in and for the State Of Washington, Duly Commissioned and Sworn, personally appeared _____, to me known to be the _____ of the Freeland Water and Sewer District, the Washington municipal corporation which executed the foregoing instrument and acknowledged the execution of said instrument to be the free and voluntary act of said corporation for the uses and purposes therein mentioned, and on oath stated that _____were/was authorized to execute said instrument for said corporation and that the seal affixed (if any) is the seal of said corporation.

Witness my hand and official seal hereto affixed the day and year in this certificate above written.

_____
Notary Public in and for the State of Washington.
Residing at _____ .
My commission expires on _____ .

APPENDIX H

FWSD WATER QUALITY MONITORING SCHEDULE

Water Quality Monitoring Schedule

System: FREELAND WATER AND SEWER DISTRICT **PWS ID: 26450 8** **Region: NORTHWEST**
Contact: Andy M Campbell **Group: A - Comm** **County: ISLAND**

NOTE: To receive credit for compliance samples, you must fill out laboratory and sample paperwork completely, send your samples to a laboratory accredited by Washington State to conduct the analyses, AND ensure the results are submitted to DOH Office of Drinking Water. There is often a lag time between when you collect your sample, when we credit your system with meeting the monitoring requirement, and when we generate the new monitoring requirement.

Coliform Monitoring Requirements

	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018	Jul 2018
Coliform Monitoring Population	1263	1264	1263	1264	1263	1263	1264	1263	1264	1263	1264	1263
Number of Routine Samples Required	2	2	2	2	2	2	2	2	2	2	2	2

- Collect samples from representative points throughout the distribution system.
- Collect required repeat samples following an unsatisfactory sample. In addition, collect a sample from each operating groundwater source.
- For systems that chlorinate, record chlorine residual (measured when the coliform sample is collected) on the coliform lab slip.

Chemical Monitoring Requirements

Distribution Monitoring

Test Panel/Analyte	*# Samples Required*	*Compliance Period*	*Frequency*	*Last Sample Date*	*Next Sample Due*	
Lead and Copper	10	Jan 2015 - Dec 2017	standard - 3 year	12/28/2016	***Sep 2017***	
Asbestos	0	Jan 2011 - Dec 2019	waiver - 9 year			
Total Trihalomethane (THM)	1	Jan 2017 - Dec 2017	reduced - 1 year	11/01/2016	***Sep 2017***	
Halo-Acetic Acids (HAA5)	1	Jan 2017 - Dec 2017	reduced - 1 year	11/01/2016	***Sep 2017***	

Water Quality Monitoring Schedule

Notes on Distribution System Chemical Monitoring

For *Lead and Copper*:
- Collect samples from the COLD WATER side of a KITCHEN or BATHROOM faucet that is used daily.
- Before sampling, make sure the water has sat unused in the pipes for at least 6 hours, but no more than 12 hours (e.g. overnight).
- If you are sampling from a faucet that has hot water, make sure cold water is the last water to run through the faucet before it sits overnight.
- If your sampling frequency is annual or every 3 years, collect samples between June 1 and September 30.

For *Asbestos:* Collect the sample from one of your routine coliform sampling sites in an area of your distribution system that has asbestos concrete pipe.

For *Disinfection Byproducts (HAA5 and THM):* Collect the samples at the locations identified in your Disinfection Byproducts (DBP) monitoring plan.

Water Quality Monitoring Schedule

Source Monitoring

- Collect 'source' chemical monitoring samples from a tap after all treatment (if any), but before entering the distribution system.
- Washington State grants monitoring waivers for various test panels /analytes. Please note that we may require some monitoring as a condition of some waivers. We have granted complete waivers for dioxin, endothal, glyphosate, diquat, and insecticides.
- Nitrate, arsenic, iron, and other individual inorganics are included as part of a Complete Inorganic (IOC) analysis when it is collected.

Source S03 *Wells A & B* *Well Field* *Use - Permanent* *Susceptility - Moderate*

Test Panel/Analyte	# Samples Required	Compliance Period	Frequency	Last Sample Date	Next Sample Due
Nitrate	1	Jan 2017 - Dec 2017	standard - 1 year	11/01/2016	***Sep 2017***
Complete Inorganic (IOC)	1	Jan 2011 - Dec 2019	waiver - 9 year	07/22/2015	
Volatile Organics (VOC)	1	Jan 2014 - Dec 2019	waiver - 6 year	11/01/2016	
Herbicides	1	Jan 2014 - Dec 2022	waiver - 9 year	12/01/2009	Dec 2018
Pesticides	0	Jan 2017 - Dec 2019	waiver - 3 year	12/01/2009	
Soil Fumigants	0	Jan 2017 - Dec 2019	waiver - 3 year		
Gross Alpha	1	Jan 2014 - Dec 2019	standard - 6 year	11/01/2016	
Radium 228	1	Jan 2014 - Dec 2019	standard - 6 year	11/01/2016	

Source S04 *Well #3 AFJ868* *Well* *Use - Permanent* *Susceptility - Moderate*

Test Panel/Analyte	# Samples Required	Compliance Period	Frequency	Last Sample Date	Next Sample Due
Nitrate	1	Jan 2017 - Dec 2017	standard - 1 year	06/06/2017	
Complete Inorganic (IOC)	1	Jan 2017 - Dec 2019	standard - 3 year	06/06/2017	
Volatile Organics (VOC)	1	Jan 2014 - Dec 2019	waiver - 6 year	11/30/2011	***Sep 2017***
Herbicides	1	Jan 2014 - Dec 2022	waiver - 9 year	11/27/2012	Nov 2021
Pesticides	0	Jan 2017 - Dec 2019	waiver - 3 year	11/27/2012	
Soil Fumigants	0	Jan 2017 - Dec 2019	waiver - 3 year		
Gross Alpha	1	Jan 2014 - Dec 2019	standard - 6 year	11/01/2016	
Radium 228	1	Jan 2014 - Dec 2019	standard - 6 year	11/01/2016	

Water Quality Monitoring Schedule

Other Information

Other Reporting Schedules	*Due Date*
Measure chlorine residuals and submit monthly reports if your system uses continuous chlorination:	monthly
Submit Consumer Confidence Report (CCR) to customers and ODW (Community systems only):	07/01/2017
Submit CCR certification form to ODW (Community systems only):	10/01/2017
Submit Water Use Efficiency report online to ODW and to customers (Community and other municipal water systems only):	07/01/2017
Send notices of lead and copper sample results to the customers sampled:	30 days after you receive the laboratory results
Submit Certification of customer notification of lead and copper results to ODW:	90 days after you notify customers

Special Notes

None

Northwest Regional Water Quality Monitoring Contacts

For questions regarding chemical monitoring:	Steve Hulsman: (253) 395-6777 or Steve.Hulsman@doh.wa.gov
For questions regarding DBPs:	Steve Hulsman: (253) 395-6777 or Steve.Hulsman@doh.wa.gov
For questions regarding coliform bacteria and microbial issues:	Carol Stuckey or Ingrid Salmon: (253) 395-6775: or carol.stuckey@doh.wa.gov or ingrid.salmon@doh.wa.gov

Additional Notes

The information on this monitoring schedule is valid as of the date in the upper left corner on the first page. However, the information may change with subsequent updates in our water quality monitoring database as we receive new data or revise monitoring schedules. There is often a lag time between when you collect your sample and when we credit your system with meeting the monitoring requirement.

We have not designed this monitoring schedule to display all compliance requirements. The purpose of this schedule is to assist water systems with planning for most water quality monitoring, and to allow systems to compare their records with DOH ODW records. Please be aware that this monitoring schedule does not include constituents that require a special monitoring frequency, such as monitoring affiliated with treatment.

Any inaccuracies on this schedule will not relieve the water system owner and operator of the requirement to comply with applicable regulations.

If you have any questions about your monitoring requirements, please contact the regional office staff listed above.

Water Quality Monitoring Schedule

System: FREELAND WATER AND SEWER DISTRICT **PWS ID: 26450 8** **Region: NORTHWEST**
Contact: Andy M Campbell **Group: A - Comm** **County: ISLAND**

NOTE: To receive credit for compliance samples, you must fill out laboratory and sample paperwork completely, send your samples to a laboratory accredited by Washington State to conduct the analyses, AND ensure the results are submitted to DOH Office of Drinking Water. There is often a lag time between when you collect your sample, when we credit your system with meeting the monitoring requirement, and when we generate the new monitoring requirement.

Coliform Monitoring Requirements

	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018	Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018
Coliform Monitoring Population	1263	1263	1264	1263	1264	1263	1264	1263	1263	1264	1263	1264
Number of Routine Samples Required	2	2	2	2	2	2	2	2	2	2	2	2

- Collect samples from representative points throughout the distribution system.
- Collect required repeat samples following an unsatisfactory sample. In addition, collect a sample from each operating groundwater source.
- For systems that chlorinate, record chlorine residual (measured when the coliform sample is collected) on the coliform lab slip.

Chemical Monitoring Requirements

Distribution Monitoring

Test Panel/Analyte	*# Samples Required*	*Compliance Period*	*Frequency*	*Last Sample Date*	*Next Sample Due*	
Lead and Copper	10	Jan 2015 - Dec 2017	standard - 3 year			
Asbestos	0	Jan 2011 - Dec 2019	waiver - 9 year			
Total Trihalomethane (THM)	1	Jan 2017 - Dec 2017	reduced - 1 year	11/01/2016	***Sep 2017***	
Halo-Acetic Acids (HAA5)	1	Jan 2017 - Dec 2017	reduced - 1 year	11/01/2016	***Sep 2017***	

Water Quality Monitoring Schedule

Notes on Distribution System Chemical Monitoring

For *Lead and Copper*:
- Collect samples from the COLD WATER side of a KITCHEN or BATHROOM faucet that is used daily.
- Before sampling, make sure the water has sat unused in the pipes for at least 6 hours, but no more than 12 hours (e.g. overnight).
- If you are sampling from a faucet that has hot water, make sure cold water is the last water to run through the faucet before it sits overnight.
- If your sampling frequency is annual or every 3 years, collect samples between June 1 and September 30.

For *Asbestos:* Collect the sample from one of your routine coliform sampling sites in an area of your distribution system that has asbestos concrete pipe.

For *Disinfection Byproducts (HAA5 and THM):* Collect the samples at the locations identified in your Disinfection Byproducts (DBP) monitoring plan.

Washington State Department of Health
Environmental Public Health
Office of Drinking Water

Water Quality Monitoring Schedule

Source Monitoring

- Collect 'source' chemical monitoring samples from a tap after all treatment (if any), but before entering the distribution system.
- Washington State grants monitoring waivers for various test panels /analytes. Please note that we may require some monitoring as a condition of some waivers. We have granted complete waivers for dioxin, endothal, glyphosate, diquat, and insecticides.
- Nitrate, arsenic, iron, and other individual inorganics are included as part of a Complete Inorganic (IOC) analysis when it is collected.

Source S03 *Wells A & B* *Well Field* *Use - Permanent* *Susceptility - Moderate*

Test Panel/Analyte	*# Samples Required*	*Compliance Period*	*Frequency*	*Last Sample Date*	*Next Sample Due*
Nitrate	1	Jan 2017 - Dec 2017	standard - 1 year	11/01/2016	***Sep 2017***
Complete Inorganic (IOC)	1	Jan 2011 - Dec 2019	waiver - 9 year	07/22/2015	
Volatile Organics (VOC)	1	Jan 2014 - Dec 2019	waiver - 6 year	11/01/2016	
Herbicides	1	Jan 2014 - Dec 2022	waiver - 9 year	12/01/2009	Dec 2018
Pesticides	0	Jan 2017 - Dec 2019	waiver - 3 year	12/01/2009	
Soil Fumigants	0	Jan 2017 - Dec 2019	waiver - 3 year		
Gross Alpha	1	Jan 2014 - Dec 2019	standard - 6 year	11/01/2016	
Radium 228	1	Jan 2014 - Dec 2019	standard - 6 year	11/01/2016	

Source S04 *Well #3 AFJ868* *Well* *Use - Permanent* *Susceptility - Moderate*

Test Panel/Analyte	*# Samples Required*	*Compliance Period*	*Frequency*	*Last Sample Date*	*Next Sample Due*
Nitrate	1	Jan 2017 - Dec 2017	standard - 1 year	08/24/2017	
Complete Inorganic (IOC)	1	Jan 2017 - Dec 2019	standard - 3 year	06/06/2017	
Volatile Organics (VOC)	1	Jan 2014 - Dec 2019	waiver - 6 year	11/30/2011	***Sep 2017***
Herbicides	1	Jan 2014 - Dec 2022	waiver - 9 year	11/27/2012	Nov 2021
Pesticides	0	Jan 2017 - Dec 2019	waiver - 3 year	11/27/2012	
Soil Fumigants	0	Jan 2017 - Dec 2019	waiver - 3 year		
Gross Alpha	1	Jan 2014 - Dec 2019	standard - 6 year	11/01/2016	
Radium 228	1	Jan 2014 - Dec 2019	standard - 6 year	11/01/2016	

Water Quality Monitoring Schedule

Other Information

Other Reporting Schedules	*Due Date*
Measure chlorine residuals and submit monthly reports if your system uses continuous chlorination:	monthly
Submit Consumer Confidence Report (CCR) to customers and ODW (Community systems only):	07/01/2017
Submit CCR certification form to ODW (Community systems only):	10/01/2017
Submit Water Use Efficiency report online to ODW and to customers (Community and other municipal water systems only):	07/01/2017
Send notices of lead and copper sample results to the customers sampled:	30 days after you receive the laboratory results
Submit Certification of customer notification of lead and copper results to ODW:	90 days after you notify customers

Special Notes

None

Northwest Regional Water Quality Monitoring Contacts

For questions regarding chemical monitoring:	Steve Hulsman: (253) 395-6777 or Steve.Hulsman@doh.wa.gov
For questions regarding DBPs:	Steve Hulsman: (253) 395-6777 or Steve.Hulsman@doh.wa.gov
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Additional Notes

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We have not designed this monitoring schedule to display all compliance requirements. The purpose of this schedule is to assist water systems with planning for most water quality monitoring, and to allow systems to compare their records with DOH ODW records. Please be aware that this monitoring schedule does not include constituents that require a special monitoring frequency, such as monitoring affiliated with treatment.

Any inaccuracies on this schedule will not relieve the water system owner and operator of the requirement to comply with applicable regulations.

If you have any questions about your monitoring requirements, please contact the regional office staff listed above.

Coliform Monitoring Plan for: Freeland Water and Sewer District

A. System information Plan Date: 2018

Water system name *Freeland Water and Sewer District*	*County* *Island*	*System I.D. number* *264508*
Name of plan preparer, Andy Campbell	Position, Manager	Phone 360-331-5566
Sources: DOH source number, source name, well depth, pumping capacity	SO1, 261', 175 gpm; SO2, 200', 185 gpm; SO4, 368', 123 gpm	
Storage: list and describe	Reservoirs; #1- 200,000 gal. and #2- 200,000 gal.	
Treatment: source number and process	Wells #1, 2 and 3, pyrolucite filtration for fe/mn removal	
Pressure Zones: number and name	Zone #1-gravity, #2-well 3, #3-Bercot intertie	
Population by pressure zone	#1-1200, #2-two, #3-eight	
Number of routine samples required monthly by regulation:		Two
Number of sample sites needed to represent the distribution system:		Eight
*Request DOH approval of triggered source monitoring plan?		No

*If approval is requested a fee will be charged for the review.

B. Laboratory Information

Laboratory name Edge Analytical	Office phone 800-755-9295
Address 1620 S. Walnut St., Burlington	Email *lab@edgeanalytical.com*
Hours of operation 8-5, M-F	

C. Wholesaling of groundwater

	Yes	No
We are a consecutive system and purchase groundwater from another water system.	X	
If yes, water system name: Harbor Hills Water System		
Contact name: Freeland Water and Sewer District owned		
Telephone numbers Office 360-331-5566 After hours pager 425-335-9396		

D. Routine, repeat, and triggered source sample locations*

Location/address for routine sample sites	Location/address for repeat sample sites	Groundwater sources for triggered sample sites**
X1. 5585 Lotto	1-1. 5585 Lotto 1-2. Freeland library 1-3. Freeland Cafe	SO3 SO4
X2. 5421 Woodard	2-1. 5421 Woodard 2-2. Nichols boat yard 2-3. Freeland Hall	SO3 SO4
X3. Short Stop	3-1. Short Stop 3-2. Trinity Church 3-3. Freeland Shell	SO3 SO4

*NOTE: If you need more than three routine samples to cover the distribution system, attach additional sheets as needed.

** When you collect the repeats, you must sample every groundwater source that was in use when the original routine sample was collected.

E. Routine sample rotation schedule

Month	Routine sites	Month	Routine sites
January	Short Stop/ 5585 Lotto	July	Short Stop/5585 Lotto
February	5585 Lotto/ 5421 Woodard	August	5585 Lotto/5421 Woodard
March	5421 Woodard/Short Stop	September	5421 Woodard/Short Stop
April	Short Stop/ 5585 Lotto	October	Short Stop/5585 Lotto
May	5585 Lotto/5421 Woodard	November	5585 Lotto/5421 Woodard
June	5421 Woodard/Short Stop	December	5421 Woodard/Short Stop

Name, Andy Campbell	Office phone 360-331-5566
Address, PO Box 1202, Freeland, WA	After hours phone 425-335-9396

F. *E. coli*-present sample response

Distribution system e. *coli* response checklist				
Background information	Yes	No	N/A	To Do List
We inform staff members about activities within the distribution system that could affect water quality.	X			
We document all water main breaks, construction & repair activities, and low pressure and outage incidents.	X			
We can easily access and review documentation on water main breaks, construction & repair activities, and low pressure and outage incidents.	X			
Our Cross-Connection Control Program is up-to-date.	X			
We test all cross-connection control devices annually as required, with easy access to the proper documentation.	X			
We routinely inspect all treatment facilities for proper operation.	X			
We identified one or more qualified individuals who are able to conduct a Level 2 assessment of our water system.	X			
We have procedures in place for disinfecting and flushing the water system if it becomes necessary.	X			
We can activate an emergency intertie with an adjacent water system in an emergency.	X			
We have a map of our service area boundaries.	X			
We have consumers who may not have access to bottled or boiled water.		X		
There is a sufficient supply of bottled water immediately available to our customers who are unable to boil their water.	X			
We have identified the contact person at each day care, school, medical facility, food service, and other customers who may have difficulty responding to a Health Advisory.	X			
We have messages prepared and translated into different languages to ensure our consumers will understand them.			X	
We have the capacity to print and distribute the required number of notices in a short time period.	X			
Policy direction	Yes	No	N/A	To Do List
We have discussed the issue of e. *coli*-present sample results with our policy makers.	X			
If we find e. *coli* in a routine distribution sample, the policy makers want to wait until repeat test results are available before issuing advice to water system customers.	X			

Distribution system e. *coli* response checklist				
Potential public notice delivery methods	Yes	No	N/A	To Do List
It is feasible to deliver a notice going door-to-door.	X			
We have a list of all of our customers' addresses.	X			
We have a list of customer telephone numbers or access to a Reverse 9-1-1 system.	X			
We have a list of customer email addresses.	X			
We encourage our customers to remain in contact with us using social media.		X		
We have an active website we can quickly update to include important messages.	X			
Our customers drive by a single location where we could post an advisory and expect everyone to see it.		X		
We need a news release to supplement our public notification process.		X		

Distribution system *e. coli* response plan
If we have e. *coli* in our distribution system we will immediately: 1. Call DOH. 2. Collect repeat and triggered source samples per Part D. Collect additional investigative samples as necessary. 3. Discuss with DOH whether to issue a health advisory. 4. Issue a "door to door" written health advisory including information from DOH website on e-coli. 5. Contact customers and discuss possible sources of contamination. 6. Conduct leak investigation. 7. Investigate area upstream for signs of water theft or tampering. 8. Read meters in area to look for possible backflows. 9. List other items as requested by WA DOH and list below;

Alternate sources	Yes	No	N/A	To Do List
We can stop using this source and still provide reliable water service to our customers.	X			
We have an emergency intertie with a neighboring water system that we can use until corrective action is complete (perhaps for several months).	X			
We can provide bottled water to all or part of the distribution system for an indefinite period.	X			
We can quickly replace our existing source of supply with a more protected new source.		X		

Temporary Treatment	Yes	No	N/A	To Do List
This source is continuously chlorinated, and our existing facilities can provide 4-log virus treatment (CT = 6) before the first customer. If yes, at what concentration? _____ mg/L	X			
We can quickly introduce chlorine into the water system and take advantage of the existing contact time to provide 4-log virus treatment to a large portion of the distribution system.	X			
We can reduce the production capacity of our pumps or alter the configuration of our storage quantities (operational storage) to increase the amount of time the water stays in the system before the first customer to achieve CT = 6.	X			
We can alter the demand for drinking water (maximum day or peak hour) through conservation messages to increase the time the water is in the system prior to the first customer in order to achieve 4-log virus treatment with chlorine.			X	

*E. coli p*resent triggered source sample response plan
If we have e. *coli* in any source water we will immediately: Call DOH, door to door consumer notifications, isolate, disinfect and re-sample source

G. System map attached

APPENDIX I

DISTRIBUTION SYSTEM HYDRAULIC MODELING MATERIALS

HARBOR HILLS PRV STATION

HARBOR HILLS INTERTIE

CLOSED ISOLATION VALVE

HOLMES HARBOR

MUTINY BAY

SILVER FIN DRIVE PUMP STATION

WELL NO. 1 PUMP STATION

RESERVOIR NO. 1

RESERVOIR NO. 2

Chipshot Way
Dunlap Dr
Rari Dr
Long Dr
Crestwood Cove Ct
East Harbor Rd
Blacktail Ln
Honeymoon Bay Rd
Tianda Ln
Bush Point Rd
Summer Rd
Timber Ln
Ridge Dr
Beach Bluff Dr
Mutiny Shore Dr
Yata Dr
Mutiny Bay Rd
Bercot Rd
SR 525
Shoreview Dr
Cameron Rd
Freeland Ave
Myrtle Ave
Lee Ct
Newman Rd
Maplegien Rd
Remoria Rd
Willow Ln
Vesta Ct
Fish Rd
Harbor Ave
Dusty Ln
Cattail Ln
Hollyhill Ln
Double Bluff Rd
Apple Tree Ln
Fill Rd
Littlefir Ln
Horseshoe Ln
Scenic Ave
Woodard Ave
Daymar Pl
Pirate Ln
Morgan View Ln
Palmer Ln
Alpha Ln
Seiferth Ln
Millman Rd
Sugar Pine Pl
Hillvista Pl
Bayvista Pl
Panorama Dr
Joli Dr
Serendipity Ln
Lancaster Rd
Manor Way
Cedar St
Lagoon Ln

JX-26 JX-181 JX-25 JX-24 JX-180 JX-100 JX-99 JX-23 JX-98 JX-27 JX-28 JX-22 J118 J116 JX-127 JX-126 JX-21 JX-29 JX-20 J114 J108 JX-173 JX-19 J110 J112 JX-17 JX-18 JX-16 JX-92 JX-91 JX-15 JX-14 JX-61 J128 J109 J120 JX-185 JX-65 J132 J126 JX-62 J124 J162 J102 J98 JX-63 JX-30 JX-67 J158 JX-133 JX-114 J160 JX-108 JX-13 JX-60 J168 JX-68 JF-130 J104 JX-12 JX-11 JX-10 J92 JX-9 JX-70 J82 JF-86 JF-111 JX-118 JX-117 JX-116 JX-8 JX-71 J78 JX-106 JX-105 JX-59 J94 JX-7 J86 JX-6 JX-78 J48 J164 JX-84 JX-96 JX-37 JX-39 JX-34 JX-128 JX-95 JX-35 JX-122 JX-123 J146 J144 J148 J150 JX-131 JX-41 JX-54 JX-53 JX-52 JX-51 JX-42 JX-47 JX-49 JX-48 JX-50 J34 J30 J32 JX-46 JX-43 JX-45 J10 J12 J176 J14 J16 J20 J22 J24 J26 J28 J18 JX-66 J134 J178 JF-189 JF-190 JX-184 JF-188 JF-191 JF-192 J180 JX-134 JX-32 JF-176 J174 JF-175 J170 JF-174 J172 JX-88 J136 J56 J52 JX-82 J138 J140 JX-102 J76 J60 J62 J74 JX-83 JX-101 JX-80 J58 J68 J64 J66 J72 JX-75 J44 JX-5 JX-90 JX-4 JX-3 JX-2 J42 J36 J38 J40

0 600 1,200 2,400 Feet

LEGEND:

TYPE

- INTERTIE
- RESERVOIR
- PRV
- BOOSTER PUMP STATION
- FLOW METER
- ZONE ISOLATION VALVE
- WELLS
- NODE
- HYDRANT
- WATERLINES

FREELAND WATER AND SEWER DISTRICT

2018 WATER SYSTEM PLAN

WATER SYSTEM MODEL
NODE ID MAP

Gray & Osborne, Inc.
CONSULTING ENGINEERS

L:\Freeland Water District\17570 Water System Plan\Figures\Model Node ID Map.mxd

2023 Peak Hour Demand Modeling Results

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
JX-27	3.13	197.4	278.96	35.34
JX-93	3.13	188.68	282.27	40.55
JX-28	3.13	173.89	278.96	45.53
J172	3.13	322	427.19	45.58
J28	3.13	229	338.98	47.66
J34	3.13	170.63	281.21	47.92
J180	3.13	166.91	279.23	48.67
J118	3.13	155.48	278.96	53.51
JF-190	3.13	152.89	279.23	54.74
JF-192	3.13	151.09	279.23	55.52
J26	3.13	209	338.98	56.32
JF-191	3.13	146.54	279.23	57.49
JX-25	3.13	144.49	278.92	58.25
JX-26	3.13	235.57	370	58.25
JX-127	3.13	138.77	278.96	60.75
J170	3.13	284	427.19	62.05
JF-189	3.13	134.66	279.23	62.64
JX-1	3.13	134.41	281.8	63.87
J18	3.13	132	279.93	64.1
J24	3.13	191	338.98	64.12
J178	3.13	130.88	279.23	64.28
JX-67	3.13	131.09	279.68	64.39
JX-2	3.13	132.07	281.69	64.83
JX-50	3.13	130	280.18	65.08
J40	3.13	131	281.3	65.13
J132	3.13	128.51	279.64	65.49
JF-188	3.13	128.01	279.23	65.52
JX-31	3.13	127.6	278.91	65.56
JX-68	3.13	125.67	279.71	66.75
J82	3.13	125.09	279.75	67.02
J66	3.13	125	279.68	67.02
JX-131	3.13	124	279.35	67.31
JX-49	3.13	124.61	280.06	67.36
JX-82	3.13	123.09	279.87	67.93
JX-95	3.13	120.42	279.35	68.86
JX-102	3.13	120.94	279.87	68.86
JX-72	3.13	120.83	279.8	68.88
JX-184	3.13	120.13	279.23	68.94
J134	3.13	120.05	279.23	68.97
JX-66	3.13	120	279.22	68.99
JX-51	3.13	120	280.18	69.41

2023 Peak Hour Demand Modeling Results

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
J68	3.13	119	279.68	69.62
J64	3.13	119	279.82	69.68
JX-100	3.13	208.97	370	69.77
J80	3.13	117.89	279.94	70.21
JX-90	3.13	117.76	280.14	70.36
J36	3.13	119.11	281.56	70.39
J168	3.13	116.91	279.72	70.55
J78	3.13	117.19	280.06	70.57
J46	3.13	116.89	280.14	70.74
J42	3.13	117.61	281.16	70.87
J38	3.13	117.71	281.35	70.9
JX-3	3.13	117.26	281.05	70.97
J22	3.13	175	338.98	71.05
J74	3.13	115	279.1	71.1
JX-78	3.13	116	280.11	71.11
JX-77	3.13	116	280.14	71.12
J76	3.13	115	279.17	71.13
J72	3.13	115	279.19	71.14
JX-71	3.13	114.57	279.77	71.58
J48	3.13	114.74	280.03	71.62
J50	3.13	114.62	279.95	71.64
JX-101	3.13	114.33	279.87	71.73
JX-80	3.13	113.59	279.86	72.05
JX-5	3.13	114.1	280.61	72.15
JX-6	3.13	113.26	280.2	72.33
JX-4	3.13	112.95	280.9	72.77
JX-70	3.13	111.66	279.77	72.84
J70	3.13	111.7	279.82	72.85
J44	3.13	112.4	280.61	72.88
J140	3.13	111.57	279.86	72.92
J52	3.13	110.96	279.87	73.19
J86	3.13	110.94	280.03	73.27
J58	3.13	110.39	279.8	73.41
JX-103	3.13	110.91	280.6	73.53
JX-76	3.13	110	279.86	73.6
JX-37	3.13	109.37	279.24	73.61
J60	3.13	109.92	279.79	73.61
J176	3.13	110	279.93	73.63
J62	3.13	109.69	279.78	73.7
JX-83	3.13	109.46	279.78	73.8
J136	3.13	108.46	279.86	74.27

2023 Peak Hour Demand Modeling Results

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
J138	3.13	107.47	279.86	74.7
J14	3.13	107	279.93	74.93
JX-81	3.13	106	279.86	75.33
JX-126	3.13	104.59	278.96	75.56
JX-48	3.13	104.05	280.04	76.25
JX-45	3.13	103.94	279.96	76.27
JX-74	3.13	103.83	279.86	76.28
JX-7	3.13	103.03	279.87	76.62
JX-52	3.13	103.12	280.18	76.72
JX-29	3.13	101.87	278.97	76.74
J56	3.13	101.84	279.86	77.14
JX-88	3.13	99	279.86	78.37
JX-75	3.13	98.24	279.86	78.7
JX-59	3.13	97.39	279.5	78.91
JX-53	3.13	96.89	279.92	79.31
JX-30	3.13	95.8	278.91	79.34
JX-69	3.13	95.97	279.76	79.64
JX-12	3.13	94.04	279.47	80.35
JX-65	3.13	92.87	279.42	80.83
JX-99	3.13	91.69	278.91	81.12
JX-47	3.13	92	280.03	81.47
J32	3.13	91.88	279.99	81.51
JX-8	3.13	91.59	279.8	81.55
JX-11	3.13	91	279.53	81.69
JX-85	3.13	90.67	279.38	81.77
JX-13	3.13	89.45	279.46	82.33
J166	3.13	89.18	279.38	82.41
JX-44	3.13	89.07	279.96	82.71
JX-125	3.13	88	279.38	82.93
J12	3.13	87	279.93	83.6
JX-34	3.13	84.7	279.39	84.36
JX-9	3.13	80.65	279.76	86.28
JX-128	3.13	78.54	279.29	86.99
J88	3.13	78.13	279.86	87.41
JX-129	3.13	76.42	279.24	87.88
J10	3.13	77	279.94	87.94
JX-54	3.13	76.8	279.85	87.98
JX-21	3.13	75.83	278.96	88.01
JX-35	3.13	75.85	279.39	88.19
JX-105	3.13	75.83	279.48	88.24
J92	3.13	75.94	279.68	88.28

2023 Peak Hour Demand Modeling Results

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
JX-24	3.13	74.7	278.92	88.49
J94	3.13	75	279.56	88.63
JX-43	3.13	75.12	279.96	88.76
JX-55	3.13	73.44	279.48	89.28
J152	3.13	73	279.48	89.47
J96	3.13	72	279.48	89.9
J148	3.13	71	279.13	90.18
J30	3.13	71.21	279.96	90.45
JX-14	3.13	70.31	279.31	90.56
JX-116	3.13	70.49	279.78	90.69
JX-33	3.13	69.61	279.48	90.94
JF-111	3.13	67.97	279.23	91.54
JX-124	3.13	67.45	279.48	91.87
JX-117	3.13	67.05	279.77	92.17
JX-10	3.13	66	279.56	92.53
J124	3.13	65.56	279.38	92.65
JX-41	3.13	65	279.21	92.82
J154	3.13	65	279.41	92.9
JX-42	3.13	65	279.96	93.14
JX-46	3.13	65	279.96	93.14
J150	3.13	63.95	279.21	93.27
J90	3.13	64.34	279.69	93.31
J122	3.13	63.13	279.38	93.7
JX-173	3.13	62	278.99	94.02
JX-118	3.13	62	279.61	94.29
JX-64	3.13	61.18	279.41	94.56
JX-120	3.13	60.36	279.61	95
JX-119	3.13	60.24	279.62	95.06
JX-122	3.13	60	279.51	95.11
JX-19	3.13	58.94	279	95.35
J104	3.13	59	279.23	95.43
J144	3.13	58.69	279.21	95.55
JX-123	3.13	58	279.64	96.04
JX-20	3.13	56.74	278.96	96.29
JX-57	3.13	57.44	279.86	96.37
JF-86	3.13	56.27	279.23	96.61
JX-23	3.13	55.6	278.92	96.76
JX-60	3.13	54	279.52	97.72
JX-38	3.13	53.66	279.23	97.74
J114	3.13	52.8	278.98	98
JF-130	3.13	52.84	279.2	98.08

2023 Peak Hour Demand Modeling Results

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
J130	3.13	52.68	279.38	98.23
J116	3.13	51.07	278.94	98.73
JX-185	3.13	51.17	279.4	98.89
J146	3.13	50	279.09	99.27
J164	3.13	50.1	279.21	99.28
J120	3.13	49	279.37	99.82
JX-106	3.13	47.76	279.2	100.28
JX-39	3.13	46.57	279.23	100.81
JX-108	3.13	46.21	279.19	100.95
JX-84	3.13	46.02	279.23	101.05
J126	3.13	45.91	279.39	101.17
JX-133	3.13	44	279.5	102.04
JX-114	3.13	42.36	279.5	102.75
JX-63	3.13	39.3	279.38	104.03
J106	3.13	36	279.05	105.31
JX-142	3.13	32.28	279.38	107.07
J160	3.13	31.33	279.19	107.4
JX-22	3.13	29.19	278.93	108.21
J108	3.13	28	279.11	108.8
JX-62	3.13	26.21	279.38	109.7
J158	3.13	25.32	279.18	110
J110	3.13	24.66	279.05	110.23
J98	3.13	22.84	279.45	111.19
J112	3.13	18.92	279.11	112.74
J162	3.13	18.5	279.18	112.95
JX-18	3.13	14.55	279.18	114.66
J102	3.13	14	279.24	114.93
JX-92	3.13	13.27	279.18	115.22
JX-91	3.13	10.36	279.2	116.49
JX-17	3.13	10	279.18	116.64
JX-109	3.13	8	279.38	117.59
JX-110	3.13	8	279.39	117.59
J128	3.13	8	279.39	117.59
JX-61	3.13	8	279.39	117.59
JX-16	3.13	6.45	279.2	118.18
JX-15	3.13	5.43	279.24	118.64

2023 Fireflow Modeling Results

ID	Total Demand (gpm)	Design Flow (gpm)	Design Pressure (psi)	Design Fire Node Pressure (psi)	Critical Pipe ID	Critical Pipe Velocity (ft/s)	
J28	501.69	94.34	20	20	P29	0.6	Deficient
J118	501.69	538.52	20	38.17	PX-129	3.46	
J180	501.69	557.31	20	20	P187	3.56	
JX-66	501.69	561.86	20	20	P141	6.38	
JF-192	501.69	576.43	20	26.86	PF-292	2.3	
JF-190	501.69	578.45	20	24.07	PF-290	3.69	
JF-189	501.69	578.45	20	33.68	PF-298	2.09	
JF-191	501.69	580.49	20	28.72	PF-291	2.57	
J178	501.69	584.13	20	34.93	PF-289	2.27	
JF-188	501.69	590.48	20	36.86	PF-288	3.83	
J134	501.69	598.06	20	27.27	PX-322	6.81	
J124	501.69	659.25	20	42.83	P125	10	
JX-20	501.69	663.22	20	79.7	PX-31	3.24	
JX-22	501.69	663.22	20	83.98	P119	4.3	
J116	501.69	663.22	20	77.5	PX-22	4.31	
J122	501.69	669.02	20	41.82	P137	10	
J114	501.69	677.21	20	81.61	PX-20	3.07	
J16	500.00	824.43	20	36.6	P17	5.32	
J64	751.69	877.9	20	30.41	P71	10	
JX-23	501.69	879.03	20	69.64	PX-23	4.29	
J88	751.69	879.59	20	57.56	PX-113	10	
J46	751.69	879.59	20	47.35	PX-96	10	
J44	751.69	879.59	20	52.1	PX-164	10	
J152	751.69	881.28	20	73.82	P157	10	
JX-39	501.69	881.28	20	72.05	PX-39	10	
JX-131	501.69	881.28	20	48.33	PX-135	10	
JX-118	751.69	881.28	20	80.62	PX-137	10	
JX-71	751.69	881.28	20	57.1	PX-84	10	
J62	751.69	885.97	20	22.4	P65	5.7	
J60	751.69	968.91	20	22.3	P63	6.24	
JX-18	751.69	1,026.39	20	99.27	PX-18	3.26	
JX-17	751.69	1,035.94	20	101.22	PX-17	3.32	
JX-92	1,001.69	1,036.68	20	97.61	PX-107	6.62	
JX-16	501.69	1,059.45	20	102.69	PX-16	3.45	
JX-91	1,001.69	1,059.46	20	99.35	PX-106	6.76	
J58	501.69	1,078.66	20	22.15	P69	6.95	
J162	1,001.69	1,093.15	20	92.29	PX-162	4.56	
J30	501.69	1,097.77	20	55.66	PX-43	7.02	
JX-43	501.69	1,097.77	20	58.71	PX-44	7.04	
JX-41	501.69	1,099.71	20	20.03	P155	7.02	
J104	751.69	1,115.99	20	58.95	P105	7.14	

2023 Fireflow Modeling Results

ID	Total Demand (gpm)	Design Flow (gpm)	Design Pressure (psi)	Design Fire Node Pressure (psi)	Critical Pipe ID	Critical Pipe Velocity (ft/s)
JX-15	751.69	1,116.00	20	103.04	PX-15	3.76
J102	751.69	1,116.00	20	86.56	PF-66	7.16
J158	1,001.69	1,149.95	20	85.17	P165	4.29
JX-14	501.69	1,195.67	20	74.87	PX-68	4.79
J40	501.69	1,198.58	20	20.01	P45	6.98
J160	1,001.69	1,205.03	20	79.39	P161	4.03
J32	501.69	1,259.07	20	53.55	PX-112	8.2
J38	501.69	1,271.76	20	20.9	P43	7.5
J150	501.69	1,277.82	20	20.51	P149	8.17
J164	501.69	1,331.94	20	68.05	P167	5.08
J36	501.69	1,341.04	20	26.57	PX-100	10
JX-24	501.69	1,345.89	20	59.75	PX-25	4.34
J42	501.69	1,355.10	20	25.71	P47	10
J128	501.69	1,359.17	20	98.26	PX-156	6.99
JX-82	501.69	1,377.47	20	20	PX-167	8.79
J98	501.69	1,382.55	20	94.66	PX-69	3.78
JX-129	501.69	1,384.91	20	56.82	PX-132	5.76
J56	751.69	1,387.63	20	20.03	PX-97	8.87
JX-109	501.69	1,390.58	20	93.52	PX-119	6.61
JX-185	501.69	1,395.79	20	62.22	PX-288	9.18
JX-80	501.69	1,411.20	20	24.97	PX-168	7.69
JX-102	501.69	1,419.09	20	20.93	PX-148	7.45
J140	501.69	1,419.57	20	22.52	PX-92	6.56
J136	501.69	1,429.22	20	20	P143	5.05
J138	501.69	1,430.49	20	20.26	PX-93	4.94
J52	501.69	1,433.16	20	20.4	P57	6.03
JX-13	751.69	1,437.33	20	58.16	P101	5.85
JX-133	501.69	1,438.22	20	85.68	PX-154	4.5
J82	751.69	1,451.11	20	40.95	P87	10
J126	501.69	1,465.54	20	60.47	P129	9.24
JX-12	751.69	1,470.11	20	52.56	PX-13	8.6
JX-105	751.69	1,490.35	20	63.2	PX-60	6.09
JX-10	751.69	1,491.57	20	76.35	PX-150	4.17
JX-85	501.69	1,496.29	20	41.56	PX-64	9.57
JX-34	501.69	1,496.29	20	50.98	PX-35	9.58
J166	751.69	1,496.56	20	33.62	PX-127	9.56
J96	751.69	1,508.00	20	57.23	P99	9.63
JX-77	751.69	1,521.32	20	53.52	PX-89	10
J48	751.69	1,528.01	20	40.3	PX-91	10
J50	751.69	1,529.63	20	30.07	P53	10
JX-51	501.69	1,565.03	20	38.34	PX-51	10

2023 Fireflow Modeling Results

ID	Total Demand (gpm)	Design Flow (gpm)	Design Pressure (psi)	Design Fire Node Pressure (psi)	Critical Pipe ID	Critical Pipe Velocity (ft/s)
J92	751.69	1,575.66	20	71.55	PX-10	4.13
J90	751.69	1,603.41	20	66.16	P93	9.12
J132	501.69	1,605.89	20	35.46	P139	7.71
JX-67	501.69	1,617.50	20	38.24	PX-80	5.38
JX-9	751.69	1,624.97	20	69.86	PX-9	3.65
J168	501.69	1,627.49	20	46.24	P171	6.79
JX-70	751.69	1,647.95	20	54.08	PX-83	6.96
JX-123	501.69	1,657.26	20	67.7	PX-125	5.38
J80	751.69	1,747.45	20	47.31	P85	5.83
J86	751.69	1,754.48	20	56.25	P89	5.13
JX-54	501.69	1,792.43	20	55.72	PX-54	6.08
J78	751.69	1,795.28	20	48.46	P83	7.51
JX-6	751.69	1,844.54	20	55.81	PX-6	6.7
JX-93	501.69	1,848.38	20	28.11	PX-255	10
J34	501.69	1,933.26	20	20.01	PX-109	8.59
JX-5	751.69	2,019.35	20	55.4	PX-5	7.44
JX-25	501.69	4,014.63	20	27.55	PX-25	4.24

2037 Peak Hour Demand Modeling Results

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
JX-27	3.3	197.4	278.05	34.95
JX-93	3.3	188.68	281.71	40.31
J172	3.3	322	424.93	44.6
JX-28	3.3	173.89	278.05	45.13
J28	3.3	229	338.07	47.26
J34	3.3	170.63	280.54	47.62
J180	3.3	166.91	278.35	48.29
J118	3.3	155.48	278.05	53.11
JF-190	3.3	152.89	278.35	54.36
JF-192	3.3	151.09	278.35	55.14
J26	3.3	209	338.07	55.93
JF-191	3.3	146.54	278.35	57.11
JX-25	3.3	144.49	278.01	57.85
JX-26	3.3	235.57	370	58.25
JX-127	3.3	138.77	278.06	60.35
J170	3.3	284	424.94	61.07
JF-189	3.3	134.66	278.35	62.26
JX-1	3.3	134.41	281.19	63.6
J24	3.3	191	338.07	63.73
J18	3.3	132	279.12	63.75
J178	3.3	130.88	278.35	63.9
JX-67	3.3	131.09	278.85	64.03
JX-2	3.3	132.07	281.07	64.56
JX-50	3.3	130	279.41	64.74
J40	3.3	131	280.64	64.84
J132	3.3	128.51	278.8	65.12
JF-188	3.3	128.01	278.35	65.14
JX-31	3.3	127.6	278	65.17
JX-68	3.3	125.67	278.89	66.39
J82	3.3	125.09	278.93	66.66
J66	3.3	125	278.85	66.66
JX-131	3.3	124	278.48	66.94
JX-49	3.3	124.61	279.27	67.01
JX-82	3.3	123.09	279.06	67.58
JX-95	3.3	120.42	278.48	68.49
JX-102	3.3	120.94	279.06	68.51
JX-72	3.3	120.83	278.98	68.53
JX-184	3.3	120.13	278.36	68.56
J134	3.3	120.05	278.35	68.59
JX-66	3.3	120	278.35	68.61
JX-51	3.3	120	279.4	69.07

2037 Peak Hour Demand Modeling Results

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
J68	3.3	119	278.84	69.26
J64	3.3	119	279	69.33
JX-100	3.3	208.97	370	69.77
J80	3.3	117.89	279.13	69.86
JX-90	3.3	117.76	279.35	70.02
J36	3.3	119.11	280.92	70.11
J168	3.3	116.91	278.89	70.19
J78	3.3	117.19	279.27	70.23
J46	3.3	116.89	279.35	70.4
J42	3.3	117.61	280.48	70.57
J38	3.3	117.71	280.69	70.62
J22	3.3	175	338.07	70.66
JX-3	3.3	117.26	280.35	70.67
J74	3.3	115	278.2	70.72
J76	3.3	115	278.28	70.75
J72	3.3	115	278.31	70.76
JX-78	3.3	116	279.32	70.77
JX-77	3.3	116	279.36	70.78
JX-71	3.3	114.57	278.95	71.22
J48	3.3	114.74	279.23	71.27
J50	3.3	114.62	279.14	71.29
JX-101	3.3	114.33	279.06	71.38
JX-80	3.3	113.59	279.05	71.69
JX-5	3.3	114.1	279.87	71.83
JX-6	3.3	113.26	279.42	72
JX-4	3.3	112.95	280.19	72.47
JX-70	3.3	111.66	278.95	72.49
J70	3.3	111.7	279.01	72.5
J44	3.3	112.4	279.87	72.56
J140	3.3	111.57	279.05	72.57
J52	3.3	110.96	279.05	72.83
J86	3.3	110.94	279.23	72.92
J58	3.3	110.39	278.99	73.05
JX-103	3.3	110.91	279.87	73.21
JX-37	3.3	109.37	278.37	73.23
JX-76	3.3	110	279.05	73.25
J60	3.3	109.92	278.97	73.25
J176	3.3	110	279.12	73.28
J62	3.3	109.69	278.96	73.34
JX-83	3.3	109.46	278.96	73.44
J136	3.3	108.46	279.05	73.92

2037 Peak Hour Demand Modeling Results

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
J138	3.3	107.47	279.05	74.35
J14	3.3	107	279.12	74.58
JX-81	3.3	106	279.05	74.98
JX-126	3.3	104.59	278.06	75.16
JX-48	3.3	104.05	279.24	75.91
JX-45	3.3	103.94	279.16	75.92
JX-74	3.3	103.83	279.05	75.92
JX-7	3.3	103.03	279.05	76.27
JX-29	3.3	101.87	278.06	76.34
JX-52	3.3	103.12	279.4	76.38
J56	3.3	101.84	279.05	76.79
JX-88	3.3	99	279.05	78.01
JX-75	3.3	98.24	279.05	78.35
JX-59	3.3	97.39	278.65	78.54
JX-30	3.3	95.8	278	78.95
JX-53	3.3	96.89	279.11	78.96
JX-69	3.3	95.97	278.94	79.28
JX-12	3.3	94.04	278.62	79.98
JX-65	3.3	92.87	278.56	80.46
JX-99	3.3	91.69	278	80.73
JX-47	3.3	92	279.23	81.13
J32	3.3	91.88	279.2	81.17
JX-8	3.3	91.59	278.98	81.19
JX-11	3.3	91	278.69	81.32
JX-85	3.3	90.67	278.52	81.4
JX-13	3.3	89.45	278.61	81.96
J166	3.3	89.18	278.52	82.04
JX-44	3.3	89.07	279.16	82.36
JX-125	3.3	88	278.52	82.55
J12	3.3	87	279.13	83.25
JX-34	3.3	84.7	278.52	83.98
JX-9	3.3	80.65	278.94	85.92
JX-128	3.3	78.54	278.42	86.61
J88	3.3	78.13	279.05	87.06
JX-129	3.3	76.42	278.37	87.5
J10	3.3	77	279.14	87.59
JX-21	3.3	75.83	278.05	87.62
JX-54	3.3	76.8	279.03	87.63
JX-35	3.3	75.85	278.53	87.82
JX-105	3.3	75.83	278.63	87.87
J92	3.3	75.94	278.85	87.92

2037 Peak Hour Demand Modeling Results

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
JX-24	3.3	74.7	278.01	88.09
J94	3.3	75	278.71	88.27
JX-43	3.3	75.12	279.15	88.41
JX-55	3.3	73.44	278.63	88.91
J152	3.3	73	278.63	89.1
J96	3.3	72	278.63	89.53
J148	3.3	71	278.24	89.8
J30	3.3	71.21	279.15	90.1
JX-14	3.3	70.31	278.44	90.18
JX-116	3.3	70.49	278.96	90.33
JX-33	3.3	69.61	278.63	90.57
JF-111	3.3	67.97	278.35	91.16
JX-124	3.3	67.45	278.63	91.51
JX-117	3.3	67.05	278.95	91.82
JX-10	3.3	66	278.71	92.17
J124	3.3	65.56	278.52	92.27
JX-41	3.3	65	278.33	92.44
J154	3.3	65	278.55	92.53
JX-42	3.3	65	279.15	92.79
JX-46	3.3	65	279.15	92.79
J150	3.3	63.95	278.33	92.89
J90	3.3	64.34	278.86	92.95
J122	3.3	63.13	278.51	93.33
JX-173	3.3	62	278.09	93.63
JX-118	3.3	62	278.78	93.93
JX-64	3.3	61.18	278.55	94.18
JX-120	3.3	60.36	278.77	94.64
JX-119	3.3	60.24	278.78	94.69
JX-122	3.3	60	278.66	94.75
JX-19	3.3	58.94	278.1	94.96
J104	3.3	59	278.36	95.05
J144	3.3	58.69	278.33	95.17
JX-123	3.3	58	278.8	95.67
JX-20	3.3	56.74	278.06	95.9
JX-57	3.3	57.44	279.04	96.02
JF-86	3.3	56.27	278.36	96.23
JX-23	3.3	55.6	278.01	96.37
JX-60	3.3	54	278.68	97.35
JX-38	3.3	53.66	278.35	97.36
J114	3.3	52.8	278.08	97.61
JF-130	3.3	52.84	278.32	97.7

2037 Peak Hour Demand Modeling Results

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
J130	3.3	52.68	278.52	97.86
J116	3.3	51.07	278.03	98.34
JX-185	3.3	51.17	278.54	98.52
J146	3.3	50	278.2	98.88
J164	3.3	50.1	278.34	98.9
J120	3.3	49	278.51	99.45
JX-106	3.3	47.76	278.32	99.9
JX-39	3.3	46.57	278.35	100.43
JX-108	3.3	46.21	278.31	100.57
JX-84	3.3	46.02	278.35	100.67
J126	3.3	45.91	278.53	100.79
JX-133	3.3	44	278.65	101.67
JX-114	3.3	42.36	278.65	102.38
JX-63	3.3	39.3	278.52	103.65
J106	3.3	36	278.15	104.92
JX-142	3.3	32.28	278.52	106.7
J160	3.3	31.33	278.3	107.01
JX-22	3.3	29.19	278.02	107.82
J108	3.3	28	278.22	108.42
JX-62	3.3	26.21	278.52	109.33
J158	3.3	25.32	278.3	109.62
J110	3.3	24.66	278.15	109.84
J98	3.3	22.84	278.59	110.82
J112	3.3	18.92	278.22	112.35
J162	3.3	18.5	278.29	112.57
JX-18	3.3	14.55	278.29	114.28
J102	3.3	14	278.36	114.55
JX-92	3.3	13.27	278.3	114.84
JX-91	3.3	10.36	278.32	116.11
JX-17	3.3	10	278.3	116.25
JX-109	3.3	8	278.52	117.22
JX-110	3.3	8	278.52	117.22
J128	3.3	8	278.53	117.22
JX-61	3.3	8	278.53	117.22
JX-16	3.3	6.45	278.32	117.8
JX-15	3.3	5.43	278.37	118.26

2037 Fireflow Modeling Results

ID	Total Demand (gpm)	Design Flow (gpm)	Design Pressure (psi)	Design Fire Node Pressure (psi)	Critical Pipe ID	Critical Pipe Velocity (ft/s)	
J28	501.80	93.22	20	20	P29	0.6	Deficient
J118	501.80	526.05	20	38.17	PX-129	3.38	
J180	501.80	550.82	20	20	P187	3.52	
JX-66	501.80	558.16	20	20	P141	6.33	
JF-192	501.80	569.64	20	26.86	PF-292	2.27	
JF-190	501.80	571.63	20	24.11	PF-290	3.65	
JF-189	501.80	571.63	20	33.69	PF-298	2.07	
JF-191	501.80	573.64	20	28.72	PF-291	2.54	
J178	501.80	577.22	20	34.95	PF-289	2.25	
JF-188	501.80	583.5	20	36.86	PF-288	3.79	
J134	501.80	590.98	20	27.55	PX-322	6.73	
JX-20	501.80	646.92	20	79.75	PX-31	3.16	
JX-23	501.80	646.92	20	70.16	PX-23	4.19	
JX-22	501.80	646.92	20	84.36	P119	4.2	
J116	501.80	646.92	20	77.75	PX-22	4.21	
J124	501.80	659.19	20	42.31	P125	10	
J114	501.80	660.49	20	81.65	PX-20	3	
J122	501.80	668.97	20	41.3	P137	10	
J16	500.00	814.38	20	36.62	P17	5.26	
J64	751.80	877.68	20	29.84	P71	10	
J88	751.80	879.48	20	57.05	PX-113	10	
J46	751.80	879.48	20	46.84	PX-96	10	
J44	751.80	879.48	20	51.62	PX-164	10	
J62	751.80	879.71	20	22.41	P65	5.66	
J152	751.80	881.28	20	73.28	P157	10	
JX-71	751.80	881.28	20	56.58	PX-84	10	
JX-39	501.80	881.28	20	71.48	PX-39	10	
JX-118	751.80	881.28	20	80.09	PX-137	10	
JX-131	501.80	881.28	20	47.77	PX-135	10	
J60	751.80	961.93	20	22.32	P63	6.2	
JX-18	751.80	999.69	20	99.28	PX-18	3.19	
JX-92	1,001.80	1,008.69	20	97.75	PX-107	6.44	
JX-17	751.80	1,008.93	20	101.23	PX-17	3.25	
JX-16	501.80	1,031.66	20	102.7	PX-16	3.37	
JX-91	1,001.80	1,031.69	20	99.44	PX-106	6.59	
J162	1,001.80	1,064.05	20	92.55	PX-162	4.44	
J58	501.80	1,070.65	20	22.16	P69	6.9	
JX-43	501.80	1,083.98	20	58.77	PX-44	6.95	
J30	501.80	1,083.98	20	55.83	PX-43	6.93	
JX-15	751.80	1,086.42	20	103.06	PX-15	3.68	
J104	751.80	1,086.42	20	59.97	P105	6.96	

2037 Fireflow Modeling Results

ID	Total Demand (gpm)	Design Flow (gpm)	Design Pressure (psi)	Design Fire Node Pressure (psi)	Critical Pipe ID	Critical Pipe Velocity (ft/s)
J102	751.80	1,086.42	20	87.18	PF-66	6.97
JX-41	501.80	1,094.41	20	20.03	P155	6.99
J158	1,001.80	1,118.84	20	85.64	P165	4.18
JX-14	501.80	1,163.63	20	74.9	PX-68	4.69
J160	1,001.80	1,171.99	20	80.02	P161	3.92
J40	501.80	1,191.57	20	20.01	P45	6.94
JX-24	501.80	1,218.58	20	60.32	PX-24	4.14
J32	501.80	1,243.04	20	53.56	PX-112	8.11
J38	501.80	1,264.20	20	20.96	P43	7.45
J150	501.80	1,271.30	20	20.51	P149	8.13
J164	501.80	1,294.24	20	68.87	P167	4.94
J128	501.80	1,321.50	20	98.47	PX-156	6.8
J36	501.80	1,340.65	20	26.14	PX-100	10
J98	501.80	1,344.23	20	94.74	PX-69	3.69
JX-129	501.80	1,345.33	20	57.63	PX-132	5.61
JX-109	501.80	1,351.85	20	93.97	PX-119	6.43
J42	501.80	1,355.24	20	25.22	P47	10
JX-82	501.80	1,366.48	20	20	PX-167	8.72
JX-185	501.80	1,376.95	20	62.42	PX-288	9.05
J56	751.80	1,378.30	20	20.04	PX-97	8.81
JX-13	751.80	1,397.46	20	58.62	P101	5.69
JX-133	501.80	1,398.23	20	85.75	PX-154	4.39
JX-80	501.80	1,399.50	20	24.97	PX-168	7.64
JX-102	501.80	1,407.63	20	20.93	PX-148	7.39
J140	501.80	1,407.77	20	22.57	PX-92	6.5
J138	501.80	1,418.58	20	20.37	PX-93	4.9
J136	501.80	1,419.05	20	20	P143	5.01
J52	501.80	1,421.55	20	20.47	P57	5.98
J126	501.80	1,424.39	20	61.76	P129	8.98
JX-12	751.80	1,429.42	20	53.19	PX-13	8.36
JX-105	751.80	1,449.18	20	63.69	PX-60	5.91
JX-10	751.80	1,450.18	20	76.41	PX-150	4.09
J82	751.80	1,450.47	20	40.38	P87	10
JX-85	501.80	1,453.08	20	42.87	PX-64	9.3
JX-34	501.80	1,453.09	20	51.94	PX-35	9.31
J166	751.80	1,453.40	20	35.38	PX-127	9.29
J96	751.80	1,465.03	20	58.15	P99	9.35
JX-77	751.80	1,518.34	20	52.99	PX-89	10
J48	751.80	1,525.48	20	39.77	PX-91	10
J50	751.80	1,527.22	20	29.53	P53	10
J92	751.80	1,531.53	20	71.65	PX-10	4.03

2037 Fireflow Modeling Results

ID	Total Demand (gpm)	Design Flow (gpm)	Design Pressure (psi)	Design Fire Node Pressure (psi)	Critical Pipe ID	Critical Pipe Velocity (ft/s)
J90	751.80	1,558.62	20	66.78	P93	8.86
J132	501.80	1,561.21	20	36.2	P139	7.51
JX-51	501.80	1,564.92	20	37.77	PX-51	10
JX-67	501.80	1,572.58	20	38.79	PX-80	5.23
JX-9	751.80	1,579.84	20	69.93	PX-9	3.57
J168	501.80	1,582.21	20	46.7	P171	6.61
JX-70	751.80	1,602.15	20	54.27	PX-83	6.76
JX-123	501.80	1,608.21	20	68.44	PX-125	5.2
J80	751.80	1,698.66	20	47.72	P85	5.68
J86	751.80	1,705.36	20	56.37	P89	5.02
JX-54	501.80	1,738.48	20	56.7	PX-54	5.92
J78	751.80	1,745.38	20	48.84	P83	7.31
JX-6	751.80	1,793.93	20	55.89	PX-6	6.59
JX-93	501.80	1,834.89	20	28.11	PX-255	10
J34	501.8	1,921.35	20	20.02	PX-109	8.58
JX-5	751.8	1,965.24	20	55.5	PX-5	7.32
JX-25	501.8	3,977.99	20	28.29	PX-25	4.13

APPENDIX J

WELLHEAD PROTECTION PROGRAM MATERIALS

Ground Water Contamination
Susceptibility Assessment Survey Form
Version 2.2

IMPORTANT! Please complete one form for each ground water source (well, wellfield, spring) used in your water system.
Photocopy as necessary.

PART I: System Information

Well owner/manager : Freeland Water and Sewer District

Water system name : Freeland Water and Sewer District

County: Island

Water system number: 264508 Source number: SO1

Well depth: 261 (ft.) (*From WFI form*)

Source name: Well A (WFI) = Well #1

WA well identification tag number: AGA908

_____ well not tagged

Number of connections: 550 Population served: 1,028

Township: 29N Range: 02E

Section: 14 1/4 1/4 Section: NE/NW

Latitude/longitude (if available): 48° 00′ 19″ / 122° 31′ 12″

How was lat./long. determined?

_____ global positioning device _____ survey _____ topographic map
___other: State of WA Water Well Report

***** Please refer to Assistance Packet for details and explanations of all questions in Parts II through V.

PART II: Well Construction and Source Information

1) Date well originally constructed: 12 / __ / 65 month/day/year

last reconstruction: __ / __ /__ month/day/year

_____ information unavailable

2) Well driller: Al Nelson

____ well driller unknown

3) Type of well:

___Drilled: __ rotary __ bored __ cable (percussion) _ Dug

__ Other: __ spring(s) __ lateral collector (Ranney)

__ driven __ jetted __ other:

Additional comments: Water Well Report says "Driven"

4) Well report available? _X_ YES (attach copy to form) __ NO

If no well log is available, please attach any other records documenting well construction; e.g. boring logs, "as built" sheets, engineering reports, well reconstruction logs.

5) Average pumping rate: 165 (gallons/min)

Source of information: operator/meter readings

If not documented, how was pumping rate determined? _____

_ Pumping rate unknown

6) Is this source treated?

If so, what type of treatment:

_X_ disinfection __ filtration __ carbon filter __ air stripper __ other

Purpose of treatment (describe materials to be removed or controlled by treatment):

preventive disinfection

7) If source is chlorinated, is a chlorine residual maintained: _X_ YES __ NO

Residual level: 0.2 mg/L (reservoir discharge) (*At the point closest to the source*.)

PART III: Hydrogeologic Information

1) Depth to top of open interval: [check one]

__ < 20 ft __ 20–50 ft __ 50–100 ft __ 100–200 ft _X_ >200 ft

__ information unavailable ('<' *means less than;* '>' *means greater than*)

2) Depth to ground water (static water level):

__ < 20 ft __ 20–50 ft __ 50–100 ft _X_ >100 ft

__ flowing well/spring (artesian)

How was water level determined?

__ well log _X_ other: sounding device in 1999 well test

_ depth to ground water unknown

3) If source is a flowing well or spring, what is the confining pressure:

_____ psi (pounds per square inch)
or
_____ feet above wellhead

4) If source is a flowing well or spring, is there a surface impoundment, reservoir, or catchment associated with this source: __ YES __ NO

5) Wellhead elevation (height above mean sea level): 240 (ft)

How was elevation determined? _X_ topographic map __ Drilling/Well Log __ altimeter

__ other: _____

__ information unavailable

6) Confining layers: (This can be completed only for those sources with a drilling log, well log or geologic report describing subsurface conditions. Please refer to assistance package for example.)

_X_ evidence of a confining layer in well log

__ no evidence of a confining layer in well log

If there is evidence of a confining layer, is the depth to ground water more than 20 feet above the **bottom** of the **lowest confining layer**? __ YES _X_ NO

__ information unavailable

7) Sanitary setback:

__ < 100 ft* _X_ 100–120 ft __ 120–200 ft __ > 200 ft

* if less than 100 ft describe the site conditions:

_____

_____

_____

_____

8) Wellhead construction:

_X_ wellhead enclosed in a wellhouse

_X_ controlled access (describe): _wellhouse is locked and within locked_____

fenced area _____

_X_ other uses for wellhouse (describe): _electrical and control panels for wells

_____

__ no wellhead control

9) Surface seal:

__ 18 ft

_X_ < 18 ft (no Department of Ecology approval) ('*<' means less than*)

__ < 18 ft (Approved by Ecology, include documentation)('*<' means less than*)

__ > 18 ft ('*>' means greater than*)

__ depth of seal unknown

__ no surface seal

10) Annual rainfall (inches per year):

__ < 10 in/yr __ 10–25 in/yr _X_ > 25 in/yr

PART IV: Mapping Your Ground Water Resource

1) Annual volume of water pumped: 26,935,181 proportioned water rights (gallons)

How was this determined?

__ meter

__ estimated: __ pumping rate (_____)

__ pump capacity (_____)

X other: Proportional share of annual water right

2) "Calculated Fixed Radius" estimate of ground water movement:
(see Instruction Packet)

6 month ground water travel time : 510 (ft)

1 year ground water travel time : 722 (ft)

5 year ground water travel time: 1,614 (ft)

10 year ground water travel time: 2,283 (ft)

Information available on length of screened/open interval?

X YES __ NO

Length of screened/open interval: 10 (ft)

3) Is there a river, lake, pond, stream, or other obvious surface water body within the 6 month time of travel boundary? __ YES X NO (mark and identify on map).

4) Is there a stormwater and/or wastewater facility, treatment lagoon, or holding pond located within the 6 month time of travel boundary? __ YES X NO (mark and identify on map).

Comments: _____

PART V: Assessment of Water Quality

1) Regional sources of risk to ground water:

Please indicate if any of the following are present within a circular area around your water source having a radius up to and including the five year ground water travel time:

	6 month	1 year	5 year	unknown
likely pesticide application				
stormwater injection wells				
other injection wells				
abandoned ground water well				
landfills, dumps, disposal areas				
known hazardous materials clean-up site				
water system(s) with known quality problems				
population density > 1 house/acre				
residences commonly have septic tanks	X	X	X	
Wastewater treatment lagoons				
sites used for land application of waste				

Mark and identify on map any of the risks listed above which are located within the 6 month time of travel boundary? (*Please include a map of the wellhead and time of travel areas with this form. Please locate and mark any of the following*.)

If other recorded or potential sources of ground water contamination exist within the ten year time of travel circular zone around your water supply, please describe:

2) Source specific water quality records:

Please indicate the occurrence of any test results since 1986 that meet the following conditions: (Unless listed on assessment, MCLs are listed in assistance package.)

A. Nitrate: (Nitrate MCL = 10 mg/l)	YES
Results greater than MCL	____
< 2 mg/liter nitrate	____
2–5 mg/liter nitrate	_X_
> 5 mg/liter nitrate	____
Nitrate sampling records unavailable	____

B. VOCs: (VOC detection level 0.5 ug/l or 0.0005 mg/l.)	YES
Results greater than MCL or SAL	____
VOCs detected at least once	____
VOCs never detected	_X_
VOC sampling records unavailable	____

C. EDB/DBCP: (EDB MCL = 0.05 ug/l or 0.00005 mg/l. DBCP MCL = 0.2 ug/l or 0.0002 mg/l.)	YES
EDB/DBCP detected below MCL at least once	____
EDB/DBCP detected above MCL at least once	____
EDB/DBCP never detected	____
EDB/DBCP tests required but not yet completed	_X_ (waiver through 12/04)
EDB/DBCP tests not required	____

D. Other SOCs (Pesticides):	YES
Other SOCs detected (pesticides and other synthetic organic chemicals)	____
Other SOC tests performed but none detected (list test methods in comments)	____
Other SOC tests not performed	_X_

If any SOCs in addition to EDB/DBCP were detected, please identify and date. If other SOC tests were performed, but no SOCs detected, list test methods here: _____

SOC waiver through 2004

E. Bacterial contamination: YES

Any bacterial detection(s) in the past 3 years in samples taken from the source (not distribution sampling records) ____

Has source (in past 3 years) had a bacteriological contamination problem found in distribution samples that was attributed to the source. ____

Source sampling records for bacteria unavailable ____

Part VI: Geographic or Hydrologic Factors Contributing to a Non-Circular Zone of Contribution

The following questions will help identify those ground water systems which may not be accurately represented by the calculated fixed radius (CFR) method described in Part IV. For these sources, the CFR areas should be used as a preliminary delineation of the critical time of travel zones for that source. As a system develops its Wellhead Protection Plan for theses sources, a more detailed delineation method should be considered.

1) Is there evidence of obvious hydrologic boundaries within the 10 year time of travel zone of the CFR? (Does the largest circle extend over a stream, river, lake, up a steep hillside, and/or over a mountain or ridge?)

__ YES _X_ NO

Describe with references to map produced in Part IV:

_____

_____

2) Aquifer Material:

A) Does the drilling log, well log or other geologic/engineering reports identify that the well is located in an area where the underground conditions are identified as fractured rock and/or basalt terrain?

__ YES _X_ NO

B) Does the drilling log, well log or other geologic/engineering reports indicate that the well is located in an area where the underground conditions are primarily identified as coarse sand and gravel?

__ YES _X_ NO

3) Is the source located in an aquifer with a high horizontal flow rate? (These can include sources located on flood plains of large rivers, artesian wells with high water pressure, and/or shallow flowing wells and springs.)

__ YES _X_ NO

4) Are there other high capacity wells (agricultural, municipal and/or industrial) located within the CFRs?

a) Presence of ground water extraction wells removing more than approximately 500 gal/min within...

	YES	NO	unknown
< 6 month travel time	__	_X_	____
6 month–1 year travel time	___	_X_	____
1–5 year travel time	___	_X_	____
5–10 year travel time	___	_X_	____

b) Presence of ground water recharge wells (dry wells) or heavy irrigation within...

	YES	NO	unknown
< 1 year travel time	___	_X_	____
1–5 year travel time	___	_X_	____
5–10 year travel time	___	_X_	____

Please identify or describe additional hydrologic or geographic conditions that you believe may affect the shape of the zone of contribution for this source. Where possible, reference them to locations on the map produced in Part IV.

Suggestions and Comments

Did you attend one of the susceptibility workshops? __ YES _X_ NO

Did you find it useful? __ YES __ NO

Did you seek outside assistance to complete the assessment? __ YES _X_ NO

- -

This form and instruction packet are still in the process of development. Your comments, suggestions and questions will help us upgrade and improve this assessment form. If you found particular sections confusing or problematic please let us know. How could this susceptibility assessment be improved or made clearer? Did the instruction package help you find the information needed to complete the assessment? How much time did it take you to complete the form? Were you able to complete the assessment without additional/outside expertise? Do you feel the assessment was valuable as a learning experience? Any other comments or constructive criticisms you have would be appreciated.

Ground Water Contamination
Susceptibility Assessment Survey Form
Version 2.2

IMPORTANT! Please complete one form for each ground water source (well, wellfield, spring) used in your water system.
Photocopy as necessary.

PART I: System Information

Well owner/manager : Freeland Water and Sewer District

Water system name : Freeland Water and Sewer District

County: Island

Water system number: 264508 Source number: SO2

Well depth: 200 (ft.) (*From WFI form*)

Source name: Well B (WFI) = Well #2

WA well identification tag number: AGA907

_____ well not tagged

Number of connections: 550 Population served: 1,028

Township: 29N Range: 02E

Section: 14 1/4 1/4 Section: NW/NW

Latitude/longitude (if available): 48° 00′ 16″ / 122° 31′ 20″

How was lat./long. determined?

_____ global positioning device _____ survey _____ topographic map
___other: State of WA Water Well Report

***** Please refer to Assistance Packet for details and explanations of all questions in Parts II through V.

PART II: Well Construction and Source Information

1) Date well originally constructed: 12 / 4 / 80 month/day/year

last reconstruction: __ / __ /__ month/day/year

_____ information unavailable

2) Well driller: B&W Well Drilling Co.

____ well driller unknown

3) Type of well:

_X_ Drilled: _X_ rotary __ bored __ cable (percussion) _ Dug

__ Other: __ spring(s) __ lateral collector (Ranney)

__ driven __ jetted __ other:

Additional comments: _____

4) Well report available? _X_ YES (attach copy to form) __ NO

If no well log is available, please attach any other records documenting well construction; e.g. boring logs, "as built" sheets, engineering reports, well reconstruction logs.

5) Average pumping rate: 189 (gallons/min)

Source of information: operator/meter readings

If not documented, how was pumping rate determined? _____

_ Pumping rate unknown

6) Is this source treated?

If so, what type of treatment:

_X_ disinfection __ filtration __ carbon filter __ air stripper __ other

Purpose of treatment (describe materials to be removed or controlled by treatment):

preventive disinfection

7) If source is chlorinated, is a chlorine residual maintained: _X_ YES __ NO

Residual level: 0.2 mg/L (reservoir discharge) (*At the point closest to the source.*)

PART III: Hydrogeologic Information

1) Depth to top of open interval: [check one]

__ < 20 ft __ 20–50 ft __ 50–100 ft _X_ 100–200 ft __ >200 ft

__ information unavailable ('<' *means less than;* '>' *means greater than*)

2) Depth to ground water (static water level):

__ < 20 ft __ 20–50 ft __ 50–100 ft _X_ >100 ft

__ flowing well/spring (artesian)

How was water level determined?

__ well log _X_ other: sounding device in 1999 well test

_ depth to ground water unknown

3) If source is a flowing well or spring, what is the confining pressure:

_____ psi (pounds per square inch)
or
_____ feet above wellhead

4) If source is a flowing well or spring, is there a surface impoundment, reservoir, or catchment associated with this source: __ YES __ NO

5) Wellhead elevation (height above mean sea level): 170 (ft)

How was elevation determined? _X_ topographic map __ Drilling/Well Log __ altimeter

__ other: _____

__ information unavailable

6) Confining layers: (This can be completed only for those sources with a drilling log, well log or geologic report describing subsurface conditions. Please refer to assistance package for example.)

_X_ evidence of a confining layer in well log

__ no evidence of a confining layer in well log

If there is evidence of a confining layer, is the depth to ground water more than 20 feet above the **bottom** of the **lowest confining layer**? __ YES _X_ NO

__ information unavailable

7) Sanitary setback:

__ < 100 ft* _X_ 100–120 ft __ 120–200 ft __ > 200 ft

* if less than 100 ft describe the site conditions:

_____

_____

_____

_____

8) Wellhead construction:

_X_ wellhead enclosed in a wellhouse

___ controlled access (describe): _____

_____

___ other uses for wellhouse (describe): _____

_____

__ no wellhead control

9) Surface seal:

__ 18 ft

___ < 18 ft (no Department of Ecology approval) ('<' *means less than*)

__ < 18 ft (Approved by Ecology, include documentation)('<' *means less than*)

_X_ > 18 ft ('>' *means greater than*)

__ depth of seal unknown

__ no surface seal

10) Annual rainfall (inches per year):

__ < 10 in/yr __ 10–25 in/yr _X_ > 25 in/yr

PART IV: Mapping Your Ground Water Resource

1) Annual volume of water pumped: 26,935,181 proportioned water rights (gallons)

How was this determined?

__ meter

__ estimated: __ pumping rate (_____)

__ pump capacity (_____)

X other: Proportional share of annual water right

2) "Calculated Fixed Radius" estimate of ground water movement:
(see Instruction Packet)

6 month ground water travel time : 417 (ft)

1 year ground water travel time : 589 (ft)

5 year ground water travel time: 1,318 (ft)

10 year ground water travel time: 1,864 (ft)

Information available on length of screened/open interval?

X YES __ NO

Length of screened/open interval: 15 (ft)

3) Is there a river, lake, pond, stream, or other obvious surface water body within the 6 month time of travel boundary? __ YES X NO (mark and identify on map).

4) Is there a stormwater and/or wastewater facility, treatment lagoon, or holding pond located within the 6 month time of travel boundary? __ YES X NO (mark and identify on map).

Comments: _____

_____

_____

_____

_____

PART V: Assessment of Water Quality

1) Regional sources of risk to ground water:

Please indicate if any of the following are present within a circular area around your water source having a radius up to and including the five year ground water travel time:

	6 month	1 year	5 year	unknown
likely pesticide application				
stormwater injection wells				
other injection wells				
abandoned ground water well				
landfills, dumps, disposal areas				
known hazardous materials clean-up site				
water system(s) with known quality problems				
population density > 1 house/acre				
residences commonly have septic tanks	X	X	X	
Wastewater treatment lagoons				
sites used for land application of waste				

Mark and identify on map any of the risks listed above which are located within the 6 month time of travel boundary? (*Please include a map of the wellhead and time of travel areas with this form. Please locate and mark any of the following*.)

If other recorded or potential sources of ground water contamination exist within the ten year time of travel circular zone around your water supply, please describe:

2) Source specific water quality records:

Please indicate the occurrence of any test results since 1986 that meet the following conditions: (Unless listed on assessment, MCLs are listed in assistance package.)

A. Nitrate: (Nitrate MCL = 10 mg/l)	YES
Results greater than MCL	____
< 2 mg/liter nitrate	____
2–5 mg/liter nitrate	_X_
> 5 mg/liter nitrate	____
Nitrate sampling records unavailable	____

B. VOCs: (VOC detection level 0.5 ug/l or 0.0005 mg/l.)	YES
Results greater than MCL or SAL	____
VOCs detected at least once	____
VOCs never detected	_X_
VOC sampling records unavailable	____

C. EDB/DBCP: (EDB MCL = 0.05 ug/l or 0.00005 mg/l. DBCP MCL = 0.2 ug/l or 0.0002 mg/l.)	YES
EDB/DBCP detected below MCL at least once	____
EDB/DBCP detected above MCL at least once	____
EDB/DBCP never detected	_X_ (waiver through 12/04)
EDB/DBCP tests required but not yet completed	____
EDB/DBCP tests not required	____

D. Other SOCs (Pesticides):	YES
Other SOCs detected (pesticides and other synthetic organic chemicals)	____
Other SOC tests performed but none detected (list test methods in comments)	____
Other SOC tests not performed	_X_

If any SOCs in addition to EDB/DBCP were detected, please identify and date. If other SOC tests were performed, but no SOCs detected, list test methods here: _____

SOC waiver through 2004

E. Bacterial contamination: YES

Any bacterial detection(s) in the past 3 years in samples taken from the source (not distribution sampling records) ____

Has source (in past 3 years) had a bacteriological contamination problem found in distribution samples that was attributed to the source. ____

Source sampling records for bacteria unavailable ____

Part VI: Geographic or Hydrologic Factors Contributing to a Non-Circular Zone of Contribution

The following questions will help identify those ground water systems which may not be accurately represented by the calculated fixed radius (CFR) method described in Part IV. For these sources, the CFR areas should be used as a preliminary delineation of the critical time of travel zones for that source. As a system develops its Wellhead Protection Plan for theses sources, a more detailed delineation method should be considered.

1) Is there evidence of obvious hydrologic boundaries within the 10 year time of travel zone of the CFR? (Does the largest circle extend over a stream, river, lake, up a steep hillside, and/or over a mountain or ridge?)

__ YES _X_ NO

Describe with references to map produced in Part IV:

_____

_____

2) Aquifer Material:

A) Does the drilling log, well log or other geologic/engineering reports identify that the well is located in an area where the underground conditions are identified as fractured rock and/or basalt terrain?

__ YES _X_ NO

B) Does the drilling log, well log or other geologic/engineering reports indicate that the well is located in an area where the underground conditions are primarily identified as coarse sand and gravel?

__ YES _X_ NO

3) Is the source located in an aquifer with a high horizontal flow rate? (These can include sources located on flood plains of large rivers, artesian wells with high water pressure, and/or shallow flowing wells and springs.)

__ YES _X_ NO

4) Are there other high capacity wells (agricultural, municipal and/or industrial) located within the CFRs?

a) Presence of ground water extraction wells removing more than approximately 500 gal/min within...

	YES	NO	unknown
< 6 month travel time	__	_X_	____
6 month–1 year travel time	___	_X_	____
1–5 year travel time	___	_X_	____
5–10 year travel time	___	_X_	____

b) Presence of ground water recharge wells (dry wells) or heavy irrigation within...

	YES	NO	unknown
< 1 year travel time	___	_X_	____
1–5 year travel time	___	_X_	____
5–10 year travel time	___	_X_	____

Please identify or describe additional hydrologic or geographic conditions that you believe may affect the shape of the zone of contribution for this source. Where possible, reference them to locations on the map produced in Part IV.

Suggestions and Comments

Did you attend one of the susceptibility workshops? __ YES _X_ NO

Did you find it useful? __ YES __ NO

Did you seek outside assistance to complete the assessment? __ YES _X_ NO

- -

This form and instruction packet are still in the process of development. Your comments, suggestions and questions will help us upgrade and improve this assessment form. If you found particular sections confusing or problematic please let us know. How could this susceptibility assessment be improved or made clearer? Did the instruction package help you find the information needed to complete the assessment? How much time did it take you to complete the form? Were you able to complete the assessment without additional/outside expertise? Do you feel the assessment was valuable as a learning experience? Any other comments or constructive criticisms you have would be appreciated.

Ground Water Contamination
Susceptibility Assessment Survey Form
Version 2.2

IMPORTANT! Please complete one form for each ground water source (well, wellfield, spring) used in your water system.
Photocopy as necessary.

PART I: System Information

Well owner/manager : Freeland Water and Sewer District

Water system name : Freeland Water and Sewer District

County: Island

Water system number: 264508 Source number: SO4

Well depth: 368 (ft.) (*From WFI form*)

Source name: Well #3 (WFI)

WA well identification tag number: AFJ868

_____ well not tagged

Number of connections: 550 Population served: 1,028

Township: 29N Range: 02E

Section: 14 1/4 1/4 Section: SE/NW

Latitude/longitude (if available): 48° 00′ 16″ / 122° 31′ 20″

How was lat./long. determined?

_____ global positioning device _____ survey _____ topographic map
___other: State of WA Water Well Report

***** Please refer to Assistance Packet for details and explanations of all questions in Parts II through V.

PART II: Well Construction and Source Information

1) Date well originally constructed: 12 / 4 / 80 month/day/year

last reconstruction: __ / __ /__ month/day/year

_____ information unavailable

2) Well driller: B&W Well Drilling Co.

____ well driller unknown

3) Type of well:

_X_ Drilled: _X_ rotary __ bored __ cable (percussion) _ Dug

__ Other: __ spring(s) __ lateral collector (Ranney)

__ driven __ jetted __ other:

Additional comments: _____

4) Well report available? _X_ YES (attach copy to form) __ NO

If no well log is available, please attach any other records documenting well construction; e.g. boring logs, "as built" sheets, engineering reports, well reconstruction logs.

5) Average pumping rate: 147 (gallons/min)

Source of information: operator/meter readings

If not documented, how was pumping rate determined? _____

_ Pumping rate unknown

6) Is this source treated?

If so, what type of treatment:

_X_ disinfection __ filtration __ carbon filter __ air stripper __ other

Purpose of treatment (describe materials to be removed or controlled by treatment):

preventive disinfection

7) If source is chlorinated, is a chlorine residual maintained: _X_ YES __ NO

Residual level: 0.2 mg/L (reservoir discharge) (*At the point closest to the source*.)

PART III: Hydrogeologic Information

1) Depth to top of open interval: [check one]

__ < 20 ft __ 20–50 ft __ 50–100 ft _X_ 100–200 ft __ >200 ft

__ information unavailable ('<' *means less than;* '>' *means greater than*)

2) Depth to ground water (static water level):

__ < 20 ft __ 20–50 ft __ 50–100 ft _X_ >100 ft

__ flowing well/spring (artesian)

How was water level determined?

__ well log _X_ other: sounding device in 1999 well test

_ depth to ground water unknown

3) If source is a flowing well or spring, what is the confining pressure:

_____ psi (pounds per square inch)
or
_____ feet above wellhead

4) If source is a flowing well or spring, is there a surface impoundment, reservoir, or catchment associated with this source: __ YES __ NO

5) Wellhead elevation (height above mean sea level): 170 (ft)

How was elevation determined? _X_ topographic map __ Drilling/Well Log __ altimeter

__ other: _____

__ information unavailable

6) Confining layers: (This can be completed only for those sources with a drilling log, well log or geologic report describing subsurface conditions. Please refer to assistance package for example.)

_X_ evidence of a confining layer in well log

__ no evidence of a confining layer in well log

If there is evidence of a confining layer, is the depth to ground water more than 20 feet above the **bottom** of the **lowest confining layer**? __ YES _X_ NO

__ information unavailable

7) Sanitary setback:

__ < 100 ft* _X_ 100–120 ft __ 120–200 ft __ > 200 ft

* if less than 100 ft describe the site conditions:

_____

_____

_____

_____

8) Wellhead construction:

_X_ wellhead enclosed in a wellhouse

___ controlled access (describe): _____

_____

___ other uses for wellhouse (describe): _____

_____

__ no wellhead control

9) Surface seal:

__ 18 ft

___ < 18 ft (no Department of Ecology approval) ('<' *means less than*)

__ < 18 ft (Approved by Ecology, include documentation)('<' *means less than*)

_X_ > 18 ft ('>' *means greater than*)

__ depth of seal unknown

__ no surface seal

10) Annual rainfall (inches per year):

__ < 10 in/yr __ 10–25 in/yr _X_ > 25 in/yr

PART IV: Mapping Your Ground Water Resource

1) Annual volume of water pumped: 26,935,181 proportioned water rights (gallons)

How was this determined?

__ meter

__ estimated: __ pumping rate (_____)

__ pump capacity (_____)

X other: Proportional share of annual water right

2) "Calculated Fixed Radius" estimate of ground water movement:
(see Instruction Packet)

6 month ground water travel time : 417 (ft)

1 year ground water travel time : 589 (ft)

5 year ground water travel time: 1,318 (ft)

10 year ground water travel time: 1,864 (ft)

Information available on length of screened/open interval?

X YES __ NO

Length of screened/open interval: 15 (ft)

3) Is there a river, lake, pond, stream, or other obvious surface water body within the 6 month time of travel boundary? __ YES X NO (mark and identify on map).

4) Is there a stormwater and/or wastewater facility, treatment lagoon, or holding pond located within the 6 month time of travel boundary? __ YES X NO (mark and identify on map).

Comments: _____

_____

_____

_____

_____

PART V: Assessment of Water Quality

1) Regional sources of risk to ground water:

Please indicate if any of the following are present within a circular area around your water source having a radius up to and including the five year ground water travel time:

	6 month	1 year	5 year	unknown
likely pesticide application				
stormwater injection wells				
other injection wells				
abandoned ground water well				
landfills, dumps, disposal areas				
known hazardous materials clean-up site				
water system(s) with known quality problems				
population density > 1 house/acre				
residences commonly have septic tanks	X	X	X	
Wastewater treatment lagoons				
sites used for land application of waste				

Mark and identify on map any of the risks listed above which are located within the 6 month time of travel boundary? (*Please include a map of the wellhead and time of travel areas with this form. Please locate and mark any of the following*.)

If other recorded or potential sources of ground water contamination exist within the ten year time of travel circular zone around your water supply, please describe:

2) Source specific water quality records:

Please indicate the occurrence of any test results since 1986 that meet the following conditions: (Unless listed on assessment, MCLs are listed in assistance package.)

A. Nitrate: (Nitrate MCL = 10 mg/l)	YES
Results greater than MCL	____
< 2 mg/liter nitrate	____
2–5 mg/liter nitrate	_X_
> 5 mg/liter nitrate	____
Nitrate sampling records unavailable	____

B. VOCs: (VOC detection level 0.5 ug/l or 0.0005 mg/l.)	YES
Results greater than MCL or SAL	____
VOCs detected at least once	____
VOCs never detected	_X_
VOC sampling records unavailable	____

C. EDB/DBCP: (EDB MCL = 0.05 ug/l or 0.00005 mg/l. DBCP MCL = 0.2 ug/l or 0.0002 mg/l.)	YES
EDB/DBCP detected below MCL at least once	____
EDB/DBCP detected above MCL at least once	____
EDB/DBCP never detected	_X_ (waiver through 12/04)
EDB/DBCP tests required but not yet completed	____
EDB/DBCP tests not required	____

D. Other SOCs (Pesticides):	YES
Other SOCs detected (pesticides and other synthetic organic chemicals)	____
Other SOC tests performed but none detected (list test methods in comments)	____
Other SOC tests not performed	_X_

If any SOCs in addition to EDB/DBCP were detected, please identify and date. If other SOC tests were performed, but no SOCs detected, list test methods here: _____

SOC waiver through 2004

E. Bacterial contamination: YES

Any bacterial detection(s) in the past 3 years in samples taken from the source (not distribution sampling records) ____

Has source (in past 3 years) had a bacteriological contamination problem found in distribution samples that was attributed to the source. ____

Source sampling records for bacteria unavailable ____

Part VI: Geographic or Hydrologic Factors Contributing to a Non-Circular Zone of Contribution

The following questions will help identify those ground water systems which may not be accurately represented by the calculated fixed radius (CFR) method described in Part IV. For these sources, the CFR areas should be used as a preliminary delineation of the critical time of travel zones for that source. As a system develops its Wellhead Protection Plan for theses sources, a more detailed delineation method should be considered.

1) Is there evidence of obvious hydrologic boundaries within the 10 year time of travel zone of the CFR? (Does the largest circle extend over a stream, river, lake, up a steep hillside, and/or over a mountain or ridge?)

__ YES _X_ NO

Describe with references to map produced in Part IV:

_____

_____

2) Aquifer Material:

A) Does the drilling log, well log or other geologic/engineering reports identify that the well is located in an area where the underground conditions are identified as fractured rock and/or basalt terrain?

__ YES _X_ NO

B) Does the drilling log, well log or other geologic/engineering reports indicate that the well is located in an area where the underground conditions are primarily identified as coarse sand and gravel?

__ YES _X_ NO

3) Is the source located in an aquifer with a high horizontal flow rate? (These can include sources located on flood plains of large rivers, artesian wells with high water pressure, and/or shallow flowing wells and springs.)

__ YES _X_ NO

4) Are there other high capacity wells (agricultural, municipal and/or industrial) located within the CFRs?

a) Presence of ground water extraction wells removing more than approximately 500 gal/min within...

	YES	NO	unknown
< 6 month travel time	__	_X_	____
6 month–1 year travel time	___	_X_	____
1–5 year travel time	___	_X_	____
5–10 year travel time	___	_X_	____

b) Presence of ground water recharge wells (dry wells) or heavy irrigation within...

	YES	NO	unknown
< 1 year travel time	___	_X_	____
1–5 year travel time	___	_X_	____
5–10 year travel time	___	_X_	____

Please identify or describe additional hydrologic or geographic conditions that you believe may affect the shape of the zone of contribution for this source. Where possible, reference them to locations on the map produced in Part IV.

Suggestions and Comments

Did you attend one of the susceptibility workshops? __ YES _X_ NO

Did you find it useful? __ YES __ NO

Did you seek outside assistance to complete the assessment? __ YES _X_ NO

- -

This form and instruction packet are still in the process of development. Your comments, suggestions and questions will help us upgrade and improve this assessment form. If you found particular sections confusing or problematic please let us know. How could this susceptibility assessment be improved or made clearer? Did the instruction package help you find the information needed to complete the assessment? How much time did it take you to complete the form? Were you able to complete the assessment without additional/outside expertise? Do you feel the assessment was valuable as a learning experience? Any other comments or constructive criticisms you have would be appreciated.

Ground Water Contamination
Susceptibility Assessment Survey Form
Version 2.2

IMPORTANT! Please complete one form for each ground water source (well, wellfield, spring) used in your water system. Photocopy as necessary.

PART I: System Information

Well owner / manager : Freeland Water and Sewer District

Water system name : Sunny View Farms Water System

County: Island

Water system number: 01072W Source number: S01

Well depth: (ft.) (*From WFI form*) 235 feet total depth. 220 feet to first open interval

Source name: WELL #1

WA well identification tag number: ALQ- 382

_____well not tagged

Township: 29N Range: 02E

Section: 13 1/4 1/4 Section: NW NE

Latitude / longitude (if available): / 48º 00' 19.58" N 122º 30' 46.85" W

How was lat. / long. determined?

_____global positioning device _____survey topographic map
X other: Google Earth

* Please refer to Assistance Packet for details and explanations of all questions in Parts II through V.

PART II: Well Construction and Source Information

1) Date well originally constructed: 04 / 08 / 1994 (month / day / year)

last reconstruction: _____ / _____ / _____ month / day / year. Not

_____ information unavailable

2) Well driller:

Mark Arnold? (legibility on well log is poor) well driller unknown

3) Type of well:

Drilled: rotary _____ bored _X_ cable (percussion) _____ Dug

_____ Other: _____ spring(s) _____ lateral collector (Ranney)

_____ driven _____ jetted _____ other:

Additional comments: _____

4) Well report available? _YES_ (attach copy to form)

If no well log is available, please attach any other records documenting well construction; e.g. boring logs, "as built" sheets, engineering reports, well reconstruction logs.

5) Average pumping rate: 40 (gallons / min)

Source of information: WFI Form

If not documented, how was pumping rate determined? _____

_____ Pumping rate unknown

6) Is this source treated? No.

If so, what type of treatment:

_ disinfection _____ filtration _____ carbon filter _____ air stripper _____ other

Purpose of treatment (describe materials to be removed or controlled by treatment):

_____

7) If source is chlorinated, is a chlorine residual maintained: _ YES _____ NO

Residual level: ????? (*At the point closest to the source.*)

PART III: Hydrogeologic Information

1) Depth to top of open interval: [check one]

_____< 20 ft _____ 20–50 ft _____ 50–100 ft _____100–200 ft _X_ >200 ft

_____ information unavailable ('<' *means less than; '>' means greater than*)

2) Depth to ground water (static water level):

__ < 20 ft __ 20–50 ft __ 50–100 ft _X_ >100 ft

__ flowing well/spring (artesian)

How was water level determined?

_X_ well log __ other: _____

_ depth to ground water unknown

3) If source is a flowing well or spring, what is the confining pressure: NA

_____ psi (pounds per square inch)
or
_____ feet above wellhead

4) If source is a flowing well or spring, is there a surface impoundment, reservoir, or catchment associated with this source: __ YES __ NO NA

5) Wellhead elevation (height above mean sea level): __213__ (ft)

How was elevation determined? _ topographic map __ Drilling/Well Log __ altimeter

_X_ other: __Google Earth_____

__ information unavailable

6) Confining layers: (This can be completed only for those sources with a drilling log, well log or geologic report describing subsurface conditions. Please refer to assistance package for example.)

_X_ evidence of a confining layer in well log

__ no evidence of a confining layer in well log

If there is evidence of a confining layer, is the depth to ground water more than 20 feet above the bottom of the lowest confining layer? __ YES _X_ NO

__ information unavailable

7) Sanitary setback:

__ < 100 ft* _X_ 100–120 ft __ 120–200 ft __ > 200 ft

* if less than 100 ft describe the site conditions:

_____

_____

_____

_____

8) Wellhead construction:

_X_ wellhead enclosed in a wellhouse

_X_ controlled access (describe): Remote location on private property

_____

__ other uses for wellhouse (describe): _____

_____

__ no wellhead control

9) Surface seal:

__ 18 ft

__ < 18 ft (no Department of Ecology approval) ('*<' means less than*)

__ < 18 ft (Approved by Ecology, include documentation) ('*<' means less than*)

_X_ > 18 ft ('*>' means greater than*)

__ depth of seal unknown

__ no surface seal

10) Annual rainfall (inches per year):

__ < 10 in / yr __ 10–25 in / yr _X_ > 25 in / yr

PART IV: Mapping Your Ground Water Resource

1) Annual volume of water pumped: 26,068,000 (gallons)

How was this determined?

__ meter

__ estimated: __ pumping rate (_____)

__ pump capacity (_____)

_X_ other: Annual Water Right Limit

2) "Calculated Fixed Radius" estimate of ground water movement:
(see Instruction Packet)

6 month ground water travel time : 410 (ft)

1 year ground water travel time : 580 (ft)

5 year ground water travel time: 1,296 (ft)

10 year ground water travel time: 1,833 (ft)

Information available on length of screened / open interval?

_X_ YES_ NO

Length of screened / open interval: 15 (ft)

3) Is there a river, lake, pond, stream, or other obvious surface water body within the 6 month time of travel boundary? __ YES _X_ NO (mark and identify on map).

4) Is there a stormwater and / or wastewater facility, treatment lagoon, or holding pond located within the 6 month time of travel boundary? __ YES _X_ NO (mark and identify on map).

Comments: _____

PART V: Assessment of Water Quality

1) Regional sources of risk to ground water:

Please indicate if any of the following are present within a circular area around your water source having a radius up to and including the five year ground water travel time:

	6 month	1 year	5 year	unknown
likely pesticide application				
stormwater injection wells				
other injection wells				
abandoned ground water well				
landfills, dumps, disposal areas				
known hazardous materials clean-up site				
water system(s) with known quality problems				
population density > 1 house / acre				
residences commonly have septic tanks	X	X	X	X
Wastewater treatment lagoons				
sites used for land application of waste				

Mark and identify on map any of the risks listed above which are located within the 6 month time of travel boundary? (*Please include a map of the wellhead and time of travel areas with this form. Please locate and mark any of the following*.)

If other recorded or potential sources of ground water contamination exist within the ten year time of travel circular zone around your water supply, please describe:

_____

_____

_____

_____

_____

_____

2) Source specific water quality records:

Please indicate the occurrence of any test results since 1986 that meet the following conditions: (Unless listed on assessment, MCLs are listed in assistance package.)

A. Nitrate: (Nitrate MCL = 10 mg/l) YES

Results greater than MCL ..... No

< 2 mg/liter nitrate..... ____

2–5 mg/liter nitrate..... 1

> 5 mg/liter nitrate..... 3

Nitrate sampling records unavailable ..... ____

B. VOCs: (VOC detection level 0.5 ug/l or 0.0005 mg/l.) Not Tested

Results greater than MCL or SAL ..... ____

VOCs detected at least once ..... ____

VOCs never detected ..... ____

VOC sampling records unavailable ____

C. EDB/DBCP: Not Tested

(EDB MCL = 0.05 ug/l or 0.00005 mg/l. DBCP MCL = 0.2 ug/l or 0.0002 mg/l.)

EDB/DBCP detected below MCL at least once..... ____

EDB/DBCP detected above MCL at least once ..... ____

EDB/DBCP never detected..... ____

EDB/DBCP tests required but not yet completed ____

EDB/DBCP tests not required ____

D. Other SOCs (Pesticides): Not Tested

Other SOCs detected ____

(pesticides and other synthetic organic chemicals)

Other SOC tests performed but none detected ____

(list test methods in comments)

Other SOC tests not performed ____

If any SOCs in addition to EDB/DBCP were detected, please identify and date. If other SOC tests were performed, but no SOCs detected, list test methods here: _____

_____

_____

E. Bacterial contamination: No

Any bacterial detection(s) in the past 3 years in samples taken from the source (not distribution sampling records). ..... No

Has source (in past 3 years) had a bacteriological contamination problem found in distribution samples that was attributed to the source..... No

Source sampling records for bacteria unavailable ____

Part VI: Geographic or Hydrologic Factors Contributing to a Non-Circular Zone of Contribution

The following questions will help identify those ground water systems which may not be accurately represented by the calculated fixed radius (CFR) method described in Part IV. For these sources, the CFR areas should be used as a preliminary delineation of the critical time of travel zones for that source. As a system develops its Wellhead Protection Plan for theses sources, a more detailed delineation method should be considered.

1) Is there evidence of obvious hydrologic boundaries within the 10 year time of travel zone of the CFR? (Does the largest circle extend over a stream, river, lake, up a steep hillside, and/or over a mountain or ridge?)

_No_ YES __ NO

Describe with references to map produced in Part IV:

_____

_____

2) Aquifer Material:

A) Does the drilling log, well log or other geologic/engineering reports identify that the well is located in an area where the underground conditions are identified as fractured rock and/or basalt terrain?

__ YES _X_ NO

B) Does the drilling log, well log or other geologic/engineering reports indicate that the well is located in an area where the underground conditions are primarily identified as coarse sand and gravel?

__ YES _X_ NO

3) Is the source located in an aquifer with a high horizontal flow rate? (These can include sources located on flood plains of large rivers, artesian wells with high water pressure, and/or shallow flowing wells and springs.)

__ YES _X_ NO

4) Are there other high capacity wells (agricultural, municipal and/or industrial) located within the CFRs?

a) Presence of ground water extraction wells removing more than approximately 500 gal/min within...

	YES	NO	unknown
< 6 month travel time	___	_X_	____
6 month–1 year travel time	___	_X_	____
1–5 year travel time	___	_X_	____
5–10 year travel time	___	_X_	____

b) Presence of ground water recharge wells (dry wells) or heavy irrigation within...

	YES	NO	unknown
< 1 year travel time	___	_X_	____
1–5 year travel time	___	_X_	____
5–10 year travel time	___	_X_	____

Please identify or describe additional hydrologic or geographic conditions that you believe may affect the shape of the zone of contribution for this source. Where possible, reference them to locations on the map produced in Part IV.

Suggestions and Comments

Did you attend one of the susceptibility workshops? X YES __ NO

Did you find it useful? X YES __ NO

Did you seek outside assistance to complete the assessment? __ YES X NO

- -

This form and instruction packet are still in the process of development. Your comments, suggestions and questions will help us upgrade and improve this assessment form. If you found particular sections confusing or problematic please let us know. How could this susceptibility assessment be improved or made clearer? Did the instruction package help you find the information needed to complete the assessment? How much time did it take you to complete the form? Were you able to complete the assessment without additional/outside expertise? Do you feel the assessment was valuable as a learning experience? Any other comments or constructive criticisms you have would be appreciated.

1. Update this form using tables and form fields to make it easier to fill out.

2. Eliminate all the unused tab settings.

3. Eliminate this section on suggestions and comments if you are not actually going to use them.

October 11, 2013

JM1306

Gray & Osborne, Inc.
701 Dexter Avenue North, Suite 200
Seattle, WA 98109

Attn: Mike Jauhola

Re: Freeland Water & Sewer District Well Capture Zone Analysis

Dear Mike,

This letter summarizes our capture zone analysis for the Freeland Water & Sewer District's three production wells. Capture zones were simulated using an existing analytic element model to approximate the likely time of travel between a leaky underground storage tank (LUST) and the production wells.

HYDROGEOLOGIC SETTING AND CONTAMINANT HISTORY

The Freeland Water District wells are completed between 200 and 368 feet below ground surface (bgs) and are screened in a sand unit approximately 100 feet thick. Roughly 45 feet of this unit is saturated and it is known as Aquifer C (Sapik and others, 1988) or the sea-level aquifer. Above this unit are sands with varying silt/clay content and local silt/clay layers.

Approximately 1900 feet north and upgradient of Well 2 is a former service station site where gasoline, benzene, and diesel contamination is present due to a leaking underground storage tank (LUST). In 2005 a fuel discrepancy was discovered in a 10,000 gallon gasoline tank. This tank was drained and no longer used, with all fuel storage tanks and their piping removed from the site in 2010. Contamination from the near-surface LUST migrated to a perched shallow aquifer (about 55 feet bgs), and from there into the deeper sea-level aquifer. Currently, there is approximately one foot of free product present floating on top of the sea level aquifer beneath the site and it is unknown how far the light non-aqueous phase liquid (LNAPL) and dissolved plume extends downgradient in the sea level aquifer.

MODEL BACKGROUND

A two-dimensional analytic element model previously developed for the Freeland Water & Sewer District was used to delineate capture zones for current and future pumping conditions and potential contaminant risks to the District supply wells. The analytic element model was created using "GFLOW" (Haitjema Software) and its domain extends at least two miles in all directions from the District's wells. Features simulated in the model include recharge, septic recharge, domestic well pumping, and hydraulic connections with nearby marine bodies. Further information regarding the model and its calibration can be found in PGG (2011), which is an addendum to the Report of Examination (ROE) that was developed for the District's recently issued water right permit (G1-28039).

The model calculates drawdown in the aquifer based on prescribed pumping stresses at the District wells and other smaller capacity supply wells in the area. The model is also able to delineate recharge areas that extend upgradient of the supply wells and time of travel within the subsurface based on computed groundwater flow velocities. For the time of travel analysis, an effective aquifer porosity of 0.25 was assumed. Capture zones and travel time analysis were evaluated for current and future pumping rates at the District supply wells as described below.

CURRENT CONDITIONS CAPTURE ZONE SIMULATION

Current pumping conditions were simulated for the District assuming 463 Equivalent Residential Units (ERUs) having an average daily demand of 210 gallons per ERU. The total average daily demand (97,230 gallons or 67.5 gallons per minute (gpm)) was then distributed between the three production wells based on the relative percentages requested for future operational pumping rates in the ROE. Assigned constant pumping rates are as follows:

- Well 1: 22.7 gpm (33.6 percent of production)
- Well 2: 27.8 gpm (41.1 percent of production)
- Well 3: 17.0 gpm (25.2 percent of production)

Capture zones for current pumping conditions are shown in Figure 1. The model suggests that contaminant releases from the LUST would have the greatest likelihood of affecting Well 2 since it lies directly downgradient of the LUST and has the highest operating rate. Under current pumping conditions, the time of travel for purely advective flow from the LUST to Well 2 is expected to be approximately six years.

FUTURE CONDITIONS CAPTURE ZONE SIMULATION

Future pumping conditions were simulated assuming the wells are pumped at their entire allotted water right of 510 acre-feet per year. The total average daily demand (455,040 gallons or 316 gpm) was then distributed between the three production wells based on the

relative percentages requested for future operational pumping rates in the ROE. Assigned constant pumping rates are as follows:

- Well 1: 106.2 gpm (33.6 percent of production)
- Well 2: 129.9 gpm (41.1 percent of production)
- Well 3: 79.7 gpm (25.2 percent of production)

Capture zones for future pumping conditions are shown in Figure 2. Once again, the model suggests that contaminant releases from the LUST would have the greatest likelihood of affecting Well 2. For full-build out future pumping conditions, the time of travel for purely advective flow from the LUST to Well 2 is expected to be approximately three to four years.

CONTAMINANT TRANSPORT EVALUATION AND POSSIBLE MODEL REFINEMENTS

The capture zones shown in Figures 1 and 2 are considered conservative since they simulate advective flow (average flow) rates for water molecules and do not consider the difference in transport rates between groundwater and the contaminants transported by groundwater. Contaminant movement is typically attenuated by mechanisms such as adsorption where contaminants adhere to soil particles which retards the rate of movement and biodegradation which reduces mass of contamination by biological processes.

Retardation coefficients were calculated using Ecology's CLARC database values for benzene, toluene, and xylenes (some of the more mobile constituents of gasoline) to account for the difference in travel times between groundwater and LUST contaminants. The retardation coefficients suggest that the hydrocarbon contaminants are expected to travel approximately 1.5 to 2.5 times slower than groundwater. Therefore under current pumping conditions, the center of the contaminant plume is expected to reach Well 2 in the next 1 to 6 years assuming no natural attenuation of the contaminants by biodegradation during transport, and assuming that contaminants reached the sea level aquifer in 2005.

Several sources of uncertainty are present in the contaminant transport calculations presented above. The following describes some of the uncertainty and additional work that could be undertaken to reduce the uncertainty.

- Contaminant transport rates through the vadose zone are unknown. Since the vadose zone is approximately 100 feet thick beneath the LUST site and silty interbeds are present, transport through the vadose zone could have taken several years (instead of occurring instantaneously as assumed above). It is known that contamination was present in the sea-level aquifer beneath the LUST in 2009 when deep monitoring wells were installed.
- Given the relatively long transport distance, a significant amount of natural degradation of the hydrocarbons could occur, potentially delaying the time of

first detection at Well 2 or even precluding its arrival. Analysis of the degradation potential is beyond the scope of these studies but should be addressed by the potentially liable party (PLP). Additional characterization and modeling studies could be completed to further assess degradation processes.

- Model transmissivity values will directly affect estimated travel times. If transmissivities are higher than modeled values, then actual contaminant transport rates will be faster than simulated rates. Conversely, if transmissivities are lower than modeled values, then actual contaminant transport rates will be slower than simulated rates. In a verification analysis, the model was run to try to simulate July 2013 drawdown data collected by the Island County Health Department(personal communication, Doug Kelly), with Well 3 pumping 140 gpm and Wells 1 and 2 not pumping. Results of this analysis suggest that local model transmissivities may be too high, but uncertainties present in the data set due to different water level measurement dates and fluctuating pumping regimes makes model refinement/recalibration based on this data somewhat difficult to achieve.

- The lateral extent of modeled capture zones are also influenced by assumed pumping rates and aquifer transmissivity values. Capture zone widths for the simulated current pumping condition are relatively narrow due to the relatively high aquifer transmissivity value (12,900 ft^2/day) and relative low average annual pumping rates (67.5 gpm). At higher rates of pumping, capture zones expand laterally in order to balance the increase in groundwater withdrawal with an increased recharge area. Capture zone widths would also be wider if a lower transmissivity value were assumed in the model due to the deeper cone of depression that would form under these conditions.

- Future work that could help further refine the model, calculated capture zones, and transport times would be to conduct a longer-term pumping test where aquifer drawdown in the wellfield vicinity would be allowed to reach quasi-equilibrium. We would recommend pumping one of the supply wells for approximately one to two weeks at a constant rate of about150 gpm while collecting 2 to 3 synoptic sets of water level measurements from the monitoring wells that were used by the Health Department in their July data collection effort as well as the other two District supply wells that are not in use. The drawdown data obtained from a controlled test could be used to assess aquifer transmissivity near the wellfield and to recalibrate the GFLOW model so that it provided a better prediction of hydraulic gradients and groundwater movement.

- The capture zone predictions presented in Figures 1 and 2 suggest that Well 2 would be the primary receptor for contaminants released from the LUST site. This outcome is largely related to the higher pumping rates that were prescribed at this site. To the extent that the District shifts more of its future production from Well 2 to Well 1 could allow contamination to move in that direction. Under a highly variable pumping regime, there is a possibility that both wells could be affected by the contaminant release. It may be prudent to

explore in greater detail how pumping stresses at these two well sites could be managed to minimize impacts to the District's wellfield.

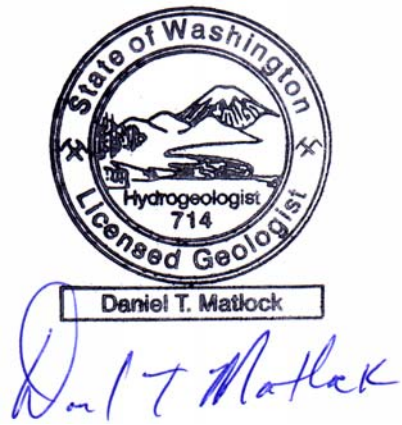
- Based on the expected hydrocarbon travel times, we recommend quarterly monitoring at Well 2 for benzene, toluene, ethylbenzene, xylene, gasoline (BTEX+G) and NWTPH-Diesel.
- It is our understanding that Farallon Consulting has plans to install at least two monitoring wells in the sea level aquifer downgradient of the LUST site to further define the limits of the contaminant plume. We assume that they will also collect water level data to refine groundwater flow directions and gradients in vicinity of the LUST site. We would recommend that the also collect water level data from the Health Department monitoring wells at the same time to provide improved definition of the groundwater movement between the LUST site and the District supply wells. Any future testing of the District's wells should incorporate water level monitoring at the Farallon wells.
- We would also recommend that at least one monitoring well be installed downgradient of the defined plume area to serve as an early warning detection system for the District's wellfield. This well could hopefully be positioned at least one-years travel time upgradient of the Districts Well 2 source. In the event that contamination is observed at this site, then it might be possible to operate Well 2 as a containment feature while using Wells 1 and 3 to meet District supply needs.

We appreciate the opportunity to work with you, and please contact us if you have any further questions regarding this letter.

Sincerely,

Pacific Groundwater Group

Dan Matlock
Principal Hydrogeologist



REFERENCES

Adelsman, A., Caldwell, B., Nazy, D., Klug, J., Swenson, D., Tallent, G., and Walther, M. Skagit Rule Amendment Rule Making Criteria:Background on the Reservations, Closures, and Hydraulic Continuity. May 2006.

PGG, 2011. Freeland Water & Sewer District Water Right Application G1-28039 Hydrogeologic Summary & Analysis. Consultant's Technical Memorandum addressed to Department of Ecology.

Sapik, D.B., Bortleson, G.C., Drost, B.W., Jones, M.A., and Prych, E.A. Ground-Water Resources and Simulation of Flow in Aquifers Containing Freshwater and Seawater, Island County, Washington. USGS Water-Resources Investigations Report 87-4182, 1988.

K:\DAN\JM1306_Freeland\GIS\FreelandCurrentConditions.mxd 10/9/2013



Figure 1
Current Pumping Condition Capture Zones

JM1306
Freeland Water & Sewer District

PgG

Freeland Sewer and Water District Supply Wells

LUST

Modeled Head Contours (0.5-foot interval)

Current Conditions Capture Zones

1-Year

5-Year

10-Year

Sections

N

0 Feet 2,000

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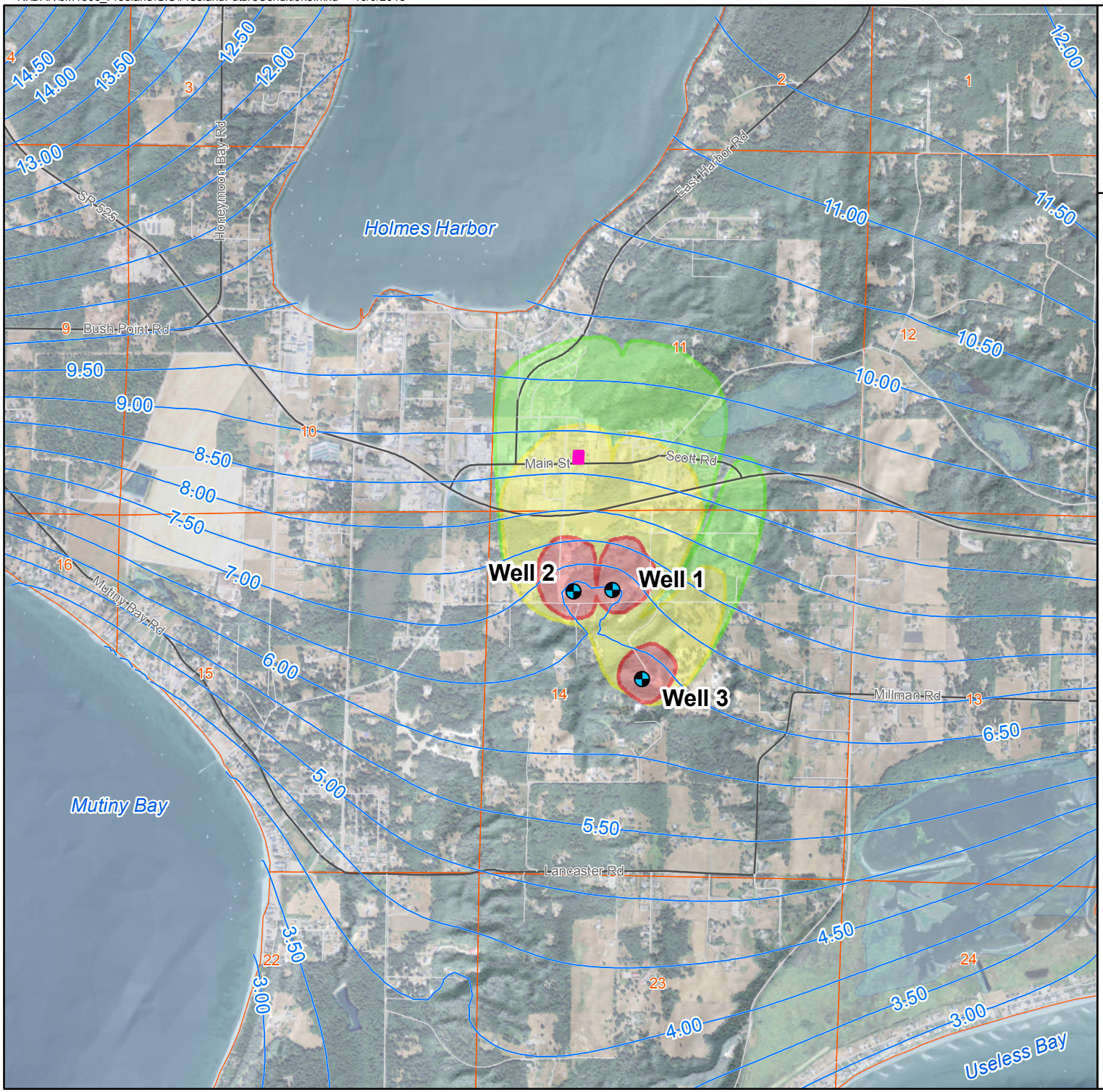


Figure 2
Future Pumping Condition Capture Zones

JM1306
Freeland Water & Sewer District

PgG

Freeland Sewer and Water District Supply Wells

LUST

Modeled Head Contours (0.5-foot interval)

Future Conditions Capture Zones

1-Year

5-Year

10-Year

Sections

N

0 Feet 2,000

Facility/Site: 1746 AMERIGAS VILLAGE AT MAPLE RIDGE

Also known as: AMERIGAS VILLAGE AT MAPLE RIDGE



Address

1967 ALLIANCE AVE

FREELAND WA 98249

Decimal Coordinates

Latitude: 48.01124

Longitude: -122.51882

Geographic Information

Ecology Region: NWRO | Legislative District: 10 | WRIA: 6

County: Island | Congressional District: 2 | Tribal Land: No

Ecology Interactions

Interaction Description	Ecology Program	Ecology Program Phone	Program ID	Start Date	End Date
Emergency/Haz Chem Rpt TIER2	HAZWASTE	(360) 407-6729	CRK000082710	1/24/2014	

Industrial Codes (External Links Below)

No NAICS information is available for this facility site.

No SIC information is available for this facility site.

Facility/Site: COREY OIL CARDLOCK UST 2969 41898821

Also known as: Corey Oil Cardlock & Auto Glass, COREY OIL CO FREELAND



Address

1650 MAIN ST

FREELAND WA 98249

Decimal Coordinates

Latitude: 48.00945

Longitude: -122.5274

Geographic Information

Ecology Region: NWRO | Legislative District: 10 | WRIA: 6

County: Island | Congressional District: 2 | Tribal Land: No

Ecology Interactions

Interaction Description	Ecology Program	Ecology Program Phone	Program ID	Start Date	End Date
Emergency/Haz Chem Rpt TIER2	HAZWASTE	(360) 407-6729	CRK000023760	1/1/1990	
Underground Storage Tank	TOXICS	(360) 407-7224	2969	1/1/1973	

Industrial Codes (External Links Below)

No NAICS information is available for this facility site.

No SIC information is available for this facility site.

Facility/Site: FREELAND SHELL STATION 6999163

Also known as: Freeland Lube Center, FREELAND SERVICE CENTER



Address

5618 FISH RD

FREELAND WA 98249-9720

Decimal Coordinates

Latitude: 48.00014

Longitude: -122.51693

Geographic Information

Ecology Region: NWRO | Legislative District: 10 | WRIA: 6

County: Island | Congressional District: 2 | Tribal Land: No

Ecology Interactions

Interaction Description	Ecology Program	Ecology Program Phone	Program ID	Start Date	End Date
Hazardous Waste Generator	HAZWASTE	(360) 407-6023	WAH000033404	8/6/2008	12/31/2011
Underground Storage Tank	TOXICS	(360) 407-7224	617036	3/5/2003	

Industrial Codes (External Links Below)

NAICS Code	NAICS Description
811191	AUTOMOTIVE OIL CHANGE AND LUBRICATIO

No SIC information is available for this facility site.

Facility/Site: 2911173 Freeland Water District

Also known as:



Address

5492 HARBOR AVE

FREELAND WA 98249

Decimal Coordinates

Latitude: 48.00985

Longitude: -122.5245

Geographic Information

Ecology Region: NWRO | Legislative District: 10 | WRIA: 6

County: Island | Congressional District: 2 | Tribal Land: No

Ecology Interactions

Interaction Description	Ecology Program	Ecology Program Phone	Program ID	Start Date	End Date
Non Enforcement Final	WATQUAL	(360) 407-6986		9/2/2005	

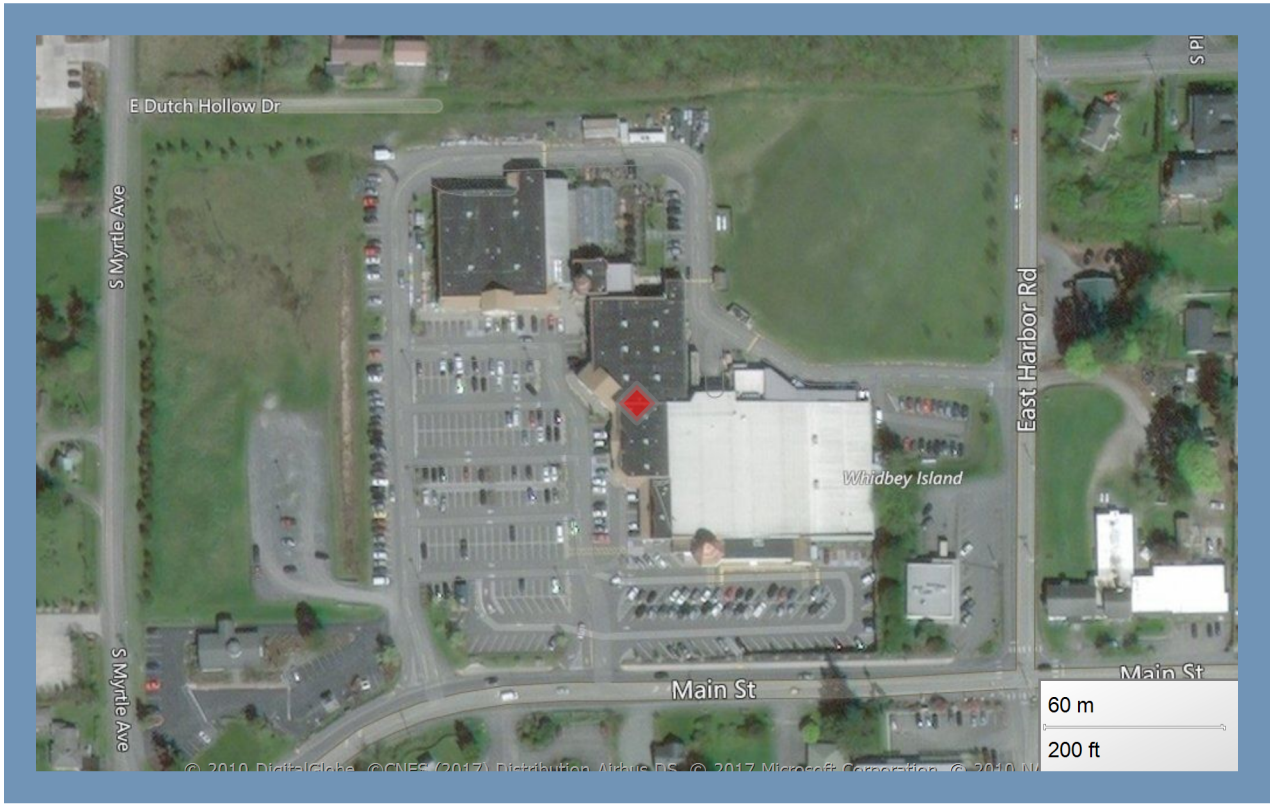
Industrial Codes (External Links Below)

No NAICS information is available for this facility site.

No SIC information is available for this facility site.

Facility/Site: 8351 Rite Aid 6722

Also known as: Rite Aid 6722



Address

1609 E MAIN ST

Freeland WA 98249

Decimal Coordinates

Latitude: 48.01043

Longitude: -122.52915

Geographic Information

Ecology Region: NWRO | Legislative District: 10 | WRIA: 6

County: Island | Congressional District: 2 | Tribal Land: No

Ecology Interactions

Interaction Description	Ecology Program	Ecology Program Phone	Program ID	Start Date	End Date
Hazardous Waste Generator	HAZWASTE	(360) 407-6023	WAH000048271	1/15/2015	

Industrial Codes (External Links Below)

NAICS Code	NAICS Description
44611	Pharmacies and Drug Stores

No SIC information is available for this facility site.

Facility/Site: SCOTTYS SERVICE 2242550

Also known as:



Address

1690 E MAIN ST

FREELAND WA 98249

Decimal Coordinates

Latitude: 48.00936

Longitude: -122.52852

Geographic Information

Ecology Region: NWRO	Legislative District: 10	WRIA: 6
County: Island	Congressional District: 2	Tribal Land: No

Ecology Interactions

Interaction Description	Ecology Program	Ecology Program Phone	Program ID	Start Date	End Date
Underground Storage Tank	TOXICS	(360) 407-7224		4/7/2006	4/7/2006

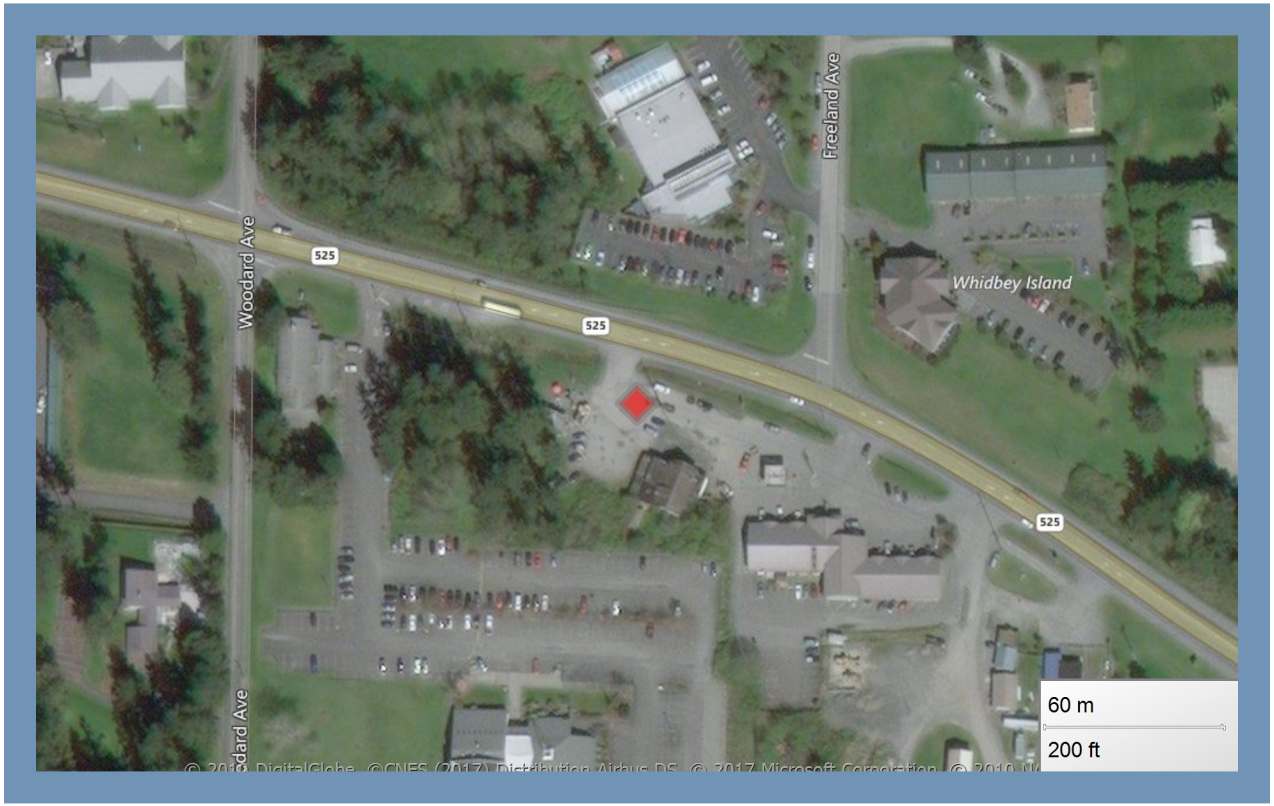
Industrial Codes (External Links Below)

No NAICS information is available for this facility site.

No SIC information is available for this facility site.

Facility/Site: SHORT STOP FREELAND 52297857

Also known as: SHORT STOP FREELAND, SHORTSTOP TEXACO



Address

1504 E HWY 525

FREELAND WA 98249-9625

Decimal Coordinates

Latitude: 48.00981

Longitude: -122.53453

Geographic Information

Ecology Region: NWRO | Legislative District: 10 | WRIA: 6

County: Island | Congressional District: 2 | Tribal Land: No

Ecology Interactions

Interaction Description	Ecology Program	Ecology Program Phone	Program ID	Start Date	End Date
LUST Facility	TOXICS	(360) 407-7224	101097	1/31/2012	
State Cleanup Site	TOXICS	(360) 407-7224		1/6/2012	
Underground Storage Tank	TOXICS	(360) 407-7224	101097	6/1/1989	

Industrial Codes (External Links Below)

NAICS Code	NAICS Description
447	Gasoline Stations

No SIC information is available for this facility site.

Facility/Site: Texaco Freeland 4671872

Also known as:



Address

18205 SR 525

FREELAND WA 98249

Decimal Coordinates

Latitude: 48.00884

Longitude: -122.50746

Geographic Information

Ecology Region: NWRO | Legislative District: 10 | WRIA: 6

County: Island | Congressional District: 2 | Tribal Land: No

Ecology Interactions

Interaction Description	Ecology Program	Ecology Program Phone	Program ID	Start Date	End Date
Enforcement Final	TOXICS	(360) 407-6986		6/29/2006	

Industrial Codes (External Links Below)

No NAICS information is available for this facility site.

No SIC information is available for this facility site.

Facility/Site: 4023143 Verizon Wireless Freeland

Also known as:



Address

1730 SCENIC AVE

FREELAND WA 98249

Decimal Coordinates

Latitude: 48.0041

Longitude: -122.52344

Geographic Information

Ecology Region: NWRO | Legislative District: 10 | WRIA: 6

County: Island | Congressional District: 2 | Tribal Land: No

Ecology Interactions

Interaction Description	Ecology Program	Ecology Program Phone	Program ID	Start Date	End Date
Emergency/Haz Chem Rpt TIER2	HAZWASTE	(360) 407-6729	CRK000069550	1/1/2008	

Industrial Codes (External Links Below)

No NAICS information is available for this facility site.

No SIC information is available for this facility site.

Facility/Site: 21272468 WHIDBEY ISLAND GAME FARM

Also known as:



Address

WHIDBEY ISLAND

FREELAND WA 98548

Decimal Coordinates

Latitude: 48.01039

Longitude: -122.52558

Geographic Information

Ecology Region: NWRO | Legislative District: 10 | WRIA: 6

County: Island | Congressional District: 2 | Tribal Land: No

Ecology Interactions

Interaction Description	Ecology Program	Ecology Program Phone	Program ID	Start Date	End Date
Underground Storage Tank	TOXICS	(360) 407-7224	518231	12/20/1999	5/18/2000

Industrial Codes (External Links Below)

No NAICS information is available for this facility site.

No SIC information is available for this facility site.

Facility/Site: 91535911 WHIDBEY ISLAND SAND & GRAVEL INC

Also known as:



Address

5603 S BAYVIEW RD

FREELAND WA 98249-0434

Decimal Coordinates

Latitude: 48.0152

Longitude: -122.53259

Geographic Information

Ecology Region: NWRO	Legislative District: 10	WRIA: 6
County: Island	Congressional District: 2	Tribal Land: No

Ecology Interactions

Interaction Description	Ecology Program	Ecology Program Phone	Program ID	Start Date	End Date
Underground Storage Tank	TOXICS	(360) 407-7224	1485	6/8/1998	5/3/2000

Industrial Codes (External Links Below)

No NAICS information is available for this facility site.

No SIC information is available for this facility site.

Facility/Site: WHIDBEY MARINE & AUTO SUPPLY 17222251

Also known as: WHIDBEY MARINE & AUTO, WHIDBEY MARINE & AUTO SUPPLY



Address

1692 MAIN ST

FREELAND WA 98249

Decimal Coordinates

Latitude: 48.00956

Longitude: -122.52364

Geographic Information

Ecology Region: NWRO | Legislative District: 10 | WRIA: 6

County: Island | Congressional District: 2 | Tribal Land: No

Ecology Interactions

Interaction Description	Ecology Program	Ecology Program Phone	Program ID	Start Date	End Date
Voluntary Cleanup Sites	TOXICS	(360) 407-7224	NW1529	12/7/2005	
LUST Facility	TOXICS	(360) 407-7224	8917	9/28/2005	
Emergency/Haz Chem Rpt TIER2	HAZWASTE	(360) 407-6729	CRK000040530	1/1/1995	
Underground Storage Tank	TOXICS	(360) 407-7224	8917	7/15/1982	1/27/2011

Industrial Codes (External Links Below)

No NAICS information is available for this facility site.

No SIC information is available for this facility site.

Facility/Site: 3223 Whidbey Marine & Auto Supply Site

Also known as: Whidbey Marine & Auto Supply Site



Address

1692 E MAIN ST

Freeland WA 98249

Decimal Coordinates

Latitude: 48.00992

Longitude: -122.52354

Geographic Information

Ecology Region: NWRO	Legislative District: 10	WRIA: 6
County: Island	Congressional District: 2	Tribal Land: No

Ecology Interactions

Interaction Description	Ecology Program	Ecology Program Phone	Program ID	Start Date	End Date
Underground Injection Control	WATQUAL			6/1/2010	

Industrial Codes (External Links Below)

No NAICS information is available for this facility site.

No SIC information is available for this facility site.

FREELAND WATER AND SEWER DISTRICT
PO Box 222, Freeland, WA 98249
5585 Lotto Ave, 360-331-5566

June 1, 2019

LETTER ON NOTIFICATION – WELLHEAD PROTECTION PLAN

Dear Water Customers;

The Freeland Water and Sewer District has developed a wellhead protection plan as required by the State Department of Health. Wellhead protection involves protecting the land area surrounding our wells in order to prevent contamination of the drinking water supply. Part of the plan is a letter of notification to all potential sources of contamination to our wells. The large portion of our community is within the wellhead protection areas surrounding our wells.

This letter is an attempt to inform you of that your property is in the District wellhead protection area, and to serve as a reminder that hazardous materials put onto the ground (or into septic systems) has the potential of contaminating our drinking water supply. Some examples of household hazardous materials are…

Paint, Paint Thinner, and other Solvents

Motor Oil, gasoline, antifreeze or similar automotive fluids. These materials can be recycled, **free of charge,** at most major auto shops and parts stores.

Fertilizers and pesticides.

Household cleaners, bleach, and furniture polish.

These materials should only be used according to label directions. Any unwanted or unused household hazardous materials can be disposed of at:

Bayview Transfer Station – Monday, Wednesday, Saturday and Sunday 9:30 a.m. to 5:00 p.m.

Coupeville Transfer Station – 7 days a week 9:30 a.m. to 5:00 p.m.

We are fortunate to have a very good supply of drinking water. It should be everyone's intent to keep it that way for our continued good use, and for the ones that come along after us. We have also enclosed a copy of Understanding and Caring for Your Septic Tank System provided by Washington State Department of Health. Thank you for following these guidelines. If you have any questions about this matter, please feel free to contact me at (360) 331-5566.

Andy Campbell
Manager
Freeland Water and Sewer District

Freeland Water and Sewer

Customers in the one year wellhead protection area as of June 1st, 2018.

To protect the drinking water supply for the customers of Freeland Water and Sewer District, the following customers will receive a well head pollution letter in June of each year.

Parcel S8245-00-00003-1, Housing Authority of Island County, 1667 Scenic Ave, (7 NW 6th St. Coupeville)

Parcel S8245-00-00017-4, The Brothers of Saint John, 1788 Scenic Ave

Parcel S8245-00-00002-0, Warren and Minda Wicher, 1645 Scenic Ave

Parcel S8245-00-00002-1, MGTLQ Investors LP, 1637 Scenic Ave

Parcel S7075-00-00001-3, Culley and Amy Lehman, 5694 Osprey Rd

Parcel S7075-00-00001-2, Timothy and Erin Wilkie, 5684 Osprey Rd

Parcel S7075-00-00001-1, Todd Mannie, 5680 Osprey Rd

Parcel S7075-00-00003-3, Shair Hamsa, PO Box 327 Freeland

Parcel S7075-00-00003-1, C Coughlin, 5620 Osprey Rd

Parcel S7075-00-0001-3, Jeff and Sheila Stonebridge, 5661 Harbor Ave

July 13, 2018

Property Owner

SUBJECT: FREELAND WATER AND SEWER DISTRICT WELLHEAD PROTECTION

Dear (Property Owner):

This letter is to inform you that property owned by you appears, from mapping available, to be wholly or partially within the Freeland Water and Sewer District wellhead protection area. As such, wastes discharged to the ground on your property, including to a septic tank and drain field, have a potential to contaminate one or more of the District's Wells. The Washington State Department of Health has rated all three of the District's wells as Moderately Susceptible to Contamination.

A properly operating and properly used septic tank and drain field system should not pose a significant threat to wells more than a few hundred feet from the drain field. However, septic tanks and drain fields are not designed for disposal of solvents, paint thinners, antifreeze, motor oil, or other chemical wastes. Therefore, disposal of any such inappropriate waste to your septic tanks/drain field system could potentially contaminate groundwater and impact the District's wells.

In the event that you have wastes that would be inappropriate for disposal in a septic system, or if you find any inappropriate disposal of chemicals has occurred on your property, we ask that you contact the Freeland Water and Sewer District at (360) 331-5566, so the District may direct you to an appropriate site for disposal of the wastes, and/or take appropriate action in response to the contamination.

Thank you for your cooperation. Together we can prevent groundwater contamination and protect our water supply.

Sincerely,

Terry Campbell
Freeland Water and Sewer District

July 13, 2018

Regulatory Agency

SUBJECT: FREELAND WATER AND SEWER DISTRICT WELLHEAD PROTECTION

Dear Regulator:

As part of the wellhead protection program for the Freeland Water and Sewer District we are hereby informing you of the findings of our wellhead protection area delineation. This is in accordance with State regulations (WAC 246-290-135).

Our water system serves approximately 610 connections and a population of approximately 1,250 people. The State Department of Health has given our three wells ratings of moderately susceptible to contamination.

The enclosed Wellhead Protection Area Map shows the 6-month, 1-year, 5-year, and l0-year time of travel boundaries for our wellhead protection area. Any ground water contamination that occurs within this wellhead protection area has a significant potential to reach our wells. It is therefore of utmost importance to us that regulatory and permitting actions taken by your agency within the proximity to our water supply sources take groundwater protection into account.

Thank you for your support in protecting our drinking water.

Sincerely,

Terry Campbell
Freeland Water and Sewer District

July 13, 2018

Emergency Response Agency

SUBJECT: FREELAND WATER AND SEWER DISTRICT WELLHEAD PROTECTION

Dear Emergency Response Agency

As part of the wellhead protection program for the Freeland Water and Sewer District water system we are hereby informing you of the findings of our wellhead protection area delineation. This is in accordance with State regulations (WAC 246-290-135).

Our water system serves approximately 610 connections and a population of approximately 1,250 people. The State Department of Health has given our groundwater sources ratings of moderately susceptible to contamination.

The enclosed Wellhead Protection Area Map shows the 6-month, 1-year, 5-year, and l0-year time of travel boundaries for our wellhead protection area. Any ground water contamination that occurs within this wellhead protection area has a significant potential to reach our wells. It is therefore of utmost importance to us that all reasonable steps be taken to ensure that spills, leaks or accidental discharges within this area do not contaminate our drinking water supplies. If a spill or accidental discharge does occur within our Wellhead Protection Area we ask that you please contact us so that we can take appropriate actions.

Please call (360) 331-5566 if you have any questions or need further information.

Thank you for your support in protecting our drinking water.

Sincerely,

Terry Campbell
Freeland Water and Sewer District

July 13, 2018

Underground Tank Owner

SUBJECT: FREELAND WATER AND SEWER DISTRICT WELLHEAD PROTECTION

Dear Owner of Underground Storage Tank:

Your facility was included in a list of active and/or abandoned underground storage tanks from the Washington State Department of Ecology. According to information provided by Ecology your facility is in compliance with all applicable regulations. We appreciate the efforts you have taken to comply with these regulations because they protect our water supply wells.

Please be advised that any leakage or spill on your property could contaminate the Freeland Water District water supply. While we are sure that you make every effort to prevent leakage or spills, accidents do happen. It is in our interest as well as yours to prevent leakage and spills and to respond as quickly as possible to any leakage or spills that may occur.

If you should ever have a leak or spill your immediate response to clean it up can make the difference between a little contaminated soil and a lost groundwater resource. In a spill emergency contacting us at (360) 331-5566 will provide us the opportunity to take appropriate action and monitor our well sources to make sure no contamination has occurred during that emergency spill.

Again, we appreciate the efforts you have already made to protect our water supply. As you can see, your continued efforts and vigilance are necessary to protect our water supply into the future.

Thank you for your support in protecting our drinking water.

Sincerely,

Terry Campbell
Freeland Water and Sewer District

July 13, 2018

RCRA Regulated Facility

SUBJECT: FREELAND WATER AND SEWER DISTRICT WELLHEAD PROTECTION

Dear Owner of RCRA listed facility:

Your facility was included in a list of active RCRA hazardous materials handling facilities from the Washington State Department of Ecology. According to information provided by Ecology your facility is in compliance with all applicable regulations. We appreciate the efforts you have taken to comply with these regulations because they protect our water supply wells.

Please be advised that any leakage or spill of hazardous materials on your property could contaminate the Freeland Water and Sewer District water supply. While we are sure that you make every effort to prevent leakage or spills, accidents do happen. It is in our interest as well as yours to prevent leakage and spills and to respond as quickly as possible to any leakage or spills that may occur.

If you should ever have a leak or spill your immediate response to clean it up can make the difference between a little contaminated soil and a lost groundwater resource. In a spill emergency, contacting us at (360) 331-5566, will provide us the opportunity to take appropriate action to protect our water supply.

Again, we appreciate the efforts you have already made to protect our water supply. As you can see, your continued efforts and vigilance are necessary to protect our water supply into the future.

Thank you for your support in protecting our drinking water.

Sincerely

Terry Campbell
Freeland Water and Sewer District

APPENDIX K

ANNUAL CONSUMER CONFIDENCE AND WUE REPORTS

Freeland Water and Sewer District - #64508
2015
CONSUMER CONFIDENCE REPORT

The Freeland Water and Sewer District Commissioners along with Whidbey Water Services LLC are proud to give you the Annual Drinking Water Report, which is a summary of The Freeland Water and Sewer District's drinking water quality last year between January and December 2015. Safe drinking water is our primary commitment.

Why am I receiving this report?

Congress passed the "Safe Drinking Water Act" and gave the U.S. Environmental Protection Agency (EPA) the job of making rules – National Primary Drinking Water Regulations (NPDWR) – to ensure that drinking water in the U.S. is safe.

In 1996, Congress passed amendments that required drinking water systems to give consumers important information about their water, including where it comes from, what is in the water, and how your water quality compares with federal standards.

This report is brought to you in accordance with the EPA's 40 Codes of Federal Regulations, NPDWR Parts 141 and 142.

Where does our water come from?

The single available water resource in the surrounding area is ground water. At the present time your water system draws all its water from three Wells.

Why must you test my water?

Drinking water, including bottled water, may reasonably be expected to contain very small amounts of some contaminants. The presence of contaminants does not necessarily mean that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800) 426-4791.

What contaminants might be in water?

Contaminants that may be present in water are microbial contaminants, inorganic contaminants, pesticides and herbicides, and organic chemical contaminants.

- Microbial contaminants, such as viruses and bacteria, which may come from septic systems or wildlife.
- Inorganic contaminants, such as salts and metals, which can be a natural occurrence or a result from storm water runoff or domestic wastewater discharges.
- Pesticides and herbicides, which may come from a variety of sources, such as agricultural and residential uses.
- Organic chemical contaminants, which include synthetic and volatile organic chemicals, are by-products of industrial processes, and could come from urban storm water runoff, and septic systems.

Are there Contaminants in Freeland Water and Sewer Distict's water?

We are pleased to report that Freeland Water and Sewer District Water System exceeded all the federal drinking water standards last year. However, it is not always possible to remove all contaminants. The EPA sets limits on the amount of a contaminant that can be in drinking water. Our Water Manager tests your water monthly for ***Coliform*** , which can show the presence of microorganisms that could cause illness. We have also tested the wells for ***Inorganic, Organic and Volatile Compounds, Radionuclides.*** **All the test results were well below the allowable levels set by the EPA and the Washington State Department of Health.**

Is our water safe for everyone?

Some people may be more vulnerable to the drinking water contaminants than the general population. Immune-compromised persons, such as people with cancer that are undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AID or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA Centers for Disease Control have guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants that are available from the Safe Drinking Water hotline (800) 426-4791.

What if I have questions about my water?

Contact: Andy Campbell (***Whidbey Water Services, LLC) Certified Water Distribution Manager at telephone number: (360)579-1535 or Email at: waterwork@whidbey.com.***

Important Definitions:

Maximum contaminant Level (MCL) = The Highest Level of a contaminant that is allowed in drinking water below which there is not known or expected risk to health. MCLs are set close to the MCLGs as feasible using the best available treatment technology.

Maximum contaminant Level Goal (MCLG) = The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

CCRU – Consumer Confidence Report Unit, are actual units multiplied by 1000 for ease of comparison.

FREELAND WATER AND SEWER DISTRICT - #264508
2015 WATER TEST RESULTS

Substance	Month/ Year Sample Taken	Highest Level Allowed (MCL) in CCR units	Water Level Detected in CCR units	Major Sources of Contaminant in Drinking Water
Radionuclide's				
Radium 228	10-15	5000	500	Erosion of Mineral deposits naturally occurring in groundwater.
Disinfection By-Products				
Chlorine Residual	2014	4000	300	Measure of disinfectant added to water.
Halocetic Acids	9-15	60000	1470	By-product of disinfection.
Total Trihalomethanes	9-15	80000	27700	By-product of disinfection.
Inorganic Contaminants				
Arsenic	7-15	10	2.4	Erosion of Mineral deposits naturally occurring in groundwater. Your drinking water currently meets EPA's revised drinking water standard for arsenic. However, it does contain low levels of arsenic. There's a small chance that some people who drink water containing low levels of arsenic for many years could develop circulatory disease, cancer, or other health problems. Most types of cancer and circulatory diseases are due to factors other than exposure to arsenic. EPA's standard balances the current understanding of arsenic's health effects against the costs of removing arsenic from drinking water.
Copper	12-13	1300	560	Corrosion of household plumbing fixtures.
Fluoride	12-04	4000	300	Erosion of Mineral deposits naturally occurring in groundwater. Naturally present in the environment.
Lead	12-13	15	7	Corrosion of household plumbing fixtures.
Nitrate	9-15	10000	2600	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.

Washington State Department of Health
Division of Environmental Health
Office of Drinking Water

Date Submitted: 7/30/2018

Water Use Efficiency
Annual Performance Report - 2017

WS Name: FREELAND WATER AND SEWER DISTRICT Water System ID# : 26450 WS County: ISLAND

Report submitted by: *A Campbell*

Meter Installation Information:

Estimate the percentage of metered connections: *100%*

If not fully metered - Current status of meter installation:

Production, Authorized Consumption, and Distribution System Leakage Information:

12-Month WUE Reporting Period: *01/01/2017* To *12/31/2017*

Incomplete or missing data for the year? *No*

If yes, explain:

Distribution System Leakage Summary:

Total Water Produced and Purchased (TP) – Annual Volume	*56,319,300* gallons
Authorized Consumption (AC) – Annual Volume	*39,318,718* gallons
Distribution System Leakage – Annual Volume TP – AC	*17,000,582* gallons
Distribution System Leakage – Percent DSL = [(TP – AC) / TP] x 100	*30.2 %*
3-year annual average	*16.0 %*

Goal-Setting Information:

Date of Most Recent Public Forum: *06/30/2016* Has goal been changed since last performance report? *No*

Note: Customer goal must be re-established every 6 years through a public process

WUE Goals:

Customer Goal (Demand Side):

reduce use by 1% by 2021

Describe Progress in Reaching Goals:

Customer (Demand Side) Goal Progress:

Customer education, customers notified when meter use high

Additional Information Regarding Supply and Demand Side WUE Efforts

Include any other information that describes how you and your customers use water efficiently:

Restructured meter reading to provide quarterly data to review loss

Washington State Department of Health
Division of Environmental Health
Office of Drinking Water

Date Submitted: 4/24/2017

Water Use Efficiency
Annual Performance Report - 2016

WS Name: FREELAND WATER AND SEWER DISTRICT Water System ID# : 26450 WS County: ISLAND

Report submitted by: *Andy Campbell*

Meter Installation Information:

Estimate the percentage of metered connections: *100%*

If not fully metered - Current status of meter installation:

Production, Authorized Consumption, and Distribution System Leakage Information:

12-Month WUE Reporting Period: *01/01/2016* To *12/31/2016*

Incomplete or missing data for the year? *No*

If yes, explain:

Distribution System Leakage Summary:

Total Water Produced and Purchased (TP) – Annual Volume	*53,755,008* gallons
Authorized Consumption (AC) – Annual Volume	*48,888,277* gallons
Distribution System Leakage – Annual Volume TP – AC	*4,866,731* gallons
Distribution System Leakage – Percent DSL = [(TP – AC) / TP] x 100	*9.1 %*
3-year annual average	*7.5 %*

Goal-Setting Information:

Date of Most Recent Public Forum: *06/30/2016* Has goal been changed since last performance report? *No*

Note: Customer goal must be re-established every 6 years through a public process

WUE Goals:

Customer Goal (Demand Side):

reduce use by 1% by 2021

Describe Progress in Reaching Goals:

Customer (Demand Side) Goal Progress:

goal not achieved, rate structure review, many leaks repaired, customer education

Additional Information Regarding Supply and Demand Side WUE Efforts

Include any other information that describes how you and your customers use water efficiently:

daily water production data review, quick response to reported leaks

Washington State Department of Health
Division of Environmental Health
Office of Drinking Water

Date Submitted: 7/1/2016

Water Use Efficiency
Annual Performance Report - 2015

WS Name: FREELAND WATER AND SEWER DISTRICT Water System ID# : 26450 WS County: ISLAND

Report submitted by: *Andy Campbell*

Meter Installation Information:

Estimate the percentage of metered connections: *100%*

If not fully metered - Current status of meter installation:

Production, Authorized Consumption, and Distribution System Leakage Information:

12-Month WUE Reporting Period: *01/01/2015* To *12/31/2015*

Incomplete or missing data for the year? *No*

If yes, explain:

Distribution System Leakage Summary:

Total Water Produced and Purchased (TP) – Annual Volume	*44,312,509* gallons
Authorized Consumption (AC) – Annual Volume	*40,412,096* gallons
Distribution System Leakage – Annual Volume TP – AC	*3,900,413* gallons
Distribution System Leakage – Percent DSL = [(TP – AC) / TP] x 100	*8.8 %*
3-year annual average	*6.0 %*

Goal-Setting Information:

Date of Most Recent Public Forum: *06/30/2016* Has goal been changed since last performance report? *Yes*

Note: Customer goal must be re-established every 6 years through a public process

WUE Goals:

Customer Goal (Demand Side):

reduce use by 1% by 2021

Describe Progress in Reaching Goals:

Customer (Demand Side) Goal Progress:

goal not achieved

Additional Information Regarding Supply and Demand Side WUE Efforts

Include any other information that describes how you and your customers use water efficiently:

public education, daily data comparisons, rate structure reviews

Washington State Department of Health
Division of Environmental Health
Office of Drinking Water

Date Submitted: 7/1/2015

Water Use Efficiency
Annual Performance Report - 2014

WS Name: FREELAND WATER AND SEWER DISTRICT Water System ID# : 26450 WS County: ISLAND

Report submitted by: *andy campbell*

Meter Installation Information:

Estimate the percentage of metered connections: *100%*

If not fully metered - Current status of meter installation:

Production, Authorized Consumption, and Distribution System Leakage Information:

12-Month WUE Reporting Period: _____ To _____

Incomplete or missing data for the year? *No*

If yes, explain:

Distribution System Leakage Summary:

Total Water Produced and Purchased (TP) – Annual Volume	*37,812,700* gallons
Authorized Consumption (AC) – Annual Volume	*36,062,517* gallons
Distribution System Leakage – Annual Volume TP – AC	*1,750,183* gallons
Distribution System Leakage – Percent DSL = [(TP – AC) / TP] x 100	*4.6 %*
3-year annual average	*6.1 %*

Goal-Setting Information:

Date of Most Recent Public Forum: *05/24/2010* Has goal been changed since last performance report? *No*

Note: Customer goal must be re-established every 6 years through a public process

WUE Goals:

Customer Goal (Demand Side):

reduce consumption by 1% by 2015

Describe Progress in Reaching Goals:

Customer (Demand Side) Goal Progress:

customer education, rate structure

Additional Information Regarding Supply and Demand Side WUE Efforts

Include any other information that describes how you and your customers use water efficiently:

doorhangers for high users, leak audits

Washington State Department of Health
Division of Environmental Health
Office of Drinking Water

Date Submitted: 6/30/2014

Water Use Efficiency
Annual Performance Report - 2013

WS Name: FREELAND WATER AND SEWER DISTRICT Water System ID# : 26450 WS County: ISLAND

Report submitted by: *andy campbell*

Meter Installation Information:

Estimate the percentage of metered connections: *100%*

If not fully metered - Current status of meter installation:

Production, Authorized Consumption, and Distribution System Leakage Information:

12-Month WUE Reporting Period: *01/01/2013* To *12/31/2013*

Incomplete or missing data for the year? *No*

If yes, explain:

Distribution System Leakage Summary:

Total Water Produced and Purchased (TP) – Annual Volume	*35,735,700* gallons
Authorized Consumption (AC) – Annual Volume	*34,042,345* gallons
Distribution System Leakage – Annual Volume TP – AC	*1,693,355* gallons
Distribution System Leakage – Percent DSL = [(TP – AC) / TP] x 100	*4.7 %*
3-year annual average	*5.5 %*

Goal-Setting Information:

Date of Most Recent Public Forum: *05/24/2010* Has goal been changed since last performance report? *No*

Note: Customer goal must be re-established every 6 years through a public process

WUE Goals:

Customer Goal (Demand Side):

reduce consumption by 1% by 2015

Describe Progress in Reaching Goals:

Customer (Demand Side) Goal Progress:

customer education, conservation rate structure, leak audits

Additional Information Regarding Supply and Demand Side WUE Efforts

Include any other information that describes how you and your customers use water efficiently:

leak audits

Washington State Department of Health
Division of Environmental Health
Office of Drinking Water

Date Submitted: 2/15/2013

Water Use Efficiency
Annual Performance Report - 2012

WS Name: FREELAND WATER AND SEWER DISTRICT Water System ID# : 26450 WS County: ISLAND

Report submitted by: *andy campbell*

Meter Installation Information:

Estimate the percentage of metered connections: *100%*

If not fully metered - Current status of meter installation:

Production, Authorized Consumption, and Distribution System Leakage Information:

12-Month WUE Reporting Period: *01/01/2012* To *12/31/2012*

Incomplete or missing data for the year? *No*

If yes, explain:

Distribution System Leakage Summary:

Total Water Produced and Purchased (TP) – Annual Volume	*34,766,930* gallons
Authorized Consumption (AC) – Annual Volume	*31,611,303* gallons
Distribution System Leakage – Annual Volume TP – AC	*3,155,627* gallons
Distribution System Leakage – Percent DSL = [(TP – AC) / TP] x 100	*9.1 %*
3-year annual average	*4.4 %*

Goal-Setting Information:

Date of Most Recent Public Forum: *05/24/2010* Has goal been changed since last performance report? *No*

Note: Customer goal must be re-established every 6 years through a public process

WUE Goals:

Customer Goal (Demand Side):

reduce consumption by 1% by 2015

Describe Progress in Reaching Goals:

Customer (Demand Side) Goal Progress:

none

Additional Information Regarding Supply and Demand Side WUE Efforts

Include any other information that describes how you and your customers use water efficiently:

public education

Washington State Department of Health
Division of Environmental Health
Office of Drinking Water

Date Submitted: 6/29/2012

Water Use Efficiency
Annual Performance Report - 2011

WS Name: FREELAND WATER AND SEWER DISTRICT Water System ID# : 26450 WS County: ISLAND

Report submitted by: *a campbell*

Meter Installation Information:

Estimate the percentage of metered connections: *100%*

If not fully metered - Current status of meter installation:

Production, Authorized Consumption, and Distribution System Leakage Information:

12-Month WUE Reporting Period: *01/01/2011* To *12/31/2011*

Incomplete or missing data for the year? *No*

If yes, explain:

Distribution System Leakage Summary:

Total Water Produced and Purchased (TP) – Annual Volume	*35,045,300* gallons
Authorized Consumption (AC) – Annual Volume	*34,063,157* gallons
Distribution System Leakage – Annual Volume TP – AC	*982,143* gallons
Distribution System Leakage – Percent DSL = [(TP – AC) / TP] x 100	*2.8 %*
3-year annual average	*5.1 %*

Goal-Setting Information:

Date of Most Recent Public Forum: *05/24/2010* Has goal been changed since last performance report? *No*

Note: Customer goal must be re-established every 6 years through a public process

WUE Goals:

Customer Goal (Demand Side):

reduce consumption by 1%

Describe Progress in Reaching Goals:

Customer (Demand Side) Goal Progress:

public education

Additional Information Regarding Supply and Demand Side WUE Efforts

Include any other information that describes how you and your customers use water efficiently:

APPENDIX L

WATER SYSTEM MAINTENANCE SCHEDULE AND FORMS

Maintenance Schedule for the Freeland Water and Sewer District

maintenance task	frequency	notes	dates completed
Booster pump + PRV stations	monthly	inspect and adjust	
Mow and trim,	monthly	facilities sites, time/as needed	
Test emergency generator	monthly	check all fluids, battery, etc, monthly	
Water meter read	bi-monthly	residential meter reads	
Meter and box maintenance	bi-monthly	water meter and box maintenance as needed	
Main valve exercise	annual	exercise, clean out box, paint lid	
Fire hydrant, exercise	annual	exercise, incl. isolation main valve	
Flush dead ends	annual	dead end mains	
Vacuum-air release valve test	annual	inspect and flush	
Well service, # of wells	annual	inspect seals, vents, static level, spring and fall	
Overhaul chlorine pump	annual	install overhaul kit	
Pressure tanks inspect.	annual	inspect and recommend	
Service emergency generator	annual	change all fluids, battery, touch up paint etc	
Service gas tools	annual	fluid change and lubricate, touch up paint	
Reservoirs inspect	bi-annual	all appurtenances, spring and fall	
Hydrant wash and repaint	five years	every five years	
Reservoirs, clean inside	five years	every five years	

comments

WHIDBEY WATER SERVICES, LLC.

3792 E. Hubble Ct, Clinton, WA. 98236. 360-579-1956

To: Freeland Water and Sewer District
PO Box 222
Freeland, WA. 98249

Re: Contract for certified Water Distribution Manager.

Whidbey Water Services, LLC proposes to take charge of the following;

1). Perform all general duties outlined in the Maintenance Schedule for the Freeland Water and Sewer District, dated 1-1-2008, (attached).
2). Water treatment and distribution system management, water quality monitoring, routine treatment sampling and system adjustment, telephone calls, and correspondence directly related to the water treatment plant and distribution system.
3). Maintain a file of sampling and repair activity, and submit a written maintenance activity report, monthly, to the Board of Commissioners or their designated other.
4). To be "On - Call 24-7" for any related problems that might arise pertaining to the water system.
5). General oversight of casual labor and sub-contractors while working on any part of the water system.
6). Perform any other related activity as authorized by the Board of Commissioners or their designated other.

Cost of labor for item 1, will be billed based on quantity/unit pricing as shown on the attached Maintenance Schedule, monthly as work is completed.

Cost of labor for items 2, 3, 4 and 5 , will be billed monthly based on the actual number of service meters multiplied by $2.50 per month. For any work not included on the above referenced documents, labor performed will be billed at $45 (forty five dollars) per hour.

Cost for item 6, work performed will be billed at $45 (forty five dollars) per hour.

Emergency call-out after 6:00 PM, time and a half, and from 6:00 PM Friday to 6:00 AM Monday, and legal holidays double time.

All cost in this agreement are subject to an annual cost of living increase on January first of each year based upon the Consumer Price Index (CPI) for the Seattle area.

When possible all parts and materials used in conjunction with this work shall be charged directly to the water system, or submitted to the treasurer, or designated other, for reimbursement, including water lab fees

All work shall be performed by, or directly supervised by, a "Certified Operator" as required by the Washington State Department of Health and will be done in a professional manner with the water system's best interest foremost, and promoting compliance with Federal, State, County and American Water Works Association standards.

This agreement shall be for one year, with automatic extensions year by year, unless notification of termination is made in writing by either party, at least sixty days prior to termination.

During the term of the Agreement, Whidbey Water Services, LLC, agrees to defend, indemnify and save harmless Freeland Water and Sewer District, it officers, employees and agents,

from any and every claim and risk and all loses, damages, demands, suits, judgments and attorney fees, and other expenses of any kind, on account of injury to or death of any and all persons and/or on account of all property damage of any kind, whether tangible or intangible, including loss of use resulting there from, caused by the work performed under this agreement, or caused in whole or in part by the use of the Premises by Whidbey Water Services, LLC, except to the extent such claim, risk, loss, damage, suit, judgment or fees are caused by the sole negligence or willful misconduct of Freeland Water and Sewer District. It is further specifically and expressly understood that the indemnification provided herein constitutes Whidbey Water Services, LLC's waiver of immunity under industrial insurance, Title 51, RCW, solely for the purposes of this indemnification. This waiver has been mutually negotiated by the parties.

I have read the above contract agreement effective this first day of January, 2008, between the parties with respect to the subject matter hereof. Commitments, warranties, representations and understandings or agreements not contained, or referred to, in this Agreement or written amendment hereto shall not be binding on either party. Except as may be expressly provided herein, no alteration of any of the terms or conditions of this Agreement will be effective without the written consent of both parties.

This contract supersedes all prior contracts or agreements between the undersigned parties and becomes signed.

As a Washington State Department of Health approved "Satellite Management Agency" for public water systems, our top priority is "Water Quality and Customer Service".

Whidbey Water Services, LLC. is acting as an independent contractor, not as an employee of the Freeland Water and Sewer District, and is licensed, bonded, insured.

Nolan Knickerbocker, President Date 2-11-08
Freeland Water and Sewer District

Andy Campbell, Owner Date 2-11-08
Whidbey Water Services, LLC.

Maintenance Schedule for the Freeland Water and Sewer District

maintenance task	frequency	quantity	unit cost	annual cost	notes	dates completed
Booster pump + PRV stations	monthly	24	$40.00	$960.00	inspect and adjust	
Mow and trim,	monthly	12	$40.00	$480.00	facilities sites, time/as needed	
Test emergency generator	monthly	11	$25.00	$275.00	check all fluids, battery, etc, monthly	
Water meter read	bi-monthly	436	$7.02	$3,060.72	residential meter reads	
Meter and box maintenance	bi-monthly	6	$100.00	$600.00	water meter and box maintenance as needed	
Main valve exercise	annual	146	$25.00	$3,650.00	exercise, clean out box, paint lid	
Fire hydrant, exercise	annual	108	$40.00	$4,320.00	exercise, incl. isolation main valve	
Flush dead ends	annual	26	$45.00	$1,170.00	dead end mains	
Vacuum-air release valve test	annual	9	$50.00	$450.00	inspect and flush	
Well service, # of wells	annual	3	$100.00	$300.00	inspect seals, vents, static level, spring and fall	
Overhaul chlorine pump	annual	1	$125.00	$125.00	install overhaul kit	
Pressure tanks inspect.	annual	1	$40.00	$40.00	inspect and recommend	
Service emergency generator	annual	1	$250.00	$250.00	change all fluids, battery, touch up paint etc	
Service gas tools	annual	1	$50.00	$50.00	fluid change and lubricate, touch up paint	
Reservoirs inspect	bi-annual	2	$80.00	$160.00	all appurtenances, spring and fall	
Hydrant wash and repaint	five years	22	$75.00	$1,650.00	every five years	
Reservoirs, clean inside	five years	0		$0.00	every five years	

TOTAL LABOR COST ANNUALLY **$17,540.72**

OPERATIONS AND MAINTENANCE PROGRAM

GENERAL

Public water systems are required to have an emergency plan as a part of their operations program as required in WAC 248-54- 610. The purpose of a water system operations and maintenance plan is to facilitate the proper and efficient operation and maintenance of a water system. Implementation of this plan should enable the District to consistently provide reliable service to the District's customers. This operation and maintenance plan is comprised of the following major elements: district management and personnel; operator certification; maintenance service reliability; and an emergency response plan. The water quality monitoring plan and the cross connection control plan are covered in separate sections of the Water System Plan.

This program provides a discussion of the general operation and maintenance of the system. Additional information regarding operation of each specific component of the system is maintained with the District Manager. The information includes detailed specification for pumps, valves and other equipments, manufacturer's recommendations for maintenance and operations and parts lists.

STATE IDENTIFICATION NUMBER

State Department of Health Identification Number: 264508

State Department of Health Contact Person:

Erika Peterson
Washington State Department of Health, NW Drinking Water Operations
20435 72nd Ave S., Suite 200, Mailstop K17-12
Kent, WA 98032-2358
Direct Phone Number - (253) 395-6766
DOH General Phone Line - (253) 395-6750
After Hours Phone Line - (877) 481-4901

MANAGEMENT AND PERSONNEL

Freeland Water & Sewer District Address and Phone Number

Freeland Water & Sewer District
P.O. Box 222
Freeland, WA 98249
Phone: (360) 331-5566
Contact: Sandy Duncan

OPERATIONS AND MAINTENANCE PROGRAM

District Responsibility and Authority

A prerequisite for the delivery of efficient, reliable service is a competent staff organization responsible for the day-to-day operations as well as budget and planning responsibilities. The following represents the various levels of responsibility within Freeland Water & Sewer District.

- **Water District Manager** – The Certified Operator listed below maintains the system and oversee the preventative maintenance.

  Andy Campbell,
  South Whidbey Water Works,
  3792 Hubble Court
  Clinton, WA 98236
  Office Phone (360) 579-1956,
  Cell (360) 320-1490
  Emergency Pager (24 hour) (425) 335-9396.

- **Outside Consultants** – Legal and engineering counsel to the District is provided by outside consultants on an as needed basis.

  Legal counsel for the District is provided by:

  Currently seeking new legal council

  Engineering counsel for the District is provided by:

  Davido Consulting Group
  P.O. Box 1132
  Freeland, WA 98249
  (360) 331-4131

- **Other Assistance** – Other assistance such as contractors and special consultants are hired by the District in accordance with requirements of the laws governing such actions.

SYSTEM OPERATIONS AND CONTROL

The District relies on the system manager for the routine operation and record-keeping needs of the District.

OPERATIONS AND MAINTENANCE PROGRAM

WATER QUALITY MONITORING

The Washington State Department of Health (DOH) has adopted regulations which specify sampling frequencies for physical, bacteriological and chemical (organic and inorganic) constituents and radionuclides. The sampling requirements depend on the number of customers, source type and other factors. The monitoring requirements for the District are set forth in Water Quality Monitoring Report (WQMR) that is established with the DOH, the 2010 report is included in the appendices to the water system plan. Please see the list of appendices page vii for exact location. The District operator is responsible for obtaining water samples and staying in compliance with the testing requirements.

The DOH requires that systems serving up to a population of 1,000 have a minimum of one routine bacteriological analysis per month. The sample is to be taken from the distribution system. When any samples is detected with coliform present four (4) repeat samples are required to verify the results. The following month after a coliform detection, the purveyor must take five (5) repeat samples. If those samples do not contain any presence of coliform bacteria, the sampling may revert to the statutory number of samples per month. If coliform bacterial is detected the DOH will specify follow-up requirements.

PREVENTIVE MAINTENANCE

Preventive and normal maintenance of District equipment and facilities is critical for providing a safe and reliable water system. In order for the District operator to properly maintain the system, he maintains an accurate system drawings and forms to record his daily work. The District operator also maintains detailed manufacturer's operating instructions, troubleshooting advice, parts lists and maintenance and repair information on each of the primary system components. This insures that the preventative maintenance performed is accomplishes in an efficient and orderly manner. Maintenance schedules that meet or exceed manufacturer's recommendations are maintained for all critical components in the water system. The following is typical of the schedules maintenance for facilities within the District:

Source

The District maintains operation instructions for the submersible well pumps, booster pumps, chlorination equipment, valves, hydrants, and other system components at the Water Manager's office. General maintenance procedures for source facilities are identified below:

Weekly: Check and test security system. Observe and record motor current draw (three phases); log and record source meter readings and pump motor hours; check motor noise, temperature, vibration.

Monthly Measure and record static or pumping water level;

Annually: Perform a one hour pump test.

As Needed: Paint structures and piping, maintain electrical and hydraulic controls. Calibrate meter and, if necessary, dismantle, clean and inspect all parts; replace worn or defective meter parts; retest meters for accuracy

Storage

Weekly: Visually inspect the reservoir for any leaks, vandalism, or other potential problems.

Annually: Check operation of level controls. Clean reservoirs and verify interior condition, vents, hatches, etc. Clear debris from top of tank, especially around opening or the hatch. Verify integrity of screens of vents, overflow, and drain lines.

As Needed: Clean reservoirs every five years. Concrete tank will be left in the native state to eliminate the need for painting. Any major spalling of the concrete or differential settlement will be addressed.

Pumping Facilities

Island Transit maintains complete operation instructions for the booster pumps at the pumphouse and/or at the District manager's office. Maintenance procedures for pumping facilities are identified below:

Weekly: Check any fault codes. Address the issue that may have caused the fault code. Observe and record pump motor hours; check motor oil level in generator; check motor noise, temperature, vibration.

Semiannually: Change motor oil on emergency generator.

As Needed: Paint structures and piping, maintain electrical and hydraulic controls.

Distribution System

Monthly: Check back flow prevention devices; clean inlet and outlet screens

Annually: **Mains** – Flush dead-end lines and others as required.

Valves – Operate full open and closed; clean out valve boxes, repair as necessary;

Backflow Prevention Devices – Test to ensure device is functioning correctly and calibrate and/or repair as necessary;

Hydrants – Operate; check drain rate; lubricate as necessary; measure pressure; paint as necessary.

Preventive Maintenance: The following program for preventive maintenance shall be maintained in the Freeland Water District.

a) **Pumping**: The pump controls and the well flow meter in each well should be checked for evidence of proper operation. Any malfunction of the electrical control system, evidence of vibration of the submersible pumps or any other signs of improper operation should be appropriately be checked weekly and serviced in accordance with the manufacturers recommendations.

b) **Storage Tank**: The Storage tank shall be checked daily for elevation of water in the tank and any evidence of leakage or vandalism.

c) **Distribution**: The Distribution system, including all fire hydrants shall be checked weekly for any visible leaks.

d) **Bacteriological Testing:** The State requires that systems serving up to a population of 1,000 have a minimum of one routine bacteriological analysis per month. The sample is to be taken from the distribution system. If a sample is detected with coliform present four (4) repeat samples are required immediately. And then five (5) repeat samples are required in the following month. If those samples do not contain any presence of coliform bacteria, the sampling may revert to the statutory number of samples per month. Otherwise DOH will specify follow-up requirements.

e) **Chemical Testing**: is outlined in the Water Quality Monitoring Report.

(7) **Cross Connection**: All new construction should be inspected for possible cross connections. Underground lawn sprinkling systems must have an approved backflow prevention device. Annual inspection or testing of specific backflow protection devices in the water system shall be made.

(8) **Monitoring the Well**: The static levels in the existing and future wells shall be monitored monthly and the results recorded. Annual each well will have a one hour pump test performed. The appropriate reservoir should be lowered prior to the pump test to minimize wasted water. Prior to the test the static water level will be recorded. During the pump test the pumping rate and water level shall be recorded at regular intervals. Time to complete recovery shall also be determined and recorded. The results shall be provided to the water system engineer, so teat the well yield can be determined and tracked.

STAFFING – OFFICE SUPPORT, DESIGN ENGINEERING, FIELD OPERATIONS

The preventative maintenance procedures and normal operations for the system are described in the previous sections. The Water District Manager, Andy Campbell, will perform the ongoing maintenance and operations schedules. See the attached contract. Water District system design changes will be performed the District's Engineer, Davido Consulting Group, Inc. Freeland Water & Sewer District staff, Sandy Duncan, will handle any miscellaneous office support required.

Qualifications / Training

Qualifications and training requirements for obtaining and maintaining certification are stipulated but the State Department of Health. The management company will be responsible for ensuring the adequacy and proficiency of their staff. The staff members will be certified to perform their assigned functions.

Records

The management company will be responsible for obtaining and keeping the District records.

Updating Operations Program: This operation program shall be reviewed and updated as necessary to assure adequate water service at all times, and shall be located and maintained in such a manner as to be usable by personnel of the District Office.

EMERGENCY PLAN OF OPERATIONS

(1) Vulnerability analysis

a) **Wells** - The existing wells are located in locked pump houses. Well #1 and Well #2 pumphouses are enclosed within locked chain link fences. Well #3 in protected by a gated access.

b) **Treatment plant** – None currently. A proposed treatment plant is scheduled for the Well #3 site. Installation of the treatment system will occur with the locked pumphouse at the Well #3 site.

c) **Storage Tanks** - The system has two (2) 200,000 gallon concrete reservoirs. Access to the reservoirs is provided by an access hatch on the roof of the reservoirs. The access hatches are locked. Access to the roof of the reservoirs is by way of an external ladder on the side of the tank. The reservoir at the Well #1 site is enclosed within a chain link fence which is locked at all times. A second reservoir is located at the Well #3 site. It is protected by way of a gated access road. Sample taps on the reservoir fill line are located within the locked pump houses and maintenance building (converted old wooden reservoir) that contains the chlorination feed pumps for Well #1 and Well #2.

d) **Pump system:** The system has three submersible pumps, one in each well. The system currently has four pressure zones. The largest pressures zone is the gravity feed system. A small booster pump is provided in the maintenance building at the Well #1 site to provide a service to the Well #3 pump house and the adjacent residence. A new booster station has been installed at the Fish Forest PRD. This booster pump station is located within a locked pump house at the intersection of Silverfin Lane and Sockeye Lane. The 4th pressure station is provided by the booster pumps located along Bercot Road. These pumps are located with a locked vault.

e) **Distribution system** - There are the average number of fire hydrants and gate valves distributed throughout the system.

(2) Emergency Numbers to Call:

System Operator (Andy Campbell) 24 Hour Emergency Pager: (425) 335-9396
Freeland Water District Office: (360) 331-5566
Island County Sheriff: (360) 678-4422 or 911
Department of Health, Northwest Drinking Water Operations: (253) 295-6750
(should be notified when there is an outage of over 24 hours duration). After hours phone line is (877) 481-4901.

Water Quality Testing Lab: Avocet Environmental Testing (Bellingham, WA) 360-734-9035.

(3) **Emergency Response:** The water system manager shall respond to all water system emergencies within ½ day. This includes but is not limited to water quality violations, distribution main breaks, power outages, cross-connection issues, system break-ins, and any other occurrence that may impact the integrity of the water system.

(4) **Public Notification:** In case of emergency, the DOH may order the Water District to provide notification by newspaper, and to radio and television stations where such notice is required to protect the public health. Public notifications shall be completed in accordance with the United States Environmental Protection Agency's (EPA) Revised Public Notification Handbook, 2nd Revision, March 2010.

A sample boil water warning template from the EPA Notification Handbook is attached to the end of this document for reference.

(5) **Recordkeeping:** The District shall keep detailed and complete records of all public notification occurrences as to document compliance with this section.

(6) **Provision of Maintenance of Reserve Supplies:** Reserve supplies of all chemicals used in monitoring the water quality or in the water treatment shall be kept on hand within the limits of the normal shelf life of these chemicals.

DISTRIBUTION SYSTEM VALVE RECORD

Valve Location ⇩ \ Date ⇨	/ /	/ /	/ /	/ /	/ /	/ /	/ /	/ /	/ /	/ /	/ /

DISTRIBUTION SYSTEM VALVE RECORD

Valve Location ⇩ \ Date ⇨	/ /	/ /	/ /	/ /	/ /	/ /	/ /	/ /	/ /	/ /	/ /

FIRE HYDRANT FLOW RECORD

Hydrant Location	Date	Pitot Pressure	Flow Rate	System Pressure	Duration	Gallons

FIRE HYDRANT MAINTENANCE RECORD

Hydrant Location	Date	Maintenance Performed

APPENDIX M

WATER QUALITY NOTIFICATION FORMS

NOTICE TO WATER SYSTEM USERS

CHEMICAL MONITORING VIOLATION

We, _____ Water System, I.D. _____, located in _____ County are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. In _____ we did not meet our monitoring requirements for the chemicals listed below, and therefore cannot be sure of the quality of your drinking water at that time.

- ☐ *Volatile Organic Contaminants (VOCs).*
- ☐ *Complete Inorganic Contaminants (IOCs).*
- ☐ *Pesticides.*
- ☐ *Herbicides.*
- ☐ _____ *Other (List Test Panel or Specific IOC Analyte)*

At this time:

- ☐ Our required _____ samples have been collected for this monitoring period.
- ☐ Samples will be collected in the future as required.
- ☐ Other information for customers:

For more information, please contact _____ at ( )____-_____ or at _____.
Owner or Operator Phone Number Address

This notice is sent to you by _____ Water System on __ / __ / __

Chemical Monitoring Public Notice Certification Form
This section must be completed by the water system. Signature below indicates notice contained all required elements.

Complete the following items (check all that apply):

Washington State Department of Health
Division of Environmental Health
Office of Drinking Water

- ❑ Notice mailed to all water customers on ____ / ____ / ____.
- ❑ Notice hand delivered to all water customers on ___ / ___ / ___.
- ❑ Notice included in annual Consumer Confidence Report (attach copy).
- ❑ Notice posted at _____ on ___ / ___ / ____.
  (***By Department Approval Only***)

_____ _____ _____
Signature of owner or operator Position Date

Send copy of completed notification and certification to:

Office of Drinking Water, Water Quality Section
PO Box 47822
Olympia, WA 98504-7822
FAX 360-236-2252

DOH Form 331-465 (10/13)

For people with disabilities, this document is available on request in other formats. To submit a request, please call 1-800-525-0127 (TDD/TTY call 711).

Drinking Water Warning: Backflow Incident

Public Notification

The _____ Water System, ID_____, located in _____County may be contaminated because of a backflow incident in which _____ (describe the substance) flowed back into the drinking water system. You are located in the service area potentially affected by this backflow incident.

Do Not Use Tap Water for Drinking, Laundry, or Bathing Until Further Notice. Use only purchased bottled water for drinking, making ice, brushing teeth, washing dishes, food preparation, and hand washing.

When backflow occurs, microbial or chemical contamination can be drawn into the water system. These contaminants can cause severe injury or illness.

What caused the backflow incident?

What is the affected area?

What are we doing to correct the problem?

Where can customers get bottled water?

What should you do before you begin using your tap water?

We will notify you when the water is safe to use.

For more information, please call _____ at ( ) ___-_____ or email _____.

Please share this notice with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments and businesses). You can post it in a public place, share copies by hand, or mail it.

The _____ Water System sent this notice to you on ___/___/____

For Water Utility Use Only:

Backflow Incident Public Notice Certification Form

Within 10 days of notifying your customers, please complete this certification form and send a copy of each type of notice you distributed (hand-delivered notices, new releases, email, phone transcript, etc.) to our regional office. Call 1-800-521-0323 for the regional office address.

Distribution was completed on ___ / ___ /____. Were the water users notified within 24 hours? • Yes • No	Check all that apply: • Hand delivery, • News release (TV, radio, newspaper, etc.), • Posting at_____ • Other _____+_____

_____ Signature of owner or operator	_____ Position	_____ Date

DOH Form (331-495) 6/14

For people with disabilities, this form is available on request in other formats. To submit a request, please call 800-525-0127 (TDD/TTY 711).

DRINKING WATER WARNING: LOSS OF PRESSURE

Public Notification

The _____ Water System, ID_____, located in _____County may be contaminated because of a loss of pressure in the water system. Even if you didn't lose water pressure, your tap water may still be contaminated.

Until Further Notice, Boil Your Tap Water Before Drinking. Bring all water to a roiling boil for one minute. Let it cool before using. You should use boiled or purchased bottled water for drinking, making ice, brushing teeth, washing dishes, and food preparation. Boiling kills bacteria and other organisms in the water.

When pressure loss occurs, contamination from the environment or from human or animal waste can be drawn into the water system. Microbes in these wastes can cause short-term health effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems. <u>These symptoms are not only caused by organisms in drinking water</u>. If you experience any of these symptoms and they persist, you may want to seek medical advice. People at increased risk should seek advice about drinking water from their health care provider.

What caused the pressure loss?

What is the affected area?

What are we doing to correct the problem?

What should you do when we restore pressure to the water system?

We will notify you when you no longer need to boil the water.

For more information, please call _____ at ( ) ___-_____ or email _____.

Please share this notice with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments and businesses). You can post it in a public place, share copies by hand, or mail it.

The _____ Water System sent this notice to you on ___/___/____

For Water Utility Use Only:

Pressure Loss Public Notice Certification Form

Within 10 days of notifying your customers, please complete this certification form and return a copy of each type of notice you distributed (hand-delivered notice, news release, email, phone transcript, etc.) to our regional office. Call 1-800-521-0323 for the regional office address.

Distribution was completed on ___ / ___ /____. Were the water users notified within 24 hours? • Yes • No	Check all that apply: • Hand delivery, • News release (TV, radio, newspaper, etc.), • Posting at_____ • Other _____

_____ Signature of owner or operator	_____ Position	_____ Date

DOH Form 331-493 (6/14)

For people with disabilities, this form is available on request in other formats. To submit a request, please call 800-525-0127 (TDD/TTY 711).

Washington State Department of Health
Division of Environmental Health
Office of Drinking Water

PUBLIC NOTICE CERTIFICATION
E. coli-MCL Violation

Within 10 days after notifying your customers about an *E. coli*-MCL violation, you must complete this form and send it to our regional office along with a copy of each type of notice you distributed to your customers (hand-delivered notices, news releases, newspaper articles, and so on).

By completing this form, you certify that:

- You met all of the public notification requirements.
- You will meet future requirements for notifying new billing units of the violation or situation.

If the boil water advisory remains in effect more than three months, you must re-notify your water users and send another completed copy of this *Public Notice Certification* to us.

Complete the following items, sign the form and mail it to the nearest regional office, addresses below:

Water System:_____ ID #_____ County:_____

Violation Date:_____ / _____ / _____ Violation Type_____

This public water system certifies that it gave this public notice to water users, following state and federal requirements for delivery, content, and deadlines. ☐ **Yes** ☐ **No**

Distribution was completed Yes ☐ **No** ☐ **on** ____ **/** ____ **/**____**.**

Check all that apply:

☐ Hand delivery,
☐ News release (TV, radio, newspaper)
☐ Posting at_____ (by DOH approval only),
☐ Other _____ (by DOH approval only).

Were the water users notified within 24 hours? Yes ☐ **No** ☐

_____ _____ _____
Signature of owner or operator | Position | Date

If you need this publication in an alternative format, call 800.525.0127 (TDD/TTY call 711). This and other publications are available at www.doh.wa.gov/drinkingwater.

Northwest Regional Office:
20425 72nd Ave S Suite 310
Kent WA 98032
(253) 395-6775
Fax: (253) 395-6760
Email: dw.nwro@doh.wa.gov

Southwest Regional Office:
PO Box 47823
Olympia WA 98504-7823
(360) 236-3030
Fax (360) 664-8058
Email: swro.coli@doh.wa.gov

Eastern Regional Office:
16201 E Indiana Ave Suite 1500
Spokane Valley WA 99216
(509) 329-2100
Fax: (509) 329-2104
Email: mark.steward@doh.wa.gov

DOH Form #331-264 (Updated 03/16)

Lead and Copper Consumer Notice certification form

All Group A water systems that conduct lead and copper monitoring must provide individual sampling results to the persons at each sample location. (CFR 141.85 (d))

Notification of Results: The water system must provide the consumer notice as soon as possible, but no later than 30 days after learning the results.

Community water systems: You must provide individual sampling results to all residences for which you received lead and copper samples. In multi-unit structures, only notify each unit tested.

Nontransient noncommunity water systems (NTNCs): You must notify all consumers who use water from the sample tap, even if they do not receive a water bill. With prior approval from DOH, NTNC water systems can post the notice in public areas.

Certification to the state: DOH must receive a sample copy of one consumer notice and a signed certification form (below) within 90 days after the end of the monitoring period.

To meet this reporting requirement, you may:

- Use the DOH Consumer Notice Template.
- Use the applicable EPA Consumer Notice template.
- Prepare your own Consumer Notice in conjunction with the state.

If you choose to produce your own Consumer Notice, it must include all of the following:

1. The sample results of the tap tested.
2. An explanation of the health effects of lead.
3. Steps consumers can take to reduce exposure to lead in drinking water.
4. The water system's contact information.
5. The maximum contaminant level goal (MCLG) and action level for lead, and the definitions of these two terms.

If you are responsible for multiple water systems, you can send to the Office of Drinking Water:

- A list of the water systems you provided Consumer Notices to, with name and PWS ID number.
- Send one copy of the Consumer Notice you used.
- Send one completed certification form (below).

Lead and Copper Results: Consumer Notification Certification Form

The water system must complete this section. The signature below certifies that the notice contains all required elements.

Complete the following items (check all that apply):

☐ I mailed/delivered all Consumer Notices to the water users at all of the lead and copper sampling locations within 30 days of receiving the lead and copper results from the laboratory.

☐ (**For NTNC systems ONLY**) Notice posted at _____ on ___ / ___ / ____ within 30 days of receiving the lead and copper results from the laboratory. (***Only By Department Approval***)

_____ _____

Water System PWS ID

_____ _____ _____

Signature of owner or operator Position Date

Send a copy of the completed notice and this certification form to: Washington State Department of Health, Office of Drinking Water, Water Quality Section,PO Box 47822, Olympia WA 98504-7822 or fax to (360) 236-2252.

DOH Form 331-462-F

If you need this publication in alternate format, call (800) 525-0127. For TTY/TDD, call (800) 833-6388

NOTICE TO WATER SYSTEM USERS

LEAD AND COPPER MONITORING VIOLATION

We, _____ Water System, I.D. _____, located in _____ County are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. In _____ we did not meet our monitoring requirements for lead and copper, and therefore cannot be sure of the quality of your drinking water at that time.

At this time:

- ☐ No action is required by the users.
- ☐ Our required lead and copper samples have been collected for this monitoring period.
- ☐ Samples will be collected in the future as required.
- ☐ Other information for customers:

For more information, please contact _____ at ( )____-_____ or at _____.
Owner or Operator Phone Number Address

Please share this information with people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses.) You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is sent to you by _____ Water System on __/__/__

Lead & Copper Monitoring Public Notice Certification Form
This section must be completed by the water system. Signature below indicates notice contained all required elements.

Complete the following items (check all that apply):

- ❑ Notice mailed to all water customers on ____ / ____/____.
- ❑ Notice hand delivered to all water customers on ___ / ___ /___.
- ❑ Notice published in newspaper (attach copy)
- ❑ Notice posted at _____ on ___ / ___ /____.
  (***By Department Approval Only***)

Washington State Department of Health
Environmental Public Health
Office of Drinking Water

_____ _____ _____
Signature of owner or operator Position Date

Send copy of completed notification and certification to:

Lead and Copper Program
Office of Drinking Water
PO Box 47822
Olympia, WA 98504-7822
FAX 360-236-2252

DOH Form 331-461 (Updated 10/13)

For people with disabilities, this document is available on request in other formats. To submit a request, please call 1-800-525-0127 (TDD/TTY call 711).

AVISO PARA LOS USUARIOS DEL SISTEMA DE AGUA

VIOLACIÓN DEL MONITOREO DE PLOMO Y COBRE

Nosotros, el sistema de agua _____ , con número de identificación (I.D#) _____, ubicado en el condado de _____, regularmente debemos monitorear contaminantes específicos en el agua que usted toma. Los resultados del monitoreo son un indicador para comprobar si el agua que usted toma cumple con los estándares de salud. En _____ no cumplimos con el requisito de monitorear el plomo y el cobre, y por lo tanto no podemos estar seguros de la calidad del agua que usted tomó en esa fecha.

En este momento:

☐ Ninguna acción se requiere de parte de los usuarios.

☐ Nuestras muestras de plomo y cobre requeridas han sido tomadas para este periodo de monitoreo.

☐ Las muestras serán tomadas en el futuro como se requiere.

☐ Otra información para los usuarios:

Para mayor información comuníquese con _____ al teléfono ( ) _____-__ _____ o con

_____	_____	_____
(dueño u operador)	(teléfono)	(dirección)

Pase esta información a todas las personas que pudieran tomar agua de este suministro, especialmente aquellas personas que no hayan recibido este aviso (por ejemplo, personas que vivan en apartamentos, asilos de ancianos, escuelas y negocios.) Usted puede hacerlo colocando este aviso en un lugar público donde se pueda leer claramente o distribuyendo copias en persona o enviándolas por correo.

Este aviso es enviado a usted por el Sistema de Suministro de Agua_____ fecha ___/___/____.

Para personas discapacitadas, este document está disponible a su pedido en otros formatos. Para hacer su pedido, llame al 1-800-525-0127 (TDD/TTY llame al 711).

APPENDIX N

CROSS CONNECTION CONTROL MATERIALS

Date

Name
Address
PO Box 219
Freeland, WA 98249
REGARDING: Annual Testing of Backflow Prevention Devices – Address,
Account XXXX

To Whom It May Concern:

I am writing this letter as a service reminder that your Annual Testing of Backflow Prevention Devices was due in June 2018. Please provide a copy of your annual test report to the District upon completion. The testing and report requested is required by the District's Rules and Regulations and Washington State Department of Health WAC 246-290-490.

The District Rules containing the mandated "Cross connection Control Program" state: "Backflow prevention devises shall be inspected and tested by a certified tester annually, or more often where successive inspections indicate repeated failure. The devises shall be repaired, overhauled or replaced whenever they are found to be defective. Said inspection and tests shall be the responsibility of the customer of the Water District and shall be completed at the customer's sole costs and expense. The customer shall keep records of inspection, tests and repairs. When any prevention backflow device is tested by a certified tester, and approved, it shall be tagged by the certified tester and in a form sufficient to allow the Water District to determine when said test was performed and approved. Records of all such tests and findings shall be transmitted to the District no later than 60 days after testing is completed. Failure of a customer or property owner to conduct or arrange for conducting all required testing may result in said testing being done or commissioned by the Water District at the expense of the customer or property owner, or when a health threat potential warrants, the District may immediately disconnect service to any premises suspected of presenting a threat due to cross connections. "Certified tester," means a person certified by the State Department of Health (DOH) or other agency so charged, to inspect and text Back-flow assemblies.

Your prompt attention to this matter is appreciated. If you've already made the arrangements, please disregard this reminder. Please contact me at 331-5792 if you have any questions regarding this matter.

Yours truly,

Terri Campbell
Administrative Assistant

FREELAND WATER DISTRICT

CROSS CONNECTIONS

Account #	Name	Service Address	Type of Device	Address	City	State	Zip	Last Inspection	Date Installed			
179760.0	AOOk Corner Properties	5618 Fish Rd	RPBA	PO Box 229	Clinton	WA	98236	9/22/2018	1/25/2001			
179770.0	AOOk Corner Properties	5618 Fish Rd	RPBA	PO Box 229	Clinton	WA	98236	9/22/2018	1/25/2001			
179780.0	AOOk Corner Properties	5618 Fish Rd	RPBA	PO Box 229	Clinton	WA	98236	9/22/2018	1/25/2001			
034500.0	Bluewater	5545 Myrtle Ave		Po Box 254	Clinton	WA	98236	1/15/2019	1/15/2009			
0125002	Chase Bank	Main St										
143000.1	China City	Newman Rd										
142050.0	Coastal Community Bank	1737 Main St		PO Box 760	Freeland	WA	98249	8/22/2018	8/15/2005			
232000.0	Dodge, Douglas	5287 Bercot Road										
136500.0	Double Bluff Beach LLC	5529 Harbor Ave		PO Box 695	Freeland	WA	98249	11/4/2018	11/4/2006			
209900.0	Fire District #3	5535 Cameron Rd	DCVA-3	5535 Cameron Rd	Freeland	WA	98249	5/22/2019	6/6/2002			
164000.0	Freeland Café	Main St							5/15/1990			
163000.0	Freeland Plaza	1635 Main St	DCVA	PO Box 969	Freeland	WA	98249	1/17/2019				
133500.0	Freeland Storage	1702 Layton		PO Box 657	Freeland	WA	98249	5/15/2018	5/15/2009			
172500.0	Harbor Center	1592 Main St	DCVA	PO Box 219	Freeland	WA	98249	6/20/2018	10/12/2001	Meter inactive 06/26/06		
178000.1	Island County Sheriff Office	East Harbor Road	RPBA	PO Box 5000	Coupeville	WA	98239	4/28/2018				
127000.0	Islander Apartments	5505-5511 View St	DCVA	C/O Tara Properties PO BOX 760	Freeland	WA	98249	9/22/2018				
173250.0	Isle West Investors	Main		PO Box 147	Freeland	WA	98249	12/10/2018	5/19/2008			
174000.0	Isle West Investors-Linds/flower	Main		PO Box 147	Freeland	WA	98249	12/10/2018	1/17/1996			
175000.0	Isle West Investors-Payless	Main		PO Box 147	Freeland	WA	98249	12/10/2018	6/29/1990			
142190.0	Main Street Sewers	Maple Ridge	RPBA	35 SE ELY St	Oak Harbo	WA	98249	5/9/2018	3/25/2002			
142100.0	Maple Ridge	Maple Ridge	DCVA	PO Box 760	Freeland	WA	98249	5/22/2019	9/26/2001			
142110.0	Maple Ridge	Maple Ridge	DCVA	PO Box 760	Freeland	WA	98249	5/22/2019	9/26/2001			
142120.0	Maple Ridge	Maple Ridge	DCVA	PO Box 760	Freeland	WA	98249	5/22/2019	9/26/2001			
142130.0	Maple Ridge	Maple Ridge	DCVA	PO Box 760	Freeland	WA	98249	5/22/2019	9/26/2001			
142140.0	Maple Ridge	Maple Ridge	DCVA	PO Box 760	Freeland	WA	98249	5/22/2019	9/26/2001			
142150.0	Maple Ridge	Maple Ridge	DCVA	PO Box 760	Freeland	WA	98249	5/22/2019	9/26/2001			
142160.0	Maple Ridge	Maple Ridge	DCVA	PO Box 760	Freeland	WA	98249	5/22/2019	9/26/2001			
213000.0	Nichols Brothers	Cameron & Shoreview	RPBA	PO Box 580	Freeland	WA	98249	5/11/2018	5/11/2011			
151000.0	Porter Whidbey Building	Harbor Avenue								OFF		
143150.0	PSE Building	Main St							12/2/2002	OFF		
143250.0	Puget Sound Energy	Main St		1101 Lk. Wash. Blve N	Renton	WA	98056	12/15/2018	2/6/2003	OFF		
NEW	Skagit Farmers Supply		DCVA					11/6/2018	9/27/2018			
NEW	Skagit Farmers Supply		DCVA					11/6/2018	9/27/2018			
NEW	Skagit Farmers Supply		DCVA					11/6/2018	9/27/2018			
NEW	Skagit Farmers Supply		RPBA					11/6/2018	9/27/2018			
145000.	Sound Elect. Bldg	Harbor & Main						7/6/2018	7/9/2018			
255550.0	St. Agustines	5217 Honeymoon Bay Road	RPBA					5/5/2018	5/5/2018			
149000.1	Steve Myres	Harbor Ave						8/1/2018	8/1/2018			
146000.0	US Bank	5560 Harbor Ave						8/31/2018				
096500.0	South Whidbey Health Care	5486 Harbor Ave	RPBA	101 N. Main Street	Coupeville	WA	98239	11/13/2018	9/30/2018			
124000.1	Whidbey Telecom	Main St						3/14/2019	9/15/2018			
Updated 4-30-19												

FREELAND WATER and SEWER DISTRICT

PREVENTION OF CONTAMINATION
CROSS-CONNECTION CONTROL
CUSTOMER AGREEMENT

Note: as used hereafter, the term "purveyor" means the Freeland Water and Sewer District, or "District".

The customer's plumbing system, starting from the termination of the District's water service meter shall be considered a potential high health hazard requiring the isolation of the customer's premise by a District approved, customer installed and maintained, air gap. The air gap shall be located as determined by the District. Water shall only be supplied to the customer through this District approved air gap.

Notwithstanding the aforesaid, the purveyor, upon assessing the risk of contamination posed by the customer's plumbing system and use of water, may allow the customer to connect to the District's water mains without an approved air gap. Permission for such connection to the District's mains service will be at the sole discretion of the District, and will be based on the following terms and limitations:

1) The customer agrees to take all measures necessary to prevent the contamination of the plumbing system within their premise and the purveyor's distribution system that may occur from backflow through a cross connection. These measures shall include the prevention of backflow under any backpressure or backsiphonage condition, including the disruption of supply from the purveyor's system that may occur by reason of routine system maintenance or during emergency conditions, such as a water main break.

2) The customer agrees to install operate and maintain at all times their plumbing system in compliance with the current edition of the plumbing code having jurisdiction as it pertains to the prevention of contamination, and protection from thermal expansion due to a closed system that could occur with the present or future installation of backflow preventers on the customer's service and/or at plumbing fixtures.

3) For cross connection control or other public health related surveys, the customer agrees to provide free access for the employees of the purveyor to all parts of the premise during reasonable working hours of the day for routine surveys, and at all times during emergencies.

4) The customer agrees to install all backflow prevention assemblies requested by the purveyor, and to maintain those assemblies in good working order. The assemblies shall be of a type, size and make approved by the purveyor and the State/County Health Authority. The assemblies shall be installed in accordance with all standards established by the purveyor.

5) The customer agrees to have all backflow prevention assemblies tested upon installation, annually thereafter or whenever requested by the purveyor, after repair and after relocation. All testing shall be done by a State Department of Health (DOH) certified

backflow prevention assembly tester (BAT). The results of the tests shall be reported within 30 days to the purveyor on a form provided by or approved by the purveyor.

6) The customer agrees to provide a Cross Connection plan to the purveyor within 30 days of connection. In which the customer will provide contact information for the certified tester responsible for the system's on going maintenance and operation. A copy of form is hereto attached.

7) The customers agrees to obtain prior approval from the purveyor for all changes in water use, and alterations and additions to the plumbing system, and shall comply with any additional requirements imposed by the purveyor for cross connection control.

8) The customer acknowledges the right of the purveyor, in keeping with changes to State regulations, or the purveyor's risk management policies. to impose retroactive requirements for additional cross connection control measures.

9) The customer acknowledges the right of the purveyor to discontinue water supply within 72 hours of giving notice, or a lesser period of time if required to protect the public health, if the customers fails to cooperate in the installation, maintenance, repair, inspection or testing of backflow prevention assemblies or air gaps required by the purveyor.

10) The customer agrees to indemnify and hold harmless the purveyor for all contamination of the customer's plumbing system or the purveyor's distribution system that results from an unprotected or inadequately protected cross connection within their premise. This indemnification shall pertain to all backflow conditions that may arise from the purveyor's suspension of water supply or reduction of water pressure, recognizing that the air gap separation otherwise required would require the customer to provide adequate facilities to collect, store and pump water for their premise.

11) The Customer specifically agrees to install and maintain at all times their plumbing system in compliance with the most current edition of the plumbing code having jurisdiction as it pertains to the prevention of water system contamination, prevention of pressure surges and thermal expansion in their water piping. For thermal expansion.

12) Further, the Customer agrees not to make any claim against the District or its agents or employees for damages and/or loss of production, sales or service, in case of water pressure variations, or the disruption of the water supply for water system repair, routine maintenance, power outages, and other conditions normally expected in the operation of a water system.

_____ _____

CUSTOMER Signature (owner/tenant) date

_____ _____

CUSTOMER Signature (owner/tenant) date

FREELAND WATER AND SEWER DISTRICT

CROSS CONNECTION CONTROL PLAN

Name of Legal Owner _____

Owner's Mailing Address _____

_____

Owner's Phone Number _____

PROPERTY NAME _____

ADDRESS OF PROPERTY _____

_____

CERTIFIED TESTER _____

CERTIFIED TESTER ADDRESS _____

_____

CERTIFIED TESTER PHONE _____

CERTIFIED TESTER CERTIFICATION NUMBER _____

_____ **Date** _____

Signature of Owner

FREELAND WATER AND SEWER DISTRICT
PO BOX 222, FREELAND WA 98249
PHONE: (360)-331-5566

CROSS CONNECTION CONTROL PLAN CHECKLIST

1. Install District approved Back Flow Prevention devise.

2. Have Back Flow Prevention Devise tested by a certified tester.

3. Certified Tester to provide Backflow Prevention Assembly Test Report to the District within 30 day of test. The report must include the following items.

a. Name of Legal Owner
b. Mailing address of Owner
c. Phone Number of Owner
d. Name of Premises/Property
e. Address of Property
f. Location of Assembly
g. Assembly Type and Manufacturer
h. Model, size and Serial Number
i. Results of test
j. Date of Test
k. Date of Retest if repairs made or test failed.
l. Name, Address, phone number(s) and signature of Certified Tester and their Certification Number.

4. It is the responsibility of the Owner to comply with the annual testing requirements.

RESOLUTION NO. 01-1
CROSS-CONNECTION CONTROL PROGRAM

A RESOLUTION of the Board of Commissioners of the Freeland Water District, Island County, Washington, a Washington State Municipal Corporation, Declaring Cross-connections to be Unlawful Unless Protected by a Backflow Prevention Device; Requiring Installation of Backflow Devices; Requiring Annual Testing of Backflow Prevention Devices; Regulating the Use of Water Supplies; Adopting Rules and Regulations and Procedures; Requiring Inspections; Providing for Abatement of Unlawful Cross-Connections and Installations of Backflow Prevention Devices; Providing Penalties for Violations.

WHEREAS, the Commissioners of Freeland Water District, Island County, Washington, have determined that cross-connections in and to the public water supply pose a potential hazard to water quality within the District; and

WHEREAS, the installation of backflow prevention devices to counteract back pressure or prevent siphonage into the public water system are necessary for the public health, welfare and safety; and

WHEREAS, the Commissioners believe that the existence or possible existence of cross-connections pose a threat and danger to the public water supply system; and

WHEREAS, the Commissioners believe that a plan to control the dangers presented by the cross-connections must be implemented; and

WHEREAS, the Commissioners believe that reasonable penalties should be implemented to enforce the plan for the control of connections;

NOW, THEREFORE, BE IT RESOLVED by the Board of Commissioners of Freeland Water District, Island County, Washington, as follows:

Section 1. Definitions: The following definitions shall apply to this resolution:

1. Backflow. A flow, other than the intended direction of flow, of any foreign liquids, gases or substances into the distribution system of a public water supply.

2. Backflow Prevention Device. A device, approved by the Sate of Washington, Department of Health, or such other state department as shall have jurisdiction over the subject matter, and by the American Water Works Association, used to counteract back pressure or prevent siphonage into the distribution system of a public water supply.

3. Cross-Connection. Any physical arrangement whereby a public water supply is connected, directly or indirectly, with any other water supply system, sewer, reclaimed water line, drain, conduit, pool, storage reservoir, irrigation lines, fire sprinkler systems, plumbing fixtures or other device or system, which contains or may contain contaminated water, sewage or other wastes or liquids, gases or contaminated air, of unknown or unsafe quality, which may be capable of imparting contamination to a public water supply as a result of backflow, back pressure, by-pass arrangements, jumper connections, removable sections, swivel or change-over devices, and other temporary or permanent devices through which or because of which,

backflow could occur are considered to be cross-connections.

4. Public Water Supply. Any system or water supply intended or used for human Consumption or other domestic use, including source, treatment, storage, transmission and distribution facilities where water is furnished to any community, to a collection or number of individuals or is made available to the public for human consumption or domestic use, but excluding water supply serving a single residence.

5. Service. A connection between a water supplier's distribution system and the customer's system, except when the customer's system distributes to more than one single-family dwelling, then each dwelling shall be considered as a service connection.

Section 2. Cross-Connection Declared Unlawful. Pursuant to WAC 246-290-490 (1), the installation or maintenance of a cross-connection is hereby prohibited, unless protected by a backflow prevention device pursuant to WAC 246-290-490 (2).

Section 3. Backflow Prevention Devices to be Installed. Backflow prevention devices shall be installed as decided and/or directed by the District, either at the service connection, and/or within any premises, and/or at any other location determined by the District whenever the existence or potential existence of a cross-connection posing a potential threat or hazard to the public health via water supply contamination. All costs of compliance with this section shall be the responsibility of the customer, owner, or developer as the case may be. Said determination shall be made by the Water District pursuant to the rules and regulations of WAC 246-290-490 and the American Water Works Association, Pacific Northwest Section's Sixth Edition of "Accepted Procedure and Practice in Cross-Connection Manual", "Water Reclamation and Reuse Manual" issued jointly by the Department of Health and Department of Ecology 1997 and "The Criteria for Sewage Works Design" Department of Ecology 1998. Backflow prevention devices required by this section shall be installed under the supervision and with the approval of the Water District. The device shall be located in an area readily accessible for maintenance and testing and where no part of the device will be submerged.

Section 4. Annual Testing of Backflow Prevention Devices. Backflow prevention devices shall be inspected and tested by a certified tester annually, or more often where successive inspections indicate repeated failure. The devices shall be repaired, overhauled or replaced whenever they are found to be defective. Said inspection and tests shall be the responsibility of the customer of the Water District and shall be completed at the customer's sole costs and expense. The customer shall keep records of inspection, tests and repairs. When any prevention backflow device is tested by a certified tester, and approved, it shall be tagged by the certified tester and in a form sufficient to allow the Water District to determine when said test was performed and approved. Records of all such tests and findings shall be transmitted to the District no later than 60 days after testing is completed. Failure of a customer or property owner to conduct or arrange for conducting all required testing may result in said testing being done or commissioned by the Water District at the expense of the customer or property owner, or when a health threat potential warrants, the District may immediately disconnect service to any premises suspected of presenting a threat due to cross connections . "Certified tester" means a person certified by the State Department of Health (DOH) or other agency so charged, to inspect and test Back-flow assemblies.

Section 5. Regulation of Water Supplies. Use and operation of any private water supply system when said system is connected in any way to the public water supply system is hereby prohibited, unless approved, in writing, by Freeland Water District.

Section 6. Adoption of Rules, Regulations, and Procedures. Rules and regulations of the State Board of Health regarding public water supplies, entitled "Cross-Connection Control Regulation in Washington State", WAC 246-290-490 and the American Water Works Association, Pacific Northwest Section's Fifth Edition of "Accepted Procedure and Practice in Cross-Connection Manual" as they presently exist and as they may, from time to time, be amended in the future, are hereby adopted and made part of this resolution as if fully set forth therein. If any part of these publications or rules and regulations are inconsistent with this resolution, the terms of this resolution shall apply. This resolution shall constitute the District's Cross-Connection Control Program pursuant to WAC 246-290-490 (1)(b).

Section 7. Adoption of Rules, Regulations, and Procedures. The Water District designates and adopts by reference the following rules, regulations and procedures:

1. "Cross Connection Control" Chapter 246-290-490 WAC
2. "Cross Connection Control Manual" AWWA PNWS Sixth Edition
3. "Water Reclamation and Reuse Standards (Section 1, Art 12 section 3)" Washington Dept of Health and Washington Dept of Ecology 1997
4. "Criteria for Sewage Works Design (Chapter E1-3.4)" Washington Department of Ecology 1998

These references are adopted as they presently exist and as they may, from time to time, be amended. If any part of these publications or rules and regulations are inconsistent with this resolution, the terms of this resolution shall apply. This resolution shall constitute the District's Cross-Connection Control Program pursuant to WAC 246-290-490 (1)(b).

Section 8. Inspection for Cross-Connections. The Water District may inspect premises periodically, or more often as deemed necessary by repeated failure or potential hazards. Such inspections may be at the expense of the customer or property owner. The District will notify, in writing, the person in whose name the water service is established under the records of Freeland Water District and in accordance with the notice provisions of Section 7 of this resolution, of the work or improvements required to correct any potential hazard. Failure to allow such an inspection within ten (10) days of the mailing of a notice of said inspection shall be grounds for the discontinuance of water service to the premises without further notice. In cases where an immediate health threat is suspected, the District may conduct inspections without notice upon oral or written presentation of credentials to any party or occupant in sufficient enough control of the premises to allow physical access. Alternatively, if denied inspection access, the District may immediately shut off service to the premises.

Section 9. Abatement of Unlawful Cross-Connections and Installation of Backflow Prevention Devices. Any violation of the provisions of this resolution is hereby declared to be a violation of the rules and regulations of Freeland Water District and, pursuant to the authority given it in WAC 246-290, and pursuant to the powers granted it in the Revised Code of Washington, Chapter 57, such violation shall be abated as follows:

1. In the event that the Water District determines that a violation does exist, written notice to Section 7, Paragraph B, shall be sent to the person in whose name the water system is established under the records of Freeland Water District, or, alternatively, a copy of such written notice shall be posted on the premises served.

2. The notice shall fully describe the violations to be corrected and shall demand that the customer contact the Water District, in writing, within ten (10) days from the date of said notice, to acknowledge receipt of the notice and to present to the Water District a plan to correct the violations. The notice shall state that water service to the premises

may be discontinued if the customer does not appear, to acknowledge receipt of the notice and present a plan for the correction of the violations within the ten (10) day period set forth in the notice or within the period of time all owed for presentation of the plan pursuant to Paragraph 3.

3. The Water District is hereby authorized to allow the customers a reasonable period of time after their appearance to present the plan of correction of the violations. The plan shall include a statement of what the customer is going to do to correct the violation or violations, the materials and parts to be used for the corrections, the name of the person or firm that will make the corrections and a time table for the completion of the corrections. The Water District then shall either approve or disapprove the plan, in writing, as follows:

    a. If approved, the plan shall be carried out by the owner according to the terms and within the time period allowed in the plan. In the event the corrections are not made in accordance with the plan and within the time period allowed in said plan, the District shall give a ten (10) day written notice to the customer(s) requiring them to correct the violations in accordance with the terms and conditions of the plan, or water service will be discontinued to the premises.

    b. If disapproved, the Water District shall notify the customer, in writing, in accordance with the provisions of Paragraph A of this Section that said violations must be corrected within a prescribed time of ninety (90) days or less, unless the District determines that it is unreasonable to require the correction within ninety (90) days, in which event a longer time period may be allowed.

4. The Water District is hereby authorized to require that interim measures be taken by the customer until said violation is fully corrected. Said measures shall be fully described in the plan for correction agreed to by the customer and the Water District.

5. In addition to the other remedies provided for herein, in the event that the violations present an immediate danger of contamination to the public water supply, service from the District's water supply system to the premises may be terminated without prior notice, provided, however, notice will be posted on the premises at the time service is discontinued.

Section 10. Penalties. In addition to the remedies set forth herein, any person who violates any of the provisions of this resolution shall be subject to the following penalties:

1. For the first shut-off, the penalty shall be $50, (Fifty Dollars, U.S.).

2. For any subsequent shut-off, within one (1) year of previous shut-off, the fine/penalty shall be $150 (One hundred fifty dollars, U.S.), plus the cost of installation of a flow and backflow prevention device.

Section 11. Compliance. All acts by any officer, agent or employee of Freeland Water District carried out pursuant to this resolution and the applicable provisions of WAC 246-290 are discretionary to the District which assumes no liability or responsibility consequent to any permission, certificate of inspection, inspection, or approval authorized herein, or issued or given as herein provided, or in consequence of anything done or not done, or acts performed pursuant to any provision of this Resolution. The District shall incur no

liability nor accept any responsibility for losses or damages due to discontinuance of service to any customer for failure to comply with this cross-connection control program.

ADOPTED at a regular meeting and duly noticed public hearing of the Board of Commissioners of Freeland Water District, Island County, Washington, on this _____. day of _____ , 2001.

FREELAND WATER DISTRICT Board of Commissioners

_____
Andrew Pringle Jr., President/Commissioner

_____
Nolan A. Knickerbocker, Secretary/Commissioner

_____
John C. A. Nestor, Commissioner

ATTEST:

_____
Thomas J. Roehl, Planning Officer, Freeland Water District

APPENDIX O

COST ESTIMATES

FREELAND WATER AND SEWER DISTRICT
PRELIMINARY COST ESTIMATE
PROJECT D-03A: Replace AC with 6"

NO.	ITEM	QUANTITY		UNIT PRICE	AMOUNT
1	Mobilization/Demobilization (10%)	LUMP SUM	$	52,000.00	$ 52,000.00
2	Trench Excavation Safety Systems	LUMP SUM	$	2,000.00	$ 2,000.00
3	Erosion Control (0.82%)	LUMP SUM	$	4,000.00	$ 4,000.00
4	Locate Existing Utilities (0.82%)	LUMP SUM	$	4,000.00	$ 4,000.00
5	6-inch Water Pipe, Including Fittings	3,970 LF	$	60.00	$ 238,200.00
6	Additional Pipe Fittings	950 LB	$	3.00	$ 2,850.00
7	6-inch Gate Valves	13 EA	$	950.00	$ 12,350.00
8	Fire Hydrants	9 EA	$	5,000.00	$ 45,000.00
9	Connections to Existing	10 EA	$	2,500.00	$ 25,000.00
10	Service Connections	40 EA	$	1,300.00	$ 52,000.00
11	Saw Cutting	4,774 EA	$	2.50	$ 11,935.00
12	Gravel Backfill	2,240 TN	$	16.50	$ 36,960.00
13	Foundation Gravel	180 TN	$	35.00	$ 6,300.00
14	Asphalt Concrete Pavement Repair	150 TN	$	210.00	$ 31,500.00
15	Cold Mix Asphalt	150 TN	$	200.00	$ 30,000.00
16	Crushed Surfacing, Top Course	240 TN	$	35.00	$ 8,400.00
17	Surface Restoration	1,150 SY	$	5.50	$ 6,325.00
	Subtotal:				$ 568,820.00
	Sales Tax (8.7%)				$ 49,487.34
	Subtotal:				$ 618,307.34
	Contingency (20%):				$ 123,692.66
	TOTAL ESTIMATED CONSTRUCTION COST:				$ 742,000.00
	Engineering and Administrative Costs (25%):				$ 186,000.00
	TOTAL ESTIMATED PROJECT COST:				$ 928,000.00

FREELAND WATER AND SEWER DISTRICT
PRELIMINARY COST ESTIMATE
PROJECT D-03B: Replace AC with 8"

NO.	ITEM	QUANTITY		UNIT PRICE		AMOUNT
1	Mobilization/Demobilization (10%)	LUMP SUM	$	31,000.00	$	31,000.00
2	Trench Excavation Safety Systems	LUMP SUM	$	1,000.00	$	1,000.00
3	Erosion Control (0.82%)	LUMP SUM	$	2,500.00	$	2,500.00
4	Locate Existing Utilities (0.82%)	LUMP SUM	$	2,500.00	$	2,500.00
5	8-inch Water Pipe, Including Fittings	1,990 LF	$	70.00	$	139,300.00
6	Additional Pipe Fittings	600 LB	$	3.00	$	1,800.00
7	8-inch Gate Valves	7 EA	$	1,250.00	$	8,750.00
8	Fire Hydrants	5 EA	$	5,000.00	$	25,000.00
9	Connections to Existing	5 EA	$	2,500.00	$	12,500.00
10	Service Connections	25 EA	$	1,300.00	$	32,500.00
11	Saw Cutting	3,194 EA	$	2.50	$	7,985.00
12	Gravel Backfill	1,350 TN	$	16.50	$	22,275.00
13	Foundation Gravel	110 TN	$	35.00	$	3,850.00
14	Asphalt Concrete Pavement Repair	110 TN	$	210.00	$	23,100.00
15	Cold Mix Asphalt	110 TN	$	200.00	$	22,000.00
16	Crushed Surfacing, Top Course	130 TN	$	35.00	$	4,550.00
17	Surface Restoration	310 SY	$	5.50	$	1,705.00
	Subtotal:				$	342,315.00
	Sales Tax (8.7%)				$	29,781.41
	Subtotal:				$	372,096.41
	Contingency (20%):				$	74,903.60
	TOTAL ESTIMATED CONSTRUCTION COST:				$	447,000.00
	Engineering and Administrative Costs (25%):				$	112,000.00
	TOTAL ESTIMATED PROJECT COST:				$	559,000.00

FREELAND WATER AND SEWER DISTRICT
PRELIMINARY COST ESTIMATE
PROJECT D-03C: Replace AC with 12"

NO.	ITEM	QUANTITY		UNIT PRICE		AMOUNT
1	Mobilization/Demobilization (10%)	LUMP SUM	$	70,000.00	$	70,000.00
2	Trench Excavation Safety Systems	LUMP SUM	$	2,000.00	$	2,000.00
3	Erosion Control (0.82%)	LUMP SUM	$	5,500.00	$	5,500.00
4	Locate Existing Utilities (0.82%)	LUMP SUM	$	5,500.00	$	5,500.00
5	12-inch Water Pipe, Including Fittings	4,470 LF	$	90.00	$	402,300.00
6	Additional Pipe Fittings	1,800 LB	$	3.00	$	5,400.00
7	12-inch Gate Valves	12 EA	$	2,200.00	$	26,400.00
8	Fire Hydrants	9 EA	$	5,000.00	$	45,000.00
9	Connections to Existing	7 EA	$	2,500.00	$	17,500.00
10	Service Connections	22 EA	$	1,300.00	$	28,600.00
11	Saw Cutting	3,586 EA	$	2.50	$	8,965.00
12	Gravel Backfill	3,540 TN	$	16.50	$	58,410.00
13	Foundation Gravel	290 TN	$	35.00	$	10,150.00
14	Asphalt Concrete Pavement Repair	140 TN	$	210.00	$	29,400.00
15	Cold Mix Asphalt	140 TN	$	200.00	$	28,000.00
16	Crushed Surfacing, Top Course	320 TN	$	35.00	$	11,200.00
17	Surface Restoration	2,240 SY	$	5.50	$	12,320.00
	Subtotal:				$	766,645.00
	Sales Tax (8.7%)				$	66,698.12
	Subtotal:				$	833,343.12
	Contingency (20%):				$	166,656.89
	TOTAL ESTIMATED CONSTRUCTION COST:				$	1,000,000.00
	Engineering and Administrative Costs (25%):				$	250,000.00
	TOTAL ESTIMATED PROJECT COST:				$	1,250,000.00

FREELAND WATER AND SEWER DISTRICT
PRELIMINARY COST ESTIMATE
PROJECT D-04: SR 505 Crossing at Woodard Ave

NO.	ITEM	QUANTITY		UNIT PRICE	AMOUNT
1	Mobilization/Demobilization (10%)	LUMP SUM	$	11,000.00	$ 11,000.00
2	Trench Excavation Safety Systems	LUMP SUM	$	1,000.00	$ 1,000.00
3	Erosion Control (0.82%)	LUMP SUM	$	1,000.00	$ 1,000.00
4	Locate Existing Utilities (0.82%)	LUMP SUM	$	1,000.00	$ 1,000.00
5	8-Inch Directionally Drilled HDPE pipe in Casing	470 LF	$	190.00	$ 89,300.00
6	Additional Pipe Fittings	150 LB	$	3.00	$ 450.00
7	8-inch Gate Valves	2 EA	$	1,250.00	$ 2,500.00
8	Fire Hydrants	0 EA	$	5,000.00	$ -
9	Connections to Existing	2 EA	$	2,500.00	$ 5,000.00
10	Service Connections	0 EA	$	1,300.00	$ -
11	Saw Cutting	104 EA	$	2.50	$ 260.00
12	Gravel Backfill	30 TN	$	16.50	$ 495.00
13	Foundation Gravel	10 TN	$	35.00	$ 350.00
14	Asphalt Concrete Pavement Repair	10 TN	$	210.00	$ 2,100.00
15	Cold Mix Asphalt	10 TN	$	200.00	$ 2,000.00
16	Crushed Surfacing, Top Course	10 TN	$	35.00	$ 350.00
17	Surface Restoration	150 SY	$	5.50	$ 825.00
	Subtotal:				$ 117,630.00
	Sales Tax (8.7%)				$ 10,233.81
	Subtotal:				$ 127,863.81
	Contingency (20%):				$ 25,136.19
	TOTAL ESTIMATED CONSTRUCTION COST:				$ 153,000.00
	Engineering and Administrative Costs (25%):				$ 38,000.00
	TOTAL ESTIMATED PROJECT COST:				$ 191,000.00

FREELAND WATER AND SEWER DISTRICT
PRELIMINARY COST ESTIMATE
PROJECT D-05: Main Street at East Harbor to South End of Myrtle Avenue

NO.	ITEM	QUANTITY		UNIT PRICE		AMOUNT
1	Mobilization/Demobilization (10%)	LUMP SUM	$	21,000.00	$	21,000.00
2	Trench Excavation Safety Systems	LUMP SUM	$	1,000.00	$	1,000.00
3	Erosion Control (0.82%)	LUMP SUM	$	1,500.00	$	1,500.00
4	Locate Existing Utilities (0.82%)	LUMP SUM	$	1,500.00	$	1,500.00
5	8-inch Water Pipe, Including Fittings	1,300 LF	$	70.00	$	91,000.00
6	Additional Pipe Fittings	400 LB	$	3.00	$	1,200.00
7	8-inch Gate Valves	4 EA	$	1,250.00	$	5,000.00
8	Fire Hydrants	4 EA	$	5,000.00	$	20,000.00
9	Connections to Existing	3 EA	$	2,500.00	$	7,500.00
10	Service Connections	10 EA	$	1,300.00	$	13,000.00
11	Saw Cutting	2,610 EA	$	2.50	$	6,525.00
12	Gravel Backfill	880 TN	$	16.50	$	14,520.00
13	Foundation Gravel	70 TN	$	35.00	$	2,450.00
14	Asphalt Concrete Pavement Repair	90 TN	$	210.00	$	18,900.00
15	Cold Mix Asphalt	90 TN	$	200.00	$	18,000.00
16	Crushed Surfacing, Top Course	90 TN	$	35.00	$	3,150.00
17	Surface Restoration	0 SY	$	5.50	$	-
	Subtotal:				$	226,245.00
	Sales Tax (8.7%)				$	19,683.32
	Subtotal:				$	245,928.32
	Contingency (20%):				$	49,071.69
	TOTAL ESTIMATED CONSTRUCTION COST:				$	295,000.00
	Engineering and Administrative Costs (25%):				$	74,000.00
	TOTAL ESTIMATED PROJECT COST:				$	369,000.00

FREELAND WATER AND SEWER DISTRICT
PRELIMINARY COST ESTIMATE
PROJECT D-08: Scenic Avenue to Cameron Road and Woodard Avenue

NO.	ITEM	QUANTITY		UNIT PRICE		AMOUNT
1	Mobilization/Demobilization (10%)	LUMP SUM	$	42,000.00	$	42,000.00
2	Trench Excavation Safety Systems	LUMP SUM	$	2,000.00	$	2,000.00
3	Erosion Control (0.82%)	LUMP SUM	$	3,500.00	$	3,500.00
4	Locate Existing Utilities (0.82%)	LUMP SUM	$	3,500.00	$	3,500.00
5	8-inch Water Pipe, Including Fittings	3,700 LF	$	70.00	$	259,000.00
6	Additional Pipe Fittings	1,100 LB	$	3.00	$	3,300.00
7	8-inch Gate Valves	8 EA	$	1,250.00	$	10,000.00
8	Fire Hydrants	8 EA	$	5,000.00	$	40,000.00
9	Connections to Existing	4 EA	$	2,500.00	$	10,000.00
10	Service Connections	14 EA	$	1,300.00	$	18,200.00
11	Saw Cutting	10 EA	$	2.50	$	25.00
12	Gravel Backfill	2,510 TN	$	16.50	$	41,415.00
13	Foundation Gravel	200 TN	$	35.00	$	7,000.00
14	Asphalt Concrete Pavement Repair	0 TN	$	210.00	$	-
15	Cold Mix Asphalt	0 TN	$	200.00	$	-
16	Crushed Surfacing, Top Course	230 TN	$	35.00	$	8,050.00
17	Surface Restoration	2,880 SY	$	5.50	$	15,840.00
	Subtotal:				$	463,830.00
	Sales Tax (8.7%)				$	40,353.21
	Subtotal:				$	504,183.21
	Contingency (20%):				$	100,816.79
	TOTAL ESTIMATED CONSTRUCTION COST:				$	605,000.00
	Engineering and Administrative Costs (25%):				$	151,000.00
	TOTAL ESTIMATED PROJECT COST:				$	756,000.00

FREELAND WATER AND SEWER DISTRICT **PR**
PRELIMINARY COST ESTIMATE
PROJECT S-01: SVF Well Improvements

NO.	ITEM	QUANTITY	UNIT PRICE	AMOUNT
1	Mobilization/Demobilization (10%)	LUMP SUM	$ 14,200.00	$ 14,200.00
2	New well building	1 LS	$ 50,000.00	$ 50,000.00
2	Site Piping, meter, valves	1 LS	$ 20,000.00	$ 20,000.00
4	Provide and install well pump	1 LS	$ 20,000.00	$ 20,000.00
5	Site excavation and grading	1 LS	$ 5,000.00	$ 5,000.00
6	Site Piping	1 LS	$ 5,000.00	$ 5,000.00
7	Electrical and Telemetry	1 LS	$ 40,000.00	$ 40,000.00
8	Crushed Surfacing	100 TN	$ 20.00	$ 2,000.00

Subtotal:	$ 156,200.00
Sales Tax (8.7%)	$ 13,589.40
Subtotal:	$ 169,789.40
Contingency (20%):	$ 34,210.60
TOTAL ESTIMATED CONSTRUCTION COST:	$ 204,000.00
Engineering and Administrative Costs (25%):	$ 51,000.00
TOTAL ESTIMATED PROJECT COST:	$ 255,000.00

FREELAND WATER AND SEWER DISTRICT
PRELIMINARY COST ESTIMATE
PROJECT S-02: Well 1 Improvements

NO.	ITEM	QUANTITY		UNIT PRICE		AMOUNT
1	Mobilization/Demobilization (10%)	LUMP SUM	$	10,000.00	$	10,000.00
2	New well building	1 LS	$	50,000.00	$	50,000.00
3	Site excavation and grading	1 LS	$	5,000.00	$	5,000.00
4	Site Piping	1 LS	$	5,000.00	$	5,000.00
5	Electrical and Telemetry	1 LS	$	40,000.00	$	40,000.00
6	Crushed Surfacing	100 TN	$	20.00	$	2,000.00

Subtotal:	$	112,000.00
Sales Tax (8.7%)	$	9,744.00
Subtotal:	$	121,744.00
Contingency (20%):	$	24,256.00
TOTAL ESTIMATED CONSTRUCTION COST:	$	146,000.00
Engineering and Administrative Costs (25%):	$	37,000.00
TOTAL ESTIMATED PROJECT COST:	$	183,000.00

FREELAND WATER AND SEWER DISTRICT
PRELIMINARY COST ESTIMATE
PROJECT S-03: Well 2 Improvements

NO.	ITEM	QUANTITY		UNIT PRICE		AMOUNT
1	Mobilization/Demobilization (10%)	LUMP SUM	$	10,000.00	$	10,000.00
2	New well building	1 LS	$	50,000.00	$	50,000.00
3	Site excavation and grading	1 LS	$	5,000.00	$	5,000.00
4	Site Piping	1 LS	$	5,000.00	$	5,000.00
5	Electrical and Telemetry	1 LS	$	40,000.00	$	40,000.00
6	Crushed Surfacing	100 TN	$	20.00	$	2,000.00

Subtotal:	$	112,000.00
Sales Tax (8.7%)	$	9,744.00
Subtotal:	$	121,744.00
Contingency (20%):	$	24,256.00
TOTAL ESTIMATED CONSTRUCTION COST:	$	146,000.00
Engineering and Administrative Costs (25%):	$	37,000.00
TOTAL ESTIMATED PROJECT COST:	$	183,000.00