West Bonner Water and Sewer District
Albeni Area Sewer System Extension Project
Environmental Information Document

March 2013

By:
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WEST BONNER WATER AND SEWER DISTRICT
Environmental Information Document
Cover Sheet

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Section A: Abstract

This document outlines the anticipated direct and indirect environmental impacts from the construction of a proposed sewer system extension project by the West Bonner Water and Sewer District (WBWSD). The proposed project will extend the existing WBWSD sewer system into the Albeni Falls area, which has recently been annexed by the District. This document reviews all alternatives considered for the proposed sewer system extension project. The overall project consists of two phases. This document applies to Phase 1 only. Phase 2 is a future project, and will be addressed when that project is ready to proceed.

Project Funding Sources:

Design

The West Bonner Water and Sewer District obtained a U.S. Army Corps of Engineers Section 595 grant in the amount of $234,000 to partially fund the design of the Phase I Water and Sewer Extension to the Albeni Falls Area. The Corps of Engineers grant was supplemented with

$78,000 from the Oldtown Urban Renewal Agency (OURA) to fund the remainder of the design. The Oldtown Urban Renewal District includes the Albeni area, which was recently annexed into the City of Oldtown and the WBWSD, and was created in 2009 to provide tax incremental funding for the water and sewer improvements to the Albeni area.

Construction

Idaho Department of Environmental Quality Clean Water State Revolving Fund Loan -
The West Bonner Water and Sewer District has been approved for a Clean Water SRF loan through the State Revolving Fund program as promulgated by the Idaho Department of Environmental Quality (DEQ) in the amount of **$1,315,000**, to fund a portion of the Phase 1 sewer system construction, including mobilization, stormwater and erosion control, sewer collection system and sewer lift station and lift station pump control building, and the sewer main crossing of the Pend Oreille River. Funding to be obtained from the DEQ CW SRF program will finance the majority of construction of the items indicated below on the Construction Cost Summary.

Table A.1 – Construction Cost Summary

Item	Cost
New Sewer Collection System	$464,561.83
Sewer Lift Station and Control Building	$475,123.91
Sewer Main River Crossing	$407,375.00
Construction Engineering	$137,200.00
Total Estimated Construction Cost	**$1,484,260.74**

The overall water and sewer extension project has been bid as seven separate bid schedules, which allows individual bid schedules to be awarded separately. Thus, individual schedules have been awarded based on the amount of funding secured by the District. The sewer extension project financing is detailed in the following Table:

Additional Funding -
Other funding sources include:

- U.S. Army Corps of Engineers Section 595 Grant; construction grant in the amount of $284,000 for the proposed sewer system extension construction. The District has secured this grant from the ACOE.
- The OURA would also be requested to fund any shortfall in Phase 1 sewer system construction.

Table A.2 – Project Financing Summary

Item	Cost
DEQ SRF Construction Loan	$1,315,000.00
Army Corps of Engineers Construction Grant	$284,000.00
Total Estimated Construction Cost	**$1,599,000.00**

The DEQ CW SRF loan will finance the majority of project construction including the sewer collection system construction, sewer lift station construction, and the sewer transmission main river crossing.

DEQ CW SRL Repayment

The West Bonner Water and Sewer District has a Reimbursement Agreement currently in place with the OURA (Agency) that provides for all tax increment revenues to the Agency (other than those required for Agency administrative purposes) to be distributed (reimbursed) to the District to be used for making the required loan payments for the DEQ Clean Water State Revolving Loan. A copy of this Agreement is attached in Appendix A-1.

The District also has a Revenue Bond Payment Guaranty Agreement with the West Bonner Investment Company, LLC that guarantees to fund that portion of the District debt service obligation for the DEQ CW SRL repayment that is not covered by the Agency tax increment reimbursement. A copy of the Revenue Bond Payment Guaranty Agreement is attached in Appendix A-2.

As a result of these agreements, it is anticipated that there will be **no monthly rate increase** to the sewer system customers for repayment of the construction loan funded by the DEQ CW SRL; however it is anticipated that there will be an increase in the current monthly user rate associated with operations and maintenance of the new collection system.

The ultimate guarantee for the DEQ CW SRL debt service obligation by the District is that the District has passed a Sewer Revenue Bond in 2010 in the amount of $1,315,000. This bond issue provides the ability of the District to raise sewer rates to the District sewer customers as necessary to provide funds to make the required payments on the DEQ State Revolving Loan.

In order to finance the operations and maintenance costs associated with the proposed project, the WBWSD would be required to increase the monthly service charges to its customers. It is estimated that the WBWSD sewer customer rates will increase by the following amounts:

Table A.3 – 2014 Average Monthly User Charge

A.	Current Average Monthly User Charge per ERU	$27.00
B.	Change in Operation and Maintenance Monthly Charge per ERU	$9.00
C.	Change in Debt Service Monthly Charge per ERU	$0.00
D.	Future Average Monthly User Charge per ERU (A+B+C)	$36.00

The above Table is based on 322 ERU's which is based on the current 286 ERU's plus the existing 24 residential and commercial ERU's in the Albeni area, which will be immediately connected to the proposed sewer collection system, and a 1 year population increase at a 2% rate of growth for the entire system. There are currently 14 permanent/residential ERUs and 10 commercial ERU's in the Albeni area which will be immediately connected to the proposed sewer system.

The estimated Operation and Maintenance costs associated with the proposed project incorporated the last year operations and maintenance budget for the WBWSD is attached in Appendix A-3. Historical revenue data provided by the West Bonner Water and Sewer District was used to estimate the revenue to be generated by the customers within the Albeni area, operating in conjunction with the existing sewer system customers the first year. As the provided budget information includes expenses for the water system and sewer system, the historical budget values were reduced by 50% to estimate operation and maintenance expenses limited to the sewer system only. The attached estimate for the projected sewer system revenue does not include additional charges for businesses using over 24,000 gallons of water. In order for the existing sewer system and proposed Albeni sewer system to generate positive revenues when compared with the increased operation and maintenance expenses, it is estimated that the West Bonner Water and Sewer District will have to raise the monthly sewer user rates from the current $27 per month per equivalent residential unit (ERU) to $36 per month per ERU.

The combination of the preceding DEQ SRL repayment funding mechanisms guarantees the loan repayment, while minimizing the financial impact on existing District sewer customers. The residents of the City of Oldtown and West Bonner Water and Sewer District have one of the lowest median annual household income levels in the State of Idaho, and it is desired to create minimal financial impact to the current District customers as a result of this project.

A Detailed Construction Cost Estimate follows, which is derived from the actual low bid received:

ITEM	DESCRIPTION	SIZE/ CAPACITY	UNITS	UNIT PRICE	PRICE
Gravity Sewer System Construction					
1	Mobilization	1	LS	$32,500.00	$32,500.00
2	Stormwater and Erosion Control	1	LS	$21,654.00	$21,654.20
3	15” Gravity Sewerline Extension	1,205	LF	$72.00	$86,760.00
4	12” Gravity Sewerline Extension	1,561	LF	$44.71	$69,792.31
5	10” Gravity Sewerline Extension	1,228	LF	$39.08	$47,990.24
6	8” Gravity Sewerline Extension	728	LF	$29.45	$21,439.60
7	Manholes	19	EA	$2,417.33	$45,929.27
8	6” Sewer Services	116	LF	$52.23	$6,058.68
9	4” Sewer Services	831	LF	$32.30	$26,841.30
10	24” Diameter Sewer Crossing Hwy 2	1	LS	$84,630.76	$84,630.76

11	Existing Sewer Interconnection	1	LS	$5,326.98	$5,326.98
12	PVC Pressure Sewer Main to HDPE Transition	309	LF	$50.61	$15,638.49
	Construction Subtotal				**$464,561.83**
Sewage Lift Station Construction					
13	Excavation, Earthwork and Shoring	1	LS	$49,809.50	$49,809.50
14	8' Diameter Wet Well, Pumps, and Appurtenances	1	LS	$134,348.17	$134,348.17
15	Valve Vault with Fittings and Piping	1	LS	$54,827.85	$54,827.85
16	Lift Station Control Building	1	LS	$65,000.00	$65,000.00
17	Stand-by Generator	1	LS	$63,000.00	$63,000.00
18	Excavation and Embankment Construction	1	LS	$2,052.57	$2,052.57
19	Generator and Propane Tank Concrete Pad	1	LS	$1,575.96	$1,575.96
20	Site Fencing	130	LF	$86.21	$11,207.30
21	18" D.I. Gravity Sewer From Lift Station to Manhole	176	LF	$160.84	$28,302.56
22	Electrical	1	LS	$65,000.00	$65,000.00
	Construction Subtotal				**$475,123.91**
Bore Sewer Line Under River					
23	Mobilization	1	LS	$30,625.00	$30,625.00
24	Stormwater and Erosion Control	1	LS	$26,750.00	$26,750.00
25	12" 200 psi HDPE Pipe	1	LS	$296,500.00	$296,500.00
26	6" HDPE Pressure Sewer Pipe	1	LS	$53,500.00	$53,500.00
	Construction Subtotal				**$407,375.00**
	Construction Subtotal				$1,347,060.74
	Construction Engineering				$137,200.00
	Contingency				$114,739.26
	TOTAL				**$1,599,000.00**

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Appendix A-2 West Bonner Water and Sewer Revenue Bond Payment Guaranty Agreement with West Bonner Investment Company, LLC

Appendix A-3 West Bonner Water and Sewer District Estimated Operations and Maintenance Budget

Appendix B-1 Panhandle Health Drainfield Permit Applications for the Albeni Area

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Appendix D-2 City of Newport, Bonner County Zoning Maps and Bonner County Land Use Map

Appendix D-3 US Census Data for City of Oldtown, City of Newport, and Bonner County

Appendix D-4 Budinger Geotechnical Report

Appendix D-5 Natural Resources Conservation Soil Survey

Appendix D-6 Western Regional Climate Center Data, DEQ Air Quality Summary

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Appendix D-8 City of Oldtown Floodplain Ordinance

Appendix D-9 National Flood Insurance Documents

Appendix D-10 James A. Sewell Wetland Deliniation Study, and Tri-Pro Cedar Products Wetland Deliniation Study

Appendix D-11 DEQ 401 Water Quality Certification Documents

Appendix D-12 Idaho Historical Sites, NWAA Archaeological Study, Idaho State Historical Society Correspondence, and Kalispel Tribe of Indians Correspondence

Appendix D-13 U.S. Fish and Wildlife Threatened and Endangered Species List for Idaho, Idaho Fish and Game Threatened and Endangered Species Synopsis,and the Chinook Salmon Essential Fish Habitat Map

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Appendix D-17 Easement Documentation and Permit Documentation

Appendix E-1 Affidavit of Publication and West Bonner Sewer System Extension Public Meeting Minutes

Appendix E-2 Request for Agency Comments Letters and Documented Responses

1.0 Section B: Purpose and Need for the Project

1.1 Project Purpose and Need

The purpose of this project is to provide an environmentally safe and reliable domestic sewer collection and disposal to the residents of the Albeni area.

The primary need for this project is to reduce surface water contamination which is the result of existing failing drainfields in the Albeni area. Panhandle Health District has documented that 14 existing drainfield permits of 20 issued permits since 1972 were replacement permits issued due to drainfield failures in the Albeni area (See Appendix B-1 and Appendix E-2). Drainfield failures result in surface effluent, which creates the potential for adverse environmental impacts to surface waters and wetlands. The proposed project will eliminate the potential for adverse environmental impacts currently created by drainfield failures in Albeni area. The City of Newport owns and operates the WWTP that treats and disposes of the wastewater generated by the residents of the City of Newport and the WBWSD. To date the City of Newport has not violated the conditions of the WWTP NPDES permit.

A map showing the proposed project within the Albeni area follows:

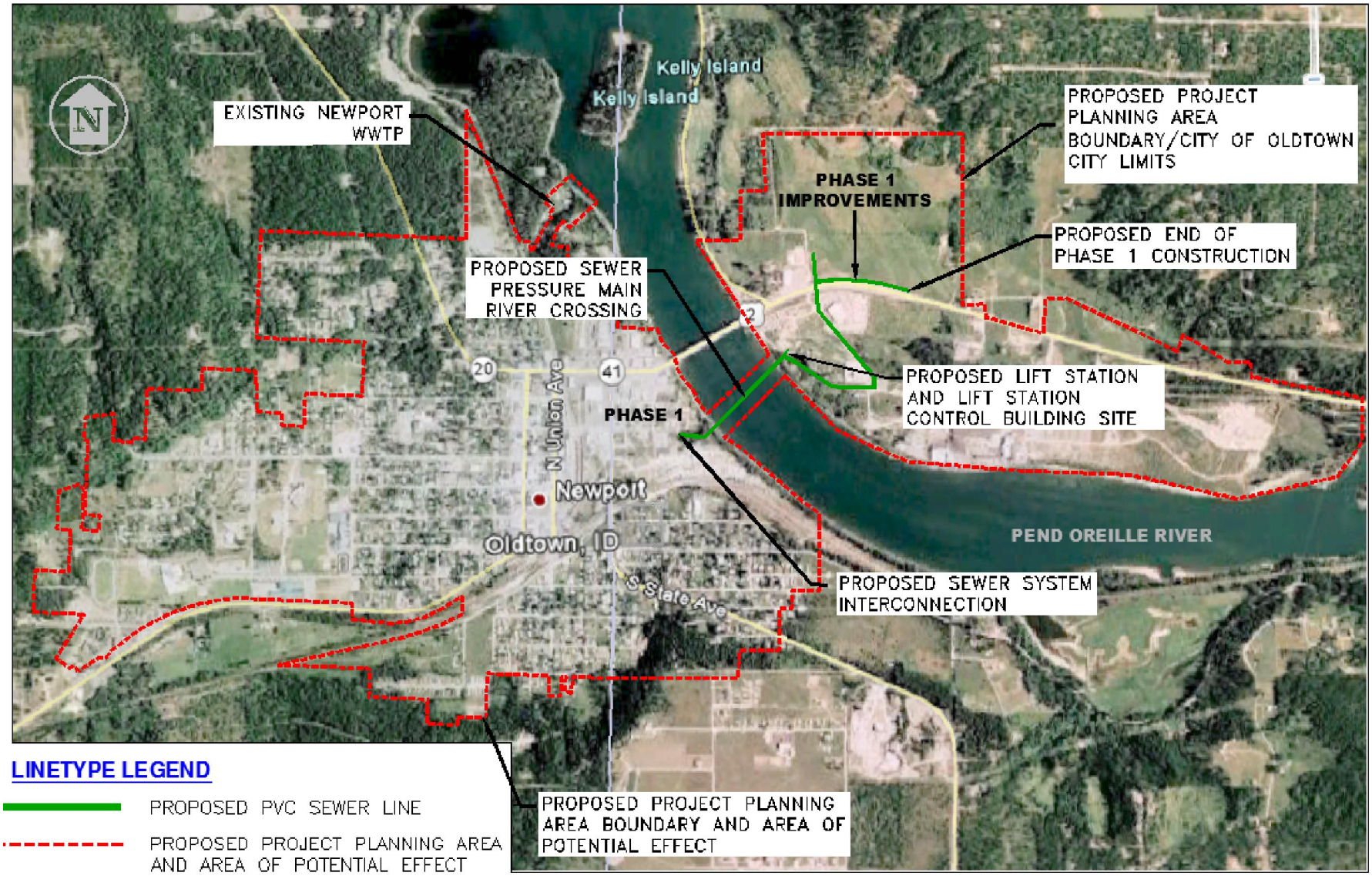

Figure 1. Albeni Falls Sewer System Improvement Proposed Project Planning Area.

1.2 Project Description

The City of Oldtown and the West Bonner Water and Sewer District recently annexed a large tract of land located in parts of Township 56 North, Range 6 West, Section 24 and Township 56 North, Range 5 West, Section 19 on the east side of the Pend Oreille River. This tract of land is commonly known as the Albeni area (See Figure 1). Currently there are numerous residences and businesses located within the Albeni area, all of which are supplied water from individual domestic well and utilize individual on-site septic systems for wastewater treatment. A community water system for the Albeni has been proposed and is scheduled for construction in the summer of 2013.

It is proposed to install a gravity sewer collection system in order to provide sewer service to the existing and future residential and commercial properties. The gravity sewer collection system will transport the wastewater from the residences and businesses to a sewer lift station to be located on the northerly side of the River in the Albeni area. The sewer lift station will pump the wastewater to the southerly side of the River through a pressure sewer main. The pressure sewer main will be installed beneath the Pend Oreille River bed using horizontal directional drilling, which will minimize disturbance to the river and will connect to the existing West Bonner Water and Sewer District gravity sewer collection system at the intersection of North Montana Avenue and East Second Street. From this interconnection point, the wastewater will flow downhill to the existing Newport wastewater treatment plant for environmentally safe treatment and disposal.

Through Phase 1 of the project, it is proposed to construct the following:

- A gravity wastewater collection system consisting of 176 linear feet of 18” ductile iron sewer main and 1,205 linear feet of 15” diameter, 1,561 linear feet of 12” diameter, 1,228 linear feet of 10” diameter, and 728 linear feet of 8” diameter PVC sewer mainlines. The proposed sewer mains will largely be located within the Diamond Mill Loop Road Right-of-Way (ROW) and adjacent to the U.S. Highway 2 ROW within the westerly portion of the Albeni area. An 8” PVC sewer main will also extend north approximately 360’ along Selkirk Way to the existing businesses located north of U.S. Highway 2. The residences and businesses will be connected to sewer mainlines with 4” and 6” diameter PVC sewer service lines, respectively.
- A buried, 8’ diameter x 22’ tall concrete sewer lift station. The sewer collection system wastewater will flow downhill to the proposed lift station where it will be pumped across the Pend Oreille River to the existing West Bonner Water and Sewer District gravity wastewater system. A 5’ wide x 8’ long x 7’ deep concrete valve and meter box will be placed adjacent to the proposed lift station. The proposed lift station and valve vault will be located southeasterly of the existing boat launch, on the north side of the River.
- A 9’-4” wide x 16’-0” long lift station control building, a 9’-4” x 14’-0” x 6” thick concrete generator pad with generator, and a 4’ x 10’ x 4” thick concrete propane tank pad with propane tank. These structures with associated equipment will be located adjacent to the sewer lift station. The sewer lift station and lift station control building will be located southerly of the Diamond Mill Loop Road and easterly of the existing boat launch.

- Phase I also will include the connection to the existing WBWSD/City of Newport sewer system which will be accomplished by a horizontal, directional boring to cross beneath the Pend Oreille River. The proposed sewer main boring will include of one 12" diameter high density polyethylene (HDPE) casing pipe a minimum of 25 feet below the bed of the river. The 12" HDPE pipe will act as casing pipe for a 6" HDPE pressure sewer force main, which will be installed inside the 12" casing pipe. The wastewater will be pumped through the 6" force main to an existing sewer manhole located at the intersection of North Montana Avenue and East Second Street, then the wastewater will flow to the existing City of Newport wastewater treatment facility for treatment and final disposal. See Figure 1 for sewer main, lift station, and lift station control building locations.

Construction of Phase 1 is anticipated to start in the spring of 2013.

Phase 2 of total project construction is not a part of this report, is not included within the outlined project estimates, and is not intended to be funded by the Clean Water State Revolving Fund loan at this time. The Phase 2 construction consists of extending the Phase 1 sewer main easterly along Highway 2 to the intersection of the highway and the west edge of Section 19, and extending the Phase 1 sewer main easterly along the BPA right-of-way approximately 3,500 ft. Phase 2 construction has not been scheduled as of this time.

2.0 Section C: Alternatives to the Proposed Action

2.1 Sewer Collection Alternatives

The following sections include a discussion of the alternatives considered for the proposed sewer collection system for the proposed project. Also included in the section is a Cursory Environmental Screening for the proposed sewer collection system alternatives, which further compares each alternative with respect to the environmental impacts (See Table 2.1).

The proposed sewer collection system is designed to interconnect the proposed sewer system river crossing, proposed sewer lift station, and the existing residences and businesses in the Albeni area. Due to the existing development within the Albeni area, the proposed sewer collection main lines will largely be located within or adjacent to the existing Diamond Mill Loop Road right-of-way. A proposed sewer main extends easterly and northerly from the proposed sewer lift station along the Diamond Mill Loop Road ROW to the Highway 2 ROW. The location of the proposed sewer main in the area surrounding Diamond Mill Loop Road was selected based on the existing access roads and residence and business locations within the area. The proposed sewer line route along the southerly section of Diamond Mill Loop Road is located within a 25' wide easement which has been established to maintain sanitary setbacks with the proposed water system in this area. The proposed sewer main crossing U.S. Highway 2 location was selected in order to provide sewer service to the existing businesses located on Selkirk Way. From the U.S. Highway 2 crossing located at the intersection with Diamond Mill Loop Road, the proposed sewer main route extends approximately 1,200 feet easterly along the U.S. Highway 2 ROW. From the U.S. Highway 2 Crossing the proposed sewer collection system also extends 360' northwesterly along Selkirk Way, in order to provide service to the businesses located there.

Due to the existing development within the Albeni area, sewer main line locations were largely limited to existing ROWs and utility easements adjacent to ROWs. As a result, the sewer collection system alternatives below involve only the type of collection system which would be located at the proposed sewer main line locations. Specifically, the sewer collection alternatives that have been considered involve gravity and pressure sewer collection systems located within existing ROWs and as indicated in the project alternatives drawing, attached in Appendix D-1.

2.1.1 Sewer Collection System Alternative No. 1: No Action

A No Action alternative will result in the continued use of individual septic systems which creates a high potential for contamination of the surface waters as the soil in the Albeni area is not conducive to percolation. High water levels and tight soil conditions in the Albeni area lead to drainfield failures which are relatively common in this area. Since this alternative does not address the existing potential for surface water contamination associated with drainfield failures; this alternative is not the preferred alternative.

2.1.2 Sewer Collection System Alternative No. 2: Gravity System with Lift Station

2.1.2.1 Alternative Description/Alternative Practicality

A gravity wastewater collection system consisting of 18”, 15”, 12”, 10”, and 8” diameter sewer mainlines. The proposed sewer mains will largely be located within the Diamond Mill Loop Road Right-of-Way (ROW) and a utility easement adjacent to the U.S. Highway 2 ROW within the westerly portion of the Albeni area. This alternative also includes a buried, 8’ diameter x 22’ tall concrete sewer lift station and lift station pump control building. The sewer collection system wastewater will flow downhill to the proposed lift station where it will be pumped across the Pend Oreille River to the existing West Bonner Water and Sewer District gravity wastewater system.

2.1.2.2 Environmental Consequences

The proposed sewer line construction would take place within or adjacent to the Diamond Loop Road ROW, adjacent to the U.S. Highway 2 ROW, and within the Selkirk Way ROW with the exception of Pend Oreille River crossing. The proposed sewer main construction will require clearing of a 25’ wide utility ROW adjacent to the existing Diamond Mill ROW at the southerly portion of the road. This area will be permanently cleared of large shrubs and trees and temporary clearing of native grasses will be required during the construction process. This alternative will also require the permanent clearing of large shrubs and vegetation at the proposed lift station, propane and generator pad, and proposed lift station control building which will be located within the 25’ wide utility ROW southerly of the southern portion of Diamond Mill Loop Road. The proposed 25’ wide utility easement extends approximately 700’ along the southerly edge of the Diamond Mill Loop Road where the proposed sewer main enters the existing Diamond Mill Loop Road ROW. The proposed sewer lift station is discussed further in the Sewer Treatment Alternatives Section. The remaining portions of the proposed sewer collection system located south of the U.S. Highway 2 ROW will be constructed within the Diamond Mill Loop Road ROW. North of U.S Highway 2 ROW the proposed sewer main will be located within a 40’ wide utility easement located adjacent to the existing U.S. Highway 2 Row. Project construction will result in temporary clearing of native grasses and weeds in this area. Currently there are no existing trees within the proposed utility easement as the land is

currently used as pasture land by the land owner. The proposed sewer main will also be buried within the proposed Selkirk Way ROW, which is largely vegetated with native grasses and weeds. The project will require temporary clearing of the grasses in this area.

The primary positive aspect of this alternative is associated with the reduced potential of surface water contamination from failing drainfields. This alternative is expected to improve local groundwater quality by eliminating current and future individual drainfields, which historically have an above average rate of failure.

Negative environmental aspects of this project include temporary and minor impacts associated with project construction. However, since the proposed sewer main construction would remain largely within existing ROWs and road ways, environmental impacts are expected to be negligible. Permanent clearing will occur at the proposed lift station site southeast of the existing boat launch.

This alternative proposes to construct several concrete manholes in areas that are below the 100 year flood elevation. In order to mitigate potential impacts during a 100 year flood event, the proposed manholes rims will be elevated to the 100 year flood elevation. The proposed sewer lift station and lift station pump control building will also be construction within the floodplain. In order to ensure functionality during a 100 year flood event, the proposed lift station and control building will have rim and finished floor elevations 8" above the 100 year flood elevation. The mitigation measures for this alternative are discussed further in the Floodplains Section of this report.

2.1.2.3 Cost Projection
An estimated cost for this alternative is provided in Appendix C-1. As shown in the attached cost comparison, this alternative is expected to be less expensive than Sewer Collection Alternative No. 3 since this alternative would not require installation of grinder sewer pumps at each lot.

2.1.2.4 Conclusion
This alternative has minimal negative environmental impacts and is expected greatly reduce or eliminate local environmental impacts associated with existing individual septic systems, including impacts on ground and surface water quality in the area. Because this alternative is cost effective and environmentally beneficial, **Alternative No. 2 is the preferred alternative**.

2.1.3 Sewer Collection System Alternative No. 3: Pressure Sewer System

2.1.3.1 Alternative Description/Alternative Practicality
This alternative consists of installing a community pressure sewer collection system with sewer main line locations identical to those indicated in Sewer Collection System Alternative No. 2. A pressure wastewater collection system would consist of collection mains and laterals sized to allow a minimum head loss for the individual on-site wastewater pumps while also maintaining a minimum scouring flow velocity of 2 feet/second. The pressure mains would be constructed of high density polyethylene or schedule 40 PVC. The wastewater generated by the residences and businesses within the project area will be directed via gravity sewer service lines to individual on-site grinder pump stations. The proposed pump stations are generally small, and would be

located within each existing and future property, and would be equipped with grinder pumps that grind all the wastewater solids into a slurry. The slurry would be pumped to the proposed sewer main lines and across the River to the existing WBWSD sewer collection system. The grinder pumps would be connected to the sewer main lines and laterals with 1”-2” diameter pipes depending on the grinder pumps required for the individual property. Sewage collected in the Albeni area collection system would be pumped by the individual on-site pump stations across the Pend Oreille River into the existing gravity sewer collection system where it would flow to the existing wastewater treatment plant.

2.1.3.2 Environmental Consequences

The proposed pressure sewer mains would be located similarly to the gravity mains in Sewer Collection System Alternative No. 2. As a result, the environmental consequences of this alternative are expected to be on par with those described in Sewer Collection System Alternative No. 2 with the exception of the permanent clearing of the lift station and lift station control building site.

The primary positive aspect of this alternative is associated with the reduced potential of surface water contamination from failing drainfields. This alternative is expected to improve local groundwater quality by eliminating current and future individual drainfields.

Negative environmental aspects of this project include temporary and minor impacts associated with project construction. However, since the proposed sewer main construction would remain largely within existing ROWs, easements, and road ways, environmental impacts are expected to be negligible.

This alternative will require installation of several pump stations within individual lots, specifically along the southerly section of Diamond Mill Loop Road. In order to mitigate the effects of a 100 year flood event, each of the proposed pump stations will require a fully water proof exterior. This will allow prevent inundation during a 100 year flood event.

2.1.3.3 Cost Projection

An estimated cost for this alternative is provided in Appendix C-1. As shown in the attached cost comparison, this alternative is expected to be substantially more expensive than Sewer Collection Alternative No. 2 due to the costs associated with construction of individual pump stations at each property.

2.1.3.4 Conclusion

This alternative is expected to have a slightly reduced environmental impact when compared to Sewer Collection System Alternative No. 2. However, this alternative is expected to be substantially more expensive than the preferred alternative. Since this alternative has a high cost, this alternative is not recommended as the preferred alternative.

Table 2.1 – Sewer Collection System Cursory Environmental Screening

Environmental Criteria	Alternative No. 1 No Action	Alternative No. 2 Gravity Sewer Collection System	Alternative No. 3 Pressure Sewer Collection System
Climate and Physical Aspects (Topography, Geology, and Soils)	No Impact	No Impact	No Impact
Population, Economic, and Social Profile	Potential Negative Impacts on Economic Development due to Decreased Lot Density	Potential Positive Impact for Population Density and Economic Development	Potential Positive Impact for Population Density and Economic Development
Land Use	No Impact	No Impact	No Impact
Floodplain Development	No Impact	Sewer collection system manholes and lift station to be constructed in the floodplain	Sewer Collection system will require pump stations to be constructed in the floodplain
Wetlands	Continued Negative Impacts on Wetlands due to Drainfield Failures	Reduced Risk of Negative Impacts due to Drainfield Failures	Reduced Risk of Negative Impacts due to Drainfield Failures
Water Quality	Continued Negative Impacts on Surface Water and Ground Water Quality	Positive Impacts to Surface Water and Ground Water Quality	Positive Impacts to Surface Water and Ground Water Quality
Wild and Scenic Rivers	No Wild and Scenic Rivers Within Project Vicinity	No Wild and Scenic Rivers Within Project Vicinity	No Wild and Scenic Rivers Within Project Vicinity
Cultural Resources	No Impact	No Impact	No Impact
Flora and Fauna	No Impact	Temporary Construction related Impacts to Local Vegetation at Sewer Line Locations outside Roadways.	Temporary Construction related Impacts to Local Vegetation at Sewer Line Locations outside Roadways.
Recreation and Open Space	No Impact	No Impact	No Impact
Agricultural Lands	No Impact	No Impact	No Impact
Air Quality	No Impact	No Adverse Impact	No Adverse Impact
Energy	No Impact	Increased Energy Usage associated with Lift Station Pumps	Increased Energy Usage associated with Individual Pump Stations
Public Health	Increased Potential Negative Impacts associated with Drainfield Failures	Reduced Potential Negative Impacts associated with Drainfield Failures	Reduced Potential Negative Impacts associated with Drainfield Failures

2.2 Sewer Treatment Alternatives

The following section includes a discussion of the alternatives considered for the Albeni area sewer treatment facilities for the proposed West Bonner Sewer Extension Project. A project alternatives drawing is attached in Appendix D-1. Also included in the section is a Cursory Environmental Screening for the proposed sewer treatment alternatives, which further compares each alternative with respect to the environmental impacts (See Table 2.2).

2.2.1 No Action Sewer Treatment Alternative

Currently there are only individual on-site wastewater treatment systems within the Albeni area. The No Action alternative would require the existing and future residents in the Albeni area to construct and use their own on-site treatment and disposal systems. Due to the restrictive soil conditions, and restrictive ground water conditions, many of the lots have a high frequency of drainfield failure. A means to treat and dispose the wastewater generated by the residents of the Albeni area is required for implementation of a sewer collection system and will reduce negative environmental impacts associated with drainfield failures. For these reasons the No Action Alternative is not the preferred alternative.

2.2.2 Sewer Treatment Alternative No. 2: Individual On-Site Sewer Treatment Systems

2.2.2.1 Alternative Description/Alternative Practicality

The second alternative reviewed consisted of installing individual on-site sewer treatment systems. Individual on-site sewer systems would consist of a septic tank connected to the residence or business with a 4" PVC service line. The septic tank would provide primary treatment to the wastewater. The septic tank effluent would be directed to a drainfield by either gravity or pressure lines. At the drainfield, the effluent would be allowed to percolate through the soils. However, due to the high lot density within the project area, the fine texture of site soils which provides poor moisture absorption capability, close proximity to wetlands, and the possibility of high ground water levels, it is not practical to install individual on-site sewer treatment systems for each residence or business. Additionally, appropriate sanitary setbacks would be impractical or impossible to achieve.

2.2.2.2 Environmental Consequences

This alternative has the highest potential to cause the most harm to the environment. On-site sewer systems (OSS) constructed in the tight soils located within the project area have commonly failed within a few years of being put into service. Failure of an OSS is evidenced by sewage surfacing in the area of the OSS or sewage backing up into the residence. Failure of an OSS provides the opportunity for sewage to flow into surface waters, causing an increase in nutrients and other contaminants which would negatively impact aquatic flora and fauna. Due to the Albeni areas proximity to the Pend Oreille River, drainfield failures have the potential to directly impact the River, which has been designated as critical habitat for bull trout, a threatened and endangered species.

2.2.2.3 Cost Projection

Due to the restrictive site conditions and the high potential for adverse environmental impacts, a construction cost analysis for this alternative was not completed.

2.2.2.4 Conclusion

This alternative has two adverse negative aspects which make it highly impractical. The first negative aspect is associated with the soil types within the Albeni area. The Albeni area contains soils with low permeability in addition to high ground water levels and numerous wetland areas which greatly increase the potential for environmental impacts from drainfield failures. The potential for drainfield failures is also documented by the Panhandle Health District permits, which have been included in Appendix B-1. Secondarily, the existing lot density makes the likelihood of maintaining appropriate sanitary setbacks impractical. Due to the potential for significant negative environmental impacts, this alternative is not the preferred alternative.

2.2.3 Sewer Treatment Alternative No. 3: New Community Sewer Treatment Facility

2.2.3.1 Alternative Description/Alternative Practicality

The third alternative reviewed consists of installing a community mechanical wastewater treatment facility within the Albeni area. A community wastewater treatment facility would most reasonably consist of an activated sludge treatment facility. In general, wastewater would be treated in four individual steps. Step one would involve removing inorganic wastes via a screening system. The second step would be the biological breakdown of the organic portion of the wastewater. This is typically accomplished in an aerated reactor basin. The third step is separation of the solids from the treated effluent through clarification or membrane technology. The fourth step is disinfecting the treated wastewater prior to final disposal. Final disposal would consist of either sub-surface disposal of the treated effluent or discharging the treated effluent to the Pend Oreille River. As stated in the individual on-site sewer systems analysis, the site soils are not suitable for sub-surface disposal. In order to discharge effluent to the river a National Pollutant Discharge Elimination System permit will be required. These permits are extremely difficult and time-consuming to obtain, and may not be possible to obtain since an existing treatment/disposal system is in close proximity. This alternative also presents land acquisition issues, as the plant would require approximately 5 acres of land located above the 100 year flood elevation. In order to obtain this amount of property, the WBWSD would be required to purchase land from the Tri-Pro Mill. While the Tri-Pro Mill has allowed the WBWSD several easements from sewer collection system construction, 5 acres of land would likely be too costly for the District when considering the already high cost of the treatment facility.

2.2.3.2 Environmental Consequences

The construction of a community treatment system would permanently impact the local environment within the footprint of the system, including the addition of treatment, laboratory, and storage structures. The treatment plant would like require permanent clearing approximately 5 acres of land. The system would also produce treated effluent and sludge that would have to be disposed of in accordance with IDEQ regulations. Effluent disposal would likely involve construction of a discharge outlet on the in the Pend Oreille River bed. Construction of this outlet will be difficult for three reasons:

1) Construction of outlet pipe would require altering the river bed, which presents sedimentation and erosion control issues within a critical habitat.

2) The Pend Oreille River is relatively shallow within the Albeni area, which increased the likelihood of the discharge pipe being damaged or destroyed by passing boaters or floating debris.
3) Permitting for discharge into the Pend Oreille River is difficult, if not impossible to obtain.

2.2.3.3 Cost Projection
An estimated cost for this alternative is provided in Appendix C-2. As shown in the cost comparison, this alternative has the highest initial cost.

2.2.3.4 Conclusion
Due to the high cost of constructing a new community treatment system, the difficulty in obtaining a discharge permit, the lack of availability of the required land tract, and the potential adverse environmental impacts, this alternative is not the preferred alternative.

2.2.4 Sewer Treatment Alternative No. 4: Transport Wastewater to Newport WWTP
2.2.4.1 Alternative Description/Alternative Practicality
The fourth alternative reviewed consists of transporting the wastewater across the River to the existing City of Newport Wastewater Treatment Plant. Transporting the wastewater to the existing City of Newport Wastewater Treatment Plant (WWTP) would consist of directing all the wastewater from the sewer collection system to a main lift station capable of pumping the wastewater across the River and into the existing WBWSD gravity collection system in the City of Oldtown. Once discharged to the existing gravity collection system, the wastewater would flow to the existing City of Newport WWTP. The WBWSD currently owns 30% of the capacity of the City of Newport Wastewater Treatment Plant. This equates to approximately 150,000 gallons per day. WBWSD is currently contributing approximately 50,000 gallons per day to the Newport WWTP and therefore has a reserve capacity of approximately 100,000 gallons per day.

2.2.4.2 Environmental Consequences
The proposed lift station will permanently impact the environment with the construction of the wet well, valve vault, and control building; however, the overall foot print of the facilities will be relatively small. The wet well will be sized to allow the operator ample time to respond to any issues with the pump station before raw sewage could overflow the wet well. The wet well will also be constructed as water tight, and will be tested to ensure there are no leaks in the wet well and associated piping. The existing City of Newport WWTP has an outstanding treatment record with no violations of their NPDES permit, providing minimal environmental impact with the disposal of the treated effluent and sludge.

The proposed sewer lift station and pump control building will be located approximately 125' northeasterly of the Pend Oreille River summer pool shore line. The proposed sewer lift station wet well rim elevation will be located 8" above the 100 year flood elevation to protect against inundation. Additionally, all proposed sewer manholes located in areas below the 100 year flood elevation will have rim elevations at or above the 100 year flood elevation. Mitigation measures for protecting against flooding are discussed more thoroughly in the Floodplain Section of this

report. However, these key design details are expected to mitigate and greatly reduce any chances of adverse environmental impacts associated with flooding.

In order to transport the wastewater from the Albeni area to the WBWSD sewer collection system, this alternative will require construction of a pressure sewer main crossing the Pend Oreille River. The River crossing alternatives and associated environmental impacts for this aspect of the project are addressed in the following section of this report.

2.2.4.3 Cost Projection

The WBWSD already owns 30% of the capacity of the existing City of Newport WWTP; as a result this alternative does not have a cost associated with wastewater treatment. An estimated cost for the lift station construction and River crossing is provided in Appendix C-2. As shown in the cost comparison, this alternative has the lowest initial cost.

2.2.4.4 Conclusion

As the WBWSD owns a portion of the City of Newport WWTP capacity, this alternative does not have a cost associated with wastewater treatment. This sewer treatment alternative provides the least potential for adverse environmental impacts when compared to Sewer Treatment Alternative No. 2 and is substantially more cost effective that Sewer Treatment Alternative No. 3. For these reasons **Sewer Treatment Alternative No. 4 is the preferred alternative.**

Table 2.2 – Sewer Treatment Alternatives Cursory Environmental Screening

Environmental Criteria	Alternative No. 1 No Action	Alternative No. 2 Individual Treatment Systems	Alternative No. 3 Community Treatment Facility	Alternative No. 4 Transport Wastewater to Newport WWTP
Climate and Physical Aspects (Topography, Geology, and Soils)	No Impact	No Impact	No Impact	No Impact
Population, Economic, and Social Profile	Potential Negative Impacts on Economic Development due to Decreased Lot Density	Potential Negative Impacts on Economic Development due to Decreased Lot Density	Potential Positive Impact for Population Density and Economic Development	Potential Positive Impact for Population Density and Economic Development
Land Use	No Impact	No Impact	No Impact	No Impact
Floodplain Development	No Impact	No Impact	No Impact	Sewer lift station to be constructed in the floodplain
Wetlands	Continued Negative Impacts on Wetlands due to Drainfield Failures	Continued Negative Impacts on Wetlands due to Drainfield Failures	No Impact	No Impact
Water Quality	Continued Negative Impacts on Surface and Ground Water	Continued Negative Impacts on Surface and Ground Water	Positive Impacts associated with Removal of Existing Drainfield Failures	Positive Impacts associated with Removal of Existing Drainfield Failures
Wild and Scenic Rivers	No Wild and Scenic Rivers Within Project Vicinity	No Wild and Scenic Rivers Within Project Vicinity	No Wild and Scenic Rivers Within Project Vicinity	No Wild and Scenic Rivers Within Project Vicinity
Cultural Resources	No Impact	No Impact	No Impact	No Impact
Flora and Fauna	Increased Potential Negative Impacts associated with Drainfield Failures	Increased Potential Negative Impacts associated with Drainfield Failures	Permanent Flora Impacts at Facility Location	Permanent Minor Flora Impacts at Facility Location
Recreation and Open Space	No Impact	No Impact	No Impact	No Impact
Agricultural Lands	No Impact	No Impact	No Impact	No Impact
Air Quality	No Impact	No Impact	No Adverse Impact	No Adverse Impact
Energy	No Impact	No Impact	Substantial Energy Consumption Increase for Wastewater Treatment Facility	Marginal Increase in Energy Consumption for Lift Station
Public Health	Increased Potential Negative Impacts associated with Drainfield Failures	Increased Potential Negative Impacts associated with Drainfield Failures	Potential Positive Impacts associated with Properly Treating Wastewater	Potential Positive Impacts associated with Properly Treating Wastewater.

2.3 Sewer Main River Crossing Alternatives and Analysis

The following sections include a discussion of the alternatives considered for the proposed sewer transmission main crossing the Pend Oreille River. The sewer main river crossing is shown in the attached project alternatives drawing in Appendix D-1. Also included in the section is a Cursory Environmental Screening for the proposed sewer main river crossing alternatives, which further compares each alternative with respect to the environmental impacts (See Table 2.3).

2.3.1 Sewer Main River Crossing Alternative No. 1: No Action

Installing a sewer main across the Pend Oreille River is necessary to transport the wastewater generated by the residents and businesses of the Albeni area to the existing City of Newport WWTP. The No Action alternative for the sewer system river crossing would require the residents and businesses of the Albeni area to continue to rely on their poorly performing on-site sewer systems or construct and maintain a costly wastewater treatment facility in the Albeni area. For this reason the No Action alternative is not the recommended preferred alternative.

2.3.2 Sewer Main River Crossing Alternative No. 2: Mount Sewer Main on Highway 2 Bridge

This alternative consists of crossing the Pend Oreille River via the U.S. Highway 2 Bridge. The Idaho Transportation Department currently owns the 4 lane bridge spanning the Pend Oreille River. Pipelines could be attached to the underside of the bridge deck to transport wastewater from the proposed project to the existing WBWSD sewer lines. Idaho Department of Transportation was contacted about the possibility of using the bridge as a pipeline support structure and they indicated that they would not allow any pipeline to be attached to the bridge, as the bridge was not designed for these additional loads.

2.3.3 Sewer Main River Crossing Alternative No. 3: Anchor Sewer Main on River Bottom

2.3.3.1 Alternative Description/Alternative Practicality

This alternative would require that the sewer main be anchored on the bed of the Pend Oreille River. The advantage to laying a sewer main on the River bottom is that less specialized equipment is required for installation, making the installation simpler. However, two items make this alternative impractical:

1. The sewer main would cross the river approximately 1.5 miles downstream of Albeni Falls Dam. This section of the river is flowing quickly and due to the shallow depth, consequently damage from debris or a shifting riverbed is a major concern.
2. In order to anchor a sewer main on the riverbed, a streambed alteration permit would need to be obtained from the Idaho Department of Water Resources and the Army Corps of Engineers. This permit may be difficult to obtain, as explained in Item No. 3, below.
3. The Pend Oreille River has been designated as critical habitat for bull trout in the area the sewer main would be placed on the river bed. Permitting requirements would consequently be excessive. The anticipated high cost associated with safely excavating debris at the sewer main location and excavating the river bank on each side of the river, and the associated permit requirements, including a Biological Assessment, make this alternative highly impractical.

2.3.3.2 Environmental Consequences

This alternative could potentially affect the Pend Oreille River bed in the following ways:

1. The Pend Oreille River has been designated as critical habitat for bull trout in the area that the sewer main would be placed on the river bed. Impacts to the bull trout could be significant due to excavation of debris at the sewer main location and excavating the river bank on each side of the river. Required maintenance to the sewer line after initial construction also creates potential impacts to the bull trout.
2. The river bed at the sewer main location will have to be excavated in order to remove any deposited debris, and to minimize any localized high or low points within the river bed. The sewer main installation will also require pipe anchors to prevent movement due to the buoyancy of the pipe and the river current. These requirements will have a negative impact on the overall river water quality, as well as negative impacts on waterfowl using the river, and the local fish population.
3. Continual changes in the river bed topography due to sedimentation or scouring caused by spring runoff currents create a potential for damage to the pipeline, which would require maintenance for repairs. On-going maintenance requirements create a negative impact on the river water quality, waterfowl using the river, and the local fish population.

A stream bed alteration permit and a biological assessment will be required for this alternative as the project would be directly impacting critical habitat. Both the permit process and biological assessment are costly and time consuming, and the permit requirements would be excessive. The potential impacts to critical habitat and costs associated with permitting this method make this alternative impractical.

This alternative is not expected to impact any area wetlands; however this alternative will require trench excavation and construction activities at and along the Pend Oreille River shoreline.

2.3.3.3 Cost Projection

Due to the potential for damage to the sewer line and the significant potential environmental impacts to an endangered species within a critical habitat, this alternative is not practical, and cost estimates for this alternative would be more expensive than the preferred alternative (See Appendix C-3).

2.3.3.4 Conclusion

Due to the inherent potential for damage to the sewer main, excessive permitting requirements, expected high costs associated with environmentally acceptable excavation and sewer main installation at the River bed, and the high potential for environmental impacts to an endangered species within a critical habitat, this alternative is not the recommended preferred alternative.

2.3.4 Sewer Main River Crossing Alternative No. 4: Lay Sewer Main in Trench Excavated within River Bottom

2.3.4.1 Alternative Description/Alternative Practicality

This alternative would require that a trench within the river bed be excavated to an average depth of approximately 6 feet, the sewer main would then be installed within the trench, and the trench then would be backfilled. This will allow the sewer main to be installed in a manner that will

prevent flotation and prevent damage from boats, barges or debris within the river. The construction process would require the installation of silt fence upstream and downstream of the sewer main trench location to avoid sediment and silt migration beyond the limits of excavation.

The primary advantages to laying the pipe in a trench on the River bottom include:

1) Burying the pipe in the river bed will eliminate the need for pipe anchors.
2) The sewer main will not be susceptible to potential damage from boats or debris.

The primary disadvantages of this alternative are a very high construction cost to complete this construction due to the significant sedimentation and erosion control requirements, and an extremely challenging environmental process in order to be successfully completed.

2.3.4.2 Environmental Consequences

During the construction process, sediments and silts will be suspended within the water at the location of the sewer main excavation. It is also likely that silt and sediments will be extremely difficult to control and could move beyond the silt fence, which would additionally impact areas declared to be critical bull trout habitat by the USFWS. Additionally, the pipeline excavation would likely cause a reshaping of the river bed in the area near the pipeline route. The potential for significant negative environmental impacts is great. Since environmentally safe construction of this alternative would be extremely challenging and costly, this alternative is considered very impractical.

This alternative is not expected to impact any area wetlands; however this alternative will require trench excavation and construction activities at and along the Pend Oreille River shoreline.

2.3.4.3 Cost Projection

An estimated cost for construction of this alternative is provided in Appendix C-3. As shown in the cost comparison, the cost of excavating across the river bottom and associated sedimentation and erosion control measures is estimated to greatly increase the cost of the sewer main river crossing when compared to the preferred alternative.

2.3.4.4 Conclusion

Due to the high costs associated with trench excavation and sewer main installation, the high potential for significant negative environmental impacts, and potential for undesirable river bed alterations, this alternative is not recommended as the preferred alternative.

2.3.5 Sewer Main River Crossing Alternative No. 5: Bore under the Pend Oreille River

2.3.5.1 Alternative Description/Alternative Practicality

This alternative proposes that a 12” HDPE 200 psi casing pipe and a 6” HDPE 200 psi sewer line would be directionally bored under the Pend Oreille River. The bore hole would be located at depths varying from 20 feet to 30 feet below the river bed, and would extend to points lying approximately 100 feet beyond the banks of the River at normal summer pool. This alternative would require no excavation within the river, and this alternative is expected to have no environmental impact on the River. The HDPE pipe will provide a means to transport wastewater from the proposed sewer collection system to the existing WBWSD sewer collection

system. While the costs for this alternative are high, the environmental impacts are nearly non-existent, making this alternative a highly practical alternative.

2.3.5.2 Environmental Consequences
The proposed 12" boring for the sewer main crossing at the Pend Oreille River will have sufficient depth to ensure no disturbance or vibration at the river channel while allowing the proposed sewer main to be embedded within native soil. This alternative will cause the least environmental impact to the critical bull trout habitat, while allowing for the interconnection of the proposed sewer collection system with the existing sewer system on the south side of the Pend Oreille River.

This alternative will not impact any nearby wetlands or surface water quality and will not require construction activities or excavations at the Pend Oreille River shoreline.

2.3.5.3 Cost Projection
An estimated construction cost for this alternative is provided in Appendix C-3. As shown in the attached cost comparison, this alternative is expected to be the lowest expense for completing the sewer main river crossing.

2.3.5.4 Conclusion
Since this alternative does not impact critical bull trout habitat, does not require a lengthy permitting process, utilizes capacity and treatment previously purchased at the existing City of Newport WWTP, and has the lowest anticipated costs associated with sewer main installation across the Pend Oreille River, **Alternative No. 5 is recommended as the preferred alternative**.

Table 2.3 – Sewer Main River Crossing Cursory Environmental Screening

Environmental Criteria	Alternative No. 1 No Action	Alternative No. 3 Lay Sewer Main on bottom of River	Alternative No. 4 Lay Sewer Main in trench on bottom of River	Alternative No. 5 Bore Sewer Main under River
Climate and Physical Aspects (Topography, Geology, and Soils)	No Impact	Long Term Negative Impacts to River Bed Topography	Potential Negative Impacts to River Bed Topography	Temporary Impacts to Topography at Bore Site Locations, Minimal Impacts
Population, Economic, and Social Profile	Potential Negative Impacts on Economic Development due to Decreased Lot Density	Potential Positive Impact for Population Density and Economic Development	Potential Positive Impact for Population Density and Economic Development	Potential Positive Impact for Population Density and Economic Development
Land Use	No Impact	No Impact	No Impact	No Impact
Floodplain Development	No Impact	Sewer Lift Station and Lift Station Control Building placed at Albeni Side of River, Minimal Impact	Sewer Lift Station and Lift Station Control Building placed at Albeni Side of River, Minimal Impact	Sewer Lift Station and Lift Station Control Building placed at Albeni Side of River, Minimal Impact
Wetlands	No Impact	No Impact	No Impact	No Impact
Water Quality	No Impact	Construction Related impacts to River Water Quality	Construction Related impacts to River Water Quality	No Impact
Wild and Scenic Rivers	No Wild and Scenic Rivers Within Project Vicinity	No Wild and Scenic Rivers Within Project Vicinity	No Wild and Scenic Rivers Within Project Vicinity	No Wild and Scenic Rivers Within Project Vicinity
Cultural Resources	No Impact	No Impact	No Impact	No Impact
Flora and Fauna	No Impact	Impact on Critical Bull Trout Habitat.	Potential Impact on Critical Bull Trout Habitat	No Impact
Recreation and Open Space	No Impact	No Impact	No Impact	No Impact
Agricultural Lands	No Impact	No Impact	No Impact	No Impact
Air Quality	No Impact	No Adverse Impact	No Adverse Impact	No Adverse Impact
Energy	No Impact	No Impact	No Impact	No Impact
Public Health	Increased Potential Negative Impacts associated with Drainfield Failures	No Impact	No Impact	No Impact

2.4 Cost Estimates

2.4.1 Construction

Table 2.5 below shows the cost estimates for each viable sewer system component alternative. Detailed construction cost estimates for each viable alternative have been prepared and are included in Appendix C-1, C-2, and C-3. All costs are based on 2013 construction costs and must be adjusted for inflation if construction is delayed.

Table 2.5 – Project Construction Cost Estimates

Alternative No.	Project Alternative	Alternative Cost
Sewer Collection System Alternatives		
2	Gravity Collection System (includes Sewer Lift Station Construction Cost)	$939,686.00
3	Pressure Collection System	$1,979,250.00
Sewer Treatment Alternatives		
3	New WWTP in Albeni Area	$3,420,000.00
4	Sewer Lift Station (includes River Crossing Alternative No. 5)	$882,499.00
River Crossing Alternatives		
3	Lay Sewer Main on River Bottom	$854,450.00
4	Lay Sewer Main in Trench on River Bottom	$841,250.00
5	Bore Under River Bed	$407,375.00

Sewer Collection Alternatives

The construction cost estimate for the gravity sewer collection system includes the sewer lift station construction because the pressure sewer collection system would be capable of transporting the effluent generated in the Albeni area without the installation of additional pumping facilities. By including the sewer lift station, the total construction cost for transporting the wastewater to the WBWSD collection system, less the river crossing construction cost, can be accurately contrasted. By this standard, the pressure system alternative is anticipated to be substantially more expensive when compared to the gravity collection system while the pressure sewer system provides no substantial environmental benefit.

The high construction cost associated with the pressure sewer collection system alternative can largely be attributed to the amount of individual property pumpstations that the District will be responsible to construct in the Albeni area. The pumpstation size and capacity and therefore construction cost will vary depending on the occupancy of each lot. The project cost can be estimated using a base construction cost for a typical residential lot, then multiply that cost by the project number of ERUs. The construction cost estimate above is includes the 20 year projected growth of 171 ERUs in the Albeni area because this is the design life of the pumpstations. However, since the proposed Phase 1 sewer collection system will initially serve approximately 24 ERUs upon

completion of Phase 1 project construction, the pressure sewer collection system will have a lower initial construction cost when compared to the gravity collection system and lift station. However, as the population in the Albeni area increases and existing vacant lots are inhabited, the construction costs for this project will surpass the construction cost associated with construction of the gravity collection system when the pressure sewer system demand reaches approximately 67 ERUs. Additionally, the useful life of the pumps is generally 20 years, during which time the District will be required to maintain the individual pumpstations. The District would also be responsible for replacing the grinder pumps at individual properties after their useful life. As a result of the District responsibility for replacement and maintenance of the individual pumpstations, the cost of the pressure sewer collection system is expected to exceed the cost of the gravity collection system by approximately 4.5 times over the 20 year useful life of sewer collection system.

Sewer Treatment Alternatives

The construction cost estimate for the sewer lift station includes the river main crossing construction because the new WWTP alternative would be capable of treating the effluent generated in the Albeni area without installation of a river main crossing. By including the sewer main river crossing, the total construction cost for wastewater treatment can be accurately contrasted. By this standard, the WWTP alternative is expected to be substantially more expensive, both initially and annually, when compared to the utilizing the existing City of Newport Wastewater Treatment Facility. Connecting the proposed system distribution system to the existing WBWSD collection system is also expected to have substantial environmental benefits when compared to constructing a new WWTP, as the lift station and river boring will not impact critical habitat during construction or during the project useful life.

The wastewater treatment plant option is also expected to have increased permitting costs. The EPA has recently made it very difficult for municipalities to obtain discharge permits for the Pend Oreille River. The process of obtaining such a permit will only increase the construction costs. Additionally, construction of the a wastewater treatment plant will require the District to maintain and operate the facility, which is expected to greatly increase the Districts utility and personnel costs.

River Crossing Alternatives

Because the sewer main river crossing is essential to the proposed project in terms of minimizing environmental impacts and project costs, three alternatives were considered for completion of the task. In considering the three river crossing alternatives, excavation of the river bed for the purpose of sewer main construction (which must take place to varying degrees if Alternative No. 3 and Alternative No. 4 are utilized) is expected to be costly due to sedimentation and erosion control measures and detrimental to Pend Oreille River water quality, particularly during construction. When comparing the separate river crossing alternatives, the proposed sewer main boring presented both environmental and financial benefits.

2.4.2 Selected Project Alternatives

Based on the environmental impacts, alternative practicality, and alternative construction cost estimates described in the previous section, the WBWSD has selected the following alternatives at the preferred alternative:

1) **Sewer Collection System Alternative No. 2: Gravity Sewer Collection System**
2) **Sewer Treatment Alternative No. 4: Transport Wastewater to Newport WWTP, which will be constructed in conjunction with River Crossing Alternative No. 5: Bore under Pend Oreille River.**

A drawing showing the locations of the preferred alternatives is attached in Appendix D-1.

The total construction cost for the preferred alternatives is estimated to be **$1,484,260.74**. A detailed project construction cost estimate is attached in Appendix C-4.

2.4.3 Annual Operations and Maintenance

An operating and maintenance budget for the first year after construction completion has been prepared and is included in Appendix A-3. Based on a 2% growth rate, it is estimated that the WBWSD will have to raise sewer rates from $27 per month to $36 per month in order finance operations and maintenance costs without a incurring an annual operating loss.

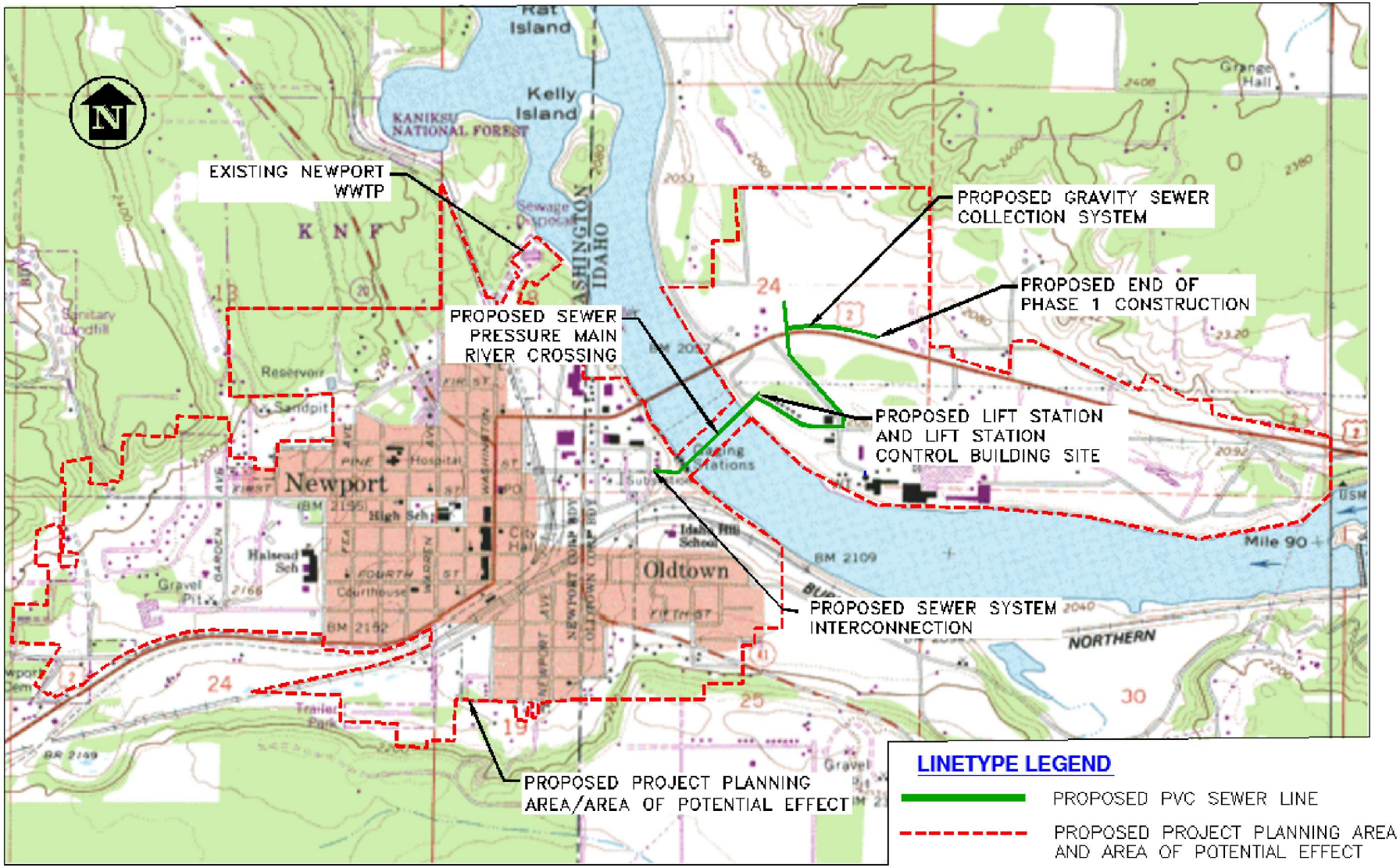

Figure 2. Proposed Project Planning Area/Area of Potential Effect USGS Project Map.

3.0 Section D: Affected Environment/Environmental Consequences

3.1 Proposed Project Planning Area/Area of Potential Effect

The proposed project planning area (PPPA) and area of potential effects (APE) as shown in Figures 1 and 2 and shown in Aerial and USGS Quadrangle drawings in Appendix D-1 coincide with the City Limit boundaries for the City of Newport, the City of Oldtown, and the West Bonner water and sewer system boundaries. The proposed project planning area, shown in Figures 1 and 2 and in the Aerial and USGS drawings attached in Appendix D-1, has been determined to coincide with the APE due to the nature of the project.

North of U.S. Highway 2, the proposed project planning area and area of potential effects coincide with the City of Oldtown city limit line indicated in the City of Oldtown Zoning Map provided in Appendix D-1 as well as the Aerial and USGS Quadrangle maps. The PPPA north of U.S. Highway 2 is bounded at the north and west edges by recently annexed private property, the Section 19/Section 24 boundary line. South of U.S. Highway 2, the PPPA and APE are bounded in the south and west at the banks of the Pend Oreille River and in the east by the east edge of the recently annexed Tri-Pro Mill property.

The PPPA and APE extend across the Pend Oreille River at the established easement for the proposed sewer main river crossing. The sewer line easement location has been approved by the Idaho Department of Lands and the U.S. Army Corps of Engineers, and is documented in the Appendix D-17.

The PPPA and APE south and west of the Pend Oreille River coincides with the established City of Newport city limits at the western limits of the project and partially the City of Oldtown city limits at the project northern limits within Idaho, and at the West Bonner Water and Sewer District sewer system boundary southeast of the City of Oldtown, as indicated in Figures 1 and 2. The PPPA/APE at the east edge of the project limits and south of the Pend Oreille River is bounded at the existing sewer system boundaries located approximately one half of a mile east of the Oldtown city limit line. Zoning maps for the City of Oldtown and the City of Newport have been provided in Appendix D-1 and D-2, respectively. The City of Newport and City of Oldtown currently have interconnecting sewer collection system. The proposed project will be connected to the existing Newport/Oldtown sewer collection system in order to transport effluent from the Albeni area to the City of Newport WWTP. In this respect, the proposed project could only affect the sewer mains and manholes located at a lower elevation than the manhole at the proposed collection system interconnection, located at the intersection of North Montana Avenue and East Second Street. However no construction activities will take place within the City of Newport and will only occur within the City of Oldtown south of the Pend Oreille River at the indicated interconnection location (See Appendix D-1 System Drawings). Since the WBWSD and City of Newport sewer collection system extends west to the City of Newport city limits the PPPA/APE at the western limits of the project, is bounded at the north by the City of Newport city limit boundary at the S13 half section line. The PPPA/APE is bounded at its farthest west point by the S23/S24 section line and generally at the south by the S24 and S19 half section line and the U.S. Highway 2 ROW.

3.2 PPPA Topography

North of the Pend Oreille River, as indicated in Figure 2, forested steeper terrain area is located at the northwest corner of the PPPA/APE. Undulating rangeland and wetland areas span between the existing U.S. Highway 2 ROW and the steeper, forested area in the northwest. South of U.S. Highway 2 and north of the Pend Oreille River, the majority of the project area consists of the developed Tri-Pro Mill property which is largely level terrain. Undeveloped areas are relatively level, undulating and grassy terrain with sparse tree and native bush cover. The river banks within the project area are relatively steep, as shown in the design drawings in Appendix D-1.

South and west of the Pend Oreille River, the majority of the terrain is developed with relatively shallow to moderate terrain with forested slopes near the northern, western and southern boundary of the PPPA and relatively minimal to shallow sloped terrain in the eastern portions near the West Bonner sewer system boundary.

3.3 Population Distribution

Currently, the population for the newly annexed Albeni area currently includes the following businesses and residences with the estimated corresponding equivalent residential unit (ERU) values:

Table 3.1 – Existing Development Within Albeni Area

Service Type/Facility	Estimated ERUs
Residential Houses – 14 ea	14
Rotary Park / Boat Launch	1
Albeni Falls Building Supply	5
Mary's Farm and Feed	1
3-Dog Night	2
Riversong Landscape	1
Jerry's Auto Clinic	2
Johnson Equipment Company	1
Selkirk Supply	3
Cornerstone Supply	4
Pend Oreille Vet Clinic	3
Tri-Pro Cedar Mill	41
TOTAL	**78**

The total population increase in all of Bonner County between 2000 and 2010 has been established by the U.S. Census Bureau as increasing 11%, from 36,835 to 40,877 (See Appendix D-3). Based on the 2010 Census, Bonner County averaged 2.37 persons per household. This equates to an estimated population of 185 permanent and non-permanent residents when multiplied by the total number of ERUs within the recently annexed Albeni area.

The Albeni area sewer collection system design considers daily users, such as business employees who would utilize the sewer collection system during general work hours in addition to permanent residents of the Albeni area. As indicated in the Table above, the number of permanent or "full-time" sewer system users equates to the 14 residential units. The proposed project will be allow of the immediate connection of the existing 14 ERUs and 10 commercial ERUs located in the westerly portion of the Albeni area. Using the Bonner County average of 2.37 persons per household, the 14 current ERUs equates to 33 permanent residents in the Albeni area.

The majority of the population is located in the south and west portion of the PPPA/APE and consists of the entire population of the City of Newport and the majority of the population of the City of Oldtown. Population data for the Cities of Newport and Oldtown from the 2010 Census shows the 2010 population is 2,126 and 184, respectively. Population densities for Pend Oreille and Bonner Counties have been documented by the 2010 Census as 2.35 and 2.37 persons per household, respectively (See Appendix D-3). According to the City of Newport 2009 Update to the City Water System and Sanitary Sewer System Capacity Analysis Report by James A. Sewell & Associates, LLC the City of Newport had approximately 1,259 ERU connections in 2008. Based on historical water usage data, the City of Oldtown had 227 ERU connections in 2008.

For further discussion regarding estimated population growth and corresponding flow values, please refer to the Flow Projection Section of this report.

3.4 Industrial and Commercial Features

There are currently 14 residential and 64 business ERUs in the Albeni area. The commercial connections have estimated ERUs based on their size and nature of the business, as indicated in the above Table 3.1. Future estimates for business and industry in the Albeni area as discussed further in the Flow Projection section and are based on the City of Oldtown Zoning Map in Appendix D-1 and attached Census data in Appendix D-3.

The majority of business and industrial areas within the PPPA/APE are located within the south and west portion, specifically the City of Oldtown and Newport. According to the City of Newport 2009 Update to the City Water System and Sanitary Sewer System Capacity Analysis Report by James A. Sewell & Associates, LLC, prepared in 2008, the City had 642 residential connections and 33 outside residential connections and a total 1,259 ERU connections. The remaining 584 ERU connections were associated with a total of 194 actual commercial connections located within the city limits. According to the 2010 U.S. Census, commercial occupations including commercial management and professionals are the most common forms of commerce in the Newport area with 22.7 percent or 185 individuals working in this area, followed by sales and service occupations. Common industrial employment in the area is lead by educational, health and social service occupations with 20.6 percent followed by retail trade and manufacturing industries.

The City of Oldtown has 227 residential sewer connections and 25 commercial sewer connections. According to the 2010 U.S. Census, production, transportation, and material moving occupations are the most common commerce with 36.1 percent, followed by

construction and service occupations. Common industrial commerce within the City of Oldtown includes agriculture, forestry, fishing and hunting, and mining, followed by manufacturing.

3.5 Proposed Sewer Extension Project Features

a) *Length and Diameter of Collector Sewer Lines and Transmission Force Main*
A gravity wastewater collection system consisting of 176 linear feet of 18" ductile iron sewer main and 1,205 linear feet of 15" diameter, 1,561 linear feet of 12" diameter, 1,228 linear feet of 10" diameter, and 728 linear feet of 8" diameter PVC sewer mainlines. The proposed sewer mains will largely be located within the Diamond Mill Loop Road Right-of-Way (ROW) and a utility easement adjacent to the U.S. Highway 2 ROW within the westerly portion of the Albeni area. An 8" PVC sewer main will also extend north approximately 360' along Selkirk Way to the existing businesses located north of U.S. Highway 2. The residences and businesses will be connected to sewer mainlines with 4" and 6" diameter PVC sewer service lines, respectively. The proposed sewer main boring will consist of installing one 1,460 LF long, 12" diameter high density polyethylene (HDPE) pipe located approximately 25 feet below the bed of the river. The 12" HDPE pipe will act as casing for a 6" HDPE pressure sewer force main. The wastewater will be pumped through the 6" force main to an existing concrete sewer manhole located at the intersection of North Montana Avenue and East Second Street, then flow to the existing City of Newport wastewater treatment facility for treatment and final disposal.

b) *Pump Stations*
A buried, 8' diameter x 22' tall concrete sewer lift station. The sewer collection system wastewater will flow downhill to the proposed lift station where it will be pumped across the Pend Oreille River to the existing West Bonner Water and Sewer District gravity wastewater system. A 5' wide x 8' long x 7' deep concrete valve and meter box will be placed adjacent to the proposed lift station. A 9'-4" wide x 16'-0" long lift station control building, a 9'-4" x 14'-0" x 6" thick concrete generator pad, and a 4' x 10' x 4" thick concrete propane tank pad will be constructed adjacent to the sewer lift station. The sewer lift station and lift station control building will be located south of the Diamond Mill Loop Road and east of the existing boat launch.

c) *Treatment Facilities*
The proposed project will connect to the existing WBWSD sewer collection system which currently serves the City of Oldtown and is interconnected with the City of Newport. The City of Newport WWTP is located on the east edge of Section 20, along the banks of the Pend Oreille River and near the Idaho/Washington border. The City of Newport WWTP location can be seen in the PPPA/APE drawings in Appendix D-1. The WBWSD currently owns 30% of the capacity of the City of Newport Wastewater Treatment Plant. This equates to approximately 150,000 gallons per day. WBWSD is currently contributing approximately 50,000 gallons per day to the Newport WWTP and therefore has a reserve capacity of approximately 100,000 gallons per day. The WWTP consists of a headworks/screening facility, primary clarification, secondary treatment with disinfection as well as solids processing and dewatering. The WWTP is designed

for an average flow of 500,000 gallons per day. The proposed project will not require physical alteration or upgrades to the existing WWTP.

d) *Schedule of Construction*
At the direction of the WBWSD, the design for this project has been completed and approved by IDEQ. It was advertised for bids in October 2012, bids were selected in November 2012, and construction is scheduled to begin in early 2013, depending on weather conditions and funding availability. Construction is scheduled to be completed approximately 12 months after construction commencement.

3.6 Proposed Sewer System Flow Projections

Development within the project area has historically been under the jurisdiction of Bonner County. The County's development regulations typically set the guidelines for maximum lot densities assuming individual on-site sewer disposal, individual wells for water supply, and limited fire protection. Densities in excess of those recommended by the County are unattainable due to difficulty with on-site sewer systems setback requirements.

To better understand realized population growth due to the addition of a public sewer collection system within the project area, the following table presents a summary of the populations listed for Oldtown, Newport and Bonner County as presented by the U.S. Census Bureau.

Table 3.2 - Population Per US Census Bureau

	2010	2008	2000	1990	Growth Rate
Oldtown, Id	184	207	190	151	1.10%
Bonner County, Id	40,877	41,168	36,835	26,622	2.17%
Newport, WA	2,126	2,126	1,921	1,691	1.25%
Average					**1.51%**

From the above table, the average population growth over the last 20 years has been less than 2%. Extension of the sewer collection system to the project area will eliminate several development constraints that have restricted growth in the past. Those limitations include but are not limited to issues associated with on-site sewage disposal and associated sanitary setback requirements with potable water and surface water sources. Planning for future growth within the project area assumes a growth rate of 4%, which is in excess of the historical average. A higher growth rate is selected to accommodate the development opportunities realized by installation of public sewer service. In addition, this portion of the City includes areas that could be developed as recreational properties. Those areas are expected to develop at a faster rate than non-recreational lots. Considering the 78 existing permanent and non-permanent ERU's within the entire Albeni area and a growth rate of 4%, the projected system demand in 20 years would be 171 ERUs and 375 ERUs in 40 years. The proposed sewer system will immediately provide service to 14 permanent/residential ERU's, assuming a growth rate of 4%, the projected system demand from residential ERUs only would be 31 ERUs at the 20 year growth condition and 67 ERUs at the 40 year growth condition.

While a 4% growth rate for the Albeni area was used for sewer collection system design, the growth rate for the City of Newport and the City of Oldtown is expected to be 2% or less, as indicated in the above Census data.

In addition to considering available U.S. Census data, the sewer collection design considers the Albeni area zoning in order to determine the total number of equivalent residential units that might be served when the project reaches complete buildout which is not anticipated to be realized in the next 40 years. However, this analysis provides an understanding of the potential population density in the Albeni area. The current Oldtown City Zoning map of the project area has been included in the attached Appendix D-1. The following Table 3.3 presents the projected buildout of the Albeni area with respect to the Oldtown City Zoning map.

Table 3.3 – Estimated Project Buildout In Residential Equivalents

Land Use	Area Within Project (acre)	Available Area for Development (80%) – (acre)	Equivalent Residential Units (ERU/Acre)	Total ERUs at Buildout
Commercial	112	89	4	356
Public Recreation	8		0	0
Single Family Residential	148	118	2.5	295
Multi-Family Residential	55	44	5	220
Light Industrial	51	41	1	41
Total	**374**	**292**		**912**

An assessment of the future buildout of the entire Albeni area indicates that a total of 912 equivalent residential units will likely be served within the Albeni area. As indicated in the Table above, it is projected that 515 ERUs of the total projected 912 ERUs will be associated permanent/residential ERUs. Understanding that the full buildout will most likely occur over many decades, and not within the next 40 years, the project intends to accommodate a 40 year growth projection with planning for the long term build-out condition. According to the City of Newport 2009 Update to the City Water System and Sanitary Sewer System Capacity Analysis Report by James A. Sewell and Associates, LLC, the City of Newport had 1,259 total sewer system ERUs in 2008. At a growth rate of 2%, the City of Newport will have an estimated 1,985 ERUs in 2031 and 2,950 ERUs in 2051. Based on information provided by the West Bonner Water and Sewer District, the District had 227 total sewer system ERU's in 2008. At a growth rate of 2%, the District will have an estimated 358 ERUs in 2031 and 532 ERUs in 2051.

Historical data from the WBWSD was used to determine the design flow for the proposed sewer collection system within the Albeni area. The following table illustrates the flows generated by the users of the WBWSD existing sewer collection system. Flows are recorded by a flow meter located upstream of the manhole where the existing City of Newport sewer main and the existing WBWSD sewer main meet.

Table 3.4 – Historic Wastewater Flows for WBWSD

Year	Wastewater Flows (gpd)	Total Sewer Connections (ERU)	Average Daily Flow (gpd/ERU)
2008	48,000	286	168
2007	52,000	286	182
2006	49,000	286	171
2005	40,000*	281	142

*Estimated flow due to incomplete meter data for a portion of 2005

The average daily flow for the years 2006 through 2008 is 174 gpd/ERU. For the purpose of designing the sewer collection piping and lift station and average daily flow of 200 gpd/ERU was used.

The existing and future peak flows were calculated from the existing ERUs assuming a peaking factor of 4 and 200 gpd/ERU. There are currently 14 residential/permanent ERUs and 10 commercial ERUs which will immediately be connected to the proposed sewer system. At the 20 year growth condition, the proposed project will provide service to approximately 31 residential/permanent ERUs in the Albeni area, which equates to 6,200 gpd of wastewater. At the 40 year growth condition, the proposed project will provide service to approximately 67 residential/permanent ERUs in the Albeni area, which equates to 13,400 gpd of wastewater.

For the total commercial, industrial, and residential 20 year projection, the proposed sewer system project will provide service to approximately 171 ERUs at 200 gpd/ERU or 34,200 gpd. At 40 year projection, the project will provide service to 375 ERUs at 200 gpd/ERU or 75,000 gpd and at buildout, a total of 912 ERUs producing 200 gpd/ERU will add approximately 182,400 gpd.

The wastewater flow attributed to the commercial and light industrial users can be calculated by subtracting the permanent/residential wastewater projections from the total system ERU projections above. At the 20 year growth condition, light industrial and commercial users are expected to generate 28,000 gpd of wastewater. At the 40 year growth condition, light industrial and commercial users are expected to generate 61,600 gpd.

The WBWSD will reach their capacity at the City of Newport wastewater treatment plant when they add a total of 505 ERUs at 200 gpd to the system. This will bring the total flow generated by the WBWSD to roughly 150,000 gpd. When the wastewater treatment plant reaches approximately 85% of its capacity, or 425,000 gpd, the City of Newport and the WBWSD will be required to prepare and implement a plan for expansion. The Table below presents an overview of the City of Newport/WBWSD WWTP capacity.

Table 3.5 – Wastewater Treatment Plant Capacity Overview

Parameter	City of Newport	WBWSD	Total
Capacity Owned %	70%	30%	100%
Capacity Owned, GPD	350,000	150,000	500,000
Current Flow, GPD	209,000	49,000	258,000
Reserve Capacity	141,000	101,000	242,000
Current Flows, % of Owned Capacity	60%	33%	52%
85% Prompt Facility Plan For Expansion	297,500	127,500	425,000
Reserve ERU to 85% (170 gpd/ERU)	521	462	983
Reserve ERU to 100% (170 gpd/ERU)	829	594	1,423
Reserve ERU to 85% (200 gpd/ERU)	443	393	836
Reserve ERU to 100% (200 gpd/ERU)	705	505	1,210

Table 3.5, shows that the existing WWTP has enough reserve capacity to treat the existing flows and the proposed flows from the proposed sewer extension projects 20 year growth condition of 171 ERUs. However, the City of Newport will likely have to expand in order to treat and dispose of the future flows from the growth within the City of Newport before the WBWSD realizes its maximum capacity.

3.6 (a) Operations and Maintenance Changes

Generally the WBWSD's gravity sewer collection system is fairly maintenance free. Typical duties for the system operators include inspecting the sewer mains for leaks or blockages, inspecting manholes for damage, and connecting residential services to the sewer mains. Currently, the operators are not required to keep records of the routine maintenance performed on the sewer collection system.

3.6 (b) Existing Collection System Capacity

The gravity sewer lines from the proposed interconnection at the manhole located at the intersection of Montana Street and Second Street downstream to the diversion manhole located upstream of the WWTP have been analyzed to determine if the pipe's size and slope are adequate to accommodate both the existing flows and the flows from the project. The number of existing and buildout ERUs were determined using a plat map and aerial photographs of the City of Oldtown. The existing and future peak flows were calculated from the existing ERU assuming a peaking factor of 4 and 200 gpd/ERU, which is the recommended peaking factor for a system of this size. The City of Newport has 87 obligated lots within its service area. It was assumed that all 87 lots had been developed for the 20 year projection and the buildout calculations. None of the pipes between the manhole at Montana and Second Street and the diversion manhole located near the WWTP will require upgrading to accommodate the flows from the existing WBWSD ERUs for the 20 year projection. However, the majority of the pipes between the manhole located at the intersection of Montana Street and Second Street and the diversion manhole near the WWTP will require upgrading to accommodate the buildout flows from the existing WBWSD and the buildout within the Albeni area.

3.7 Environmental Features Affected by the Proposed Project

3.7 (A) Physical Aspects

In 1984 the Idaho Transportation Department (ITD) conducted a geotechnical investigation of the Pend Oreille River bed as part of construction for the new U.S. Highway 2 Bridge over the Pend Oreille River. A total of 6 tests were performed where the existing Highway 2 Bridge crosses the River. Test hole 1 is located on top of the west bank of the river, test holes 2-5 are located in the river channel, and test hole 6 is located on top of the east bank. The test results indicate that the subsurface soils range from silt to gravelly silty sand with no rock encountered to an approximate elevation of 1930'. In 2010, Budinger and Associates was retained to perform a geotechnical evaluation of the river bed. This geotechnical investigation indicated silt, sand, and gravel materials suitable for directional drilling and is included in Appendix D-4. The geotechnical analysis also indicated the northeasterly corner of the project planning area, north of U.S. Highway 2, is Qfg – Quaternary flood deposits. This type of deposit is described as poorly to moderately well-sorted stratified deposits of boulders, cobbles, pebbles and sand and did not indicate the presence of nearby faults. The geotechnical analysis of the bore sites indicated that each site was acceptable for project construction. There is no reason to suspect that the soils encountered elsewhere in the project will contain materials that will hinder construction of buried utilities.

North of the Highway 2, as indicated in Figure 2, a forested steeper terrain area is located at the northeast corner of the PPPA/APE. This area will be the steepest area within the project construction area, with roughly 2 to 1 slopes or less, although no construction related to this project is scheduled in this area. The majority of the project site is fairly level with slopes typically less than 5%. With such large flat areas, surface water has ponded in the various wetlands in the Albeni area. It is not unreasonable to expect that a high water table will cause groundwater intrusion into open trenches. Construction of buried utilities will be delayed until the drier months of the year to minimize the effects on high water tables.

According the Natural Resources Conservation Service (NRCS), there are hydric soils in the project area. In light of this, the proposed sewer mains have been laid out to adequately avoid these areas, per comments from the NRCS in Appendix E-2. A soil survey showing anticipated hydric soil areas as well as a web soil survey is attached in Appendix D-5. Based on the NRCS soil surveys and geotechnical surveys, we do not anticipate any adverse effects on construction of the project from a soils standpoint.

3.7 (B) Climate

The Western Regional Climate Center data is included in Appendix D-6 and lists the following climate information for the area, from the Newport Station:

- Average Maximum Temperature: 85.2 °F (July)
- Average Minimum Temperature: 17.9 °F (Jan)
- Average Annual Total Precipitation: 25.96 inches
- Average Total Snowfall: 58.1 inches

The prevailing wind direction is generally from the south or southwest.

A copy of the DEQ North Idaho Air Quality Summary, dated March 2012 is included in Appendix D-6. The summary indicates that the Sandpoint area, which is the closest city listed for Bonner County, has experienced a "Green" Air Quality Index Rating 100 percent of the year from January to March of 2012. "Green" is the highest rating for the Air Quality Index. Given the Air Quality Index readings for the Sandpoint area, the project area is considered to have good air quality.

The only anticipated emissions due to the project will be temporary exhaust emissions from construction equipment and small releases of fugitive dust due to construction activities. Dust abatement requirements are included in the project plans and specifications. Vegetation and debris from clearing operations will be hauled off-site for disposal. Due to the small size of the anticipated emissions, the project is not expected to impact regional air quality. The project will not add a permanent emissions source to the area.

3.7 (C) Population

As shown in Table 3.2, above, the population growth realized by the nearby towns and cities has been less than 2%. Extension of the sewer collection system to the Albeni area will address a growing public health hazard, and other issues associated with on-site sewage disposal. With the installation of public water and sewer systems, we are obligated to plan for future growth within the Albeni area. Planning for future growth within the Albeni area will include the assumption of a growth rate of 4%, which is in excess of the historical average. A higher growth rate is selected to accommodate the development opportunities realized by the availability of a community sewer collection system.

As indicated in Table 3.3, the sewer collection system was designed to accommodate 912 ERUs which accounts for commercial and light industrial system users in addition to permanent residential users. Considering the population projections for permanent/residential users only, the current 14 permanent/residential ERUs in the Albeni area (at a 4% growth rate) is projected to equate to 31 ERUs at the 20 year growth condition and 67 ERUs at the 40 year growth condition. Using 2.37 persons per household from the 2010 U.S. Census data for Bonner County, the projected permanent residential system demand equates to a population of 73 at 20 year growth condition and159 at the 40 year growth condition. At the projected full system buildout of 515 permanent residential ERUs, the projected population of the Albeni area is 1,221.

While a 4% growth rate for the Albeni area was used for the sewer system design, the growth rate for the City of Newport and the City of Oldtown/WBWSD is expected to be 2% or less, as indicated in the Census data, above. Population data indicates that the West Bonner Water & Sewer District had 286 sewer system ERUs, while the City of Newport had a population of 1,259 ERUs/2,126 individuals in 2008. A population growth rate of 2% for the City of Oldtown and the 2.37 persons per household in Bonner County would suggest a District population of 848 and 1,260 at 20 and 40 years from present. A population growth rate of 2% for the City of Newport and the 2.35 persons per household in Pend Oreille County would suggest a population of 4,665 and 6,933 at 20 and 40 years from present.

According the 2010 Census the actual population growth of Bonner County was 11 percent, from 36,835 in 2000 to 40,877 in 2010, which equates an approximate annual growth rate of 1%. This growth rate is less than the projected rate used above to calculate population growth. Thus, the assumed 4% population growth for the Albeni area is conservative. The proposed sewer lines provide adequate deliverable capacity to meet the estimated demands for the Albeni area for the 40 year and full buildout growth conditions.

3.7 (D) Economics and Social Profile

According to the U.S. Census Bureau, the estimated median household income in 2010 for Bonner County was $41,943 while the City of Oldtown median household income was $30,417 in 2010. Due to the similarity in the socioeconomic profile of the City of Oldtown area, the Oldtown median income is expected to be similar to the median income of the Albeni area. Additionally, the majority of the proposed sewer mainlines will be constructed in or adjacent to existing roadways and easements, and the proposed sewer lift station pump control building will be constructed on land owned by the City. Thus, the proposed project will not result in relocation or destruction of any existing housing regardless of income or ownership.

The proposed project will indirectly facilitate light industrial and commercial business establishment and the construction of new homes within multiple income brackets. The proposed sewer collection system is expected to benefit private property owners which currently have individual septic systems. The proposed project may also benefit private land owners wish to develop their property. Since the proposed project is expected to provide positive economic effects in the Albeni area while not requiring relocation or destruction of any existing residents or business, the proposed project is anticipated to provide an overall improvement of the socio-economic status in the Albeni area.

As indicated in Table A.3 in the Abstract Section of this document, the existing Oldtown sewer system operations and maintenance (O&M) user charge is $27 per month and the debt service charge is $0 per month. The proposed project is expected to necessitate the user rates be raised to fund the increased costs associated with sewer system operation and maintenance. The estimated increase in user rates is $9 per equivalent residential unit such that user charge for each equivalent residential unit is $36 per month. The Budget Estimate attached in Appendix A-3 details the estimated O&M budget based on historical budgets provided by the West Bonner Water and Sewer District, including overage charges for sewer usage. The users are not expected to pay a debt service charge due to the project.

Project construction financing will come from a $1,315,000 loan through the Clean Water State Revolving Fund loan program promulgated by the Idaho Department of Environmental Quality (DEQ) and a $284,000 grant from the U.S. Army Corps of Engineers to pay for the Phase 1 sewer collection system construction. The West Bonner Water & Sewer District has a Reimbursement Agreement currently in place with the Oldtown Urban Renewal Agency that provides for all tax increment revenues to the Agency, other than those required for Agency administrative purposes, to be distributed (reimbursed) to the District to be used for making the

required payments on the DEQ Clean Water State Revolving Loan. A copy of this Agreement is included as Appendix A-1.

Additionally, the District has a Revenue Bond Payment Guaranty Agreement with the West Bonner Investment Company, LLC that guarantees to fund that portion of the District debt service obligation for the DEQ CWSRL repayment that is not covered by the Agency tax increment reimbursement. A copy of the Revenue Bond Payment Guaranty Agreement is included as Appendix A-2.

The West Bonner Water and Sewer District has also obtained a $284,000.00 Construction Grant from the U.S. Army Corps of Engineers for Phase 1 sewer collection system construction. Any remaining funding for Phase 1 sewer system project construction will be provided by the Oldtown Urban Renewal Agency.

The combination of the preceding DEQ SRL repayment funding mechanisms guarantees the loan repayment, while minimizing the financial impact on existing District sewer customers. According to the US Census in 2010, the residents of the City of Oldtown and West Bonner Water & Sewer District have a median annual household income of $30,417 which is well below the average median annual household income for any county in the State of Idaho. As a result, the WBWSD intends to create minimal financial impact to the current District customers as a result of this project.

3.7 (E) Land Use

The PPPA and APE north of the Pend Oreille River is currently part of the incorporated City of Oldtown and includes light commercial areas in the Albeni area, residential areas, and rural areas, as shown on the City of Oldtown Zoning Map in Appendix D-1 and on the Bonner County Zoning Map and Bonner County Projected Land Use Map in Appendix D-2. The majority of the project area contains privately owned and previously developed areas, such as the Tri-Pro Cedar Mill property. The Tri-Pro Mill site is currently in use and has been in use for over 100 years. The Tri-Pro Mill has reduced in size over the past several decades; however the Mill has historically utilized all the property extending north from the banks of the Pend Oreille River to the U.S. Highway 2 ROW and extending west from the east existing City of Oldtown city limit line to the U.S. Highway 2 Bridge. As a result, the majority of the Albeni area has been utilized for various purposes associated with that industry for nearly a century.

The City, upon annexing the Albeni area, has primarily zoned the project area single family residential, multi-family residential, light commercial, light industrial and public recreational areas. The proposed project is expected to facilitate land use as indicated in the attached zoning maps and is not expected to be incompatible in any of the established area zoning. The proposed project will provide the existing residences and businesses in the Albeni area access to a safe, environmentally responsible sewage collection and treatment. Since the area in which the proposed project is to be constructed is already within the incorporated area of the City of Oldtown, historically used as a mill and lumber yard, there will not be any adverse effects on existing forest land or rangeland.

The majority of the Albeni area is rated as "prime farmland if drained" by the NRCS. However, there is no area currently classified as important forestland, or important rangeland (See Appendix D-7). The project is not expected to impact land classifications south and west of the Pend Oreille River per comments from Greg Becker of the NRCS (See Appendix E-2). The public recreational land near the proposed project location is located southerly of, and adjacent to, the U.S. Highway 2 right-of-way (ROW) and adjacent to the Pend Oreille River. This area includes a boat launch and parking area. This area is classified by the Idaho State Fish and Wildlife Service as public land, and is the only formally public classified land in proximity of the project construction area. This public land will not be affected by the proposed project construction.

Areas to the southerly and westerly of the Pend Oreille River have various types of prime farmland where slopes are 0 to 10 percent. However, the project is not expected to impact lands in these areas as project construction will remain within established roads and ROWs.

3.7 (F) Floodplains

Floodplain Location/Description

Portions of the project area south of U.S. Highway 2 are positioned within a Special Flood Hazard Area. These Special Flood Hazard Areas are indicated on the attached FEMA Flood Insurance Map of the project area (See Appendix D-1). The majority of the Special Flood Area is located southerly of the east end of the U.S. Highway 2 Bridge over the Pend Oreille River. This area is currently developed with light commercial and residential structures. These areas have a 1% chance of a 100 year flood event. Northerly of U.S. Highway 2 there are no areas indicated as Special Flood Areas within the project area. The 100 year flood elevation or base flood elevation (BFE) in the project area is 2056.5 feet above sea level. Refer to the map attached as Appendix D-1 that shows areas at or below 100 year flood elevation within the project area. In contrast, the River surface elevation normally varies from 2036 to 2038 at high water level.

Project Impacts to Floodplains

There are developed portions of the Albeni area, which are located southerly of the U.S. Highway 2 ROW and northerly of the Pend Oreille River, that are below the 100 year flood elevation. The proposed project could secondarily facilitate development in the Albeni area, which could include those areas lying within the floodplain; however, the existing City Floodplain Ordinance will restrict development within the floodplain to avoid or minimize the environmental impacts to future development from a 100 year flood event. The City of Oldtown Floodplain Ordinance is included in Appendix D-8.

The proposed project will include the installation of the sewer lift station, lift station pump control building, and several sewer manholes in areas below the BFE. These manholes are located within the 25' wide utility easement adjacent to the south portion of Diamond Mill Loop Road and within the existing Diamond Mill Loop Road. Portions of the Diamond Mill Loop Road currently have road surface elevations below the BFE. These portions of the road, which are below the BFE, will be elevated such that the road surface will be at or above the BFE as part of the proposed community water system construction project in the area. This will allow for the

sewer manholes, which are proposed to be constructed within portions of the roadway, to have rim elevations at or above the BFE. The sewer extension project will also require that fill be placed adjacent to the proposed pump control building for the purpose of leveling the site. The proposed manholes located within the proposed utility easement southerly of the Diamond Mill Loop Road will have additional fill placed around each of the proposed sewer manholes as the concrete manholes will extend approximately 2'-4' above the existing ground surface. No additional above ground development will take place as part of the proposed project.

Mitigation Measures
Local jurisdictions typically allow development within the floodplain of the Pend Oreille River with certain restrictions, in part, because of the recreational nature of the Pend Oreille River. The restrictions are intended to eliminate or minimize the potential damage to development within the floodplain, and to eliminate or minimize the amount of fill that can be placed within the floodplain as part of development within the floodplain, which can potentially affect the Base Flood Elevation. The elevation of the majority of the project area that is below the BFE is within approximately 2' of the BFE, which is 2056.5 feet above sea level. Any future structures that may be constructed within these areas will be required by the City to have a finished floor elevation above the BFE, and construction below the BFE will be required to be flood-proofed. Areas significantly below the 100 year flood elevation are located on or near the river banks where no construction or development are expected to occur. Impacts from a 100 year flood event are further reduced when contrasting the proposed project with the City adopted zoning map. Several areas below the BFE and adjacent to the existing Albeni Falls Mill Addition have been zoned as public recreational, reducing the secondary anticipated impacts from project development and implementation (See Albeni Area Zoning Map in Appendix D-1). Any new construction that may occur within the floodplain will require all necessary permitting, including a No-Rise Elevation Certification and a Floodplain Development Permit, in accordance with comments from the Idaho Department of Water Resources (IDWR). **The District has obtained a Floodplain Development Permit from the City of Oldtown for construction of this project (See Appendix D-17).**

The proposed project will include installation of several sewer manholes, a sewer lift station and lift station pump control building located in areas below the 100 year flood elevation. The proposed sewer lift station will have a rim elevation 8" above the 100 year flood elevation and the lift station control building will have a finished floor elevation 8" above the 100 year flood elevation. The proposed sewer manholes located in areas below the 100 year flood elevation will each have a rim elevation of 2056.5 feet above sea level, equal to the 100 year flood elevation. Several of these manholes are located within the 25' wide utility easement adjacent to the south portion of Diamond Mill Loop Road. In order to install these manholes with rim elevations at the BFE, the manholes will extend a maximum of 4' above the existing grade. These mitigation measures will ensure the proposed sewer system will remain functional during a 100 year flooding event in the Albeni area. A No-Rise Elevation Certification will not be required as fill placed at the proposed lift station and sewer manholes will be offset by excavations in portions of the Tri-Pro Mill property.

The project area is located downstream of the Albeni Falls dam, and as a result, flooding in this

section of the River has traditionally been slow-progressing in nature. The slow flooding nature of the River will allow evacuation time for residents within the floodplain, and due to the proximity of Highway 2, those residents will have a readily accessible evacuation route in a 100 year flood scenario.

The City of Oldtown is participating in the National Flood Insurance Program, as shown in Appendix D-9, and has adopted a floodplain ordinance, as shown in Appendix D-8, that regulates development within the floodplain, which will minimize the potential for future adverse impact from floods.

By constructing project facilities and manholes at or above the BFE, offsetting fill volumes with excavations in other areas, and obtaining a Floodplain Development Permit from the City of Oldtown, any impacts to areas below the BFE as a result of the construction of the proposed sewer collection system improvements are expected to be minor.

3.7 (G) Wetlands

North of U.S. Highway 2

North of U.S. Highway 2 there are identified wetlands located several hundred feet northerly of the proposed 10" and 8" sewer main lines. These wetlands will not be impacted by the proposed sewer extension project. The wetland area locations shown on the wetland comparison drawing attached in Appendix D-1. The wetlands north of U.S. Highway 2 were established through the a wetlands delineation study completed in August, 2010 for the West Bonner Water and Sewer District by James A. Sewell & Associates, LLC (See Appendix D-10). The wetlands delineation concluded that there are palustrine emergent persistent seasonally flooded wetlands in the areas northerly of U.S Highway 2. The proposed sewer extension project will also utilize erosion mitigation measures for the sewer main construction near the wetland areas pursuant to the requirements of IDEQ Stormwater Best Management Practices.

Wetlands located north of the U.S. Highway 2 ROW have been identified as jurisdictional wetlands. As a result, future development within and adjacent to these wetlands, which occurs as a secondary impact of the proposed project, will be regulated by the USACE and the USEPA. Currently, the wetlands are located within privately owned property being used as range land. If future development within this private property occurs, developers will be required to comply with Federal wetland development standards and regulations.

South of U.S. Highway 2

In areas located between the U.S. Highway 2 ROW and the Pend Oreille River there are several sites that are classified as wetlands. The wetland area locations within the Tri-Pro property are the result of a wetlands delineation study completed in July 2008 for Tri-Pro Cedar Products property by Environmental Inc., which is also attached in Appendix D-10. This wetlands delineation concluded that there are small areas of emergent freshwater wetlands and freshwater ponds which are currently located within areas zoned as Commercial and Multi-Family Residential by the City of Oldtown. The property containing these wetlands is currently privately owned. The wetland locations identified by these two delineation studies can be seen in the wetland comparison drawing (Appendix D-1). A jurisdictional determination of the existing

wetlands in the project area south of Highway 2 has not been completed due to the fact that the Army Corps of Engineers has reviewed the proposed sewer system extension project design drawings and has determined that the proposed project will not impact the existing wetlands. The Corps conclusions regarding the proposed sewer extension project impact on wetlands have been documented in an email dated March 14, 2013, attached in Appendix E-2.

A single identified wetland area, located to the immediate north and adjacent to the Diamond Mill Loop Road will have a sewer main line trench pass 13' southeasterly of the south edge of the wetland area. The proposed sewer line in this area will be constructed along the centerline of the existing road in order to ensure no impacts on the adjacent wetland, and ensure that the wetland is not drained as a result of project construction. The proposed sewer extension project will also utilize erosion mitigation measures for the sewer main construction near the wetland areas pursuant to the requirements of IDEQ Stormwater Best Management Practices. During project construction silt fencing will be places at the toe of the road embankment to ensure no the wetlands will not be impacted by stormwater run-off from the disturbed areas. Additionally, the road shoulder will be hydroseeded in order to provide a vegetated buffer zone which will further protect the wetland from future stormwater run-off events. With the implementation of DEQ BMP's coupled with the installation of the sewer distribution line installation within the existing roadway, the proposed sewer line installation is not expected to impact the existing wetlands.

The proposed sewer system extension project is expected to directly improve wetland water quality by eliminating existing individual drainfields located within the Albeni area. Negative impacts to Albeni area wetlands attributed to future development will be mitigated through developer adherence to established and future Federal and State requirements for wetland development requirements for jurisdictional wetlands and City ordinances and State regulations for non-jurisdictional wetlands development.

South and West of the Pend Oreille River
No wetland areas to the south and west of the Pend Oreille River have been identified within the PPPA/APE. Additionally, no impacts to any wetland areas that may exist within the City of Newport or Oldtown are anticipated. And no construction is expected to take place within the City of Newport and only that area within the City of Oldtown as shown in Appendix C-5.

Agency Comments on Wetland Impacts
The ACOE was contacted in regard to the West Bonner water and sewer extension project. The ACOE terms and conditions of the NWP 12 and 14 permits for the proposed project are as follows:

a) The wetland boundaries shall be clearly marked with flagging or fencing prior to construction. No fill material shall be placed in the wetlands except the wetland fill is specifically authorized and shown on the design drawings.
b) Do not discharge temporary fills or stockpile dredged or fill material in wetlands. Excess dredged or fill material must be spoiled in upland areas where it cannot reenter waters of the United States, including wetlands.

c) Permittee is responsible for all work done by any contractor. Permittee shall ensure any contractor who performs the work is informed of and follows all the terms and conditions of the authorization documents. Permittee shall also ensure these terms and conditions are incorporated into engineering plans and contract specifications.
d) The permittee understands and agrees that, if future operations by the U.S. Army Corps of Engineers require the removal, relocation, or other alteration, of the structure or work authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the ACOE, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the U.S. No claim shall be made against the U.S. on account of any such removal or alteration.

Also the ACOE indicated that the boring under the Pend Oreille River must comply with the conditions detailed in the Section 401 Water Quality Certification issued by DEQ. The 401 WQC documentation is attached in Appendix D-11 and all conditions there of will be followed during sewer system construction. The NWP 12 and 14 and Section 10 of the Clean Water Act approval for the sewer system project allows for the construction of the proposed boring at the Pend Oreille River. As shown in the attached comments the Army Corps of Engineers, Walla Walla District, has approved the Section 10 Rivers and Harbors Act permit for the proposed sewer boring at the Pend Oreille River. According to the ACOE definition, work on the project commenced with the wetland delineation conducted at the wetland crossing at the proposed water tank access road. Since "work under contract" has begun on the project, the Corps has indicated that the Nationwide Permits are valid until June of 2014, as shown in email correspondence with Mary Reinhart at the ACOE Walla Walla District attached in Appendix E-2.

3.7 (H) Wild and Scenic Rivers

The PPPA/APE does not contain a wild and scenic river, and the Pend Oreille River is not in the Wild and Scenic River System. The proposed sewer collection system is located approximately 103 miles northwesterly of the St. Joe River which is the closest Wild and Scenic River System.

3.7 (I) Cultural Resources

We have attached a list of all historical sites within the State of Idaho as indicated by the State Historical Preservation Organization (See Appendix D-12). As evidenced by this list, there are no historical structures listed by the National Register of Historic Places in the project area. We have also contacted the Kalispel Tribe of Indians (KTOI) to ascertain the location of any sites of tribal significance within the project area. As evidenced by the attached correspondence with the KTOI, there are two areas of historical significance within the project area (See Appendix E-2). Because the KTOI determined one of the historically significant sites to be a Tradition Cultural Property (TCP), an archaeological study and report was deemed necessary to ensure all historically significant structures and sites were protected. James A. Sewell and Associates, LLC contracted for an archaeological study to be conducted by Northwest Archaeological Associates, Inc. (See Appendix D-12). Northwest Archaeological Associates (NWAA) found that (4) cultural resources are within or partially within the project area. All of the indicated cultural

resource sites are located within the Tri-Pro Mill property, south of U.S. Highway 2, outside of the proposed construction area. The archeologists found that the proposed project will not negatively affect any of the cultural resources identified. One of these culturally significant sites was identified as a TCP by the KTOI, and has not been formally documented at the request of Mr. Kevin Lyons, KTOI Cultural Resources Program Manager. However, as indicated in the attached correspondence from the KTOI, the proposed project is not expected to impact the TCP.

We have submitted the archaeological study to, and received correspondence from, the Idaho State Historical Society. They have reviewed and accepted the archaeological study (see attached correspondence in Appendix E-2).

The attached archaeological study found that historically significant sites within the Albeni area have been compromised as a result of the previous development activity in the area, largely attributed to Mill activities. In certain cases, such as the historic railroad grade within the Tri-Pro Mill property, some original railroad rails crafted nearly one hundred years ago remain. However, the archaeologists concluded these areas have been previously compromised such that the proposed project would not directly affect their present state. Since the archaeological study found that the proposed project is not going to affect any of the historical assets within the project area, negative impacts are not anticipated. The location of the TCP, indicated by the KTOI as a culturally sensitive site, was not released to the public. However, the KTOI has indicated that the project will not negatively impact this site. Thus, no mitigation is warranted or proposed for previously discovered sites. In the event of an inadvertent discovery of a potential historically/culturally important site or remains, construction work will be stopped pending notification and investigation of the Kalispel Tribe of Indians and the Idaho State Historical Preservation Society.

3.7 (J) Biological Resources

There are a variety of species of terrestrial vegetation, fish and wildlife present within the project area that may be temporarily impacted by the construction process. Permanent impacts to local flora and fauna will be limited to the specific footprints of the proposed structures. Vegetation, fisheries and wildlife, and threatened and endangered species will be addressed individually in this section.

<u>Vegetation</u>

The project area has a multitude of varieties of small habitats including small forested areas, freshwater wetland areas, and grassy fields. North of U.S. Highway 2, small areas of grassy, undulating rangeland will be temporarily cleared of grasses for sewer main construction. Trenching along the north ROW of U.S. Highway 2 will temporarily affect approximately 1.52 acres of grassy vegetation within the private pasture land.

South of U.S. Highway 2 and north of the Pend Oreille River, the existing land is sporadically covered with pockets of forest, emergent freshwater wetland, and grassy vacant properties. The majority of the proposed sewer line trenching will be located within or adjacent to existing roads and within existing road ROWs and proposed utility easements. Permanent impacts to vegetation south of U.S. Highway 2 will largely be confined to the footprint of the proposed lift station

pump control building. The project is not expected to impact vegetation south and west of the Pend Oreille River.

South of U.S. Highway 2 and north of the Pend Oreille River, the proposed lift station pump control building and sewer main installation will require approximately 0.31 acres of brushy sporadic vegetation located along the southerly edge of Diamond Mill Loop Road to be permanently removed. Minor impacts on grasses will occur throughout the proposed project area during construction activities. All disturbed areas located outside of or adjacent to existing roads would be hydro-seeded with an appropriate native seed mixture conducive to rapid growth and easy maintenance to prevent erosion. Tree removal to facilitate project construction will be limited to building footprints and areas where sewer main construction is located outside existing roadways. The run-off and stormwater control measures outlined above will be utilized during construction to mitigate any impacts to the surrounding areas. Because the majority of the proposed sewer main is located adjacent to existing road ROW's already cleared of trees, trees removed as a result of the project construction are not expected to be significant and will not be replanted as the existing suburban environment currently has sparse existing tree cover. The overall impacts to vegetation from the sewer main trenching, and the construction of the proposed lift station and lift station control building, would not be considered significant.

The proposed project is expected to secondarily facilitate development in the Albeni area. Considering the potential 20 year and 40 year growth conditions of Phase 1 of the project, future development has the potential to have adverse effects on area vegetation. While the proposed project will improve surface water quality, future development has the potential to result in the permanent clearing of currently undeveloped vegetated areas in the westerly portions of the Albeni area. These effects will be mitigated by current and future City, State, and Federal building and development regulations. Impacts to vegetation will also be mitigated by Federal and State wetland setback and buffer zone requirements for wetlands and stormwater run-off control measures. Effects will also be reduced due to the fact that existing vegetation includes sparse tree coverage and primarily native grasses within no prime rangeland or forest lands.

Vegetation in the PPPA located to the south and west of the Pend Oreille River will not be impacted by the proposed project.

Fisheries and Wildlife

Native fauna species that may be impacted during the construction process include whitetail deer (*Odocoileus virginianus*), deer mouse (*Peromyscus maniculatus*), red squirrel (*Tamiasciurus hudsonicus*), Canada goose (*Branta Canadensis*), killdeer (*Charadrius vociferous*), mallard (*Anas platyrhynchos*), and osprey (*Pandion haliaetus*). There are numerous species of fish in the Pend Oreille River including northern pike (*Esox lucius*), largemouth bass (*Micropterus salmoides*), and bull trout (*Salvelinus confluentus)*. The majority of impacts to local fish and wildlife as a direct result of the project will be limited to the effects of increased construction traffic as a result of the construction process.

Increased construction equipment, vehicle and pedestrian traffic may have temporary effects on nesting populations of killdeer and Canadian geese. The proposed 12" boring for the sewer

transmission main crossing at the Pend Oreille River is not expected to have an adverse impact on fisheries populations, since there will be no construction directly within the River. The proposed sewer line boring will occur approximately 20' below the riverbed to ensure that no disturbance or vibration occurs within the riverbed while allowing the proposed sewer line to be embedded in the native soil. As the majority of the project area is within the City of Oldtown and within close proximity to U.S. Highway 2, the construction of the project is not expected to adversely affect any of the resident wildlife, and will only marginally increase the existing impacts on resident wildlife from human activity. Minor impacts on wildlife are expected as a result of the proposed permanent structures since the majority of the proposed structures are located south of U.S. Highway 2 and in a previously developed mill site area. Long term impacts on wildlife habitat will be limited to construction of permanent, above-ground structures such as the proposed sewer lift station control building. Permanent impacts to wildlife habitat as a result of the project are not expected to be significant as the proposed project structures are relatively small and isolated in a single area, adjacent to the existing boat launch. Trees removed to facilitate installation of these permanent structures will not be replanted as the existing suburban environment is sparsely tree covered. Upon completion of the proposed sewer line trenching and proposed lift station and lift station control building, there are not expected to be further impacts on resident wildlife directly related to the proposed project.

The proposed project is expected to secondarily facilitate development in the Albeni area. When considering the potential 20 year and 40 year growth conditions of Phase 1 of the project, future development has the potential to have adverse impacts to local fauna. These effects will be mitigated by current and future City, State, and Federal building and development regulations, and the fact that existing development has already impacted the existing of fauna in the Albeni area.

Fauna within the PPPA located to the south and west of the Pend Oreille River will not be impacted by the proposed project.

Threatened and Endangered Species

There are currently 22 endangered or threatened plant and animal species in the State of Idaho. The U.S. Fish and Wildlife Service has identified several threatened and endangered animal species within Bonner County, including: Canadian lynx (*Lynx Canadanesis*), grizzly bear (*Ursus arctos horribilis*), Selkirk mountain caribou, (*Rangifer tarandus caribou*), Wolverine (*Gulo gulo*), and bull trout (*salvelinus confuentus*). See Appendix D-13 for further information on threatened and endangered species. Based on information provided by the U.S. Fish and Wildlife Service and the Idaho State Fish and Game, and given that the project area is within the City of Oldtown, we do not anticipate the presence of any endangered species within the project boundaries. However, the U.S. Fish and Wildlife Service identifies the section of the Pend Oreille River at the project area as an area that is inhabited by threatened bull trout (*salvelinus confuentus*), and is a designated critical habitat for this species.

Any possible negative impacts on threatened and endangered species and critical habitat will be limited to the construction phase of the project. Bull trout is the single threatened species identified as inhabiting the project area. We do not anticipate any impacts on other identified

endangered and threatened species as a result of project construction. Additionally, disturbance to bull trout is not expected to be significant at any time during the project. The proposed 12" diameter boring for the sewer transmission main crossing of the Pend Oreille River will be located a minimum of 20' below the riverbed to ensure no disturbance or vibration occurs at the riverbed while allowing the proposed sewer line to be embedded within native soil. Silt fencing will be installed below the bore locations to ensure bore tailings are not deposited in the Pend Oreille River. Additionally, care will be taken to avoid any shoreline damage, although no damage is anticipated as a result of the project. The overall impacts to fish species, including the bull trout, and critical habitat during the construction phase of the project will not exceed the present level of impacts resulting from current human activities. With the exception of the proposed river crossing, there will be no construction activities that will take place near any tributaries to, or adjacent to the Pend Oreille River. Thus, the impacts from the proposed project on existing bull trout or other fisheries populations within the Pend Oreille River will have no effect. Furthermore, comment for the project was obtained by Mary Reinhard at the ACOE Walla Walla District in regard to the Section 10 Rivers and Harbors Act permit for the sewer line boring at the Pend Oreille River. Mrs. Reinhard contacted Bryon Holt at the USFWS with regard to possible disturbance to bull trout critical habitat. The correspondence is documented in Appendix E-2 of this report. The USFWS found no significant impact as a result of the project, and declined to require a Biological Assessment be completed for the project. Threatened and endangered species that may be located within the PPPA located to the south and west of the Pend Oreille River will not be impacted by the proposed project.

The proposed project is expected to secondarily facilitate development in the Albeni area. When considering the potential 20 year and 40 year growth conditions of Phase 1 of the project, future development has the potential to have minor negative impacts on the Pend Oreille River in the form of private dock and boat house construction. However, these effects are expected to be mitigated by current and future State, and Federal regulations.

The Idaho Department of Environmental Quality has identified (3) threatened, (1) endangered and (2) candidate species that determined to existing in Bonner County. These species include the Bull Trout, Lynx, Grizzly Bear, Woodland Caribou, North American Wolverine and Whitebark Pine tree. Comments from Ester Ceja at the Idaho Department of Environmental Quality, attached in Appendix E-2, indicate that the proposed project will have "No Effect" on any threatened, endangered, or candidate species list in Bonner County.

The proposed West Bonner Sewer Extension Project will not impact areas classified as Chinook Salmon Essential Fish Habitat. See the Chinook Salmon Essential Fish Habitat Map in Appendix D-13 for the project location in contrast to designated Chinook Salmon EFH areas.

3.7 (K) Recreational and Open Spaces

As shown in City of Oldtown Zoning Map attached in Appendix D-1, areas enclosed by Diamond Mill Loop Road have been zoned as recreational areas. The proposed sewer line will not cross the currently undeveloped park area. The proposed project will not impact recreation and open space areas located north of U.S. Highway 2 and areas located south and west of the Pend Oreille River.

Development of the park area is not a part of the proposed sewer extension project due to financial limitations.

3.7 (L) Agricultural Lands

Much of the project construction area north of the Pend Oreille River is classified as "prime farmland if drained" by the NRCS, however the project is not expected to impact land classifications northerly of the Pend Oreille River per comments from Greg Becker of the NRCS (See Appendix E-2). Proposed project planning areas to the south and west of the Pend Oreille River, including the city limits of Oldtown and Newport, have various types of soil classified as "prime farmland if drained" where slopes are 0 to 10 percent. However, project construction will remain within existing roadways and ROWs within the City of Oldtown. Thus, no mitigation action is needed to protect important farmland, important forestland, or important rangeland.

3.7 (M) Air Quality

The Environmental Protection Agency (EPA) has outlined six criteria pollutants which include: ozone, lead, particulate matter, carbon monoxide, nitrogen dioxide, and sulfur dioxide. Individual counties are monitored for each of these ambient air pollutants and when a county is found to be free of a specific pollutant, it is referred to as "attainment" for that pollutant. Based on information provided by the EPA for Bonner County, Kootenai County and the City of Spokane, it appears that the project area is located in an attainment county for ozone, particulate matter, carbon monoxide, and nitrogen dioxide (See Appendix D-14). The EPA also indicates that Idaho has no areas of non-attainment for the air quality pollutants lead and sulfur dioxide. Of the primary pollutants listed by the EPA, large particulate matter will be the primary air pollutant discharged during the proposed project construction. Particulate Matter approximately 10 micrometers in size, or PM_{10}, includes dust, dirt, soot, smoke and liquid droplets directly emitted into the air that are by sources such as construction activity, fires and natural windblown dust. A Non-Attainment Map for the State of Idaho is attached in Appendix D-14, which indicates that the City of Sandpoint is a non-attainment area for PM_{10}. PM_{10} contributions due to the proposed project would generally be the result of equipment operation during the construction process and would generally be limited to fugitive dust. Techniques to minimize PM_{10} particles will be employed during construction activities. Mitigation measures that will be taken include wetting of the construction area and avoidance of extended periods of idling construction equipment. With these mitigation techniques, any construction related impacts to air quality are not expected to be significant.

Considering the Albeni area is located within the city limits of Oldtown and has been utilized by area residents and business for an extended period of time, the proposed project is not expected to have an adverse secondary impact on air quality.

3.7 (N) Water Quality, Quantity, and Sole Source Aquifers

Water Quality

The Natural Resources Conservation Service indicates that the groundwater depths in the project area are relatively shallow in areas immediately north of U.S. Highway 2 and in much of the Tri-Pro Mill property south of U.S. Highway 2. In certain areas south the U.S. Highway 2, the

groundwater depth ranges from approximately 0.5' to 6' below the existing ground surface in February to May (See Appendix D-15). The NRCS also indicates that an underlying groundwater table exists in the majority of the low lying project area that ranges from 31' to 46' deep.

Due to the shallow water table and the predominate existence of soils having poor moisture transmissivity within the Albeni area, many of the existing drainfields have failed. According to the Panhandle Health records, as many as 17 permits for drainfield repair or replacement have been issued for the Albeni area since 1976 (See Appendix B-1). Additionally, of the 20 permits issued in the Albeni area since 1972, 14 permits were issued for drainfield replacement. Drainfield failures typically result in surfacing effluent, which creates a high potential for contamination of nearby surface waters.

Since the Albeni area does not currently have a centralized sewer collection system, installation of a community sewer collection system, which will transport wastewater to the Newport WWTP for treatment, is expected to have a positive impact on the Albeni area groundwater by removing the influence of local drainfields on area groundwater. This conclusion is supported by comments from Mr. Hagan at IDEQ, which have been attached in Appendix E-2.

Water Quantity
The existing 78 ERUs in the Albeni area are expected to generate an average daily wastewater flow of 200 gallons per day per ERU; this equates 15,600 gpd or 0.024 cubic feet per second (cfs). The wastewater generated by the Albeni area residents will be pumped to the Newport WWTP where it will be treated and discharged into the Pend Oreille River. The WBWSD and City of Newport currently have a combined average daily discharge of 258,000 gpd, or 0.40 cfs. At full buildout, the Albeni area will have a total of 912 ERUs producing 200 gpd/ERU each, which equates to 182,400 gpd or 0.28 cfs additional discharge from the City of Newport WWTP. The Pend Oreille River has a discharge ranging from 20,000-30,000 cfs depending on the season and annual precipitation. Since the existing WWTP discharge is very small when compared to the Pend Oreille River discharge, the increase in discharge associated with the Albeni area is not expected to adversely impact the River water quality.

In addition, the Newport WWTP has as received Washington Department of Ecology's Outstanding Wastewater Treatment Plant Award every year since 1997. The Outstanding Wastewater Treatment Plant Award is presented annually to municipal WWTP facilities for compliance with NPDES permit requirements in Washington State.

Since the WWTP discharge is very small compared to the typical Pend Oreille River flow and considering the Newport WWTP exemplary record of conformance with Washington Department of Ecology and EPA effluent standards, the proposed project is not expected to have a significant impact on the Pend Oreille River water quality or quantity.

The proposed project construction will be completed per the requirements of the County stormwater ordinance and using Best Management Practices for Stormwater Runoff. The proposed project is also not expected to result in nonpoint water quality problems during its design life. Thus, nonpoint water quality issues are not expected to be significant. Additionally,

the Idaho Department of Fish and Game has indicated that BMP's for stormwater and erosion be utilized to further minimize potential impacts to surface water. Best Management Practices required by IDEQ have been incorporated into the project design drawings and specifications.

The proposed project is not expected to affect area water rights. It is expected that the groundwater quality within the project area will improve as the existing drainfield effluent will no longer influence groundwater in the Albeni area.

The USEPA indicated in their comments that the proposed project is not located within a sole source aquifer or stream flow source area (See Appendix E-2).

The IDEQ has indicated that the proposed project will not impact groundwater quality in the Albeni area as there will be no sources of contamination created as a result of the project. And the proposed project will positively impact groundwater in the Albeni area by reducing or eliminating individual property drainfields.

The WBWSD intends to utilize water metering and user overage charges to reduce wastewater generation in the Albeni area. The WBWSD is currently proposing to construct a community water system extension into the Albeni area which will implement these water conservation measures.

3.7 (O) Public Health

Noise

The proposed project is not expected to have adverse noise impacts in the Albeni area. The proposed project noise impacts will only be associated with project construction activities which will be conducted during normal business hours unless special permission is obtained from WBWSD.

Vectors

The proposed project will not create areas of stagnant water or create other environments conducive to insect or pest reproduction and repopulation. Additionally, the proposed project is not expected to negatively impact public health.

Public Health

The proposed project is expected to positively impact Albeni area surface water quality by removal of existing area drainfields in the Albeni area. The proposed project is not expected to negatively impact public health.

3.7 (P) Solid Waste/Sludge Management

Upon reaching the Newport WWTP, the wastewater is treated in the following four step process: headworks/screening facility, primary clarification, secondary treatment with disinfection as well as solids processing and dewatering. After the dewatering process, the City of Newport pays a subcontractor to dispose of the solids in a State permitted facility. The sludge disposal process occurs in a number of ways including land application or use as fertilizer.

3.7 (Q) Energy
The proposed (2) high efficiency submersible grinder pumps are expected to slightly increase power consumption within the Albeni area. However, the proposed project will provide the most efficient use of power to transport wastewater from the Albeni area at current and projected development. The proposed sewer system will be managed and maintained by the West Bonner Water and Sewer District.

3.7 (R) Reuse/Land Application or Subsurface Disposal
The City of Newport WWTP employs a subcontractor to dispose of the solid waste after the WWTP dewatering process. The proposed sewer extension project will utilize a portion of the 30% capacity of the Newport WWTP owned by WBWSD. Since the proposed project will utilize existing treatment facilities, no land application or subsurface disposal is considered part of the project scope.

3.7 (S) Regionalization
There are no existing jurisdictional disputes or controversies regarding this project. The City of Newport owns and operates the wastewater treatment plant that treats the residential wastewater from the residents of the City of Newport and the WBWSD. The WBWSD service area includes the complete area within the city limits of Oldtown, areas outside of the City Limits to the southeast and adjacent to the Pend Oreille River, and the recently annex Albeni area. The WBWSD owns 30% of the capacity of the WWTP. The City of Newport WWTP is able to treat and dispose of the wastewater from the City of Newport and the WBWSD with no violations of the NPDES permit. The agreement which guarantees the WBWSD 30% of the total capacity of the City of Newport WWTP capacity is attached in Appendix D-16.

3.8 Summary of Environmental Impacts and Mitigation Measures

Environmental Impacts
It is concluded that the installation of a centralized sewer collection system in the Albeni area would provide an environmentally responsible and reliable domestic sewer collection system to the existing residences and businesses. The proposed sewer collection system will eliminate the existing surface water contamination associated with individual drainfield areas, improving surface water quality. The proposed sewer extension project will have limited negative environmental impacts, largely associated with sewer system construction, and in fact would improve surface water quality in the area. The proposed project will require a small quantity of fill to be placed adjacent to the proposed lift station pump control building and will require permanent clearing of the existing vegetation at the proposed sewer lift station site. Sewer collection system construction will temporarily impact vegetation at the sewer main locations outside existing roadways; however, these effects are expected to be temporary in nature.

The proposed project has the potential for future adverse effects on native vegetation, flora and fauna. These effects are attributed to future development within the Albeni area. However, these effects are expected to be mitigated by existing and future City ordinances and State and Federal regulations.

Mitigation Measures
The proposed sewer collection system construction within the floodplain has required the District to obtain a Floodplain Development Permit from the City of Oldtown. The District has obtained this permit which is attached in Appendix D-17. A No-Rise Elevation Certification will not be required for this project as fill placed as part of the project will be offset in quantity by excavations within the floodplain on Tri-Pro Mill property.

The proposed project will require permanent clearing of the lift station site. The refuse created by the clearing of these areas will be removed and disposed of off-site. Stormwater run-off will be controlled by the implementation of IDEQ Stormwater Best Management Practices, which have been incorporated into the project design drawings in accordance with Idaho Fish and Game mitigation requirements. Areas excavated for sewer main installation and other project related excavations that are located outside of roadways will be hydroseeded to minimize erosion related impacts.

The propose project is not expected to directly impact existing wetland areas. Construction impacts at the existing Diamond Mill Loop Road adjacent to the existing wetland area will be mitigated through the installation of the silt fencing, and through vegetated buffer zones at the road ROW lines, and through implementation of stormwater and runoff control plan pursuant to IDEQ Best Management Practices. Secondary impacts to wetlands will be mitigated by existing and future ACOE and EPA regulations or future City ordinances, depending on the jurisdiction determination of the existing area wetlands. Secondary impacts to other Albeni area resources, such as vegetation and fauna, are expected to be mitigated through existing and future City, State and Federal development regulations.

In the event of an inadvertent discovery of a potential historically/culturally important site, remains or artifact, construction work will be stopped pending notification and investigation by the Kalispel Tribe of Indians and/or the Idaho State Historical Preservation Society.

The proposed alternative of sewer main boring beneath the Pend Oreille River is expected to eliminate all potential impacts to critical bull trout habitat and the Pend Oreille River bed as a result of the project river crossing. Additionally, waste cuttings and drilling mud from the proposed sewer line boring will be removed from the project site for disposal at an approved disposal site. The proposed sewer boring will not impact existing wetlands. Stormwater run-off and erosion control plan pursuant to DEQ BMP's will be implemented at the drill site to mitigate any potential impacts to the surrounding area and the Pend Oreille River.

Air quality is not anticipated to be significantly affected by the project and the Albeni area has no existing air quality issues. During project construction, fugitive dust emissions will be control by wetting construction areas and construction equipment will not be left running for extended periods of time.

All of the proposed mitigation measures are included within the project contract documents and design drawings in order to ensure their implementation. The project will be constructed

according to the preferred alternative project drawing in Appendix D-1. The proposed project design drawings have been approved by IDEQ and ACOE. The proposed project is expected to have an overall positive effect on the groundwater and surface water in the Albeni area.

Table 3.6, below, includes a summary of the potential environmental impacts and their associated mitigation measures for the proposed project.

Table 3.6. Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Mitigation Measures
Floodplains	Project buildings and manholes will be construction at or above the 100 year flood elevation. Fill placement at the lift station control building will be offset through excavation within the floodplain on Tri-Pro Mill property. Future construction that occurs within the floodplain will require all necessary permitting, including a No-Rise Elevation Certification and a Floodplain Development Permit, be obtained. Per IDWR comments, the District has obtained a Floodplain Development Permit from the City of Oldtown. A No-Rise Elevation Certification will not be require as part of this project since fill placement will be offset by excavations on Tri-Pro Mill property. Several areas below the BFE and adjacent to the existing Albeni Falls Mill Addition have been zoned as public recreational, reducing the secondary anticipated impacts from project development and implementation.
Wetlands	The ACOE terms and conditions of the Section 10 permit are as follows: a) The wetland boundaries shall be clearly marked with flagging or fencing prior to construction. No fill material shall be placed in the wetlands except the wetland fill is specifically authorized and shown on the design drawings. b) Do not discharge temporary fills or stockpile dredged or fill material in wetlands. Excess dredged or fill material must be spoiled in upland areas where it cannot reenter waters of the United States, including wetlands. c) Permittee is responsible for all work done by any contractor. Permittee shall ensure any contractor who performs the work is informed of and follows all the terms and conditions of the authorization documents. Permittee shall also ensure these terms and conditions are incorporated into engineering plans and contract specifications. d) The permittee understands and agrees that, if future operations by the U.S. require the removal, relocation, or other alteration, of the structure or work authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the ACOE, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the U.S. No claim shall be made against the U.S. on account of any such removal or alteration. According to the ACOE definition, work on the project commenced with the wetland delineation report conducted at the wetland area north of U.S. Highway 2. This qualifies as "work under contract" as the Corps has indicated in the Appendix E-2 correspondence. Also, the ACOE indicated that the proposed boring under the Pend Oreille River must comply with the conditions detailed in the Section 401 Water Quality Certification issued by DEQ.

	Bonner County and DEQ Stormwater BMP's have been incorporated into the design drawings to prevent impacts from stormwater runoff to wetlands and Pend Oreille River.
Cultural Resources	In the event of an inadvertent discovery of a potential historically/culturally important site or remains, construction work will be stopped pending notification and investigation of the Kalispel Tribe of Indians and the Idaho State Historical Preservation Society.
Flora and Fauna	Stormwater run-off and erosion control BMP's will be utilized during the construction process to mitigate impacts to surrounding environments per Idaho Fish and Game, IDWR and DEQ comments. The proposed 12" boring for the sewer line crossing at the Pend Oreille River will have sufficient depth to ensure no disturbance or vibration at the river channel while allowing the proposed sewer main to be embedded within native soil. Silt fencing will be installed below the bore locations to ensure bore tailings are not deposited in the Pend Oreille River. Bore tailings will be transported for disposal at an approved disposal site.
Air Quality	Wetting of the construction areas to control fugitive dust, avoidance of extended periods for idling construction equipment, and construction debris will be disposed of off-site per IDEQ comments.
Water Quality	Per IDFG and IDEQ recommendations, stormwater run-off and erosion control BMP's will be used at the boring location, adjacent to wetland locations and at all fill locations to protect surface water quality. Proposed project shall maintain sanitary setback requirements with existing potable water facilities, including wells and water lines. If the required sanitary setback cannot be maintained with an existing potable water well, the well shall be decommissioned per IDWR requirements. Army Corps of Engineers and IDL have been contacted for a permit for the sewer transmission main crossing Pend Oreille River. In the event of an inadvertent discovery of an injection well or abandoned well, Idaho Department of Water Resources shall be notified.
Erosion	All areas disturbed by project construction, outside the existing roadway, are to be hydroseeded. Erosion and stormwater run-off will be mitigated by grass infiltration areas, vegetated buffer zones, and hydroseeding as required by the IDEQ Stormwater Best Management Practices.
Noise	Construction activities will be conducted during normal business hours unless special permission is obtained from WBWSD.

3.9 Easement/Property Ownership Transfer Requirements

All easements and property ownership transfers required for the construction of the proposed sewer system improvement project have been executed. These easements/property ownership transfers are within the Ward property located north of U.S. Highway 2 and the Tri-Pro Mill

property located southerly of U.S. Highway 2. The easements and property transfer located north of U.S. Highway 2 and within the Ward Property are as follows:

- A 40' utility easement along the north ROW boundary along U.S. Highway 2 which extends approximately 1,200 feet east from the proposed sewer main highway crossing along the Highway 2 ROW to the proposed end of Phase 1 construction.
- A 60' wide road ROW dedication for Selkirk Way, within which sewer utilities will be constructed.

The easements and property transfers located south of U.S. Highway 2 and within the Tri-Pro Mill property are as follows:

- A 60' wide road ROW dedication for Diamond Mill Loop Road. Documentation of the status for the easement approval has been included in Appendix D-17.
- A 25' wide utility easement dedication along the southern section of Diamond Mill Loop Road within which sewer utilities will be constructed.

Copies of the signed and notarized easements for executing the proposed easements and property transfers for areas north and south of U.S. Highway 2 are provided in Appendix D-17.

Additionally, copies of easements for sewer main placement below the Pend Oreille River, required by the Idaho Department of Lands, and permits for sewer main construction within the U.S. Highway 2 ROW, required by Idaho Department of Transportation, have been included in Appendix D-17. The proposed U.S. Highway 2 sewer main crossing ROW Encroachment Permit has been conditionally approved pending slope shoring plans to be provided by the contractor. The proposed U.S. Highway 2 ROW Encroachment Permit for Selkirk Way is currently in the process of being obtained. Documentation of the status for the Selkirk Way Encroachment Permit has been included in Appendix D-17, along with the Permit Application. We have also included in Appendix D-17 the Floodplain Development Permit the District has obtained from the City of Oldtown for the proposed project.

4.0 Public Participation and Agency Consultation

4.1 Public Participation

A public notice was published in the Bonner County Daily Bee newspaper on November 28, 2012 notifying the general public of a public hearing to be held at the Oldtown City Hall located at 215 N. Washington Ave in Oldtown, Idaho on December 13, 2012, to inform the public of the sewer system extension project preferred alternative, and request comments concerning the project alternatives to the proposed action. This allowed for 14 days of notification which is required for the public meeting. The public notice included a summary of the general scope and objectives for the sewer system extension into the Albeni Area. The public notice also indicated that comments will be accepted at Oldtown City Hall beginning on November 28, 2012 and ending December 13, 2012, when the project is formally adopted by the WBWSD Board. A copy of the sewer extension project facility plan, which has been approved by DEQ, was made available at the Oldtown City hall for public review and comment. A copy of the text of the public notice and the project alternatives summary sheet which was made available are attached

in Appendix E-1. Since no members of the general public attended the public project meeting, no mailing list is included in this document.

The public notice published on November 28, 2012 states that project alternatives will be presented to the board for official adoption at the meeting which was held 14 days after the public notice was published. The West Bonner Water and Sewer Board did adopt the preferred alternative at this meeting, as no comments were made by the public regarding the project in the 14 days prior to the meeting, and no members of the general public were present for the meeting.

The meeting minutes documenting their acceptance of the recommend preferred alternative is attached in Appendix E-1.

4.2 Consulted Agencies Mailing List

Requests for comment on the proposed sewer system extension project were sent to the following agencies and addresses:

1. Kalispel Tribe of Indians
   Attn: Kevin J. Lyons, Archaeologist
   P.O. Box 39
   Usk, WA 99180

2. Idaho State Historical Society
   Attn: Travis Pitkin
   210 Main Street
   Boise, ID 83702

3. US Fish and Wildlife Service
   Attn: Bryon Holt
   North Idaho Field Office
   11103 East Montgomery Drive
   Spokane Valley, WA 99208

4. Idaho Department of Lands
   Attn: Roger Jansson
   3780 Industrial Avenue South
   Coeur d' Alene, ID 83815

5. USDA Natural Resources Conservation Service
   Attn: Greg Becker, District Conservationist
   1224 Washington Ave, Suite 101
   Sandpoint, ID 83864

6. US Army Corps of Engineers
   Attn: Beth Reinhart
   2065 West Riverstone Drive, Suite 201
   Coeur d' Alene, ID 83814

7. Idaho Department of Water Resources
   Attn: Mary McGown
   Idaho Water Center
   322 East Front Street
   P.O. Box 83720
   Boise, ID 83720

8. Idaho Department of Water Resources
   Attn Thomas Neace
   Idaho Water Center
   322 East Front Street
   P.O. Box 83720
   Boise, ID 83720

9. Idaho Department of Water Resources
   Attn: Al Beardslee
   7600 Mineral Drive, Suite 100
   Coeur d' Alene, ID 83815

10. Idaho Department of Environmental Quality
    Attn: John Tindall
    2110 Ironwood Parkway
    Coeur d' Alene, ID 83814

11. Idaho Department of Environmental Quality
    Attn: Ed Hagan
    1410 North Hilton
    Boise, ID 83706

12. US Environmental Protection Agency
    Attn. Susan Eastman
    EPA Region 10
    1200 Sixth Ave. Suite 900, OWW-136
    Seattle, WA 98101

13. Panhandle Health District
    Attn. John Dowling
    322 Marion Ave.
    Sandpoint, ID 83864

14. Idaho Fish and Game
    Attn: Mary Terra-Berns
    Panhandle Regional Office Staff Biologist
    2885 West Kathleen
    Coeur d'Alene, ID 83815

15. US Environmental Protection Agency
    Attn: James Werntz
    Region 10 Idaho Operations Office
    950 W. Bannock Street, Suite 900
    Boise, Idaho 83702

A summary of the agency comments is presented in Table 4.1. A copy of the Agency correspondence is included in Appendix E-2. Written comments from these agencies have been received from all agencies. Email correspondence with the USFWS indicated that the agency is declining to comment on the project and is included in Appendix E-2.

Table 4.1 Summary of Agency Comments

Correspondence From Agencies					
Agency	**Contact**	**Address**	**Date**	**Type of Correspondence**	**Comments**
Kalispel Tribe of Indians	Kevin Lyons	P.O. Box 39 Usk, WA 99180	2/22/2010	Letter	1. Two traditional cultural properties lie within the APE. Conduct an archeological survey. 2. Proposed project will not endanger traditional cultural properties. Report unexpected discoveries to SHPO and Kalispel Tribe.
Idaho State Historical Society	Travis Pitkin	210 Main Street Boise, ID 83702	6/29/2010	Letter	1. No further action beyond archaeological study is required. 2. Any unanticipated discoveries require notification of KTOI and ISHPO.
US Fish and Wildlife Service	Bryon Holt	11103 East Montgomery Drive Spokane Valley, WA 99206	10/15/2010	Email	1. USFWS has determined there will be no significant impact to the Pend Oreille River as a result of the project.
Idaho Department of Lands	Edward Robinson	3780 Industrial Drive Coeur d' Alene, ID 83815	1/27/2011	Letter	1. West Bonner Water and Sewer District will need to obtain an easement for use of the sewer main crossing at the Pend Oreille River through Idaho Department of Lands.
USDA Natural Resources Conservation Service	Greg Becker, District Conservationist	1224 Washington Ave, Suite 101 Sandpoint, ID 83864	1/27/2011	Letter/Email	Email Response after follow-up contact 4/13/11: 1. Main line locations and ACOE partnership are ideal for general avoidance of hydric soils and wetland areas.
US Army Corps of Engineers	Beth Reinhart	2065 West Riverstone Drive, Suite 201 Coeur d' Alene, ID 83814	2/1/2011	Email	1. Wetlands must be clearly marked during construction. 2. Boring must comply with requirements with the conditions detailed in the Section 401 Water Quality Certification include erosion and stormwater BMP's and turbidity monitoring.
Idaho Department of Water Resources	Mary McGown	322 East Front Street P.O. Box 83720 Boise, ID 83720	1/27/2011	Letter/Email	Email Response after follow-up contact 4/15/11: 1. A Floodplain Development Permit will be required from the City of Oldtown prior to construction.
Idaho Department of Water Resources	Matt Anders	322 East Front Street P.O. Box 83720 Boise, ID 83720	1/27/2011	Letter	1. Contact well specialist in IDWR Coeur d' Alene office if unused/abandon wells or injection wells are discovered during construction. 2. Maintain sanitary setbacks from water wells which may remain in use after the project completion. If sanitary setbacks cannot be maintained, then the well in question must be decommissioned per IDWR requirements. 3. No injection wells within the project area. 4. Contact Panhandle Health District and DEQ for sanitary setback requirements. 5. Contact ACOE regarding sewer main river crossing.
Idaho Department of Water Resources	Al Beardslee	7600 Mineral Drive, Suite 100 Coeur d' Alene, ID 83815	3/16/2011	Letter/Email	Email Response after follow-up contact 3/24/11: 1. No mitigation requests with respect to sewer system extension project.
Idaho Department of Environmental Quality	John Tindall	2110 Ironwood Parkway Coeur d' Alene, ID 83814	1/27/2011	Letter/Email	Email Response after follow-up contact 4/15/11: 1. DEQ will need to approve plans and specifications prior to construction. 2. Stormwater and erosion controls shall be developed to protect surface waters and groundwater from being impacted during construction. 3. Proposed sewer main river crossing will need to be permitted by the Army Corps of Engineers. 4. Project plans must incorporate reasonable controls on fugitive dust sources during all phases of the project. 5. Project plans must describe the proper disposal of demolition and construction debris. Open burning of demolition and construction debris is not permitted. 6. Depending on the facilities maximum capacity to emit air pollutant, an air quality permit may be required prior to construction.
Idaho Department of Environmental Quality	Ed Hagan	1410 North Hilton Boise, Idaho 83706	2/5/13		Email Response 2/6/13: 1. Propose sewer extension is expected to improve groundwater quality. No mitigation necessary.
Idaho Department of Fish and Game	Mary Terra-Berns	2885 West Kathleen Coeur d'Alene, ID 83814	12/21/12	Letter	Letter Response 1/15/13: 1. Work activities for this project should ensure water quality, fish and fish habitat, and adjacent riparian habitats receive maximum protection through all appropriate BMP's.
Panhandle Health District	John Dowling	322 Marion Ave. Sandpoint, ID 83864	2/23/12	Letter	Letter Response 3/6/12: 1. Panhandle Health Department has no objections and encourages project approval.
US Environmental Protection Agency	James Werntz	950 W. Bannock Str., Suite 900 Boise, ID 83702	12/21/12	Letter	Email Response 2/11/13: 1. Consider secondary impacts to wetlands. 2. Obtain a Section 404 permit from ACOE for any wetland crossing. 3. Discuss potential impacts to wetlands and aquatic life and associated mitigation measures.
US Environmental Protection Agency	Susan Eastman	EPA Region 10 1200 Sixth Ave. Suite 900, OWW-136 Seattle, WA. 98101	8/4/11	Email	Email Response 8/5/11: 1. The proposed project is not located above a sole source aquifer.

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Appendix A-1

West Bonner Water and Sewer Reimbursement Agreement with Oldtown Urban Renewal Agency

James A. Sewell & Associates, LLC

REIMBURSEMENT AGREEMENT

THIS AGREEMENT made between the Oldtown Urban Renewal Agency, an urban renewal agency created pursuant to the laws of the State of Idaho (herein the AGENCY), and the West Bonner Water and Sewer District No. 1, a water and sewer district created pursuant to the laws of the State of Idaho (herein the DISTRICT), each being a governmental entity of the State of Idaho.

WITNESSETH:

WHEREAS, each of the parties hereto is a "public agency" as defined by Idaho Code, and

WHEREAS, each of the parties may, by Resolution duly enacted by each party agree to contract for the promises contained herein, and

WHEREAS, the DISTRICT has a need for improvements to its water and sewer systems in order to update the deteriorating system (collectively the "Systems") and to foster economic development within the jurisdictional boundaries of the DISTRICT; and

WHEREAS, the AGENCY anticipates that it will have funding to pay for public improvements to the DISTRICT'S Systems through revenue allocation financing; and

WHEREAS, the improvements referenced herein are a part of the urban renewal plan recommended by the AGENCY and approved by the Oldtown City Council.

NOW, THEREFORE, subject to the limitations of this Agreement and in order to provide capital improvements within the DISTRICT, it is hereby agreed as follows:

1. DURATION OF AGREEMENT: This Agreement shall be effective until all capital improvements described in Exhibit A, attached hereto and included by this reference, have been constructed, accepted by the DISTRICT, and costs identified below have been reimbursed by the AGENCY or a third party.

2. PURPOSE: The purpose of this Agreement is to provide a general financing mechanism for the improvements, which includes reimbursement by the AGENCY for a portion of the capital improvements to be constructed as part of the DISTRICT'S systems, and the associated administrative and engineering costs, as listed in Exhibit A. If the DISTRICT elects to construct the improvements to the systems in phases, a separate addendum to this agreement will be prepared for each phase detailing the work, as well as specific funding details for that phase.

3. MANNER OF FINANCING: The Board of Directors of the District intends to present revenue bond propositions to the voters for their approval for financing the necessary improvements to the system. However, all parties to this Agreement agree that the current rate payers should not be paying for the cost of the system improvements. Therefore, improvements to the DISTRICT system, including engineering, administrative and inspection expenses, will be funded through multiple revenue sources: revenue allocation funds received by the AGENCY

and used to reimburse the DISTRICT, grant and loan monies the DISTRICT may be able to obtain and developer contributions.

4. ADMINISTRATOR: The DISTRICT shall be the Administrator of the construction of the system improvement for all phases of the project contemplated by this Agreement. It shall be the duty of the Administrator to coordinate the design, construction and inspection of the authorized improvements. The Administrator shall have the final say in all design and construction decisions.

5. PAYMENT: The DISTRICT shall receive AGENCY approval before incurring expenses that are going to be ultimately paid by the AGENCY. AGENCY agrees to turn over all tax increment received by DISTRICT within thirty (30) days of receiving the increment, less twenty percent (20%) to be retained by AGENCY for AGENCY'S administrative costs, until such time as the AGENCY has paid the DISTRICT for all costs incurred by DISTRICT relating to the DISTRICT'S financing obligation for the construction of the system improvements.

6. CONSTRUCTION OF IMPROVEMENTS. It is contemplated that both engineering costs and DISTRICT costs associated with project administration will be paid by WEST BONNER INVESTMENT COMPANY LLC, a property owner within the DISTRICT'S boundaries and the boundaries of the urban renewal district. The payment of those costs will be either made directly to the DISTRICT as reimbursement, or to the engineering firm engaged by the DISTRICT The property owner will be reimbursed for those costs by the AGENCY through a separate agreement with AGENCY, which reimbursement to the property owner will not reduce the payment to be made to the DISTRICT pursuant to the term of Paragraph 5 The DISTRICT shall cause the administration, inspection and construction of improvements contemplated by this agreement.

7. DESIGN OF IMPROVEMENTS. The DISTRICT shall cause the improvements to be designed, or review any proposed designs of improvements contemplated by this agreement that are prepared by, or on behalf of, WEST BONNER INVESTMENT LLC. Any designs that are proposed by WEST BONNER INVESTMENT COMPANY LLC must receive DISTRICT approval prior to commencement with bidding the work or commencement of construction.

8. ACCEPTANCE OF IMPROVEMENTS. When the improvements contemplated by this agreement have been constructed in a workmanlike fashion, in accordance with the approved design and plans, and to the DISTRICT'S satisfaction, the DISTRICT will accept the improvements as part of its system.

9. LIABILITY – HOLD HARMLESS: Each party shall assume complete liability for, and indemnify and hold the other party harmless for all of the acts of the indemnifying party and its personnel provided under this Agreement.

10. RESOLUTION OF DISPUTES: Should a dispute arise between the parties, it is agreed that they will attempt to mediate the dispute in accordance with Idaho Law. Should it be necessary to resolve a dispute in court, it is agreed that the prevailing party shall be entitled to its

reasonable costs and attorney fees and that venue for such dispute shall be the District Court of the State of Idaho, in and for the County of Bonner.

11. RELATIONSHIP OF PARTIES. Nothing in this agreement or any documents executed in connection with this agreement shall be construed as making DISTRICT, AGENCY and/or WEST BONNER INVESTMENT LLC a joint venture or partners.

DATED this _____ day of _____, 2011.

ENTITY:	ENTITY:
_____	_____
Oldtown Urban Renewal Agency	*West Bonner Water and Sewer District No. 1*
By_____	By_____
Its_____	Its_____
ATTEST:	ATTEST:
_____	_____
Clerk of Agency	Clerk of District

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Exhibit A
Conceptual Agency Funded Public Improvements and Agency Startup Costs

STARTUP COSTS: Not to exceed $20,000 for the creation of the District and $5,000 annually for the operation of the Agency, until increment is received in 2012		**$ 30,000**
INFRASTRUCTURE COSTS:		
Streets:		
Albeni Loop Upgrade	$140,300	
Selkirk Extension	49,500	
Turn Lanes on Highway 2	305,000	
Total Streets		**$ 494,800**
Wastewater:		
Lines Extension	$500,000	
River Crossing	800,000	
Total Wastewater		**$1,300,000**
Water:		
Replace West Bonner Reservoir	$549,000	
Replace W. Bonner Trans Line	1,000,000	
Wells, Pumps and Pumphouse	500,000	
New Reservoir Water Lines	888,770	
New Water Reservoir	400,000	
Water Lines River Crossing	537,175	
Total Water		**$3,874,945**
Public Facilities:		
Oldtown Public Facilities	$100,000	
Parks Improvements	97,600	
Total Public Facilities		**$ 197,600**
Total Conceptual Agency Funded Public Improvements and Agency Startup Costs		**$5,897,545**

PARTICIPANT shall be also reimbursed for expenses for engineering and other professional services provided to government entities for the above projects.

Appendix A-2

Revenue Bond Payment Guaranty Agreement

James A. Sewell & Associates, LLC

REVENUE BOND PAYMENT GUARANTY AGREEMENT

THIS AGREEMENT made between West Bonner Water and Sewer District No. 1, a water and sewer district created pursuant to the laws of the State of Idaho, (herein "District"), and West Bonner Investment Company, LLC, an Idaho limited liability company, (herein "Company").

WHEREAS, Company is the owner of property that is located within the boundaries of the District and also within the boundaries of the Oldtown Urban Renewal District (herein "OURD"); and

WHEREAS, Company's land is not currently served by District and the existing water and sewer system will need to be extended across the Pend Oreille River (herein "River") in order to serve Company's property that is located on the opposite side of the River from where the existing water and sewer lines are located; and

WHEREAS, in order for Company to be able to develop Company's property in a manner that is economically viable, it is essential that certain improvements are made to the water and sewer system which include the extension of water and sewer system lines across the River to provide service to Company's property (herein "Improvements"); and

WHEREAS, the current OURD plan provides for improvements to the water and sewer systems in order to update the deteriorating systems and extend the existing water and sewer system across the River in order to foster economic development; and

WHEREAS, it is anticipated that the tax increment that will be derived from the Company's property once water and sewer service are available to the property will be sufficient to pay for the Improvements over time and to that end the District and OURD have entered into a reimbursement agreement with each other in which the District will construct the Improvements and be reimbursed by OURD using tax revenues realized through the tax increment (herein "Reimbursement Agreement"); and

WHEREAS, District is willing to pursue funding the Improvements to serve the Company through the issuance of water revenue bonds and sewer revenue bonds (herein "Bond" or "Bonds"), provided: 1) the District is reimbursed by OURD with the tax increment received as a result of development of the Company's property; and 2) Company provides a guaranty to fund all debt service obligations of the Bonds not

satisfied through OURD's tax increment reimbursement, thereby guaranteeing that District will never need to increase its water and sewer utility rates for the purpose of funding debt service obligations for the Bonds so existing District customers are not burdened with the cost of Bonds issued for the benefit of Company; and

WHEREAS, it is in the best interest of Company to guaranty funding for the debt service obligations for the Bonds so that the Improvements can be installed in a more expeditious manner, which is a benefit to the Company and will allow the Company to develop its property sooner.

NOW THEREFORE in order to insure that sufficient funds are available to make the debt service obligations for the Bonds, it is hereby agreed as follows.

1. RECITALS. The above recitals are incorporated as a material part of this Agreement.

2. DEFINITIONS.

a. "Company" means West Bonner Investment Company, LLC, an Idaho Limited Liability Company, its successors or assigns.

b. "Base Year" means the year in which the Bonds are issued by the District.

c. "Bonds" means two series of Bonds to be issued by the District, a water revenue Bond in the aggregate principal amount of up to $2,420,000.00 and a sewer revenue Bond in the aggregate principal amount of up to $1,315,000.00.

d. "District" means West Bonner Water & Sewer District, a water and sewer district created and operating under the laws of the State of Idaho.

e. "Letter of Credit" means the Letter of Credit initially delivered by the Company's bank including any renewal or extension thereof in accordance with its terms. The Letter of Credit shall be in an amount sufficient to cover the total debt service for the life of the Bonds, less any Restricted Cash Deposit initially provided by Company to District; shall be irrevocable for the life of the Bonds; and shall enable the Bond Registrar as defined in the ordinances authorizing the Bonds to draw an amount sufficient to pay when and as due thereon the principal of and interest on the Bonds or the full amount of the Letter of Credit as provided in Paragraph 6. The Letter of Credit shall contain procedural and administrative terms acceptable to the Bond Registrar and the attorney for the District, including a requirement that the Bond Registrar shall be provided at least

thirty (30) days' prior written notice of the expiration of the Letter of Credit. The Letter of Credit may not be revoked during the life of the Bonds, provided, the amount of the Letter of Credit may be reduced annually by the Company's bank in accordance with the reduction of the District's debt service obligations for the remaining life of the Bonds.

f. "OURD" means the Oldtown Urban Renewal District, or its successors.

g. "Outstanding Principal Balance" means on any particular day the aggregate of all funds that the District has drawn under the Bonds to that day, less the aggregate of all payments of principal on the Bond made by the District on or before that day.

h. "Restricted Cash Deposit" means a principal sum of cash initially deposited by Company in a restricted account of the District and to be used solely for the payment of debt service obligations of the Bonds or to fund any reserve account requirement for the Bonds.

h. "Revenue Allocation Proceeds" means that incremental portion of Taxes exceeding the amount of Taxes collected by OURD for property located within the area served by the Improvements in the Base Year after deductions for the School Credit and other deductions that may be required by the Law and transmitted to the District for debt service on the Bonds.

i. "Surety" means a Letter of Credit, a Restricted Cash Deposit, or any combination thereof provided by Company in an amount equal to the total outstanding debt service obligation of the District for the Bonds, plus the principal amount of any reserve account obligation that may be required of the District by the purchaser(s) of the Bonds.

j. "Taxes" means all levies on an ad valorem basis upon land, real property, personal property or any other property, tangible or intangible, included within the Oldtown Urban Renewal District.

3. DURATION OF AGREEMENT. This Agreement shall be effective upon execution by both parties and shall remain in effect until the Bonds are paid in full.

4. PAYMENT SURETY. The Company shall provide Surety to the District in an amount equal to the outstanding debt service obligations of the District for the Bonds, plus the amount of any reserve account obligation required of the District by the

purchaser(s) of the Bonds. The amount of the required Surety may be reduced annually in accordance with Paragraph 5 herein.

a. It is expressly agreed by the Parties that no Bonds, or any portion thereof, will be issued by the District without the prior written approval of the Company as to the total amount of the Bonds to be issued by the District for which Company will provide Surety.

b. Upon the Company's written approval of the amount of the Bonds for which it will provide Surety, Company agrees to provide to District a Restricted Cash Deposit, an irrevocable Letter of Credit in a form approved by the District's attorney(s), or any combination thereof, in an amount sufficient to guaranty the total outstanding debt service obligations of the Bonds. Any Letter of Credit must be irrevocable for the life of the Bonds and provide for automatic renewal until such time as the Surety is released by the District.

c. If any or all of the Surety is in the form of a Restricted Cash Deposit, the District shall deposit the funds in an interest bearing account. District shall be entitled to retain any interest that may accrue on the account for District's administrative costs related to managing the account.

d. The Surety must be provided either prior to the commencement of construction of the Improvements, or the District entering in any written agreement to issue the Bonds , whichever comes first.

e. Company understands and agrees that District has no obligation to construct the Improvements or issue the Bonds if the Company does not provide the Surety as required herein. Company further understands and agrees that District will only proceed with construction of the Improvements and/or issuance of the Bonds upon the binding commitment of Company to provide adequate and continuing Surety for the payment of all debt service obligations for the Bonds. Any breach of the promises herein by Company will cause District to incur substantial monetary damages for which Company shall be fully liable.

f. If interim financing of the Improvements is required prior to the issuance of the Bonds, Company shall be responsible for the costs associated with the interim financing. Nothing in this agreement is intended to prohibit the Company from providing the

interim financing if allowed to do so by the entity that will be purchasing the Bonds and under terms satisfactory to District.

g. If the District is required to fund a reserve account pursuant to the terms of the Bonds, Company shall fully fund said reserve account in a form acceptable to the District's bond counsel.

5. SURETY REDUCTION. District agrees that the dollar amount of the Surety may be reduced on an annual basis. The amount of reductions shall be determined by the outstanding debt service obligation owing on the Bonds, provided the parties may agree to additional reduction of the Surety based on the amount of Revenue Allocation Proceeds the OURD has available to pay to District pursuant to the Reimbursement Agreement entered into between the District and OURD. Once the principal and interest on the Bonds is paid in full and the Bonds are fully defeased, District will fully release the Surety and any principal amount remaining in any reserve account established for the Bonds.

6. BOND PAYMENTS.

a. District agrees to apply all Revenue Allocation Proceeds transmitted to District pursuant to the Reimbursement Agreement entered into between District and OURD on the _____ day of _____, 2011 to the annual debt service payments for the Bonds. In the event that on the sixtieth (60th) day prior to the date on which the Bond payments are due, the District has not received Revenue Allocation Proceeds from OURD in an amount sufficient to make the annual debt service payments for the Bonds, the District will provide written notice to Company of the dollar amount of the funds that are needed to make the total annual debt service payments for the Bonds. No later than thirty (30) days prior to the due date of the Bond payment, Company shall deliver to District either cash, or a cashiers or certified check in the amount specified by District in the notice.

b. Company's failure to timely deliver the funds to District as provided herein automatically authorizes the District to draw on the Surety in the amount necessary to make the total annual debt service payments on the Bonds.

c. Company agrees to not interfere with District's right to draw on the Surety funds. If Company interferes, or attempts to interfere with District's right to draw on the Surety, District shall be entitled to draw the entire amount remaining in the Surety and

apply those funds to the current Bond payments and to pre-pay as much of the outstanding debt service obligations for the Bonds as the proceeds of the Surety allow.

7. RELATIONSHIP OF PARTIES. Nothing in this agreement or any documents executed in connection with the construction of the Improvements or the Bond shall be construed as making District and Company as joint venture or partners.

8. LIABILITY — HOLD HARMLESS: Each party shall assume complete liability for, and indemnify and hold the other party harmless for all of the acts, or failure to act, of the indemnifying party and its principals, officers, agents, employees and personnel provided under this Agreement.

9. NONWAIVER: Failure of District to exercise any of the rights under this Agreement, or breach thereof, shall not be deemed to be a waiver of such right or a waiver of any subsequent breach.

10. CHOICE OF LAW: Any dispute under this Agreement, or related to this Agreement, shall be decided in accordance with the laws of the state of Idaho.

11. ATTORNEY FEES: Reasonable attorney fees shall be awarded to the prevailing party in any action to enforce this Agreement or to declare forfeiture or termination of this Agreement.

WEST BONNER WATER AND SEWER DISTRICT

By: _____

Its: _____

Date: _____

WEST BONNER INVESTMENT COMPANY, LLC

By: Michael D. Beck

Its: MANAGER / AUTHORIZED AGENT

Date: 8/11/11

ATTEST:

_____

Clerk of West Bonner Water and Sewer District

K:\175925\00003\17035_LDM\17035A20MY

Appendix A-3
Budget Information

West Bonner Water and Sewer District
Operations and Maintenance Budget Estimate

James A. Sewell & Associates, LLC

JAMES A. SEWELL & ASSOCIATES, LLC
Consulting Engineers
Newport, Washington

SJF

Date: **1/3/13**
Project: **West Bonner Sewer Extension - West Bonner W-S District**
Subject: **Expected Operation, Maintenance & Replacement Budget - West Bonner Water and Sewer District**

ERUs (Based on 2% Growth Rate)	**322**	**322**	**286**	**286**	**286**	**286**	**286**	**286**	**286**
BUDGET YEAR	**2014 (EST)**	**2014 (EST)**	**2012**	**2011**	**2010**	**2009**	**2008**	**2007**	**2006**
User Rate (per Month)	$36.00	**$27.00**	**$27.00**	**$26.00**	**$25.00**	**$25.00**	**$25.00**		
Notes:	**Sewer Only**	**Water/Sewer with Project**							
REVENUE									
Charges for Services: Water	$ -	$ 91,511.00	$ 72,000.00	$ 68,500.00	$ 73,562.00	$ 72,983.00	$ 72,989.00	$ 82,776.00	$ 79,737.92
Charges for Services: Sewer	$ 142,440.00	$ 106,434.00	$ 96,000.00	$ 95,000.00	$ 94,044.00	$ 92,184.00	$ 94,770.00	$ 83,191.00	$ 75,862.28
Taxes - property and sales	$ 8,722.00	$ 17,444.00	$ 17,444.00	$ 17,006.00	$ 16,264.00	$ 9,870.00	$ 11,348.00	$ 11,190.00	$ 11,980.87
Hook-up fees	$ 18,000.00	$ 18,000.00	$ 18,000.00	$ 9,000.00	$ 16,000.00	$ -	$ 4,400.00	$ 2,200.00	$ 2,200.00
Other income	$ -	$ -	$ 10.00	$ 300.00	$ 1,100.00	$ -	$ 6,160.00	$ -	$ -
Sludge Hauling	$ 5,000.00	$ 5,000.00	$ 5,000.00	$ 4,200.00	$ 5,494.00	$ 8,834.00	$ 12,237.00	$ 3,593.00	$ 15,230.20
Total Operating Revenues	$ 174,162.00	$ 238,389.00	$ 208,454.00	$ 194,006.00	$ 206,464.00	$ 183,871.00	$ 201,904.00	$ 182,950.00	$ 185,011.27
EXPENSES									
Bank Fees	$ -	$ 35.00	$ 35.00	$ 35.00	$ 35.00	$ -	$ 25.00	$ 13.00	$ 8.50
Dues and subscriptions	$ 272.50	$ 545.00	$ 525.00	$ 525.00	$ 500.00	$ 474.00	$ 462.00	$ 736.00	$ 170.00
Insurance - liability	$ 1,570.00	$ 3,140.00	$ 2,645.00	$ 3,000.00	$ 2,763.00	$ 3,138.00	$ 3,046.00	$ 2,986.00	$ -
Insurance - medical/disability	$ 5,250.00	$ 10,500.00	$ 9,000.00	$ 10,560.00	$ 11,070.00	$ 8,210.00	$ 5,989.00	$ 5,059.00	$ 2,319.55
Licenses and permits	$ 90.00	$ 180.00	$ 140.00	$ 180.00	$ 90.00	$ 90.00	$ 1,077.00	$ 1,077.00	$ 85.00
Miscellaneous	$ 175.00	$ 350.00	$ 350.00	$ 350.00	$ 250.00	$ 1,113.00	$ 255.00	$ 612.00	$ 150.00
Office supplies	$ 1,100.00	$ 2,200.00	$ 1,350.00	$ 2,200.00	$ 2,200.00	$ 1,029.00	$ 476.00	$ 550.00	$ 796.09
Operating lease/Sewer Bond Payment	$ 27,800.00	$ 27,800.00	$ 27,800.00	$ 27,800.00	$ 27,800.00	$ 27,800.00	$ 27,800.00	$ 27,800.00	$ 27,800.00
Payroll taxes and workers' compensation	$ 3,182.00	$ 6,364.00	$ 6,364.00	$ 4,833.00	$ 4,896.00	$ 4,762.00	$ 3,986.00	$ 3,281.00	$ 3,627.94
Postage and delivery	$ 475.00	$ 950.00	$ 900.00	$ 900.00	$ 850.00	$ 906.00	$ 709.00	$ 709.00	$ 687.69
Printing, publishing and recording	$ 500.00	$ 1,000.00	$ 300.00	$ 1,000.00	$ 300.00	$ 966.00	$ 331.00	$ 1,137.00	$ 574.63
Repairs and maintenance	$ 10,700.00	$ 21,400.00	$ 16,037.00	$ 16,550.00	$ 13,100.00	$ 11,687.00	$ 10,033.00	$ 5,515.00	$ 20,439.79
Retirement contributions & PERSI	$ 3,455.00	$ 6,910.00	$ 6,910.00	$ 5,247.00	$ 6,905.00	$ 5,488.00	$ 4,466.00	$ 3,730.00	$ -
Sewer plant operations and management fee	$ 71,516.00	$ 71,516.00	$ 63,520.00	$ 70,822.00	$ 66,531.00	$ 61,740.00	$ 58,550.00	$ 56,958.00	$ 40,965.51
Small tools and supplies	$ 2,100.00	$ 4,200.00	$ 3,972.00	$ 3,500.00	$ 2,950.00	$ 3,439.00	$ 3,880.00	$ 3,668.00	$ 2,488.05
Utilities and telephone	$ 4,250.00	$ 8,500.00	$ 6,320.00	$ 6,840.00	$ 6,700.00	$ 5,405.00	$ 5,764.00	$ 4,843.00	$ 3,666.89
Vehicle and mileage	$ 1,250.00	$ 2,500.00	$ 10,000.00	$ 1,000.00	$ 2,000.00	$ 2,144.00	$ 3,287.00	$ 1,882.00	$ 1,772.45
Wages	$ 34,250.00	$ 68,500.00	$ 66,500.00	$ 50,500.00	$ 64,000.00	$ 56,560.00	$ 44,535.00	$ 39,100.00	$ 44,222.15
Water Testing	$ -	$ 1,200.00	$ 1,200.00	$ 1,200.00	$ 800.00	$ 505.00	$ 352.00	$ 914.00	$ 376.00
Education and training	$ -	$ -	$ 1,000.00	$ 800.00	$ 100.00	$ -	$ -	$ -	$ 30.00
Equipment rental	$ -	$ 25.00	$ 25.00	$ 25.00	$ 25.00	$ -	$ -	$ -	$ 25.00
District Supplies	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 557.74
Professional fees	$ 3,000.00	$ 6,000.00	$ 5,500.00	$ 6,500.00	$ 8,500.00	$ 10,663.00	$ -	$ -	$ 3,147.28
State fees	$ 516.00	$ 1,032.00	$ 1,032.00	$ 1,032.00	$ 1,032.00	$ -	$ -	$ -	$ 2,064.00
Shipping and handling	$ 100.00	$ 200.00	$ 200.00	$ 200.00	$ 250.00	$ -	$ -	$ -	$ 199.47
Chlorine gas	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 475.30
Compressed gas	$ -	$ 650.00	$ 500.00	$ 630.00	$ 600.00	$ -	$ -	$ -	$ -
Fuel	$ 2,500.00	$ 5,000.00	$ 4,500.00	$ 4,500.00	$ 2,500.00	$ -	$ -	$ -	$ -
Total Operating Costs	$ 174,051.50	$ 250,697.00	$ 236,625.00	$ 220,729.00	$ 226,747.00	$ 206,119.00	$ 175,023.00	$ 160,570.00	$ 156,649.03
Non-Operating Income (Expenses)									
Interest income	$ 10.00	$ 1,000.00	$ 10.00	$ 300.00	$ 1,100.00	$ 4,693.00	$ 8,834.00	$ 12,543.00	$ 8,608.60
Interest expense	$ -	$ -	$ -	$ -	$ -	$ -	$ (724.00)	$ (1,087.00)	$ 1,412.50
Logging	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 3,515.00	$ 13,987.22
(Loss) on sale of equipment	$ -	$ -	$ -	$ -	$ -	$ -	$ (720.00)	$ -	$ -
Total Non-Operating Income (Expenses)	$ 10.00	$ 1,000.00	$ 10.00	$ 300.00	$ 1,100.00	$ 4,693.00	$ 7,390.00	$ 14,971.00	$ 24,008.32
Total Operating Costs	$ 174,051.50	$ 250,697.00	$ 236,625.00	$ 220,729.00	$ 226,747.00	$ 206,119.00	$ 175,023.00	$ 160,570.00	$ 156,649.03
Net Operating Income	**$ 120.50**	**$ (11,308.00)**	**$ (28,161.00)**	**$ (26,423.00)**	**$ (19,183.00)**	**$ (17,555.00)**	**$ 34,271.00**	**$ 37,351.00**	**$ 52,370.56**

Appendix B-1
Albeni Area Drainfield Permit Information

Panhandle Health District Drainfield Permit Applications for the Albeni Area

James A. Sewell & Associates, LLC

SECTION 24 : Over ½ of issued Permits have failed.

2010	Haines, Mill Addition Effluents on ground, Installed 2006	Replacement
2009	SELKIRK / Ace Hardware	Replacement
2003	Ramos, Mill Addition	Replacement
1998	ALBENI FALLS BLD Infiltrator failed, Installed 1995 after failure	Replacement
1997	Gray, Mill Addition	Replacement
1995	Bush, Mill Addition	Replacement
1994	Carnes, La Clerc Rd	Replacement
1991	Cunningham, La Clerc Rd	Repair
1989	Brennan	Replacement
1986	Ward	"
1983	Cassleman	"
1981	Hack	"
1979	Roberts	"
1976	Ward	"

Panhandle Health District 1

Search Results Returned: 1 to 20 of 20

Permit Number	Old Permit Number	Applicant Name	Parcel Number	Section	Township	Range	Address	County	Subdivision	Lot	Block
00-09-0202		CAROL & LARRY SHULL	000040000060A	24	56N	06W	OLDTOWN, ID 83822	BONNER	ALBENI FALLS MILL ADD	6	
00-09-0211		AEROCELL INC.	RP56N06W245050A	24	56N	06W	PO BOX 1799 OLDTOWN, ID 83822	BONNER			
00-09-0441		NEWPORT / OLDTOWN ROTARY CLUB	N00000248220	24	56N	06W	SOUTHEAST CORNER OF OLDTOWN BRIDGE OLD TOWN, ID 83822	BONNER			
01-09-0313		HITES EXCAVATING	000040000030	24	56N	06W	HWY 2 TO OLD DIAMOND MILL RD TO PROPERTY PRIEST RIVER, ID 83856	BONNER	ALBENI FALLS MILL ADD.	3	
03-09-8779		CARLOS & LINDA RAMOS	000040000020A	24	56N	06W	339 OLD DIAMOND MILL RD OLDTOWN, ID 83822	BONNER	ALBENI FALLS MILL ADD.	2	
07-09-107756		BRENNAN INVESTMENTS LLC	RP56N06W241801A	24	56N	06W		BONNER			
09-09-118190		PERRY HOLDINGS LLC	rpn00000248090a	24	56N	06W	495 HWY 2 E OLD TOWN, ID 83822	BONNER			
10-09-119938		JANELL HAINES	RP000040000040A	24	56N	06W	280 OLD DIAMOND MILL RD OLD TOWN, ID 83822	BONNER	ALBENI FALLS MILL ADDITION	4	
76-09-56152	234	JAMES L WARD		24	56N	06W	PRIEST RIVER, ID 83856	BONNER			
79-09-59716	902	GLEN ROBERTS		24	56N	06W	PRIEST RIVER, ID 83856	BONNER			
81-09-62864	3444	JULES HACK		24	56N	06W	PRIEST RIVER, ID 83856	BONNER			
83-09-65273	6707	CASSLEMAN		24	56N	06W		BONNERI		7	
86-09-68655	12807	JAMES L WARD		24	56N	06W	OLD TOWN, ID 83822	BONNER			
89-09-71317	14433	BRENNAN		24	56N	06W		BONNER			
91-09-74590	17347	FRANK CUNNINGHAM		24	56N	06W	LE CLERC CREEK RD OLD TOWN, ID 83822	BONNER			
94-09-49300	22305	CARNES BARBARA	RP56N06W240602A	24	56N	06W	LECLERC RD OLD TOWN, ID 83822	BONNER			
95-09-47323	23421	JUDY BUSH	RP0000400000501	24	56N	06W	OLD DIAMOND MILL RIVER ROAD OLD TOWN, ID 83822	BONNER	ALBENI FALLS MILL	5	
95-09-47378	23475	ALBENI FALLS BUILDING SUPPLY	RP56N06W247680A	24	56N	06W	PRIEST RIVER, ID 83856	BONNER			
97-09-0445		IRENE GRAY	RP000040000070A	24	56N	06W		BONNER	Albeni Falls Mill	7	
98-09-0544		ALBENI FALLS BUILDING	RP56N06W247680A	24	56N	06W	OLD TOWN, ID 83822	BONNER			

New Search Download Results

Panhandle Health District I
On-Site Sewage System Application

10-09-119938

APPLICATION TYPE

☐ **Site Evaluation**

A site evaluation is conducted to determine if a site is suitable for on-site sewage disposal. A septic permit will be required prior to installation of a septic system.
Site Evaluations are valid one (1) year from date of issuance and are not renewable.

☐ **Site Evaluation & Septic Permit** ☒ **Septic Permit** REPAIR

A septic permit approval depends on the following: Site evaluation approval, the predicted maximum daily sewage flow; house size and location; well / spring location; surface water locations; changes to native soil (road cuts, grading, benching); distance to neighboring structures (wells, buildings, drainfields); proposed land use; soil quality; other issues of concern.. Permits to construct a septic system are not granted until all such issues are addressed and / or submitted in writing as part of the plot plan / permit application AND found to be consistent with current regulations.
A septic permit is valid (1) year from date of issuance and may be renewed up to a maximum of (3) years from date of issuance.

ANY CHANGES TO THE SITE OR CONDITIONS OF THE APPLICATION AFTER ISSUANCE OF THE PERMIT MAY RENDER THE PERMIT INVALID.

Property Owner	Applicant:
Name: Janell Haines	Name: Janell Haines
Address: 280 Old Diamond mill Rd	Address: Po Box 253
City, State, Zip: Oldtown ID ~~83852~~ 83822	City, State, Zip: Pondergy ID 83852
Phone: 208-290-3536	Phone:

Applicant is: ☒ Landowner ☐ Contractor ☐ Installer ☐ Other:

PROPERTY – LEGAL DESCRIPTION

Parcel #: RP00004000040A | Section: 24 | Township: 56 N | Range: 6 W

Subdivision Name: Alberni Falls mill addition | Lot #: 4 | Block #: | Acreage:

Property Address: 280 Old diamond mill Rd Oldtown ID 83822

TYPE OF INSTALLATION

☐ New ☒ Replacement ☐ Upgrade/Expansion ☐ Tank Only

Is there an existing dwelling on this parcel? ☐ Yes ☐ No Description:

PROPOSED USE

☒ **Individual** - Single Family Dwelling

☐ **Two-Party** (2 Dwellings)

☐ **Other :** _____ (example: shop, garage, barn, RV Pad)

☐ **Community** (3-9 Dwellings) - **Number of Units:**_____

☐ **Large Soil Absorption** (2,500 gal/day or 10 + Dwellings) - **Number of Units:**_____

☐ **Commercial / Industrial** - **Building Type:**_____

For Community, Commercial, Large Soil Absorption & Engineered Systems Only:

Average Daily Flow: **Peak Daily Flow:** *(Determined by Site Evaluation Review)*

DWELLING INFORMATION

Number of Bedrooms:	Number of Baths:	Sq. Footage:	Number of People	Garbage Disposal
3	2	1640		☒ Yes ☐ No

Date Received: 1/26/10

Receipt #: 15884 $200.00 CASH

Revised 06/09

PERMIT # 10-09-119938

Assigned to: Quinn By:

Panhandle Health District 1

On-Site Sewage System Application

A site evaluation is not an approval or a permit to install a septic system. Permit approval depends on the following: Site evaluation approval, the predicted maximum daily sewage flow; house size and location; well / spring location; surface water locations; changes to native soil (road cuts, grading, benching); distance to neighboring structures (wells, buildings, drainfields); proposed land use; soil quality; other issues of concern.
Permits to construct a septic system are not granted until all such issues are addressed and / or submitted in writing as part of the plot plan / permit application AND found to be consistent with current regulations. **Site Evaluations and Septic Permits are valid one (1) year from date of Issuance.**

09-09-118190

400.-

ANY CHANGES TO THE SITE OR CONDITIONS OF THE APPLICATION AFTER ISSUANCE OF THE PERMIT MAY RENDER THE PERMIT INVALID.

☐ **Site Evaluation** ☐ **Site Evaluation & Permit** ☐ **Permit**

Owner's Name Perry Holdings LLC.

Mailing Address 1111 Oxford Rd. Date

City Bonners Ferry Phone # 208-290-3218

State ID Zip 83805

LEGAL DESCRIPTION: T. R. S. 24-56N-6W

Subdivision Tax 35 Lot Block **Parcel #** RPN 00000248090A

Location / Directions / Physical Address Selkirk ACE Hardware 495 Hwy. 2 East, Oldtown Size (Acres) 1.5

Applicant Name James L. & Patricia N. Perry

Mailing Address 1111 Oxford Rd.

City Bonners Ferry Phone # 208-290-3218

Applicant is: ☑ Landowner ☐ Contractor ☐ Installer ☐ Other State ID Zip 83805

Type of Septic Installation ☐ New ☑ Replacement ☐ Upgrade/Expansion

Proposed Use ☑ Individual ☐ Community (3 to 9 dwellings) ☐ Large Soil Absorption (2,500 gal / day or 10 or more dwellings)

Is there an existing dwelling on this parcel? ☑ Yes ☐ No Description Business Bldg. + several out buildings

Type of Dwelling

☐ Single Family Residence ☑ Commercial

☐ Multiple Family Res. ☐ Other

(For Single & Multiple Family Residences Only) n/a

# of Bedrooms # of Baths Sq. Ft. # of People

# of Living Units Garbage Disposal ☐ Yes ☐ No

(For Community, Commercial, Large Soil Absorption & Engineered Systems Only)

Average Daily Flow Peak Daily Flow

#33

Panhandle Health District I

On-Site Sewage System Application 03-09-8779

A site evaluation is not an approval or a permit to install a septic system. Permit approval depends on the following: Site evaluation approval, the predicted maximum daily sewage flow; house size and location; well / spring location; surface water locations; changes to native soil (road cuts, grading, benching); distance to neighboring structures (wells, buildings, drainfields); proposed land use; soil quality; other issues of concern.

Permits to construct a septic system are not granted until all such issues are addressed and / or submitted in writing as part of the plot plan / permit application AND found to be consistent with current regulations.

165-3836

ANY CHANGES TO THE SITE OR CONDITIONS OF THE APPLICATION AFTER ISSUANCE OF THE PERMIT MAY RENDER THE PERMIT INVALID.

☐ Site Evaluation ☐ Site Evaluation & Permit ☒ Permit

Owner's Name: Carlos Ramos Date: 1/29/03

Mailing Address: 339 Old Diamond Mill Rd. Phone #: (208) 437-3389

City: Oldtown State: ID. Zip: 83822

Legal Description: T.56N R.6W S.24 Parcel #: RP00040000020A

Subdivision: Alveni Falls Mill Add Lot 2 Block Size: 0.39 (Acres)

Location / Directions / Physical Address: 339 Old Diamond Mill Rd.

Applicant Name: Carlos Ramos and Glenda Ramos

Mailing Address: 339 Old Diamond Mill Rd. Phone #: 437-3389

City: Oldtown State: ID Zip: 83822

Applicant is: ☒ Landowner ☐ Contractor ☐ Installer ☐ Other

Type of Septic Installation ☐ New ☒ Replacement

Proposed Use ☒ Individual ☐ Community (3 to 9 dwellings) ☐ Large Soil Absorption (2,500 gal / day or 10 or more dwellings)

Is there an existing dwelling on this parcel? ☒ Yes ☐ No Description: Story and a half

Type of Dwelling

☒ Single Family Residence ☐ Commercial

☐ Multiple Family Res. ☐ Other

(For Single & Multiple Family Residences Only)

# of Bedrooms: 3 # of Baths: 1 Sq. Ft.: 1700 # of People: 4

# of Living Units: Garbage Disposal ☐ Yes ☒ No

(For Community, Commercial, Large Soil Absorption & Engineered Systems Only)

Average Daily Flow: Peak Daily Flow:

Highlighted Areas Are Required for the Permit Process to be Initiated; All Information Required for Completion

Panhandle Health District I

ON-SITE SEWAGE SYSTEM PERMIT

Septic Permit # SP 98-09-0544 **Issue Date** 12/24/98

This permit is valid for one year for an individual subsurface sewage disposal system for:

Parcel # RP56N06W247680A, Township 56N, Range 06W, Section 24, Boise Meridian; a acre plot currently belonging to ALBENI FALLS BUILDIN. The system has been sized for a square foot single family residence.

The following conditions are placed upon the permit:

SEPTIC TANK-

- Tank Capacity will be at least 1500 gallons (concrete only)

DRAINFIELD (& replacement area)-

- Drainfield size will be at least 300 square feet

CONDITIONS-

replacement drainfield—infiltrator failed

SEPARATION DISTANCES:

- Distance of tank from dwelling foundation - 5 feet minimum
- Distance of tank from well - 50 feet minimum
- Distance of tank from private water lines - 10 feet minimum
- Distance of tank from public water lines - 25 feet minimum

- Distance of field from property line - 5 feet minimum
- Distance of field from dwelling foundation - 20 feet minimum
- Distance of field from well - 100 feet minimum
- Distance of field from surface water - 200 feet minimum
- Distance of field from septic tank - 6 feet minimum
- Distance of field from water lines - 25 feet minimum
- Drainfield must not exceed 4 feet in depth unless specified alternative system

Permit Issued by Robert Camp, Environmental Health Specialist

Final Approval of this Permit requires inspection of the system in the ground, uncovered, and submittal of a plot plan distinguishing system construction specifications and final layout including location on the plot with respect to other permanent structures. To Schedule a final Inspection call the number listed below.

Final Plot Plan Submitted on: 12/22/98 Installation Date: 12/18/98

System Installed by: Copper Bay Const Installer #: _____

Inspected by: Bob

Approved on: 12/18/98 Disapproved on: _____

Reference: *Rules & Regulations for individual and Subsurface Sewage Disposal Systems*

322 Marion • Sandpoint, Idaho 83864 • (208) 265-6384

Panhandle Health District I

ON-SITE SEWAGE SYSTEM PERMIT

Septic Permit # SP 97-09-0445 **Issue Date** 10/31/97

This permit is valid for one year for an individual subsurface sewage disposal system for:

Parcel # RP000040000070A, Township 56N, Range 06W, Section 24, Boise Meridian; Lot 7, Block of Albeni Falls Mill; a 0.30 acre plot currently belonging to Irene Gray. The system has been sized for a 1248 square foot single family residence with 3 bedrooms and 1 baths.

The following conditions are placed upon the permit:

SEPTIC TANK-

- Tank Capacity will be at least 1000 gallons
  ***It is recommended that the tank capacity be increased 50% due to utilization of a Garbage, Disposal or tank pumping frequency increased to annually.

DRAINFIELD (& replacement area)-

- Drainfield size will be at least 600 square feet

CONDITIONS-

REPLACEMENT SYSTEM---INSTALL AS MUCH DRAINFIELD AS POSSIBLE TO MEET 600 SQ.FOOT REQUIREMENT

SEPARATION DISTANCES:

- Distance of tank from dwelling foundation - 5 feet minimum
- Distance of tank from well - 50 feet minimum
- Distance of tank from private water lines - 10 feet minimum
- Distance of tank from public water lines - 25 feet minimum

- Distance of field from property line - 5 feet minimum
- Distance of field from dwelling foundation - 20 feet minimum
- Distance of field from well - 100 feet minimum
- Distance of field from surface water - 200 feet minimum
- Distance of field from septic tank - 6 feet minimum
- Distance of field from water lines - 25 feet minimum
- Drainfield must not exceed 4 feet in depth unless specified alternative system

COPY

Permit Issued by _____, Environmental Health Specialist
Robert Camp

Final Approval of this Permit requires inspection of the system in the ground, uncovered, and submittal of a plot plan distinguishing system construction specifications and final layout including location on the plot with respect to other permanent structures. To Schedule a final Inspection call the number listed below.

Final Plot Plan Submitted on: _____ Installation Date: _____

System Installed by: _____ Installer #: _____

Inspected by: _____

Approved on: _____ Disapproved on: _____

Reference: *Rules & Regulations for Individual and Subsurface Sewage Disposal Systems*

322 Marion • Sandpoint, Idaho 83864 • (208) 265-6384

PANHANDLE HEALTH DISTRICT I

ON-SITE SEWAGE SYSTEM APPLICATION AND PERMIT 98140

INDIVIDUAL SEWAGE DISPOSAL SITE EVALUATION

Evaluation #: _____ Fee: _____ Date: 8-1-95

For (Name:) JUDY BUSH

Legal Description of Property: Alden Falls Mill #5 S.24 T.5N R.6W Parcel #: RP0000400000501

Location: 3rd House on Old Diamond Mill River Rd, Oldtown just East of South Bridge to Newport

Size of Lot (Acres): .28

Applicant's Signature: Judy Bush

Mailing Address: Rt 4 Box 33 OLDTOWN ID 83822

Applicant is: ☒ Landowner ☐ Contractor ☐ Installer ☐ Other _____

Phone #: 437-0378

Is there an existing dwelling on this parcel? ☒ Yes ☐ No

Soil Type: _____

☐ See Test Hole Information Sheet

Remarks: _____

Valid for One Year From Date: _____ By: _____ EHS

INDIVIDUAL SEWAGE DISPOSAL PERMIT

Permit #: 23421 Replacement Fee: 90 Date: 8/1/95

PLOT PLAN ATTACHED (show house, other buildings, etc.) Aquifer Surcharge: _____

Bedrooms 4 Baths 2 Sq. Ft. _____ # of People 4 # of Living Units 1

SEPTIC TANK: 1000 Gallons, Type of Tank: ☒ Cement ☐ Other: _____

Distance to Dwelling Foundation: 5 ft. min. Well: 50 ft. min. Water Line: 10 ft. min. Public Water Line: 25 ft. min.

DRAINFIELD: 300 Sq. ft. Absorption Bed: _____ Sq. ft. Alternative System: _____

Component Separations: property lines 5 ft. min./dwelling foundation 20 ft. min./well 100 ft. min./surface water 300 ft. min./septic tank 6 ft. min./water suction line 100 ft. min. Public water line 25 ft. min. Drainfield must not exceed 4 ft. in depth.

TYPE OF DWELLING	TYPE OF INSTALLATION	DISP. SYSTEM	EST. TYPE	
☒ SINGLE	☐ NEW	☒ DRAINFIELD	☐ 231 COMM SEW	☐ 235 NEW NON RES
☐ MULTIPLE	☒ REPLACEMENT	☐ ABS BED	☐ 232 NEW RES	☐ 236 EXIT NON RES
☐ COMMERCIAL		☐ BASIC ALTER	☒ 233 EXIT RES	☐ 237 NON RES ALT
☐ OTHER		☐ COMPLEX ALTER	☐ 234 RES ALT	

As Much drain field as possible

Remarks and/or conditions: _____

Applicant's Signature: Judy Bush

Mailing Address: Rt 4 Box 33 Oldtown Id 83822.

Phone: 437-0378

Plot Plan Submitted: _____

Permit Issued by: Bob Camp, EHS. Approved: 8/2/95 Not Approved: _____

This permit is not transferable and is valid for one year from date of issue.

THIS OFFICE MUST BE NOTIFIED FOR FINAL INSPECTION

Approved: 1/25/96 Not Approved: _____ Date: _____

Inspected by: Bob Camp Installed By: R.H. EXCAVATING Date: 8-7-95

Remarks: As builts turned in 1/96

TEST HOLE INSPECTION TIME: 1.5 PERMIT INSPECTION TIME: 1.5 FINAL INSPECTION TIME: _____

FINAL APPROVAL PENDING SUBMITTAL OF AS-BUILT DRAWING

ENTERED JAN 31 1996

Reference: *Rules & Regulations for Individual and Subsurface Sewage Disposal Systems*

Revised: 4/95

60' INPT

87727

PANHANDLE HEALTH DISTRICT I
APPLICATION AND PERMIT FOR ON-SITE SEWAGE SYSTEM

INDIVIDUAL SEWAGE DISPOSAL SITE EVALUATION RECEIVED AUG 3 0 1994

Site Eval.#: _____ Fee: _____ Date: _____

For (Name): BARBARA M. CARNES

Legal Description of Property: SE 24 T. 56 R 6W TAX PARCEL # RP56N06W240602A

~~Permit Number:~~ _____

Location: LECLERC RD Size of Lot (Acreage): 90

Applicant's Signature: Barbara M. Carnes

Mailing Address: Rt 4 Bx 980 Deltona, Id Phone #: 437-4291

Applicant is: (✓) Landowner ( )-Contractor ( )-Installer Soil Type: _____

SEE TEST HOLE INFORMATION SHEET

Remarks : _____

Valid For One Year From Date: _____ By: _____

Environmental Health Specialist

INSPECTION TIME: 1/30

INDIVIDUAL SEWAGE DISPOSAL INSTALLATION PERMIT

INDIVIDUAL SEWAGE DISPOSAL PERMIT Fee: 90.00 Aquifer Surcharge:

Permit #: 22305 REPLACEMENT DRAIN field Date: 8/30/94

PLOT PLAN ATTACHED (show house, other buildings, etc.)

Bedrooms 3 Baths 2 Sq. Ft. 2080 No. of People 4

Septic Tank: _____ Gallons, Distance to dwelling foundation: 5 ft. min. Well: 50 ft. min. Water Line: 10 ft. min. Public Water Line 25 ft. min. Type of tank: Cement _____ Other _____

Component separations: Property lines 5 ft. min./Dwelling foundation 20 Ft. min./Well 100 ft. min./Surface water 300 ft. min./Neighbor's well 100 ft. min./Septic tank 6 ft. min./Water service lines 25 ft. min./Water suction line 100 ft. min.

TYPE OF DWELLING	TYPE OF INSTALLATION	DISP SYSTEM	EST TYPE	
(X) SINGLE	( ) NEW	(X) DRAINFIELD	( ) 231 COMM SEW	( ) 235 NEW NON RES
( ) MULTIPLE	(X) REPLACEMENT	( ) ABS BED	( ) 232 NEW RES	( ) 236 EXIT NON RES
( ) COMMERCIAL	DF SQ 400 4x100'	( ) BASIC ALTER	(X) 233 EXIT RES	( ) 237 NON RES ALT
( ) OTHER		( ) COMPLEX ALTER	( ) 234 RES ALT	

Remarks and/or conditions: _____

I understand that this permit is non-transferable and is valid for 1 year from date of application. Drainfield must not exceed 4 feet in depth.

Applicant's Signature: Barbara M. Carnes Phone: 437-4291

Mailing Address: Rt 4 Bx 980 Deltona, Id 83822

Plot plan submitted: _____ Approved: 8/30/94 Not Approved: _____

Permit issued by Bob Camp, Environmental Health Specialist

INSPECTION TIME: _____

THIS OFFICE MUST BE NOTIFIED FOR FINAL INSPECTION

Approved: _____ Not Approved: _____ Date: _____

Inspected by _____ Installed by: _____ Installer Lic. #: _____

Remarks: _____

INSPECTION TIME: _____

Reference: *Rules & Regulations for Individual and Subsurface Sewage Disposal Systems*

Revised 10/93

87727

PANHANDLE HEALTH DISTRICT I
APPLICATION AND PERMIT FOR ON-SITE SEWAGE SYSTEM

INDIVIDUAL SEWAGE DISPOSAL SITE EVALUATION RECEIVED AUG 3 0 1994

Site Eval.#: _____ Fee: _____ Date: _____

For (Name): BARBARA M. CARNES

Legal Description of Property: S 24 T 56 R 6W TAX PARCEL # RP 56N06W240602A

[redacted]

Location: LECLERC RD

Applicant's Signature: Barbara M. Carnes Size of Lot (Acreage): 90

Mailing Address: Rt 4 Bx 980 Oldtown, Id Phone #: 437-4291

Applicant is: (✓) Landowner ( )-Contractor ( )-Installer Soil Type: _____

SEE TEST HOLE INFORMATION SHEET

Remarks : _____

Valid For One Year From Date: _____ By: _____

Environmental Health Specialist

INSPECTION TIME: 1:30

INDIVIDUAL SEWAGE DISPOSAL INSTALLATION PERMIT

INDIVIDUAL SEWAGE DISPOSAL PERMIT Fee: 90.00 Aquifer Surcharge:

Permit #: 22305 REPLACEMENT DRAIN FIELD Date: 8/30/94

PLOT PLAN ATTACHED (show house, other buildings, etc.)

Bedrooms 3 Baths 2 Sq. Ft. 2080 No. of People 4

Septic Tank: _____ Gallons, Distance to dwelling foundation: 5 ft. min. Well: 50 ft. min. Water Line: 10 ft. min. Public Water Line 25 ft. min. Type of tank: Cement _____ Other _____

Component separations: Property lines 5 ft. min./Dwelling foundation 20 Ft. min./Well 100 ft. min./Surface water 300 ft. min./Neighbor's well 100 ft. min./Septic tank 6 ft. min./Water service lines 25 ft. min./Water suction line 100 ft. min.

TYPE OF DWELLING	TYPE OF INSTALLATION	DISP SYSTEM	EST TYPE	
(X) SINGLE	( ) NEW	(✓) DRAINFIELD	( ) 231 COMM SEW	( ) 235 NEW NON RES
( ) MULTIPLE	(X) REPLACEMENT	( ) ABS BED	( ) 232 NEW RES	( ) 236 EXIT NON RES
( ) COMMERCIAL	DF SQ 400	( ) BASIC ALTER	(✓) 233 EXIT RES	( ) 237 NON RES ALT
( ) OTHER	4x100'	( ) COMPLEX ALTER	( ) 234 RES ALT	

Remarks and/or conditions: _____

I understand that this permit is non-transferable and is valid for 1 year from date of application. Drainfield must not exceed 4 feet in depth.

Applicant's Signature: Barbara M. Carnes

Mailing Address: Rt 4 Bx 980 Oldtown, Id 83822 Phone: 437-4291

Plot plan submitted: _____ Approved: 8/30/94 Not Approved: _____

Permit issued by Bob Camp, Environmental Health Specialist

INSPECTION TIME: _____

THIS OFFICE MUST BE NOTIFIED FOR FINAL INSPECTION

Approved: _____ Not Approved: _____ Date: _____

Inspected by _____ Installed by: _____ Installer Lic. #: _____

Remarks: _____

INSPECTION TIME: _____

Reference: *Rules & Regulations for Individual and Subsurface Sewage Disposal Systems* Revised 10/93

PANHANDLE HEALTH DISTRICT I

RECEIVED JUL

APPLICATION AND PERMIT FOR ON-SITE SEWAGE SYSTEM

INDIVIDUAL SEWAGE DISPOSAL SITE EVALUATION

Paid: Cash _____ Check _____ No Fee _____

Fee _____
Date _____
Site Eval. # _____

For (name) Frank Cunningham
Legal description of property
Section 34 Township 56 R 6W
Location 1/4 mile North of Oldtown Bridge on Leclerc Creek Rd.

Size of lot _____ ft. x _____ ft.
Applicant's signature Frank Cunningham Applicant is: Owner X Other _____
Mailing Address: Rt 4 Box 982 Oldtown ID 83822 Phone: 447-5816 message

SITE EVALUATION

Testhole #1

Testhole #2

Testhole #3

Testhole #4

Remarks: _____

Valid for one year from date: _____ By: _____
Environmental Health Specialist

INDIVIDUAL SEWAGE DISPOSAL INSTALLATION PERMIT

INDIVIDUAL SEWAGE DISPOSAL PERMIT Repair

Permit # 17347

Fee: 40.00
Date: 6-24-91

PLOT PLAN ATTACHED (show house, other buildings, etc.)
No. of Living Units 1 Bedrooms 2 Baths 1 Sq. Ft. 12X56 No. of People 1
Septic Tank: existing Gallons, Distance to dwelling foundation: 5 ft. min.
Well: 50 ft. min. Water Line: 10 ft. min. Public Water Line 25 ft. min. Surface Water 50 ft. min.
Type of tank: Cement X Other _____
Disposal area: Drainfield X Ab. Bed _____ Other _____ Dimensions 300 sq ft.
Component separations: Property lines 5 ft. min./Dwelling foundation 20 ft. min./Well 100 ft. min./Surface water 300 ft./min./Neighbor's well 100 ft. min./Septic tank 6 ft. min./Water service lines 25 ft. min./Water suction line 100 ft. min.
Remarks and/or conditions: observe setback requirements

I understand that this permit is non-transferable and is valid for 1 year from date of application. Drainfield must not exceed 4 feet in depth.

Applicant's Signature Frank Cunningham Phone 447-5816 message
Mailing address: Rt 4 Box 982 OLDTOWN 83822
Plot plan submitted _____ Approved _____ Not approved: _____
Permit issued by Chris S. Donaldson, Environmental Health Specialist

THIS OFFICE MUST BE NOTIFIED FOR FINAL INSPECTION 24 HOURS BEFORE COVERING SYSTEM

Inspection: System covered: Yes Approved: Yes 7/18/91 Not approved: _____
Inspected by Bob Camp Installed by Frank Cunningham
Remarks _____ Date: _____

Reference: *Rules & Regulations for Individual and Subsurface Sewage Disposal Systems*

ON-SITE SEWAGE SYSTEM PERMIT

Panhandle Health District I
Environmental Health Section

322 MARION
SANDPOINT, ID 83864

Septic Permit #07-09-105906

Parcel # RP56N05W193750A

Owner
Ronald R Cooper
P O Box 3569
OLDTOWN, ID 83822

Applicant
Ronald R Cooper
P O Box 3569
OLD TOWN, ID 83822

Enclosed please find your On-Site Sewage System Permit. This permit includes three sections.

Section One- The first section is the actual On-Site Sewage System Permit. This permit is an approval for **construction** of the sewage system. Final approval of the permit is given after a final inspection has been done.

Section Two- The second section is an **Installer's Copy** of the permit. If you have hired a licensed installer, this is the portion of the permit, which provides them with the necessary information to install the system properly. As they are licensed, they should already know all separation distances listed on the permit.

Section Three- The third section of the permit is an **As-Built.** A drawing / plot plan of how the system was built with reference points to permanent structures should be made. This will be filed with your permit at the health district for future reference. You may wish to copy this for you own records as well.

If you have any further questions about the permit please contact the Environmental Health Specialist listed at the bottom of the permit

ON-SITE SEWAGE SYSTEM PERMIT

Septic Permit # **07-09-105906** **Issue Date** 6/14/2007

This permit is valid for one year from issue date for an individual subsurface sewage disposal System for: Parcel # RP56N05W193750A, Township 56N, Range 05W, Section 19, Boise Meridian; a 9 acre plot currently Belonging to Ronald R Cooper. In Subdivision. The system has been sized for a 1000 square foot single family dwelling with 2 bedrooms.

The following conditions are placed on the permit:

Septic Tank - Capacity will be at least 1000 gallons.

Drainfield (& replacement area) – 300 sq. feet

Conditions -

Separation Distances -

Drainfield:

Distance of tank from dwelling foundation - 5 feet minimum
Distance of tank from private well - 50 feet minimum
Distance of tank from public well - 100 feet minimum
Distance of tank from private water lines - 10 feet minimum
Distance of tank from public water lines - 25 feet minimum
Distance of drainfield from property line - 5 feet minimum
Distance of drainfield from dwelling foundation/slab - 10 feet minimum
Distance of drainfield from dwelling basement - 20 feet minimum
Distance of drainfield from well - 100 feet minimum
Distance of drainfield from septic tank - 6 feet minimum
Distance of drainfield from water lines - 25 feet minimum
Drainfield must not exceed 4 feet in depth unless specified for an alternate system
Distance of field from surface water –300 Feet Minimum

Final approval of this permit requires inspection of the system in the ground, uncovered, and submittal of a plot plan distinguishing system construction specifications and final layout including location on the plot with respect to other permanent structures. To schedule a final inspection call the number listed below.

Permit Issued by _____, Environmental Health Specialist
DERIC INKSTER EHS

Reference: *Rules & Regulations for individual and Subsurface Sewage Disposal Systems*

Panhandle Health District I

Final Inspection Sheet

Permit # 07.09.105906	Date: 8-20-07	EHS#	Time:
Date/Time Ready: MON - Aug 20 @ 10:30	Installer: Homeowner - Ron Cooper	License #	
Owner Name:		Phone # 437-0269	

Location/Directions: 959 Hwy 2 - Old Town

Approved: ☒ OK Per Phone 8.29.07 | Disapproved: ☐

Reason for Approval or Disapproval:

Follow-up inspection date: | Approved: ☐ | Disapproved: ☐

Type of system: E.Z Flow

# of laterals: 1 | Length 60 | Depth 2

Distribution type:

Size of tank: 1000 500 | # of compartments:

Type of tank Concrete

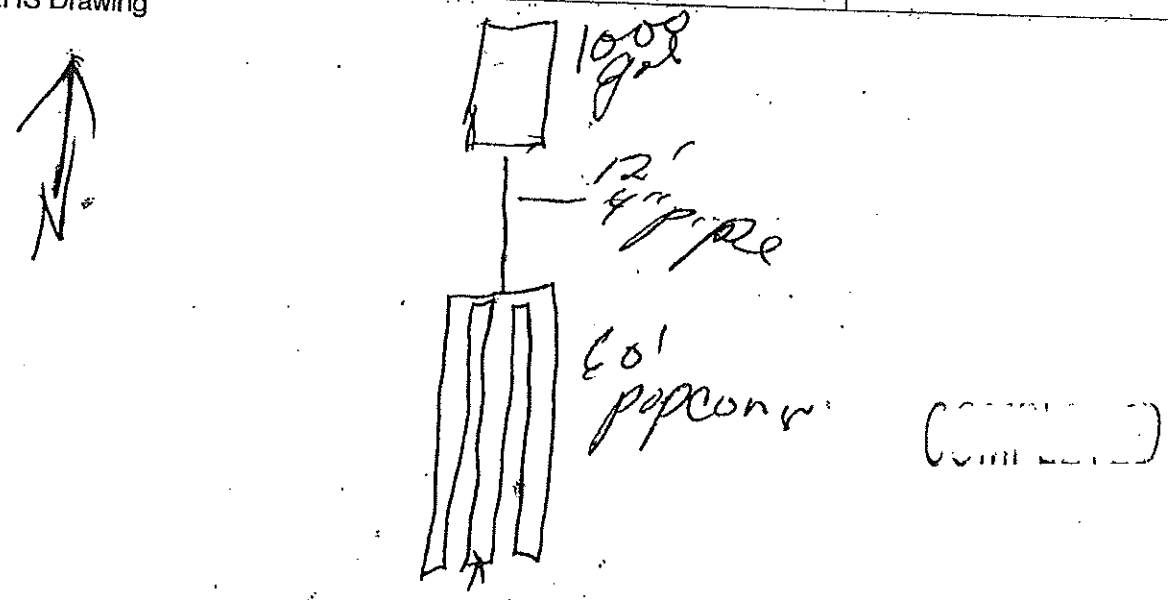
Pressure tested

2cell size

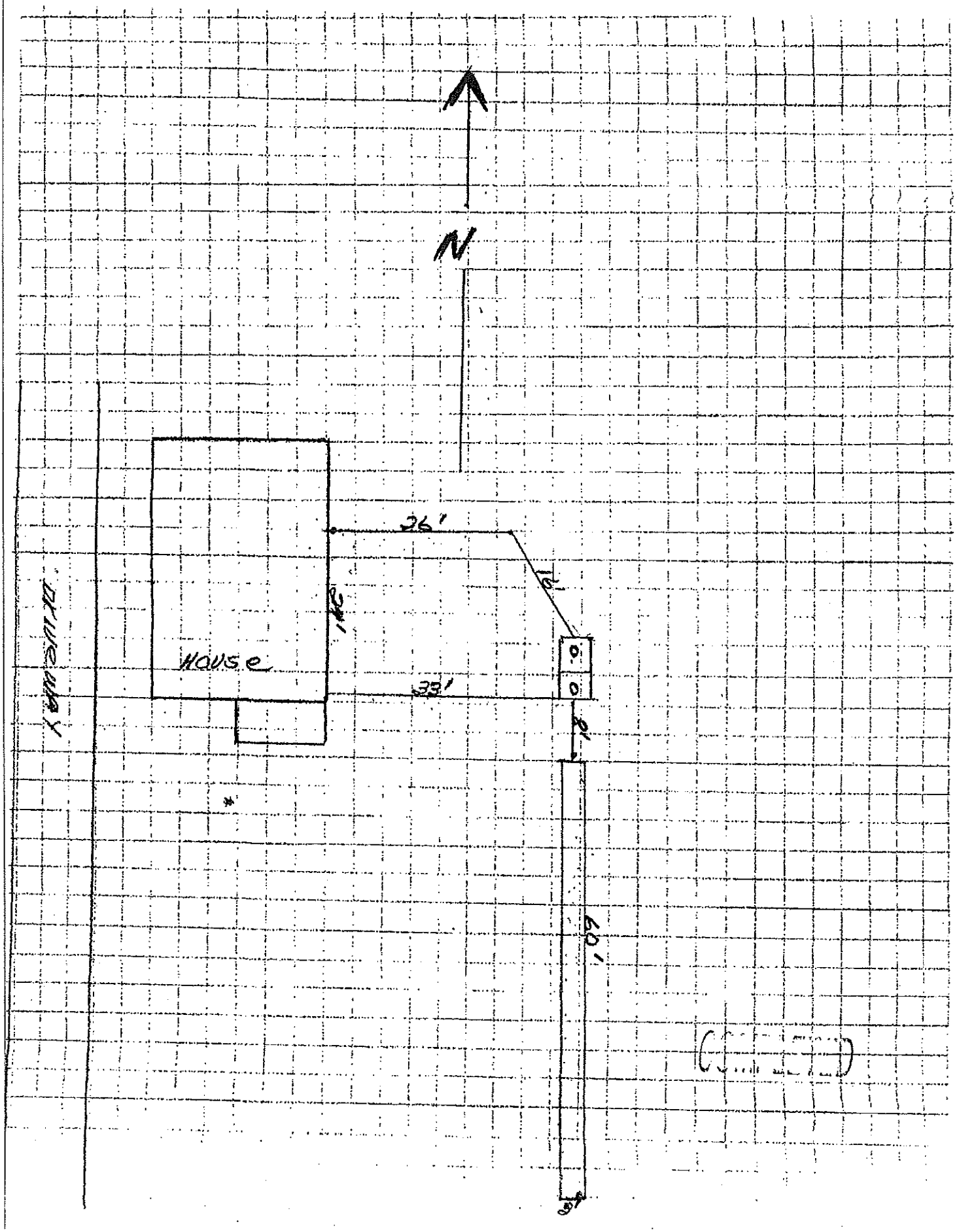
Pump installed (Y) ☐ (N) ☐ N/A ☐

☐ Easement
☐ Curtain drain
☐ Diversion ditch
☐ Other structures
☐ Well or spring
☐ Neighbor dwelling
☐ Property line
☐ Water lines

EHS Drawing



COMPLETED


N
26'
16'
House
35'
2'
60'
DRIVEWAY

Panhandle Health District I
On-Site Sewage System Application

A site evaluation is not an approval or a permit to install a septic system. Permit approval depends on the following: Site evaluation approval, the predicted maximum daily sewage flow; house size and location; well / spring location; surface water locations; changes to native soil (road cuts, grading, benching); distance to neighboring structures (wells, buildings, drainfields); proposed land use; soil quality; other issues of concern.
Permits to construct a septic system are not granted until all such issues are addressed and / or submitted in writing as part of the plot plan / permit application AND found to be consistent with current regulations. Site Evaluations and Septic Permits are valid one (1) year from date of issuance. 07-09-105906

ANY CHANGES TO THE SITE OR CONDITIONS OF THE APPLICATION AFTER ISSUANCE OF THE PERMIT MAY RENDER THE PERMIT INVALID. Repair $200

☐ **Site Evaluation** ☐ **Site Evaluation & Permit** ☒ **Permit**

Owner's Name Ronald R. Cooper Date 6-22-07

Mailing Address P.O. Box 3569 Phone # 208-437-0269

City Old Town State Id Zip 83822

Legal Description: T 52 N R 5 W S 19 Parcel # RP52N05W1900 3750 A

Subdivision _____ Lot _____ Block _____ Size (Acres) 9

Location/Directions to site address: 959 Hwy. 2 Old Town, Id.

Applicant Name Same.

Mailing Address _____ Phone # _____

City _____ State _____ Zip _____

Applicant is: ☒ Landowner ☐ Contractor ☐ Installer ☐ Other _____

Type of Septic Installation ☐ New ☒ Replacement

Proposed Use ☐ Individual ☐ Community (3 to 9 dwellings) ☐ Large Soil Absorption (2,500 gal / day or 10 or more dwellings)

Is there an existing dwelling on this parcel? ☒ Yes ☐ No Description _____

Type of Dwelling

☒ Single Family Residence ☐ Commercial _____

☐ Multiple Family Res. ☐ Other _____

(For Single & Multiple Family Residences Only)

# of Bedrooms 2 # of Baths 1 Sq. Ft. 1000 # of People 2

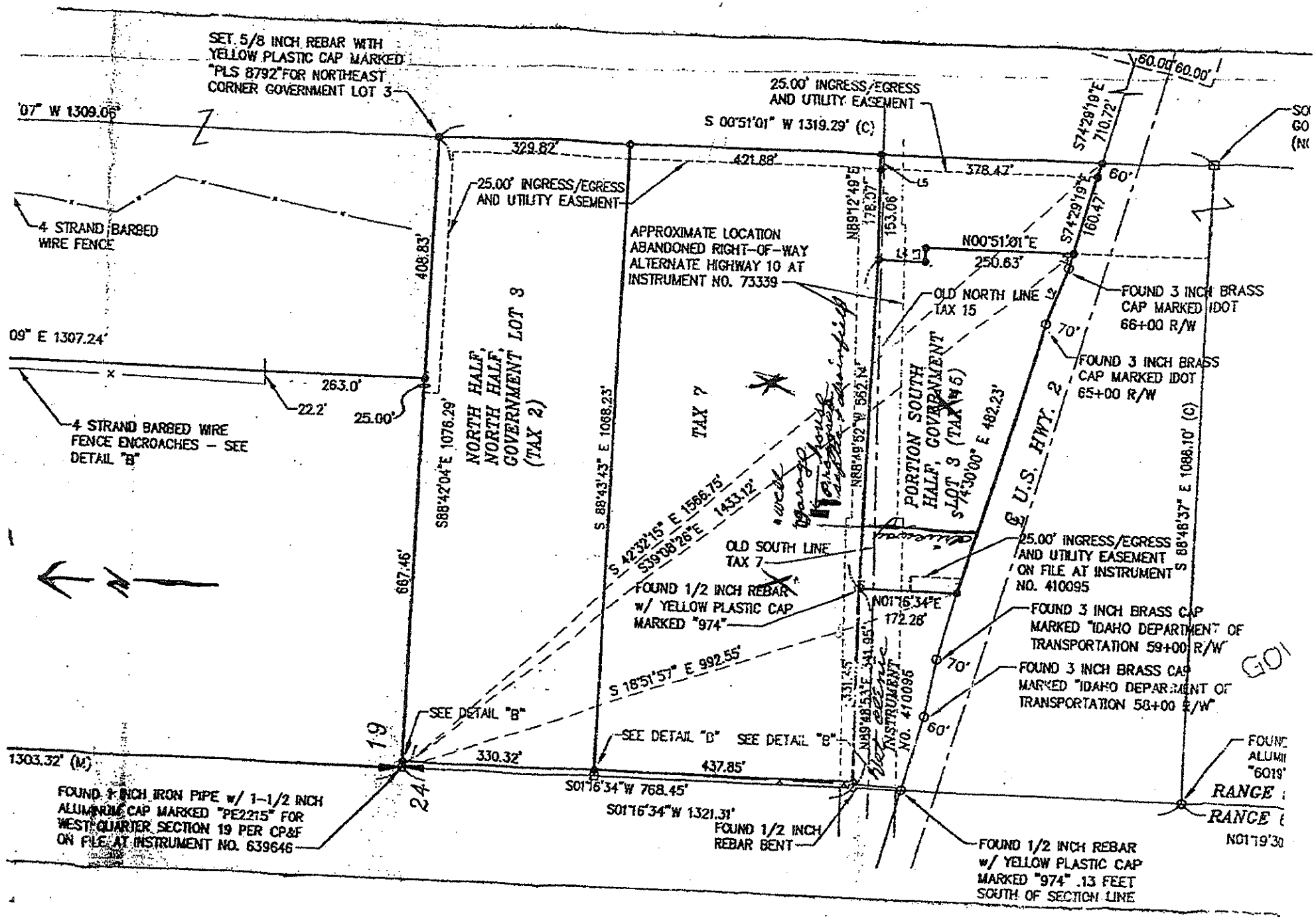
# of Living Units 1 Garbage Disposal ☒ Yes ☒ No

(For Community, Commercial, Large Soil Absorption & Engineered Systems Only)

Average Daily Flow _____ Peak Daily Flow _____

ORIGINAL PERMIT # 03.09.9204

Highlighted areas are required for the Permit Process to be initiated; all information required to complete


SET 5/8 INCH REBAR WITH YELLOW PLASTIC CAP MARKED "PLS 8792" FOR NORTHEAST CORNER GOVERNMENT LOT 3
'07" W 1309.05'
25.00' INGRESS/EGRESS AND UTILITY EASEMENT
S 00°51'01" W 1319.29' (C)
329.82'
421.88'
378.47'
60.00' 60.00'
S74°29'19"E 710.72'
60'
4 STRAND BARBED WIRE FENCE
408.83'
APPROXIMATE LOCATION ABANDONED RIGHT-OF-WAY ALTERNATE HIGHWAY 10 AT INSTRUMENT NO. 73339
N89°12'49"E 178.07'
153.06'
N00°51'01"E 250.63'
S74°29'19"E 160.47'
OLD NORTH LINE TAX 15
FOUND 3 INCH BRASS CAP MARKED IDOT 66+00 R/W
70'
FOUND 3 INCH BRASS CAP MARKED IDOT 65+00 R/W
09" E 1307.24'
263.0'
22.2'
25.00'
4 STRAND BARBED WIRE FENCE ENCROACHES – SEE DETAIL "B"
S88°42'04"E 1076.29'
NORTH HALF, NORTH HALF, GOVERNMENT LOT 3 (TAX 2)
S 88°43'43" E 1088.23'
TAX 7
N88°49'52"W 562.14'
PORTION SOUTH HALF, GOVERNMENT LOT 3 (TAX 5)
S74°30'00" E 482.23'
U.S. HWY. 2
S 88°48'37" E 1088.10' (C)
667.46'
S 42°32'15" E 1566.75'
S39°08'26"E 1433.12'
OLD SOUTH LINE TAX 7
25.00' INGRESS/EGRESS AND UTILITY EASEMENT ON FILE AT INSTRUMENT NO. 410095
FOUND 1/2 INCH REBAR w/ YELLOW PLASTIC CAP MARKED "974"
N01°16'34"E 172.28'
FOUND 3 INCH BRASS CAP MARKED "IDAHO DEPARTMENT OF TRANSPORTATION 59+00 R/W"
S 18°51'57" E 992.55'
331.35'
N89°48'53"E 341.95'
INSTRUMENT NO. 410095
70'
FOUND 3 INCH BRASS CAP MARKED "IDAHO DEPARTMENT OF TRANSPORTATION 58+00 R/W"
SEE DETAIL "B"
19
SEE DETAIL "D"
SEE DETAIL "B"
60'
1303.32' (M)
330.32'
437.85'
24
S01°16'34"W 768.45'
S01°16'34"W 1321.31'
FOUND 1 INCH IRON PIPE w/ 1-1/2 INCH ALUMINUM CAP MARKED "PE2215" FOR WEST QUARTER SECTION 19 PER CP&F ON FILE AT INSTRUMENT NO. 639646
FOUND 1/2 INCH REBAR BENT
FOUND 1/2 INCH REBAR w/ YELLOW PLASTIC CAP MARKED "974" .13 FEET SOUTH OF SECTION LINE
RANGE
N01°19'30"

PANHANDLE HEALTH DISTRICT I
APPLICATION AND PERMIT FOR ON-SITE SEWAGE SYSTEM

INDIVIDUAL SEWAGE DISPOSAL SITE EVALUATION
Paid: Cash ____ Check ____ No Fee ____

Fee: 30.-
Date: 8/1/88
Site Eval. # ____

For (name) D.A.W. Forest Products
Legal description of property TWP 56N R 5W Section 19
Location Old Town Idaho
Size of lot 200 ACRES ft. x 1 ft.
Applicant's signature Cecil J Hamm Applicant is: ____ Owner ✓ Other
Mailing Address: P.O. Box 11882 Spokane, WA 99211 Phone 509-220-0541

SITE EVALUATION

Testhole #1 Testhole #2

Testhole #3 Testhole #4

Remarks: Replacing Existing Septic

Valid for one year from date: ____ By: ____
Environmental Health Specialist

INDIVIDUAL SEWAGE DISPOSAL INSTALLATION PERMIT

INDIVIDUAL SEWAGE DISPOSAL PERMIT
Permit # 13809 Replacement 25
Fee: 30.00
Date: 8/1/88
PLOT PLAN ATTACHED (show house, other buildings, etc.)
No. Living Units 0 Bedrooms ____ People served Sawmill Other ____
Septic Tank: 1000 Gallons, Distance to dwelling foundation: 5 ft. min.
Well: 50 ft. min. Water Line: 10 ft. min. Surface Water: 50 ft. min.
Type of tank: Cement X Other ____
Disposal area: Drainfield X Ab. Bed 10X30 Other ____ Dimensions MIN - 300 Sq ft
Component separations: Property lines 5 ft. min./Dwelling foundation 20 ft. min./Well 100 ft. min./Surface water 300 ft./min./Neighbor's well 100 ft. min./Septic tank 6 ft. min./Water service lines 25 ft. min./Water suction line 100 ft. min.
Remarks and/or conditions: Industrial Sawmill Bldg. 10 Fixtures

I understand that this permit is non-transferable and is valid for 1 year from date of application. Drainfield must not exceed 4 feet in depth.
Applicant's Signature Cecil J Hamm Phone: ____
Mailing address: P.O. Box 11882 Spokane, WA 99211
Plot plan submitted ____ Approved 8/2/88 Disapproved ____
Permit issued by Bob Camp, Environmental Health Specialist

THIS OFFICE MUST BE NOTIFIED FOR FINAL INSPECTION 24 HOURS BEFORE COVERING SYSTEM

Inspection: System covered ____ Approved ____ Not approved
Inspected by ____ Installed by ____
Remarks ____ Date: ____

Reference: Rules & Regulations for Individual and Subsurface Sewage Disposal Systems

DETAILED PLOT PLAN

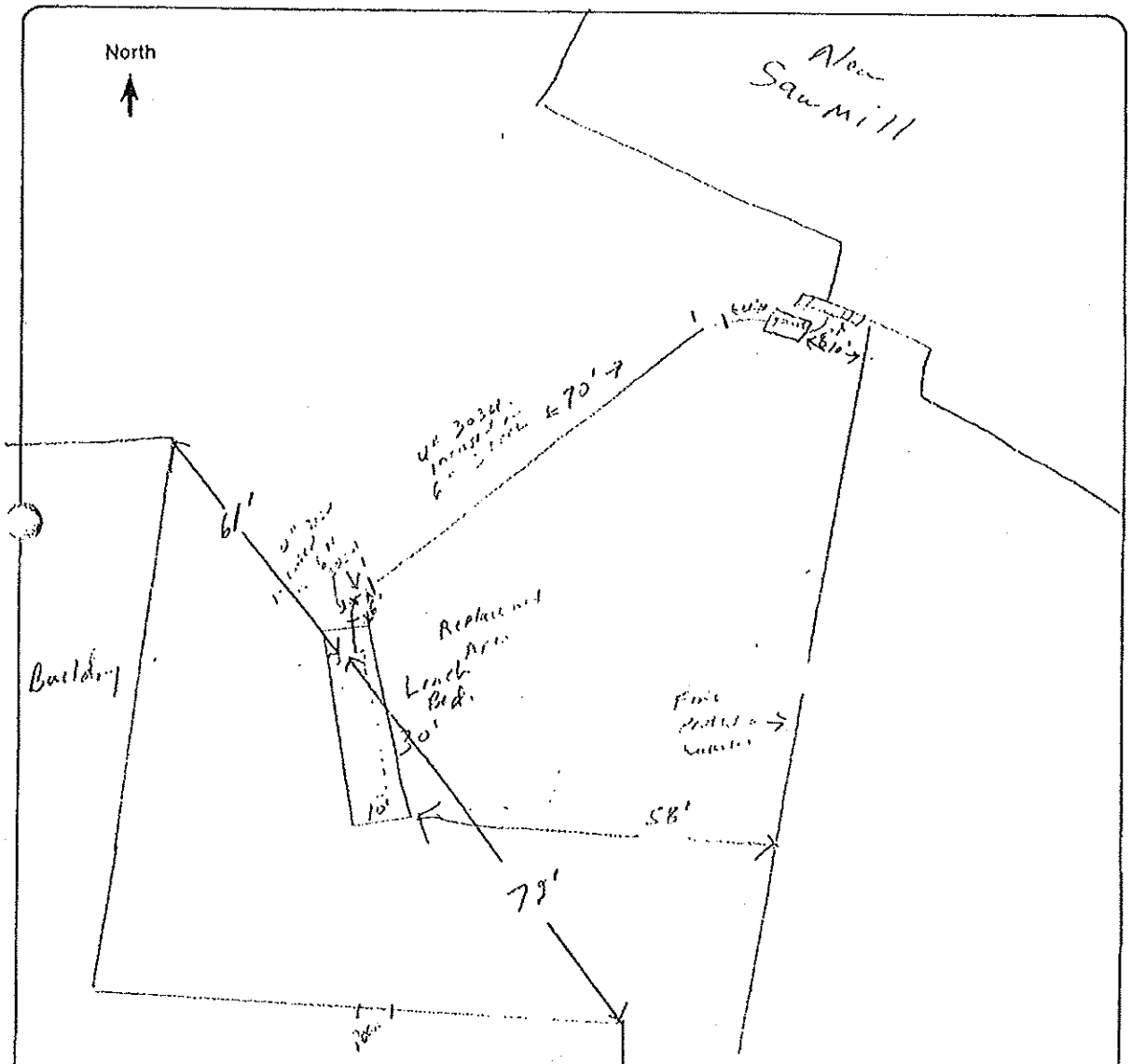
Permit # 13809 Date 12/20/88

Name D Rew

Legal Desc.

Lot size or acreage

PLAN MUST SHOW Setbacks & Existing or Proposed Easements. Existing buildings. Location and dimensions of lot lines, proposed buildings, septic system, and distances to wells, water lines, surface water, house, etc.



The information shown and the statements I have made are correct.

Applicant's Signature Date 12/20/88

NOTE: A scale drawing may be required. Installer's as-built drawings must be made on plot plan.

Replacement.

PANHANDLE HEALTH DISTRICT I
APPLICATION AND PERMIT FOR ON-SITE SEWAGE SYSTEM

INDIVIDUAL SEWAGE DISPOSAL SITE EVALUATION

Paid: Cash _____ Check ✓ No Fee _____

Fee: _____
Date: _____
Site Eval. # _____

For (name) Imre Mankotics
Legal description of property 56-540-19. lot 4 BLK 1 DIA HTS.

Location West of Priest River

Size of lot _____ ft. x _____ ft.
Applicant's signature _____ Applicant is: _____ Owner _____ Other
Mailing Address: _____ Phone _____

SITE EVALUATION

Testhole #1 Testhole #2

Testhole #3 Testhole #4

Remarks: _____

Valid for one year from date: _____ By: _____
Environmental Health Specialist

INDIVIDUAL SEWAGE DISPOSAL INSTALLATION PERMIT

INDIVIDUAL SEWAGE DISPOSAL PERMIT D. F. Replacement

Permit # 13027
Fee: 30.00
Date: 11-18-87

PLOT PLAN ATTACHED (show house, other buildings, etc.)
No. Living Units 1 Bedrooms _____ People served _____ Other _____
Spectic Tank: 1000 Gallons, Distance to dwelling foundation: 5 ft. min.
Well: 50 ft. min. Water Line: 10 ft. min. Surface Water: 50 ft. min.
Type of tank: Cement _____ Other _____
Disposal area: Drainfield 150' Ab. Bed _____ Other _____ Dimensions 2-60' lines
Component separations: Property lines 5 ft. min./Dwelling foundation 20 ft. min./Well 100 ft. min./Surface water 300 ft./min./Neighbor's well 100 ft. min./Septic tank 6 ft. min./Water service lines 25 ft. min./Water suction line 100 ft. min.
Remarks and/or conditions: _____

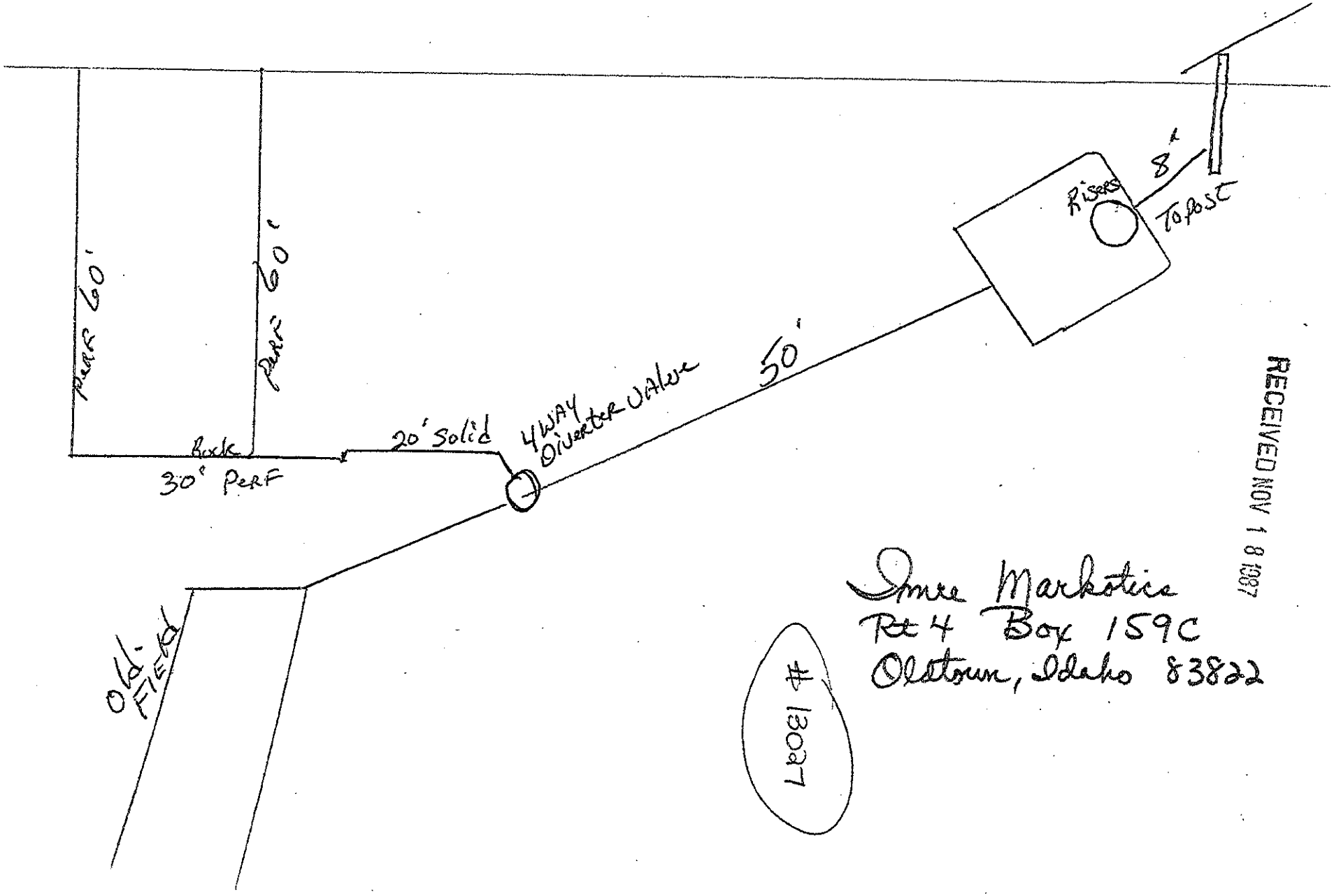
I understand that this permit is non-transferable and is valid for 1 year from date of application. Drainfield must not exceed 4 feet in depth.

Applicant's Signature Endicott Pump & Sales Phone: 448-2713
Mailing address: Rt 1 Box 59 Priest River Id 83856
Plot plan submitted _____ Approved ✓ Disapproved _____
Permit issued by Bob Camp, Environmental Health Specialist

THIS OFFICE MUST BE NOTIFIED FOR FINAL INSPECTION 24 HOURS BEFORE COVERING SYSTEM

Inspection: System covered ✓ Approved ✓ Not approved _____
~~Inspected~~ by Bob Camp Installed by Endicott
Remarks _____ Date: _____

Reference: *Rules & Regulations for Individual and Subsurface Sewage Disposal Systems*



Imre Markotics
Rt 4 Box 159C
Oldtown, Idaho 83822

13027

RECEIVED NOV 18 1987

Appendix C-1
Alternatives Cost Estimate

Sewer Collection System Alternatives Cost Estimate

James A. Sewell & Associates, LLC

JAMES A. SEWELL & ASSOCIATES, LLC 2/6/2013
Newport, Washington SJF

ENGINEER'S OPINION OF PROBABLE COST

CLIENT: West Bonner Water & Sewer District
PROJECT: Extend Water & Sewer Utilities to Albeni Falls Area
SUBJECT: Engineer's Opinion of Probable Cost For 20 Year Development Condition

Sewer Collection System Alternative No. 2 : Construction of New Gravity Sewer Collection System
NOTE: Prices are based on Davis-Bacon Wage Rates for the 2013 Construction Year

ITEM	DESCRIPTION	SIZE/CAPACITY	UNITS	UNIT PRICE	PRICE
General					
1	Moblization	1	LS	$ 32,500.00	$ 32,500.00
2	Stormwater and Erosion Control	1	LS	$ 21,654.20	$ 21,654.20
	Subtotal				**$ 54,154.20**
Gravity Sewer Collection System Construction					
1	15" Gravity Sewerline Extension	1,205	LF	$ 72.00	$ 86,760.00
2	12" Gravity Sewerline Extension	1,561	LF	$ 44.71	$ 69,792.31
3	10" Gravity Sewerline Extension	1,228	LF	$ 39.08	$ 47,990.24
4	8" Gravity Sewerline Extension	728	LF	$ 29.45	$ 21,439.60
5	Manholes	19	EA	$ 2,417.33	$ 45,929.27
6	6" Sewer Services	116	LF	$ 52.23	$ 6,058.68
7	4" Sewer Services	831	LF	$ 32.30	$ 26,841.30
8	24" Dia. Sewer Crossing Hwy 2	1	LS	$ 84,630.76	$ 84,630.76
9	Existing Sewer Interconnections	1	LS	$ 5,326.98	$ 5,326.98
10	PVC Pressure Sewer Main to HDPE Transition	309	LF	$ 50.61	$ 15,638.49
	Subtotal				**$ 464,561.83**
Lift Station Construction					
1	Excavation, Earthwork, Shoring	1	LS	$ 49,809.50	$ 49,809.50
2	8' Diameter Wet Well, pumps and Appurtenances	1	LS	$ 134,348.17	$ 134,348.17
3	Valve Vault with Fittings and Piping	1	LS	$ 54,827.85	$ 54,827.85
4	Control Building	1	LS	$ 65,000.00	$ 65,000.00
5	Stand-by Generator	1	LS	$ 63,000.00	$ 63,000.00
6	Excavation and Embankment Construction	1	LS	$ 2,052.57	$ 2,052.57
7	Generator and Propane Tank Conc. Pad	1	LS	$ 1,575.96	$ 1,575.96
8	Site Fencing	130	LF	$ 86.21	$ 11,207.30
9	18" D.I. Gravity Sewer From L.S. to Manhole	176	LF	$ 160.81	$ 28,302.56
10	Electrical	1	LS	$ 65,000.00	$ 65,000.00
	Subtotal				**$ 475,123.91**
	CONSTRUCTION SUBTOTAL				**$ 939,685.74**

JAMES A. SEWELL & ASSOCIATES, LLC 2/12/2013
Newport, Washington SJF

ENGINEER'S OPINION OF PROBABLE COST

CLIENT: West Bonner Water & Sewer District
PROJECT: Extend Water & Sewer Utilities to Albeni Falls Area
SUBJECT: Engineer's Opinion of Probable Cost For 20 Year Development Condition

Sewer Collection System Alternative No. 3 : Construction of New Pressure Sewer Collection System
NOTE: Prices are based on Davis-Bacon Wage Rates for the 2013 Construction Year

ITEM	DESCRIPTION	SIZE/CAPACITY	UNITS	UNIT PRICE	PRICE
Pressure Sewer System Construction					
1	6" Pressure Sewerline Extension	1,240	LF	$ 25.00	$ 31,000.00
2	4" Pressure Sewerline Extension	3,200	LF	$ 17.50	$ 56,000.00
3	Highway Crossing	120	LF	$ 700.00	$ 84,000.00
4	Connection to Existing System	1	EA	$ 5,000.00	$ 5,000.00
5	Pressure Sewer Service	171	LF	$ 500.00	$ 85,500.00
6	Fiber Optic Locate and Protect	1	LS	$ 5,000.00	$ 5,000.00
7	Sewage Air Release Valve	1	EA	$ 2,750.00	$ 2,750.00
	Subtotal				**$ 269,250.00**
Individual Pump Station Installation					
1	E-One Explosion Proof Pump Basins	171	EA	$ 10,000.00	$ 1,710,000.00
	Subtotal				**$ 1,710,000.00**
	CONSTRUCTION TOTAL				**$ 1,979,250.00**

Appendix C-2
Alternatives Cost Estimate

Sewer Treatment Alternatives Cost Estimate

James A. Sewell & Associates, LLC

JAMES A. SEWELL & ASSOCIATES, LLC 2/6/2013
Newport, Washington SJF

ENGINEER'S OPINION OF PROBABLE COST

CLIENT: West Bonner Water & Sewer District
PROJECT: Extend Water & Sewer Utilities to Albeni Falls Area
SUBJECT: Engineer's Opinion of Probable Cost

Sewer Treatment Alternative No. 3: Construct New Wastewater Treatment Plant to Serve Subdivision

NOTE: Prices are based on Davis-Bacon Wage Rates for the 2013 Construction Year

ITEM	DESCRIPTION	SIZE/CAPACITY	UNITS	UNIT PRICE	PRICE
Wastewater Treatment Plant Construction					
1	Wastewater Treatment Plant	228,000	Gal	$ 15.00	$ 3,420,000.00
	CONSTRUCTION TOTAL				**$ 3,420,000.00**

JAMES A. SEWELL & ASSOCIATES, LLC 2/6/2013
Newport, Washington SJF

ENGINEER'S OPINION OF PROBABLE COST

CLIENT: West Bonner Water & Sewer District
PROJECT: Extend Water & Sewer Utilities to Albeni Falls Area
SUBJECT: Engineer's Opinion of Probable Cost

Sewer Treatment Alternative No. 4: Pump Wastewater to Newport WWTP

NOTE: Prices are based on Davis-Bacon Wage Rates for the 2013 Construction Year

ITEM	DESCRIPTION	SIZE/CAPACITY	UNITS	UNIT PRICE	PRICE
Lift Station Construction					
1	Excavation, Earthwork, Shoring	1	LS	$ 49,809.50	$ 49,809.50
2	8' Diameter Wet Well, pumps and Appurtenances	1	LS	$ 134,348.17	$ 134,348.17
3	Valve Vault with Fittings and Piping	1	LS	$ 54,827.85	$ 54,827.85
4	Control Building	1	LS	$ 65,000.00	$ 65,000.00
5	Stand-by Generator	1	LS	$ 63,000.00	$ 63,000.00
6	Excavation and Embankment Construction	1	LS	$ 2,052.57	$ 2,052.57
7	Generator and Propane Tank Conc. Pad	1	LS	$ 1,575.96	$ 1,575.96
8	Site Fencing	130	LF	$ 86.21	$ 11,207.30
9	18" D.I. Gravity Sewer From L.S. to Manhole	176	LF	$ 160.81	$ 28,302.56
10	Electrical	1	LS	$ 65,000.00	$ 65,000.00
	CONSTRUCTION SUBTOTAL				**$ 475,123.91**
Bore Sewer Lines Under River					
1	Moblization	1	LS	$ 30,625.00	$ 30,625.00
2	Stormwater and Erosion Control	1	LS	$ 26,750.00	$ 26,750.00
3	12" 200 psi HDPE Pipe	1	LS	$ 296,500.00	$ 296,500.00
4	6" HDPE Pressure Sewer Pipe	1	LS	$ 53,500.00	$ 53,500.00
	Construction Subtotal				**$ 407,375.00**
	CONSTRUCTION TOTAL				**$ 882,498.91**

Appendix C-3
Alternatives Cost Estimate

Sewer Main River Crossing Alternatives Estimates

James A. Sewell & Associates, LLC

JAMES A. SEWELL & ASSOCIATES, LLC 2/6/2013
Newport, Washington SJF

ENGINEER'S OPINION OF PROBABLE COST

CLIENT: West Bonner Water & Sewer District
PROJECT: West Bonner Water System Ext. Sewer Main River Crossing Alternative Comparison
SUBJECT: Engineer's Opinion of Probable Cost

Sewer Main River Crossing Alternative No. 3: Lay Pipeline on River Bottom
NOTE: Prices are based on Davis-Bacon Wage Rates for the 2013 Construction Year

ITEM	DESCRIPTION	SIZE/CAPACITY	UNITS	UNIT PRICE	PRICE
Lay Pipe On River Bottom					
1	12" 200 psi HDPE Casing Pipe	1,450	LF	$ 40.00	$ 58,000.00
2	6" 200 psi HDPE Carrier Pipe	1,450	LF	$ 25.00	$ 36,250.00
3	Lay Sewer Casing and Carrier Across River Bottom	1,450	LF	$ 500.00	$ 725,000.00
4	Pipe Anchoring System	1,450	LF	$ 16.00	$ 23,200.00
5	Stage Equipment	1	LS	$ 10,000.00	$ 10,000.00
6	Sewer Transition Fittings	1	EA	$ 2,000.00	$ 2,000.00
	Construction Subtotal				**$ 854,450.00**

JAMES A. SEWELL & ASSOCIATES, LLC 2/6/2013
Newport, Washington SJF

ENGINEER'S OPINION OF PROBABLE COST

CLIENT: West Bonner Water & Sewer District
PROJECT: West Bonner Water System Ext. Sewer Main River Crossing Alternative Comparison
SUBJECT: Engineer's Opinion of Probable Cost

Sewer Main River Crossing Alternative No. 4: Pipeline in Trench Across River Bottom
NOTE: Prices are based on Davis-Bacon Wage Rates for the 2013 Construction Year

ITEM	DESCRIPTION	SIZE/CAPACITY	UNITS	UNIT PRICE	PRICE
Lay Pipe In Trench On River Bottom					
1	12" 200 psi HDPE Casing Pipe in Trench	1,450	LF	$ 40.00	$ 58,000.00
2	6" 200 psi HDPE Carrier Pipe in Casing Pipe	1,450	LF	$ 25.00	$ 36,250.00
3	Trench Across River Bottom	1,450	LF	$ 500.00	$ 725,000.00
4	Silt Fencing Across River Bottom	1	LS	$ 10,000.00	$ 10,000.00
5	Stage Trenching Equipment	1	LS	$ 10,000.00	$ 10,000.00
6	Sewer Transition Fittings	1	LS	$ 2,000.00	$ 2,000.00
	Construction Subtotal				**$ 841,250.00**

JAMES A. SEWELL & ASSOCIATES, LLC 2/6/2013
Newport, Washington SJF

ENGINEER'S OPINION OF PROBABLE COST

CLIENT: West Bonner Water & Sewer District
PROJECT: Extend Water & Sewer Utilities to Albeni Falls Area
SUBJECT: Engineer's Opinion of Probable Cost

Sewer Main River Crossing Alternative No. 5: Directionally Drill Sewer Main Under River
NOTE: Prices are based on Davis-Bacon Wage Rates for the 2013 Construction Year

ITEM	DESCRIPTION	SIZE/CAPACITY	UNITS	UNIT PRICE	PRICE
Bore Sewer Lines Under River					
1	Moblization	1	LS	$ 30,625.00	$ 30,625.00
2	Stormwater and Erosion Control	1	LS	$ 26,750.00	$ 26,750.00
3	12" 200 psi HDPE Pipe	1	LS	$ 296,500.00	$ 296,500.00
4	6" HDPE Pressure Sewer Pipe	1	LS	$ 53,500.00	$ 53,500.00
	Construction Subtotal				**$ 407,375.00**
	CONSTRUCTION TOTAL				**$ 407,375.00**

Appendix C-4
Preferred Alternative

Preferred Alternative Construction Cost Estimates

James A. Sewell & Associates, LLC

JAMES A. SEWELL & ASSOCIATES, LLC 2/6/2013
Newport, Washington SJF

ENGINEER'S OPINION OF PROBABLE COST

CLIENT: West Bonner Water & Sewer District
PROJECT: Extend Water & Sewer Utilities to Albeni Falls Area
SUBJECT: Engineer's Opinion of Probable Cost

Preferred Alternative Total Project Cost Estimate
Sewer Collection Alternative No. 2, Sewer Treatment Alternative No. 4,
and River Crossing Alternative No. 5
NOTE: Prices are based on Davis-Bacon Wage Rates for the 2013 Construction Year

ITEM	DESCRIPTION	SIZE/CAPACITY	UNITS	UNIT PRICE	PRICE
New Gravity Sewer Collection System Construction					
1	Moblization	1	LS	$ 32,500.00	$ 32,500.00
2	Stormwater and Erosion Control	1	LS	$ 21,654.20	$ 21,654.20
3	15" Gravity Sewerline Extension	1,205	LF	$ 72.00	$ 86,760.00
4	12" Gravity Sewerline Extension	1,561	LF	$ 44.71	$ 69,792.31
5	10" Gravity Sewerline Extension	1,228	LF	$ 39.08	$ 47,990.24
6	8" Gravity Sewerline Extension	728	LF	$ 29.45	$ 21,439.60
7	Manholes	19	EA	$ 2,417.33	$ 45,929.27
8	6" Sewer Services	116	LF	$ 52.23	$ 6,058.68
9	4" Sewer Services	831	LF	$ 32.30	$ 26,841.30
10	24" Dia. Sewer Crossing Hwy 2	1	LS	$ 84,630.76	$ 84,630.76
11	Existing Sewer Interconnections	1	LS	$ 5,326.98	$ 5,326.98
12	PVC Pressure Sewer Main to HDPE Transition	309	LF	$ 50.61	$ 15,638.49
	Construction Subtotal				**$ 464,561.83**
Sewage Lift Station Construction					
1	Excavation, Earthwork, Shoring	1	LS	$ 49,809.50	$ 49,809.50
2	8' Diameter Wet Well, pumps and Appurtenances	1	LS	$ 134,348.17	$ 134,348.17
3	Valve Vault with Fittings and Piping	1	LS	$ 54,827.85	$ 54,827.85
4	Control Building	1	LS	$ 65,000.00	$ 65,000.00
5	Stand-by Generator	1	LS	$ 63,000.00	$ 63,000.00
6	Excavation and Embankment Construction	1	LS	$ 2,052.57	$ 2,052.57
7	Generator and Propane Tank Conc. Pad	1	LS	$ 1,575.96	$ 1,575.96
8	Site Fencing	130	LF	$ 86.21	$ 11,207.30
9	18" D.I. Gravity Sewer From L.S. to Manhole	176	LF	$ 160.81	$ 28,302.56
10	Electrical	1	LS	$ 65,000.00	$ 65,000.00
	Construction Subtotal				**$ 475,123.91**
Bore Sewer Lines Under River					
1	Moblization	1	LS	$ 30,625.00	$ 30,625.00
2	Stormwater and Erosion Control	1	LS	$ 26,750.00	$ 26,750.00
3	12" 200 psi HDPE Pipe	1	LS	$ 296,500.00	$ 296,500.00
4	6" HDPE Pressure Sewer Pipe	1	LS	$ 53,500.00	$ 53,500.00
	Construction Subtotal				**$ 407,375.00**
	Subtotal				$ 1,347,060.74
	Construction Engineering				$ 137,200.00
	Construction Subtotal				**$ 1,484,260.74**
	Contingency				$ 114,739.26
	TOTAL				**$ 1,599,000.00**

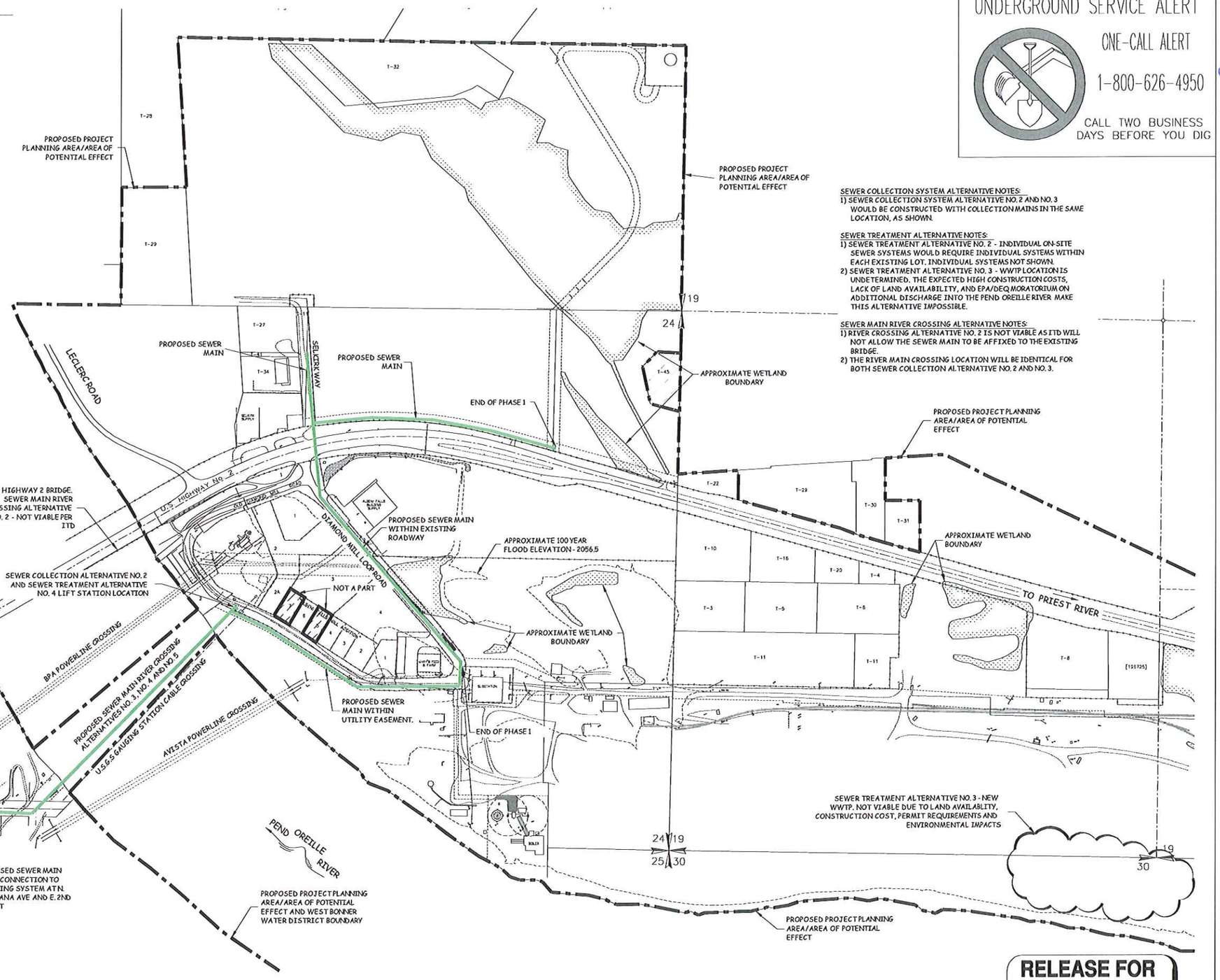
Appendix D-1
Proposed Project Maps

Sewer System Alternatives Drawing, Sewer System Preferred Alternative Drawing, Proposed Project Planning Area and Area of Potential Affect Aerial and USGS Drawings, City of Oldtown Zoning Map, 100 Year Flood Map, FEMA Firmette Maps, and Wetland Comparison Drawing for PPPA.

James A. Sewell & Associates, LLC

LEGEND

- EXISTING POWER POLE
- EXISTING WATER SERVICE
- EXISTING SEWER MANHOLE
- EXISTING FIRE HYDRANT LOCATION
- EXISTING STORM DRAIN
- EXISTING MAILBOX
- EXISTING STREET SIGN LOCATION
- EXISTING TELEPHONE PEDESTAL
- EXISTING EDGE OF ASPHALT
- EXISTING FENCELINE
- APPROXIMATE TREE OR SHRUB LOCATION
- PROPOSED SEWER COLLECTION SYSTEM LOCATION. SEWER COLLECTION ALTERNATIVE NO. 2 AND NO. 3
- 100-YEAR FLOOD ELEVATION (2056.5)
- PROPOSED PROJECT PLANNING AREA AND AREA OF POTENTIAL EFFECT



SEWER COLLECTION SYSTEM ALTERNATIVE NOTES:
1) SEWER COLLECTION SYSTEM ALTERNATIVE NO. 2 AND NO. 3 WOULD BE CONSTRUCTED WITH COLLECTION MAINS IN THE SAME LOCATION, AS SHOWN.

SEWER TREATMENT ALTERNATIVE NOTES:
1) SEWER TREATMENT ALTERNATIVE NO. 2 - INDIVIDUAL ON-SITE SEWER SYSTEMS WOULD REQUIRE INDIVIDUAL SYSTEMS WITHIN EACH EXISTING LOT. INDIVIDUAL SYSTEMS NOT SHOWN.
2) SEWER TREATMENT ALTERNATIVE NO. 3 - WWTP LOCATION IS UNDETERMINED. THE EXPECTED HIGH CONSTRUCTION COSTS, LACK OF LAND AVAILABILITY, AND EPA/DEQ MORATORIUM ON ADDITIONAL DISCHARGE INTO THE PEND OREILLE RIVER MAKE THIS ALTERNATIVE IMPOSSIBLE.

SEWER MAIN RIVER CROSSING ALTERNATIVE NOTES:
1) RIVER CROSSING ALTERNATIVE NO. 2 IS NOT VIABLE AS ITD WILL NOT ALLOW THE SEWER MAIN TO BE AFFIXED TO THE EXISTING BRIDGE.
2) THE RIVER MAIN CROSSING LOCATION WILL BE IDENTICAL FOR BOTH SEWER COLLECTION ALTERNATIVE NO. 2 AND NO. 3.

UNDERGROUND SERVICE ALERT

ONE-CALL ALERT

1-800-626-4950

CALL TWO BUSINESS DAYS BEFORE YOU DIG

PROFESSIONAL ENGINEER REGISTERED 3998 STATE OF IDAHO ERIC J. ELDEBURG

ENGINEER'S STAMP

No.	DATE	REVISION	DRN/CHK
1	9-3-10	RELEASE FOR AGENCY REVIEW	JMB/KAK

James A. Sewell and Associates, LLC
CONSULTING ENGINEERS
NEWPORT, WASHINGTON, 99156
(509) 447-3626

SHEET TITLE: SEWER SYSTEM ALTERNATIVES OVERALL PLAN VIEW

PROJECT: SEWER SYSTEM EXTENSION, 2012
WEST BONNER W&S DISTRICT
OLDTOWN, BONNER COUNTY, IDAHO

DATE:	11-19-12
SCALE:	AS SHOWN
DRAWN BY:	JMB
CHECKED BY:	EJE
FILE NAME:	WEST BONNER PA36012
DATA No.:	23072-09-002

SHEET 1 OF 1

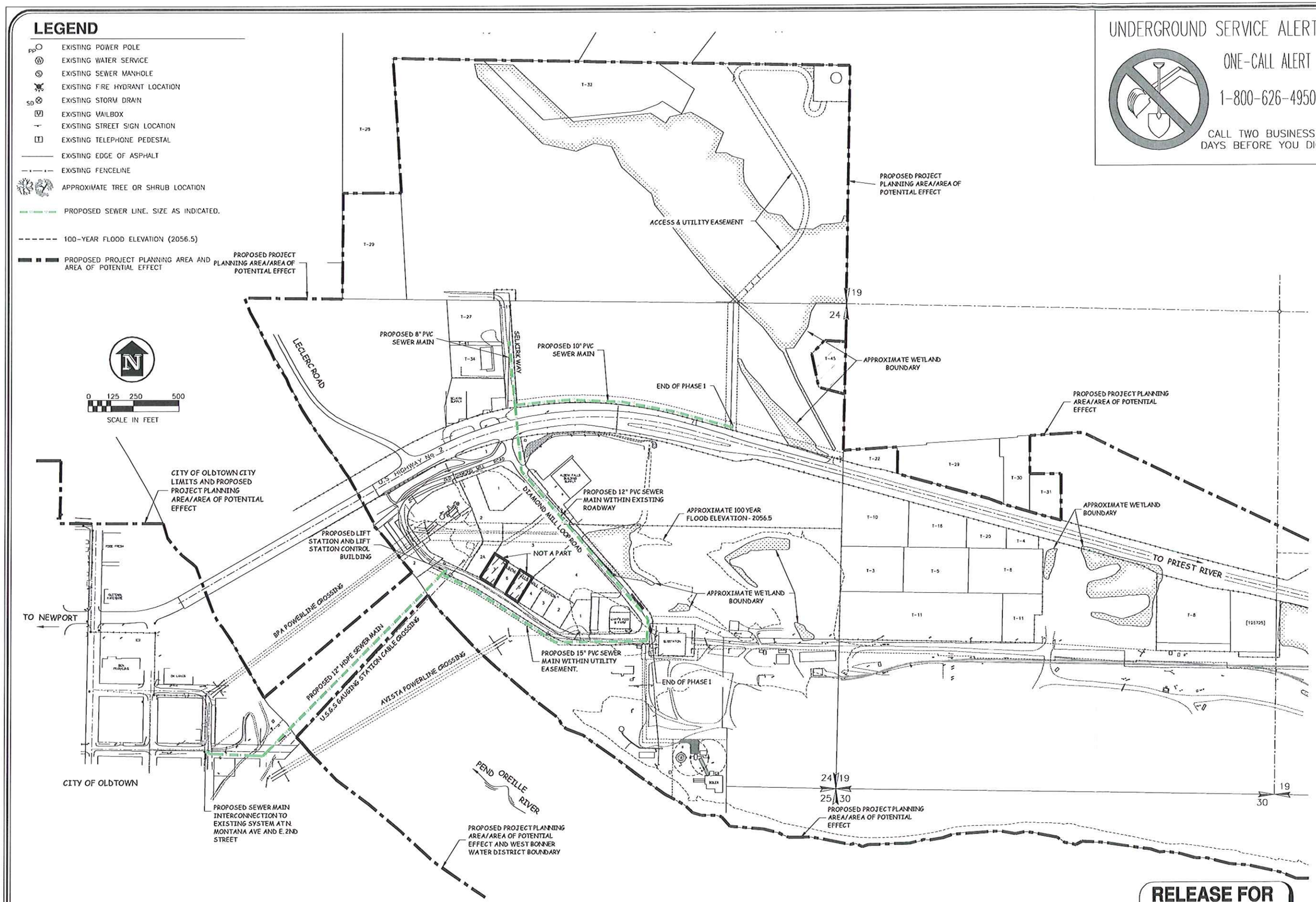
4.1 **SEWER EXTENSION SYSTEM COLLECTION, RIVER CROSSING, AND TREATMENT ALTERNATIVES, PHASE 1**

SCALE: AS SHOWN

RELEASE FOR AGENCY REVIEW

LEGEND

- EXISTING POWER POLE
- EXISTING WATER SERVICE
- EXISTING SEWER MANHOLE
- EXISTING FIRE HYDRANT LOCATION
- EXISTING STORM DRAIN
- EXISTING MAILBOX
- EXISTING STREET SIGN LOCATION
- EXISTING TELEPHONE PEDESTAL
- EXISTING EDGE OF ASPHALT
- EXISTING FENCELINE
- APPROXIMATE TREE OR SHRUB LOCATION
- PROPOSED SEWER LINE. SIZE AS INDICATED.
- 100-YEAR FLOOD ELEVATION (2056.5)
- PROPOSED PROJECT PLANNING AREA AND AREA OF POTENTIAL EFFECT



UNDERGROUND SERVICE ALERT

ONE-CALL ALERT

1-800-626-4950

CALL TWO BUSINESS DAYS BEFORE YOU DIG

RELEASE FOR AGENCY REVIEW

4.1 **OVERALL LAYOUT - SEWER EXTENSION PREFERRED ALTERNATIVE, PHASE 1**

SCALE: AS SHOWN

PROFESSIONAL ENGINEER REGISTERED 3998 STATE OF IDAHO ERIC J. ELDENBURG

ENGINEER'S STAMP

No.	DATE	REVISION	DRN/CHK
1	9-3-10	RELEASE FOR AGENCY REVIEW	JMB/KAK

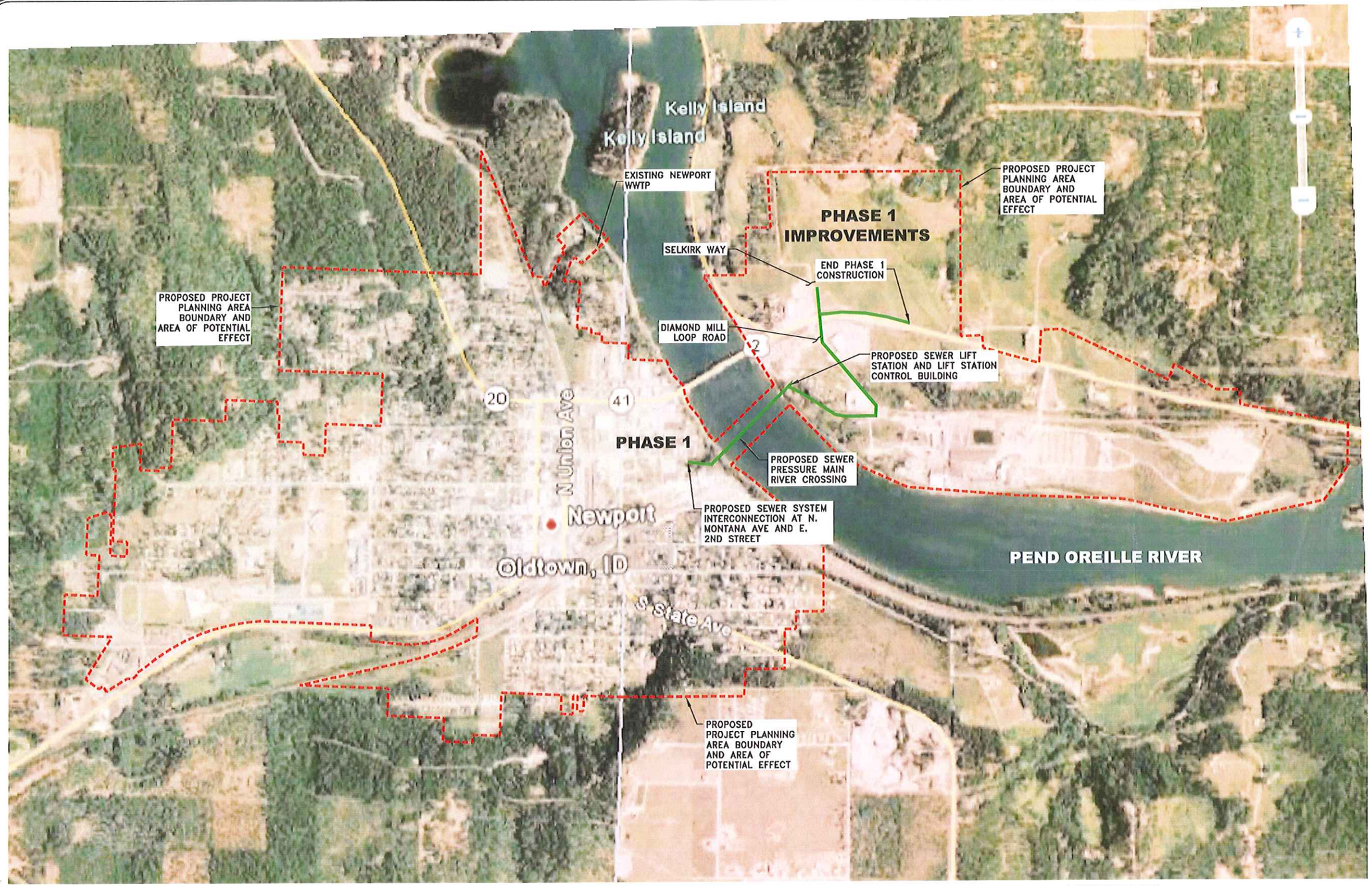
James A. Sewell and Associates, LLC
CONSULTING ENGINEERS
NEWPORT, WASHINGTON, 99156
(509) 447-3626

SHEET TITLE:
SEWER SYSTEM PREFERRED ALTERNATIVE
OVERALL PLAN VIEW

PROJECT:
SEWER SYSTEM EXTENSION, 2012
WEST BONNER W&S DISTRICT
OLDTOWN, BONNER COUNTY, IDAHO

DATE: 11-19-12
SCALE: AS SHOWN
DRAWN BY: JMB
CHECKED BY: EJE
FILE NAME: [illegible]
DATA No.: 23072-09-002

SHEET 1 OF 1



LINETYPE LEGEND

- PROPOSED SEWER SYSTEM
- PROPOSED PROJECT PLANNING AREA (PPPA) AND AREA OF POTENTIAL IMPACT (APE)

NOTE:
THE PROPOSED PROJECT PLANNING AREA (PPPA) AND THE AREA OF POTENTIAL EFFECT (APE) COINCIDE AT ALL LOCATIONS.

N

SCALE: NTS

4.1 **SEWER SYSTEM EXTENSION PROPOSED PROJECT PLANNING AREA AERIAL MAP**

PROFESSIONAL ENGINEER REGISTERED 3998 STATE OF IDAHO ERIC J. ELDEVBURG

9/5/13

ENGINEER'S STAMP

No.	DATE	REVISION	DRN/CHK

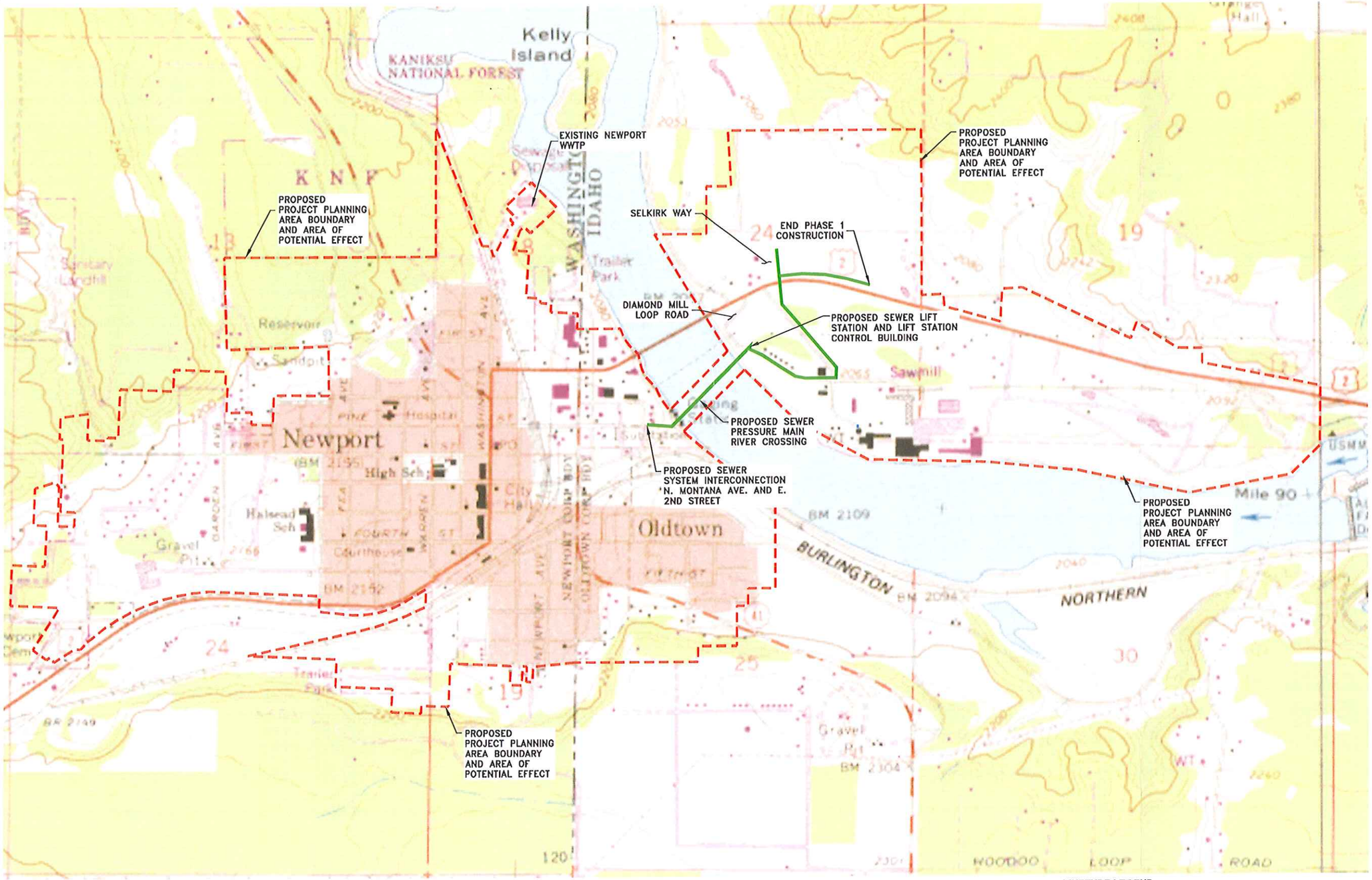
James A. Sewell and Associates, LLC
CONSULTING ENGINEERS
NEWPORT, WASHINGTON, 99156
(509) 447-3626

JAMES A. SEWELL AND ASSOCIATES, LLC

SHEET TITLE: PROPOSED PROJECT PLANNING AREA AERIAL MAP
PROJECT: SEWER SYSTEM EXTENSION, 2012
WEST BONNER W&S DISTRICT
OLDTOWN, BONNER COUNTY, IDAHO

DATE:	11-16-12
SCALE:	AS SHOWN
DRAWN BY:	SJF
CHECKED BY:	EJE
FILE NAME:	Bonner Project 2
DATA No.:	23072-09-002

SHEET 1 OF 1



LINETYPE LEGEND

- PROPOSED SEWER SYSTEM
- PROPOSED PROJECT PLANNING AREA AND AREA OF POTENTIAL IMPACT

NOTE:
THE PROPOSED PROJECT PLANNING AREA AND THE AREA OF POTENTIAL EFFECT COINCIDE AT ALL LOCATIONS.

N

SCALE: NTS

4.1 **SEWER SYSTEM EXTENSION PROPOSED PROJECT PLANNING AREA USGS QUADRANGLE MAP**

PROFESSIONAL ENGINEER REGISTERED 3998 STATE OF IDAHO ERIC J. ELDENBURG

ENGINEER'S STAMP

No.	DATE	REVISION	DRN/CHK

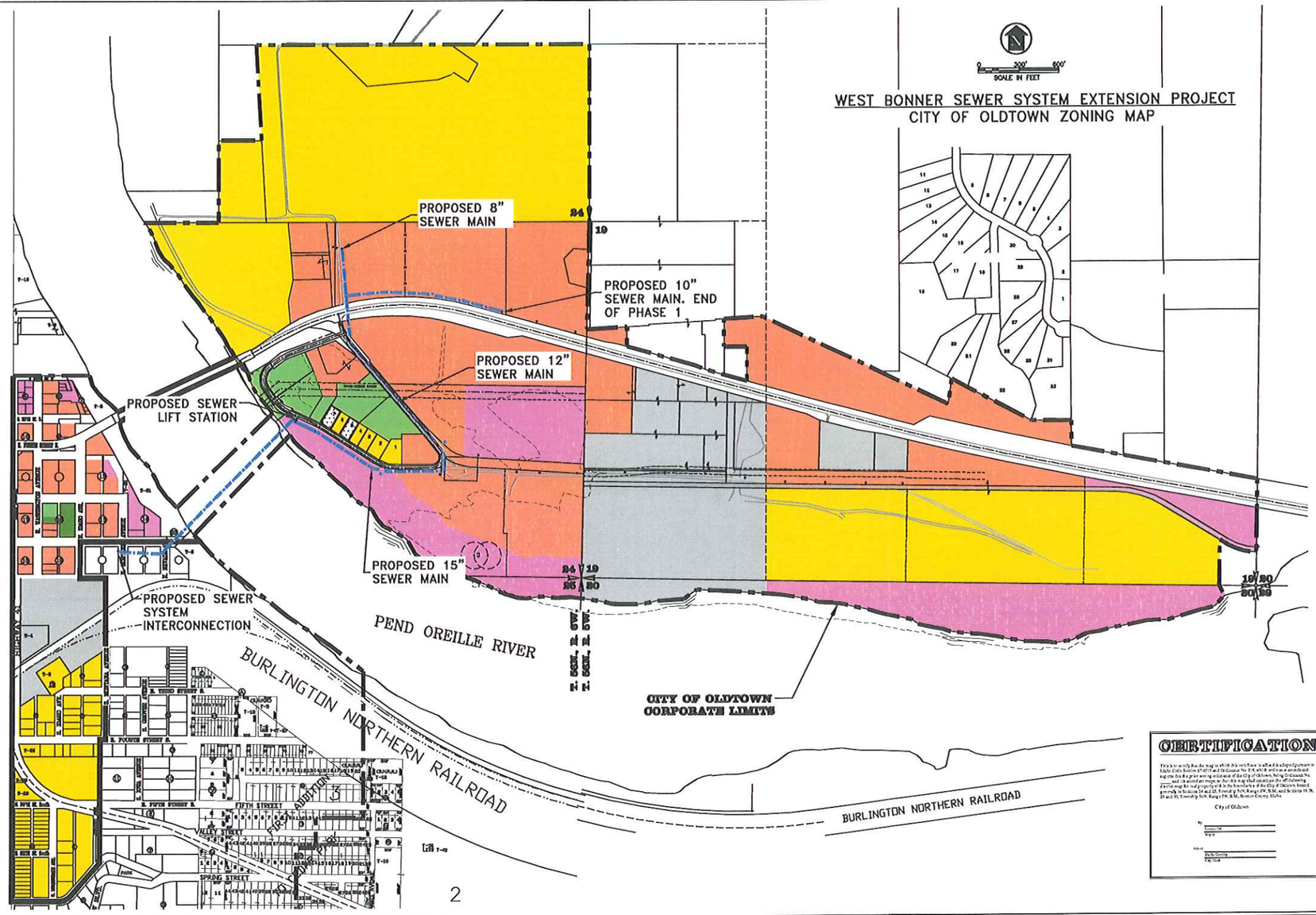
James A. Sewell and Associates, LLC
CONSULTING ENGINEERS
NEWPORT, WASHINGTON, 99156
(509) 447-3626

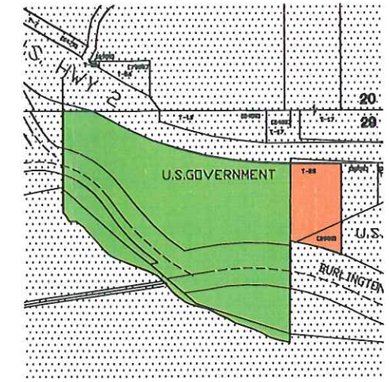
SHEET TITLE: PROPOSED PROJECT PLANNING AREA QUADRANGLE MAP
PROJECT: SEWER SYSTEM EXTENSION, 2012
WEST BONNER W&S DISTRICT
OLDTOWN, BONNER COUNTY, IDAHO

DATE:	11-26-12
SCALE:	AS SHOWN
DRAWN BY:	SJF
CHECKED BY:	EJE
FILE NAME:	Figure 1 Project 2
DATA No.:	23072-09-002

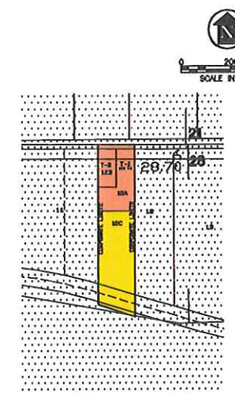
SHEET 1 OF 1

WEST BONNER SEWER SYSTEM EXTENSION PROJECT
CITY OF OLDTOWN ZONING MAP





56N-5W-29



56N-5W-28

LINETYPE LEGEND

- CITY OF OLDTOWN CITY LIMITS
- PROPOSED PROJECT PLANNING AREA AND AREA OF POTENTIAL EFFECT
- PROPOSED SEWER MAIN

- COMMERCIAL
- PUBLIC RECREATIONAL
- SINGLE FAMILY RESIDENTIAL
- MULTI FAMILY RESIDENTIAL
- LIGHT INDUSTRIAL
- PUBLIC SERVICES

NOTE: PROPERTY LINES AND RIGHTS-OF-WAY WERE DERIVED FROM BONNER COUNTY ASSESORS MAPS AND ARE NOT CONSIDERED TO BE OF SURVEY ACCURACY.

CERTIFICATION

This is to certify that this map or plat to which this certificate is attached is the official zoning map or Idaho Code Sections 67-6511 and 67-6512 and City Ordinance No. 2-8, which is entitled an ordinance and reads in the pertinent portions as follows: "The City of Oldtown, being Ordinance No. ____, and the accompanying map, which is on file in the city clerk's office, shall constitute the official zoning map for the city of Oldtown, Idaho, and shall consist of the following: Parcels in the City of Oldtown, located generally in Sections 19 and 20, Township 56N, Range 4W, B.M., and Sections 24, 29, 28 and 30, Township 56N, Range 5W, B.M., Bonner County, Idaho.

City of Oldtown

By: _____ Mayor

Attest: _____ City Clerk

Jones & Stroud Associates, LLC
CONSULTING ENGINEERS
NEWPORT, WASHINGTON, 99156
(509) 447-3626

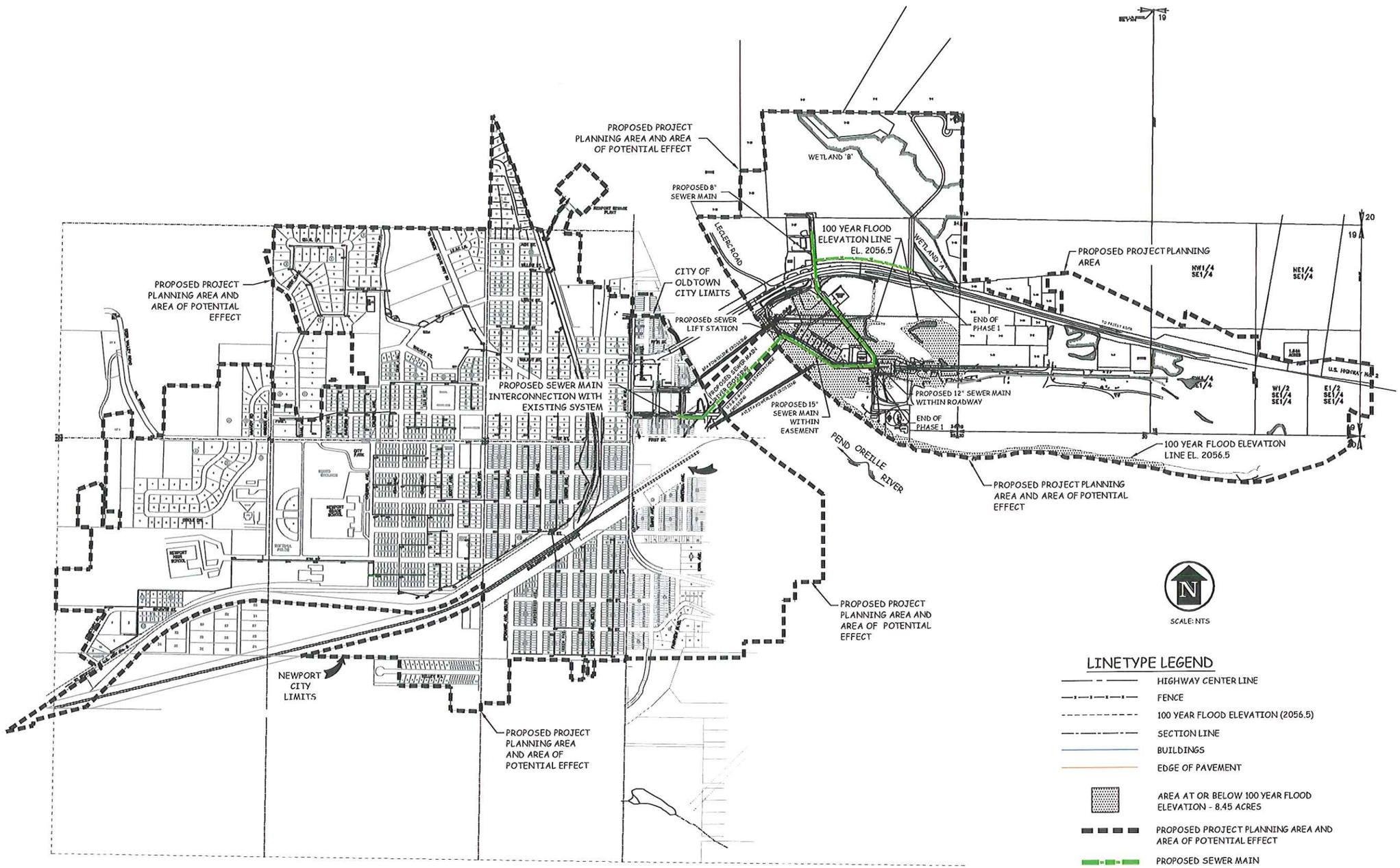
PROFESSIONAL ENGINEER 3998 STATE OF IDAHO
OWNER'S STAMP

NO.	DATE	REVISION	DRAWN

SHEET TITLE: WEST BONNER SEWER EXTENSION PROJECT CITY OF OLDTOWN ZONING MAP

PROJECT: SEWER SYSTEM EXTENSION OLDTOWN, BONNER COUNTY, IDAHO

DATE	2-9-10
SCALE	
DRAWN BY:	JMB
CHECKED BY:	EJE
FILE No.	2JB09-OD6US



LINETYPE LEGEND

- HIGHWAY CENTER LINE
- FENCE
- 100 YEAR FLOOD ELEVATION (2056.5)
- SECTION LINE
- BUILDINGS
- EDGE OF PAVEMENT
- AREA AT OR BELOW 100 YEAR FLOOD ELEVATION - 8.45 ACRES
- PROPOSED PROJECT PLANNING AREA AND AREA OF POTENTIAL EFFECT
- PROPOSED SEWER MAIN

NOTE:
THE PROPOSED PROJECT PLANNING AREA AND THE AREA OF POTENTIAL EFFECT COINCIDE AT ALL LOCATIONS.

4.1 **WEST BONNER SEWER SYSTEM EXTENSION PROJECT 100 YEAR FLOOD MAP**

SCALE: AS SHOWN

PROFESSIONAL ENGINEER REGISTERED 3998 STATE OF IDAHO ERIC J. ELDERBERG

ENGINEER'S STAMP

No.	DATE	REVISION	DRN/CHK

James A. Sewell and Associates, LLC
CONSULTING ENGINEERS
NEWPORT, WASHINGTON, 99156
(509) 447-3626

SHEET TITLE: WEST BONNER SEWER SYSTEM EXTENSION PROJECT 100 YEAR FLOOD MAP

PROJECT: SEWER SYSTEM EXTENSION, 2012
WEST BONNER W&S DISTRICT
OLDTOWN, BONNER COUNTY, IDAHO

DATE:	5-5-10
SCALE:	AS SHOWN
DRAWN BY:	JMB
CHECKED BY:	EJE
FILE NAME:	[illegible]
DATA No.:	23072-09-002

SHEET 1 OF 1

LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A	No Base Flood Elevations determined.
ZONE AE	Base Flood Elevations determined.
ZONE AH	Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
ZONE AO	Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
ZONE AR	Special Flood Hazard Areas formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
ZONE A99	Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
ZONE V	Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
ZONE VE	Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X	Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile, and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X	Areas determined to be outside the 0.2% annual chance floodplain.
ZONE D	Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

1% Annual Chance Floodplain Boundary

0.2% Annual Chance Floodplain Boundary

N

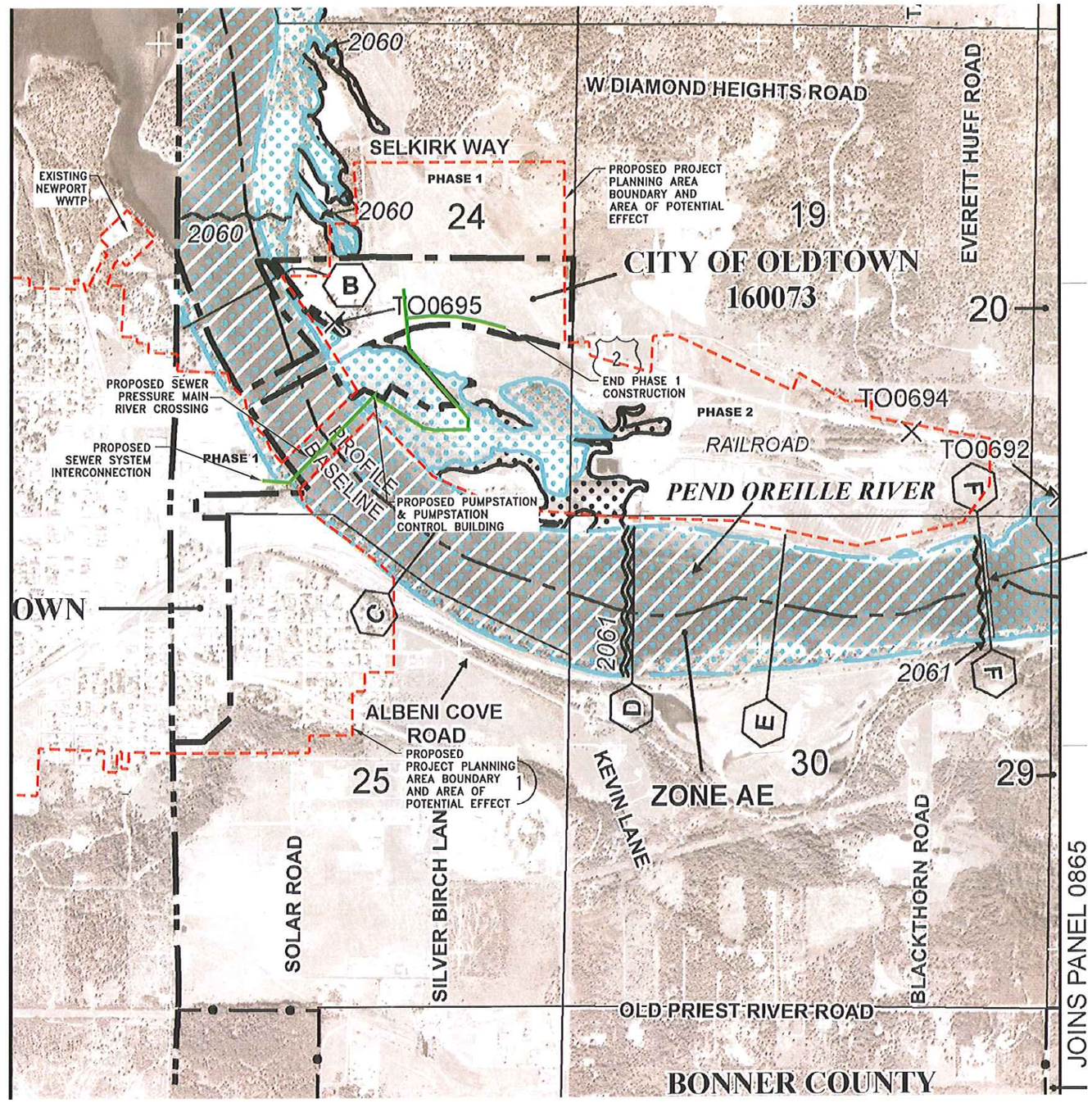
SCALE: NTS

NOTE:
THE PROPOSED PROJECT PLANNING AREA AND THE AREA OF POTENTIAL EFFECT COINCIDE AT ALL LOCATIONS.

LINETYPE LEGEND

PROPOSED PVC SEWER LINE

PROPOSED PROJECT PLANNING AREA AND AREA OF POTENTIAL EFFECT



4.1 **WEST BONNER SEWER SYSTEM EXTENSION PROPOSED PROJECT PLANNING AREA**
BONNER COUNTY FEMA FIRMETTE MAP NO. 16017C0850E

PROFESSIONAL ENGINEER 3998 STATE OF IDAHO ERIC J. ELDENBURG

ENGINEER'S STAMP

No.	DATE	REVISION	DRN/CHK

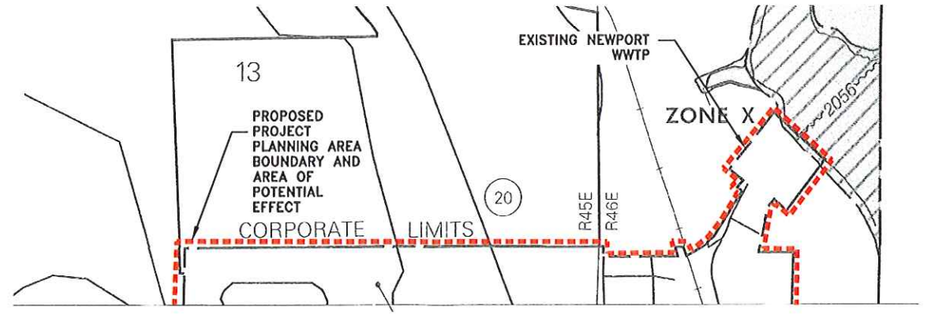
James A. Sewell and Associates, LLC
CONSULTING ENGINEERS
NEWPORT, WASHINGTON, 99156
(509) 447-3626

SHEET TITLE: PROPOSED PROJECT PLANNING AREA BONNER COUNTY FEMA FIRMETTE MAP NUMBER 16017C0850E
PROJECT: SEWER SYSTEM EXTENSION, 2012 WEST BONNER W&S DISTRICT OLDTOWN, BONNER COUNTY, IDAHO

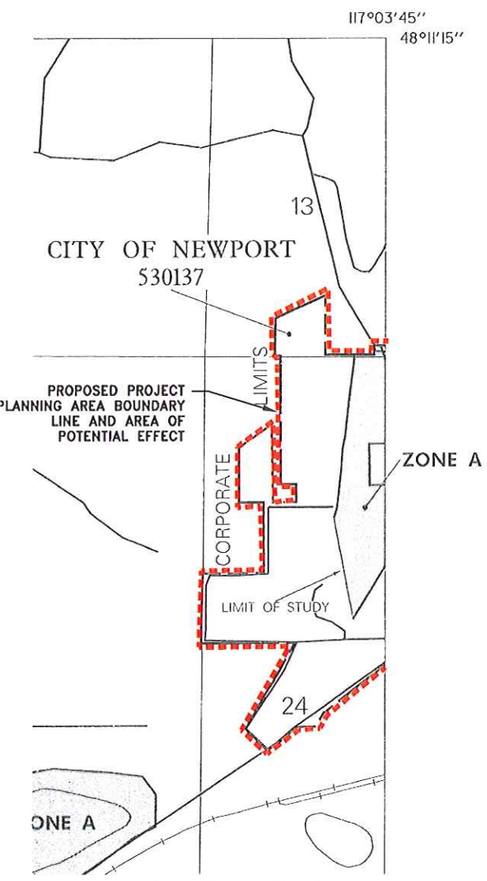
DATE:	11-16-12
SCALE:	AS SHOWN
DRAWN BY:	SJF
CHECKED BY:	EJE
FILE NAME:	Bonner Firmette 2
DATA No.:	23072-09-002

SHEET 1 OF 1

NOTE:
THE PROPOSED PROJECT PLANNING AREA AND THE AREA OF POTENTIAL EFFECT COINCIDE AT ALL LOCATIONS.



MAP NO. 53051C0885C
SCALE: NOT TO SCALE



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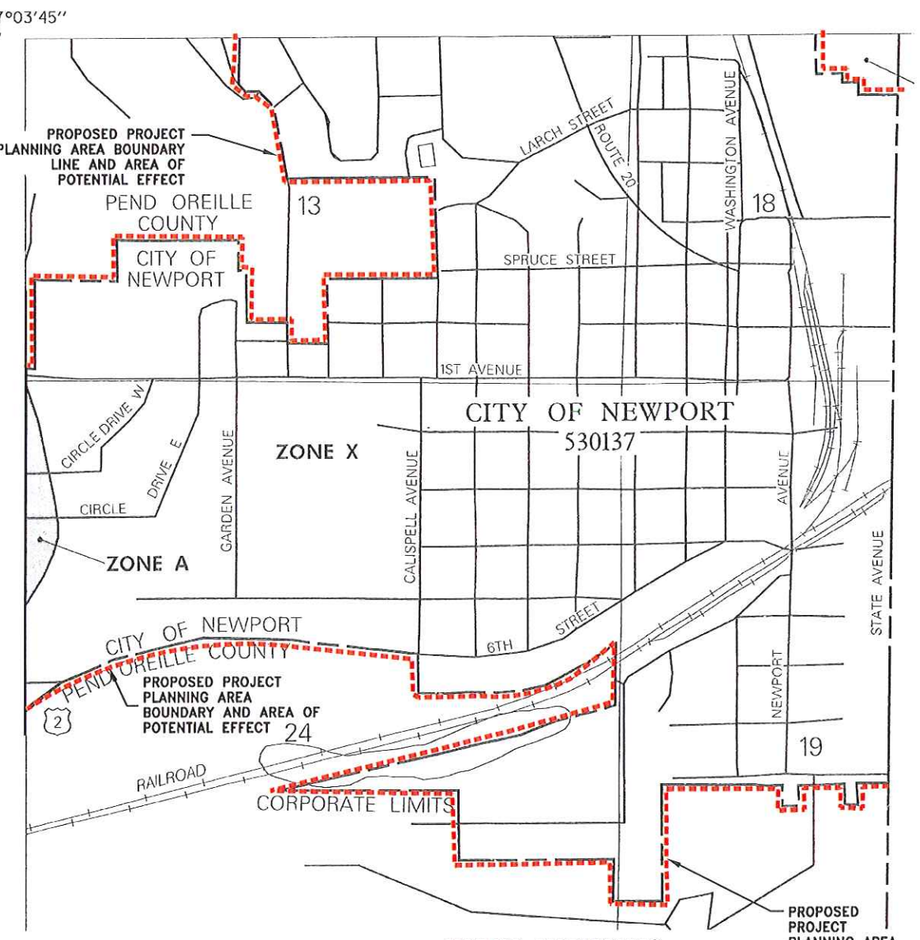


MAP NO. 53051C0895C
SCALE: NOT TO SCALE

LINETYPE LEGEND

PROPOSED PROJECT PLANNING AREA AND AREA OF POTENTIAL EFFECT

LEGEND

SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD

- **ZONE A** No base flood elevations determined.
- **ZONE AE** Base flood elevations determined.
- **ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.
- **ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- **ZONE A99** To be protected from 100-year flood by Federal flood protection system under construction; no base flood elevations determined.
- **ZONE V** Coastal flood with velocity hazard (wave action); no base flood elevations determined.
- **ZONE VE** Coastal flood with velocity hazard (wave action); base flood elevations determined.

FLOODWAY AREAS IN ZONE AE

OTHER FLOOD AREAS

- **ZONE X** Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year flood.

OTHER AREAS

- **ZONE X** Areas determined to be outside 500-year floodplain.
- **ZONE D** Areas in which flood hazards are undetermined.

UNDEVELOPED COASTAL BARRIERS

Identified 1983 | Identified 1990 | Otherwise Protected Areas

Coastal barrier areas are normally located within or adjacent to Special Flood Hazard Areas.

Floodplain Boundary

Floodway Boundary

Zone D Boundary

Boundary Dividing Special Flood Hazard Zones, and Boundary Dividing Areas of Different Coastal Base Flood Elevations Within Special Flood Hazard Zones

513 — Base Flood Elevation Line; Elevation in Feet. See Map Index for Elevation Datum.

D — D — Cross Section Line

(El. 987) — Base Flood Elevation in Feet Where Uniform Within Zone

N

SCALE: NTS

4.1 **WEST BONNER SEWER SYSTEM EXTENSION PROPOSED PROJECT PLANNING AREA**
CITY OF NEWPORT FEMA FIRMETTE COMPILATION MAP NO.s 53051C0890C, 53051C0895C, 53051C0885C

PROFESSIONAL ENGINEER REGISTERED 3998 STATE OF IDAHO ERIC W. ELDERBURG
9/13/12

ENGINEER'S STAMP

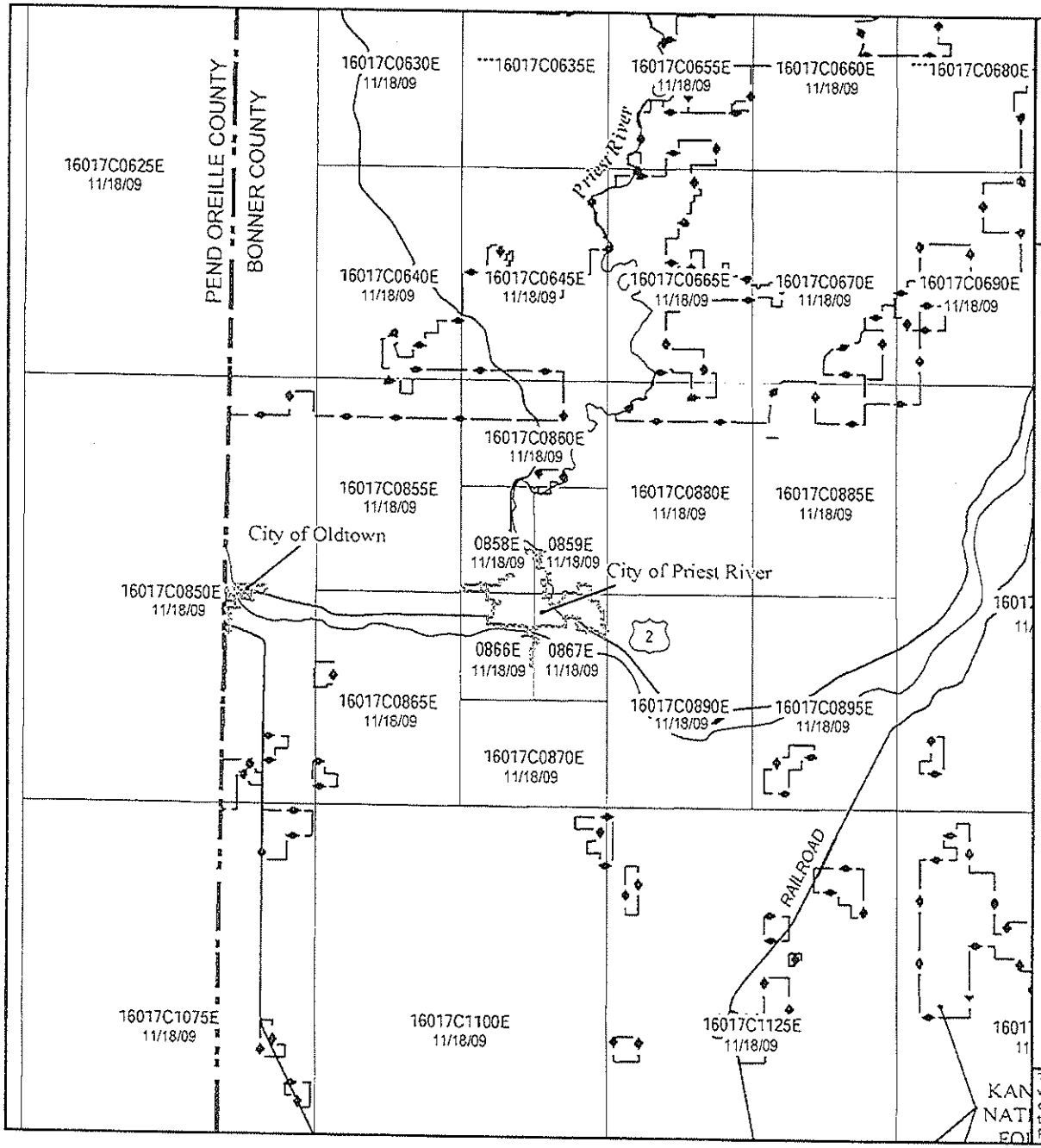
No.	DATE	REVISION	DRN/CHK

James A. Sewell and Associates, LLC
CONSULTING ENGINEERS
NEWPORT, WASHINGTON, 99156
(509) 447-3626

SHEET TITLE: PROPOSED PROJECT PLANNING AREA
PEND OREILLE COUNTY FEMA FIRMETTE
MAP NO.S 53051C0890C, 53051C0895C, 53051C0885C
PROJECT: SEWER SYSTEM EXTENSION, 2012
WEST BONNER W&S DISTRICT
OLDTOWN, BONNER COUNTY, IDAHO

DATE:	11-16-12
SCALE:	AS SHOWN
DRAWN BY:	SJF
CHECKED BY:	EJE
FILE NAME:	[illegible]
DATA No.:	23072-09-002

SHEET 1 OF 1



NFIP

NATIONAL FLOOD INSURANCE PROGRAM

MAP INDEX

FIRM

FLOOD INSURANCE RATE MAP

BONNER COUNTY, IDAHO

AND INCORPORATED AREAS

(SEE LISTING OF COMMUNITIES TABLE)

MAP INDEX

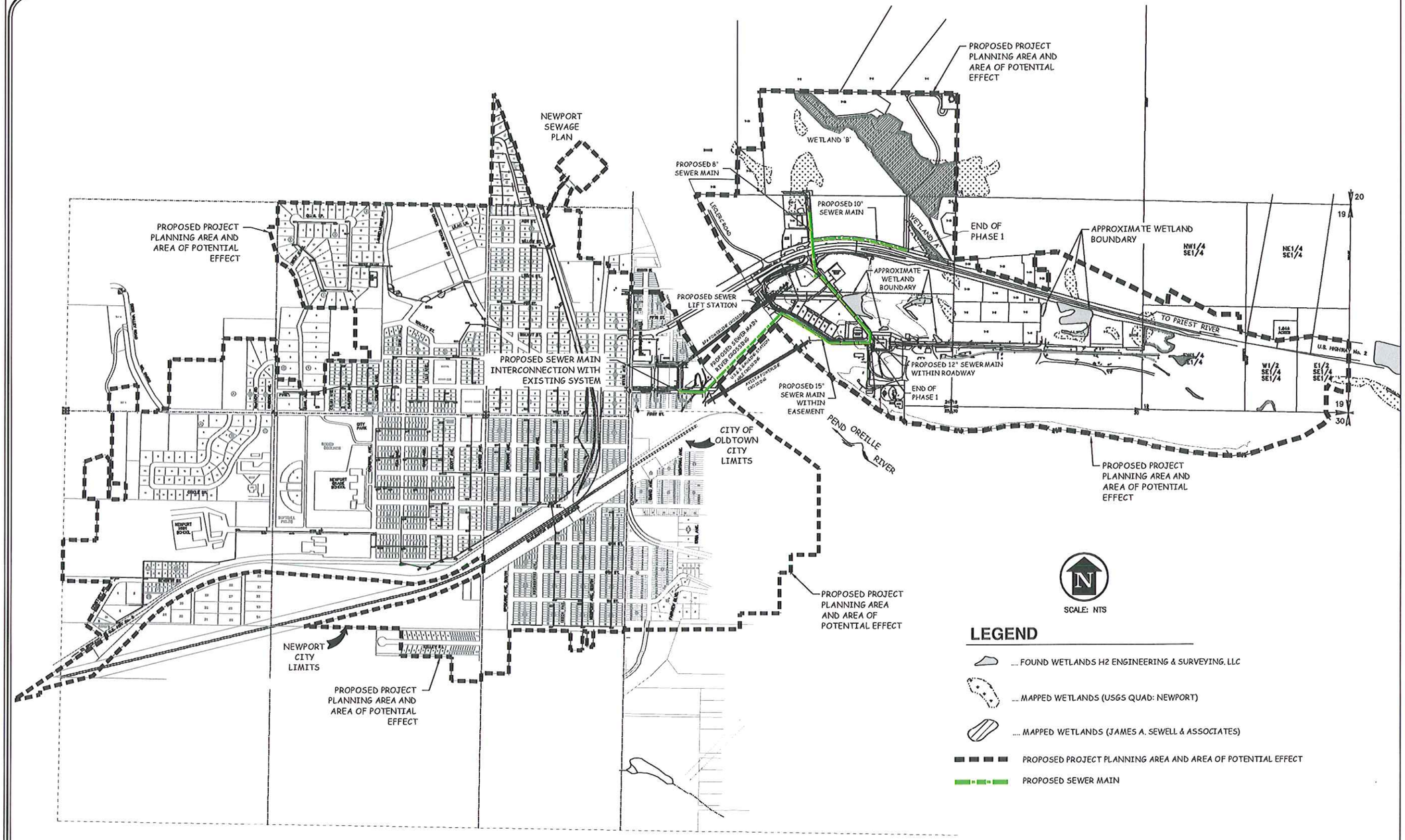
PANELS PRINTED: 50, 75, 150, 225, 250, 275, 300, 400, 405, 410, 415, 420, 430, 435, 440, 445, 475, 480, 485, 490, 495, 505, 510, 515, 520, 530, 535, 540, 545, 575, 625, 630, 640, 645, 655, 660, 665, 670, 685, 690, 695, 705, 710, 714, 715, 716, 718, 720, 730, 735, 750, 755, 760, 775, 850, 855, 858, 859, 860, 865, 866, 867, 870, 880, 885, 890, 895, 925, 950, 975, 981, 1000, 1005, 1010, 1014, 1015, 1016, 1018, 1019, 1050, 1075, 1100, 1125, 1150, 1175, 1230, 1235, 1255, 1260, 1300, 1325, 1375, 1400

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
16017CIND0A
EFFECTIVE DATE
NOVEMBER 18, 2009

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov



LEGEND

- ... FOUND WETLANDS H2 ENGINEERING & SURVEYING, LLC
- ... MAPPED WETLANDS (USGS QUAD: NEWPORT)
- .... MAPPED WETLANDS (JAMES A. SEWELL & ASSOCIATES)
- PROPOSED PROJECT PLANNING AREA AND AREA OF POTENTIAL EFFECT
- PROPOSED SEWER MAIN

NOTE:
THE PROPOSED PROJECT PLANNING AREA AND THE AREA OF POTENTIAL EFFECT COINCIDE AT ALL LOCATIONS.

4.1 **WEST BONNER SEWER SYSTEM EXTENSION PROJECT WETLAND COMPARISON MAP**

SCALE: AS SHOWN

PROFESSIONAL ENGINEER 3998 STATE OF IDAHO ERIC J. ELDERBURG 9/5/12

ENGINEER'S STAMP

No.	DATE	REVISION	DRN/CHK

James A. Sewell and Associates, LLC
CONSULTING ENGINEERS
NEWPORT, WASHINGTON, 99156
(509) 447-3626

SHEET TITLE: WEST BONNER SEWER SYSTEM EXTENSION PROJECT WETLAND COMPARISON MAP

PROJECT: SEWER SYSTEM EXTENSION, 2012
WEST BONNER W&S DISTRICT
OLDTOWN, BONNER COUNTY, IDAHO

DATE:	5-10-10
SCALE:	AS SHOWN
DRAWN BY:	JMB
CHECKED BY:	EJE
FILE NAME:	[illegible]
DATA No.:	23072-09-002

SHEET 1 OF 1

Appendix D-2
Zoning Maps

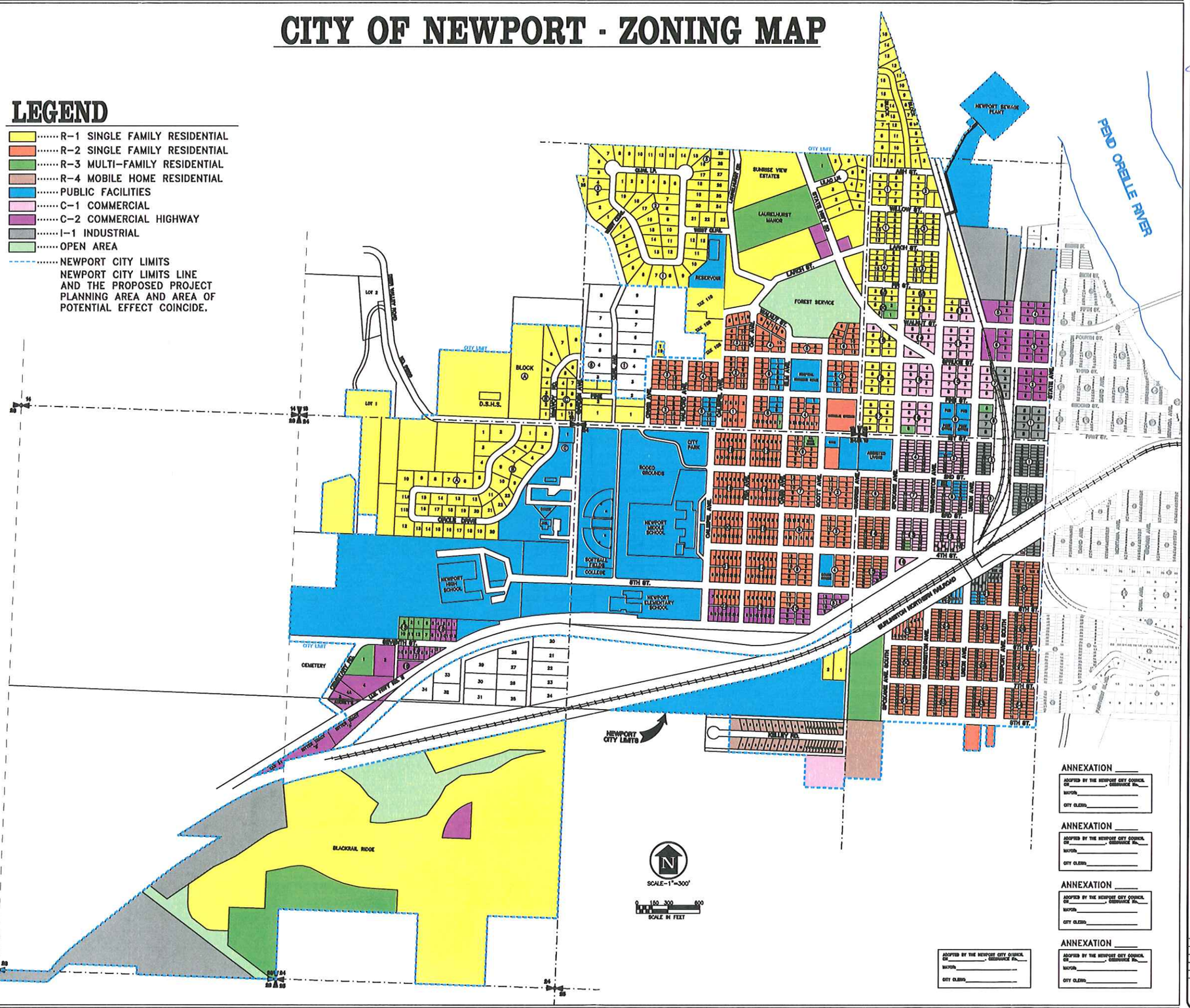
Bonner County, City of Newport Zoning Maps and Bonner County Projected Land Use Map

James A. Sewell & Associates, LLC

CITY OF NEWPORT - ZONING MAP

LEGEND

- R-1 SINGLE FAMILY RESIDENTIAL
- R-2 SINGLE FAMILY RESIDENTIAL
- R-3 MULTI-FAMILY RESIDENTIAL
- R-4 MOBILE HOME RESIDENTIAL
- PUBLIC FACILITIES
- C-1 COMMERCIAL
- C-2 COMMERCIAL HIGHWAY
- I-1 INDUSTRIAL
- OPEN AREA
- NEWPORT CITY LIMITS
  NEWPORT CITY LIMITS LINE AND THE PROPOSED PROJECT PLANNING AREA AND AREA OF POTENTIAL EFFECT COINCIDE.



ENGINEER'S STAMP

NO.	DATE	REVISION
2	11-9-00	REVISION
1	1-17-01	REVISION

James A. Sewell and Associates, LLC
CONSULTING ENGINEERS
NEWPORT, WASHINGTON, 99156
(509) 447-3626

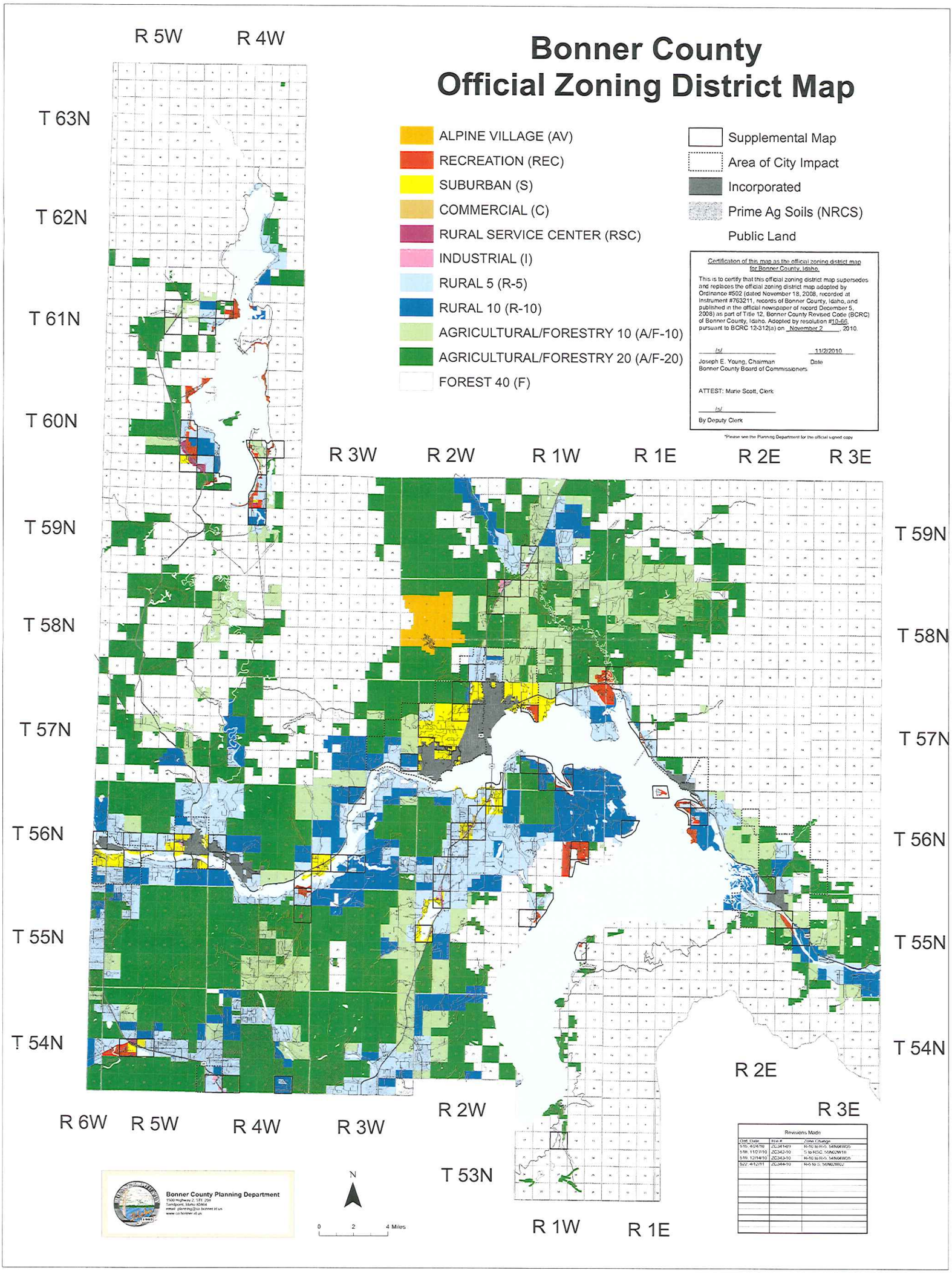
ZONING MAP
CITY OF NEWPORT

SHEET TITLE:
PROJECT:

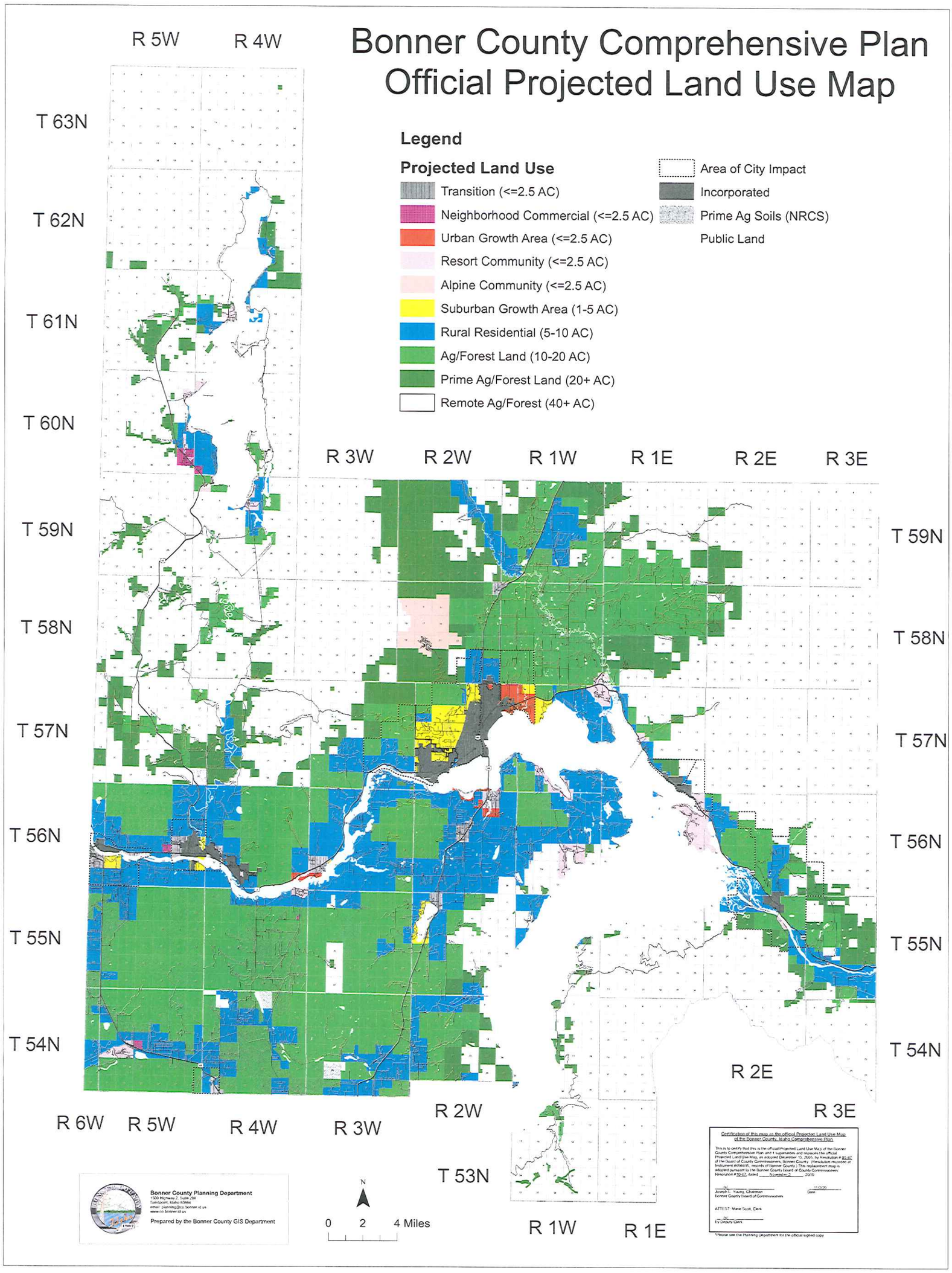
DATE: 1-18-01
SCALE: 1"=300'
DRAWN BY: BAO
CHECKED BY: RFH/RRH
FILE No.: NEWPORT-ZONE-1

SHEET 1 OF 1

Bonner County
Official Zoning District Map



Bonner County Comprehensive Plan
Official Projected Land Use Map



Appendix D-3
US Census Data

Bonner County and Pend Oreille County 2010 US Census Data, City of Oldtown and City of Newport 2000 US Census Data, City of Newport and City of Oldtown 2010 US Census Data

James A. Sewell & Associates, LLC

Table DP-1. Profile of General Demographic Characteristics: 2000

Geographic area: Oldtown city, Idaho

[For information on confidentiality protection, nonsampling error, and definitions, see text]

Subject	Number	Percent
Total population	**190**	**100.0**
SEX AND AGE		
Male	91	47.9
Female	99	52.1
Under 5 years	15	7.9
5 to 9 years	7	3.7
10 to 14 years	17	8.9
15 to 19 years	20	10.5
20 to 24 years	9	4.7
25 to 34 years	20	10.5
35 to 44 years	37	19.5
45 to 54 years	22	11.6
55 to 59 years	8	4.2
60 to 64 years	6	3.2
65 to 74 years	14	7.4
75 to 84 years	13	6.8
85 years and over	2	1.1
Median age (years)	37.5	(X)
18 years and over	139	73.2
Male	62	32.6
Female	77	40.5
21 years and over	131	68.9
62 years and over	34	17.9
65 years and over	29	15.3
Male	10	5.3
Female	19	10.0
RACE		
One race	184	96.8
White	178	93.7
Black or African American	-	-
American Indian and Alaska Native	6	3.2
Asian	-	-
Asian Indian	-	-
Chinese	-	-
Filipino	-	-
Japanese	-	-
Korean	-	-
Vietnamese	-	-
Other Asian [1]	-	-
Native Hawaiian and Other Pacific Islander	-	-
Native Hawaiian	-	-
Guamanian or Chamorro	-	-
Samoan	-	-
Other Pacific Islander [2]	-	-
Some other race	-	-
Two or more races	6	3.2
Race alone or in combination with one or more other races: [3]		
White	184	96.8
Black or African American	-	-
American Indian and Alaska Native	12	6.3
Asian	-	-
Native Hawaiian and Other Pacific Islander	-	-
Some other race	-	-

Subject	Number	Percent
HISPANIC OR LATINO AND RACE		
Total population	**190**	**100.0**
Hispanic or Latino (of any race)	4	2.1
Mexican	3	1.6
Puerto Rican	-	-
Cuban	-	-
Other Hispanic or Latino	1	0.5
Not Hispanic or Latino	186	97.9
White alone	174	91.6
RELATIONSHIP		
Total population	**190**	**100.0**
In households	190	100.0
Householder	81	42.6
Spouse	34	17.9
Child	56	29.5
Own child under 18 years	43	22.6
Other relatives	4	2.1
Under 18 years	3	1.6
Nonrelatives	15	7.9
Unmarried partner	4	2.1
In group quarters	-	-
Institutionalized population	-	-
Noninstitutionalized population	-	-
HOUSEHOLD BY TYPE		
Total households	**81**	**100.0**
Family households (families)	47	58.0
With own children under 18 years	22	27.2
Married-couple family	34	42.0
With own children under 18 years	13	16.0
Female householder, no husband present	10	12.3
With own children under 18 years	6	7.4
Nonfamily households	34	42.0
Householder living alone	28	34.6
Householder 65 years and over	10	12.3
Households with individuals under 18 years	27	33.3
Households with individuals 65 years and over	22	27.2
Average household size	2.35	(X)
Average family size	3.00	(X)
HOUSING OCCUPANCY		
Total housing units	**100**	**100.0**
Occupied housing units	81	81.0
Vacant housing units	19	19.0
For seasonal, recreational, or occasional use	2	2.0
Homeowner vacancy rate (percent)	1.6	(X)
Rental vacancy rate (percent)	25.0	(X)
HOUSING TENURE		
Occupied housing units	**81**	**100.0**
Owner-occupied housing units	60	74.1
Renter-occupied housing units	21	25.9
Average household size of owner-occupied units	2.35	(X)
Average household size of renter-occupied units	2.33	(X)

- Represents zero or rounds to zero. (X) Not applicable.

[1] Other Asian alone, or two or more Asian categories.

[2] Other Pacific Islander alone, or two or more Native Hawaiian and Other Pacific Islander categories.

[3] In combination with one or more of the other races listed. The six numbers may add to more than the total population and the six percentages may add to more than 100 percent because individuals may report more than one race.

Source: U.S. Census Bureau, Census 2000.

Table DP-2. Profile of Selected Social Characteristics: 2000

Geographic area: Oldtown city, Idaho

[Data based on a sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see text]

Subject	Number	Percent
SCHOOL ENROLLMENT		
Population 3 years and over enrolled in school	**40**	**100.0**
Nursery school, preschool	-	-
Kindergarten	3	7.5
Elementary school (grades 1-8)	12	30.0
High school (grades 9-12)	11	27.5
College or graduate school	14	35.0
EDUCATIONAL ATTAINMENT		
Population 25 years and over	**139**	**100.0**
Less than 9th grade	9	6.5
9th to 12th grade, no diploma	26	18.7
High school graduate (includes equivalency)	59	42.4
Some college, no degree	36	25.9
Associate degree	9	6.5
Bachelor's degree	-	-
Graduate or professional degree	-	-
Percent high school graduate or higher	74.8	(X)
Percent bachelor's degree or higher	-	(X)
MARITAL STATUS		
Population 15 years and over	**162**	**100.0**
Never married	41	25.3
Now married, except separated	72	44.4
Separated	8	4.9
Widowed	14	8.6
Female	14	8.6
Divorced	27	16.7
Female	10	6.2
GRANDPARENTS AS CAREGIVERS		
Grandparent living in household with one or more own grandchildren under 18 years	-	-
Grandparent responsible for grandchildren	-	-
VETERAN STATUS		
Civilian population 18 years and over	**155**	**100.0**
Civilian veterans	22	14.2
DISABILITY STATUS OF THE CIVILIAN NONINSTITUTIONALIZED POPULATION		
Population 5 to 20 years	**33**	**100.0**
With a disability	13	39.4
Population 21 to 64 years	**117**	**100.0**
With a disability	49	41.9
Percent employed	40.8	(X)
No disability	68	58.1
Percent employed	54.4	(X)
Population 65 years and over	**32**	**100.0**
With a disability	14	43.8
RESIDENCE IN 1995		
Population 5 years and over	**182**	**100.0**
Same house in 1995	84	46.2
Different house in the U.S. in 1995	98	53.8
Same county	32	17.6
Different county	66	36.3
Same state	13	7.1
Different state	53	29.1
Elsewhere in 1995	-	-

Subject	Number	Percent
NATIVITY AND PLACE OF BIRTH		
Total population	**198**	**100.0**
Native	198	100.0
Born in United States	198	100.0
State of residence	71	35.9
Different state	127	64.1
Born outside United States	-	-
Foreign born	-	-
Entered 1990 to March 2000	-	-
Naturalized citizen	-	-
Not a citizen	-	-
REGION OF BIRTH OF FOREIGN BORN		
Total (excluding born at sea)	-	-
Europe	-	-
Asia	-	-
Africa	-	-
Oceania	-	-
Latin America	-	-
Northern America	-	-
LANGUAGE SPOKEN AT HOME		
Population 5 years and over	**182**	**100.0**
English only	174	95.6
Language other than English	8	4.4
Speak English less than "very well"	3	1.6
Spanish	8	4.4
Speak English less than "very well"	3	1.6
Other Indo-European languages	-	-
Speak English less than "very well"	-	-
Asian and Pacific Island languages	-	-
Speak English less than "very well"	-	-
ANCESTRY (single or multiple)		
Total population	**198**	**100.0**
Total ancestries reported	*200*	*101.0*
Arab	-	-
Czech[1]	4	2.0
Danish	-	-
Dutch	3	1.5
English	21	10.6
French (except Basque)[1]	7	3.5
French Canadian[1]	-	-
German	23	11.6
Greek	-	-
Hungarian	-	-
Irish[1]	22	11.1
Italian	9	4.5
Lithuanian	-	-
Norwegian	29	14.6
Polish	-	-
Portuguese	-	-
Russian	-	-
Scotch-Irish	7	3.5
Scottish	3	1.5
Slovak	-	-
Subsaharan African	-	-
Swedish	-	-
Swiss	3	1.5
Ukrainian	-	-
United States or American	6	3.0
Welsh	-	-
West Indian (excluding Hispanic groups)	-	-
Other ancestries	63	31.8

-Represents zero or rounds to zero. (X) Not applicable.

[1]The data represent a combination of two ancestries shown separately in Summary File 3. Czech includes Czechoslovakian. French includes Alsatian. French Canadian includes Acadian/Cajun. Irish includes Celtic.

Source: U.S. Bureau of the Census, Census 2000.

Table DP-3. Profile of Selected Economic Characteristics: 2000

Geographic area: Oldtown city, Idaho

[Data based on a sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see text]

Subject	Number	Percent
EMPLOYMENT STATUS		
Population 16 years and over	**160**	**100.0**
In labor force	83	51.9
Civilian labor force	83	51.9
Employed	64	40.0
Unemployed	19	11.9
Percent of civilian labor force	22.9	(X)
Armed Forces	-	-
Not in labor force	77	48.1
Females 16 years and over	**88**	**100.0**
In labor force	38	43.2
Civilian labor force	38	43.2
Employed	24	27.3
Own children under 6 years	**15**	**100.0**
All parents in family in labor force	5	33.3
COMMUTING TO WORK		
Workers 16 years and over	**64**	**100.0**
Car, truck, or van - - drove alone	44	68.8
Car, truck, or van - - carpooled	10	15.6
Public transportation (including taxicab)	-	-
Walked	3	4.7
Other means	4	6.3
Worked at home	3	4.7
Mean travel time to work (minutes)[1]	32.5	(X)
Employed civilian population 16 years and over	**64**	**100.0**
OCCUPATION		
Management, professional, and related occupations	7	10.9
Service occupations	11	17.2
Sales and office occupations	10	15.6
Farming, fishing, and forestry occupations	6	9.4
Construction, extraction, and maintenance occupations	13	20.3
Production, transportation, and material moving occupations	17	26.6
INDUSTRY		
Agriculture, forestry, fishing and hunting, and mining	6	9.4
Construction	7	10.9
Manufacturing	17	26.6
Wholesale trade	4	6.3
Retail trade	9	14.1
Transportation and warehousing, and utilities	-	-
Information	2	3.1
Finance, insurance, real estate, and rental and leasing	3	4.7
Professional, scientific, management, administrative, and waste management services	2	3.1
Educational, health and social services	7	10.9
Arts, entertainment, recreation, accommodation and food services	5	7.8
Other services (except public administration)	-	-
Public administration	2	3.1
CLASS OF WORKER		
Private wage and salary workers	58	90.6
Government workers	6	9.4
Self-employed workers in own not incorporated business	-	-
Unpaid family workers	-	-

Subject	Number	Percent
INCOME IN 1999		
Households	**85**	**100.0**
Less than $10,000	15	17.6
$10,000 to $14,999	15	17.6
$15,000 to $24,999	16	18.8
$25,000 to $34,999	11	12.9
$35,000 to $49,999	17	20.0
$50,000 to $74,999	9	10.6
$75,000 to $99,999	-	-
$100,000 to $149,999	2	2.4
$150,000 to $199,999	-	-
$200,000 or more	-	-
Median household income (dollars)	23,542	(X)
With earnings	59	69.4
Mean earnings (dollars)[1]	25,720	(X)
With Social Security income	28	32.9
Mean Social Security income (dollars)[1]	12,307	(X)
With Supplemental Security Income	7	8.2
Mean Supplemental Security Income (dollars)[1]	3,757	(X)
With public assistance income	4	4.7
Mean public assistance income (dollars)[1]	125	(X)
With retirement income	16	18.8
Mean retirement income (dollars)[1]	9,119	(X)
Families	**51**	**100.0**
Less than $10,000	5	9.8
$10,000 to $14,999	10	19.6
$15,000 to $24,999	15	29.4
$25,000 to $34,999	5	9.8
$35,000 to $49,999	12	23.5
$50,000 to $74,999	2	3.9
$75,000 to $99,999	-	-
$100,000 to $149,999	2	3.9
$150,000 to $199,999	-	-
$200,000 or more	-	-
Median family income (dollars)	23,125	(X)
Per capita income (dollars)[1]	11,894	(X)
Median earnings (dollars):		
Male full-time, year-round workers	26,250	(X)
Female full-time, year-round workers	10,625	(X)

Subject	Number below poverty level	Percent below poverty level
POVERTY STATUS IN 1999		
Families	**11**	**21.6**
With related children under 18 years	4	25.0
With related children under 5 years	4	36.4
Families with female householder, no husband present	**3**	**37.5**
With related children under 18 years	-	-
With related children under 5 years	-	-
Individuals	**44**	**22.4**
18 years and over	29	18.7
65 years and over	2	6.3
Related children under 18 years	8	23.5
Related children 5 to 17 years	2	11.1
Unrelated individuals 15 years and over	16	30.8

-Represents zero or rounds to zero. (X) Not applicable.

[1]If the denominator of a mean value or per capita value is less than 30, then that value is calculated using a rounded aggregate in the numerator. See text.

Source: U.S. Bureau of the Census, Census 2000.

Table DP-4. Profile of Selected Housing Characteristics: 2000

Geographic area: Oldtown city, Idaho

[Data based on a sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see text]

Subject	Number	Percent
Total housing units	**107**	**100.0**
UNITS IN STRUCTURE		
1-unit, detached	43	40.2
1-unit, attached	1	0.9
2 units	-	-
3 or 4 units	5	4.7
5 to 9 units	-	-
10 to 19 units	-	-
20 or more units	-	-
Mobile home	53	49.5
Boat, RV, van, etc	5	4.7
YEAR STRUCTURE BUILT		
1999 to March 2000	-	-
1995 to 1998	-	-
1990 to 1994	8	7.5
1980 to 1989	7	6.5
1970 to 1979	25	23.4
1960 to 1969	20	18.7
1940 to 1959	35	32.7
1939 or earlier	12	11.2
ROOMS		
1 room	-	-
2 rooms	12	11.2
3 rooms	21	19.6
4 rooms	32	29.9
5 rooms	23	21.5
6 rooms	10	9.3
7 rooms	6	5.6
8 rooms	3	2.8
9 or more rooms	-	-
Median (rooms)	4.1	(X)
Occupied housing units	**80**	**100.0**
YEAR HOUSEHOLDER MOVED INTO UNIT		
1999 to March 2000	32	40.0
1995 to 1998	16	20.0
1990 to 1994	8	10.0
1980 to 1989	17	21.3
1970 to 1979	-	-
1969 or earlier	7	8.8
VEHICLES AVAILABLE		
None	10	12.5
1	29	36.3
2	31	38.8
3 or more	10	12.5
HOUSE HEATING FUEL		
Utility gas	-	-
Bottled, tank, or LP gas	2	2.5
Electricity	61	76.3
Fuel oil, kerosene, etc	9	11.3
Coal or coke	-	-
Wood	8	10.0
Solar energy	-	-
Other fuel	-	-
No fuel used	-	-
SELECTED CHARACTERISTICS		
Lacking complete plumbing facilities	-	-
Lacking complete kitchen facilities	-	-
No telephone service	10	12.5

Subject	Number	Percent
OCCUPANTS PER ROOM		
Occupied housing units	**80**	**100.0**
1.00 or less	74	92.5
1.01 to 1.50	6	7.5
1.51 or more	-	-
Specified owner-occupied units	**28**	**100.0**
VALUE		
Less than $50,000	9	32.1
$50,000 to $99,999	11	39.3
$100,000 to $149,999	8	28.6
$150,000 to $199,999	-	-
$200,000 to $299,999	-	-
$300,000 to $499,999	-	-
$500,000 to $999,999	-	-
$1,000,000 or more	-	-
Median (dollars)	80,000	(X)
MORTGAGE STATUS AND SELECTED MONTHLY OWNER COSTS		
With a mortgage	22	78.6
Less than $300	-	-
$300 to $499	10	35.7
$500 to $699	2	7.1
$700 to $999	4	14.3
$1,000 to $1,499	6	21.4
$1,500 to $1,999	-	-
$2,000 or more	-	-
Median (dollars)	650	(X)
Not mortgaged	6	21.4
Median (dollars)	213	(X)
SELECTED MONTHLY OWNER COSTS AS A PERCENTAGE OF HOUSEHOLD INCOME IN 1999		
Less than 15.0 percent	4	14.3
15.0 to 19.9 percent	5	17.9
20.0 to 24.9 percent	4	14.3
25.0 to 29.9 percent	-	-
30.0 to 34.9 percent	3	10.7
35.0 percent or more	9	32.1
Not computed	3	10.7
Specified renter-occupied units	**23**	**100.0**
GROSS RENT		
Less than $200	-	-
$200 to $299	-	-
$300 to $499	12	52.2
$500 to $749	9	39.1
$750 to $999	-	-
$1,000 to $1,499	-	-
$1,500 or more	-	-
No cash rent	2	8.7
Median (dollars)	463	(X)
GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME IN 1999		
Less than 15.0 percent	5	21.7
15.0 to 19.9 percent	-	-
20.0 to 24.9 percent	2	8.7
25.0 to 29.9 percent	7	30.4
30.0 to 34.9 percent	-	-
35.0 percent or more	7	30.4
Not computed	2	8.7

-Represents zero or rounds to zero. (X) Not applicable.

Source: U.S. Bureau of the Census, Census 2000.

Table 7. **Households and Families: 2000**—Con.

[For information on confidentiality protection, nonsampling error, and definitions, see text]

State County County Subdivision Place	Total households	Family households: Total: Number	Family households: Total: Percent with own children under 18 years	Family households: Married-couple family: Number	Family households: Married-couple family: Percent with own children under 18 years	Family households: Female householder, no husband present: Number	Family households: Female householder, no husband present: Percent with own children under 18 years	Nonfamily households: Total	Nonfamily households: Householder living alone: Total	Nonfamily households: Householder living alone: 65 years and over	Average size: Households	Average size: Families
Boise County—Con.												
Horseshoe Bend CCD—Con.												
Placerville city	30	23	13.0	18	5.6	4	25.0	7	7	3	2.00	2.22
Idaho City CCD	1 162	846	44.8	731	40.2	64	73.4	316	244	47	2.54	2.95
Idaho City city	191	120	55.0	88	45.5	23	78.3	71	59	11	2.38	3.00
Bonner County	14 693	10 264	43.7	8 603	38.9	1 098	68.0	4 429	3 531	1 202	2.49	2.94
Blanchard-Glengary CCD	4 817	3 593	41.7	3 115	38.2	282	63.8	1 224	957	303	2.60	2.99
Oldtown city (part)	71	40	42.5	32	37.5	6	50.0	31	26	9	2.35	3.08
Priest River city (part)	3	2	50.0	1	-	-	(X)	1	1	-	2.00	2.50
Clark Fork CCD	947	656	34.5	577	30.7	55	60.0	291	245	88	2.32	2.77
Clark Fork city	238	138	42.0	113	38.9	19	52.6	100	89	39	2.22	2.94
East Hope city	104	69	14.5	66	13.6	3	33.3	35	31	12	1.92	2.33
Hope city	34	24	41.7	22	36.4	1	100.0	10	8	3	2.32	2.75
Priest River CCD	2 220	1 552	41.9	1 333	37.9	133	65.4	668	541	193	2.49	2.96
Oldtown city (part)	10	7	71.4	2	50.0	4	75.0	3	2	1	2.30	2.57
Priest River city (part)	689	467	51.8	379	46.7	63	71.4	222	183	86	2.53	3.09
Sandpoint CCD	6 709	4 463	47.4	3 578	41.2	828	71.2	2 246	1 788	618	2.43	2.93
Dover city	147	96	40.6	80	33.8	11	81.8	51	39	15	2.33	2.79
Kootenai city	171	107	59.8	75	50.7	18	83.3	64	48	10	2.54	3.04
Ponderay city	264	169	45.6	132	38.6	18	66.7	95	69	21	2.38	2.88
Sandpoint city	2 873	1 681	54.1	1 164	44.7	397	75.3	1 192	991	406	2.29	2.94
Bonneville County	28 753	21 463	54.4	17 818	51.9	2 666	68.3	7 290	6 159	2 251	2.83	3.33
Idaho Falls CCD	26 168	19 315	54.7	15 868	52.1	2 540	68.7	6 853	5 801	2 097	2.80	3.31
Ammon city	1 843	1 546	59.5	1 327	57.2	173	75.7	297	255	117	3.27	3.62
Idaho Falls city	18 793	13 173	53.5	10 610	50.1	1 908	69.0	5 620	4 759	1 707	2.65	3.21
Iona city	372	318	52.2	284	52.5	22	54.5	54	46	20	3.23	3.55
Idaho Falls West CCD	575	464	51.1	418	50.0	23	60.9	111	85	25	3.09	3.44
Swan Valley CCD	436	336	38.1	312	35.6	11	63.6	100	85	48	2.66	3.08
Irwin city	71	48	33.3	43	25.6	2	100.0	23	22	11	2.21	2.73
Swan Valley city	79	58	36.2	55	36.4	1	100.0	21	15	9	2.70	3.16
Ucon CCD	1 574	1 348	54.5	1 220	53.8	92	59.8	226	188	81	3.30	3.60
Ririe city (part)	10	7	42.9	6	33.3	-	(X)	3	2	-	2.50	3.00
Ucon city	280	236	52.1	209	52.2	22	50.0	44	36	12	3.30	3.62
Boundary County	3 707	2 698	46.9	2 275	42.7	277	71.1	1 009	857	314	2.61	3.07
Bonners Ferry CCD	2 356	1 690	47.6	1 402	44.1	192	66.1	666	578	240	2.60	3.10
Bonners Ferry city	1 027	650	50.2	493	44.8	115	67.8	377	338	159	2.37	3.00
Moyie Springs CCD	755	556	44.1	489	39.9	42	83.3	199	159	44	2.59	3.02
Moyie Springs city	240	177	52.0	146	46.6	23	82.6	63	44	12	2.73	3.14
Naples CCD	596	452	47.6	384	41.4	43	81.4	144	120	30	2.65	3.06
Butte County	1 089	803	44.5	688	42.4	81	66.7	286	257	119	2.64	3.14
Arco CCD	973	707	44.1	596	41.8	80	66.3	266	239	112	2.61	3.12
Arco city	427	269	46.5	206	41.7	51	68.6	158	145	65	2.35	3.04
Butte City city	36	19	42.1	15	33.3	1	100.0	17	14	4	2.11	2.74
Moore city	81	58	36.2	51	31.4	6	83.3	23	19	11	2.42	2.90
Howe CCD	116	96	46.9	92	46.7	1	100.0	20	18	7	2.96	3.29
Camas County	396	287	42.5	258	39.9	18	72.2	109	88	33	2.49	2.92
East Camas CCD	106	76	32.9	71	29.6	4	75.0	30	24	9	2.37	2.75
West Camas CCD	290	211	46.0	187	43.9	14	71.4	79	64	24	2.54	2.99
Fairfield city	162	115	47.0	98	40.8	11	90.9	47	41	18	2.44	2.92
Canyon County	45 018	33 954	52.8	27 326	50.0	4 549	65.8	11 064	8 905	3 784	2.85	3.28
Caldwell CCD	10 621	7 680	52.7	5 872	49.2	1 306	66.2	2 941	2 384	1 067	2.80	3.28
Caldwell city (part)	8 371	5 669	54.6	4 267	50.8	1 171	66.6	2 502	2 009	897	2.77	3.29
Greenleaf city (part)	255	200	58.5	163	55.2	26	76.9	55	52	29	3.08	3.57
Notus city (part)	-	-	(X)	-	(X)	-	(X)	-	-	-	-	-
Huston CCD	1 011	828	48.2	729	47.6	60	56.7	183	143	54	3.12	3.47
Melba CCD	633	483	52.0	420	52.4	31	67.7	150	123	49	3.00	3.41
Melba city	156	106	56.6	82	58.5	12	75.0	50	43	23	2.81	3.37
Middleton CCD	3 546	2 829	49.8	2 419	47.7	261	63.6	717	548	208	2.90	3.23
Caldwell city (part)	-	-	(X)	-	(X)	-	(X)	-	-	-	-	-
Middleton city	1 017	756	58.9	586	56.5	118	66.9	261	188	70	2.93	3.35
Nampa CCD	25 551	19 188	53.7	15 406	50.9	2 598	66.4	6 363	5 119	2 117	2.82	3.25
Caldwell city (part)	592	486	68.9	368	66.8	79	81.0	106	75	13	3.07	3.36
Nampa city	18 090	13 016	56.5	10 065	53.5	2 063	68.3	5 074	4 084	1 739	2.77	3.25
Notus CCD	796	673	58.4	543	57.1	85	69.4	123	94	37	3.46	3.74
Notus city (part)	147	113	58.4	95	60.0	10	40.0	34	27	8	3.12	3.58
Parma CCD	1 526	1 178	47.9	997	46.2	112	61.6	348	298	158	2.84	3.27
Parma city	617	454	52.0	372	50.0	57	66.7	163	142	87	2.85	3.41
Wilder CCD	1 334	1 095	49.1	940	47.4	96	55.2	239	196	94	3.14	3.50
Greenleaf city (part)	22	20	65.0	14	57.1	4	75.0	2	1	-	3.50	3.65
Wilder city	389	315	64.4	255	64.7	38	63.2	74	67	41	3.76	4.30
Caribou County	2 560	1 978	51.2	1 773	49.4	134	71.6	582	521	263	2.83	3.29
Bancroft CCD	277	210	51.9	191	51.3	12	50.0	67	66	44	2.90	3.49
Bancroft city	144	104	52.9	92	52.2	7	57.1	40	39	27	2.65	3.27
Fort Hall CCD	-	-	(X)	-	(X)	-	(X)	-	-	-	-	-
Grace CCD	714	564	47.7	506	47.0	32	53.1	150	141	81	2.86	3.29
Grace city	364	275	46.5	234	45.3	23	56.5	89	85	54	2.72	3.21
Soda Springs CCD	1 482	1 133	53.5	1 012	50.7	88	81.8	349	300	131	2.78	3.23
Soda Springs city	1 210	905	54.5	800	51.0	79	84.8	305	267	113	2.74	3.24
Wayan CCD	87	71	40.8	64	42.2	2	50.0	16	14	7	3.26	3.73
Cassia County	7 060	5 489	54.5	4 605	52.3	621	67.1	1 571	1 376	673	2.99	3.46
Albion CCD	874	710	52.5	654	52.3	30	66.7	164	140	59	3.11	3.51
Albion city	108	66	50.0	60	48.3	4	100.0	42	33	15	2.43	3.12
Malta city	62	50	48.0	46	45.7	3	100.0	12	12	8	2.85	3.30
Burley CCD	4 501	3 390	54.7	2 725	51.3	499	68.5	1 111	984	491	2.88	3.39
Burley city (part)	3 193	2 305	54.8	1 770	50.5	414	68.8	888	798	398	2.76	3.32
Declo CCD	951	810	54.4	721	54.4	58	53.4	151	122	50	3.25	3.58

Table 1. **Age and Sex: 2000**—Con.

[For information on confidentiality protection, nonsampling error, and definitions, see text]

State County County Subdivision Place	Total population	Median age	Age: Under 5 years	5 to 17 years	18 to 20 years	21 to 24 years	25 to 34 years	35 to 44 years	45 to 54 years	55 to 59 years	60 to 64 years
Boise County—Con.											
Horseshoe Bend CCD—Con.											
Placerville city	60	54.7	1	6	-	-	3	4	17	10	3
Idaho City CCD	2 953	39.5	208	597	60	62	278	618	580	221	120
Idaho City city	458	37.4	37	97	12	16	43	87	81	32	17
Bonner County	36 835	40.8	2 100	7 301	1 263	1 195	3 532	5 815	6 602	2 313	1 879
Blanchard-Glengary CCD	12 533	40.8	715	2 593	394	376	1 113	2 063	2 215	868	696
Oldtown city (part)	167	37.6	14	29	6	9	19	32	19	7	5
Priest River city (part)	6	40.5	1	1	-	-	1	-	1	-	1
Clark Fork CCD	2 195	46.5	92	365	63	32	162	298	450	148	139
Clark Fork city	530	40.4	33	98	15	11	71	79	77	22	28
East Hope city	200	57.8	6	15	4	1	12	16	40	12	10
Hope city	79	43.8	5	12	4	2	6	12	20	3	6
Priest River CCD	5 539	40.8	310	1 082	173	186	541	857	939	398	326
Oldtown city (part)	23	35.5	1	7	2	-	1	5	3	1	1
Priest River city (part)	1 748	35.2	127	378	69	78	217	249	222	77	84
Sandpoint CCD	16 568	39.9	983	3 241	633	601	1 716	2 597	2 998	899	718
Dover city	342	45.9	8	61	13	11	22	48	70	22	18
Kootenai city	441	34.9	34	92	16	14	65	76	56	18	19
Ponderay city	638	37.4	54	110	29	24	75	100	115	33	24
Sandpoint city	6 835	36.5	478	1 288	333	334	835	1 005	1 001	286	219
Bonneville County	82 522	31.8	6 800	19 728	3 507	4 366	10 101	12 325	10 749	3 733	2 815
Idaho Falls CCD	74 378	31.6	6 211	17 579	3 177	4 026	9 325	11 045	9 575	3 303	2 477
Ammon city	6 187	28.8	586	1 662	277	274	761	896	760	220	158
Idaho Falls city	50 730	32.3	4 164	11 217	2 171	2 956	6 567	7 422	6 594	2 305	1 691
Iona city	1 201	33.4	89	338	50	36	110	184	153	57	45
Idaho Falls West CCD	1 777	33.4	116	460	63	96	190	300	263	88	64
Swan Valley CCD	1 160	40.7	77	226	35	33	117	153	186	82	63
Irwin city	157	47.8	5	25	4	5	7	20	35	10	9
Swan Valley city	213	40.3	23	32	4	5	24	26	34	12	13
Ucon CCD	5 207	32.0	396	1 463	232	211	469	827	725	260	211
Ririe city (part)	25	38.8	-	4	3	2	2	3	2	1	5
Ucon city	943	31.8	72	255	44	45	86	157	126	45	40
Boundary County	9 871	38.3	687	2 193	326	352	994	1 415	1 625	534	424
Bonners Ferry CCD	6 206	38.2	430	1 365	227	242	598	892	947	336	253
Bonners Ferry city	2 515	39.1	172	505	86	119	250	366	334	121	81
Moyie Springs CCD	1 966	39.2	121	454	39	61	215	271	361	110	89
Moyie Springs city	656	32.4	40	175	13	32	90	93	91	24	21
Naples CCD	1 699	37.4	136	374	60	49	181	252	317	88	82
Butte County	2 899	38.8	190	652	107	76	285	410	410	171	165
Arco CCD	2 558	39.6	155	578	97	58	244	361	372	151	146
Arco city	1 026	40.2	76	210	41	29	108	122	141	57	67
Butte City city	76	40.5	5	13	2	3	6	13	11	7	10
Moore city	196	42.7	11	38	3	4	27	22	19	16	14
Howe CCD	343	34.3	35	74	10	18	41	49	38	20	19
Camas County	991	39.7	43	202	30	35	99	180	136	72	65
East Camas CCD	251	40.3	8	43	6	8	31	47	34	16	21
West Camas CCD	740	39.5	35	159	24	27	68	133	102	56	44
Fairfield city	395	38.9	18	83	13	16	47	60	51	30	28
Canyon County	131 441	30.5	11 986	28 693	6 216	7 854	19 035	18 141	15 175	5 590	4 290
Caldwell CCD	30 702	30.9	2 670	6 646	1 678	1 917	4 019	4 110	3 626	1 347	1 094
Caldwell city (part)	24 142	29.4	2 261	5 102	1 422	1 708	3 410	3 060	2 631	977	777
Greenleaf city (part)	785	31.5	63	218	32	26	95	121	99	37	25
Notus city (part)	-	-	-	-	-	-	-	-	-	-	-
Huston CCD	3 158	34.1	217	805	135	135	320	475	460	156	116
Melba CCD	1 900	32.2	150	461	83	90	243	292	235	77	79
Melba city	439	30.5	38	106	20	26	57	70	38	16	15
Middleton CCD	10 284	34.1	807	2 360	348	423	1 340	1 683	1 471	525	372
Caldwell city (part)	-	-	-	-	-	-	-	-	-	-	-
Middleton city	2 978	27.7	330	687	110	201	531	420	307	97	67
Nampa CCD	74 113	29.8	7 133	15 678	3 542	4 810	11 638	10 081	7 971	2 954	2 195
Caldwell city (part)	1 825	24.1	237	436	89	194	381	235	126	38	27
Nampa city	51 867	28.5	5 465	10 592	2 665	3 840	9 112	6 606	4 747	1 723	1 324
Notus CCD	2 751	26.1	337	722	124	134	441	336	266	91	102
Notus city (part)	458	30.9	34	119	18	17	65	62	51	19	22
Parma CCD	4 340	35.1	337	1 001	146	145	537	605	600	210	164
Parma city	1 771	32.7	132	424	66	72	242	234	206	61	71
Wilder CCD	4 193	32.6	335	1 020	160	200	497	559	546	230	168
Greenleaf city (part)	77	25.8	5	22	3	7	11	10	15	1	2
Wilder city	1 462	23.8	167	406	84	111	208	160	127	54	40
Caribou County	7 304	35.0	547	1 765	289	308	739	1 053	948	384	277
Bancroft CCD	803	35.1	70	209	20	25	77	101	98	57	30
Bancroft city	382	38.3	27	89	11	12	39	45	59	24	14
Fort Hall CCD	-	-	-	-	-	-	-	-	-	-	-
Grace CCD	2 041	35.3	162	484	75	78	216	266	268	113	86
Grace city	990	36.5	67	244	30	38	105	131	135	58	30
Soda Springs CCD	4 176	34.9	303	989	175	193	431	639	554	194	149
Soda Springs city	3 381	33.9	252	791	151	171	368	511	409	154	116
Wayan CCD	284	36.0	12	83	19	12	15	47	28	20	12
Cassia County	21 416	31.1	1 867	5 446	888	1 037	2 381	2 870	2 466	969	762
Albion CCD	2 716	32.8	235	728	96	106	262	384	345	107	115
Albion city	262	43.2	13	62	2	3	25	34	41	12	21
Malta city	177	35.5	18	41	6	9	14	16	25	5	3
Burley CCD	13 297	31.0	1 167	3 231	572	701	1 555	1 718	1 475	579	459
Burley city (part)	9 074	30.8	843	2 057	386	527	1 149	1 155	942	392	299
Declo CCD	3 121	30.0	277	862	123	128	334	463	369	178	93

Table DP-1. Profile of General Demographic Characteristics: 2000

Geographic area: Newport city, Washington

[For information on confidentiality protection, nonsampling error, and definitions, see text]

Subject	Number	Percent
Total population	**1,921**	**100.0**
SEX AND AGE		
Male	888	46.2
Female	1,033	53.8
Under 5 years	143	7.4
5 to 9 years	147	7.7
10 to 14 years	171	8.9
15 to 19 years	155	8.1
20 to 24 years	106	5.5
25 to 34 years	202	10.5
35 to 44 years	256	13.3
45 to 54 years	222	11.6
55 to 59 years	86	4.5
60 to 64 years	79	4.1
65 to 74 years	170	8.8
75 to 84 years	131	6.8
85 years and over	53	2.8
Median age (years)	36.6	(X)
18 years and over	1,362	70.9
Male	609	31.7
Female	753	39.2
21 years and over	1,277	66.5
62 years and over	399	20.8
65 years and over	354	18.4
Male	131	6.8
Female	223	11.6
RACE		
One race	1,870	97.3
White	1,818	94.6
Black or African American	-	-
American Indian and Alaska Native	11	0.6
Asian	17	0.9
Asian Indian	-	-
Chinese	12	0.6
Filipino	4	0.2
Japanese	-	-
Korean	-	-
Vietnamese	1	0.1
Other Asian [1]	-	-
Native Hawaiian and Other Pacific Islander	2	0.1
Native Hawaiian	-	-
Guamanian or Chamorro	2	0.1
Samoan	-	-
Other Pacific Islander [2]	-	-
Some other race	22	1.1
Two or more races	51	2.7
Race alone or in combination with one or more other races: [3]		
White	1,867	97.2
Black or African American	7	0.4
American Indian and Alaska Native	43	2.2
Asian	26	1.4
Native Hawaiian and Other Pacific Islander	2	0.1
Some other race	34	1.8

Subject	Number	Percent
HISPANIC OR LATINO AND RACE		
Total population	**1,921**	**100.0**
Hispanic or Latino (of any race)	57	3.0
Mexican	45	2.3
Puerto Rican	-	-
Cuban	-	-
Other Hispanic or Latino	12	0.6
Not Hispanic or Latino	1,864	97.0
White alone	1,791	93.2
RELATIONSHIP		
Total population	**1,921**	**100.0**
In households	1,841	95.8
Householder	760	39.6
Spouse	318	16.6
Child	587	30.6
Own child under 18 years	498	25.9
Other relatives	82	4.3
Under 18 years	45	2.3
Nonrelatives	94	4.9
Unmarried partner	43	2.2
In group quarters	80	4.2
Institutionalized population	70	3.6
Noninstitutionalized population	10	0.5
HOUSEHOLD BY TYPE		
Total households	**760**	**100.0**
Family households (families)	472	62.1
With own children under 18 years	247	32.5
Married-couple family	318	41.8
With own children under 18 years	138	18.2
Female householder, no husband present	116	15.3
With own children under 18 years	83	10.9
Nonfamily households	288	37.9
Householder living alone	254	33.4
Householder 65 years and over	138	18.2
Households with individuals under 18 years	273	35.9
Households with individuals 65 years and over	243	32.0
Average household size	2.42	(X)
Average family size	3.09	(X)
HOUSING OCCUPANCY		
Total housing units	**820**	**100.0**
Occupied housing units	760	92.7
Vacant housing units	60	7.3
For seasonal, recreational, or occasional use	7	0.9
Homeowner vacancy rate (percent)	3.5	(X)
Rental vacancy rate (percent)	8.6	(X)
HOUSING TENURE		
Occupied housing units	**760**	**100.0**
Owner-occupied housing units	443	58.3
Renter-occupied housing units	317	41.7
Average household size of owner-occupied units	2.43	(X)
Average household size of renter-occupied units	2.41	(X)

- Represents zero or rounds to zero. (X) Not applicable.

[1] Other Asian alone, or two or more Asian categories.

[2] Other Pacific Islander alone, or two or more Native Hawaiian and Other Pacific Islander categories.

[3] In combination with one or more of the other races listed. The six numbers may add to more than the total population and the six percentages may add to more than 100 percent because individuals may report more than one race.

Source: U.S. Census Bureau, Census 2000.

Table DP-2. Profile of Selected Social Characteristics: 2000

Geographic area: Newport city, Washington

[Data based on a sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see text]

Subject	Number	Percent
SCHOOL ENROLLMENT		
Population 3 years and over enrolled in school	**553**	**100.0**
Nursery school, preschool	47	8.5
Kindergarten	35	6.3
Elementary school (grades 1-8)	266	48.1
High school (grades 9-12)	144	26.0
College or graduate school	61	11.0
EDUCATIONAL ATTAINMENT		
Population 25 years and over	**1,153**	**100.0**
Less than 9th grade	69	6.0
9th to 12th grade, no diploma	201	17.4
High school graduate (includes equivalency)	380	33.0
Some college, no degree	274	23.8
Associate degree	68	5.9
Bachelor's degree	85	7.4
Graduate or professional degree	76	6.6
Percent high school graduate or higher	76.6	(X)
Percent bachelor's degree or higher	14.0	(X)
MARITAL STATUS		
Population 15 years and over	**1,426**	**100.0**
Never married	284	19.9
Now married, except separated	677	47.5
Separated	35	2.5
Widowed	178	12.5
Female	149	10.4
Divorced	252	17.7
Female	159	11.2
GRANDPARENTS AS CAREGIVERS		
Grandparent living in household with one or more own grandchildren under 18 years	**34**	**100.0**
Grandparent responsible for grandchildren	17	50.0
VETERAN STATUS		
Civilian population 18 years and over	**1,323**	**100.0**
Civilian veterans	209	15.8
DISABILITY STATUS OF THE CIVILIAN NONINSTITUTIONALIZED POPULATION		
Population 5 to 20 years	**505**	**100.0**
With a disability	44	8.7
Population 21 to 64 years	**850**	**100.0**
With a disability	259	30.5
Percent employed	41.3	(X)
No disability	591	69.5
Percent employed	74.1	(X)
Population 65 years and over	**320**	**100.0**
With a disability	124	38.8
RESIDENCE IN 1995		
Population 5 years and over	**1,755**	**100.0**
Same house in 1995	797	45.4
Different house in the U.S. in 1995	951	54.2
Same county	515	29.3
Different county	436	24.8
Same state	247	14.1
Different state	189	10.8
Elsewhere in 1995	7	0.4

Subject	Number	Percent
NATIVITY AND PLACE OF BIRTH		
Total population	**1,888**	**100.0**
Native	1,849	97.9
Born in United States	1,848	97.9
State of residence	902	47.8
Different state	946	50.1
Born outside United States	1	0.1
Foreign born	39	2.1
Entered 1990 to March 2000	8	0.4
Naturalized citizen	16	0.8
Not a citizen	23	1.2
REGION OF BIRTH OF FOREIGN BORN		
Total (excluding born at sea)	**39**	**100.0**
Europe	13	33.3
Asia	6	15.4
Africa	-	-
Oceania	-	-
Latin America	1	2.6
Northern America	19	48.7
LANGUAGE SPOKEN AT HOME		
Population 5 years and over	**1,755**	**100.0**
English only	1,706	97.2
Language other than English	49	2.8
Speak English less than "very well"	11	0.6
Spanish	28	1.6
Speak English less than "very well"	7	0.4
Other indo-European languages	15	0.9
Speak English less than "very well"	4	0.2
Asian and Pacific Island languages	3	0.2
Speak English less than "very well"	-	-
ANCESTRY (single or multiple)		
Total population	**1,888**	**100.0**
Total ancestries reported	*2,036*	*107.8*
Arab	7	0.4
Czech[1]	7	0.4
Danish	14	0.7
Dutch	38	2.0
English	306	16.2
French (except Basque)[1]	117	6.2
French Canadian[1]	21	1.1
German	409	21.7
Greek	-	-
Hungarian	2	0.1
Irish[1]	236	12.5
Italian	64	3.4
Lithuanian	6	0.3
Norwegian	106	5.6
Polish	22	1.2
Portuguese	14	0.7
Russian	25	1.3
Scotch-Irish	55	2.9
Scottish	63	3.3
Slovak	-	-
Subsaharan African	-	-
Swedish	79	4.2
Swiss	2	0.1
Ukrainian	12	0.6
United States or American	120	6.4
Welsh	17	0.9
West Indian (excluding Hispanic groups)	-	-
Other ancestries	294	15.6

-Represents zero or rounds to zero. (X) Not applicable.

[1]The data represent a combination of two ancestries shown separately in Summary File 3. Czech includes Czechoslovakian. French includes Alsatian. French Canadian includes Acadian/Cajun. Irish includes Celtic.

Source: U.S. Bureau of the Census, Census 2000.

Table DP-3. Profile of Selected Economic Characteristics: 2000

Geographic area: Newport city, Washington

[Data based on a sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see text]

Subject	Number	Percent
EMPLOYMENT STATUS		
Population 16 years and over	**1,393**	**100.0**
In labor force	690	49.5
Civilian labor force	690	49.5
Employed	601	43.1
Unemployed	89	6.4
Percent of civilian labor force	12.9	(X)
Armed Forces	-	-
Not in labor force	703	50.5
Females 16 years and over	**770**	**100.0**
In labor force	347	45.1
Civilian labor force	347	45.1
Employed	313	40.6
Own children under 6 years	**158**	**100.0**
All parents in family in labor force	89	56.3
COMMUTING TO WORK		
Workers 16 years and over	**585**	**100.0**
Car, truck, or van - - drove alone	392	67.0
Car, truck, or van - - carpooled	80	13.7
Public transportation (including taxicab)	2	0.3
Walked	80	13.7
Other means	5	0.9
Worked at home	26	4.4
Mean travel time to work (minutes)[1]	18.5	(X)
Employed civilian population 16 years and over	**601**	**100.0**
OCCUPATION		
Management, professional, and related occupations	177	29.5
Service occupations	133	22.1
Sales and office occupations	138	23.0
Farming, fishing, and forestry occupations	10	1.7
Construction, extraction, and maintenance occupations	71	11.8
Production, transportation, and material moving occupations	72	12.0
INDUSTRY		
Agriculture, forestry, fishing and hunting, and mining	40	6.7
Construction	42	7.0
Manufacturing	74	12.3
Wholesale trade	10	1.7
Retail trade	60	10.0
Transportation and warehousing, and utilities	33	5.5
Information	2	0.3
Finance, insurance, real estate, and rental and leasing	28	4.7
Professional, scientific, management, administrative, and waste management services	15	2.5
Educational, health and social services	184	30.6
Arts, entertainment, recreation, accommodation and food services	43	7.2
Other services (except public administration)	44	7.3
Public administration	26	4.3
CLASS OF WORKER		
Private wage and salary workers	380	63.2
Government workers	148	24.6
Self-employed workers in own not incorporated business	61	10.1
Unpaid family workers	12	2.0

Subject	Number	Percent
INCOME IN 1999		
Households	**743**	**100.0**
Less than $10,000	139	18.7
$10,000 to $14,999	86	11.6
$15,000 to $24,999	136	18.3
$25,000 to $34,999	117	15.7
$35,000 to $49,999	101	13.6
$50,000 to $74,999	89	12.0
$75,000 to $99,999	44	5.9
$100,000 to $149,999	20	2.7
$150,000 to $199,999	7	0.9
$200,000 or more	4	0.5
Median household income (dollars)	25,709	(X)
With earnings	501	67.4
Mean earnings (dollars)[1]	36,368	(X)
With Social Security income	273	36.7
Mean Social Security income (dollars)[1]	10,974	(X)
With Supplemental Security income	74	10.0
Mean Supplemental Security income (dollars)[1]	5,530	(X)
With public assistance income	103	13.9
Mean public assistance income (dollars)[1]	5,228	(X)
With retirement income	153	20.6
Mean retirement income (dollars)[1]	9,934	(X)
Families	**459**	**100.0**
Less than $10,000	69	15.0
$10,000 to $14,999	40	8.7
$15,000 to $24,999	70	15.3
$25,000 to $34,999	85	18.5
$35,000 to $49,999	63	13.7
$50,000 to $74,999	65	14.2
$75,000 to $99,999	41	8.9
$100,000 to $149,999	15	3.3
$150,000 to $199,999	7	1.5
$200,000 or more	4	0.9
Median family income (dollars)	30,898	(X)
Per capita income (dollars)[1]	13,900	(X)
Median earnings (dollars):		
Male full-time, year-round workers	31,597	(X)
Female full-time, year-round workers	20,469	(X)

Subject	Number below poverty level	Percent below poverty level
POVERTY STATUS IN 1999		
Families	**101**	**22.0**
With related children under 18 years	91	35.0
With related children under 5 years	44	42.7
Families with female householder, no husband present	**72**	**59.5**
With related children under 18 years	66	68.0
With related children under 5 years	35	92.1
Individuals	**423**	**23.6**
18 years and over	235	18.9
65 years and over	40	12.5
Related children under 18 years	188	34.4
Related children 5 to 17 years	141	33.7
Unrelated individuals 15 years and over	102	27.5

-Represents zero or rounds to zero. (X) Not applicable.

[1]If the denominator of a mean value or per capita value is less than 30, then that value is calculated using a rounded aggregate in the numerator. See text.

Source: U.S. Bureau of the Census, Census 2000.

Table DP-4. Profile of Selected Housing Characteristics: 2000

Geographic area: Newport city, Washington

[Data based on a sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see text]

Subject	Number	Percent
Total housing units	**817**	**100.0**
UNITS IN STRUCTURE		
1-unit, detached	584	71.5
1-unit, attached	7	0.9
2 units	19	2.3
3 or 4 units	13	1.6
5 to 9 units	60	7.3
10 to 19 units	50	6.1
20 or more units	40	4.9
Mobile home	44	5.4
Boat, RV, van, etc	-	-
YEAR STRUCTURE BUILT		
1999 to March 2000	10	1.2
1995 to 1998	47	5.8
1990 to 1994	69	8.4
1980 to 1989	92	11.3
1970 to 1979	97	11.9
1960 to 1969	70	8.6
1940 to 1959	210	25.7
1939 or earlier	222	27.2
ROOMS		
1 room	21	2.6
2 rooms	37	4.5
3 rooms	87	10.6
4 rooms	133	16.3
5 rooms	198	24.2
6 rooms	124	15.2
7 rooms	84	10.3
8 rooms	76	9.3
9 or more rooms	57	7.0
Median (rooms)	5.2	(X)
Occupied housing units	**762**	**100.0**
YEAR HOUSEHOLDER MOVED INTO UNIT		
1999 to March 2000	184	24.1
1995 to 1998	260	34.1
1990 to 1994	112	14.7
1980 to 1989	101	13.3
1970 to 1979	39	5.1
1969 or earlier	66	8.7
VEHICLES AVAILABLE		
None	101	13.3
1	274	36.0
2	281	36.9
3 or more	106	13.9
HOUSE HEATING FUEL		
Utility gas	5	0.7
Bottled, tank, or LP gas	3	0.4
Electricity	686	90.0
Fuel oil, kerosene, etc	6	0.8
Coal or coke	-	-
Wood	60	7.9
Solar energy	-	-
Other fuel	2	0.3
No fuel used	-	-
SELECTED CHARACTERISTICS		
Lacking complete plumbing facilities	4	0.5
Lacking complete kitchen facilities	4	0.5
No telephone service	31	4.1

Subject	Number	Percent
OCCUPANTS PER ROOM		
Occupied housing units	**762**	**100.0**
1.00 or less	731	95.9
1.01 to 1.50	17	2.2
1.51 or more	14	1.8
Specified owner-occupied units	**382**	**100.0**
VALUE		
Less than $50,000	46	12.0
$50,000 to $99,999	213	55.8
$100,000 to $149,999	80	20.9
$150,000 to $199,999	34	8.9
$200,000 to $299,999	7	1.8
$300,000 to $499,999	-	-
$500,000 to $999,999	-	-
$1,000,000 or more	2	0.5
Median (dollars)	90,600	(X)
MORTGAGE STATUS AND SELECTED MONTHLY OWNER COSTS		
With a mortgage	256	67.0
Less than $300	2	0.5
$300 to $499	39	10.2
$500 to $699	42	11.0
$700 to $999	111	29.1
$1,000 to $1,499	58	15.2
$1,500 to $1,999	4	1.0
$2,000 or more	-	-
Median (dollars)	800	(X)
Not mortgaged	126	33.0
Median (dollars)	195	(X)
SELECTED MONTHLY OWNER COSTS AS A PERCENTAGE OF HOUSEHOLD INCOME IN 1999		
Less than 15.0 percent	119	31.2
15.0 to 19.9 percent	85	22.3
20.0 to 24.9 percent	49	12.8
25.0 to 29.9 percent	36	9.4
30.0 to 34.9 percent	28	7.3
35.0 percent or more	63	16.5
Not computed	2	0.5
Specified renter-occupied units	**339**	**100.0**
GROSS RENT		
Less than $200	55	16.2
$200 to $299	61	18.0
$300 to $499	113	33.3
$500 to $749	79	23.3
$750 to $999	9	2.7
$1,000 to $1,499	-	-
$1,500 or more	-	-
No cash rent	22	6.5
Median (dollars)	397	(X)
GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME IN 1999		
Less than 15.0 percent	55	16.2
15.0 to 19.9 percent	47	13.9
20.0 to 24.9 percent	38	11.2
25.0 to 29.9 percent	50	14.7
30.0 to 34.9 percent	16	4.7
35.0 percent or more	106	31.3
Not computed	27	8.0

-Represents zero or rounds to zero. (X) Not applicable.

Source: U.S. Bureau of the Census, Census 2000.

State & County QuickFacts

Bonner County, Idaho

People QuickFacts	Bonner County	Idaho
Population, 2010	40,877	1,567,582
Population, percent change, 2000 to 2010	11.0%	21.1%
Population, 2000	36,835	1,293,955
Persons under 5 years old, percent, 2009	5.3%	8.1%
Persons under 18 years old, percent, 2009	21.1%	27.1%
Persons 65 years old and over, percent, 2009	15.5%	12.1%
Female persons, percent, 2009	50.0%	49.8%
White persons, percent, 2010 (a)	96.0%	89.1%
Black persons, percent, 2010 (a)	0.1%	0.6%
American Indian and Alaska Native persons, percent, 2010 (a)	0.8%	1.4%
Asian persons, percent, 2010 (a)	0.5%	1.2%
Native Hawaiian and Other Pacific Islander, percent, 2010 (a)	0.1%	0.1%
Persons reporting two or more races, percent, 2010	2.1%	2.5%
Persons of Hispanic or Latino origin, percent, 2010 (b)	2.2%	11.2%
White persons not Hispanic, persons, 2010	94.4%	84.0%
Living in same house 1 year ago, pct 1 yr old & over, 2005-2009	86.9%	80.0%
Foreign born persons, percent, 2005-2009	2.5%	5.8%
Language other than English spoken at home, pct age 5+, 2005-2009	3.7%	10.0%
High school graduates, percent of persons age 25+, 2005-2009	90.4%	87.7%
Bachelor's degree or higher, pct of persons age 25+, 2005-2009	20.6%	23.7%
Veterans, 2005-2009	4,945	131,409
Mean travel time to work (minutes), workers age 16+, 2005-2009	23.4	20.0
Housing units, 2009	19,968	647,502
Homeownership rate, 2005-2009	78.4%	71.2%
Housing units in multi-unit structures, percent, 2005-2009	9.3%	14.6%
Median value of owner-occupied housing units, 2005-2009	$226,500	$166,700
Households, 2005-2009	15,461	552,726
Persons per household, 2005-2009	2.58	2.64
Per capita money income in past 12 months (2009 dollars) 2005-2009	$23,379	$22,262
Median household income, 2009	$41,270	$44,644
Persons below poverty level, percent, 2009	15.8%	14.4%

Business QuickFacts	Bonner County	Idaho
Private nonfarm establishments, 2008	1,600	46,246[1]
Private nonfarm employment, 2008	13,136	537,952[1]
Private nonfarm employment, percent change 2000-2008	26.0%	19.3%[1]
Nonemployer establishments, 2008	3,732	110,461
Total number of firms, 2007	5,642	151,671
Black-owned firms, percent, 2007	F	0.2%
American Indian and Alaska Native owned firms, percent, 2007	S	0.9%

Asian-owned firms, percent, 2002	F	0.9%
Native Hawaiian and Other Pacific Islander owned firms, percent, 2007	F	S
Hispanic-owned firms, percent, 2007	S	2.6%
Women-owned firms, percent, 2007	20.6%	23.5%
Manufacturers shipments, 2007 ($1000)	498,636	18,010,976
Merchant wholesaler sales, 2007 ($1000)	149,654	14,286,715
Retail sales, 2007 ($1000)	485,307	20,526,631
Retail sales per capita, 2007	$11,788	$13,691
Accommodation and food services sales, 2007 ($1000)	63,260	2,415,951
Building permits, 2009	3	4,863
Federal spending, 2008	280,792	11,227,185[1]
Geography QuickFacts	**Bonner County**	**Idaho**
Land area, 2000 (square miles)	1,737.67	82,747.21
Persons per square mile, 2010	23.5	18.9
FIPS Code	017	16
Metropolitan or Micropolitan Statistical Area	None	

1: Includes data not distributed by county.

(a) Includes persons reporting only one race.
(b) Hispanics may be of any race, so also are included in applicable race categories.

D: Suppressed to avoid disclosure of confidential information
F: Fewer than 100 firms
FN: Footnote on this item for this area in place of data
NA: Not available
S: Suppressed; does not meet publication standards
X: Not applicable
Z: Value greater than zero but less than half unit of measure shown

Source U.S. Census Bureau: State and County QuickFacts. Data derived from Population Estimates, Census of Population and Housing, Small Area Income and Poverty Estimates, State and County Housing Unit Estimates, County Business Patterns, Nonemployer Statistics, Economic Census, Survey of Business Owners, Building Permits, Consolidated Federal Funds Report
Last Revised: Friday, 03-Jun-2011 15:26:28 EDT

State & County QuickFacts

Pend Oreille County, Washington

People QuickFacts	Pend Oreille County	Washington
Population, 2010	13,001	6,724,540
Population, percent change, 2000 to 2010	10.8%	14.1%
Population, 2000	11,732	5,894,143
Persons under 5 years old, percent, 2009	5.4%	6.8%
Persons under 18 years old, percent, 2009	22.8%	23.6%
Persons 65 years old and over, percent, 2009	17.6%	12.1%
Female persons, percent, 2009	50.1%	50.0%
White persons, percent, 2010 (a)	91.6%	77.3%
Black persons, percent, 2010 (a)	0.4%	3.6%
American Indian and Alaska Native persons, percent, 2010 (a)	3.8%	1.5%
Asian persons, percent, 2010 (a)	0.6%	7.2%
Native Hawaiian and Other Pacific Islander, percent, 2010 (a)	0.1%	0.6%
Persons reporting two or more races, percent, 2010	2.9%	4.7%
Persons of Hispanic or Latino origin, percent, 2010 (b)	3.0%	11.2%
White persons not Hispanic, persons, 2010	89.8%	72.5%
Living in same house 1 year ago, pct 1 yr old & over, 2005-2009	88.8%	81.1%
Foreign born persons, percent, 2005-2009	2.1%	12.1%
Language other than English spoken at home, pct age 5+, 2005-2009	3.9%	16.5%
High school graduates, percent of persons age 25+, 2005-2009	86.6%	89.4%
Bachelor's degree or higher, pct of persons age 25+, 2005-2009	17.4%	30.8%
Veterans, 2005-2009	1,713	615,860
Mean travel time to work (minutes), workers age 16+, 2005-2009	29.8	25.4
Housing units, 2009	7,344	2,814,238
Homeownership rate, 2005-2009	77.9%	65.3%
Housing units in multi-unit structures, percent, 2005-2009	6.7%	25.9%
Median value of owner-occupied housing units, 2005-2009	$186,200	$277,600
Households, 2005-2009	5,101	2,512,327
Persons per household, 2005-2009	2.47	2.52
Per capita money income in past 12 months (2009 dollars) 2005-2009	$21,502	$29,320
Median household income, 2009	$39,288	$56,479
Persons below poverty level, percent, 2009	18.7%	12.3%

Business QuickFacts	Pend Oreille County	Washington
Private nonfarm establishments, 2008	250	182,207[1]
Private nonfarm employment, 2008	2,166	2,536,645[1]
Private nonfarm employment, percent change 2000-2008	39.2%	11.9%[1]
Nonemployer establishments, 2008	809	400,718
Total number of firms, 2007	1,076	551,439
Black-owned firms, percent, 2007	F	S

American Indian and Alaska Native owned firms, percent, 2007	F	1.2%
Asian-owned firms, percent, 2002	F	5.8%
Native Hawaiian and Other Pacific Islander owned firms, percent, 2007	F	0.2%
Hispanic-owned firms, percent, 2007	F	3.2%
Women-owned firms, percent, 2007	S	28.7%
Manufacturers shipments, 2007 ($1000)	D	112,053,283
Merchant wholesaler sales, 2007 ($1000)	1,728	76,790,966
Retail sales, 2007 ($1000)	66,624	92,968,519
Retail sales per capita, 2007	$5,208	$14,380
Accommodation and food services sales, 2007 ($1000)	9,155	12,389,422
Building permits, 2009	74	17,011
Federal spending, 2008	91,964	56,435,550[1]

Geography QuickFacts	Pend Oreille County	Washington
Land area, 2000 (square miles)	1,400.27	66,544.06
Persons per square mile, 2010	9.3	101.1
FIPS Code	051	53
Metropolitan or Micropolitan Statistical Area	None	

1: Includes data not distributed by county.

(a) Includes persons reporting only one race.
(b) Hispanics may be of any race, so also are included in applicable race categories.

D: Suppressed to avoid disclosure of confidential information
F: Fewer than 100 firms
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Source U.S. Census Bureau: State and County QuickFacts. Data derived from Population Estimates, Census of Population and Housing, Small Area Income and Poverty Estimates, State and County Housing Unit Estimates, County Business Patterns, Nonemployer Statistics, Economic Census, Survey of Business Owners, Building Permits, Consolidated Federal Funds Report
Last Revised: Friday, 03-Jun-2011 15:36:33 EDT

U.S. Census Bureau

American FactFinder

DP-1

Profile of General Population and Housing Characteristics: 2010
2010 Demographic Profile Data

NOTE: For more information on confidentiality protection, nonsampling error, and definitions, see http://www.census.gov/prod/cen2010/doc/dpsf.pdf.

Geography: Oldtown city, Idaho

Subject	Number	Percent
SEX AND AGE		
Total population	184	100.0
Under 5 years	14	7.6
5 to 9 years	10	5.4
10 to 14 years	15	8.2
15 to 19 years	8	4.3
20 to 24 years	6	3.3
25 to 29 years	8	4.3
30 to 34 years	12	6.5
35 to 39 years	17	9.2
40 to 44 years	10	5.4
45 to 49 years	14	7.6
50 to 54 years	19	10.3
55 to 59 years	11	6.0
60 to 64 years	12	6.5
65 to 69 years	2	1.1
70 to 74 years	6	3.3
75 to 79 years	5	2.7
80 to 84 years	6	3.3
85 years and over	9	4.9
Median age (years)	41.1	(X)
16 years and over	144	78.3
18 years and over	138	75.0
21 years and over	137	74.5
62 years and over	33	17.9
65 years and over	28	15.2
Male population	91	49.5
Under 5 years	5	2.7
5 to 9 years	8	4.3
10 to 14 years	7	3.8
15 to 19 years	4	2.2
20 to 24 years	2	1.1
25 to 29 years	4	2.2
30 to 34 years	6	3.3
35 to 39 years	7	3.8
40 to 44 years	7	3.8
45 to 49 years	8	4.3
50 to 54 years	7	3.8
55 to 59 years	8	4.3
60 to 64 years	8	4.3
65 to 69 years	1	0.5
70 to 74 years	3	1.6
75 to 79 years	1	0.5
80 to 84 years	3	1.6
85 years and over	2	1.1

Median age (years)	41.3	(X)
16 years and over	70	38.0
18 years and over	68	37.0
21 years and over	67	36.4
62 years and over	13	7.1
65 years and over	10	5.4
Female population	93	50.5
Under 5 years	9	4.9
5 to 9 years	2	1.1
10 to 14 years	8	4.3
15 to 19 years	4	2.2
20 to 24 years	4	2.2
25 to 29 years	4	2.2
30 to 34 years	6	3.3
35 to 39 years	10	5.4
40 to 44 years	3	1.6
45 to 49 years	6	3.3
50 to 54 years	12	6.5
55 to 59 years	3	1.6
60 to 64 years	4	2.2
65 to 69 years	1	0.5
70 to 74 years	3	1.6
75 to 79 years	4	2.2
80 to 84 years	3	1.6
85 years and over	7	3.8
Median age (years)	39.9	(X)
16 years and over	74	40.2
18 years and over	70	38.0
21 years and over	70	38.0
62 years and over	20	10.9
65 years and over	18	9.8
RACE		
Total population	184	100.0
One Race	183	99.5
White	181	98.4
Black or African American	1	0.5
American Indian and Alaska Native	0	0.0
Asian	0	0.0
Asian Indian	0	0.0
Chinese	0	0.0
Filipino	0	0.0
Japanese	0	0.0
Korean	0	0.0
Vietnamese	0	0.0
Other Asian [1]	0	0.0
Native Hawaiian and Other Pacific Islander	0	0.0
Native Hawaiian	0	0.0
Guamanian or Chamorro	0	0.0
Samoan	0	0.0
Other Pacific Islander [2]	0	0.0
Some Other Race	1	0.5
Two or More Races	1	0.5
White; American Indian and Alaska Native [3]	1	0.5
White; Asian [3]	0	0.0
White; Black or African American [3]	0	0.0
White; Some Other Race [3]	0	0.0
Race alone or in combination with one or more other races: [4]		
White	182	98.9
Black or African American	1	0.5

American Indian and Alaska Native	1	0.5
Asian	0	0.0
Native Hawaiian and Other Pacific Islander	0	0.0
Some Other Race	1	0.5
HISPANIC OR LATINO		
Total population	184	100.0
Hispanic or Latino (of any race)	5	2.7
Mexican	0	0.0
Puerto Rican	0	0.0
Cuban	0	0.0
Other Hispanic or Latino [5]	5	2.7
Not Hispanic or Latino	179	97.3
HISPANIC OR LATINO AND RACE		
Total population	184	100.0
Hispanic or Latino	5	2.7
White alone	4	2.2
Black or African American alone	0	0.0
American Indian and Alaska Native alone	0	0.0
Asian alone	0	0.0
Native Hawaiian and Other Pacific Islander alone	0	0.0
Some Other Race alone	1	0.5
Two or More Races	0	0.0
Not Hispanic or Latino	179	97.3
White alone	177	96.2
Black or African American alone	1	0.5
American Indian and Alaska Native alone	0	0.0
Asian alone	0	0.0
Native Hawaiian and Other Pacific Islander alone	0	0.0
Some Other Race alone	0	0.0
Two or More Races	1	0.5
RELATIONSHIP		
Total population	184	100.0
In households	184	100.0
Householder	80	43.5
Spouse [6]	26	14.1
Child	53	28.8
Own child under 18 years	43	23.4
Other relatives	9	4.9
Under 18 years	1	0.5
65 years and over	1	0.5
Nonrelatives	16	8.7
Under 18 years	2	1.1
65 years and over	0	0.0
Unmarried partner	11	6.0
In group quarters	0	0.0
Institutionalized population	0	0.0
Male	0	0.0
Female	0	0.0
Noninstitutionalized population	0	0.0
Male	0	0.0
Female	0	0.0
HOUSEHOLDS BY TYPE		
Total households	80	100.0
Family households (families) [7]	47	58.8
With own children under 18 years	26	32.5
Husband-wife family	26	32.5
With own children under 18 years	11	13.8
Male householder, no wife present	6	7.5
With own children under 18 years	6	7.5

Female householder, no husband present	15	18.8
With own children under 18 years	9	11.3
Nonfamily households [7]	33	41.3
Householder living alone	28	35.0
Male	18	22.5
65 years and over	2	2.5
Female	10	12.5
65 years and over	6	7.5
Households with individuals under 18 years	28	35.0
Households with individuals 65 years and over	20	25.0
Average household size	2.30	(X)
Average family size [7]	2.87	(X)
HOUSING OCCUPANCY		
Total housing units	109	100.0
Occupied housing units	80	73.4
Vacant housing units	29	26.6
For rent	12	11.0
Rented, not occupied	1	0.9
For sale only	6	5.5
Sold, not occupied	1	0.9
For seasonal, recreational, or occasional use	0	0.0
All other vacants	9	8.3
Homeowner vacancy rate (percent) [8]	10.0	(X)
Rental vacancy rate (percent) [9]	30.0	(X)
HOUSING TENURE		
Occupied housing units	80	100.0
Owner-occupied housing units	53	66.3
Population in owner-occupied housing units	130	(X)
Average household size of owner-occupied units	2.45	(X)
Renter-occupied housing units	27	33.8
Population in renter-occupied housing units	54	(X)
Average household size of renter-occupied units	2.00	(X)

X Not applicable.

[1] Other Asian alone, or two or more Asian categories.

[2] Other Pacific Islander alone, or two or more Native Hawaiian and Other Pacific Islander categories.

[3] One of the four most commonly reported multiple-race combinations nationwide in Census 2000.

[4] In combination with one or more of the other races listed. The six numbers may add to more than the total population, and the six percentages may add to more than 100 percent because individuals may report more than one race.

[5] This category is composed of people whose origins are from the Dominican Republic, Spain, and Spanish-speaking Central or South American countries. It also includes general origin responses such as "Latino" or "Hispanic."

[6] "Spouse" represents spouse of the householder. It does not reflect all spouses in a household. Responses of "same-sex spouse" were edited during processing to "unmarried partner."

[7] "Family households" consist of a householder and one or more other people related to the householder by birth, marriage, or adoption. They do not include same-sex married couples even if the marriage was performed in a state issuing marriage certificates for same-sex couples. Same-sex couple households are included in the family households category if there is at least one additional person related to the householder by birth or adoption. Same-sex couple households with no relatives of the householder present are tabulated in nonfamily households. "Nonfamily households" consist of people living alone and households which do not have any members related to the householder.

[8] The homeowner vacancy rate is the proportion of the homeowner inventory that is vacant "for sale." It is computed by dividing the total number of vacant units "for sale only" by the sum of owner-occupied units, vacant units that are "for sale only," and vacant units that have been sold but not yet occupied; and then multiplying by 100.

[9] The rental vacancy rate is the proportion of the rental inventory that is vacant "for rent." It is computed by dividing the total number of vacant units "for rent" by the sum of the renter-occupied units, vacant units that are "for rent," and vacant units that have been rented but not yet occupied; and then multiplying by 100.

Source: U.S. Census Bureau, 2010 Census.

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Source: U.S. Census Bureau | American FactFinder

U.S. Census Bureau

FactFinder

DP03

SELECTED ECONOMIC CHARACTERISTICS
2006-2010 American Community Survey 5-Year Estimates

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, for 2010, the 2010 Census provides the official counts of the population and housing units for the nation, states, counties, cities and towns. For 2006 to 2009, the Population Estimates Program provides intercensal estimates of the population for the nation, states, and counties.

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Data and Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

	Oldtown city, Idaho			
Subject	Estimate	Estimate Margin of Error	Percent	Percent Margin of Error
EMPLOYMENT STATUS				
Population 16 years and over	166	+/-68	166	(X)
In labor force	63	+/-39	38.0%	+/-11.7
Civilian labor force	63	+/-39	38.0%	+/-11.7
Employed	61	+/-39	36.7%	+/-12.0
Unemployed	2	+/-3	1.2%	+/-2.1
Armed Forces	0	+/-119	0.0%	+/-17.7
Not in labor force	103	+/-36	62.0%	+/-11.7
Civilian labor force	63	+/-39	63	(X)
Percent Unemployed	(X)	(X)	3.2%	+/-5.9
Females 16 years and over	105	+/-37	105	(X)
In labor force	12	+/-10	11.4%	+/-8.6
Civilian labor force	12	+/-10	11.4%	+/-8.6
Employed	12	+/-10	11.4%	+/-8.6
Own children under 6 years	38	+/-32	38	(X)
All parents in family in labor force	0	+/-119	0.0%	+/-48.1
Own children 6 to 17 years	2	+/-3	2	(X)
All parents in family in labor force	0	+/-119	0.0%	+/-100.0
COMMUTING TO WORK				
Workers 16 years and over	61	+/-39	61	(X)
Car, truck, or van -- drove alone	30	+/-21	49.2%	+/-28.0
Car, truck, or van -- carpooled	28	+/-29	45.9%	+/-28.4
Public transportation (excluding taxicab)	1	+/-2	1.6%	+/-3.6
Walked	2	+/-4	3.3%	+/-6.6
Other means	0	+/-119	0.0%	+/-38.0
Worked at home	0	+/-119	0.0%	+/-38.0
Mean travel time to work (minutes)	34.2	+/-6.7	(X)	(X)
OCCUPATION				
Civilian employed population 16 years and over	61	+/-39	61	(X)
Management, business, science, and arts occupations	0	+/-119	0.0%	+/-38.0
Service occupations	7	+/-11	11.5%	+/-16.4
Sales and office occupations	10	+/-8	16.4%	+/-14.0
Natural resources, construction, and maintenance occupations	22	+/-26	36.1%	+/-30.7

Production, transportation, and material moving occupations	22	+/-20	36.1%	+/-24.1
INDUSTRY				
Civilian employed population 16 years and over	61	+/-39	61	(X)
Agriculture, forestry, fishing and hunting, and mining	17	+/-27	27.9%	+/-34.0
Construction	7	+/-8	11.5%	+/-15.1
Manufacturing	10	+/-16	16.4%	+/-24.0
Wholesale trade	0	+/-119	0.0%	+/-38.0
Retail trade	6	+/-7	9.8%	+/-11.6
Transportation and warehousing, and utilities	10	+/-10	16.4%	+/-16.0
Information	2	+/-4	3.3%	+/-6.6
Finance and insurance, and real estate and rental and leasing	2	+/-3	3.3%	+/-4.7
Professional, scientific, and management, and administrative and waste management services	0	+/-119	0.0%	+/-38.0
Educational services, and health care and social assistance	1	+/-2	1.6%	+/-3.6
Arts, entertainment, and recreation, and accommodation and food services	6	+/-11	9.8%	+/-16.3
Other services, except public administration	0	+/-119	0.0%	+/-38.0
Public administration	0	+/-119	0.0%	+/-38.0
CLASS OF WORKER				
Civilian employed population 16 years and over	61	+/-39	61	(X)
Private wage and salary workers	61	+/-39	100.0%	+/-38.0
Government workers	0	+/-119	0.0%	+/-38.0
Self-employed in own not incorporated business workers	0	+/-119	0.0%	+/-38.0
Unpaid family workers	0	+/-119	0.0%	+/-38.0
INCOME AND BENEFITS (IN 2010 INFLATION-ADJUSTED DOLLARS)				
Total households	102	+/-34	102	(X)
Less than $10,000	11	+/-15	10.8%	+/-14.7
$10,000 to $14,999	23	+/-17	22.5%	+/-17.6
$15,000 to $24,999	12	+/-12	11.8%	+/-12.3
$25,000 to $34,999	20	+/-19	19.6%	+/-17.0
$35,000 to $49,999	25	+/-12	24.5%	+/-10.6
$50,000 to $74,999	2	+/-3	2.0%	+/-3.0
$75,000 to $99,999	9	+/-16	8.8%	+/-15.1
$100,000 to $149,999	0	+/-119	0.0%	+/-26.7
$150,000 to $199,999	0	+/-119	0.0%	+/-26.7
$200,000 or more	0	+/-119	0.0%	+/-26.7
Median household income (dollars)	30,417	+/-12,409	(X)	(X)
Mean household income (dollars)	29,790	+/-10,026	(X)	(X)
With earnings	51	+/-29	50.0%	+/-19.1
Mean earnings (dollars)	42,433	+/-13,439	(X)	(X)
With Social Security	37	+/-17	36.3%	+/-16.3
Mean Social Security income (dollars)	14,403	+/-4,262	(X)	(X)
With retirement income	17	+/-16	16.7%	+/-16.1
Mean retirement income (dollars)	7,635	+/-4,921	(X)	(X)
With Supplemental Security Income	20	+/-18	19.6%	+/-18.5
Mean Supplemental Security Income (dollars)	6,065	+/-1,792	(X)	(X)
With cash public assistance income	8	+/-13	7.8%	+/-13.2
Mean cash public assistance income (dollars)	4,638	+/-22	(X)	(X)
With Food Stamp/SNAP benefits in the past 12 months	32	+/-25	31.4%	+/-23.8
Families	71	+/-34	71	(X)
Less than $10,000	9	+/-14	12.7%	+/-19.0
$10,000 to $14,999	17	+/-16	23.9%	+/-21.0
$15,000 to $24,999	16	+/-20	22.5%	+/-24.0
$25,000 to $34,999	14	+/-18	19.7%	+/-21.8
$35,000 to $49,999	13	+/-9	18.3%	+/-14.0
$50,000 to $74,999	2	+/-3	2.8%	+/-4.4
$75,000 to $99,999	0	+/-119	0.0%	+/-34.8
$100,000 to $149,999	0	+/-119	0.0%	+/-34.8
$150,000 to $199,999	0	+/-119	0.0%	+/-34.8
$200,000 or more	0	+/-119	0.0%	+/-34.8

Median family income (dollars)	23,984	+/-7,540	(X)	(X)
Mean family income (dollars)	24,530	+/-6,675	(X)	(X)
Per capita income (dollars)	14,974	+/-5,954	(X)	(X)
Nonfamily households	31	+/-22	31	(X)
Median nonfamily income (dollars)	18,250	+/-15,311	(X)	(X)
Mean nonfamily income (dollars)	21,568	+/-7,139	(X)	(X)
Median earnings for workers (dollars)	23,750	+/-1,612	(X)	(X)
Median earnings for male full-time, year-round workers (dollars)	24,875	+/-28,849	(X)	(X)
Median earnings for female full-time, year-round workers (dollars)	14,583	+/-14,602	(X)	(X)
HEALTH INSURANCE COVERAGE				
Civilian noninstitutionalized population	(X)	(X)	(X)	(X)
With health insurance coverage	(X)	(X)	(X)	(X)
With private health insurance	(X)	(X)	(X)	(X)
With public coverage	(X)	(X)	(X)	(X)
No health insurance coverage	(X)	(X)	(X)	(X)
Civilian noninstitutionalized population under 18 years	(X)	(X)	(X)	(X)
No health insurance coverage	(X)	(X)	(X)	(X)
Civilian noninstitutionalized population 18 to 64 years	(X)	(X)	(X)	(X)
In labor force:	(X)	(X)	(X)	(X)
Employed:	(X)	(X)	(X)	(X)
With health insurance coverage	(X)	(X)	(X)	(X)
With private health insurance	(X)	(X)	(X)	(X)
With public coverage	(X)	(X)	(X)	(X)
No health insurance coverage	(X)	(X)	(X)	(X)
Unemployed:	(X)	(X)	(X)	(X)
With health insurance coverage	(X)	(X)	(X)	(X)
With private health insurance	(X)	(X)	(X)	(X)
With public coverage	(X)	(X)	(X)	(X)
No health insurance coverage	(X)	(X)	(X)	(X)
Not in labor force:	(X)	(X)	(X)	(X)
With health insurance coverage	(X)	(X)	(X)	(X)
With private health insurance	(X)	(X)	(X)	(X)
With public coverage	(X)	(X)	(X)	(X)
No health insurance coverage	(X)	(X)	(X)	(X)
PERCENTAGE OF FAMILIES AND PEOPLE WHOSE INCOME IN THE PAST 12 MONTHS IS BELOW THE POVERTY LEVEL				
All families	(X)	(X)	32.4%	+/-26.8
With related children under 18 years	(X)	(X)	38.6%	+/-39.2
With related children under 5 years only	(X)	(X)	30.0%	+/-43.4
Married couple families	(X)	(X)	0.0%	+/-57.1
With related children under 18 years	(X)	(X)	0.0%	+/-69.9
With related children under 5 years only	(X)	(X)	0.0%	+/-85.6
Families with female householder, no husband present	(X)	(X)	52.3%	+/-38.1
With related children under 18 years	(X)	(X)	65.4%	+/-57.3
With related children under 5 years only	(X)	(X)	50.0%	+/-50.0
All people	(X)	(X)	24.5%	+/-23.3
Under 18 years	(X)	(X)	48.0%	+/-42.2
Related children under 18 years	(X)	(X)	48.0%	+/-42.2
Related children under 5 years	(X)	(X)	42.1%	+/-49.6
Related children 5 to 17 years	(X)	(X)	66.7%	+/-60.2
18 years and over	(X)	(X)	17.5%	+/-16.3
18 to 64 years	(X)	(X)	22.3%	+/-20.6
65 years and over	(X)	(X)	0.0%	+/-49.4
People in families	(X)	(X)	32.1%	+/-28.6
Unrelated individuals 15 years and over	(X)	(X)	3.5%	+/-8.5

Source: U.S. Census Bureau, 2006-2010 American Community Survey

Explanation of Symbols:
An '**' entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.
An '-' entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution.
An '-' following a median estimate means the median falls in the lowest interval of an open-ended distribution.
An '+' following a median estimate means the median falls in the upper interval of an open-ended distribution.
An '***' entry in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.
An '*****' entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.
An 'N' entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.
An '(X)' means that the estimate is not applicable or not available.

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

There were changes in the edit between 2009 and 2010 regarding Supplemental Security Income (SSI) and Social Security. The changes in the edit loosened restrictions on disability requirements for receipt of SSI resulting in an increase in the total number of SSI recipients in the American Community Survey. The changes also loosened restrictions on possible reported monthly amounts in Social Security income resulting in higher Social Security aggregate amounts. These results more closely match administrative counts compiled by the Social Security Administration.

Workers include members of the Armed Forces and civilians who were at work last week.

Industry codes are 4-digit codes and are based on the North American Industry Classification System 2007. The Industry categories adhere to the guidelines issued in Clarification Memorandum No. 2, "NAICS Alternate Aggregation Structure for Use By U.S. Statistical Agencies," issued by the Office of Management and Budget.

Occupation codes are 4-digit codes and are based on the Standard Occupational Classification (SOC) 2010. The 2010 Census occupation codes were updated in accordance with the 2010 revision of the SOC. To allow for the creation of 2006-2010 and 2008-2010 tables, occupation data in the multiyear files (2006-2010 and 2008-2010) were recoded to 2010 Census occupation codes. We recommend using caution when comparing data coded using 2010 Census occupation codes with data coded using previous Census occupation codes. For more information on the Census occupation code changes, please visit our website at http://www.census.gov/hhes/www/ioindex/.

While the 2006-2010 American Community Survey (ACS) data generally reflect the December 2009 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas; in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities.

Estimates of urban and rural population, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2000 data. Boundaries for urban areas have not been updated since Census 2000. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

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Source: U.S. Census Bureau | American FactFinder

U.S. Census Bureau

AMERICAN FactFinder

DP-1

Profile of General Population and Housing Characteristics: 2010
2010 Demographic Profile Data

NOTE: For more information on confidentiality protection, nonsampling error, and definitions, see http://www.census.gov/prod/cen2010/doc/dpsf.pdf.

Geography: Newport city, Washington

Subject	Number	Percent
SEX AND AGE		
Total population	2,126	100.0
Under 5 years	168	7.9
5 to 9 years	152	7.1
10 to 14 years	161	7.6
15 to 19 years	158	7.4
20 to 24 years	110	5.2
25 to 29 years	120	5.6
30 to 34 years	107	5.0
35 to 39 years	116	5.5
40 to 44 years	112	5.3
45 to 49 years	133	6.3
50 to 54 years	112	5.3
55 to 59 years	145	6.8
60 to 64 years	91	4.3
65 to 69 years	95	4.5
70 to 74 years	73	3.4
75 to 79 years	83	3.9
80 to 84 years	83	3.9
85 years and over	107	5.0
Median age (years)	38.8	(X)
16 years and over	1,604	75.4
18 years and over	1,540	72.4
21 years and over	1,465	68.9
62 years and over	492	23.1
65 years and over	441	20.7
Male population	990	46.6
Under 5 years	83	3.9
5 to 9 years	92	4.3
10 to 14 years	88	4.1
15 to 19 years	70	3.3
20 to 24 years	47	2.2
25 to 29 years	55	2.6
30 to 34 years	50	2.4
35 to 39 years	48	2.3
40 to 44 years	60	2.8
45 to 49 years	71	3.3
50 to 54 years	52	2.4
55 to 59 years	64	3.0
60 to 64 years	41	1.9
65 to 69 years	37	1.7
70 to 74 years	32	1.5
75 to 79 years	32	1.5
80 to 84 years	35	1.6
85 years and over	33	1.6

Median age (years)	36.3	(X)
16 years and over	708	33.3
18 years and over	683	32.1
21 years and over	649	30.5
62 years and over	189	8.9
65 years and over	169	7.9
Female population	1,136	53.4
Under 5 years	85	4.0
5 to 9 years	60	2.8
10 to 14 years	73	3.4
15 to 19 years	88	4.1
20 to 24 years	63	3.0
25 to 29 years	65	3.1
30 to 34 years	57	2.7
35 to 39 years	68	3.2
40 to 44 years	52	2.4
45 to 49 years	62	2.9
50 to 54 years	60	2.8
55 to 59 years	81	3.8
60 to 64 years	50	2.4
65 to 69 years	58	2.7
70 to 74 years	41	1.9
75 to 79 years	51	2.4
80 to 84 years	48	2.3
85 years and over	74	3.5
Median age (years)	41.1	(X)
16 years and over	896	42.1
18 years and over	857	40.3
21 years and over	816	38.4
62 years and over	303	14.3
65 years and over	272	12.8
RACE		
Total population	2,126	100.0
One Race	2,048	96.3
White	1,962	92.3
Black or African American	7	0.3
American Indian and Alaska Native	21	1.0
Asian	24	1.1
Asian Indian	7	0.3
Chinese	13	0.6
Filipino	4	0.2
Japanese	0	0.0
Korean	0	0.0
Vietnamese	0	0.0
Other Asian [1]	0	0.0
Native Hawaiian and Other Pacific Islander	9	0.4
Native Hawaiian	9	0.4
Guamanian or Chamorro	0	0.0
Samoan	0	0.0
Other Pacific Islander [2]	0	0.0
Some Other Race	25	1.2
Two or More Races	78	3.7
White; American Indian and Alaska Native [3]	39	1.8
White; Asian [3]	11	0.5
White; Black or African American [3]	5	0.2
White; Some Other Race [3]	5	0.2
Race alone or in combination with one or more other races: [4]		
White	2,034	95.7
Black or African American	19	0.9

American Indian and Alaska Native	70	3.3
Asian	40	1.9
Native Hawaiian and Other Pacific Islander	12	0.6
Some Other Race	38	1.8
HISPANIC OR LATINO		
Total population	2,126	100.0
Hispanic or Latino (of any race)	95	4.5
Mexican	70	3.3
Puerto Rican	3	0.1
Cuban	0	0.0
Other Hispanic or Latino [5]	22	1.0
Not Hispanic or Latino	2,031	95.5
HISPANIC OR LATINO AND RACE		
Total population	2,126	100.0
Hispanic or Latino	95	4.5
White alone	49	2.3
Black or African American alone	0	0.0
American Indian and Alaska Native alone	5	0.2
Asian alone	0	0.0
Native Hawaiian and Other Pacific Islander alone	0	0.0
Some Other Race alone	23	1.1
Two or More Races	18	0.8
Not Hispanic or Latino	2,031	95.5
White alone	1,913	90.0
Black or African American alone	7	0.3
American Indian and Alaska Native alone	16	0.8
Asian alone	24	1.1
Native Hawaiian and Other Pacific Islander alone	9	0.4
Some Other Race alone	2	0.1
Two or More Races	60	2.8
RELATIONSHIP		
Total population	2,126	100.0
In households	2,030	95.5
Householder	874	41.1
Spouse [6]	312	14.7
Child	627	29.5
Own child under 18 years	517	24.3
Other relatives	93	4.4
Under 18 years	50	2.4
65 years and over	14	0.7
Nonrelatives	124	5.8
Under 18 years	19	0.9
65 years and over	7	0.3
Unmarried partner	65	3.1
In group quarters	96	4.5
Institutionalized population	94	4.4
Male	47	2.2
Female	47	2.2
Noninstitutionalized population	2	0.1
Male	2	0.1
Female	0	0.0
HOUSEHOLDS BY TYPE		
Total households	874	100.0
Family households (families) [7]	506	57.9
With own children under 18 years	263	30.1
Husband-wife family	312	35.7
With own children under 18 years	138	15.8
Male householder, no wife present	40	4.6
With own children under 18 years	26	3.0

Female householder, no husband present	154	17.6
With own children under 18 years	99	11.3
Nonfamily households [7]	368	42.1
Householder living alone	336	38.4
Male	132	15.1
65 years and over	46	5.3
Female	204	23.3
65 years and over	119	13.6
Households with individuals under 18 years	297	34.0
Households with individuals 65 years and over	297	34.0
Average household size	2.32	(X)
Average family size [7]	3.04	(X)
HOUSING OCCUPANCY		
Total housing units	954	100.0
Occupied housing units	874	91.6
Vacant housing units	80	8.4
For rent	28	2.9
Rented, not occupied	2	0.2
For sale only	18	1.9
Sold, not occupied	1	0.1
For seasonal, recreational, or occasional use	6	0.6
All other vacants	25	2.6
Homeowner vacancy rate (percent) [8]	3.6	(X)
Rental vacancy rate (percent) [9]	6.6	(X)
HOUSING TENURE		
Occupied housing units	874	100.0
Owner-occupied housing units	482	55.1
Population in owner-occupied housing units	1,196	(X)
Average household size of owner-occupied units	2.48	(X)
Renter-occupied housing units	392	44.9
Population in renter-occupied housing units	834	(X)
Average household size of renter-occupied units	2.13	(X)

X Not applicable.

[1] Other Asian alone, or two or more Asian categories.

[2] Other Pacific Islander alone, or two or more Native Hawaiian and Other Pacific Islander categories.

[3] One of the four most commonly reported multiple-race combinations nationwide in Census 2000.

[4] In combination with one or more of the other races listed. The six numbers may add to more than the total population, and the six percentages may add to more than 100 percent because individuals may report more than one race.

[5] This category is composed of people whose origins are from the Dominican Republic, Spain, and Spanish-speaking Central or South American countries. It also includes general origin responses such as "Latino" or "Hispanic."

[6] "Spouse" represents spouse of the householder. It does not reflect all spouses in a household. Responses of "same-sex spouse" were edited during processing to "unmarried partner."

[7] "Family households" consist of a householder and one or more other people related to the householder by birth, marriage, or adoption. They do not include same-sex married couples even if the marriage was performed in a state issuing marriage certificates for same-sex couples. Same-sex couple households are included in the family households category if there is at least one additional person related to the householder by birth or adoption. Same-sex couple households with no relatives of the householder present are tabulated in nonfamily households. "Nonfamily households" consist of people living alone and households which do not have any members related to the householder.

[8] The homeowner vacancy rate is the proportion of the homeowner inventory that is vacant "for sale." It is computed by dividing the total number of vacant units "for sale only" by the sum of owner-occupied units, vacant units that are "for sale only," and vacant units that have been sold but not yet occupied; and then multiplying by 100.

[9] The rental vacancy rate is the proportion of the rental inventory that is vacant "for rent." It is computed by dividing the total number of vacant units "for rent" by the sum of the renter-occupied units, vacant units that are "for rent," and vacant units that have been rented but not yet occupied; and then multiplying by 100.

Source: U.S. Census Bureau, 2010 Census.

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DP03

SELECTED ECONOMIC CHARACTERISTICS
2006-2010 American Community Survey 5-Year Estimates

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, for 2010, the 2010 Census provides the official counts of the population and housing units for the nation, states, counties, cities and towns. For 2006 to 2009, the Population Estimates Program provides intercensal estimates of the population for the nation, states, and counties.

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Data and Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

	Newport city, Washington			
Subject	Estimate	Estimate Margin of Error	Percent	Percent Margin of Error
EMPLOYMENT STATUS				
Population 16 years and over	1,787	+/-262	1,787	(X)
In labor force	911	+/-174	51.0%	+/-6.4
Civilian labor force	911	+/-174	51.0%	+/-6.4
Employed	814	+/-154	45.6%	+/-6.1
Unemployed	97	+/-61	5.4%	+/-3.2
Armed Forces	0	+/-123	0.0%	+/-1.9
Not in labor force	876	+/-173	49.0%	+/-6.4
Civilian labor force	911	+/-174	911	(X)
Percent Unemployed	(X)	(X)	10.6%	+/-5.9
Females 16 years and over	1,051	+/-179	1,051	(X)
In labor force	453	+/-115	43.1%	+/-8.4
Civilian labor force	453	+/-115	43.1%	+/-8.4
Employed	377	+/-103	35.9%	+/-8.5
Own children under 6 years	167	+/-88	167	(X)
All parents in family in labor force	95	+/-58	56.9%	+/-24.2
Own children 6 to 17 years	421	+/-159	421	(X)
All parents in family in labor force	245	+/-124	58.2%	+/-16.7
COMMUTING TO WORK				
Workers 16 years and over	781	+/-148	781	(X)
Car, truck, or van -- drove alone	568	+/-124	72.7%	+/-8.7
Car, truck, or van -- carpooled	92	+/-52	11.8%	+/-6.2
Public transportation (excluding taxicab)	0	+/-123	0.0%	+/-4.4
Walked	96	+/-64	12.3%	+/-7.8
Other means	0	+/-123	0.0%	+/-4.4
Worked at home	25	+/-21	3.2%	+/-2.6
Mean travel time to work (minutes)	19.0	+/-4.4	(X)	(X)
OCCUPATION				
Civilian employed population 16 years and over	814	+/-154	814	(X)
Management, business, science, and arts occupations	185	+/-72	22.7%	+/-7.9
Service occupations	179	+/-69	22.0%	+/-7.4
Sales and office occupations	178	+/-73	21.9%	+/-7.9
Natural resources, construction, and maintenance occupations	168	+/-81	20.6%	+/-8.8

Production, transportation, and material moving occupations	104	+/-56	12.8%	+/-6.6
INDUSTRY				
Civilian employed population 16 years and over	814	+/-154	814	(X)
Agriculture, forestry, fishing and hunting, and mining	52	+/-43	6.4%	+/-5.1
Construction	76	+/-54	9.3%	+/-6.3
Manufacturing	97	+/-55	11.9%	+/-6.7
Wholesale trade	0	+/-123	0.0%	+/-4.2
Retail trade	86	+/-69	10.6%	+/-7.9
Transportation and warehousing, and utilities	80	+/-42	9.8%	+/-4.6
Information	19	+/-21	2.3%	+/-2.5
Finance and insurance, and real estate and rental and leasing	23	+/-23	2.8%	+/-2.9
Professional, scientific, and management, and administrative and waste management services	23	+/-21	2.8%	+/-2.6
Educational services, and health care and social assistance	168	+/-63	20.6%	+/-6.8
Arts, entertainment, and recreation, and accommodation and food services	91	+/-55	11.2%	+/-6.1
Other services, except public administration	44	+/-31	5.4%	+/-3.8
Public administration	55	+/-36	6.8%	+/-4.3
CLASS OF WORKER				
Civilian employed population 16 years and over	814	+/-154	814	(X)
Private wage and salary workers	523	+/-118	64.3%	+/-9.4
Government workers	218	+/-76	26.8%	+/-7.4
Self-employed in own not incorporated business workers	73	+/-49	9.0%	+/-5.6
Unpaid family workers	0	+/-123	0.0%	+/-4.2
INCOME AND BENEFITS (IN 2010 INFLATION-ADJUSTED DOLLARS)				
Total households	982	+/-141	982	(X)
Less than $10,000	184	+/-68	18.7%	+/-6.3
$10,000 to $14,999	162	+/-78	16.5%	+/-7.0
$15,000 to $24,999	196	+/-78	20.0%	+/-7.1
$25,000 to $34,999	81	+/-44	8.2%	+/-4.4
$35,000 to $49,999	97	+/-46	9.9%	+/-4.5
$50,000 to $74,999	128	+/-48	13.0%	+/-4.9
$75,000 to $99,999	88	+/-39	9.0%	+/-4.0
$100,000 to $149,999	25	+/-27	2.5%	+/-2.7
$150,000 to $199,999	16	+/-17	1.6%	+/-1.7
$200,000 or more	5	+/-8	0.5%	+/-0.8
Median household income (dollars)	22,639	+/-5,146	(X)	(X)
Mean household income (dollars)	35,436	+/-4,714	(X)	(X)
With earnings	634	+/-108	64.6%	+/-7.1
Mean earnings (dollars)	35,994	+/-5,889	(X)	(X)
With Social Security	334	+/-86	34.0%	+/-7.0
Mean Social Security income (dollars)	13,125	+/-1,727	(X)	(X)
With retirement income	158	+/-56	16.1%	+/-5.7
Mean retirement income (dollars)	21,247	+/-5,564	(X)	(X)
With Supplemental Security Income	99	+/-60	10.1%	+/-5.8
Mean Supplemental Security Income (dollars)	8,003	+/-1,770	(X)	(X)
With cash public assistance income	49	+/-30	5.0%	+/-3.0
Mean cash public assistance income (dollars)	3,235	+/-1,137	(X)	(X)
With Food Stamp/SNAP benefits in the past 12 months	321	+/-87	32.7%	+/-7.5
Families	571	+/-105	571	(X)
Less than $10,000	101	+/-59	17.7%	+/-9.1
$10,000 to $14,999	53	+/-38	9.3%	+/-6.3
$15,000 to $24,999	76	+/-47	13.3%	+/-7.3
$25,000 to $34,999	46	+/-33	8.1%	+/-5.7
$35,000 to $49,999	85	+/-43	14.9%	+/-7.2
$50,000 to $74,999	84	+/-36	14.7%	+/-6.3
$75,000 to $99,999	80	+/-38	14.0%	+/-6.8
$100,000 to $149,999	25	+/-27	4.4%	+/-4.5
$150,000 to $199,999	16	+/-17	2.8%	+/-2.9
$200,000 or more	5	+/-8	0.9%	+/-1.4

Median family income (dollars)	37,989	+/-11,550	(X)	(X)
Mean family income (dollars)	45,457	+/-8,090	(X)	(X)
Per capita income (dollars)	16,214	+/-2,037	(X)	(X)
Nonfamily households	411	+/-103	411	(X)
Median nonfamily income (dollars)	15,189	+/-2,043	(X)	(X)
Mean nonfamily income (dollars)	20,314	+/-4,217	(X)	(X)
Median earnings for workers (dollars)	16,236	+/-2,034	(X)	(X)
Median earnings for male full-time, year-round workers (dollars)	41,696	+/-21,566	(X)	(X)
Median earnings for female full-time, year-round workers (dollars)	25,045	+/-4,657	(X)	(X)
HEALTH INSURANCE COVERAGE				
Civilian noninstitutionalized population	(X)	(X)	(X)	(X)
With health insurance coverage	(X)	(X)	(X)	(X)
With private health insurance	(X)	(X)	(X)	(X)
With public coverage	(X)	(X)	(X)	(X)
No health insurance coverage	(X)	(X)	(X)	(X)
Civilian noninstitutionalized population under 18 years	(X)	(X)	(X)	(X)
No health insurance coverage	(X)	(X)	(X)	(X)
Civilian noninstitutionalized population 18 to 64 years	(X)	(X)	(X)	(X)
In labor force:	(X)	(X)	(X)	(X)
Employed:	(X)	(X)	(X)	(X)
With health insurance coverage	(X)	(X)	(X)	(X)
With private health insurance	(X)	(X)	(X)	(X)
With public coverage	(X)	(X)	(X)	(X)
No health insurance coverage	(X)	(X)	(X)	(X)
Unemployed:	(X)	(X)	(X)	(X)
With health insurance coverage	(X)	(X)	(X)	(X)
With private health insurance	(X)	(X)	(X)	(X)
With public coverage	(X)	(X)	(X)	(X)
No health insurance coverage	(X)	(X)	(X)	(X)
Not in labor force:	(X)	(X)	(X)	(X)
With health insurance coverage	(X)	(X)	(X)	(X)
With private health insurance	(X)	(X)	(X)	(X)
With public coverage	(X)	(X)	(X)	(X)
No health insurance coverage	(X)	(X)	(X)	(X)
PERCENTAGE OF FAMILIES AND PEOPLE WHOSE INCOME IN THE PAST 12 MONTHS IS BELOW THE POVERTY LEVEL				
All families	(X)	(X)	25.9%	+/-9.4
With related children under 18 years	(X)	(X)	41.0%	+/-12.6
With related children under 5 years only	(X)	(X)	87.3%	+/-25.9
Married couple families	(X)	(X)	11.3%	+/-9.4
With related children under 18 years	(X)	(X)	18.0%	+/-16.6
With related children under 5 years only	(X)	(X)	78.1%	+/-38.7
Families with female householder, no husband present	(X)	(X)	53.3%	+/-16.2
With related children under 18 years	(X)	(X)	64.4%	+/-19.6
With related children under 5 years only	(X)	(X)	100.0%	+/-64.2
All people	(X)	(X)	28.3%	+/-7.6
Under 18 years	(X)	(X)	43.7%	+/-14.4
Related children under 18 years	(X)	(X)	41.4%	+/-14.9
Related children under 5 years	(X)	(X)	66.0%	+/-23.6
Related children 5 to 17 years	(X)	(X)	33.9%	+/-15.6
18 years and over	(X)	(X)	22.0%	+/-6.3
18 to 64 years	(X)	(X)	22.0%	+/-7.0
65 years and over	(X)	(X)	22.0%	+/-12.5
People in families	(X)	(X)	26.2%	+/-9.2
Unrelated individuals 15 years and over	(X)	(X)	35.5%	+/-15.1

Source: U.S. Census Bureau, 2006-2010 American Community Survey

Explanation of Symbols:
An '**' entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.
An '-' entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution.
An '-' following a median estimate means the median falls in the lowest interval of an open-ended distribution.
An '+' following a median estimate means the median falls in the upper interval of an open-ended distribution.
An '***' entry in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.
An '******' entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.
An 'N' entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.
An '(X)' means that the estimate is not applicable or not available.

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

There were changes in the edit between 2009 and 2010 regarding Supplemental Security Income (SSI) and Social Security. The changes in the edit loosened restrictions on disability requirements for receipt of SSI resulting in an increase in the total number of SSI recipients in the American Community Survey. The changes also loosened restrictions on possible reported monthly amounts in Social Security income resulting in higher Social Security aggregate amounts. These results more closely match administrative counts compiled by the Social Security Administration.

Workers include members of the Armed Forces and civilians who were at work last week.

Industry codes are 4-digit codes and are based on the North American Industry Classification System 2007. The Industry categories adhere to the guidelines issued in Clarification Memorandum No. 2, "NAICS Alternate Aggregation Structure for Use By U.S. Statistical Agencies," issued by the Office of Management and Budget.

Occupation codes are 4-digit codes and are based on the Standard Occupational Classification (SOC) 2010. The 2010 Census occupation codes were updated in accordance with the 2010 revision of the SOC. To allow for the creation of 2006-2010 and 2008-2010 tables, occupation data in the multiyear files (2006-2010 and 2008-2010) were recoded to 2010 Census occupation codes. We recommend using caution when comparing data coded using 2010 Census occupation codes with data coded using previous Census occupation codes. For more information on the Census occupation code changes, please visit our website at http://www.census.gov/hhes/www/ioindex/.

While the 2006-2010 American Community Survey (ACS) data generally reflect the December 2009 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas; in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities.

Estimates of urban and rural population, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2000 data. Boundaries for urban areas have not been updated since Census 2000. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

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Source: U.S. Census Bureau | American FactFinder

U.S. Census Bureau

AMERICAN FactFinder

DP-1

Profile of General Population and Housing Characteristics: 2010
2010 Demographic Profile Data

NOTE: For more information on confidentiality protection, nonsampling error, and definitions, see http://www.census.gov/prod/cen2010/doc/dpsf.pdf.

Geography: Bonner County, Idaho

Subject	Number	Percent
SEX AND AGE		
Total population	40,877	100.0
Under 5 years	2,142	5.2
5 to 9 years	2,411	5.9
10 to 14 years	2,713	6.6
15 to 19 years	2,447	6.0
20 to 24 years	1,674	4.1
25 to 29 years	1,891	4.6
30 to 34 years	2,108	5.2
35 to 39 years	2,260	5.5
40 to 44 years	2,353	5.8
45 to 49 years	3,053	7.5
50 to 54 years	3,601	8.8
55 to 59 years	3,805	9.3
60 to 64 years	3,410	8.3
65 to 69 years	2,569	6.3
70 to 74 years	1,782	4.4
75 to 79 years	1,122	2.7
80 to 84 years	790	1.9
85 years and over	746	1.8
Median age (years)	45.8	(X)
16 years and over	33,106	81.0
18 years and over	32,027	78.3
21 years and over	30,846	75.5
62 years and over	8,956	21.9
65 years and over	7,009	17.1
Male population	20,592	50.4
Under 5 years	1,106	2.7
5 to 9 years	1,258	3.1
10 to 14 years	1,376	3.4
15 to 19 years	1,294	3.2
20 to 24 years	847	2.1
25 to 29 years	971	2.4
30 to 34 years	1,087	2.7
35 to 39 years	1,103	2.7
40 to 44 years	1,205	2.9
45 to 49 years	1,491	3.6
50 to 54 years	1,751	4.3
55 to 59 years	1,855	4.5
60 to 64 years	1,771	4.3
65 to 69 years	1,346	3.3
70 to 74 years	930	2.3
75 to 79 years	564	1.4
80 to 84 years	371	0.9
85 years and over	266	0.7

Median age (years)	45.2	(X)
16 years and over	16,576	40.6
18 years and over	16,043	39.2
21 years and over	15,406	37.7
62 years and over	4,509	11.0
65 years and over	3,477	8.5
Female population	20,285	49.6
Under 5 years	1,036	2.5
5 to 9 years	1,153	2.8
10 to 14 years	1,337	3.3
15 to 19 years	1,153	2.8
20 to 24 years	827	2.0
25 to 29 years	920	2.3
30 to 34 years	1,021	2.5
35 to 39 years	1,157	2.8
40 to 44 years	1,148	2.8
45 to 49 years	1,562	3.8
50 to 54 years	1,850	4.5
55 to 59 years	1,950	4.8
60 to 64 years	1,639	4.0
65 to 69 years	1,223	3.0
70 to 74 years	852	2.1
75 to 79 years	558	1.4
80 to 84 years	419	1.0
85 years and over	480	1.2
Median age (years)	46.3	(X)
16 years and over	16,530	40.4
18 years and over	15,984	39.1
21 years and over	15,440	37.8
62 years and over	4,447	10.9
65 years and over	3,532	8.6
RACE		
Total population	40,877	100.0
One Race	40,023	97.9
White	39,261	96.0
Black or African American	58	0.1
American Indian and Alaska Native	315	0.8
Asian	184	0.5
Asian Indian	15	0.0
Chinese	34	0.1
Filipino	62	0.2
Japanese	21	0.1
Korean	14	0.0
Vietnamese	7	0.0
Other Asian [1]	31	0.1
Native Hawaiian and Other Pacific Islander	42	0.1
Native Hawaiian	13	0.0
Guamanian or Chamorro	4	0.0
Samoan	4	0.0
Other Pacific Islander [2]	21	0.1
Some Other Race	163	0.4
Two or More Races	854	2.1
White; American Indian and Alaska Native [3]	496	1.2
White; Asian [3]	160	0.4
White; Black or African American [3]	80	0.2
White; Some Other Race [3]	45	0.1
Race alone or in combination with one or more other races: [4]		
White	40,104	98.1
Black or African American	153	0.4

American Indian and Alaska Native	846	2.1
Asian	379	0.9
Native Hawaiian and Other Pacific Islander	81	0.2
Some Other Race	215	0.5
HISPANIC OR LATINO		
Total population	40,877	100.0
Hispanic or Latino (of any race)	911	2.2
Mexican	581	1.4
Puerto Rican	64	0.2
Cuban	16	0.0
Other Hispanic or Latino [5]	250	0.6
Not Hispanic or Latino	39,966	97.8
HISPANIC OR LATINO AND RACE		
Total population	40,877	100.0
Hispanic or Latino	911	2.2
White alone	655	1.6
Black or African American alone	7	0.0
American Indian and Alaska Native alone	25	0.1
Asian alone	7	0.0
Native Hawaiian and Other Pacific Islander alone	2	0.0
Some Other Race alone	128	0.3
Two or More Races	87	0.2
Not Hispanic or Latino	39,966	97.8
White alone	38,606	94.4
Black or African American alone	51	0.1
American Indian and Alaska Native alone	290	0.7
Asian alone	177	0.4
Native Hawaiian and Other Pacific Islander alone	40	0.1
Some Other Race alone	35	0.1
Two or More Races	767	1.9
RELATIONSHIP		
Total population	40,877	100.0
In households	40,524	99.1
Householder	17,100	41.8
Spouse [6]	9,448	23.1
Child	10,034	24.5
Own child under 18 years	7,944	19.4
Other relatives	1,670	4.1
Under 18 years	663	1.6
65 years and over	293	0.7
Nonrelatives	2,272	5.6
Under 18 years	216	0.5
65 years and over	149	0.4
Unmarried partner	1,189	2.9
In group quarters	353	0.9
Institutionalized population	260	0.6
Male	140	0.3
Female	120	0.3
Noninstitutionalized population	93	0.2
Male	35	0.1
Female	58	0.1
HOUSEHOLDS BY TYPE		
Total households	17,100	100.0
Family households (families) [7]	11,591	67.8
With own children under 18 years	4,187	24.5
Husband-wife family	9,448	55.3
With own children under 18 years	2,897	16.9
Male householder, no wife present	784	4.6
With own children under 18 years	475	2.8

Female householder, no husband present	1,359	7.9
With own children under 18 years	815	4.8
Nonfamily households [7]	5,509	32.2
Householder living alone	4,442	26.0
Male	2,266	13.3
65 years and over	641	3.7
Female	2,176	12.7
65 years and over	1,050	6.1
Households with individuals under 18 years	4,652	27.2
Households with individuals 65 years and over	4,986	29.2
Average household size	2.37	(X)
Average family size [7]	2.82	(X)
HOUSING OCCUPANCY		
Total housing units	24,669	100.0
Occupied housing units	17,100	69.3
Vacant housing units	7,569	30.7
For rent	470	1.9
Rented, not occupied	51	0.2
For sale only	495	2.0
Sold, not occupied	88	0.4
For seasonal, recreational, or occasional use	5,808	23.5
All other vacants	657	2.7
Homeowner vacancy rate (percent) [8]	3.7	(X)
Rental vacancy rate (percent) [9]	9.7	(X)
HOUSING TENURE		
Occupied housing units	17,100	100.0
Owner-occupied housing units	12,757	74.6
Population in owner-occupied housing units	30,332	(X)
Average household size of owner-occupied units	2.38	(X)
Renter-occupied housing units	4,343	25.4
Population in renter-occupied housing units	10,192	(X)
Average household size of renter-occupied units	2.35	(X)

X Not applicable.

[1] Other Asian alone, or two or more Asian categories.

[2] Other Pacific Islander alone, or two or more Native Hawaiian and Other Pacific Islander categories.

[3] One of the four most commonly reported multiple-race combinations nationwide in Census 2000.

[4] In combination with one or more of the other races listed. The six numbers may add to more than the total population, and the six percentages may add to more than 100 percent because individuals may report more than one race.

[5] This category is composed of people whose origins are from the Dominican Republic, Spain, and Spanish-speaking Central or South American countries. It also includes general origin responses such as "Latino" or "Hispanic."

[6] "Spouse" represents spouse of the householder. It does not reflect all spouses in a household. Responses of "same-sex spouse" were edited during processing to "unmarried partner."

[7] "Family households" consist of a householder and one or more other people related to the householder by birth, marriage, or adoption. They do not include same-sex married couples even if the marriage was performed in a state issuing marriage certificates for same-sex couples. Same-sex couple households are included in the family households category if there is at least one additional person related to the householder by birth or adoption. Same-sex couple households with no relatives of the householder present are tabulated in nonfamily households. "Nonfamily households" consist of people living alone and households which do not have any members related to the householder.

[8] The homeowner vacancy rate is the proportion of the homeowner inventory that is vacant "for sale." It is computed by dividing the total number of vacant units "for sale only" by the sum of owner-occupied units, vacant units that are "for sale only," and vacant units that have been sold but not yet occupied; and then multiplying by 100.

[9] The rental vacancy rate is the proportion of the rental inventory that is vacant "for rent." It is computed by dividing the total number of vacant units "for rent" by the sum of the renter-occupied units, vacant units that are "for rent," and vacant units that have been rented but not yet occupied; and then multiplying by 100.

Source: U.S. Census Bureau, 2010 Census.

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Source: U.S. Census Bureau | American FactFinder

State & County QuickFacts

Bonner County, Idaho

People QuickFacts	Bonner County	Idaho
Population, 2011 estimate	NA	1,584,985
Population, 2010	40,877	1,567,582
Population, percent change, 2000 to 2010	11.0%	21.1%
Population, 2000	36,835	1,293,953
Persons under 5 years, percent, 2010	5.2%	7.8%
Persons under 18 years, percent, 2010	21.7%	27.4%
Persons 65 years and over, percent, 2010	17.1%	12.4%
Female persons, percent, 2010	49.6%	49.9%
White persons, percent, 2010 (a)	96.0%	89.1%
Black persons, percent, 2010 (a)	0.1%	0.6%
American Indian and Alaska Native persons, percent, 2010 (a)	0.8%	1.4%
Asian persons, percent, 2010 (a)	0.5%	1.2%
Native Hawaiian and Other Pacific Islander, percent, 2010 (a)	0.1%	0.1%
Persons reporting two or more races, percent, 2010	2.1%	2.5%
Persons of Hispanic or Latino origin, percent, 2010 (b)	2.2%	11.2%
White persons not Hispanic, percent, 2010	94.4%	84.0%
Living in same house 1 year & over, 2006-2010	87.3%	81.1%
Foreign born persons, percent, 2006-2010	2.8%	5.9%
Language other than English spoken at home, pct age 5+, 2006-2010	3.3%	10.2%
High school graduates, percent of persons age 25+, 2006-2010	91.0%	88.2%
Bachelor's degree or higher, pct of persons age 25+, 2006-2010	22.5%	24.3%
Veterans, 2006-2010	4,584	130,011
Mean travel time to work (minutes), workers age 16+, 2006-2010	23.9	20.1
Housing units, 2010	24,669	667,796
Homeownership rate, 2006-2010	74.5%	71.0%
Housing units in multi-unit structures, percent, 2006-2010	10.1%	14.9%
Median value of owner-occupied housing units, 2006-2010	$236,300	$172,700
Households, 2006-2010	18,206	570,283
Persons per household, 2006-2010	2.21	2.63
Per capita money income in past 12 months (2010 dollars) 2006-2010	$24,745	$22,518
Median household income 2006-2010	$41,943	$46,423
Persons below poverty level, percent, 2006-2010	14.3%	13.6%

Business QuickFacts	Bonner County	Idaho
Private nonfarm establishments, 2009	1,510	44,300[1]
Private nonfarm employment, 2009	11,877	500,226[1]
Private nonfarm employment, percent change 2000-2009	13.9%	11.0%[1]
Nonemployer establishments, 2009	3,631	107,029
Total number of firms, 2007	5,642	151,671
Black-owned firms, percent, 2007	F	0.2%

American Indian- and Alaska Native-owned firms, percent, 2007	S	0.9%
Asian-owned firms, percent, 2007	0.7%	0.8%
Native Hawaiian and Other Pacific Islander-owned firms, percent, 2007	F	S
Hispanic-owned firms, percent, 2007	S	2.6%
Women-owned firms, percent, 2007	20.6%	23.5%
Manufacturers shipments, 2007 ($1000)	498,636	18,010,976
Merchant wholesaler sales, 2007 ($1000)	149,654	14,286,715
Retail sales, 2007 ($1000)	485,307	20,526,631
Retail sales per capita, 2007	$11,788	$13,691
Accommodation and food services sales, 2007 ($1000)	63,260	2,415,951
Building permits, 2010	17	4,153
Federal spending, 2009	329,070	13,833,030[1]

Geography QuickFacts	Bonner County	Idaho
Land area in square miles, 2010	1,734.57	82,643.12
Persons per square mile, 2010	23.6	19.0
FIPS Code	017	16
Metropolitan or Micropolitan Statistical Area	None	

1: Includes data not distributed by county.

Population estimates for counties will be available in April, 2012 and for cities in June, 2012.

(a) Includes persons reporting only one race.
(b) Hispanics may be of any race, so also are included in applicable race categories.

D: Suppressed to avoid disclosure of confidential information
F: Fewer than 100 firms
FN: Footnote on this item for this area in place of data
NA: Not available
S: Suppressed; does not meet publication standards
X: Not applicable
Z: Value greater than zero but less than half unit of measure shown

Source U.S. Census Bureau: State and County QuickFacts. Data derived from Population Estimates, American Community Survey, Census of Population and Housing, State and County Housing Unit Estimates, County Business Patterns, Nonemployer Statistics, Economic Census, Survey of Business Owners, Building Permits, Consolidated Federal Funds Report
Last Revised: Tuesday, 31-Jan-2012 16:49:31 EST

U.S. Census Bureau

AMERICAN FactFinder

DP-1

Profile of General Population and Housing Characteristics: 2010
2010 Demographic Profile Data

NOTE: For more information on confidentiality protection, nonsampling error, and definitions, see http://www.census.gov/prod/cen2010/doc/dpsf.pdf.

Geography: Pend Oreille County, Washington

Subject	Number	Percent
SEX AND AGE		
Total population	13,001	100.0
Under 5 years	698	5.4
5 to 9 years	696	5.4
10 to 14 years	868	6.7
15 to 19 years	791	6.1
20 to 24 years	488	3.8
25 to 29 years	511	3.9
30 to 34 years	533	4.1
35 to 39 years	644	5.0
40 to 44 years	730	5.6
45 to 49 years	994	7.6
50 to 54 years	1,143	8.8
55 to 59 years	1,244	9.6
60 to 64 years	1,176	9.0
65 to 69 years	933	7.2
70 to 74 years	608	4.7
75 to 79 years	424	3.3
80 to 84 years	263	2.0
85 years and over	257	2.0
Median age (years)	47.8	(X)
16 years and over	10,560	81.2
18 years and over	10,193	78.4
21 years and over	9,836	75.7
62 years and over	3,198	24.6
65 years and over	2,485	19.1
Male population	6,593	50.7
Under 5 years	341	2.6
5 to 9 years	386	3.0
10 to 14 years	460	3.5
15 to 19 years	409	3.1
20 to 24 years	243	1.9
25 to 29 years	251	1.9
30 to 34 years	263	2.0
35 to 39 years	327	2.5
40 to 44 years	369	2.8
45 to 49 years	490	3.8
50 to 54 years	561	4.3
55 to 59 years	655	5.0
60 to 64 years	612	4.7
65 to 69 years	463	3.6
70 to 74 years	333	2.6
75 to 79 years	212	1.6
80 to 84 years	128	1.0
85 years and over	90	0.7

Median age (years)	47.5	(X)
16 years and over	5,320	40.9
18 years and over	5,141	39.5
21 years and over	4,937	38.0
62 years and over	1,618	12.4
65 years and over	1,226	9.4
Female population	6,408	49.3
Under 5 years	357	2.7
5 to 9 years	310	2.4
10 to 14 years	408	3.1
15 to 19 years	382	2.9
20 to 24 years	245	1.9
25 to 29 years	260	2.0
30 to 34 years	270	2.1
35 to 39 years	317	2.4
40 to 44 years	361	2.8
45 to 49 years	504	3.9
50 to 54 years	582	4.5
55 to 59 years	589	4.5
60 to 64 years	564	4.3
65 to 69 years	470	3.6
70 to 74 years	275	2.1
75 to 79 years	212	1.6
80 to 84 years	135	1.0
85 years and over	167	1.3
Median age (years)	48.1	(X)
16 years and over	5,240	40.3
18 years and over	5,052	38.9
21 years and over	4,899	37.7
62 years and over	1,580	12.2
65 years and over	1,259	9.7
RACE		
Total population	13,001	100.0
One Race	12,627	97.1
White	11,907	91.6
Black or African American	52	0.4
American Indian and Alaska Native	488	3.8
Asian	73	0.6
Asian Indian	9	0.1
Chinese	13	0.1
Filipino	15	0.1
Japanese	10	0.1
Korean	3	0.0
Vietnamese	12	0.1
Other Asian [1]	11	0.1
Native Hawaiian and Other Pacific Islander	16	0.1
Native Hawaiian	10	0.1
Guamanian or Chamorro	1	0.0
Samoan	2	0.0
Other Pacific Islander [2]	3	0.0
Some Other Race	91	0.7
Two or More Races	374	2.9
White; American Indian and Alaska Native [3]	207	1.6
White; Asian [3]	47	0.4
White; Black or African American [3]	28	0.2
White; Some Other Race [3]	19	0.1
Race alone or in combination with one or more other races: [4]		
White	12,251	94.2
Black or African American	113	0.9

American Indian and Alaska Native	747	5.7
Asian	136	1.0
Native Hawaiian and Other Pacific Islander	31	0.2
Some Other Race	134	1.0
HISPANIC OR LATINO		
Total population	13,001	100.0
Hispanic or Latino (of any race)	391	3.0
Mexican	258	2.0
Puerto Rican	20	0.2
Cuban	5	0.0
Other Hispanic or Latino [5]	108	0.8
Not Hispanic or Latino	12,610	97.0
HISPANIC OR LATINO AND RACE		
Total population	13,001	100.0
Hispanic or Latino	391	3.0
White alone	230	1.8
Black or African American alone	2	0.0
American Indian and Alaska Native alone	22	0.2
Asian alone	0	0.0
Native Hawaiian and Other Pacific Islander alone	0	0.0
Some Other Race alone	67	0.5
Two or More Races	70	0.5
Not Hispanic or Latino	12,610	97.0
White alone	11,677	89.8
Black or African American alone	50	0.4
American Indian and Alaska Native alone	466	3.6
Asian alone	73	0.6
Native Hawaiian and Other Pacific Islander alone	16	0.1
Some Other Race alone	24	0.2
Two or More Races	304	2.3
RELATIONSHIP		
Total population	13,001	100.0
In households	12,903	99.2
Householder	5,479	42.1
Spouse [6]	2,870	22.1
Child	3,163	24.3
Own child under 18 years	2,427	18.7
Other relatives	625	4.8
Under 18 years	296	2.3
65 years and over	106	0.8
Nonrelatives	766	5.9
Under 18 years	83	0.6
65 years and over	67	0.5
Unmarried partner	408	3.1
In group quarters	98	0.8
Institutionalized population	94	0.7
Male	47	0.4
Female	47	0.4
Noninstitutionalized population	4	0.0
Male	3	0.0
Female	1	0.0
HOUSEHOLDS BY TYPE		
Total households	5,479	100.0
Family households (families) [7]	3,628	66.2
With own children under 18 years	1,253	22.9
Husband-wife family	2,870	52.4
With own children under 18 years	824	15.0
Male householder, no wife present	257	4.7
With own children under 18 years	141	2.6

Female householder, no husband present	501	9.1
With own children under 18 years	288	5.3
Nonfamily households [7]	1,851	33.8
Householder living alone	1,544	28.2
Male	847	15.5
65 years and over	299	5.5
Female	697	12.7
65 years and over	393	7.2
Households with individuals under 18 years	1,433	26.2
Households with individuals 65 years and over	1,804	32.9
Average household size	2.35	(X)
Average family size [7]	2.84	(X)
HOUSING OCCUPANCY		
Total housing units	7,936	100.0
Occupied housing units	5,479	69.0
Vacant housing units	2,457	31.0
For rent	138	1.7
Rented, not occupied	5	0.1
For sale only	111	1.4
Sold, not occupied	30	0.4
For seasonal, recreational, or occasional use	1,863	23.5
All other vacants	310	3.9
Homeowner vacancy rate (percent) [8]	2.5	(X)
Rental vacancy rate (percent) [9]	9.9	(X)
HOUSING TENURE		
Occupied housing units	5,479	100.0
Owner-occupied housing units	4,225	77.1
Population in owner-occupied housing units	9,900	(X)
Average household size of owner-occupied units	2.34	(X)
Renter-occupied housing units	1,254	22.9
Population in renter-occupied housing units	3,003	(X)
Average household size of renter-occupied units	2.39	(X)

X Not applicable.

[1] Other Asian alone, or two or more Asian categories.

[2] Other Pacific Islander alone, or two or more Native Hawaiian and Other Pacific Islander categories.

[3] One of the four most commonly reported multiple-race combinations nationwide in Census 2000.

[4] In combination with one or more of the other races listed. The six numbers may add to more than the total population, and the six percentages may add to more than 100 percent because individuals may report more than one race.

[5] This category is composed of people whose origins are from the Dominican Republic, Spain, and Spanish-speaking Central or South American countries. It also includes general origin responses such as "Latino" or "Hispanic."

[6] "Spouse" represents spouse of the householder. It does not reflect all spouses in a household. Responses of "same-sex spouse" were edited during processing to "unmarried partner."

[7] "Family households" consist of a householder and one or more other people related to the householder by birth, marriage, or adoption. They do not include same-sex married couples even if the marriage was performed in a state issuing marriage certificates for same-sex couples. Same-sex couple households are included in the family households category if there is at least one additional person related to the householder by birth or adoption. Same-sex couple households with no relatives of the householder present are tabulated in nonfamily households. "Nonfamily households" consist of people living alone and households which do not have any members related to the householder.

[8] The homeowner vacancy rate is the proportion of the homeowner inventory that is vacant "for sale." It is computed by dividing the total number of vacant units "for sale only" by the sum of owner-occupied units, vacant units that are "for sale only," and vacant units that have been sold but not yet occupied; and then multiplying by 100.

[9] The rental vacancy rate is the proportion of the rental inventory that is vacant "for rent." It is computed by dividing the total number of vacant units "for rent" by the sum of the renter-occupied units, vacant units that are "for rent," and vacant units that have been rented but not yet occupied; and then multiplying by 100.

Source: U.S. Census Bureau, 2010 Census.

U S C E N S U S B U R E A U
Helping You Make Informed Decisions

Source: U.S. Census Bureau | American FactFinder

Appendix D-4
Soil Information

Budinger and Associates Geotechnical Analysis

James A. Sewell & Associates, LLC

Budinger & Associates
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Kevin Koesel, PE
James A. Sewell and Associates
600 4th Street West
Newport, WA 99156

July 20, 2010

Project Number S10030
Addendum #1

PROJECT: Albeni Water Reservoir Site
Oldtown, ID

SUBJECT: Addendum to Geotechnical Engineering Evaluation Report – Test Drilling at the Tank Site

Dear Mr. Koesel,

Budinger & Associates, Inc. is pleased to provide this report summarizing the results of additional geotechnical exploration and analysis for the proposed water reservoir in Oldtown, Idaho. This addendum is subject to the same terms and conditions as the original Geotechnical Engineering Evaluation Report dated April 9, 2010.

1. PROJECT CONSIDERATIONS & SCOPE

The services for the addendum were limited to the following scope:

1. Drill 1 test boring (Boring 6) with split-spoon sampling in the area of the proposed water tank;
2. Log subsurface conditions including encountered soil conditions, soil moisture, and groundwater levels;
3. Complete one cone penetration test (CPT) with pore pressure measurement;
4. Perform a slope stability analysis with the subsurface information;
5. Prepare this report.

2. ENCOUNTERED CONDITIONS

SUBSURFACE CONDITIONS

The encountered soil conditions are described in the attached Boring Logs and illustrated in the attached Results of Cone Penetration Test plots. The descriptions of the subsurface conditions are in accordance with the procedures described in Chapter 5 of the original report.

During exploration for Boring 6 we encountered 1) thin layer of topsoil 2) silty clay/ silty sand, 3) sand. When comparing encountered observations made from the Reservoir Site in test pits 3 and 4, it appears that the layer 3) sand becomes stratified with silt at depths greater than 10 feet below ground surface. The three soil layers encountered are described below:

1) Topsoil of silty sand with some gravel was encountered in the upper 2 feet of Boring 6.

2) Silty clay/silty sand as described in the report was encountered from 2 to 10 feet below ground surface (BGS), underlying the topsoil. As observed in Test Pit 4, this soil horizon was dominated by sand that was relative uniform, poorly graded, and contained small amounts of silt and clay. The cone tip resistance (q_t) values ranged from 2 to 60 tons per square foot (tsf) and friction ratio (ratio of sleeve to tip resistance) from 0.5 to 6.5%.

3) Sand was observed from 10 to 30 feet BGS in Boring 6. Sand became stratified with silt at 10 feet BGS, which was at greater depths than encountered in the Report. Spacing of stratification was on the order of 1 to 6 inches and contacts between the sand and silt were abrupt. Fresh faces from some of the sand layers contained laminations, or fine layering of Sand and fine material on the scale of $1/10^{th}$ inches. Laminations were parallel and straight to wavy and undulatory. The silt was low plasticity. As noted in the *Boring Log*, the Sand was generally fine at 10 feet depth, but graded to very fine Sand with increased amount of silt and clay towards the bottom of the boring.

Stratification of the sand is most likely represented in the CPT results, where below 10 feet depth q_t alternates between low and high over depths on the scale of an inch to tens of inches. The majority of the q_t values ranged from 40 to 60 tons per square foot (tsf) and a couple layers were as low as 20 tsf and as high as 120 tsf. The friction ratio (ratio of sleeve to tip resistance) varied from 1.0 to 4.0% from 10 to 40 feet BGS and varied from 1.5 to 2.5% from 40 to 50 feet BGS.

GROUNDWATER

Groundwater was encountered at 11.5 feet BGS in the exploratory boring. The pore pressure results ranged from 2 to 4 feet of head in the upper 30 feet and then steadily increased to 15 feet of head from 30 to 50 feet BGS. This indicates saturated soil conditions and a potentiometric head that decreases with depth due to drainage downslope. We believe that the shallow water table is perched upon the less permeable silt.

3. CONCLUSIONS

The CPT and boring results indicated the upper 10 feet of subsurface to be loose to medium dense. At 10 to 50 feet the blow counts indicate the subsurface conditions are medium stiff and CPT test results indicate a bearing pressure to be good. Due to the subsurface conditions our original recommendations have slightly changed.

4. RECOMMENDATIONS

The following recommendations supplement and supersede those presented in the original Geotechnical Engineering Evaluation Report dated April 9, 2010.

FOUNDATIONS

We recommend founding the reservoir on a pad of open-graded, crushed, gravel (OGCG) meeting ITD 703.08 (Idaho Transportation Department Standard Specifications for Highway Construction, current edition) Rock Cap, extending a minimum of one foot below the bottom of the perimeter footing. The open-graded gravel should be underlain by Layer 2 (silty clay/silty sand)or Layer 3 (sand). The footings should bear at maximum pressures of 3500 pounds per square foot (psf) embedded a minimum of 24 inches below grade. Note: with a 12 inch layer of OGCG below the footings, the total frost embedment will be 36 inches. Interior columns should also be embedded a minimum of 24 inches below grade. The recommended minimum width for wall footings is 18 inches and the column footings a minimum of 36 inches.

DRAINAGE
Shallow groundwater was encountered during the field explorations. We anticipate groundwater will be encountered during construction. In our original report we recommended a trench drain be installed up slope from the tank site. The trench drain will divert the ground water away from the site for construction. The trench drain should remain in place after construction.

We also recommend bearing the tank floor on a minimum of 12-inches of OGCG as described above. The OGCG layer should be drained to an unobstructed, safe outlet. The outlet should be located laterally away from the down-gradient extent of the tank. The foundation drain should be placed at the base of the footings or below the footings. The drain should consist of a 4-inch perforated PVC pipe surrounded by a minimum of 2 feet of OGCG as described in the foundations section of this report. The drain rock should be wrapped in filter fabric.

Separate OGCG from surrounding soils including the floor and footing subgrades with geotextile.

LIQUEFACTION
Soil liquefaction occurs in loose sandy soils that are saturated. The CPT results and the N values indicate that the soil is medium dense. Thus, we conclude that liquefaction potential is low.

SETTLEMENT
Based on an average N-value of 10 for the upper 10 feet and a corresponding drained modulus of 240 kips per square foot (ksf), total predicted settlement was calculated using the anticipated loads from Section 1 of the original report. Total estimated settlement is between ¾ and 1-inch. Some additional settlement may occur from wall and column loads, but is estimated to be less than ½-inch.

Thank you for the opportunity to provide these services. If we may be of further assistance, please call. We also have an excellent team of technicians available to assist with quality control during construction.

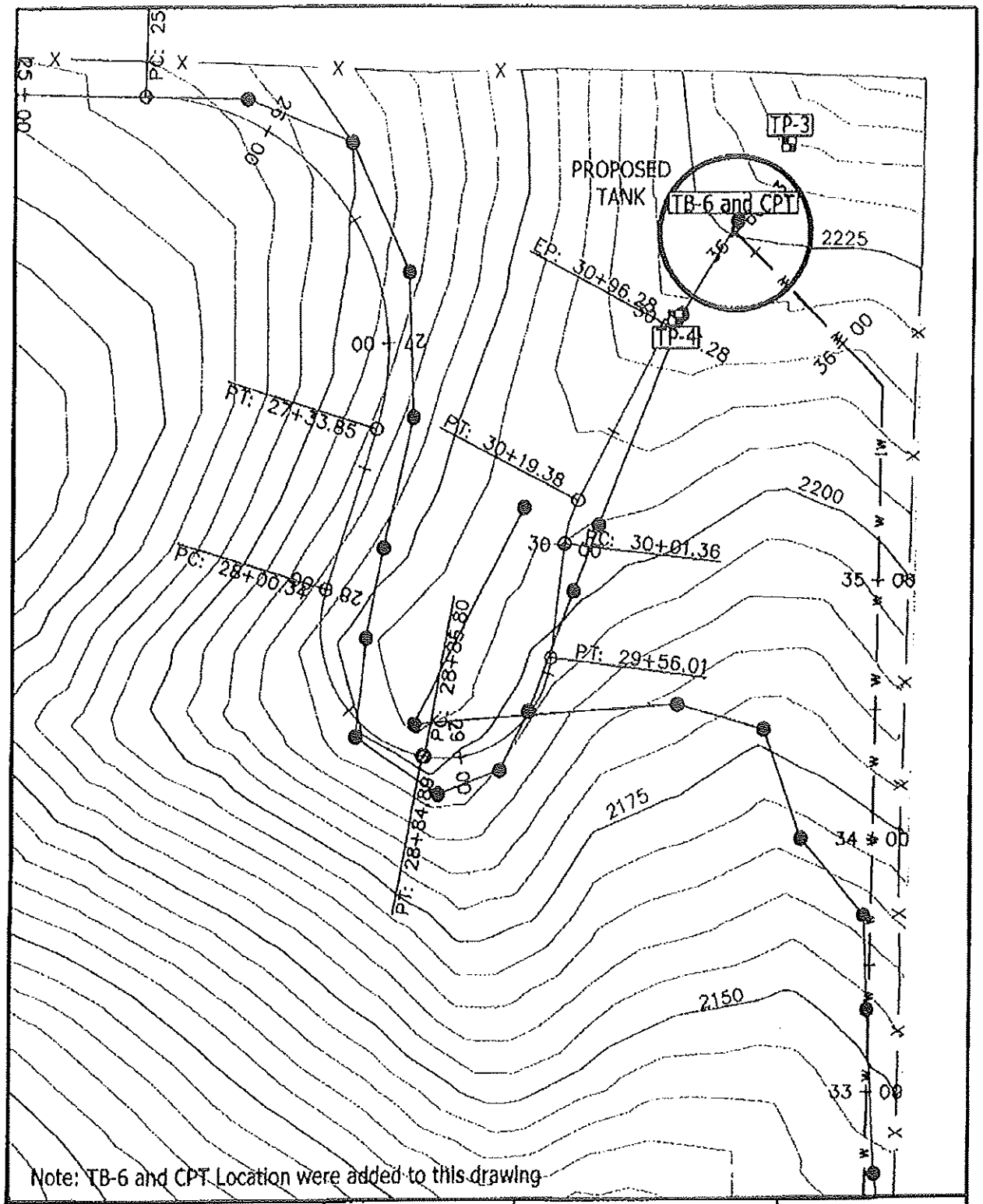
Respectfully Submitted:
BUDINGER & ASSOCIATES, INC.

Megan Rounds, PE Geotechnical Engineer	Steve Burchett, PE Geotechnical Engineer, Principal	John E. Finnegan, PE Geotechnical Engineer, Principal

MMR/jg
Addressee – 1

Enclosures
Site Plan – Figure 2
Boring Log 6 – Figure 4-6
CPT Results – Figure 5

PROFESSIONAL ENGINEER REGISTERED 12163 7/20/10 STATE OF IDAHO MEGAN M. ROUNDS



N SCALE: 1"=50' 0 25 50	BASE PLAN PROVIDED BY SEVELL & ASSOCIATES	Budinger & Associates	WATER RESERVOIR SITE PLAN ALBENI TANK & UTILITY CROSSING OLDTOWN, IDAHO	FIGURE 2-2 PROJECT NUMBER S10030 DATE: 7/2010

TEST BORING 6

Date of Boring: 6-24-10
Driller: Budinger & Assoc., Inc.
Type of Drill: EAMR tracked drill
Location: Center of proposed water reservoir
Surface: thick brush

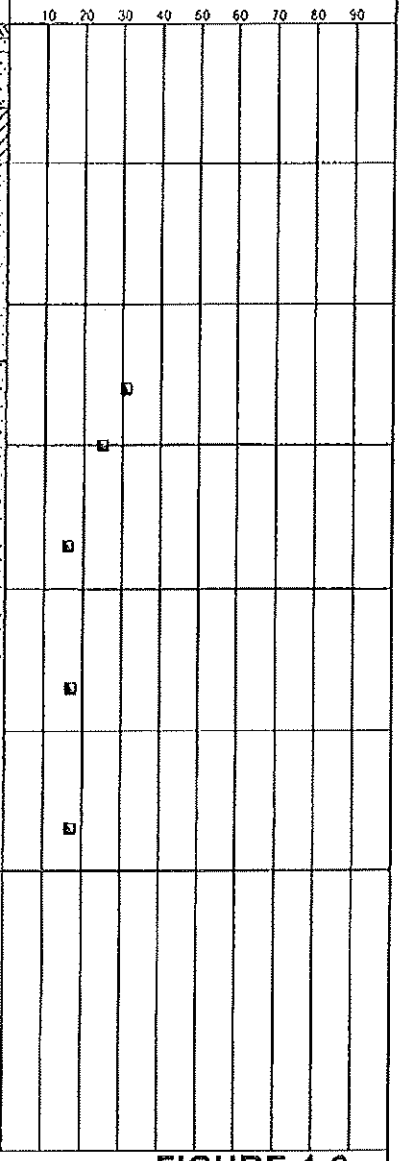
Elevation: 2225 ft
Logged by: T. Black
Size of hole: 6.5" O.D. (3-1/4" I.D.) hollow stem auger

DEPTH	SAMPLES RQD, BLOW COUNTS N (% RECOVERY)	MOISTURE, COLOR, CONDITION	DESCRIPTION
0		moist, brown, soft	TOPSOIL, SILTY SAND with Gravel
		moist, brown to dark brown, loose to medium dense	SILTY SAND with small amount Clay, trace Gravel
5		wet to saturated, brown to gray, mottled, medium dense	appears to be colluvium with possible relicit soil horizon at 3'
		wet to saturated, light brown, medium dense	CLAYEY SAND, slight to moderate cohesion SAND (fine) trace Silt, occasional Gravel (medium), low cohesion
10			
15	31 (25%)	saturated, gray, medium dense	SILT, some Sand and Clay, fine to medium, subrounded to subangular, micaceous - (from 12 to 30 feet the soil is layered - approximately 1 to 6 inch layers of sand, silt and clay in varying amounts from mostly sand to mostly clay)
	25 (67%)		
20	16 (100%)		(more silt and clay layers with depth and sandy layers become more fine with depth)
25	17 (100%)		
30	17 (100%)		(brownish gray to gray with reddish orange mottling in shoe of sample at 28½ to 30 feet - possible transition to different soil layer or highly weathered granite) End of Boring @ 30 ft
35			
40			

SOIL LOG

TEST RESULTS

ATTERBERG LIMITS PL ⊢——⊣ LL
WATER CONTENT ○
STANDARD PEN TEST, N-VALUE (OBSERVED) ■
3" SPLIT SPOON PENETRATION, BLOWS/FT ■



Budinger & Associates
1101 North Fancher Road
Spokane Valley, WA 99212

BORING LOGS **FIGURE 4-6**

Project: Albeni Tank & Utility Crossing
Location: Old Town, Idaho
Number: S10030

LWWT BORING LOGS.GPJ BUDINGER.GDT 7/20/10

CPT Results

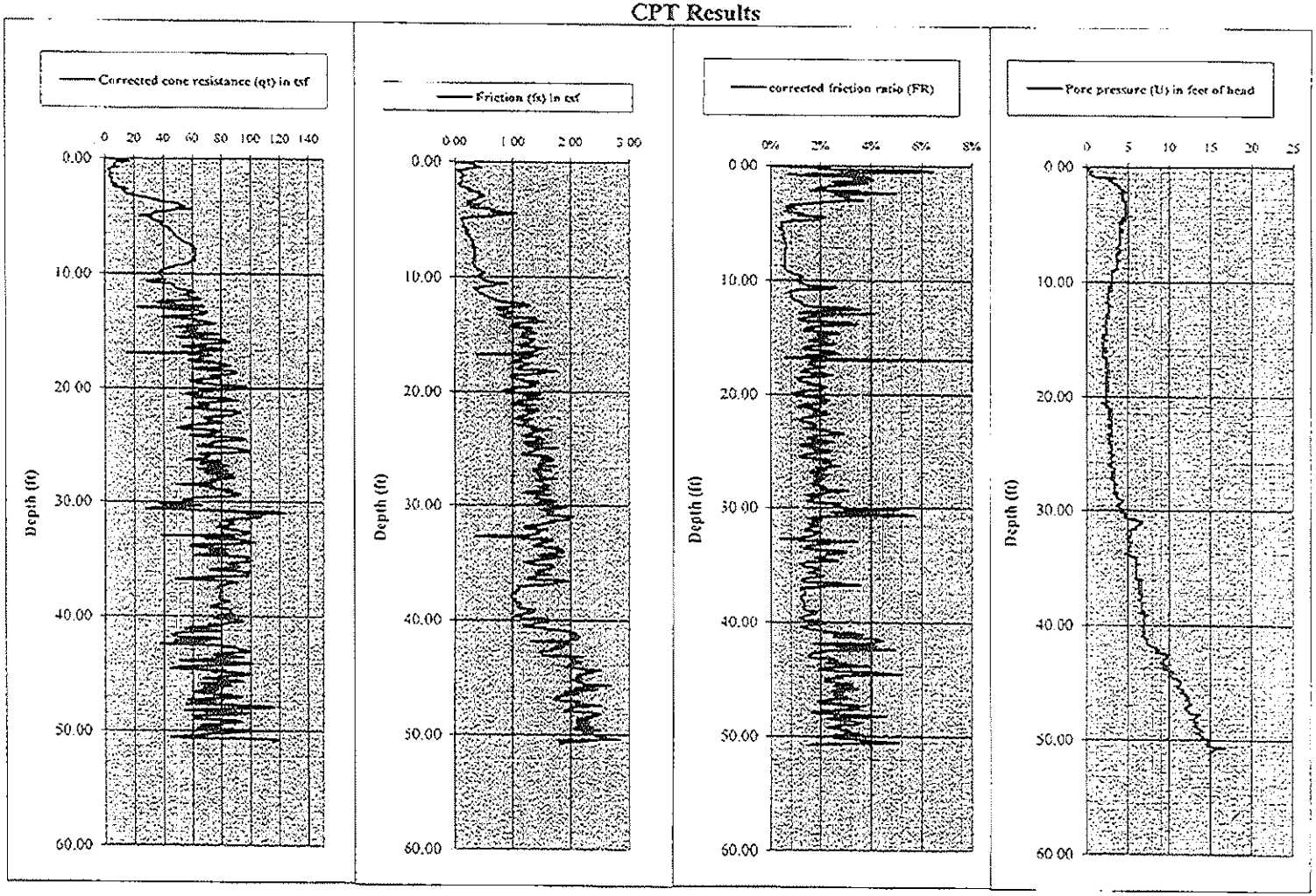


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FIGURE 5

Budinger
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Kevin Koesel, PE
James A. Sewell and Associates
600 4th Street West
Newport, WA 99156

April 9, 2010

Project Number S10030

PROJECT: Albeni Water Reservoir Site &
Pend Oreille River Utility Crossing
Oldtown, ID

SUBJECT: Results of Geotechnical
Exploration and Analysis

Dear Mr. Koesel,

Budinger & Associates, Inc. is pleased to provide the results of a geotechnical exploration and analysis for the proposed water reservoir wet well and utility crossing in Oldtown, Idaho. This report comprises 7 Chapters. The conclusions and recommendations are provided in Chapters 3 and 4, respectively.

Thank you for the opportunity to provide these services. If we may be of further assistance, please call. We also have an excellent team of technicians available to assist with quality control during construction.

Respectfully Submitted:
BUDINGER & ASSOCIATES, INC.

Megan M. Rounds

Megan Rounds, PE
Geotechnical Engineer

Steve Burchett, PE
Environmental/
Geotechnical Engineer, Principal

John E. Finnegan, PE
Geotechnical Engineer, Principal

MMR/kh
Addressee – 1

PROFESSIONAL ENGINEER
REGISTERED
8521
STATE OF IDAHO
JOHN E. FINNEGAN

4-9-10

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EMBEDDED FIGURES

Figure No.	*Description*
4.3.1	*RETAINING WALLS*
4.3.2	*LATERAL RESISTANCE*

ATTACHED FIGURES

Figure No.	*Description*
1	*VICINITY MAP*
2-1	*UTILITY CROSSING SITE PLAN*
2-2	*WATER RESERVOIR SITE PLAN*
3	*GUIDE TO SOIL & ROCK DESCRIPTIONS*
4-1 to 4-5	*TEST PIT AND BORING LOGS*
5	*GRAIN SIZE DISTRIBUTION RESULTS*
6-1 & 6-2	*TRIAXIAL SHEAR TEST RESULTS*

APPENDICES

A1:	SIEMENS & ASSOCIATES REPORT, MARCH 1, 2010
A2:	WELL LOGS

1. *CONTEXT*

This report presents the results of a geotechnical exploration and analysis for the proposed 500,000–gallon water reservoir; a river undercrossing for water and sewer lines; and a 30-foot deep wet well.

1.1 *PROJECT CONSIDERATIONS*

A proposed 500,000-gallon water reservoir will be constructed on a hillside. The diameter of the reservoir will be 60 feet and the height of the reservoir will be 30 feet. Structural loads for the reservoir were provided as follows:

Ring Wall Dead Load	1,020 plf
Ring Wall Live Load	675 plf
Center Column Dead Load	12,750 lbs
Center Column Live Load	42,500 lbs
Floor dead load	10 psf
Floor live load	1,900 psf

The wet well will be constructed between the Old Diamond Mill Road and the right (east) bank of the Pend Oreille River, south of the public boat launch. Sewell & Associates stated that the ordinary high water mark for Pend Orielle River is 2,035.33 feet. We understand the wet well will be approximately 30 feet deep and will be used to pump wastewater across the river.

The project will also include water and sewer lines to be constructed under Pend Oreille River. We understand the utility crossings will be constructed with a directional bore.

The water reservoir site was inaccessible to drilling equipment necessary to adequately characterize the support conditions. The client elected not to mobilize all-terrain drill equipment to save costs, but stated that a boring would be made when the site is made accessible to less-expensive truck mounted drill equipment.

LOCATION

The project site is located in Oldtown, Idaho. The water reservoir site is located approximately 2,000 feet north of State Highway 2 and 0.5 miles east of Pend Oreille River. The wet well site is located south of State Highway 2 and adjacent to the left (east) bank of Pend Oreille River. The utility crossing will start at the wet well site and extend across the river to the right (west) bank. The project site is illustrated on the attached *Vicinity Map* and *Site Plan*.

1.2 *SCOPE*

This geotechnical study involved interpretation of the surface and subsurface conditions to provide conclusions as to the suitability of the geotechnical conditions to support the improvements and provide geotechnical parameters needed for others to design and construct. We endeavored to conduct these services in accordance with generally accepted geotechnical engineering practices as outlined in the proposal dated February 9, 2010 (Proposal Number 050S10).

As proposed, the following scope was completed.

- Research available geotechnical, topographic, and geologic information, as well as preliminary plans by J.A. Sewell & Associates;
- Conduct geophysical surveys along the undercrossing alignment (Provided by Siemens and Associates);
- Drill and sample 1 boring using air rotary methods to a maximum depth of 33.5 feet below ground surface; sample soils at intervals of 5 feet;
- Excavate and sample 4 test pits in the vicinity of the river crossing and the water reservoir site. The test pits were excavated to a maximum depth of 14 feet below ground surface. Bulk soil samples were obtained;
- Log subsurface conditions including encountered soil, penetration resistance, soil moisture, and groundwater levels;
- Prepare geotechnical report documenting data and analysis completed, as well as providing geotechnical recommendations addressing:
    a) Foundation design criteria for the lift station and water reservoir including allowable bearing pressures, anticipated settlement, lateral earth pressure, and minimum size of spread footings;
    b) Earthwork criteria such as subgrade preparation, use of existing soils as fill, placement of fill, and temporary slope angles;
    c) Evaluation of geotechnical conditions as they relate to wet well construction and utility undercrossing;

Note: A drilled boring will be needed at the water reservoir site prior to final design and construction.

Construction inherently entails risk and this project is not an exception. The purpose of this study is to reduce risks related to subjects in the scope to levels generally accepted for similar projects designed with the benefit of similar geotechnical studies.

2. *ENCOUNTERED CONDITIONS*

2.1 *GEOLOGICAL SETTING*

Source: Reed, Russel, Burmester F., Breckenridge, Roy M., McFadden, Roy M., and Phillips, William M. Lewis S., Preliminary Geologic Map of Sandpoint 30 x 60 Quadrangle, Idaho and Montana, Idaho Geologic Survey, Open File Report DWM-94-M, 2008.

The geologic unit mapped in the area of the proposed wet well is Qal – Quaternary Alluvium (Holocene). The unit is described as poorly to well-sorted boulders, cobbles, gravel, sand, silt and clay in floodplains, terraces and valley bottoms.

The geologic unit mapped in the area of the proposed water reservoir is Qfg – Quaternary flood deposits. The unit is described as poorly to moderately well-sorted stratified deposits of boulders, cobbles, pebbles and sand resulting form multiple episodes of catastrophic outbursts from glacial-dammed Lake Missoula. The particles are subrounded to angular clasps of diverse lithologies and can be as large as 3 yards in diameter.

Well logs were reviewed to gather more subsurface geologic information. No well logs were in close proximity to the water reservoir site, but some wells were located upgradient to the north west of the site. These logs were reviewed and the deepest well log is attached, in an Appendix as Well Tag No 0010529. The well was drilled to a depth of 523 below ground surface (BGS). Sand and gravel soils were encountered to a depth of 190 feet BGS and were underlain by a layer of clay that was 50 feet thick. The clay extended to 270 feet BGS and was underlain by bedrock. Bedrock is not likely to be encountered within the water reservoir site.

Near the proposed wet well water levels reportedly penetrated 18 to 32 feet of clay overlying 90 feet or more of sand. The Appendix includes the log with Tag No. 033281
.

SEISMIC CONSIDERATIONS

We understand that the 2006 International Building Code (IBC) will be used as the basis for design of the proposed water reservoir and wet well structure. The seismic parameters were calculated using USGS's software, Earthquake Ground Motion Parameters Version 5.0.9a. The following latitude and longitude were used to specify the location of the subject property.

Latitude: 48.189 N
Longitude: 117.022 W

The maximum earthquake spectral response accelerations, based on a site class of B are:

Short Period Response (S_S) – 0.383g per Figure 1615(1)
One Second Response (S_1) – 0.109g per Figure 1615(2)

Boring 1 illustrates standard Penetration Blow Counts between 15 and 50, corresponding to a site classification of D per Table 1613.5.2. Thus, the maximum considered earthquake spectral response accelerations need to be adjusted for site class effects as follows:

Short Period Response (S_{MS}) – 0.571g per Figure 1615(1)
One Second Response (S_{M1}) – 0.259g per Figure 1615(2)

Seismic Refraction Microtremor results from 3 surveys located along the underground alignment reveal the following:

ReMI #o.	River Channel Area	Depth (ft)	Shearwave Velocity (rt/sec)	Correlated N Value
1	Right	0-7	200-400	<1-4
		7-30	700-750	21-31
2	Middle	0-3	200	<1
		3-20	500 -600ft/sec	8-14
		20-30	750-800	31-36
3	Left (west) side	0-9	200-400	<1 to 4
		9-30	750-800	34-36

2.2 *SURFACE CONDITIONS*

The site location, surrounding surface features, and topographic contours are illustrated on the *Vicinity Map* and *Site Plan*. The ground surface in the area of the wet well and water reservoir is covered with dense brush, grass, weeds and trees.

The proposed water reservoir site is located on a hillside. The hillside slopes downward in three directions at approximately 2.5(Horizontal):1(Vertical) in the steepest direction and will require approximately a 10 foot cut to create a level building area. The ground surface in the area of the wet well is relatively level, sloping downward toward the Pend Oreille River. The river bank slope is approximately 1.5(Horizontal):1(Vertical).

2.3 *SUBSURFACE CONDITIONS*

The attached *Boring Log* and *Test Pit Logs* include detailed descriptions of the subsurface conditions, in accordance with the procedures described in Chapter 5.

These distinct soil units were encountered: 1) fill and topsoil, 2) silty clay/silty sand, and 3) sand. The following paragraphs summarize the materials encountered, based on anticipated relevance to the project.

GROUND SURFACE- FILL & TOPSOIL

Reservoir Site

Topsoil of silty sand with some gravel was encountered at the surface in the reservoir site explorations. The topsoil was approximately 1 foot thick. No signs of disturbance was observed at the reservoir site.

Left (West) Side of River

Minor thicknesses of fill were placed on the west side of the river possibly during construction of the intake/gaging structures. Areas with some fill are present, but the majority of the site surface appeared to be in a natural condition. Shear wave velocities of approximately 250 feet per second were encountered in the upper 2 to 4 feet.

Wet Well Area

Fill was encountered at the surface in the exploration bore for the wet well. The fill was gravel with some sand and a small amount of silt. The fill was medium dense and well graded. We understand that fill was placed in the area of the wet well to create the access roadway. An employee for the City of Oldtown said the surrounding area was always wet. Six feet of fill was placed in the area so it could be used by traffic.

SILTY CLAY/SILTY SAND (SC/SS)

Reservoir Site

The topsoil was underlain by sand to silty sand. Sand was encountered in the down-gradient test pit but was underlain by a layer of silty sand. If the reservoir site is moved up-gradient we anticipate silty sand will be encountered beneath the topsoil.

Left (West) Side of River

Test pits on the west side of the river sloughed at 5 feet BGS. Test Pit 1 encountered sand, while Test Pit 2 encountered a 2-foot thick layer of silty sand that was moist and medium dense.

Wet Well Area

The boring encountered a 4-foot thick layer of silty clay. Observed N-value of 17 to 21 indicated that the silty clay was medium stiff to stiff. Some fine roots were present.

SAND

Reservoir Site

In Test Pit 2, the silty sand was underlain by fine sand with a trace of low-plasticity silt and clay. The sand was relatively uniform and poorly graded.

Test pits were used to save costs over drilled borings due to difficult access conditions. Deeper information is needed prior to final design and construction, which we understand will be obtained when access is in provided.

Left (West) Side of River
Test Pit 2 encountered sand beneath the silty sand. Sidewalls of Test Pit 1 were unstable, so the excavation was discontinued at 6 feet BGS. The sand was fine with a trace of low-plasticity silt and clay.

Wet Well Area
The boring encountered sand beginning at 7.5 feet BGS. Thin zones of fine gravel were observed that became courser with depth though the silt content appeared to remain consistent. Blow counts revealed a medium dense condition. Moisture content of the sand changed from dry to moist at about 15 feet BGS, then to saturated at 23 feet BGS.

2.4 *SURFACE AND GROUNDWATER HYDROLOGY*

Reservoir Site
Test Pits 3 and 4 at the reservoir site encountered groundwater at 8 and 10 feet BGS, respectively. Aspen trees were growing in the area of the reservoir site. Aspen trees tend to grow in wet areas so their presence may indicates seeps and springs in the area. Pit sidewalls were not stable below the groundwater table.

Left (West) Side of River
Test Pits 1 and 2 on the left side of the river encountered groundwater at 2 feet BGS. Pit sidewalls were not stable below the groundwater table.

Wet Well Area
The exploratory boring encountered groundwater at 23.3 feet BGS. We understand that surface ponding is common in the area indicating the potential for a shallow table approaching the ground surface. River water levels influence the groundwater elevation; groundwater levels likely remain at or above river levels. If the excavation is below the river elevation then water has the potential to migrate into the excavation.

Permeability

SILTY CLAY/SILTY SAND (SC/SS)
The estimated hydraulic conductivity of the SC/SS unit is 0.2 to 2 inches per second. Sieve analysis results indicate an effective grain size for the clean sand of 0.17 millimeters. Estimated hydraulic conductivity of the sand is approximately 40 inch per second, using the Hazen Method (Hazen 1911).

3. *CONCLUSIONS*

Based on the encountered conditions described in Chapter 2, we conclude that the site offers favorable geotechnical conditions for support of the project.

In the area of the reservoir site, more subsurface explorations are required. Specifically a boring at least 50 feet below the propose reservoir foundation elevation deep is needed. The native clean sand is typically favorable for support of conventional shallow spread footings. However, the clean sand is below the water table and the reservoir site is located on a hillside with slopes on three sides. An exploratory boring is necessary to complete the slope stability analysis.

Groundwater will influence the excavations. Dewatering will be required and will increase project costs. The river elevation will affect excavations adjacent to the river due to high permeability of the sand. Construction timing may be dependent on river elevation. It may still be difficult to dewater the entire excavation for the wet well, so a portion of the wet well may need to be installed as a caisson.

The reservoir site will require foundation drains to decrease the hydrostatic pressure from groundwater. Differential settlement will tend to occur due to the sloping terrain where restraint is lower on the downhill side. A pad of open graded gravel would improve drainage, improve stability and reduce differential settlement potential.

The overflow water should not be allowed to pond near the reservoir, due to steep slopes and the underlying sand. Water from the over-flow valve should be directed to a natural drainage path.

The high permeability of the sand will make it difficult to dewater an area for a large excavation. The directional boring for the river crossing will require a large excavation on one side of the river for the drill machine. The reservoir site will also require a large excavation. The sides of the excavation, in both locations, will not be stable due to the shallow ground water. Water could be diverted from the construction area by installing a trench drain up gradient from both excavations. The trench drain should be constructed before starting the large excavations and should extend to a depth that is approximately 5 feet deeper than planned excavation depth. The trench drain should direct groundwater around planned excavations. Soil freezing and coffer dam construction are also options for the reservoir and drill machines excavations.

4. *RECOMMENDATIONS*

Based upon the conclusions presented in Chapter 3, we recommend founding the wet well in the SAND unit. To control settlements and slope stability, as well as to control seepage pressures from the shallow ground water table, we recommend founding the reservoir on a 5-foot thick pad of open-graded gravel. Alternatives to the gravel pad include use of densely compacted aggregate piers combined with a groundwater interception trench drain. The recommendations presented throughout this chapter are intended to provide the geotechnical criteria needed for an economically feasible design at normally accepted risk levels. More conservative design parameters may be used if lower risks are preferred. Specifically, the design and construction should incorporate the following recommendations concerning earthwork, foundations, lateral earth pressures, and the well floor.

4.1 *EARTHWORK*

The earthwork for this project will be difficult because of the shallow depth to groundwater – at the reservoir site, river crossing, and wet well site. The native SAND unit will allow rapid infiltration and will tend to heave in the bottom of excavations if the excavations are not dewatered first.

EXCAVATION

Clean sand is not stable when saturated. Therefore, sidewalls of excavations will cave below the water table and overlying capillary fringe. Excavations for the reservoir and directional bore pit will require dewatering. The drain should divert the water away from the excavation. Diverted water should be directed to a natural drainage way and should not be allowed to pond on the hillside or cause erosion. If excavations are shored, but not dewatered, heave of the SAND unit could occur.

Water levels at the wet well site, which is adjacent to Pend Oreille River, should be researched to facilitate timing of construction for a period of normally low water levels. OSHA soil Type C conditions should be anticipated to control temporary stability. OSHA temporary excavation criteria includes maximum slope inclination of 1½ H:1V (Horizontal:Vertical) in the temporary condition for Type C soil.

If the wet well is deeper than the river elevation, that portion of the wet well may need a caisson. The water can be forced out of the wet well while the caisson is being placed by using either air or a plug in the bottom of the caisson. The contractor's shoring design will need to be completed and sealed by a registered professional engineer.

The directional bore machine will require a bore pit on both sides of the river. Depending on time of construction, groundwater may be encountered in the bore pit excavation. A trench drain up gradient from the bore pit may be helpful to reduce water seepage potential. Advanced means of seepage control may be necessary, such as soil freezing or cofferdam construction. Conventional dewatering from a temporary sump may require high discharge rates to control inflows.

PREPARATION OF SURFACES TO RECEIVE FILL

For preparation of the site, we recommend removing and replacing encountered fill and topsoil below foundations and slabs. We anticipate topsoil to be approximately 1 foot thick and fill in the area of the wet well to be approximately 6 feet thick.

Surfaces to receive fill and backfill should be excavated nearly level (8% maximum slope), brought to optimum moisture (±2%) if necessary, and compacted in-place to at least 92% of maximum dry unit weight. For structural fill, much of the existing soil will be suitable for reuse. Debris such as wood and metal, as well as boulders too large for compaction equipment and organic soils should be removed.

Place fill in nearly level lifts and compact to at least 92% of maximum dry unit weight. The lift thickness should vary with the capability of the equipment. Obtain the maximum unit weight and optimum moisture contents for fill material in accordance with the Modified Proctor (ASTM D 1557).

A qualified soils technician representing the Geotechnical Engineer should be present during fill and backfill operations to monitor the subgrade preparation and unit weight of each lift of fill.

4.2 *FOUNDATIONS*

We recommend an exploratory boring be completed in the area of the reservoir when access is available. Therefore, these recommendations are preliminary for planning purposes and may be altered after the completion of additional explorations. Due to shallow groundwater and characteristics of the clean SAND unit, we recommend installing a gravel pad below the reservoir as described further below (see Settlement).

FOUNDATIONS

A pad of open graded gravel, at least 5 feet thick, is recommended below the reservoir. The gravel pad needs to extend 3 feet wider than the reservoir. With this pad wall and column footings may bear at 5000 pounds per square foot (psf). Foundations should be at a minimum depth of 3 feet BGS to protect against frost action. However, footings do not need to extend to frost depth if founded on open gravel that is drained. A minimum embedment of 12 inches is recommended. The top 6 inches should be materials with 10 to 20 percent, slopes away at 2 percent to shed water.

The wet well will need to be drilled due to shallow groundwater and unstable subsurface conditions, so conventional spread footings will not be an option. Recommended allowable bearing pressure is 2,000 psf.

TEMPORARY LIVE LOADS

To calculate seismic loading, the acceleration and site classification criteria described in Section 2.1 of Chapter 2 should be followed. Soil liquefaction occurs when the strength and stiffness of the soil is reduced by earthquake shaking. It appears the underlying soils are fine grained and saturated so there is potential for liquefaction to occur. The well logs in the area indicate the fine-grained soil to be approximately 100 feet thick. We recommend a boring be completed at the reservoir site to determine the underlying soil conditions. A liquefaction analysis requires blow count

information for a depth of 50 feet below the expected foundation elevation. So the boring should extend a minimum of 60 feet BGS. If the analysis determines that the soil has a potential to liquefy, then underlying soil may need to be modified or a deep foundation

HYDROSTATIC/BUOYANT FORCES

Shallow groundwater was encountered during the field explorations. The wet well should be designed to resist the buoyant forces. If the wet well is constructed as a caisson then it will be difficult to use the foundation to resist buoyant forces. Therefore, it may be necessary to add rings on the shallow portions of the drywell. The rings can be designed to be used to resist the buoyant forces.

The water reservoir should be designed with foundations drains. The foundation drains will direct the water away from the reservoir and decrease the potential for hydrostatic forces on the walls of the reservoir.

SETTLEMENT

The relative density of the soil that will support the reservoir is not known at this time. An additional bore is required to evaluate the underlying sand. Based on an assumed average N-Value of 15 and a corresponding drained modulus of 230 kips per square foot (ksf), the total predicted settlement was calculated using the anticipated loads from Section 1.1. Settlement results from wall and column loads are estimated to be less than ½-inch. While the floor loads will influence the soil to a depth of more than 30-feet below the reservoir, we recommend providing a 5-foot thick pad of open graded (see next section- Slope Stability Analysis) below the reservoir to reduce potential for differential settlements, improve drainage and reduce risks from unexpected reservoir leakage. Settlement will take place rapidly with the majority occurring during construction.

In the area of the wet well, the weight of the soil removed will be larger then the weight of the water in the wet well, so no settlement is anticipated for the wet well. However, due to the shallow groundwater, there is a potential for the sand to heave during construction and after construction. Heaving is caused when the surrounding soil is saturated. Installing a potion of the wet well like a caisson will decrease the potential for heaving during construction. The wet well will have to be designed to prevent the underlying soil from heaving after construction.

SLOPE STABILITY ANALYSIS

The reservoir will be located on a hillside. The existing slopes appear stable in their current configuration. No evidence of large-scale slope movement or long-term slope creep was observed at the time of our field evaluation. We assumed that the hillside is underlain by soils of the clean SAND stratum. However, we recommend an exploratory bore be completed so that we have soil information for the underlying conditions. We completed an undrained triaxial test on the SAND. The sample was obtained at 8 feet BGS. The triaxial test results indicate an angle of internal friction of 34 degrees and no cohesion.

We analyzed the existing slope for stability using the triaxial test results. We performed a stability analysis using Bishop's method of slices to calculate the minimum factor of safety for the underlying sand with groundwater 8 feet BGS.

For the assumed conditions (since a boring is required to understand the underlying conditions), we calculated the minimum factor of safety to be 1.5 for slope stability. For stability, a minimum factor of safety of 1.5 is typically considered to be adequate. To meet the analysis assumptions, we recommend 1) installing a pad of open-graded gravel, per ITD 703.08 (Idaho Transportation Department Standard Specifications for Highway Construction, 2004) Rock Cap, at least 5-feet thick below the reservoir to control different settlement and 2) installing a groundwater interception drain surrounding the reservoir as described in section 4.5. The pad should be separated from the underlying soil with geotextile or a graded filter such as 4-inches of ½-inch minus base per ITD 703.04 and the pad should drain by daylighting on the slope or with a relief pipe.

4.3 *DIRECTIONAL BORE*

The utility crossing under the Pend Oreille River will be completed by using directional bore equipment. The cost of a directional bore varies depending on the type of subsurface material. Siemens and Associates conducted a Geophysical Reconnaissance of the river bed to obtain an understanding of underlying geology. It appears the riverbed may be underlain by sand and gravel. Grain size of the gravel is unknown. If the gravel is coarse then it will be difficult for the directional bore machine to proceed with soil drilling tools. Therefore, it may be necessary for the drilling machine to use rock tools, which has a potential to increase the cost of the project.

4.4 *LATERAL EARTH PRESSURES*

RETAINING STRUCTURES

Assuming drained conditions and level backfill, the lateral earth pressures against retaining structures may be calculated using the following Active or At-Rest pressures. Appropriate safety factors should be applied in retaining wall designs that are not included in values provided. Since some displacement is required to mobilize the full active strength (approximately 0.2% of the wall height), the At-Rest pressure factors must be used when retaining structures are rigidly restrained to limit yield under earth pressure. Slopes and surcharge loads above a wall will increase the earth pressure.

TABLE 4.3.1	*RETAINING WALLS*	
	EQUIVALENT FLUID PRESSURE	
STRATUM	ACTIVE	AT REST
Native Clean Sand or Similar Structural Fill	40 pcf	60 pcf

LATERAL RESISTANCE

Lateral forces can be transferred to soil through use of passive earth pressures together with earth/concrete friction factors presented in Table 4.3.2. These values are unfactored and anticipate properly compacted horizontal backfill. They will be substantially reduced when unit weights are less than those recommended under *Earthwork* and when the surface is sloped.

TABLE 4.3.2	*LATERAL RESISTANCE*	
		EQUIVALENT FLUID PRESSURE
STRATUM	EARTH/CONCRETE FRICTION FACTOR	PASSIVE EARTH CONDITION DRAINED
Native Clean Sand or Similar Structural Fill	0.35	350 pcf

4.5 DRAINAGE

Trench drains should consist of a 4-inch perforated PVC pipe. Perforations should be on top of the pipe. There should be no perforations on the bottom of the pipe. The pipe should be placed in the bottom of the trench and surrounded with approximately 2 feet of drainrock. The drainrock should then be covered with filter fabric and then the trench can be backfilled with the native sand soil, compacted per Section 4.1.

4.6 ADDITIONAL SERVICES

Soil and foundation engineering comprises a 5-part endeavor involving cooperation with the owner, designer, and constructor as follows:

1. Preliminary investigation to assist in planning and to economically adapt the project to its geologic environment.
2. Soil study to analyze subsurface conditions and recommend design criteria.
3. Consultation with the designer to verify adaptation of the specific design to the site in accordance with the recommendations.
4. Monitor fill placement to verify proper compaction.
5. Construction observation to verify the conditions encountered and to make recommendations for modifications as necessary.

This report satisfies Item 2 of the 5-phase endeavor. We are eager to provide assistance with design and construction as appropriate to assist in completing a safe and economical project.

5. *FIELD EXPLORATION*

The fieldwork was conducted by NICET soils engineering technician and licensed driller Ethan Hageman and supervised by geotechnical engineer Steve Burchett, PE and Megan Rounds, PE on March 4, 2010. The field activities generally consisted of the following:

- Reconnaissance of the site and surrounding area;
- Drilling and logging subsurface conditions for 1 exploratory boring using air rotary drilling;
- Excavating and logging subsurface conditions for 4 test pits using an excavator.
- Obtaining split-spoon and bulk samples of the soils.

Results are presented in Figures listed in the *Table of Contents*.

5.1 *TEST BORINGS*

One boring was drilled with a truck-mounted Mobile B-57 utilizing 4½-inch outside diameter casing at the proposed wet well location. The western undercrossing location and reservoir site were not accessible with our truck-mounted drill; these areas were accessed by a tracked excavator provided by Pumnea Excavation.

AIR ROTARY DRILLING

The air rotary method involves circulating air through a specially designed pilot bit that engages with a casing bit during drilling, but disengages upon reversal of rotation to allow retrieval of the drill stem at desired sampling depths.

EXPLORATORY EXCAVATION

Two test pits were advanced at the proposed reservoir location; one 40 feet uphill and one 40 feet downhill of the center of the proposed reservoir. They were advanced to a depth of 12 to 14 feet. At this depth, groundwater and collapsing sidewalls made deeper excavation impractical. Two test pits were excavated at the western undercrossing location; one on the shoreline, and one adjacent to the access road near the likely termination of the horizontal boring. The test pit on the shore of the river sloughed considerably once below the water table, and groundwater freely entered the excavation until it stabilized at the level of adjacent surface water.

Test pits were backfilled without significant compactive effort due to shallow groundwater and saturated soil conditions, The backfill will need to be stabilized during construction by excavation and compaction.

5.2 *SOIL SAMPLES*

Samples were obtained by driving samplers through the temporary drill casing and by excavating soil out of the excavator bucket.

STANDARD PENETRATION TESTS *ASTM D 1586*

To obtain samples of soil, Standard Penetration Tests (SPT) were conducted by driving a 2-inch O.D. split-spoon sampler with a 140-pound hammer actuated by a Mobile automatic hammer to provide a test of penetration resistance. The resulting blow count for each foot of sampler advancement, representing uncorrected N-values, is presented on the *Boring Log*. The energy ratio (ER) is much higher with the automatic hammer compared to the reference cathead/rope system. Consequently, to correct N-values an ER of 1.2 is assumed in order to reflect the greater energy imparted by the automatic hammer.

3-INCH SPLIT SPOON SAMPLES (3"SS) *ASTM D 3550*

Blow counts with the 3"SS do not represent N-values since the end area of the 3-inch sampler is approximately twice that of the standard sampler. Uncorrected N-values can be approximated by multiplying the observed blow counts (in blows per foot) by 0.5 for the 3-inch split-spoon. As with SPT sampling, N-values for the 3-inch split spoon are corrected with an ER of 1.2 to reflect the energy of the automatic hammer.

5.3 SOIL CLASSIFICATION

UNIFIED SOIL CLASSIFICATION SYSTEM *ASTM D 2487*

The encountered soils and rock were classified visually from split-spoon samples, rock core samples and drill rig response. The soil descriptions presented on the Boring Logs are intended to comply with the Unified Soil Classification System (USCS), described in the *Guide to Soil and Rock Descriptions*, attached, which is recognized internationally in the fields of engineering and construction.

5.4 LOCATION

HORIZONTAL & VERTICAL CONTROL

The *Site Plan* (Figure 2) was reproduced from a preliminary plan provided by the client. The elevations presented in the *Boring Log* and *Test Pit Logs* were interpolated from these plans. Horizontal and vertical locations can be considered accurate to ±10 and ±1 feet, respectively, relative to the information provided.

6. *LABORATORY ANALYSIS*

Laboratory testing was performed on representative samples of the soils encountered to provide data used in our assessment of soil characteristics. The tests were chosen to assess moisture, grain-size distribution, as well as engineering and chemical parameters.

Tests were conducted, where practical, in general accordance with nationally recognized standards (ASTM, AASHTO, etc.), which are intended to model in-situ soil conditions and behavior. The results are summarized on the *Laboratory Summary* (Table 1).

6.1 *INDEX PARAMETERS*

MOISTURE CONTENT ***ASTM D 2116***

Moisture contents were determined by direct weight proportion (weight of water/weight of dry soil) determined by drying soil samples in an oven until reaching constant weight.

GRADATION ***ASTM D 421***

Gradation analysis was performed by the mechanical sieve and hydrometer method. The mechanical sieve method is utilized to determine particle size distribution based upon the dry weight of sample passing through sieves of varying mesh sizes.

Since very small particles (silt & clay) cannot be reliably sieved, the grain size distribution was measured past the #200 sieve with the hydrometer method, which makes use of the principle that larger particles will settle in a suspension of fluid faster than smaller particles as defined by Stoke's Law. The concentration of suspended soil particles is measured versus time with a hydrometer to determine percentage and size of soil particles in a fluid of known temperature, viscosity, and specific gravity.

ATTERBERG LIMITS ***ASTM D 4318***

Atterberg limits were determined for a representative sample of the native soil. Atterberg Limits describe the properties of a soil's fine-grained constituents by relating the water content to the soil's limits of engineering behavior. As the water content increases, the state of soil changes from a brittle solid to a plastic solid and then to a viscous liquid.

The Liquid Limit (LL) is the water content above which the soil tends to behave as a viscous liquid. Similarly, the Plastic Limit (PL) is defined as the water content below which the soil tends to behave as a brittle solid. The Plasticity Index (PI) describes the range of water contents over which a soil is plastic and is derived by subtracting the PL from the LL.

HAZEN METHOD

The Hazen method was used to calculate the hydraulic conductivity of sandy sediments. The method is applicable to sands where the effective grain size (D_{10}) is between approximately 0.1 and 3.0 mm. The effective grain size was determined as a result of the gradation test results.

TRIAXIAL SHEAR TEST ***ASTM D-4767***

Representative samples of each recognized stratigraphic layer were tested in a Triaxial cell under consolidated undrained (CU) conditions to determine shear strength. The test involves applying a uniform confining stress in a controlled fluid chamber isolated from the sample by a thin rubber membrane then applying an additional vertical load mechanically until failure at approximately 1ksf, 2 ksf, and 4 ksf confining pressures.

6.2 CHEMICAL PARAMETERS

pH *AASHTO T 289*

Certain clayey soils can contain excess acidity that attacks concrete and iron. Corrosive potential of embedded iron and steel can be quantified by determining the pH (acidity = PH<7) and minimum resistivity of soil. Buried conduit, culverts, and reinforcing will deteriorate rapidly under acidic conditions. Cathodic protection is used to protect such components. Neutral pH (7±1) generally represents the least corrosive potential.

7. *LIMITATIONS*

The conclusions and recommendations presented herein are based upon the results of the field explorations presented in Chapter 3. They are predicated upon our understanding of the project, its design, and its location as defined in Chapter 1.

We endeavored to conduct this study in accordance with generally accepted geotechnical engineering practices in this area. This report presents our professional interpretation of investigation data developed, which we believe meets the standards of the geotechnical profession in this area; we make no other warranties, express or implied.

Unless test locations are specified by others or limited by accessibility, the scope of analysis is intended to develop data from a representative portion of the site. However, the areas tested are discreet. Interpolation between these discreet locations is made for illustrative purposes only, but should be expected to vary. If a greater level of detail is desired, the client should request an increased scope of exploration.

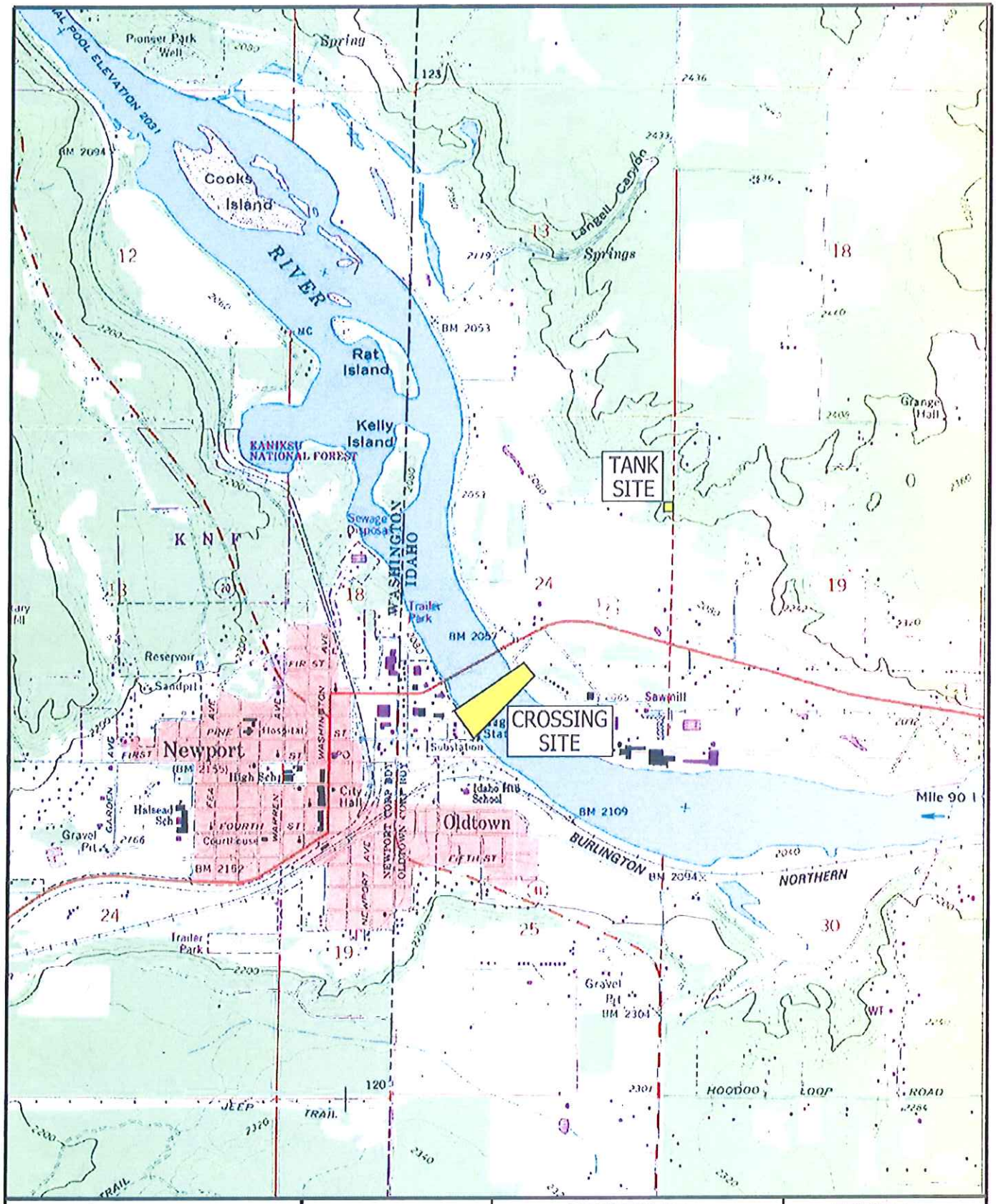
This study was not specifically intended to provide information for cost estimation. While we realize that this report may present information, which could be used for bidding, it was not intended for that purpose. If it were, different field procedures would likely have been used to more reliably assist the estimator. Consequently, use of this information for bidding purposes is strictly at the contractor's risk.

Likewise, this study deals with physical characteristics of the soil encountered on the site. Chemical characteristics, including identification of dangerous chemicals or hazardous materials, are beyond the scope of this exploration. The delineation of wetlands is also beyond the scope of this report. If conditions are encountered which vary from those described in this report, they should be brought to our attention immediately so that these recommendations may be re-evaluated.

Changes in engineering standards, code requirements, or general improvements of the state-of-the-art, could render this exploration less than adequate at a future date. Consequently, if the proposed construction is not started within one year, this report should be re-evaluated prior to application.

The conclusions and recommendations presented herein are intended for design and construction of the currently proposed project as described in Paragraph 1.1. Changes in alignment, layout, loads, or construction material should be brought to our attention so that we may reassess the applicability of these recommendations.

Furthermore, as project success depends on the proper application of these recommendations in both design and construction, we cannot accept liability in cases where these recommendations are not applied or followed as intended. Consequently, any liability on our part must be accompanied by our retention to assist the owner and designer in properly implementing these recommendations.



N

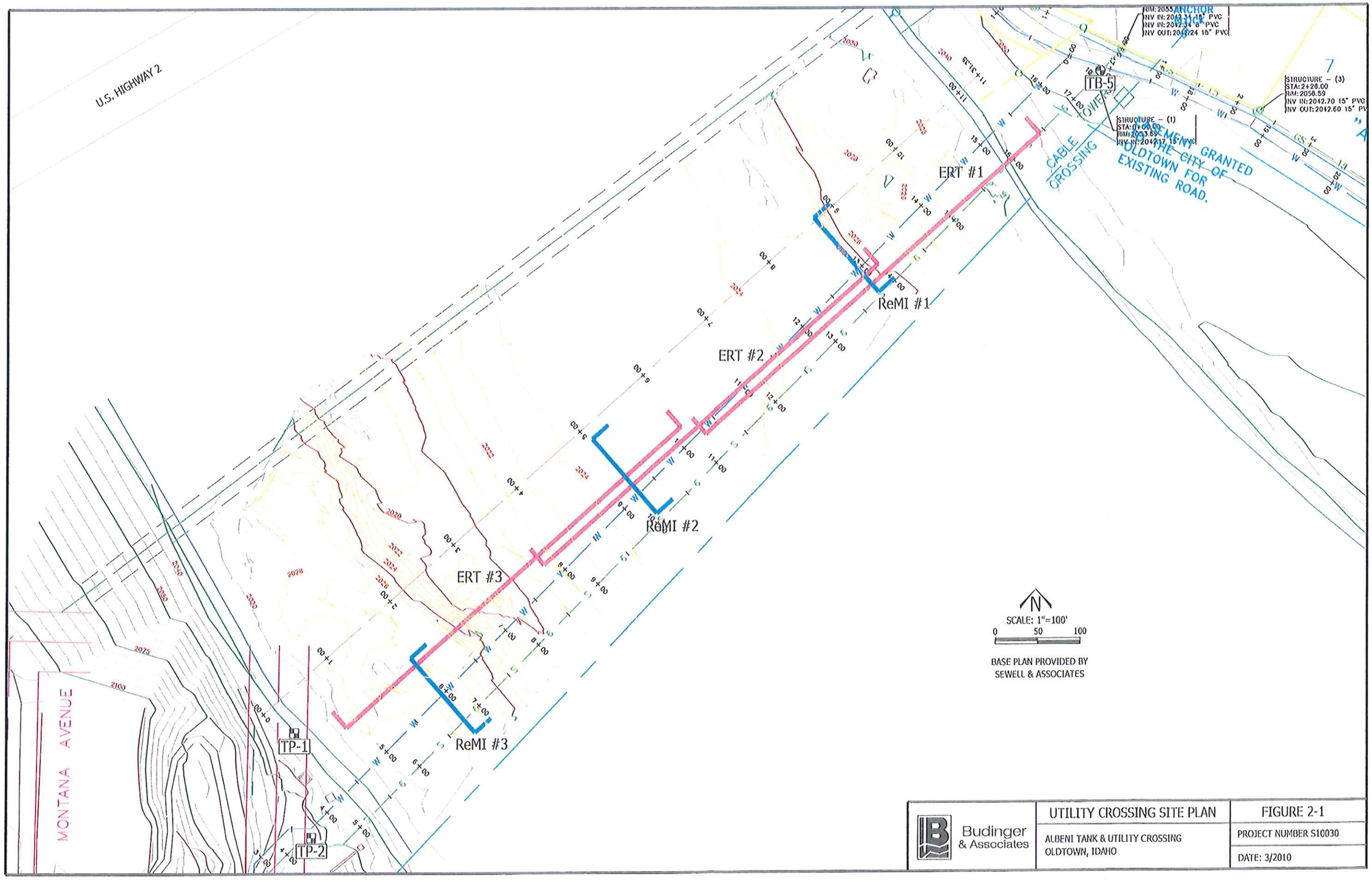
SCALE: 1"=2000'

0 1000 2000

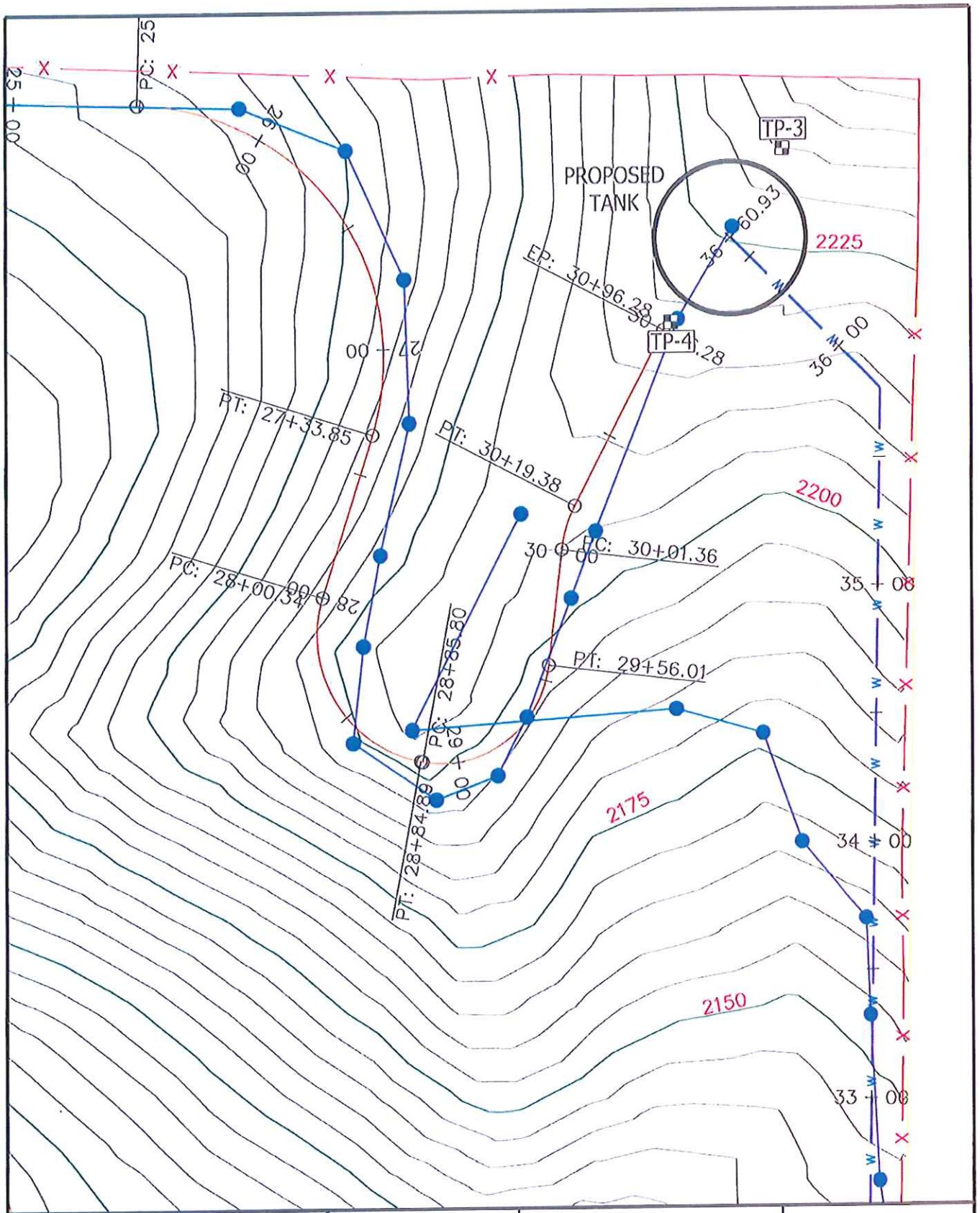
SOURCE: U.S.G.S.

Budinger & Associates

VICINITY MAP	FIGURE 1
ALBENI TANK & UTILITY CROSSING OLDTOWN, IDAHO	PROJECT NUMBER S10030
	DATE: 3/2010



Budinger & Associates	UTILITY CROSSING SITE PLAN	FIGURE 2-1
	ALBENI TANK & UTILITY CROSSING OLDTOWN, IDAHO	PROJECT NUMBER S10030
		DATE: 3/2010



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SCALE: 1"=50'

0 25 50

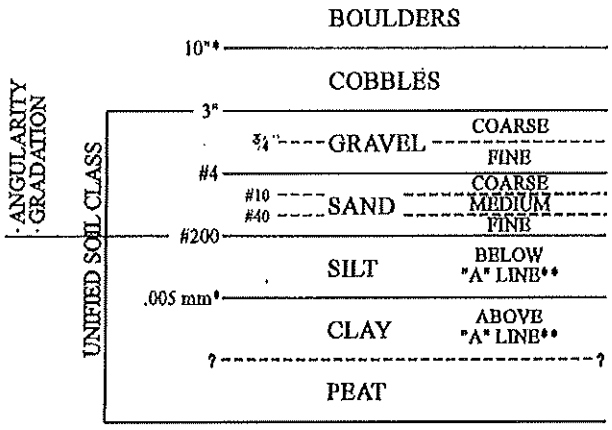
BASE PLAN PROVIDED BY SEWELL & ASSOCIATES

Budinger & Associates

WATER RESERVOIR SITE PLAN	FIGURE 2-2
ALBENI TANK & UTILITY CROSSING OLDTOWN, IDAHO	PROJECT NUMBER S10030 DATE: 3/2010

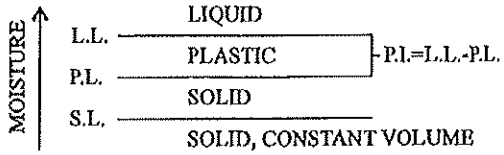
GUIDE TO SOIL & ROCK DESCRIPTIONS

UNIFIED
SOIL CLASSIFICATION SYSTEM
(USCS)

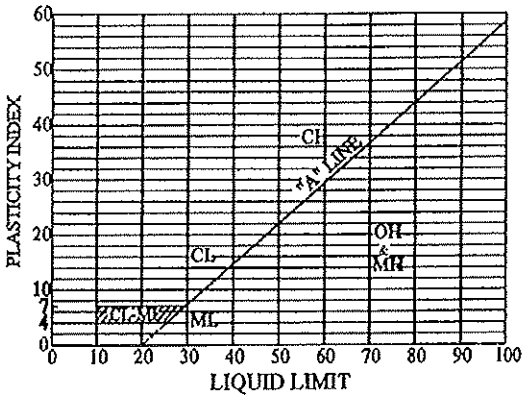


* NOT INCLUDED IN U.S.C.S.
** SEE PLASTICITY CHART

ATTERBERG LIMITS



PLASTICITY CHART



GUIDE TO SOIL DESCRIPTION MODIFIERS, MOISTURE, AND CONDITION PRESENTED ON LOGS.

MODIFIER	ESTIMATED PERCENTAGE OF SAMPLE
SUFFIX "LY" OR "Y".....	GREATER THAN 40%
SOME	22% - 45%
SMALL AMOUNT	8% - 25%
TRACE/OCCASIONAL	0% - 12%

MOISTURE

- DRY
- SLIGHTLY MOIST
- VERY MOIST
- SATURATED

CONDITION

COARSE GRAINED:
- VERY LOOSE
- LOOSE
- MEDIUM DENSE
- DENSE
- VERY DENSE

FINE GRAINED:
- VERY SOFT
- SOFT
- MEDIUM
- STIFF
- VERY STIFF
- HARD

ROCK:
- SOFT
- MODERATELY HARD
- HARD
- VERY HARD

▽ GROUNDWATER INDICATION DURING DRILLING

▼ GROUNDWATER INDICATION AFTER DRILLING

SAMPLES

- STANDARD 2" PENETRATION TEST SAMPLER WITH BLOWS PER FOOT
- 3" SPLIT SPOON SAMPLER WITH BLOWS PER FOOT
- DRILL CUTTING SAMPLE
- BULK SAMPLE
- SHELBY TUBE SAMPLE
- DIAMOND CORE RUN WITH % RECOVERY & ROCK QUALITY DESIGNATION
- 4" O.D. SPLIT SPOON SAMPLER WITH BLOWS PER FOOT
- R REFUSAL OF SAMPLE (50+ BLOWS PER 6")

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Geotechnical & Environmental Engineers
Construction Materials Testing & Special Inspection

FIGURE 3

TEST PIT 1

Date: 3-4-10
Excavator: Pumnea Excavation
Equipment: Caterpillar E1208 Tracked Excavator
Location: Adjacent to River Near West Undercrossing
Surface: Sandy Beach

Elevation: 2035 ft
Logged by: S. Burchett
Size of Hole: 3 x 6

DEPTH	SAMPLE	MOISTURE, COLOR, CONDITION	DESCRIPTION	SOIL LOG
0		wet to saturated, light brown, medium dense	SAND, small amount Gravel, trace to small amount Silt	
5			occasional Cobbles and Boulders scattered along shoreline and riverbank	
			excavation sloughed considerably below 2' water level End of Excavation @ 6 ft	
10				
15				
20				

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TEST PIT LOGS **FIGURE 4-1**

Project: Albeni Tank & Utility Crossing
Location: Old Town, Idaho
Number: S10030

TEST PIT 2

Date: 3-4-10
Excavator: Pumnea Excavation
Equipment: Caterpillar E1208 Tracked Excavator
Location: Adjacent to Access Road At West Undercrossing
Surface: bare

Elevation: 2060 ft
Logged by: S. Burchett
Size of Hole: 3 x 10

DEPTH	SAMPLE	MOISTURE, COLOR, CONDITION	DESCRIPTION	SOIL LOG
0		moist, brown, loose to medium dense	SAND (medium), small amount Silt, occasional Gravel, small amount Organics in upper 12"	
5		moist, light brown, medium dense	SILTY SAND, occasional Gravel	
10		slightly moist, light brown, medium dense	SAND (medium), trace silt, occasional Gravel occasional Cobbles and Boulders present on adjacent slopes	
15			End of Excavation @ 14 ft	
20				

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TEST PIT LOGS **FIGURE 4-2**

Project: Albeni Tank & Utility Crossing
Location: Old Town, Idaho
Number: S10030

TEST PIT BORING LOGS.GPJ BUDINGER.GDT 4/1/10

TEST PIT 3

Date: 3-4-10
Excavator: Pumnea Excavation
Equipment: Caterpillar E1208 Tracked Excavator
Location: 40 Feet Uphill From Center Of Water Reservoir
Surface: Dense Brush

Elevation: 2235 ft
Logged by: S. Burchett
Size of hole: 3 x 10

DEPTH	SAMPLE	MOISTURE, COLOR, CONDITION	DESCRIPTION	SOIL LOG
0		moist, brown, soft	TOPSOIL, SILTY SAND with Gravel	
		moist, brown to dark brown, loose to medium dense	SILTY SAND with small amount Clay, trace Gravel appears to be colluvium with possible relicit soil horizon at 3'	
5		wet to saturated, brown to gray, mottled, medium dense	CLAYEY SAND, slight to moderate cohesion	
10		wet to saturated, light brown, medium dense	SAND (fine) trace Silt, occasional Gravel (medium), low cohesion groundwater slowly entered excavation below 8'	
15			pit terminated at 14' due to excessive sloughing End of Excavation @ 14 ft	
20				

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TEST PIT LOGS **FIGURE 4-3**

Project: Albeni Tank & Utility Crossing
Location: Old Town, Idaho
Number: S10030

TEST PIT BY WENDY BORING LOGS.GPJ BUDINGER.GDT 4/7/10

TEST PIT 4

Date: 3-4-10
Excavator: Pumnea Excavation
Equipment: Caterpillar E1208 Tracked Excavator
Location: 40 Feet Downhill From Center Of Water Reservoir
Surface: Grass and Weeds

Elevation: 2218 ft
Logged by: S. Burchett
Size of hole: 3 x 10

DEPTH	SAMPLE	MOISTURE, COLOR, CONDITION	DESCRIPTION	SOIL LOG
0		slightly moist, brown, loose to medium dense	TOPSOIL, SILTY SAND, trace Clay, small amount Gravel, some Organics	
		moist, light brown	SAND (fine), occasional Gravel (rounded), trace Silt and Clay	
5			mottled reddish brown to gray from 6'-8', with black Organic soil possible relicit topsoil horizon	
10		moist to saturated, gray, firm	SILTY SAND, small amount Clay, slightly plastic, uniform deposit water slowly seeped into pit below 10'	
			test pit terminated at 13' due to excessive sloughing End of Excavation @ 13 ft	
15				
20				

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TEST PIT LOGS **FIGURE 4-4**

Project: Albeni Tank & Utility Crossing
Location: Old Town, Idaho
Number: S10030

TEST PIT BY WENDY BORING LOGS.GPJ BUDINGER.GDT 4/7/10

TEST BORING 5

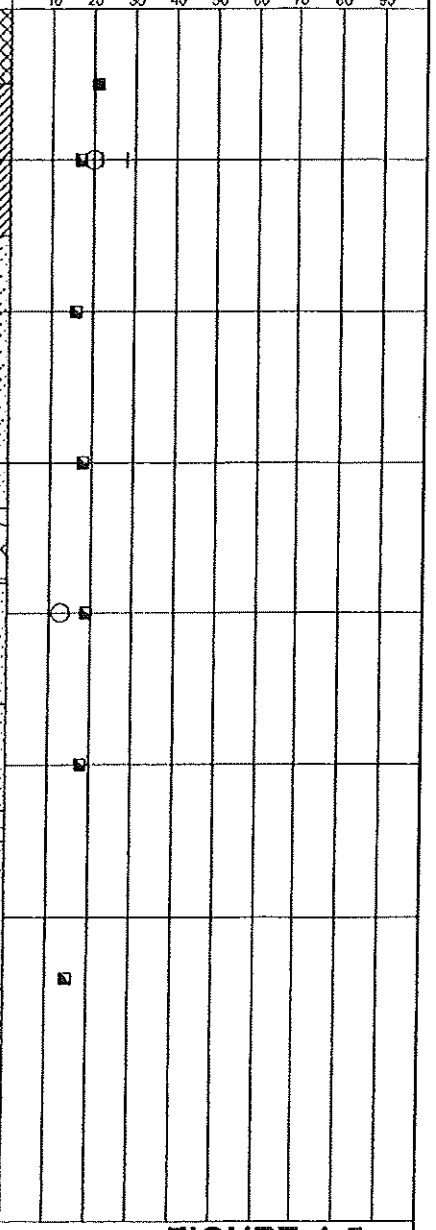
Date of Boring: 3-4-10
Driller: Budinger & Assoc., Inc.
Type of Drill: Mobile B-57 with automatic SPT hammer
Location: Road Shoulder Adjacent to Wet Well
Surface: Thick Brush

Elevation: 2060 ft
Logged by: M. Rounds
Size of hole: air rotary overburden system, 4.5 in O.D. casing

DEPTH	SAMPLES RQD, BLOW COUNTS N (% RECOVERY)	MOISTURE, COLOR, CONDITION	DESCRIPTION
0		dry, brown, medium dense	FILL: GRAVEL, some Sand, small amount Silt, well graded, subangular.
	21 (88%)	dry, gray and black, medium dense	SILTY CLAY, some Sand, some fine roots, non-plastic.
5	17 (88%)	dry, gray and black, medium dense	SILTY CLAY, some Sand, some pockets of fine roots, non-plastic.
	(0%)	dry, tan, medium dense	SAND, fine-grained, clean, poorly-graded, subangular
10	16 (83%)	dry, tan, medium dense	SAND, medium-grained, clean, poorly-graded, subangular
15	18 (94%)	moist, tan and black, medium dense	SAND, coarse-grained, clean, thin layers of black Sand, poorly-graded, subangular.
		moist, tan, medium dense	GRAVEL, fine-grained, poorly-graded, subangular.
20	19 (94%)	moist to wet, tan, medium dense	SAND, coarse-grained, clean, thin layers of black Sand, poorly-graded, subangular.
		saturated	
25	18 (88%)		
		saturated, tan, medium dense	GRAVEL, fine-grained, poorly-graded, subangular.
30		saturated, tan, medium dense	SAND, coarse-grained, clean, thin layers of black Sand, poorly-graded, subangular.
	15 (100%)		
35			End of Boring @ 33.5 ft
40			

TEST RESULTS

ATTERBERG LIMITS PL ⊢——⊣ LL
WATER CONTENT ○
STANDARD PEN TEST, N-VALUE (OBSERVED) ◪
3" SPLIT SPOON PENETRATION, BLOWS/FT ■



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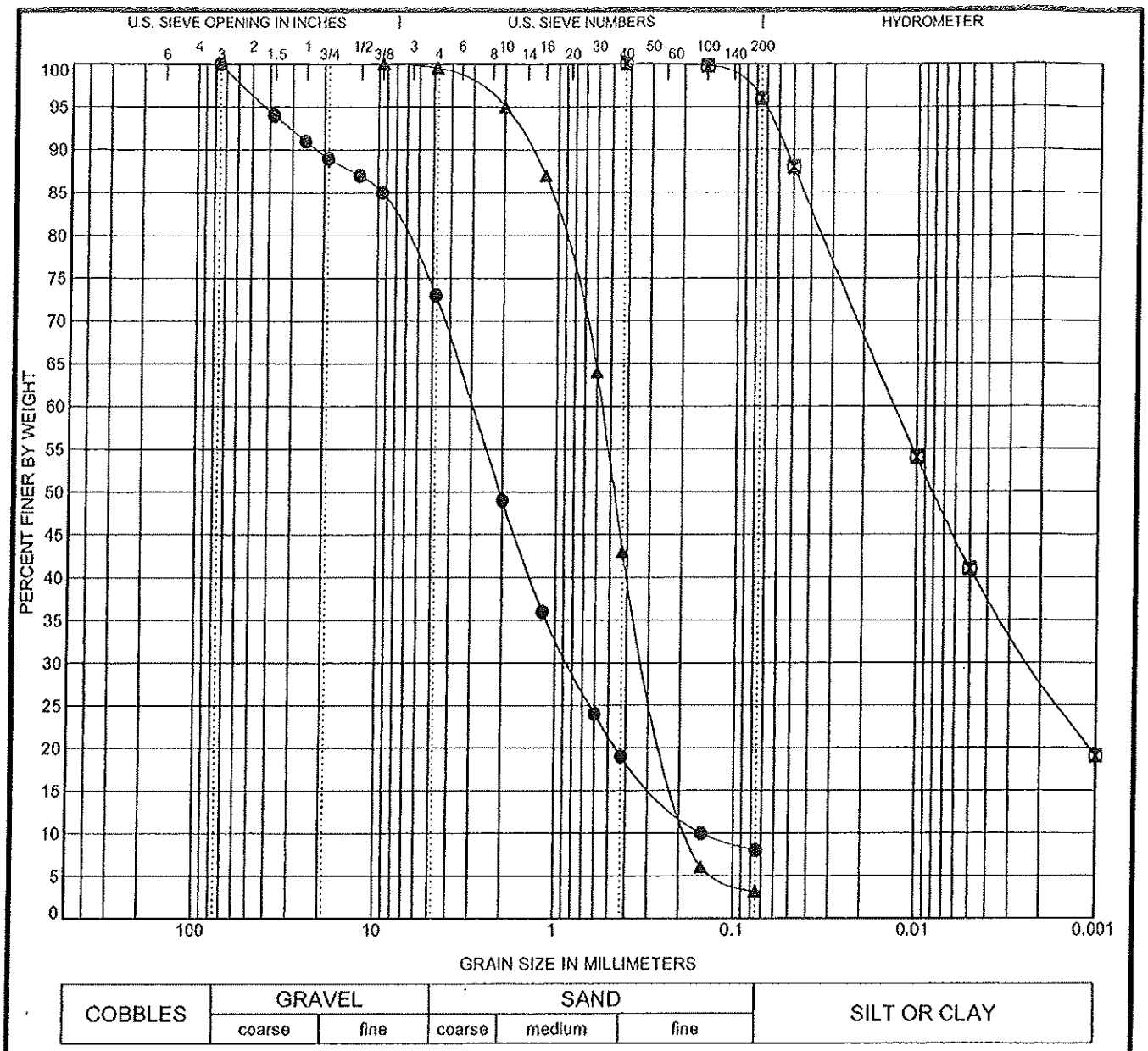
BORING LOGS **FIGURE 4-5**

Project: Albeni Tank & Utility Crossing
Location: Old Town, Idaho
Number: S10030

LOGS WITHOUT WELL WITH TESTS BORING LOGS.GPJ BUDINGER.GDT 4/1/10



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	# / Depth		Lab #	Classification	LL	PL	PI	Cc	Cu
●	2	8.0		WELL-GRADED SAND with SILT and GRAVEL(SW-SM)	NP	NP	NP	1.58	19.92
⊠	5	5.0		SILTY CLAY(CL-ML)	28	22	6		
▲	5	20.0		POORLY GRADED SAND(SP)				0.92	3.35

	# / Depth		Lab #	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	2	8.0		76.2	2.987	0.841	0.15	27.2	64.7	8.0	
⊠	5	5.0		0.425	0.013	0.002		0.0	4.0	96.0	
▲	5	20.0		9.5	0.562	0.295	0.168	0.6	96.2	3.2	

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GRAIN SIZE DISTRIBUTION RESULTS

Project: Albeni Tank & Utility Crossing

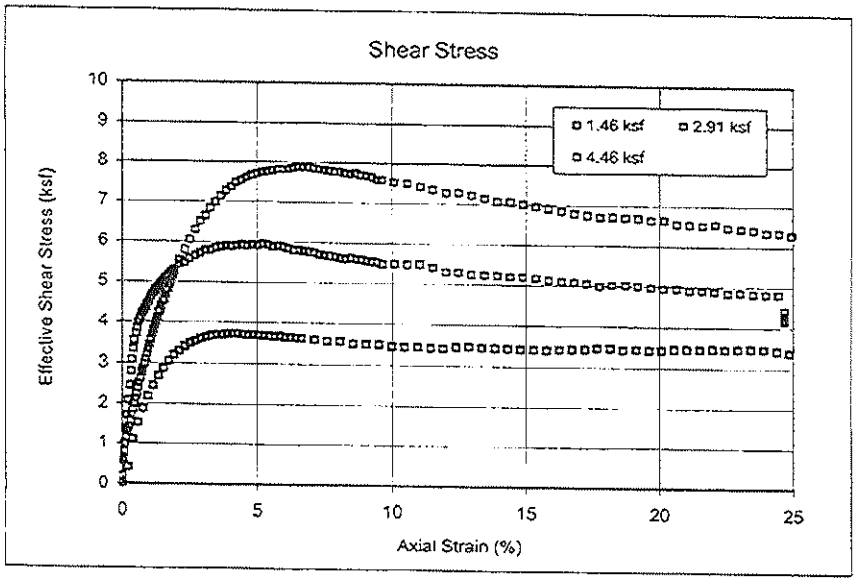
Location: Old Town, Idaho

Number: S10030

FIGURE 5

US_GRAIN_SIZE_BORING LOGS.GPJ BUDINGER.GDT 4/1/10

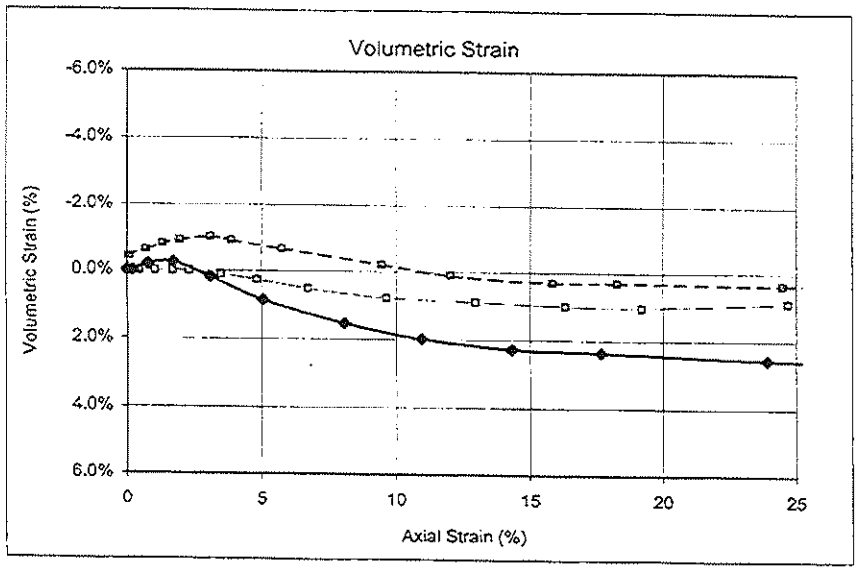
Report of CU Triaxial Shear Test

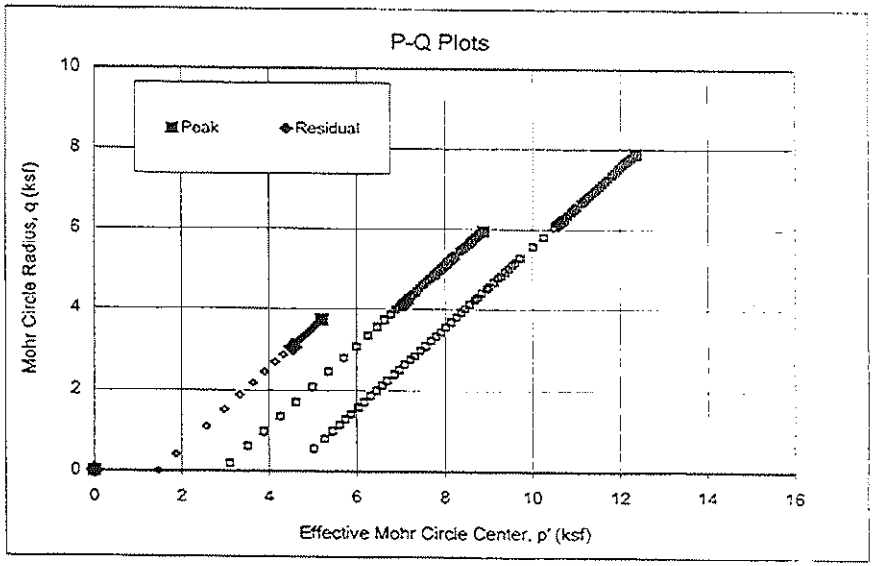


Remolded/shear rate 20%/hour	1.46 ksf	2.91 ksf	4.46 ksf
Initial dry unit weight (pcf)	115.4	115.6	114.8
Initial Wc (%)	13.2%	13.2%	13.2%
Final dry unit weight (pcf)	113.0	112.0	114.5
Final Wc (%)	15.0%	14.0%	12.7%

Consolidation Stress (ksf)	Peak Failure Stress p (ksf)	Peak Failure Stress q (ksf)	Residual Failure Stress p (ksf)	Residual Failure Stress q (ksf)
1.46	5.21	3.73	4.55	3.07
2.91	8.87	5.94	7.10	4.16
4.46	12.35	7.89	10.62	6.16

Above values are effective stresses





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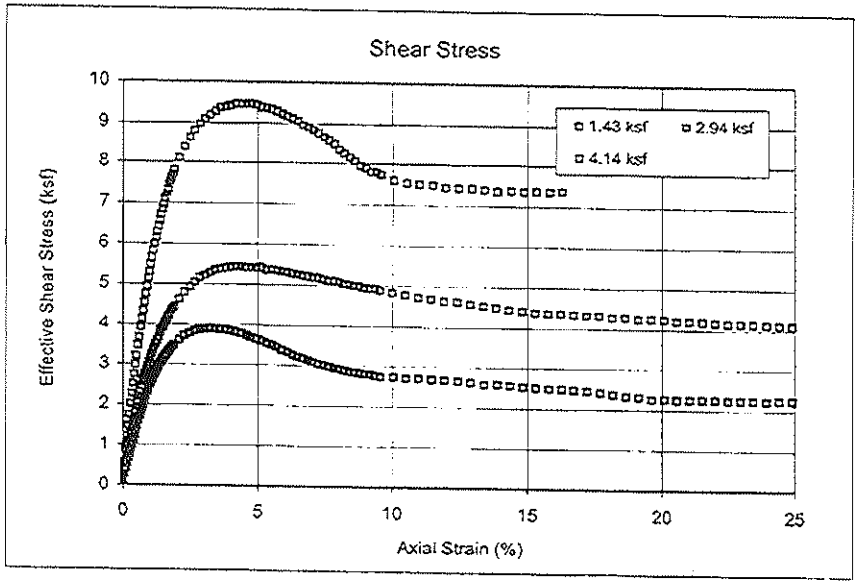
TRIAXIAL SHEAR TEST RESULTS
Project: Albeni Tank Utility Crossing
Location: Old Town, Idaho
Number: S10030

Figure 6-1

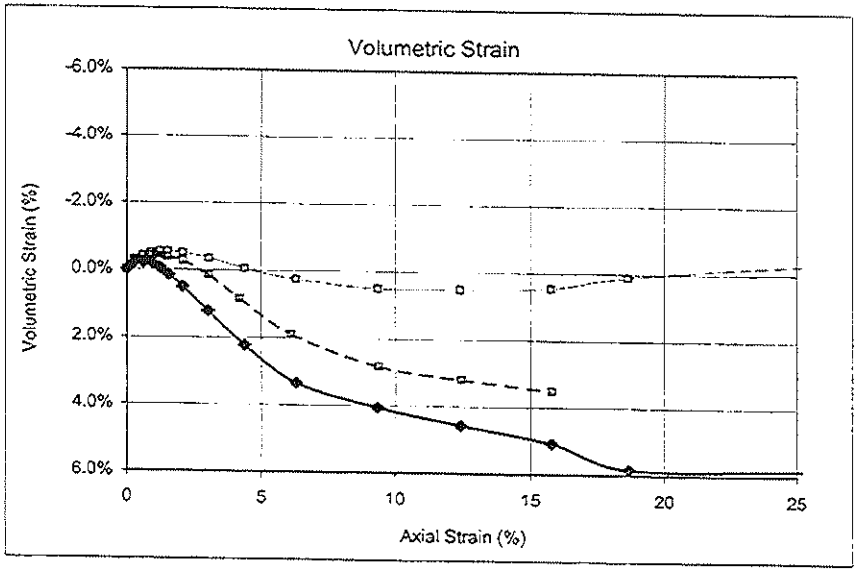
Report of CU Triaxial Shear Test

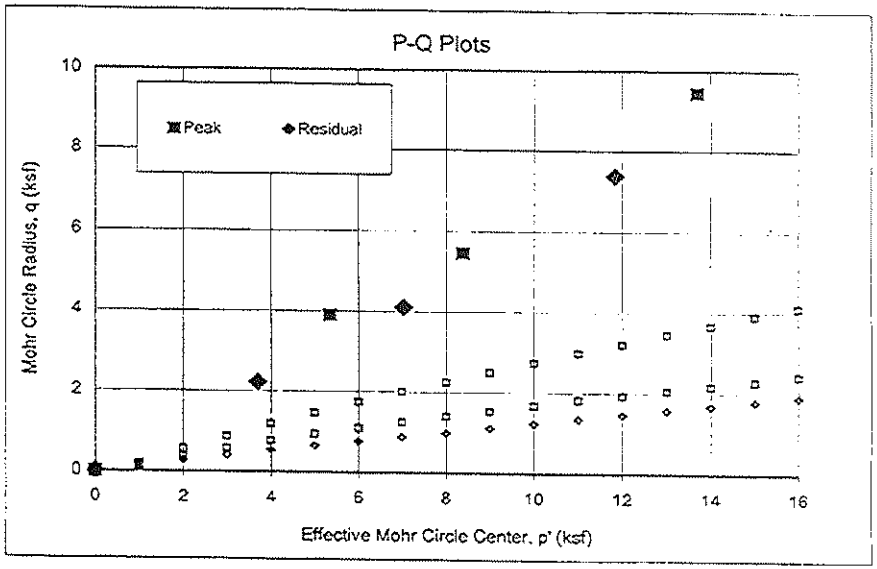


Remolded/shear rate 20%/hour	1.43 ksf	2.94 ksf	4.14 ksf
Initial dry unit weight (pcf)	109.1	105.9	110.9
Initial Wc (%)	15.2%	16.8%	11.9%
Final dry unit weight (pcf)	109.0	105.7	108.9
Final Wc (%)	17.9%	19.5%	17.7%

Consolidation Stress (ksf)	Peak Failure Stress p (ksf)	Peak Failure Stress q (ksf)	Residual Failure Stress p (ksf)	Residual Failure Stress q (ksf)
1.43	5.35	3.91	3.70	2.22
2.94	8.39	5.45	7.04	4.10
4.14	13.70	9.46	11.84	7.37

Above values are effective stresses





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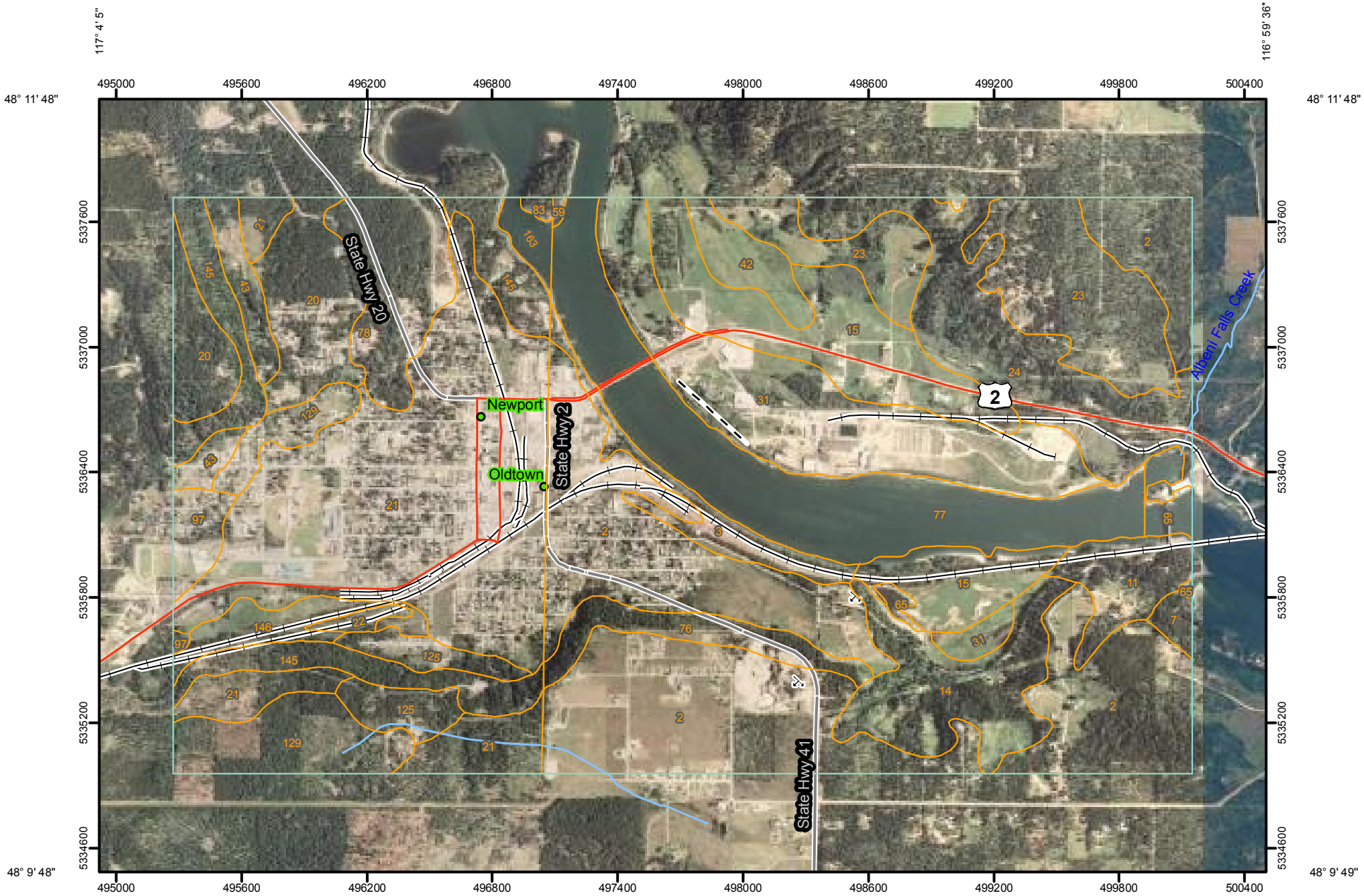
TRIAXIAL SHEAR TEST RESULTS
Project: Albeni Tank Utility Crossing
Location: Old Town, Idaho
Number: S10030

Figure 6-2

Appendix D-5
Soil Information

Natural Resources Conservation Service Albeni Area Soil Survey

James A. Sewell & Associates, LLC



Map Scale: 1:26,500 if printed on A size (8.5" x 11") sheet.

N

Meters: 0, 350, 700, 1,400, 2,100

Feet: 0, 1,000, 2,000, 4,000, 6,000

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Units

Special Point Features

Blowout

Borrow Pit

Clay Spot

Closed Depression

Gravel Pit

Gravelly Spot

Landfill

Lava Flow

Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Sodic Spot

Spoil Area

Stony Spot

Very Stony Spot

Wet Spot

Other

Special Line Features

Gully

Short Steep Slope

Other

Political Features

Cities

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

MAP INFORMATION

Map Scale: 1:26,500 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: UTM Zone 11N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Bonner County Area, Idaho, Parts of Bonner and Boundary Counties
Survey Area Data: Version 6, Jan 31, 2008

Soil Survey Area: Pend Oreille County Area, Washington
Survey Area Data: Version 7, Jun 15, 2009

Your area of interest (AOI) includes more than one soil survey area. These survey areas may have been mapped at different scales, with a different land use in mind, at different times, or at different levels of detail. This may result in map unit symbols, soil properties, and interpretations that do not completely agree across soil survey area boundaries.

Date(s) aerial images were photographed: 7/2/2006

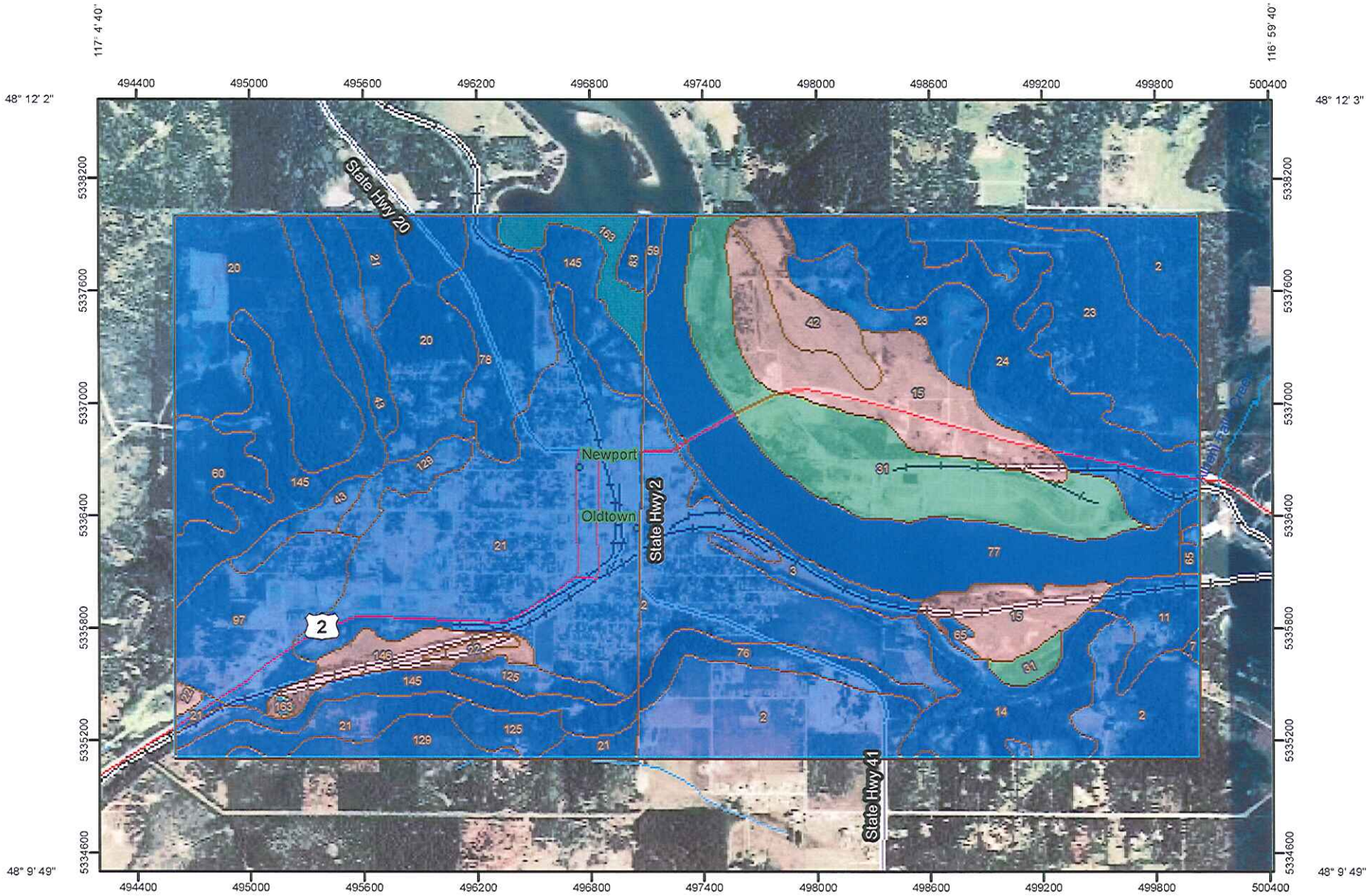
The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Bonner County Area, Idaho, Parts of Bonner and Boundary Counties (ID604)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
2	Bonner gravelly silt loam, 0 to 4 percent slopes	631.8	19.0%
3	Bonner gravelly silt loam, 30 to 65 percent slopes	49.1	1.5%
7	Cabinet silt loam, 12 to 30 percent slopes	10.5	0.3%
11	Dufort-Rock outcrop complex, 5 to 45 percent slopes	54.5	1.6%
14	Haploxeralfs and Xerochrepts, 30 to 55 percent slopes	127.6	3.8%
15	Hoodoo silt loam, 0 to 1 percent slopes	213.9	6.4%
23	Kootenai gravelly silt loam, 0 to 4 percent slopes	196.7	5.9%
24	Kootenai gravelly silt loam, 20 to 55 percent slopes	187.4	5.6%
31	Mission silt loam, 0 to 2 percent slopes	246.2	7.4%
42	Pywell-Hoodoo complex, 0 to 1 percent slopes	38.5	1.2%
59	Vassar-Moscow association, 35 to 65 percent slopes	1.7	0.0%
65	Water	23.2	0.7%
76	Typic Xerorthents, 30 to 65 percent slopes	53.4	1.6%
77	Kegel loam	272.8	8.2%
Subtotals for Soil Survey Area		**2,107.3**	**63.3%**
Totals for Area of Interest		**3,327.6**	**100.0%**

Pend Oreille County Area, Washington (WA651)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
20	Bonner silt loam, 0 to 10 percent slopes	135.7	4.1%
21	Bonner gravelly silt loam, 0 to 10 percent slopes	541.3	16.3%
22	Borosaprists, ponded	8.3	0.2%
43	Dufort silt loam, 0 to 15 percent slopes	42.3	1.3%
78	Mobate-Rock outcrop complex, 40 to 65 percent slopes	96.5	2.9%
83	Moscow-Rock outcrop complex, 40 to 65 percent slopes	3.3	0.1%
97	Orwig sandy loam, 0 to 20 percent slopes	28.1	0.8%
125	Sacheen loamy fine sand, 5 to 15 percent slopes	54.6	1.6%
129	Scotia fine sandy loam, 7 to 15 percent slopes	112.8	3.4%
145	Typic Xerorthents, 30 to 65 percent slopes	140.0	4.2%
146	Uncas muck	41.8	1.3%
163	Water	15.4	0.5%
Subtotals for Soil Survey Area		**1,220.3**	**36.7%**
Totals for Area of Interest		**3,327.6**	**100.0%**

Hydric Rating by Map Unit—Bonner County Area, Idaho, Parts of Bonner and Boundary Counties; and Pend Oreille County Area, Washington



MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Units

Soil Ratings

- All Hydric
- Partially Hydric
- Not Hydric
- Unknown Hydric
- Not rated or not available

Political Features

- Cities

Water Features

- Oceans
- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

MAP INFORMATION

Map Scale: 1:29,500 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: UTM Zone 11N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Bonner County Area, Idaho, Parts of Bonner and Boundary Counties
Survey Area Data: Version 6, Jan 31, 2008

Soil Survey Area: Pend Oreille County Area, Washington
Survey Area Data: Version 7, Jun 15, 2009

Your area of interest (AOI) includes more than one soil survey area. These survey areas may have been mapped at different scales, with a different land use in mind, at different times, or at different levels of detail. This may result in map unit symbols, soil properties, and interpretations that do not completely agree across soil survey area boundaries.

Date(s) aerial images were photographed: 7/2/2006

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydric Rating by Map Unit

Hydric Rating by Map Unit— Summary by Map Unit — Bonner County Area, Idaho, Parts of Bonner and Boundary Counties				
Map unit symbol	**Map unit name**	**Rating**	**Acres in AOI**	**Percent of AOI**
2	Bonner gravelly silt loam, 0 to 4 percent slopes	Not Hydric	525.4	13.5%
3	Bonner gravelly silt loam, 30 to 65 percent slopes	Not Hydric	49.1	1.3%
7	Cabinet silt loam, 12 to 30 percent slopes	Not Hydric	2.4	0.1%
11	Dufort-Rock outcrop complex, 5 to 45 percent slopes	Not Hydric	46.6	1.2%
14	Haploxeralfs and Xerochrepts, 30 to 55 percent slopes	Not Hydric	116.9	3.0%
15	Hoodoo silt loam, 0 to 1 percent slopes	All Hydric	220.5	5.7%
23	Kootenai gravelly silt loam, 0 to 4 percent slopes	Not Hydric	257.8	6.6%
24	Kootenai gravelly silt loam, 20 to 55 percent slopes	Not Hydric	224.3	5.8%
31	Mission silt loam, 0 to 2 percent slopes	Partially Hydric	261.0	6.7%
42	Pywell-Hoodoo complex, 0 to 1 percent slopes	All Hydric	54.4	1.4%
59	Vassar-Moscow association, 35 to 65 percent slopes	Not Hydric	7.8	0.2%
65	Water	Not Hydric	12.6	0.3%
76	Typic Xerorthents, 30 to 65 percent slopes	Not Hydric	53.4	1.4%
77	Kegel loam	Not Hydric	283.8	7.3%
Subtotals for Soil Survey Area			**2,116.0**	**54.5%**
Totals for Area of Interest			**3,885.8**	**100.0%**

Hydric Rating by Map Unit— Summary by Map Unit — Pend Oreille County Area, Washington				
Map unit symbol	**Map unit name**	**Rating**	**Acres in AOI**	**Percent of AOI**
20	Bonner silt loam, 0 to 10 percent slopes	Not Hydric	316.3	8.1%
21	Bonner gravelly silt loam, 0 to 10 percent slopes	Not Hydric	562.2	14.5%
22	Borosaprists, ponded	All Hydric	12.9	0.3%
43	Dufort silt loam, 0 to 15 percent slopes	Not Hydric	65.3	1.7%
60	Kaniksu sandy loam, 0 to 15 percent slopes	Not Hydric	52.2	1.3%
78	Mobate-Rock outcrop complex, 40 to 65 percent slopes	Not Hydric	115.9	3.0%
83	Moscow-Rock outcrop complex, 40 to 65 percent slopes	Not Hydric	10.7	0.3%

Hydric Rating by Map Unit— Summary by Map Unit — Pend Oreille County Area, Washington				
Map unit symbol	**Map unit name**	**Rating**	**Acres in AOI**	**Percent of AOI**
97	Orwig sandy loam, 0 to 20 percent slopes	Not Hydric	142.8	3.7%
125	Sacheen loamy fine sand, 5 to 15 percent slopes	Not Hydric	54.5	1.4%
129	Scotia fine sandy loam, 7 to 15 percent slopes	Not Hydric	72.8	1.9%
145	Typic Xerorthents, 30 to 65 percent slopes	Not Hydric	275.0	7.1%
146	Uncas muck	All Hydric	46.6	1.2%
163	Water	Unknown Hydric	42.7	1.1%
Subtotals for Soil Survey Area			**1,769.7**	**45.5%**
Totals for Area of Interest			**3,885.8**	**100.0%**

Description

This rating indicates the proportion of map units that meets the criteria for hydric soils. Map units are composed of one or more map unit components or soil types, each of which is rated as hydric soil or not hydric. Map units that are made up dominantly of hydric soils may have small areas of minor nonhydric components in the higher positions on the landform, and map units that are made up dominantly of nonhydric soils may have small areas of minor hydric components in the lower positions on the landform. Each map unit is designated as "all hydric," "partially hydric," "not hydric," or "unknown hydric," depending on the rating of its respective components.

"All hydric" means that all components listed for a given map unit are rated as being hydric, while "not hydric" means that all components are rated as not hydric. "Partially hydric" means that at least one component of the map unit is rated as hydric, and at least one component is rated as not hydric. "Unknown hydric" indicates that at least one component is not rated so a definitive rating for the map unit cannot be made.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

References:

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18.

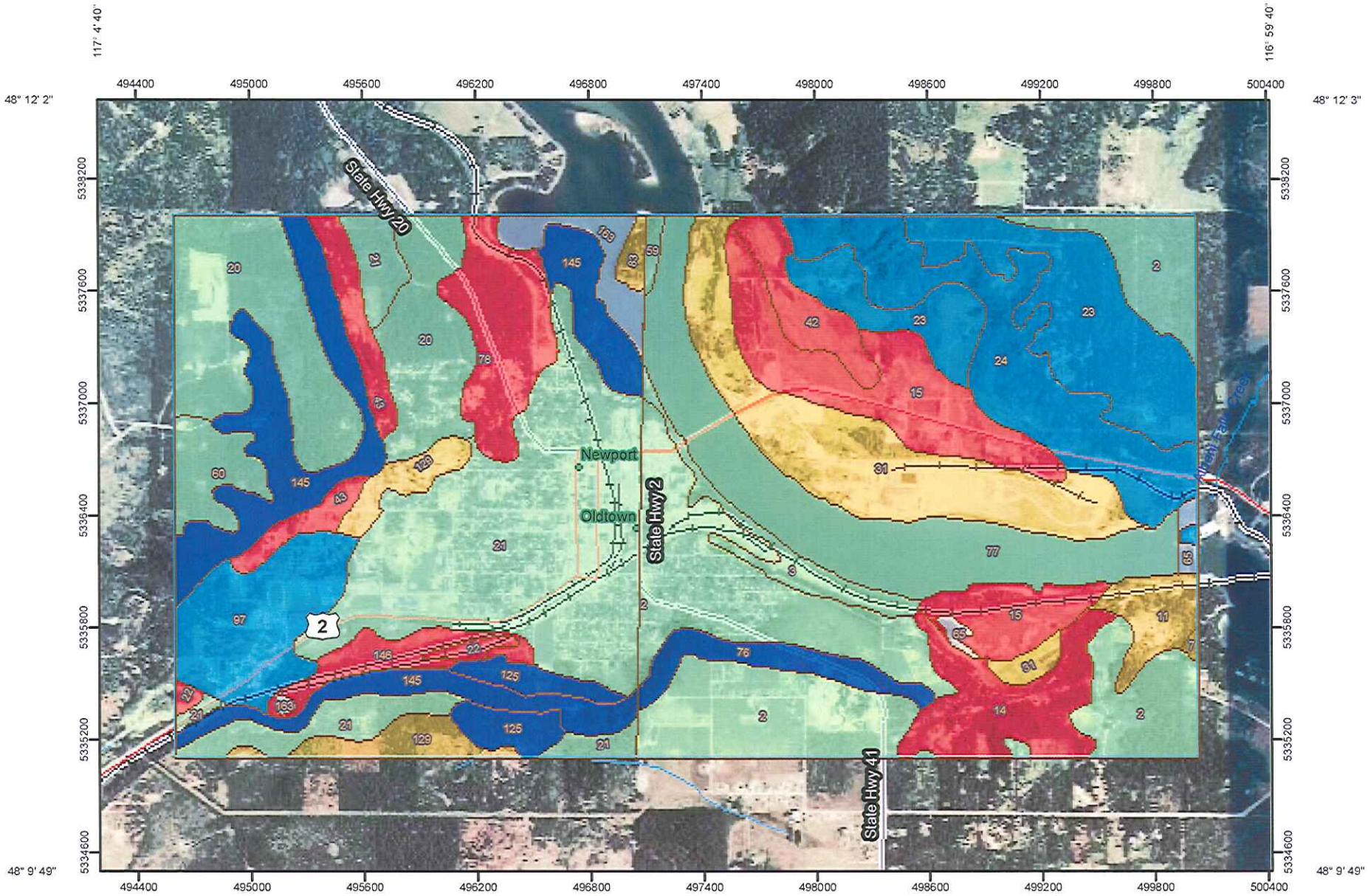
Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.

Soil Survey Staff. 2006. Keys to soil taxonomy. 10th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.

Rating Options

Aggregation Method: Absence/Presence

Tie-break Rule: Lower


117° 4' 40"
116° 59' 40"
48° 12' 2"
48° 12' 3"
48° 9' 49"
494400
495000
495600
496200
496800
497400
498000
498600
499200
499800
500400
5338200
5337600
5337000
5336400
5335800
5335200
5334600
State Hwy 20
State Hwy 2
State Hwy 41
Newport
Oldtown
2
Map Scale: 1:29,500 if printed on A size (8.5" x 11") sheet.
N
Meters
0
400
800
1,600
2,400
Feet
0
1,500
3,000
6,000
9,000

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Units

Soil Ratings

<= 12.1319

> 12.1319 AND <= 19.8101

> 19.8101 AND <= 38.5494

> 38.5494 AND <= 62.5165

> 62.5165 AND <= 108.1538

Not rated or not available

Political Features

Cities

Water Features

Oceans

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

MAP INFORMATION

Map Scale: 1:29,500 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: UTM Zone 11N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Bonner County Area, Idaho, Parts of Bonner and Boundary Counties
Survey Area Data: Version 6, Jan 31, 2008

Soil Survey Area: Pend Oreille County Area, Washington
Survey Area Data: Version 7, Jun 15, 2009

Your area of interest (AOI) includes more than one soil survey area. These survey areas may have been mapped at different scales, with a different land use in mind, at different times, or at different levels of detail. This may result in map unit symbols, soil properties, and interpretations that do not completely agree across soil survey area boundaries.

Date(s) aerial images were photographed: 7/2/2006

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Saturated Hydraulic Conductivity (Ksat)

Saturated Hydraulic Conductivity (Ksat)— Summary by Map Unit — Bonner County Area, Idaho, Parts of Bonner and Boundary Counties				
Map unit symbol	**Map unit name**	**Rating (micrometers per second)**	**Acres in AOI**	**Percent of AOI**
2	Bonner gravelly silt loam, 0 to 4 percent slopes	37.9121	525.4	13.5%
3	Bonner gravelly silt loam, 30 to 65 percent slopes	37.9121	49.1	1.3%
7	Cabinet silt loam, 12 to 30 percent slopes	15.9175	2.4	0.1%
11	Dufort-Rock outcrop complex, 5 to 45 percent slopes	15.2637	46.6	1.2%
14	Haploxeralfs and Xerochrepts, 30 to 55 percent slopes	7.6034	116.9	3.0%
15	Hoodoo silt loam, 0 to 1 percent slopes	9.0000	220.5	5.7%
23	Kootenai gravelly silt loam, 0 to 4 percent slopes	62.5165	257.8	6.6%
24	Kootenai gravelly silt loam, 20 to 55 percent slopes	62.5165	224.3	5.8%
31	Mission silt loam, 0 to 2 percent slopes	15.9321	261.0	6.7%
42	Pywell-Hoodoo complex, 0 to 1 percent slopes	9.0000	54.4	1.4%
59	Vassar-Moscow association, 35 to 65 percent slopes	28.5165	7.8	0.2%
65	Water		12.6	0.3%
76	Typic Xerorthents, 30 to 65 percent slopes	103.7473	53.4	1.4%
77	Kegel loam	31.8022	283.8	7.3%
Subtotals for Soil Survey Area			**2,116.0**	**54.5%**
Totals for Area of Interest			**3,885.8**	**100.0%**

Saturated Hydraulic Conductivity (Ksat)— Summary by Map Unit — Pend Oreille County Area, Washington				
Map unit symbol	**Map unit name**	**Rating (micrometers per second)**	**Acres in AOI**	**Percent of AOI**
20	Bonner silt loam, 0 to 10 percent slopes	36.3626	316.3	8.1%
21	Bonner gravelly silt loam, 0 to 10 percent slopes	36.3626	562.2	14.5%
22	Borosaprists, ponded	9.0000	12.9	0.3%
43	Dufort silt loam, 0 to 15 percent slopes	12.1319	65.3	1.7%
60	Kaniksu sandy loam, 0 to 15 percent slopes	38.5494	52.2	1.3%

Saturated Hydraulic Conductivity (Ksat)— Summary by Map Unit — Pend Oreille County Area, Washington				
Map unit symbol	**Map unit name**	**Rating (micrometers per second)**	**Acres in AOI**	**Percent of AOI**
78	Mobate-Rock outcrop complex, 40 to 65 percent slopes	11.0690	115.9	3.0%
83	Moscow-Rock outcrop complex, 40 to 65 percent slopes	19.8101	10.7	0.3%
97	Orwig sandy loam, 0 to 20 percent slopes	57.5604	142.8	3.7%
125	Sacheen loamy fine sand, 5 to 15 percent slopes	108.1538	54.5	1.4%
129	Scotia fine sandy loam, 7 to 15 percent slopes	13.3846	72.8	1.9%
145	Typic Xerorthents, 30 to 65 percent slopes	103.7473	275.0	7.1%
146	Uncas muck	9.0000	46.6	1.2%
163	Water		42.7	1.1%
Subtotals for Soil Survey Area			**1,769.7**	**45.5%**
Totals for Area of Interest			**3,885.8**	**100.0%**

Description

Saturated hydraulic conductivity (Ksat) refers to the ease with which pores in a saturated soil transmit water. The estimates are expressed in terms of micrometers per second. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Saturated hydraulic conductivity is considered in the design of soil drainage systems and septic tank absorption fields.

For each soil layer, this attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

The numeric Ksat values have been grouped according to standard Ksat class limits.

Rating Options

Units of Measure: micrometers per second

Aggregation Method: Dominant Component

Component Percent Cutoff: *None Specified*

Tie-break Rule: Fastest

Interpret Nulls as Zero: No

Layer Options: Depth Range

Top Depth: 0

Bottom Depth: 36

Units of Measure: Inches

Appendix D-6
Climate Data

Western Regional Climate Center Newport Data, DEQ North Idaho Air Quality Summary

James A. Sewell & Associates, LLC

NEWPORT, WASHINGTON (455844)

Period of Record Monthly Climate Summary

Period of Record : 10/1/1909 to 12/31/2010

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Average Max. Temperature (F)	31.6	38.3	48.2	59.3	68.7	75.5	85.2	84.2	73.3	58.2	40.9	32.9	58.0
Average Min. Temperature (F)	17.9	20.5	25.5	31.1	37.9	43.6	46.4	44.4	38.4	32.3	27.2	21.4	32.2
Average Total Precipitation (in.)	3.18	2.30	2.28	1.78	2.08	1.86	0.91	0.99	1.35	2.11	3.55	3.57	25.96
Average Total SnowFall (in.)	18.9	10.2	4.4	0.4	0.0	0.0	0.0	0.0	0.0	0.4	6.3	17.4	58.1
Average Snow Depth (in.)	10	10	5	0	0	0	0	0	0	0	1	5	3

Percent of possible observations for period of record.
Max. Temp.: 98.4% Min. Temp.: 98.3% Precipitation: 98.8% Snowfall: 99% Snow Depth: 95.8%
Check Station Metadata or Metadata graphics for more detail about data completeness.

Western Regional Climate Center, wrcc@dri.edu

PRIEST RIVER EXP STN, IDAHO (107386)

Period of Record Monthly Climate Summary

Period of Record : 2/ 1/1898 to 12/31/2010

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Average Max. Temperature (F)	30.6	37.0	45.6	57.1	66.8	73.5	82.6	81.7	71.0	55.7	39.1	31.7	56.0
Average Min. Temperature (F)	18.5	20.2	24.7	30.3	37.5	43.4	46.4	44.7	38.5	32.2	26.8	21.5	32.0
Average Total Precipitation (in.)	3.94	2.87	2.74	2.09	2.39	2.26	1.07	1.14	1.57	2.59	4.09	4.34	31.08
Average Total SnowFall (in.)	25.4	13.7	6.8	0.9	0.0	0.0	0.0	0.0	0.0	0.6	10.0	23.8	81.4
Average Snow Depth (in.)	16	18	11	1	0	0	0	0	0	0	2	8	5

Percent of possible observations for period of record.
Max. Temp.: 99.9% Min. Temp.: 99.8% Precipitation: 99.9% Snowfall: 99.8% Snow Depth: 99.2%
Check Station Metadata or Metadata graphics for more detail about data completeness.

Western Regional Climate Center, wrcc@dri.edu

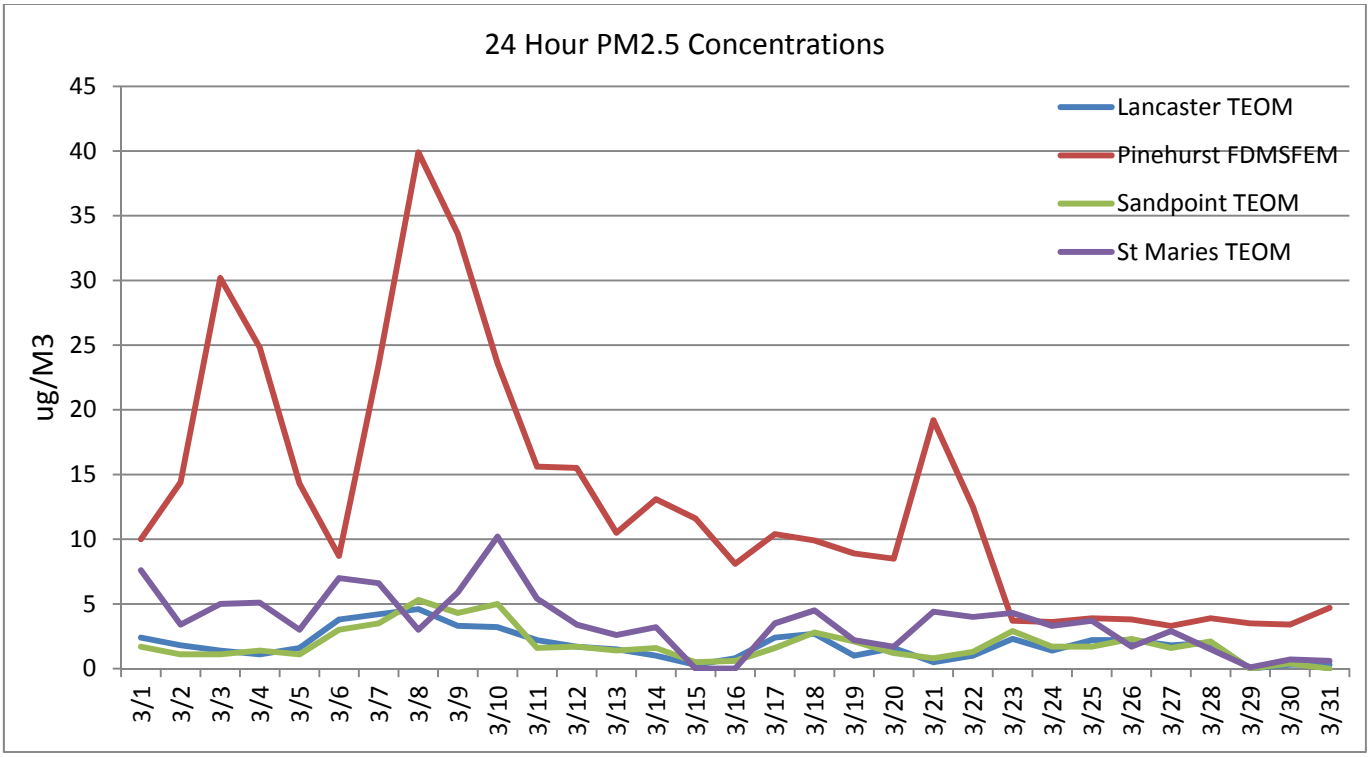
North Idaho Air Quality Summary – March 2012

This summary of North Idaho's air quality is compiled from the various air quality samplers located in the Department of Environmental Quality's Coeur d'Alene Region for the month of March 2012.

The Coeur d'Alene Regional Network encompasses the counties of Boundary, Bonner, Kootenai, Shoshone, and Benewah. The data presented in this report is considered preliminary data and has not been completely evaluated for all quality assurance requirements.

PM2.5 CONTINUOUS DATA

The graph below displays the average daily 24-hour $PM_{2.5}$ values for the month and is expressed in micrograms per cubic meter, ($\mu g/m^3$). These values were calculated by averaging hourly values midnight to midnight from the agency's $PM_{2.5}$ TEOM samplers located in the Cities of Pinehurst, Sandpoint, and St. Maries and on Lancaster Road in Kootenai County.



The table below shows the maximum 24 hour values calculated from continuous TEOM monitoring for this reporting period. The National Ambient Air Quality Standard (NAAQS) for PM2.5 is 35 µg/m^3 for a 24 hour average. Recently, the U.S. EPA approved the TEOM-FDMS as a Federal Equivalent Method (FEM) for the collection and reporting of PM2.5 data. In January 2011 the Coeur d'Alene Regional Office (CRO) began using a TEOM-FDMS equivalent method for NAAQS reporting from the Pinehurst monitoring station. The CRO still uses Federal Reference Method (FRM) filter based sample measurements at the St. Maries monitoring site to determine NAAQS compliance. Depiction of preliminary continuous monitoring data in the table below is for reporting purposes only.

Region	Highest Reading	Date
Kootenai TEOM	**4.6**	**March 8**
Pinehurst TEOM-FDMS	**39.9 ***	**March 8**
Sandpoint TEOM	**5.3**	**March 8**
St. Maries TEOM	**10.2**	**March 10**

***** Value is suspect.

The identified value above is suspect because the monitor experienced operational errors for 25% of the day this high reading occurred. The daily concentration resulting from the collocated filter sampler (see below) indicated the TEOM-FDMS over-reported the daily concentration by nearly 36%. This data will be flagged.

PM2.5 FEDERAL REFERENCE METHOD (FRM) DATA

At this time the Coeur d'Alene Regional Office of Idaho DEQ uses the Federal Reference Method Sampler (filter based) measurements for NAAQS compliance determination at the St. Maries monitoring site. This method requires that 75% of available data be collected per quarter. Other filter processing requirements are applicable to this method. The Coeur d'Alene Regional Office's collection efficiency rate for March is shown in the table below. The FRM filters at the Pinehurst site are used for quality assurance purposes.

March FRM filter recovery Efficiency

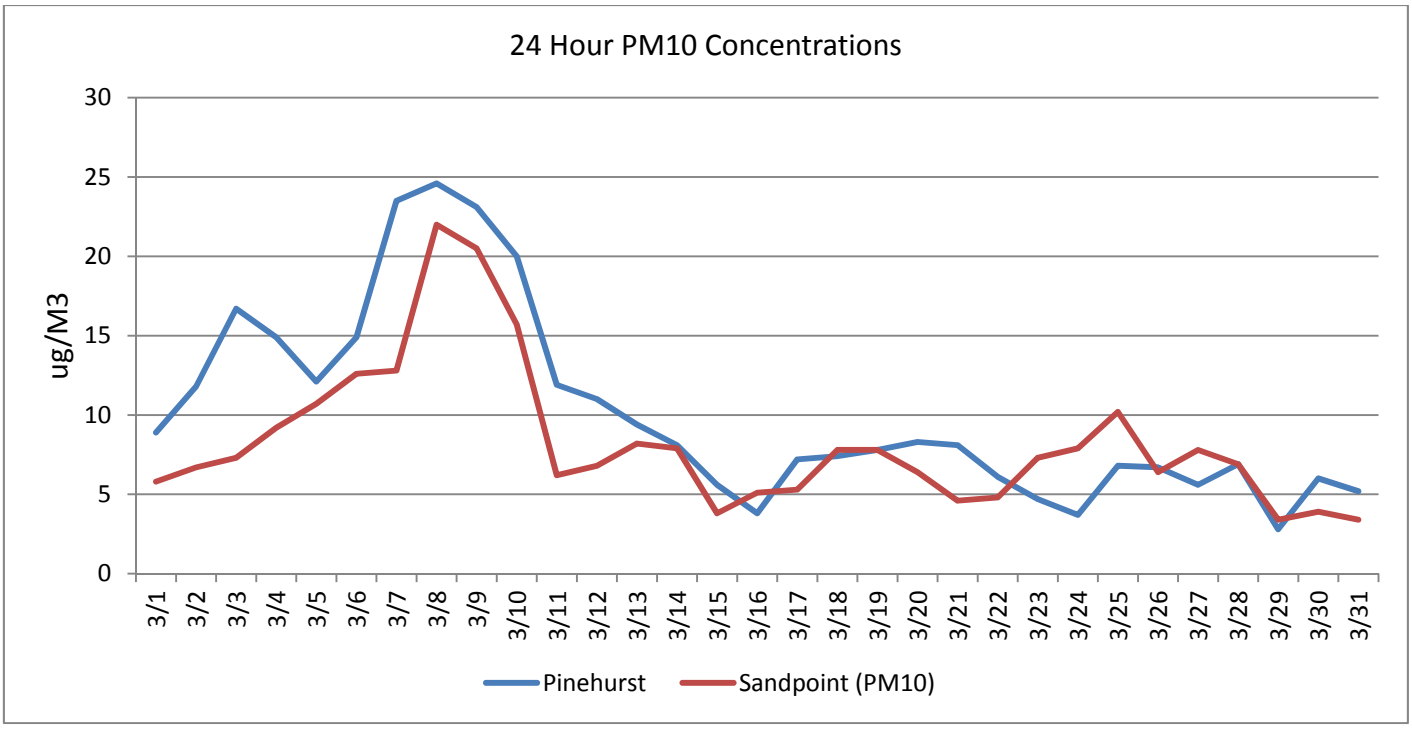
Site	Sample Days	Valid Samples	Collection Percentage
Pinehurst *	**5**	**5**	**100%**
Pinehurst Precision *	**5**	**5**	**100%**
St. Maries	**5**	**5**	**100%**

***** Monitors missed the scheduled run day on 3/4/12 but operated on 3/8/12 as a makeup run day

With filter based FRMs make-up runs are allowed for missed scheduled runs as long as they occur before the next scheduled run day. In the above case the monitors were on a one in six day schedule. That means that the missed run on 3/4/12 could be made up before 3/10/12. The monitors ran on 3/8/12.

PM10 CONTINUOUS DATA

The graph below shows the 24 hour values for PM10. No apparent exceedances of the 150 µg/m^3 for a 24 hour average standard have occurred over this reporting period.



OZONE DATA

Ozone monitoring in the Coeur d'Alene has been discontinued starting with the 2012 season. The design values (3 year average of annual 4th highest daily value) in Kootenai County have been declining for the past 5 years with the 2011season having a value of 0.057 ppm. Because of this trend, and the fact that last year's design value was only 76% of the NAAQS, DEQ decided to use its limited resources to focus on other, higher priority monitoring efforts. DEQ will be observing ozone concentrations in and around Spokane, Washington to determine if regional ozone levels worsen. Should conditions warrant, ozone monitoring will resume at the Lancaster site.

NETWORK INFORMATION

The table below summarizes all active and inactive air quality samplers located within the North Idaho area during the month of March 2012.

Site	Monitor	Type	Comments	Current Status	Data Completeness
Lancaster / Rathdrum Prairie	R&P 1400A TEOM PM2.5	Continuous	.	**Active**	**99%**
Lancaster / Rathdrum Prairie	Meteorological Tower	Continuous		**Active**	**99%**
St. Maries	R&P 1400AB TEOM PM2.5	Continuous		**Active**	**99%**
St. Maries	Thermo Model 2025 FRM PM2.5	Filter		**Active**	**100%**
Pinehurst	R&P 8500 FDMS TEOM PM2.5	Continuous		**Active**	**94%**
Pinehurst	Thermo Model 2025 FRM PM2.5	Filter		**Active**	**100%**
Pinehurst	R & P Model 2025 FRM PM2.5	Filter	Precision	**Active**	**100%**
Pinehurst	R&P 1400AB TEOM PM10	Continuous		**Active**	**99%**
Pinehurst	Meteorological Tower	Continuous		**Active**	**99%**
Sandpoint U of I Extension Office	Meteorological Tower	Continuous		**Active**	**99%**
Sandpoint USFS	R&P 1400A TEOM PM2.5	Continuous		**Active**	**99%**
Sandpoint USFS	R&P 1400AB TEOM PM10	Continuous		**Active**	**99%**
Lakes Management Plan	Meteorological Tower	Continuous		**Active**	**91%**
Porthill International Border Site	Radiance Research Nephelometer /wind speed & direction	Continuous	CRB Seasonal	**Inactive**	
Athol	Radiance Research Nephelometer	Continuous	CRB Seasonal	**Inactive**	
Mt. Hall School	Radiance Research Nephelometer/ wind speed & direction	Continuous	CRB Seasonal	**Inactive**	
Garwood Elementary	Radiance Research Nephelometer	Continuous	CRB Seasonal	**Inactive**	

During March, 13 of 13 active samplers achieved 75% or greater data completeness.

AIR QUALTY INDEX

The air quality index is a tool used to convey information to the public regarding local levels of air pollution and the associated health concerns. These levels are depicted in the table below.

Air Quality Index (AQI): Particle/Ozone Pollution

Index Values	Levels of Health Concern	Cautionary Statements
0-50	Good	None
51-100	Moderate	Unusually sensitive people should consider reducing prolonged or heavy exertion outdoors.
101-150	Unhealthy for Sensitive Groups	People with heart or lung disease, older adults, and children should reduce prolonged or heavy exertion outdoors.
151-200	Unhealthy	People with heart or lung disease, older adults, and children should avoid prolonged or heavy exertion outdoors. Everyone else should reduce prolonged or heavy exertion.
201-300	Very Unhealthy	People with heart or lung disease, older adults, and children should avoid all physical activity outdoors. Everyone else should avoid prolonged or heavy exertion.
301-500	Hazardous	People with heart or lung disease, older adults, and children should remain indoors and keep activity levels low. Everyone else should avoid all physical activity outdoors.

Below is a table showing the total weekday Air Quality Index (AQI) values for each of the reporting cities located in North Idaho for this reporting month. Differences in totals were due to sampler down time.

March 2012

Coeur d'Alene	Pinehurst	Sandpoint	St. Maries
Green = 21	Green = 15	Green = 21	Green = 21
Yellow = 0	Yellow = 5	Yellow = 0	Yellow = 0
Orange = 0	Orange = 1	Orange = 0	Orange = 0

2012 YEAR TO DATE AQI TOTALS

Coeur d'Alene	Pinehurst	Sandpoint	St. Maries
Green = 58 (100%)	Green =34 (55%)	Green = 61 (100%)	Green = 58 (98%)
Yellow = 0	Yellow = 25 (40%)	Yellow = 0	Yellow = 1 (2%)
Orange = 0	Orange = 3 (5%)	Orange = 0	Orange = 0

For further information about air quality in Idaho and the northwest region visit the following sites on the Internet or contact Ralph Paul, Coeur d'Alene Region Airshed Coordinator, at 208-769-1422.

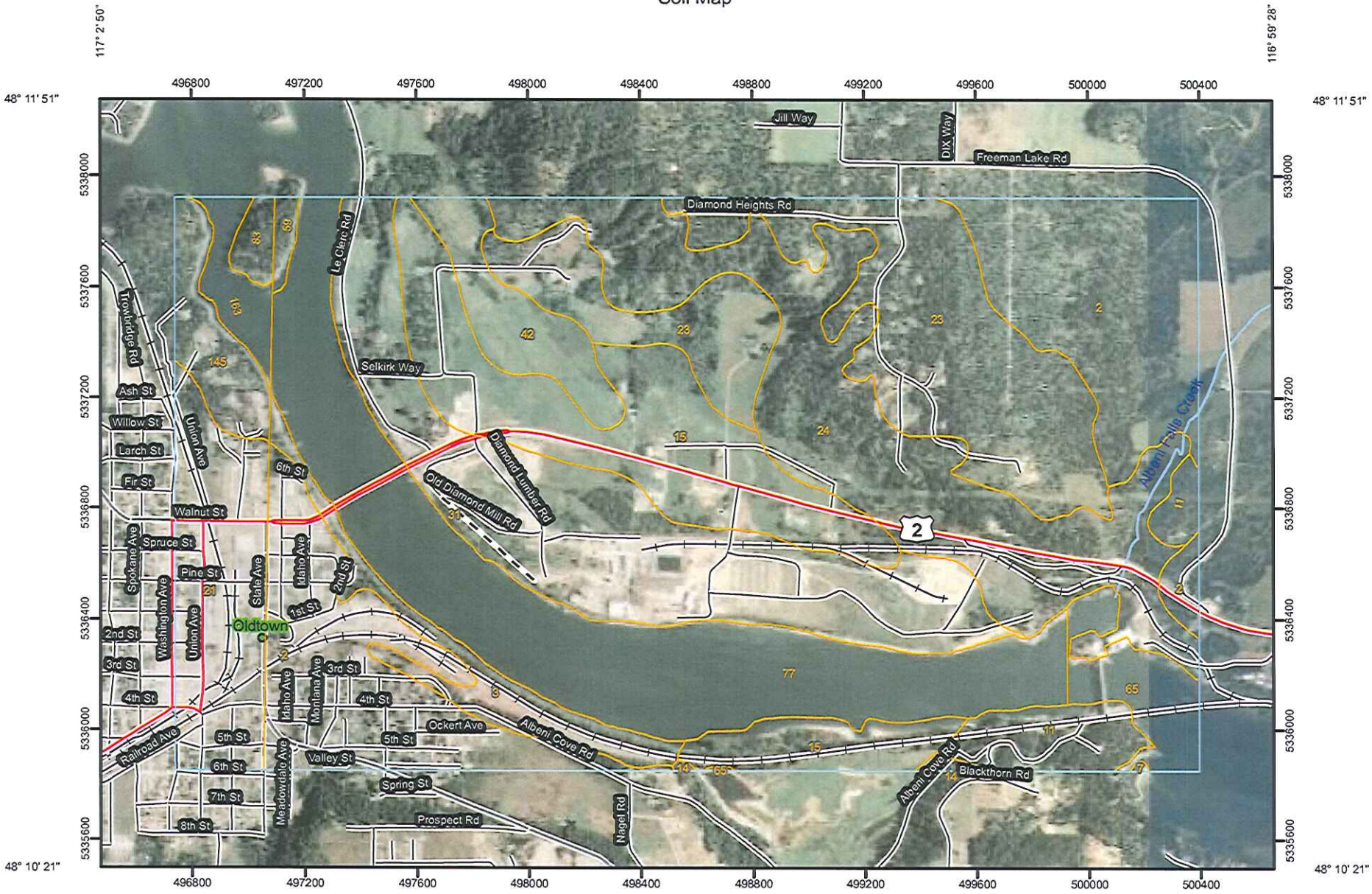
http://www.deq.idaho.gov/
http://www.deq.idaho.gov/daily-air-quality-reports-forecasts
www.airnow.gov/index.cfm?action=airnow.fcsummary&stateid=16

Appendix D-7
Soil Information

Natural Resources Conservation Service Albeni Area Farmland and Rangeland Classification

James A. Sewell & Associates, LLC

Custom Soil Resource Report
Soil Map



Map Scale: 1:19,900 if printed on A size (8.5" x 11") sheet.

N

Meters: 0, 250, 500, 1,000, 1,500

Feet: 0, 1,000, 2,000, 4,000, 6,000

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Units

Special Point Features

- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other

Special Line Features

- Gully
- Short Steep Slope
- Other

Political Features

- Cities

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

MAP INFORMATION

Map Scale: 1:19,900 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: UTM Zone 11N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Bonner County Area, Idaho, Parts of Bonner and Boundary Counties
Survey Area Data: Version 7, Aug 7, 2012

Soil Survey Area: Pend Oreille County Area, Washington
Survey Area Data: Version 9, Oct 2, 2012

Your area of interest (AOI) includes more than one soil survey area. These survey areas may have been mapped at different scales, with a different land use in mind, at different times, or at different levels of detail. This may result in map unit symbols, soil properties, and interpretations that do not completely agree across soil survey area boundaries.

Date(s) aerial images were photographed: 7/2/2006

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Bonner County Area, Idaho, Parts of Bonner and Boundary Counties (ID604)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
2	Bonner gravelly silt loam, 0 to 4 percent slopes	288.7	15.4%
3	Bonner gravelly silt loam, 30 to 65 percent slopes	49.1	2.6%
7	Cabinet silt loam, 12 to 30 percent slopes	0.4	0.0%
11	Dufort-Rock outcrop complex, 5 to 45 percent slopes	46.2	2.5%
14	Haploxeralfs and Xerochrepts, 30 to 55 percent slopes	2.6	0.1%
15	Hoodoo silt loam, 0 to 1 percent slopes	197.5	10.5%
23	Kootenai gravelly silt loam, 0 to 4 percent slopes	246.7	13.2%
24	Kootenai gravelly silt loam, 20 to 55 percent slopes	252.0	13.5%
31	Mission silt loam, 0 to 2 percent slopes	242.4	12.9%
42	Pywell-Hoodoo complex, 0 to 1 percent slopes	49.0	2.6%
59	Vassar-Moscow association, 35 to 65 percent slopes	5.8	0.3%
65	Water	41.0	2.2%
77	Kegel loam	280.5	15.0%
Subtotals for Soil Survey Area		**1,701.8**	**90.9%**
Totals for Area of Interest		**1,872.8**	**100.0%**

Pend Oreille County Area, Washington (WA651)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
21	Bonner gravelly silt loam, 0 to 10 percent slopes	103.5	5.5%
83	Moscow-Rock outcrop complex, 40 to 65 percent slopes	9.4	0.5%
145	Typic Xerorthents, 30 to 65 percent slopes	36.8	2.0%
163	Water	21.4	1.1%
Subtotals for Soil Survey Area		**171.0**	**9.1%**
Totals for Area of Interest		**1,872.8**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic

class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical

or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Soil Information for All Uses

Soil Reports

The Soil Reports section includes various formatted tabular and narrative reports (tables) containing data for each selected soil map unit and each component of each unit. No aggregation of data has occurred as is done in reports in the Soil Properties and Qualities and Suitabilities and Limitations sections.

The reports contain soil interpretive information as well as basic soil properties and qualities. A description of each report (table) is included.

Land Classifications

This folder contains a collection of tabular reports that present a variety of soil groupings. The reports (tables) include all selected map units and components for each map unit. Land classifications are specified land use and management groupings that are assigned to soil areas because combinations of soil have similar behavior for specified practices. Most are based on soil properties and other factors that directly influence the specific use of the soil. Example classifications include ecological site classification, farmland classification, irrigated and nonirrigated land capability classification, and hydric rating.

Prime and other Important Farmlands (Prime Farmland)

This table lists the map units in the survey area that are considered important farmlands. Important farmlands consist of prime farmland, unique farmland, and farmland of statewide or local importance. This list does not constitute a recommendation for a particular land use.

In an effort to identify the extent and location of important farmlands, the Natural Resources Conservation Service, in cooperation with other interested Federal, State, and local government organizations, has inventoried land that can be used for the production of the Nation's food supply.

Prime farmland is of major importance in meeting the Nation's short- and long-range needs for food and fiber. Because the supply of high-quality farmland is limited, the U.S. Department of Agriculture recognizes that responsible levels of government, as well as individuals, should encourage and facilitate the wise use of our Nation's prime farmland.

Prime farmland, as defined by the U.S. Department of Agriculture, is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses. It could be cultivated land, pastureland, forestland, or other land, but it is not urban or built-up land or water areas. The soil quality, growing season, and moisture supply are those needed for the soil to economically produce sustained high yields of crops when proper management, including water management, and acceptable farming methods are applied. In general, prime farmland has an adequate and dependable supply of moisture from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, an acceptable salt and sodium content, and few or no rocks. The water supply is dependable and of adequate quality. Prime farmland is permeable to water and air. It is not excessively erodible or saturated with water for long periods, and it either is not frequently flooded during the growing season or is protected from flooding. Slope ranges mainly from 0 to 6 percent. More detailed information about the criteria for prime farmland is available at the local office of the Natural Resources Conservation Service.

For some of the soils identified in the table as prime farmland, measures that overcome a hazard or limitation, such as flooding, wetness, and droughtiness, are needed. Onsite evaluation is needed to determine whether or not the hazard or limitation has been overcome by corrective measures.

A recent trend in land use in some areas has been the loss of some prime farmland to industrial and urban uses. The loss of prime farmland to other uses puts pressure on marginal lands, which generally are more erodible, droughty, and less productive and cannot be easily cultivated.

Unique farmland is land other than prime farmland that is used for the production of specific high-value food and fiber crops, such as citrus, tree nuts, olives, cranberries, and other fruits and vegetables. It has the special combination of soil quality, growing season, moisture supply, temperature, humidity, air drainage, elevation, and aspect needed for the soil to economically produce sustainable high yields of these crops when properly managed. The water supply is dependable and of adequate quality. Nearness to markets is an additional consideration. Unique farmland is not based on national criteria. It commonly is in areas where there is a special microclimate, such as the wine country in California.

In some areas, land that does not meet the criteria for prime or unique farmland is considered to be *farmland of statewide importance* for the production of food, feed, fiber, forage, and oilseed crops. The criteria for defining and delineating farmland of statewide importance are determined by the appropriate State agencies. Generally, this land includes areas of soils that nearly meet the requirements for prime farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods. Some areas may produce as high a yield as prime farmland if conditions are favorable. Farmland of statewide importance may include tracts of land that have been designated for agriculture by State law.

In some areas that are not identified as having national or statewide importance, land is considered to be *farmland of local importance* for the production of food, feed, fiber, forage, and oilseed crops. This farmland is identified by the appropriate local agencies. Farmland of local importance may include tracts of land that have been designated for agriculture by local ordinance.

Report—Prime and other Important Farmlands (Prime Farmland)

Prime and other Important Farmlands– Bonner County Area, Idaho, Parts of Bonner and Boundary Counties		
Map Symbol	**Map Unit Name**	**Farmland Classification**
2	Bonner gravelly silt loam, 0 to 4 percent slopes	All areas are prime farmland
3	Bonner gravelly silt loam, 30 to 65 percent slopes	Not prime farmland
7	Cabinet silt loam, 12 to 30 percent slopes	Not prime farmland
11	Dufort-Rock outcrop complex, 5 to 45 percent slopes	Not prime farmland
14	Haploxeralfs and Xerochrepts, 30 to 55 percent slopes	Not prime farmland
15	Hoodoo silt loam, 0 to 1 percent slopes	Prime farmland if drained
23	Kootenai gravelly silt loam, 0 to 4 percent slopes	Prime farmland if irrigated
24	Kootenai gravelly silt loam, 20 to 55 percent slopes	Not prime farmland
31	Mission silt loam, 0 to 2 percent slopes	Prime farmland if drained
42	Pywell-Hoodoo complex, 0 to 1 percent slopes	Prime farmland if drained
59	Vassar-Moscow association, 35 to 65 percent slopes	Not prime farmland
65	Water	
77	Kegel loam	Prime farmland if drained

Prime and other Important Farmlands– Pend Oreille County Area, Washington		
Map Symbol	**Map Unit Name**	**Farmland Classification**
21	Bonner gravelly silt loam, 0 to 10 percent slopes	Prime farmland if irrigated
83	Moscow-Rock outcrop complex, 40 to 65 percent slopes	Not prime farmland
145	Typic Xerorthents, 30 to 65 percent slopes	Not prime farmland
163	Water	Not prime farmland

Hydric Soils (Hydric Soils)

This table lists the map unit components that are rated as hydric soils in the survey area. This list can help in planning land uses; however, onsite investigation is recommended to determine the hydric soils on a specific site (National Research Council, 1995; Hurt and others, 2002).

The three essential characteristics of wetlands are hydrophytic vegetation, hydric soils, and wetland hydrology (Cowardin and others, 1979; U.S. Army Corps of Engineers, 1987; National Research Council, 1995; Tiner, 1985). Criteria for all of the characteristics must be met for areas to be identified as wetlands. Undrained hydric soils that have natural vegetation should support a dominant population of ecological wetland plant species. Hydric soils that have been converted to other uses should be capable of being restored to wetlands.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). These soils, under natural conditions, are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil,

however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

Hydric soils are identified by examining and describing the soil to a depth of about 20 inches. This depth may be greater if determination of an appropriate indicator so requires. It is always recommended that soils be excavated and described to the depth necessary for an understanding of the redoximorphic processes. Then, using the completed soil descriptions, soil scientists can compare the soil features required by each indicator and specify which indicators have been matched with the conditions observed in the soil. The soil can be identified as a hydric soil if at least one of the approved indicators is present.

Map units that are dominantly made up of hydric soils may have small areas, or inclusions, of nonhydric soils in the higher positions on the landform, and map units dominantly made up of nonhydric soils may have inclusions of hydric soils in the lower positions on the landform.

The criteria for hydric soils are represented by codes in the table (for example, 2B3). Definitions for the codes are as follows:

1. All Histels except for Folistels, and Histosols except for Folists.
2. Soils in Aquic suborders, great groups, or subgroups, Albolls suborder, Historthels great group, Histoturbels great group, or Andic, Cumulic, Pachic, or Vitrandic subgroups that:
   A. are somewhat poorly drained and have a water table at the surface (0.0 feet) during the growing season, or
   B. are poorly drained or very poorly drained and have either:
      i. a water table at the surface (0.0 feet) during the growing season if textures are coarse sand, sand, or fine sand in all layers within a depth of 20 inches, or
      ii. a water table at a depth of 0.5 foot or less during the growing season if saturated hydraulic conductivity (Ksat) is equal to or greater than 6.0 in/hr in all layers within a depth of 20 inches, or
      iii. a water table at a depth of 1.0 foot or less during the growing season if saturated hydraulic conductivity (Ksat) is less than 6.0 in/hr in any layer within a depth of 20 inches.
3. Soils that are frequently ponded for long or very long duration during the growing season.
4. Soils that are frequently flooded for long or very long duration during the growing season.

References:

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.
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Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.
United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

Report—Hydric Soils (Hydric Soils)

Hydric Soils– Bonner County Area, Idaho, Parts of Bonner and Boundary Counties				
Map symbol and map unit name	**Component**	**Percent of map unit**	**Landform**	**Hydric criteria**
15—Hoodoo silt loam, 0 to 1 percent slopes				
	Hoodoo	70	Flood plains, drainageways	2B3
	Capehorn	5	Flood plains	2B3
	Wrencoe	5	Depressions	2B3, 4
	Hoodoo, peat substratum	5	Depressions	2B3
	Pywell	5	Depressions	1
31—Mission silt loam, 0 to 2 percent slopes				
	Hoodoo	3	Flood plains, drainageways	2B3
	Odenson	2	Depressions	2B3
42—Pywell-Hoodoo complex, 0 to 1 percent slopes				
	Pywell	40	Flood plains, depressions	1
	Hoodoo	35	Flood plains	2B3
	Capehorn	5	Flood plains	2B3
	Wrencoe	5	Flood plains	2B3, 4

Land Management

This folder contains a collection of tabular reports that present soil interpretations related to land management. The reports (tables) include all selected map units and components for each map unit, limiting features and interpretive ratings. Land management interpretations are tools designed to guide the user in evaluating existing conditions in planning and predicting the soil response to various land management practices, for a variety of land uses, including cropland, forestland, hayland, pastureland, horticulture, and rangeland. Example interpretations include suitability for a variety of irrigation practices, log landings, haul roads and major skid trails, equipment operability, site preparation, suitability for hand and mechanical planting, potential erosion hazard associated with various practices, and ratings for fencing and waterline installation.

Rangeland Fencing, Pygmy Rabbit Habitat, and Resistance to Fugitive Dust (Rangeland)

This table can help rangeland owners or managers plan the use of soils for range production and management. Interpretive ratings are given for the soils according to the limitations that affect various aspects of rangeland management.

The ratings are both verbal and numerical. Numerical ratings in the table indicate the degree to which individual soil properties affect the suitability of each soil for the indicated use. The numerical ratings are shown as decimal fractions ranging from 0.00 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the specified aspect of rangeland management (0.00) and the point at which the soil feature is not a limitation (1.00).

The ratings for *fencing* are based on slope, flooding, soil texture, rock fragments on or below the surface, depth to a restrictive layer that is indurated, depth to a water table, and salinity. The soils are described as being well suited, moderately suited, or poorly suited. A rating of *well suited* indicates that no significant limitations affect construction activities, *moderately suited* indicates that one or more limitations can cause some difficulty in construction, and *poorly suited* indicates that one or more limitations can make construction very difficult or very costly. The overall rating class for each soil is assigned based on the average numerical rating of the individual soil properties considered in the interpretation.

The ratings for *pygmy rabbit habitat potential* are based on slope, content of rock fragments in the soil, soil texture, depth to a water table, ponding, flooding, and depth to a restrictive layer. The potential of the soils is described as high, moderate, or low. A rating of *high* indicates that the soil has features that are favorable to pygmy rabbit habitat. *Moderate* indicates that the soil has features that are moderately favorable. One or more soil properties are less than desirable. *Low* indicates that the soil has one or more properties that are unfavorable for pygmy rabbit habitat. The overall rating class for each soil is assigned based on the average numerical rating of the individual soil properties considered in the interpretation.

The ratings for *resistance to fugitive dust* are based on rock fragments on or below the surface, texture of the surface layer, and content of carbonates. The resistance of the soils is described as high, moderate, or low. A rating of *high* indicates that the soil has properties that make it resistant to the formation of dust. *Moderate* indicates that

the formation of dust is likely. *Low* indicates that the soil has one or more properties that make the formation of dust very likely. The overall rating class for each soil is assigned based on the numerical rating of the individual soil properties indicating the highest resistance to dust formation considered in the interpretation.

Report—Rangeland Fencing, Pygmy Rabbit Habitat, and Resistance to Fugitive Dust (Rangeland)

[Onsite investigation may be needed to validate the interpretations in this table and to confirm the identity of the soil on a given site. The numbers in the value columns range from 0.00 to 0.99. The smaller the value, the greater the limitation. The table shows only the top five limitations for any given soil. The soil may have additional limitations]

Rangeland Fencing, Pygmy Rabbit Habitat, and Resistance to Fugitive Dust – Bonner County Area, Idaho, Parts of Bonner and Boundary Counties							
Map symbol and soil name	Pct. of map unit	Fencing		Pygmy rabbit habitat potential		Resistance to fugitive dust	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2—Bonner gravelly silt loam, 0 to 4 percent slopes							
Bonner	85	Well suited		Low potential		Moderate resistance to dust propagation	
		Potential frost action	0.50	Population of sagebrush	0.00	Index value of surface texture	0.00
				Content of gravel	0.27	Content of rock fragments	0.01
3—Bonner gravelly silt loam, 30 to 65 percent slopes							
Bonner	80	Poorly suited		Low potential		Moderate resistance to dust propagation	
		Slope	0.00	Population of sagebrush	0.00	Index value of surface texture	0.00
		Potential frost action	0.50	Slope	0.00	Content of rock fragments	0.01
				Content of gravel	0.27		
7—Cabinet silt loam, 12 to 30 percent slopes							
Cabinet	80	Poorly suited		Low potential		Low resistance to dust propagation	
		Content of clay	0.00	Population of sagebrush	0.00	Index value of surface texture	0.00
		Wetness	0.14	Content of clay	0.00	Content of rock fragments	0.00
		Potential frost action	0.50	Depth to saturation	0.00		
		Slope	0.68	Slope	0.75		
		Depth to restriction	0.87				

Rangeland Fencing, Pygmy Rabbit Habitat, and Resistance to Fugitive Dust – Bonner County Area, Idaho, Parts of Bonner and Boundary Counties							
Map symbol and soil name	Pct. of map unit	Fencing		Pygmy rabbit habitat potential		Resistance to fugitive dust	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
11—Dufort-Rock outcrop complex, 5 to 45 percent slopes							
Dufort	45	Moderately suited		Low potential		Low resistance to dust propagation	
		Slope	0.22	Population of sagebrush	0.00	Index value of surface texture	0.00
		Potential frost action	0.50	Content of cobbles and stones	0.00	Content of rock fragments	0.00
				Slope	0.26		
Rock outcrop	30	Not rated		Not rated		Not rated	
14—Haploxeralfs and Xerochrepts, 30 to 55 percent slopes							
Haploxeralfs	40	Poorly suited		Low potential		Low resistance to dust propagation	
		Slope	0.00	Population of sagebrush	0.00	Index value of surface texture	0.00
		Shrink-swell	0.00	Slope	0.00	Content of rock fragments	0.00
		Potential frost action	0.50	Content of clay	0.00		
Xerochrepts	30	Well suited		Low potential		Low resistance to dust propagation	
		Slope	0.00	Population of sagebrush	0.00	Index value of surface texture	0.00
				Slope	0.00	Content of rock fragments	0.00
15—Hoodoo silt loam, 0 to 1 percent slopes							
Hoodoo	70	Well suited		Low potential		Low resistance to dust propagation	
		Potential frost action	0.50	Population of sagebrush	0.00	Index value of surface texture	0.00
		Wetness	0.56	Depth to restrictive layer	0.00	Content of rock fragments	0.00
				Depth to saturation	0.01		

Rangeland Fencing, Pygmy Rabbit Habitat, and Resistance to Fugitive Dust – Bonner County Area, Idaho, Parts of Bonner and Boundary Counties							
Map symbol and soil name	Pct. of map unit	Fencing		Pygmy rabbit habitat potential		Resistance to fugitive dust	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
23—Kootenai gravelly silt loam, 0 to 4 percent slopes							
Kootenai	80	Well suited		Low potential		Moderate resistance to dust propagation	
				Population of sagebrush	0.00	Index value of surface texture	0.00
				Content of sand	0.00	Content of rock fragments	0.01
				Content of cobbles and stones	0.68		
24—Kootenai gravelly silt loam, 20 to 55 percent slopes							
Kootenai	80	Well suited		Low potential		Moderate resistance to dust propagation	
		Slope	0.00	Population of sagebrush	0.00	Index value of surface texture	0.00
				Content of sand	0.00	Content of rock fragments	0.01
				Slope	0.00		
				Content of cobbles and stones	0.68		
31—Mission silt loam, 0 to 2 percent slopes							
Mission	75	Poorly suited		Low potential		Low resistance to dust propagation	
		Wetness	0.01	Population of sagebrush	0.00	Index value of surface texture	0.00
		Depth to restriction	0.04	Depth to saturation	0.00	Content of rock fragments	0.00
		Potential frost action	0.50	Depth to restrictive layer	0.00		

Rangeland Fencing, Pygmy Rabbit Habitat, and Resistance to Fugitive Dust – Bonner County Area, Idaho, Parts of Bonner and Boundary Counties							
Map symbol and soil name	Pct. of map unit	Fencing		Pygmy rabbit habitat potential		Resistance to fugitive dust	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
42—Pywell-Hoodoo complex, 0 to 1 percent slopes							
Pywell	40	Well suited		Low potential		Low resistance to dust propagation	
		Potential frost action	0.50	Population of sagebrush	0.00	Index value of surface texture	0.00
				Content of clay	0.00	Content of rock fragments	0.00
				Depth to saturation	0.25		
Hoodoo	35	Well suited		Low potential		Low resistance to dust propagation	
		Potential frost action	0.50	Population of sagebrush	0.00	Index value of surface texture	0.00
		Wetness	0.56	Depth to restrictive layer	0.00	Content of rock fragments	0.00
				Depth to saturation	0.01		
59—Vassar-Moscow association, 35 to 65 percent slopes							
Vassar	40	Poorly suited		Low potential		Low resistance to dust propagation	
		Slope	0.00	Population of sagebrush	0.00	Index value of surface texture	0.00
		Potential frost action	0.50	Depth to restrictive layer	0.00	Content of rock fragments	0.00
				Slope	0.00		
Moscow	35	Well suited		Low potential		Low resistance to dust propagation	
		Slope	0.00	Population of sagebrush	0.00	Index value of surface texture	0.00
				Slope	0.00	Content of rock fragments	0.00
				Content of gravel	0.32		
				Content of clay	0.92		
65—Water							
Water	100	Not rated		Not rated		Not rated	
77—Kegel loam							
Kegel	100	Moderately suited		Low potential		Low resistance to dust propagation	
		Wetness	0.14	Population of sagebrush	0.00	Index value of surface texture	0.00
		Potential frost action	0.50	Depth to saturation	0.00	Content of rock fragments	0.00

Rangeland Fencing, Pygmy Rabbit Habitat, and Resistance to Fugitive Dust – Pend Oreille County Area, Washington							
Map symbol and soil name	Pct. of map unit	Fencing		Pygmy rabbit habitat potential		Resistance to fugitive dust	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
21—Bonner gravelly silt loam, 0 to 10 percent slopes							
Bonner	100	Well suited		Low potential		Moderate resistance to dust propagation	
		Potential frost action	0.50	Population of sagebrush	0.00	Index value of surface texture	0.00
				Content of sand	0.00	Content of rock fragments	0.01
				Content of cobbles and stones	0.78		
83—Moscow-Rock outcrop complex, 40 to 65 percent slopes							
Moscow	65	Well suited		Low potential		Low resistance to dust propagation	
		Slope	0.00	Population of sagebrush	0.00	Index value of surface texture	0.00
				Slope	0.00	Content of rock fragments	0.00
				Content of gravel	0.01		
Rock outcrop	20	Not rated		Not rated		Not rated	
145—Typic Xerorthents, 30 to 65 percent slopes							
Typic xerorthents	100	Poorly suited		Low potential		Moderate resistance to dust propagation	
		Slope	0.00	Population of sagebrush	0.00	Index value of surface texture	0.01
		Depth to restriction	0.04	Content of cobbles and stones	0.00	Content of rock fragments	0.02
		Content of cobbles	0.32	Slope	0.00		
		Content of stones and boulders	0.82	Content of sand	0.00		
				Depth to restrictive layer	0.00		
163—Water							
Water	100	Not rated		Not rated		Not rated	

Forestland Planting and Harvesting (Forestland)

This table can help forestland owners or managers plan the use of soils for wood crops. Interpretive ratings are given for the soils according to the limitations that affect planting and harvesting on forestland. The ratings are both verbal and numerical.

Rating class terms indicate the degree to which the soils are suited to a specified aspect of forestland management. *Well suited* indicates that the soil has features that are favorable for the specified management aspect and has no limitations. Good performance can be expected, and little or no maintenance is needed. *Moderately suited* indicates that the soil has features that are moderately favorable for the specified management aspect. One or more soil properties are less than desirable, and fair performance can be expected. Some maintenance is needed. *Poorly suited* indicates that the soil has one or more properties that are unfavorable for the specified management aspect. Overcoming the unfavorable properties requires special design, extra maintenance, and costly alteration. *Unsuited* indicates that the expected performance of the soil is unacceptable for the specified management aspect or that extreme measures are needed to overcome the undesirable soil properties.

Numerical ratings in the table indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the specified aspect of forestland management (1.00) and the point at which the soil feature is not a limitation (0.00).

The paragraphs that follow indicate the soil properties considered in rating the soils. More detailed information about the criteria used in the ratings is available in the "National Forestry Manual," which is available in local offices of the Natural Resources Conservation Service or on the Internet.

Ratings in the columns *suitability for hand planting* and *suitability for mechanical planting* are based on slope, depth to a restrictive layer, content of sand, plasticity index, rock fragments on or below the surface, depth to a water table, and ponding. The soils are described as well suited, moderately suited, poorly suited, or unsuited to these methods of planting. It is assumed that necessary site preparation is completed before seedlings are planted.

Ratings in the column *suitability for use of harvesting equipment* are based on slope, rock fragments on the surface, plasticity index, content of sand, the Unified classification, depth to a water table, and ponding. The soils are described as well suited, moderately suited, or poorly suited to this use.

Reference:
United States Department of Agriculture, Natural Resources Conservation Service, National forestry manual.

Report—Forestland Planting and Harvesting (Forestland)

[Onsite investigation may be needed to validate the interpretations in this table and to confirm the identity of the soil on a given site. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The table shows only the top five limitations for any given soil. The soil may have additional limitations]

Forestland Planting and Harvesting– Bonner County Area, Idaho, Parts of Bonner and Boundary Counties							
Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2—Bonner gravelly silt loam, 0 to 4 percent slopes							
Bonner	85	Well suited		Moderately suited		Moderately suited	
				Rock fragments	0.50	Low strength	0.50
3—Bonner gravelly silt loam, 30 to 65 percent slopes							
Bonner	80	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
				Rock fragments	0.50	Low strength	0.50
7—Cabinet silt loam, 12 to 30 percent slopes							
Cabinet	80	Well suited		Poorly suited		Moderately suited	
				Slope	0.75	Low strength	0.50
						Slope	0.50
11—Dufort-Rock outcrop complex, 5 to 45 percent slopes							
Dufort	45	Well suited		Poorly suited		Moderately suited	
				Slope	0.75	Slope	0.50
						Low strength	0.50
Rock outcrop	30	Not rated		Not rated		Not rated	
14—Haploxeralfs and Xerochrepts, 30 to 55 percent slopes							
Haploxeralfs	40	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
						Low strength	0.50
Xerochrepts	30	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
15—Hoodoo silt loam, 0 to 1 percent slopes							
Hoodoo	70	Well suited		Well suited		Moderately suited	
						Low strength	0.50
23—Kootenai gravelly silt loam, 0 to 4 percent slopes							
Kootenai	80	Well suited		Moderately suited		Moderately suited	
				Rock fragments	0.50	Low strength	0.50

Forestland Planting and Harvesting– Bonner County Area, Idaho, Parts of Bonner and Boundary Counties							
Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
24—Kootenai gravelly silt loam, 20 to 55 percent slopes							
Kootenai	80	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
				Rock fragments	0.50	Low strength	0.50
31—Mission silt loam, 0 to 2 percent slopes							
Mission	75	Well suited		Well suited		Moderately suited	
						Low strength	0.50
42—Pywell-Hoodoo complex, 0 to 1 percent slopes							
Pywell	40	Well suited		Well suited		Poorly suited	
						Low strength	1.00
Hoodoo	35	Well suited		Well suited		Moderately suited	
						Low strength	0.50
59—Vassar-Moscow association, 35 to 65 percent slopes							
Vassar	40	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
						Low strength	0.50
Moscow	35	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
65—Water							
Water	100	Not rated		Not rated		Not rated	
77—Kegel loam							
Kegel	100	Well suited		Well suited		Moderately suited	
						Low strength	0.50

Forestland Planting and Harvesting– Pend Oreille County Area, Washington							
Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
21—Bonner gravelly silt loam, 0 to 10 percent slopes							
Bonner	100	Well suited		Moderately suited		Moderately suited	
				Slope	0.50	Low strength	0.50
				Rock fragments	0.50		
83—Moscow-Rock outcrop complex, 40 to 65 percent slopes							
Moscow	65	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
						Low strength	0.50
Rock outcrop	20	Not rated		Not rated		Not rated	
145—Typic Xerorthents, 30 to 65 percent slopes							
Typic xerorthents	100	Moderately suited		Unsuited		Poorly suited	
		Rock fragments	0.50	Slope	1.00	Slope	1.00
		Slope	0.50	Rock fragments	0.75		
163—Water							
Water	100	Not rated		Not rated		Not rated	

Appendix D-8
Floodplain Information

City of Oldtown Floodplain Ordinance

James A. Sewell & Associates, LLC

ORDINANCE 2010-4

Flood Damage Prevention Ordinance

AN ORDINANCE OF THE CITY OF OLDTOWN A MUNICIPAL CORPORATION OF THE STATE OF IDAHO, ESTABLISHING PURPOSE AND AUTHORITY , INCLUDING FINDINGS; PROVIDING DEFINITIONS; PROVIDING APPLICABILITY; ADOPTING THE APPLICABLE FLOOD INSURANCE RATE MAPS; REQUIRING PERMITS; PROVIDING FOR ADMINISTRATION, PERMIT PROCESSING AND THE AUTHORITY OF THE ADMINISTRATOR; PROVIDING SUBDIVISION, CONSTRUCTION, MANUFACTURED HOME, RECREATIONAL VEHICLE, AND FLOODWAY STANDARDS; PROVIDING VARIANCE AND APPEAL PROCESSES AND CRITERIA; PROVIDING THAT A VIOLATION IS A MISDEMEANOR PUNISHABLE BY A FINE NOT TO EXCEED ONE THOUSAND DOLLARS, OR JAIL NOT TO EXCEED ONE HUNDRED EIGHTY DAYS, OR BOTH; PROVIDING SEVERABILITY; PROVIDING REPEAL OF CONFLICTING ORDINANCES; AND PROVIDING AN EFFECTIVE DATE .

IT IS ORDAINED by the mayor and city council of the city of Oldtown, Idaho as follows:

I. STATUTORY AUTHORIZATION, FINDINGS OF FACT, PURPOSE, AND OBJECTIVES

A. Statutory Authority

The Legislature of the State of Idaho in I.C. 46-1020 through I.C. 46-1024, authorized local government units to adopt a floodplain map and floodplain management ordinance that identifies floodplains and that sets forth minimum development requirements in floodplains that are designed to promote the public health, safety, and general welfare of its citizenry.

B. Findings of Fact

The flood hazard areas of the city of Oldtown are subject to periodic inundation that results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood relief and protection, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.

(1) These flood losses are caused by structures in flood hazard areas, which are inadequately elevated, flood-proofed, or otherwise unprotected from flood damages, and by the cumulative effect of obstructions in floodplains causing increases in flood heights and velocities.

(2) Local government units have the primary responsibility for planning, adoption and enforcement of land use regulations to accomplish proper floodplain management.

C. Statement of Purpose

It is the purpose of this ordinance to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

(1) Require that development that is vulnerable to floods, including structures and facilities necessary for the general health, safety and welfare of citizens, be protected against flood damage at the time of initial construction;
(2) Restrict or prohibit uses which are dangerous to health, safety and property due to water or erosion hazards, or which increase flood heights, velocities, or erosion;
(3) Control filling, grading, dredging and other development which may increase flood damage or erosion;
(4) Prevent or regulate the construction of flood barriers that will unnaturally divert flood waters or that may increase flood hazards to other lands;
(5) Preserve and restore natural floodplains, stream channels, and natural protective barriers which carry and store flood waters.

D. Objectives

The objectives of this ordinance are to:

(1) Protect human life, health and property;
(2) Minimize damage to public facilities and utilities such as water purification and sewage treatment plants, water and gas mains, electric, telephone and sewer lines, streets and bridges located in floodplains;
(3) Help maintain a stable tax base by providing for the sound use and development of flood prone areas;
(4) Minimize expenditure of public money for costly flood control projects;
(5) Minimize the need for rescue and emergency services associated with flooding and generally undertaken at the expense of the general public;
(6) Minimize prolonged business interruptions.

II. DEFINITIONS

Unless specifically defined in Article II, words or phrases used in this ordinance shall be interpreted according to the meaning they have in common usage.

"Accessory structure" means a structure on the same lot or parcel as a principal structure, the use of which is incidental and subordinate to the principal structure. An insurable building should not be classified as an accessory or appurtenant structure.

"Appeal" means a request for review of the Floodplain Administrator's interpretation of provisions of this ordinance or request for a variance.

"Area of shallow flooding" means a designated AO or AH Zone on a community's Flood Insurance Rate Map (FIRM) with base flood depths from one to three feet, and/or where a clearly defined channel does not exist, where the path of flooding is unpredictable and indeterminate, and where velocity flow may be evident.

"Area of special flood hazard" is the land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year. Zone designations on FIRMs include the letters A, AE, V. Also known as the Special Flood Hazard Area (SFHA).

"Base Flood" means the flood having a one percent chance of being equaled or exceeded each year. The Base Flood is the Regulatory Flood.

"Base Flood Elevation (BFE)" means the water surface elevation during the base flood in relation to a specified datum. The Base Flood Elevation (BFE) is depicted on the FIRM to the nearest foot and in the FIS to the nearest .1 foot.

"Basement" means the portion of a structure including crawlspace with its floor sub grade (below ground level) on all sides.

"Building" see "Structure."

"Critical Facility" means a facility that is critical for the health and welfare of the population and is especially important following hazard events. Critical facilities include essential facilities, transportation systems, lifeline utility systems, high potential loss facilities and hazardous material facilities.

"Datum" The vertical datum is a base measurement point (or set of points) from which all elevations are determined. Historically, that common set of points has been the National Geodetic Vertical Datum of 1929 (NGVD29). The vertical datum currently adopted by the federal government as a basis for measuring heights is the North American Vertical Datum of 1988 (NAVD88).

"Development" means any man-made change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation, drilling operations, and storage of equipment or materials.

"Digital FIRM (DFIRM)," means Digital Flood Insurance Rate Map. It depicts flood risk and zones and flood risk information The DFIRM presents the flood risk information in a format suitable for electronic mapping applications.

"Existing Construction" means a structure for which the "start of construction" commenced before November 15, 2010.

"Existing manufactured home park or subdivision" means a manufactured home park or subdivision where the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum the installation of utilities, the construction of streets, and final site grading or the pouring of concrete pads) is completed before November 15, 2010.

"Expansion to an existing manufactured home park or subdivision" means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed, including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads.

"Federal Emergency Management Agency (FEMA)" is the agency with the overall responsibility for administering the National Flood Insurance Program.

"Flood" or "flooding" means a general and temporary condition of partial or complete inundation of normally dry land areas from:

(a) the overflow of inland or tidal waters; or
(b) the unusual and rapid accumulation or runoff of surface waters from any source.

"Flood Fringe" means the portion of the floodplain outside of the floodway covered by floodwaters during the regulatory flood.

"Flood Hazard Boundary Map (FHBM)" means an official map of a community, issued by the Federal Insurance Administration or U.S. Department of Housing and Urban Development, where the boundaries of areas of special flood hazard have been designated as Zone A. The FHBM usually is the initial flood hazard map.

"Flood Insurance Rate Map (FIRM)" means an official map of a community, issued by the Federal Insurance Administration, delineating the areas of special flood hazard and/or risk premium zones applicable to the community.

"Flood Insurance Study (FIS)" means the official report by the Federal Insurance Administration evaluating flood hazards and containing flood profiles, floodway boundaries and water surface elevations of the base flood.

"Floodplain" means the land that has been or may be covered by floodwaters, or is surrounded by floodwater and inaccessible, during the occurrence of the regulatory flood. The riverine floodplain includes the floodway and the flood fringe. (I.C. 46-1021)

"Flood Protection Elevation (FPE)" means an elevation that corresponds to the elevation of the one percent (1%) chance annual flood (base flood), plus any increase in flood elevation due to floodway encroachment. Therefore the Flood Protection Elevation for Oldtown is equal to the BFE plus floodway elevation (if present).

"Flood Proofing" means any combination of structural and non structural additions, changes or adjustments to structures which reduce or eliminate fllod damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

"Floodway (Regulatory Floodway)" means the channel of a river or other watercourse and those portions of the floodplain adjoining the channel required to discharge and store the floodwater or flood flows associated with the regulatory flood.

"Freeboard" means a factor of safety usually expressed in feet above a flood level for the purposes of floodplain management. Freeboard tends to compensate for the many unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions, such as wave action, obstructed bridge openings, debris and ice jams and the hydrologic effects of urbanization in a watershed.

"Functionally Dependent Facility" means a facility that cannot be used for its intended purpose unless it is located or carried out in close proximity to water, such as a docking or port facility necessary for the loading and unloading of cargo or passengers, shipbuilding, or ship repair facilities. The term does not include long-term storage, manufacture, sales, or service facilities.

"Highest Adjacent Grade (HAG)" means the highest natural elevation of the ground surface prior to construction, adjacent to the proposed walls of a structure. Refer to the Elevation Certificate, FEMA Form 81-31, for HAG related to building elevation information.

"Historic Structure" means a structure that is:

(a) Listed individually in the National Register of Historic Places (a listing maintained by the U.S. Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register.
(b) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or to a district preliminarily determined by the Secretary to qualify as a registered historic district.
(c) Individually listed on a state inventory of historic places and determined as eligible by states with historic preservation programs which have been approved by the Secretary of the Interior, or
(d) Individually listed on a local inventory of historic places and determined as eligible by communities with historic preservation programs that have been certified either:
    i. By an approved state program as determined by the Secretary of the Interior, or
    ii. Directly by the Secretary of the Interior in states without approved programs.

"Letter of Map Change (LOMC)" means an official FEMA determination, by letter, to amend or revise effective Flood Insurance Rate Maps, Flood Boundary and Floodway Maps, and Flood Insurance Studies. LOMCs are issued in the following categories:

Letter of Map Amendment (LOMA)
A revision based on technical data showing that a property was incorrectly included in a designated special flood hazard area. A LOMA amends the current effective Flood Insurance Rate Map and establishes that a specific property is not located in a special flood hazard area.

Letter of Map Revision (LOMR)
A revision based on technical data showing that, usually due to manmade changes, shows changes to flood zones, flood elevations, floodplain and floodway delineations, and planimetric features. One common type of LOMR, a LOMR-F, is a determination that a structure of parcel has been elevated by fill above the base flood elevation and is excluded from the special flood hazard area.

Conditional Letter of Map Revision (CLOMR)
A formal review and comment by FEMA as to whether a proposed project complies with the minimum National Flood Insurance Program floodplain management criteria. A CLOMR does NOT amend or revise effective Flood Insurance Rate Maps, Flood Boundary and Floodway Maps, or Flood Insurance Studies.

"Levee" means a man-made structure, usually an earthen embankment, designed and constructed according to sound engineering practices, to contain, control, or divert the flow of water so as to provide protection from temporary flooding.

"Levee System" means a flood protection system that consists of a levee, or levees, and associated structures, such as closure and drainage devices, which are constructed and operated in accordance with sound engineering practices.

"Lowest Adjacent Grade (LAG)" means the lowest point of the ground level next to the structure. Refer to the Elevation Certificate, FEMA Form 81-31, for LAG related to building elevation information.

"Lowest Floor" means the lowest floor of the lowest enclosed area (including basement) used for living purposes, which includes working, storage, cooking and eating, or recreation, or any combination thereof. This includes any floor that could be converted to such a use including a basement or crawl space. An unfinished or flood resistant enclosure, used solely for parking of vehicles, building access, or storage, in an area other than a basement, is not considered a structure's lowest floor. The lowest floor is a determinate for the flood insurance premium for a building, home or business.

"Manufactured Home" means a structure, transportable in one or more sections, built on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities. The term "Manufactured Home" does not include a "Recreational Vehicle."

"Mean Sea Level" means for purposes of the National Flood Insurance Program, the National Geodetic Vertical Datum (NGVD) of 1929 or other datum, to which Base Flood Elevations shown on a community's FIRM are referenced.

"New construction" means a structure for which the "start of construction" commenced after November 15, 2010 and includes subsequent improvements to the structure.

"New Manufactured Home Park or Subdivision" means a place where the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum the installation of utilities, the construction of streets, and final site grading or the pouring of concrete pads) is completed on or after November 15, 2010.

"Recreational Vehicle" means a vehicle that is:

(a) Built on a single chassis,
(b) 400 square feet or less when measured at the largest horizontal projection,
(c) Designed to be self-propelled or permanently towed by a light duty truck, and
(d) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

"Regulatory Floodway" means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot..

"Repetitive Loss" means flood-related damages sustained by a structure on two separate occasions during a 10-year period for which the cost where the construction of facilities for servicing the lots on which the cost of repairs at the time of each such flood event, on the average, equals or exceeds 25 percent of the market value of the structure before the damages occurred.

"Start of construction" includes substantial improvement and means the date the development permit was issued, provided the actual start of construction, repair, reconstruction, or improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a

manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading, and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not the alteration affects the external dimensions of a building.

"Structure" means a walled and roofed building, including a gas or liquid storage tank that is principally above ground, as well as a manufactured home.

"Substantial damage" means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed 50 percent of its market value before the damage occurred.

"Substantial improvement" means reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the "start of construction" of the improvement. This term includes structures which have incurred "substantial damage," regardless of the actual repair work performed. The market value of the structure should be (1) the appraised value of the structure prior to the start of the initial repair or improvement, or (2) in the case of damage, the value of the structure prior to the damage occurring. This term includes structures which have incurred "substantial damage", regardless of the actual amount of repair work performed. The term does not include either:

(a) A project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications, which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions, or
(b) Alteration of a Historic Structure, provided that the alteration will not preclude the structure's continued designation as an Historic Structure.

"Variance" is a grant of relief by the governing body from a requirement of this ordinance.

"Water surface elevation" means the height, in relation to the North American Vertical Datum (NAVD) of 1988 (or other specified datum) of floods of various magnitudes and frequencies in the flood plains of costal or riverine areas.

III. GENERAL PROVISIONS

A. Lands to Which This Ordinance Applies

This ordinance shall apply to all Special Flood Hazard Areas within the jurisdiction of Oldtown. Nothing in this Ordinance is intended to allow uses or structures that are otherwise prohibited by the zoning ordinance.

B. Basis for Area of Special Flood Hazard

The Special Flood Hazard Areas identified by the Federal Emergency Management Agency in its Flood Insurance Study (FIS) for Bonner County, Idaho and incorporated areas, dated November 18,

2009, with accompanying Flood Insurance Rate Maps (FIRM) or Digital Flood Insurance Rate Maps (DFIRM), and other supporting data, are adopted by reference and declared a part of this ordinance. The FIS and the FIRM are on file at the office of the city clerk located at 215 North Washington Oldtown, ID 83822.

C. Establishment of Floodplain Development Permit

A Floodplain Development Permit shall be required prior to development activities in Special Flood Hazard Areas established in Article III Section B.

D. Interpretation

In the interpretation and application of this ordinance all provisions shall be:

(1) Considered as minimum requirements;
(2) Liberally construed in favor of the governing body, and;
(3) Deemed neither to limit nor repeal any other powers granted under state statutes.

E. Warning and Disclaimer of Liability

The degree of flood protection required by this ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur. Flood heights may be increased by man-made or natural causes. This ordinance does not imply that land outside the Special Flood Hazard Areas or uses permitted within such areas will be free from flooding or flood damages. This ordinance shall not create liability on the part of the city of Oldtown or by any officer or employee thereof for flood damages that result from reliance on this ordinance or an administrative decision lawfully made hereunder.

IV. ADMINISTRATION

A. Designation of Floodplain Ordinance Administrator

The Planning and Zoning Administrator is hereby appointed as the Floodplain Administrator who is responsible for administering and implementing the provisions of this ordinance.

B. Permit Procedures

Application for a Floodplain Development Permit shall be made to the Floodplain Administrator on forms furnished by the administrator or the administrator's designee prior to starting development activities. Specifically, the following information is required:

(1) Application Stage
  (a) Plans in duplicate drawn to scale with elevations of the project area and the nature, location, dimensions of existing and proposed structures, earthen fill placement, storage of materials or equipment and drainage facilities.
  (b) Elevation in relation to the Flood Protection Elevation, or highest adjacent grade, of the lowest floor level, including crawlspaces or basement, of all proposed structures;
  (c) Elevation to which any non-residential structure will be flood-proofed;
  (d) Design certification from a registered professional engineer or architect that any proposed non-residential flood-proofed structure will meet the flood-proofing criteria in Article V(F)(2);

(e) Description of the extent to which any watercourse will be altered or relocated as a result of a proposed development, and;

(2) Construction Stage

(a) For all new construction and substantial improvements, the permit holder shall provide to the Floodplain Administrator an as-built certification of the floor elevation or flood-proofing level, using appropriate FEMA elevation or flood-proofing certificate, immediately after the lowest floor or flood-proofing is completed. When flood-proofing is utilized for non-residential structures, the certification shall be prepared by or under the direct supervision of a professional engineer or architect and certified by same.

(b) Certificate deficiencies identified by the Floodplain Administrator shall be corrected by the permit holder immediately and prior to work proceeding. Failure to submit certification or failure to make the corrections shall be cause for the Floodplain Administrator to issue a stop-work order for the project.

(3) Technical Review

(a) If the community does not have the expertise to evaluate the technical data that is part of the application, the community may contract for an independent engineering review or require a review by FEMA through the Letter of Map Revision process. The applicant will pay the costs of an independent technical review.

(4) Expiration of Floodplain Development Permit

(a) All floodplain development permits shall be conditional upon the commencement of work within 180 days. A floodplain development permit shall expire 180 days after issuance unless the permitted activity has been substantially begun and thereafter is pursued to completion.

C. Duties and Responsibilities of the Administrator

Duties of the Floodplain Administrator shall include, but shall not be limited to:

(1) Review all floodplain development permit applications to assure that the permit requirements of this ordinance have been satisfied.

(2) Review proposed development to assure that necessary permits have been received from governmental agencies from which approval is required by federal or state law, including section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334; the Endangered Species Act of 1973, 16 U.S.C. 1531-1544; and State of Idaho Stream Channel Alteration permits, I.C. 42 Chapter 38 require that copies of such permits be provided and maintained on file.

(3) When Base Flood Elevation data or floodway data are not available, then the Floodplain Administrator shall obtain, review and reasonably utilize any base flood elevation and floodway data available from a federal, state or other source in order to administer the provisions of this ordinance.

(4) When Base Flood Elevations or other current engineering data are not available, the Floodplain Administrator shall take into account the flood hazards, to the extent they are known, to determine whether a proposed building site will be reasonably safe from flooding.

(5) Obtain, and record the actual elevation in relation to the vertical datum on the effective FIRM, or highest adjacent grade, of the lowest floor level, including basement, of all new construction or substantially improved structures.

(6) Obtain, and record the actual elevation, in relation to the vertical datum on the effective FIRM to which any new or substantially improved structures have been flood-proofed.
(7) When flood-proofing is utilized for a structure, the Floodplain Administrator shall obtain certification of design criteria from a registered professional engineer or architect.
(8) Where interpretation is needed of the exact location of boundaries of the Areas of Special Flood Hazard including regulatory floodway (for example, where there appears to be a conflict between a mapped boundary and actual field conditions) the Floodplain Administrator shall make the interpretation. Any person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in this Ordinance.
(9) All records pertaining to the provisions of this ordinance shall be maintained in the office of the city/county clerk or his/her designee and shall be open for public inspection.

V. PROVISIONS FOR FLOOD HAZARD REDUCTION

A. Subdivision Standards

(1) All subdivision proposals shall be consistent with the need to minimize flood damage.
(2) All subdivision preliminary plats/development plans shall include the mapped flood hazard zones from the effective FIRM.
(3) Base flood elevation data shall be generated and/or provided for subdivision proposals and all other proposed development, including manufactured home parks and subdivisions, greater than fifty lots or five acres, whichever is less.
(4) All subdivisions shall have public utilities and facilities such as sewer, gas, electric and water systems located and constructed to minimize flood damage.
(5) All subdivisions shall have adequate drainage provided to reduce exposure to flood hazards.

B. Construction Standards

In all Areas of Special Flood Hazard the following provisions are required.

(1) New construction and substantial improvements of an existing structure, including a structure that has been substantially damaged, shall be anchored to prevent flotation, collapse or lateral movement of the structure.
(2) New construction and substantial improvements of an existing structure, including a structure that has been substantially damaged, shall be constructed with materials and utility equipment resistant to flood damage.
(3) New construction or substantial improvements of an existing structure, including a structure that has been substantially damaged, shall be constructed by methods and practices that minimize flood damage.
(4) All new construction or substantial improvements of an existing structure, including a structure that has been substantially damaged, that includes a fully enclosed area located below the lowest floor formed by the foundation and other exterior walls shall be designed to be an unfinished or flood resistant enclosure. The enclosure shall be designed to equalize hydrostatic flood forces on exterior walls by allowing for the automatic entry and exit of floodwater. Designs for complying with this requirement must be certified by a licensed professional engineer or architect or meet the following minimum criteria:

(a) Provide a minimum of two openings with a total net area of not less
   i. than one square inch for every square foot of enclosed area subject to flooding;
   ii. the bottom of all openings shall be no higher than one foot above the higher of the exterior or interior grade or floor immediately below the opening;
   iii. openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic flow of floodwater in both directions without manual intervention.

(b) To comply with the "Lowest Floor" criteria of this ordinance, the unfinished or flood resistant enclosure shall only be used for parking of vehicles, limited storage of maintenance equipment used in connection with the premises, or entry to the elevated area.

(c) The interior portion of such enclosed area shall not be partitioned or finished into separate rooms.

(d) For crawlspace foundation types, construction must follow the guidelines in FEMA TB 11-01, Crawlspace Construction for Structures Located in Special Flood Hazard Areas: National Flood Insurance Program Interim Guidance, specifically:
   i. Below grade crawlspaces are prohibited at sites where the velocity of floodwaters exceed 5 feet per second;
   ii. Interior grade of the crawlspace below the BFE must not be more than 2 feet below the lowest adjacent exterior grade (LAG);
   iii. Height of the below grade crawlspace, measured from the lowest interior grade of the crawlspace to the bottom of the floor joist must not exceed 4 feet at any point;
   iv. Contain an adequate drainage system that removes floodwaters from the interior area of the crawlspace.

(5) All heating and air conditioning equipment and components, all electrical, ventilation, plumbing, and other facilities shall be designed and/or elevated to prevent water from entering or accumulating within the components during flooding.

(6) New and replacement water supply systems shall be designed to minimize or to eliminate infiltration of flood waters into the system.

(7) New and replacement sanitary sewage systems shall be designed to minimize or to eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters.

(8) On-site waste disposal systems shall be located and constructed to avoid functional impairment, or contamination from them, during flooding.

(9) Any alteration, repair, reconstruction or improvement to a structure that is not compliant with the provisions of this ordinance, shall be undertaken only if the nonconformity is minimal in order to meet health and safety standards.

C. Manufactured Home Standards

In all Areas of Special Flood Hazard where the Flood Protection Elevation is established, these standards for manufactured homes and recreational vehicles that are an allowed use under the zoning ordinance shall apply:

(1) Manufactured homes placed or substantially improved:
   (a) On individual lots or parcels
   (b) In new or substantially improved manufactured home parks or subdivisions

(c) In expansions to existing manufactured home parks or sub-divisions, or on a site in an existing manufactured home park or subdivision where a manufactured home has incurred "substantial damage" as the result of a flood, must have the lowest floor, including basement, elevated to the Flood Protection Elevation.

(2) Manufactured homes placed or substantially improved in an existing manufactured home park or subdivision may be elevated so that either:

(a) The lowest floor of the manufactured home is elevated to the Flood Protection Elevation.

(b) The manufactured home chassis is elevated and supported by reinforced piers (or other foundation elements of at least an equivalent strength) of no less that 36 inches above the highest adjacent grade.

(3) Manufactured homes shall be anchored to prevent flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This standard shall be in addition to, and consistent with, applicable state requirements.

(4) Manufactured homes placed on solid perimeter walls shall meet the flood vent requirements in Article V(B)(4).

D. Accessory Structures

Relief from the elevation or dry flood-proofing standards may be granted for an accessory structure containing no more than 200 square feet. Such a structure must meet the following standards:

(1) It shall not be used for human habitation;

(2) It shall be constructed of flood resistant materials;

(3) It shall be constructed and placed on the lot to offer the minimum resistance to the flow of floodwaters;

(4) It shall be firmly anchored to prevent flotation;

(5) Services such as electrical and heating equipment shall be elevated or flood-proofed to or above the Flood Protection Elevation;

(6) It shall meet the opening requirements of Article V(B)(4).

E. Recreational Vehicle Standards

In all Areas of Special Flood Hazard, Recreational Vehicles, must either:

(1) Be on the site for fewer than 180 consecutive days;

(2) Be fully licensed and ready for highway use, on its wheels or jacking system, attached to the site only by quick disconnect type utilities and security devices, and have no permanently attached structures or addition, or

(3) The recreational vehicle must meet all the requirements for "New Construction," including the anchoring and elevation requirements.

F. Floodway Standards

The following provisions shall apply in a floodway:

(1) A project in the regulatory floodway must undergo an encroachment review to determine its effect on flood flows. An encroachment analysis must include:

(a) Determination and documentation that the filling, grading or construction of a structure will not obstruct flood flows and will not cause an increase in flood heights upstream or adjacent to the project site;

(b) Determination and documentation that grading, excavation, channel improvements, bridge and culvert replacements that remove an obstruction, do not cause increases in downstream flood flows;

(c) Certification and documentation by a licensed professional engineer that the project will not result in a rise in flood heights;

(d) The Administrator may make the encroachment determination for minor projects, such as projects that do not increase the natural grade (e.g., paving a driveway or parking lot at existing grade, open fences and small isolated obstructions such as a mailbox or telephone pole.

(2) Upon demonstrating that there are no alternatives, the applicant may propose an encroachment in the floodway that will cause an increase in the base flood elevation in excess of the allowable level provided that the applicant obtain a Conditional Letter of Map Revision from FEMA before the development can be approved and permitted.

G. Standards for Zones with Base Flood Elevations

In Special Flood Hazard Areas designated A1-30, AE, AH, A (with estimated BFE), the following provisions are required.

(1) New construction and substantial improvements

(a) Where base flood elevation data are available, new construction or substantial improvement of any structure or manufactured home shall have the lowest floor, including basement, constructed at or above the community's Flood Protection Elevation. If solid foundation perimeter walls are used to elevate a structure, openings sufficient to facilitate the unimpeded movement of flood waters shall be provided in accordance with the construction standards in Article V(B)(4).

(2) Non-Residential Construction

(a) New construction or the substantial improvement of any non-residential structure located in zones A1-30, AE, or AH must be flood-proofed if the new construction or improvement is not elevated. The structure and attendant utility and sanitary facilities, must be designed to be water tight to the Flood Protection Elevation or to one (1) foot above the base flood elevation, whichever is higher, with walls substantially impermeable to the passage of water, and structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A licensed professional engineer or architect must certify that the design and methods of construction are in accordance with accepted standards of practice for meeting these provisions, and shall provide certification to the Administrator.

(3) Where the floodway has not been determined, no new construction, substantial improvements, or other development (including fill) shall be permitted in Zones A1-30 and AE on the effective FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community. Applicants of proposed projects that increase the base flood elevation more than one foot are required to obtain and submit to the Floodplain Administrator, a Conditional Letter of Map Revision (CLOMR) preconstruction.

(4) Post construction, the applicant must apply to FEMA for a Letter of Map Revision for changes to the flood hazard map proposed in the CLOMR.

(5) In AH Zones, drainage paths shall be provided to guide flood water around and away from proposed and existing structures.

H. Standards for Zones Without Base Flood Elevations and/or Floodway (A Zones)

These standards apply in Special Flood Hazard Areas where streams exist but no base flood elevation data have been provided (A Zones), or where base flood data have been provided but a floodway has not been delineated.

(1) When base flood elevation or floodway data have not been identified by FEMA in a Flood Insurance Study and /or Flood Insurance Rate Maps, then the Floodplain Administrator shall obtain, review, and reasonably utilize scientific or historic base flood elevation and floodway data available from a federal, state, or other source, in order to administer this ordinance. If data are not available from any source, **only** then provisions 2 and 3 shall apply.

(a) Where the floodplain administrator has obtained base flood elevation data, applicants of proposed projects that increase the base flood elevation more than one foot shall obtain a Conditional Letter of Map Revision preconstruction and a Letter of Map Revision post construction.

(2) No encroachments, including structures or fill, shall be located within an area equal to the width of the stream or fifty feet, whichever is greater, measured from the ordinary high water mark, unless certification by a licensed professional engineer documents that the encroachment will not result in any increase in flood levels during the base flood.

(3) In special flood hazard areas without base flood elevation data, new construction and substantial improvements of existing structures shall have the lowest floor of the lowest enclosed area (including basement or crawlspace) elevated no less than two feet above the highest adjacent grade at the building site. Openings sufficient to facilitate the unimpeded movement of flood waters shall be provided in accordance with the construction standards in Articles V (B) and (C).

I. Standards for Areas of Shallow Flooding (AO Zones)

Shallow flooding areas designated AO Zones, are Areas of Special Flood Hazard that have base flood depths of one to three feet, with no clearly defined channel. The following provisions apply.

(1) All new construction and substantial improvements of residential and nonresidential structures shall have the lowest floor, including basement, elevated above the adjacent grade at least as high as the flood depth number specified in feet on the Flood Insurance Rate Map (FIRM). If no flood depth number is specified, the lowest floor, including basement, shall be elevated at least two feet (2) above the highest adjacent grade. Openings sufficient to facilitate the unimpeded movement of flood waters shall be provided in accordance with the construction standards in Article V(B)(4).

(2) New construction or the substantial improvement of a non-residential structure may be flood-proofed in lieu of elevation. The structure and attendant utility and sanitary facilities must be designed to be water tight to the specified base flood level or at least two (2) feet above highest adjacent grade, with walls substantially impermeable to the passage of water, and structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A registered professional engineer or architect shall certify that the design and methods of construction are in accordance with accepted standards of practice for meeting these provisions, and shall provide certification to the Floodplain Administrator.

(3) Drainage paths shall be provided to guide floodwater around and away from all proposed and existing structures.

J. Alteration of a Watercourse

A water course is considered altered when any change occurs within its banks.

(1) The bankfull flood carrying capacity of the altered or relocated portion of the water course shall not be diminished. Prior to issuance of a floodplain development permit, the applicant must submit a description of the extent to which any water course will be altered or relocated as a result of the proposed development and submit certification by a registered professional engineer that the bankfull flood carrying capacity of the water course will not be diminished.

(2) Adjacent communities, the U.S. Army Corps of Engineers and the Idaho Department of Water Resources Stream Channel Alteration program must be notified prior to any alteration or relocation of a water course. Evidence of notification must be submitted to the floodplain administrator and to the Federal Emergency Management Agency.

(3) The applicant shall be responsible for providing the necessary maintenance for the altered or relocated portion of the water course so that the flood carrying capacity will not be diminished.

(4) The applicant shall meet the requirements to submit technical data in Sections K (1) and K(2) when an alteration of a water course results in the relocation or elimination of the special flood hazard area, including the placement of culverts.

K. Requirement to Submit New Technical Data

(1) For all development proposals that impact floodway delineations or base flood elevations, the community shall ensure that technical data reflecting such changes be submitted to FEMA within six months of the date such information becomes available. These development proposals include:

(a) Floodway encroachments that increase or decrease base flood elevations or alter floodway boundaries;

(b) Fill sites to be used for the placement of proposed structures where the applicant desires to remove the site from the special flood hazard area in accordance with V (A)(3);

(c) Alteration of watercourses that result in a relocation or elimination of the special flood hazard area, including the placement of culverts;

(d) Subdivision or large-scale development proposals requiring establishment of base flood elevations according to Article V (A)(3).

(2) It is the responsibility of the applicant to have technical data prepared in a format required for a Conditional Letter of Map Revision or Letter of Map Revision and submitted to FEMA. Submittal and processing fees for these map revisions shall be the responsibility of the applicant.

VI. VARIANCE AND APPEAL PROCEDURES

A. Variance

(1) An application for a variance must be submitted to the city clerk on the form provided by the city of Oldtown and include at a minimum the same information required for a development permit and an explanation for the basis for the variance request.

(2) Upon receipt of a completed application for a variance, the variance request will be set for public hearing at the next city council meeting in which time is available for the matter to be heard.
(3) Prior to the public hearing, Notice of the hearing will be published in the official newspaper of the city at least 15 days prior to the hearing. In addition to the newspaper publication, written notice shall be provided to all adjoining property owners.
(4) The burden to show that the variance is warranted and meets the criteria set out herein is on the applicant

B. Criteria for Variances

(1) Generally, the only condition under which a variance from the elevation standard may be issued is for new construction and substantial improvements to be erected on a small or irregularly shaped lot contiguous to and surrounded by lots with existing structures constructed below the base flood level. As the lot size increases the technical justification required for issuing the variance increases.
(2) Variances shall not be issued within a designated floodway if any increase in flood levels during the base flood discharge would result.
(3) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
(4) Variances may be issued upon;
   (a) A showing by the applicant of good and sufficient cause;
   (b) A determination that failure to grant the variance would result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws and ordinances.
(5) Variances pertain to a physical piece of property; they are not personal in nature and do not pertain to the structure, its inhabitants, economic or financial circumstances. They primarily address small lots in densely populated residential neighborhoods.

C. Variance Decision

The decision to either grant or deny a variance shall be in writing and shall set forth the reasons for such approval and denial. If the variance is granted, the property owner shall be put on notice along with the written decision that the permitted building will have its lowest floor below the Flood Protection Elevation and that the cost of flood insurance likely will be commensurate with the increased flood damage risk.

D. Appeals

The city council shall hear and decide appeals from the interpretations of the Administrator.

(1) An appeal must be filed with the city clerk within fourteen (14) days of the date of any permit denial or interpretation of the Administrator. Failure to timely file an appeal shall be considered a failure to exhaust the administrative remedies. The appeal must set out the interpretation of the Administrator and a narrative setting forth the facts relied upon by the appellant and the appellants claim regarding the error in the interpretation.
(2) Upon receipt of a completed appeal, the appeal will be scheduled for the next available city council meeting to be heard. The city council shall consider the following in ruling on an appeal:

(a) All technical evaluations, all relevant factors, standards specified in other sections of this ordinance, including:
   i. The danger that materials may be swept onto other lands to the injury of others;
   ii. The danger to life and property due to flooding or erosion damage;
   iii. The susceptibility of the proposed facility and its contents to flood damage and the effects of such damage on the individual landowner;
   iv. The importance of the services provided by the proposed facility to the community;
   v. The necessity of the facility to a waterfront location, where applicable;
   vi. The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;
   vii. The compatibility of the proposed use with existing and anticipated development;
   viii. The relationship of the proposed use to the comprehensive plan and flood plain management program for that area;
   xi. The safety of access to the property in times of flooding for ordinary and emergency vehicles;
   x. The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site; and
   xi. The cost of providing government services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.

E. Decision

The city council decision on appeal shall be in writing and set out the facts, technical information and the legal basis for the decision.

VII. PENALTIES FOR VIOLATION

No structure or land shall hereafter be located, extended, converted or altered unless in full compliance with the terms of this ordinance and other applicable regulations.

Violation of the provisions of this ordinance or failure to comply with any of its requirements, including violation of conditions and safeguards established in connection with grants of variance or special exceptions shall constitute a misdemeanor. Any person who violates this ordinance or fails to comply with any of its requirements shall, upon conviction thereof, be fined not more than $1,000 or imprisoned for not more than 180 days, or both. Each day the violation continues shall be considered a separate offense. Nothing herein contained shall prevent the city of Oldtown from taking such other lawful actions as is necessary to prevent or remedy any violation.

VIII. SEVERABILITY

The ordinance is hereby declared to be severable. Should any portion of this ordinance be declared invalid by a court of competent jurisdiction, the remaining provisions shall continue in full force and effect and shall be read to carry out the purpose(s) of the ordinance before the declaration of partial invalidity.

IX. REPEAL OF CONFLICTING PROVISIONS

All provisions of the current city of Oldtown municipal code or ordinances of the city of Oldtown which conflict with the provisions of this ordinance are hereby repealed to the extent of such conflict.

X. EFFECTIVE DATE

This ordinance shall be effective upon passage and publication as provided by law.

Enacted by the city council as an ordinance of the city of Oldtown on the 15th day of November, 2010.

Approved by the Mayor on this _____ day of _____, 2010.

CITY OF OLDTOWN

_____

Lonnie L. Orr, Mayor

ATTEST:

_____

Sheila Gormley, City Clerk

Appendix D-9
Floodplain Information

National Flood Insurance Program Participants List

James A. Sewell & Associates, LLC

Federal Emergency Management Agency
Community Status Book Report
IDAHO
Communities Participating in the National Flood Program

CID	Community Name	County	Init FHBM Identified	Init FIRM Identified	Curr Eff Map Date	Reg-Emer Date	Tribal
160158#	ABERDEEN, CITY OF	BINGHAM COUNTY	06/27/75	08/15/79	08/15/79	08/15/79	No
160001#	ADA COUNTY *	ADA COUNTY	06/28/77	12/18/84	10/02/03	12/18/84	No
160204#	ADAMS COUNTY*	ADAMS COUNTY		11/20/00	11/20/00	11/20/00	No
160042#	ALBION, TOWN OF	CASSIA COUNTY	01/10/75	08/15/83	08/15/83	08/15/83	No
160109#	AMERICAN FALLS, CITY OF	POWER COUNTY	05/24/74	06/30/76	01/19/82(M)	06/30/76	No
160028#	AMMON, CITY OF	BONNEVILLE COUNTY	10/26/73	07/19/82	04/02/02	06/30/76	No
160034#	ARCO, CITY OF	BUTTE COUNTY	06/28/74	09/24/84	09/24/84(M)	09/24/84	No
160040#	BANCROFT, CITY OF	CARIBOU COUNTY	08/16/74	09/14/90	09/14/90	09/14/90	No
160009#	BANNOCK COUNTY *	BANNOCK COUNTY	01/17/75	09/05/79	07/07/09	09/05/79	No
160225	BEAR LAKE COUNTY *	BEAR LAKE COUNTY			01/01/50	05/09/11(E)	No
160021#	BELLEVUE, CITY OF	BLAINE COUNTY	11/23/73	08/01/78	11/26/10	08/01/78	No
160014#	BENEWAH COUNTY*	BENEWAH COUNTY	01/10/75	07/16/79	09/25/09	07/16/79	No
160018#	BINGHAM COUNTY *	BINGHAM COUNTY	06/20/78	11/15/79	10/20/98	11/15/79	No
160019#	BLACKFOOT, CITY OF	BINGHAM COUNTY	01/23/74	09/05/79	10/20/98	09/05/79	No
165167#	BLAINE COUNTY *	BLAINE COUNTY	09/18/73	03/16/81	11/26/10	03/16/81	No
160205#	BOISE COUNTY*	BOISE COUNTY	09/14/82	09/14/82	04/05/88	04/05/88	No
160002#	BOISE, CITY OF	ADA COUNTY	06/21/74	04/17/84	10/02/03	04/17/84	No
160206#	BONNER COUNTY*	BONNER COUNTY	10/25/77	08/01/84	11/18/09	08/01/84	No
160031#	BONNERS FERRY, CITY OF	BOUNDARY COUNTY	06/28/74	04/22/77	08/19/85(M)	04/22/77	No
160027#	BONNEVILLE COUNTY *	BONNEVILLE COUNTY	10/18/74	11/04/81	04/02/02	11/04/81	No
160207#	BOUNDARY COUNTY*	BOUNDARY COUNTY	08/02/77	08/02/82	08/02/82	11/13/84	No
160202#	BOVILL, CITY OF	LATAH COUNTY	07/02/76	12/18/79	12/18/79	12/18/79	No
160043#	BURLEY, CITY OF	CASSIA COUNTY	05/24/74	03/09/82	03/09/82(M)	03/09/82	No
160033#	BUTTE COUNTY*	BUTTE COUNTY		06/03/86	06/03/86(M)	06/03/86	No
160036#	CALDWELL, CITY OF	CANYON COUNTY	11/19/76	09/03/80	05/24/11	09/03/80	No
160199#	CAMBRIDGE, CITY OF	WASHINGTON COUNTY	08/08/75	02/19/87	06/16/09	02/19/87	No
160208#	CANYON COUNTY *	CANYON COUNTY	05/24/77	09/28/84	05/24/11	09/28/84	No
160234#	CAREY, CITY OF	BLAINE COUNTY		04/20/00	11/26/10	03/22/06	No
160209	CARIBOU COUNTY*	CARIBOU COUNTY			01/01/50	08/20/99(E)	No
160161#	CASCADE, CITY OF	VALLEY COUNTY	09/19/75	09/15/89	09/15/89	09/15/89	No
160041#	CASSIA COUNTY *	CASSIA COUNTY	08/16/77	08/15/83	08/15/83	08/15/83	No
160053#	CHALLIS, CITY OF	CUSTER COUNTY	12/05/75	09/24/84	03/04/88	09/24/84	No
160162#	CHUBBUCK, CITY OF	BANNOCK COUNTY		07/07/09	(NSFHA)	07/07/09	No
160210#	CLARK COUNTY *	CLARK COUNTY	04/10/79	09/24/84	09/24/84(M)	09/24/84	No
160132#	CLARK FORK, CITY OF	BONNER COUNTY	09/19/75	03/15/82	11/18/09	03/15/82	No
160046#	CLEARWATER COUNTY *	CLEARWATER COUNTY	12/20/74	05/15/80	05/15/80	05/15/80	No
160078#	COEUR D'ALENE, CITY OF	KOOTENAI COUNTY	03/29/74	05/03/10	05/03/10	09/02/82	No
160067#	COTTONWOOD, CITY OF	IDAHO COUNTY	05/17/74	05/01/85	05/01/85(M)	05/01/85	No
160005#	COUNCIL, CITY OF	ADAMS COUNTY	05/03/74	11/20/00	11/20/00	11/20/00	No
160163#	CRAIGMONT, CITY OF	LEWIS COUNTY	06/25/76	02/05/86	02/05/86(M)	02/05/86	No
160102#	CULDESAC, CITY OF	NEZ PERCE COUNTY	10/18/74	01/20/82	01/20/82	01/20/82	No
160211#	CUSTER COUNTY*	CUSTER COUNTY		03/04/88	03/04/88	09/05/95	No
160164#	DALTON GARDENS, CITY OF	KOOTENAI COUNTY		05/03/10	(NSFHA)	04/07/11	No
160133#	DEARY, CITY OF	LATAH COUNTY	01/17/75	06/05/85	06/05/85(M)	06/05/85	No
160044#	DECLO, CITY OF	CASSIA COUNTY	09/06/74	08/15/83	08/15/83	08/15/83	No
160121	DONNELLY, CITY OF	VALLEY COUNTY	09/06/74	04/15/77	04/15/77(M)	04/15/77	No
160006#	DOVER, CITY OF	BONNER COUNTY		11/18/09	11/18/09	01/16/07	No
	The City has adopted Bonner County (160206)FIRM dated 8/4/1987 panel #1602050300C.						
160165#	DOWNEY, CITY OF	BANNOCK COUNTY	01/09/79	09/16/81	07/07/09	02/08/85	No
160166#	DRIGGS, CITY OF	TETON COUNTY		08/04/88	01/01/50	04/15/11	No

160215	LEWIS COUNTY *	LEWIS COUNTY	(NSFHA)	02/12/86	No

Federal Emergency Management Agency
Community Status Book Report
IDAHO
Communities Participating in the National Flood Program

CID	Community Name	County	Init FHBM Identified	Init FIRM Identified	Curr Eff Map Date	Reg-Emer Date	Tribal
160104#	LEWISTON, CITY OF	NEZ PERCE COUNTY	08/16/74	01/20/82	01/20/82	01/20/82	No
160216#	LINCOLN COUNTY*	LINCOLN COUNTY		02/05/86	02/05/86	02/05/86	No
160177#	MACKAY, CITY OF	CUSTER COUNTY	05/02/75	09/24/84	03/04/88	09/24/84	No
160217#	MADISON COUNTY *	MADISON COUNTY	01/31/78	06/03/91	06/03/91	06/03/91	No
160106#	MALAD CITY, CITY OF	ONEIDA COUNTY	05/24/74	09/27/85	09/27/85	09/27/85	No
160197#	MALTA, TOWN OF	CASSIA COUNTY	12/13/74	09/24/84	09/24/84(M)	05/15/97	No
160175#	MCCALL, CITY OF	VALLEY COUNTY	09/05/75	04/17/89	04/17/89	04/17/89	No
160176#	MCCAMMON, CITY OF	BANNOCK COUNTY	04/23/76	09/15/78	07/07/09	12/21/78	No
160180#	MERIDIAN, CITY OF	ADA COUNTY	05/28/76	09/27/91	10/02/03	03/20/92	No
160037#	MIDDLETON, CITY OF	CANYON COUNTY	11/02/73	09/03/80	05/24/11	09/03/80	No
160123#	MIDVALE,CITY OF	WASHINGTON COUNTY	09/13/74	02/19/87	06/16/09	02/19/87	No
160201	MINIDOKA COUNTY*	MINIDOKA COUNTY	09/06/77	10/01/86	10/01/86(L)	10/01/86	No
160090#	MOSCOW, CITY OF	LATAH COUNTY	02/15/74	05/15/80	04/15/02	05/15/80	No
160058#	MOUNTAIN HOME, CITY OF	ELMORE COUNTY	06/07/74	09/30/88	03/15/94	09/30/88	No
160115#	MULLAN, CITY OF	SHOSHONE COUNTY	12/28/73	08/01/79	09/26/08	08/01/79	No
160038#	NAMPA, CITY OF	CANYON COUNTY	05/31/74	09/28/84	05/24/11	09/28/84	No
160181#	NEW MEADOWS, CITY OF	ADAMS COUNTY	02/21/75	06/05/85	11/20/00	06/05/85	No
160101#	NEZ PERCE COUNTY *	NEZ PERCE COUNTY	10/25/77	04/04/83	04/04/83	04/04/83	No
160255#	NEZPERCE, CITY OF	LEWIS COUNTY		08/03/89	08/03/89	08/03/89	No
160147#	NOTUS, CITY OF	CANYON COUNTY	09/26/75	03/18/80	05/24/11	03/18/80	No
160045#	OAKLEY, CITY OF	CASSIA COUNTY	10/18/74	08/01/97	08/01/97(L)	08/01/97	No
160073#	OLDTOWN, CITY OF	BONNER COUNTY		11/18/09	11/18/09	12/21/10	No
160229	ONEIDA COUNTY *	ONEIDA COUNTY			01/01/50	10/10/03(E)	No
160047#	OROFINO, CITY OF	CLEARWATER COUNTY	11/23/73	12/02/80	12/02/80	12/02/80	No
160116#	OSBURN, CITY OF	SHOSHONE COUNTY	01/23/74	09/05/79	09/26/08	09/05/79	No
160183#	PARIS, CITY OF	BEAR LAKE COUNTY	09/19/75	09/24/84	09/24/84(M)	09/24/84	No
160039#	PARMA, CITY OF	CANYON COUNTY	05/17/74	09/30/80	05/24/11	09/30/80	No
160100	PAUL, CITY OF	MINIDOKA COUNTY	06/14/74		(NSFHA)	06/20/76	No
160198#	PAYETTE COUNTY *	PAYETTE COUNTY	05/17/77	02/15/83	02/15/84	02/15/84	No
160184#	PAYETTE, CITY OF	PAYETTE COUNTY	05/02/75	02/15/84	02/15/84	02/15/84	No
160105#	PECK, CITY OF	NEZ PERCE COUNTY	08/16/74	01/20/82	01/20/82	01/20/82	No
160048	PIERCE, CITY OF	CLEARWATER COUNTY	06/21/74	08/29/78	08/29/78(M)	08/29/78	No
160200#	PINEHURST, CITY OF	SHOSHONE COUNTY	01/31/75	07/02/79	09/26/08	07/02/79	No
160012#	POCATELLO, CITY OF	BANNOCK COUNTY	03/01/74	05/01/80	07/07/09	05/01/80	No
160150#	PONDERAY, CITY OF	BONNER COUNTY	08/13/76	11/18/09	11/18/09	01/13/10	No
160083#	POST FALLS, CITY OF	KOOTENAI COUNTY	01/09/74	05/03/10	05/03/10	02/17/82	No
160219	POWER COUNTY*	POWER COUNTY			(NSFHA)	03/19/86	No
160186#	PRESTON, CITY OF	FRANKLIN COUNTY	08/29/75	09/24/84	09/24/84(M)	09/24/84	No
160026#	PRIEST RIVER,CITY OF	BONNER COUNTY	06/28/74	02/17/82	11/18/09	02/17/82	No
160187#	RATHDRUM, CITY OF	KOOTENAI COUNTY	07/11/75	05/03/10	05/03/10	09/28/84	No
160098#	REXBURG, CITY OF	MADISON COUNTY	12/17/73	06/03/91	06/03/91	06/03/91	No
160189#	RIGGINS, CITY OF	IDAHO COUNTY		12/19/97	12/19/97	12/19/97	No
160152#	ROBERTS, CITY OF	JEFFERSON COUNTY	01/24/75	02/17/88	09/26/08(M)	12/29/08	No
160110	ROCKLAND, CITY OF	POWER COUNTY	12/27/74	04/01/77	04/01/77(M)	04/01/77	No
160016#	SAINT MARIES, CITY OF	BENEWAH COUNTY	02/15/74	11/15/79	09/25/09	11/15/79	No
160093#	SALMON, CITY OF	LEMHI COUNTY	06/25/76	12/04/84	12/04/84	12/04/84	No
160025#	SANDPOINT,CITY OF	BONNER COUNTY	06/21/74	02/17/82	11/18/09	02/17/82	No
160114#	SHOSHONE COUNTY *	SHOSHONE COUNTY	07/05/77	09/05/79	09/26/08	09/05/79	No

Federal Emergency Management Agency
Community Status Book Report
IDAHO
Communities Not in the National Flood Program

CID	Community Name	County	Init FHBM Identified	Init FIRM Identified	Curr Eff Map Date	Sanction Date	Tribal
160247#	CROUCH, CITY OF	BOISE COUNTY		04/05/88	04/05/88	04/05/89	No
160134#	DUBOIS, CITY OF	CLARK COUNTY	12/27/74	09/24/84	09/24/84	07/04/88(S)	No
160137#	FRANKLIN, CITY OF	FRANKLIN COUNTY	09/05/75	08/19/85	08/19/85	09/05/76	No
160241#	GRAND VIEW, CITY OF	OWYHEE COUNTY	04/03/79		04/03/79	04/03/80	No
160235#	GREENLEAF, CITY OF	CANYON COUNTY			05/24/11		No
160259#	HAMER, CITY OF	JEFFERSON COUNTY		02/17/88	09/26/08	02/17/89	No
160141#	HAUSER, CITY OF	KOOTENAI COUNTY	10/08/76	05/03/10	05/03/10	10/08/77	No
160179#	MENAN, CITY OF	JEFFERSON COUNTY	04/30/76	02/17/88	09/26/08	04/30/77	No
160249#	PLACERVILLE, CITY OF	BOISE COUNTY		04/05/88	04/05/88	04/05/89	No
160149#	PLUMMER, CITY OF	BENEWAH COUNTY	10/29/76	09/25/09	09/25/09	10/29/77	No
160153	ST. CHARLES, CITY OF	BEAR LAKE COUNTY	03/19/76		03/19/76	03/19/77	No
160049#	WEIPPE, CITY OF	CLEARWATER COUNTY	05/17/74	12/04/79	12/04/79	12/04/79(S)	No
160072	WHITE BIRD, CITY OF	IDAHO COUNTY	09/13/74	09/18/86	09/18/86	07/04/88(S)	No

Summary:

Total Not in Flood Program	13
Total Suspended from Emergency Program	0
Total Suspended from Regular Program	3
Total Withdrawn Communities Not In Program	0
Total Not In Program With Hazard Area Identified	13
Total Not In Program With Hazard Area Identified < 1 Year	0

Legend:

Appendix D-10
Wetland Information

James A. Sewell Wetland Delineation Study and Tri-Pro Cedar Products Wetland Delineation Report

James A. Sewell & Associates, LLC

JAMES A. SEWELL & ASSOCIATES, LLC

1205 Highway 2, Suite 101
Sandpoint, Idaho 83864
(208) 263-4160
(208) 263-5229 Fax

*Civil Engineering *Electrical Engineering *Land Surveying *Building Inspection * Land Use Planning

WEST BONNER WATER AND SEWER DISTRICT

May 24, 2011

INTRODUCTION

Wetland Boundary Delineation and Report, Wetland Assessment, Preconstruction Notice and Joint Application Request for Verification
West Bonner Water and Sewer District ("Applicant")
James and Bobbie Ward ("Owner")

Delineator and Authorized Agent
Martin E. Taylor, AICP
Member -- *American Institute of Certified Planners*
Wetland Delineator Certification Program (WTI)

Delineation and Preconstruction Notice Purpose
This wetland boundary delineation, report and preconstruction notice, and accompanying wetland assessment and joint application, are made a part of a request for Nationwide Permit 12 verification ("utility line activities") and preconstruction notice ("PCN") approval, as required by Nationwide Permit General Condition 27. This documentation accompanies a request to place fill associated with a service road designed to access the proposed water system storage tank (see accompanying mapping and joint application). The joint application also includes a "Section 10 waters" proposal to directional bore under the bed of the Pend Oreille River without a discharge of dredged or fill materials. Made a part of this report and the accompanying joint application and incorporated by reference herein is the complete engineered plans set (57 sheets; 8/11/10, rev. 3/8/11); the cultural resources assessment (5/19/10); the preliminary engineering report (8/30/10); and the environmental assessment (3/21/11).

Background: The West Bonner Water and Sewer District is proposing to install a community wide water distribution system and sewer collection system. The proposed water system installation and sewer extension will centralize services to the existing residences and commercial buildings while allowing for future residential and commercial expansion . The project will provide fire suppression flows to residences and facilities within the city of Oldtown area, provide safe, potable water to residential and commercial areas, provide a sanitary means of collecting and disposing of wastewater, and facilitate in the future growth of the community.

Site Location: The delineated wetland areas are located in and are surrounded by the Ward's livestock pasture. The directional bore generally extends from Old Diamond Mill Road along the east side of the Pend Oreille River to Montana Avenue along the west side of the river. Both the wetland fill and directional bore activities are situated in Township 56 North, Range 6 West, Section 24, Boise Meridian, Bonner County, Idaho.

Wetland Site Visits: April 19, 2010; April 23, 2010; April 26, 2010; and May 12, 2010

METHODS

Methods used included: Routine Method (Level 3; Existing Data and Onsite Inspection). The project includes an area greater than 5 acres. A determination was made that "normal" conditions were present. No wetlands are associated with the directional bore staging areas. No wetlands are associated with water and sewer line installation, with the noted exception of the subject water tank access road. All proposed water and sewer piping will be routed either within or adjacent to roadways or road rights of way as depicted in the engineered plans set.

Vegetation

On site inspections included: identifying plant community types; selecting a representative observation point (data plot) within each plant community; visually selecting the dominant species from each stratum (tree, shrub, herb, woody vine); recording the indicator status of dominant species; and determining whether vegetation was hydrophytic based on the rapid test, the dominance test or prevalence index worksheets, or morphological adaptations.

Hydrology

Field observations included (as applicable): water measurement depths at the surface; within soil pits; and depth to saturated soils. Additional hydrologic data considered included the wetland hydrology primary and secondary indicators specified on the data form *(Wetland Determination Data Form - Western Mountains, Valleys and Coast Regions*; May 2010 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys and Coast Region – Version 2.0*). If available, recorded data were also considered.

Soil

Soil pits were associated with all data plots in an attempt to verify the presence or absence of hydric soils. Profile descriptions and hydric soil indicators were considered as specified on the referenced data form. Soil survey general data were considered to the extent applicable.

Modifications of methods used included:

Transects were prepared consistent with the Routine Method for areas greater than five acres in order to approximate the "Wetland B" boundary due to extent of the wetland complex (20.97 acres; 913,239 square feet). No modifications were necessary for determining the "Wetland B" boundary. Though "Wetland A" contains less than five acres (0.97 acre; 42,447 square feet), one transect was prepared pursuant to the same Routine Method standard employed for "Wetland B."

Sources of existing information used included: Preliminary data gathering included: USGS quadrangles; USFWS wetland inventory mapping; USFWS Region 9 plant list (and 1993 Region 9 Supplement); SCS (NCRS) Bonner County Soil Survey; USGS National Hydrologic Dataset -

Geodatabase; Tom Dubendorfer, PWS (plant identification); FEMA Flood Insurance Rate Maps; and James A. Sewell & Associates proposed utility line alignment (water tank and water line access road).

RESULTS AND DISCUSSION

Description of site

Topography

The tank access road site consists predominantly of level to undulating pasture. A hillside sloping from north to south borders "Wetland B" to the north. "Wetland A" consists of a swale-like, isolated depression bisecting the southeast corner of the pasture.

The proposed bore casing pipe will intersect the ground surface in areas with minimal to flat slopes (see plans Sheet 4 of 57).

Plant Communities

Wetland plant communities consist of species that occur in a shared habitat and environment populated predominantly by dominants *Phalaris arundinacea* (reed canary grass), *Carex sp.* (sedge) and *Juncus sp.* (rushes). Subordinate species include *Lysichiton americanum* (skunk cabbage) and *Typha latifolia* (cattail).

Non-wetland plant communities consist of species that occur in a shared habitat and environment populated predominantly by dominants *Centaurea maculosa* (knapweed) and *Taraxacum officinale* (dandelion). Subordinate species include *Achillea millefolium* (yarrow) and *Bromus sp.* (miscellaneous pasture grasses).

Soils (mapped and found)

Mapped soils suggest that the subject area contains Hoodoo silt loam, 0-1 percent slopes, a Mollic Andaquept, and Pywell-Hoodoo complex, 0-1 percent slopes, a Typic Borosaprist. Both soils are classified as hydric. Data plots confirmed the presence of these soil types, though vegetation and hydrology did not in all Hoodoo and Pywell data plots confirm the presence of wetlands. Though soil test pits often revealed low chroma, redox features and a corresponding depleted matrix, thus qualifying as hydric soil, some data plots lacked dominant hydrophytic vegetation and wetland hydrology indicators.

Additional mapped soils include Kootenai gravelly silt loam, 0-4 percent slopes, a Typic Xerochrept. This soil is not categorized as hydric. "Upland" data plots confirmed the presence of this soil type.

Hydrology

Field indicators of wetland hydrology were observed in several data plots (attached). Specifically, the visual observation of saturation within the upper 12 inches of the soil profile proved evident. These saturated conditions occur within a major portion of the root zone (within 12 inches of the surface) in sufficient duration to support hydrophytic vegetation between at minimum 5 percent to 12.5 percent of the growing season (between 8 days to 19 days in Bonner County based on 157 days of >28°F temps for 5 years in 10). Accordingly, these data plots fall within "Hydrologic Zone V: Irregularly inundated or saturated." Additionally, several data plots also included evidence of a high water table and/or wetland drainage patterns (swales).

USFWS Wetland Inventory Map
"Wetland A" is classified by Cowardin as PUSC (palustrine unconsolidated shore seasonally flooded). "Wetland B" is classified by Cowardin as PEM1C (palustrine emergent persistent seasonally flooded; ±20 acres). The easternmost one acre (more or less) of "Wetland B" is classified by Cowardin as PSS1A (palustrine scrub-shrub broad-leaved deciduous temporarily flooded).

SCS (NRCS) Soil Map
Soils Map Sheet 55 depicts the subject area. Map Units 15 and 42 comprise the two hydric soil types within the project boundary (Hoodoo silt loam and Pywell-Hoodoo complex, respectively). Map Unit 23 comprises the non-hydric soil type (Kootenai gravelly silt loam).

Findings
Wetland Types Identified (USFWS Inventory)
Description
The USFWS inventory references three mapped wetlands, as noted, all of which were confirmed in the field. Hydrology indicators include a seasonal high water table, soil saturation, wetland drainage patterns and in some areas, surface water. Of noteworthiness is the accuracy of the USFWS wetland boundaries when compared with the actual field-located boundaries.

Locations
The survey-located wetland boundaries and proposed service road alignment are depicted on the accompanying map. Delineated wetlands total 21.94 acres. "Wetland A" is isolated and will not be affected by the proposed water tank service road. (The proposed road alignment is located west of the actual wetland boundary.) "Wetland B" is proposed to be traversed by about 534 lineal feet of service road requiring an estimated 13,845 square feet (0.32 acre) of fill.

Area
The accompanying site plan includes the boundary of both delineated wetlands, field transects, and data plot locations. Acreage totals are also included.

Contrast with non-wetlands
The "Wetland A" wetland/upland boundary proved distinct, the boundary following the top of a defined swale. As noted on the applicable data plots, "Wetland B" boundaries were contrasted with upland boundaries most noticeably along the north boundary where ground elevations rose markedly from the wetland edge up the adjacent hillside. Contrasts between wetland and upland were more subliminal along the south boundary of "Wetland B", warranting additional data points collected on three additional site visits (April 23, 2010; April 26, 2010; and May 12, 2010).

Boundary
Where a distinct, abrupt upland boundary was apparent due to changes topography and the absence of dominant hydrohytic vegetation, boundary lath were placed. Similarly, where a distinct, abrupt wetland boundary was apparent due to obvious primary hydrology indicators (e.g, surface water) and the dominance of hydrophytic vegetation ("rapid test"), boundary lath were placed. Where boundaries were less apparent, nine transects involving 27 locations were sampled and data plots prepared (one transect and four data plots for "Wetland A"; and 8 transects and 23 data plots for "Wetland B"). Where boundaries proved less distinct due to subtle differences in topography,

vegetation, hydrology and soils, the distance between confirmed wetland and confirmed upland data plots was averaged between the plots. This established the wetland boundary as mapped.

Mitigation Statement
MDT Montana Wetland Assessment Methodology (1999)
This analysis established the assessment area as a "Category IV" wetland, concluding a "low" rating for uniqueness and a "low" rating for production export/food chain support. "Functional Units" totaled 1.12 (3.5 Actual Points x 0.32 Estimated AA Acreage). Compensatory mitigation totals $24,640.00 (Valencia Wetland Bank credits at $22,000.00/credit x 1.12 FU). Please refer to the accompanying assessment for rating details.

Both directional bore locations will be set back approximately 200 feet from the Pend Oreille River ordinary summer pool elevation. In areas where the river bank has steeper slopes, the proposed boring is approximately 20 feet to 25 feet below the bank surface. The proposed horizontal distance from the ordinary summer pool elevation and the minor slopes at the proposed beginning/end of the bore casing pipe will provide adequate protection against bank failure and minimize or eliminate any impacts on the river bed and fauna species. Below are the specific measurements:

The bore locations, referenced from the 2031.5 foot summer pool elevation, are as follows:
West side (Oldtown)
24.5 feet above summer pool; 210 feet from river bank at summer pool
East side (Albeni Area)
17.5 feet above summer pool; 189 feet from river bank at summer pool

Other Types of Water
Description
The proposed utility road does not include other types of jurisdictional waters of the U.S., such as streams, rivers, lakes and similar non-wetland, but regulated, waters. Part of the proposed route does include a directional bore under the Pend Oreille River as noted, and is a "Section 10 waters of the U.S." As stated, all water and sewer piping will be routed either within or adjacent to roadways or road rights of way as depicted in the engineered plans set. Consequently, no other "Section 404" or "Section 10" waters appear affected.

CONCLUSION
Total Area and Wetland Types (and other regulated waters)
"Wetland A" contains 0.97 acres. "Wetland B" contains 20.97 acres. Both wetland types are palustrine, with both wetland types being seasonally or temporarily flooded. The utility road wetland crossing does not involve other regulated waters. As referenced, the Pend Oreille River is a "Section 10 water."

Permit Needs
Prior to utility road fill placement and commencing with the directional bore, it is anticipated that, in addition to the jurisdictional determination, a NWP 12 will need to be verified and a PCN acknowledged by Corps staff via the "joint application" process.

Final Authority

The final NWP-12 verification and PCN determination rest with the Army Corps of Engineers.

LITERATURE CITED

FEMA *Flood Insurance Rate Maps,* Panel 16017C0850E, 2009.
USDA, *Soil Survey of the Bonner County Area*, 1982.
USGS, *Newport* Quadrangles, 1986.
USGS, *National Hydrologic Dataset, Geodatabase*, 2010.
USFWS, *National Wetland Inventory, Newport* Quadrangle, 1987.

APPENDIX

Data forms
Wetland assessment
Wetland boundary determination mapping
Joint Application
USFWS wetland overlay
Aerial overlay
USGS quad overlay
Engineered plans set (57 sheets; 8/11/10, rev. 3/8/11)
Cultural resources assessment (5/19/10)
Preliminary engineering report (8/30/10)
Environmental assessment (3/21/11)

JOINT APPLICATION FOR PERMITS

U.S. ARMY CORPS OF ENGINEERS - IDAHO DEPARTMENT OF WATER RESOURCES - IDAHO DEPARTMENT OF LANDS

Authorities: The Department of Army Corps of Engineers (Corps), Idaho Department of Water Resources (IDWR), and Idaho Department of Lands (IDL) established a joint process for activities impacting jurisdictional waterways that require review and/or approval of both the Corps and State of Idaho. Department of Army permits are required by Section 10 of the Rivers & Harbors Act of 1899 for any structure(s) or work in or affecting navigable waters of the United States and by Section 404 of the Clean Water Act for the discharge of dredged or fill materia is into waters of the United States, including adjacent wetlands. State permits are required under the State of Idaho, Stream Protection Act (Title 42, Chapter 38, Idaho Code and Lake Protection Act (Section 58, Chapter 13 et seq., Idaho Code).

Joint Application : Applicant will need to send a completed application, along with one (1) set of legible and reproducible drawings illustrating the location and character of the proposed activities/project to both the Corps and the State of Idaho. Information provided on this application will be used in evaluating the proposed activities. Disclosure of requested information is voluntary, however, if the information is not provided, the application may not be processed and permits may not be issued. Information requested in Block 26 and Block 27 are not required to process the application. DO NOT START WORK UNTIL YOU RECEIVE ALL PERMITS FROM BOTH THE CORPS AND THE STATE OF IDAHO.

Drawings & Supplemental Requirements : See Instruction Guide for required vicinity map, plan-view, and section-view drawings on 8-1/2 x 11 paper size.

INCOMPLETE APPLICATIONS MAY NOT BE PROCESSED

[1] DATE: November 15, 2010

[2] CONTACT INFORMATION - APPLICANT: Required

Name: Lonnie Orr, Chairman
Company: West Bonner Water and Sewer District
Mailing Address: 215 N. Washington Ave.
City: Oldtown State: ID Zip: 83822
PH #:(208) 437-0554 E-mail: cityofoldtown@hotmail.com

[3] CONTACT INFORMATION - AGENT: Completion of Block #29 Required

Name: Martin E. Taylor, AICP
Company: James A. Sewell & Associates
Mailing Address: 1205 Highway 2, Suite 101
City: Sandpoint State: ID Zip: 83864
PH #:(208) 263-4160 E-mail: mtaylor@jasewell.com

[4] PROJECT NAME or TITLE:
West Bonner Water and Sewer District water tank access road

[5] PROJECT STREET ADDRESS:
None available (site is open pasture)

[6] PROJECT CITY: Oldtown

[7] PROJECT COUNTY: Bonner

[8] PROJECT ZIP CODE: 83822

[9] NEAREST WATERWAY/WATERBODY: Pend Oreille River

[10] TAX PARCEL ID#: 56N06W241801

[11] LATITUDE/LONGITUDE (Required with vicinity Map): Lat: 48-11-16 Long: 117-01-23

[12a] 1/4	[12b] 1/4	[12c] SECTION	[12d] TOWNSHIP	[12E] RANGE
SE	NE	24	56 North	6 West

[13a] ESTIMATED START DATE: June 2011

[13b] ESTIMATED END DATE: September 2011

[14] DESCRIBE INTENDED USE (Commercial, Industrial, Public, Private, Other): Service road accessing a public water tank and distribution system.

[15] HAVE ALL ADJACENT PROPERTY OWNERS BEEN NOTIFIED OF PROPOSED ACTIVITY OR PROJECT? ☒ NO ☐ YES
Complet the attached sheet by providing list of contract information (including names, address, phone number) of all adjacent property owners.

[16] ☐ CHECK BOX IF ALTERATION(S) ARE LOCATED ON PUBLIC TRUST LANDS ADMINISTERED BY STATE OF IDAHO DEPARTMENT OF LANDS.

[17] DIRECTIONS TO PROJECT SITE Include vicinity map with legible crossroads, street numbers/names, landmarks, attach additional sheet(s), if needed:
The proposed approach to the water tank road is located on the north side of U.S. Highway 2, about one-quarter mile east of the intersection of Selkirk Way and U.S. Highway 2. The proposed road alignment is lathed. The proposed wetland crossing begins at lath "B-1" and terminates at lath "B-31."

[18] HAS WORK BEGAN ON THIS PROJECT/ACTIVITY? ☒ NO ☐ YES If yes, describe ALL work that has occurred, including dates; attach additional sheet(s), if needed:

[19] PREVIOUSLY ISSUED PERMIT AUTHORIZATIONS:
None.

[20] TYPE, MATERIAL AND AMOUNT BEING DISCHARGED BELOW THE ORDINARY HIGH WATER MARK, IN CUBIC YARDS:
(1) TYPE gravel Cubic Yards ±750 (2) TYPE Cubic Yards (3) TYPE Cubic Yards

[21] SURFACE AREA IN ACRES OF WETLAND OR OTHER WATERS FILLED See Instructions Guide:
0.32 Acres OR 13,845 Square Feet

[22] SIZE AND FLOW CAPACITY OF BRIDGE OR CULVERT & DRAINAGE AREA SERVED: N/A Square Miles

[23] IS PROJECT LOCATED IN A MAPPED FLOODWAY? ☒ NO ☐ YES If yes, contact the floodplain administrator in the local government jurisdiction in which the project is located. A Floodplain Development permit and a No-Rise Certification may be required.

FOR AGENCY USE ONLY

Corps of Engineers #:	ID Water Resources #:	ID Dept of Lands #:
Date Received:	Date Received:	Date Received:
☐ Incomplete App. - Return Date:	Fee Received: Receipt #:	Fee Received: Receipt #:

24a OVERALL DESCRIPTION & PURPOSE OF PROJECT TO WATERS OF U.S., INCLUDING WETLANDS Attach additional sheet(s), if needed:

The West Bonner Water and Sewer District is proposing to install a community wide water distribution system and sewer collection system. The proposed water system installation and sewer extension will centralize services to the existing residences and commercial buildings while allowing for future residential and commercial expansion. . The project will provide fire suppression flows to residences and facilities within the city of Oldtown area, provide safe, potable water to residential and commercial areas, provide a sanitary means of collecting and disposing of wastewater, and facilitate in the future growth of the community.

24b DETAILED DESCRIPTION OF EACH INDIVIDUAL ACTIVITY, WITHIN OVERALL PROJECT (Include dimensions, equipment, construction,methods, etc.):

"Wetland B" (see accompanying map) is proposed to be traversed by about 534 lineal feet of service road requiring an estimated 13,845 square feet (0.32 acre) of fill. NWP-12 authorizes utility line and access road construction. Road construction equipment includes dozers, excavators, back hoes, dump trucks and rollers.

25a DESCRIBE MEASURES TAKEN TO AVOID, MINIMIZE, COMPENSATE FOR IMPACTS TO WATERS OF THE UNITED STATES, INCLUDING WETLANDS: See Instruction Guide for specific details.

Based on topographic considerations, property boundaries, and as-built structures, the most direct route to the tank site while limiting impacts to adjacent wetlands was established. Other potential wetland crossings were either off site, slope constrained, or were obstructed by structures. The proposed road is the minimum width necessary (12') to accommodate construction, subsequent tank and water line maintenance, and service vehicles. The proposed road is designed as near as possible to pre-construction grade. Culverts will be installed to maintain surface water movement as necessary.

25b PROPOSED MITIGATION PLAN: Attach copy of proposed mitigation plan or statement/reasoning why no mitigation plan is required. Attach additional sheet(s), if needed.

The MDT Montana Wetland Assessment (1999) methodology established the assessment area as a "Category IV" wetland, concluding a "low" rating for uniqueness and a "low" rating for production export/food chain support. "Functional Units" totaled 1.12 (3.5 Actual Points x 0.32 Estimated AA Acreage). Compensatory mitigation in proposed and totals $24,640.00 (Valencia Wetland Bank credits at $22,000.00/credit x 1.12 FU).

26 LIST EACH IMPACT TO STREAM, RIVER, LAKE, RESERVOIR, INCLUDING SHORELINE. Attach site map with location of EACH impact listed; attach additional sheet(s).

Activity Number	Name of Waterbody	Seasonal or Perennial	Avg. Stream Width (Linear Feet)	Description of Impact (road crossing, impound, culvert, etc.)	Impact Length (Linear Feet)
1	N/A.	N/A.	N/A.	N/A.	N/A.
2					
3					
4					

TOTAL STREAM IMPACTS (Linear Feet):

27 LIST EACH WETLAND IMPACT, INCLUDING MECHANIZED CLEARING, FILL, EXCAVATION, FLOOD, DRAINAGE, ETC.
Attach site map with location of EACH impact listed; attach additional sheet(s).

Activity Number	Wetland Type (Emergent, Forested, Scrub/Shrub)	Distance to Waterbody (Linear Feet)	Description of Impact (purpose of road crossing, impoundment, culvert, etc.)	Impact Size (Acres or Square Feet)
1	Emergent	N/A.	Utility line access road and water line construction will required wetland fill.	0.32 acre or 13,845 square feet
2				
3				
4				

TOTAL WETLAND IMPACTS (Linear Feet): ±534

28 AUTHORIZATION OF AGENT/ACCESS: I hereby authorize the Agent (listed in Block 3 of this application) to act in my behalf in the processing of this application and to furnish all information, drawings, maps, and supplemental information in support of this application. I hereby grant to the agencies to which this application is made, the right to access/come upon the above-described location(s) to inspect the propsed and completed work/activities.

Signature of Applicant *Date*

29 CERTIFICATION: Application is hereby made for permit, or permits, to authorize the work and uses of the work as described in this application and all supporting documentation. I certify that the information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein, or I am acting as the duly authorized agent for the applicant.*

Signature of Applicant *Date* *Signature of Agent* *Date*

* The application must be signed by the person who desires to undertake the proposed activity AND signed by a duly authorized agent, if the authorization statement in both Blocks 3 & 28 havebeen completed and signed. 18 USC Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious, or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than $10,000 or imprisoned not more than five years or both..

ADJACENT PROPERTY OWNERS NOTIFICATION REQUIREMENT

Provide the name, physical address, and telephone number of ALL adjacent property owners.

This includes adjacent property owners with ownership located on both sides of the near stream bank AND/OR all other ownership on the waterway that may be affected by the proposed activities/project. Also, include homeowner or community associations within the proposed project area.

CONTACT INFORMATION - OWNERSHIP NEAR STREAM BANK

DOWNSTREAM NOTIFICATION

Name: CARNES, BARBARA (parcel 56N06W240603)

Mailing Address: 267 LE CLERC RD

City: OLDTOWN State: ID Zip: 83822

PH #:(208) 437-4291 E-mail:

UPSTREAM NOTIFICATION

Name: COOPER, RONALD (parcel 56N05W193750)

Mailing Address: PO BOX 3569

City: OLDTOWN State: ID Zip: 83822

PH #:(208) 437-0269 E-mail:

CONTACT INFORMATION - OWNERSHIP ON WATERWAY

Name: WARD, JAMES (parcel 56N06W241801)

Mailing Address: PO BOX 325

City: OLDTOWN State: ID Zip: 83822

PH #:(208) 4374863 E-mail:

Name:

Mailing Address:

City: State: Zip:

PH #:( ) E-mail:

Name:

Mailing Address:

City: State: WA Zip:

PH #:( ) E-mail:

Name:

Mailing Address:

City: State: Zip:

PH #:( ) E-mail:

Name:

Mailing Address:

City: State: Zip:

PH #:( ) E-mail:

Attach as many additional sheets as needed.

MDT Montana Wetland Assessment Form (revised 5/25/1999)

1. Project Name: West Bonner Water and Sewer District Water System 2. Project #: 23072-09-002-02-03 (JAS) Control #: N/A 3.

Evaluation Date: Mo. August Day 6 Yr. 2010 4. Evaluator(s): Martin E. Taylor, AICP, Wetland Delineator 5. Wetlands/Site#(s) "Wetland B"

6. Wetland Location(s):
   i. Legal: T 56 N ; R 6 W ; S 24
   ii. Approx. Stationing or Mileposts: No mile marker available. (U.S. Highway 2 ±0.25 mile east of Selkirk Way/Hwy 2 intersection)
   iii. Watershed: 17010216 GPS Reference No. (if applies): 48°11'20" North Latitude; 117°01'22" West Longitude (approx. center of AA)
   Other Location Information: The subject pasture is located on the north side of U.S. Highway 2 in the city of Oldtown, Idaho. The site lies east of the Ace Hardware store and Selkirk Way (gravel road).

7. a. Evaluating Agency: Corps of Engineers; 8. Wetland size: (total acres) 20.97 acres (surveyed)
   b. Purpose of Evaluation:
   1. X Wetlands potentially affected by WBSD water service line access road project
   2. ___ Mitigation wetlands; pre-construction 9. Assessment area: (AA, tot., ac.) 0.32 (calculated); "2. Disproportional"
   3. ___ Mitigation wetlands; post-construction see instructions on determining AA)
   4. X Other Calculating mitigation credits to be purchased from the Valencia Wetland Mitigation Bank.

10. Classification of Wetland and Aquatic Habitats in AA (HGM according to Brinson, first col.; USFWS according to Cowardin [1979], remaining cols.)

HGM Class	System	Subsystem	Class	Water Regime	Modifier	% of AA
Depressional	P (PEM1C) (Palustrine emergent persistent seasonally flooded)	None	EM	C	None	100

(Abbreviations: System: Palustrine(P)/ Subsyst.: none/ Classes: Rock Bottom (RB), Unconsolidated bottom (UB), Aquatic Bed (AB), Unconsolidated Shore (US), Moss-lichen Wetland (ML), Emergent Wetland (EM), Scrub-Shrub Wetland (SS), Forested Wetland (FO)/ System: Lacustrine (L)/, Subsyst.: Limnetic (2)/ Classes: RB, UB, AB/ Subsystem: Littoral (4)/ Classes: RB, UB, AB, US, EM/ System: Riverine (R)/ Subsyst.: Lower Perennial (2)/ Classes: RB, UB, AB, US, EM/ Subsystem: Upper Perennial (3)/ Classes: RB, UB, AB, US/ Water Regimes: Permanently Flooded (H), Intermittently Exposed (G), Semipermanently Flooded (F), Seasonally Flooded (C), Saturated (B), Temporarily Flooded (A), Intermittently Flooded (J) Modifiers: Excavated (E), Impounded (I), Diked (D), Partly Drained (PD), Farmed (F), Artificial (A) HGM Classes: Riverine, Depressional, Slope, Mineral Soil Flats, Organic Soil Flats, Lacustrine Fringe

11. Estimated relative abundance: (of similarly classified sites within the same Major Montana Watershed Basin, see definitions)
   (Circle one) Unknown Rare Common Abundant
   Comments: Not applicable. The project is located in Idaho. 12.

General condition of AA:
   i. Regarding disturbance: (use matrix below to determine [circle] appropriate response)

Conditions within AA	*Predominant conditions adjacent to (within 500 feet of) AA*		
	Land managed in predominantly natural state; is not grazed, hayed, logged, or otherwise converted; does not contain roads or buildings.	Land not cultivated, but moderately grazed or hayed or selectively logged; or has been subject to minor clearing; contains few roads or buildings.	Land cultivated or heavily grazed or logged; subject to substantial fill placement, grading, clearing, or hydrological alteration; high road or building density.
AA occurs and is managed in predominantly natural state; is not grazed, hayed, logged, or otherwise converted; does not contain roads or occupied buildings.	low disturbance	low disturbance	moderate disturbance
AA not cultivated, but moderately grazed or hayed or selectively logged; or has been subject to relatively minor clearing, fill placement, or hydrological alteration; contains few roads or buildings.	moderate disturbance	***moderate disturbance***	high disturbance
AA cultivated or heavily grazed or logged; subject to relatively substantial fill placement, grading, clearing, or hydrological alteration; high road or building density.	high disturbance	high disturbance	high disturbance

Comments: (types of disturbance, intensity, season, etc.): The site consists of seasonal, moderately grazed pasture, resulting in an AA with moderate disturbance.

ii. Prominent weedy, alien, & introduced species (including those not domesticated, feral): (list)
Centaurea maculosa (knapweed); *Taraxacum officinale* (dandelion)

iii. Provide brief descriptive summary of AA and surrounding land use/habitat:
The AA and surrounding properties consist predominantly of level to undulating pasture. A hillside sloping from north to south borders the AA to the north.

13. Structural Diversity: (based on number of "Cowardin" *vegetated* classes present [do not include unvegetated classes], see #10 above)

# of "Cowardin" vegetated classes present in AA (see #10)	≥ 3 vegetated classes (or ≥ 2 if one is forested)	2 vegetated classes (or 1 if forested)	*≤ 1 vegetated class*
Rating (circle)	High	Moderate	*Low*

Comments: One "emergent" vegetation class is present in the AA, resulting in low structural diversity.

SECTION PERTAINING to FUNCTIONS & VALUES ASSESSMENT

14A. Habitat for Federally Listed or Proposed Threatened or Endangered Plants or Animals:

I. AA is Documented (D) or Suspected (S) to contain (circle one based on definitions contained in instructions):

Primary or critical habitat (list species) D S _____
Secondary habitat (list species) D S _____
Incidental habitat (list species) D S _____
No usable habitat D S There is no critical habitat or endangered species within the project boundaries.*

II. Rating (use the conclusions from i above and the matrix below to arrive at [circle] the functional points and rating [H = high, M = moderate, or L = low] for this function)

Highest Habitat Level	doc./primary	sus/primary	doc./secondary	sus./secondary	doc./incidental	sus./incidental	None
Functional Points / Rating	1 (H)	.9 (H)	.8 (M)	.7 (M)	.5 (L)	.3 (L)	*0 (L)*

Sources for documented use (e.g. observations, records, etc): * U.S. Fish and Wildlife Service; Idaho Department of Fish and Game.

14B. Habitat for plant or animals rated S1, S2, or S3 by the Montana Natural Heritage Program: (not including species listed in14A above)

I. AA is Documented (D) or Suspected (S) to contain (circle one based on definitions contained in instructions):

Primary or critical habitat (list species) D S _____
Secondary habitat (list species) D S _____
Incidental habitat (list species) D S _____
No usable habitat D S _____

ii. Rating (use the conclusions from i above and the matrix below to arrive at [circle] the functional points and rating [H = high, M = moderate, or L = low] for this function)

Highest Habitat Level	doc./primary	sus/primary	doc./secondary	sus./secondary	doc./incidental	sus./incidental	None
Functional Points / Rating	1 (H)	.8 (H)	.7 (M)	.6 (M)	.2 (L)	.1 (L)	*0 (L)*

Sources for documented use (e.g. observations, records, etc.): Not applicable. The project is located in Idaho.

14C. General Wildlife Habitat Rating:

I. Evidence of overall wildlife use in the AA (circle substantial, moderate, or low based on supporting evidence):

Substantial (based on any of the following [check]):
__ observations of abundant wildlife #'s or high species diversity (during any period)
__ abundant wildlife sign such as scat, tracks, nest structures, game trails, etc.
__ presence of extremely limiting habitat features not available in the surrounding area
__ interviews with local biologists with knowledge of the AA

Low (based on any of the following [check]):
__ few or no wildlife observations during peak use periods
__ little to no wildlife sign
__ sparse adjacent upland food sources
__ interviews with local biologists with knowledge of the AA

Moderate (based on any of the following [check]):
__ observations of scattered wildlife groups or individuals or relatively few species during peak periods
X common occurrence of wildlife* sign such as scat, tracks, nest structures, game trails, etc. (*waterfowl)
__ adequate adjacent upland food sources
__ interviews with local biologists with knowledge of the AA

ii. Wildlife habitat features (working from top to bottom, circle appropriate AA attributes in matrix to arrive at exceptional (E), high (H), moderate (M), or low (L) rating. Structural diversity is from #13. For class cover to be considered evenly distributed, vegetated classes must be within 20% of each other in terms of their percent composition of the AA (see #10). Abbreviations for surface water durations are as follows: P/P = permanent/perennial; S/I = seasonal/intermittent; T/E = temporary/ephemeral; and A = absent [see instructions for further definitions of these terms].)

Structural diversity (see #13)	High								Moderate								*Low*			
Class cover distribution (all vegetated classes)	Even				Uneven				Even				Uneven				Even			
Duration of surface water in ≥ 10% of AA	P/P	S/I	T/E	A	P/P	S/I	T/E	A	P/P	S/I	T/E	A	P/P	S/I	T/E	A	P/P	*S/I*	T/E	A
Low disturbance at AA (see #12i)	E	E	E	H	E	E	H	H	E	H	H	M	E	H	M	M	E	H	M	M
Moderate disturbance at AA (see #12i)	H	H	H	H	H	H	H	M	H	H	M	M	H	M	M	L	H	*M*	L	L
High disturbance at AA (see #12i)	M	M	M	L	M	M	L	L	M	M	L	L	M	L	L	L	L	L	L	L

iii. **Rating** (use the conclusions from i and ii above and the matrix below to arrive at [circle] the functional points and rating [E = exceptional, H = high, M = moderate, or L = low] for this function)

Evidence of wildlife use (i)	*Wildlife habitat features rating (ii)*			
	Exceptional	High	***Moderate***	Low
Substantial	1 (E)	.9 (H)	.8 (H)	.7 (M)
Moderate	.9 (H)	.7 (M)	***.5 (M)***	.3 (L)
Minimal	.6 (M)	.4 (M)	.2 (L)	.1 (L)

Comments: Moderate evidence of overall wildlife use in the AA combined with moderate wildlife habitat features result in a moderate general wildlife habitat rating of 0.5 functional points.

14D. General Fish/Aquatic Habitat Rating: (Assess this function if the AA is used by fish or the existing situation is "correctable" such that the AA could be used by fish [i.e., fish use is precluded by perched culvert or other barrier, etc.]. If the AA is not or was not historically used by fish due to lack of habitat, excessive gradient, etc., circle **NA** here and proceed to **14E**. If fish use occurs in the AA but is not desired from a resource management perspective [such as fish use within an irrigation canal], then Habitat Quality [i below] should be marked as "Low", applied accordingly in ii below, and noted in the comments.)

i. **Habitat Quality** (circle appropriate AA attributes in matrix to arrive at exceptional (E), high (H), moderate (M), or low (L) quality rating.

Duration of surface water in AA	Permanent / Perennial			Seasonal / Intermittent			Temporary / Ephemeral		
Cover - % of waterbody in AA containing cover objects such as submerged logs, large rocks & boulders, overhanging banks, floating-leaved vegetation, etc.	>25%	10–25%	<10%	>25%	10–25%	<10%	>25%	10–25%	<10%
Shading - >75% of streambank or shoreline within AA contains riparian or wetland scrub-shrub or forested communities	E	E	H	H	H	M	M	M	M
Shading -- 50 to 75% of streambank or shoreline within AA contains rip. or wetland scrub-shrub or forested communities	H	H	M	M	M	M	M	L	L
Shading - < 50% of streambank or shoreline within AA contains rip. or wetland scrub-shrub or forested communities	H	M	M	M	L	*L*	L	L	L

ii. **Modified Habitat Quality** (Circle the appropriate response to the following question. If answer is Y, then reduce rating in i above by one level [E = H, H = M, M = L, L = L]). *Is fish use of the AA precluded or significantly reduced by a culvert, dike, or other man-made structure or activity or is the waterbody included on the MDEQ list of waterbodies in need of TMDL development with listed "Probable Impaired Uses" including cold or warm water fishery or aquatic life support?* Y *N* Modified habitat quality rating = (circle) E H M *L*

iii. **Rating** (use the conclusions from i and ii above and the matrix below to arrive at [circle] the functional points and rating [E = exceptional, H = high, M =moderate, or L = low])

Types of fish known or suspected within AA	*Modified Habitat Quality (ii)*			
	Exceptional	High	Moderate	*Low*
Native game fish	1 (E)	.9 (H)	.7 (M)	.5 (M)
Introduced game fish	.9 (H)	.8 (H)	.6 (M)	.4 (M)
Non-game fish	.7 (M)	.6 (M)	.5 (M)	.3 (L)
No fish	.5 (M)	.3 (L)	.2 (L)	*.1 (L)*

Comments: The AA consists of a seasonally flooded wetlands absent of fish, resulting in a low Moderate Habitat Quality rating of 0.1.

14E. Flood Attenuation: (applies only to wetlands subject to flooding via in-channel or overbank flow. If wetlands in AA are not flooded from in-channel or overbank flow, circle **NA** here and proceed to next function.) N/A.

i. **Rating** (working from top to bottom, use the matrix below to arrive at [circle] the functional points and rating [H = high, M = moderate, or L = low])

Estimated wetland area in AA subject to periodic flooding	≥ 10 acres			<10, >2 acres			≤2 acres		
% of flooded wetland classified as forested, scrub/shrub, or both	75%	25-75%	<25%	75%	25-75%	<25%	75%	25-75%	<25%
AA contains **no outlet or restricted outlet**	1(H)	.9(H)	.6(M)	.8(H)	.7(H)	.5(M)	.4(M)	.3(L)	.2(L)
AA contains **unrestricted outlet**	.9(H)	.8(H)	.5(M)	.7(H)	.6(M)	.4(M)	.3(L)	.2(L)	.1(L)

ii. Are residences, businesses, or other features which may be significantly damaged by floods located within 0.5 miles downstream of the AA (circle)?
Y N Comments:

14F. Short and Long Term Surface Water Storage: (Applies to wetlands that flood or pond from overbank or in-channel flow, precipitation, upland surface flow, or groundwater flow. If no wetlands in the AA are subject to flooding or ponding, circle **NA** here and proceed with the evaluation.)

i. **Rating** (working from top to bottom, use the matrix below to arrive at [circle] the functional points and rating [H = high, M = moderate, or L = low]. Abbreviations for surface water durations are as follows: P/P = permanent/perennial; S/I = seasonal/intermittent; and T/E = temporary/ephemeral [see instructions for further definitions of these terms].)

Estimated maximum acre feet of water contained in wetlands within the AA that are subject to periodic flooding or ponding	>5 acre feet			<5, >1 acre feet			*≤1 acre foot*		
Duration of surface water at wetlands within the AA	P/P	S/I	T/E	P/P	S/I	T/E	P/P	*S/I*	T/E
Wetlands in AA flood or pond ≥ 5 out of 10 years	1(H)	.9(H)	.8(H)	.8(H)	.6(M)	.5(M)	.4(M)	*.3(L)*	.2(L)
Wetlands in AA flood or pond < 5 out of 10 years	.9(H)	.8(H)	.7(M)	.7(M)	.5(M)	.4(M)	.3(L)	.2(L)	.1(L)

Comments: The 0.32 acre AA seasonally flooded to a depth of between 6 inches equals about 0.16 acre feet of ponding, resulting in a low Short and Long Term Surface Water Storage rating of 0.3.

14G. Sediment/Nutrient/Toxicant Retention and Removal: (Applies to wetlands with potential to receive excess sediments, nutrients, or toxicants through influx of surface or ground water or direct input. If no wetlands in the AA are subject to such input, circle **NA** here and proceed to **14H.**)

i. **Rating** (working from top to bottom, use the matrix below to arrive at [circle] the functional points and rating [H = high, M = moderate, or L = low].

Sediment, nutrient, and toxicant input levels within AA	AA receives or surrounding land use with potential to deliver low to moderate levels of sediments, nutrients, or compounds such that other functions are not substantially impaired. Minor sedimentation, sources of nutrients or toxicants, or signs of eutrophication present.				Waterbody on MDEQ list of waterbodies in need of TMDL development for "probable causes" related to sediment, nutrients, or toxicants or AA receives or surrounding land use with potential to deliver high levels of sediments, nutrients, or compounds such that other functions are substantially impaired. Major sedimentation, sources of nutrients or toxicants, or signs of eutrophication present.			
% cover of wetland vegetation in AA	*≥ 70%*		< 70%		≥ 70%		< 70%	
Evidence of flooding or ponding in AA	*Yes*	No	Yes	No	Yes	No	Yes	No
AA contains **no or restricted outlet**	*1 (H)*	.8 (H)	.7 (M)	.5 (M)	.5 (M)	.4 (M)	.3 (L)	.2 (L)
AA contains **unrestricted outlet**	.9 (H)	.7 (M)	.6 (M)	.4 (M)	.4 (M)	.3 (L)	.2 (L)	.1 (L)

Comments: Based on the proximity of grazing activities, the depressional AA with no direct or a restricted outlet could receive nutrient input through surface water runoff, resulting in a high Sediment/Nutrient/Toxicant Retention and Removal rating of 1.0.

14H Sediment/Shoreline Stabilization: (applies only if AA occurs on or within the banks or a river, stream, or other natural or man-made drainage, or on the shoreline of a standing water body which is subject to wave action. If does not apply, circle **NA** here and proceed to **14I**)

i. **Rating** (working from top to bottom, use the matrix below to arrive at [circle] the functional points and rating [E = exceptional, H = high, M = moderate, or L = low] for this function.

% Cover of wetland streambank or shoreline by species with deep, binding rootmasses	*Duration of surface water adjacent to rooted vegetation*		
	permanent / perennial	seasonal / intermittent	Temporary / ephemeral
≥ 65%	1 (H)	.9 (H)	.7 (M)
35-64%	.7 (M)	.6 (M)	.5 (M)
< 35%	.3 (L)	.2 (L)	.1 (L)

Comments: N/A. The AA consists of a depression located within a pasture.

14I. Production Export/Food Chain Support:
i. **Rating** (working from top to bottom, use the matrix below to arrive at [circle] the functional points and rating [H = high, M = moderate, or L = low] for this function. Factor A = acreage of vegetated component in the AA; Factor B = structural diversity rating from #13; Factor C = whether or not the AA contains a surface or subsurface outlet; the final three rows pertain to duration of surface water in the AA, where P/P = permanent/perennial; S/I = seasonal/intermittent; T/E /A= temporary/ephemeral or absent [see instructions for further definitions of these terms].)

A	Vegetated component >5 acres						Vegetated component 1-5 acres						*Vegetated component <1 acre*					
B	High		Moderate		Low		High		Moderate		Low		High		Moderate		*Low*	
C	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	*Yes*	No
P/P	1H	.9H	.9H	.8H	.8H	.7M	.9H	.8H	.8H	.7M	.7M	.6M	.7M	.6M	.6M	.4M	.4M	.3L
S/I	.9H	.8H	.8H	.7M	.7M	.6M	.8H	.7M	.7M	.6M	.6M	.5M	.6M	.5M	.5M	.3L	*.3L*	.2L
T/E/A	.8H	.7M	.7M	.6M	.6M	.5M	.7M	.6M	.6M	.5M	.5M	.4M	.5M	.4M	.4M	.2L	.2L	.1L

Comments: Based on the 0.32 acre vegetated component, the low structural diversity, the presumed subsurface outlet associated with potential groundwater discharge and recharge, and the seasonal or intermittent surface water duration, the AA includes a low Production Export/Food Chain Support mean rating of 0.3.

14J. Groundwater Discharge/Recharge: (Check the indicators in i & ii below that apply to the AA)

i. **Discharge Indicators**
___Springs are known or observed
___Vegetation growing during dormant season/drought
X Wetland occurs at the toe of a natural slope

ii. **Recharge Indicators**
___Permeable substrate present without underlying impeding layer
___Wetland contains inlet but no outlet
___Other

___Seeps are present at the wetland edge
___AA permanently flooded during drought periods
___Wetland contains an outlet, but no inlet
___Other

iii. **Rating:** Use the information from i and ii above and the table below to arrive at [circle] the functional points and rating [H = high, L = low].

Criteria	*Functional Points and Rating*
AA is known Discharge/Recharge area or one or more indicators of D/R present	***1 (H)***
No Discharge/Recharge indicators present	.1 (L)
Available Discharge/Recharge information inadequate to rate AA D/R potential	N/A (Unknown)

Comments: Wetlands are associated at the toe of a natural slope at DP-B-4 and DP-B-25. Therefore, the AA includes a high Groundwater Discharge/Recharge rating of 1.0.

14K. Uniqueness:

i. **Rating** (working from top to bottom, use the matrix below to arrive at [circle] the functional points and rating [H = high, M = moderate, or L = low].

Replacement potential	AA contains fen, bog, warm springs or mature (>80 yr-old) forested wetland or plant association listed as "S1" by the MNHP			AA does not contain previously cited rare types and structural diversity (#13) is high or contains plant association listed as "S2" by the MNHP			***AA does not contain previously cited rare types or associations and structural diversity (#13) is low-*** moderate		
Estimated relative abundance (#11)	rare	common	abundant	rare	common	abundant	rare	common	abundant
Low disturbance at AA (#12i)	1 (H)	.9 (H)	.8 (H)	.8 (H)	.6 (M)	.5 (M)	.5 (M)	.4 (M)	.3 (L)
Moderate disturbance at AA (#12i)	.9 (H)	.8 (H)	.7 (M)	.7 (M)	.5 (M)	.4 (M)	.4 (M)	.3 (L)	***.2 (L)***
High disturbance at AA (#12i)	.8 (H)	.7 (M)	.6 (M)	.6 (M)	.4 (M)	.3 (L)	.3 (L)	.2 (L)	.1 (L)

Comments: *Estimated relative abundance (#11):* Not applicable. The project is located in Idaho.
With low structural diversity, an unknown relative abundance and moderate disturbance, a low Uniqueness rating of 0.2 is estimated.

14L. Recreation/Education Potential: i. Is the AA a known rec./ed. site: (circle) Y ***N*** (If yes, rate as [circle] High [1] and go to ii; ***if no go to iii***)

ii. Check categories that apply to the AA: ___ Educational/scientific study; ___ Consumptive rec.; ___ Non-consumptive rec.; ___Other

iii. Based on the location, diversity, size, and other site attributes, is there strong potential for rec./ed. use? Y ***N***
(If yes, go to ii, then proceed to iv; ***if no, then rate as [circle] Low [0.1]***)

iv. **Rating** (use the matrix below to arrive at [circle] the functional points and rating [H = high, M = moderate, or L = low] for this function.

Ownership	*Disturbance at AA (#12i)*		
	low	moderate	high
public ownership	1 (H)	.5 (M)	.2 (L)
private ownership	.7 (M)	.3 (L)	.1 (L)

Comments: The AA consists of privately owned pasture, contains no known recreational or educational sites, and includes a moderate disturbance ranking, resulting in low Recreation/Education Potential rating of 0.1.

FUNCTION & VALUE SUMMARY & OVERALL RATING

Function & Value Variables	Rating	Actual Functional Points	Possible Functional Points	Functional Units; (Actual Points x Estimated AA Acreage @0.32)
A. Listed/Proposed T&E Species Habitat	L	0	1	0
B. MT Natural Heritage Program Species Habitat	N/A	N/A	1	N/A
C. General Wildlife Habitat	M	0.5	1	0.16
D. General Fish/Aquatic Habitat	L	0.1		0.032
E. Flood Attenuation	N/A	N/A		N/A
F. Short and Long Term Surface Water Storage	L	0.3		0.096
G. Sediment/Nutrient/Toxicant Removal	H	1.0		0.32
H. Sediment/Shoreline Stabilization	N/A	N/A		N/A
I. Production Export/Food Chain Support	L	0.3	1	0.96
J. Groundwater Discharge/Recharge	H	1.0	1	0.32
K. Uniqueness	L	0.2	1	0.064
L. Recreation/Education Potential	L	0.1	1	0.032
Totals:		3.5	7	1.12

1.12 x $22,000.00 = $24,640.00 wetland bank credits.

OVERALL ANALYSIS AREA (AA) RATING: (Circle appropriate category based on the criteria outlined below) I II *III* IV

Category I Wetland: (Must satisfy **one** of the following criteria; if does not meet criteria, go to Category II)

___ Score of 1 functional point for Listed/Proposed Threatened or Endangered Species; **or**
___ Score of 1 functional point for Uniqueness; **or**
___ Score of 1 functional point for Flood Attenuation **and** answer to Question 14E.ii is "yes"; **or**
___ Total actual functional points > 80% (round to nearest whole #) of total possible functional points. *(Actual totals: 50%)*

Category II Wetland: (Criteria for Category I not satisfied **and** meets any **one** of the following criteria; if not satisfied, go to Category IV)

___ Score of 1 functional point for Species Rated S1, S2, or S3 by the MT Natural Heritage Program; **or**
___ Score of .9 or 1 functional point for General Wildlife Habitat; **or**
___ Score of .9 or 1 functional point for General Fish/Aquatic Habitat; **or**
___ "High" to "Exceptional" ratings for **both** General Wildlife Habitat **and** General Fish/Aquatic Habitat; **or**
___ Score of .9 functional point for Uniqueness; **or**
___ Total Actual Functional Points > 65% (round to nearest whole #) of total possible functional points. *(Actual totals: 50%)*

Category III Wetland: (Criteria for Categories I, II or IV not satisfied)

Category IV Wetland: (Criteria for Categories I or II are not satisfied and all of the following criteria are met; if does not satisfy criteria go to Category III)

X "Low" rating for Uniqueness; **and**
X "Low" rating for Production Export/Food Chain Support; **and**
___ Total actual functional points < 30% (round to nearest whole #) of total possible functional points

Spencer Ferguson

From: Marty Taylor [mtaylor@jasewell.com]
Sent: Friday, June 03, 2011 10:16 AM
To: Eric Eldenburg; Spencer Ferguson; Kevin Koesel
Subject: FW: Valencia Bank credit a special condition of action # NWW-2010-664 West Bonner Sewer and Water

Attachments: NWW-2010-664_NWP_Verification letter.pdf

NWW-2010-664_N
WP_Verification ...

Gentlemen:

Attached is the Corps authorization letter for the wetland fill and bore.

Note that this approval is valid until 3/18/12. Thereafter, all of the nationwide permits expire (they are all valid for five years beginning in 2007).

Several conditions were attached to the authorization that were sent to Lonnie only. It is critical to maintain compliance that the contractor adhere to these conditions. Let me know if I need to assist.

Prior to work commencing, the WBWSD will need to provide to the Corps proof of payment to the wetland bank for those "wetland credits."

Marty

Martin E. Taylor, AICP
Member -- American Institute of Certified Planners Land Use Planning, Design and Entitlements Wetland Delineations Project Management

James A. Sewell & Associates, LLC
Consulting Engineers, Surveyors and Land Use Planners
1205 Highway 2, Suite 101
Sandpoint, Idaho 83864
Office: 208-263-4160
Fax: 208-263-5229
Cell: 208-610-0465

-----Original Message-----
From: Reinhart, Mary E NWW [mailto:Mary.E.Reinhart@usace.army.mil]
Sent: Friday, June 03, 2011 9:46 AM
To: Martinez, Greg J NWW; valenciawetland@gmail.com
Cc: Marty Taylor
Subject: Valencia Bank credit a special condition of action # NWW-2010-664 West Bonner Sewer and Water

Good Morning Donna and Greg, West Bonner Sewer and Water District was authorized to perform work under NWP 12 and NWP 14. A special condition of that permit is that they must purchase 1.05 credits from the Valencia Trust prior to starting work. Work is proposed to begin this June.

If you have any questions please give me a call.
Thanks,
beth

Beth Reinhart
Regulatory Project Manager
Army Corps of Engineers

Coeur D'Alene Regulatory Office
2065 W Riverstone Dr., Ste 201
Coeur d'Alene, ID 83814
208 765-8971
208 765-8368 fax
mary.e.reinhart@usace.army.mil

Idaho Department of Environmental Quality

Final §401 Water Quality Certification

May 24, 2011

404 Permit: NWW-2010-664-C03; West Bonner Water and Sewer District Project

Applicant/Authorized Agent: Applicant: Mr. Lonnie Orr, West Bonner Water and Sewer District 215 N. Washington Ave Oldtown, ID 83822. Authorized Agent: Martin E. Taylor, AICP James A. Sewell & Associates 1205 Highway 2, Suite 101 Sandpoint, ID 83864.

Receiving Water Body Name/Assessment Unit: Unnamed Tributary to Pend Oreille River and associated wetland. Assessment Unit #ID17010216PN002_02

Receiving Water Body Condition: The unnamed tributary to Pend Oreille River has not been assessed and for the purposes of antidegradation review, we assume that it fully supports all existing beneficial uses. Pend Oreille River is an impaired waterbody for dissolved gas supersaturation, phosphorus, and temperature.

Project Location: Section 24, T56N, R6W; Project begins on the north side of Highway 2 approximately 0.5 mile from the east bank of the Pend Oreille River Highway 2 bridge.

Pursuant to the provisions of Section 401(a)(1) of the Federal Water Pollution Control Act (Clean Water Act), as amended, 33 USC Section 1341 (a)(1), and Idaho Code §§ 39-101 et.seq., and 39-3601 et.seq., the Idaho Department of Environmental Quality (DEQ) has authority to review activities receiving Section 404 dredge and fill permits and issue a water quality certification decision.

Based upon its review of the permit application and associated information for the above-referenced activity, DEQ certifies that if the permittee complies with the terms and conditions imposed by the permit along with the conditions set forth in this water quality certification, then there is reasonable assurance the activity will comply with the applicable requirements of Sections 301, 302, 303, 306, and 307 of the Clean Water Act, including the Idaho Water Quality Standards (WQS) (IDAPA 58.01.02) and other appropriate water quality requirements of State law.

This certification does not constitute authorization of the permitted activities by any other state or federal agency or private person or entity. This certification does not excuse the permit holder from the obligation to obtain any other necessary approvals, authorizations or permits.

PROJECT DESCRIPTION

West Bonner Water and Sewer District proposed to install a 12 inch waterline and create a 0.59 mile road on top of the line, of which 534 feet cross a wetland. The purpose of the road is to access a location where a potable water tank could be constructed along with a distribution line to supply water to the District's customers. To cross the wetland, the plans require three 12 inch cross culverts to provide water connectivity throughout the wetland. Silt fences are to be placed at the base of the road fill along each side of the wetland crossing. A rock lined ditch is proposed for 300 feet along the east slope of the road as it climbs up in elevation from the wetland crossing. Rock armor is also proposed for the upslope side of the road near the top of the hill continuing on to the water tank location. Construction will be done when the wetland no longer has standing water along the project alignment.

RECEIVING WATERBODY DESCRIPTION

The assessment unit associated with the unnamed tributary and wetland has the following designated beneficial uses: cold water aquatic life; primary contact recreation; domestic, agricultural, and industrial water supply; wildlife habitats; and aesthetics. To date, DEQ has not assessed beneficial use support status of this assessment unit.

ANTIDEGRADATION

Idaho's antidegradation policy (IDAPA 58.01.02.051) requires that existing uses of all waters in the state and the level of water quality necessary to protect those uses be maintained (Tier I protection). In addition, where the quality of water is better than that required to maintain beneficial uses (the water body is considered "high Quality"), then DEQ must assure that no degradation will be allowed unless it is deemed to be necessary to accommodate important economic or social development (Tier II protection).

Because the beneficial use support status in the assessment unit associated with the unnamed tributary and wetland has not been evaluated, DEQ must determine the appropriate level of antidegradation protection on a case-by-case basis. Because no data is currently available and the collection of necessary data to determine the support status of the assessment unit would take considerable time, the applicant has agreed to consider the unnamed tributary a high quality water for the purposes of this antidegradation review in order to prevent further delays in the issuance of this certification. Therefore, DEQ has provided Tier 2 antidegradation protection to this assessment unit. DEQ will reevaluate the level of antidegradation protection afforded to this assessment unit based on available information when preparing future 401 certifications for federally-permitted activities that may affect these receiving water bodies.

The primary pollutants of concern for this project are sediment, turbidity, and petroleum products. Conditions of this certification ensure that this project will not cause a lowering of water quality in this tributary for any pollutants. As such, there is a reasonable assurance of compliance with the Tier II antidegradation provisions applicable to this unnamed tributary to Pend Oreille River.

As long as the project is conducted in accordance with the provisions of the project plans, Section 404 Permit, and conditions of this certification, then there is reasonable assurance the existing beneficial uses and water quality of this tributary will be maintained and protected. Therefore, DEQ concludes that this activity complies with Idaho's antidegradation policy.

CONDITIONS THAT ARE NECESSARY TO ASSURE COMPLIANCE WITH WATER QUALITY STANDARDS OR OTHER APPROPRIATE WATER QUALITY REQUIREMENTS OF STATE LAW

1. This certification authorizes the activity as described in the joint application for permit received February 23, 2011 and amended by the applicant on March 25 and 30, 2011.

2. This certification is conditioned upon the requirement that any modification (e.g. change in best management practices to a less protective practice, work windows, etc.) of the permitted activity shall first be provided to DEQ for review to determine compliance with Idaho Water Quality Standards and to provide additional certification pursuant to §401. Such modifications may not be implemented until DEQ has made a determination whether additional certification is necessary.

3. DEQ reserves the right to modify, amend, or revoke this certification if DEQ determines that, due to changes in relevant circumstances, including without limitation, changes in project activities, the characteristics of the receiving water body, or state water quality standards, there is no longer reasonable assurance of compliance with water quality standards or other appropriate requirements of state law.

4. This certification may be revoked for failure of the permittee to comply with the conditions of this certification or the terms and conditions of the referenced permit. Revocation shall become effective upon written notice to the permittee, and the appropriate opportunity to be heard. Once revoked, all activities related to the permittee's violation of the conditions of this certification as permitted under the referenced permit shall immediately cease. The activity may not resume unless authorized by DEQ.

5. A copy of this certification must be kept on the job site and readily available for review by any contractor working on the project as well as any federal, state, or local government personnel.

6. The applicant shall provide access to the project site upon request by DEQ personnel for site inspections, monitoring, and/or to ensure that conditions of this certification are being met.

7. The applicant is responsible for all work done by contractors and must ensure the contractor(s) are informed of and follow all the conditions described in this certification and the Section 404 permit.

8. If there is a spill or release of a hazardous material to State waters or to land such that there is likelihood the material will enter State Waters, the State Communications Center shall be contacted immediately at 1-800-632-8000. All contractors shall have ready access to the State Communications Center number.

9. Hazardous and deleterious materials shall not be stored, disposed of, or accumulated adjacent to or in the immediate vicinity of state waters unless adequate measures and controls are provided to insure that those materials will not enter state waters as result of high water, precipitation runoff, wind, storage facility failure, accidents in operation, or unauthorized third party activities.

10. Equipment shall be kept in good repair so as to not chronically leak fluids. If equipment in good repair normally leak fluids, absorbent pads or other containment shall be placed to capture the fluid while on the project.

11. Silt fences shall be placed in such a manner so as to prevent sediment from entering the wetland outside the footprint of the fill. Silt fence is not to be used to trap sediment within the wetland. The intent of silt fence use is to keep soil on uplands and within the project boundary. Correct installation of silt fencing shall follow the contours of the land and not be placed perpendicular to the contour (i.e. fence does not go uphill or downhill).

12. Straw bales shall not be used as check dams. Suitable alternatives include, but are not limited to, rock check dams and straw wattles.

13. Turbidity in the defined stream channel downstream of this work shall not exceed background turbidity by more than 50 NTU instantaneously or 25 NTU for more than 10 consecutive days. Turbidity may be monitored using a turbidity meter or by visual observations. If numeric turbidity data is collected using a turbidity meter, the applicant shall evaluate compliance with the numeric turbidity standard. If visual monitoring is conducted in lieu of a turbidity meter, it must be performed by a person who is on site during all construction activity. Turbidity monitoring must occur when a plume is observed in the stream.

14. If turbidity standards are exceeded or a plume of turbid water is observed, immediate steps shall be taken to reduce turbidity to below the standard. Best management practices shall be modified to ensure that the turbidity standards are not exceeded in the future.

15. Plan and Specification review and approval for installation of water and wastewater lines and other appropriate related designs shall be obtained from DEQ prior to start of this project. Contact Katie Baker-Casile at 208.666.4640 for more information.

16. Rock armor shall be placed at each culvert inlet and outlet at all wetland locations.

17. The wetland portion of waterline burial and road construction shall not begin until standing water within the project footprint has dried up.

18. Excavated wetland soils shall be placed on uplands or within the road footprint to minimize wetland disturbance outside of the project area.

19. Temporary storage of construction materials or excavated wetland soils shall be located outside of the wetland boundary or within the road footprint to minimize wetland disturbance.

20. Discharge of water from the pipeline trench into the wetland is not authorized. Water shall be discharged to upland sites and infiltrated into the ground. If discharge of trench water into the wetland is necessary, submit the selected best management practice(s) associated with this proposed discharge to DEQ for review and approval.

RIGHT TO APPEAL FINAL CERTIFICATION

The final Section 401 Water Quality Certification may be appealed by submitting a petition to initiate a contested case, pursuant to Idaho Code § 39-107(5), and the Rules of Administrative Procedure Before the Board of Environmental Quality, IDAPA 58.01.23, within 35 days of the date of the final certification.

Questions regarding the actions taken in this certification should be directed to June Bergquist, Coeur d'Alene Regional Office at 208.666.4605 or june.bergquist@deq.idaho.gov .

Daniel Redline
Regional Administrator
Coeur d'Alene Regional Office

STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

2110 Ironwood Parkway • Coeur d'Alene, Idaho 83814 • (208) 769-1422

C.L. "Butch" Otter, Governor
Toni Hardesty, Director

May 24, 2011

Mr. Lonnie Orr, Chairman
West Bonner Water and Sewer District
215 N. Washington Ave
Oldtown, ID 83822

RE: Final §401 Water Quality Certification for West Bonner Water and Sewer District Project; NWW 2010-664-C03

Dear Mr. Orr,

Enclosed is the final water quality certification for the West Bonner Water and Sewer District project. This certification was advertised for public comment for 21 days between April 25 and May 16, 2011. No comments were received and no substantive changes were made to the final certification. If you have any questions or concerns, please contact June Bergquist at 208.666.4605 or june.bergquist@deq.idaho.gov .

Sincerely,

Daniel Redline
Regional Administrator
Coeur d'Alene Regional Office

Enclosure

c: Beth Reinhart, Corps of Engineers - Coeur d'Alene Office
Martin E. Taylor, AICP James A. Sewell & Associates

James A Sewell & Assoc LLC

JUN 01 2011

Sandpoint, Idaho

Spencer Ferguson

From: Marty Taylor [mtaylor@jasewell.com]
Sent: Monday, May 23, 2011 3:45 PM
To: Spencer Ferguson
Subject: RE: West Bonner W&S porposed work in Oldtown

S:
Please print for your EA records.

Martin E. Taylor, AICP
Member -- American Institute of Certified Planners Land Use Planning, Design and Entitlements Wetland Delineations Project Management

James A. Sewell & Associates, LLC
Consulting Engineers, Surveyors and Land Use Planners
1205 Highway 2, Suite 101
Sandpoint, Idaho 83864
Office: 208-263-4160
Fax: 208-263-5229
Cell: 208-610-0465

-----Original Message-----
From: Reinhart, Mary E NWW [mailto:Mary.E.Reinhart@usace.army.mil]
Sent: Monday, May 23, 2011 3:31 PM
To: Marty Taylor; Kevin Koesel
Cc: Eric Eldenburg; bryon_holt@fws.gov; Spencer Ferguson
Subject: RE: West Bonner W&S porposed work in Oldtown

ALL, I spoke with Bryon Holt - FWS regarding the need to consult under Section7 ESA. He confirmed what we all hoped to hear, the boring and associated work would be a "no effect" determination for bull trout.

Beth

-----Original Message-----
From: Marty Taylor [mailto:mtaylor@jasewell.com]
Sent: Monday, May 23, 2011 2:53 PM
To: Kevin Koesel
Cc: Eric Eldenburg; bryon_holt@fws.gov; Reinhart, Mary E NWW; Spencer Ferguson
Subject: RE: West Bonner W&S porposed work in Oldtown

Kevin:

In my discussing with Beth 5/23/11 the continued need for vibration attenuation data, she offered that she had discussed the bore location separation data you provided, below, with Bryon at USFWS and that the vibration data are no longer necessary.

Accordingly, we should be good to go with the Corps and USFWS as far as the Section 10 affects.

I'll let Beth confirm, but I wanted to get with you right away so that you and the bore company don't invest any more energy in this task.

I'll be able to now complete the revised joint app (to include the river bore "Section

10" permit).

Thanks.

Marty

Martin E. Taylor, AICP

Member -- American Institute of Certified Planners

Land Use Planning, Design and Entitlements

Wetland Delineations

Project Management

James A. Sewell & Associates, LLC

Consulting Engineers, Surveyors and Land Use Planners

1205 Highway 2, Suite 101

Sandpoint, Idaho 83864

Office: 208-263-4160

Fax: 208-263-5229

Cell: 208-610-0465

-----Original Message-----
From: Reinhart, Mary E NWW [mailto:Mary.E.Reinhart@usace.army.mil]
Sent: Friday, May 20, 2011 9:31 AM
To: Spencer Ferguson
Cc: Kevin Koesel; Marty Taylor; Eric Eldenburg; bryon_holt@fws.gov
Subject: RE: West Bonner W&S porposed work in Oldtown

All, my bad! Thanks Spencer for clarification.

Beth

-----Original Message-----

From: Spencer Ferguson [mailto:sferguson@jasewell.com]

Sent: Friday, May 20, 2011 8:21 AM

To: Reinhart, Mary E NWW

Cc: Kevin Koesel; Marty Taylor; Eric Eldenburg; bryon_holt@fws.gov

Subject: RE: West Bonner W&S porposed work in Oldtown

Hey Beth,

I believe we have a misunderstanding as to the applicable summer pool elevation for the Pend Oreille River within the project area. It is our understanding that the summer pool elevation of Lake Pend Oreille and the Pend Oreille River upstream of the Albeni Falls Dam is 2062.5 feet above sea level. We have determined that summer pool elevation of the Pend Oreille River downstream of the Albeni Falls Dam, where the project is located to be 2031.5, as indicated in my previous email. We have also determined the 100-year flood elevation, downstream of the Albeni dam to be 2056.5. The proposed bore on the west edge of the Pend Oreille River is to be installed at an approximate 2056.0 elevation which would coincide with the water pool during a 100-year event. The proposed bore on the east edge of the Pend Oreille River will be installed at an approximate 2049 elevation, and thus, be located below the water line during a 100-year event. Please let me know if you have further questions.

Thanks,

Spencer Ferguson, EIT
James A. Sewell & Associates, LLC
600-4th Street West
Newport, WA 99156
(509) 447-3626
(509) 447-2112 Fax

-----Original Message-----
From: Reinhart, Mary E NWW [mailto:Mary.E.Reinhart@usace.army.mil]
Sent: Thursday, May 19, 2011 2:46 PM
To: Spencer Ferguson
Subject: RE: West Bonner W&S porposed work in Oldtown

HI, I think we may be using a different datum. The Corps recognizes the summer pool of LPO as 2065.2.

Please adjust the measurements as needed.

Thank you,

Beth

-----Original Message-----

From: Spencer Ferguson [mailto:sferguson@jasewell.com]

Sent: Thursday, May 19, 2011 2:10 PM

To: Reinhart, Mary E NWW

Cc: bryon_holt@fws.gov; Eric Eldenburg; Kevin Koesel; Marty Taylor

Subject: RE: West Bonner W&S porposed work in Oldtown

Beth,

We have determined the approximate ordinary summer water elevation to be 2031.5. I assume this is the pool elevation from which Bryon would like to reference our boring locations.

The bore locations, referenced from the 2031.5 summer pool elevation, are as follows:

West side (Oldtown):

24.5' above summer pool; 210' from river bank at summer pool

East side (Albeni Area):

17.5' above summer pool; 189' from river bank at summer pool

See attached sheets 4 and 5 for further clarification.

The proposed bore casing pipe will intersect the ground surface in areas with minimal to flat slopes. These locations will be set back approximately 200' from the ordinary summer water pool. In areas where river bank has steeper slopes, the proposed borings are approximately 20'-25' below the bank surface. We believe that the proposed horizontal distance from the ordinary high water pool and the minor slopes at the proposed beginning/end of the bore casing pipe will provide adequate protection against bank failure and minimize or eliminate any impacts on the river bed and fauna species.
Please
refer to the attached drawings for further information.

We anticipate a 20" bore diameter. The proposed casing pipe will be 12" HDPE DR 11, 200 psi pipe. This will be used at the water and sewer line bores.

I hope this answers your questions. Let me know if I can provide further information. We are still working on obtaining vibration information from contractors.

Thanks,

Spencer Ferguson, EIT
James A. Sewell & Associates, LLC
600-4th Street West
Newport, WA 99156
(509) 447-3626
(509) 447-2112 Fax

-----Original Message-----
From: Reinhart, Mary E NWW [mailto:Mary.E.Reinhart@usace.army.mil]
Sent: Thursday, May 19, 2011 1:15 PM
To: Spencer Ferguson

Cc: Marty Taylor

Subject: RE: West Bonner W&S porposed work in Oldtown

Hi, in my initial conversation with Bryon he wants to know distance from 2062.5 that the boring will begin , both sides. Wants clarification boring will not result in bank failure. Wants to know diameter of bore hole and casing material.

If you can send this to me I can get it right back over to him. I will not have time to review documents provided at yesterday's meeting until next week.

Thanks,

beth

-----Original Message-----

From: Spencer Ferguson [mailto:sferguson@jasewell.com]

Sent: Thursday, May 19, 2011 9:26 AM

To: Reinhart, Mary E NWW

Cc: Marty Taylor; Eric Eldenburg

Subject: West Bonner W&S porposed work in Oldtown

Beth,

I have attached, for your convenience, our correspondence with the USFWS regarding the West Bonner W&S project. This correspondence is also located in Exhibit 6 of the Environmental Assessment we provide you at yesterdays meeting. As you reaffirmed in yesterdays meeting, the USFWS declined to comment on the project pending a determination of potential impacts on local fisheries by the ACOE. I hope this helps with your review the project with regards to the section 10 permit and we will provide you with the boring sound attenuation information as soon as possible.

Thanks,

Spencer Ferguson, EIT

James A. Sewell & Associates, LLC

600-4th Street West

Newport, WA 99156

(509) 447-3626

(509) 447-2112 Fax

Spencer Ferguson

From: Marty Taylor [mtaylor@jasewell.com]
Sent: Tuesday, May 31, 2011 10:16 AM
To: Reinhart, Mary E NWW
Cc: Eric Eldenburg; Spencer Ferguson
Subject: West Bonner Water and Sewer District Revised Joint App

Hi Beth:

Mailed to you 5/31/11 is a revised joint app (re-signed by the applicant) including that Section 10 bore, a revised report referencing same, and some corrected mapping. You already have the environmental eval, the engineering report and the arch recon, as well as the engineering plans set, so I didn't include those redundant documents.

I'm thinking that you should be good to go with the NWP-12/Section 10/PCN verification and authorization, particularly given your progress with the USFWS these past couple of weeks ("no effect").

Let me know how your review is coming along, please.

June at DEQ shared with me 401 Cert info, below.

Thanks.

Marty

Martin E. Taylor, AICP
Member -- *American Institute of Certified Planners*
Land Use Planning, Design and Entitlements
Wetland Delineations
Project Management

James A. Sewell & Associates, LLC
Consulting Engineers, Surveyors and Land Use Planners
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Sandpoint, Idaho 83864
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Fax: 208-263-5229
Cell: 208-610-0465

From: June.Bergquist@deq.idaho.gov [mailto:June.Bergquist@deq.idaho.gov]
Sent: Tuesday, May 24, 2011 2:30 PM
To: Marty Taylor
Subject: RE: West Bonner W&S - Seattle District FONSI with EA

Hi Marty,
The final certification for West Bonner is up for signature and should be out the door in a day or two.
June

WETLAND DELINEATION REPORT

Tri-Pro Cedar Products
Bonner County
Parts of S19 & 30 T56N, R5W
&
S24 & 25, T56N, R6W

July 2008

Prepared for:

Tri-Pro Cedar Products
1122 East Highway 2
Oldtown, Id 83822

Prepared by:

Environmental Inc.
27391 North Timber Ridge Road
Rathdrum, ID 83858
208.651.4536
david_armes@hughes.net

WETLAND DELINEATION REPORT

This Wetland Delineation was completed on behalf of and for the exclusive use of the client and/or its agents, consultants, and contractors. The scope of services performed to complete this report may not be appropriate to satisfy the needs of other users, and any other use or re-use of this report is at the sole risk of said user. The findings and conclusions contained in this report are based upon the currently accepted legal and regulatory requirements, agency guidance, and the best professional judgment of the preparer. The findings presented herin apply to those conditions observed at the site at the time of the evaluation. Future environmentally significant changes may occur at the site, which could result in future findings and conclusions differing from those contained in this report.

Prepared for:

Tri-Pro Cedar Products
1122 East Highway 2
Oldtown, Id 83822

Prepared by:

David A. Armes
Certified Wetland Biologist

Environmental Inc.
27391 North Timber Ridge Road
Rathdrum, ID 83858
208.651.4536
david_armes@hughes.net

Environmental Inc.
27391 North Timber Ridge Road
Rathdrum, ID 83858
208.651.4536

July 30, 2008

Tri-Pro Cedar Products
Attn: Mr. Steve Linton
1122 East Highway 2
Oldtown, Id 83822

RE: Tri-Pro Cedar Products Wetland Delineation

Hello Steve.

Thanks for the opportunity to work with you on your project. Attached are two hard copies and the electronic version of the Wetland Delineation Report. Our group has completed the land use planning and environmental permitting and approval process for many projects in North Idaho. We would be pleased to assist you in the future with your project as you continue to explore and analyze your options.

I wanted to touch base with you on future regulatory requirements. If wetlands will be impacted as a result of the project the following phases are generally required prior to construction or site disturbances:

1. **Pre-application/permitting.** If wetlands are identified on the property and shall be impacted by the project a pre-application consultation (including a field verification) with the United States Army Corps of Engineers (for jurisdictional wetlands only) may be necessary. This would include review and discussion of the findings in the Wetland Delineation Report, an onsite review with regulatory agencies, and a Jurisdictional Determination and Verification by the United States Army Corps of Engineers.
2. **Impact analysis.** The regulatory guidelines outline a required process of wetland avoidance, minimization, and mitigation. Wetlands should be avoided to the maximum extent, wetland impacts should then be minimized, and finally unavoidable wetland impacts will require wetland mitigation to replace the loss of wetlands functions and values.
3. **Permitting/Mitigation.** Impacts to wetlands and/or streams will likely require a permit from the United States Army Corps of Engineers, the Idaho Department of Water Resources, the Idaho Department of Water Quality, and compliance with Bonner County regulations. Wetland mitigation will likely be required for impacts to wetlands and will need to be approved prior to final permitting.
4. **Bonner County Requirements.** In addition to wetland requirements, Bonner County also requires an Environmental Analysis/Land Capability Report, depending on the type of development you are submitting.

Best Regards,

Environmental Inc.
David A. Armes

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EXECUTIVE SUMMARY AND FINDINGS

Environmental Inc. conducted a wetland delineation for the Tri-Pro Cedar Property located in parts of S19 & 30 T56N, R5W & S24 & 25, T56N, R6W of Bonner County, Idaho (Project Location Maps Appendix A) (Project). This Wetland Delineation Report delineates, describes, and maps the presence and extent of wetlands, jurisdictional waters of the United States and non-jurisdictional surface waters based upon definitions in the 1987 Corps of Engineers Wetlands Delineation Manual, state requirements, and local requirements.

Based on the presence of hydrophytic vegetation, hydric soils, and positive indicators of wetland hydrology, ten (10) wetlands (Wetlands A-J) were identified during the field investigation (Appendix D Wetland Map).

Wetlands H and I are connected to the Pend Oreille River via surface waters and are considered jurisdictional under Section 404 of the Clean Water Act.

Wetland A, B, C, D, E, F, G, and J do not appear to be hydrologically connected via surface waters to a jurisdictional waterway. However due to the close proximity to the Pend Oreille River, these wetlands may be considered "adjacent" to a jurisdictional waterway. The final jurisdictional determination is made during the verification, jurisdictional determination, and permitting process with the regulatory agencies.

Unavoidable impacts to wetlands or associated buffers (if any) will likely require avoidance, minimization, and mitigation measures outlined in a report to accompany any permit applications or submittals for approval to any state, or local agencies. Bonner County currently does not require buffers around wetlands.

1. INTRODUCTION

Environmental Inc. conducted a wetland delineation for the Tri-Pro Cedar Property located in parts of S19 & 30 T56N, R5W & S24 & 25, T56N, R6W of Bonner County, Idaho (Project Location Maps Appendix A) (Project). This Wetland Delineation Report delineates, describes, and maps the presence and extent of wetlands, jurisdictional waters of the United States and non-jurisdictional surface waters based upon definitions in the 1987 Corps of Engineers Wetlands Delineation Manual, state requirements, and local requirements.

1.1 Purpose

The purpose of the study was to document the presence or absence of wetlands and surface waters located on the project site.

1.2 Regulatory Requirements

Federal

Local, state and federal regulations apply to activities in and near wetlands. The Clean Water Act is a federal act that regulates the placement of fill in jurisdictional wetlands and waters of the United States. Section 404 of the Clean Water Act requires permits for filling jurisdictional wetlands and waters of the United States. Section 404 permits must be administered by the United States Army Corps of Engineers (USACE) and certified by the state agency (as outlined in Section 401 of the Clean Water Act). Work within the boundaries of jurisdictional wetlands or the ordinary high water mark of waters of the United States are regulated under the USACE permitting process.

The USACE defines wetlands, as areas where hydrophytic vegetation, hydric soils, and wetland hydrology are simultaneously present. The USACE only regulates jurisdictional wetlands. Wetlands are considered jurisdictional by the USACE if they are closely associated with jurisdictional waters of the United States. The term waters of the United States has a broad meaning and incorporates both deepwater aquatic habitats and special aquatic sites, including wetlands, as follows:

a. The territorial seas;

b. Costal and inland waters, lakes, rivers, and streams that are navigable waters of the United States, including adjacent wetlands;

c. Tributaries to navigable waters of the United States, including adjacent wetlands;

d. Interstate waters and their tributaries, including adjacent wetlands; and

e. All other waters of the United States not identified above, the degradation of or destruction of which could affect interstate commerce.

Final determination of jurisdictional wetlands and waters of the United States is subject to approval by the USACE. Wetlands and surface waters that are not under USACE jurisdiction may still require permits from local, county, or state agencies.

State

The Idaho Department of Water Resources (IDWR) defines waters of the state as "A natural water course of perceptible extent with definite beds and banks which confines and conducts continuously flowing water. The channel referred to is that which exists at the present time, regardless of where the

channel may have been located at any time in the past". The IDWR requires a Joint Application Permit Form be submitted at a minimum of 60 days prior to disturbing waters of the state.

Local

Bonner County may regulate streams and wetlands that both are and are not found jurisdictional (non-jurisdictional) under Section 404 of the Clean Water Act. These streams and wetlands may be regulated during the project approval process based upon the counties current statutes and ordinances.

Prior to final design or any construction, all appropriate regulatory agencies should be contacted to verify the findings of this report and to obtain appropriate approvals and permits.

2. METHODOLOGY

The analysis for wetlands conducted on this site was based on the routine (on-site) methodology of the USACE Wetlands Delineation Manual (Environmental Laboratory, 1987). This method requires that evidence of three parameters (hydrophytic vegetation, hydric soils, and wetland hydrology) be simultaneously present for a wetland determination.

Two levels of information have been gathered for this analysis. This includes the preliminary site research and a site-specific investigation for the presence of wetlands.

2.1 Preliminary Research

Review of existing information was conducted to develop background knowledge of physical features and to identify the potential for wetland occurrence on the subject property. Information related to topography, drainage, and water features was obtained. The following resource documents were available for preliminary review of the site conditions:

- Quadrangle topography maps United States Geological Survey (USGS).
- National Wetlands Inventory. U.S. Fish and Wildlife Service (USFWS).
- Soil Survey of Bonner County, Idaho. Natural Resources Conservation Service (NRCS).
- Hydric Soils List of Bonner County, Idaho. Natural Resources Conservation Service (NRCS).

2.2 Site Specific Investigation

The site-specific investigation included the establishment of formal data plots (DP) to evaluate the three wetland parameters of hydrology, hydric soils, and hydrophytic vegetation.

2.2.1 Hydrology

Wetland hydrology was evaluated at each data plot location and other locations throughout the site. Evaluation of hydrology included observation of surface water, soil saturation, groundwater depth, ponding, or evidence of drainage patterns.

2.2.2 Soils

In accordance with the methodology, soil samples were taken at all data plots, and were examined for indicators of hydric conditions. Hydric soils are those that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions that favor the growth of hydrophytic vegetation. Hydric soil indicators may include thick organic layers, gleying, or low soil matrix chroma (chroma of one or less without mottles or chroma of two or less with mottles). Mottling may occur in areas of fluctuating water table levels.

2.2.3 Vegetation

Formal sampling plots were established in areas of homogenous vegetation. Plant species on the site were identified (Hitchcock and Cronquist, 1973 and Cooke, 1997). Vegetation is considered hydrophytic (adapted to wet conditions) when over 50 percent of the dominant plant species had an indicator status of facultative (FAC), facultative wetland (FACW), or obligate (OBL).

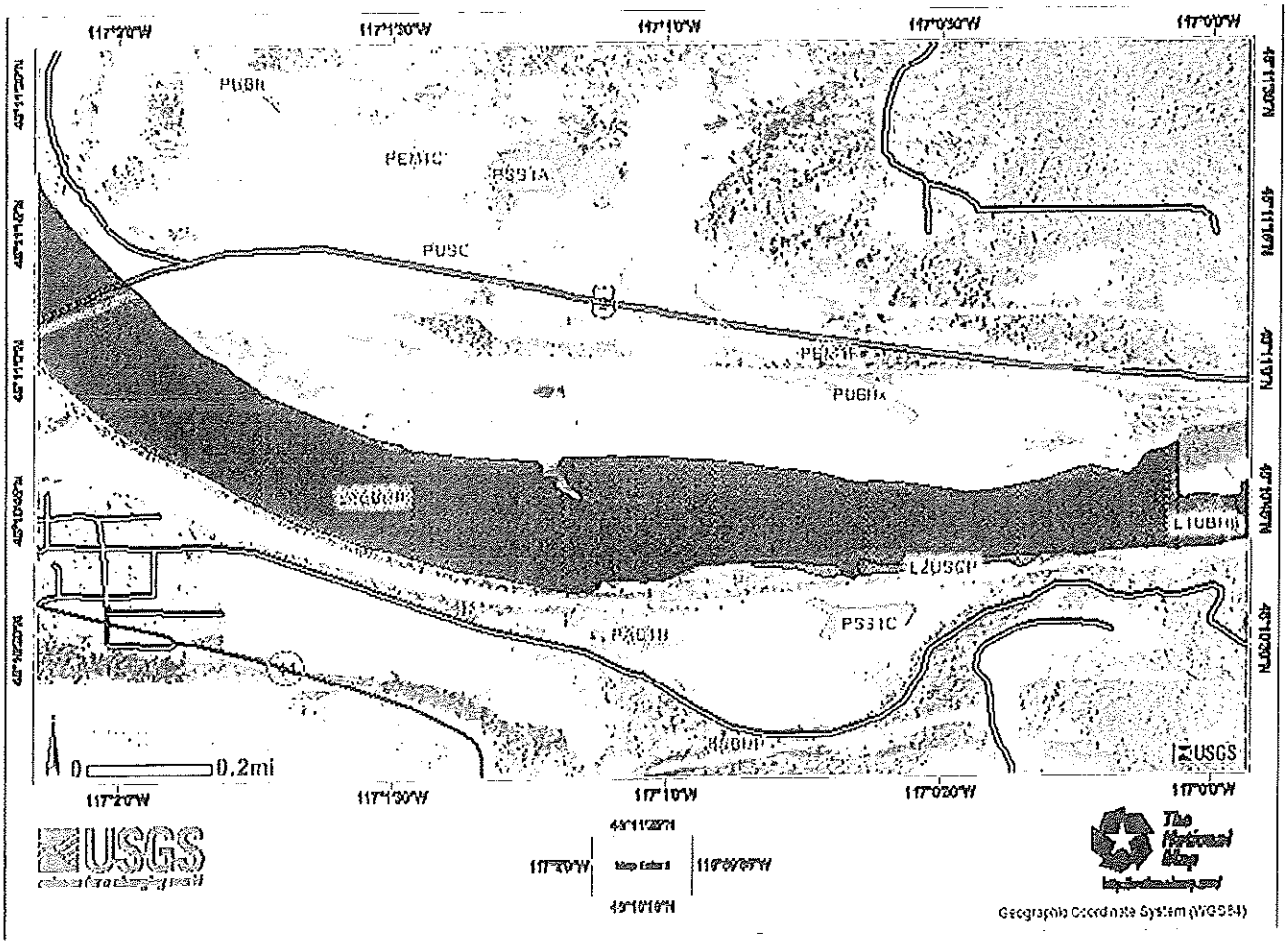
3. RESULTS

3.1 Preliminary Research

The National Wetland Inventory data identified multiple wetlands on the project site (USFWS, 2006).

3.1.1 National Wetlands Inventory

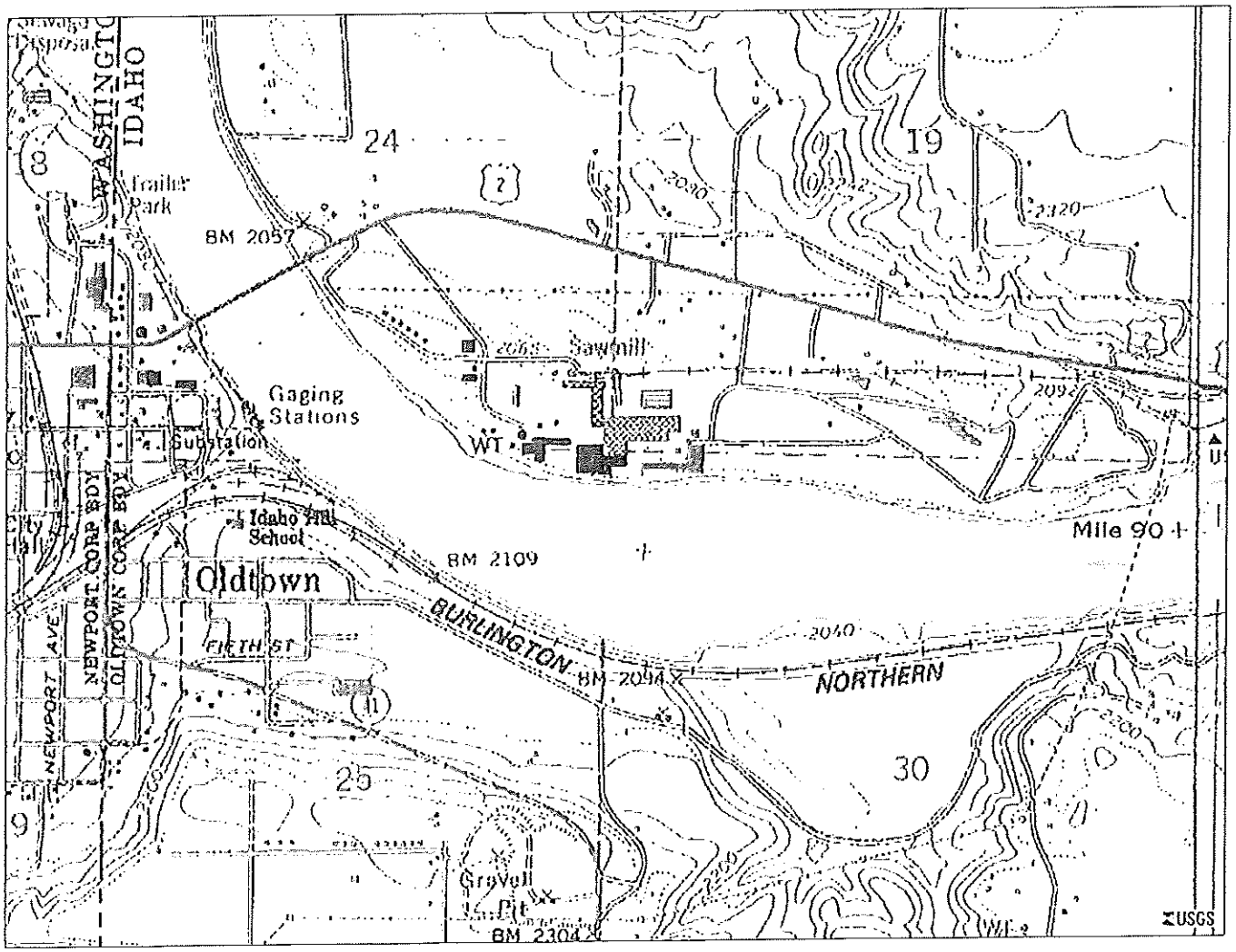
Figure 1 National Wetland Inventory Map Depicting NWI Wetlands



3.1.2 Topographical Map

No blue-line streams were identified on the USGS topographical map.

Figure 2 Topographical Map



3.1.3 Soils

The Soil Survey mapped four soils series within the vicinity of the site (Soil Report, Appendix B). The Hydric Soils List of Bonner County Area Idaho lists 15-Hoodoo silt loam and 31-Mission silt loam as hydric soils (please see the soil map located in the Soil Report, Appendix B).

3.2 Site-Specific Investigation

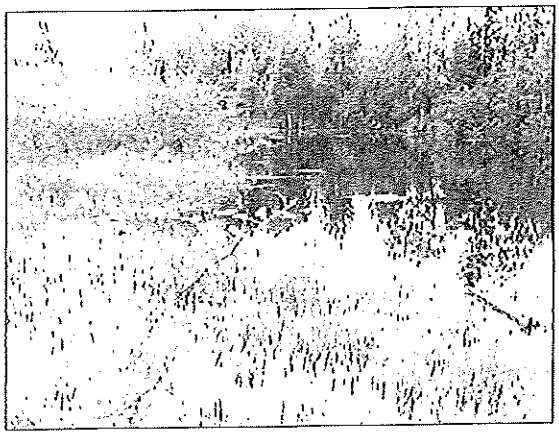
On 06/03/08 and 06/12/08 on site field investigations were conducted for the presence and extent of wetlands and surface waters on the property. Twenty-eight formal data plots (DP) were recorded (DP#1-28) (Wetland Data Forms, Appendix C) for the purposes of evaluating the hydrology, hydric soils, and hydrophytic vegetation. Additionally informal data plots were also utilized to evaluate areas for one or more of the wetland indicators. These formal and informal DP's served as the primary means for the wetland determination and wetland boundary location.

3.3 Wetland Determination

Based on the presence of hydrophytic vegetation, hydric soils, and positive indicators of wetland hydrology, ten (10) wetlands were identified during the field investigation (Appendix D Wetland Map).

3.3.1 Wetland A

Wetland A is approximately 1.26 acres in size. This wetland is classified as an aquatic bed, palustrine emergent, paulustrine scrub shrub and palustrine forested wetland (Cowardin, 1979). This wetland does not appear to have a surface connection with a navigable waterway and is not likely jurisdictional under Section 404 of the Clean Water Act. However due to the proximity to the Pend Oreille River, this wetland may be considered "adjacent" to a jurisdictional waterway. The final jurisdictional determination is made during the verification, jurisdictional determination, and permitting process with the regulatory agencies.



Wetland A

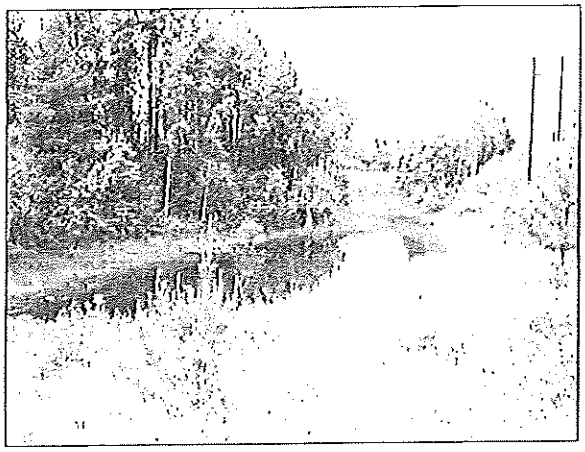
3.3.2 Wetland B

Wetland B is approximately 0.076 acres in size. This wetland is classified as a palustrine emergent wetland (Cowardin, 1979). This wetland does not appear to have a surface connection with a navigable waterway and is not likely jurisdictional under Section 404 of the Clean Water Act. However due to the proximity to the Pend Oreille River, this wetland may be considered "adjacent" to a jurisdictional waterway. The final jurisdictional determination is made during the verification, jurisdictional determination, and permitting process with the regulatory agencies.

3.3.3 Wetland C

Wetland C is approximately 0.656 acres in size. This wetland is classified as an aquatic bed, palustrine emergent, paulustrine scrub shrub and palustrine forested wetland (Cowardin, 1979). This wetland does not appear to have a surface connection with a navigable waterway and is not likely jurisdictional under Section 404 of the Clean Water Act. However due to the proximity to the Pend Oreille River, this wetland may be considered "adjacent" to a jurisdictional waterway. The final jurisdictional determination is made during the verification, jurisdictional determination, and permitting process with the regulatory agencies.

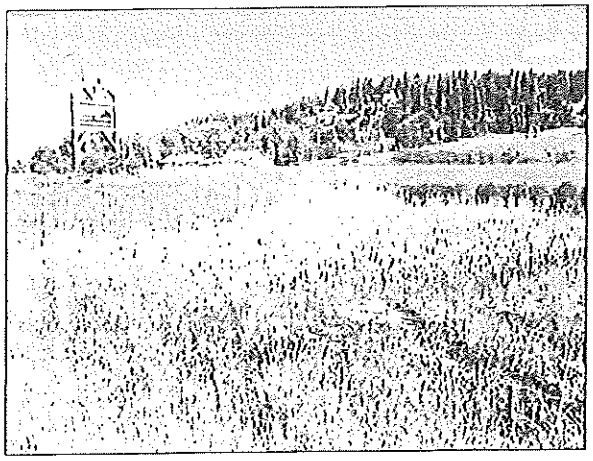
Wetland C



Wetland C

3.3.4 Wetland D

Wetland D is approximately 2.184 acres in size. This wetland is classified as an aquatic bed and palustrine emergent wetland (Cowardin, 1979). This wetland does not appear to have a surface connection with a navigable waterway and is not likely jurisdictional under Section 404 of the Clean Water Act. However due to the proximity to the Pend Oreille River, this wetland may be considered "adjacent" to a jurisdictional waterway. The final jurisdictional determination is made during the verification, jurisdictional determination, and permitting process with the regulatory agencies.



Wetland D

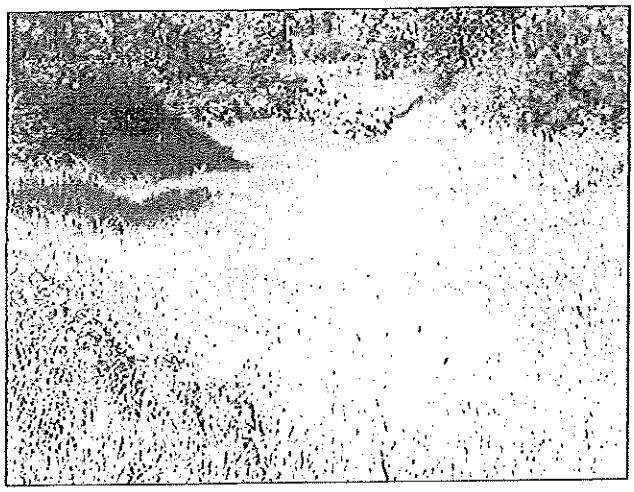
3.3.5 Wetland E

Wetland E is approximately 2.015 acres in size. This wetland is classified as an aquatic bed, palustrine emergent, paulustrine scrub shrub and palustrine forested wetland (Cowardin, 1979). This wetland does not appear to have a surface connection with a navigable waterway and is not likely jurisdictional under Section 404 of the Clean Water Act. However due to the proximity to the Pend Oreille River, this wetland may be considered "adjacent" to a jurisdictional waterway. The final jurisdictional determination is made during the verification, jurisdictional determination, and permitting process with the regulatory agencies.

3.3.6 Wetland F

Wetland F is approximately 0.079 acres in size. This wetland is classified as a palustrine emergent wetland (Cowardin, 1979). This wetland does not appear to have a surface connection with a navigable waterway and is not likely jurisdictional under Section 404 of the Clean Water Act. However due to the proximity to the Pend Oreille River, this wetland may be considered "adjacent" to a jurisdictional waterway. The final jurisdictional determination is made during the verification, jurisdictional determination, and permitting process with the regulatory agencies.

Wetland E



Wetland F

3.3.7 Wetland G

Wetland G is approximately 0.445 acres in size. This wetland is classified as a palustrine forested wetland (Cowardin, 1979). This wetland does not appear to have a surface connection with a navigable waterway and is not likely jurisdictional under Section 404 of the Clean Water Act. However due to the proximity to the Pend Oreille River, this wetland may be considered "adjacent" to a jurisdictional waterway. The final jurisdictional determination is made during the verification, jurisdictional determination, and permitting process with the regulatory agencies.

Wetland G

3.3.8 Wetland H →

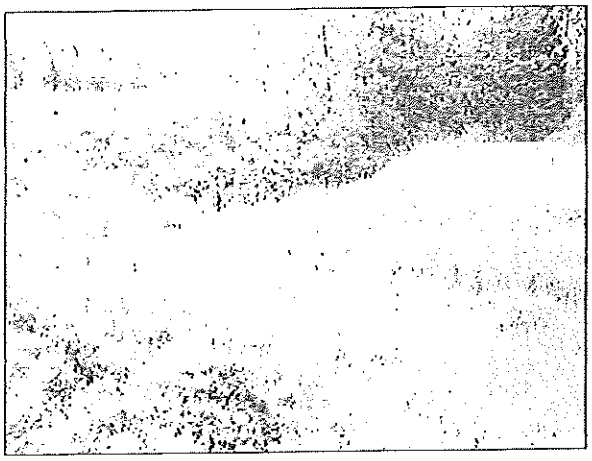
Wetland H is approximately 0.151 acres in size. This wetland is classified as a palustrine emergent wetland (Cowardin, 1979). This wetland has a surface connection with a navigable waterway and is likely jurisdictional under Section 404 of the Clean Water Act. The final jurisdictional determination is made during the verification, jurisdictional determination, and permitting process with the regulatory agencies.

3.3.9 Wetland I

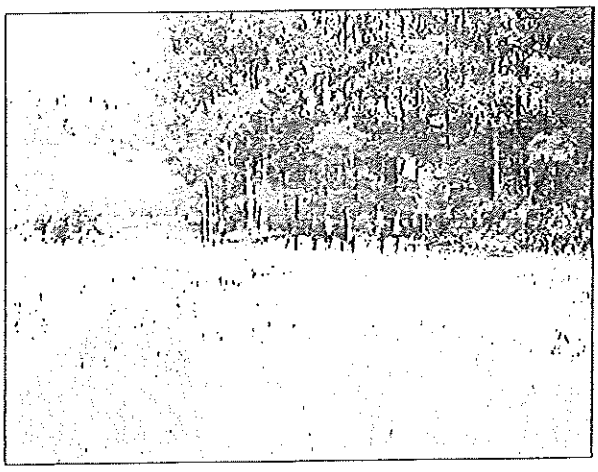
Wetland I is approximately 0.196 acres in size. This wetland is classified as an aquatic bed, palustrine emergent, and paulustrine scrub shrub wetland (Cowardin, 1979). This wetland has a surface connection with a navigable waterway and is likely jurisdictional under Section 404 of the Clean Water Act. The final jurisdictional determination is made during the verification, jurisdictional determination, and permitting process with the regulatory agencies

3.3.10 Wetland J

Wetland J is approximately 0.165 acres in size. This wetland is classified as a palustrine emergent and palustrine forested wetland (Cowardin, 1979). This wetland does not appear to have a surface connection with a navigable waterway and is not likely jurisdictional under Section 404 of the Clean Water Act. However due to the proximity to the Pend Oreille River, this wetland may be considered "adjacent" to a jurisdictional waterway. The final jurisdictional determination is made during the verification, jurisdictional determination, and permitting process with the regulatory agencies.



Wetland I



Wetland J

4. PERMITTING AND REGULATORY REQUIREMENTS

4.1 Wetlands

Wetlands H and I are connected to the Pend Oreille River via surface waters and are considered jurisdictional under Section 404 of the Clean Water Act.

Wetland A, B, C, D, E, F, G, and J do not appear to be hydrologically connected via surface waters to a jurisdictional waterway. However due to the close proximity to the Pend Oreille River, these wetlands may be considered "adjacent" to a jurisdictional waterway. The final jurisdictional determination is made during the verification, jurisdictional determination, and permitting process with the regulatory agencies.

4.2 Buffers Zones and Mitigation

Bonner County currently does not require buffers around wetlands.

Unavoidable impacts to wetlands or associated buffers (if any) will likely require avoidance, minimization, and mitigation measures outlined in a report to accompany any permit applications or submittals for approval to any state, or local agencies.

5. REFERENCES

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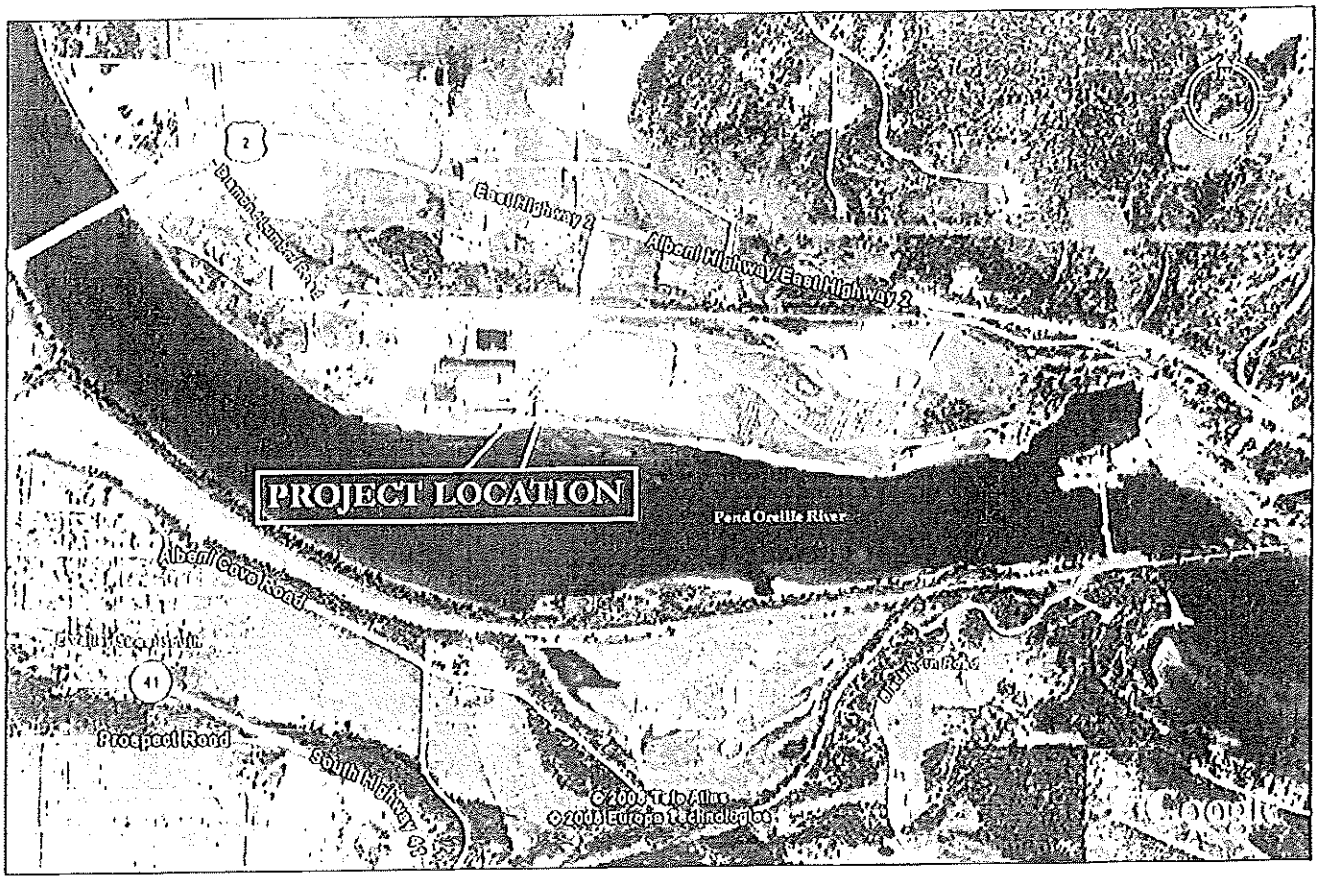
APPENDIX A PROJECT LOCATION



APPENDIX B SOIL REPORT

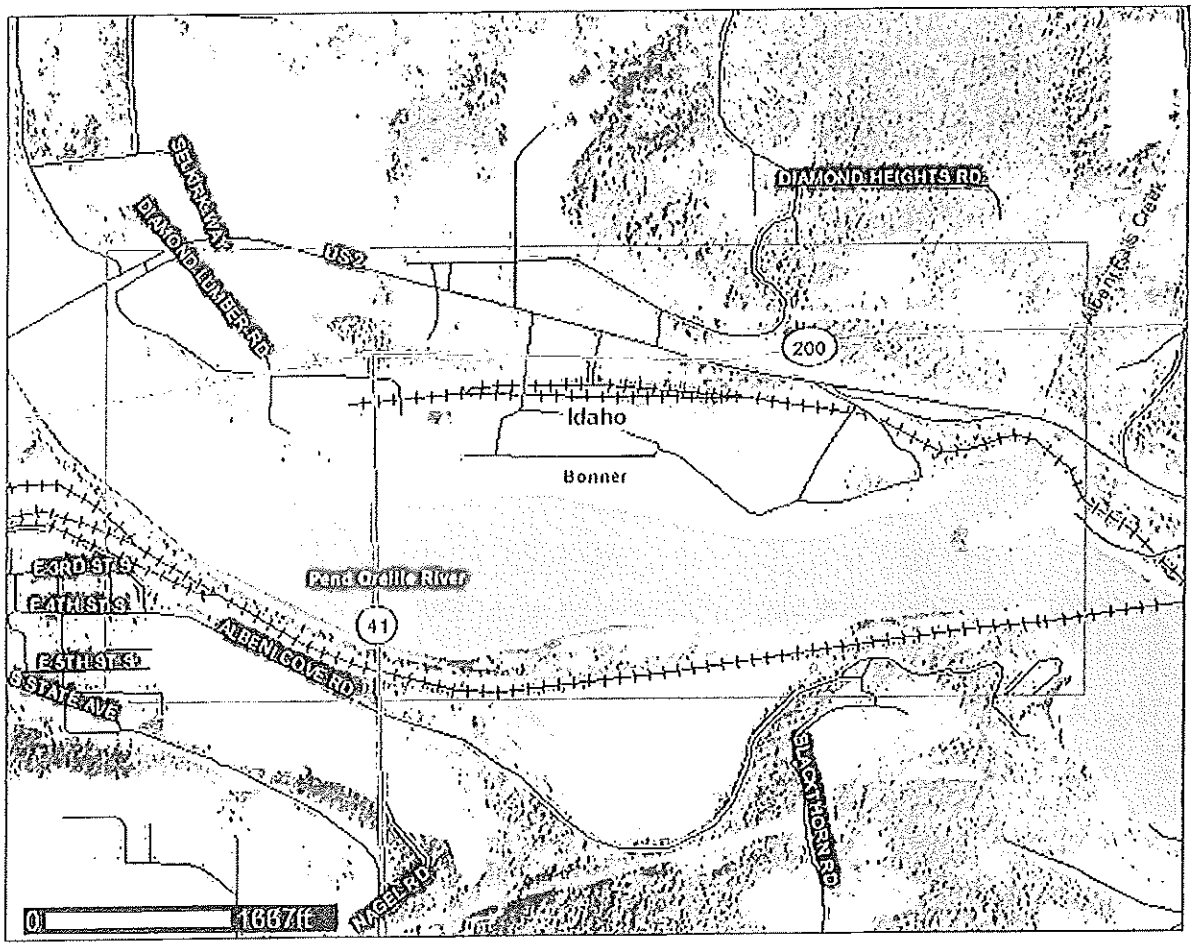
United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Bonner County Area, Idaho, Parts of Bonner and Boundary Counties



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Soil Data Mart Web site or the NRCS Web Soil Survey. The Soil Data Mart is the data storage site for the official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the

individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

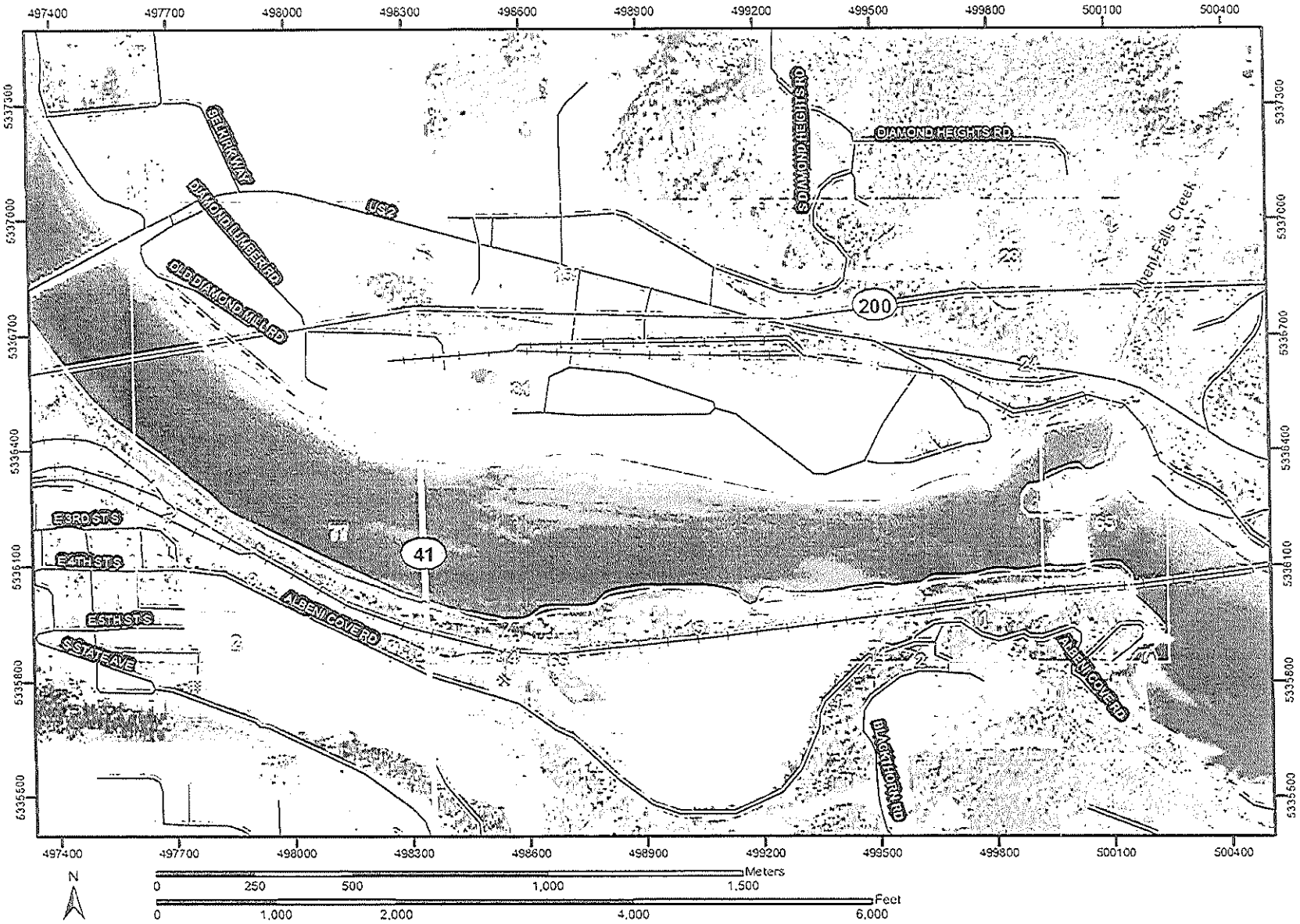
Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map



MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Units

Special Point Features

- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other

Special Line Features

- Gully
- Short Steep Slope
- Other

Political Features

Municipalities

- Cities
- Urban Areas

Water Features

- Oceans
- Streams and Canals

Transportation

- Rails

Roads

- Interstate Highways
- US Routes
- State Highways
- Local Roads
- Other Roads

MAP INFORMATION

Original soil survey map sheets were prepared at publication scale. Viewing scale and printing scale, however, may vary from the original. Please rely on the bar scale on each map sheet for proper map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: UTM Zone 11N

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Bonner County Area, Idaho, Parts of Bonner and Boundary Counties
Survey Area Data: Version 6, Jan 31, 2008

Date(s) aerial images were photographed: 6/9/1998; 8/4/1998; 8/20/1999

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Bonner County Area, Idaho, Parts of Bonner and Boundary Counties (ID604)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
2	Bonner gravelly silt loam, 0 to 4 percent slopes	38.9	5.0%
3	Bonner gravelly silt loam, 30 to 65 percent slopes	32.9	4.2%
7	Cabinet silt loam, 12 to 30 percent slopes	0.5	0.1%
11	Dufort-Rock outcrop complex, 5 to 45 percent slopes	37.4	4.8%
14	Haploxeralfs and Xerochrepts, 30 to 55 percent slopes	2.7	0.3%
15	Hoodoo silt loam, 0 to 1 percent slopes	106.4	13.6%
23	Kootenai gravelly silt loam, 0 to 4 percent slopes	28.6	3.7%
24	Kootenai gravelly silt loam, 20 to 55 percent slopes	124.9	16.0%
31	Mission silt loam, 0 to 2 percent slopes	189.5	24.2%
65	Water	26.6	3.4%
77	Kegel loam	193.9	24.8%
Totals for Area of Interest (AOI)		782.2	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called

noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Bonner County Area, Idaho, Parts of Bonner and Boundary Counties Version date:1/31/2008 12:46:19 PM

2—Bonner gravelly silt loam, 0 to 4 percent slopes

Map Unit Setting

Elevation: 2,000 to 3,000 feet
Mean annual precipitation: 25 to 35 inches
Mean annual air temperature: 43 to 46 degrees F
Frost-free period: 90 to 120 days

Map Unit Composition

Bonner and similar soils: 85 percent

Description of Bonner

Setting

Landform: Outwash terraces
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Volcanic ash and loess over outwash derived from granite and/or schist and/or gneiss

Properties and qualities

Slope: 0 to 4 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 5.9 inches)

Interpretive groups

Land capability classification (irrigated): 3s
Land capability (nonirrigated): 4s

Typical profile

0 to 1 inches: Slightly decomposed plant material
1 to 6 inches: Gravelly silt loam
6 to 22 inches: Gravelly silt loam
22 to 30 inches: Gravelly loam
30 to 60 inches: Very gravelly loamy sand

3—Bonner gravelly silt loam, 30 to 65 percent slopes

Map Unit Setting

Elevation: 2,000 to 3,000 feet
Mean annual precipitation: 25 to 35 inches
Mean annual air temperature: 43 to 46 degrees F
Frost-free period: 90 to 120 days

Map Unit Composition

Bonner and similar soils: 80 percent

Description of Bonner

Setting

Landform: Outwash terraces
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Riser
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Volcanic ash and loess over outwash derived from granite and/or schist and/or gneiss

Properties and qualities

Slope: 30 to 65 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 5.9 inches)

Interpretive groups

Land capability (nonirrigated): 7e

Typical profile

0 to 1 inches: Slightly decomposed plant material
1 to 6 inches: Gravelly silt loam
6 to 22 inches: Gravelly silt loam
22 to 30 inches: Gravelly loam
30 to 60 inches: Very gravelly loamy sand

7—Cabinet silt loam, 12 to 30 percent slopes

Map Unit Setting

Elevation: 2,100 to 2,800 feet
Mean annual precipitation: 30 to 38 inches
Mean annual air temperature: 43 to 45 degrees F
Frost-free period: 90 to 120 days

Map Unit Composition

Cabinet and similar soils: 80 percent

Description of Cabinet

Setting

Landform: Terraces
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Volcanic ash and loess over mixed glaciolacustrine deposits

Properties and qualities

Slope: 12 to 30 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 6 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: High (about 10.7 inches)

Interpretive groups

Land capability (nonirrigated): 6e

Typical profile

0 to 1 inches: Slightly decomposed plant material
1 to 12 inches: Silt loam
12 to 20 inches: Silty clay loam
20 to 35 inches: Clay
35 to 60 inches: Stratified very fine sandy loam to clay

11—Dufort-Rock outcrop complex, 5 to 45 percent slopes

Map Unit Setting

Elevation: 2,100 to 3,600 feet
Mean annual precipitation: 25 to 35 inches
Mean annual air temperature: 43 to 45 degrees F
Frost-free period: 90 to 110 days

Map Unit Composition

Dufort and similar soils: 45 percent
Rock outcrop: 30 percent

Description of Dufort

Setting

Landform: Mountain slopes, hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank, side slope
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Volcanic ash and/or loess over till derived from granite and/or gneiss and/or schist

Properties and qualities

Slope: 5 to 45 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Moderate (about 6.0 inches)

Interpretive groups
Land capability (nonirrigated): 6e

Typical profile
0 to 13 inches: Silt loam
13 to 24 inches: Gravelly silt loam
24 to 60 inches: Very gravelly sandy loam

Description of Rock Outcrop

Properties and qualities
Slope: 5 to 45 percent
Depth to restrictive feature: 0 inches to lithic bedrock

Typical profile
0 to 60 inches: Unweathered bedrock

14—Haploxeralfs and Xerochrepts, 30 to 55 percent slopes

Map Unit Setting
Elevation: 2,050 to 2,500 feet
Mean annual precipitation: 30 to 35 inches
Mean annual air temperature: 41 to 45 degrees F
Frost-free period: 90 to 110 days

Map Unit Composition
Haploxeralfs and similar soils: 40 percent
Xerochrepts and similar soils: 30 percent

Description of Haploxeralfs

Setting
Landform: Escarpments
Landform position (two-dimensional): Backslope
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Volcanic ash and loess over silty glaciolacustrine deposits

Properties and qualities
Slope: 30 to 55 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.06 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: High (about 11.2 inches)

Interpretive groups
Land capability (nonirrigated): 7e

Typical profile
0 to 8 inches: Silt loam
8 to 36 inches: Silty clay loam
36 to 60 inches: Stratified fine sand to silty clay

Description of Xerochrepts

Setting

Landform: Escarpments
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Volcanic ash and/or loess over sandy glaciolacustrine deposits and/or outwash and/or till

Properties and qualities

Slope: 30 to 55 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 5.0 inches)

Interpretive groups

Land capability (nonirrigated): 7e

Typical profile

0 to 4 inches: Variable
4 to 25 inches: Gravelly sandy loam
25 to 60 inches: Very gravelly loamy sand

15—Hoodoo silt loam, 0 to 1 percent slopes

Map Unit Setting

Elevation: 2,000 to 4,200 feet
Mean annual precipitation: 25 to 45 inches
Mean annual air temperature: 41 to 46 degrees F
Frost-free period: 60 to 120 days

Map Unit Composition

Hoodoo and similar soils: 70 percent
Minor components: 20 percent

Description of Hoodoo

Setting

Landform: Flood plains, drainageways
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Volcanic ash and/or mixed alluvium

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: About 12 to 24 inches
Frequency of flooding: Occasional

Frequency of ponding: None
Available water capacity: High (about 10.7 inches)

Interpretive groups
Land capability classification (irrigated): 3w
Land capability (nonirrigated): 4w

Typical profile
0 to 15 inches: Silt loam
15 to 52 inches: Silt loam
52 to 60 inches: Very cobbly silty clay loam

Minor Components

Capehorn
Percent of map unit: 5 percent
Landform: Flood plains

Wrencoe
Percent of map unit: 5 percent
Landform: Depressions

Hoodoo, peat substratum
Percent of map unit: 5 percent
Landform: Depressions

Pywell
Percent of map unit: 5 percent
Landform: Depressions

23—Kootenai gravelly silt loam, 0 to 4 percent slopes

Map Unit Setting
Elevation: 2,100 to 2,700 feet
Mean annual precipitation: 25 to 30 inches
Mean annual air temperature: 43 to 46 degrees F
Frost-free period: 90 to 120 days

Map Unit Composition
Kootenai and similar soils: 80 percent

Description of Kootenai

Setting
Landform: Outwash terraces
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Volcanic ash and loess over outwash derived from granite and/or gneiss and/or schist

Properties and qualities
Slope: 0 to 4 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches

Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 4.7 inches)

Interpretive groups

Land capability classification (irrigated): 3s
Land capability (nonirrigated): 4s

Typical profile

0 to 1 inches: Slightly decomposed plant material
1 to 6 inches: Gravelly silt loam
6 to 17 inches: Gravelly silt loam
17 to 27 inches: Very gravelly sandy loam
27 to 60 inches: Extremely gravelly loamy coarse sand

24—Kootenai gravelly silt loam, 20 to 55 percent slopes

Map Unit Setting

Elevation: 2,100 to 2,700 feet
Mean annual precipitation: 25 to 30 inches
Mean annual air temperature: 43 to 46 degrees F
Frost-free period: 90 to 120 days

Map Unit Composition

Kootenai and similar soils: 80 percent

Description of Kootenai

Setting

Landform: Outwash terraces, escarpments
Landform position (three-dimensional): Riser
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Volcanic ash and loess over outwash derived from granite and/or gneiss and/or schist

Properties and qualities

Slope: 20 to 55 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 4.7 inches)

Interpretive groups

Land capability (nonirrigated): 7e

Typical profile

0 to 1 inches: Slightly decomposed plant material
1 to 6 inches: Gravelly silt loam
6 to 17 inches: Gravelly silt loam
17 to 27 inches: Very gravelly sandy loam
27 to 60 inches: Extremely gravelly loamy coarse sand

31—Mission silt loam, 0 to 2 percent slopes

Map Unit Setting

Elevation: 2,000 to 2,800 feet
Mean annual precipitation: 25 to 38 inches
Mean annual air temperature: 43 to 45 degrees F
Frost-free period: 90 to 120 days

Map Unit Composition

Mission and similar soils: 75 percent
Minor components: 5 percent

Description of Mission

Setting

Landform: Terraces
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Volcanic ash and loess over silty glaciolacustrine deposits

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Available water capacity: Moderate (about 8.7 inches)

Interpretive groups

Land capability (nonirrigated): 4s

Typical profile

0 to 1 inches: Slightly decomposed plant material
1 to 3 inches: Silt loam
3 to 12 inches: Silt loam
12 to 21 inches: Silt loam
21 to 33 inches: Silt
33 to 48 inches: Silt loam
48 to 60 inches: Stratified fine sand to silty clay

Minor Components

Hoodoo

Percent of map unit: 3 percent
Landform: Flood plains, drainageways
Down-slope shape: Concave
Across-slope shape: Linear

Odenson

Percent of map unit: 2 percent

Landform: Depressions

65—Water

Map Unit Composition

Water: 100 percent

77—Kegel loam

Map Unit Setting

Elevation: 2,500 to 4,000 feet
Mean annual precipitation: 20 to 35 inches
Mean annual air temperature: 43 to 45 degrees F
Frost-free period: 80 to 100 days

Map Unit Composition

Kegel and similar soils: 100 percent

Description of Kegel

Setting

Landform: Flood plains
Parent material: Alluvium

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: About 6 to 24 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Available water capacity: Moderate (about 7.0 inches)

Interpretive groups

Land capability (nonirrigated): 4w

Typical profile

0 to 16 inches: Loam
16 to 20 inches: Gravelly sandy loam
20 to 30 inches: Sandy loam
30 to 60 inches: Very gravelly sandy loam

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HYDRIC SOILS LIST

Bonner County Area, Idaho, Parts of Bonner and Boundary Counties

This report only includes map units with at least one hydric component. Map units with no hydric components are not listed. Definitions of hydric criteria codes are included at the end of the report.

Map symbol and map unit name	Component	Percent of map unit	Hydric rating	Landform	Hydric soils criteria			
					Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
4: Bonner silt loam, cool, 0 to 4 percent slopes	Bonner	80	No	---	---	---	---	---
	Rathdrum, selle, and coburn	15	No	---	---	---	---	---
	Capehorn	5	Yes	flood plain	2B3	Yes	No	No
6: Cabinet silt loam, 2 to 12 percent slopes	Cabinet	80	No	---	---	---	---	---
	Bonner, cool	5	No	---	---	---	---	---
	Mission	5	No	---	---	---	---	---
	Pywell	5	Yes	depression	2B3	Yes	No	No
	Wrencoe	5	Yes	depression	3,4,2B3	Yes	Yes	Yes
8: Capehorn silt loam, 0 to 2 percent slopes	Capehorn	80	Yes	flood plain	2B3	Yes	No	No
	Bonner cool	5	No	---	---	---	---	---
	Elmira variant	5	No	---	---	---	---	---
	Hoodoo	5	Yes	flood plain	2B3,3,4	Yes	Yes	Yes
	Rathdrum	5	No	---	---	---	---	---
9: Colburn very fine sandy loam, 0 to 4 percent slopes	Colburn	70	No	---	---	---	---	---
	Capehorn	5	Yes	flood plain	4,3,2B3	Yes	Yes	Yes
	Elmira	5	No	---	---	---	---	---
	Hoodoo	5	Yes	depression	4,2B3,3	Yes	Yes	Yes
	Mission	5	No	---	---	---	---	---
	Pywell	5	Yes	depression	4,3,2B3	Yes	Yes	Yes
	Selle	5	No	---	---	---	---	---
13: Elmira variant loamy coarse sand, 0 to 2 percent slopes	Elmira variant	75	No	---	---	---	---	---

HYDRIC SOILS LIST--Continued

Bonner County Area, Idaho, Parts of Bonner and Boundary Counties

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Map symbol and map unit name	Component	Percent of map unit	Hydric rating	Landform	Hydric soils criteria			
					Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
	Bonner cool	5	No	---	---	---	---	---
	Capehorn	5	Yes	flood plain	4,3,2B3	Yes	Yes	Yes
	Elmira variant better drained	5	No	---	---	---	---	---
	Hoodoo	5	Yes	flood plain	3,4,2B3	Yes	Yes	Yes
	Pywell	5	Yes	flood plain	2B3,3,4	Yes	Yes	Yes
15: Hoodoo silt loam, 0 to 1 percent slopes	Hoodoo	70	Yes	flood plain	2B3	Yes	No	No
	Bonner	5	No	---	---	---	---	---
	Capehorn	5	Yes	flood plain	2B3	Yes	No	No
	Hoodoo, peet substratum	5	Yes	depression	2B3	Yes	No	No
	Pywell	5	Yes	depression	1	No	No	No
	Rathdrum	5	No	---	---	---	---	---
	Wrencoe	5	Yes	depression	2B3	Yes	No	No
31: Mission silt loam, 0 to 2 percent slopes	Mission	75	No	---	---	---	---	---
	Bonner	5	No	---	---	---	---	---
	Colburn	5	No	---	---	---	---	---
	Hoodoo and odenson	5	Yes	depression	2B3,3,4	Yes	Yes	Yes
	Selle	5	No	---	---	---	---	---
	Very deep soil	5	No	---	---	---	---	---
32: Mission silt loam, 2 to 12 percent slopes	Mission	70	No	---	---	---	---	---
	Bonner	5	No	---	---	---	---	---
	Colburn	5	No	---	---	---	---	---
	Hoodoo	5	Yes	depression	2B3,3,4	Yes	Yes	Yes
	Selle	5	No	---	---	---	---	---

HYDRIC SOILS LIST--Continued

Bonner County Area, Idaho, Parts of Bonner and Boundary Counties

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Map symbol and map unit name	Component	Percent of map unit	Hydric rating	Landform	Hydric soils criteria			
					Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
	Very deep soil	5	No	---	---	---	---	---
	Wrencoe	5	Yes	flood plain	2B3,3,4	Yes	Yes	Yes
33: Mission silt loam, 12 to 30 percent slopes	Mission	75	No	---	---	---	---	---
	Dufort	5	No	---	---	---	---	---
	Haploxeralfs	5	No	---	---	---	---	---
	Odenson	5	Yes	depression	4,3,2B3	Yes	Yes	Yes
	Pend Oreille	5	No	---	---	---	---	---
	Xerochrepts	5	No	---	---	---	---	---
34: Odenson silt loam, 0 to 2 percent slopes	Odenson	70	Yes	terrace	2B3	Yes	No	No
	Colburn	5	No	---	---	---	---	---
	Hoodoo	5	Yes	depression	2B3,3,4	Yes	Yes	Yes
	Mission	5	No	---	---	---	---	---
	Pywell	5	Yes	basin floor	2B3,4,3	Yes	Yes	Yes
	Selle	5	No	---	---	---	---	---
	Wrencoe	5	Yes	depression	2B3,3,4	Yes	Yes	Yes
35: Pend Oreille silt loam, 5 to 45 percent slopes	Pend Oreille	70	No	---	---	---	---	---
	Bonner	5	No	---	---	---	---	---
	Dufort	5	No	---	---	---	---	---
	Hoodoo	5	Yes	depression	2B3	Yes	No	No
	Sagle	5	No	---	---	---	---	---
	Treble	5	No	---	---	---	---	---
	Vay	5	No	---	---	---	---	---
36: Pend Oreille-Hoodoo silt loams, 0 to 30 percent slopes	Pend Oreille	50	No	---	---	---	---	---
	Hoodoo	20	Yes	flood plain	4,2B3	Yes	Yes	No

HYDRIC SOILS LIST--Continued

Bonner County Area, Idaho, Parts of Bonner and Boundary Counties

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Map symbol and map unit name	Component	Percent of map unit	Hydric rating	Landform	Hydric soils criteria			
					Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
	Treble	10	No	---	---	---	---	---
	Bonner	5	No	---	---	---	---	---
	Dufort	5	No	---	---	---	---	---
	Pywell	5	Yes	depression	1	No	No	No
	Sagle	5	No	---	---	---	---	---
37: Pend Oreille-Rock outcrop complex, 5 to 45 percent slop es	Pend Oreille	45	No	---	---	---	---	---
	Rock outcrop	25	No	---	---	---	---	---
	Ardtoo	5	No	---	---	---	---	---
	Dufort	5	No	---	---	---	---	---
	Hoodoo	5	Yes	depression	2B3	Yes	No	No
	Sagle	5	No	---	---	---	---	---
	Treble	5	No	---	---	---	---	---
	Vay	5	No	---	---	---	---	---
41: Pywell muck, 0 to 1 percent slopes	Pywell	85	Yes	flood plain	1	No	No	No
	Capehorn	5	Yes	flood plain	3,2B3,4	Yes	Yes	Yes
	Hoodoo	5	Yes	flood plain	2B3,3,4	Yes	Yes	Yes
	Wrencoe	5	Yes	flood plain	4,2B3,3	Yes	Yes	Yes
42: Pywell-Hoodoo complex, 0 to 1 percent slopes	Pywell	40	Yes	flood plain	1	No	No	No
	Hoodoo	35	Yes	flood plain	2B3	Yes	No	No
	Rathdrum	10	No	---	---	---	---	---
	Bonner	5	No	---	---	---	---	---
	Capehorn	5	Yes	flood plain	4,3,2B3	Yes	Yes	Yes
	Wrencoe	5	Yes	flood plain	3,4,2B3	Yes	Yes	Yes
43: Rathdrum silt loam, 0 to 2 percent slopes	Rathdrum	80	No	---	---	---	---	---

HYDRIC SOILS LIST--Continued

Bonner County Area, Idaho, Parts of Bonner and Boundary Counties

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Map symbol and map unit name	Component	Percent of map unit	Hydric rating	Landform	Hydric soils criteria			
					Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
	Bonner	5	No	---	---	---	---	---
	Hoodoo	5	Yes	depression	2B3	Yes	No	No
	Kaniksu	5	No	---	---	---	---	---
	Kootenai	5	No	---	---	---	---	---
44: Rathdrum silt loam, cool, 0 to 8 percent slopes	Rathdrum	80	No	---	---	---	---	---
	Bonner	5	No	---	---	---	---	---
	Capehorn	5	Yes	flood plain	2B3	Yes	No	No
	Hoodoo	5	Yes	depression	2B3	Yes	No	No
	Selle	5	No	---	---	---	---	---
45: Rathdrum-Bonner silt loams, 0 to 8 percent slopes	Rathdrum	40	No	---	---	---	---	---
	Bonner	35	No	---	---	---	---	---
	Kootenai	10	No	---	---	---	---	---
	Hoodoo	5	Yes	depression	2B3	Yes	No	No
	Kaniksu	5	No	---	---	---	---	---
	Selle	5	No	---	---	---	---	---
47: Sagle silt loam, 5 to 30 percent slopes	Sagle	70	No	---	---	---	---	---
	Bonner	5	No	---	---	---	---	---
	Colburn	5	No	---	---	---	---	---
	Dufort	5	No	---	---	---	---	---
	Hoodoo	5	Yes	depression	2B3	Yes	No	No
	Pend Oreille	5	No	---	---	---	---	---
	Treble	5	No	---	---	---	---	---
48: Selle fine sandy loam, 0 to 8 percent slopes	Selle	70	No	---	---	---	---	---
	Bonner	5	No	---	---	---	---	---

HYDRIC SOILS LIST--Continued

Bonner County Area, Idaho, Parts of Bonner and Boundary Counties

This report only includes map units with at least one hydric component. Map units with no hydric components are not listed. Definitions of hydric criteria codes are included at the end of the report.

Map symbol and map unit name	Component	Percent of map unit	Hydric rating	Landform	Hydric soils criteria			
					Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
	Colburn	5	No	---	---	---	---	---
	Elmira	5	No	---	---	---	---	---
	Hoodoo	5	Yes	flood plain	2B3	Yes	No	No
	Mission	5	No	---	---	---	---	---
	Pywell	5	Yes	flood plain	1	No	No	No
49: Selle-Elmira complex, 0 to 20 percent slopes	Selle	55	No	---	---	---	---	---
	Elmira	30	No	---	---	---	---	---
	Hoodoo	5	Yes	flood plain	2B3	Yes	No	No
	Colburn	4	No	---	---	---	---	---
	Mission	3	No	---	---	---	---	---
	Pywell	3	Yes	depression	1	No	No	No
50: Selle-Mission complex, 0 to 12 percent slopes	Selle	50	No	---	---	---	---	---
	Mission	30	No	---	---	---	---	---
	Colburn	5	No	---	---	---	---	---
	Elmira	5	No	---	---	---	---	---
	Hoodoo	5	Yes	depression	2B3	Yes	No	No
	Odenson	5	Yes	depression	2B3	Yes	No	No
64: Wrencoe silty clay, 0 to 2 percent slopes	Wrencoe	80	Yes	flood plain	4,2B3	Yes	Yes	No
	Bonner	5	No	---	---	---	---	---
	Hoodoo	5	Yes	depression	4,2B3	Yes	Yes	No
	Mission	5	No	---	---	---	---	---
	Pywell	5	Yes	flood plain	1	No	No	No
75: Pywell muck, unprotected, undrained, 0 to 1 percent slopes	Pywell, unprotected, undrained	85	Yes	flood plain, valley floor, depression	1,2B3,4	Yes	Yes	No

HYDRIC SOILS LIST--Continued

Bonner County Area, Idaho, Parts of Bonner and Boundary Counties

This report only includes map units with at least one hydric component. Map units with no hydric components are not listed. Definitions of hydric criteria codes are included at the end of the report.

Map symbol and map unit name	Component	Percent of map unit	Hydric rating	Landform	Hydric soils criteria			
					Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
	DeVoignes, unprotected, undrained	5	Yes	flood plain, drainageway	2B3,4	Yes	Yes	No
	Seelovers, unprotected, undrained	5	Yes	flood plain, valley floor	2B3,4	Yes	Yes	No
	Schnoorson, unprotected, undrained	5	Yes	flood plain, depression, swale	2B3	Yes	No	No

Explanation of hydric criteria codes:

1. All Histels except for Folistels, and Histosols except for Folists.
2. Soils in Aquic suborders, great groups, or subgroups, Albolls suborder, Historthels great group, Histoturbels great group, Pachic subgroups, or Cumulic subgroups that:
   A. are somewhat poorly drained and have a water table at the surface (0.0 feet) during the growing season, or
   B. are poorly drained or very poorly drained and have either:
      1.) a water table at the surface (0.0 feet) during the growing season if textures are coarse sand, sand, or fine sand in all layers within a depth of 20 inches, or
      2.) a water table at a depth of 0.5 foot or less during the growing season if permeability is equal to or greater than 6.0 in/hr in all layers within a depth of 20 inches, or
      3.) a water table at a depth of 1.0 foot or less during the growing season if permeability is less than 6.0 in/hr in any layer within a depth of 20 inches.
3. Soils that are frequently ponded for long or very long duration during the growing season.
4. Soils that are frequently flooded for long or very long duration during the growing season.

APPENDIX C WETLAND DATA FORMS

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site:	Tri-Pro Cedar Property	Date:	6/3/08
Applicant/Owner:	Tri-Pro Cedar Products	County:	Bonner
Investigator:	David A. Armes	State:	ID

Do Normal Circumstances exist on the site?	x	Yes		No	Community ID:	
Is the site significantly disturbed (Atypical Situation)?	X	Yes		No	Transect ID:	
Is Area a Potential Problem Area? seasonal	x	Yes		No	Plot ID:	DP# A1W

VEGETATION

Dominant Plant Species		Percent	Stratum	Indicator	Dominant Plant Species		Percent	Stratum	Indicator
1	*Phalaris arundinacea*	25%	H	FACW	8				
2	*Crataegus douglasii*	10%	S	FAC	9				
3	*Populus tremuloides*	5%	T	FAC+	10				
4	*Alopecurus pratensis*	35%	H	FACW	11				
5	*Tanacetum vulgare*	15%	H	NL	12				
6					13				
7					14				

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 80%

Remarks: Hydrophytic vegetation was present.

HYDROLOGY

	Recorded Data (describe in Remarks)
	Stream, Lake, or Tide Gauge
	Aerial Photographs
x	Other
	No recorded data available

Field Observations:

Depth of Surface Water:	4+	(In.)
Depth of Free Water in Pit:	0	(In.)
Depth to Saturated Soil:	0	(In.)

Wetland Hydrology Indicators:

Primary Indicators:

Y	Inundated
Y	Saturated in Upper 12 inches
N	Water Marks
N	Drift Lines
N	Sediment Deposits
N	Drainage Patters in Wetlands

Secondary Indicators (2 or more required):

N	Oxidized Root Channels in Upper 12"
N	Water-Stained Leaves
N	Local Soil Survey Data
N	FAC-Neutral Test
N	Other (explain in remarks)

Remarks: Hydrology was present.

SOILS

Map Unit Name (series and Phase): 31 – Mission Silt Loam 0 to 2 percent slopes & 15 – Hoodoo Silt Loam

Taxonomy (Subgroup):

Drainage Class: somewhat poorly drained *Circle*

Field Observations Confirm Mapped Type? Yes

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
0-14	A/B	10YR 3/2	10YR 5/6	MODERATE	

Hydric Soil Indicators:

N	Histosol	N	Reducing Conditions	N	High Organic Content In Surface Layer in Sandy Soils
N	Histic Epipedon	Y	Gleyed or Low-Chroma Colors	Y	Listed on National Hydric Soils List
N	Sulfidic Odor	N	Concretions	Y	Listed on Local Hydric Soils List
N	Aquatic Moisture Regime	N	Organic Streaking in Sandy Soils	N	Other (explain in remarks)

Remarks: Hydric soils were present, listed as hydric on national list..

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	X	Yes		No	Is this Sampling Point Within a Wetland?	X	Yes
Wetland Hydrology Present?	X	Yes		No			No
Hydric Soils Present?	X	Yes		No			

Remarks: This sampling point was located within a wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site:	Tri-Pro Cedar Property	Date:	6/3/08
Applicant/Owner:	Tri-Pro Cedar Products	County:	Bonner
Investigator:	David A. Armes	State:	ID

Do Normal Circumstances exist on the site?	x	Yes		No	Community ID:	
Is the site significantly disturbed (Atypical Situation)?	X	Yes		No	Transect ID:	
Is Area a Potential Problem Area? seasonal	x	Yes		No	Plot ID:	DP# A2W

VEGETATION

Dominant Plant Species		Percent	Stratum	Indicator	Dominant Plant Species		Percent	Stratum	Indicator
1	*Phalaris arundinacea*	25%	H	FACW	8				
2	*Crataegus douglasii*	40%	S	FAC	9				
3	*Populus tremuloides*	5%	T	FAC+	10				
4	*Alopecurus pratensis*	15%	H	FACW	11				
5	*Tanacetum vulgare*	5%	H	NL	12				
6					13				
7					14				

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 80%

Remarks: Hydrophytic vegetation was present.

HYDROLOGY

	Recorded Data (describe in Remarks)
	Stream, Lake, or Tide Gauge
	Aerial Photographs
x	Other
	No recorded data available

Field Observations:

Depth of Surface Water:	4+	(In.)
Depth of Free Water in Pit:	0	(In.)
Depth to Saturated Soil:	0	(In.)

Wetland Hydrology Indicators:

Primary Indicators:

Y	Inundated
Y	Saturated in Upper 12 inches
N	Water Marks
N	Drift Lines
N	Sediment Deposits
N	Drainage Patters in Wetlands

Secondary Indicators (2 or more required):

N	Oxidized Root Channels in Upper 12"
N	Water-Stained Leaves
N	Local Soil Survey Data
N	FAC-Neutral Test
N	Other (explain in remarks)

Remarks: Hydrology was present.

SOILS

Map Unit Name (series and Phase): 31 – Mission Silt Loam 0 to 2 percent slopes & 15 – Hoodoo Silt Loam

Drainage Class: somewhat poorly drained *Circle*

Taxonomy (Subgroup):

Field Observations Confirm Mapped Type? Yes

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
0-14	A/B	10YR 3/2			

Hydric Soil Indicators:

N	Histosol	N	Reducing Conditions	N	High Organic Content in Surface Layer in Sandy Soils
N	Histic Epipedon	Y	Gleyed or Low-Chroma Colors	Y	Listed on National Hydric Soils List
N	Sulfidic Odor	N	Concretions	Y	Listed on Local Hydric Soils List
N	Aquatic Moisture Regime	N	Organic Streaking in Sandy Soils	N	Other (explain in remarks)

Remarks: Hydric soils were present, listed as hydric on national list..

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	X	Yes		No	Is this Sampling Point Within a Wetland? X Yes No
Wetland Hydrology Present?	X	Yes		No	
Hydric Soils Present?	X	Yes		No	

Remarks: This sampling point was located within a wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site:	Tri-Pro Cedar Property	Date:	6/3/08
Applicant/Owner:	Tri-Pro Cedar Products	County:	Bonner
Investigator:	David A. Armes	State:	ID

Do Normal Circumstances exist on the site?	x	Yes		No	Community ID:	
Is the site significantly disturbed (Atypical Situation)?	X	Yes		No	Transect ID:	
Is Area a Potential Problem Area? seasonal	x	Yes		No	Plot ID:	DP# A3W

VEGETATION

Dominant Plant Species		Percent	Stratum	Indicator	Dominant Plant Species		Percent	Stratum	Indicator
1	*Phalaris arundinacea*	45%	H	FACW	8				
2	*Alopecurus pratensis*	25%	H	FACW	9				
3	*Eleocharis palustris*	25%	H	OBL	10				
4					11				
5					12				
6					13				
7					14				

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 50%

Remarks: Hydrophytic vegetation was NOT present.

HYDROLOGY

	Recorded Data (describe in Remarks)
	Stream, Lake, or Tide Gauge
	Aerial Photographs
x	Other
	No recorded data available

Field Observations:

Depth of Surface Water:	6	(In.)
Depth of Free Water in Pit:	0	(In.)
Depth to Saturated Soil:	0	(In.)

Wetland Hydrology Indicators:

Primary Indicators:

Y	Inundated
Y	Saturated in Upper 12 inches
N	Water Marks
N	Drift Lines
N	Sediment Deposits
N	Drainage Patters in Wetlands

Secondary Indicators (2 or more required):

N	Oxidized Root Channels in Upper 12"
N	Water-Stained Leaves
N	Local Soil Survey Data
N	FAC-Neutral Test
N	Other (explain in remarks)

Remarks: Hydrology was present.

SOILS

Map Unit Name (series and Phase): 31 – Mission Silt Loam 0 to 2 percent slopes & 15 – Hoodoo Silt Loam

Drainage Class: somewhat poorly drained *Circle*

Taxonomy (Subgroup):

Field Observations Confirm Mapped Type? Yes

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
0-14	A/B	10YR 3/1			

Hydric Soil Indicators:

N	Histosol	N	Reducing Conditions	N	High Organic Content in Surface Layer in Sandy Soils
N	Histic Epipedon	Y	Gleyed or Low-Chroma Colors	Y	Listed on National Hydric Soils List
N	Sulfidic Odor	N	Concretions	Y	Listed on Local Hydric Soils List
N	Aquatic Moisture Regime	N	Organic Streaking in Sandy Soils	N	Other (explain in remarks)

Remarks: Hydric soils were present, listed as hydric on national list.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	x	Yes		No	Is this Sampling Point Within a Wetland?	X	Yes		No
Wetland Hydrology Present?	x	Yes		No					
Hydric Soils Present?	X	Yes		No					

Remarks: This sampling point was located within a wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site:	Tri-Pro Cedar Property	Date:	6/3/08
Applicant/Owner:	Tri-Pro Cedar Products	County:	Bonner
Investigator:	David A. Ames	State:	ID

Do Normal Circumstances exist on the site?	x	Yes		No	Community ID:	
Is the site significantly disturbed (Atypical Situation)?	X	Yes		No	Transect ID:	
Is Area a Potential Problem Area? seasonal	x	Yes		No	Plot ID:	DP# A4NW

VEGETATION

Dominant Plant Species		Percent	Stratum	Indicator	Dominant Plant Species		Percent	Stratum	Indicator
1	*Phalaris arundinacea*	40%	H	FACW	8				
2	*Crataegus douglasii*	10%	S	FAC	9				
3	*Tanacetum vulgare*	35%	H	NL	10				
4	*Alopecurus pratensis*	5%	H	FACW	11				
5					12				
6					13				
7					14				

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 75%

Remarks: Hydrophytic vegetation was present.

HYDROLOGY

	Recorded Data (describe in Remarks)
	Stream, Lake, or Tide Gauge
	Aerial Photographs
x	Other
	No recorded data available

Field Observations:

Depth of Surface Water:	0	(In.)
Depth of Free Water in Pit:	>14	(In.)
Depth to Saturated Soil:	>14	(In.)

Wetland Hydrology Indicators:

Primary Indicators:

N	Inundated
N	Saturated in Upper 12 inches
N	Water Marks
N	Drift Lines
N	Sediment Deposits
N	Drainage Patters in Wetlands

Secondary Indicators (2 or more required):

N	Oxidized Root Channels in Upper 12"
N	Water-Stained Leaves
N	Local Soil Survey Data
N	FAC-Neutral Test
N	Other (explain in remarks)

Remarks: Hydrology was NOT present.

SOILS

Map Unit Name (series and Phase): 31 – Mission Silt Loam 0 to 2 percent slopes & 15 – Hoodoo Silt Loam

Taxonomy (Subgroup):

Drainage Class: somewhat poorly drained *Circle*

Field Observations Confirm Mapped Type? Yes

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
0-14	A/B	10YR 3/2			

Hydric Soil Indicators:

N	Histosol	N	Reducing Conditions	N	High Organic Content in Surface Layer in Sandy Soils
N	Histic Epipedon	N	Gleyed or Low-Chroma Colors	Y	Listed on National Hydric Soils List
N	Sulfidic Odor	N	Concretions	Y	Listed on Local Hydric Soils List
N	Aquatic Moisture Regime	N	Organic Streaking in Sandy Soils	N	Other (explain in remarks)

Remarks: Hydric soils were present, listed as hydric on national list..

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	X	Yes		No	Is this Sampling Point Within a Wetland?		Yes	X	No
Wetland Hydrology Present?		Yes	X	No				
Hydric Soils Present?	X	Yes		No				

Remarks: This sampling point was located within a wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site:	Tri-Pro Cedar Property	Date:	6/3/08
Applicant/Owner:	Tri-Pro Cedar Products	County:	Bonner
Investigator:	David A. Armes	State:	ID

Do Normal Circumstances exist on the site?	x	Yes		No	Community ID:	
Is the site significantly disturbed (Atypical Situation)?	X	Yes		No	Transect ID:	
Is Area a Potential Problem Area? seasonal	x	Yes		No	Plot ID:	DP# A5NW

VEGETATION

	Dominant Plant Species	Percent	Stratum	Indicator		Dominant Plant Species	Percent	Stratum	Indicator
1	*Phalaris arundinacea*	40%	H	FACW	8				
2	*Tanacetum vulgare*	35%	H	NL	9				
3	*Alopecurus pratensis*	5%	H	FACW	10				
4	*Amsinckia intermedia*	5%	H	NL	11				
5					12				
6					13				
7					14				

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 50%

Remarks: Hydrophytic vegetation was NOT present.

HYDROLOGY

	Recorded Data (describe in Remarks)
	Stream, Lake, or Tide Gauge
	Aerial Photographs
x	Other
	No recorded data available

Field Observations:

Depth of Surface Water:	0	(In.)
Depth of Free Water in Pit:	>14	(In.)
Depth to Saturated Soil:	>14	(In.)

Wetland Hydrology Indicators:

Primary Indicators:

N	Inundated
N	Saturated in Upper 12 inches
N	Water Marks
N	Drift Lines
N	Sediment Deposits
N	Drainage Patters in Wetlands

Secondary Indicators (2 or more required):

N	Oxidized Root Channels in Upper 12"
N	Water-Stained Leaves
N	Local Soil Survey Data
N	FAC-Neutral Test
N	Other (explain in remarks)

Remarks: Hydrology was NOT present.

SOILS

Map Unit Name (series and Phase): 31 – Mission Silt Loam 0 to 2 percent slopes & 15 – Hoodoo Silt Loam

Drainage Class: somewhat poorly drained *Circle*

Taxonomy (Subgroup):

Field Observations Confirm Mapped Type? Yes

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
0-14	A/B	10YR 3/2			

Hydric Soil Indicators:

N	Histosol	N	Reducing Conditions	N	High Organic Content in Surface Layer in Sandy Soils
N	Histic Epipedon	N	Gleyed or Low-Chroma Colors	Y	Listed on National Hydric Soils List
N	Sulfidic Odor	N	Concretions	Y	Listed on Local Hydric Soils List
N	Aquatic Moisture Regime	N	Organic Streaking in Sandy Soils	N	Other (explain in remarks)

Remarks: Hydric soils were present, listed as hydric on national list..

WETLAND DETERMINATION

Hydrophytic Vegetation Present?		Yes	X	No	Is this Sampling Point Within a Wetland?		Yes	X	No
Wetland Hydrology Present?		Yes	X	No					
Hydric Soils Present?	X	Yes		No					

Remarks: This sampling point was located within a wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site:	Tri-Pro Cedar Property	Date:	6/3/08
Applicant/Owner:	Tri-Pro Cedar Products	County:	Bonner
Investigator:	David A. Armes	State:	ID

Do Normal Circumstances exist on the site?	x	Yes		No	Community ID:	
Is the site significantly disturbed (Atypical Situation)?	X	Yes		No	Transect ID:	
Is Area a Potential Problem Area? seasonal	x	Yes		No	Plot ID:	DP# B1NW

VEGETATION

Dominant Plant Species		Percent	Stratum	Indicator	Dominant Plant Species		Percent	Stratum	Indicator
1	*Phalaris arundinacea*	70%	H	FACW	8				
2	*Spiraea douglasii*	30%	H	FACW	9				
3					10				
4					11				
5					12				
6					13				
7					14				

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100%

Remarks: Hydrophytic vegetation was present.

HYDROLOGY

	Recorded Data (describe in Remarks)
	Stream, Lake, or Tide Gauge
	Aerial Photographs
x	Other
	No recorded data available

Field Observations:

Depth of Surface Water:	0	(In.)
Depth of Free Water in Pit:	0	(In.)
Depth to Saturated Soil:	0	(In.)

Wetland Hydrology Indicators:

Primary Indicators:

N	Inundated
N	Saturated in Upper 12 inches
N	Water Marks
N	Drift Lines
N	Sediment Deposits
N	Drainage Patters in Wetlands

Secondary Indicators (2 or more required):

N	Oxidized Root Channels in Upper 12"
N	Water-Stained Leaves
N	Local Soil Survey Data
N	FAC-Neutral Test
N	Other (explain in remarks)

Remarks: Hydrology was NOT present.

SOILS

Map Unit Name (series and Phase): 31 – Mission Silt Loam 0 to 2 percent slopes & 15 – Hoodoo Silt Loam

Drainage Class: somewhat poorly drained *Circle*

Taxonomy (Subgroup):

Field Observations Confirm Mapped Type? Yes

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
0-14	A/B	10YR 3/2			

Hydric Soil Indicators:

N	Histosol	N	Reducing Conditions	N	High Organic Content in Surface Layer in Sandy Soils
N	Histic Epipedon	N	Gleyed or Low-Chroma Colors	Y	Listed on National Hydric Soils List
N	Sulfidic Odor	N	Concretions	Y	Listed on Local Hydric Soils List
N	Aquatic Moisture Regime	N	Organic Streaking in Sandy Soils	N	Other (explain in remarks)

Remarks: Hydric soils were present, listed as hydric on national list..

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	X	Yes		No	Is this Sampling Point Within a Wetland?		Yes	X	No
Wetland Hydrology Present?		Yes	X	No				
Hydric Soils Present?	X	Yes		No				

Remarks: This sampling point was located within a wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site:	Tri-Pro Cedar Property	Date:	6/3/08
Applicant/Owner:	Tri-Pro Cedar Products	County:	Bonner
Investigator:	David A. Armes	State:	ID

Do Normal Circumstances exist on the site?	x	Yes		No	Community ID:	
Is the site significantly disturbed (Atypical Situation)?	X	Yes		No	Transect ID:	
Is Area a Potential Problem Area? seasonal	x	Yes		No	Plot ID:	DP# B2W

VEGETATION

Dominant Plant Species		Percent	Stratum	Indicator	Dominant Plant Species		Percent	Stratum	Indicator
1	*Phalaris arundinacea*	100%	H	FACW	8				
2					9				
3					10				
4					11				
5					12				
6					13				
7					14				

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100%

Remarks: Hydrophytic vegetation was present.

HYDROLOGY

	Recorded Data (describe in Remarks)
	Stream, Lake, or Tide Gauge
	Aerial Photographs
x	Other
	No recorded data available

Field Observations:

Depth of Surface Water:	0	(In.)
Depth of Free Water in Pit:	>14	(In.)
Depth to Saturated Soil:	6	(In.)

Wetland Hydrology Indicators:

Primary Indicators:

N	Inundated
Y	Saturated in Upper 12 inches
N	Water Marks
N	Drift Lines
N	Sediment Deposits
N	Drainage Patters in Wetlands

Secondary Indicators (2 or more required):

N	Oxidized Root Channels in Upper 12"
N	Water-Stained Leaves
N	Local Soil Survey Data
N	FAC-Neutral Test
N	Other (explain in remarks)

Remarks: Hydrology was present.

SOILS

Map Unit Name (series and Phase): 31 – Mission Silt Loam 0 to 2 percent slopes & 15 – Hoodoo Silt Loam

Drainage Class: somewhat poorly drained *Circle*

Taxonomy (Subgroup):

Field Observations Confirm Mapped Type? Yes

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
0-14	A/B	10YR 3/2			

Hydric Soil Indicators:

N	Histosol	N	Reducing Conditions	N	High Organic Content in Surface Layer in Sandy Soils
N	Histic Epipedon	N	Gleyed or Low-Chroma Colors	Y	Listed on National Hydric Soils List
N	Sulfidic Odor	N	Concretions	Y	Listed on Local Hydric Soils List
N	Aquatic Moisture Regime	N	Organic Streaking in Sandy Soils	N	Other (explain in remarks)

Remarks: Hydric soils were present, listed as hydric on national list..

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	X	Yes		No	Is this Sampling Point Within a Wetland?	X	Yes		No
Wetland Hydrology Present?	X	Yes		No					
Hydric Soils Present?	X	Yes		No					

Remarks: This sampling point was located within a wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site:	Tri-Pro Cedar Property	Date:	6/3/08
Applicant/Owner:	Tri-Pro Cedar Products	County:	Bonner
Investigator:	David A. Armes	State:	ID

Do Normal Circumstances exist on the site?	x	Yes		No	Community ID:	
Is the site significantly disturbed (Atypical Situation)?	X	Yes		No	Transect ID:	
Is Area a Potential Problem Area? seasonal	x	Yes		No	Plot ID:	DP# C1W

VEGETATION

Dominant Plant Species		Percent	Stratum	Indicator	Dominant Plant Species		Percent	Stratum	Indicator
1	*Phalaris arundinacea*	70%	H	FACW	8				
2	*Eleocharis palustris*	25%		OBL	9				
3					10				
4					11				
5					12				
6					13				
7					14				

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100%

Remarks: Hydrophytic vegetation was present.

HYDROLOGY

	Recorded Data (describe in Remarks)
	Stream, Lake, or Tide Gauge
	Aerial Photographs
x	Other
	No recorded data available

Field Observations:

Depth of Surface Water:	12	(In.)
Depth of Free Water in Pit:	0	(In.)
Depth to Saturated Soil:	0	(In.)

Wetland Hydrology Indicators:

Primary Indicators:

Y	Inundated
Y	Saturated in Upper 12 inches
N	Water Marks
N	Drift Lines
N	Sediment Deposits
N	Drainage Patters in Wetlands

Secondary Indicators (2 or more required):

N	Oxidized Root Channels in Upper 12"
N	Water-Stained Leaves
N	Local Soil Survey Data
N	FAC-Neutral Test
N	Other (explain in remarks)

Remarks: Hydrology was present.

SOILS

Map Unit Name (series and Phase): 31 – Mission Silt Loam 0 to 2 percent slopes & 15 – Hoodoo Silt Loam

Drainage Class: somewhat poorly drained *Circle*

Taxonomy (Subgroup):

Field Observations Confirm Mapped Type? Yes

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
0-14	A/B	10YR 3/1			

Hydric Soil Indicators:

N	Histosol	N	Reducing Conditions	N	High Organic Content in Surface Layer in Sandy Soils
N	Histic Epipedon	Y	Gleyed or Low-Chroma Colors	Y	Listed on National Hydric Soils List
N	Sulfidic Odor	N	Concretions	Y	Listed on Local Hydric Soils List
N	Aquatic Moisture Regime	N	Organic Streaking in Sandy Soils	N	Other (explain in remarks)

Remarks: Hydric soils were present, listed as hydric on national list.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	X	Yes		No	Is this Sampling Point Within a Wetland?	X	Yes
Wetland Hydrology Present?	X	Yes		No			No
Hydric Soils Present?	X	Yes		No			

Remarks: This sampling point was located within a wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site:	Tri-Pro Cedar Property	Date:	6/3/08
Applicant/Owner:	Tri-Pro Cedar Products	County:	Bonner
Investigator:	David A. Armes	State:	ID

Do Normal Circumstances exist on the site?	x	Yes		No	Community ID:	
Is the site significantly disturbed (Atypical Situation)?	X	Yes		No	Transect ID:	
Is Area a Potential Problem Area? seasonal	x	Yes		No	Plot ID:	DP# C2NW

VEGETATION

Dominant Plant Species		Percent	Stratum	Indicator	Dominant Plant Species		Percent	Stratum	Indicator
1	*Phalaris arundinacea*	65%	H	FACW	8				
2	*Tanacetum vulgare*	25%	H	NL	9				
3					10				
4					11				
5					12				
6					13				
7					14				

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 50%

Remarks: Hydrophytic vegetation was NOT present.

HYDROLOGY

	Recorded Data (describe in Remarks)
	Stream, Lake, or Tide Gauge
	Aerial Photographs
x	Other
	No recorded data available

Field Observations:

Depth of Surface Water:	0	(In.)
Depth of Free Water in Pit:	>14	(In.)
Depth to Saturated Soil:	>14	(In.)

Wetland Hydrology Indicators:

Primary Indicators:

N	Inundated
N	Saturated in Upper 12 inches
N	Water Marks
N	Drift Lines
N	Sediment Deposits
N	Drainage Patters in Wetlands

Secondary Indicators (2 or more required):

N	Oxidized Root Channels in Upper 12"
N	Water-Stained Leaves
N	Local Soil Survey Data
N	FAC-Neutral Test
N	Other (explain in remarks)

Remarks: Hydrology was NOT present.

SOILS

Map Unit Name (series and Phase): 31 – Mission Silt Loam 0 to 2 percent slopes & 15 – Hoodoo Silt Loam

Drainage Class: somewhat poorly drained *Circle*

Taxonomy (Subgroup):

Field Observations Confirm Mapped Type? Yes

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
0-14	A/B	10YR 3/2			

Hydric Soil Indicators:

N	Histosol	N	Reducing Conditions	N	High Organic Content in Surface Layer in Sandy Soils
N	Histic Epipedon	Y	Gleyed or Low-Chroma Colors	Y	Listed on National Hydric Soils List
N	Sulfidic Odor	N	Concretions	Y	Listed on Local Hydric Soils List
N	Aquatic Moisture Regime	N	Organic Streaking in Sandy Soils	N	Other (explain in remarks)

Remarks: Hydric soils were present, listed as hydric on national list.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?		Yes	X	No	Is this Sampling Point Within a Wetland?		Yes	X	No
Wetland Hydrology Present?		Yes	X	No					
Hydric Soils Present?	X	Yes		No					

Remarks: This sampling point was NOT located within a wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site:	Tri-Pro Cedar Property	Date:	6/3/08
Applicant/Owner:	Tri-Pro Cedar Products	County:	Bonner
Investigator:	David A. Armes	State:	ID

Do Normal Circumstances exist on the site?	x	Yes		No	Community ID:	
Is the site significantly disturbed (Atypical Situation)?	X	Yes		No	Transect ID:	
Is Area a Potential Problem Area? seasonal	x	Yes		No	Plot ID:	DP# C3W

VEGETATION

Dominant Plant Species		Percent	Stratum	Indicator	Dominant Plant Species		Percent	Stratum	Indicator
1	*Typha latifolia*	90%	H	OBL	8				
2					9				
3					10				
4					11				
5					12				
6					13				
7					14				

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100%

Remarks: Hydrophytic vegetation was present.

HYDROLOGY

	Recorded Data (describe in Remarks)
	Stream, Lake, or Tide Gauge
	Aerial Photographs
x	Other
	No recorded data available

Field Observations:

Depth of Surface Water:	12	(In.)
Depth of Free Water in Pit:	0	(In.)
Depth to Saturated Soil:	0	(In.)

Wetland Hydrology Indicators:

Primary Indicators:

Y	Inundated
Y	Saturated in Upper 12 inches
N	Water Marks
N	Drift Lines
N	Sediment Deposits
N	Drainage Patters in Wetlands

Secondary Indicators (2 or more required):

N	Oxidized Root Channels in Upper 12"
N	Water-Stained Leaves
N	Local Soil Survey Data
N	FAC-Neutral Test
N	Other (explain in remarks)

Remarks: Hydrology was present.

SOILS

Map Unit Name (series and Phase): 31 – Mission Silt Loam 0 to 2 percent slopes & 15 – Hoodoo Silt Loam

Drainage Class: somewhat poorly drained *Circle*

Taxonomy (Subgroup):

Field Observations Confirm Mapped Type? Yes

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
0-14	A/B	10YR 3/1			

Hydric Soil Indicators:

N	Histosol	N	Reducing Conditions	N	High Organic Content in Surface Layer in Sandy Soils
N	Histic Epipedon	Y	Gleyed or Low-Chroma Colors	Y	Listed on National Hydric Soils List
N	Sulfidic Odor	N	Concretions	Y	Listed on Local Hydric Soils List
N	Aquatic Moisture Regime	N	Organic Streaking in Sandy Soils	N	Other (explain in remarks)

Remarks: Hydric soils were present, listed as hydric on national list.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	X	Yes		No	Is this Sampling Point Within a Wetland?	X	Yes
Wetland Hydrology Present?	X	Yes		No			No
Hydric Soils Present?	X	Yes		No			

Remarks: This sampling point was located within a wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site:	Tri-Pro Cedar Property	Date:	6/3/08
Applicant/Owner:	Tri-Pro Cedar Products	County:	Bonner
Investigator:	David A. Ames	State:	ID

Do Normal Circumstances exist on the site?	x	Yes		No	Community ID:	
Is the site significantly disturbed (Atypical Situation)?	X	Yes		No	Transect ID:	
Is Area a Potential Problem Area? seasonal	x	Yes		No	Plot ID:	DP# C4NW

VEGETATION

Dominant Plant Species		Percent	Stratum	Indicator	Dominant Plant Species		Percent	Stratum	Indicator
1	*Phalaris arundinacea*	45%	H	FACW	8				
2	*Tanacetum vulgare*	25%	H	NL	9				
3					10				
4					11				
5					12				
6					13				
7					14				

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 50%

Remarks: Hydrophytic vegetation was NOT present.

HYDROLOGY

	Recorded Data (describe in Remarks)
	Stream, Lake, or Tide Gauge
	Aerial Photographs
x	Other
	No recorded data available

Field Observations:

Depth of Surface Water:	0	(In.)
Depth of Free Water in Pit:	>14	(In.)
Depth to Saturated Soil:	>14	(In.)

Wetland Hydrology Indicators:

Primary Indicators:

N	Inundated
N	Saturated in Upper 12 inches
N	Water Marks
N	Drift Lines
N	Sediment Deposits
N	Drainage Patters in Wetlands

Secondary Indicators (2 or more required):

N	Oxidized Root Channels in Upper 12"
N	Water-Stained Leaves
N	Local Soil Survey Data
N	FAC-Neutral Test
N	Other (explain in remarks)

Remarks: Hydrology was NOT present.

SOILS

Map Unit Name (series and Phase): 31 – Mission Silt Loam 0 to 2 percent slopes & 15 – Hoodoo Silt Loam

Drainage Class: somewhat poorly drained *Circle*

Taxonomy (Subgroup):

Field Observations Confirm Mapped Type? Yes

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
0-14	A/B	10YR 3/2			

Hydric Soil Indicators:

N	Histosol	N	Reducing Conditions	N	High Organic Content in Surface Layer in Sandy Soils
N	Histic Epipedon	Y	Gleyed or Low-Chroma Colors	Y	Listed on National Hydric Soils List
N	Sulfidic Odor	N	Concretions	Y	Listed on Local Hydric Soils List
N	Aquatic Moisture Regime	N	Organic Streaking in Sandy Soils	N	Other (explain in remarks)

Remarks: Hydric soils were present, listed as hydric on national list.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?		Yes	X	No	Is this Sampling Point Within a Wetland?		Yes	X	No
Wetland Hydrology Present?		Yes	X	No					
Hydric Soils Present?	X	Yes		No					

Remarks: This sampling point was NOT located within a wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site:	Tri-Pro Cedar Property	Date:	6/3/08
Applicant/Owner:	Tri-Pro Cedar Products	County:	Bonner
Investigator:	David A. Armes	State:	ID

Do Normal Circumstances exist on the site?	x	Yes		No	Community ID:	
Is the site significantly disturbed (Atypical Situation)?	X	Yes		No	Transect ID:	
Is Area a Potential Problem Area? seasonal	x	Yes		No	Plot ID:	DP# D1W

VEGETATION

Dominant Plant Species		Percent	Stratum	Indicator	Dominant Plant Species		Percent	Stratum	Indicator
1	*Typha latifolia*	45%	H	OBL	8				
2	*Phalaris arundinacea*	50%	H	FACW	9				
3					10				
4					11				
5					12				
6					13				
7					14				

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100%

Remarks: Hydrophytic vegetation was present.

HYDROLOGY

	Recorded Data (describe in Remarks)
	Stream, Lake, or Tide Gauge
	Aerial Photographs
x	Other
	No recorded data available

Field Observations:

Depth of Surface Water:	24	(In.)
Depth of Free Water in Pit:	0	(In.)
Depth to Saturated Soil:	0	(In.)

Wetland Hydrology Indicators:

Primary Indicators:

Y	Inundated
Y	Saturated in Upper 12 inches
N	Water Marks
N	Drift Lines
N	Sediment Deposits
N	Drainage Patters in Wetlands

Secondary Indicators (2 or more required):

N	Oxidized Root Channels in Upper 12"
N	Water-Stained Leaves
N	Local Soil Survey Data
N	FAC-Neutral Test
N	Other (explain in remarks)

Remarks: Hydrology was present.

SOILS

Map Unit Name (series and Phase): 31 – Mission Silt Loam 0 to 2 percent slopes & 15 – Hoodoo Silt Loam

Drainage Class: somewhat poorly drained *Circle*

Taxonomy (Subgroup):

Field Observations Confirm Mapped Type? Yes

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
0-14	A/B	10YR 3/1			

Hydric Soil Indicators:

N	Histosol	N	Reducing Conditions	N	High Organic Content In Surface Layer in Sandy Soils
N	Histic Epipedon	Y	Gleyed or Low-Chroma Colors	Y	Listed on National Hydric Soils List
N	Sulfidic Odor	N	Concretions	Y	Listed on Local Hydric Soils List
N	Aquatic Moisture Regime	N	Organic Streaking in Sandy Soils	N	Other (explain in remarks)

Remarks: Hydric soils were present, listed as hydric on national list.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	X	Yes		No	Is this Sampling Point Within a Wetland?	X	Yes
Wetland Hydrology Present?	X	Yes		No			No
Hydric Soils Present?	X	Yes		No			

Remarks: This sampling point was located within a wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site:	Tri-Pro Cedar Property	Date:	6/3/08
Applicant/Owner:	Tri-Pro Cedar Products	County:	Bonner
Investigator:	David A. Armes	State:	ID

Do Normal Circumstances exist on the site?	x	Yes		No	Community ID:	
Is the site significantly disturbed (Atypical Situation)?	X	Yes		No	Transect ID:	
Is Area a Potential Problem Area? seasonal	x	Yes		No	Plot ID:	DP# D2NW

VEGETATION

Dominant Plant Species		Percent	Stratum	Indicator	Dominant Plant Species		Percent	Stratum	Indicator
1	*Bromus inermis*	25%	H	FAC	8				
2	*Phalaris arundinacea*	50%	H	FACW	9				
3	*Lupinus sericeus*	20%	H	NL	10				
4					11				
5					12				
6					13				
7					14				

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 66%

Remarks: Hydrophytic vegetation was present.

HYDROLOGY

	Recorded Data (describe in Remarks)
	Stream, Lake, or Tide Gauge
	Aerial Photographs
x	Other
	No recorded data available

Field Observations:

Depth of Surface Water:	0	(In.)
Depth of Free Water in Pit:	>14	(In.)
Depth to Saturated Soil:	>14	(In.)

Wetland Hydrology Indicators:

Primary Indicators:

N	Inundated
N	Saturated in Upper 12 inches
N	Water Marks
N	Drift Lines
N	Sediment Deposits
N	Drainage Patters in Wetlands

Secondary Indicators (2 or more required):

N	Oxidized Root Channels in Upper 12"
N	Water-Stained Leaves
N	Local Soil Survey Data
N	FAC-Neutral Test
N	Other (explain in remarks)

Remarks: Hydrology was NOT present.

SOILS

Map Unit Name (series and Phase): 31 – Mission Silt Loam 0 to 2 percent slopes & 15 – Hoodoo Silt Loam

Drainage Class: somewhat poorly drained *Circle*

Taxonomy (Subgroup):

Field Observations Confirm Mapped Type? Yes

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
0-14	A/B	10YR 3/2			

Hydric Soil Indicators:

N	Histosol	N	Reducing Conditions	N	High Organic Content in Surface Layer in Sandy Soils
N	Histic Epipedon	N	Gleyed or Low-Chroma Colors	Y	Listed on National Hydric Soils List
N	Sulfidic Odor	N	Concretions	Y	Listed on Local Hydric Soils List
N	Aquatic Moisture Regime	N	Organic Streaking in Sandy Soils	N	Other (explain in remarks)

Remarks: Hydric soils were present, listed as hydric on national list.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	X	Yes		No	Is this Sampling Point Within a Wetland?		Yes	X	No
Wetland Hydrology Present?		Yes	X	No				
Hydric Soils Present?	X	Yes		No				

Remarks: This sampling point was located within a wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site:	Tri-Pro Cedar Property	Date:	6/3/08
Applicant/Owner:	Tri-Pro Cedar Products	County:	Bonner
Investigator:	David A. Armes	State:	ID

Do Normal Circumstances exist on the site?	x	Yes		No	Community ID:	
Is the site significantly disturbed (Atypical Situation)?	X	Yes		No	Transect ID:	
Is Area a Potential Problem Area? seasonal	x	Yes		No	Plot ID:	DP# D3W

VEGETATION

Dominant Plant Species		Percent	Stratum	Indicator	Dominant Plant Species		Percent	Stratum	Indicator
1	*Phalaris arundinacea*	100%	H	FACW	8				
2					9				
3					10				
4					11				
5					12				
6					13				
7					14				

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100%

Remarks: Hydrophytic vegetation was present.

HYDROLOGY

	Recorded Data (describe in Remarks)
	Stream, Lake, or Tide Gauge
	Aerial Photographs
x	Other
	No recorded data available

Field Observations:

Depth of Surface Water:	24	(In.)
Depth of Free Water in Pit:	0	(In.)
Depth to Saturated Soil:	0	(In.)

Wetland Hydrology Indicators:

Primary Indicators:

Y	Inundated
Y	Saturated in Upper 12 inches
N	Water Marks
N	Drift Lines
N	Sediment Deposits
N	Drainage Patters in Wetlands

Secondary Indicators (2 or more required):

N	Oxidized Root Channels in Upper 12"
N	Water-Stained Leaves
N	Local Soil Survey Data
N	FAC-Neutral Test
N	Other (explain in remarks)

Remarks: Hydrology was present.

SOILS

Map Unit Name (series and Phase): 31 – Mission Silt Loam 0 to 2 percent slopes & 15 – Hoodoo Silt Loam

Taxonomy (Subgroup):

Drainage Class: somewhat poorly drained *Circle*

Field Observations Confirm Mapped Type? Yes

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
0-14	A/B	10YR 3/1			

Hydric Soil Indicators:

N	Histosol	N	Reducing Conditions	N	High Organic Content in Surface Layer in Sandy Soils
N	Histic Epipedon	Y	Gleyed or Low-Chroma Colors	Y	Listed on National Hydric Soils List
N	Sulfidic Odor	N	Concretions	Y	Listed on Local Hydric Soils List
N	Aquatic Moisture Regime	N	Organic Streaking in Sandy Soils	N	Other (explain in remarks)

Remarks: Hydric soils were present, listed as hydric on national list.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	X	Yes		No	Is this Sampling Point Within a Wetland?	X	Yes
Wetland Hydrology Present?	X	Yes		No			No
Hydric Soils Present?	X	Yes		No			

Remarks: This sampling point was located within a wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site:	Tri-Pro Cedar Property	Date:	6/3/08
Applicant/Owner:	Tri-Pro Cedar Products	County:	Bonner
Investigator:	David A. Armes	State:	ID

Do Normal Circumstances exist on the site?	x	Yes		No	Community ID:	
Is the site significantly disturbed (Atypical Situation)?	X	Yes		No	Transect ID:	
Is Area a Potential Problem Area? seasonal	x	Yes		No	Plot ID:	DP# E1W

VEGETATION

	Dominant Plant Species	Percent	Stratum	Indicator		Dominant Plant Species	Percent	Stratum	Indicator
1	*Typha latifolia*	45%	H	FACW	8				
2	*Spiraea douglasii*	25%	H	FACW	9				
3	*Populus balsamifera*	20%	T	FAC	10				
4	*Rosa nutkana*	15%	S	FAC	11				
5					12				
6					13				
7					14				

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100%

Remarks: Hydrophytic vegetation was present.

HYDROLOGY

	Recorded Data (describe in Remarks)
	Stream, Lake, or Tide Gauge
	Aerial Photographs
x	Other
	No recorded data available

Field Observations:

Depth of Surface Water:	30+	(In.)
Depth of Free Water in Pit:	0	(In.)
Depth to Saturated Soil:	0	(In.)

Wetland Hydrology Indicators:

Primary Indicators:

Y	Inundated
Y	Saturated in Upper 12 inches
N	Water Marks
N	Drift Lines
N	Sediment Deposits
N	Drainage Patters in Wetlands

Secondary Indicators (2 or more required):

N	Oxidized Root Channels in Upper 12"
N	Water-Stained Leaves
N	Local Soil Survey Data
N	FAC-Neutral Test
N	Other (explain in remarks)

Remarks: Hydrology was present.

SOILS

Map Unit Name (series and Phase): 31 – Mission Silt Loam 0 to 2 percent slopes & 15 – Hoodoo Silt Loam

Drainage Class: somewhat poorly drained *Circle*

Taxonomy (Subgroup):

Field Observations Confirm Mapped Type? Yes

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
0-14	A/B	10YR 3/1			

Hydric Soil Indicators:

N	Histosol	N	Reducing Conditions	N	High Organic Content in Surface Layer in Sandy Soils
N	Histic Epipedon	Y	Gleyed or Low-Chroma Colors	Y	Listed on National Hydric Soils List
N	Sulfidic Odor	N	Concretions	Y	Listed on Local Hydric Soils List
N	Aquatic Moisture Regime	N	Organic Streaking in Sandy Soils	N	Other (explain in remarks)

Remarks: Hydric soils were present, listed as hydric on national list.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	X	Yes		No	Is this Sampling Point Within a Wetland?	X	Yes
Wetland Hydrology Present?	X	Yes		No			No
Hydric Soils Present?	X	Yes		No			

Remarks: This sampling point was located within a wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site:	Tri-Pro Cedar Property	Date:	6/3/08
Applicant/Owner:	Tri-Pro Cedar Products	County:	Bonner
Investigator:	David A. Armes	State:	ID

Do Normal Circumstances exist on the site?	x	Yes		No	Community ID:	
Is the site significantly disturbed (Atypical Situation)?	X	Yes		No	Transect ID:	
Is Area a Potential Problem Area? seasonal	x	Yes		No	Plot ID:	DP# E2W

VEGETATION

Dominant Plant Species		Percent	Stratum	Indicator	Dominant Plant Species		Percent	Stratum	Indicator
1	*Typha latifolia*	10%	H	FACW	8				
2	*Spiraea douglasii*	55%	H	FACW	9				
3	*Populus balsamifera*	25%	T	FAC	10				
4	*Rosa nutkana*	10%	S	FAC	11				
5					12				
6					13				
7					14				

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100%

Remarks: Hydrophytic vegetation was present.

HYDROLOGY

	Recorded Data (describe in Remarks)
	Stream, Lake, or Tide Gauge
	Aerial Photographs
x	Other
	No recorded data available

Field Observations:

Depth of Surface Water:	30+	(In.)
Depth of Free Water in Pit:	0	(In.)
Depth to Saturated Soil:	0	(In.)

Wetland Hydrology Indicators:

Primary Indicators:

Y	Inundated
Y	Saturated in Upper 12 inches
N	Water Marks
N	Drift Lines
N	Sediment Deposits
N	Drainage Patters in Wetlands

Secondary Indicators (2 or more required):

N	Oxidized Root Channels in Upper 12"
N	Water-Stained Leaves
N	Local Soil Survey Data
N	FAC-Neutral Test
N	Other (explain in remarks)

Remarks: Hydrology was present.

SOILS

Map Unit Name (series and Phase): 31 – Mission Silt Loam 0 to 2 percent slopes & 15 – Hoodoo Silt Loam

Drainage Class: somewhat poorly drained *Circle*

Taxonomy (Subgroup):

Field Observations Confirm Mapped Type? Yes

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
0-14	A/B	10YR 3/1			

Hydric Soil Indicators:

N	Histosol	N	Reducing Conditions	N	High Organic Content in Surface Layer in Sandy Soils
N	Histic Epipedon	Y	Gleyed or Low-Chroma Colors	Y	Listed on National Hydric Soils List
N	Sulfidic Odor	N	Concretions	Y	Listed on Local Hydric Soils List
N	Aquatic Moisture Regime	N	Organic Streaking in Sandy Soils	N	Other (explain in remarks)

Remarks: Hydric soils were present, listed as hydric on national list.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	X	Yes		No	Is this Sampling Point Within a Wetland?	X	Yes
Wetland Hydrology Present?	X	Yes		No			No
Hydric Soils Present?	X	Yes		No			

Remarks: This sampling point was located within a wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site:	Tri-Pro Cedar Property	Date:	6/3/08
Applicant/Owner:	Tri-Pro Cedar Products	County:	Bonner
Investigator:	David A. Armes	State:	ID

Do Normal Circumstances exist on the site?	x	Yes		No	Community ID:	
Is the site significantly disturbed (Atypical Situation)?	X	Yes		No	Transect ID:	
Is Area a Potential Problem Area? seasonal	x	Yes		No	Plot ID:	DP# E3NW

VEGETATION

Dominant Plant Species		Percent	Stratum	Indicator	Dominant Plant Species		Percent	Stratum	Indicator
1	*Symphoricarpos albus*	25%	H	FACU	8				
2	*Spiraea douglasii*	50%	H	FACW	9				
3	*Populus balsamifera*	45%	T	FAC	10				
4	*Rosa nutkana*	10%	S	FAC	11				
5					12				
6					13				
7					14				

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 75%

Remarks: Hydrophytic vegetation was present.

HYDROLOGY

	Recorded Data (describe in Remarks)
	Stream, Lake, or Tide Gauge
	Aerial Photographs
x	Other
	No recorded data available

Field Observations:

Depth of Surface Water:	0	(In.)
Depth of Free Water in Pit:	>14	(In.)
Depth to Saturated Soil:	>14	(In.)

Wetland Hydrology Indicators:

Primary Indicators:

N	Inundated
N	Saturated in Upper 12 inches
N	Water Marks
N	Drift Lines
N	Sediment Deposits
N	Drainage Patters in Wetlands

Secondary Indicators (2 or more required):

N	Oxidized Root Channels in Upper 12"
N	Water-Stained Leaves
N	Local Soil Survey Data
N	FAC-Neutral Test
N	Other (explain in remarks)

Remarks: Hydrology was NOT present.

SOILS

Map Unit Name (series and Phase): 31 – Mission Silt Loam 0 to 2 percent slopes & 15 – Hoodoo Silt Loam

Drainage Class: somewhat poorly drained *Circle*

Taxonomy (Subgroup):

Field Observations Confirm Mapped Type? Yes

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
0-14	A/B	10YR 3/2			

Hydric Soil Indicators:

N	Histosol	N	Reducing Conditions	N	High Organic Content in Surface Layer in Sandy Soils
N	Histic Epipedon	N	Gleyed or Low-Chroma Colors	Y	Listed on National Hydric Soils List
N	Sulfidic Odor	N	Concretions	Y	Listed on Local Hydric Soils List
N	Aquatic Moisture Regime	N	Organic Streaking in Sandy Soils	N	Other (explain in remarks)

Remarks: Hydric soils were present, listed as hydric on national list.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	X	Yes		No	Is this Sampling Point Within a Wetland?		Yes	X	No
Wetland Hydrology Present?		Yes	X	No					
Hydric Soils Present?	X	Yes		No					

Remarks: This sampling point was located within a wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site:	Tri-Pro Cedar Property	Date:	6/3/08
Applicant/Owner:	Tri-Pro Cedar Products	County:	Bonner
Investigator:	David A. Armes	State:	ID

Do Normal Circumstances exist on the site?	x	Yes		No	Community ID:	
Is the site significantly disturbed (Atypical Situation)?	X	Yes		No	Transect ID:	
Is Area a Potential Problem Area? seasonal	x	Yes		No	Plot ID:	DP# E4NW

VEGETATION

Dominant Plant Species		Percent	Stratum	Indicator	Dominant Plant Species		Percent	Stratum	Indicator
1	*Symphoricarpos albus*	20%	H	FACU	8				
2	*Spiraea douglasii*	40%	H	FACW	9				
3	*Populus balsamifera*	45%	T	FAC	10				
4	*Rosa nutkana*	15%	S	FAC	11				
5					12				
6					13				
7					14				

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 75%

Remarks: Hydrophytic vegetation was present.

HYDROLOGY

	Recorded Data (describe in Remarks)
	Stream, Lake, or Tide Gauge
	Aerial Photographs
x	Other
	No recorded data available

Field Observations:

Depth of Surface Water:	0	(In.)
Depth of Free Water in Pit:	>14	(In.)
Depth to Saturated Soil:	>14	(In.)

Wetland Hydrology Indicators:

Primary Indicators:

N	Inundated
N	Saturated in Upper 12 inches
N	Water Marks
N	Drift Lines
N	Sediment Deposits
N	Drainage Patters in Wetlands

Secondary Indicators (2 or more required):

N	Oxidized Root Channels in Upper 12"
N	Water-Stained Leaves
N	Local Soil Survey Data
N	FAC-Neutral Test
N	Other (explain in remarks)

Remarks: Hydrology was NOT present.

SOILS

Map Unit Name (series and Phase): 31 – Mission Silt Loam 0 to 2 percent slopes & 15 – Hoodoo Silt Loam

Drainage Class: somewhat poorly drained *Circle*

Taxonomy (Subgroup):

Field Observations Confirm Mapped Type? Yes

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
0-14	A/B	10YR 3/2			

Hydric Soil Indicators:

N	Histosol	N	Reducing Conditions	N	High Organic Content in Surface Layer in Sandy Soils
N	Histic Epipedon	N	Gleyed or Low-Chroma Colors	Y	Listed on National Hydric Soils List
N	Sulfidic Odor	N	Concretions	Y	Listed on Local Hydric Soils List
N	Aquatic Moisture Regime	N	Organic Streaking in Sandy Soils	N	Other (explain in remarks)

Remarks: Hydric soils were present, listed as hydric on national list.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	X	Yes		No	Is this Sampling Point Within a Wetland?		Yes	X	No
Wetland Hydrology Present?		Yes	X	No				
Hydric Soils Present?	X	Yes		No				

Remarks: This sampling point was located within a wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site:	Tri-Pro Cedar Property	Date:	6/12/08
Applicant/Owner:	Tri-Pro Cedar Products	County:	Bonner
Investigator:	David A. Armes	State:	ID

Do Normal Circumstances exist on the site?	x	Yes		No	Community ID:	
Is the site significantly disturbed (Atypical Situation)?	X	Yes		No	Transect ID:	
Is Area a Potential Problem Area? seasonal	x	Yes		No	Plot ID:	DP# F1W

VEGETATION

Dominant Plant Species		Percent	Stratum	Indicator	Dominant Plant Species		Percent	Stratum	Indicator
1	*Phalaris arundinacea*	85%	H	FACW	8				
2					9				
3					10				
4					11				
5					12				
6					13				
7					14				

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100%

Remarks: Hydrophytic vegetation was present.

HYDROLOGY

	Recorded Data (describe in Remarks)
	Stream, Lake, or Tide Gauge
	Aerial Photographs
x	Other
	No recorded data available

Field Observations:

Depth of Surface Water:	1	(In.)
Depth of Free Water in Pit:	0	(In.)
Depth to Saturated Soil:	0	(In.)

Wetland Hydrology Indicators:

Primary Indicators:

Y	Inundated
Y	Saturated in Upper 12 inches
N	Water Marks
N	Drift Lines
N	Sediment Deposits
N	Drainage Patters in Wetlands

Secondary Indicators (2 or more required):

N	Oxidized Root Channels in Upper 12"
N	Water-Stained Leaves
N	Local Soil Survey Data
N	FAC-Neutral Test
N	Other (explain in remarks)

Remarks: Hydrology was present.

SOILS

Map Unit Name (series and Phase): 31 – Mission Silt Loam 0 to 2 percent slopes & 15 – Hoodoo Silt Loam

Drainage Class: somewhat poorly drained *Circle*

Taxonomy (Subgroup):

Field Observations Confirm Mapped Type? Yes

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
0-14	A/B	10YR 3/2			

Hydric Soil Indicators:

N	Histosol	N	Reducing Conditions	N	High Organic Content in Surface Layer in Sandy Soils
N	Histic Epipedon	N	Gleyed or Low-Chroma Colors	Y	Listed on National Hydric Soils List
Y	Sulfidic Odor	N	Concretions	Y	Listed on Local Hydric Soils List
N	Aquatic Moisture Regime	N	Organic Streaking in Sandy Soils	N	Other (explain in remarks)

Remarks: Hydric soils were present, listed as hydric on national list..

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	X	Yes		No	Is this Sampling Point Within a Wetland?	X	Yes		No
Wetland Hydrology Present?	X	Yes		No					
Hydric Soils Present?	X	Yes		No					

Remarks: This sampling point was located within a wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site:	Tri-Pro Cedar Property	Date:	6/12/08
Applicant/Owner:	Tri-Pro Cedar Products	County:	Bonner
Investigator:	David A. Armes	State:	ID

Do Normal Circumstances exist on the site?	x	Yes		No	Community ID:	
Is the site significantly disturbed (Atypical Situation)?	X	Yes		No	Transect ID:	
Is Area a Potential Problem Area? seasonal	x	Yes		No	Plot ID:	DP# F2NW

VEGETATION

Dominant Plant Species		Percent	Stratum	Indicator	Dominant Plant Species		Percent	Stratum	Indicator
1	*Phalaris arundinacea*	90%	H	FACW	8				
2					9				
3					10				
4					11				
5					12				
6					13				
7					14				

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100%

Remarks: Hydrophytic vegetation was present.

HYDROLOGY

	Recorded Data (describe in Remarks)
	Stream, Lake, or Tide Gauge
	Aerial Photographs
x	Other
	No recorded data available

Field Observations:

Depth of Surface Water:	0	(In.)
Depth of Free Water in Pit:	>14	(In.)
Depth to Saturated Soil:	>14	(In.)

Wetland Hydrology Indicators:

Primary Indicators:

N	Inundated
N	Saturated in Upper 12 inches
N	Water Marks
N	Drift Lines
N	Sediment Deposits
N	Drainage Patters in Wetlands

Secondary Indicators (2 or more required):

N	Oxidized Root Channels in Upper 12"
N	Water-Stained Leaves
N	Local Soil Survey Data
N	FAC-Neutral Test
N	Other (explain in remarks)

Remarks: Hydrology was present.

SOILS

Map Unit Name (series and Phase): 31 – Mission Silt Loam 0 to 2 percent slopes & 15 – Hoodoo Silt Loam

Drainage Class: somewhat poorly drained *Circle*

Taxonomy (Subgroup):

Field Observations Confirm Mapped Type? Yes

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
0-14	A/B	10YR 3/2			

Hydric Soil Indicators:

N	Histosol	N	Reducing Conditions	N	High Organic Content in Surface Layer in Sandy Soils
N	Histic Epipedon	N	Gleyed or Low-Chroma Colors	Y	Listed on National Hydric Soils List
N	Sulfidic Odor	N	Concretions	Y	Listed on Local Hydric Soils List
N	Aquatic Moisture Regime	N	Organic Streaking in Sandy Soils	N	Other (explain in remarks)

Remarks: Hydric soils were present, listed as hydric on national list..

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	X	Yes		No	Is this Sampling Point Within a Wetland?		Yes	X	No
Wetland Hydrology Present?		Yes	X	No					
Hydric Soils Present?	X	Yes		No					

Remarks: This sampling point was NOT located within a wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site:	Tri-Pro Cedar Property	Date:	6/12/08
Applicant/Owner:	Tri-Pro Cedar Products	County:	Bonner
Investigator:	David A. Armes	State:	ID

Do Normal Circumstances exist on the site?	x	Yes		No	Community ID:	
Is the site significantly disturbed (Atypical Situation)?	X	Yes		No	Transect ID:	
Is Area a Potential Problem Area? seasonal	x	Yes		No	Plot ID:	DP# G1W

VEGETATION

	Dominant Plant Species	Percent	Stratum	Indicator		Dominant Plant Species	Percent	Stratum	Indicator
1	*Populus tremuloides*	35%	T	FAC+	8				
2	*Spiraea douglasii*	30%	H	FACW	9				
3	*Populus balsamifera*	5%	T	FAC	10				
4	*Rosa nutkana*	10%	S	FAC	11				
5	*Crataegus douglasii*	20%	S	FACW	12				
6					13				
7					14				

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100%

Remarks: Hydrophytic vegetation was present.

HYDROLOGY

- [ ] Recorded Data (describe in Remarks)
- [ ] Stream, Lake, or Tide Gauge
- [ ] Aerial Photographs
- [x] Other
- [ ] No recorded data available

Field Observations:
Depth of Surface Water: 8 (In.)
Depth of Free Water in Pit: 0 (In.)
Depth to Saturated Soil: 0 (In.)

Wetland Hydrology Indicators:

Primary Indicators:
- [Y] Inundated
- [Y] Saturated in Upper 12 inches
- [N] Water Marks
- [N] Drift Lines
- [N] Sediment Deposits
- [N] Drainage Patters in Wetlands

Secondary Indicators (2 or more required):
- [N] Oxidized Root Channels in Upper 12"
- [N] Water-Stained Leaves
- [N] Local Soil Survey Data
- [N] FAC-Neutral Test
- [N] Other (explain in remarks)

Remarks: Hydrology was present.

SOILS

Map Unit Name (series and Phase): 31 – Mission Silt Loam 0 to 2 percent slopes & 15 – Hoodoo Silt Loam

Drainage Class: somewhat poorly drained *Circle*

Taxonomy (Subgroup):

Field Observations Confirm Mapped Type? Yes

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
0-14	A/B	10YR 3/1			

Hydric Soil Indicators:
- [N] Histosol
- [N] Histic Epipedon
- [N] Sulfidic Odor
- [N] Aquatic Moisture Regime
- [N] Reducing Conditions
- [Y] Gleyed or Low-Chroma Colors
- [N] Concretions
- [N] Organic Streaking in Sandy Soils
- [N] High Organic Content in Surface Layer in Sandy Soils
- [Y] Listed on National Hydric Soils List
- [Y] Listed on Local Hydric Soils List
- [N] Other (explain in remarks)

Remarks: Hydric soils were present, listed as hydric on national list.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	X	Yes		No	Is this Sampling Point Within a Wetland?	X	Yes
Wetland Hydrology Present?	X	Yes		No			No
Hydric Soils Present?	X	Yes		No			

Remarks: This sampling point was located within a wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site:	Tri-Pro Cedar Property	Date:	6/12/08
Applicant/Owner:	Tri-Pro Cedar Products	County:	Bonner
Investigator:	David A. Armes	State:	ID

Do Normal Circumstances exist on the site?	x	Yes		No	Community ID:	
Is the site significantly disturbed (Atypical Situation)?	X	Yes		No	Transect ID:	
Is Area a Potential Problem Area? seasonal	x	Yes		No	Plot ID:	DP# G2NW

VEGETATION

	Dominant Plant Species	Percent	Stratum	Indicator		Dominant Plant Species	Percent	Stratum	Indicator
1	*Populus tremuloides*	45%	T	FAC+	8				
2	*Spiraea douglasii*	35%	H	FACW	9				
3	*Crataegus douglasii*	5%	S	FACW	10				
4	*Rosa nutkana*	5%	S	FAC	11				
5					12				
6					13				
7					14				

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100%

Remarks: Hydrophytic vegetation was present.

HYDROLOGY

	Recorded Data (describe in Remarks)
	Stream, Lake, or Tide Gauge
	Aerial Photographs
x	Other
	No recorded data available

Field Observations:

Depth of Surface Water:	0	(In.)
Depth of Free Water in Pit:	>14	(In.)
Depth to Saturated Soil:	>14	(In.)

Wetland Hydrology Indicators:

Primary Indicators:

N	Inundated
N	Saturated in Upper 12 inches
N	Water Marks
N	Drift Lines
N	Sediment Deposits
N	Drainage Patters in Wetlands

Secondary Indicators (2 or more required):

N	Oxidized Root Channels in Upper 12"
N	Water-Stained Leaves
N	Local Soil Survey Data
N	FAC-Neutral Test
N	Other (explain in remarks)

Remarks: Hydrology was present.

SOILS

Map Unit Name (series and Phase): 31 – Mission Silt Loam 0 to 2 percent slopes & 15 – Hoodoo Silt Loam

Drainage Class: somewhat poorly drained *Circle*

Taxonomy (Subgroup):

Field Observations Confirm Mapped Type? Yes

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
0-14	A/B	10YR 3/1			

Hydric Soil Indicators:

N	Histosol	N	Reducing Conditions	N	High Organic Content in Surface Layer in Sandy Soils
N	Histic Epipedon	N	Gleyed or Low-Chroma Colors	Y	Listed on National Hydric Soils List
N	Sulfidic Odor	N	Concretions	Y	Listed on Local Hydric Soils List
N	Aquatic Moisture Regime	N	Organic Streaking in Sandy Soils	N	Other (explain in remarks)

Remarks: Hydric soils were present, listed as hydric on national list.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	X	Yes		No	Is this Sampling Point Within a Wetland?		Yes	X No
Wetland Hydrology Present?		Yes	X	No				
Hydric Soils Present?	X	Yes		No				

Remarks: This sampling point was NOT located within a wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site:	Tri-Pro Cedar Property	Date:	6/12/08
Applicant/Owner:	Tri-Pro Cedar Products	County:	Bonner
Investigator:	David A. Armes	State:	ID

Do Normal Circumstances exist on the site?	x	Yes		No	Community ID:	
Is the site significantly disturbed (Atypical Situation)?	X	Yes		No	Transect ID:	
Is Area a Potential Problem Area? seasonal	x	Yes		No	Plot ID:	DP# H1W

VEGETATION

	Dominant Plant Species	Percent	Stratum	Indicator		Dominant Plant Species	Percent	Stratum	Indicator
1	*Phalaris arundinacea*	60%	H	FACW	8				
2	*Rumex crispus*	5%	H	FAC+	9				
3	*Salix bebbiana*	5%	S	FACW	10				
4	Un-id grass	20%	S		11				
5					12				
6					13				
7					14				

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 75%

Remarks: Hydrophytic vegetation was present.

HYDROLOGY

	Recorded Data (describe in Remarks)
	Stream, Lake, or Tide Gauge
	Aerial Photographs
x	Other
	No recorded data available

Field Observations:

Depth of Surface Water:	0	(In.)
Depth of Free Water in Pit:	>14	(In.)
Depth to Saturated Soil:	6	(In.)

Wetland Hydrology Indicators:

Primary Indicators:

N	Inundated
Y	Saturated in Upper 12 inches
N	Water Marks
N	Drift Lines
N	Sediment Deposits
N	Drainage Patters in Wetlands

Secondary Indicators (2 or more required):

N	Oxidized Root Channels in Upper 12"
N	Water-Stained Leaves
N	Local Soil Survey Data
N	FAC-Neutral Test
N	Other (explain in remarks)

Remarks: Hydrology was present.

SOILS

Map Unit Name (series and Phase): 31 – Mission Silt Loam 0 to 2 percent slopes & 15 – Hoodoo Silt Loam

Drainage Class: somewhat poorly drained *Circle*

Taxonomy (Subgroup):

Field Observations Confirm Mapped Type? Yes

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
0-14	A/B	2.5YR 4/1	10YR 5/5		

Hydric Soil Indicators:

N	Histosol	N	Reducing Conditions	N	High Organic Content in Surface Layer in Sandy Soils
N	Histic Epipedon	Y	Gleyed or Low-Chroma Colors	Y	Listed on National Hydric Soils List
N	Sulfidic Odor	N	Concretions	Y	Listed on Local Hydric Soils List
N	Aquatic Moisture Regime	N	Organic Streaking in Sandy Soils	N	Other (explain in remarks)

Remarks: Hydric soils were present, listed as hydric on national list.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	X	Yes		No	Is this Sampling Point Within a Wetland?	X	Yes		No
Wetland Hydrology Present?	X	Yes		No				
Hydric Soils Present?	X	Yes		No				

Remarks: This sampling point was located within a wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site:	Tri-Pro Cedar Property	Date:	6/12/08
Applicant/Owner:	Tri-Pro Cedar Products	County:	Bonner
Investigator:	David A. Armes	State:	ID

Do Normal Circumstances exist on the site?	x	Yes		No	Community ID:	
Is the site significantly disturbed (Atypical Situation)?	X	Yes		No	Transect ID:	
Is Area a Potential Problem Area? seasonal	x	Yes		No	Plot ID:	DP# H2W

VEGETATION

Dominant Plant Species		Percent	Stratum	Indicator	Dominant Plant Species		Percent	Stratum	Indicator
1	*Phalaris arundinacea*	70%	H	FACW	8				
2	*Rumex crispus*	5%	H	FAC+	9				
3	*Salix bebbiana*	5%	S	FACW	10				
4	Un-Id grass	15%	S		11				
5					12				
6					13				
7					14				

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 75%

Remarks: Hydrophytic vegetation was present.

HYDROLOGY

	Recorded Data (describe in Remarks)
	Stream, Lake, or Tide Gauge
	Aerial Photographs
x	Other
	No recorded data available

Field Observations:

Depth of Surface Water:	0	(In.)
Depth of Free Water in Pit:	>14	(In.)
Depth to Saturated Soil:	>14	(In.)

Wetland Hydrology Indicators:

Primary Indicators:

N	Inundated
N	Saturated in Upper 12 inches
N	Water Marks
N	Drift Lines
N	Sediment Deposits
N	Drainage Patters in Wetlands

Secondary Indicators (2 or more required):

N	Oxidized Root Channels in Upper 12"
N	Water-Stained Leaves
N	Local Soil Survey Data
N	FAC-Neutral Test
N	Other (explain in remarks)

Remarks: Hydrology was NOT present.

SOILS

Map Unit Name (series and Phase): 31 – Mission Silt Loam 0 to 2 percent slopes & 15 – Hoodoo Silt Loam

Drainage Class: somewhat poorly drained *Circle*

Taxonomy (Subgroup):

Field Observations Confirm Mapped Type? Yes

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
0-14	A/B	10YR 3/2			

Hydric Soil Indicators:

N	Histosol	N	Reducing Conditions	N	High Organic Content in Surface Layer in Sandy Soils
N	Histic Epipedon	N	Gleyed or Low-Chroma Colors	Y	Listed on National Hydric Soils List
N	Sulfidic Odor	N	Concretions	Y	Listed on Local Hydric Soils List
N	Aquatic Moisture Regime	N	Organic Streaking in Sandy Soils	N	Other (explain in remarks)

Remarks: Hydric soils were present, listed as hydric on national list.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	X	Yes		No	Is this Sampling Point Within a Wetland?		Yes	X	No
Wetland Hydrology Present?		Yes	X	No			
Hydric Soils Present?	X	Yes		No			

Remarks: This sampling point was located within a wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site:	Tri-Pro Cedar Property	Date:	6/12/08
Applicant/Owner:	Tri-Pro Cedar Products	County:	Bonner
Investigator:	David A. Armes	State:	ID

Do Normal Circumstances exist on the site?	x	Yes		No	Community ID:	
Is the site significantly disturbed (Atypical Situation)?	X	Yes		No	Transect ID:	
Is Area a Potential Problem Area? seasonal	x	Yes		No	Plot ID:	DP# 11W

VEGETATION

Dominant Plant Species		Percent	Stratum	Indicator	Dominant Plant Species		Percent	Stratum	Indicator
1	*Typha latifolia*	40%	H	FACW	8				
2	*Spiraea douglasii*	20%	H	FACW	9				
3	*Eleocharis palustris*	5%	H	OBL	10				
4	*Carex rostrata*	5%	H	OBL	11				
5	*Phalaris arundinacea*	5%	H	FACW	12				
6					13				
7					14				

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100%

Remarks: Hydrophytic vegetation was present.

HYDROLOGY

	Recorded Data (describe in Remarks)
	Stream, Lake, or Tide Gauge
	Aerial Photographs
x	Other
	No recorded data available

Field Observations:

Depth of Surface Water:	12+	(In.)
Depth of Free Water in Pit:	0	(In.)
Depth to Saturated Soil:	0	(In.)

Wetland Hydrology Indicators:

Primary Indicators:

Y	Inundated
Y	Saturated in Upper 12 inches
N	Water Marks
N	Drift Lines
N	Sediment Deposits
N	Drainage Patters in Wetlands

Secondary Indicators (2 or more required):

N	Oxidized Root Channels in Upper 12"
N	Water-Stained Leaves
N	Local Soil Survey Data
N	FAC-Neutral Test
N	Other (explain in remarks)

Remarks: Hydrology was present.

SOILS

Map Unit Name (series and Phase): 31 – Mission Silt Loam 0 to 2 percent slopes & 15 – Hoodoo Silt Loam

Drainage Class: somewhat poorly drained *Circle*

Taxonomy (Subgroup):

Field Observations Confirm Mapped Type? Yes

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
0-14	A/B	10YR 3/1			

Hydric Soil Indicators:

N	Histosol	N	Reducing Conditions	N	High Organic Content in Surface Layer in Sandy Soils
N	Histic Epipedon	Y	Gleyed or Low-Chroma Colors	Y	Listed on National Hydric Soils List
N	Sulfidic Odor	N	Concretions	Y	Listed on Local Hydric Soils List
N	Aquatic Moisture Regime	N	Organic Streaking in Sandy Soils	N	Other (explain in remarks)

Remarks: Hydric soils were present, listed as hydric on national list.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	X	Yes		No	Is this Sampling Point Within a Wetland?	X	Yes		No
Wetland Hydrology Present?	X	Yes		No					
Hydric Soils Present?	X	Yes		No					

Remarks: This sampling point was located within a wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site:	Tri-Pro Cedar Property	Date:	6/12/08
Applicant/Owner:	Tri-Pro Cedar Products	County:	Bonner
Investigator:	David A. Armes	State:	ID

Do Normal Circumstances exist on the site?	x	Yes		No	Community ID:	
Is the site significantly disturbed (Atypical Situation)?	X	Yes		No	Transect ID:	
Is Area a Potential Problem Area? seasonal	x	Yes		No	Plot ID:	DP# I2NW

VEGETATION

Dominant Plant Species		Percent	Stratum	Indicator	Dominant Plant Species		Percent	Stratum	Indicator
1	*Phalaris arundinacea*	40%	H	FACW	8				
2	*Spiraea douglasii*	5%	H	FACW	9				
3					10				
4					11				
5					12				
6					13				
7					14				

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100%

Remarks: Hydrophytic vegetation was present.

HYDROLOGY

	Recorded Data (describe in Remarks)
	Stream, Lake, or Tide Gauge
	Aerial Photographs
x	Other
	No recorded data available

Field Observations:

Depth of Surface Water:	0	(In.)
Depth of Free Water in Pit:	>14	(In.)
Depth to Saturated Soil:	>14	(In.)

Wetland Hydrology Indicators:

Primary Indicators:

N	Inundated
N	Saturated in Upper 12 inches
N	Water Marks
N	Drift Lines
N	Sediment Deposits
N	Drainage Patters in Wetlands

Secondary Indicators (2 or more required):

N	Oxidized Root Channels in Upper 12"
N	Water-Stained Leaves
N	Local Soil Survey Data
N	FAC-Neutral Test
N	Other (explain in remarks)

Remarks: Hydrology was NOT present.

SOILS

Map Unit Name (series and Phase): 31 – Mission Silt Loam 0 to 2 percent slopes & 15 – Hoodoo Silt Loam

Drainage Class: somewhat poorly drained *Circle*

Taxonomy (Subgroup):

Field Observations Confirm Mapped Type? Yes

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
0-14	A/B	10YR 3/1			

Hydric Soil Indicators:

N	Histosol	N	Reducing Conditions	N	High Organic Content in Surface Layer in Sandy Soils
N	Histic Epipedon	N	Gleyed or Low-Chroma Colors	Y	Listed on National Hydric Soils List
N	Sulfidic Odor	N	Concretions	Y	Listed on Local Hydric Soils List
N	Aquatic Moisture Regime	N	Organic Streaking in Sandy Soils	N	Other (explain in remarks)

Remarks: Hydric soils were present, listed as hydric on national list.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	X	Yes		No	Is this Sampling Point Within a Wetland?		Yes	X	No
Wetland Hydrology Present?		Yes	X	No					
Hydric Soils Present?	X	Yes		No					

Remarks: This sampling point was located within a wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site:	Tri-Pro Cedar Property	Date:	6/12/08
Applicant/Owner:	Tri-Pro Cedar Products	County:	Bonner
Investigator:	David A. Armes	State:	ID

Do Normal Circumstances exist on the site?	x	Yes		No	Community ID:	
Is the site significantly disturbed (Atypical Situation)?	X	Yes		No	Transect ID:	
Is Area a Potential Problem Area? seasonal	x	Yes		No	Plot ID:	DP# J1W

VEGETATION

Dominant Plant Species		Percent	Stratum	Indicator	Dominant Plant Species		Percent	Stratum	Indicator
1	*Typha latifolia*	25%	H	FACW	8				
2	*Spiraea douglasii*	10%	H	FACW	9				
3	*Populus tremuloides*	15%	T	FAC+	10				
4	*Phalaris arundinacea*	25%	H	FACW	11				
5	*Alopecurus pratensis*	20%	H	FACW	12				
6					13				
7					14				

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100%

Remarks: Hydrophytic vegetation was present.

HYDROLOGY

	Recorded Data (describe in Remarks)
	Stream, Lake, or Tide Gauge
	Aerial Photographs
x	Other
	No recorded data available

Field Observations:

Depth of Surface Water:	4+	(In.)
Depth of Free Water in Pit:	0	(In.)
Depth to Saturated Soil:	0	(In.)

Wetland Hydrology Indicators:

Primary Indicators:

Y	Inundated
Y	Saturated in Upper 12 inches
N	Water Marks
N	Drift Lines
N	Sediment Deposits
N	Drainage Patters in Wetlands

Secondary Indicators (2 or more required):

N	Oxidized Root Channels in Upper 12"
N	Water-Stained Leaves
N	Local Soil Survey Data
N	FAC-Neutral Test
N	Other (explain in remarks)

Remarks: Hydrology was present.

SOILS

Map Unit Name (series and Phase): 31 – Mission Silt Loam 0 to 2 percent slopes & 15 – Hoodoo Silt Loam

Drainage Class: somewhat poorly drained *Circle*

Taxonomy (Subgroup):

Field Observations Confirm Mapped Type? Yes

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
0-14	A/B	10YR 3/2			

Hydric Soil Indicators:

N	Histosol	N	Reducing Conditions	N	High Organic Content in Surface Layer in Sandy Soils
N	Histic Epipedon	N	Gleyed or Low-Chroma Colors	Y	Listed on National Hydric Soils List
N	Sulfidic Odor	N	Concretions	Y	Listed on Local Hydric Soils List
N	Aquatic Moisture Regime	N	Organic Streaking in Sandy Soils	N	Other (explain in remarks)

Remarks: Hydric soils were present, listed as hydric on national list.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	X	Yes		No	Is this Sampling Point Within a Wetland?	X	Yes		No
Wetland Hydrology Present?	X	Yes		No				
Hydric Soils Present?	X	Yes		No				

Remarks: This sampling point was located within a wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site:	Tri-Pro Cedar Property	Date:	6/12/08
Applicant/Owner:	Tri-Pro Cedar Products	County:	Bonner
Investigator:	David A. Armes	State:	ID

Do Normal Circumstances exist on the site?	x	Yes		No	Community ID:	
Is the site significantly disturbed (Atypical Situation)?	X	Yes		No	Transect ID:	
Is Area a Potential Problem Area? seasonal	x	Yes		No	Plot ID:	DP# J2NW

VEGETATION

	Dominant Plant Species	Percent	Stratum	Indicator		Dominant Plant Species	Percent	Stratum	Indicator
1	*Tanacetum vulgare*	35%	H	NL	8				
2	*Phalaris arundinacea*	40%	H	FACW	9				
3	*Alopecurus pratensis*	20%	H	FACW	10				
4					11				
5					12				
6					13				
7					14				

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 66%

Remarks: Hydrophytic vegetation was present.

HYDROLOGY

	Recorded Data (describe in Remarks)
	Stream, Lake, or Tide Gauge
	Aerial Photographs
x	Other
	No recorded data available

Field Observations:

Depth of Surface Water:	0	(In.)
Depth of Free Water in Pit:	>14	(In.)
Depth to Saturated Soil:	>14	(In.)

Wetland Hydrology Indicators:

Primary Indicators:

N	Inundated
N	Saturated in Upper 12 inches
N	Water Marks
N	Drift Lines
N	Sediment Deposits
N	Drainage Patters in Wetlands

Secondary Indicators (2 or more required):

N	Oxidized Root Channels in Upper 12"
N	Water-Stained Leaves
N	Local Soil Survey Data
N	FAC-Neutral Test
N	Other (explain in remarks)

Remarks: Hydrology was NOT present.

SOILS

Map Unit Name (series and Phase): 31 – Mission Silt Loam 0 to 2 percent slopes & 15 – Hoodoo Silt Loam

Drainage Class: somewhat poorly drained *Circle*

Taxonomy (Subgroup):

Field Observations Confirm Mapped Type? Yes

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
0-14	A/B	10YR 3/2			

Hydric Soil Indicators:

N	Histosol	N	Reducing Conditions	N	High Organic Content in Surface Layer in Sandy Soils
N	Histic Epipedon	N	Gleyed or Low-Chroma Colors	Y	Listed on National Hydric Soils List
N	Sulfidic Odor	N	Concretions	Y	Listed on Local Hydric Soils List
N	Aquatic Moisture Regime	N	Organic Streaking in Sandy Soils	N	Other (explain in remarks)

Remarks: Hydric soils were present, listed as hydric on national list.

WETLAND DETERMINATION

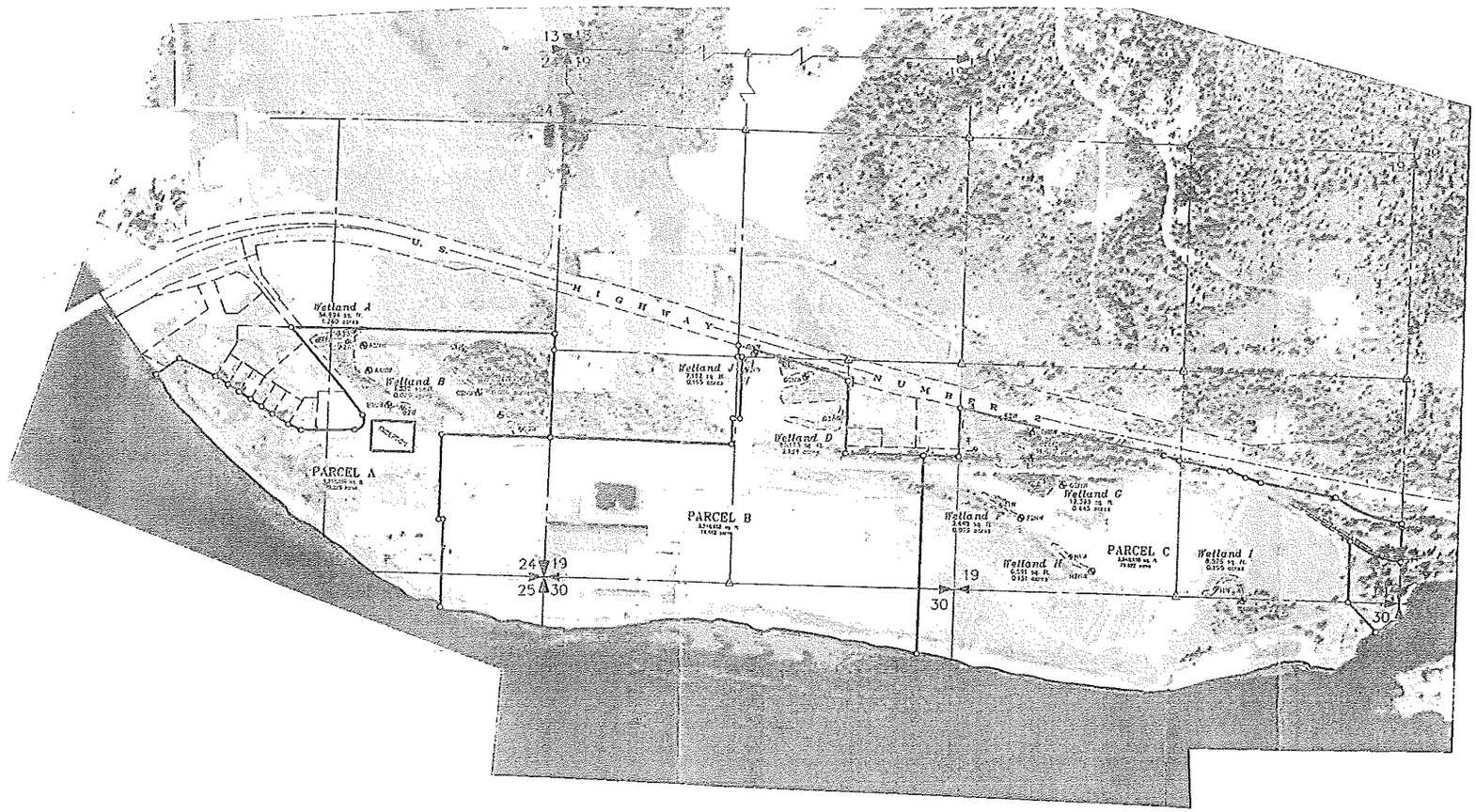
Hydrophytic Vegetation Present?	X	Yes		No	Is this Sampling Point Within a Wetland?		Yes	X	No
Wetland Hydrology Present?		Yes	X	No					
Hydric Soils Present?	X	Yes		No					

Remarks: This sampling point was located within a wetland.

APPENDIX D WETLAND MAP

WETLAND EXHIBIT

Part of Sections 19 and 30, Township 58 North, Range 6 West and Sections 24 and 25, Township 58 North, Range 6 West, Boise Meridian, Bonner County, Idaho



n

0 400 800
scale in feet
1"=400'

legend

- △ = Calculated Point (nothing found or set)
- ⊕ = "Hw" (not set) location with designation #
- ⊕ = "W" (set) location with designation #
- ■ = Found survey monument, as noted
- ○ = Set 5/8" Rebar marked "H2 PLS 12110"
- = Boundary Line
- = Parcel Line
- = Adjacent Property Line
- = Section Line
- = Survey Line
- = Easement Line
- = Deed Line
- = Right-of-Way Line
- = Railroad

8383 N Hess Street, Suite 2
Hayden, Idaho 83835
Phone: (208) 772-8500
Fax: (208) 772-8513
www.h2survey.com

h2 Engineering & Surveying, LLC

Date: April 2019
Project Number: 2018-003

Sheet 1 of 5

Appendix D-11
Water Quality Certification

Proposed River Crossing 401 Water Quality Certification

James A. Sewell & Associates, LLC

Idaho Department of Environmental Quality

Final §401 Water Quality Certification

May 24, 2011

404 Permit: NWW-2010-664-C03; West Bonner Water and Sewer District Project

Applicant/Authorized Agent: Applicant: Mr. Lonnie Orr, West Bonner Water and Sewer District 215 N. Washington Ave Oldtown, ID 83822. Authorized Agent: Martin E. Taylor, AICP James A. Sewell & Associates 1205 Highway 2, Suite 101 Sandpoint, ID 83864.

Receiving Water Body Name/Assessment Unit: Unnamed Tributary to Pend Oreille River and associated wetland. Assessment Unit #ID17010216PN002_02

Receiving Water Body Condition: The unnamed tributary to Pend Oreille River has not been assessed and for the purposes of antidegradation review, we assume that it fully supports all existing beneficial uses. Pend Oreille River is an impaired waterbody for dissolved gas supersaturation, phosphorus, and temperature.

Project Location: Section 24, T56N, R6W; Project begins on the north side of Highway 2 approximately 0.5 mile from the east bank of the Pend Oreille River Highway 2 bridge.

Pursuant to the provisions of Section 401(a)(1) of the Federal Water Pollution Control Act (Clean Water Act), as amended, 33 USC Section 1341 (a)(1), and Idaho Code §§ 39-101 et.seq., and 39-3601 et.seq., the Idaho Department of Environmental Quality (DEQ) has authority to review activities receiving Section 404 dredge and fill permits and issue a water quality certification decision.

Based upon its review of the permit application and associated information for the above-referenced activity, DEQ certifies that if the permittee complies with the terms and conditions imposed by the permit along with the conditions set forth in this water quality certification, then there is reasonable assurance the activity will comply with the applicable requirements of Sections 301, 302, 303, 306, and 307 of the Clean Water Act, including the Idaho Water Quality Standards (WQS) (IDAPA 58.01.02) and other appropriate water quality requirements of State law.

This certification does not constitute authorization of the permitted activities by any other state or federal agency or private person or entity. This certification does not excuse the permit holder from the obligation to obtain any other necessary approvals, authorizations or permits.

PROJECT DESCRIPTION

West Bonner Water and Sewer District proposed to install a 12 inch waterline and create a 0.59 mile road on top of the line, of which 534 feet cross a wetland. The purpose of the road is to access a location where a potable water tank could be constructed along with a distribution line to supply water to the District's customers. To cross the wetland, the plans require three 12 inch cross culverts to provide water connectivity throughout the wetland. Silt fences are to be placed at the base of the road fill along each side of the wetland crossing. A rock lined ditch is proposed for 300 feet along the east slope of the road as it climbs up in elevation from the wetland crossing. Rock armor is also proposed for the upslope side of the road near the top of the hill continuing on to the water tank location. Construction will be done when the wetland no longer has standing water along the project alignment.

RECEIVING WATERBODY DESCRIPTION

The assessment unit associated with the unnamed tributary and wetland has the following designated beneficial uses: cold water aquatic life; primary contact recreation; domestic, agricultural, and industrial water supply; wildlife habitats; and aesthetics. To date, DEQ has not assessed beneficial use support status of this assessment unit.

ANTIDEGRADATION

Idaho's antidegradation policy (IDAPA 58.01.02.051) requires that existing uses of all waters in the state and the level of water quality necessary to protect those uses be maintained (Tier I protection). In addition, where the quality of water is better than that required to maintain beneficial uses (the water body is considered "high Quality"), then DEQ must assure that no degradation will be allowed unless it is deemed to be necessary to accommodate important economic or social development (Tier II protection).

Because the beneficial use support status in the assessment unit associated with the unnamed tributary and wetland has not been evaluated, DEQ must determine the appropriate level of antidegradation protection on a case-by-case basis. Because no data is currently available and the collection of necessary data to determine the support status of the assessment unit would take considerable time, the applicant has agreed to consider the unnamed tributary a high quality water for the purposes of this antidegradation review in order to prevent further delays in the issuance of this certification. Therefore, DEQ has provided Tier 2 antidegradation protection to this assessment unit. DEQ will reevaluate the level of antidegradation protection afforded to this assessment unit based on available information when preparing future 401 certifications for federally-permitted activities that may affect these receiving water bodies.

The primary pollutants of concern for this project are sediment, turbidity, and petroleum products. Conditions of this certification ensure that this project will not cause a lowering of water quality in this tributary for any pollutants. As such, there is a reasonable assurance of compliance with the Tier II antidegradation provisions applicable to this unnamed tributary to Pend Oreille River.

As long as the project is conducted in accordance with the provisions of the project plans, Section 404 Permit, and conditions of this certification, then there is reasonable assurance the existing beneficial uses and water quality of this tributary will be maintained and protected. Therefore, DEQ concludes that this activity complies with Idaho's antidegradation policy.

CONDITIONS THAT ARE NECESSARY TO ASSURE COMPLIANCE WITH WATER QUALITY STANDARDS OR OTHER APPROPRIATE WATER QUALITY REQUIREMENTS OF STATE LAW

1. This certification authorizes the activity as described in the joint application for permit received February 23, 2011 and amended by the applicant on March 25 and 30, 2011.

2. This certification is conditioned upon the requirement that any modification (e.g. change in best management practices to a less protective practice, work windows, etc.) of the permitted activity shall first be provided to DEQ for review to determine compliance with Idaho Water Quality Standards and to provide additional certification pursuant to §401. Such modifications may not be implemented until DEQ has made a determination whether additional certification is necessary.

3. DEQ reserves the right to modify, amend, or revoke this certification if DEQ determines that, due to changes in relevant circumstances, including without limitation, changes in project activities, the characteristics of the receiving water body, or state water quality standards, there is no longer reasonable assurance of compliance with water quality standards or other appropriate requirements of state law.

4. This certification may be revoked for failure of the permittee to comply with the conditions of this certification or the terms and conditions of the referenced permit. Revocation shall become effective upon written notice to the permittee, and the appropriate opportunity to be heard. Once revoked, all activities related to the permittee's violation of the conditions of this certification as permitted under the referenced permit shall immediately cease. The activity may not resume unless authorized by DEQ.

5. A copy of this certification must be kept on the job site and readily available for review by any contractor working on the project as well as any federal, state, or local government personnel.

6. The applicant shall provide access to the project site upon request by DEQ personnel for site inspections, monitoring, and/or to ensure that conditions of this certification are being met.

7. The applicant is responsible for all work done by contractors and must ensure the contractor(s) are informed of and follow all the conditions described in this certification and the Section 404 permit.

8. If there is a spill or release of a hazardous material to State waters or to land such that there is likelihood the material will enter State Waters, the State Communications Center shall be contacted immediately at 1-800-632-8000. All contractors shall have ready access to the State Communications Center number.

9. Hazardous and deleterious materials shall not be stored, disposed of, or accumulated adjacent to or in the immediate vicinity of state waters unless adequate measures and controls are provided to insure that those materials will not enter state waters as result of high water, precipitation runoff, wind, storage facility failure, accidents in operation, or unauthorized third party activities.

10. Equipment shall be kept in good repair so as to not chronically leak fluids. If equipment in good repair normally leak fluids, absorbent pads or other containment shall be placed to capture the fluid while on the project.

11. Silt fences shall be placed in such a manner so as to prevent sediment from entering the wetland outside the footprint of the fill. Silt fence is not to be used to trap sediment within the wetland. The intent of silt fence use is to keep soil on uplands and within the project boundary. Correct installation of silt fencing shall follow the contours of the land and not be placed perpendicular to the contour (i.e. fence does not go uphill or downhill).

12. Straw bales shall not be used as check dams. Suitable alternatives include, but are not limited to, rock check dams and straw wattles.

13. Turbidity in the defined stream channel downstream of this work shall not exceed background turbidity by more than 50 NTU instantaneously or 25 NTU for more than 10 consecutive days. Turbidity may be monitored using a turbidity meter or by visual observations. If numeric turbidity data is collected using a turbidity meter, the applicant shall evaluate compliance with the numeric turbidity standard. If visual monitoring is conducted in lieu of a turbidity meter, it must be performed by a person who is on site during all construction activity. Turbidity monitoring must occur when a plume is observed in the stream.

14. If turbidity standards are exceeded or a plume of turbid water is observed, immediate steps shall be taken to reduce turbidity to below the standard. Best management practices shall be modified to ensure that the turbidity standards are not exceeded in the future.

15. Plan and Specification review and approval for installation of water and wastewater lines and other appropriate related designs shall be obtained from DEQ prior to start of this project. Contact Katie Baker-Casile at 208.666.4640 for more information.

16. Rock armor shall be placed at each culvert inlet and outlet at all wetland locations.

17. The wetland portion of waterline burial and road construction shall not begin until standing water within the project footprint has dried up.

18. Excavated wetland soils shall be placed on uplands or within the road footprint to minimize wetland disturbance outside of the project area.

19. Temporary storage of construction materials or excavated wetland soils shall be located outside of the wetland boundary or within the road footprint to minimize wetland disturbance.

20. Discharge of water from the pipeline trench into the wetland is not authorized. Water shall be discharged to upland sites and infiltrated into the ground. If discharge of trench water into the wetland is necessary, submit the selected best management practice(s) associated with this proposed discharge to DEQ for review and approval.

RIGHT TO APPEAL FINAL CERTIFICATION

The final Section 401 Water Quality Certification may be appealed by submitting a petition to initiate a contested case, pursuant to Idaho Code § 39-107(5), and the Rules of Administrative Procedure Before the Board of Environmental Quality, IDAPA 58.01.23, within 35 days of the date of the final certification.

Questions regarding the actions taken in this certification should be directed to June Bergquist, Coeur d'Alene Regional Office at 208.666.4605 or june.bergquist@deq.idaho.gov .

Daniel Redline
Regional Administrator
Coeur d'Alene Regional Office

Appendix D-12
Historical Information

Idaho Historical Sites and Albeni Area NWAA Archaeological Study

James A. Sewell & Associates, LLC

Cold Springs Pegram Truss Railroad Bridge
97000762
Over the Big Wood R., 0.5 mi. S of jct. of US 93 and ID 267, Ketchum
970725
Pegram Truss Railroad Bridges of Idaho MPS

Gimlet Pegram Truss Railroad Bridge
97000757
Over the Big Wood R., 0.5 mi. S of jct. of US 93 and E. Fork Wood River Rd., Ketchum
970725
Pegram Truss Railroad Bridges of Idaho MPS

Greenhow and Rumsey Store Building
83000280
Main Ave., Ketchum
830818

SUN VALLEY

Proctor Mountain Ski Lift
80001294
Trail Creek, Sun Valley
800120

Sawtooth City
75000625
Address Restricted, Sun Valley
750404

[redacted]

IDAHO CITY

Arrowrock Dam
72000437
About 10 mi. E of Boise on U.S. Forest Service Roads, Boise
721109

Idaho City
75000626
Bounded by city limits, Idaho City
750627

PLACERVILLE

Placerville Historic District
84001029
Roughly bounded by townsite limits, Placerville
840907

[redacted]

BAYVIEW

Lake Pend Oreille Lime and Cement Industry Historic District
94001450
Roughly, discontiguous sites around Bayview and Lakeview, Bayview
970327

COOLIN

Vinther and Nelson Cabin
82002507
Eight Mile Island, Coolin
820721

DOVER

Dover Church
86002153
Washington between 3rd and 4th, Dover
890808

PRIEST RIVER

Hotel Charbonneau
91001718
207 Wisconsin St., Priest River
911119

Priest River Commercial Core Historic District
95001057
Roughly bounded by Wisconsin, Montgomery, and Cedar Sts. and Albeni Rd., Priest River
950831

Priest River High School
95001402
1020 W. Albeni Hwy., Priest River
951207
Public School Buildings in Idaho

This stone structure (c. 1905) is one of three bread ovens associated with the ***Spokane and International Railroad Construction Camp*** *near Eastport (Boundary County). All that remains of the temporary railroad camp are building depressions, log wall remnants, dumping areas, and these ovens, believed to be erected by Italian construction laborers. (c. 1990; ISHS 1997.21.7.)*

MPS
SANDPOINT

Bernd, W. A., Building
83000282
307-311 N. 1st. Ave., Sandpoint
830818

Nesbitt, Amanda, House
82002508
602 N. 4th Ave., Sandpoint
820715

Priest River Experimental Forest
94000661
Idaho Panhandle National Forest, Sandpoint
940701

Sandpoint Burlington Northern Railway Station
73000682
Cedar St. at Sand Creek, Sandpoint
730705

Sandpoint Community Hall
86002148
204 S. 1st Ave., Sandpoint
860911

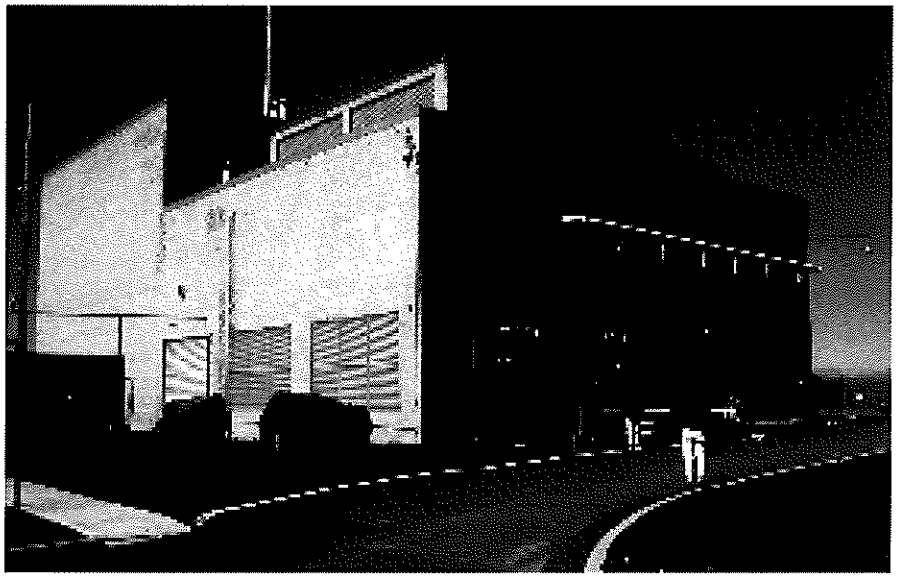
Sandpoint Historic District
84001100
Roughly 1st and 2nd Aves., Main and Cedar Sts., Sandpoint
840907

BONNEVILLE COUNTY

IDAHO FALLS

Beckman, Andrew and Johanna M., Farm
92001414
US 20 0.5 mi. W of jct. with New Sweden Rd., Idaho Falls
921106
New Sweden and Riverview Farmsteads and Institutional Buildings MPS

*When it was commissioned in 1951, the **Experimental Breeder Reactor No. 1** (Butte County) demonstrated that a nuclear reactor is capable of breeding (creating more fuel than its operation consumes) and of achieving economically competitive nuclear power. Because of its major impact on the nation's desire for cheap, efficient power, EBR #1 was deemed a National Historic Landmark in 1966— only two years after it was decommissioned. (1996; ISHS 1997.21.8.)*



Beckman, Oscar and Christina, Farmstead
91001713
SW corner of jct. of New Sweden—Shelley Rd. and US 20, Idaho Falls
911119
New Sweden and Riverview Farmsteads and Institutional Buildings MPS

Bonneville County Courthouse
79000781
Capital Ave. and C St., Idaho Falls
790710

Bonneville Hotel
84001032
400 Blk W. C St., Idaho Falls
840830
Idaho Falls Downtown MRA

Douglas-Farr Building
84001035
493 N. B Ave., Idaho Falls
840830
Idaho Falls Downtown MRA

Eagle Rock Ferry
74000734
N of Idaho Falls on Snake River, Idaho Falls
740607

Eleventh Street Historic District
97000863
Roughly bounded by S. Boulevard, 13th, 10th, and 9th Sts., S. Emerson and S. Lee Aves., Idaho Falls
970808

Farmers and Merchants Bank Building
84001037
383 W. A St., Idaho Falls
840830
Idaho Falls Downtown MRA

First Presbyterian Church
78001052
325 Elm St., Idaho Falls
780329

NATIONAL REGISTER OF HISTORIC PLACES IN IDAHO

ADDENDUM TO LISTINGS
SEPTEMBER 1, 1997 THROUGH JULY 31, 2009

(✓ Indicates Latest Listings)

ADA COUNTY

BOISE

Anduiza Hotel
619 Grove St., Boise
02-25-03
03000064 (A, C)

Boulevard Mo-tel
1121 S. Capitol Blvd., Boise
01-07-98
97001609 (A, C)

Chitwood, Joseph, House
1321 Denver St., Boise
08-23-06
06000709 (A)

Idaho National Guard Armory
801 Reserve St., Boise
02-26-99
Tourtellotte & Hummel Architecture in Idaho TR
99000253 (A, C)

Ninth Street Bridge
E of new 9th St. bridge, over Boise River, Boise
09-14-01
Metal Truss Highway Bridges of Idaho MPS
01000980 (C)

O'Farrell, John A., Cabin
N side of W. Fort St. between N. 4th and N. 5th sts., Boise
12-03-99
99001415 (A, f)

Schick/Ostolasa Farmstead
5213 Dry Creek Rd., Boise
08-23-06
06000710 (A)

KUNA

Boise City - Silver City Road: Fick Property Segment
3232 W. Kuna-Mora Rd., Kuna vicinity
07-15-99
99000852 (A)

Lilyquist-Christianson Building
459 W. 3rd, Kuna
04-01-99
99000415 (A)

MERIDIAN

Bell, R. H. and Jessie, House
137 E. Pine St., Meridian
02-01-06
05001599 (C)

Hill, Clara, House
1123 N. Main St.., Meridian
02-01-06
05001600 (C)

Mittleider Farmstead Historic District
575 Rumpel Ln., Meridian vicinity
03-20-03
Historic Rural Properties of Ada County, Idaho MPS
03000122 (A, C)

Mountain States Telephone and Telegraph Company Building
815 N. Main St., Meridian
09-17-08
08000905 (A)

STAR

Star Camp
N. Star Rd. and W. 3rd St., Star
04-27-05
05000344 (A, a)

BANNOCK COUNTY

LAVA HOT SPRINGS

L.D.S. Ward Building
187 S. 2nd Ave. W., Lava Hot Springs
12-09-99
99001474 (C, a)

POCATELLO

Lincoln-Johnson Avenues Residential Historic District
Roughly bounded by W. Hayden St., the Portneuf River, W. Benton St., and the West Bench, Pocatello
03-15-06
06000126 (A, C)

Old Town Residential Historic District
Roughly bounded by W. Benton St., S. Garfield St., W. Lewis St., and the Portneuf River, Pocatello
04-02-08
08000249 (A, C)

Pocatello Westside Residential Historic District
Roughly bounded by N. Arthur Ave., W. Fremont St., N. Grant Ave., and W. Young St., Pocatello
03-17-03
03000102 (A, C)

BEAR LAKE COUNTY

FISH HAVEN

Scofield, Anna Nielsen, House
2788 US 89, Fish Haven
04-01-99
99000417 (C)

GEORGETOWN

Georgetown Relief Society Hall
161 3rd NW St., Georgetown
09-18-98
98001171 (A)

BINGHAM COUNTY

BLACKFOOT

Eastern Idaho District Fair Historic District
97 Park Dr., Blackfoot
08-10-01
01000864 (A, g)

BLAINE COUNTY

HAILEY

✓ **Chase, Eben S. and Elizabeth S., House**
203 E. Bullion St., Hailey
05-05-09
09000292 (A)

Hailey Masonic Lodge
100 S. 2nd Ave., Hailey
09-12-08
08000869 (A)

KETCHUM

Ketchum Ranger District Administrative Site
131/171 River St., Ketchum
02-09-07
07000005 (A, C)

BOISE COUNTY

SWEET

Upper Brownlee School
On Dry Buck Rd., 0.1 mi. NE of jct. with Timber Butte Rd., Sweet vicinity
03-31-98
Public School Buildings in Idaho MPS
98000264 (A, C)

BONNER COUNTY

PRIEST RIVER

Lamb Creek School
28769 N. Hwy. 57, Priest River vicinity
11-30-99
Public School Buildings in Idaho MPS
99001418 (A)

Settlement School
Settlement Rd., 0.5 mi. E of jct. with East Side Rd., Priest River
04-01-99
Public School Buildings in Idaho MPS
99000418 (A, C)

SANDPOINT

Olson, Charles A. and Mary, House
401 Church St., Sandpoint
05-30-01
01000566 (C)

Sandpoint Federal Building
419 N. 2nd Ave., Sandpoint
08-08-01
01000836 (C)

Sandpoint High School
102 S. Euclid Ave., Sandpoint
10-28-99
Public School Buildings in Idaho MPS
99001277 (A, C)

BONNEVILLE COUNTY

IDAHO FALLS

Art Troutner Houses Historic District
3950, 4032, 4012 S. 5th W., Idaho Falls
09-10-08
08000868 (C)

Holy Rosary Church
228 E. 9th St., Idaho Falls
07-17-02
02000802 (C, a)

Idaho Falls Airport Historic District
2381 Foote Dr., Idaho Falls
09-10-97
97001126 (A)

BOUNDARY COUNTY

BONNERS FERRY

Soderling, Russell and Pearl, House
217 W. Madison St., Bonners Ferry
01-15-98
97001650 (C)

BUTTE COUNTY

ARCO

Arco Baptist Community Church
402 W. Grand Ave., Arco
11-29-01
01001303 (C)

CANYON COUNTY

CALDWELL

Boise River and Canal Bridge
Plymouth St. (Old Hwy. 30), Caldwell
02-07-07
Metal Truss Highway Bridges of Idaho MPS
07000003 (C)

Caldwell Residential Historic District
Roughly bounded by Cleveland Blvd., Everett St., S. 12th Ave., and S. 20th Ave., Caldwell
09-23-02
02001064 (A, C, a)

Dorman, Henry W. and Ida Frost, House
114 Logan St., Caldwell
07-05-00
00000756 (A, C)

NAMPA

Lockman, Jacob P., House
23 9th Ave. N., Nampa
07-27-05
05000735 (C)

Old Nampa Neighborhood Historic District
Roughly bounded by 4th Ave. S., 4th St. S., 11th Ave. S., and 9th St. S.
03-21-07
07000164 (A, C)

WILDER

Obendorf, George, Gothic Arch Truss Barn
24047 Batt Corner Rd., Wilder vicinity
10-28-99
99001278 (C)

CUSTER COUNTY

CLAYTON

Idaho Mining and Smelter Company Store
One Ford St., Clayton
02-01-06
05001601 (A)

ELMORE COUNTY

ATLANTA

Atlanta Ranger Station Historic District
At end of Middle Fork Rd., Boise NF, Atlanta
01-23-03
02001726 (A, C)

FRANKLIN COUNTY

FRANKLIN

Relic Hall
111 E. Main St., Franklin
10-11-01
00001627 (C)

FREMONT COUNTY

ISLAND PARK

Crabtree, Glen and Addie, Cabin
3939 Cowan Rd., Island Park
06-29-00
00000742 (C)

ARCHAEOLOGICAL AND HISTORICAL SURVEY REPORT
IDAHO ARCHAEOLOGICAL SURVEY

CULTURAL RESOURCES ASSESSMENT OF THE ALBENI ANNEX WATER AND SEWER PROJECT

City of Oldtown
Bonner County, Idaho

by
Ann Sharley, M.A., RPA

Prepared for

James A. Sewell & Associates, LLC
600 Fourth Street West
Newport, WA 99156

May 19, 2010
NWAA Project No. ID10-004

Northwest Archaeological Associates, Inc.
5418 20th Avenue NW, Suite 200
Seattle, Washington 98107

CONTAINS CONFIDENTIAL INFORMATION - NOT FOR GENERAL DISTRIBUTION

ARCHAEOLOGICAL AND HISTORICAL SURVEY REPORT
ARCHAEOLOGICAL SURVEY OF IDAHO

A. KEY INFORMATION

1. Project name: Albeni Annex Water and Sewer Project.

2. Report number or associated federal project number: Northwest Archaeological Associates, Inc. (NWAA) Project No. ID10-004; U.S. Army Corps of Engineers project number has not yet been assigned.

3. Agency name: James A. Sewell & Associates, LLC, Newport, Washington; the project will be permitted and partially funded by the U.S. Army Corps of Engineers. The project contact is: Mr. Spencer Ferguson, EIT, James A. Sewell & Associates, LLC, 600 Fourth Street West, Newport, WA 99156.

4. Report author: Ann Sharley, MA, RPA, Northwest Archaeological Associates, Inc. (NWAA), 5418 20th Avenue NW, Suite 200, Seattle, WA 98107.

5. Date: May 19, 2010.

6. County: Bonner.

7. Township, range, section: T. 56 N., R. 5 W., Section 19 and T. 56 N., R. 6 W., Section 24, Boise Meridian (Figure 1).

USGS topographic map(s): Newport, Wash.-Idaho, 7.5', 1968, photorevised 1986.

8. Acres Surveyed

23 intensive (30-meter or less transect interval)
0 reconnaissance (greater than 30-meter transect interval, intuitive, or statistical sample).

B. PROJECT DESCRIPTION

1. Description of project and potential direct and indirect impacts to known or suspected historic properties: Prior to additional development in the Albeni Annex area of Oldtown, Idaho, utilities must be upgraded. The proposed Albeni Annex Water and Sewer Project consists of approximately five miles of new water and sewer lines, to be installed in trenches excavated approximately four feet wide and six feet deep. Two new wells will also be drilled, a water storage tank will be installed, and a pipeline will be drilled beneath the Pend Oreille River, connecting the new water and sewer lines with existing systems in Oldtown (Figures 2 and 3). Since the U.S. Army Corps of Engineers will provide project funding and approve project permits, the Albeni Annex Water and Sewer Project is subject to Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA).

2. Description of Area of Potential Effects (APE): The project APE is the area that will be disturbed during installation of water and sewer lines, drilling of wells, and installation of the water tank (Figures 2 and 3). At the request of the Kalispel Tribe of Indians, the Pend Oreille River shoreline bordering the Albeni Annex area was added to the APE. A number of buildings, 50 or more years of age, sit immediately adjacent to the APE: sawmill buildings, river gauging stations, and abandoned residences and shops. None of these buildings will be removed or modified during project activities, and indirect project effects such as vibration and noise will not be of an intensity to affect the structures. Since improvements in the building vicinities will consist of buried utility lines, the structures' visual settings will not be permanently altered. Therefore these resources were not included in the APE.

3. Project acres: 23 acres.

4. Owner(s) of land in project area: The greater part of the project is on privately owned lands or lands within the U.S. Route 2 (US 2) right-of-way. Small portions of the project are owned by the City of Oldtown.

C. STATEMENT OF OBJECTIVES FOR SURVEY

The purpose of the survey was to identify, document, and evaluate pre-contact and historical cultural material within the APE, in compliance with Section 106 of the NHPA, through review of archival sources, intensive surface examination, and subsurface testing.

D. LOCATION AND ENVIRONMENTAL SETTING

1. Setting: The Albeni Annex Water and Sewer project APE extends across low terraces bordering the Pend Oreille River in the Newport, Washington-Oldtown, Idaho area, one-half mile downstream from Albeni Falls. Modern development in the project vicinity began in the late nineteenth century as Euroamericans moved to the area, attracted by dense stands of timber and the promise of free land. By 1909 a large sawmill occupied the terrace across the Pend Oreille River from Newport and Oldtown–part of the present project area (Figure 4). Today Newport and Oldtown are small thriving communities, surrounded by scattered farms, pastures, and commercial developments. Second- and third-growth forests cover the adjacent hills, and the Pend Oreille River, impounded by hydroelectric dams, has become a series of reservoirs.

Known geologic history of the project vicinity dates back more than 2 billion years to the Precambrian era when the first sediments of the Belt Series were deposited in shallow regional seas. Over time geological processes turned these sediments to stone, metamorphosed the stone into metasedimentary rock such as argillite, quartzite, and siltite, added intrusive igneous bodies, and uplifted the bedrock into hills and mountains. During the Eocene epoch, roughly 50 million years ago, movement along the Newport fault formed a linear depression through the mountains, creating a drainage channel that would become the Pend Oreille River valley (McKee 1972:71-77; Stoffel et al. 1991).

As climates cooled during the Pleistocene, continental glaciers flowed into the area from present-day Canada, grinding the mountains into rounded hills and widening and deepening the Pend Oreille valley. Final retreat of the glaciers, around 11,000 years ago, opened the region to human occupation. As the glacial ice melted, ephemeral lakes formed in low-lying areas of the valley. Sands, gravels, and boulders were thickly deposited over the landscape, some transported into the area with glacial outburst floods as glacial ice dams to the east weakened and collapsed (Breckenridge 1989:5-8; Gough 1997:4, 5; Stoffel et al. 1991). In time soils formed in the glacial sediments, including the Bonner, Mission, and Kootenai silt loams and gravelly silt loams found in the project area along the river and valley margins. Poorly drained Hoodoo and Pywell series soils, formed in alluvium and decomposed plant materials, are present along US 2 in the central portion of the APE, evidence of post-glacial flooding and pooling of water (Weisel 1982). Recent years have seen portions of these low marshy areas filled, reclaiming the land for modern development. Today much of the APE is devoid of vegetation and exotic weeds predominate in vegetated areas (Figure 5). Open stands of ponderosa pine and Douglas fir with understories of native forbs and bushes occur on higher landforms and around the margins of the millsite, and riparian plant communities border the river and fill low-lying marshy areas (Figure 6).

E. PRE-FIELD RESEARCH

1. Sources of information checked:

[x] Overviews
[x] National Register
[x] Archaeological site records/maps
[x] Survey records
[x] Ethnographic studies
[x] Architectural site records/maps
[ ] Other (list):

[x] Historical records/maps (T56N, R5W; T56N, R6W): General Land Office (GLO) official plats 1893, 1894, surveyor's notes 1892, 1893; Bureau of Land Management (BLM) master title plats and historic indices 1971, 1973; BLM land patent records 2010; U.S. Geological Survey (USGS) Newport 30' map 1936, USGS Priest Lake 30' map 1913, USGS Sandpoint 30' map 1910; Kaniksu National Forest map 1914; Sanborn fire insurance maps Newport, Washington 1908, 1912, 1940

The literature review for this project included a site file search at the Idaho State Historic Preservation Office (SHPO) in Boise; review of General Land Office (GLO) plats, surveyor's notes, master title plats, historic indices, and land patent records available on Bureau of Land Management (BLM) websites; examination of historical U.S. Geological Survey (USGS) and U.S. Forest Service maps; review of Sanborn fire insurance maps; and examination of cultural resources and natural history reports on file at NWAA in Seattle. Local historian Anne Geaudreau was contacted on April 22, 2010, to inquire about previous artifact finds in the project vicinity; she had not heard of any.

NWAA contacted the Kalispel Tribe of Indians through a letter dated April 15, 2010, briefly describing the project and inquiring about cultural resource concerns, including traditional cultural properties (TCPs) that could be affected by the proposed project (Appendix A). It should be noted that these letters do not constitute formal consultation, which is the responsibility of the lead federal agency or its designee.

NWAA archaeologist/architectural historian Ann Sharley met with Kevin Lyons, Kalispel Tribe of Indians Cultural Resources Program Manager, on April 21, 2010, at the Kalispel Tribe's Spokane, Washington, office. During this meeting Mr. Lyons apprised Ms. Sharley that the present project vicinity is a Kalispel Tribe of Indians (KTI) traditional cultural property, that is, a "precious place" important to the tribal community in maintaining its unique identity and culture. The TCP in the project vicinity is an alternate winter village site called *Čkʷi'ʎlɔəqʷ* ("Red Tree") in reference to a large ponderosa pine that once grew there. The Kalispel people selected winter village locations based on proximity to needed resources, particularly winter deer yards, an important consideration in a region where winter lasts nearly five months. An alternate winter village would be occupied, perhaps every fifth year, as predation pressure or other factors caused deer populations in the area of the primary village to decline. In addition to its significance as a winter village site, Red Tree is important to the Kalispel people as the birthplace of prominent tribal historian Blind Paul (Figure 7), an important figure in Kalispel history. Although Kalispel tribal members no longer visit the site, it remains an important and valued connection with their past (Fandrich et al. 2000:4.18; Lyons 2005, 2009a; Kevin Lyons, personal communication 2010; Smith 1985:40, 41). Boundaries of the Red Tree TCP have not yet been established; therefore the KTI, at this time, does not wish to formally document the property or evaluate its eligibility for listing in the National Register of Historic Places (NRHP) (Kevin Lyons, personal communication 2010).

2. Summary of previous studies in the general area: Five previous cultural resource investigations have been conducted within 0.5 mile of the present APE. These studies are summarized in Table 1. Four of these studies intersect the present project. Brannan and Clark Schmidt's 2007 visual survey of the Albeni Falls-Pine Street powerline corridor included a small portion of the present project, 0.1 mile west of the Pend Oreille River near the Newport Substation; the archaeologists recorded one cultural resource during the survey–the Albeni Falls-Pine Street Transmission Line (17-17917). Carbonneau Kincaid and Hudson's survey of the proposed Great Pend Oreille River Trail overlapped the present project along US 2. Ms. Carbonneau Kincaid excavated four shovel probes to a depth of 40-50 centimeters (16-20 inches) below surface near the eastern end of the Pend Oreille River Bridge, but recovered no cultural material. Fandrich, Peterson, and Deaver's ethnographic, historical, and archaeological investigations of traditional Kalispel lands were published in 2000. Fieldwork for the project included 1999 survey of the Pend Oreille River shoreline bordering the entire Albeni Annex project; the archaeologists identified only one cultural resource in that area–shoreline features of the historical millsite (17-17816). In 2000 Kevin Lyons, Kalispel Tribe of Indians Cultural Resources Program Manager, surveyed the proposed Oldtown Recreational Park, a seven-acre parcel adjoining the present project on the west. In addition to the visual survey of the parcel and river shoreline, Mr. Lyons excavated four shovel tests to a depth of 30 centimeters (12 inches) below surface; no cultural resources were identified in the extensively disturbed parcel.

Table 1. Recent Studies within 0.5 Mile of the APE.

AUTHOR	DATE	PROJECT	SURVEY AREA	RESULTS*
Gaston, J.	1982	Annual Report of Archeological Investigations, Idaho Transportation Department	Includes portions of Section 24, T56N, R6W	Oldtown Bridge (17-4925)
Lyons, K.	2000	Oldtown Recreational Park Acquisition	Portions of Section 24, T56N, R6W	No new resources
Fandrich, B., L. Peterson, and S. Deaver	2000	A Kalispel Indian Cultural History	Includes portions of Sections 24, 25, T56N, R6W, Sections, 20, 30, T56N, R5W	Reported three ethnographic villages and one ethnographic fishery in Newport/ Oldtown/Albeni Falls area; recorded three historical sites (10BR957, 17-17816, 17-17817)
Carbonneau Kincaid, S., and L. Hudson	2005	Great Pend Oreille River Trail, Segment 5	Portions of Section 19, T56N, R5W, Section 24, T56N, R6W	No new resources
Brannan, N., and S. Clark Schmidt	2007	Albeni Falls–Pine Street Structure Replacements	Portions of Section 19, T56N, R5W, Section 24, T56N, R6W	Albeni Falls-Pine Street BPA Transmission Line (17-17917)

* Resources within 0.5 mi of the APE.

F. EXPECTED HISTORIC AND PREHISTORIC LAND USE AND SITE SENSITIVITY

1. Are cultural properties known in this area? [X] Yes [ ] No

Nine cultural resources have previously been recorded within 0.5 mile of the present project. These properties are listed in Table 2. Two of these resources–the Pend Oreille River Sawmill (17-17816) shoreline features and the Albeni Falls-Pine Street Transmission Line (17-17917)–are partially within the Albeni Annex Water and Sewer APE. Despite their proximity to the proposed Albeni Annex Water and Sewer project, none of the nine previously recorded cultural resources will be affected, either directly or indirectly, by proposed project activities

Table 2. Previously Recorded Cultural Properties within 0.5 Mile of the APE.

SITE NO./ FIELD NO.	SITE NAME	SITE DATE	NRHP STATUS	RELATIONSHIP TO APE
10BR995	Great Northern Railway (main line)	Ca. 1892	Recommended eligible (main line)	0.5 mi E, 0.3 mi S
10BR871	Steamboat Landing Site	Pre-contact, ca. 1895-1915	Unevaluated	0.3 mi NW
10BR19	Prehistoric habitation (open camp)	Pre-contact	Unevaluated	0.25 mi SE
10BR957	Cultural material scatter	Ca. 1950s?	Recommended not eligible	0.1 mi SE
17-17816	Pend Oreille River sawmill [Fidelity / Humbird / Diamond Match shoreline features]	1910-1948	Recommended not eligible	Within APE
17-17817	Burlington Northern Railroad culvert	Ca. 1920	Recommended not individually eligible, but contributing to eligibility of Great Northern Railway (10BR995)	0.5 mi S
17-17766	Idaho Hill Elementary School	1923	Recommended eligible	0.2 mi S
17-17917	Albeni Falls-Pine Street Transmission Line	1954	Determined not eligible by SHPO (Pengilly 2007)	Partially within APE
17-4925	Oldtown Bridge	1926-1927	Not eligible (no longer extant)	N/A

2. Are cultural properties expected? [X] Yes [ ] No
Ethnographic period Kalispel village sites are reported on both sides of the Pend Oreille River in the project vicinity and pre-contact cultural material has been found in the Newport-Oldtown area. Early Euroamerican settlement and industry also occurred in the project vicinity–the first store was built in 1889, 0.1 mile north of the western APE, and a sawmill was established in 1908/1909 in the area of the eastern APE. Historical and modern maps show a railroad spur, built to access the sawmill, partially within the APE. Although the limited size of the APE decreases the chance of encountering cultural materials, and extensive historical period disturbance reduces the probability of locating intact cultural deposits, the chance of finding evidence of pre-contact, ethnohistorical, and historical period activity in the project vicinity is moderately high.

3. What cultural themes/contexts could be encountered within the survey area?

Theme		Time Period
[x] Prehistoric Archaeology	[ ] Military	[x] Pre-Contact
[ ]Agriculture	[x] Mining Industry	[x] Historic Native American
[ ] Architecture	[x] Native Americans	[x] Exploration: 1805-1860
[ ] Civilian Conserv. Corp.	[ ] Politics/Government	[x] Settlement: 1855-1890
[x] Commerce	[ ] Public Land Mngt/Conserv.	[x] Phase I Statehood:1890-1904
[ ] Communication	[ ] Recreation/Tourism	[x] Phase II Statehood:1904-20
[x] Culture and Society	[x] Settlement	[x] Interwar: 1920-1940
[x] Ethnic Heritage	[x] Timber Industry	[x] Pre-Modern: 1940-1958
[x] Exploration/Fur Trapping	[x] Transportation	[x] Modern: 1958-present
[x] Industry	[ ] Other (list)	

4. Brief description of where cultural properties associated with expected themes might be found with respect to landforms, water, vegetation, slope, fauna, and historical documentation:
Probability for pre-contact, ethnohistorical, and historical cultural resources is highest in areas of well-drained sediments along the Pend Oreille River. Valley margins adjacent to wet bottomlands, particularly areas with sandy soils, are high probability for pre-contact and early historical period camas processing sites. Upland areas bordering the Pend Oreille valley could contain evidence of the earliest Native American residents of the region.

Ethnographic/Historical Context:
Following final glacial retreat in the Pend Oreille region, low-lying areas were inundated by vast meltwater lakes while the uplands remained a cold steppe environment. Projectile point styles and radiocarbon dates provide evidence that humans, probably highly mobile big game hunters, were living in the Pend Oreille basin prior to 8,000 years before present (BP) (Miss 2002, 2005, 2006:21). As the climate warmed between 8,000 and 6,000 BP, residents of the region adopted a foraging strategy focused on upland resources–large and small game animals and a variety of plant foods (Miss 2006:21). From 6,000 to 2,500 BP, as the climate again cooled and dense coniferous forests replaced grasslands and open woodlands, people expanded into more diverse habitats, focusing their subsistence activities on previously underutilized resources such as camas, bitterroot, and biscuitroot (Miss 2006:22). By 2,500 BP the Pend Oreille river valley had become a major resource area and travel corridor, and most people lived in semi-permanent villages along the river's banks. Camas had, by this time, become a dietary staple and local residents processed large quantities of the root vegetable for local use and probably for trade (Miss 2006:22). This was the subsistence pattern observed by the first Europeans to enter the Pend Oreille region.

The Albeni Annex Water and Sewer project is located within the traditional territory of Salishan-speaking Kalispel people. The Kalispel were divided geographically into upper and lower bands: the Upper Kalispel resided along the Pend Oreille River, Pend Oreille Lake, and the Clark Fork River, upstream from Albeni Falls, while the Lower Kalispel were centered in the Calispell Valley, downstream from the falls (Kalispel Tribe of Indians 2010; Lahren 1998:284; Miss 2002:22; Ray 1936:103). Like other Columbia Plateau groups, the Kalispel generally spent the winters in permanent streamside villages. As warmer weather arrived, village residents broke into smaller groups for travel to favored hunting, fishing, and plant gathering locales (Lahren 1998:285; Lyons

2003a:3, 2003b:5, 2009b:3). Numerous ethnographic Kalispel villages, campsites, and resource extraction locations have been documented in the Pend Oreille basin, including a winter village site in the present Newport area, another winter village–"Red Tree"–across the river in the vicinity of the historical/modern sawmill, and a third winter village–"Portage around the Falls"–near a popular fishery at Albeni Falls (Deaver 2000:17, 20; Fandrich et al. 2000:4.18, 4.21; Ray 1936:129; Smith 1985:38-42).

The first documented Euroamerican incursion into the Pend Oreille valley came in September 1809 as a North West Company exploratory party led by David Thompson descended the Kootenai River to present-day Bonners Ferry, then continued south over an established Indian trail to Lake Pend Oreille. After exploring the northern portion of the lake by canoe, Thompson selected a site for a trading post on the eastern shore and directed his men to begin construction. Leaving members of the party to complete the facility, Thompson proceeded on horseback around the northern end of the lake and down the right bank of the Pend Oreille River, following an Indian trail. During the trip Thompson and his Native American guide stopped to fish at Albeni Falls, apparently a well-known local fishery. Later a group of Native Americans presented Thompson with two cakes of "root bread" and 12 pounds of roots, presumably *Camassia quamash* (camas) harvested in the valley (Elliott 1932:19-21; McCart and McCart 2000; Nisbet 1994; Smith 2000:7.20).

By the early 1840s Christian missionaries were regularly visiting the Pend Oreille valley and, in 1844, Jesuit priests Adrian Hoecken and Pierre Jean DeSmet established St. Michael's Mission near Albeni Falls. The following year the facility was moved farther downstream to the present Cusick area and renamed St. Ignatius Mission. Although many Kalispel people settled near the mission and took up farming, seasonal flooding and infertile soils resulted in poor harvests, and the discouraged converts began to drift away. In 1854, in an effort to retain their new congregants, the priests again relocated the mission, this time to more favorable agricultural land in western Montana. The Upper Kalispel and most of the Lower Kalispel moved to Montana with the priests, but within two years nearly all the Lower Kalispel people had returned to their traditional homes in the Pend Oreille valley (Chalfant 1974:193; Fahey 1986:7-13; Lahren 1998).

In 1855, Washington Territorial Governor Isaac Stevens concluded the Hell Gate Treaty with Flathead, Kootenai, and Pend Oreille peoples, creating the Flathead Indian Reservation in western Montana. Governor Stevens had planned to negotiate a separate treaty with the Kalispel, but the outbreak of the Indian Wars forced him to postpone further negotiations and return to Olympia (Chalfant 1974:196-198; Fahey 1986:17, 18, 53, 54; Lahren 1998:294). During subsequent years the government continued to pressure the Lower Kalispel to cede their lands and, in 1887, the Northwest Indian Commission met with the Lower Kalispel leadership to negotiate a formal treaty. Under pressure, Michael, leader of one of two major Lower Kalispel bands, signed the treaty and moved his followers to the Flathead Reservation. Victor and Marcella, however, leaders of the other Lower Kalispel band, refused to sign, insisting on a reservation on traditional Lower Kalispel lands (Chalfant 1974:199-203; Cotes 1980:24; Lahren 1998:294).

Gold strikes in British Columbia and Montana during the 1860s brought miners and freighters through the Pend Oreille region, and subsequent decades saw a handful of Euroamerican farmers, merchants, and lumbermen move into the valley. The first settler in the Newport-Oldtown area, an Irishman named Mike Kelley, arrived in 1889. Mr. Kelley built a log store on the west bank of the Pend Oreille River, just south of today's Interstate Bridge. Other settlers soon arrived, apparently aware of the Great Northern's plans for a railroad through the area, and by 1890 the population had grown to the point that a post office was warranted. Residents of the new community selected the name Newport for their town, hopeful that steamboats operating out of Albeni Falls would add it as a port of call (Cork 1991:39, 40).

Arrival of the Great Northern transcontinental railroad in 1892, and completion of federal government cadastral surveys shortly thereafter, greatly accelerated immigration. The railroad ran along the north bank of the Pend Oreille River to Albeni Falls, where it crossed on a steel bridge and continued along the south bank of the river to Newport, Idaho, before turning south toward Spokane (General Land Office [GLO] 1893a, 1894a, 1899). When the Great Northern depot, a rail car, burned in 1894, the company selected a level spot across the state line in Washington and built a permanent frame

structure. Businesses and residents wished to be near the depot and gradually the town of Newport shifted from Idaho to Washington. In time the original town came to be called Oldtown, a name that was made official in 1947 when the town incorporated (Bamonte and Bamonte 1996:202; Cork 1991:40).

During the early twentieth century, logging and lumbering were the Pend Oreille region's primary industries, and numerous sawmills sprang up along the river. One of these, located at the northern edge of Newport, Washington, was acquired in 1904 by the Fidelity Lumber Company of Spokane. Fidelity, however, had plans for expansion and the company began looking for a larger parcel of land. Around 1908 Fidelity acquired a low riverside terrace across the Pend Oreille River from Oldtown and Newport and built a large modern mill, accessed by a rail spur from the Great Northern main line at Albeni Falls (Figures 8 and 9) (Bamonte and Bamonte 1998:36; Chance 1991:57, 58; Steele and Rose 1904:162; U.S. Forest Service 1914).

As Euroamericans moved into the Pend Oreille region, most Kalispel residents drifted to the more remote right (east) bank of the Pend Oreille River. Settlers generally avoided the area of the old St. Ignatius Mission and there, in a small remnant of their once-vast territory, the Kalispel made their home. In 1914 the federal government gave legal protection to the Indian "squatters," setting aside this small area, through Executive Order, as the Kalispel Indian Reservation (Lindeman 2000:8.10; KTI 2010).

The 1910s were a difficult decade for the lumber industry. Most mills, including the Fidelity plant, operated only sporadically. In the summer of 1915 the Fidelity Lumber Company went into receivership and, the following year, the Humbird Lumber Company, a Weyerhaeuser subsidiary, purchased the Oldtown plant. The lumber industry subsequently revived and saw a number of good years, but in the early 1930s the Depression again disrupted logging and lumbering, and production in the region plummeted. In 1935, after sitting idle for an extended period, Humbird's Oldtown mill was sold to the Diamond Match Company for the unbelievably low price of $60,000. Acquisition of the mill, located just over the state line in Idaho, allowed Diamond Match to purchase timber from state lands at in-state rates, and the Oldtown plant was put back into production (Chance 1991:132-135, 252-257, 277; Renk 2006:28).

Waning of extractive industries–particularly logging and mining–during the late twentieth century saw the population of the Pend Oreille valley drop precipitously. Members of the Kalispel Tribe of Indians, however, as in the past, clung to their traditional homeland. Today, the Kalispel Tribe has again become an influential presence in the region. This federally recognized group works actively to preserve its heritage and culture, protect the regional environment, and improve the social and economic well-being of both Indian and non-Indian community members (KTI 2010). Tribal members continue to visit places of traditional value in the project vicinity, and tribal representatives actively participate in planning for state and federally funded projects. The Oldtown mill continues to operate, although ownership has changed several times since its Diamond Match days. Lands in the vicinity of the mill were recently annexed by the City of Oldtown, and additional development is planned for the area.

G. FIELD METHODS

1. Areas examined and type of coverage:

On April 22 and 23, 2010, two NWAA archaeologists conducted fieldwork in the Albeni Annex Water and Sewer Project APE. The archaeologists walked over the APE in transects spaced 5 to 15 meters (16 to 50 feet) apart (Figure 2). The APE generally followed existing roads, railroads, and fence lines, making it easy to locate using project engineering plans and aerial photographs. Portions of the project running cross-country had been staked by Sewell & Associates personnel, and boundaries of the shoreline portion of the APE were determined with Global Positioning System-(GPS-) generated UTM coordinates. The archaeologists thoroughly examined the ground surface, throughout the survey, for evidence of past cultural activity, with special attention to areas of exposed sediments. The archaeologists faced up cut banks along the shoreline with a trowel, as needed for improved visibility. The archaeologists documented the survey and cultural resources encountered with digital photographs and field notes, recorded on standard NWAA daily work record, photo log, site, and site update forms.

Anticipating compacted sediments, gravel, wood waste, and other debris within the APE, NWAA contracted with a backhoe operator for excavation of test pits, allowing visualization of subsurface sediments and identification of buried cultural deposits. On April 23, 2010, the backhoe operator, directed by an archaeologist, excavated five test pits, each a trench approximately 5 feet (1.5 meters) long, 2.5 feet (0.8 meter) wide, and 6.5 to 7.5 feet (2 to 2.3 meters) deep (Figure 2 and Appendix B). Test pit locations were chosen in areas with limited subsurface exposure, and an effort was made to sample all portions of project area landforms. Presence of underground utilities, however, prevented excavation in certain portions of the APE. The archaeologist observed the excavation from a safe distance, frequently checking the walls and floors of the test pit and the spoils piles for cultural materials. Samples of the excavated sediments were screened through 1/4-inch mesh hardware cloth to check for smaller objects or materials. The archaeologist documented the tests with digital photographs, GPS-generated UTM coordinates, and field notes on standard NWAA shovel probe forms (Figure 10). Other than imported earth and rock fill, the only cultural materials encountered in the five tests were a vertical 12-inch diameter log post with a sharpened lower end extending from 10 to 180 centimeters (4 to 70 inches) below surface in Backhoe Probe 4, and a relatively thin, colorless glass bottle sherd recovered between 1 and 9 centimeters (0.4 to 3.5 inches) below surface in Backhoe Probe 5. Cultural materials were noted and reburied in the holes from which they came.

2. Description of ground surface conditions: Ground visibility–exposed sediments–ranged from 10 to 95 percent of the ground surface throughout the APE: an estimated 10 percent north of US 2, 10-90 percent in the millsite, and 80-95 percent along the Pend Oreille River shoreline. Approximately 40 percent of the APE has been artificially leveled or disturbed during railroad, road, or sawmill construction. An additional 30 percent consists of deep imported fill, used to reclaim low marshy areas. Fluctuation of the Box Canyon Dam reservoir has eroded the shoreline, and large portions of the riverbank have been filled, rip-rapped, or used as industrial waste disposal sites.

3. Areas not examined and reasons why: The entire APE was examined for cultural resources.

4. Names of personnel participating in the survey in the: Ann Sharley, archaeologist/architectural historian, and Simone Carbonneau Kincaid, archaeologist, Northwest Archaeological Associates, Inc., Seattle.

5. Date(s) of survey: April 22 and 23, 2010.

6. Problems encountered: None.

H. RESULTS

1. Listing of <u>all</u> cultural properties (including previously recorded) in this area: Four cultural resources were identified within or partially within the APE: The Fidelity Lumber Company Great Northern Railroad Spur (Field No. AA-10-1), the Albeni Falls-Pine Street Transmission Line (17-17917), the Pend Oreille River Sawmill (17-17816) shoreline features, and the Red Tree Winter Village Site Traditional Cultural Property. The railroad spur was recorded during the present project; a copy of the Idaho Historic Sites Inventory (IHSI) form completed for the property is included in Appendix C. The transmission line and sawmill shoreline features were initially documented during previous cultural resource surveys; original IHSI forms for both properties and a site update form, completed by NWAA, for the sawmill shoreline features are also in Appendix C. An update of the powerline form was unnecessary since the site was recorded recently and the site's condition appeared unchanged. The Red Tree TCP was not formally documented at the request of the Kalispel Tribe of Indians (Kevin Lyons, KTI Cultural Resources Program Manager, personal communication 2010). Brief descriptions of the four resources follow.

<u>Fidelity Lumber Company Great Northern Railroad Spur (Field No. AA-10-1)</u>: This standard gauge railroad spur was built, ca. 1909, to access the Fidelity Lumber Company sawmill from the Great Northern main line at Albeni Falls (Figures 9 and 11). Historical maps show the spur entering the millsite from the east, passing along the northern boundary of the complex, then curving south to the mill's boiler house/sawmill building. At some point the curving western segment of the line, approximately 700 feet in length, was removed, leaving no evidence of its location. The spur now ends abruptly at a modern building, much of its final 200 feet paved over and unusable. After 1940,

additional rail spurs or sidings were constructed in the mill area, paralleling the original track; segments of these lines have since been removed (Chance 1991:57, 58, 103; Sanborn Map Company 1940:Sheet 1; U.S. Forest Service 1914).

Today, shortly after entering the millsite, the spur divides into two and then three parallel lines. (1940 Sanborn maps show only one line in this location.) The northernmost of the three lines has been removed west of Diamond Mill Road, leaving only the ballast-covered grade to mark its route. A hand-operated mechanical switch stand at each of the turnouts moves the switch rails and rotates a color-coded switch target to signal the track position to oncoming trains. Maintenance through the years has resulted in replacement of ties, rails, and other trackage elements; embossed dates, however, suggest that some rails may be original.

Albeni Falls-Pine Street Transmission Line (17-17917): This 2.1-mile-long, 115-kilovolt Bonneville Power Administration (BPA) transmission line was constructed in 1954 and 1963, connecting the power plant at Albeni Falls Dam with the Newport Substation in Oldtown, Idaho. The feature consists of 16 wood H-frame structures and three wood three-pole structures. The line crosses over the Albeni Annex project near the Newport Substation, west of the Pend Oreille River (Figure 12).

Pend Oreille River Sawmill (17-17816): This property, consisting of three piling alignments and the remains of a large circular brick structure, was recorded in 1999 during cultural resources survey of the Pend Oreille River shoreline. Since the survey was restricted to the 2028- to 2041-foot elevation zone, associated sawmill buildings on the terrace above the beach were not recorded or evaluated (Figure 13) (Fandrich et al. 2000:5.23; Walker-Kuntz 1999). The site was revisited in 2002 (by the original recorder?) and a site form update was completed, providing additional descriptions of the property and historical information. NWAA archaeologists visited the site as part of the present Albeni Annex Water and Sewer Project, a survey limited to the shoreline and proposed utility corridors. NWAA completed another site update form for the property, documenting a fifth site feature–an extensive scatter of industrial waste and structural debris dumped over the riverbank–and adding a sketch map (Appendix C).

Red Tree Winter Village Site Traditional Cultural Property: This property, located in the present project vicinity, is the site of the *Čkʷi'ʎɔəqʷ* ("Red Tree") alternate winter village site, as well as the birthplace of tribal historian Blind Paul. The location, a Kalispel "precious place," remains important to tribal members in maintaining their unique identity and culture. The boundaries of this property have not yet been defined.

2. Recommendations for National Register eligibility of each cultural property:

Fidelity Lumber Company Great Northern Railroad Spur (Field No. AA-10-1): Over the years, the configuration of the Fidelity Lumber Company rail spur has been significantly altered: the western 700 feet of the line has been removed, sidings and spurs have been added, and segments of these features have been removed. The rail spur's integrity–of location, design, materials, workmanship, and association–has been severely compromised. Loss of integrity prevents the feature from conveying its historical significance, precluding individual eligibility for listing in the National Register of Historic Places (NRHP). The spur, however, may contribute to eligibility of the historical sawmill site, and should be reevaluated if the millsite as a whole is evaluated. The proposed Albeni Annex Water and Sewer Project will not affect extant portions of the rail spur, either directly or indirectly.

Albeni Falls-Pine Street Transmission Line (17-17917): BPA archaeologists recorded the Albeni Falls-Pine Street Transmission Line in 2007 and recommended that it be determined ineligible for NRHP listing due to replacement of fabric and relocation of portions of the route (Brannan and Clark Schmidt 2007). The Idaho State Historic Preservation Office (SHPO) concurred with the recommendation (Pengilly 2007).

Pend Oreille River Sawmill (17-17816): In the 2002 site form update, this property is recommended not eligible for NRHP listing due to loss of integrity. Today the property remains unevaluated. Although compromised integrity precludes individual NRHP eligibility for the shoreline features, they may contribute to eligibility of the sawmill property as a whole. Evaluation of the shoreline features should, therefore, accompany evaluation of the historical sawmill. The present project will have no

effect on site 17-17816 or the adjacent sawmill buildings, and evaluation of the millsite is currently unnecessary.

Red Tree Winter Village Site Traditional Cultural Property: Since the boundaries of the Red Tree Winter Village Site TCP have not yet been established, the KTI does not wish to formally document the property, at this time, or evaluate its eligibility for listing in the National Register of Historic Places (NRHP) (Kevin Lyons, personal communication 2010). Consultation with the Kalispel Tribe of Indians will be necessary to determine what impact, if any, the Albeni Annex Water and Sewer Project will have on this resource.

3. Recommendations for further investigations needed to evaluate cultural properties: The U.S. Army Corps of Engineers (USACE), as the federal project proponent, will initiate formal government-to-government consultation with the Kalispel Tribe of Indians regarding the proposed project, as directed by the NHPA. During this consultation process, the USACE will ask the Tribe to identify historic properties of traditional religious and cultural significance, including TCPs, that could be affected by the project. The USACE, in consultation with the Tribe and the SHPO, will then assess the affect of the project on identified historic properties. If an adverse effect to historic properties is anticipated, the USACE will, in consultation with the Tribe and SHPO, develop and evaluate alternatives or modifications to the project in order to avoid, minimize, or mitigate the adverse effect.

4. Cultural properties noted but not formally recorded: None.

I. CONCLUSIONS AND RECOMMENDATIONS

1. Discussion of potential threats to the integrity of the cultural properties and recommendations for future investigations or protective actions:
No individually significant cultural resources were identified within the APE, and cultural resources that may contribute to NRHP eligibility of the historical sawmill site will not be affected by the proposed project, either directly or indirectly. The project's effect on the Red Tree Winter Village Site Traditional Cultural Property must be addressed during formal government-to-government consultation between the U.S. Army Corps of Engineers and the Kalispel Tribe of Indians. If the Albeni Annex Water and Sewer Project will not adversely affect the Red Tree Winter Village Site TCP, the project is expected to have no effect on significant cultural resources.

In the event that additional cultural materials, dating either to the pre-contact or historical period, are unearthed during construction in the APE, work should be halted in the immediate vicinity of the find and a qualified archaeologist contacted to assess the significance of the resource. If project activities expose human remains, either in the form of burials, isolated bones, teeth, or other mortuary items, work in that area should immediately stop and local law enforcement and the Idaho State Historic Preservation Officer (208-334-3847) should be notified. No additional excavation should be undertaken until a treatment plan has been agreed upon by the appropriate agencies and affected Native American tribes. At no time should exposed human remains be left unattended.

Prior to initiation of land-altering project activities, James A. Sewell & Associates, LLC, on behalf of the City of Oldtown, should submit this document to appropriate agencies and interested parties, including the Idaho State Historic Preservation Office (SHPO), the U.S. Army Corps of Engineers, and the Kalispel Tribe of Indians.

2. For 106-related surveys, discussion of relationship of each cultural property to direct and indirect project impacts.
No individually significant cultural resources were identified within the APE, and cultural resources within the APE that may contribute to NRHP eligibility of the historical sawmill site will not be affected, either directly or indirectly, by the proposed project.

3. For 106-related surveys affecting cultural properties, discussion of avoidance or mitigation options for each property: N/A.

J. ATTACHMENTS

1. **Appropriate forms attached for each site?** [x] YES
2. **Maps attached?** [x] YES
3. **Other attachments?** [x] YES -- photographs and correspondence

K. REPOSITORY

Northwest Archaeological Associates, Inc., 5418 20th Avenue NW, Suite 200, Seattle, WA 98107.

L. CERTIFICATION OF RESULTS

I certify that this investigation was conducted and documented according to the Secretary of Interior's Standards and Guidelines and that the report is complete and accurate to the best of my knowledge.

Ann Sharley
Signature of Reporter — May 19, 2010 Date

Principal Investigator — May 19, 2010 Date

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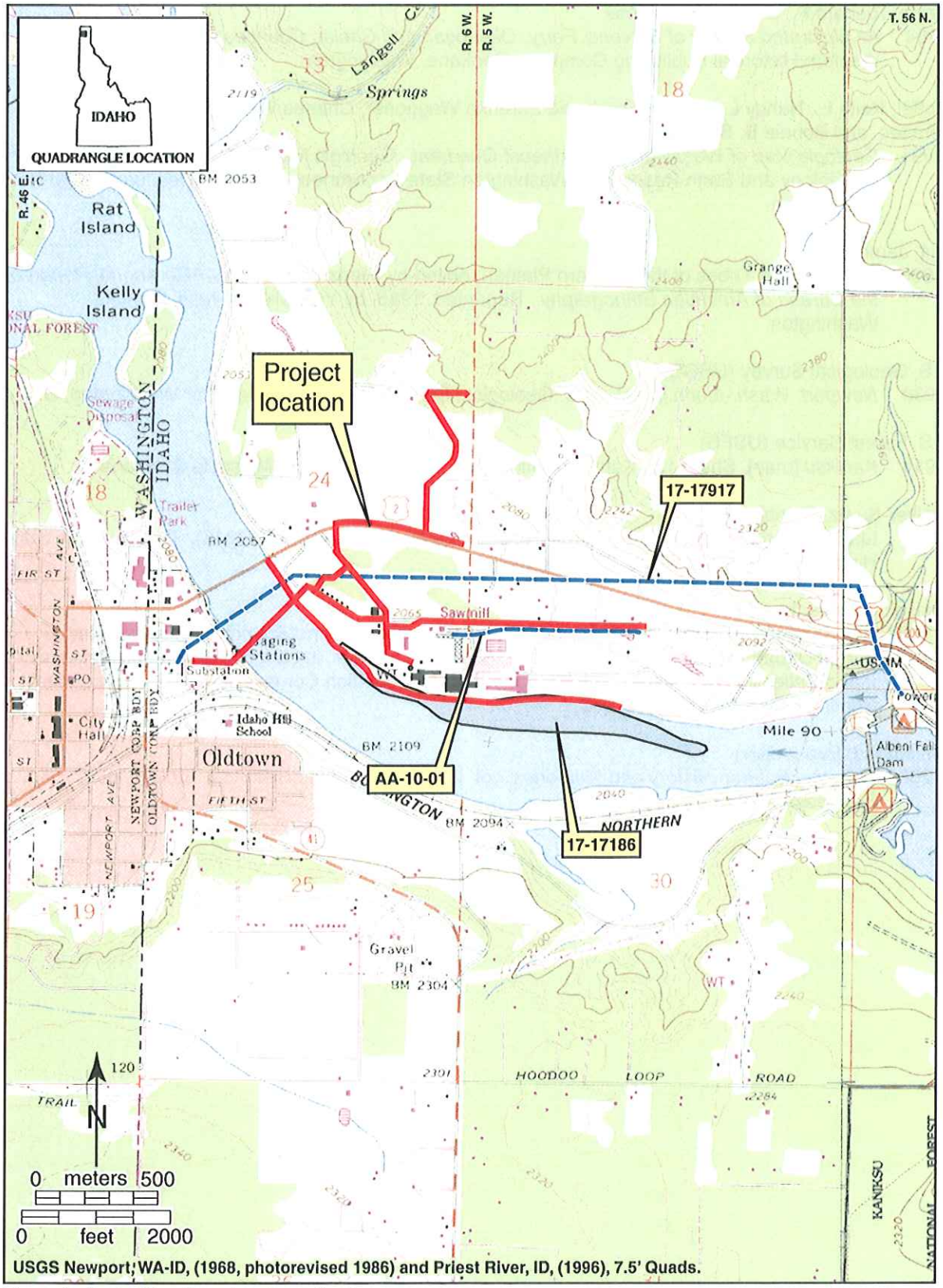


Figure 1. Project location, showing cultural resources.

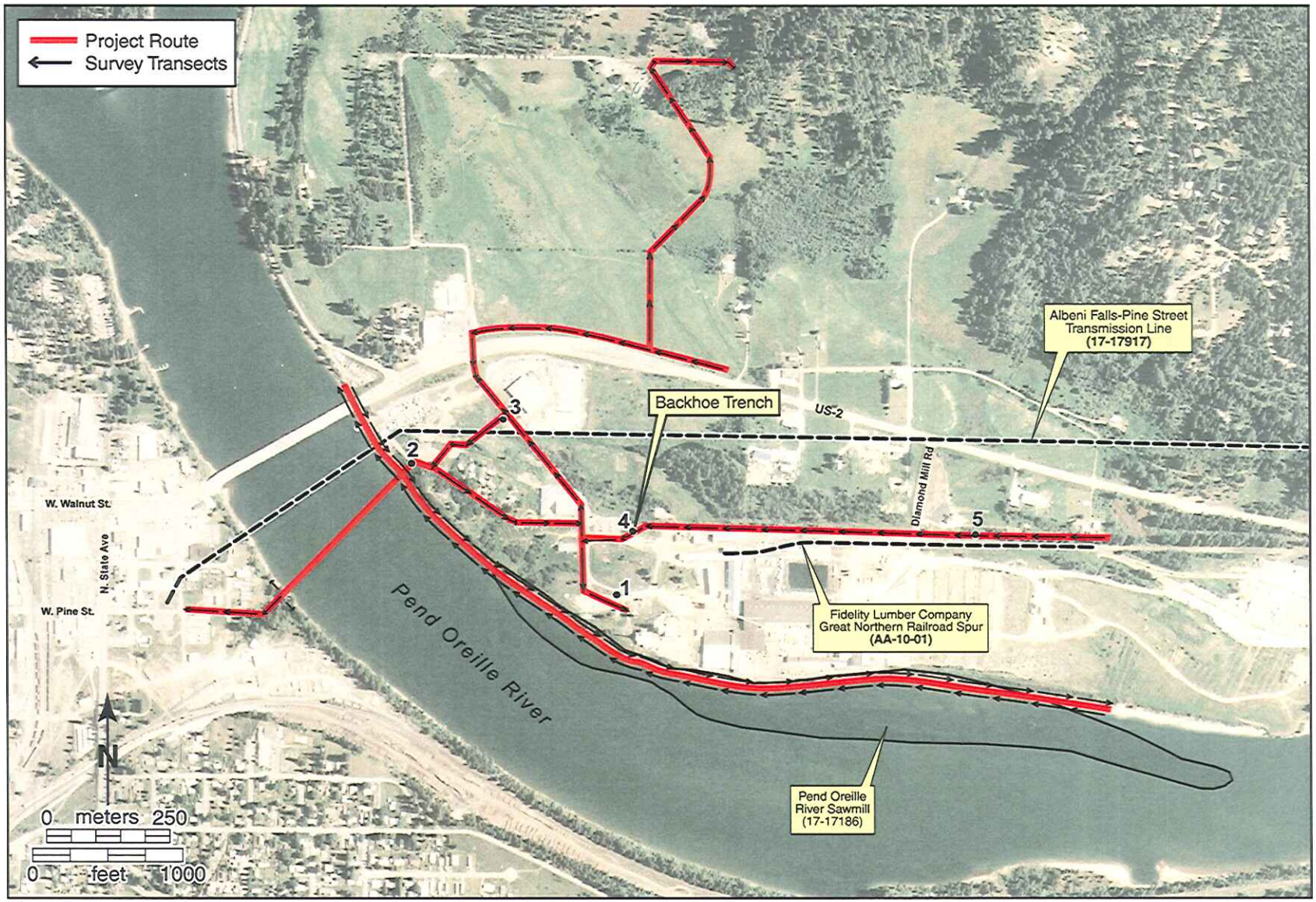


Figure 2. Project area, showing survey transects, backhoe probe locations, and cultural resources.

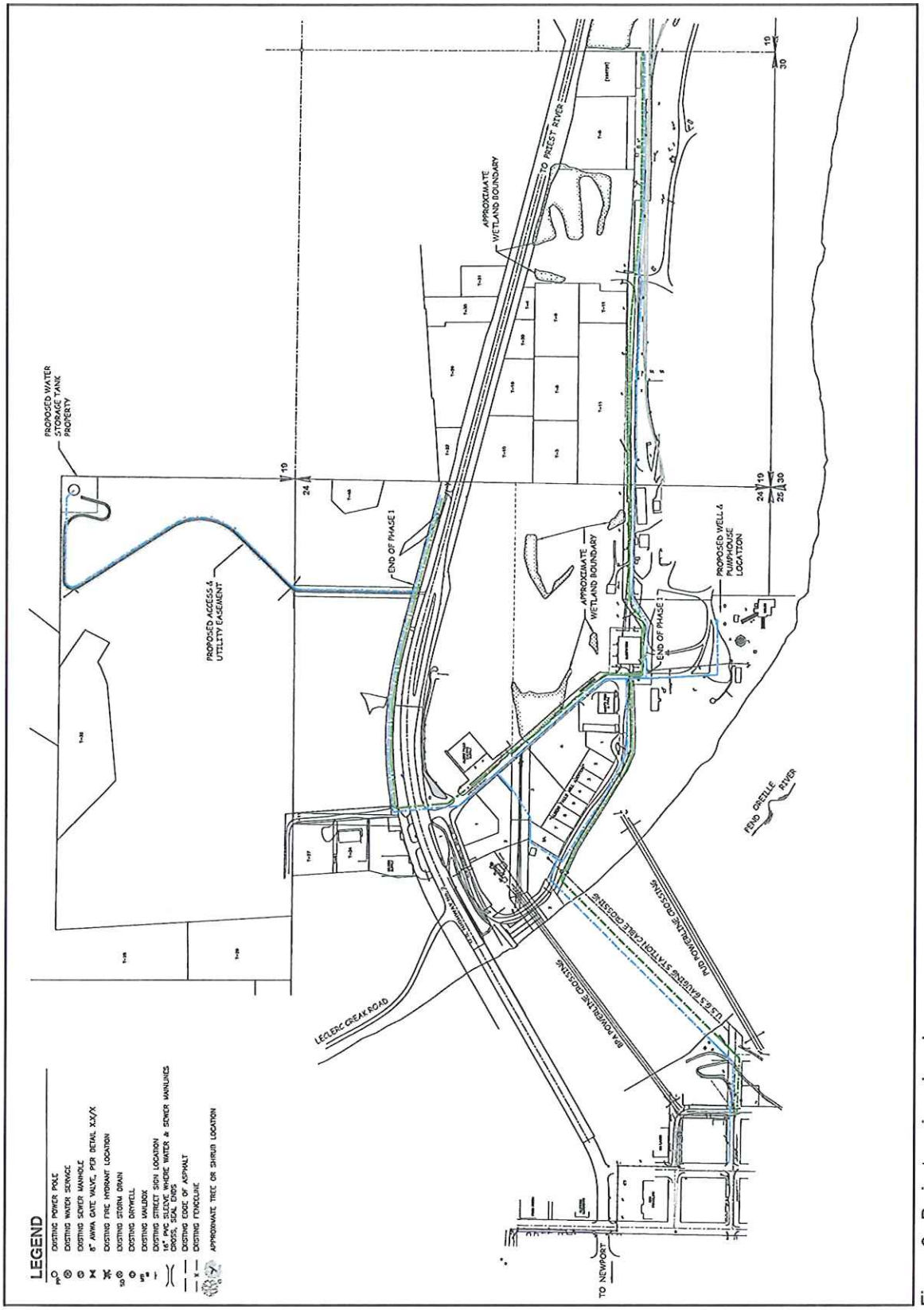


Figure 3. Project engineering plans.

Figure 4. Overview of project vicinity; view to the northeast.

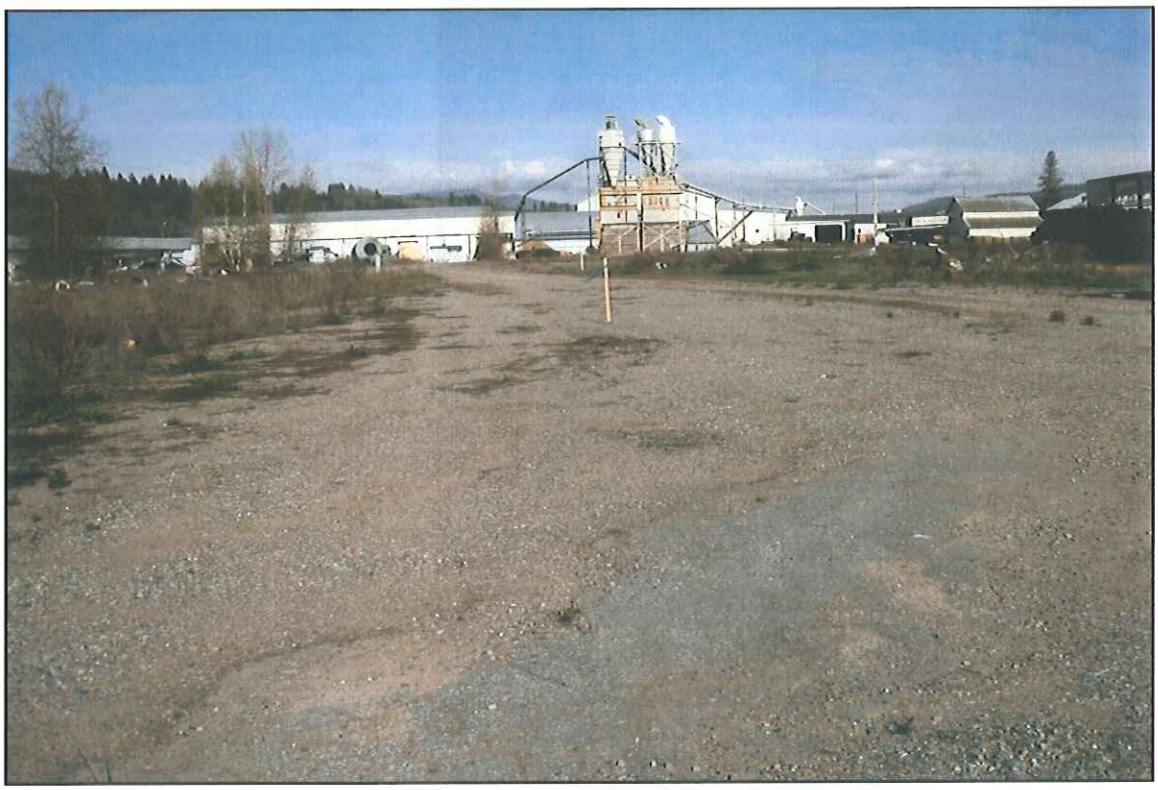


Figure 5. Overview of project APE east of Pend Oreille River; view to the east.

Figure 6. Overview of project APE west of Pend Oreille River; view to the northwest.

Figure 7. Undated historical photograph of Kalispel tribal historian Blind Paul and unidentified child (photograph courtesy of Allan H. Smith Collection, Lewis and Clark State College, Lewiston, Idaho).

Figure 8. Fidelity Lumber Company sawmill in 1910 (Bamonte and Bamonte 1998:36).

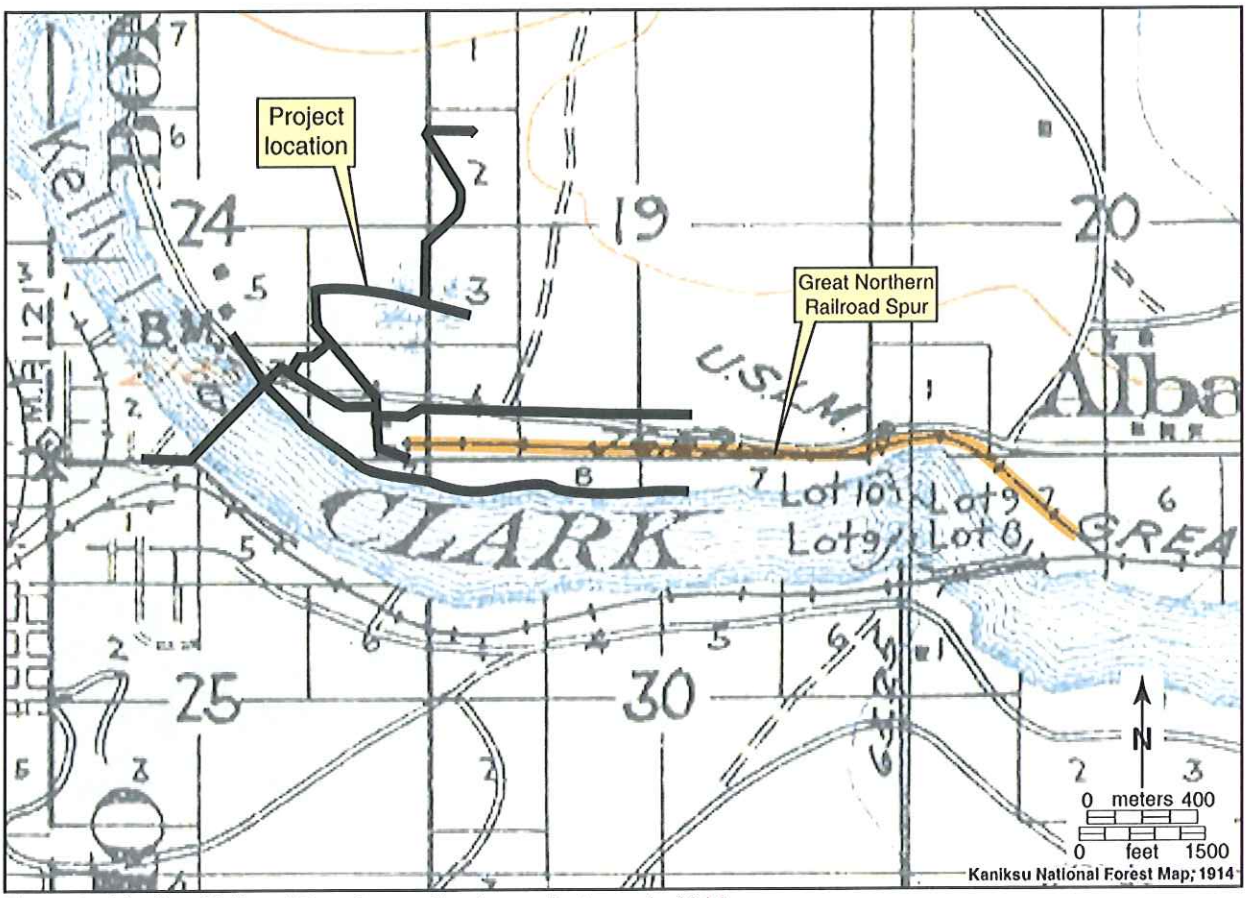


Figure 9. Kaniksu National Forest map showing project area in 1914.

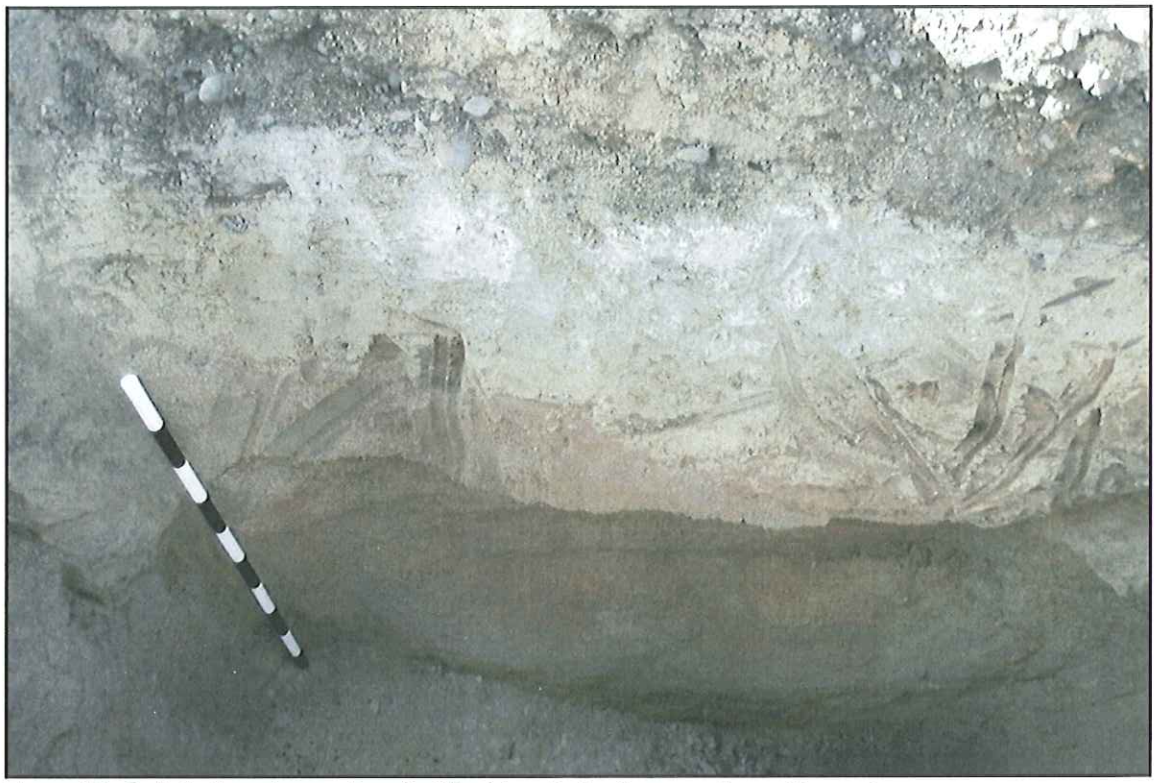


Figure 10. Soil stratigraphy: south wall of Backhoe Probe 1; one meter rod for scale.

Figure 11. Fidelity Lumber Company Great Northern Railroad Spur (Field No. AA-10-1) just south of Tri Pro Cedar Products office; view to the southeast.

Figure 12. Albeni Falls-Pine Street Transmission Line (17-17917) crossing Second Street in Oldtown and entering the Newport Substation; view to the west.

Figure 13. Pend Oreille River Sawmill (17-17816); view to the southeast.

APPENDIX A
Correspondence

Northwest Archaeological Associates, Inc.
Cultural Resources Management Services
5418 20th Avenue NW, Suite 200, Seattle, WA 98107

April 15, 2010

Mr. Kevin Lyons, Cultural Resources Program Manager
Kalispel Tribe of Indians, Natural Resources Department
P. O. Box 39
Usk, WA 99180

RE: Cultural Resources Assessment of the Albeni Annex Water and Sewer Project, Bonner County

Dear Mr. Lyons,

James A. Sewell and Associates of Newport, Washington, has contracted with Northwest Archaeological Associates, Inc. (NWAA) for cultural resources assessment of the Albeni Annex Water and Sewer Project. The proposed project is located in Oldtown, Idaho, in portions of Sections 19 and 30, Township 56 North, Range 5 West, and Section 24, Township 56 North, Range 6 West, Boise Meridian (see attached maps). Since the U.S. Army Corps of Engineers will provide project funding and approve project permits, the Albeni Annex Water and Sewer Project is subject to the National Historic Preservation Act of 1966, as amended (NHPA).

A private landowner in the Albeni Annex area of Oldtown is planning to develop a parcel of land into residential lots. Due to the density of the proposed residential development, community water distribution and sewer collection systems are needed. The proposed Albeni Annex Water and Sewer Project consists of approximately five miles of new water and sewer lines, to be installed in trenches, excavated approximately four feet wide and six feet deep. Two new wells will also be drilled, a water storage tank will be installed, and a pipeline will be drilled beneath the Pend Oreille River, connecting the new water and sewer lines with existing systems in Oldtown (see attched maps).

As noted in our recent emails to you, NWAA will be conducting field survey of the project area of potential effects (APE) as soon as possible, probably April 22 and 23, 2010. Fieldwork will include a 100 percent visual survey of the APE, as well as subsurface testing with a backhoe to examine subsurface deposits and determine if archaeological materials are present.

We are contacting you to inquire about historic properties, cultural resources, or traditional use areas, including traditional cultural properties (TCPs), that could be affected by the project. If the Kalispel Tribe has any cultural resource concerns, please let me know as soon as possible so we can include this information in our report. Thank you for scheduling a meeting with me prior to the fieldwork (3 p.m., Wed., April 21, at the Kalispel Tribe's Spokane office, Saranac Building, 25 W. Main, Spokane). We respect any concerns the Tribe may have about sharing sensitive information, and we will be happy to work with you in a way that respects those concerns. Thank you again for your assistance.

Sincerely,

Ann Sharley

Ann Sharley, MA, RPA
Archaeologist/Architectural Historian

Enclosures: Project location map, project map

Tel: (206) 781-1909
Cell: (509) 998-5074
Email: asharley@northwestarch.com

APPENDIX B
Backhoe Probe Data

Table B-1. Backhoe Probe Summary (UTM Zone 11, NAD83).

BACKHOE PROBE NUMBER	UTM COORDINATES: EASTING, NORTHING	STRATIGRAPHIC DESCRIPTION (depth in centimeters below surface)	CULTURAL MATERIAL OBSERVED	COMMENTS
1	498102, 5336557	0-20: Mixed dark brown silt loam and yellowish brown sandy loam with estimated 50-75% of volume rounded pebbles. Impression: Imported fill.	None	Backhoe probe excavated at edge of graded road in central millsite area.
		Abrupt transition, horizontal boundary: 20-84: Very compact light greyish-brown silts with estimated 10% of volume rounded pebbles. Impression: Glacial lake sediments, top bladed off.	None	
		Abrupt transition, wavy boundary: 84-200: Yellowish-brown medium sands with estimated 5% of volume rounded pea-size pebbles. Impression: Glacial sediments.	None	
2	497685, 5336825	0-21: Dark brown sandy loam with estimated 40% of volume rounded pebbles. Impression: Organic horizon formed in overbank alluvial sediments.	None	Backhoe probe excavated near edge of low terrace above the Pend Oreille River; landform appears intact.
		Abrupt transition, wavy boundary: 21-130: Very compact light greyish-brown silts with estimated 10% of volume rounded pebbles. Impression: Glacial lake sediments.	None	
		Abrupt transition, wavy boundary: 130-200: Fine yellowish-grey sands with an occasional rounded pebble. Impression: Glacial sediments.	None	
3	497872, 5336915	0-230: Yellowish-brown sand medium sands with estimated 30% of volume rounded pebbles and cobbles; frequent strata of brown silt loam with estimated 20-30% of volume rounded pebbles and cobbles. Impression: Imported fill; never reached intact sediments.	None	Backhoe probe excavated in an area of fill adjacent to a wetland.
4	498135, 5336687	0-12: Dark brown silt loam with estimated 20% of volume rounded pebbles; much woody debris. Impression: Fill.	Vertical log post 12" diameter with sharpened lower end *in situ* from 10-180 cm below surface.	Backhoe probe excavated beside a graded road in the northern millsite area.
		Abrupt transition, wavy boundary: 12-80: Mixed light greyish-brown silts with an occasional rounded pebble, dark brown sandy loams with 20% of volume rounded pebbles, and burned materials. Impression: Fill.	Log posts continues.	
		Abrupt transition, wavy boundary: 80-170: Compact light greyish-brown silts with occasional rounded pebble. Impression: Glacial lake sediments, top bladed off.	Log post continues.	
		Abrupt transition, wavy boundary: 170-220: Medium yellowish-grey sands with an occasional rounded pebble. Impression: Glacial sediments.	Log post continues to 180 cm below surface.	

Table B-1. Backhoe Probe Summary (UTM Zone 11, NAD83).

BACKHOE PROBE NUMBER	UTM COORDINATES: EASTING, NORTHING	STRATIGRAPHIC DESCRIPTION (depth in centimeters below surface)	CULTURAL MATERIAL OBSERVED	COMMENTS
5	498834, 5336680	0-9: Dark brown silt loam with estimated 10% of volume rounded pebbles. Impression: Organic horizon, disturbed.	Colorless bottle glass sherd, relatively thin.	Backhoe probe excavated immediately north of a railroad spur and 50 feet south of a wetland.
		Abrupt transition, wavy boundary: 20-84: Yellowish-brown silt loam with occasional rounded pebble. Impression: Soil formed in glacial lake/alluvial sediments, top disturbed?	None	
		Abrupt transition, wavy boundary: 84-200: Yellowish-brown medium sands with occasional rounded pebble. Impression: Glacial sediments.	None	

APPENDIX C
Site Forms and Site Form Updates

IDAHO HISTORIC SITES INVENTORY FORM

PROPERTY NAME: Fidelity Lumber Company Great Northern Railroad Spur | FIELD#: AA-10-1

STREET: Diamond Mill Road, just south of Tri Pro Cedar Products office | RESTRICT: ☐

CITY: Oldtown | VICINITY: ☒ | COUNTY CD: 17 | COUNTY NAME: Bonner

SUBNAME: Albeni Annex | BLOCK: N/A | SUBLOT: N/A | ACRES: 5 | LESS THAN: ☐

TAX PARCEL: Unknown | UTMZ: 11 | EASTING: 498318 | NORTHING: 5336652

TOWNSHIP: 56 | N_S: N | RANGE: 5 | E_W: W | SECTION: 19 | 1/4 | 1/4

QUADRANGLE: Newport, Wash.-Idaho, 7.5', USGS | OTHERMAP: Kaniksu, Sheet 12, 1914, Forest Service, District Office, Missoula

SANBORN MAP: Newport, WA 1940 | SANBORN MAP#: Sheet 1 | PHOTO#:

PROPERTYTYPE: Structure | CONST/ACT1: Original construction | ACTDATE1: 1909 | CIRCA1: ☒

CONST/ACT2: | ACTDATE2: | CIRCA2: ☐

ASSOCIATED FEATURES: None | TOTAL # FEATURES: 1

ORIGINAL USE: Transportation | WALL MATERIAL: None

ORIGSUBUSE: Rail-related | FOUND. MATERIAL: Stone (ballast)

CURRENTUSE: Transportation | ROOF MATERIAL: None

CURSUBUSE: Rail-related | OTHER MATERIAL: Steel, wood

ARCHSTYLE: No Style | PLAN: Linear | CONDITION: Fair

NR REF #: | NPS CERT: | ACTIONDATE: | FUTURE ELIG DATE:

DIST/MPLNAME1: | DIST/MPLNAME2:

Individually Eligible ☐ | Contributing in a potential district Multiple Property Study ☒ | Noncontributing ☐ | Future eligibility ☐

Not Eligible ☐ | Not evaluated ☒

CRITERIA A ☒ B ☐ C ☒ D ☐ | CRITERIA CONSIDERATION A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐

AREA OF SIGNIF: Industry, Transportation | AREA OF SIGNIF: Engineering

COMMENTS: This 1.5-mile-long railroad spur was built ca. 1909 to access the Fidelity Lumber Company from the main Great Northern line at Albeni Falls. Although the configuration of the spur has been significantly altered within the millsite, portions of the line are still maintained and serviceable.

PROJ/RPT TITLE: Albeni Annex Water and Sewer Project, NWAA Project No. ID10-004 (Sharley 2010) | SVY DATE: 04/22/2010 | SVY LEVEL: Intensive

RECORDED BY: Ann Sharley | PH: (206) 781-1909 | ADDRESS: Northwest Archaeological Associates, Inc. 5418 20th Ave. NW, Suite 200, Seattle, WA 98107

SUBMITTED PHOTOS ☒ NEGS ☐ SLIDES ☐ SKETCH MAP ☒

SVY RPT #: | ******** FOR ISHPO USE ONLY ******** | IHSI#:

MS RPT #: | SITS#:

IHPR #: | HABS NO. ID-: | HAER NO. ID-: | REV#:

CS#: | IHSI# REF: | NR REF# 2: | REV# REF:

SVY RPT# 1: | SVY RPT# 2: | SVY RPT# 3: | MS RPT# 1: | MS RPT# 2:

REV# | SITS# | IHSI#

ADUL NOTES:
-Section 106 compliance report.
-Legal description for entire spur: Sections 19, 20, and 29, T56N, R5W and Section 24, T56N, R6W, BM.
-UTMs derived from differentially corrected GPS, NAD83: west end of spur 498318 mE, 5336652 mN, east end of surveyed spur segment 499080 mE, 5336653 mN.

ATTACH ☒

MOREDATA ☐

OF PHOTOS: | NEGBOX#: | # OF SLIDES: | SHPO DETER: | DETER DATE:

INITIALLED: | ENTRY DATE: | REVISE1: | REVISE2: | REVISE3:

IDAHO HISTORIC SITES INVENTORY FORM -ATTACHMENT

PROPERTY NAME Fidelity Lumber Company Great Northern Railroad Spur IHSI#

FIELD# AA-10-1 COMMENTS: COUNTY NAME Bonner

ATTACH ☒

During the early twentieth century, logging and lumbering were the Pend Oreille Region's primary industries, and numerous sawmills sprang up along the Pend Oreille River. One of these, the Fidelity Lumber Company mill, was built in 1908 and 1909 across the river from Newport, Washington, and Oldtown, Idaho. A standard gauge railroad spur was built, ca. 1909, to access the Fidelity Lumber Company sawmill from the Great Northern main line at Albeni Falls. Although the sawmill changed hands through the years--purchased by the Humbird Lumber Company in 1916, the Diamond Match Company in 1935, and, later, other firms–the rail spur continued to serve as a shipping outlet for the plant (Chance 1991:57, 58, 132-135, 252-257, 277; Sanborn Map Company 1940:Sheet 1; U.S. Forest Service 1914).

Historical maps show the rail spur entering the millsite from the east, passing along the northern boundary of the complex, then curving south to the mill's boiler house/sawmill building. At some point the curving western segment of the line, approximately 700 feet in length, was removed, leaving no evidence of its location. The spur now ends abruptly at a modern building, much of its final 200 feet paved over and unusable. After 1940, additional rail spurs or sidings were constructed in the mill area, paralleling the original track; segments of these lines have since been removed (Chance 1991:57, 58, 103; Sanborn Map Company 1940:Sheet 1; U.S. Forest Service 1914).

Today, shortly after entering the millsite, the spur divides into two and then three parallel lines. (1940 Sanborn maps show only one line in this location.) The northernmost of the three lines has been removed west of Diamond Mill Road, leaving only the ballast-covered grade to mark its route. A hand-operated mechanical switch stand at each of the turnouts moves the switch rails and rotates a color-coded switch target to signal the track position to oncoming trains.

Maintenance through the years has resulted in replacement of ties, rails, and other trackage elements. Rails and tie plates are embossed with strings of characters that include foundry information and dates of manufacture. Embossed dates on the rails suggest that some may be original. Examples from the spur segments east of Diamond Mill Road include:
-Rails, north spur: "O.H. 90.LB P.S.Co. 1912 IIIIIIIIIII" and "L.S. Co. BUFFALO. 9032, 9, 1909".
-Tie plates, north spur: "90 P.C. S. CO. 26", "36I ILL. G. U.S.A. 27", and "<I> 1925 RRS CO PAT".
-Rails, central spur : "160 MARYLAND IIIII 08" and "G. N. LINE. L. S. Co. BUFFALO 9030 6 1908".
-Tie plates, central spur : "90 RB B.S.C. 37", "36I ILL USA 36", and "7-55-68 B.S.Co - L - 1934".
-Rails, south spur: "G.N. LINE L.S.CO. BUFFALO. 9030. 4. 1908", "G. N. LINE. LACKAWANNA 9030 II 1913", and "-CAMBRIA-90 LBS NO 560 - 1912".
-Tie plates, south spur: "5-58 -L-1927 B.S.CO.-" and "55-58 -L. 1924 B.S.".

Over the years, the configuration of the Fidelity Lumber Company rail spur has been significantly altered. The rail spur's integrity–of location, design, materials, workmanship, and association–has been severely compromised. Loss of integrity prevents the feature from conveying its historical significance, precluding individual eligibility for listing in the National Register of Historic Places (NRHP). Extant spur segments, however, may contribute to NRHP eligibility of the historical sawmill site, and should be reevaluated if the millsite as a whole is evaluated.

References cited:

Chance, David H.
1991 The Lumber Industry of Washington's Pend Oreille Valley, 1888-1941. Prepared for the Colville National Forest, Colville. David & Jennifer Chance & Associates, Moscow, Idaho.

Sanborn Map Company
1940 Newport, Stevens Co., Wash. [maps]. 1912 edition, updated to 1940. Sanborn Map Company, New York, New York.

Sharley, Ann
2010 Cultural Resources Assessment of the Albeni Annex Water and Sewer Project, City of Oldtown, Bonner County, Idaho. NWAA Project No. ID10-004. Northwest Archaeological Associates, Inc., Seattle, Washington.

U.S. Forest Service (USFS)
1914 Kaniksu [map], Sheet 12. Kaniksu National Forest, District Office, Missoula, Montana.

IHSI#
SITS#
REV#

IDAHO HISTORIC SITES INVENTORY FORM

PROPERTY NAME Fidelity Lumber Company Great Northern Railroad Spur FIELD# AA-10-1

Overview of railroad spur just south of Tri Pro Cedar Products office; view to the southeast.

Spur track turnout with switch stand just south of Tri Pro Cedar Products office; view to the northwest.

IDAHO HISTORIC SITES INVENTORY FORM

PROPERTY NAME Fidelity Lumber Company Great Northern Railroad Spur FIELD# AA-10-1

PHOTO PAGE 2 of 2

Close-up view of the turnout switch stand and target; view to the northwest.

IDAHO HISTORIC SITES INVENTORY FORM

PROPERTY NAME: Update form: Pend Oreille River Sawmill (Fidelity/Humbird/Diamond Match sawmill) | FIELD#: 17-17816

STREET: Pend Oreille River shoreline, opposite town of Newport | RESTRICT: ☐

CITY: Oldtown | VICINITY: ☒ | COUNTY CD: 17 | COUNTY NAME: Bonner

SUBNAME: Albeni Annex | BLOCK: | SUBLOT: | ACRES: 2 | LESS THAN: ☒

TAX PARCEL: | UTMZ: 11 | EASTING: 497866 | NORTHING: 5336606

TOWNSHIP: 56 | N_S: N | RANGE: 6 | E_W: W | SECTION: 25 | NE 1/4 | NE 1/4

QUADRANGLE: Newport, Wash.-Idaho, 7.5' | OTHERMAP:

SANBORN MAP: Newport, WA 1940 | SANBORN MAP#: Sheet 1 | PHOTO#:

PROPERTYTYPE: Structure | CONST/ACT1: Original construction | ACTDATE1: 1909 | CIRCA1: ☒

CONST/ACT2: | ACTDATE2: | CIRCA2: ☐

ASSOCIATED FEATURES: extensive debris scatter, three piling alignment features | TOTAL # FEATURES: 6

ORIGINAL USE: Industry/Processing | WALL MATERIAL: Brick

ORIGSUBUSE: manufacturing facility | FOUND. MATERIAL:

CURRENTUSE: Industry/Processing | ROOF MATERIAL:

CURSUBUSE: manufacturing facility | OTHER MATERIAL:

ARCHSTYLE: No Style | PLAN: Round | CONDITION: Poor

NR REF #: | NPS CERT: | ACTIONDATE: | FUTURE ELIG DATE:

DIST/MPLNAME1: | DIST/MPLNAME2:

Individually Eligible ☐ | Contributing in a potential ☒ | Noncontributing ☐ | Future eligibility ☐

Not Eligible ☐ | district Multiple Property Study ☐ | Not evaluated ☒

CRITERIA A ☒ B ☐ C ☐ D ☐ | CRITERIA CONSIDERATION A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐

AREA OF SIGNIF: Industry | AREA OF SIGNIF:

COMMENTS: This update form adds information to the original 17-17816 site form, completed in 1999 and updated in 2002. The site and update forms document shoreline features of the Fidelity Lumber Co. mill (later owned by Humbird Lumber Co., Diamond Match Co., and other firms). During all three visits time limitations and access issues prevented recording of the millsite buildings/features on the terrace above the river.

PROJ/RPT TITLE: Albeni Annex Water and Sewer Project, NWAA Project No. ID10-004 (Sharley 2010) | SVY DATE: 04/22/2010 | SVY LEVEL: Intensive

RECORDED BY: Ann Sharley | PH: (206) 781-1909 | ADDRESS: Northwest Archaeological Associates, Inc. 5418 20th Ave. NW, Suite 200, Seattle, WA 98107

SUBMITTED PHOTOS ☒ NEGS ☐ SLIDES ☐ SKETCH MAP ☒

SVY RPT #: | ******** FOR ISHPO USE ONLY ******** | IHSI#: 17-17816 (update)

MS RPT #: | SITS#:

IHPR #: | HABS NO. ID-: | HAER NO. ID-: | REV#:

CS#: | IHSI# REF: | NR REF# 2: | REV# REF:

SVY RPT# 1: | SVY RPT# 2: | SVY RPT# 3: | MS RPT# 1: | MS RPT# 2:

ADUL NOTES:
-Section 106 compliance report.
-Legal description for entire property as presently recorded: N2 of N2, Sec. 30, T56N, R5W, and S2 of SE4, Sec. 24, and NE4 of NE4, Sec. 25, T56N, R6W, BM.
-UTMs, NAD83: West end of site (derived from differentially corrected GPS) 497866 mE, 5336606 mN, approximate east end of site 499349 mE, 5336192 mN.

ATTACH ☒

MOREDATA ☐

REV# | SITS# | IHSI#

OF PHOTOS: | NEGBOX#: | # OF SLIDES: | SHPO DETER: | DETER DATE:

INITIALLED: | ENTRY DATE: | REVISE1: | REVISE2: | REVISE3:

IDAHO HISTORIC SITES INVENTORY FORM -ATTACHMENT

PROPERTY NAME: Update form: Pend Oreille River Sawmill (Fidelity/Humbird/Diamond Match sawmill) IHSI#: 17-17816 (update)

FIELD#: 17-17816 COMMENTS: COUNTY NAME: Bonner

Four features of site 17-17816 are recorded in the original 1999 and 2002 forms. This update documents one additional feature–the extensive debris scatter–and adds a sketch map. The five site features, and their eligibility for listing in the National Register of Historic Places (NRHP) are addressed below. Site 17-17816 appears essentially unchanged since the 1999 and 2002 visits.

ATTACH ☒

Feature 1, two piling alignments: As described in the original forms.

Feature 2, partially collapsed circular brick structure: As described in the original forms.

Feature 3, five piling alignments: As described in the original forms.

Feature 4, 0.75-mile-long piling alignment: This feature is apparently the linear alignment of pilings far out in the river, barely visible above the waterline, as well as the cluster of approximately 24 pilings 40 feet from the right (north/east) bank of the river. The piling cluster is lozenge-shaped in plan view, approximately 40 feet long (aligned with the river flow) and 25 feet wide. The pilings are spaced approximately 3 feet apart, and the tops are sawed off 0.5 to 5 feet above the waterline.

Feature 5: This feature is an extensive debris scatter, primarily industrial waste and structural debris, dumped over the riverbank. The scatter extends for 0.5 mile and includes steel spikes, red bricks, firebricks, clinker, concrete chunks, hardware, machinery parts, wire, flat glass, colorless and amber bottle glass, metal pipes, angle iron, bark, and other woody debris. All ferrous metal is thoroughly corroded and materials in certain parts of the scatter have been burned.

Although the sawmill's shoreline features are not individually eligible for NRHP listing due to loss of integrity, they may contribute to eligibility of the sawmill property as a whole. Evaluation of the shoreline features should, therefore, accompany evaluation of the historical sawmill.

References cited:

Sharley, Ann
2010 Cultural Resources Assessment of the Albeni Annex Water and Sewer Project, City of Oldtown, Bonner County, Idaho. NWAA Project No. ID10-004. Northwest Archaeological Associates, Inc., Seattle, Washington.

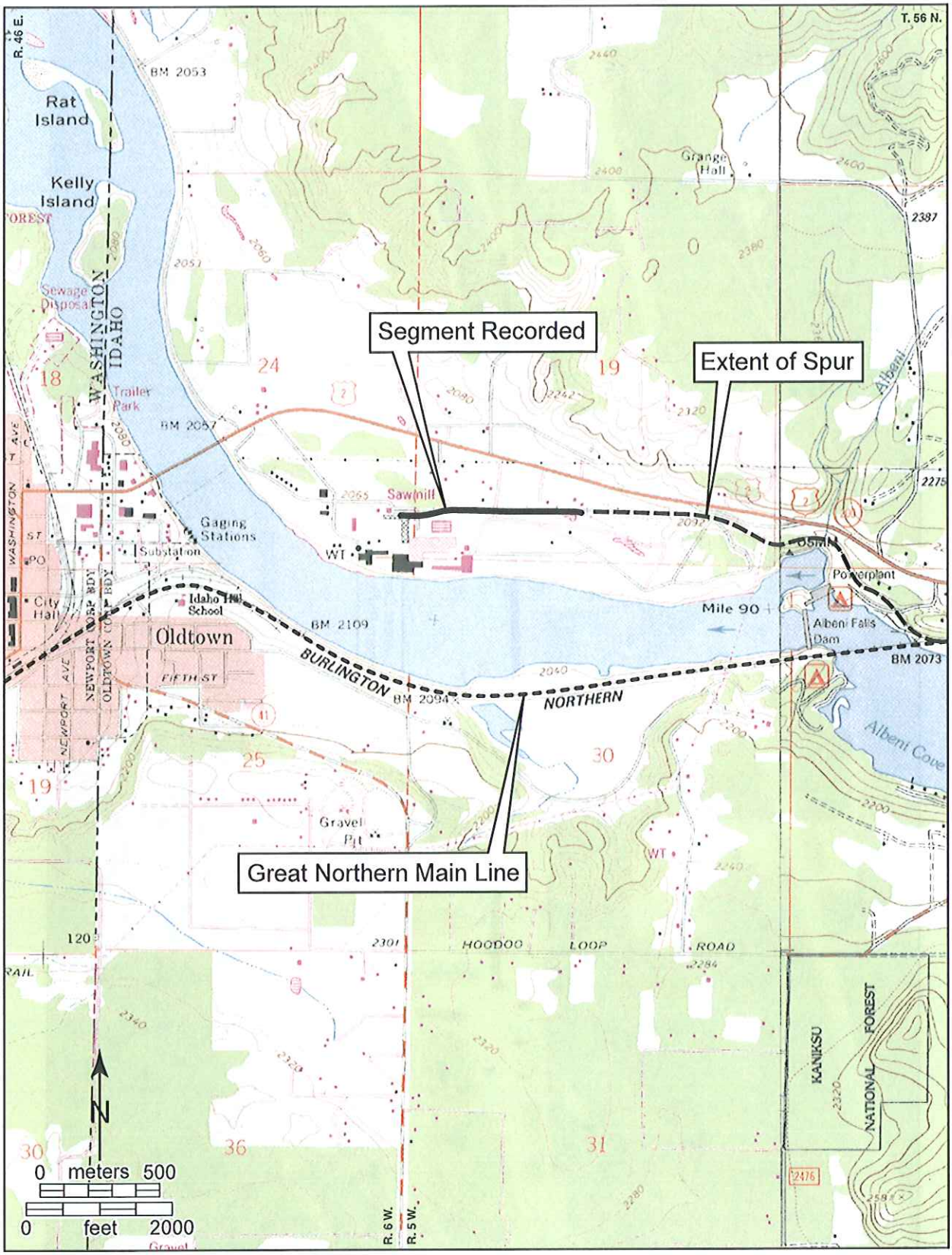
IHSI# _____
SITS# _____
REV# _____

IDAHO HISTORIC SITES INVENTORY FORM

PROPERTY NAME: Fidelity Lumber Company Great Northern Railroad Spur

FIELD#: AA-10-1

LOCATION MAP



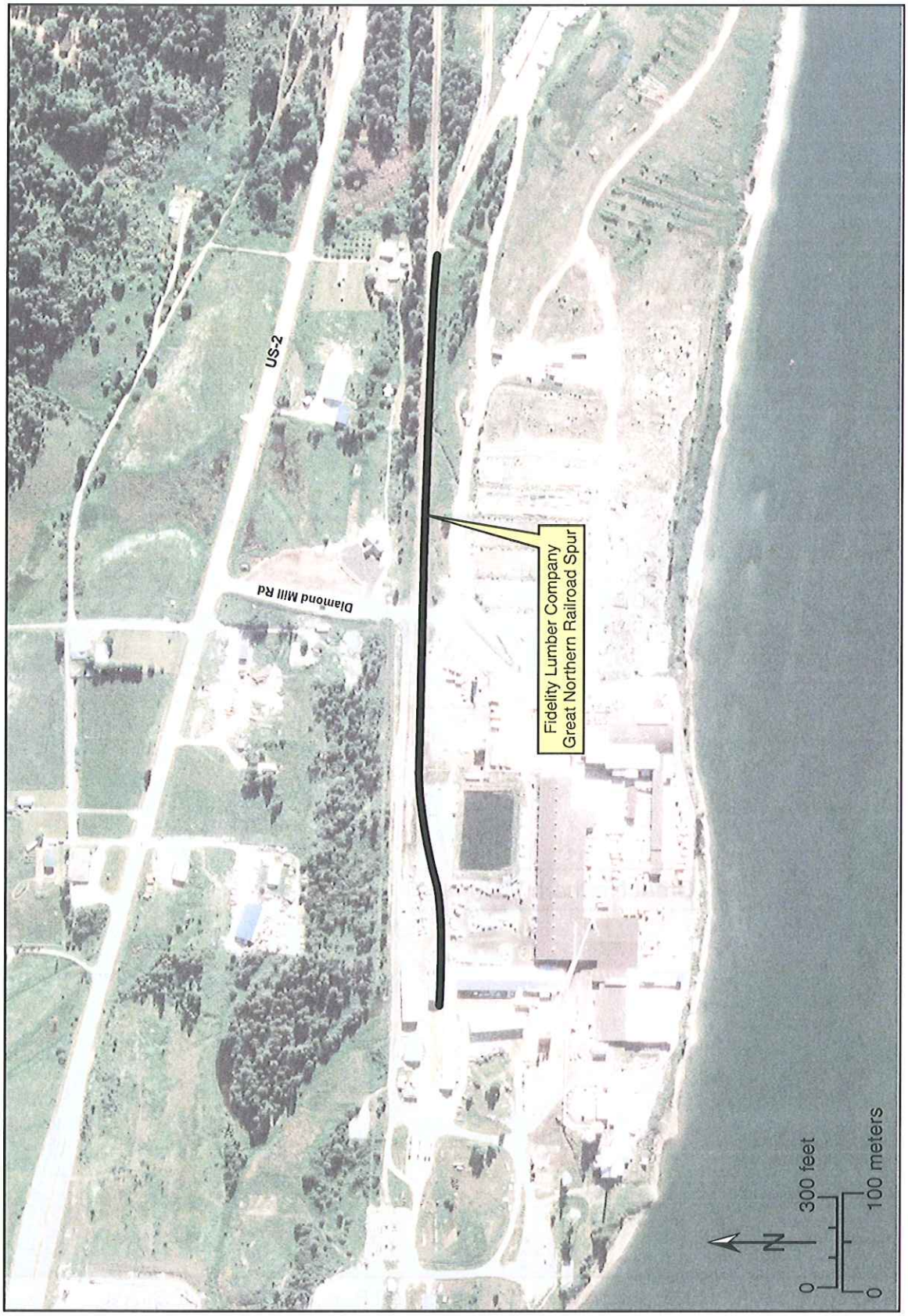
USGS Newport, WA-ID, (1968, photorevised 1986) and Priest River, ID, (1996), 7.5' Quads.

IDAHO HISTORIC SITES INVENTORY FORM

PROPERTY NAME: Fidelity Lumber Company Great Northern Railroad Spur

FIELD#: AA-10-1

SKETCH MAP



IDAHO HISTORIC SITES INVENTORY FORM

PROPERTY NAME: Update form: Pend Oreille River Sawmill (Fidelity/Humbird/Diamond Match sawmill)

FIELD#: 17-17816

PHOTO PAGE

Feature 5 foreground, Feature 2 background; view to the northeast.

Artifact in Feature 5; tape for scale.

IDAHO HISTORIC SITES INVENTORY FORM

17-17816

PROPERTY NAME: Pend Oreille River sawmill | FIELD#: PWK-20

STREET: lying within Pend Oreille River extending from N shore, E of Oldtown | RESTRICT ☐

CITY: Oldtown | VICINITY ☑ | COUNTY CD: 17 | COUNTY NAME: Bonner

SUBNAME: | BLOCK: | SUBLOT: | ACRES: 2 | LESS THAN ☑

TAX PARCEL: | UTMZ: 11 | EASTING: 497960 | NORTHING: 5336320

TOWNSHIP: 56 | N_S: N | RANGE: 6 | E_W: W | SECTION: 24 | SW 1/4 | SE 1/4

QUADRANGLE: Newport 7.5' | OTHERMAP:

SANBORN MAP: | SANBORN MAP#: | PHOTO#:

PROPERTY TYPE: Structure | CONST/ACT1: Original Construction | ACTDATE1: 1910 | CIRCA1 ☐

CONST/ACT2: | ACTDATE2: | CIRCA2 ☐

ASSOCIATED FEATURES: 3 series of wood pilings, remains of kiln (or burner) | TOTAL # FEATURES: 4

ORIGINAL USE: Industry/Processing | WALL MATERIAL:

ORIGSUBUSE: manufacturing facility | FOUND. MATERIAL:

CURRENT USE: Vacant/Not in Use | ROOF MATERIAL:

CURSUBUSE: | OTHER MATERIAL: WOOD

ARCHSTYLE: | PLAN: | CONDITION: Poor

NR REF #: | NPS CERT: | ACTIONDATE: | FUTURE ELIG DATE:

DIST/MPLNAME1: | DIST/MPLNAME2:

Individually Eligible ☐ | Contributing in a potential district ☐ | Noncontributing ☐ | Future eligibility ☐

Not Eligible ☑ | Multiple Property Study ☐ | Not evaluated ☐

CRITERIA A ☐ B ☐ C ☐ D ☐ | CRITERIA CONSIDERATION A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐

AREA OF SIGNIF: | AREA OF SIGNIF:

COMMENTS: Though the site represents elements of the historically important Fidelity/Humbird/Diamond Match lumber mill, the features within the site have lost their integrity. The features of the site have been partially dismantled and are non-functional.

PROJ/RPT TITLE: | SVY DATE: 1999 | SVY LEVEL: Reconnaissance

RECORDED BY: Patrick Walker-Kuntz | PH: 406-252-9163 | ADDRESS: Ethnoscience, PO Box 30577, Billings MT 59107-0577

SUBMITTED PHOTOS ☑ NEGS ☐ SLIDES ☐ SKETCH MAP ☐

SVY RPT #: | ******** FOR ISHPO USE ONLY ******** | IHSI#: 17-17816

MS RPT #: | SITS#:

IHPR #: | HABS NO. ID-: | HAER NO. ID-: | REV#: 98-415

CS #: | IHSI# REF: | NR REF# 2: | REV# REF:

SVY RPT# 1: | SVY RPT# 2: | SVY RPT# 3: | MS RPT# 1: | MS RPT# 2:

ADD'L NOTES: Color photographs. Also located in T56N, R6W Section 25 (NE4, NE4); T56N, R5W Section 30 (NW4 and NW4, NE4). Original site form indicates currently used as a sawmill, but the photographs indicate it is not in use. Updated site form reflects intensive survey.

ATTACH ☐

MOREDATA ☐

REV# | SITS# | IHSI#

OF PHOTOS: 4 | NEGBOX#: | # OF SLIDE: | SHPO DETER: | DETER DATE:

INITIALLED: be | ENTRY DATE: 5/19/00 | REVISE1: 11/8/04 | REVISE2: | REVISE3:

IDAHO HISTORIC SITES INVENTORY
IDAHO STATE PRESERVATION OFFICE

This form provides the basic documentation required to determine a property's eligibility for the National Register. To ensure an expedited review, complete all starred (*) items on front and back, as well as the National Register Recommendation.

PROPERTY DATA

*Property Name/Field Number: PWK-20 **Site No.: 17-17816 Update**
*Map Reference: Newport, 7.5' Topographic Map 1968 Photorevised 1986
*Township: 56N *Range: 6W Boise Meridian
Section 25 N1/2 NE1/4 1/4 NE1/4,
Section 24 SE1/4 1/4 1/4 SW1/4 1/4 SE1/4,
Section 30 N1/2 NW1/4,
Section 30 SW1/4 1/4 1/4 NW1/4 1/4 NE1/4
UTM: Zone 11; 497960, 499420 easting, 5336320, 5335970 northing
*County: Bonner *Acres
*Address: *City: Old Town
Lot(s) Block(s)
Historic Context(s): Industry (Sawmill)
*Property Type: Structure *Total # features: 4
*Associated bldgs./structures: pilings, firehouse
*Construction Date: 1910 *Estimated Construction Period: 1910-1948
Style: Plan:
*Condition: Poor *Moved: No
*Materials: wood, brick, metal
*Original Use: log sorting and storage boom
*Current Use: none

NATIONAL REGISTER RECOMMENDATION: (check all that apply)

____ Individually eligible
____ Contributing in a potential district
____ Multiple property study
____ Significant person
____ Architectural/artistic values
__X__ Not eligible
____ Noncontributing
____ Historical significance
____ Historic landscape
____ Not evaluated

Comment: Site has lost integrity

Site 17-17816 is recommended not eligible for inclusion in the NRHP under Criteria A, B, C or D. Though the site represents elements of the historically important Fidelity / Humbird / Diamond Match lumber mill, the features within the site have lost their integrity. The wood pilings of Features 1, 3 and 4 have been cut off; the building of Feature 2 is partially collapsed, and the equipment has been removed. The features are no longer able to convey their historic context. The site is therefore recommended not eligible for inclusion in the NRHP under Criterion A. Former mill owner Thomas J. Humbird, a regionally important businessman, was not directly associated with the site. The site is therefore recommended not eligible for inclusion in the NRHP under Criterion B. The features are not architecturally unique. The features have also lost their integrity. The site is therefore recommended not eligible for inclusion in the NRHP under Criterion C. The physical integrity and artifact deposition of the site has been compromised by decades of river water flow. The artifact assemblage observed at the site suggests that it is unlikely to yield further information about the history of the area. The site is therefore recommended not eligible for inclusion in the NRHP under Criterion D.

NATIONAL REGISTER RECOMMENDATION: (continued)

*Recorded by: Patrick Walker-Kuntz *Phone: (406) 252-9163
*Address: Ethnoscience, Inc., 4140 King Ave. East, Billings, MT 59101

*Project/Report Title:

Fandrich, B., L. M. Peterson and S. Deaver
2000 [The River] A Kalispel Indian Cultural History. Ethnoscience, Inc., Billings, MT. Prepared for the Kalispel Tribe Department of Natural Resources, Usk, WA.

Fandrich, B.
2002Pend Oreille River: An evaluation of 23 Historic Sites located between Albeni Falls Dam and Box Canyon Dam. Ethnoscience, Inc., Billings, MT. Prepared for EES Consulting, Belevue, WA.

Survey Report #: Reconnaissance: X Intensive: *Date: 1999 Site Form Updated: 2002

IHSI #_____
R&C #_____
SITS #_____

DESCRIPTION

Site 17-17816 consists of piling features and a building feature associated with the Fidelity Lumber Company mill (subsequently owned by the Humbird Lumber Company and the Diamond Match Company). The features of Site 17-17816 have been partially dismantled and are non-functional. The features are located on top of the river terrace, the beach area and in the Pend Oreille River. The site area is estimated at 150 ft (north-south) x 4,900 ft (east-west). The site is vegetated with grasses, sedges and forbs.

Feature 1 consists of two wood piling alignments that were once part of the log storage boom system. The pilings are approximately 13 ft apart and angle southwest-northeast approximately 164 ft from the cutbank, across the beach area and into the Pend Oreille River. One row has 24 pilings visible; the other row has 12 pilings visible. The visible portion of the various pilings project approximately 4 to 19.5 inches above the water surface (variable depending upon fluctuating water level).

Feature 2 is a partially collapsed circular brick building that was once the mill firehouse. The building is approximately 16 ft in height (5 ft of which is underground) and 16 ft in diameter. The walls are one foot thick. The interior of this structure is empty except for a metal landing with pipes that is located approximately 10 ft from the ground. There is a 12-inch diameter metal pipe resting on top of the structure that extends into a wooden, bridge-like structure on the north side of Feature 2. The pipe is part of the original 12-inch water intake, and the metal landing provided access to the pump and engine (both missing). The firehouse had an original discharge capacity of 1,000 gallons of water per minute through an 8-inch pipe (Newport Miner, 17 June 1909:1). Cultural materials near and possibly associated with Feature 2 include pipes sticking out of the ground, rusted nails, machinery parts, a railroad tie, concrete blocks and a wooden piling approximately 6.6 ft in height. The feature is approximately 68 ft north of the water edge and 295 ft west of Feature 1.

DESCRIPTION (continued)

Feature 3 consists of five piling alignments. The pilings were once part of a jam pier system that protected the jack chain ramp from damage. The piling alignments run north-south from the base of the cutbank across the beach and into the river. The alignments are approximately 164 ft in length and stand about 20 ft apart. Each alignment averages eight visible pilings. The pilings have been sawed off and now project approximately 4 to 20 inches above the water (this may vary depending upon water fluctuation). This feature is approximately 980 ft from Feature 2.

Feature 4 is a series of wood pilings that were once part of the log storage boom system. The pilings parallel the east bank of the river for approximately three-quarters of a mile, beginning about 492 ft east of Feature 1. The pilings run east toward Albeni Falls Dam. The pilings have been sawed off and are barely visible above the current (unknown) water level.

(Above the 2040 ft contour level is the former Fidelity mill, now operated by Tri Pro Cedar Products. The mill is located outside the project area and is not included within the current site boundary. As such, the mill is neither described nor evaluated in this form.)

PROPERTY HISTORY

Construction of the Fidelity mill began in 1908 and was completed in 1909 (Newport Miner, 27 August 1908, 17 June 1909). Pilings for the log sorting and storage boom (Features 1 & 4), the firehouse (Feature 2) and the jack chain ramp (Feature 3) were constructed as part of the Fidelity mill operation. The first log drive to the mill was completed in the spring of 1909, prior to completion of the mill. River current at Site 17-17816 hindered the development of ice in the log storage boom area. This allowed mill operation to continue into early winter, after other mills located downriver had closed for the season (Chance 1991:104). The adjoining mill site, located outside the current project area and site boundary, included a saw mill, a planing mill, a shingle mill, a lath mill, a boiler room (with five boilers and a 350-kW generator), a dry kiln, a sorting shed and a storage yard (Newport Miner 17 June 1909; Chance 1991:104). The mill initially employed approximately 150 people and had a production capacity of 75,000 board feet of lumber in a 10-hour shift. The mill, however, was unable to stem the financial difficulties that befell Fidelity Lumber Company in 1908.

The mill was purchased in 1916 by the Humbird Lumber Company of Sandpoint, Idaho. The Humbird Lumber Company was a subsidiary of the Weyerhaeuser Company, one of the largest lumber companies in the United States. Humbird continued operation of the mill until the company closed its operation in 1934. The mill was then purchased by the Diamond Match Company, which operated the mill until 1961. Through the years, the mill underwent several modifications. The mill is currently operated by Tri Pro Cedar Products.

DOCUMENTATION

Chance, D. H.
1991 *The Lumber Industry of Washington's Pend Oreille Valley*. David & Jenifer Chance & Associates, Moscow, ID. Submitted to the Colville National Forest, Contract No. 43-05G1-0-4600.

Newport Miner [Newport, WA.]
1908 Fidelity starts work. 27 August:1.
1909 Big mill will soon run. 17 June:1.

IDAHO HISTORIC SITES INVENTORY
IDAHO HISTORIC PRESERVATION OFFICE **Site No.: 17-17816 Update**

SECTION 106 REVIEW AND COMPLIANCE DATA

Map and Photographic Requirements:

It is critical that we know the precise location of the property described on this form. Please include a clear map showing the exact location of the property. For city properties, a city map or equivalent must clearly pinpoint the location and identify nearby streets. For rural properties, USGS topographic maps or equivalent are recommended.

*Map included: __√__ Yes

In order to evaluate the physical integrity of a property and its eligibility for the National Register, **clear** photographs must accompany this form. Photographs must provide a good overall view of the property as it presently appears. This may require several views of a building sufficient to illustrate minor facades, architectural details, interiors , and overall perspectives of the surrounding environment. For urban properties, photographs of adjacent buildings and streetscapes ate appropriate. **Do not affix photographs to paper, etc.**

*Photographs(s) included: __√__ Yes

If possible, include significant historical events, dates, persons, associated with the property. Note any documentary sources which support the property's significance such as archival materials, newspapers, books, articles, historic photographs, etc.

RETURN THIS FORM TO: Idaho State Historic Preservation Office
210 Main
Boise, ID 83702

****

SHPO COMMENTS

Listed in NR: _____ Less than fifty year of age: _____

Context(s) for evaluation:

_____ ELIGIBLE - Criterion A B C D
_____ NOT ELIGIBLE - Available documentation does not support eligibility under any Criterion or Exception.

Reason:

Federal Agency Involved:

Reviewer: _____ Date: _____

NOTES:

IDAHO HISTORIC SITES INVENTORY
IDAHO STATE PRESERVATION OFFICE

This form provides the basic documentation required to determine a property's eligibility for the National Register. To ensure an expedited review, complete all starred (*) items on front and back, as well as the National Register Recommendation.

PROPERTY DATA

*Property Name/Field Number: PWK-20
*Map Reference: Newport 7.5' Topographic Map 1968 Photorevised 1986
*Township: 56N *Range: 6W *Section: See Continuation Form
* _____ 1/4 of * _____ 1/4 of * _____ 1/4, Boise Meridian
UTM: Zone 11; 497960, 499420 easting 5336320, 5335970 northing
*County: Bonner *Acres [illegible]
*Address: [illegible] *City: [illegible]
Lot(s) [illegible] Block(s) _____
Historic Context(s): Industry (Sawmill)
*Property Type: Structure *Total # features 4
*Associated bldgs./structures [illegible] Kiln or burner
*Construction Date: _____ *Estimated Construction Period c. 1920
Style: _____ Plan: _____
*Condition: Poor *Moved: No
*Materials: Wood Poles, Brick
*Original Use: Sawmill [illegible]
*Current Use: Sawmill [illegible]

NATIONAL REGISTER RECOMMENDATION: (check all that apply)

____ Individually eligible
____ Contributing in a potential district
____ Multiple property study
____ Significant person
____ Architectural/artistic values
____ Not eligible
____ Noncontributing
____ Historical significance
____ Historic landscape
__✓__ Not evaluated

Comment_____

*Recorded by: Patrick Walker-Kuntz *Phone: (406) 252-9163
*Address: Ethnoscience, P.O. Box 30577, Billings, MT 59107-0577
*Project/Report Title:
[illegible]

Survey Report #: _____ Reconnaissance: __√__ Intensive: _____ *Date: 1999 √

FIELD NOTES/SKETCHES

IHSI #__17-17816__
R&C #_____
SITS #_____

IDAHO HISTORIC SITES INVENTORY
IDAHO HISTORIC PRESERVATION OFFICE

Field Number: PWK-20

DESCRIPTION

Describe the property's physical characteristics, such as form, plan, style, materials, foundation, roof type, integrity, condition, dimensions, interior design, alterations/additions, etc.

Feature 1 consists of two wood piling alignments that are approximately four meters apart and angle SW-NE approximately 50 m from the cutbank, across the riverbank, and into the Pend Oreille River. One row has 24 pilings visible; the other row has 12 pilings visible. The pilings vary in height from 10 cm to 50 cm above the water surface.

Feature 2 is a circular brick structure that is partially collapsed. The structure is approximately 5 m high (1/3 of that is underground) and the diameter is 5 m. The walls are 30 cm (3 bricks) thick. The interior of this structure is empty except for a metal landing with pipes that is approximately 3 m from the ground. There is a metal pipe (33 cm in diameter) resting on top of the structure that extends into a wooden bridge-like structure on the north side of Feature 2. This may have connected to the broiler room at the top of the ridge (outside the current project area). The broiler room dates between 1901-1907 and Feature 2 is possibly an extension of the broiler room. Cultural materials around Feature 2 include pipes sticking out of the ground, rusted nails, machinery parts, a railroad tie, concrete blocks and a wooden piling approximately 2 m in height. Feature 2 is 21 m north of the water's edge and 90 m west of Feature 1. It is possible this feature was a kiln or a burner.

Feature 3 consists of five wood piling alignments running perpendicular to the river bank. The rows run north-south from the base of the cutbank, down the riverbank, and into the river. The alignments are approximately 50 m in length and stand about six meters apart. Each alignment averages eight visible pilings. The pilings have been sawed off and now stand 10 cm to 50 cm above the water. This feature is approximately 300 m from Feature 2 and the area is scattered with logs. This feature may have been a log boom.

Feature 4 is a series of wood pilings that align the north side of the river for approximately 3/4 of a mile beginning about 150 m east of Feature 1. The pilings run east towards the dam. The pilings have been sawed off and are barely visible above the water.

PROPERTY HISTORY

Provide an overview of the property's history and development.

DOCUMENTATION

Property ownership history (deed/title search):

Current owner's name and address:

Private

Sources/bibliography consulted (note publications, historical documents, drawings/plans, newspapers, photographs, oral histories etc.)

SECTION 106 REVIEW AND COMPLIANCE DATA

Map and Photographic Requirements:

It is critical that we know the precise location of the property described on this form. Please include a clear map showing the exact location of the property. For city properties, a city map or equivalent must clearly pinpoint the location and identify nearby streets. For rural properties, USGS topographic maps or equivalent are recommended.

*Map included: __√__ Yes

In order to evaluate the physical integrity of a property and its eligibility for the National Register, **clear** photographs must accompany this form. Photographs must provide a good overall view of the property as it presently appears. This may require several views of a building sufficient to illustrate minor facades, architectural details, interiors , and overall perspectives of the surrounding environment. For urban properties, photographs of adjacent buildings and streetscapes ate appropriate. **Do not affix photographs to paper, etc.**

*Photographs(s) included: __√__ Yes

If possible, include significant historical events, dates, persons, associated with the property. Note any documentary sources which support the property's significance such as archival materials, newspapers, books, articles, historic photographs, etc.

RETURN THIS FORM TO: Idaho State Historic Preservation Office
210 Main
Boise, ID 83702

****

SHPO COMMENTS

Listed in NR: _____ Less than fifty year of age: _____
Context(s) for evaluation: _____
_____ ELIGIBLE -Criterion A B C D
_____ NOT ELIGIBLE - Available documentation does not support eligibility under any Criterion or Exception.

Reason: _____
_____
_____

Federal Agency Involved: _____

Reviewer: _____ Date: _____

NOTES:

IDAHO HISTORIC SITES INVENTORY
IDAHO HISTORIC PRESERVATION OFFICE

Field Number: PWK-20

DESCRIPTION (continued)

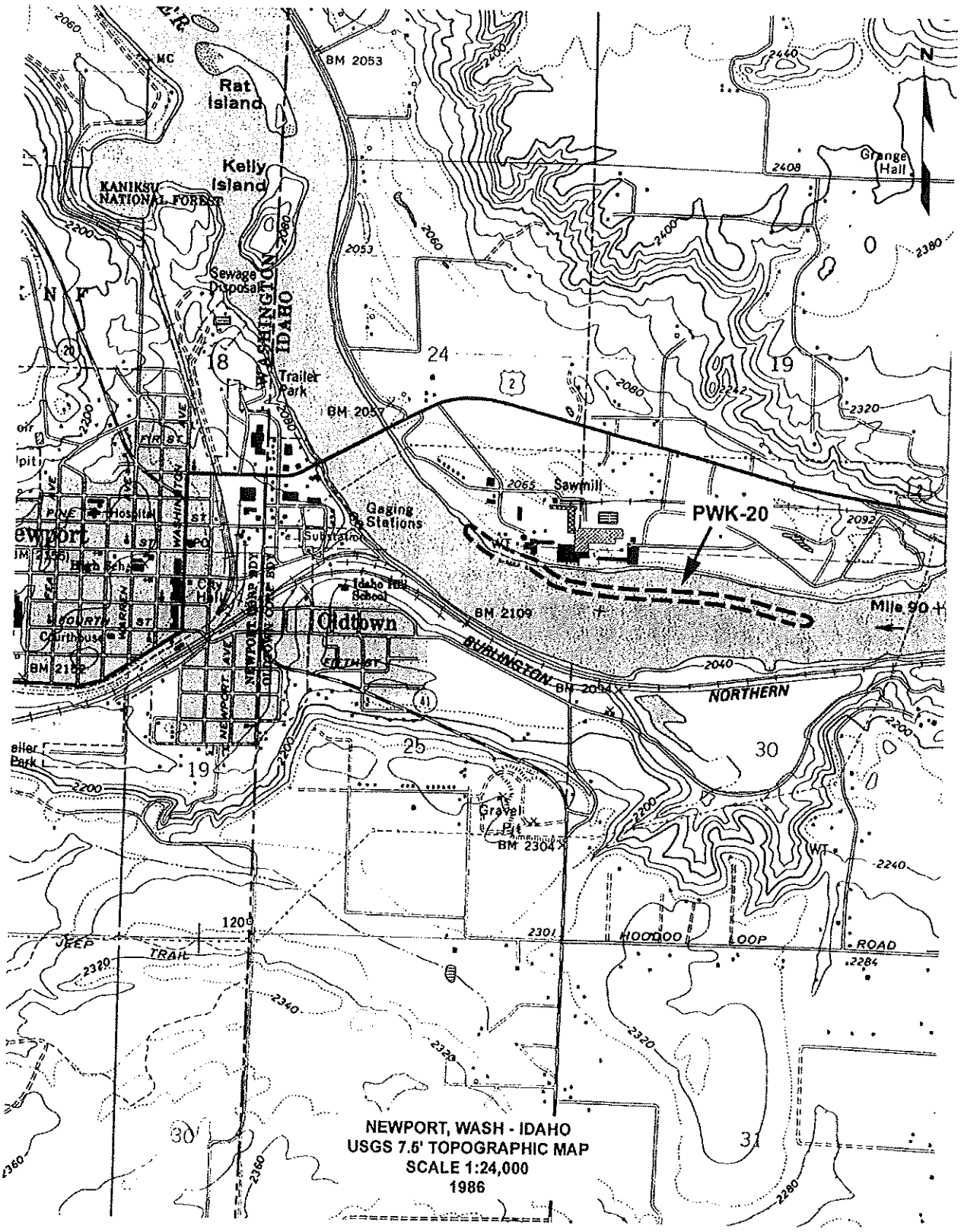
Legal location: Section 25 N1/2 NE1/4 1/4 NE1/4
Section 24 SE1/4 1/4 1/4 SW1/4 1/4 SE1/4
Section 30 N1/2 NW1/4
Section 30 SW1/4 1/4 1/4 NW1/4 1/4 NE1/4

PROPERTY HISTORY (continued)

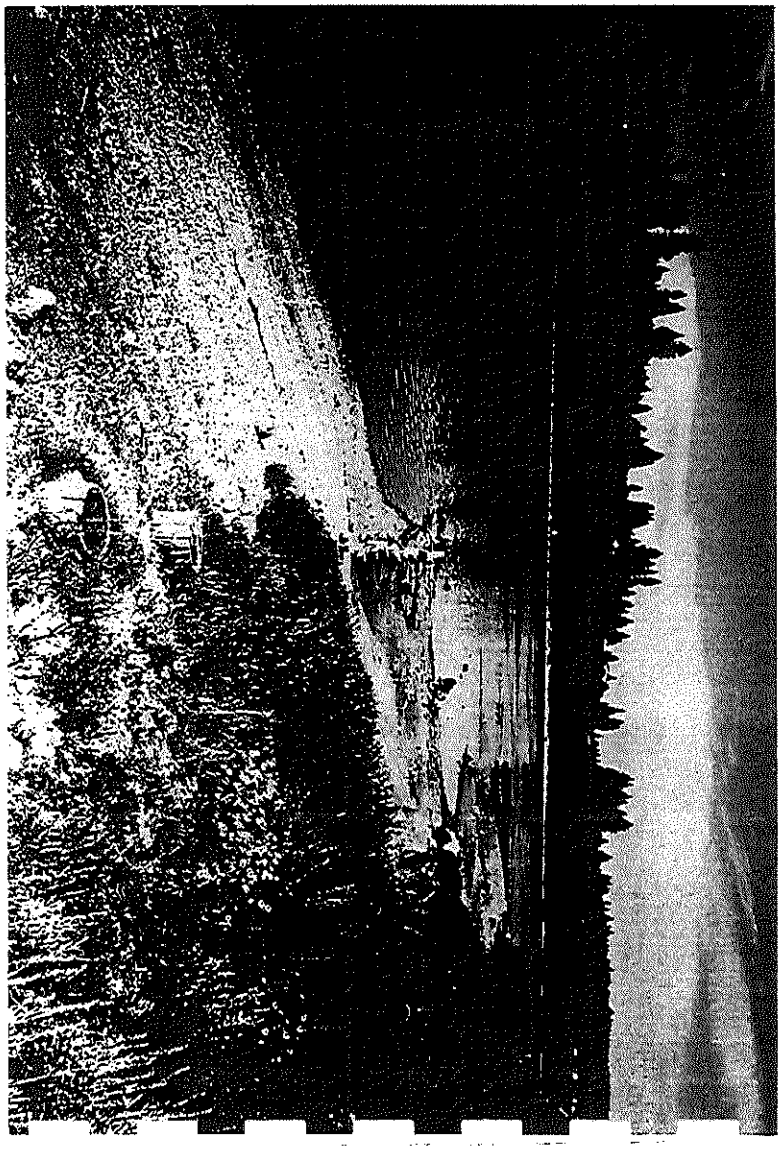
DOCUMENTATION (continued)

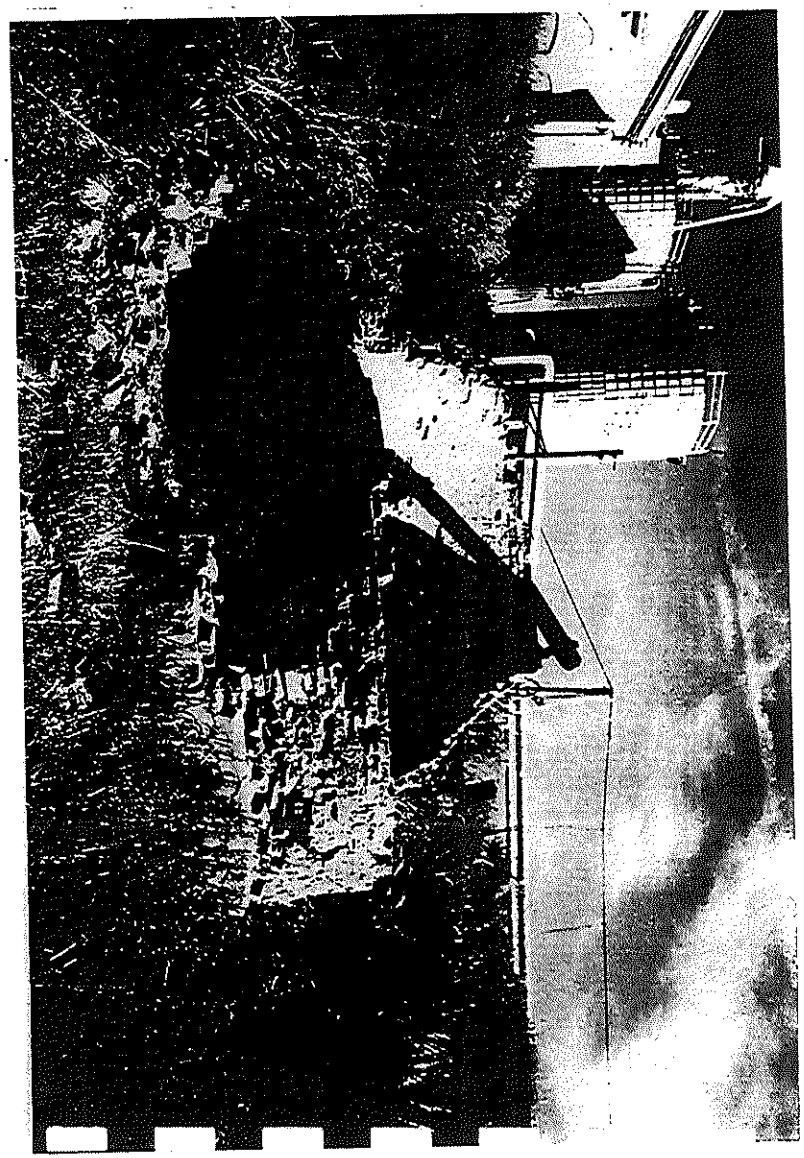
Sources/bibliography consulted (continued)

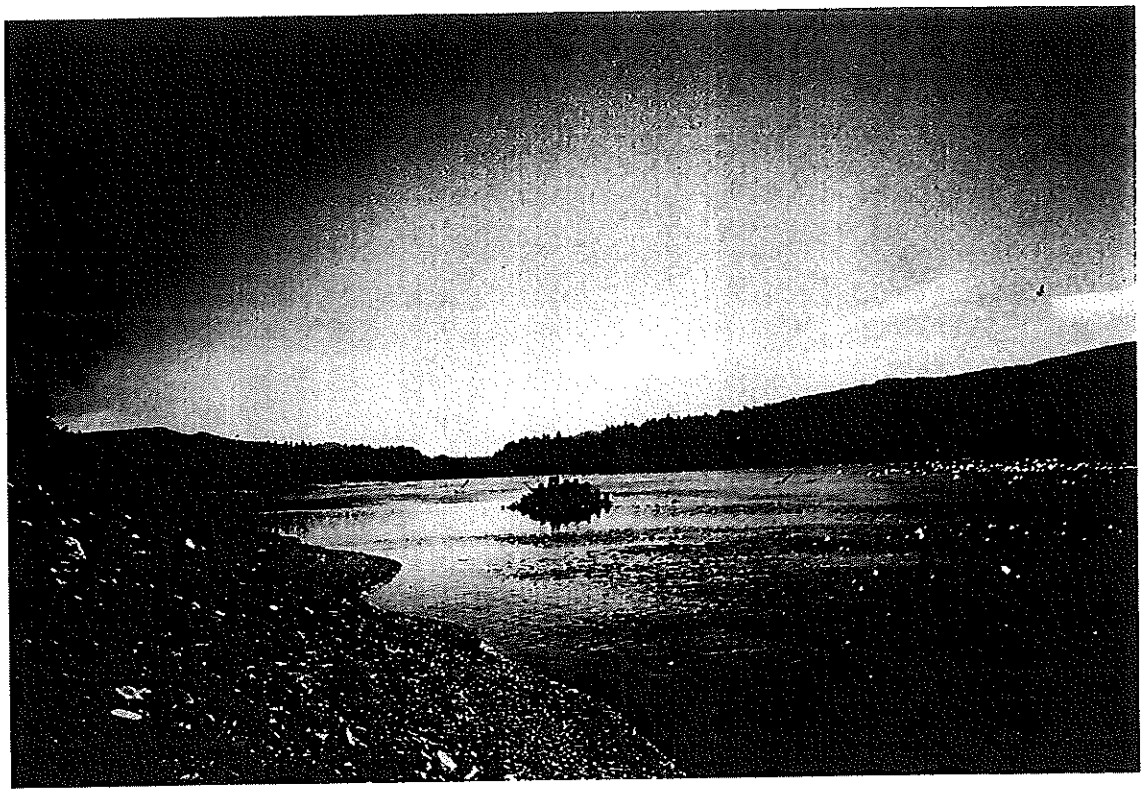
IDAHO HISTORIC SITES INVENTORY
IDAHO STATE PRESERVATION OFFICE
TOPOGRAPHIC MAP

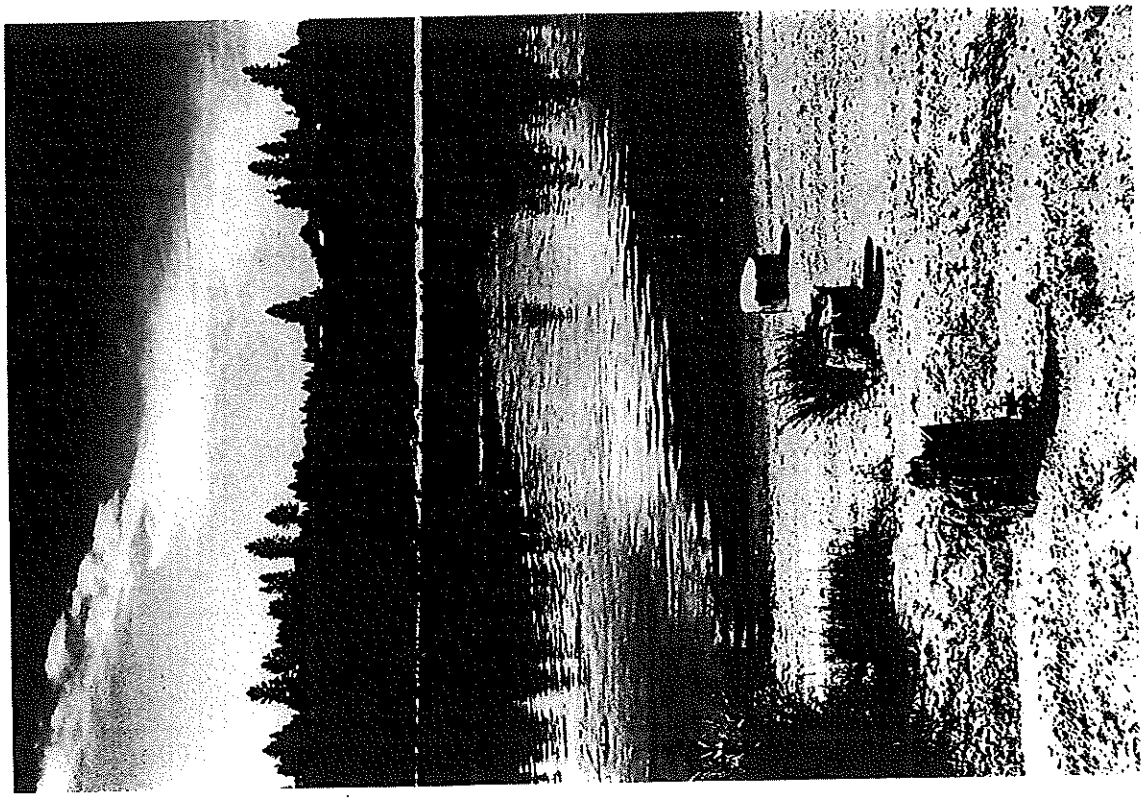


17-17816









Appendix D-13
Threatened and Endangered Species Information

U.S. Fish and Wildlife Endangered and Threatened Species List of Idaho, County Specific Endangered and Threatened Species List, and Chinook Salmon Essential Fish Habitat Map

James A. Sewell & Associates, LLC

Species Reports
Environmental Conservation Online System

Listings and occurrences for Idaho

Notes:

- This report shows the listed species associated in some way with this state.
- This list does not include experimental populations and similarity of appearance listings.
- This list includes non-nesting sea turtles and whales in State/Territory coastal waters.
- This list includes species or populations under the sole jurisdiction of the National Marine Fisheries Service.
- Click on the highlighted scientific names below to view a Species Profile for each listing.

Summary of Animals listings

Animal species listed in this state and that occur in this state (10 species)

Status	Species
T	Bear, grizzly lower 48 States, except where listed as an experimental population or delisted (*Ursus arctos horribilis*)
E	Caribou, woodland Selkirk Mountain population (*Rangifer tarandus caribou*)
E	Limpet, Banbury Springs Entire (*Lanx sp.*)
T	Lynx, Canada (Contiguous U.S. DPS) (*Lynx canadensis*)
T	Snail, Bliss Rapids Entire (*Taylorconcha serpenticola*)
E	Snail, Snake River physa (*Physa natricina*)
E	Springsnail, Bruneau Hot (*Pyrgulopsis bruneauensis*)
T	Squirrel, northern Idaho ground Entire (*Spermophilus brunneus brunneus*)
E	Sturgeon, white U.S.A. (ID, MT), Canada (B.C.), Kootenai R. system (*Acipenser transmontanus*)
T	Trout, bull U.S.A., conterminous, lower 48 states (*Salvelinus confluentus*)

Animal species listed in this state that do not occur in this state (6 species)

Status	Species
E	Rabbit, pygmy Columbia Basin DPS (*Brachylagus idahoensis*)
T	Salmon, chinook Snake River fall-run ESU (*Oncorhynchus (=Salmo) tshawytscha*)
T	Salmon, chinook Snake River spring/summer-run ESU (*Oncorhynchus (=Salmo) tshawytscha*)
E	Salmon, sockeye U.S.A. (Snake River, ID stock wherever found.) (*Oncorhynchus (=Salmo) nerka*)
T	Steelhead Snake R. Basin (*Oncorhynchus (=Salmo) mykiss*)
E	Wolf, gray U.S.A.: All of AL, AR, CA, CO, CT, DE, FL, GA, KS, KY, LA, MA, MD, ME, MO, MS, NC, NE, NH, NJ, NV, NY, OK, PA, RI, SC, TN, VA, VT and WV; those portions of AZ, NM, and TX not included in an experimental population; and portions of IA, IN, IL, ND, OH, OR, SD, UT, and WA. Mexico. (*Canis*

lupus)

Summary of Plant listings

Plant species listed in this state and that occur in this state (5 species)

Status	Species
T	Catchfly, Spalding's (*Silene spaldingii*)
T	Four-o'clock, MacFarlane's (*Mirabilis macfarlanei*)
T	Howellia, water (*Howellia aquatilis*)
T	Ladies'-tresses, Ute (*Spiranthes diluvialis*)
T	Peppergrass, Slickspot (*Lepidium papilliferum*)

Last updated: January 28, 2013

ECOS Home | **Contact Us**

U.S. Fish and Wildlife Service

Natural Resources of Concern

This resource list is to be used for planning purposes only — it is not an official species list.

Endangered Species Act species list information for your project is available online and listed below for the following FWS Field Offices:

IDAHO FISH AND WILDLIFE OFFICE
1387 SOUTH VINNELL WAY, SUITE 368
BOISE, ID 83709
(208) 378-5243
http://www.fws.gov/idaho/species/IdahoSpeciesList.pdf

Project Name:

West Bonner Sewer EID

Project Counties:

Bonner, ID

Project Type:

Wastewater Pipeline

Endangered Species Act Species List (USFWS Endangered Species Program).

There are a total of 7 threatened, endangered, or candidate species, and/or designated critical habitat on your species list. Species on this list are the species that may be affected by your project and could include species that exist in another geographic area. For example, certain fishes may appear on the species list because a project could cause downstream effects on the species. Please contact the designated FWS office if you have questions.

Species that may be affected by your project: (View all critical habitat on one map)

Conifers and Cycads	Status	Species Profile	Contact

Natural Resources of Concern

Whitebark pine (*Pinus albicaulis*)	Candidate	species info		Idaho Fish And Wildlife Office
Fishes				
Bull Trout (*Salvelinus confluentus*) Population: U.S.A., conterminous, lower 48 states	Threatened	species info	Final designated critical habitat	Idaho Fish And Wildlife Office
White sturgeon (*Acipenser transmontanus*) Population: U.S.A. (ID, MT), Canada (B.C.), Kootenai R. system	Endangered	species info		Idaho Fish And Wildlife Office
Mammals				
Canada Lynx (*Lynx canadensis*) Population: (Contiguous U.S. DPS)	Threatened	species info		Idaho Fish And Wildlife Office
Grizzly bear (*Ursus arctos horribilis*) Population: lower 48 States, except where listed as an experimental population or delisted	Threatened	species info		Idaho Fish And Wildlife Office
North American wolverine (*Gulo gulo luscus*)	Candidate	species info		Idaho Fish And Wildlife Office
Woodland caribou (*Rangifer tarandus caribou*) Population: Selkirk Mountain population	Endangered	species info		Idaho Fish And Wildlife Office

FWS National Wildlife Refuges (USFWS National Wildlife Refuges Program).

There are no refuges found within the vicinity of your project.

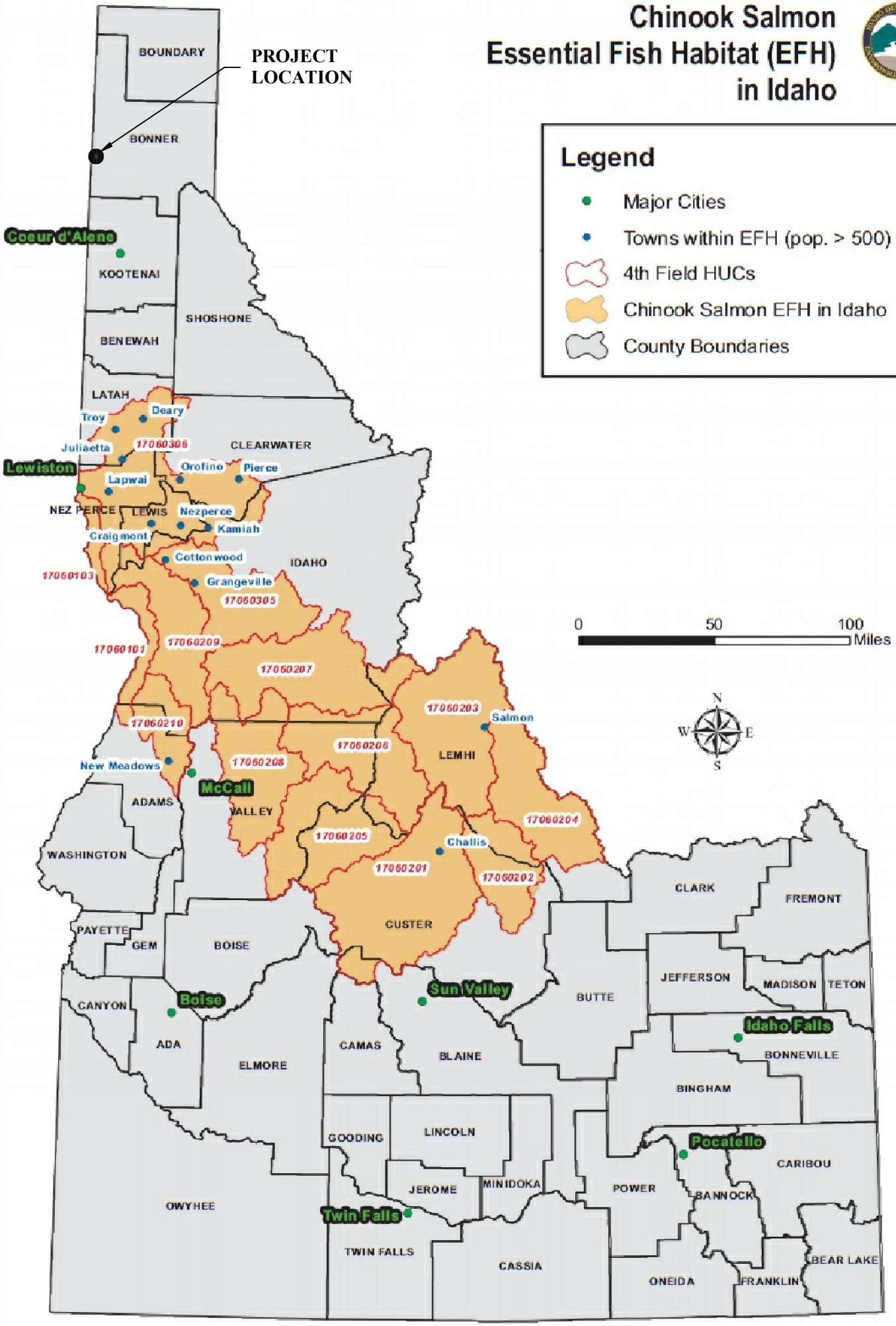
Natural Resources of Concern

FWS Migratory Birds (USFWS Migratory Bird Program).

Most species of birds, including eagles and other raptors, are protected under the Migratory Bird Treaty Act (16 U.S.C. 703). Bald eagles and golden eagles receive additional protection under the Bald and Golden Eagle Protection Act (16 U.S.C. 668). The Service's Birds of Conservation Concern (2008) report identifies species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become listed under the Endangered Species Act as amended (16 U.S.C 1531 et seq.).

NWI Wetlands (USFWS National Wetlands Inventory).

The U.S. Fish and Wildlife Service is the principal Federal agency that provides information on the extent and status of wetlands in the U.S., via the National Wetlands Inventory Program (NWI). In addition to impacts to wetlands within your immediate project area, wetlands outside of your project area may need to be considered in any evaluation of project impacts, due to the hydrologic nature of wetlands (for example, project activities may affect local hydrology within, and outside of, your immediate project area). It may be helpful to refer to the USFWS National Wetland Inventory website. The designated FWS office can also assist you. Impacts to wetlands and other aquatic habitats from your project may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal Statutes. Project Proponents should discuss the relationship of these requirements to their project with the Regulatory Program of the appropriate U.S. Army Corps of Engineers District.


Chinook Salmon
Essential Fish Habitat (EFH)
in Idaho
PROJECT LOCATION
Legend
Major Cities
Towns within EFH (pop. > 500)
4th Field HUCs
Chinook Salmon EFH in Idaho
County Boundaries
0
50
100
Miles
N
S
E
W
BOUNDARY
BONNER
KOOTENAI
SHOSHONE
BENEWAH
LATAH
CLEARWATER
NEZ PERCE
LEWIS
IDAHO
LEMHI
ADAMS
WASHINGTON
VALLEY
CUSTER
CLARK
FREMONT
PAYETTE
GEM
BOISE
CANYON
ADA
ELMORE
CAMAS
BLAINE
BUTTE
JEFFERSON
MADISON
TETON
BONNEVILLE
BINGHAM
GOODING
LINCOLN
JEROME
MINIDOKA
POWER
BANNOCK
CARIBOU
OWYHEE
TWIN FALLS
CASSIA
ONEIDA
FRANKLIN
BEAR LAKE
Coeur d'Alene
Lewiston
McCall
Boise
Sun Valley
Idaho Falls
Pocatello
Twin Falls
Troy
Deary
Juliaetta
Lapwai
Orofino
Pierce
Nezperce
Kamiah
Craigmont
Cottonwood
Grangeville
Salmon
New Meadows
Challis
17060306
17060103
17060305
17060209
17060101
17060207
17060203
17060210
17060206
17060208
17060204
17060205
17060201
17060202

Appendix D-14
Air Quality Information

Environmental Protection Agency Air Quality Data for Bonner County, Kootenai County, City of Spokane, and Idaho DEQ Non-Attainment Map

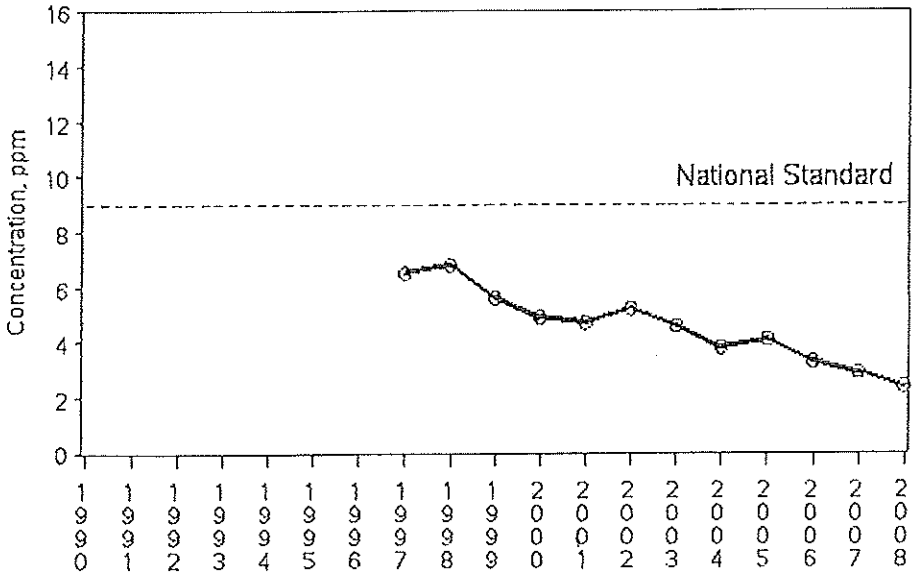
James A. Sewell & Associates, LLC

CO Air Quality, 1990 - 2008

(Based on Annual 2nd Maximum 8-hour Average)

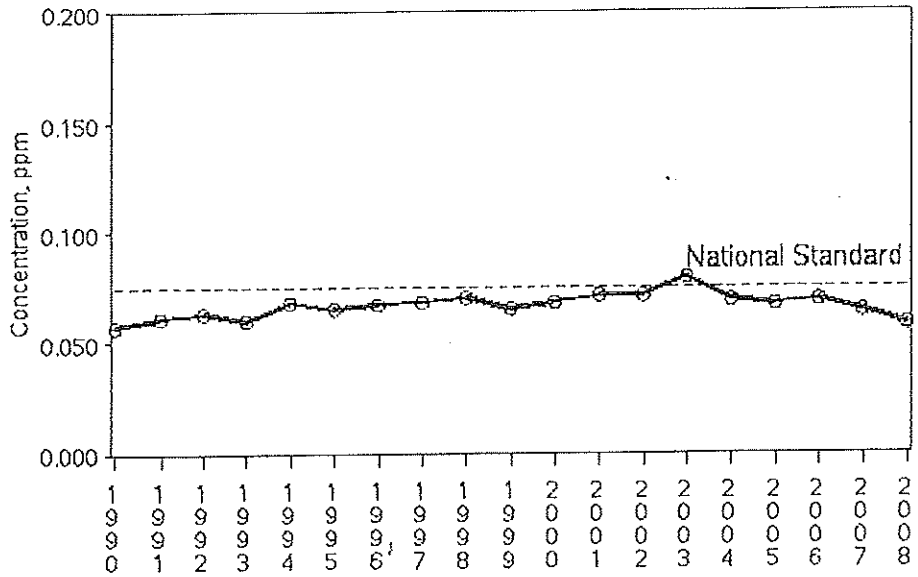
Spokane,WA

SITE=530630049 POC=1



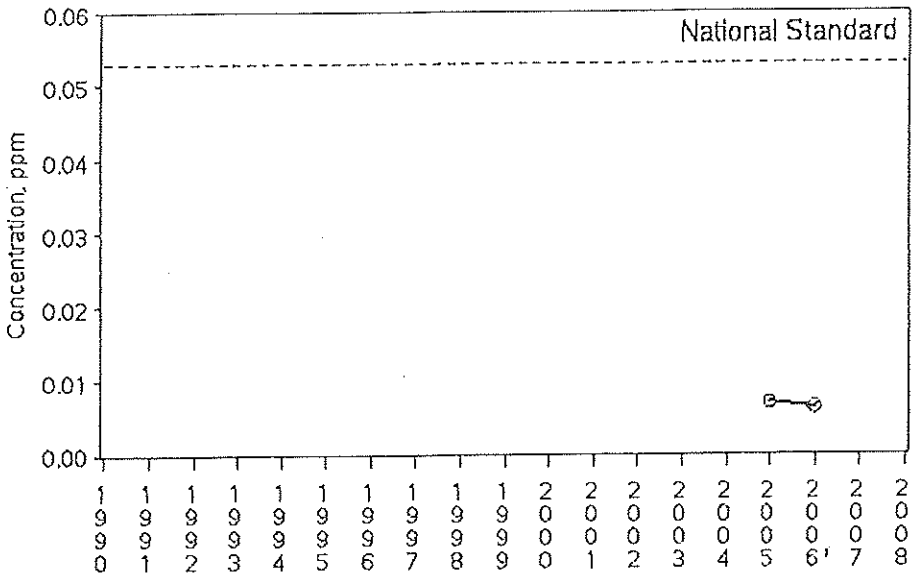
Ozone Air Quality, 1990 - 2008

(Based on Annual 4th Maximum 8-Hour Average)
Spokane,WA
SITE=530630046 POC=1



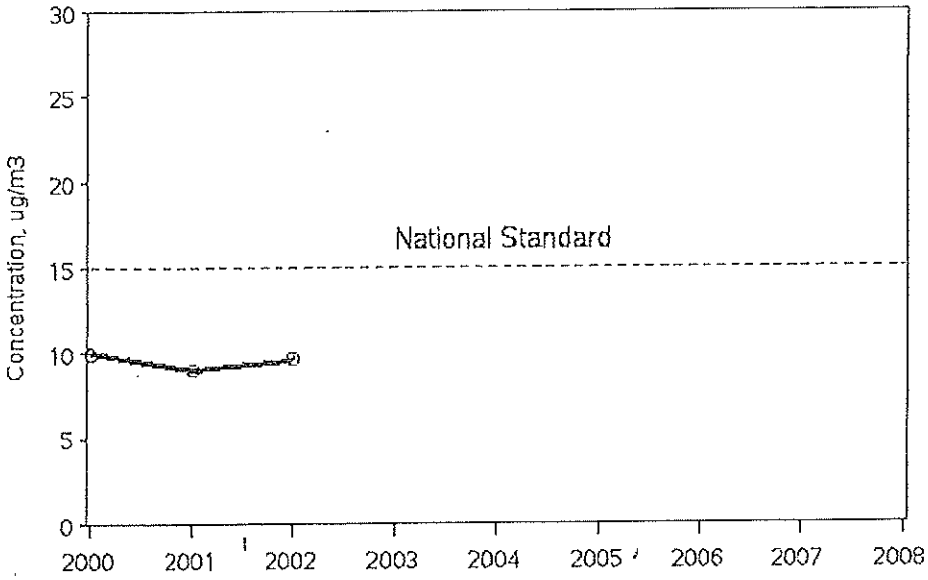
NO2 Air Quality, 1990 - 2008

(Based on Annual Arithmetic Average)
Kootenai County
SITE=160550003 POC=1



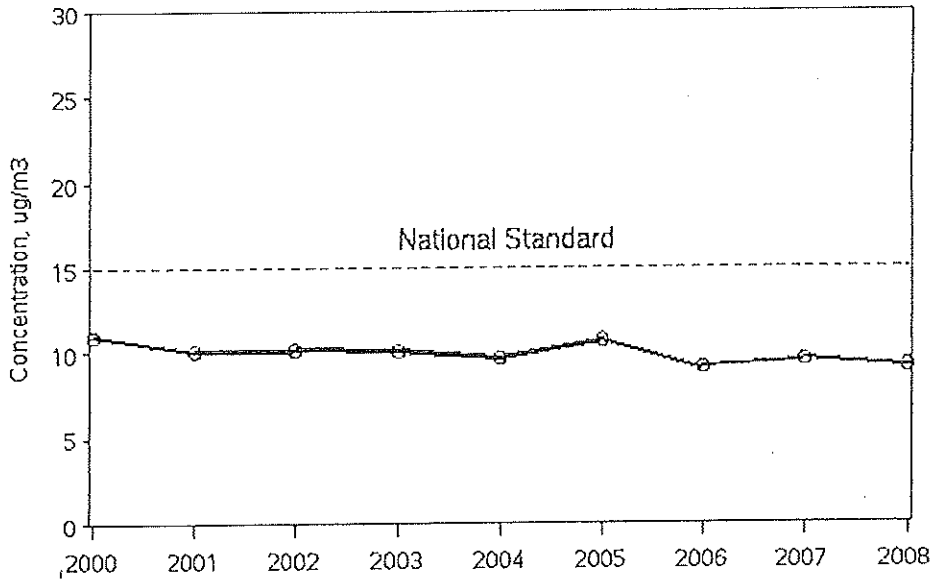
PM2.5 Air Quality, 2000 - 2008

(Based on Seasonally-Weighted Annual Average)
Kootenai County
SITE=160550006 POC=1



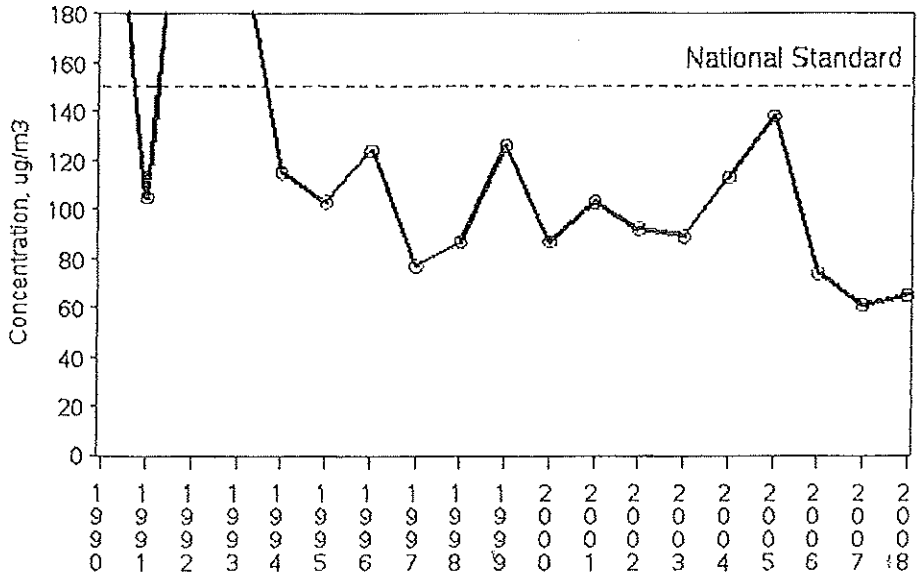
PM2.5 Air Quality, 2000 - 2008

(Based on Seasonally-Weighted Annual Average)
Spokane,WA
SITE=530630016 POC=1



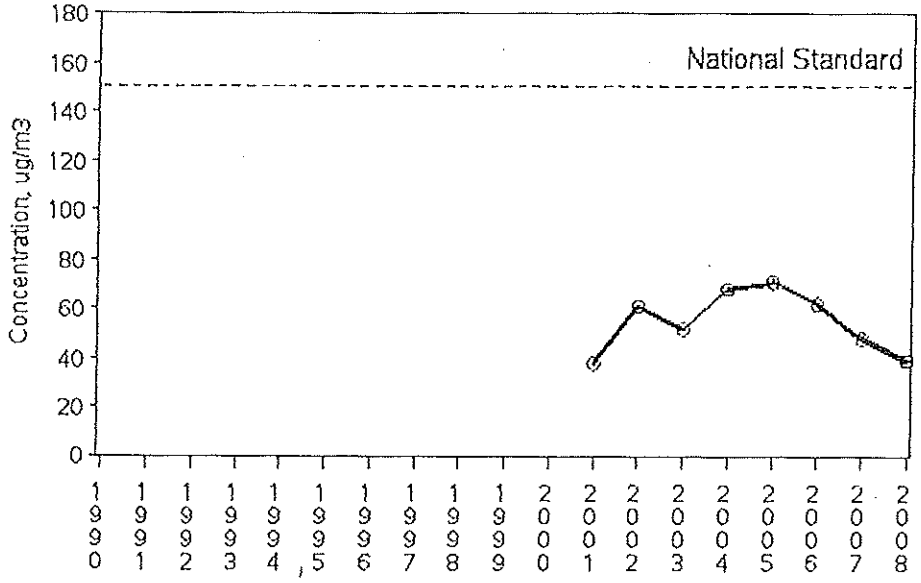
PM10 Air Quality, 1990 - 2008

(Based on Annual 2nd Maximum 24-Hour Average)
Spokane,WA
SITE=530630016 POC=3



PM10 Air Quality, 1990 - 2008

(Based on Annual 2nd Maximum 24-Hour Average)
Bonner County
SITE=160170004 POC=1



AirData Nonattainment Areas Map - Criteria Air Pollutants
Generated on Tuesday, January 4, 2011

AirData

You are here: EPA Home Air & Radiation AirData Reports and Maps Select Geography Select Report/Map Nonattainment Areas Map Criteria Nonattainment Areas Map

EPA is assessing its data systems, including AirData reports and maps. Data updates are suspended while the assessment is underway. The last update included data through January 10, 2009; see database status for details. For more recent air quality data, visit the AirExplorer and Air Emission Sources sites.

Nonattainment Areas Map - Criteria Air Pollutants

Geographic Area: Idaho
Pollutant: Lead (in particulate)

Idaho has no Lead (in particulate) nonattainment areas.

You may use your browser's Back button (or the *New Map Criteria* link below) to return to the selection criteria page.

Disclaimer: Nonattainment information for this map is provided by the EPA Office of Air Quality Planning and Standards, and is based on air monitoring data in EPA's Air Quality System (AQS) database. The nonattainment designations in this map were in effect as of December 16, 2008. For detailed information about nonattainment areas, see the Green Book Web site.

Readers are cautioned not to infer a qualitative ranking order of geographic areas based on AirData maps, charts, or reports. Air pollution levels measured in the vicinity of a particular monitoring site may not be representative of the prevailing air quality of a county or urban area. Pollutants emitted from a particular source may have little impact on the immediate geographic area, and the amount of pollutants emitted does not indicate whether the source is complying with applicable regulations.

This request took 1.01 seconds of real time (v9.2 build 1495).

AirData Nonattainment Areas Map - Criteria Air Pollutants
Generated on Tuesday, January 4, 2011

AirData

You are here: EPA Home Air & Radiation AirData Reports and Maps Select Geography Select Report/Map Nonattainment Areas Map Criteria Nonattainment Areas Map

EPA is assessing its data systems, including AirData reports and maps. Data updates are suspended while the assessment is underway. The last update included data through January 10, 2009; see database status for details. For more recent air quality data, visit the AirExplorer and Air Emission Sources sites.

Nonattainment Areas Map - Criteria Air Pollutants

Geographic Area: Idaho
Pollutant: Sulfur Dioxide

Idaho has no Sulfur Dioxide nonattainment areas.

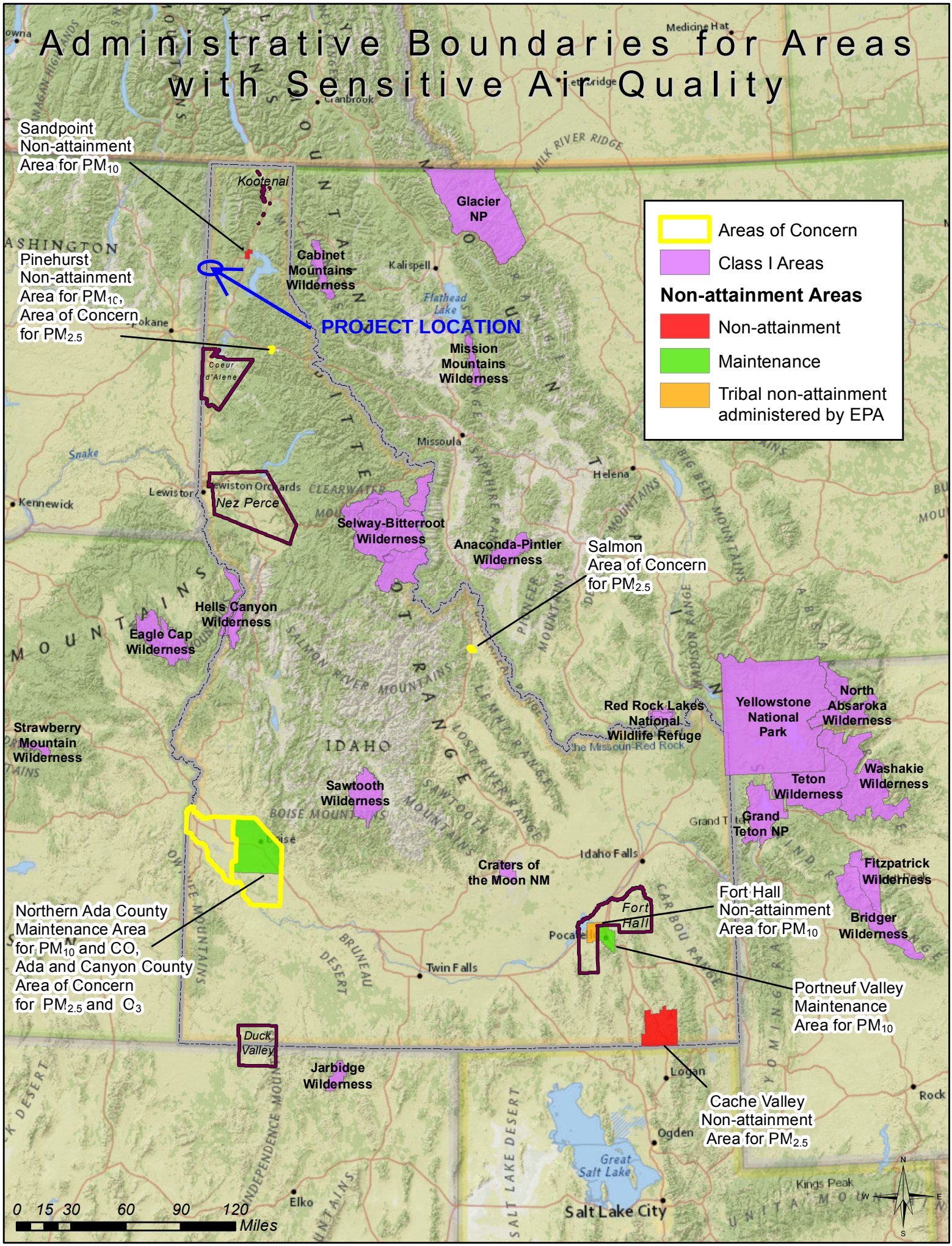
You may use your browser's Back button (or the *New Map Criteria* link below) to return to the selection criteria page.

Disclaimer: Nonattainment information for this map is provided by the EPA Office of Air Quality Planning and Standards, and is based on air monitoring data in EPA's Air Quality System (AQS) database. The nonattainment designations in this map were in effect as of December 16, 2008. For detailed information about nonattainment areas, see the Green Book Web site.

Readers are cautioned not to infer a qualitative ranking order of geographic areas based on AirData maps, charts, or reports. Air pollution levels measured in the vicinity of a particular monitoring site may not be representative of the prevailing air quality of a county or urban area. Pollutants emitted from a particular source may have little impact on the immediate geographic area, and the amount of pollutants emitted does not indicate whether the source is complying with applicable regulations.

This request took 0.34 seconds of real time (v9.2 build 1495).

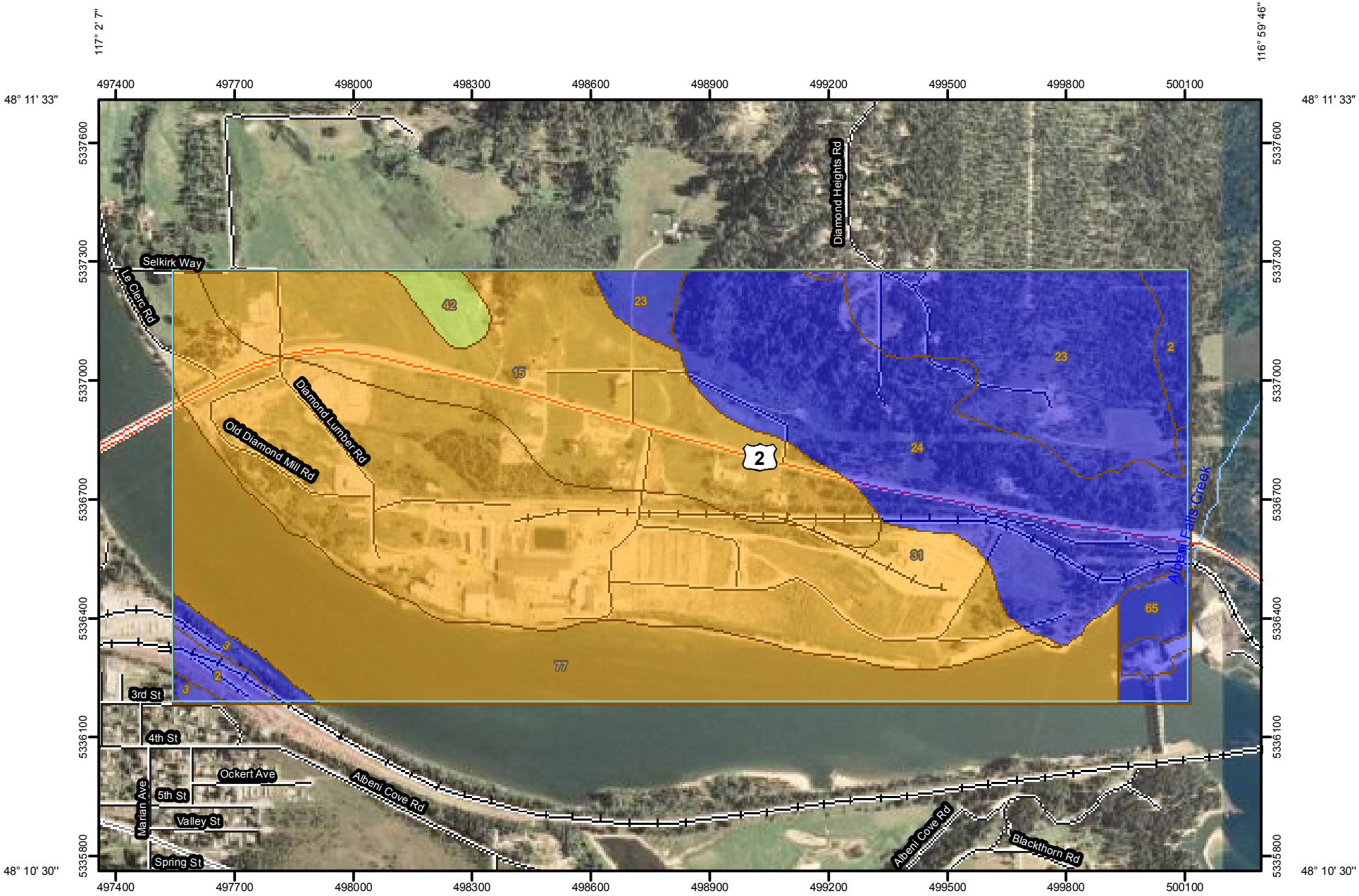
Administrative Boundaries for Areas with Sensitive Air Quality



Appendix D-15
Water Table Information

Albeni Area NCRS Water Table Survey

James A. Sewell & Associates, LLC



Map Scale: 1:13,900 if printed on A size (8.5" x 11") sheet.

N

Meters: 0 150 300 600 900

Feet: 0 500 1,000 2,000 3,000

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Units

Soil Ratings

0 - 25

25 - 50

50 - 100

100 - 150

150 - 200

> 200

Political Features

Cities

Water Features

Oceans

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

MAP INFORMATION

Map Scale: 1:13,900 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: UTM Zone 11N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Bonner County Area, Idaho, Parts of Bonner and Boundary Counties
Survey Area Data: Version 6, Jan 31, 2008

Date(s) aerial images were photographed: 7/2/2006

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Depth to Water Table

Depth to Water Table— Summary by Map Unit — Bonner County Area, Idaho, Parts of Bonner and Boundary Counties				
Map unit symbol	**Map unit name**	**Rating (centimeters)**	**Acres in AOI**	**Percent of AOI**
2	Bonner gravelly silt loam, 0 to 4 percent slopes	>200	13.4	1.9%
3	Bonner gravelly silt loam, 30 to 65 percent slopes	>200	7.1	1.0%
15	Hoodoo silt loam, 0 to 1 percent slopes	46	118.1	17.1%
23	Kootenai gravelly silt loam, 0 to 4 percent slopes	>200	78.8	11.4%
24	Kootenai gravelly silt loam, 20 to 55 percent slopes	>200	130.2	18.8%
31	Mission silt loam, 0 to 2 percent slopes	31	199.0	28.8%
42	Pywell-Hoodoo complex, 0 to 1 percent slopes	61	7.5	1.1%
65	Water	>200	10.6	1.5%
77	Kegel loam	38	126.4	18.3%
Totals for Area of Interest			**691.0**	**100.0%**

Description

"Water table" refers to a saturated zone in the soil. It occurs during specified months. Estimates of the upper limit are based mainly on observations of the water table at selected sites and on evidence of a saturated zone, namely grayish colors (redoximorphic features) in the soil. A saturated zone that lasts for less than a month is not considered a water table.

This attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

Rating Options

Units of Measure: centimeters

Aggregation Method: Dominant Component

Component Percent Cutoff: *None Specified*

Tie-break Rule: Lower

Interpret Nulls as Zero: No

Beginning Month: January

Ending Month: December

Appendix D-16
Regionalization Information

City of Oldtown/City of Newport Wastewater Treatment Plant Joint Ownership Agreement

James A. Sewell & Associates, LLC

COPY

AGREEMENT

THIS AGREEMENT, made and entered into this 27th day of Sept, 1983, by and between the CITY OF NEWPORT, Washington, hereinafter referred to as the "CITY", and the WEST BONNER SEWER DISTRICT NO. 1 of Bonner County, Idaho, hereinafter referred to as the "DISTRICT".

WITNESSETH:

WHEREAS, the City is the owner of a Sewage Treatment Plant operated for the benefit of its residents; and

WHEREAS, the City and District have had an agreement that allows for the disposal of the District's sewage through the City's Sewage Treatment Plant; and

WHEREAS, the City has installed a flow metering device at the junction of the City and District's systems, which said flow metering device has a remote reading and recording instrument located at the Sewage Treatment Plant and was installed to establish a percentage of flow between the City and District, which percentage of flow will determine the District's wholesale costs in relation to operation and maintenance of the Sewage Treatment Plant; and

WHEREAS, the City intends to expand and improve the existing Sewage Treatment Plant; and

WHEREAS, the City has enacted Ordinance 357 permitting the furnishing of sewerage service outside of the corporated limits of the City according to the provisions of said Ordinance; and

WHEREAS, the State of Washington laws, RCW 39.34.030 authorizes municipalities to enter into inter-local agreements with other state agencies; and

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WHEREAS, the State of Idaho laws, I.C. § 67-2326 through 67-2333 authorizes joint action by public agencies; and

WHEREAS, the City and District have met from time to time and have determined that it is of mutual benefit to the health and welfare of the respective municipalities to enter into a re-negotiated agreement for the continuation of providing sewerage disposal services.

NOW, THEREFORE, in consideration of the benefits to each party and in consideration of the mutual covenants herein contained, it is hereby agreed between the City and the District as follows:

PART ONE

CUSTOMER RELATED O&M SERVICES

ITEM I

The purpose of this agreement is to provide continued sewerage disposal service to the District and establish a method for the District to pay for said sewerage disposal service and provide for a method of calculation of the District's share of costs for the Phase II Sewage Treatment Plant expansion and improvements based on a percentage of flow ratio and growth factor, such share of costs hereinafter referred to as the "connection fee".

ITEM II

The City and District each own and maintain a "retail" sewage collection system within the limits of both municipalities. Each municipality shall maintain, operate and keep in good repair its own respective "retail" sewage collection system. The City agrees to take all necessary measures to collect delinquent fees from users who are physically located within the City limits, but who are connected to the District's sewage collection system. Such

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measures shall include any and all collection means which are authorized by law.

ITEM III

The City and District shall hold and save each other harmless of and from any liability of any kind or nature as to maintenance, repairs, upkeep or any other damages to their respective "retail" collection systems.

ITEM IV

The City and District will each enact and enforce such ordinances, resolutions and orders as are necessary to prevent system damaging contaminants and excess non-sanitary waters from being discharged into the collection system and to assure compliance with all other requirements either imposed by law for the operation of public sewage collection and treatment facilities generally, or essential for prudent system operation.

ITEM V

The City shall maintain, operate and keep in good repair the City's Sewage Treatment Plant in compliance with all applicable local, state and federal laws and regulations.

ITEM VI

The City and District shall disallow any connections to their respective "retail" collection system which do not comply with the existing or future applicable regulations relating to the discharge of sewage into the City's Sewage Treatment Plant. The quality of the sewage discharge into the City's Sewage Treatment Plant shall not exceed the heavy metal and other chemical allowances required by the State of Washington, Department of Ecology (DOE), and Federal Environmental Protection Agency (EPA), without prior pre-

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treatment or as provided for in the City's and the District's sewer use ordinance.

Both the City and the District agree to provide, by ordinance or resolution, for the enforcement of the terms and provisions of this paragraph, and to provide that a violation thereof shall subject the violating party to civil and criminal penalties which, in the opinion of the respective governing bodies of the City and the District, are adequate to protect the system. Said ordinance shall further provide for injunctive relief against the violating party and for the collection of costs and attorney's fees.

ITEM VII

At the District's written request, other sewerage related services may be rendered by the City. Actual costs for labor, materials furnished and equipment rental will be determined by a schedule of rates adopted by the City.

ITEM VIII

The City has installed a flow metering device at the junction of the City and District's systems, which said flow metering device has a remote reading and recording instrument located at the Sewage Treatment Plant and was installed to establish a sewage percentage of flow between the City and District. The City also maintains a similar flow metering device for all flow received at the Sewage Treatment Plant. The flow metering device, recorders, and sampling devices shall be maintained by the City and shall be accessable upon request by the District for verifying measurements, calibrations and percent of flow calculations. Maintenance and upkeep costs of the flow metering device and associated equipment will be an operation and maintenance (O&M) expense.

ITEM IX

The percentage of flow ratio will determine the District's

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share of actual operating and maintenance expenses of the City's Sewage Treatment Plant for a budget year. A budget year will be from January 1st through December 31st. The percentage of flow ratio will be calculated from July 1st through June 30th. And once the flow ratio has been established it will remain constant thereafter, provided plus or minus of two percent tolerance will be required before adjusting the previous years percentage of flow ratio. Percentage adjustments will reflect proportionately the District's share of actual O&M expenses.

The following formula will be used to calculate the percentage of flow ratio:

$$\frac{1}{12} \times \frac{a}{b} \times \text{budget estimate for new fiscal year O\&M costs} = \text{estimated WBSD No.1 monthly billing} \times 12 = \text{estimated WBSD No.1 yearly billing}$$

a = metered flow from District's collection system for a twelve month period;

b = total metered flow through the Sewage Treatment Plant during the same twelve month period.

The City will provide to the District no later than July 31st of each year a projected O&M budget estimate for the forthcoming budget year. The City will give to the District a copy of the finalized Sewer O&M budget no later than January 31st of the new budget year, which such O&M budget being annotated to reflect the actual O&M line item expenses that will be billed monthly to the District.

The City will submit to the District three (3) working days after the first City Council meeting a billing for the District's budgeted O&M expenses incurred during the previous month. The District agrees to pay each bill within thirty (30) days of receipt.

It is mutually agreed that for the budget year 1983, the District shall pay the City twenty-five percent of operation and maintenance cost of the Sewage Treatment Plant.

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All questions concerning the District's bills shall be in writing and directed to the City's Administrative Assistant for processing. Questions not resolved to the District's satisfaction may be referred to the joint Sewer Committee by either party for resolution.

The City will evaluate the Wastewater Treatment Plant's actual O&M expenditures at the end of a budget year, such evaluation will serve to make necessary adjustments to the District's paid O&M expenses for the previous budget year.

O&M adjustments will be made in the following manner:

1. Amounts due the District will be reimbursed by:
   a. reducing the amount of the District's estimated O&M expenses for the new budget year, or
   b. by payment of a "lump sum".
2. Amounts due the City will be reimbursed by:
   a. increasing the amount of the District's estimated O&M expenses for the new budget year, or
   b. by payment of a "lump sum".

The choice of options is that of the municipality owing the debt for adjusted O&M expenses.

Evaluation of the actual O&M expenses will be made after January 21st and the District will be notified of the adjustment during the month of February.

ITEM X

The City maintains two (2) renewal, replacement and betterment reserve accounts for the purpose of funding anticipated capital improvements and unforeseen capital expenditures. The reserve accounts are not to be used for routine O&M expenses of expansion. When actual costs are incurred and funds are expended from the reserve accounts, the City will bill the District and such billing will be based on the yearly percentage of flow ratio

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as outlined in ITEM IX (PART 1).

ITEM XI

The security for payment by the District to the City is as follows: (a) the District's "retail" charge to its users will be treated as an expense of operation and maintenance of the District's sewerage system; (b) the District will set its rates and charges sufficient to adequately maintain and operate its system, pay its charges to the City, pay its own debt service and provide for a reserve.

ITEM XII

For the purpose of settling any differences that may arise relating to the operation of any of the terms of this agreement, the City shall select two (2) members of its Council to represent the City, and the District shall select two (2) members of its governing board to represent the District, and such persons shall constitute a committee to consider such differences.

After a fair good faith hearing has been held by the committee, a majority vote of its members shall be the recommended settlement of the differences, and such recommendation shall be certified to the respective governing boards for their consideration and adoption.

The committee shall hold hearings upon seven (7) days notice, and only with all members in attendance. Failure of the members to attend such hearings, without good cause, shall be construed as a withdrawal of the alleged difference.

ITEM XIII

The City and District shall hold and save each other harmless of and from any liability of any kind or nature as to any loan

COPY

debt service repayment required by either the City of District.

PART TWO

PHASE II IMPROVEMENTS

ITEM I

The District agrees to pay to the City, a connection fee for the 1983 Phase II improvements to the Sewage Treatment Plant. Said fee is to be considered as a capacity investment in thirty percent of the additional increment in treatment capacity resulting from the Phase II improvements. As the daily average design flow of the increment of Phase II improvements is 220,000 gallons per day, the capacity of the District's connection fee shall be:

220,000 GPD x 30% = 66,000 gallon per day. *

* capacity based on monthly average flow rate.

The District agrees to pay as a connection fee, thirty percent of Phase II common project costs, conditioned as follows:

1. Common project costs will be considered those costs which benefit both the City and District, and which are integral to construction of said improvements (including bid price and any change orders). Costs which are not considered common project costs, and which shall be borne by the City and District independently, include but are not limited to:
   a. legal fees for municipal bonding and loans, review of interagency agreements, or other non-construction legal assistance.
   b. engineering fees for rate studies, ordinance and interagency agreement developement, assistance in grant or loan acquisition, or other non-construction legal assistance.
   c. administrative costs which are not documented as construction project related or which are a routine function of City operation.

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d. charges for interim interest on loans during the construction period; provided that if the District fails to make partial payments within forty-five (45) days after receipt of request for payment, then the District will be charged their proportionate share of the accrued interim interest for the outstanding amount until payment is made by the District.

2. The City assumes full responsibility regarding the preparation of progress payment estimates.

3. The District shall make monthly progress payments to the City within forty-five (45) days after receipt of request for payment. The billings from the City shall include cost share calculations consistent with conditions of the agreement.

4. The City shall exercise full control in all matters relating to the Phase II Sewage Plant construction and shall determine the amount of awarded contracts.

5. The District's estimated connection fee for Phase II improvements is $276,550.00 and will be proportionally adjusted after awarding of bids, but shall not exceed $75,000.00 in District's cost and the State of Idaho grant eligible participation.

ITEM II

The City and District mutually agree that twenty percent of the existing treatment capacity of 280,000 gallons per day is an equitable percentage allowable to the District for prior District's capacity investments.

As provided for in ITEM I (PART TWO), the District's current connection fee for Phase II improvements is a capacity investment in thirty percent of the 220,000 gallons per day of increased treatment capacity, which totals a gross capacity of 500,000 gallons per day. Therefore, it is agreed that the District's proportionate share of the Sewage Treatment Plant capacity, upon

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IN WITNESS WHEREOF, the parties to this agreement have executed the same by reason of the authorization separately obtained by each party as required by the laws governing their powers.

DATED AT NEWPORT, WASHINGTON, this 27th day of Sept, 1983

Mayor
City of Newport, Washington

ATTEST:

City of Newport
City Clerk-Treasurer

Chairman
West Bonner Sewer District No. 1
of Bonner County, Idaho

ATTEST:

Secretary
West Bonner Sewer District No. 1
of Bonner County, Idaho

COPY

completion of Phase II improvements shall be:

Cwb = 20% x 280,000 GPD + 30% x 220,000 = 122,000 GPD *

* the term "gallons per day" shall be based on a "monthly average flow rate". Cwb means capacity of treatment for West Bonner Sewer District No. 1.

In no event shall it be construed, suggested or implied in any form, that the District shares in the ownership of the City's Wastewater Treatment Plant, irregardless of the District's participation in the costs for expansion, improvements or betterments of the Plant, whether it be in the past, present or in the future.

ITEM III

In the management of the Wastewater Treatment Plant, the City intends to fully utilize the maximum treatment capacity allowable prior to expanding the Plant after the Phase II improvements have been made, provided that unexpected growth would necessitate the expansion of the Plant prior to reaching maximum treatment capacity. However, the District's Treatment Plant capacity of 122,000 gallons per day shall be made available by the City to the District as needed.

Whether it be the City, or the District, or both exceeding their respective current, allowable capacities (whereby the maximum treatment capacity is reached), that would necessitate the need to expand the plant. That expansion will be determined by the City, and such determination will be based on the terms and conditions of this agreement.

In the event that it shall become necessary for the City to up-grade the Wastewater Treatment Plant (i.e. to maintain the quality of effluent to meet changed regulatory standards), the District agrees that it will participate in the cost of the improvements.

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All costs related to up-grading, improvements or betterments of the Wastewater Treatment Plant, whereby the District participates, will be negotiated on a ratio basis.

If the City should expand treatment capacity and it is determined under the terms of this agreement that the District is not required to participate, then the District would not be charged for additional O&M costs caused by expansion.

PART THREE

STANDARD PROVISIONS

ITEM I

The life of this contract shall be for a period of thirty (30) years from date hereof. The City hereby grants to the District the option to extend the life of this contract for an additional twenty (20) years from the expiration date of this agreement, by making written notice to the City one-hundred eighty (180) days prior to the date of expiration. Thereafter, any further extensions of time shall be for such periods as shall be agreed upon by the City and the District.

ITEM II

The agreement shall be in full force and effect from such date as each of the parties shall take the action required by law to validate the same.

ITEM III

This agreement, upon signing, supercedes all prior agreements between the City and District pertaining to the same subject matter.

Appendix D-17
Project Easement and Permit Information

Easement Documentation and Permit Applications

James A. Sewell & Associates, LLC

Easements North of U.S. Highway 2

James A. Sewell & Associates, LLC

AGREEMENT TO CONVEY EASEMENTS/DEDICATIONS
(Ward Family Living Trust/West Bonner Water & Sewer District)

This Agreement is dated this 29th day of November, 2011, by and between James L. Ward and Bobbie J. Ward, Trustees of the Ward Family Living Trust, with its principal place of business located at PO Box 325 Oldtown, ID 83822 (hereinafter referred to as "Grantor") and West Bonner Water & Sewer District No. 1, a political subdivision of the State of Idaho, with its principal place of business located at 215 N. Washington Ave, Oldtown, ID 83822 (hereinafter referred to as "Grantee").

RECITALS

A. Grantor is the owner of various parcels of real property located in Bonner County, Idaho.

B. Grantee is in the process of constructing certain improvements and extensions of its existing water and sewer system in Oldtown, Idaho.

C. In order to facilitate access and use of these improvements, Grantor agrees to convey certain access/utility easements and dedicate certain parcels to Grantee as more fully set forth herein.

NOW, THEREFORE, based upon the mutual consideration contained herein, the parties agree as follows:

1. **Conveyance of Easement or Right of Way**: Grantor, upon the express conditions set forth in paragraph 4, does hereby agree to grant, assign and convey to Grantee access and utility easements as more fully identified in the Attachments 1-5. Said easements shall convey from Grantor to Grantee a perpetual, free, continuous and uninterrupted right to use the Easement Area to construct, reconstruct, operate, maintain and repair water and/or sewer lines. The easement shall provide that Grantee, or its successors or assigns, will be solely responsible for construction and maintenance costs of the Easement Area.

Upon completion of the construction, the Grantee shall restore the surface of the property to its original condition and shall indemnify and hold the Grantor harmless against any and all loss, cost, or damage arising out of the exercise of the rights granted herein.

2. **Dedication of Parcels for Public Use**: Grantor, upon the express conditions set forth in paragraph 4, does hereby agree to dedicate and grant to Grantee, in fee simple and for public purposes, certain parcels of real estate as more fully identified in the Attachment 6. In addition, Grantor hereby agrees to dedicate to the City of Oldtown, in fee simple and for public purposes, certain parcels of real estate as more fully identified in the Attachment 7.

3. **Purchase Price**: The total purchase price for the Easements and Dedication shall be Fifty Thousand Dollars ($50,000.00) to be paid out of the funding set forth in paragraph 4, below.

4. **Condition of Agreement**. Grantee has applied for funding through the Idaho Department of Environmental Quality (IDEQ) in the amount of $2,400,000.00 to be applied to upgrade and extend the Grantee's water lines. The parties agree that the Grant of Easement and Deed of Dedication for Public Use set forth in this the Agreement are expressly conditioned upon IDEQ granting and releasing funding in the amount of $2,400,000.00. This agreement shall be null and void, without any further liability thereon, and the Easements and Dedications shall not be recorded in the event IDEQ does not grant and release the funding as requested.

5. **Easement to Run with the Land**: So long as they are used for the public purpose of water and sewer lines construction and maintenance, the easements granted herein shall run with the land and inure to the benefit of the Grantee to this Agreement, together with its agents, successors and assigns.

6. **Miscellaneous**: This Agreement shall be governed by the laws of the state of Idaho. Venue for any dispute arising out of this Agreement shall be in Kootenai County, Idaho. In the event a lawsuit arises out of this agreement, the prevailing party therein shall be entitled to an award of its reasonable attorney fees and costs.

Dated this 29 day of November, 2011.

WARD FAMILY
LIVING TRUST

By: James L. Ward, Trustee

WEST BONNER WATER & SEWER
DISTRICT NO. 1

By: Lonnie Orr
Title: Chairman

By: Bobbie J. Ward, Trustee

STATE OF Arizona
:ss.
County of Yuma

On this 29 day of November, 2011, before me the undersigned, a Notary Public for Idaho, personally appeared, James L. Ward and Bobbie J. Ward, Trustees of the Ward Family Living Trust, the entity whose name is subscribed to the within instrument and acknowledged to me that they executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year first written above.

DONNA M. WHITE
Notary Public - Arizona
Yuma County
My Comm. Expires May 26, 2014

Notary Public for ~~Idaho~~ AZ
Residing at: Yuma County
My Commission Expires: May 26, 2014

~~STATE OF IDAHO~~)
:ss.
County of Yuma

On this 29 day of November, 2011, before me the undersigned, a Notary Public for Idaho, personally appeared Lonnie Orr known or identified to me to be the Chairman of the West Bonner Water and Sewer District No. 1, the entity whose name is subscribed to the within instrument and acknowledged to me that he executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year first written above.

Notary Public for Idaho
Residing at: _____
My Commission Expires: _____

Should be for Lonnie

Donna White

ATTACHMENT 1

Recorded at the Request of (when recorded return to):	

UTILITY AND DRAINAGE EASEMENT

KNOW ALL MEN BY THESE PRESENT that JAMES L. WARD and BOBBIE J. WARD, Trustees of the WARD FAMILY LIVING TRUST, whose address is PO Box 325, Oldtown, ID 83822 (hereinafter referred to as "Grantor"), for and in consideration of ten dollars ($10.00), the receipt of which is hereby acknowledged, and the further consideration of the benefits to be derived by Grantor from the placing of water mains, sanitary sewer mains, and public utilities on the premises hereinafter described, do hereby grant and convey unto the WEST BONNER WATER AND SEWER DISTRICT NO. 1, a water and sewer district created pursuant to Idaho law (hereinafter referred to as "Grantee"), whose address is 215 N. Washington Ave., Oldtown, ID 83822, an easement to construct, reconstruct and perpetually maintain public utility tanks and lines and the incidental drainage thereof in, upon and across the following described land, to wit:

> All that certain tract, piece or parcel of land, lying and being situated in the County of Bonner, State of Idaho, described in the attached legal description and diagram (EXHIBIT "Ward 1" and "Ward 2") attached hereto and made a part hereof for all purposes, to which reference is made for a more particular description of said property.

TO HAVE AND TO HOLD the same perpetually to the Grantee, its successors and assigns, together with the right and privilege at any and all times to enter said premises, or any part thereof, for the purpose of constructing and maintaining said water mains, public utilities, drainage and for making connections therewith; all upon the condition that the Grantee shall be solely responsible for all construction and maintenance costs in the easement area and the Grantee will at all times after doing any work in connection with the construction or repair of said water mains, sanitary sewer, or public utilities restore the surface of said premises to the condition in which the same was found before such work was undertaken. Grantee further

agrees to indemnify and hold Grantor harmless against any and all loss, cost, or damage arising out of the exercise of the rights granted herein.

DATED this 29 day of November, 2011.

WARD FAMILY LIVING TRUST

By: James L. Ward, Trustee

By: Bobbie J. Ward, Trustee

STATE OF Arizona)
:ss
County of Yuma)

On this 29 day of November, 20 11 before me Donna White, the undersigned Notary Public, personally appeared James L. Ward and Bobbie J. Ward, known or identified to me to be the Trustees of the Ward Family Living Trust, the person who executed the instrument on behalf of said trust and acknowledged to me that such trust executed the same.

(SEAL)

Notary Public for Yuma County
Residing at: Yuma Arizona
Commission Expires: May 26, 2014

DONNA M. WHITE
Notary Public - Arizona
Yuma County
My Comm. Expires May 26, 2014

JAMES A. SEWELL & ASSOCIATES, LLC

600-4th Street West
Newport, Washington 99156
(509) 447-3626 (208) 437-2641
(509) 447-2112 Fax

*Civil Engineering *Electrical Engineering *Land Surveying *Building Inspection * Land Use Planning

UTILITY and DRAINAGE EASEMENT

6-07-2010

A Tract of land for a utility easement located in Section 24, Township 56 North, Range 6 West, Boise Meridian, Bonner County, Idaho, said tract of land being 20.00 feet in width, 10.00 feet on each side of the following described centerline:

Beginning at a point that bears N88°57'22"W 200.00 feet and S0°57'55"W 30.00 feet, all from the North 1/16th corner (Northeast corner of the Southeast Quarter of the Northeast Quarter and being an existing concrete monument) of said Section 24; thence N88°57'22"W, 60.00 feet to the terminus of this easement.

WATER TANK SITE DRAINAGE EASEMENT

EXHIBIT Ward 1

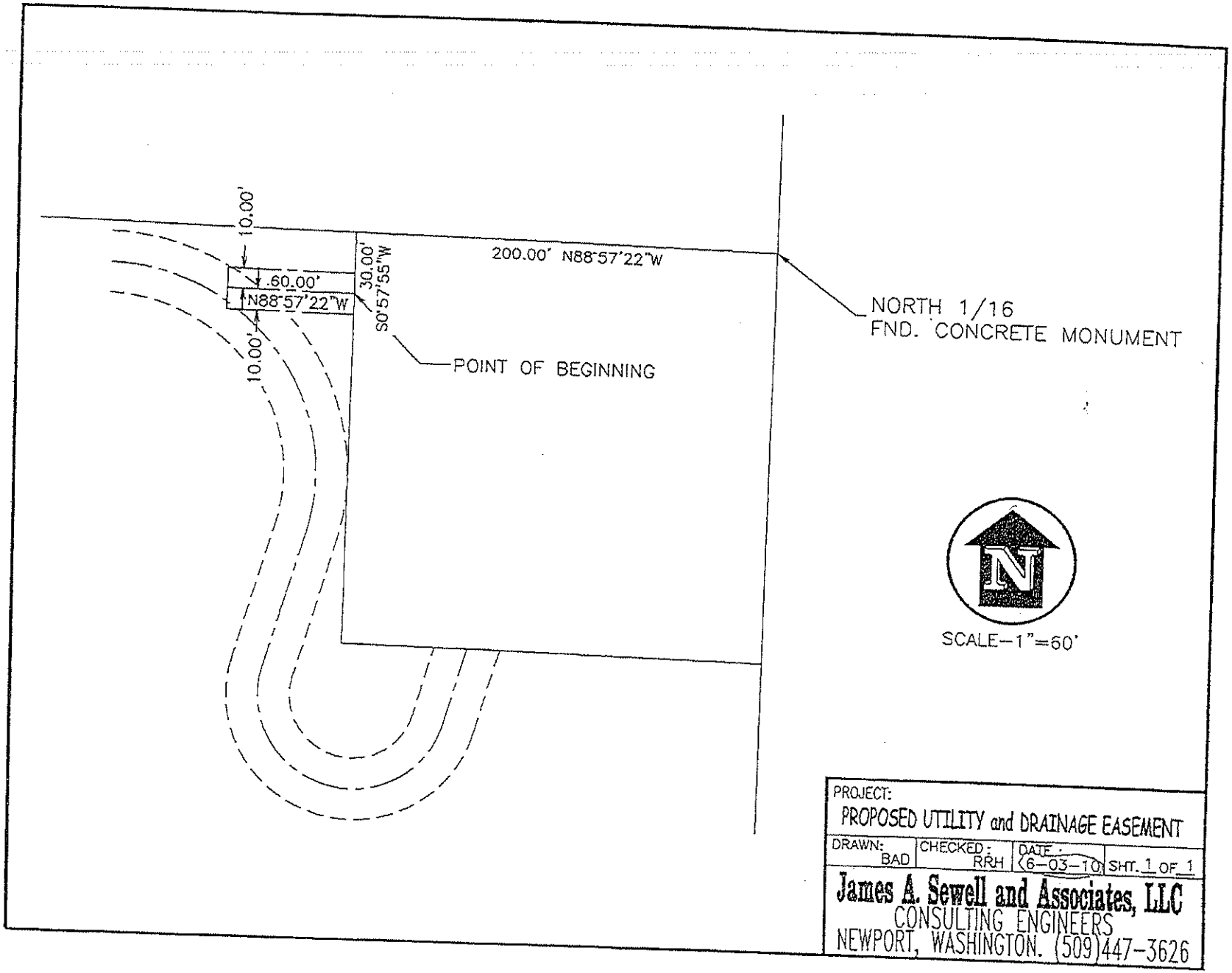


EXHIBIT Weed 2

8

ATTACHMENT 2

Recorded at the Request of (when recorded return to):	

UTILITY AND ACCESS EASEMENT

KNOW ALL MEN BY THESE PRESENT that JAMES L. WARD and BOBBIE J. WARD, Trustees of the WARD FAMILY LIVING TRUST, whose address is PO Box 325, Oldtown, ID 83822 (hereinafter referred to as "Grantor"), for and in consideration of ten dollars ($10.00), the receipt of which is hereby acknowledged, and the further consideration of the benefits to be derived by Grantor from the placing of water mains, sanitary sewer mains, and public utilities on the premises hereinafter described, do hereby grant and convey unto the WEST BONNER WATER AND SEWER DISTRICT NO. 1, a water and sewer district created pursuant to Idaho law (hereinafter referred to as "Grantee"), whose address is 215 N. Washington Ave., Oldtown, ID 83822, an easement to construct, reconstruct and perpetually maintain water mains, sanitary sewer mains, and public utilities, together with the right to make connections and such other construction and improvements incidental to the construction and maintenance of such lines in, upon and across the following described land, to wit:

> All that certain tract, piece or parcel of land, lying and being situated in the County of Bonner, State of Idaho, described in the attached legal description and diagram (EXHIBIT "Ward 5" and EXHIBIT "Ward 6") attached hereto and made a part hereof for all purposes, to which reference is made for a more particular description of said property.

TO HAVE AND TO HOLD the same perpetually to the Grantee, its successors and assigns, together with the right and privilege at any and all times to enter said premises, or any part thereof, for the purpose of constructing and maintaining said water mains, sanitary sewer mains, and public utilities, and for making connections therewith; all upon the condition that the Grantee shall be solely responsible for all construction and maintenance costs in the easement area and the Grantee will at all times after doing any work in connection with the construction or repair of said water mains, sanitary sewer, or public utilities restore the surface of said premises

to the condition in which the same was found before such work was undertaken. Grantee further agrees to indemnify and hold Grantor harmless against any and all loss, cost, or damage arising out of the exercise of the rights granted herein.

DATED this 29 day of November, 2011.

WARD FAMILY LIVING TRUST

By: James L. Ward, Trustee

By: Bobbie J. Ward, Trustee

STATE OF Arizona)
:ss
County of Yuma)

On this 29 day of November 2011 before me Donna White, the undersigned Notary Public, personally appeared James L. Ward and Bobbie J. Ward, known or identified to me to be the Trustees of the Ward Family Living Trust, the person who executed the instrument on behalf of said trust and acknowledged to me that such trust executed the same.

(SEAL)

DONNA M. WHITE
Notary Public - Arizona
Yuma County
My Comm. Expires May 26, 2014

Notary Public for Arizona
Residing at: Yuma County
Commission Expires: May 24 2014

JAMES A. SEWELL & ASSOCIATES, LLC

600-4th Street West
Newport, Washington 99156
(509) 447-3626 (208) 437-2641
(509) 447-2112 Fax

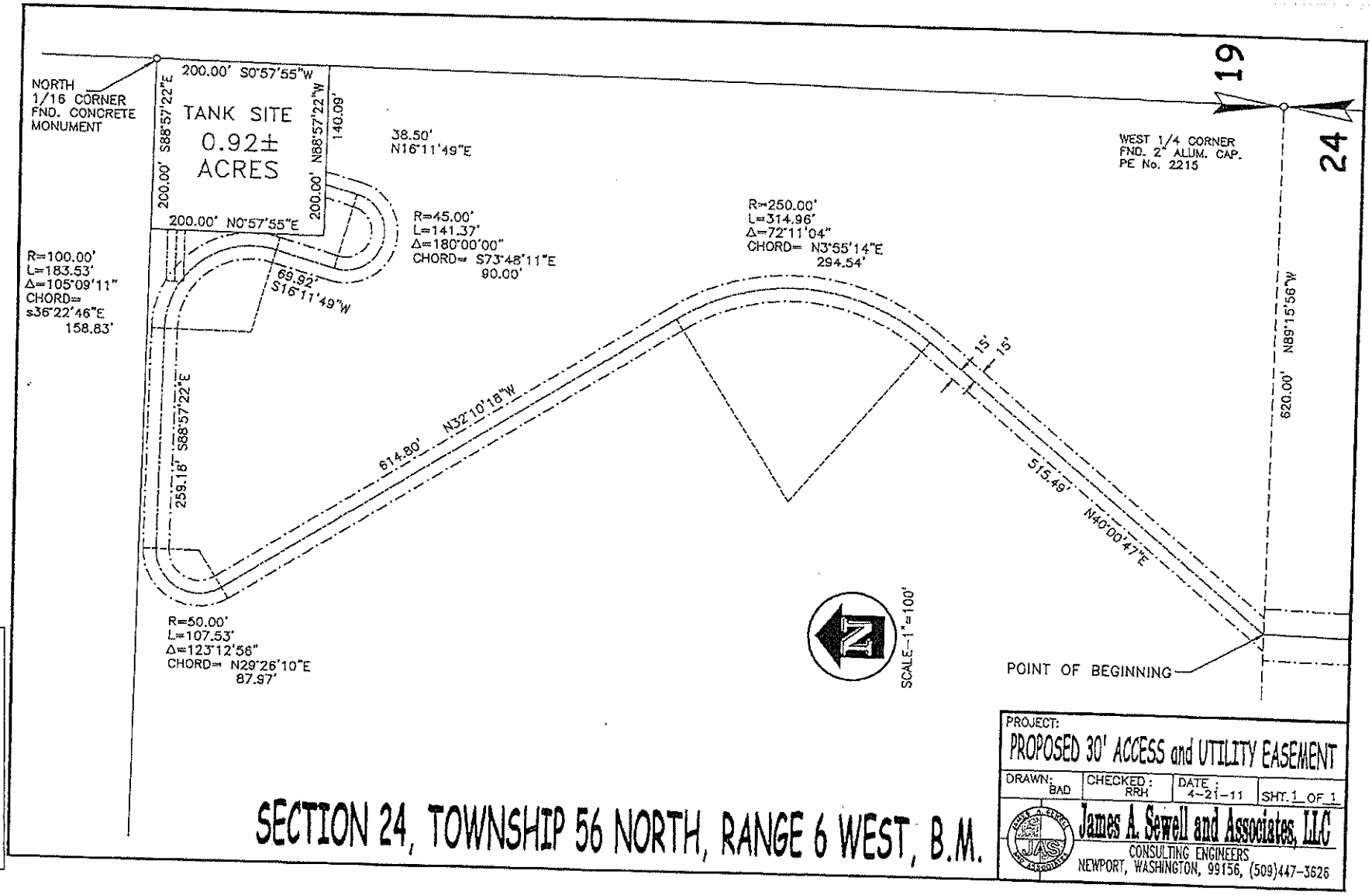
*Civil Engineering *Electrical Engineering *Land Surveying *Building Inspection * Land Use Planning

30' ACCESS and UTILITY EASEMENT
4-21-2011

A Tract of land for an access and utility easement located in Section 24, Township 56 North, Range 6 West, B.M., Bonner County, Idaho. Said tract being 30 feet in width, 15 feet on each side of the following described line:

Beginning at a point along the East West Center of Section Line of said Section 24 as shown on a Record of Survey by RLS No. 758 recorded May 28th, 1976, said point being N89°15'56"W 620.00 feet from the East Quarter Corner of said Section 24; thence N40°00'47"E 515.49 feet; thence following a curve to the left, 314.96 feet (delta = 72°11'04", radius = 250.00 feet, chord = N3°55'14"E, 294.54 feet); thence N32°10'18"W 614.80 feet; thence following a curve to the right, 107.53 feet (delta = 123°12'56", radius = 50.00 feet, chord = N29°26'10"E, 87.97 feet) to a point 20.00 feet southerly of a line that runs East-West as shown on Record of Survey Recorder's No. 271925 (East-West line bearing as shown on said Record of Survey is N88°01'29"W); thence S88°57'22"E 259.18 feet to a point 20.00 feet southerly of said East-West line; thence following a curve to the right, 183.53 feet (delta = 105°09'11", radius = 100.00 feet, chord = S36°22'46"E, 158.83 feet); thence S16°11'49"W 69.92 feet; thence following a curve to the left, 141.37 feet (delta = 180°00'00", radius = 45.00 feet, chord = S73°48'11"E, 90.00 feet); thence N16°11'49"E 38.50 feet to the South line of a tract of land for a water tank site and the terminus of this access and utility easement.

EXHIBIT Word 3



SECTION 24, TOWNSHIP 56 NORTH, RANGE 6 WEST, B.M.

EXHIBIT Wood 4

ATTACHMENT 3

Recorded at the Request of (when recorded return to):	

UTILITY AND ACCESS EASEMENT

KNOW ALL MEN BY THESE PRESENT that JAMES L. WARD and BOBBIE J. WARD, Trustees of the WARD FAMILY LIVING TRUST, whose address is PO Box 325, Oldtown, ID 83822 (hereinafter referred to as "Grantor"), for and in consideration of ten dollars ($10.00), the receipt of which is hereby acknowledged, and the further consideration of the benefits to be derived by Grantor from the placing of water mains, sanitary sewer mains, and public utilities on the premises hereinafter described, do hereby grant and convey unto the WEST BONNER WATER AND SEWER DISTRICT NO. 1, a water and sewer district created pursuant to Idaho law (hereinafter referred to as "Grantee"), whose address is 215 N. Washington Ave., Oldtown, ID 83822, an easement to construct, reconstruct and perpetually maintain water mains, sanitary sewer mains, and public utilities, together with the right to make connections and such other construction and improvements incidental to the construction and maintenance of such lines in, upon and across the following described land, to wit:

> All that certain tract, piece or parcel of land, lying and being situated in the County of Bonner, State of Idaho, described in the attached legal description and diagram (EXHIBIT "Ward 7" and EXHIBIT "Ward 8") attached hereto and made a part hereof for all purposes, to which reference is made for a more particular description of said property.

TO HAVE AND TO HOLD the same perpetually to the Grantee, its successors and assigns, together with the right and privilege at any and all times to enter said premises, or any part thereof, for the purpose of constructing and maintaining said water mains, sanitary sewer mains, and public utilities, and for making connections therewith; all upon the condition that the Grantee shall be solely responsible for all construction and maintenance costs in the easement area and the Grantee will at all times after doing any work in connection with the construction or repair of said water mains, sanitary sewer, or public utilities restore the surface of said premises

to the condition in which the same was found before such work was undertaken. Grantee further agrees to indemnify and hold Grantor harmless against any and all loss, cost, or damage arising out of the exercise of the rights granted herein.

DATED this 29 day of November, 2011.

WARD FAMILY LIVING TRUST

By: James L. Ward, Trustee

By: Bobbie J. Ward, Trustee

STATE OF Arizona)
:ss
County of Yuma)

On this 29 day of November 2011, before me Donna White, the undersigned Notary Public, personally appeared James L. Ward and Bobbie J. Ward, known or identified to me to be the Trustees of the Ward Family Living Trust, the person who executed the instrument on behalf of said trust and acknowledged to me that such trust executed the same.

(SEAL)

DONNA M. WHITE
Notary Public - Arizona
Yuma County
My Comm. Expires May 26, 2014

Notary Public for Yuma County
Residing at: Yuma County Arizona
Commission Expires: May 26 2014

JAMES A. SEWELL & ASSOCIATES, LLC

600-4th Street West
Newport, Washington 99156
(509) 447-3626 (208) 437-2641
(509) 447-2112 Fax

*Civil Engineering *Electrical Engineering *Land Surveying *Building Inspection * Land Use Planning

60' ACCESS and UTILITY EASEMENT

6-01-2010

A Tract of land for an access and utility easement located in Section 24, Township 56 North, Range 6 West, B.M., Bonner County, Idaho. Said tract being 60 feet in width, 30 feet on each side of the following described line:

Beginning at a point along the East West Center of Section Line of said Section 24 as shown on a Record of Survey by RLS No. 758 recorded May 28th, 1976, said point being N89°15'56"W 620.00 feet from the East Quarter Corner of said Section 24; thence S1°18'14"W, parallel to the East Line of said Section 24, 692.23 feet to the North Right-of-Way of United States Highway No. 2 and the terminus of this Easement.

EXHIBIT 5

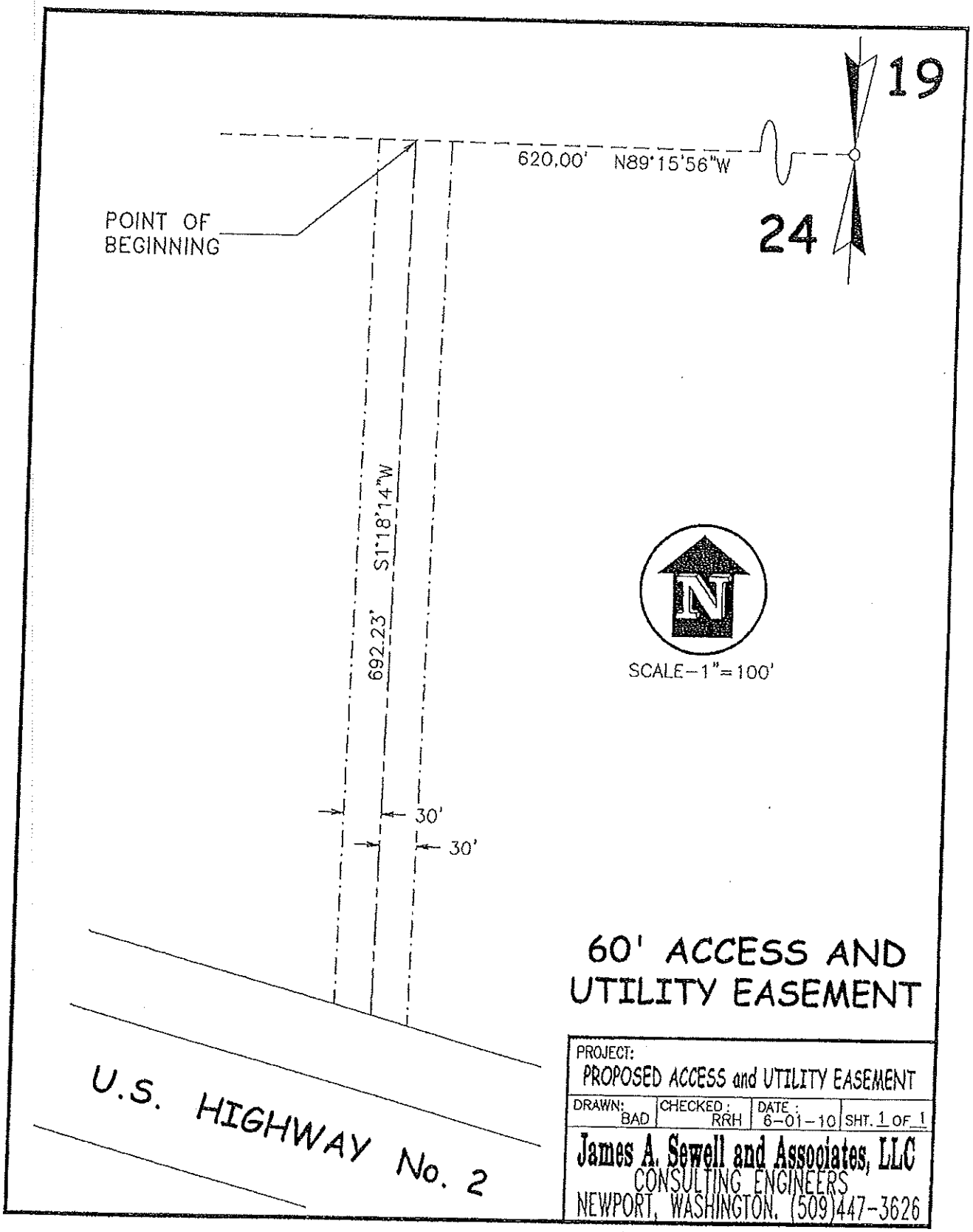


EXHIBIT Word 60

ATTACHMENT 4

Recorded at the Request of (when recorded return to):	

UTILITY AND ACCESS EASEMENT

KNOW ALL MEN BY THESE PRESENT that JAMES L. WARD and BOBBIE J. WARD, Trustees of the WARD FAMILY LIVING TRUST, whose address is PO Box 325, Oldtown, ID 83822 (hereinafter referred to as "Grantor"), for and in consideration of ten dollars ($10.00), the receipt of which is hereby acknowledged, and the further consideration of the benefits to be derived by Grantor from the placing of water mains, sanitary sewer mains, and public utilities on the premises hereinafter described, do hereby grant and convey unto the WEST BONNER WATER AND SEWER DISTRICT NO. 1, a water and sewer district created pursuant to Idaho law (hereinafter referred to as "Grantee"), whose address is 215 N. Washington Ave., Oldtown, ID 83822, an easement to construct, reconstruct and perpetually maintain water mains, sanitary sewer mains, and public utilities, together with the right to make connections and such other construction and improvements incidental to the construction and maintenance of such lines in, upon and across the following described land, to wit:

> All that certain tract, piece or parcel of land, lying and being situated in the County of Bonner, State of Idaho, described in the attached legal description and diagram (EXHIBIT "Ward 9" and EXHIBIT "Ward 10") attached hereto and made a part hereof for all purposes, to which reference is made for a more particular description of said property.

TO HAVE AND TO HOLD the same perpetually to the Grantee, its successors and assigns, together with the right and privilege at any and all times to enter said premises, or any part thereof, for the purpose of constructing and maintaining said water mains, sanitary sewer mains, and public utilities, and for making connections therewith; all upon the condition that the Grantee shall be solely responsible for all construction and maintenance costs in the easement area and the Grantee will at all times after doing any work in connection with the construction or repair of said water mains, sanitary sewer, or public utilities restore the surface of said premises

to the condition in which the same was found before such work was undertaken. Grantee further agrees to indemnify and hold Grantor harmless against any and all loss, cost, or damage arising out of the exercise of the rights granted herein.

DATED this 29 day of November, 2011.

WARD FAMILY LIVING TRUST

By: James L. Ward, Trustee

By: Bobbie J. Ward, Trustee

STATE OF Arizona)
:ss
County of Yuma)

On this 29 day of November 2011 before me Donna White, the undersigned Notary Public, personally appeared James L. Ward and Bobbie J. Ward, known or identified to me to be the Trustees of the Ward Family Living Trust, the person who executed the instrument on behalf of said trust and acknowledged to me that such trust executed the same.

(SEAL)

Notary Public for Arizona
Residing at: Yuma County Arizona
Commission Expires May 26 2014

DONNA M. WHITE
Notary Public - Arizona
Yuma County
My Comm. Expires May 26, 2014

JAMES A. SEWELL & ASSOCIATES, LLC

600-4th Street West
Newport, Washington 99156
(509) 447-3626 (208) 437-2641
(509) 447-2112 Fax

*Civil Engineering *Electrical Engineering *Land Surveying *Building Inspection * Land Use Planning

40' UTILITY EASEMENT

9-16-2010

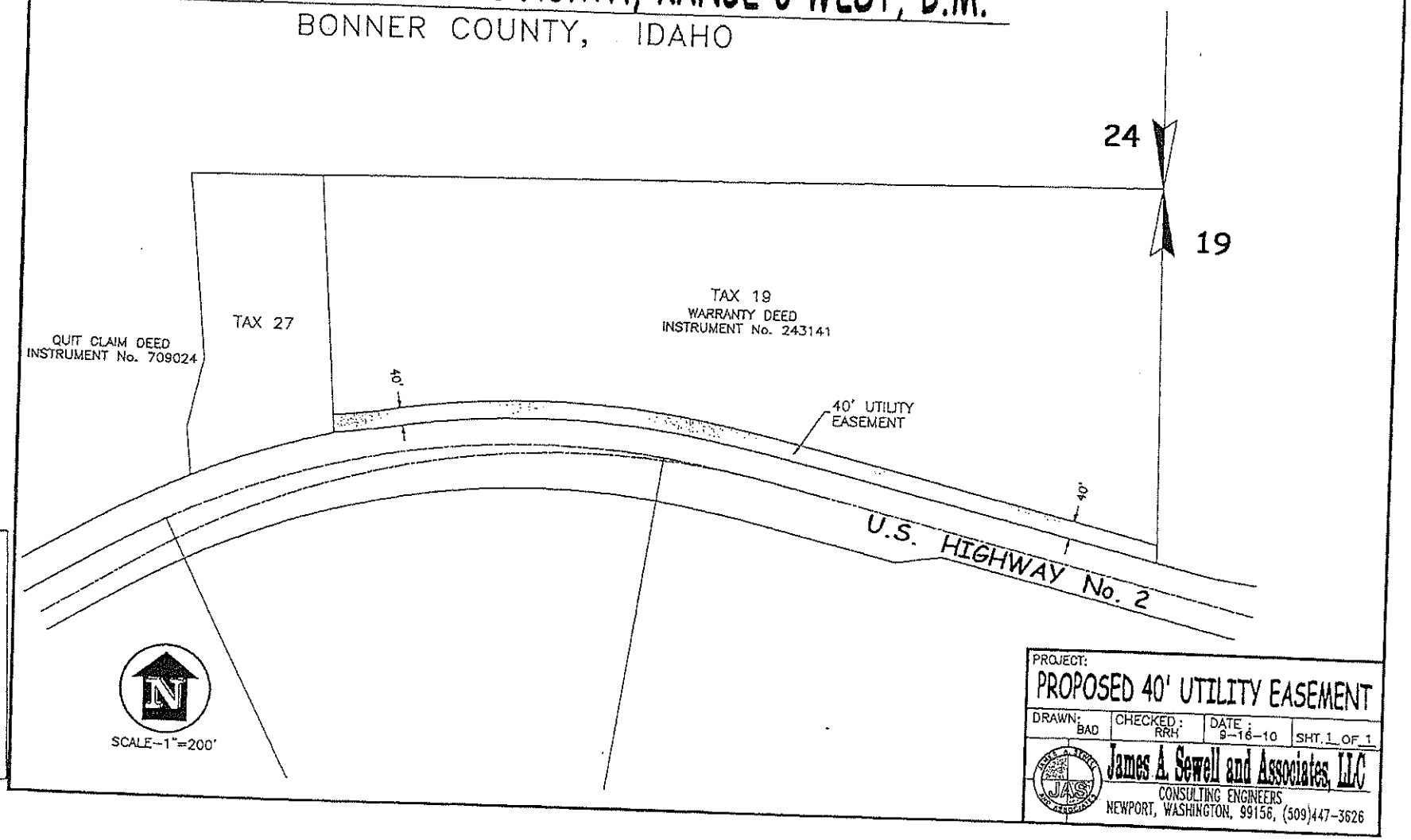
A Tract of land for a utility easement located in Section 24, Township 56 North, Range 6 West, B.M., Bonner County, Idaho. Said tract being 40 feet in width and more particularly described as follows:

A 40.00 foot wide strip of land lying 40.00 feet northerly of and parallel to the North Right-of-Way Line of United States Highway No. 2. Said 40.00 foot wide strip of land lies Easterly of the East Line of Tax 27 as described as an exception in Quit Claim Deed Instrument No. 709204 and Westerly of the East Line of said Section 24.

EXHIBIT Weed 7

SECTION 24, TOWNSHIP 56 NORTH, RANGE 6 WEST, B.M.

BONNER COUNTY, IDAHO



PROJECT:
PROPOSED 40' UTILITY EASEMENT

DRAWN: BAD	CHECKED: RRH	DATE: 9-16-10	SHT. 1 OF 1

James A. Sewell and Associates, LLC
CONSULTING ENGINEERS
NEWPORT, WASHINGTON, 99156, (509)447-3626

EXHIBIT Wood 8

84

ATTACHMENT 5

Recorded at the Request of (when recorded return to):	

UTILITY AND ACCESS EASEMENT

KNOW ALL MEN BY THESE PRESENT that JAMES L. WARD and BOBBIE J. WARD, Trustees of the WARD FAMILY LIVING TRUST, whose address is PO Box 325, Oldtown, ID 83822 (hereinafter referred to as "Grantor"), for and in consideration of ten dollars ($10.00), the receipt of which is hereby acknowledged, and the further consideration of the benefits to be derived by Grantor from the placing of water mains, sanitary sewer mains, and public utilities on the premises hereinafter described, do hereby grant and convey unto the WEST BONNER WATER AND SEWER DISTRICT NO. 1, a water and sewer district created pursuant to Idaho law (hereinafter referred to as "Grantee"), whose address is 215 N. Washington Ave., Oldtown, ID 83822, an easement to construct, reconstruct and perpetually maintain water mains, sanitary sewer mains, and public utilities, together with the right to make connections and such other construction and improvements incidental to the construction and maintenance of such lines in, upon and across the following described land, to wit:

> All that certain tract, piece or parcel of land, lying and being situated in the County of Bonner, State of Idaho, described in the attached legal description and diagram (EXHIBIT "Ward 3" and EXHIBIT "Ward 4") attached hereto and made a part hereof for all purposes, to which reference is made for a more particular description of said property.

TO HAVE AND TO HOLD the same perpetually to the Grantee, its successors and assigns, together with the right and privilege at any and all times to enter said premises, or any part thereof, for the purpose of constructing and maintaining said water mains, sanitary sewer mains, and public utilities, and for making connections therewith; all upon the condition that the Grantee shall be solely responsible for all construction and maintenance costs in the easement area and the Grantee will at all times after doing any work in connection with the construction or repair of said water mains, sanitary sewer, or public utilities restore the surface of said premises

to the condition in which the same was found before such work was undertaken. Grantee further agrees to indemnify and hold Grantor harmless against any and all loss, cost, or damage arising out of the exercise of the rights granted herein.

DATED this 29 day of November, 2011.

WARD FAMILY LIVING TRUST

By: James L. Ward, Trustee

By: Bobbie J. Ward, Trustee

STATE OF Arizona)
:ss
County of Yuma)

On this 29 day of November 2011, before me Donna White, the undersigned Notary Public, personally appeared James L. Ward and Bobbie J. Ward, known or identified to me to be the Trustees of the Ward Family Living Trust, the person who executed the instrument on behalf of said trust and acknowledged to me that such trust executed the same.

(SEAL)

Notary Public for Arizona
Residing at: Yuma Arizona
Commission Expires: May 26 2014

DONNA M. WHITE
Notary Public - Arizona
Yuma County
My Comm. Expires May 26, 2014

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*Civil Engineering *Electrical Engineering *Land Surveying *Building Inspection * Land Use Planning

9-16-2010

A Tract of land for a Right-of-Way located in Section 24, Township 56 North, Range 6 West, B.M., Bonner County, Idaho. Said tract being described as follows:

A strip of land lying 60.00 foot Easterly and parallel to the East line of Tax 27 as described as an exception in Quit Claim Deed Instrument No. 709024. Said 60.00 foot Right-of-Way lies Northerly of the North Right-of-Way line of United States Highway No. 2 and southerly of the East-West centerline of said Section 24. The Easterly Boundary line of said 60.00 foot Right-of-Way bears 6.60 feet Easterly of and parallel to the Westerly boundary line of Tax 19 as described in Warranty Deed Instrument Number 243141.

Also, the following described parcel of land is included in this Right-of-Way:

Beginning at the Northeast Corner of said Tax 27 (as described as an exception in Quit Claim Deed Instrument Number 709024); thence S89°11'04"W, along said East-West centerline of Section 24, 29.96 feet; thence N0°48'56"W, 60.00 feet; thence N89°11'04"E, 120.00 feet; thence S0°48'56"E, 60.00 feet to its intersection with said East-West centerline of Section 24; thence S89°11'04"W, along said East-West centerline of Section 24, 90.04 feet to the point of beginning.

Said Right-of-Way containing approximately 0.97 acres.

EXHIBIT Word 9

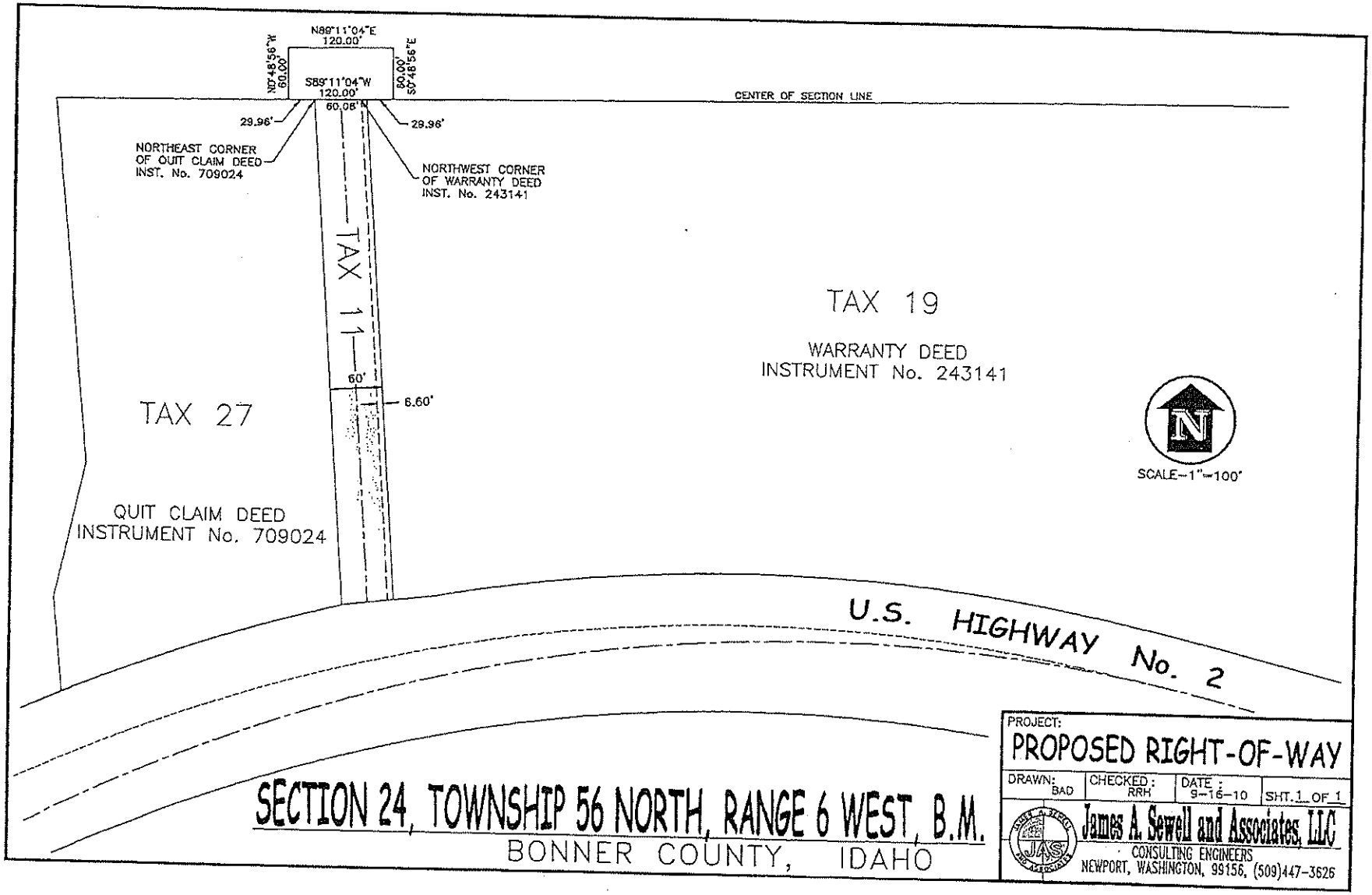

EXHIBIT used 10

99

ATTACHMENT 6

Recorded at the Request of (when recorded return to):	

DEED OF DEDICATION

NOW, THEREFORE, in consideration of the premises, and other good and value consideration, the receipt and sufficiency of which are hereby acknowledged, JAMES L. WARD and BOBBIE J. WARD, Trustees of the WARD FAMILY LIVING TRUST, whose address is PO Box 325, Oldtown, ID 83822, being the sole owner and possessor hereof, does hereby dedicate, grant and convey unto WEST BONNER WATER & SEWER DISTRICT NO. 1, an Idaho political subdivision ("Grantee"), together with its successors and assigns, in fee simple, for the purpose of operating a water tank site, the property more particularly described as follows:

SEE ATTACHED EXHIBIT "WARD 11" FOR A LEGAL DESCRIPTION

SEE ATTACHED EXHIBIT "WARD 12" FOR A DIAGRAM

DATED this 29 day of November, 2011.

WARD FAMILY LIVING TRUST

By: JAMES L. WARD
Title: Trustee

DONNA M. WHITE
Notary Public - Arizona
Yuma County
My Comm. Expires May 26, 2014

By: BOBBIE J. WARD
Title: Trustee

STATE OF Arizona)
:ss
County of Yuma)

On this 29 day of November 2011, before me Donna White, the undersigned Notary Public, personally appeared JAMES L. WARD and BOBBIE J. WARD, known or identified to me to be the Trustees of the WARD FAMILY LIVING TRUST the persons who executed the instrument on behalf of said trust and acknowledged to me that such trust executed the same.

(SEAL)

Notary Public for ~~Idaho~~ Arizona
Residing at: Yuma County
Commission Expires: May 26 2014

DONNA M. WHITE
Notary Public - Arizona
Yuma County
My Comm. Expires May 26, 2014

JAMES A. SEWELL & ASSOCIATES, LLC

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*Civil Engineering *Electrical Engineering *Land Surveying *Building Inspection * Land Use Planning

WATER TANK SITE
4-08-2010

A Tract of land located in Section 24, Township 56 North, Range 6 West, B.M., Bonner County, Idaho, being more particularly described as follows:

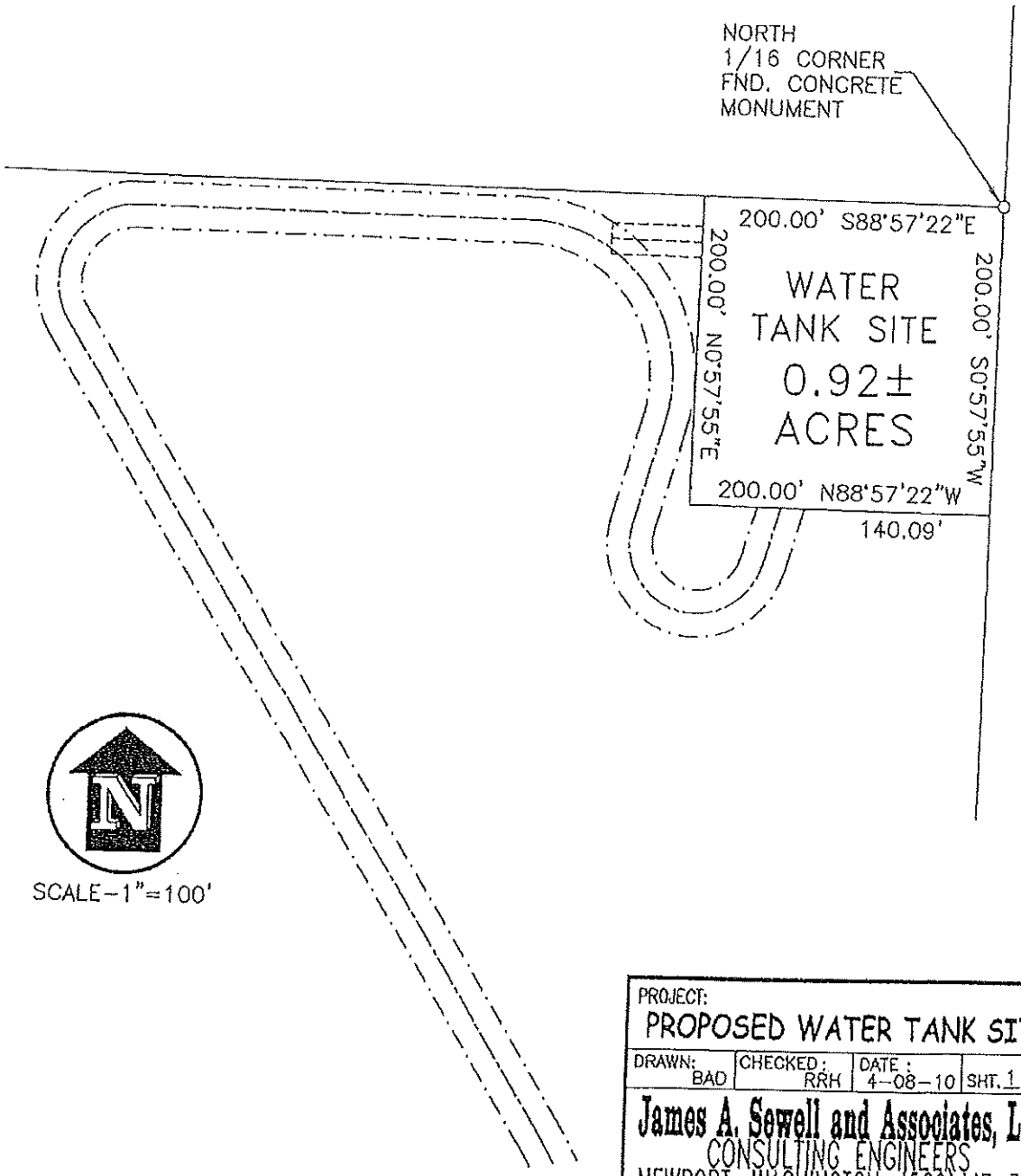
Beginning at the North 1/16 corner common to Section 24, Township 56 North, Range 6 West, B.M. and Section 19, Township 56 North, Range 5 West, B.M.; thence S0°57'55"W along the East line of said Section 24, 200.00 feet; thence N88°57'22"W, parallel to a line that runs East-West as shown on Record of Survey Recorder's No. 271925 (East-West line bearing as shown on said Record of Survey is N88°01'29"W), 200.00 feet; thence N0°57'55"E, parallel to said East line of Section 24, 200.00 feet to its intersection with said East-West line as shown on Record of Survey Recorder's No. 271925; thence S88°57'22"E along said East-West line as shown on Record of Survey Recorder's No. 271925, 200.00 feet to the point of beginning.

Said Tract containing approximately 0.92 acres.

EXHIBIT Ward 11

SECTION 24, TOWNSHIP 56 NORTH, RANGE 6 WEST, B.M.

BONNER COUNTY, IDAHO



PROJECT:
PROPOSED WATER TANK SITE

DRAWN: BAD	CHECKED: RRH	DATE: 4-08-10	SHT. 1 OF 1

James A. Sewell and Associates, LLC
CONSULTING ENGINEERS
NEWPORT, WASHINGTON, (509)447-3626

EXHIBIT Word 12

Recorded at the Request of (when recorded return to):	

DEED OF DEDICATION FOR PUBLIC ROADWAY

NOW, THEREFORE, in consideration of the premises, and other good and value consideration, the receipt and sufficiency of which are hereby acknowledged, JAMES L. WARD and BOBBIE J. WARD, Trustees of the WARD FAMILY LIVING TRUST, whose address is PO Box 325, Oldtown, ID 83822, being the sole owner and possessor hereof, does hereby dedicate, grant and convey unto the CITY OF OLDTOWN, an Idaho political subdivision ("Grantee"), whose address is 215 N. Washington, Oldtown, ID 83822 together with its successors and assigns, in fee simple, for the express public purpose of constructing and maintaining a public roadway thereon, the property more particularly described as follows:

SEE ATTACHED EXHIBIT "WARD 13" FOR A LEGAL DESCRIPTION

SEE ATTACHED EXHIBIT "WARD 14" FOR A DIAGRAM

Provided this Deed of Dedication shall be subject to a prior grant of easement for public utilities by the Ward Family Living Trust to the West Bonner Water and Sewer District No. 1 and recorded in the Bonner County Recorder's Office as Instrument No._____.

DATED this 29 day of November, 2011.

WARD FAMILY LIVING TRUST

By: James L. Ward
Title: Trustee

By: Bobbie J. Ward
Title: Trustee

STATE OF Arizona
County of Yuma) :ss

On this 29 day of November 2011 before me Donna White, the undersigned Notary Public, personally appeared James L. Ward and Bobbie J. Ward, known or identified to me to be the trustees of the Ward Family Living Trust, the persons who executed the instrument on behalf of said trust and acknowledged to me that such trust executed the same.

(SEAL)

Notary Public for Arizona
Residing at: Yuma Arizona
Commission Expires: May 26 2014

DONNA M. WHITE
Notary Public - Arizona
Yuma County
My Comm. Expires May 26, 2014

ATTACHMENT 7

JAMES A. SEWELL & ASSOCIATES, LLC

600-4th Street West
Newport, Washington 99156
(509) 447-3626 (208) 437-2641
(509) 447-2112 Fax

*Civil Engineering *Electrical Engineering *Land Surveying *Building Inspection * Land Use Planning

RIGHT-OF-WAY
9-16-2010

A Tract of land for a Right-of-Way located in Section 24, Township 56 North, Range 6 West, B.M., Bonner County, Idaho. Said tract being described as follows:

A strip of land lying 60.00 foot Easterly and parallel to the East line of Tax 27 as described as an exception in Quit Claim Deed Instrument No. 709024. Said 60.00 foot Right-of-Way lies Northerly of the North Right-of-Way line of United States Highway No. 2 and southerly of the East-West centerline of said Section 24. The Easterly Boundary line of said 60.00 foot Right-of-Way bears 6.60 feet Easterly of and parallel to the Westerly boundary line of Tax 19 as described in Warranty Deed Instrument Number 243141.

Also, the following described parcel of land is included in this Right-of-Way:

Beginning at the Northeast Corner of said Tax 27 (as described as an exception in Quit Claim Deed Instrument Number 709024); thence S89°11'04"W, along said East-West centerline of Section 24, 29.96 feet; thence N0°48'56"W, 60.00 feet; thence N89°11'04"E, 120.00 feet; thence S0°48'56"E, 60.00 feet to its intersection with said East-West centerline of Section 24; thence S89°11'04"W, along said East-West centerline of Section 24, 90.04 feet to the point of beginning.

Said Right-of-Way containing approximately 0.97 acres.

EXHIBIT Word 13

38

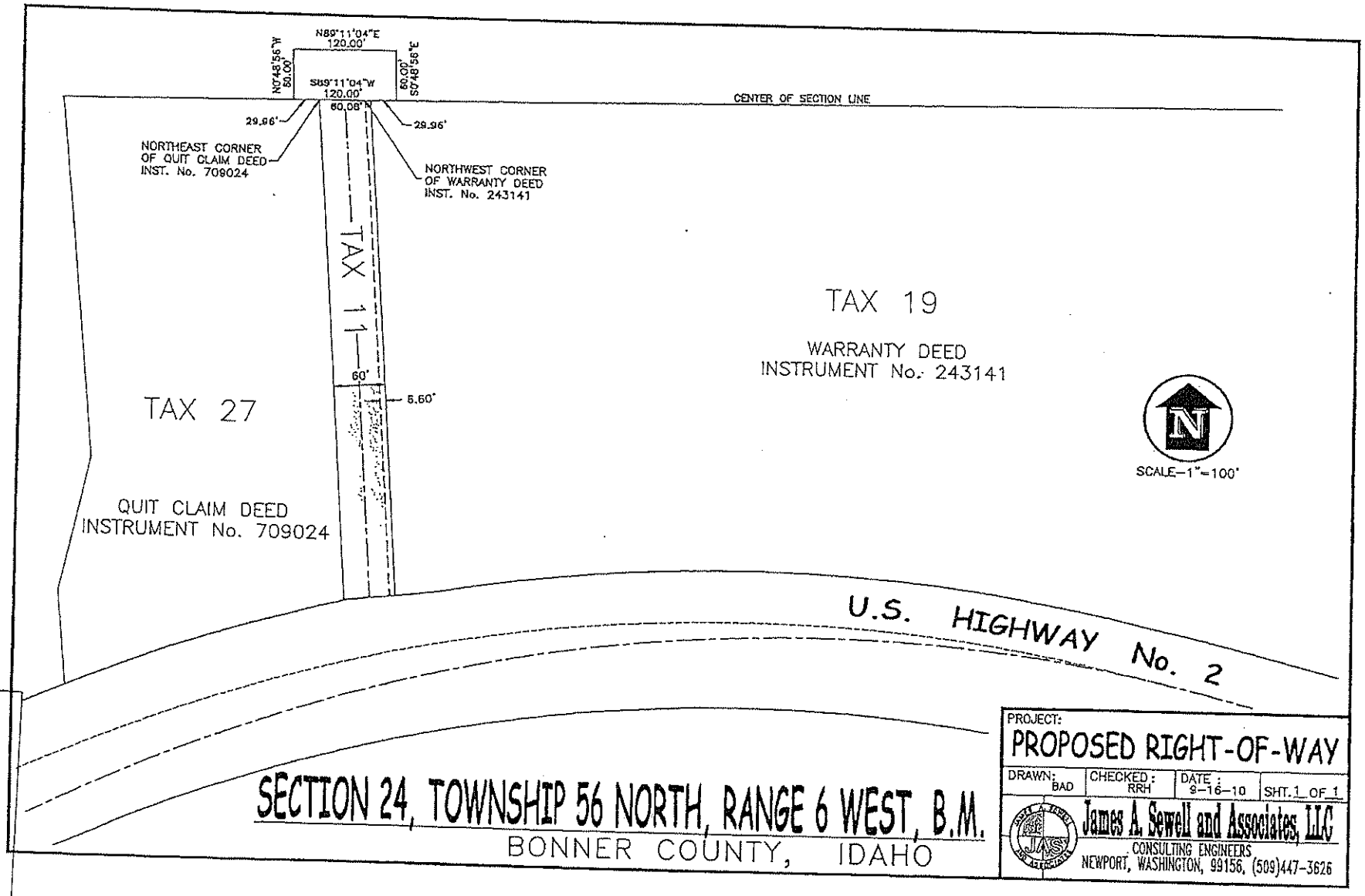


EXHIBIT "A" cont'd

Easements South of U.S. Highway 2

James A. Sewell & Associates, LLC

Recorded at the Request of (when recorded return to):	

DEED OF DEDICATION

NOW, THEREFORE, in consideration of the premises, and other good and value consideration, the receipt and sufficiency of which are hereby acknowledged, JHM INVESTMENTS, LLC, an Idaho limited liability company, whose address is PO Box 190, Athol, ID 83801, being the sole owner and possessor hereof, does hereby dedicate, grant and convey unto WEST BONNER WATER & SEWER DISTRICT, an Idaho political subdivision ("Grantee"), together with its successors and assigns, in fee simple, for the purpose of operating a sewer pump station, sewer lines, water lines and associated appurtenances, the property more particularly described as follows:

SEE ATTACHED EXHIBIT "A" FOR A LEGAL DESCRIPTION

SEE ATTACHED EXHIBIT "B" FOR A PARCEL MAP

DATED this 12th day of September, 2012

JHM INVESTMENTS, LLC

Holly D. Janhsen

By: Holly D. Janhsen
Title: Manager

STATE OF Idaho)
:ss
County of Bonner)

On this 12th day of September 2012 before me Karen Phillips, the undersigned Notary Public, personally appeared Holly D. Janhsen, known or identified to me to be the manager of JHM Investments, LLC, the person who executed the instrument on behalf of said limited liability company and acknowledged to me that such limited liability company executed the same.

(SEAL)

Karen Phillips
Notary Public for Idaho
Residing at: Oldtown, Idaho
Commission Expires: 9-30-14

JAMES A. SEWELL & ASSOCIATES, LLC

600-4th Street West
Newport, Washington 99156
(509) 447-3626 (208) 437-2641
(509) 447-2112 Fax

*Civil Engineering *Electrical Engineering *Land Surveying *Building Inspection * Land Use Planning

JHM Investments, LLC to West Bonner Water and Sewer District
6-07-2010

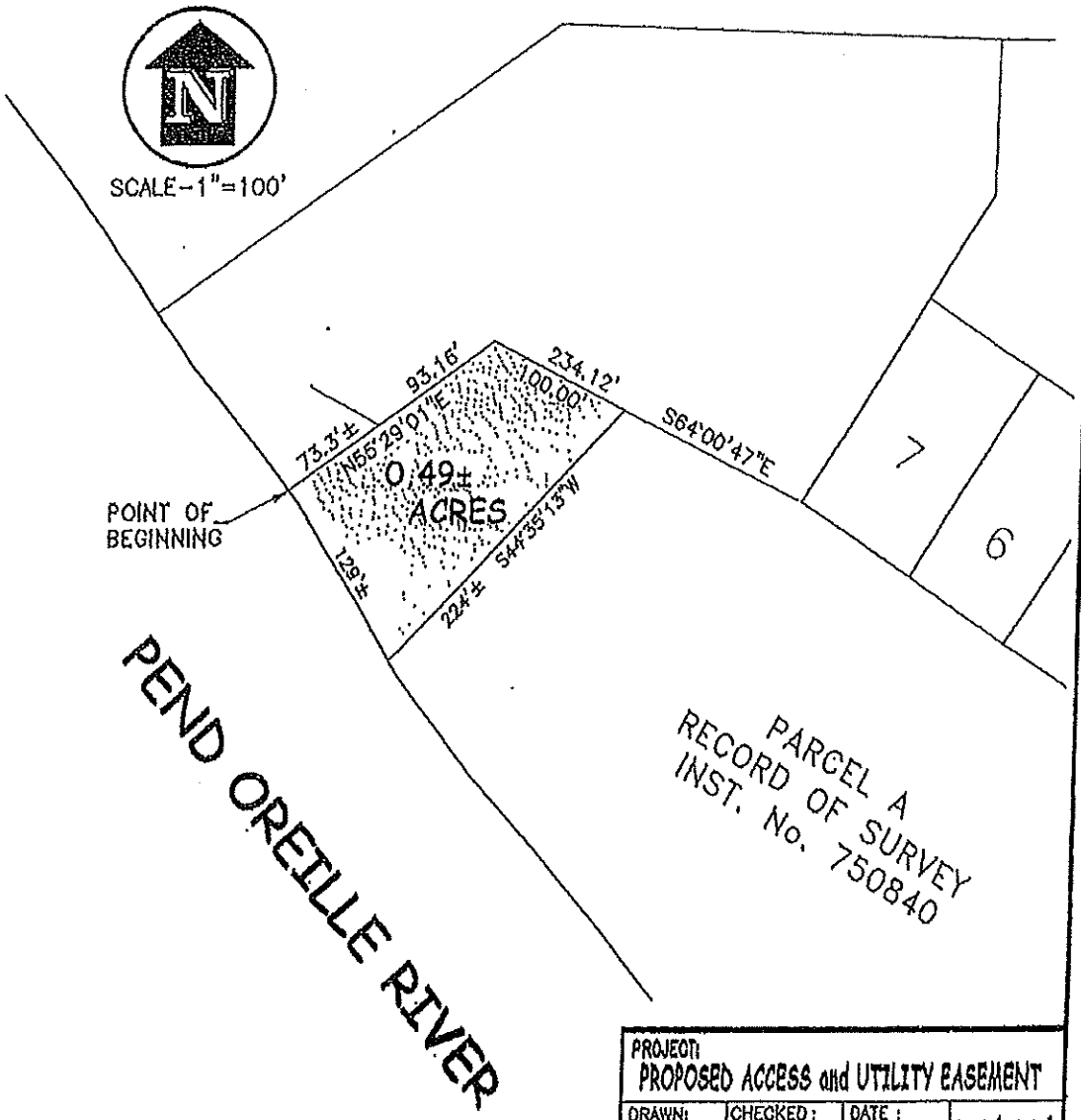
A Tract of land for Utility Easement located in Section 24, Township 56 North, Range 6 West, Boise Meridian, Bonner County, Idaho, more particularly described as follows:

Beginning at the intersection of the ordinary high water line of the Pend Oreille River and the Northwesterly boundary line of Parcel A as shown on Record of Survey Recorder's Certificate No. 750840; thence N55°29'01"E along said Northwesterly boundary line of said Parcel A, 73.3 feet more or less to an existing 5/8 inch rebar by PLS No. 12110; thence continuing along the said Northwesterly boundary line N55°29'01"E, 93.16 to the end point of said Northwesterly boundary line at an existing 5/8 inch rebar by PLS No. 12110; thence S64°00'47"E along the Northeasterly boundary line of said Parcel A, 100.00 feet; thence S44°35'13"W, 224 feet more or less, to its intersection with the ordinary high water line of the Pend Oreille River; thence Northwesterly, 129 feet more or less, to the point of beginning. Said Easement containing 0.49 acres more or less.

EXHIBIT A

SEWER PUMPSTATION SITE

JHM INVESTMENTS, LLC TO WEST BONNER WATER AND SEWER DISTRICT



NOTE:
SEE RECORD OF SURVEY RECORDER'S CERTIFICATE No. 750840.

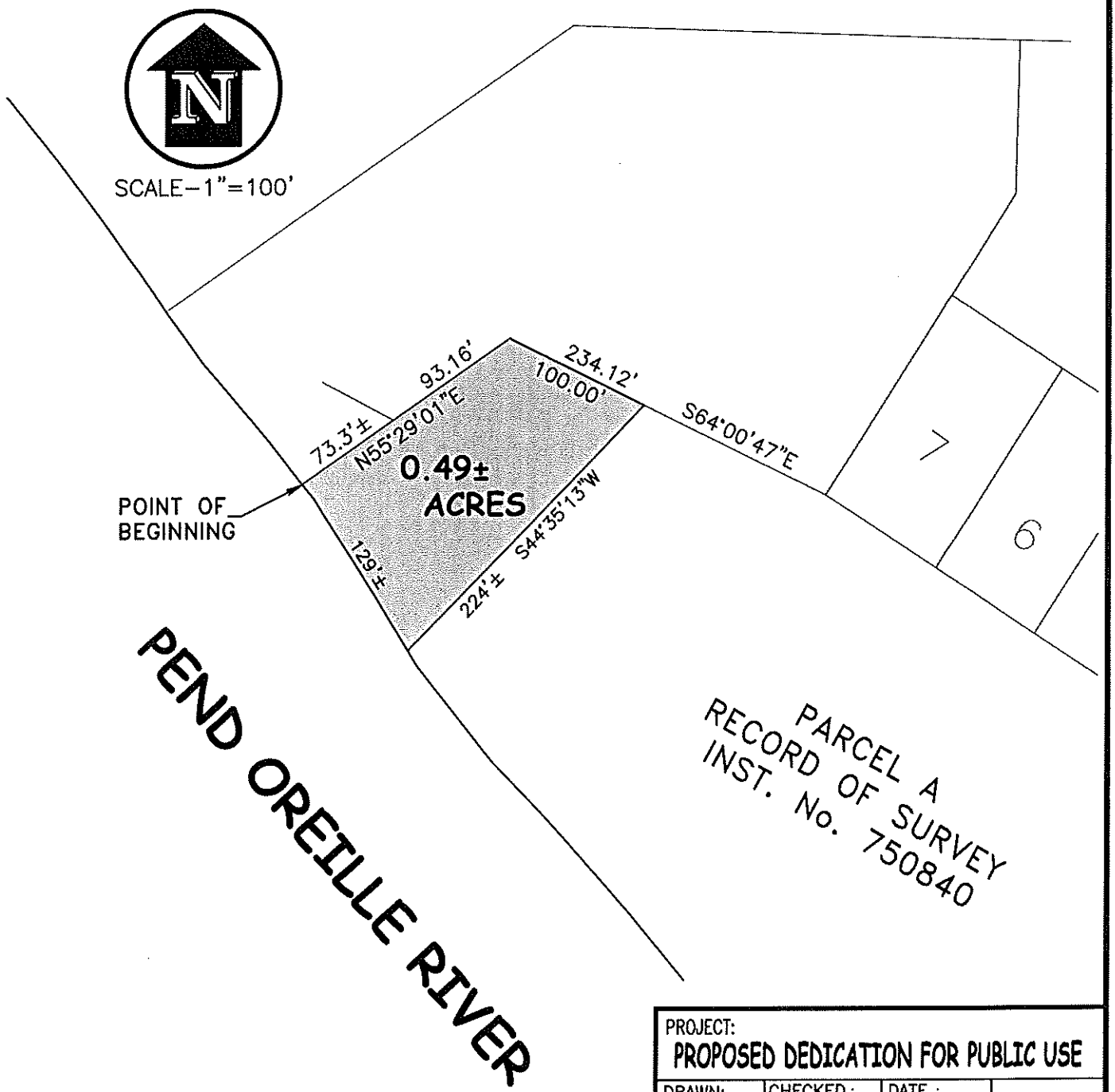
PROJECT:
PROPOSED ACCESS and UTILITY EASEMENT

DRAWN: BAO	CHECKED: RRH	DATE: 6-07-10	SHT. 1 OF 1

James A. Sewell and Associates, LLC
CONSULTING ENGINEERS
NEWPORT, WASHINGTON. (509)447-3626

EXHIBIT B

JHM INVESTMENTS, LLC TO WEST BONNER WATER AND SEWER DISTRICT



NOTE:
SEE RECORD OF SURVEY RECORDER'S CERTIFICATE No. 750840.

PROJECT:
PROPOSED DEDICATION FOR PUBLIC USE

DRAWN:	CHECKED:	DATE:	SHT. 1 OF 1
BAD	RRH	8–31–12	

James A. Sewell and Associates, LLC
CONSULTING ENGINEERS
NEWPORT, WASHINGTON. (509)447-3626

JAMES A. SEWELL & ASSOCIATES, LLC

600-4th Street West
Newport, Washington 99156
(509) 447-3626 (208) 437-2641
(509) 447-2112 Fax

*Civil Engineering *Electrical Engineering *Land Surveying *Building Inspection * Land Use Planning

JHM Investments, LLC to West Bonner Water and Sewer District
8-31-2012

A Tract of land for Dedication for Public Use located in Section 24, Township 56 North, Range 6 West, Boise Meridian, Bonner County, Idaho, more particularly described as follows:

Beginning at the intersection of the ordinary high water line of the Pend Oreille River and the Northwesterly boundary line of Parcel A as shown on Record of Survey Recorder's Certificate No. 750840; thence N55°29'01"E along said Northwesterly boundary line of said Parcel A, 73.3 feet more or less to an existing 5/8 inch rebar by PLS No. 12110; thence continuing along the said Northwesterly boundary line N55°29'01"E, 93.16 to the end point of said Northwesterly boundary line at an existing 5/8 inch rebar by PLS No. 12110; thence S64°00'47"E along the Northeasterly boundary line of said Parcel A, 100.00 feet; thence S44°35'13"W, 224 feet more or less, to its intersection with the ordinary high water line of the Pend Oreille River; thence Northwesterly, 129 feet more or less, to the point of beginning. Said Easement containing 0.49 acres more or less.

AGREEMENT TO CONVEY EASEMENTS/DEDICATIONS
(JHM Investments, LLC/West Bonner Water & Sewer District)

This Agreement is dated this 2 day of DECEMBER, 2011, by and between JHM Investments, LLC, an Idaho limited liability company, with its principal place of business located at PO Box 190, Athol, ID 83801 (hereinafter referred to as "Grantor") and West Bonner Water & Sewer District No. 1, a political subdivision of the State of Idaho, with its principal place of business located at 215 N. Washington Ave, Oldtown, ID 83822 (hereinafter referred to as "Grantee").

RECITALS

A. Grantor is the owner of various parcels of real property located in Bonner County, Idaho.

B. Grantee is in the process of constructing certain improvements and extensions of its existing water and sewer system in Oldtown, Idaho.

C. In order to facilitate access and use of these improvements, Grantor agrees to convey certain access/utility easements and dedicate certain parcels to Grantee as more fully set forth herein.

NOW, THEREFORE, based upon the mutual consideration contained herein, the parties agree as follows:

1. **Conveyance of Easement or Right of Way**: Grantor, upon the express conditions set forth in paragraph 3, does hereby agree to grant, assign and convey to Grantee access and utility easements as more fully identified in the attached Exhibits 1-5. Said easements shall convey from Grantor to Grantee a perpetual, free, continuous and uninterrupted right to use the Easement Area to construct, reconstruct, operate, maintain and repair water and/or sewer lines. The easement shall provide that Grantee, or its successors or assigns, will be solely responsible for construction and maintenance costs of the Easement Area.

Upon completion of the construction, the Grantee shall restore the surface of the property to its original condition and shall indemnify and hold the Grantor harmless against any and all loss, cost, or damage arising out of the exercise of the rights granted herein.

2. **Dedication of Parcels for Public Use**: Grantor, upon the express conditions set forth in paragraph 3, does hereby agree to dedicate and grant to Grantee, in fee simple and for public purposes, certain parcels of real estate as more fully identified in the attached Exhibits 6-7.

3. **Condition of Agreement**. Grantee has applied for funding through the Idaho Department of Environmental Quality (IDEQ) in the amount of $2,400,000.00 to be applied to upgrade and extend the Grantee's water lines. The parties agree that the Grant of Easement and Dedication of Parcels for Public Use set forth in this the Agreement are expressly conditioned upon IDEQ granting and releasing funding in the amount of $2,400,000.00. This agreement shall be null and void, without any further liability thereon, and the Easements and Dedications shall not be recorded in the event IDEQ does not grant and release the funding.

4. **Easement to Run with the Land**: So long as they are used for the public purpose of water and sewer lines construction and maintenance, the easements granted herein shall run with the land and inure to the benefit of the Grantee to this Agreement, together with its agents, successors and assigns.

5. **Miscellaneous**: This Agreement shall be governed by the laws of the state of Idaho. Venue for any dispute arising out of this Agreement shall be in Kootenai County, Idaho. In the event a lawsuit arises out of this agreement, the prevailing party therein shall be entitled to an award of its reasonable attorney fees and costs.

Dated this 2 day of December, 2011.

JHM INVESTMENTS, LLC	WEST BONNER WATER & SEWER DISTRICT NO. 1
Holly D. Janhsen	Lonnie L. Orr
By: Holly D. Janhsen	By: Lonnie Orr
Title: Manager	Title: Chairman

KAREN PHILLIPS NOTARY PUBLIC STATE OF IDAHO

STATE OF IDAHO)
:ss.
County of Bonner)

On this 2nd day of December, 2011, before me the undersigned, a Notary Public for Idaho, personally appeared, Holly D. Janhsen, known or identified to me to be the Member of JHM Investments, LLC, the entity whose name is subscribed to the within instrument and acknowledged to me that he executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year first written above.

Karen Phillips
Notary Public for Idaho
Residing at: Oldtown, Idaho
My Commission Expires: 9-30-14

STATE OF IDAHO)
:ss.
County of_____)

On this _____ day of _____, 2011, before me the undersigned, a Notary Public for Idaho, personally appeared Lonnie Orr known or identified to me to be the Chairman of the West Bonner Water and Sewer District No. 1, the entity whose name is subscribed to the within instrument and acknowledged to me that he executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year first written above.

_____
Notary Public for Idaho
Residing at: _____
My Commission Expires:_____

State of Idaho)
) SS
County of Bonner)

On this 2nd day of December in the year of 2011, before me, Sheila M. Gormley, personally appeared Lonnie L. Orr, proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is (are) subscribed to the within instrument, and acknowledged that he (she)(they) executed the same.

Sheila M. Gormley
Notary Public
For the City of Oldtown
My Commission Expires on 5/16/2013.

SHEILA M. GORMLEY
NOTARY PUBLIC
STATE OF IDAHO

EXHIBIT 1

Recorded at the Request of (when recorded return to):	

UTILITY EASEMENT

KNOW ALL MEN BY THESE PRESENT that JHM INVESTMENTS, LLC, an Idaho limited liability company, whose address is PO Box 190, Athol, ID 83801 (hereinafter referred to as "Grantor"), for and in consideration of ten dollars ($10.00), the receipt of which is hereby acknowledged, and the further consideration of the benefits to be derived by Grantor from the placing of water mains, sanitary sewer mains, and public utilities on the premises hereinafter described, do hereby grant and convey unto the WEST BONNER WATER AND SEWER DISTRICT NO. 1, a water and sewer district created pursuant to Idaho law (hereinafter referred to as "Grantee"), whose address is 215 N. Washington Ave., Oldtown, ID 83822, an easement to construct, reconstruct and perpetually maintain water mains, sanitary sewer mains, and public utilities, together with the right to make connections and such other construction and improvements incidental to the construction and maintenance of such lines in, upon and across the following described land, to wit:

> All that certain tract, piece or parcel of land, lying and being situated in the County of Bonner, State of Idaho, described in the attached legal description and diagram (EXHIBIT "A" and "B" respectively) attached hereto and made a part hereof for all purposes, to which reference is made for a more particular description of said property.

TO HAVE AND TO HOLD the same perpetually to the Grantee, its successors and assigns, together with the right and privilege at any and all times to enter said premises, or any part thereof, for the purpose of constructing and maintaining said water mains, sanitary sewer mains, and public utilities, and for making connections therewith; all upon the condition that the Grantee will at all times after doing any work in connection with the construction or repair of said water mains, sanitary sewer, or public utilities restore the surface of said premises to the condition in which the same was found before such work was undertaken.

DATED this 2 day of DECEMBER, 2011.

JHM INVESTMENTS, LLC

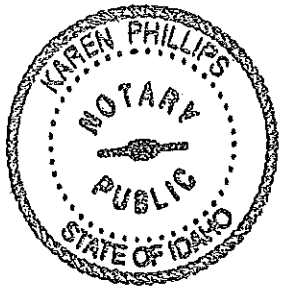
Holly D. Janhsen

By: Holly D. Janhsen
Title: Manager

STATE OF IDAHO)
:ss
County of Bonner)

On this 2nd day of December, 2011, before me Karen Phillips, the undersigned Notary Public, personally appeared Holly D. Janhsen, known or identified to me to be the manager of JHM Investments, LLC, the person who executed the instrument on behalf of said limited liability company and acknowledged to me that such limited liability company executed the same.

(SEAL)



Karen Phillips
Notary Public for Idaho
Residing at: Oldtown, Idaho
Commission Expires: 9-30-14

JAMES A. SEWELL & ASSOCIATES, LLC

600-4th Street West
Newport, Washington 99156
(509) 447-3626 (208) 437-2641
(509) 447-2112 Fax

*Civil Engineering *Electrical Engineering *Land Surveying *Building Inspection * Land Use Planning

UTILITY EASEMENT
JHM Investments, LLC to West Bonner Water and Sewer District
6-07-2010

A Tract of land for a utility easement located in Section 24, Township 56 North, Range 6 West, Boise Meridian, Bonner County, Idaho, said tract of land being 20.00 feet in width, 10.00 feet on each side of the following described centerline:

Beginning at a point which bears N87°40'51"W 598.14 feet and N1°42'28"E 245.00 feet and N88°17'32"W 300.00 feet all from the Southeast corner of said Section 24; thence N88°17'32"W 155.00 feet; thence N0°48'31"E 464.98 feet to its intersection with the Westerly extension of the South boundary line of an Exception as shown on Record of Survey Recorder's Certificate No. 750840 and the terminus of this easement. Said terminus point bears N87°18'29"W, 25.00 feet from the Southwest corner of said Exception.

WATERLINE EASEMENT TO WELL SITE

EXHIBIT A

JHM INVESTMENTS, LLC TO WEST BONNER WATER AND SEWER DISTRICT

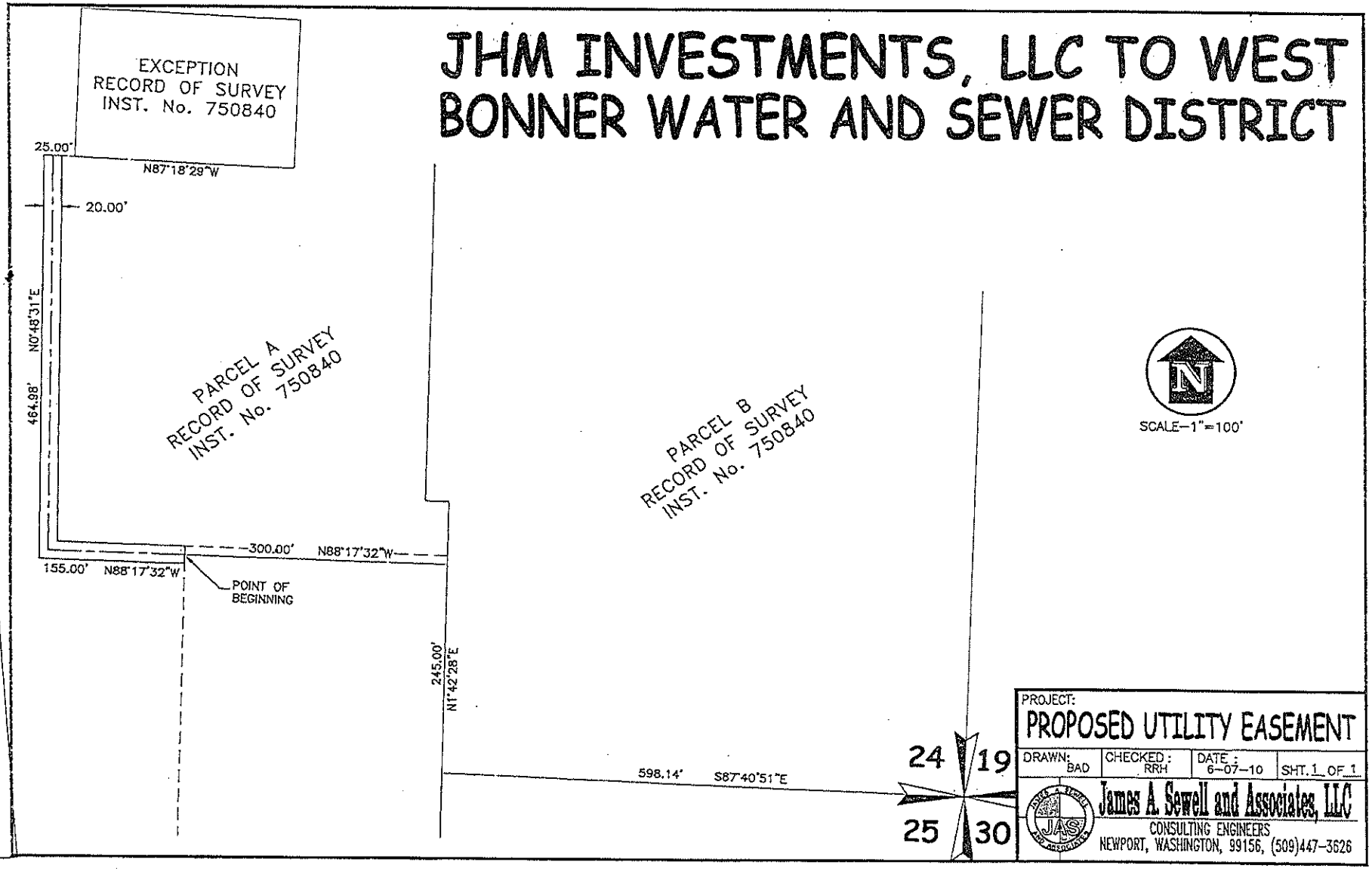


EXHIBIT B

EXHIBIT 2

Recorded at the Request of (when recorded return to):	

UTILITY EASEMENT

KNOW ALL MEN BY THESE PRESENT that JHM INVESTMENTS, LLC, an Idaho limited liability company, whose address is PO Box 190, Athol, ID 83801 (hereinafter referred to as "Grantor"), for and in consideration of ten dollars ($10.00), the receipt of which is hereby acknowledged, and the further consideration of the benefits to be derived by Grantor from the placing of water mains, sanitary sewer mains, and public utilities on the premises hereinafter described, do hereby grant and convey unto the WEST BONNER WATER AND SEWER DISTRICT NO. 1, a water and sewer district created pursuant to Idaho law (hereinafter referred to as "Grantee"), whose address is 215 N. Washington Ave., Oldtown, ID 83822, an easement to construct, reconstruct and perpetually maintain water mains, sanitary sewer mains, and public utilities, together with the right to make connections and such other construction and improvements incidental to the construction and maintenance of such lines in, upon and across the following described land, to wit:

> All that certain tract, piece or parcel of land, lying and being situated in the County of Bonner, State of Idaho, described in the attached legal description and diagram (EXHIBIT "A" and "B" respectively) attached hereto and made a part hereof for all purposes, to which reference is made for a more particular description of said property.

TO HAVE AND TO HOLD the same perpetually to the Grantee, its successors and assigns, together with the right and privilege at any and all times to enter said premises, or any part thereof, for the purpose of constructing and maintaining said water mains, sanitary sewer mains, and public utilities, and for making connections therewith; all upon the condition that the Grantee will at all times after doing any work in connection with the construction or repair of said water mains, sanitary sewer, or public utilities restore the surface of said premises to the condition in which the same was found before such work was undertaken.

DATED this 2 day of DECEMBER, 2011.

JHM INVESTMENTS, LLC

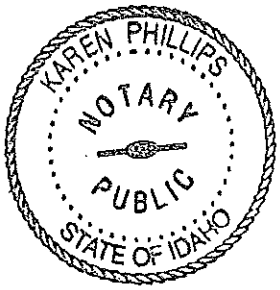
Holly D. Janhsen

By: Holly D. Janhsen
Title: Manager

STATE OF IDAHO)
:ss
County of Bonner)

On this 2nd day of December, 2011 before me Karen Phillips the undersigned Notary Public, personally appeared Holly D. Janhsen, known or identified to me to be the manager of JHM Investments, LLC, the person who executed the instrument on behalf of said limited liability company and acknowledged to me that such limited liability company executed the same.

(SEAL)



Karen Phillips
Notary Public for Idaho
Residing at: Oldtown, Idaho
Commission Expires: 9-30-14

JAMES A. SEWELL & ASSOCIATES, LLC

600-4th Street West
Newport, Washington 99156
(509) 447-3626 (208) 437-2641
(509) 447-2112 Fax

*Civil Engineering, *Electrical Engineering *Land Surveying *Building Inspection * Land Use Planning

Right-of-Way
6-07-2010

A Tract of land for a Right-of-Way located in Section 24, Township 56 North, Range 6 West, Boise Meridian, Bonner County, Idaho. Said Right-of-Way is 60.00 feet easterly and southerly of the North line of Parcel A as shown on Record of Survey Recorder's Certificate No. 750840 and more particularly described as follows:

Beginning at the Northwesterly corner of said Parcel A; thence S87°54'38"E along the Northerly boundary line of said Parcel A, 80.80 feet; thence S39°57'33"E, 443.39 feet; thence S37°20'19"E, 264.62 feet to its intersection with the Northerly boundary line of an Exception as shown on said Record of Survey; thence N87°18'29"W along the Northerly boundary line of said Exception, 46.14 feet to the Northwest corner of said Exception; thence S2°45'27"W, along the Westerly boundary line of said Exception, 111.53 feet; thence S89°46'30"W, 319.04 feet; thence N89°02'14"W, 106.52 feet; thence N66°01'44"W, 102.32 feet; thence N56°29'31"W, 117.41 feet; thence N56°39'03"W, 79.79 feet; thence N56°47'03"W, 78.50 feet; thence N56°56'03"W, 80.38 feet; thence N56°36'52"W, 78.39 feet; thence N57°07'03"W, 83.84 feet; thence N64°00'47"W, 264.45 feet to its intersection with the Northwesterly boundary line of said Parcel A; thence N55°29'01"E along said Northwesterly boundary line of Parcel A, 68.94 feet to the Northeasterly end point of said Northwesterly boundary line, being a 5/8 inch rebar by PLS 12110; thence S64°00'47"E, along the Northeasterly boundary line, 234.12 feet; thence continuing along said Northeasterly boundary line S57°07'03"E, 87.72 feet; thence continuing along said Northeasterly boundary line S56°36'52"E, 78.49 feet; thence continuing along said Northeasterly boundary line S56°56'03"E, 80.29 feet; thence continuing along said Northeasterly boundary line S56°47'03"E, 78.65 feet; thence continuing along said Northeasterly boundary line S56°39'03"E, 79.94 feet; thence continuing along said Northeasterly boundary line

EXHIBIT A-1

JAMES A. SEWELL & ASSOCIATES, LLC

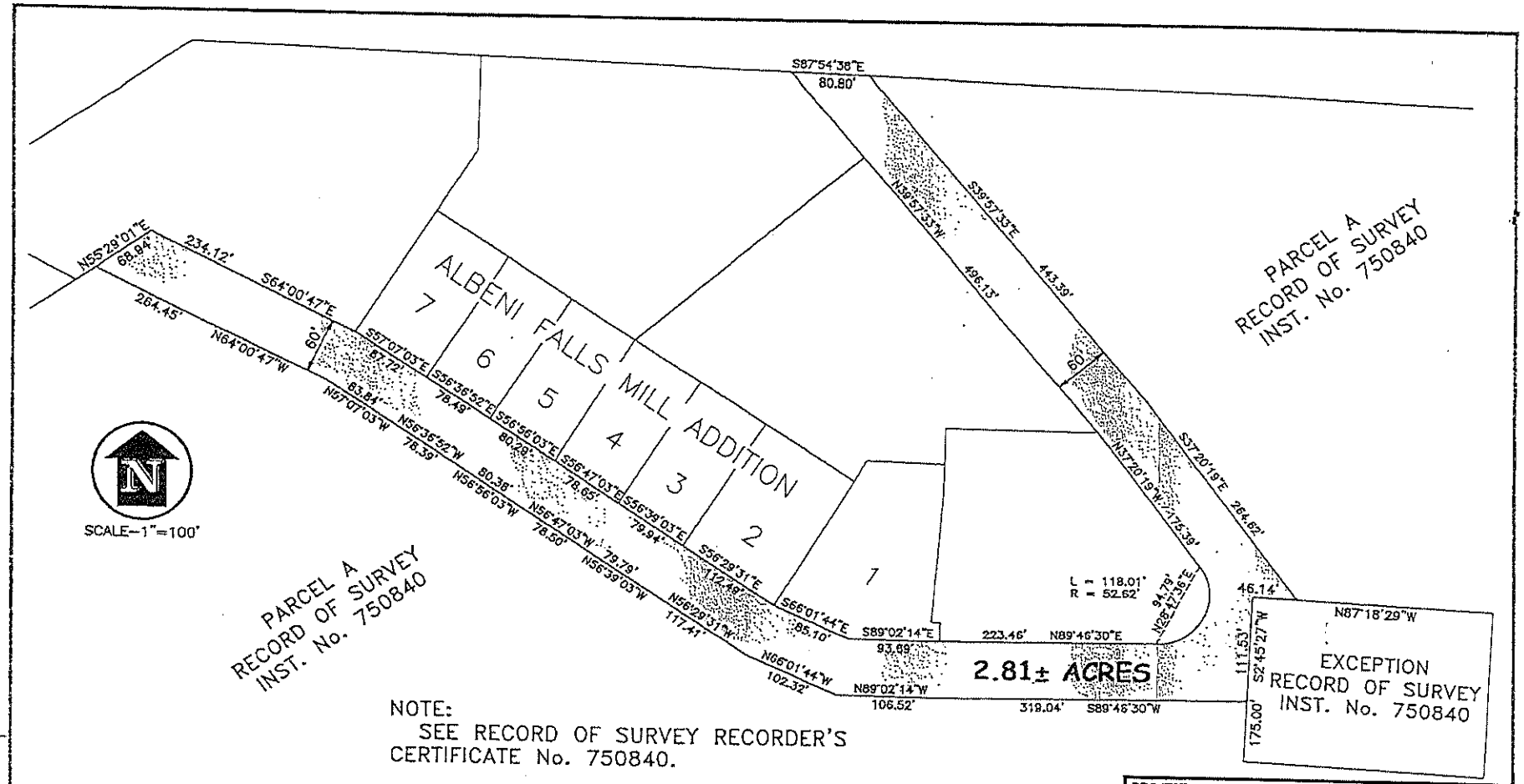
600-4th Street West
Newport, Washington 99156
(509) 447-3626 (208) 437-2641
(509) 447-2112 Fax

*Civil Engineering *Electrical Engineering *Land Surveying *Building Inspection * Land Use Planning

S56°29'31"E, 112.49 feet; thence continuing along said Northeasterly boundary line S66°01'44"E, 85.10 feet; thence continuing along the Northerly boundary line S89°02'14"E, 93.69 feet; thence continuing along said Northerly boundary line N89°46'30"E, 223.46 feet; thence along a non-tangent curve to the left 118.01 feet (radius = 52.62 feet, chord = N28°47'36"E, 94.79 feet); thence continuing along the Southwesterly boundary line N37°20'19"W, 175.39 feet; thence continuing along said Southwesterly boundary line N39°57'33"W, 496.13 feet to the point of beginning. Said Right-of-Way containing 2.81 acres more or less.

OLD MILL ROAD RIGHT-OF-WAY

EXHIBIT A-2



NOTE:
SEE RECORD OF SURVEY RECORDER'S CERTIFICATE No. 750840.

JHM INVESTMENTS, LLC TO WEST BONNER WATER AND SEWER DISTRICT

PROJECT:
PROPOSED RIGHT-OF-WAY

DRAWN: BAD	CHECKED: RRH	DATE: 6-07-10	SHT. 1 OF 1

James A. Sewell and Associates, LLC
CONSULTING ENGINEERS
NEWPORT, WASHINGTON, 99156, (509)447-3626

EXHIBIT B

EXHIBIT 3

Recorded at the Request of (when recorded return to):	

UTILITY EASEMENT

KNOW ALL MEN BY THESE PRESENT that JHM INVESTMENTS, LLC, an Idaho limited liability company, whose address is PO Box 190, Athol, ID 83801 (hereinafter referred to as "Grantor"), for and in consideration of ten dollars ($10.00), the receipt of which is hereby acknowledged, and the further consideration of the benefits to be derived by Grantor from the placing of water mains, sanitary sewer mains, and public utilities on the premises hereinafter described, do hereby grant and convey unto the WEST BONNER WATER AND SEWER DISTRICT NO. 1, a water and sewer district created pursuant to Idaho law (hereinafter referred to as "Grantee"), whose address is 215 N. Washington Ave., Oldtown, ID 83822, an easement to construct, reconstruct and perpetually maintain water mains, sanitary sewer mains, and public utilities, together with the right to make connections and such other construction and improvements incidental to the construction and maintenance of such lines in, upon and across the following described land, to wit:

> All that certain tract, piece or parcel of land, lying and being situated in the County of Bonner, State of Idaho, described in the attached legal description and diagram (EXHIBIT "A" and "B" respectively) attached hereto and made a part hereof for all purposes, to which reference is made for a more particular description of said property.

TO HAVE AND TO HOLD the same perpetually to the Grantee, its successors and assigns, together with the right and privilege at any and all times to enter said premises, or any part thereof, for the purpose of constructing and maintaining said water mains, sanitary sewer mains, and public utilities, and for making connections therewith; all upon the condition that the Grantee will at all times after doing any work in connection with the construction or repair of said water mains, sanitary sewer, or public utilities restore the surface of said premises to the condition in which the same was found before such work was undertaken.

DATED this 2 day of DECEMBER, 2011.

JHM INVESTMENTS, LLC

Holly D. Jarhsen

By: Holly D. Jarhsen
Title: Manager

STATE OF IDAHO)
:ss
County of Bonner)

On this 2nd day of December, 2011 before me Karen Phillips, the undersigned Notary Public, personally appeared Holly D. Janhsen, known or identified to me to be the manager of JHM Investments, LLC, the person who executed the instrument on behalf of said limited liability company and acknowledged to me that such limited liability company executed the same.

(SEAL) KAREN PHILLIPS NOTARY PUBLIC STATE OF IDAHO

Karen Phillips
Notary Public for Idaho
Residing at: Oldtown, Idaho
Commission Expires: 9-30-14

JAMES A. SEWELL & ASSOCIATES, LLC

600-4th Street West
Newport, Washington 99156
(509) 447-3626 (208) 437-2641
(509) 447-2112 Fax

*Civil Engineering *Electrical Engineering *Land Surveying *Building Inspection * Land Use Planning

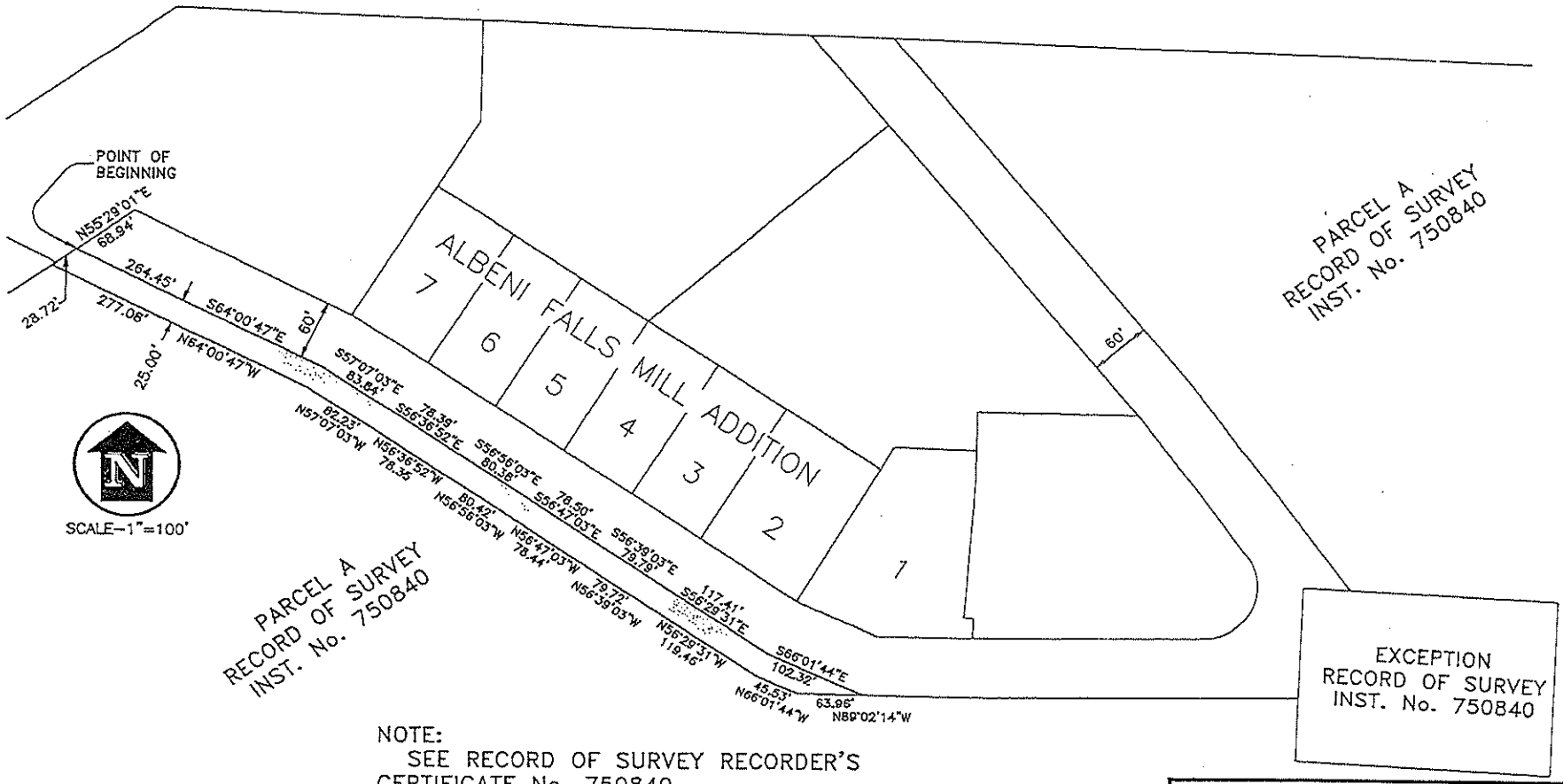
UTILITY EASEMENT
JHM Investments, LLC to West Bonner Water and Sewer District
6-07-2010

A Tract of land for a Utility Easement located in Section 24, Township 56 North, Range 6 West, Boise Meridian, Bonner County, Idaho, more particularly described as follows:

Beginning at a point which bears S55°29'01"W, 68.94 feet from an existing 5/8 inch rebar by PLS No. 12110 at the Northeasterly end of the Northwesterly boundary line of Parcel A as shown on Record of Survey Recorder's Certificate No. 750840; thence S64°00'47"E, 264.45 feet; thence S57°07'03"E, 83.84 feet; thence S56°36'52"E, 78.39 feet; thence S56°56'03"E, 80.38 feet; thence S56°47'03"E, 78.50 feet; thence S56°39'03"E, 79.79 feet; thence S56°29'31"E, 117.41 feet; thence S66°01'44"E, 102.32 feet; thence N89°02'14"W, 63.96 feet; thence N66°01'44"W, 45.53 feet; thence N56°29'31"W, 119.46 feet; thence N56°39'03'W, 79.72 feet; thence N56°47'03"W, 78.44 feet; thence N56°56'03"W, 80.42 feet; thence N56°36'52"W, 78.35 feet; thence N57°07'03"W, 82.23 feet; thence N64°00'47"W, 277.08 feet to its intersection with the Northwesterly boundary line of said Parcel A; thence N55°29'01"E along said Northwesterly boundary line of Parcel A, 28.72 feet to the point of beginning. Said Easement containing 0.50 acres, more or less.

SEWER LINE EASEMENT BESIDE OLD MILL ROAD

EXHIBIT A



NOTE:
SEE RECORD OF SURVEY RECORDER'S CERTIFICATE No. 750840.

JHM INVESTMENTS, LLC TO WEST BONNER WATER AND SEWER DISTRICT

PROJECT:
PROPOSED UTILITY EASEMENT

DRAWN: BAD	CHECKED: RRH	DATE: 6-07-10	SHT. 1 OF 1

James A. Sewell and Associates, LLC
CONSULTING ENGINEERS
NEWPORT, WASHINGTON, 99156, (509)447-3626

EXHIBIT B

EXHIBIT 4

Recorded at the Request of (when recorded return to):	

UTILITY EASEMENT

KNOW ALL MEN BY THESE PRESENT that JHM INVESTMENTS, LLC, an Idaho limited liability company, whose address is PO Box 190, Athol, ID 83801 (hereinafter referred to as "Grantor"), for and in consideration of ten dollars ($10.00), the receipt of which is hereby acknowledged, and the further consideration of the benefits to be derived by Grantor from the placing of water mains, sanitary sewer mains, and public utilities on the premises hereinafter described, do hereby grant and convey unto the WEST BONNER WATER AND SEWER DISTRICT NO. 1, a water and sewer district created pursuant to Idaho law (hereinafter referred to as "Grantee"), whose address is 215 N. Washington Ave., Oldtown, ID 83822, an easement to construct, reconstruct and perpetually maintain water mains, sanitary sewer mains, and public utilities, together with the right to make connections and such other construction and improvements incidental to the construction and maintenance of such lines in, upon and across the following described land, to wit:

> All that certain tract, piece or parcel of land, lying and being situated in the County of Bonner, State of Idaho, described in the attached legal description and diagram (EXHIBIT "A" and "B" respectively) attached hereto and made a part hereof for all purposes, to which reference is made for a more particular description of said property.

TO HAVE AND TO HOLD the same perpetually to the Grantee, its successors and assigns, together with the right and privilege at any and all times to enter said premises, or any part thereof, for the purpose of constructing and maintaining said water mains, sanitary sewer mains, and public utilities, and for making connections therewith; all upon the condition that the Grantee will at all times after doing any work in connection with the construction or repair of said water mains, sanitary sewer, or public utilities restore the surface of said premises to the condition in which the same was found before such work was undertaken.

DATED this 2 day of DECEMBER, 2011.

JHM INVESTMENTS, LLC

Holly D. Janhsen

By: Holly D. Janhsen
Title: Manager

STATE OF IDAHO)
:ss
County of Bonner)

On this 2nd day of December, 2014, before me Karen Phillips, the undersigned Notary Public, personally appeared Holly D. Janhsen, known or identified to me to be the manager of JHM Investments, LLC, the person who executed the instrument on behalf of said limited liability company and acknowledged to me that such limited liability company executed the same.

(SEAL)

KAREN PHILLIPS NOTARY PUBLIC STATE OF IDAHO

Karen Phillips
Notary Public for Idaho
Residing at: Oldtown, Idaho
Commission Expires: 9-30-14

JAMES A. SEWELL & ASSOCIATES, LLC

600-4th Street West
Newport, Washington 99156
(509) 447-3626 (208) 437-2641
(509) 447-2112 Fax

*Civil Engineering *Electrical Engineering *Land Surveying *Building Inspection * Land Use Planning

ACCESS AND UTILITY EASEMENT
JHM Investments, LLC to West Bonner Water and Sewer District
6-07-2010

A Tract of land for an access and utility easement located in Section 24, Township 56 North, Range 6 West and Section 19, Township 56 North, Range 5 West, Boise Meridian, Bonner County, Idaho, more particularly described as follows:

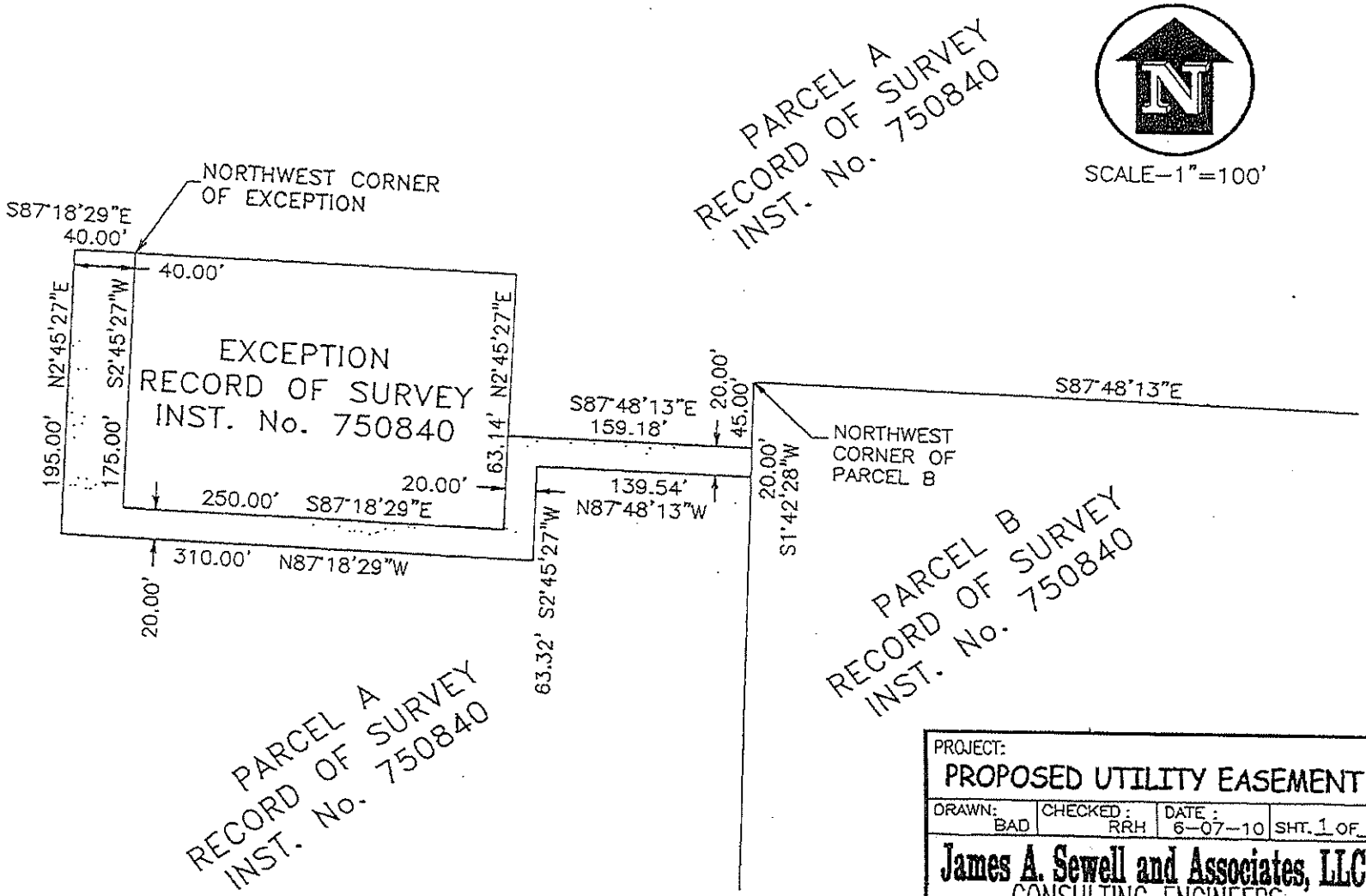
Beginning at the Northwest corner of an Exception as shown on Record of Survey Recorder's Certificate No. 750840; thence S2°45'27"W, along the West boundary line of said Exception, 175.00 feet to the Southwest corner of said Exception; thence S87°18'29"E, along the South boundary line of said Exception, 250.00 feet to the Southeast corner of said Exception; thence N2°45'27"E, along the East boundary line of said Exception, 63.14 feet; thence S87°48'13"E 159.18 feet to its intersection with the West boundary line of Parcel B as shown on said Record of Survey Recorder's Certificate No. 750840 (said point bears S1°42'28"W 45.00 feet from the Northwest corner of said Parcel B); thence S1°42'28"W, along the West boundary line of said Parcel B, 20.00 feet; thence N87°48'13"W 139.54 feet to a point which is 20.00 feet easterly of the East boundary line of said Exception; thence S2°45'27"W, parallel to and 20.00 feet easterly of the East boundary line of said Exception, 63.32 feet; thence N87°18'29"W, parallel to and 20 feet southerly of the South boundary line of said Exception, 310.00 feet; thence N2°45'27"E, parallel to and 40.00 feet westerly of the West boundary line of said Exception, 195.00 feet to its intersection with the westerly extension of the North boundary line of said Exception; thence S87°18'29"E, 40.00 feet to the Northwest corner of said of Exception and point of beginning.

WATERLINE EASEMENT AROUND AVISTA PROPERTY

EXHIBIT A

JHM INVESTMENTS, LLC TO WEST BONNER WATER AND SEWER DISTRICT

EXHIBIT B



PROJECT:
PROPOSED UTILITY EASEMENT

DRAWN:	CHECKED:	DATE:	SHT. 1 OF 1
BAD	RRH	6–07–10	

James A. Sewell and Associates, LLC
CONSULTING ENGINEERS
NEWPORT, WASHINGTON. (509)447-3626

EXHIBIT 5

Recorded at the Request of (when recorded return to):	

UTILITY EASEMENT

KNOW ALL MEN BY THESE PRESENT that JHM INVESTMENTS, LLC, an Idaho limited liability company, whose address is PO Box 190, Athol, ID 83801 (hereinafter referred to as "Grantor"), for and in consideration of ten dollars ($10.00), the receipt of which is hereby acknowledged, and the further consideration of the benefits to be derived by Grantor from the placing of water mains, sanitary sewer mains, and public utilities on the premises hereinafter described, do hereby grant and convey unto the WEST BONNER WATER AND SEWER DISTRICT NO. 1, a water and sewer district created pursuant to Idaho law (hereinafter referred to as "Grantee"), whose address is 215 N. Washington Ave., Oldtown, ID 83822, an easement to construct, reconstruct and perpetually maintain water mains, sanitary sewer mains, and public utilities, together with the right to make connections and such other construction and improvements incidental to the construction and maintenance of such lines in, upon and across the following described land, to wit:

> All that certain tract, piece or parcel of land, lying and being situated in the County of Bonner, State of Idaho, described in the attached legal description and diagram (EXHIBIT "A" and "B" respectively) attached hereto and made a part hereof for all purposes, to which reference is made for a more particular description of said property.

TO HAVE AND TO HOLD the same perpetually to the Grantee, its successors and assigns, together with the right and privilege at any and all times to enter said premises, or any part thereof, for the purpose of constructing and maintaining said water mains, sanitary sewer mains, and public utilities, and for making connections therewith; all upon the condition that the Grantee will at all times after doing any work in connection with the construction or repair of said water mains, sanitary sewer, or public utilities restore the surface of said premises to the condition in which the same was found before such work was undertaken.

DATED this 2 day of DECEMBER, 2011.

JHM INVESTMENTS, LLC

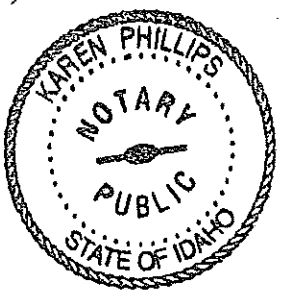
Holly D. Janhsen

By: Holly D. Janhsen
Title: Manager

STATE OF IDAHO)
:ss
County of Bonner)

On this 2nd day of December, 2011 before me Karen Phillips the undersigned Notary Public, personally appeared Holly D. Janhsen, known or identified to me to be the manager of JHM Investments, LLC, the person who executed the instrument on behalf of said limited liability company and acknowledged to me that such limited liability company executed the same.

(SEAL)



Karen Phillips
Notary Public for Idaho
Residing at: Oldtown, Idaho
Commission Expires: 9-30-14

JAMES A. SEWELL & ASSOCIATES, LLC

600-4th Street West
Newport, Washington 99156
(509) 447-3626 (208) 437-2641
(509) 447-2112 Fax

*Civil Engineering *Electrical Engineering *Land Surveying *Building Inspection * Land Use Planning

UTILITY EASEMENT
JHM Investments, LLC to West Bonner Water and Sewer District
6-07-2010

A Tract of land for a utility easement located in Section 24, Township 56 North, Range 6 West, Boise Meridian, Bonner County, Idaho, said tract of land being 40.00 feet in width, 20.00 feet on each side of the following described centerline:

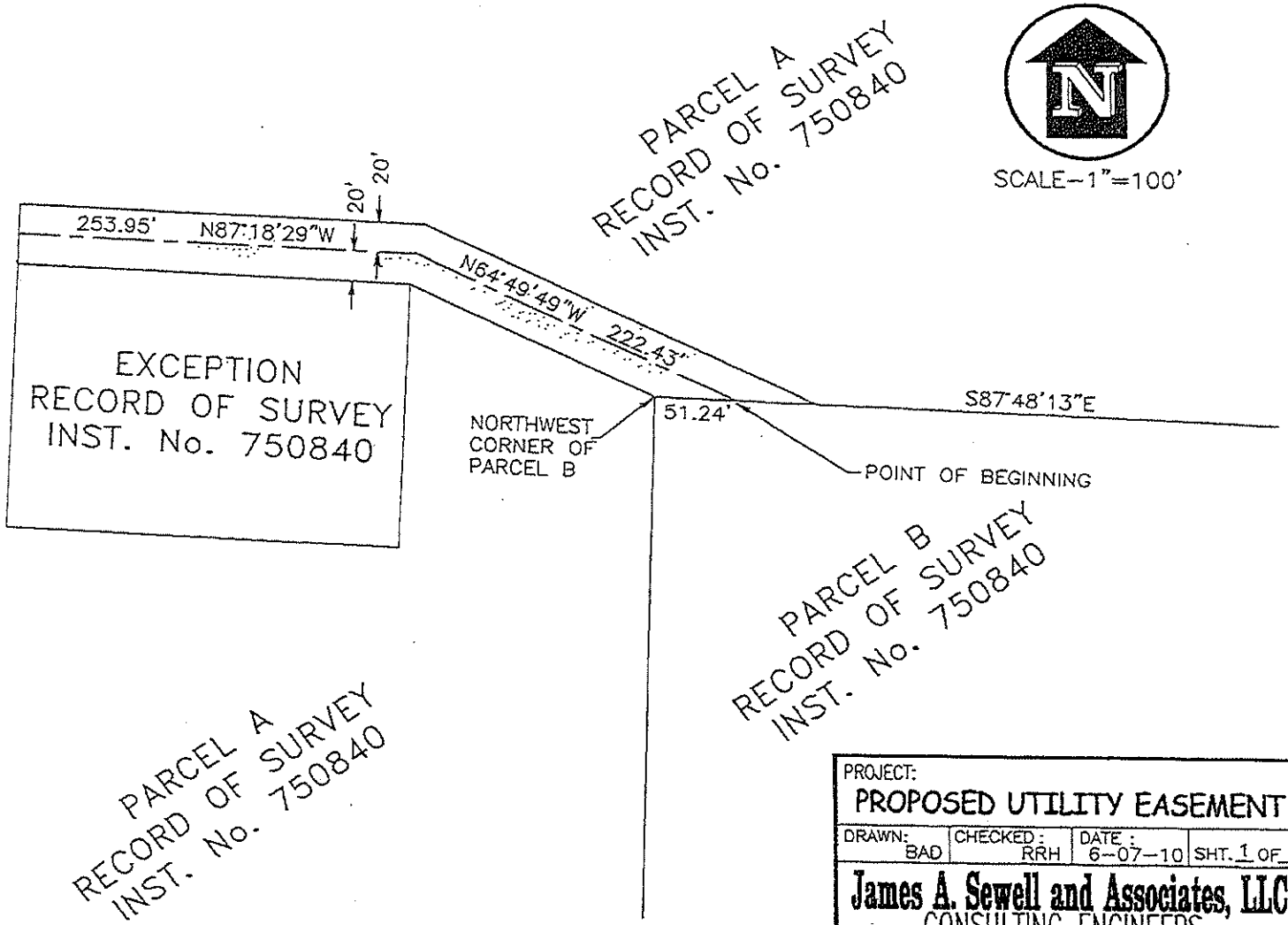
Beginning at a point on the Northern boundary line of Parcel B as shown on Record of Survey Recorder's Certificate No. 750840, said point bears S87°48'13"E, 51.24 feet from the Northwest corner of said Parcel B; thence N64°49'49"W, 222.43 feet to a point which is 20.00 feet northerly of the North line of an Exception as shown on said Record of Survey Recorder's Certificate No. 750840; thence N87°18'29"W, parallel to and 20.00 feet Northerly of said North line of the Exception, 253.95 feet to its intersection with a Northerly extension of the West line of said Exception and terminus of this easement.

SEWER LINE EASEMENT AROUND AVISTA PROPERTY

EXHIBIT A

JHM INVESTMENTS, LLC TO WEST BONNER WATER AND SEWER DISTRICT

EXHIBIT B



PROJECT:
PROPOSED UTILITY EASEMENT

DRAWN:	CHECKED:	DATE:	SHT. 1 OF 1
BAD	RRH	6–07–10	

James A. Sewell and Associates, LLC
CONSULTING ENGINEERS
NEWPORT, WASHINGTON. (509)447-3626

EXHIBIT 6

Recorded at the Request of (when recorded return to):	

DEED OF DEDICATION FOR PUBLIC USE

NOW, THEREFORE, in consideration of the premises, and other good and value consideration, the receipt and sufficiency of which are hereby acknowledged, JHM INVESTMENTS, LLC, an Idaho limited liability company, whose address is PO Box 190, Athol, ID 83801, being the sole owner and possessor hereof, does hereby dedicate, grant and convey unto WEST BONNER WATER & SEWER DISTRICT NO. 1, an Idaho political subdivision ("Grantee"), together with its successors and assigns, in fee simple, for the public purpose of operating a sewer pump station, the property more particularly described as follows:

SEE ATTACHED EXHIBIT "A" FOR A LEGAL DESCRIPTION

SEE ATTACHED EXHIBIT "B" FOR A PARCEL MAP

DATED this 2 day of DECEMBER, 2011.

JHM INVESTMENTS, LLC

Holly D. Janhsen

By: Holly D. Janhsen
Title: Manager

Recorded at the Request of (when recorded return to):	

DEED OF DEDICATION FOR PUBLIC USE

NOW, THEREFORE, in consideration of the premises, and other good and value consideration, the receipt and sufficiency of which are hereby acknowledged, JHM INVESTMENTS, LLC, an Idaho limited liability company, whose address is PO Box 190, Athol, ID 83801, being the sole owner and possessor hereof, does hereby dedicate, grant and convey unto WEST BONNER WATER & SEWER DISTRICT NO. 1, an Idaho political subdivision ("Grantee"), together with its successors and assigns, in fee simple, for the public purpose of operating a sewer pump station, the property more particularly described as follows:

SEE ATTACHED EXHIBIT "A" FOR A LEGAL DESCRIPTION

SEE ATTACHED EXHIBIT "B" FOR A PARCEL MAP

DATED this 2 day of DECEMBER, 2011.

JHM INVESTMENTS, LLC

Holly D. Janhsen

By: Holly D. Janhsen
Title: Manager

STATE OF IDAHO)
:ss
County of Bonner)

On this 2nd day of December, 2014, before me Karen Phillips the undersigned Notary Public, personally appeared Holly D. Janhsen, known or identified to me to be the manager of JHM Investments, LLC, the person who executed the instrument on behalf of said limited liability company and acknowledged to me that such limited liability company executed the same.

(SEAL)

Karen Phillips
Notary Public for Idaho
Residing at: Oldtown Idaho
Commission Expires: 9-30-14

KAREN PHILLIPS NOTARY PUBLIC STATE OF IDAHO

JAMES A. SEWELL & ASSOCIATES, LLC

600-4th Street West
Newport, Washington 99156
(509) 447-3626 (208) 437-2641
(509) 447-2112 Fax

*Civil Engineering *Electrical Engineering *Land Surveying *Building Inspection * Land Use Planning

JHM Investments, LLC to West Bonner Water and Sewer District
6-07-2010

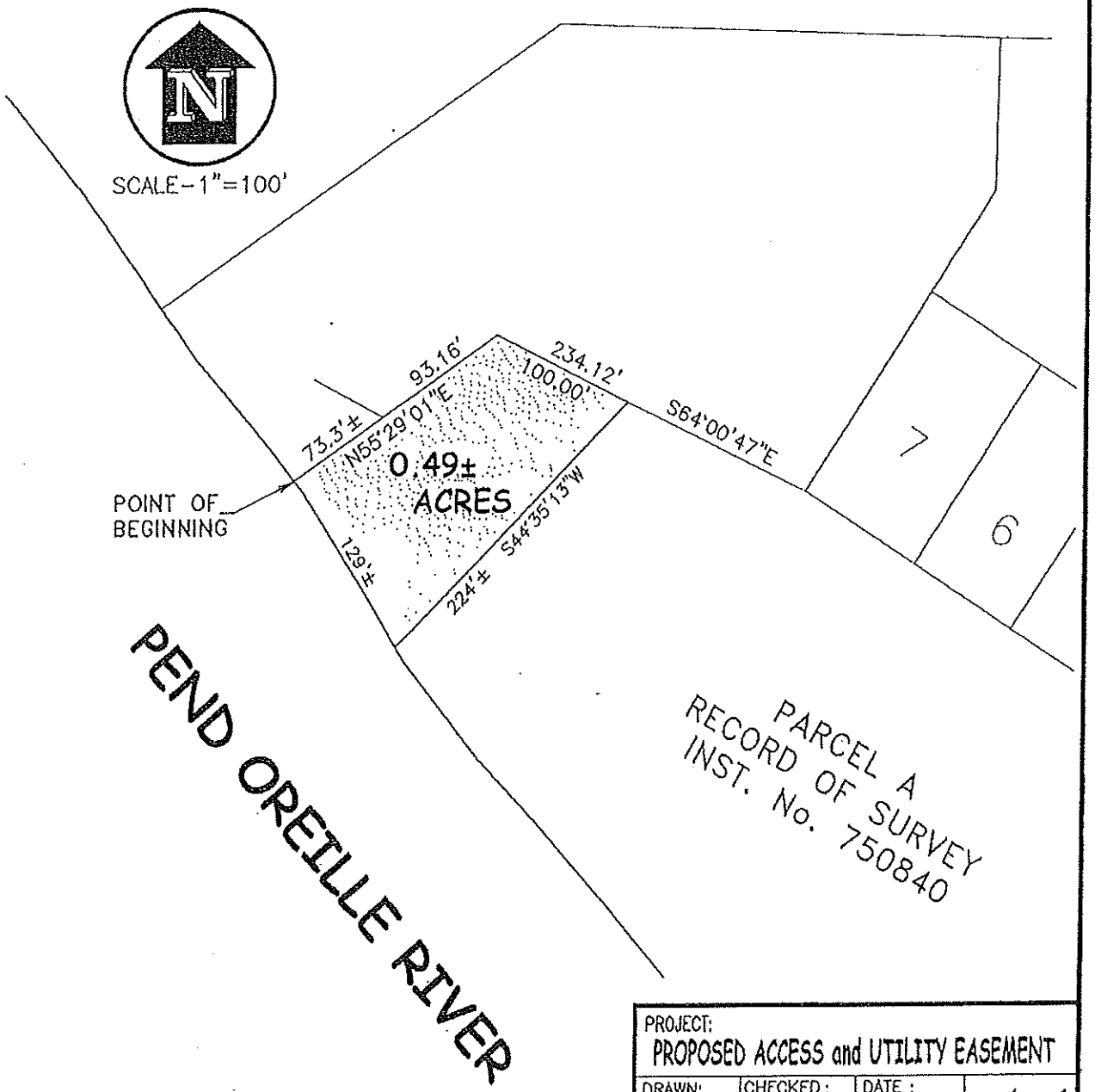
A Tract of land for Utility Easement located in Section 24, Township 56 North, Range 6 West, Boise Meridian, Bonner County, Idaho, more particularly described as follows:

Beginning at the intersection of the ordinary high water line of the Pend Oreille River and the Northwesterly boundary line of Parcel A as shown on Record of Survey Recorder's Certificate No. 750840; thence N55°29'01"E along said Northwesterly boundary line of said Parcel A, 73.3 feet more or less to an existing 5/8 inch rebar by PLS No. 12110; thence continuing along the said Northwesterly boundary line N55°29'01"E, 93.16 to the end point of said Northwesterly boundary line at an existing 5/8 inch rebar by PLS No. 12110; thence S64°00'47"E along the Northeasterly boundary line of said Parcel A, 100.00 feet; thence S44°35'13"W, 224 feet more or less, to its intersection with the ordinary high water line of the Pend Oreille River; thence Northwesterly, 129 feet more or less, to the point of beginning. Said Easement containing 0.49 acres more or less.

EXHIBIT A

SEWER PUMPSTATION SITE

JHM INVESTMENTS, LLC TO WEST BONNER WATER AND SEWER DISTRICT



NOTE:
SEE RECORD OF SURVEY RECORDER'S CERTIFICATE No. 750840.

PROJECT: PROPOSED ACCESS and UTILITY EASEMENT			
DRAWN: BAD	CHECKED: RRH	DATE: 6-07-10	SHT. 1 OF 1

James A. Sewell and Associates, LLC
CONSULTING ENGINEERS
NEWPORT, WASHINGTON. (509)447-3626

EXHIBIT B

EXHIBIT 7

Recorded at the Request of (when recorded return to):	

DEED OF DEDICATION FOR PUBLIC USE

NOW, THEREFORE, in consideration of the premises, and other good and value consideration, the receipt and sufficiency of which are hereby acknowledged, JHM INVESTMENTS, LLC, an Idaho limited liability company, whose address is PO Box 190, Athol, ID 83801, being the sole owner and possessor hereof, does hereby dedicate, grant and convey unto WEST BONNER WATER & SEWER DISTRICT NO. 1, an Idaho political subdivision ("Grantee"), together with its successors and assigns, in fee simple, for the public purpose of operating a water well site, the property more particularly described as follows:

SEE ATTACHED EXHIBIT "A" FOR A LEGAL DESCRIPTION

SEE ATTACHED EXHIBIT "B" FOR A PARCEL MAP

DATED this 2 day of DECEMBER, 2011.

JHM INVESTMENTS, LLC

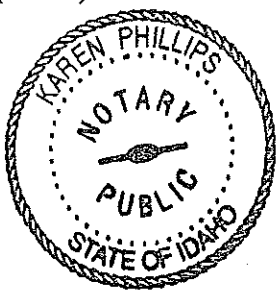
Holly D. Janhsen

By: Holly D. Janhsen
Title: Manager

STATE OF IDAHO)
:ss
County of Bonner)

On this 2nd day of December, 2011, before me Karen Phillips the undersigned Notary Public, personally appeared Holly D. Janhsen, known or identified to me to be the manager of JHM Investments, LLC, the person who executed the instrument on behalf of said limited liability company and acknowledged to me that such limited liability company executed the same.

(SEAL)



Karen Phillips
Notary Public for Idaho
Residing at: Oldtown Idaho
Commission Expires: 9-30-14

JAMES A. SEWELL & ASSOCIATES, LLC

600-4th Street West
Newport, Washington 99156
(509) 447-3626 (208) 437-2641
(509) 447-2112 Fax

*Civil Engineering *Electrical Engineering *Land Surveying *Building Inspection * Land Use Planning

UTILITY EASEMENT - WELLSITE

11-22-2011

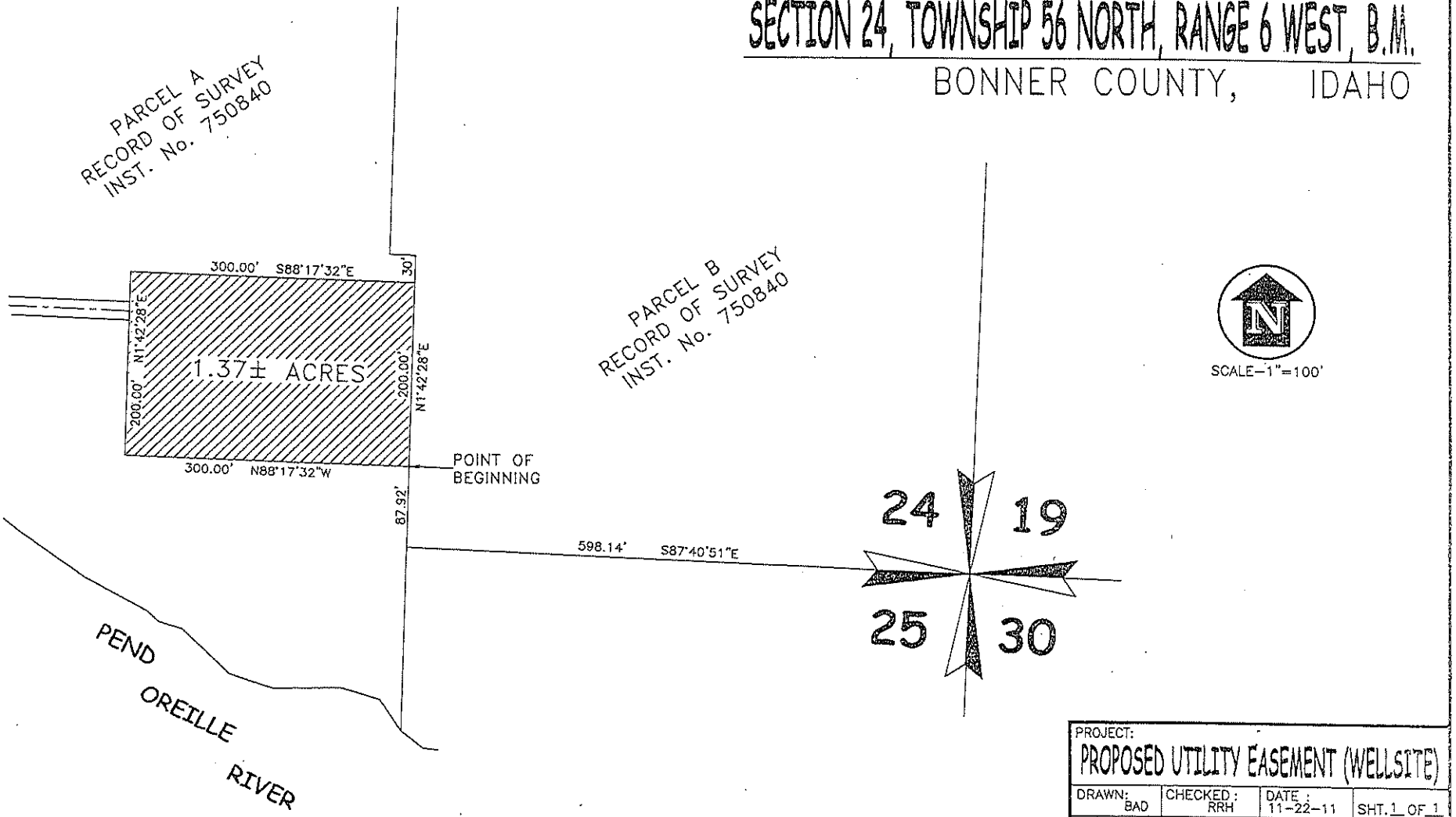
A Tract of land for an access and utility easement located in Section 24, Township 56 North, Range 6 West, Boise Meridian, Bonner County, Idaho, more particularly described as follows:

Beginning at a point along the easterly line of Parcel A as shown on Record of Survey Recorder's Certificate No. 750840 (said point bears N87°40'51"W, 598.14 feet and N1°42'28"E, 87.92 feet all from the Southeast corner of said Section 24); thence N88°17'32"W, 300.00 feet; thence parallel to said easterly line of Parcel A, N1°42'28"E, 200.00 feet; thence S88°17'32"E, 300.00 feet to its intersection with said easterly line of Parcel A; thence S1°42'28"W, along said easterly line of Parcel A, 200.00 feet to the point of beginning. Said parcel of land containing 1.37 acres more or less.

EXHIBIT A

SECTION 24, TOWNSHIP 56 NORTH, RANGE 6 WEST, B.M.

BONNER COUNTY, IDAHO



PROJECT:
PROPOSED UTILITY EASEMENT (WELLSITE)

DRAWN: BAD	CHECKED: RRH	DATE: 11-22-11	SHT. 1 OF 1

James A. Sewell and Associates, LLC
CONSULTING ENGINEERS
NEWPORT, WASHINGTON, 99156, (509)447-3626

EXHIBIT B

JAMES A. SEWELL & ASSOCIATES, LLC

600-4th Street West
Newport, Washington 99156
(509) 447-3626 (208) 437-2641
(509) 447-2112 Fax

*Civil Engineering *Electrical Engineering *Land Surveying *Building Inspection * Land Use Planning

February 24, 2011

Idaho Department of Lands
2550 Highway 2 West
Sandpoint, ID 83864-7305

Attn: Jim Brady
Subj: West Bonner Water Sewer District
Ref: Easement Application for Utility Crossing Under Pend Oreille River

Dear Mr. Brady:

Enclosed please find one copy of the legal description and one copy of the easement map for the proposed utility crossing under the Pend Oreille River near Oldtown, Idaho. Also enclosed, please find a completed easement application signed by the West Bonner Water and Sewer District chairman and a check for $300 for payment of the application fee.

The easement will allow for installation of a 6" pressure sewer line with 12" casing and a 12" water distribution main under the Pend Oreille River. The sewer line casing pipe and the water distribution pipe will be installed under the Pend Oreille River using horizontal directional drilling. Once the 12" sewer casing is installed, the 6" pressure sewer line will be pulled inside the 12" casing pipe.

The sewer line will allow the City of Oldtown to extend sewer service to future developments located on the east side of the Pend Oreille River. The sewer line will transfer residential wastewater from the east side of the River to the existing City of Oldtown wastewater collection system on the west side of the River. The water line will provide a means to transfer water to and from the existing City of Oldtown water distribution system to and from future developments located on the east side of the River. Installation of the water and sewer line is necessary for expansion of the City of Oldtown to the east. The City is bordered on the west and north by the border with Washington. To the south the land rises dramatically and any expansion to the south would require construction of a new water pressure tier.

A digital copy of this letter and application package has been emailed to your email address.

IDAHO DEPARTMENT OF LANDS

EASEMENT APPLICATION INSTRUCTIONS

Note: Before an easement application will be accepted, applicants must first contact the appropriate Idaho Department of Lands Supervisory Area Office. The IDL Supervisory Office will determine if the requested easement is viable. An easement application must then be completed and submitted to the IDL Supervisory Area Office. Easement applications are processed on a first come first serve basis. IDL review of a complete easement application package may take a minimum of 120 days. Incomplete applications and those requiring further information may take longer. Incomplete applications will be returned to the applicant.

When accepting applications for easements, the Idaho Department of Lands requires the following:

1. A signed and dated easement application.
2. Purpose of easement
3. A legal description of the easement — either metes and bounds or a centerline description with ties to one, and preferably two PLSS corners.
4. A map and one copy of the above legal description - paper.
5. A map and one copy of the above legal description - digital.
6. $100.00 non-refundable easement application fee — (Endowment Land Only —Not Submerged Land).

PROCEDURE

The procedure for acquiring an easement across state lands is as follows:

1. Contact the appropriate IDL Supervisory Area Office to determine if the proposed easement will be allowed based on the need, location, and amount of state land that will be encumbered by the easement and the costs involved.

2. If approved by the IDL Supervisory Area Office, the applicant will need to fill out and submit an easement application, which may be obtained from the Area office or online, and pay a non-refundable $100.00 application fee if across endowment lands.

3. Submit a hard copy of both the map and legal description. A digital copy must also be submitted. The legal description as an MS-Word file and the map as a pdf file.

APPLICATION

When the record of survey has been completed, submit the following documents to the Department of Lands Supervisory Area Office:

JAMES A. SEWELL & ASSOCIATES, LLC

600-4th Street West
Newport, Washington 99156
(509) 447-3626 (208) 437-2641
(509) 447-2112 Fax

*Civil Engineering *Electrical Engineering *Land Surveying *Building Inspection * Land Use Planning

UTILITY EASEMENT
Pend Oreille River Crossing to West Bonner Water and Sewer District
2-23-2011

A Tract of land for an access and utility easement located in Section 24, Township 56 North, Range 6 West, Boise Meridian, located in Bonner County, Idaho and being 80.00 feet in width, 40.00 feet on each side of the following described line:

Beginning at a point along the westerly ordinary high water line of the Pend Oreille River (said point bears N83°33'32"W, 3041.29 feet from the Southeast Corner of said Section 24. Said point also bears S88°57'48"E, 296.06 feet and N44°48'27"E, 131.38 feet from the Southwest Corner of Block 14 as shown on the Townsite of "Newport"); thence N44°48'27"E, 1083.10 feet to the easterly ordinary high water line of the said Pend Oreille River and the terminus of this easement (said terminus point bears S56°31'26"W, 2780.16 feet from the East Quarter Corner of said Section 24).

SECTION 24, TOWNSHIP 56 NORTH, RANGE 6 WEST, B.M.

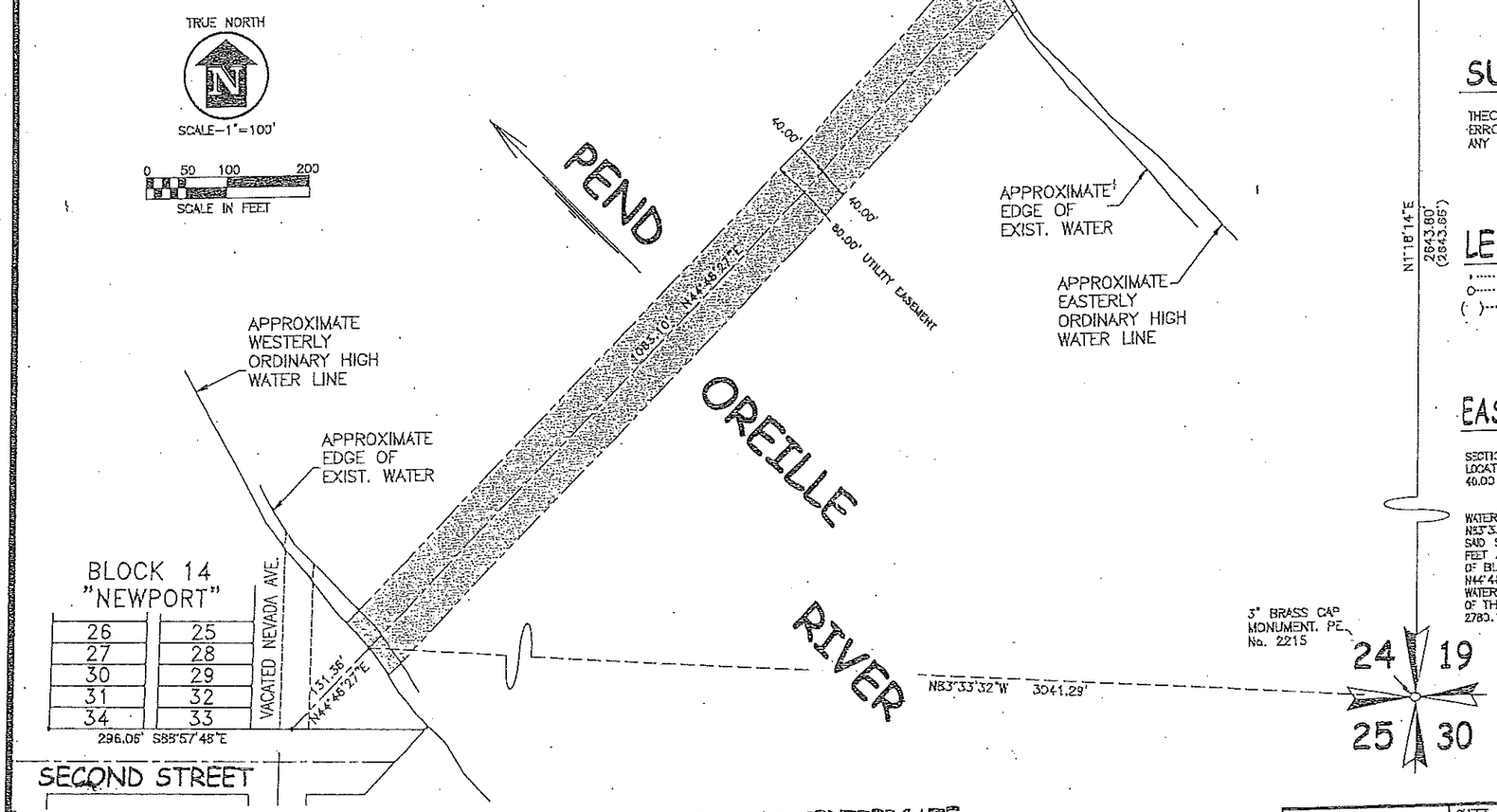
BONNER COUNTY, IDAHO

COUNTY RECORDER'S CERTIFICATE

FILED FOR RECORD THIS ____ DAY OF _____ 2011, AT THE REQUEST OF JAMES A. SEWELL and ASSOCIATES, LLC.

RECORDER'S CERTIFICATE No. _____

_____
COUNTY RECORDER



BASIS OF BEARING

ASSUMED N1°18'14"E ALONG THE EAST LINE OF SECTION 24.

SURVEYOR'S NOTE

THIS SURVEY WAS PERFORMED USING A 3 SECOND THEODOLITE WITH ELECTRONIC DISTANCE METER. THE LINEAR ERROR OF CLOSURE OF THE RANDOM TRAVERSE, PRIOR TO ANY ADJUSTMENT, MEETS OR EXCEDES STATE REQUIREMENTS.

LEGEND

- ····· COMPUTED POINT, NOTHING SET
- o····· FOUND CORNER AS NOTED.
- ( )··· INFORMATION AS SHOWN ON RECORD OF SURVEY INST. No. 655494 FILED BY PLS No. 6019 ON JULY 26th, 2004.

EASEMENT DESCRIPTION

A TRACT OF LAND FOR A UTILITY EASEMENT LOCATED IN SECTION 24, TOWNSHIP 56 NORTH, RANGE 6 WEST, BOISE MERIDIAN, LOCATED IN BONNER COUNTY, IDAHO AND BEING 80.00 FEET IN WIDTH, 40.00 FEET ON EACH SIDE OF THE FOLLOWING DESCRIBED LINE:

BEGINNING AT A POINT ALONG THE WESTERLY ORDINARY HIGH WATER LINE OF THE PEND OREILLE RIVER (SAID POINT BEARS N83°33'32"W, 3041.29 FEET FROM THE SOUTHEAST CORNER OF SAID SECTION 24. SAID POINT ALSO BEARS S88°57'48"E, 296.06 FEET AND N44°48'27"E, 131.38 FEET ALL FROM THE SOUTHWEST CORNER OF BLOCK 14 AS SHOWN ON THE TOWNSITE OF "NEWPORT"); THENCE N44°48'27"E, 1083.10 FEET TO THE EASTERLY ORDINARY HIGH WATER LINE OF SAID PEND OREILLE RIVER AND THE TERMINUS OF THIS EASEMENT (SAID TERMINUS POINT BEARS S56°31'26"W, 2780.16 FEET FROM THE EAST QUARTER CORNER OF SAID SECTION 24.

SURVEYOR'S CERTIFICATE

THIS MAP CORRECTLY REPRESENTS A SURVEY MADE BY ME OR UNDER MY DIRECTION IN CONFORMANCE WITH THE REQUIREMENTS OF THE "SURVEY RECORDING ACT" AT THE REQUEST OF WEST BONNER WATER AND SEWER DISTRICT.

PROFESSIONAL LAND SURVEYOR REGISTERED 6019 STATE OF IDAHO RANDY RAY HOISINGTON

_____ DATE

_____ RANDY R. HOISINGTON, PLS No. 6019

SECTION 24, T56N, R6W, B.M.

SHEET TITLE: SURVEY FOR WEST BONNER WATER AND SEWER DISTRICT

DATE: 5-02-11
SCALE: 1"=100'
DRAWN: BAD
CHECKED: RRH
PROJ.NO.:
CAD FILE NO.: B56-OREILLE-BSLM
SHT 1 OF 1

James A. Sewell and Associates, LLC
CONSULTING ENGINEERS
NEWPORT, WASHINGTON, 99156, (509)447-3626

Project Permits

James A. Sewell & Associates, LLC

IDAHO TRANSPORTATION DEPARTMENT
600 W. Prairie Ave.
Coeur d'Alene, ID 83815-8764

(208) 772-1200
itd.idaho.gov

June 30, 2011

RECEIVED
JUL 01 2011
JAMES A. SEWELL
& ASSOCIATES LLC

Lonnie Orr
City of Oldtown
215 North Washington Avenue
Oldtown, ID 83822

Re: **Permit # 1-11-22**
US-2 MP 07.53

Dear Mayor Orr:

This letter is to notify you that your application for a right-of-way encroachment permit for the above referenced location has been conditionally approved.

Please contact the Idaho Transportation Department (ITD) maintenance foreman, Shannon Thornton, to obtain your permit and detail the work schedule and inspection dates. Shannon can be reached at (208) 263-3412.

A copy of the signed permit **must** be with the person at which time work is being done inside the right-of-way.

If you have any questions pertaining to the permit or have difficulty contacting the foreman, please contact me at (208) 772-1297 or diane.dubos@itd.idaho.gov.

Sincerely,

Diane DuBos
Permit Coordinator

cc: DTE/file
OPS MGR
MTNCE/Thornton
James and Bobbie Ward
James A Sewell & Associates, LLC

IDAHO TRANSPORTATION DEPARTMENT
600 W. Prairie Ave.
Coeur d'Alene, ID 83815-8764

(208) 772-1200
itd.idaho.gov

June 30, 2011

Lonnie Orr
City of Oldtown
215 North Washington Avenue
Oldtown, ID 83822

Re: Permit # 1-11-22
US-2 MP 07.53

Dear Mayor Orr:

Enclosed is a right-of-way encroachment permit for the above referenced location. This permit has been conditionally approved for work to begin. All contents including this letter and any special provisions that accompany the permit become part of the approved permit.

A copy of this permit **must** be with the person at which time work is being done inside the right-of-way. Please review the new Code of Federal Regulations safety clothing requirements for working in the right of way and also General Provisions on the permit application.

Buried utility facilities owned by the State could be located within the project limits and may or may not be shown on the project plans. State owned utility facilities include but are not limited to traffic signals, illumination, traffic recording sites, weather monitoring sites, video detection systems, and electronic message signs. The contractor is to request locates of buried utility facilities owned by the State by contacting the District Traffic Signal Foreman at (208) 772-1299.

If the permitted work does not begin within one (1) year of issuance of permit, the permit shall be considered void. At the discretion of the District Engineer, a one-time extension, not to exceed six (6) months, may be granted if a written request is received from the permittee prior to the expiration date.

If you have any questions pertaining to the permit, please contact me at (208) 772-1297 or diane.dubos@itd.idaho.gov.

Sincerely,

Diane DuBos
Permit Coordinator

cc: DTE/file
OPS MGR
MTNCE/Thornton
James and Bobbie Ward; James A Sewell & Associates, LLC

PERMIT NUMBER 1-11-022

Permit Approval Exhibit A

Construction traffic control devices shall be crashworthy and meet the requirements of NCHRP-350 as follows:

Category 1 Work Zone Safety Devices; including cones, drums, tubular markers, and delineators shall meet the requirements.

Category 2 Work Zone Safety Devices; including barricades, portable sign stands with signs, vertical panels, Category 1 devices with auxiliary lights and/or signs, and devices under 100 lbs (45 kg) shall meet the requirements.

Category 3 Work Zone Safety Devices; including portable signs with hard (plywood, aluminum) substrate, temporary portable concrete barrier, and all devices exceeding 100 lbs (45 kg) and/or "expected to cause significant occupant velocity change" shall meet the NCHRP-350 requirements with the following exception:

Crash Cushions and Truck Mounted Attenuators shall meet NCHRP-350 requirements if purchased AFTER October 1, 1998. All crash cushions and truck mounted attenuators purchased PRIOR to October 1, 1998 may continue to be used until they complete their normal service life if they meet NCHRP-230 requirements.

Category 4 Work Zone Safety Devices; including portable changeable message signs, arrow panels, and other trailer mounted devices may be used without attenuation. These devices may be placed behind crashworthy barriers or shielded with TMA's or crash cushions providing the attenuation does not impair their functionality or create a hazardous condition

The permittee shall submit proof of compliance with NCHRP-350 requirements upon request from an Idaho Transportation Department representative.

MUTCD Section 6E.02 High-Visibility Safety Apparel Standard:

For daytime and nighttime activity, flaggers shall wear safety apparel meeting the requirements of ISEA "American National Standard for High-Visibility Apparel" (see Section 1A.11) and labeled as meeting the ANSI 107-1999 standard performance for Class 2 risk exposure. The apparel background (outer) material color shall be either fluorescent orange-red or fluorescent yellow-green as defined in the standard. The retro-reflective material shall be orange, yellow, white, silver, yellow-green, or a fluorescent version of these colors, and shall be visible at a minimum distance of 300 m (1,000 ft). The retro-reflective safety apparel shall be designed to clearly identify the wearer as a person.

For nighttime activity, safety apparel meeting the requirements of ISEA "American National Standard for High-Visibility Apparel" (see Section 1A.11) and labeled as meeting the ANSI 107-1999 standard performance for Class 3 risk exposure should be considered for flagger wear (instead of the Class 2 safety apparel in the Standard above).

Right-Of-Way Encroachment Application and Permit
Approaches or Public Streets

ITD 2109 (Rev. 2-11)
itd.idaho.gov

ITD Permit Application Number 1-11-022

For ITD Use

Project Number From ITD Highway Plan	Date Application Received	Date Application Determined Complete	In City Limits
	4-14-11		☒ Yes ☐ No

Route	Segment	C/L Milepost	C/L Station	Pop. 5000 or Greater
US-2	1590	0.753 ☐ Right ☒ Left	☐ Right ☐ Left	☐ Yes ☒ No

Traffic Impact Study Required	Appraisal Required	Median Type (Raised, Painted, etc.)	Number of Lanes	Access Control Type (I-V)
☐ Yes ☒ No	☐ Yes ☒ No	painted	2	III

Distance From Nearest Approach (Both sides, both directions of roadway)	Approach Volume (From TIS or ITE Trip Generation Handbook)
	Vehicle Trips per Day

Applicant Information (Please Print or Type)

Applicant(s) Name (Printed)	Mailing Address or P.O. Box	City	State	Zip Code
City of Oldtown	215 North Washington Ave.	Oldtown	ID	83822

E-Mail Address (If available)	Daytime Phone Number	Alternate Phone Number
cityofoldtown@hotmail.com	208-437-3833	

Property Owner's Name (Printed)	Property Address and TAX ID Number	City (If in city limits)	County
James and Bobbie Ward	West half of easement is on Parcel #RP56N06W247350A East half of easement is on Parcel #RP56N06W247203A	Oldtown	Bonner

Nearest Public Street/Road	Current Property Use	Current Zoning	Proposed Property Use	Proposed Zoning
Selkirk Way North	Agricultural	Commercial	Access road for water Tank	Commercial

How is Access Currently Gained?	Property Owner Owns Adjacent Properties
No current access.	☐ Yes ☒ No If Yes, Describe

Request Details

Is this a new approach?	Is this a temporary approach	If this is a proposed modification to an existing approach, check all that apply
☒ Yes ☐ No	☐ Yes ☒ No	☐ Location ☐ Width ☐ Use ☐ Remove ☐ Consolidate Multiple

Desired Approach Width (Without flares at property line)	Type of Approach Requested
40'	☐ Agricultural ☐ SF Residential ☒ Joint Use ☐ MF Residential ☐ Subdivision ☐ Commercial ☐ Public Street

Additional information you would like ITD to be aware of - Attach additional sheets if necessary.

This aproach is proposed to be used as a City street in the future. We anticipate three lanes of traffic in the future. The existing highway approach located at approximate highway station 48+27 is to be abandoned following construction of proposed highway approach. We ask that the ITD extend the construction period from 1 year to 2 years.

ITD District Review

Section	Reviewer	Date	Recommendation Approve	Recommendation Deny	Section	Reviewer	Date	Recommendation Approve	Recommendation Deny
Design	[illegible]	6-15-11	☒	☐	Right-of-Way	JGF	6/15/11	☑	☐
Maintenance	[illegible]	6.15.11	☑	☐	Traffic	[illegible]	6-15-11	☑	☐
Planner	DED	6/15/11	☑	☐	Dist. Engineer			☐	☐

List any conditions of approval

List reason(s) for denial recommendation

RECEIVED APR 14 2011

General Requirements

ITD Permit Application Number 1-11-022

1. The original permit or a copy must be kept on the job site whenever work is taking place.
2. No work shall commence until the permittee is given notice to proceed by an authorized representative of ITD. The permittee shall notify ITD five (5) working days prior to commencing the permitted work if work does not commence immediately upon notice by ITD.
3. During the progress of all work, traffic control devices shall be erected and maintained as necessary or as directed. All traffic control devices shall conform to the most current edition of the *Manual on Uniform Traffic Control Devices for Streets and Highways*, as adopted by the State. Equipment or materials left within the highway right-of-way when work is not taking place shall be delineated and protected with appropriate approved traffic control devices.
4. All work within the State Highway Right of Way shall comply with the requirements of the ITD Workzone Safety and Mobility Policy. Copies available from ITD upon request.
5. All work herein permitted shall conform to current government and industry standards, including Americans with Disabilities Act, and shall be performed and completed to the satisfaction of ITD. The expense of any required supervision of work performed under this permit shall be borne by the permittee.
6. Work done under this permit shall be constructed in a manner that shall not cause water to flow onto the roadway or shoulder, and shall not interfere with the existing drainage on the State Highway System or any adjacent drainage system.
7. The permittee shall furnish all material, labor, and equipment involved in the construction of the approach and its appurtenances. This shall include furnishing drainage pipe, curb, gutter, concrete sidewalk, etc., where required.
8. ITD may inspect the materials and workmanship during construction and upon completion to determine that all terms and conditions of the permit are met. Inspectors are authorized to enforce the conditions of the permit during construction and to halt any activities within state right-of-way that do not comply with the provisions of the permit, that conflict with concurrent highway construction or maintenance work, and/or that endanger highway property, natural or cultural resources protected by law, or the health and safety of workers or the public.
9. ITD shall be reimbursed by the permittee for any additional inspection required to insure compliance with the conditions of this permit. Inspection fees will be based upon inspection time including travel from the ITD facility and charged at rates commensurate with industry standards.
10. Upon completion of the permitted work, any disturbance of the highway, right of way, and/or traffic control devices shall be restored to the satisfaction of ITD including the removal of all rubbish and debris and may include seeding, planting and grading.
11. Any encroachment that is found to be in non-compliance with the terms of the approved permit may be required to be modified, relocated, or removed at the sole expense of the permittee upon written notification by the District Engineer or his authorized representative.
12. The permittee shall maintain at its sole expense the encroachment for which this permit is granted.
13. Changes in the use as defined in I.D.A.P.A. 39.03.42, of the permitted access not consistent with the terms and conditions listed on the permit may be considered a violation of the permit. Any modification, relocation, or removal of an encroachment or subject granted by this permit shall require a new permit prior to commencement of such work.
14. ITD may revoke, amend, amplify, or terminate this permit or any of the conditions herein enumerated if the permittee fails to comply with any or all of its provisions, requirements, or regulations as herein set forth or through willful or unreasonable neglect, fails to heed or comply with notices given, or if the approach, structure, or subject herein granted is not installed or operated and maintained in conformity herewith.

Acceptance and Approval to Work

ITD Permit Application Number 1-11-022

By signing this permit, the permittee or his authorized representative certify that they have been made aware of and agree with all requirements of the permit, including any and all restrictions and further agree to indemnify, save harmless, and defend regardless of outcome ITD from the expenses of and against all suits or claims, including costs, expenses, and attorney fees that may be incurred by reason of any act or omission, neglect, or misconduct of the permittee or its contractor in the design, construction, and maintenance of the work, which is the subject of this permit.

Property Owner/Authorized Representative's Signature	Company Name (If applicable)	Phone Number	Date
X			

Subject to all terms, conditions, and provisions of this permit or attachments, permission is hereby granted to begin work within the State Highway Right of Way.

Idaho Transportation Department Authorized Representative's Signature	Title	Date
X		

Attachments:

☐ Special Provisions/Conditions of Approval	☐ Legal Description/Deed
☒ Traffic Control Plan	☐ Power of Attorney for Authorized Representative
☐ Standard Drawings	☐ Site Plans
☒ Construction Drawings	☐ TIS _____
☐ P&Z Approvals _____	☐ Copy of Letter of Incorporation _____
☐ Dept. Roadway Plansheets _____	☐ Letters of Recommendation/Denial _____
☐ Easements/Agreements _____	☐ Joint Access Agreements _____
☐ Property Appraisal _____	☐ Other _____

Final Approval

Subject to all terms, conditions, and provisions of this permit or attachments, **Final Inspection** has been completed and the permitted work within the State Highway Right of Way is hereby given final approval.

District Engineer or Assigns Signature	Date
X	

Subject to all terms, conditions, and provisions of this permit or attachments, changes in access on the State Highway System have been completed and have been given final approval to be recorded against the property as described in the legal description shown in Attachment A.

District Engineer or Assigns Signature	Date
X	

Subscribed and sworn before me this

_____ day of _____, year _____ in the County of _____, State of _____

personally appeared before me _____, to me known to be the person(s) described in and who executed the within and forgoing instrument, and acknowledged that he/she signed the same as his/her voluntary act and deed for the uses and purposes therein mentioned.

Witness my hand and official seal hereto affixed

Notary Public's Signature _____ SEAL

My Commission Expires _____

June 23, 2011
Oldtown, Idaho

Diane DuBos
Permit Coordinator
Idaho Transportation Department
600 W Prairie Avenue
Coeur d'Alene, Id 83815-8764

Subject: Permit for access to water tank off Hwy. 2

To Whom it may Concern:

We, James L. and Bobbie J. Ward, husband and wife and Trustees of the Ward Family Trust do agree that the land will be provided for a 60 ft. access right of way on our property provided appropriate compensation is forth coming. Said access to be provided to the City of Oldtown.

James L. Ward James L. Ward

Bobbie J. Ward Bobbie J. Ward

Cc: Eric J. Eldenburg, P.E.
James A Sewell & Associates, LLC
600 4th Street West
Newport, Wa 99156

RECEIVED JUN 28 2011

Notes for Figure 6H-6—Typical Application 6
Shoulder Work with Minor Encroachment

Guidance:

1. All lanes should be a minimum of 3 m (10 ft) in width as measured to the near face of the channelizing devices.
2. The treatment shown should be used on a minor road having low speeds. For higher-speed traffic conditions, a lane closure should be used.

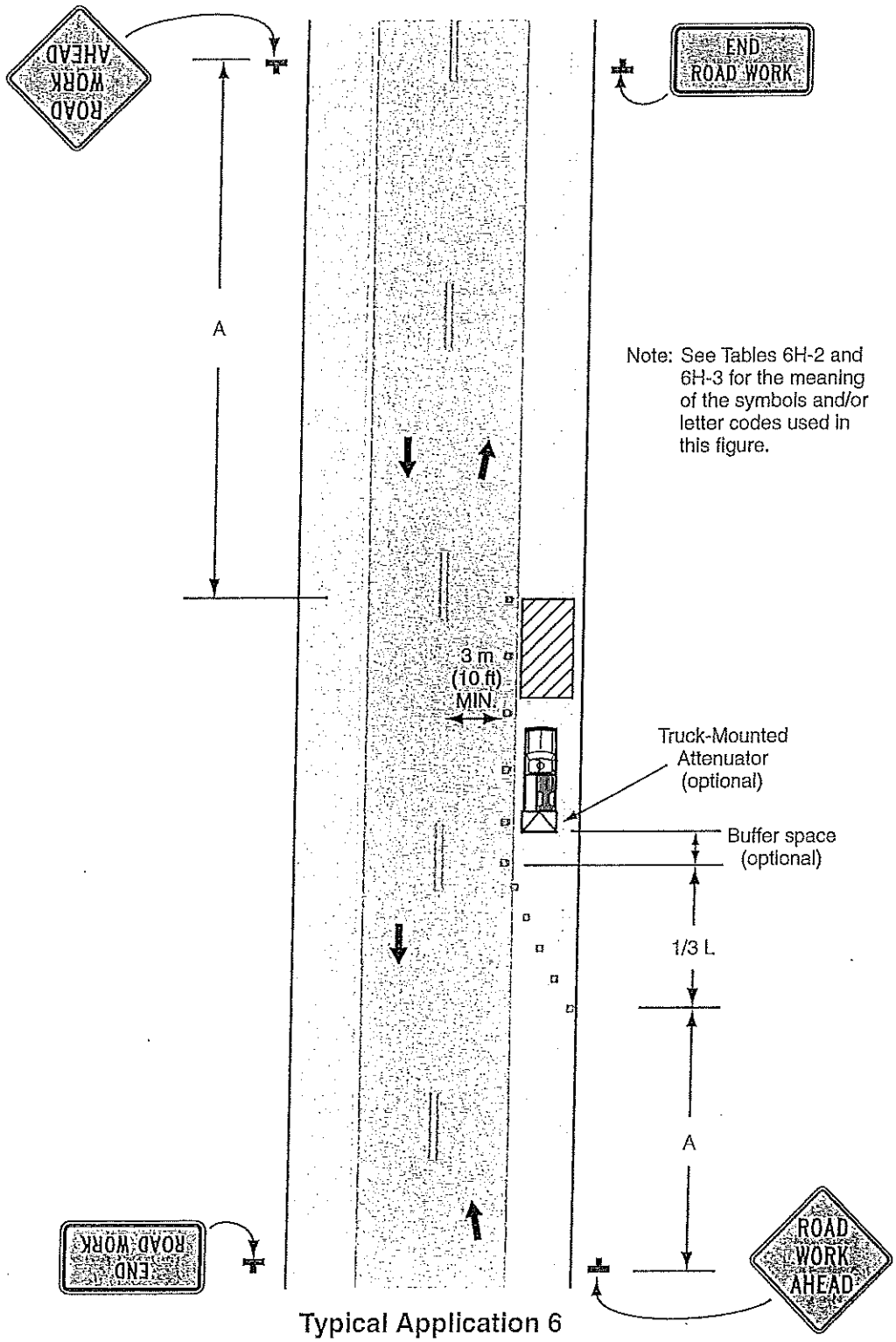
Option:

3. For short-term use on low-volume, low-speed roadways with vehicular traffic that does not include longer and wider heavy commercial vehicles, a minimum lane width of 2.7 m (9 ft) may be used.
4. Where the opposite shoulder is suitable for carrying vehicular traffic and of adequate width, lanes may be shifted by use of closely spaced channelizing devices, provided that the minimum lane width of 3 m (10 ft) is maintained.
5. Additional advance warning may be appropriate, such as a ROAD NARROWS sign.
6. Temporary traffic barriers may be used along the work space.
7. The shadow vehicle may be omitted if a taper and channelizing devices are used.
8. A truck-mounted attenuator may be used on the shadow vehicle.
9. For short-duration work, the taper and channelizing devices may be omitted if a shadow vehicle with activated high-intensity rotating, flashing, oscillating, or strobe lights is used.
10. Vehicle hazard warning signals may be used to supplement high-intensity rotating, flashing, oscillating, or strobe lights.

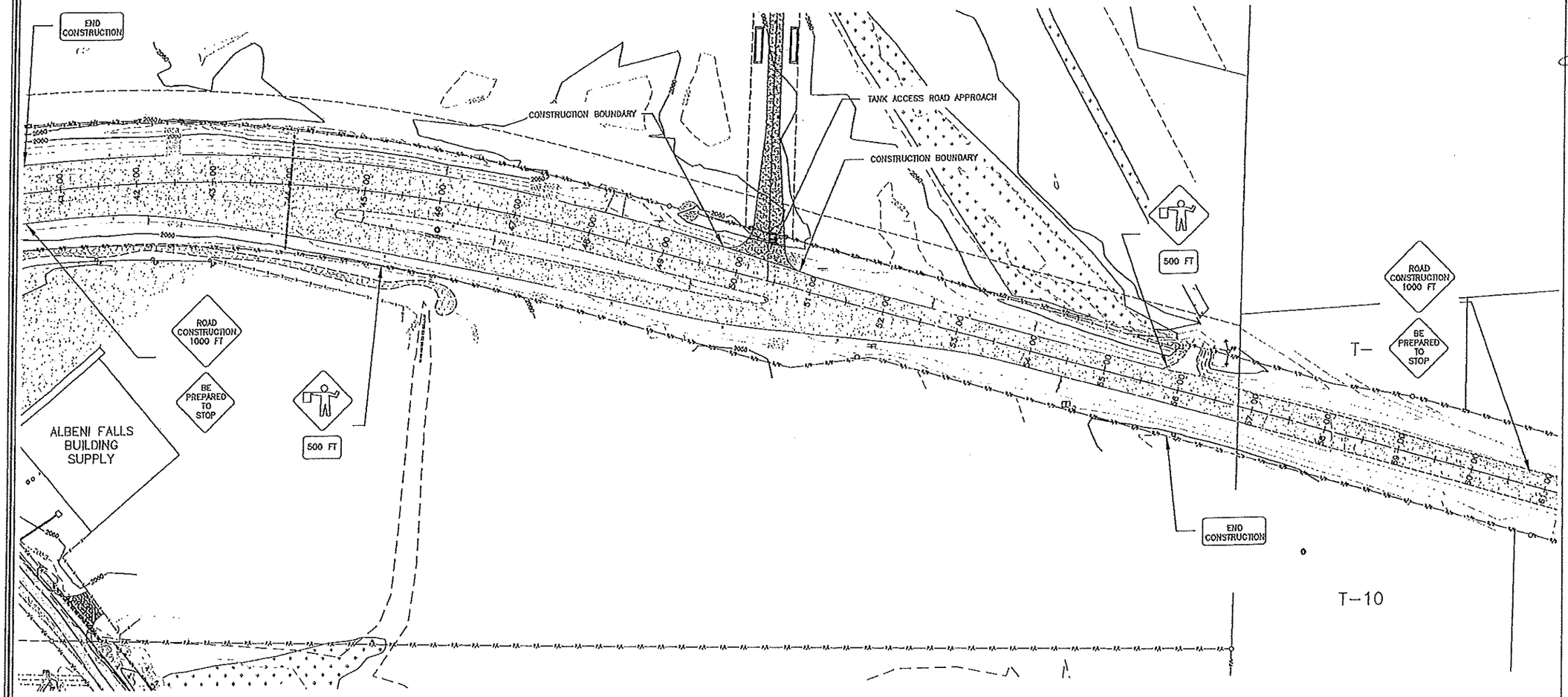
Standard:

11. Vehicle hazard warning signals shall not be used instead of the vehicle's high-intensity rotating, flashing, oscillating, or strobe lights.

Figure 6H-6. Shoulder Work with Minor Encroachment (TA-6)



Typical Application 6



LEGEND

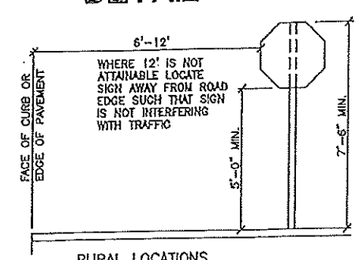
END CONSTRUCTION SIGN – 48"x24" TO BE LOCATED 500 FEET FROM END OF ROAD CONSTRUCTION, BLACK LETTERS & ORANGE BACKGROUND — END CONSTRUCTION (2)

FLAGGER SIGN (30"x30") WITH SUPPLEMENTAL SIGN (24"x18") – TO BE LOCATED 500 FEET FROM ROAD CONSTRUCTION, BLACK LETTERS ON ORANGE BACKGROUND — 500 FT (2)

BE PREPARED TO STOP SIGN – 30"x30" TO BE LOCATED WITH ROAD CONSTRUCTION 100 FT SIGN, BLACK LETTERS WITH ORANGE BACKGROUND — BE PREPARED TO STOP (2)

ROAD CONSTRUCTION SIGN – 30"x30" 1000' FROM CONSTRUCTION AREA, BLACK LETTERS ON ORANGE BACKGROUND — ROAD CONSTRUCTION 1000 FT (2)

DETAIL



RURAL LOCATIONS WITHOUT CURB AND GUTTER

NOTE:
ALL SIGNAGE SHALL CONFORM TO APPLICABLE SECTIONS OF MOST RECENT EDITION OF MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
SIGNS SHALL BE MOVED AS NECESSARY TO FOLLOW CONSTRUCTION PROGRESS
IF FLAGGERS ARE NOT UTILIZED DURING THE CONSTRUCTION PROCESS, FLAGGER SIGNS AND "BE PREPARED TO STOP" SIGNS CAN BE OMITTED.

SIGN MOUNTING:
1. SIGNS SHALL BE MOUNTED TO TREATED 4"X4" POSTS BURIED A MINIMUM OF 2.5' TO PREVENT DISPLACEMENT FROM WIND AND VANDALISM. IF CONCRETE BASE IS USED THE POST SHALL BE OF BREAKAWAY DESIGN.
2. EXISTING POLES (LIGHT POLES, POWER POLES) CAN BE USED WHERE APPROPRIATE.
3. SIGN SHALL BE MOUNTED ACCORDING TO THE MOST RECENT EDITION OF THE IDAHO TRANSPORTATION DEPARTMENT SPECIFICATIONS.

N

0 35 70 140
SCALE IN FEET

4.1 TANK ACCESS ROAD APPROACH TRAFFIC CONTROL PLAN
SCALE– AS SHOWN

PROFESSIONAL ENGINEER REGISTERED 6/16/11 13998 STATE OF IDAHO LEIF J. ELDEHBURG

ENGINEER'S STAMP

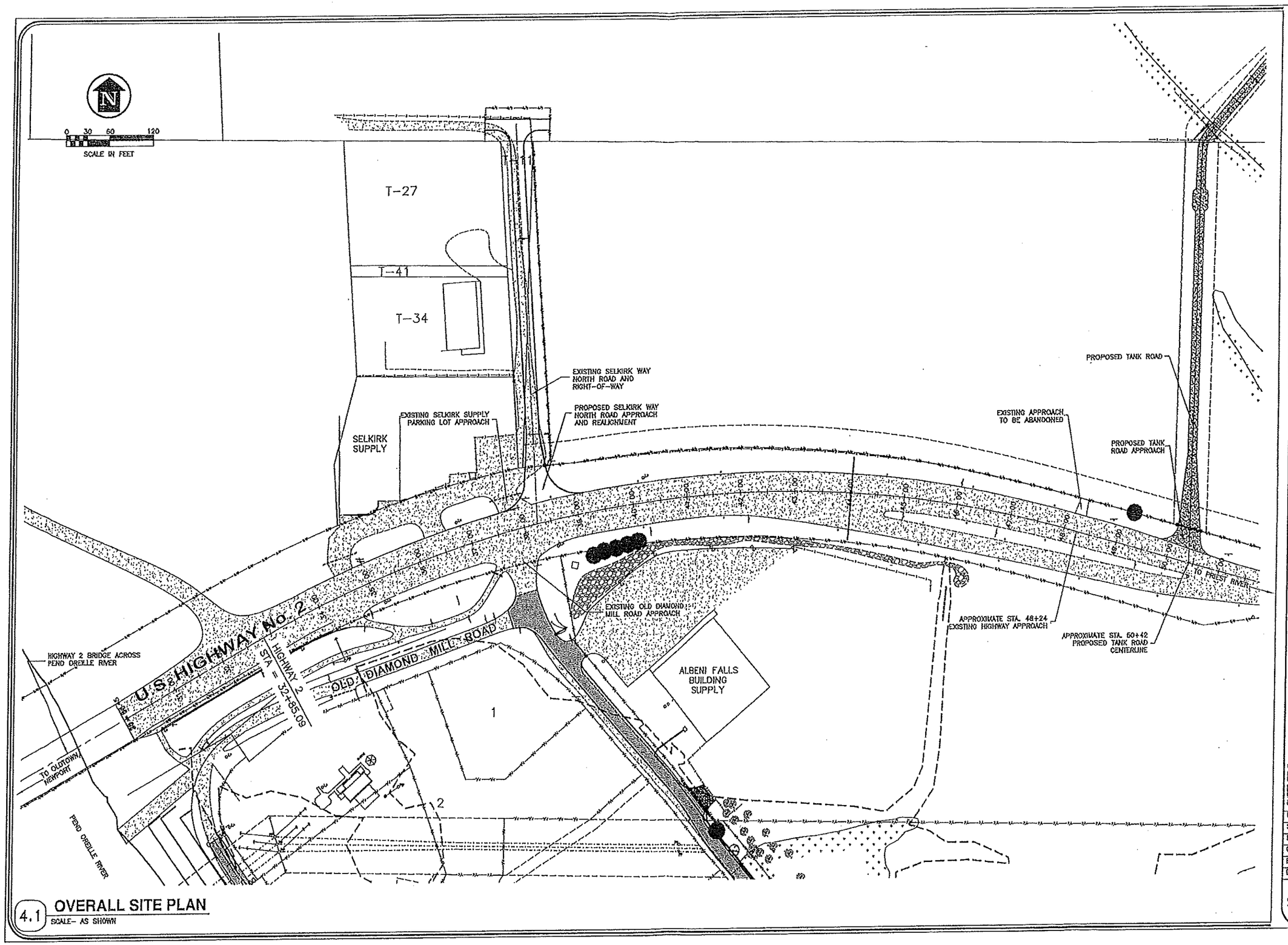
No.	DATE	REVISION	DRN/CHK

James A. Sewell and Associates, LLC
CONSULTING ENGINEERS
NEWPORT, WASHINGTON, 99156
(509) 447-3626

SHEET TITLE: TANK ACCESS ROAD APPROACH TRAFFIC CONTROL PLAN
PROJECT: WATER & SEWER SYSTEM EXTENSIONS, 2011
WEST BONNER W&S DISTRICT
OLDTOWN, BONNER COUNTY, IDAHO

DATE:	8-2-10
SCALE:	AS SHOWN
DRAWN BY:	TMP
CHECKED BY:	EJE
FILE NAME:	ALB04-W&S-3310
DATA No.:	23072-09-002

SHEET 1 OF 1



4.1 OVERALL SITE PLAN
SCALE- AS SHOWN

ENGINEER'S STAMP

No.	DATE	REVISION	DRN/CHK

James A. Sewell and Associates, LLC
CONSULTING ENGINEERS
NEWPORT, WASHINGTON, 99156
(509) 447-3626

SHEET TITLE: OVERALL SITE PLAN
PROJECT: WATER & SEWER SYSTEM EXTENSIONS, 2011
WEST BONNER W&S DISTRICT
OLDTOWN, BONNER COUNTY, IDAHO

DATE:	2-22-11
SCALE:	AS SHOWN
DRAWN BY:	TMP
CHECKED BY:	EJE
FILE NAME:	ALBEN-W&S-3510
DATA No.:	23072-09-003

SHEET 1 OF 2

IDAHO TRANSPORTATION DEPARTMENT
600 W. Prairie Ave.
Coeur d'Alene, ID 83815-8764

(208) 772-1200
itd.idaho.gov

RECEIVED
JUL 01 2011
JAMES A. SEWELL
& ASSOCIATES LLC

June 30, 2010

Eric Eldenburg
James A Sewell & Associates, LLC
600 4th Street West
Newport, WA 99156

RE: PERMIT 1-11-043
US-2 MP 0.404

Dear Mr. Eldenburg:

Your request for right-of-way encroachment permit for the above referenced location has been approved. Upon receipt and approval of the shoring plans from your contractor the permit will be issued directly to you.

A copy of the permit **must** be with the person at which time work is being done inside the right-of-way. Contact ITD maintenance foreman, Shannon Thornton, both prior to your work and at the conclusion for inspection. Shannon can be reached at (208) 263.3412. Failure to contact the maintenance foreman will result in voidance of the permit. Please review the new Code of Federal Regulations safety clothing requirements for working in the right of way and also General Provisions on the second page of the ITD 2110.

Special Provisions are as follows:

- MUTCD Traffic Control shall be used
- Reseed disturbed ground

Buried utility facilities owned by the State could be located within the project limits and may or may not be shown on the project plans. State owned utility facilities include but are not limited to traffic signals, illumination, traffic recording sites, weather monitoring sites, video detection systems, and electronic message signs. The contractor is to request locates of buried utility facilities owned by the State by contacting the District Traffic Signal Foreman at (208) 772-1299.

If the permitted work does not begin within one (1) year of issuance of permit, the permit shall be considered void. At the discretion of the District Engineer, a one-time extension, not to exceed six (6) months, may be granted if a written request is received from the permittee prior to the expiration date.

If you have any questions pertaining to the permit, please contact me at (208) 772-1297 or diane.dubos@itd.idaho.gov.

Sincerely,

Diane DuBos
Permit Coordinator

cc: DTE/file
OPS MGR
Mtnce/Thornton

Permit Approval Exhibit A

Idaho Statute Title 55, Chapter 22, Section 55-2201 through 55-2210 requires that if excavation is involved, the applicant must notify the One-Call Service by calling 8-1-1 at least two business days and not more than 10 business days before the start of excavation. Please go to http://www.digline.com/index.php for more information.

Construction traffic control devices shall be crashworthy and meet the requirements of NCHRP-350 as follows:

Category 1 Work Zone Safety Devices; including cones, drums, tubular markers, and delineators shall meet the requirements.

Category 2 Work Zone Safety Devices; including barricades, portable sign stands with signs, vertical panels, Category 1 devices with auxiliary lights and/or signs, and devices under 100 lbs (45 kg) shall meet the requirements.

Category 3 Work Zone Safety Devices; including portable signs with hard (plywood, aluminum) substrate, temporary portable concrete barrier, and all devices exceeding 100 lbs (45 kg) and/or "expected to cause significant occupant velocity change" shall meet the NCHRP-350 requirements with the following exception:

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Category 4 Work Zone Safety Devices; including portable changeable message signs, arrow panels, and other trailer mounted devices may be used without attenuation. These devices may be placed behind crashworthy barriers or shielded with TMA's or crash cushions providing the attenuation does not impair their functionality or create a hazardous condition

The permittee shall submit proof of compliance with NCHRP-350 requirements upon request from an Idaho Transportation Department representative.

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For daytime and nighttime activity, flaggers shall wear safety apparel meeting the requirements of ISEA "American National Standard for High-Visibility Apparel" (see Section 1A.11) and labeled as meeting the ANSI 107-1999 standard performance for Class 2 risk exposure. The apparel background (outer) material color shall be either fluorescent orange-red or fluorescent yellow-green as defined in the standard. The retroreflective material shall be orange, yellow, white, silver, yellow-green, or a fluorescent version of these colors, and shall be visible at a minimum distance of 300 m (1,000 ft). The retroreflective safety apparel shall be designed to clearly identify the wearer as a person.

For nighttime activity, safety apparel meeting the requirements of ISEA "American National Standard for High-Visibility Apparel" (see Section 1A.11) and labeled as meeting the ANSI 107-1999 standard performance for Class 3 risk exposure should be considered for flagger wear (instead of the Class 2 safety apparel in the Standard above).

COPY

JAMES A. SEWELL & ASSOCIATES, LLC

600-4th Street West
Newport, Washington 99156
(509) 447-3626 (208) 437-2641
(509) 447-2112 Fax

*Civil Engineering *Electrical Engineering *Land Surveying *Building Inspection * Land Use Planning

October 14, 2011

Idaho Transportation Department
District 1 Traffic
600 West Prairie
Coeur d'Alene, ID 83815

Attn: Stephanie Hale
Subj: West Bonner Water and Sewer District – Albeni Area Annexation
Ref: Transmittal of Road Approach Permit Applications

Dear Stephanie:

Enclosed please find one road approach permit application for Selkirk Way North and one permit application for Old Diamond Mill Road for the subject project for your review and approval. Also enclosed please find the approach construction drawings and a traffic control plan.

If you have any questions or need any thing further please contact myself or Eric Eldenburg at our Newport office, 509-447-3626.

Sincerely,

JAMES A. SEWELL & ASSOCIATES, LLC

By _____
Travis Parry, E.I.T

Encl: Road Approach Permit Application for Selkirk Way North
Road Approach Permit Application for Old Diamond Mill Road
Construction Drawings
Traffic Control Plan

pc: Lonnie Orr, 215 N. Washington Ave., Oldtown, ID 83822 w/encl
Jim Perry, 495 E. Highway 2, Oldtwon, ID 83822 w/encl
File w/encl

Instructions For CompletingITD 2109, Right-Of-WayEncroachment ApplicationAnd Permit- Approaches or Public Streets

Idaho Transportation Department

Note: An incomplete application will delay processing

You may be able to expedite the application process and reduce site designing and engineering costs by requesting a pre-application conference with the Idaho Transportation Department (ITD). Contact your local ITD District Office and ask to speak with the Permits Coordinator to schedule a meeting.

District 1	District 2	District 3	District 4	District 5	District 6
600 W. Prairie Ave. Coeur d'Alene, Idaho 83815-8764 (208) 772-1200	P.O. Box 837 Lewiston, Idaho 83501-0837 208) 799-4300	8150 Chinden Blvd. Boise, Idaho 83714-8028 (208) 334-8300	216 S. Date St. Shoshone, Idaho 83352-0820 (208) 886-7800	5151 S. 5th Ave. Pocatello, Idaho 83205-4700 (208) 239-3300	206 N. Yellowstone Ave. Rigby, Idaho 83442-0097 (208) 745-7781
Counties served: Benewah, Bonner, Boundary, Kootenai, Shoshone	Counties served: Clearwater, Idaho, Latah, Lewis, Nez Perce	Counties served: Ada, Adams, Boise, Canyon, Elmore, Gem, Owyhee, Payette, Valley, Washington	Counties served: Blaine, Camas, Cassia, Custer, Gooding, Jerome, Lincoln, Minidoka, Twin Falls	Counties served: Bannock, Bear Lake, Bingham, Caribou, Franklin, Oneida, Power	Counties served: Bonneville, Butte, Clark, Custer, Fremont, Jefferson, Lemhi, Madison,Teton

1. Use one form for each requested approach. The form initially serves as an ***application*** for a connection between an adjacent property and a state highway. If approved, the completed form becomes a ***permit*** for the state highway connection.
2. Please print (in ink), type, or complete the application in Microsoft Word and print the form.
3. Read and understand these instructions and all of the General Requirements on the form. These requirements apply to all approach permits and if you are granted a permit; you must adhere to each of them. Additional permit-specific provisions may be a part of any approved permit, and you will be given the opportunity to review them prior to accepting your permit.
4. Complete each item in the shaded area under "Applicant Information" and "Request Details".
5. Include the following with your application:
   a. Non-refundable application fee (ranges from $50-$100- please confirm the applicable amount with ITD).
   b. A copy of the latest deed of record which identifies the property owner and provides the legal description of the property abutting the State Highway Right of Way where the proposed access is being requested. If ownership of the property changes during the permit process, a new form must be submitted with the new ownership documentation.
   c. Photographs of the proposed driveway location, including one looking each direction along the highway from the proposed location. Digital photographs are acceptable.
   d. Plans or drawings as follows:
      i. For agricultural, single-family or joint-useapproaches, include an8 ½" x 11" or 11" x17" drawing showing the location of the proposed access on your property which is shown in relation to property lines, highway, existing and proposed buildings. A second drawing or map should be included that shows the location of your property in relation to other roads and landmarks. Show all dimensions, mark which direction is north and if possible, draw to scale. Include copies of any easements or agreements with adjacent property owners.
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   e. If the development will generate more than 25 trips during the peak hour or more than 250 trips per day, include a Transportation Impact Study (TIS). Details regarding the required contents of a TIS are available from the District Permits Coordinator or District Traffic Engineer.
6. After your application is received:
   a. ITD will review the application, all access options, local conditions, and local government plans. The application will then be discussed internally with staff. Your request may be approved, approved with conditions, or denied.
   b. If your application is approved or approved with conditions, you will receive a letter from ITD indicating your permit has been accepted for approval accompanied by the application form and any additional special provisions that must be adhered to. Prior to starting any work in ITD right of way, you must review the conditions, and return the application with

the property owner's signature or the application and a copy of the Power of Attorney for the authorized representative who signed on their behalf. The application will then be signed by ITD and becomes your **permit** to begin work. You will be notified by ITD where you can pick up your approved permit.

i. All work under the permit shall be completed within one year from the date that the Department issues the permit to begin work. Applicant may request, in writing, one, 6 month extension prior to expiration of the permit.

ii. All permitted work shall be completed and available for final inspection within thirty (30) days after construction begins, unless otherwise stated in the special provisions of the permit.

iii. After construction is completed you must notify the ITD Maintenance Foreman for final inspection of the permitted work. The contact information for the foreman will be included in your permit package.

iv. Permit will be considered **temporary** until final approvalby the ITD.

v. Failure to complete all work in accordance with the requirements of the permit and receive final approval within the allotted time will render the permit null and void.

vi. Changes in deeded access will be recorded with the County following the final approval by ITD. You will receive a copy of the recorded document which should be retained for future reference.

c. If your application is denied, you will be notified by certified mail. The reason(s) for the denial and the process for appealing the denial will be outlined in the letter you receive.

7. If your application is approved, your signature indicates you understand the following:

a. Approaches shall be for the bona fide purpose of securing access and not for parking, conducting business, or servicing vehicles on the highway right-of-way. A list of all prohibited uses of ITD right-of-way is available in I.D.A.P.A. 39.03.42.

b. Any permit or privilege granted under an ITD 2109 shall not be deemed or held to be an exclusive one and shall not prohibit the state from using any of its highways, streets, or public places or affect its right to full supervision and control over all or any part of them. ITD reserves the right to add, remove, modify, repair, or relocate any encroachment(s) or appurtenance(s) within the highway right-of-way which currently exists or has been authorized by this permit, to accomplish the relocation, reconstruction, widening, or maintenance of the highway and/or to improve safety or mobility on or adjacent to the highway system.

c. Any traffic control features or devices in the State Highway right of way, such as islands, median openings, traffic signals, illumination and other traffic control devices required as a condition of a permit, are not an integral part of the approach authorized by the permit and as such shall become property of the State upon final inspection and approval by ITD. ITD reserves the right to change these features and devices in the future in order to promote safety and/or mobility within the State Highway right of way. Expenditure of monies for purchase or installation of said features or devices shall not create an ownership interest in the features or devices.

Right-Of-Way Encroachment Application and Permit Approaches or Public Streets

ITD 2109 (Rev. 07-28-11)
itd.idaho.gov

ITD Permit Application Number _____

For ITD Use

Project Number From ITD Highway Plan	Date Application Received	Date Application Determined Complete	In City Limits

Route	Segment	C/L Milepost	C/L Station	Pop. 5000 or Greater
		☐ Right ☐ Left	☐ Right ☐ Left	☐ Yes ☐ No

Traffic Impact Study Required	Appraisal Required	Median Type (Raised, Painted, etc.)	Number of Lanes	Access Control Type (I-V)
☐ Yes ☐ No	☐ Yes ☐ No			

Distance From Nearest Approach (Both sides, both directions of roadway)	Approach Volume (From TIS or ITE Trip Generation Handbook)
	Vehicle Trips per Day

Site Distance	Reason if Restrictedto Right Or Left	Culvert Needed	If Yes, Enter Size
Right Left		☐ Yes ☐ No	Dia. Length

Applicant Information (Please Print or Type)

Applicant(s) Name (Printed)	Mailing Address or P.O. Box	City	State	Zip Code
City of Oldtown	215 N. Washington Ave.	Oldtown	ID	83822

E-Mail Address (If available)	Daytime Phone Number	Alternate Phone Number
cityofoldtown@hotmail.com	(208) 437-3833	

Property Owner's Name (Printed)	Property Address and TAX ID Number	City (If in city limits)	County
City of Oldtown	S24, T56N, R6W	Oldtown	Bonner

Nearest Public Street/Road	Current Property Use	Current Zoning	Proposed Property Use	Proposed Zoning
Selkirk Way North	Commercial/Residential Access Road	Commercial	City Street	Commercial

How is Access Currently Gained?	Property Owner Owns Adjacent Properties
Existing 60' wide commercial parking lot approach	☐ Yes ☒ No If Yes, Describe

Request Details

Is this a new approach?	Is this a temporary approach	If this is a proposed modification to an existing approach, check all that apply
☐ Yes ☒ No	☐ Yes ☒ No	☒ Location ☒ Width ☐ Use ☐ Remove ☐ Consolidate Multiple

Desired Approach Width (Without flares at property line)	Type of Approach Requested
38'	☐ Agricultural ☐ SF Residential ☐ Joint Use ☐ MF Residential ☐ Subdivision ☐ Commercial ☒ Public Street

Additional information you would like ITD to be aware of - Attach additional sheets if necessary.

It is proposed to relocate the existing approach for Selkirk Way North to the center of the Selkirk Way North right-of-way. Currently access to Selkirk Way North is obtained by travelling through the existing parking lot for Selkirk Ace Hardware. Relocating the approach will allow access to Selkirk Way North via the public right-of-way. Access to the Selkirk Ace parking lot will be maintained via an approach on Selkirk Way North.

ITD District Review

Section	Reviewer	Date	Recommendation		Section	Reviewer	Date	Recommendation	
			Approve	Deny				Approve	Deny
Design			☐	☐	Right-of-Way			☐	☐
Maintenance			☐	☐	Traffic			☐	☐
Planner			☐	☐	Dist. Engineer			☐	☐

List any conditions of approval

List reason(s) for denial recommendation

General Requirements

ITD Permit Application Number _____

1. The original permit or a copy must be kept on the job site whenever work is taking place.
2. No work shall commence until the permittee is given notice to proceed by an authorized representative of ITD. The permittee shall notify ITD five (5) working days prior to commencing the permitted work if work does not commence immediately upon notice by ITD.
3. During the progress of all work, traffic control devices shall be erected and maintained as necessary or as directed. All traffic control devices shall conform to the most current edition of the *Manual on Uniform Traffic Control Devices for Streets and Highways*, as adopted by the State. Equipment or materials left within the highway right-of-way when work is not taking placeshall be delineated and protected with appropriate approved traffic control devices.
4. All work within the State Highway Right of Way shall comply with the requirements of the ITD Workzone Safety and Mobility Policy. Copies available from ITD upon request.
5. All work herein permitted shall conform to current government and industry standards, including Americans with Disabilities Act, and shall be performed and completed to the satisfaction of ITD. The expense of any required supervision of work performed under this permit shall be borne by the permittee.
6. Work done under this permit shall be constructed in a manner that shall not cause water to flow onto the roadway or shoulder, and shall not interfere with the existing drainage on the State Highway System or any adjacent drainage system.
7. The permittee shall furnish all material, labor, and equipment involved in the construction of the approach and its appurtenances. This shall include furnishing drainage pipe, curb, gutter, concrete sidewalk, etc., where required.
8. ITD may inspect the materials and workmanship during construction and upon completion to determine that all terms and conditions of the permit are met. Inspectors are authorized to enforce the conditions of the permit during construction and to halt any activities within state right-of-way that do not comply with the provisions of the permit, that conflict with concurrent highway construction or maintenance work, and/or that endanger highway property, natural or cultural resources protected by law, or the health and safety of workers or the public.
9. ITD shall be reimbursed by the permittee for any additional inspection required to insure compliance with the conditions of this permit. Inspection fees will be based upon inspection time including travel from the ITD facility and charged at rates commensurate with industry standards.
10. Upon completion of the permitted work, any disturbance of the highway, right of way, and/or traffic control devices shall be restored to the satisfaction of ITD including the removal of all rubbish and debris and may include seeding, planting and grading.
11. Any encroachment that is found to be in non-compliance with the terms of the approved permit may be required to be modified, relocated, or removed at the sole expense of the permittee upon written notification by the District Engineer or his authorized representative.
12. The permittee shall maintain at its sole expense the encroachment for which this permit is granted.
13. Changes in the use as defined in I.D.A.P.A. 39.03.42, of the permitted access not consistent with the terms and conditions listed on the permit may be considered a violation of the permit. Any modification, relocation, or removal of an encroachment or subject granted by this permit shall require a new permit prior to commencement of such work.
14. ITD may revoke, amend, amplify, or terminate this permit or any of the conditions herein enumerated if the permittee fails to comply with any or all of its provisions, requirements, or regulations as herein set forth or through willful or unreasonable neglect, fails to heed or comply with notices given, or if the approach, structure, or subject herein granted is not installed or operated and maintained in conformity herewith.

Acceptance and Approval to Work

ITD Permit Application Number _____

By signing this permit, the permitteeor his authorized representative certify that they have been made aware of and agree with all requirements of the permit, including any and all restrictions and further agree to indemnify, save harmless, and defend regardless of outcome ITD from the expenses of and against all suits or claims, including costs, expenses, and attorney fees that may be incurred by reason of any act or omission, neglect, or misconduct of the permittee or its contractor in the design, construction, and maintenance of the work, which is the subject of this permit.

Property Owner/Authorized Representative's Signature	Company Name (If applicable)	Phone Number	Date
X	City of Oldtown	208-437-3833	10-12-11

Subject to all terms, conditions, and provisions of this permit or attachments, permission is hereby granted to begin work within the State Highway Right of Way.

Idaho Transportation Department Authorized Representative's Signature	Title	Date
X		

Attachments:

☐ Special Provisions/Conditions of Approval	☐ Legal Description/Deed
☒ Traffic Control Plan	☐ Power of Attorney for Authorized Representative
☐ Standard Drawings	☐ Site Plans
☒ Construction Drawings	☐ TIS _____
☐ P&Z Approvals_____	☐ Copy of Letter of Incorporation_____
☐ Dept. Roadway Plansheets_____	☐ Letters of Recommendation/Denial_____
☐ Easements/Agreements_____	☐ Joint Access Agreements_____
☐ Property Appraisal_____	☐ Other_____

Final Approval

Subject to all terms, conditions, and provisions of this permit or attachments, **Final Inspection** has been completed and the permitted work within the State Highway Right of Way is hereby given final approval.

District Engineer or Assigns Signature	Date
X	

Subject to all terms, conditions, and provisions of this permit or attachments, changes in access on the State Highway System have been completed and have been given final approval to be recorded against the property as described in the legal description shown in Attachment A.

District Engineer or Assigns Signature	Date
X	

Subscribed and sworn before me this

_____ day of _____, year _____ in the County of _____, State of _____

personally appeared before me_____, to me known to be the person(s) described in and who executed the within and forgoing instrument, and acknowledged that he/she signed the same as his/her voluntary act and deed for the uses and purposes therein mentioned.

Witness my hand and official seal hereto affixed

Notary Public's Signature _____ SEAL

My Commission Expires _____

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c. Any traffic control features or devices in the State Highway right of way, such as islands, median openings, traffic signals, illumination and other traffic control devices required as a condition of a permit, are not an integral part of the approach authorized by the permit and as such shall become property of the State upon final inspection and approval by ITD. ITD reserves the right to change these features and devices in the future in order to promote safety and/or mobility within the State Highway right of way. Expenditure of monies for purchase or installation of said features or devices shall not create an ownership interest in the features or devices.

Right-Of-Way Encroachment Application and Permit Approaches or Public Streets

ITD 2109 (Rev. 07-28-11)
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ITD Permit Application Number _____

For ITD Use

Project Number From ITD Highway Plan	Date Application Received	Date Application Determined Complete	In City Limits

Route	Segment	C/L Milepost	C/L Station	Pop. 5000 or Greater
		☐ Right ☐ Left	☐ Right ☐ Left	☐ Yes ☐ No

Traffic Impact Study Required	Appraisal Required	Median Type (Raised, Painted, etc.)	Number of Lanes	Access Control Type (I-V)
☐ Yes ☐ No	☐ Yes ☐ No			

Distance From Nearest Approach (Both sides, both directions of roadway)	Approach Volume (From TIS or ITE Trip Generation Handbook)
	Vehicle Trips per Day

Site Distance	Reason if Restrictedto Right Or Left	Culvert Needed	If Yes, Enter Size
Right Left		☐ Yes ☐ No	Dia. Length

Applicant Information (Please Print or Type)

Applicant(s) Name (Printed)	Mailing Address or P.O. Box	City	State	Zip Code
City of Oldtown	215 N. Washington Ave.	Oldtown	ID	83822

E-Mail Address (If available)	Daytime Phone Number	Alternate Phone Number
cityofoldtown@hotmail.com	(208) 437-3833	

Property Owner's Name (Printed)	Property Address and TAX ID Number	City (If in city limits)	County
City of Oldtown	S24, T56N, R6W	Oldtown	Bonner

Nearest Public Street/Road	Current Property Use	Current Zoning	Proposed Property Use	Proposed Zoning
Old Diamond Mill Road	Commercial/Residential Access Road	Commercial	City Street	Commercial

How is Access Currently Gained?	Property Owner Owns Adjacent Properties
Existing Old Diamond Mill Road approach	☐ Yes ☒ No If Yes, Describe

Request Details

Is this a new approach?	Is this a temporary approach	If this is a proposed modification to an existing approach, check all that apply
☐ Yes ☒ No	☐ Yes ☒ No	☒ Location ☐ Width ☐ Use ☐ Remove ☐ Consolidate Multiple

Desired Approach Width (Without flares at property line)	Type of Approach Requested
40'	☐ Agricultural ☐ SF Residential ☐ Joint Use ☐ MF Residential ☐ Subdivision ☐ Commercial ☒ Public Street

Additional information you would like ITD to be aware of - Attach additional sheets if necessary.

It is proposed to relocate the existing approach for Old Diamond Mill road to the east to align with the proposed location for the Selkirk Way North road approach. The Selkirk Way North road approach is located opposite of Highway 2 from the Old Diamond Mill road approach. The Old Diamond Mill Road approach will be relocated to the east so the centerline is located in line with the proposed Selkirk Way North road centerline.

ITD District Review

Section	Reviewer	Date	Recommendation		Section	Reviewer	Date	Recommendation	
			Approve	Deny				Approve	Deny
Design			☐	☐	Right-of-Way			☐	☐
Maintenance			☐	☐	Traffic			☐	☐
Planner			☐	☐	Dist. Engineer			☐	☐

List any conditions of approval

List reason(s) for denial recommendation

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ITD Permit Application Number _____

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5. All work herein permitted shall conform to current government and industry standards, including Americans with Disabilities Act, and shall be performed and completed to the satisfaction of ITD. The expense of any required supervision of work performed under this permit shall be borne by the permittee.
6. Work done under this permit shall be constructed in a manner that shall not cause water to flow onto the roadway or shoulder; and shall not interfere with the existing drainage on the State Highway System or any adjacent drainage system.
7. The permittee shall furnish all material, labor, and equipment involved in the construction of the approach and its appurtenances. This shall include furnishing drainage pipe, curb, gutter, concrete sidewalk, etc., where required.
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14. ITD may revoke, amend, amplify, or terminate this permit or any of the conditions herein enumerated if the permittee fails to comply with any or all of its provisions, requirements, or regulations as herein set forth or through willful or unreasonable neglect, fails to heed or comply with notices given, or if the approach, structure, or subject herein granted is not installed or operated and maintained in conformity herewith.

Acceptance and Approval to Work

ITD Permit Application Number _____

By signing this permit, the permitteeor his authorized representative certify that they have been made aware of and agree with all requirements of the permit, including any and all restrictions and further agree to indemnify, save harmless, and defend regardless of outcome ITD from the expenses of and against all suits or claims, including costs, expenses, and attorney fees that may be incurred by reason of any act or omission, neglect, or misconduct of the permittee or its contractor in the design, construction, and maintenance of the work, which is the subject of this permit.

Property Owner/Authorized Representative's Signature	Company Name (if applicable)	Phone Number	Date
X	City of Oldtown	208-437-3833	10-12-11

Subject to all terms, conditions, and provisions of this permit or attachments, permission is hereby granted to begin work within the State Highway Right of Way.

Idaho Transportation Department Authorized Representative's Signature	Title	Date
X		

Attachments:

☐ Special Provisions/Conditions of Approval	☐ Legal Description/Deed
☒ Traffic Control Plan	☐ Power of Attorney for Authorized Representative
☐ Standard Drawings	☐ Site Plans
☒ Construction Drawings	☐ TIS _____
☐ P&Z Approvals_____	☐ Copy of Letter of Incorporation_____
☐ Dept. Roadway Plansheets_____	☐ Letters of Recommendation/Denial_____
☐ Easements/Agreements_____	☐ Joint Access Agreements_____
☐ Property Appraisal_____	☐ Other_____

Final Approval

Subject to all terms, conditions, and provisions of this permit or attachments, **Final Inspection** has been completed and the permitted work within the State Highway Right of Way is hereby given final approval.

District Engineer or Assigns Signature	Date
X	

Subject to all terms, conditions, and provisions of this permit or attachments, changes in access on the State Highway System have been completed and have been given final approval to be recorded against the property as described in the legal description shown in Attachment A.

District Engineer or Assigns Signature	Date
X	

Subscribed and sworn before me this

_____ day of _____, year _____ in the County of _____, State of _____

personally appeared before me_____, to me known to be the person(s) described in and who executed the within and forgoing instrument, and acknowledged that he/she signed the same as his/her voluntary act and deed for the uses and purposes therein mentioned.

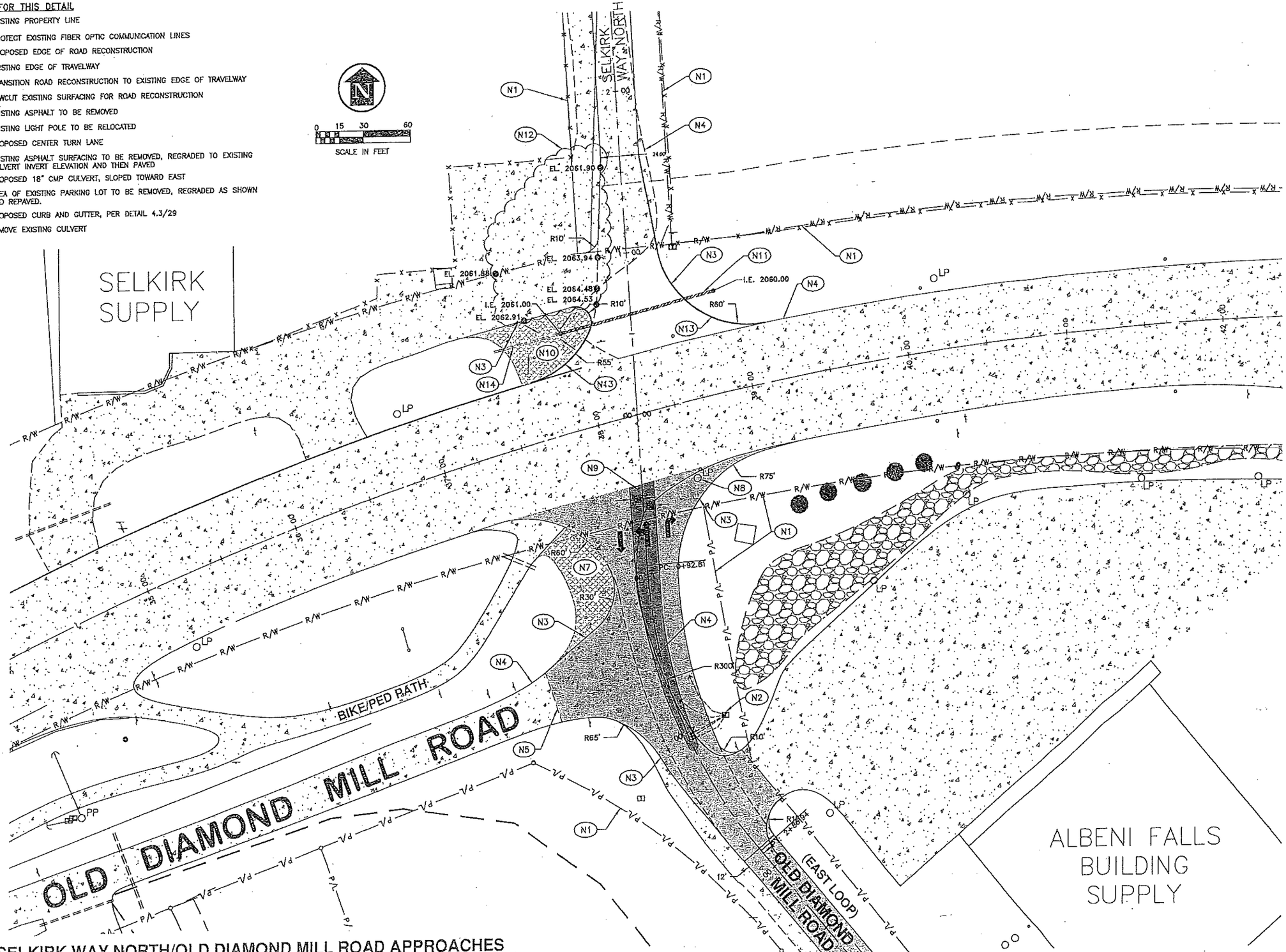
Witness my hand and official seal hereto affixed

Notary Public's Signature _____ SEAL

My Commission Expires _____

NOTES FOR THIS DETAIL

- (N1) EXISTING PROPERTY LINE
- (N2) PROTECT EXISTING FIBER OPTIC COMMUNICATION LINES
- (N3) PROPOSED EDGE OF ROAD RECONSTRUCTION
- (N4) EXISTING EDGE OF TRAVELWAY
- (N5) TRANSITION ROAD RECONSTRUCTION TO EXISTING EDGE OF TRAVELWAY
- (N6) SAWCUT EXISTING SURFACING FOR ROAD RECONSTRUCTION
- (N7) EXISTING ASPHALT TO BE REMOVED
- (N8) EXISTING LIGHT POLE TO BE RELOCATED
- (N9) PROPOSED CENTER TURN LANE
- (N10) EXISTING ASPHALT SURFACING TO BE REMOVED, REGRADED TO EXISTING CULVERT INVERT ELEVATION AND THEN PAVED
- (N11) PROPOSED 18" CMP CULVERT, SLOPED TOWARD EAST
- (N12) AREA OF EXISTING PARKING LOT TO BE REMOVED, REGRADED AS SHOWN AND REPAVED.
- (N13) PROPOSED CURB AND GUTTER, PER DETAIL 4.3/29
- (N14) REMOVE EXISTING CULVERT



4.1 SELKIRK WAY NORTH/OLD DIAMOND MILL ROAD APPROACHES

SCALE– AS SHOWN

PROFESSIONAL ENGINEER REGISTERED 23998 STATE OF IDAHO ERIC J. ELDENBURG 5/12/14

ENGINEER'S STAMP

No.	DATE	REVISION	DRN/CHK

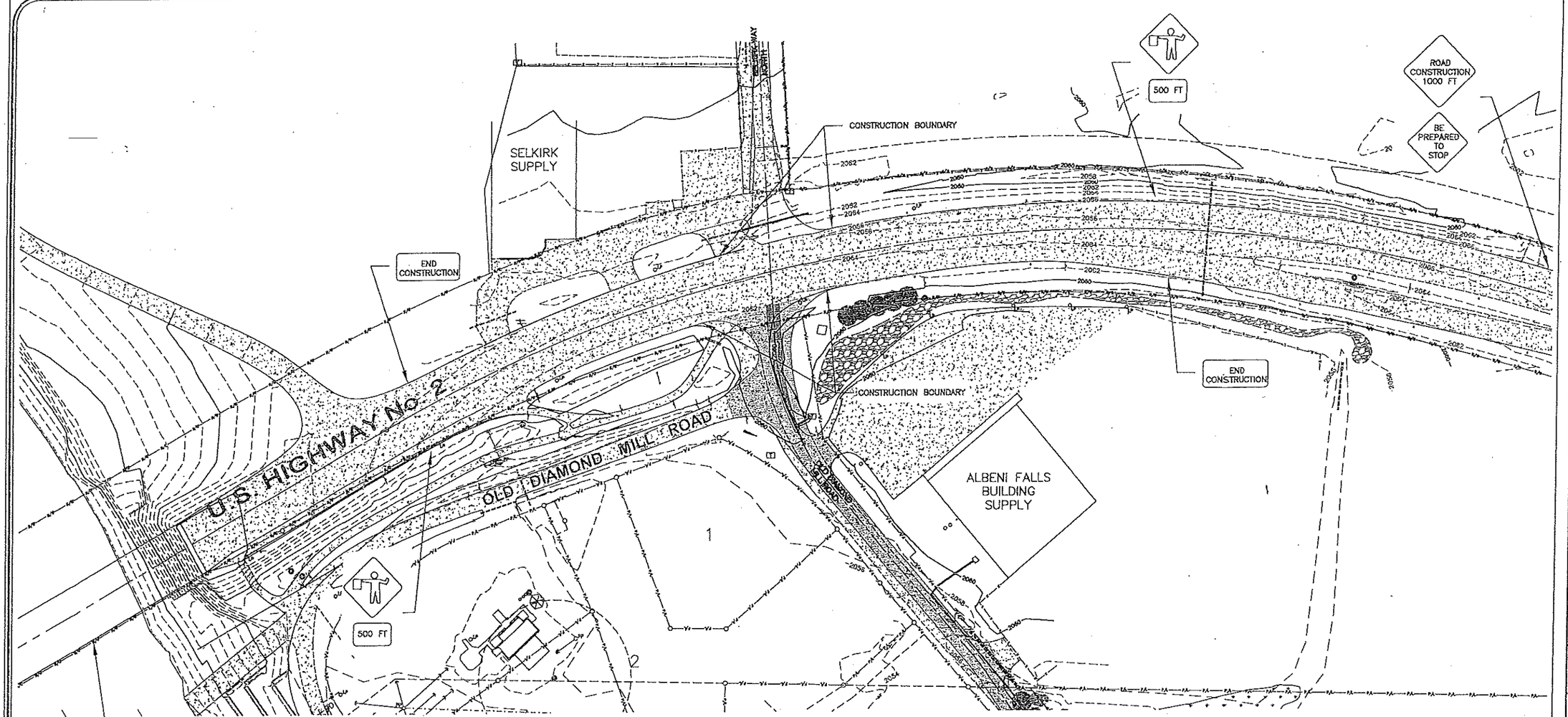
James A. Sewell and Associates, LLC
CONSULTING ENGINEERS
NEWPORT, WASHINGTON, 99156
(509) 447-3626

SHEET TITLE: U.S. HIGHWAY No. 2 & DIAMOND MILL LOOP ROAD INTERSECTION

PROJECT: WATER & SEWER SYSTEM EXTENSIONS, 2011
WEST BONNER W&S DISTRICT
OLDTOWN, BONNER COUNTY, IDAHO

DATE:	5-5-10
SCALE:	AS SHOWN
DRAWN BY:	JMB
CHECKED BY:	EJE
FILE NAME:	ALBENI-W&S-3510
DATA No.:	23072-00-002

SHEET 1 OF 1



LEGEND

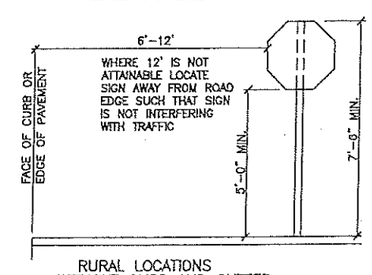
END CONSTRUCTION SIGN – 48"x24" TO BE LOCATED 500 FEET FROM END OF ROAD CONSTRUCTION, BLACK LETTERS & ORANGE BACKGROUND — END CONSTRUCTION (2)

FLAGGER SIGN (30"x30") WITH SUPPLEMENTAL SIGN (24"x18") – TO BE LOCATED 500 FEET FROM ROAD CONSTRUCTION, BLACK LETTERS ON ORANGE BACKGROUND — 500 FT (2)

BE PREPARED TO STOP SIGN – 30"x30" TO BE LOCATED WITH ROAD CONSTRUCTION 100 FT SIGN, BLACK LETTERS WITH ORANGE BACKGROUND — BE PREPARED TO STOP (2)

ROAD CONSTRUCTION SIGN – 30"x30" 1000' FROM CONSTRUCTION AREA, BLACK LETTERS ON ORANGE BACKGROUND — ROAD CONSTRUCTION 1000 FT (2)

DETAIL



RURAL LOCATIONS WITHOUT CURB AND GUTTER

NOTE:
ALL SIGNAGE SHALL CONFORM TO APPLICABLE SECTIONS OF MOST RECENT EDITION OF MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
SIGNS SHALL BE MOVED AS NECESSARY TO FOLLOW CONSTRUCTION PROGRESS
IF FLAGGERS ARE NOT UTILIZED DURING BORING PROCESS, FLAGGER SIGNS AND "BE PREPARED TO STOP" SIGNS CAN BE OMITTED.

SIGN MOUNTING:
1. SIGNS SHALL BE MOUNTED TO TREATED 4"X4" POSTS BURIED A MINIMUM OF 2.5' TO PREVENT DISPLACEMENT FROM WIND AND VANDALISM. IF CONCRETE BASE IS USED THE POST SHALL BE OF BREAKAWAY DESIGN.
2. EXISTING POLES (LIGHT POLES, POWER POLES) CAN BE USED WHERE APPROPRIATE.
3. SIGN SHALL BE MOUNTED ACCORDING TO THE MOST RECENT EDITION OF THE IDAHO TRANSPORTATION DEPARTMENT SPECIFICATIONS.

0 35 70 140
SCALE IN FEET

4.1 TRAFFIC CONTROL PLAN
SCALE– AS SHOWN

PROFESSIONAL ENGINEER REGISTERED 3998 STATE OF IDAHO JAMES A. SEWELL & ASSOCIATES, LLC
ENGINEER'S STAMP

No.	DATE	REVISION	DRN/CHK

James A. Sewell and Associates, LLC
CONSULTING ENGINEERS
NEWPORT, WASHINGTON, 99156
(509) 447–3626

SHEET TITLE: TRAFFIC CONTROL PLAN
PROJECT: WATER & SEWER SYSTEM EXTENSIONS, 2011
WEST BONNER W&S DISTRICT
OLDTOWN, BONNER COUNTY, IDAHO

DATE:	9–2–10
SCALE:	AS SHOWN
DRAWN BY:	TMP
CHECKED BY:	EJE
FILE NAME:	ALBEN–WAS–3510
DATA No.:	23072–09–002

SHEET 1 OF 1

DEPARTMENT OF THE ARMY
WALLA WALLA DISTRICT, CORPS OF ENGINEERS
COEUR D'ALENE REGULATORY OFFICE
2065 W. RIVERSTONE DR, STE 201
COEUR D'ALENE, ID 83814

REPLY TO
ATTENTION OF

June 3, 2011

Regulatory Division

SUBJECT: NWW-2010-664-C03

Mr. Lonnie Orr, Chairman
West Bonner Water and Sewer District
215 N Washington Ave.
Oldtown, ID 83822

Dear Mr. Orr:

We hereby verify that your proposed project is authorized in accordance with Department of Army (DA) **Nationwide Permit (NWP) No. 12 Utility Lines and NWP 14 Linear Transportation.** Work includes the total discharge of 750 cubic yards of gravel with a total impact to Waters of the US to include 0.30 acres of fill in wetlands. All work shall be done in accordance to the "Albeni Area Water and Sewer Extension Project, Oldtown, Bonner County, Idaho Environmental Assessment, dated March 21, 2011. Please refer to File Number NWW-2010-664-C03 in all future correspondence with our office regarding this project.

This project is located within Section 24 of Township 56 North, Range 6 West, in Oldtown, in Bonner County, Idaho.

DA permit authorization is necessary because your project will involve work and the discharge of dredged and/or fill material into Waters of the U.S., including wetlands under our regulatory jurisdiction. Specifically, the work would involve:

1. Directional boring under the Pend Oreille River for installation of sewer and water lines.
2. The discharge of fill in 0.30 acres of wetland to construct and access road to a water tower.

CONDITIONS

The regional and general permit conditions for NWP No. 12 and NWP No. 14 are available at on the Walla Walla District website at www.nww.usace.army.mil/html/offices/op/rf/2007NWPRegionalCondition_Idaho.pdf. You must comply with all regional and general conditions and the special conditions, listed below, for this verification letter to remain valid and to avoid possible enforcement actions.

The following Special Conditions include:

a. Provide a copy of the banking instrument to the Corps confirming the purchase of 1.05 functional units from the Valencia Trust prior to placing fill authorized in this letter.

b. The wetland boundaries shall be clearly marked with flagging or fencing prior to construction. No fill material shall be placed in wetlands except the wetland fill is specifically authorized and shown on the permit drawings

c. Do not discharge temporary fills or stockpile dredged or fill material in wetlands. Excess dredged or fill material must be spoiled in upland areas where it cannot reenter waters of the United States, including wetlands.

d. Permittee is responsible for all work done by any contractor. Permittee shall ensure any contractor who performs the work is informed of and follows all the terms and conditions of this authorization, including any Special Conditions listed above. Permittee shall also ensure these terms and conditions are incorporated into engineering plans and contract specifications.

e. The permittee understands and agrees that, if future operations by the U.S. require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the U.S. No claim shall be made against the U.S. on account of any such removal or alteration.

You must also comply with the conditions detailed in the Section 401 Water Quality Certification (WQC) issued by the Idaho Department of Environmental Quality (IDEQ) dated May 24, 2011, copy attached. The associated Regional Conditions for the WQC may also be accessed at the website provided above. If you should change the project activities or description described in your application, this NWP may not be valid; please contact us prior to starting work. If you have any questions regarding the conditions set forth in the Water Quality Certification, please contact IDEQ at (208) 769-1422.

This verification is valid until March 18, 2012, which is the date all of the existing Nationwide Permits will expire. If you have commenced or are under contract to commence this activity before March 18, 2012, you will have twelve (12) months from this date to complete the activity under the present terms and conditions of the above-referenced Nationwide Permits. In the event you have not commenced or completed construction of your project by this date, a new application or verification is required.

Attached to this verification of NWP No. 12 and NWP No. 14 are two copies of the Preliminary Jurisdictional Determination (JD) forms for Waters of the United States, including wetland(s), located within your project area. Please sign both copies and return one to the Corps at the address in the letterhead above. The other copy is for your records. The Preliminary JD is a non-binding action and shall remain in effect, unless a request for an Approved Jurisdictional Determination or new information supporting a revision is provided to this office. Enclosed you will also find a Request for Appeal form. Please note that since this jurisdictional determination is preliminary, it is subject to change and therefore is not an appealable action under the Corps of Engineers Administrative Appeal Procedures (33 CFR 331).

Please note, Nationwide Permit General Condition 26 (*Compliance Certification*) requires that every permittee who has received NWP verification must submit a signed certification regarding the completed work and any required mitigation. The enclosed

Compliance Certification form is enclosed for your convenience and must be completed and returned to us.

This letter of authorization does not convey any property rights, or any exclusive privileges and does not authorize any injury to property or excuse you from compliance with other Federal, State, or local statutes, ordinances, regulations, or requirements which may affect this work.

We are interested in your thoughts and opinions concerning the quality of service you received from the Walla Walla District, Corps of Engineers Regulatory Division. Please visit us online at www.nww.usace.army.mil/html/offices/op/rf/survey.asp, which will be automatically submitted to us. Alternatively, you may call and request a paper copy of the survey, which you may complete and return to us by mail or fax (208) 765-8368. For additional information about the Walla Walla Regulatory please visit us at www.nww.usace.army.mil/html/offices/op/rf/rfhome.asp.

Please contact me by telephone at (208) 765-8971, by mail at the address in the letterhead, or via e-mail at mary.e.reinhart@usace.army.mil if you have any questions or need additional information. A copy of this letter is being sent to the following individuals, for informational purposes.

Sincerely,

Beth Reinhart
Regulatory Project Manager
Coeur d'Alene Regulatory Office

Enclosure

Electronic Copies Furnished to Attached List:
Mr. Martin Taylor, Sewell and Associates, Sandpoint

JAMES A. SEWELL & ASSOCIATES, LLC

600-4th Street West
Newport, Washington 99156
(509) 447-3626 (208) 437-2641
(509) 447-2112 Fax

*Civil Engineering *Electrical Engineering *Land Surveying *Building Inspection * Land Use Planning

March 2, 2012

COPY

City of Oldtown
215 North Washington Ave
Oldtown, ID 83822

Attn: **Bryan Quayle, Planning Administrator**
Subj: **West Bonner Water and Sewer Extension Project**
Ref: **Request for Floodplain Development Permit**

Dear Mr. Quayle:

The West Bonner Water and Sewer District is in the process of obtaining approval from local and State regulatory agencies in order to begin construction of a proposed water and sewer system extension project located within the Albeni area. As part of the construction approval process, the District has been asked to obtain a floodplain development permit for the proposed water and sewer extension project. Enclosed, please find the following:

1. An overall project Site Plan showing the proposed construction in relation to the 100 year flood elevation or base flood elevation (BFE).
2. A partial set of project design drawings for the proposed water and sewer lines and associated appurtenances located below the BFE.
3. An email from Mary McGown of the Idaho Department of Water Resources dated April 15, 2011 showing the Pend Oreille River floodway within the project area.

The proposed project construction below the 100 year flood elevation is limited to the area north of the Pend Oreille River and south of U.S. Highway 2. The 100 year flood elevation within the Albeni area has been established at 2056.5 feet above sea level. The proposed water and sewer extension project includes construction of the following components within the zone designated as having a 1% chance of annual flooding:

Water System

- Approximately 2561' of 12" diameter C900 Class 165 PVC water line.
- An 8'-0" x 13'-0" x 8'-6" deep concrete vault and associated appurtenances.

Sewer System

- Approximately 186' of 18" diameter Schedule 40 PVC gravity sewer line.
- Approximately 715' of 15" diameter Schedule 40 PVC gravity sewer line.
- Approximately 934' of 12" diameter Schedule 40 PVC gravity sewer line.
- (6) 4' diameter concrete sewer manholes
- An 8'-0" diameter x 28'-10" deep concrete sewer pump station
- A 5'-2" x 8'-0" x 6'-7" deep concrete vault and appurtenances
- A 9'-4" x 12'-0" concrete masonry unit (CMU) electrical control building for pump station.
- A 9'-4" x 14'-3" x 6" thick concrete generator pad.
- A 4'-0" x 10'-0" x 4" thick concrete propane tank pad.

The proposed project will also include approximately 1300' of 12" diameter high density polyethylene (HDPE) water and sewer mains crossing the Pend Oreille River. The proposed water and sewer mains will be directionally bored below the riverbed. The proposed borings will eliminate trenching and excavation within the Pend Oreille River floodway as indentified by Mary McGown, (See attached).

The proposed project will require construction within the zone designated as having a 1% chance of annual flooding located within the Albeni area. No trenching or excavation will take place within the floodway or floodplain on the south side of the Pend Oreille River.

The proposed water and sewer system extension project has been designed to eliminate or mitigate the effects of a 100 year flood event in the following ways:

Sewer System

- The proposed sewer system electrical building, adjacent stand-by generator pad and propane tank pad have been designed to have finished floor surfaces at or above the BFE.
- The proposed pump station and adjacent sewer valve vault have been designed such that their lids are located at or above the BFE. The proposed pumpstation and adjacent sewer valve vault have been designed to prevent water intrusion below the BFE.
- The proposed sewer pumpstation construction will require approximately 49 cubic yards material be excavated. The excavated material will be used as fill to elevate the surrounding area to the BFE to facilitate construction of the proposed sewer system electrical building and generator pad. No other fill will be imported to this specific site that will be placed below the BFE.
- The proposed sewer manholes located below the BFE have been designed to have water tight manhole lids in order to prevent water intrusion.

Water System

- The proposed pumphouse and water wells locations are above and outside the zone designated as having a 1% chance of annual flooding.

- Proposed water system buried valve vault located northwest of the proposed sewer pumpstation has been designed to resist the affects of a 100 year flood event.
- The proposed project will utilize existing roadways in the area to access the proposed water system pumphouse. The existing pumphouse access road is below the BFE from approximate Station 0+25 to Station 2+50 and will be is approximately 1.5' below the BFE at the lowest point. However, existing alternative access routes via the eastern entrance of the Tri-Pro Mill above the BFE are available for use during a 100 year flood event.

Diamond Mill Loop Road Rehabilitation

- The proposed project will require trenching within sections of the existing Diamond Mill Loop Road located below BFE which will necessitate road resurfacing in those areas. As part of the resurfacing project, approximately 1,962 cubic yards of fill will be placed to reconstruct and realign the section of the roadway that is located within the zone designated as having a 1% chance of annual flooding
- The proposed project will elevate the existing "West Loop" portion of Diamond Mill Loop Road surface to at or above the BFE from the proposed start of road reconstruction to approximately Station 6+40. At Station 6+40, the proposed road elevation will remain at approximately 3" below the BFE until Station 10+50, where the proposed finished road grade is raised above the BFE. The proposed road improvements in this area will ensure access to the proposed sewer pumpstation and electric building during a 100 year flood event. The proposed project will also allow the "West Loop" section of Diamond Mill Loop Road to remain passable during a 100 year flood event.
- The proposed road improvements will elevate the existing "East Loop" portion of Diamond Mill Loop Road to at or above the BFE from approximately Station 4 +50 to Station 6+33 and Station 13+16 to Station 13+60. The remaining portions of the existing "East Loop" portion of Diamond Mill Loop Road that are currently below the BFE will be elevated to at or within 1.5' below the BFE.

Additional Mitigation Measures and Agency Contacts

- As part of the environmental review process required by DEQ, the District has received both a Section 10 and Section 404 permit from the U.S. Army Corps of Engineers for the proposed river crossing and proposed wetland fill associated with the construction of the water tank access road. The proposed access road is located north of U.S. Highway 2 and is not below the BFE.
- The District has been granted an easement from the Idaho Department of Lands for the proposed water and sewer river crossing.
- The proposed project has been issued a Finding of No Significant Impact (FONSI) by the U.S. Army of Engineers and the U.S. Fish and Wildlife Service.

Please contact us with any questions or if additional information is necessary. We will plan to attend the City Council meeting at which the application will be discussed. Thank you for your expedited processing of this application.

Sincerely,

JAMES A. SEWELL & ASSOCIATES

By _____
Spencer Ferguson, EIT

Encl (2): West Bonner Water Extension Design Drawings, 100 Year Flood Map, IDWR Email

pc: Lonnie Orr, West Bonner Water & Sewer District, 215 North Washington Ave, Oldtown, ID 83822 w/ encl.

File with encl.

CITY OF OLDTOWN
215 North Washington Avenue
Oldtown, ID 83822

Telephone 208-448-2123
Fax 208-448-2232

March 28, 2012

Spencer Ferguson
James A. Sewell & Associates
600 Fourth Street West
Newport, WA 99156

RE: **Flood Plain Development Permit**

Dear Mr. Ferguson,

This letter is written in response to the March 2, 2012 floodplain development permit request for the West Bonner Water and Sewer District extension project. A review of the Phase 1 plans submitted with the request together with your March 20, 2012 email providing revised facilities elevation and floodplain fill information was conducted in accordance with the city's floodplain development ordinance. Additional comment was provided to staff by the District chairman and included in the determination. Based on the information provided, the expansion project was found to be consistent with floodplain development requirements. Consider this letter as notice **the permit is granted subject to the following conditions:**

1) The portions of both the east and west loops of Old Diamond Mill Road to be reconstructed within this project will have finish grades at or above the BFE (Base Flood Elevation).

2) The sewer pump manhole shall have a rim elevation approximately one (1) foot above the BFE. All other manholes shall have rim elevations at or above the BFE.

3) The sewer electrical control building floor shall be elevated to approximately one (1) foot above the BFE.

4) To avoid a No-Rise Certification all proposed fill placed within the floodplain shall be offset by equal or greater excavations within the floodplain. Such excavations shall be documented to the city and materials properly placed upland from the floodplain.

Please contact me at 208-290-7700 if you have any questions.

Sincerely,

Bryan M. Quayle
Floodplain Administrator

Cc: City Clerk, District

Appendix E-1
Project Public Meeting Information

Affidavit of Publications and Public Meeting Minutes

James A. Sewell & Associates, LLC

AFFIDAVIT OF PUBLICATION

STATE OF IDAHO)
) ss.
County of Bonner)

Ambre Chapman, being first duly sworn on oath, deposes and states:

1. I am a citizen of the United States of America, over the age of 18 years, a resident of Bonner County, Idaho, and am not a party to the proceedings referred to in the attached Public meeting
My business address is P.O. Box 159, Sandpoint, Idaho.

2. I am the Bookkeeper of the Bonner County Daily Bee, a newspaper of general publication in Bonner County, Idaho;

3. Said newspaper has been continuously and uninterruptedly published in Bonner County, Idaho during a period of 12 months prior to the first publication of said Notice, and thereafter.

4. The attached Notice was published in the regular and entire issue of the Bonner County Daily Bee for a period of 1x ~~consecutive weeks~~, commencing on the 29 day of November 2012, and ending on the 29 day of November 2012.

Ambre Chapman

State of Idaho, county of Bonner ss.
On this 29 day of Nov, in the year of 2012, before me, Sherilyn Jones, Notary Public, personally appeared
Ambre Chapman, known or identified to me to be the person whose name is subscribed to the within instrument, and acknowledged to me that he
(or they) executed the same.

Sherilyn Jones
Notary Public
Residing at: Sandpoint
Comm. Exp.: 2/24/17

SHERILYN JONES
NOTARY PUBLIC
STATE OF IDAHO

#1854

WEST BONNER WATER AND SEWER DISTRICT NOTICE OF PUBLIC MEETING AND REQUEST FOR PUBLIC COMMENTS

The West Bonner Water and Sewer District will hold a public meeting at the Oldtown City Hall located at 215 N. Washington Ave in Oldtown, Idaho on December 13, 2012 starting at 6:30pm to discuss and obtain public comments on their upcoming Albeni area sewer system extension project. The project is proposed to provide a centralized sewer system for the recently annexed Albeni area residents. The proposed project consists of: 1) The installation of a sewer lift station and pump control building located near the Pend Oreille River east of the boat launch, and; 2) Construction of a sewer collection system that will serve the westerly Albeni area. The purpose of this notice is to inform the public of the project and to initiate the request for comments period concerning the proposed project alternatives, their identified environmental impacts, and possible actions or methods that would avoid or minimize these impacts. The District will formally adopt a specific project alternative for implementation after taking and reviewing all public comments for the project. The public comment period regarding the proposed project alternatives will be closed at the end of this agenda item on the December 13th public meeting.

A list of the proposed project alternatives and a copy of the Water and Sewer Extension Facility Plan are available for review and comment at the Oldtown City Hall located at 215 N. Washington Avenue, Oldtown, ID 83822, 208-437-3833.

Any person interested in commenting on this proposal should submit written comments to Lonnie Orr, Chairman West Bonner Water and Sewer District, prior to the December 13th meeting at 215 N. Washington Ave., Oldtown, ID 83822. Or written comments may also be submitted at the public meeting on December 13th, 2012, commencing at 6:30pm.

The regular monthly meeting of the **West Bonner Water & Sewer Board** was called to order by Chairman, Lonnie Orr, on Thursday, December 13, 2012, at 6:30 p.m. at Oldtown City Hall.

Roll Call:
Present: Lonnie Orr, Carl Kloepfer, Randy Edgar, Bob Sedlacek
Absent: Jan Edgar

Minutes: Randy made the MOTION, seconded by Carl to approve the minutes of the last meeting. Motion carried.

Guests: **Eric Eldenburg of J. A. Sewell & Associates**
Spencer Ferguson of J. A. Sewell & Associates

Unfinished Business:
Water/Sewer Extension Project Update: A meeting was held on December 5th at the IDEQ offices in Coeur d'Alene to discuss the funding issues that affect the project. Representatives and attorneys from the West Bonner Water & Sewer District, the Oldtown Urban Renewal Agency, J. A. Sewell & Associates, IDEQ, and the West Bonner Investment Company, LLC were in attendance. Because the investors have become uncomfortable with the Bond Guaranty Agreement they signed with the water & sewer district, all parties tried to come up with alternate funding ideas. To that end, the water & sewer district board has submitted a letter of interest to IDEQ for a loan to fund the sewer portion of the project. It is anticipated that loan awards should be made by the end of January 2013. Attorney, Mike Chapman agreed to put a document together by December 17, 2012 that would outline all funding problems and their solutions that would be acceptable to all parties. Speaking for the water and sewer board, Lonnie Orr informed IDEQ that the district is committed to completion of the project.

Eric will meet with Mike Boeck to reiterate the water & sewer board's position on funding issues and to explore the possibility of a meeting between the water & sewer district board and the development group to help expedite an agreement on these issues.

The water & sewer board will hold a special meeting on December 19th to discuss whether they should continue with the project or call a permanent halt to it.

New Business:
Application for Water Rights for New Wells: Bob made the MOTION, seconded by Randy to sign the water right application and send it in to the Idaho Department of Water Resources. Motion carried.

Consideration of Alternatives for Sewer Extension to the Albeni Area: The alternatives are as follows:

Alternatives for Sewer Collection System:
#1. No Action.
#2. Community Gravity Collection System with Lift Station. (Preferred)
#3. Community Pressure Collection System.

Alternatives for Sewer Treatment:
#1. No Action.
#2. Install Individual On-site Sewer Treatment Systems.
#3. Construct New Community Treatment System.

#4. Transport Wastewater to City of Newport WWTP. (Preferred)

Alternatives for Sewer River Crossing:
#1. No Action.
#2. Mount Sewer Lines to Highway 2 Bridge.
#3. Lay Pipeline on River Bottom.
#4. Trenching Across River.
#5. Directionally Drill Pipe Under the River. (Preferred)

All recommended, preferred alternatives have the least environmental impact, are logistically the most feasible, and are the most cost effective. Carl made the MOTION, seconded by Bob to accept the recommended, preferred alternatives. Motion carried.

Financial:
The arrears list was presented and discussed.

Bills were presented for payment. Randy made the MOTION, seconded by Carl, to approve the bills as presented for payment. Motion carried.

Next Meeting Date: January 9, 2013, at 6:30 p.m. at Oldtown City Hall.

Adjournment: Randy made the MOTION, seconded by Carl to adjourn the meeting. Motion carried. Meeting was adjourned at 8:00 p.m.

_____ _____
Lonnie L. Orr, Chairman Sheila M. Gormley, Clerk

Sewer Collection System

Alternative #1 – No Action
Currently within the project boundary there are only individual on-site wastewater collection and treatment systems. There are no community wastewater collection systems. The No Action alternative would require the existing and future residents in the Albeni area to construct and use their own on-site collection, treatment, and disposal systems. Due to the restrictive soil conditions, restrictive ground water conditions, and required setbacks to wells, many of the properties will not be able to construct on-site wastewater facilities. A means to collect the wastewater generated by the residents of the Albeni area and transport it to a treatment and disposal system is required for this project, therefore, the No Action Alternative is not the preferred option.

Alternative #2 – Community Gravity Collection System with Lift Station
The second alternative reviewed consisted of installing a community gravity sewer collection system. A gravity wastewater collection system would consist of 10", 12", 15" and 18" diameter sewer main lines. Branching out from these mainlines would be smaller 8" diameter laterals. The residences and businesses will be connected to the main lines and laterals with 4" or 6" diameter PVC gravity sewer service lines. The wastewater generated by the residences and businesses will flow downslope through the service lines into the laterals and main lines. From the main lines, the wastewater will flow to a main pump station that will pump the wastewater across the Pend Oreille River where it will flow to the existing City of Newport wastewater treatment facility for treatment and final disposal.

Environmental Impacts
The proposed sewer line construction would take place within existing rights-of-way or easements throughout the project site. This alternative would cause minor and temporary impacts on the local environment.

Since this alternative has only temporary environmental impacts; it has the lowest anticipated costs associated with sewer collection system installation; and, has the least amount of maintenance for the WBWSD, this alternative is recommended as the **preferred alternative**.

Alternative #3 – Community Pressure Collection System
The third alternative reviewed consists of installing a community pressure sewer collection system. A pressure wastewater collection system would consist of collection mains and laterals sized to allow a minimum head loss for the individual on-site wastewater pumps while also maintaining a minimum scouring flow velocity of 2 feet/second. A flow velocity of 2 feet/second is desired to scour any solids or bacteriological growth off the inner pipe walls. The pressure mains would be constructed of high density polyethylene or schedule 40 PVC. The wastewater generated by the residences and businesses within the project area will be directed via gravity sewer service lines to individual on-site grinder pump stations. These pump stations would be equipped with grinder pumps that grind all the solids in the wastewater into a slurry, and then pump the slurry to its final destination. The grinder pumps would be connected to the main lines and laterals with 1"-2" diameter pipes depending on the grinder pumps used. Sewage collected in the collection system would be pumped by the individual on-site pump stations

across the river into the existing collection system where it would flow to the existing wastewater treatment plant.

Environmental Impacts
The proposed sewer line construction would take place within existing rights-of-way and easements throughout the project site. This alternative would cause minor and temporary impacts on the local environment.

Although this alternative has only temporary environmental impacts, it has the higher anticipated costs associated with the sewer collection system installation, and requires more maintenance by the WBWSD therefore, this alternative is not recommended as the preferred alternative.

Sewer Treatment

Alternative #1 – No Action

Currently within the project boundary there are only individual on-site wastewater treatment systems. There are no community wastewater treatment systems. The No Action alternative would require the existing and future residents in the Albeni area to construct and use their own on-site treatment and disposal systems. Due to the restrictive soil conditions, restrictive ground water conditions, and required setbacks to wells, many of the lots would not be able to construct on-site wastewater facilities. A means to treat and dispose the wastewater generated by the residents of the Albeni area is required for this project, therefore the No Action Alternative is not the preferred alternative.

Alternative #2 – Install Individual On-Site Sewer Treatment Systems

The second alternative reviewed consisted of installing individual on-site sewer treatment systems. Individual on-site sewer systems would consist of a septic tank connected to the residence or business with a 4" PVC service line. The septic tank would provide primary treatment to the wastewater. The septic tank effluent would be directed to a drainfield by either gravity or pressure lines. At the drainfield, the effluent would be allowed to percolate through the soils. However, due to the high lot density within the project area, the fine texture of site soils which provides poor moisture absorption capability, close proximity to wetlands, and the possibility of high ground water levels it would be impractical to install individual on-site sewer treatment systems for each residence or business. Additionally, appropriate sanitary setbacks would be impractical or impossible to achieve.

Environmental Impacts

This alternative has the highest potential to cause the most harm to the environment. On-site sewer systems (OSS) constructed in the tight soils located within the project area have commonly failed within a few years of being put into service. Failure of an OSS is evidenced by sewage surfacing in the area of the OSS or sewage backing up into the residence. Failure of an OSS provides the opportunity for sewage to flow into surface waters, causing an increase in nutrients and other contaminants which would negatively impact aquatic flora and fauna. Additionally, the Pend Oreille River has been designated as critical habitat for Bulltrout, a threatened and endangered species.

Due to the restrictive site conditions and the high potential for adverse environmental impacts, installing individual on-site sewer systems is not the preferred alternative and is not included in the alternatives cost analysis.

Alternative #3 – Construct New Community Treatment System

The third alternative reviewed consists of installing a community mechanical wastewater treatment system. A community wastewater treatment system would most reasonably consist of an activated sludge treatment facility. In general, wastewater would be treated in four individual steps. Step one would involve removing inorganic wastes via a screening system. The second step would be the biological breakdown of the organic portion of the wastewater. This is typically accomplished in an aerated reactor basin. The third step is separation of the solids from the treated effluent through clarification or membrane technology. The fourth step is disinfecting

the treated wastewater prior to final disposal. Final disposal would consist of either sub-surface disposal of the treated effluent or discharging the treated effluent to the Pend Oreille River. As stated in the individual on-site sewer systems analysis, the site soils are not suitable for sub-surface disposal. In order to discharge effluent to the river a National Pollutant Discharge Elimination System permit will be required. These permits are extremely difficult and time-consuming to obtain, and may not be possible to obtain since an existing treatment/disposal system is in close proximity.

Environmental Impacts
The construction of a community treatment system would permanently impact the local environment within the footprint of the system, due to the addition of treatment, laboratory, and storage structures. The system would also produce treated effluent and sludge that would have to be disposed of in accordance with IDEQ regulations. As stated above, permits for disposal of effluent and sludge are extremely difficult if not impossible to obtain.

Due to the high cost of constructing a new community treatment system and the potential adverse environmental impacts, this alternative is not the preferred alternative.

Alternative #4 – Transport Wastewater to City of Newport WWTP
The fourth alternative reviewed consists of transporting the wastewater across the river to the existing City of Newport wastewater treatment plant. Transporting the wastewater to the existing City of Newport Wastewater Treatment Plant (WWTP) would consist of directing all the wastewater from the project to a main pump station capable of pumping the wastewater across the river and into the existing gravity collection system in the City of Oldtown. Once discharged to the existing gravity collection system, the wastewater would flow to the existing City of Newport WWTP. The WBWSD currently owns 30% of the capacity of the City of Newport Wastewater Treatment Plant. This equates to approximately 150,000 gallons per day. WBWSD is currently contributing approximately 50,000 gallons per day to the Newport WWTP and therefore has a reserve capacity of approximately 100,000 gallons per day.

The proposed pump station will permanently impact the environment with the construction of the wetwell, valve vault, and control building; however, the overall foot print of the facilities will be relatively small. The wet well will be sized to allow the operator ample time to respond to any issues with the pump station before raw sewage could overflow the wet well. The wet well will also be constructed as water tight, and will be tested to ensure there are no leaks in the wet well and associated piping. The existing City of Newport WWTP has an outstanding treatment record with no violations of their NPDES permit providing minimal environmental impact with the disposal of the treated effluent and sludge.

Because the WBWSD already owns 30% of the capacity of the existing City of Newport WWTP and this alternative provides the least opportunities for adverse environmental impacts and is more cost effective when compared with Alternative No. 3, this alternative is **the preferred alternative.**

Sewer River Crossing

Alternative #1- No Action

Installing a sewer main across the Pend Oreille River is necessary to transport the wastewater generated by the residents and businesses of the Albeni area to the existing City of Newport WWTP. The No Action alternative for the sewer system river crossing would require the residents and businesses of the Albeni area to continue to rely on their poorly performing on-site sewer systems. For this reason the No Action alternative is not the recommended preferred alternative.

Alternative #2- Mount Sewer Lines to Highway 2 Bridge

This alternative consists of crossing the Pend Oreille River via the US 2 Bridge. The Idaho Transportation Department currently owns the 4 lane bridge spanning the Pend Oreille River. Pipelines could be attached to the underside of the bridge deck to transport wastewater from the proposed project to the existing WBWSD sewer lines. Idaho Department of Transportation was contacted about the possibility of using the bridge as a pipeline support structure and they indicated that they would not allow any pipeline to be attached to the bridge, as the bridge was not designed for these additional loads.

Alternative #3- Lay Pipeline on River Bottom

This alternative would require that the sewer main be anchored on the bed of the Pend Oreille River. The advantage to laying a sewer line on the River bottom is that less specialized equipment is required for installation, making the installation simpler. However, several items make this alternative impractical:

1. The pipeline would cross the river approximately 1.5 miles downstream of Albeni Falls Dam. This section of the river is flowing quickly and due to the shallow depth, damage from debris or a shifting riverbed is a concern.
2. In order to lay a pipeline on the riverbed, a streambed alteration permit would need to be obtained from the Idaho Department of Water Resources and the Army Corps of Engineers.
3. The Pend Oreille River has been designated as critical habitat for Bulltrout in the area that the sewer main would be placed on the river bed. Permitting requirements would consequently be excessive. The anticipated high cost associated with safely excavating debris at the sewer main location and excavating the river bank on each side of the river, and the associated permit requirements, including a Biological Assessment, make this alternative highly impractical.

This alternative could potentially affect the Pend Oreille River bed in the following ways:

1. The Pend Oreille River has been designated as critical habitat for bull trout in the area that the sewer main would be placed on the river bed. Impacts to the bull trout could be significant due to excavation of debris at the sewer main location and excavating the river bank on each side of the river. Required maintenance to the sewer line after initial construction also creates potential impacts to the bull trout.

2. The river bed at the sewer main location will have to be excavated in order to remove any deposited debris, and to minimize any localized high or low points within the river bed. The installation will require pipe anchors to prevent movement due to the buoyancy of the pipe and the river current. These requirements will have a negative impact on the overall river water quality.
3. Continual changes in the river bed topography due to sedimentation or scouring caused by spring runoff currents create a potential for damage to the pipeline, which would require maintenance for repairs. On-going maintenance requirements create a negative impact on the river water quality.

A stream bed alteration permit and a biological assessment will be required for this alternative as the project would be directly impacting critical habitat. Both the permit process and biological assessment are costly and time consuming, and the permit requirements would be excessive. The potential impacts to critical habitat make this alternative impractical.

Due to the inherent potential for damage to the sewer line, excessive permitting requirements, expected high costs associated with environmentally acceptable excavation and sewer main installation, and the high potential for environmental impacts to an endangered species within a critical habitat, this alternative is not the recommended preferred alternative.

Alternative #4 – Trenching Across River

This alternative would require that a trench within the river bed be excavated to an average depth of approximately 6 ft, the pipeline would then be installed within the trench and backfilled. This will allow the pipeline to be installed in a manner that will prevent flotation and prevent damage from boats, barges or debris within the river. The river depth in this section, during low water conditions, ranges from 7‘ to 11’. Excavating a trench 11’ below the water surface of a moving river would be extremely difficult. In order to perform this alternative, a streambed alteration permit would need to be obtained from the Idaho Department of Water Resources, the Army Corps of Engineers, and the Idaho Department of Lands. The construction process would require the installation of silt fence upstream and downstream of the pipeline trench to avoid sediment and silt migration beyond the limits of excavation.

The primary advantages to laying the pipe in a trench on the River bottom include:

1. Burying the pipe in the river bed will eliminate the need for pipe anchors.
2. The sewer main will not be susceptible to potential damage from boats or debris.

The primary disadvantages of this alternative are a very high construction cost to complete this construction due to the significant silt fencing requirements, and that it represents an extremely challenging environmental process in order to be successfully completed.

During the construction process, sediments and silts will be suspended within the water at the location of the pipeline excavation. It is also possible that silt and sediments could move beyond the silt fence, which would additionally impact areas declared to be critical bulltrout habitat by the USFWS. Additionally, the pipeline trenches could cause a reshaping of the river bed in the area near the pipeline route. The potential for significant negative environmental impacts is

great. Environmentally safe construction of this alternative would be extremely challenging and costly, which makes this alternative highly impractical.

Due to the high costs associated with trench excavation and sewer main installation, the high potential for significant negative environmental impacts, and potential for river bed alterations, this alternative is not recommended as the preferred alternative.

Alternative #5 – Directionally Drill Pipe Under River

This alternative proposes the installation of a 12" HDPE 200 psi casing pipe and a 6" HDPE 200 psi sewer line. The bore hole would be located at depths varying from 20 feet to 30 feet below the river bed, and would extend to points lying approximately 100 ft beyond the banks of the river at normal summer pool. This alternative would require no excavation within the river, and this alternative is expected to have no environmental impact on the river. The HDPE pipe will provide a means to transport wastewater from the proposed sewer collection system to the existing City of Oldtown sewer collection system. While the costs for this alternative are quite high, the environmental impacts are nearly non-existent, making this alternative a highly practical alternative.

Since this alternative does not impact critical bulltrout habitat and has the lowest anticipated costs associated with pipe installation across the Pend Oreille River, this alternative is recommended as the **preferred alternative**.

Appendix E-2
Agency Contact Information

Request for Agency Comments Letters and Received Agency Comments

James A. Sewell & Associates, LLC

COPY

JAMES A. SEWELL & ASSOCIATES, LLC

600-4th Street West
Newport, Washington 99156
(509) 447-3626 (208) 437-2641
(509) 447-2112 Fax

*Civil Engineering *Electrical Engineering *Land Surveying *Building Inspection * Land Use Planning

January 27, 2011

Idaho Department of Water Resources
322 East Front Street
P.O. Box 83720
Boise, ID 83720

Attn: Mary McGown, PhD
Subj: West Bonner Water and Sewer Extension Project
Ref: Solicitation of Comments

Dear Ms. McGown:

The West Bonner Water and Sewer District is in the process of performing an environmental review pursuant to the National Environmental Policy Act for the Idaho Department of Environmental Quality in order that they may assess the environmental impact of the proposed West Bonner Water and Sewer System Extension Project. A short description of the proposed project is enclosed along with a Site Plan showing the proposed construction as well as an aerial map and USGS topographic map that depicts the projects boundaries. The project construction is to take place within portions of T56N, R6W, Section 24 and T56N, R5W, Section 19.

We are requesting your review and comments for any potential conflicts of the project to applicable state floodplain management and permitting regulations within the project area. We also request your assessment of the compatibility of the proposed project with federal or local governments.

A FEMA Firmette is enclosed which shows the location of the FEMA delineated floodplain area from the Pend Oreille River in relation to the proposed construction. Also enclosed please find a drawing of the project area with the 100-year flood area as determined by a survey conducted by James A. Sewell and Associates. The floodplain area encroaches inland in the northwest corner of the project area south of U.S. Highway 2.

Please review the enclosed information at your earliest convenience and feel free to let me know if you have any questions or if additional information is necessary.

Sincerely,

JAMES A. SEWELL & ASSOCIATES

By _____
Spencer Ferguson, EIT

Enclosures (6): West Bonner Water and Sewer Extension Project Description, Aerial Project Map, Project Site Plan, USGS Topographic Map, FEMA Firmette and Legend, 100 Year Flood Map

File with enclosures

COPY

JAMES A. SEWELL & ASSOCIATES, LLC

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January 27, 2011

Idaho Department of Environmental Quality
2110 Ironwood Parkway
Coeur d' Alene, ID 83814

Attn: John Tindall, P.E.
Subj: West Bonner Water and Sewer Extension Project
Ref: Solicitation of Comments

Dear Mr. Tindall:

The West Bonner Water and Sewer District is in the process of performing an environmental review pursuant to the National Environmental Policy Act for the Idaho Department of Environmental Quality in order that they may assess the environmental impact of the proposed West Bonner Water and Sewer System Extension Project. A short description of the proposed project is enclosed along with a Site Plan showing the proposed construction as well as an aerial map and USGS topographic map that depicts the projects boundaries. The project construction is to take place within portions of T56N, R6W, Section 24 and T56N, R5W, Section 19.

We are requesting your review and comments for any potential conflicts of the project to applicable state water quality, air quality, and permitting regulations within the project area. We also request information on any known major air pollution sources within the project area and whether the area is in general compliance with ambient air standards.

A FEMA Firmette is enclosed which shows the location of the FEMA delineated floodplain area from the Pend Oreille River in relation to the proposed construction. Also enclosed please find a drawing of the project area with the 100-year flood area as determined by a survey conducted by James A. Sewell and Associates. The floodplain area encroaches inland in the northwest corner of the project area south of U.S. Highway 2.

Also enclosed is a drawing depicting delineated wetland areas within the project area. The drawing is a compellation of wetland areas delineated in (2) separate studies and areas identified on USGS topographic maps. A large wetland area located north of U.S. Highway 2 will be impacted by construction of the proposed water line and water tank access road. South of U.S.

Highway 2 the proposed water and sewer lines will be constructed adjacent to existing road ways and will not encroach into any identified wetland areas.

Please review the enclosed information at your earliest convenience and feel free to let me know if you have any questions or if additional information is necessary.

Sincerely,

JAMES A. SEWELL & ASSOCIATES

By _____
Spencer Ferguson, EIT

Enclosures (7): West Bonner Water and Sewer Extension Project Description, Aerial Project Map, Project Site Plan, USGS Topographic Map, FEMA Firmette and Legend, 100 Year Flood Map, Wetland Comparison Map

File with enclosures

COPY
JAMES A. SEWELL & ASSOCIATES, LLC

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(509) 447-2112 Fax

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January 27, 2011

Idaho Department of Water Resources
322 East Front Street
P.O. Box 83720
Boise, ID 83720

Attn: Thomas Neace
Subj: West Bonner Water and Sewer Extension Project
Ref: Solicitation of Comments

Dear Mr. Neace:

The West Bonner Water and Sewer District is in the process of performing an environmental review pursuant to the National Environmental Policy Act for the Idaho Department of Environmental Quality in order that they may assess the environmental impact of the proposed West Bonner Water and Sewer System Extension Project. A short description of the proposed project is enclosed along with a Site Plan showing the proposed construction as well as an aerial map and USGS topographic map that depicts the projects boundaries. The project construction is to take place within portions of T56N, R6W, Section 24 and T56N, R5W, Section 19.

We are requesting your review and comments for any potential conflicts of the project to applicable state water well and permitting regulations within the project area.

Please review the enclosed information at your earliest convenience and feel free to let me know if you have any questions or if additional information is necessary.

Sincerely,

JAMES A. SEWELL & ASSOCIATES

By _____
Spencer Ferguson, EIT

Enclosures (4): West Bonner Water and Sewer Extension Project Description, Aerial Project Map, Project Site Plan, USGS Topographic Map

File with enclosures

COPY

JAMES A. SEWELL & ASSOCIATES, LLC

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January 27, 2011

Idaho Department of Lands, Northern Operations
3780 Industrial Avenue South
Coeur d' Alene, ID 83815

Attn: Roger Jansson
Subj: West Bonner Water and Sewer Extension Project
Ref: Solicitation of Comments

Dear Mr. Jansson:

The West Bonner Water and Sewer District is in the process of performing an environmental review pursuant to the National Environmental Policy Act for the Idaho Department of Environmental Quality in order that they may assess the environmental impact of the proposed West Bonner Water and Sewer System Extension Project. A short description of the proposed project is enclosed along with a Site Plan showing the proposed construction as well as an aerial map and USGS topographic map that depicts the projects boundaries. The project construction is to take place within portions of T56N, R6W, Section 24 and T56N, R5W, Section 19.

We are requesting information on the possible impacts of the proposed project on land and land use within the jurisdiction of the Idaho Department of Lands. We also request any recommendations you may have to minimize or avoid any identified impacts.

Please review the enclosed information at your earliest convenience and feel free to let me know if you have any questions or if additional information is necessary.

Sincerely,

JAMES A. SEWELL & ASSOCIATES

By _____
Spencer Ferguson, EIT

Enclosures (4): West Bonner Water and Sewer Extension Project Description, Aerial Project Map, Project Site Plan, USGS Topographic Map,

File with enclosures

COPY
JAMES A. SEWELL & ASSOCIATES, LLC

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Newport, Washington 99156
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January 27, 2011

USDA Natural Resources Conservation Service
1224 Washington Ave, Suite 101
Sandpoint, ID 83864

Attn: Greg Becker, District Conservationist
Subj: West Bonner Water and Sewer Extension Project
Ref: Solicitation of Comments

Dear Mr. Becker:

The West Bonner Water and Sewer District is in the process of performing an environmental review pursuant to the National Environmental Policy Act for the Idaho Department of Environmental Quality in order that they may assess the environmental impact of the proposed West Bonner Water and Sewer System Extension Project. A short description of the proposed project is enclosed along with a Site Plan showing the proposed construction as well as an aerial map and USGS topographic map that depicts the projects boundaries. The project construction is to take place within portions of T56N, R6W, Section 24 and T56N, R5W, Section 19.

We are requesting information on any potential impacts of the project on important farmland and prime rangeland and any recommendations you may have to minimize or avoid these impacts. We also seek your assessment of the compatibility of the proposed project with state and local governments or any private programs and policies to protect important farmland.

Please review the enclosed information at your earliest convenience and feel free to let me know if you have any questions or if additional information is necessary.

Sincerely,

JAMES A. SEWELL & ASSOCIATES

By _____
Spencer Ferguson, EIT

Enclosures (4): West Bonner Water and Sewer Extension Project Description, Aerial Project Map, Project Site Plan, USGS Topographic Map

File with enclosures

COPY

JAMES A. SEWELL & ASSOCIATES, LLC

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March 16, 2011

Idaho Department of Water Resources
7600 Mineral Drive, Suite 100
Coeur d' Alene, ID 83815

Attn: Al Beardslee
Subj: West Bonner Water and Sewer Extension Project
Ref: Solicitation of Comments

Dear Mr. Beardslee:

The West Bonner Water and Sewer District is in the process of performing an environmental review pursuant to the National Environmental Policy Act for the Idaho Department of Environmental Quality in order that they may assess the environmental impact of the proposed West Bonner Water and Sewer System Extension Project. A short description of the proposed project is enclosed along with a Site Plan showing the proposed construction as well as an aerial map and USGS topographic map that depicts the projects boundaries. The project construction is to take place within portions of T56N, R6W, Section 24 and T56N, R5W, Section 19.

We are requesting your review and comments for any potential conflicts of the project to applicable state water well and permitting regulations within the project area.

In order to move forward with project financing, we would appreciate a response within 30 days. Thank you for your time and consideration on this matter. Please feel free to contact me at our Newport office if you have any questions.

Sincerely,

JAMES A. SEWELL & ASSOCIATES

By _____
Spencer Ferguson, EIT

Enclosures (5): West Bonner Water and Sewer Extension Project Description, Aerial Project Map, Project Site Plan, USGS Topographic Map, Well Construction Plan View

File with enclosures

COPY

JAMES A. SEWELL & ASSOCIATES, LLC

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Newport, Washington 99156
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February 23, 2012

Panhandle Health District
322 Marion Ave.
Sandpoint, ID 83864

Attn: **John Dowling**
Subj: **West Bonner Water System Extension Project**
Ref: **Solicitation of Comments**

Dear Mr. Dowling:

The West Bonner Water and Sewer District is in the process of performing an environmental review pursuant to the National Environmental Policy Act for the Idaho Department of Environmental Quality in order that they may assess the environmental impact of the proposed West Bonner Water and Sewer System Extension Project. A short description of the proposed project is enclosed along with a Site Plan showing the proposed construction as well as an aerial map and USGS topographic map that depicts the projects boundaries. The project construction is to take place within portions of T56N, R6W, Section 24 and T56N, R5W, Section 19.

We are requesting your general review and comments on the project. We are also requesting any specific comments on potential conflicts of the project with applicable sanitary setback regulations within the project area.

Please review the enclosed information at your earliest convenience and feel free to let me know if you have any questions or if additional information is necessary.

Sincerely,

JAMES A. SEWELL & ASSOCIATES

By_____
Spencer Ferguson, EIT

Encl (4) West Bonner Water Extension Project Description, Aerial Project Map, Project Site Plan, and USGS Topographic Map.

pc: Lonnie Orr, West Bonner Water & Sewer District, 215 North Washington Ave, Oldtown, ID 83822 w/o encl.

File with encl.

JAMES A. SEWELL & ASSOCIATES, LLC

600-4th Street West
Newport, Washington 99156
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December 21, 2012

COPY

Idaho Fish and Game
2885 West Kathleen
Coeur d'Alene, ID 83815

Attn: **Mary Terra-Berns, Environmental Staff Biologist**
Subj: **West Bonner Sewer Extension Project**
Ref: **Solicitation of Comments**

Dear Ms. Terra-Berns:

The West Bonner Water and Sewer District is in the process of performing an environmental review pursuant to the National Environmental Policy Act for the Idaho Department of Environmental Quality in order that they may assess the environmental impact of the proposed West Bonner Sewer System Extension Project. A short description of the proposed project is enclosed along with a Site Plan showing the proposed construction as well as an aerial map and USGS topographic map that depicts the projects boundaries. The project construction is to take place within portions of T56N, R6W, Section 24 and T56N, R5W, Section 19.

We are requesting your review and comments for any potential impacts of the project to applicable state environmental quality regulations within the project area. We also request recommendations for any applicable environmental impact mitigation measures.

A FEMA Firmette is enclosed which shows the location of the FEMA delineated floodplain area from the Pend Oreille River in relation to the proposed construction. Also enclosed please find a drawing of the project area with the 100-year flood area as determined by a survey conducted by James A. Sewell and Associates. The floodplain area encroaches inland in the northwest corner of the project area south of U.S. Highway 2.

Also enclosed is a drawing depicting delineated wetland areas within the project area. The drawing is a compellation of wetland areas delineated in (2) separate studies and areas identified on USGS topographic maps. The proposed sewer lines will be constructed adjacent to existing road ways and will not encroach into any identified wetland areas.

Please review the enclosed information at your earliest convenience and feel free to let me know if you have any questions or if additional information is necessary.

Sincerely,

JAMES A. SEWELL & ASSOCIATES

By _____
Spencer Ferguson, EIT

Enclosures (7): West Bonner Sewer Extension Project Description, Aerial Project Map, Project Site Plan, USGS Topographic Map, FEMA Firmette Map, 100 Year Flood Map, Wetland Comparison Map

pc: Lonnie Orr, West Bonner Water & Sewer District, 215 North Washington Ave, Oldtown, ID 83822 w/encl

Ester Ceja, Idaho Department of Environmental Quality, 1410 North Hilton, Boise, Idaho 83706 w/ encl

File with enclosures

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December 21, 2012

Environmental Protection Agency
Region 10 Idaho Operations Office
950 West Bannock Street, Suite 900
Boise, ID 83702

Attn: **James Werntz, Director**
Subj: **West Bonner Sewer Extension Project**
Ref: **Solicitation of Comments**

Dear Mr. Werntz:

The West Bonner Water and Sewer District is in the process of performing an environmental review pursuant to the National Environmental Policy Act for the Idaho Department of Environmental Quality in order that they may assess the environmental impact of the proposed West Bonner Sewer System Extension Project. A short description of the proposed project is enclosed along with a Site Plan showing the proposed construction as well as an aerial map and USGS topographic map that depicts the projects boundaries. The project construction is to take place within portions of T56N, R6W, Section 24 and T56N, R5W, Section 19.

We are requesting your review and comments for any potential conflicts of the project to applicable federal water quality, air quality, and permitting regulations within the project area. We also request information on any known major air pollution sources within the project area and whether the area is in general compliance with ambient air standards.

A FEMA Firmette is enclosed which shows the location of the FEMA delineated floodplain area from the Pend Oreille River in relation to the proposed construction. Also enclosed please find a drawing of the project area with the 100-year flood area as determined by a survey conducted by James A. Sewell and Associates. The floodplain area encroaches inland in the northwest corner of the project area south of U.S. Highway 2.

Also enclosed is a drawing depicting delineated wetland areas within the project area. The drawing is a compellation of wetland areas delineated in (2) separate studies and areas identified

on USGS topographic maps. The proposed sewer lines will be constructed adjacent to existing road ways and will not encroach into any identified wetland areas.

Please review the enclosed information at your earliest convenience and feel free to let me know if you have any questions or if additional information is necessary.

Sincerely,

JAMES A. SEWELL & ASSOCIATES

By_____
Spencer Ferguson, EIT

Enclosures (7): West Bonner Sewer Extension Project Description, Aerial Project Map, Project Site Plan, USGS Topographic Map, FEMA Firmette and Legend, 100 Year Flood Map, Wetland Comparison Map

File with enclosures

JAMES A. SEWELL & ASSOCIATES, LLC

600-4th Street West
Newport, Washington 99156
(509) 447-3626 (208) 437-2641
(509) 447-2112 Fax

*Civil Engineering *Electrical Engineering *Land Surveying *Building Inspection * Land Use Planning

February 5, 2013

Idaho Department of Environmental Quality
1410 North Hilton
Boise, ID 83706

Attn: **Ed Hagan**
Subj: **West Bonner Sewer Extension Project**
Ref: **Solicitation of Comments**

Dear Mr. Hagan:

The West Bonner Water and Sewer District is in the process of performing an environmental review pursuant to the National Environmental Policy Act for the Idaho Department of Environmental Quality in order that they may assess the environmental impact of the proposed West Bonner Sewer System Extension Project. A short description of the proposed project is enclosed along with a Site Plan showing the proposed construction as well as an aerial map and USGS topographic map that depicts the projects boundaries. The project construction is to take place within portions of T56N, R6W, Section 24 and T56N, R5W, Section 19.

We are requesting your review and comments for any potential conflicts of the project to applicable state ground water and permitting regulations within the project area. We are also requesting your general review and comments on the project.

In order to move forward with project financing, we would appreciate a response within 30 days. Thank you for your time and consideration on this matter. Please feel free to contact me at our Newport office if you have any questions.

Sincerely,

JAMES A. SEWELL & ASSOCIATES

By_____
Spencer Ferguson, EIT

Enclosures (5): West Bonner Water and Sewer Extension Project Description, Aerial Project Map, Project Site Plan, USGS Topographic Map

File with enclosures

West Bonner Sewer Extension Project

Project Description

The City of Oldtown and the West Bonner Water and Sewer District recently annexed a large tract of land located in parts of Township 56 North, Range 6 West, Section 24 and Township 56 North, Range 5 West, Section 19 on the east side of the Pend Oreille River. This tract of land is commonly known as the Albeni area. Currently there are several residences and businesses located within the westerly portion of the Albeni area, while the easterly portion of the Albeni area consists largely of vacant land which is currently owned by the Tri-Pro Cedar Mill. Currently all the residences and businesses dispose of wastewater using individual on-site septic systems. The surface soils within the Albeni area predominantly include clay and silt. These types of soil have poor moisture absorption capabilities with respect to drainfield applications within individual on-site septic systems. The Albeni area also has a significant amount of surface water which ultimately flows into the Pend Oreille River. Drainfield failures result in septic tank effluent surfacing and combining with surface water runoff, ultimately draining into the Pend Oreille River. The incidence of drainfield failure with the Albeni area is relatively high, which creates a hazard to the public and a hazard to the environment. Additionally, due to the density of existing and proposed residential and commercial properties, the required sanitary setbacks for individual wells and on-site sewer systems are and will be impractical to achieve. Therefore it is proposed to install a community wide sewer collection system. The proposed sewer system will centralize services to the existing residences and commercial buildings, transporting the effluent generated within the Albeni area to the existing City of Newport wastewater treatment plant.

It is proposed to install a gravity sewer collection system to provide sewer service to the existing and proposed residential and commercial properties. The gravity sewer collection system will transmit the wastewater from the existing and proposed residences and businesses to a sewer lift station to be located on the east side of the river in the Albeni area. The sewer lift station will pump the wastewater to the west side of the River through a pressure sewer line. The pressure sewer line will be installed beneath the Pend Oreille River bed using horizontal directional drilling to minimize disturbance to the river, and will connect to the existing West Bonner Water and Sewer District gravity sewer collection system at the intersection of North Montana Avenue and East Second Street. From this interconnection point, the wastewater will flow downhill to the existing Newport wastewater treatment plant for treatment and disposal.

The proposed sewer system extension will be completed in two phases. The West Bonner Water and Sewer District and the Army Corps of Engineers will partner in the oversight of the construction of Phase 1 of the West Bonner Sewer System Extension project.

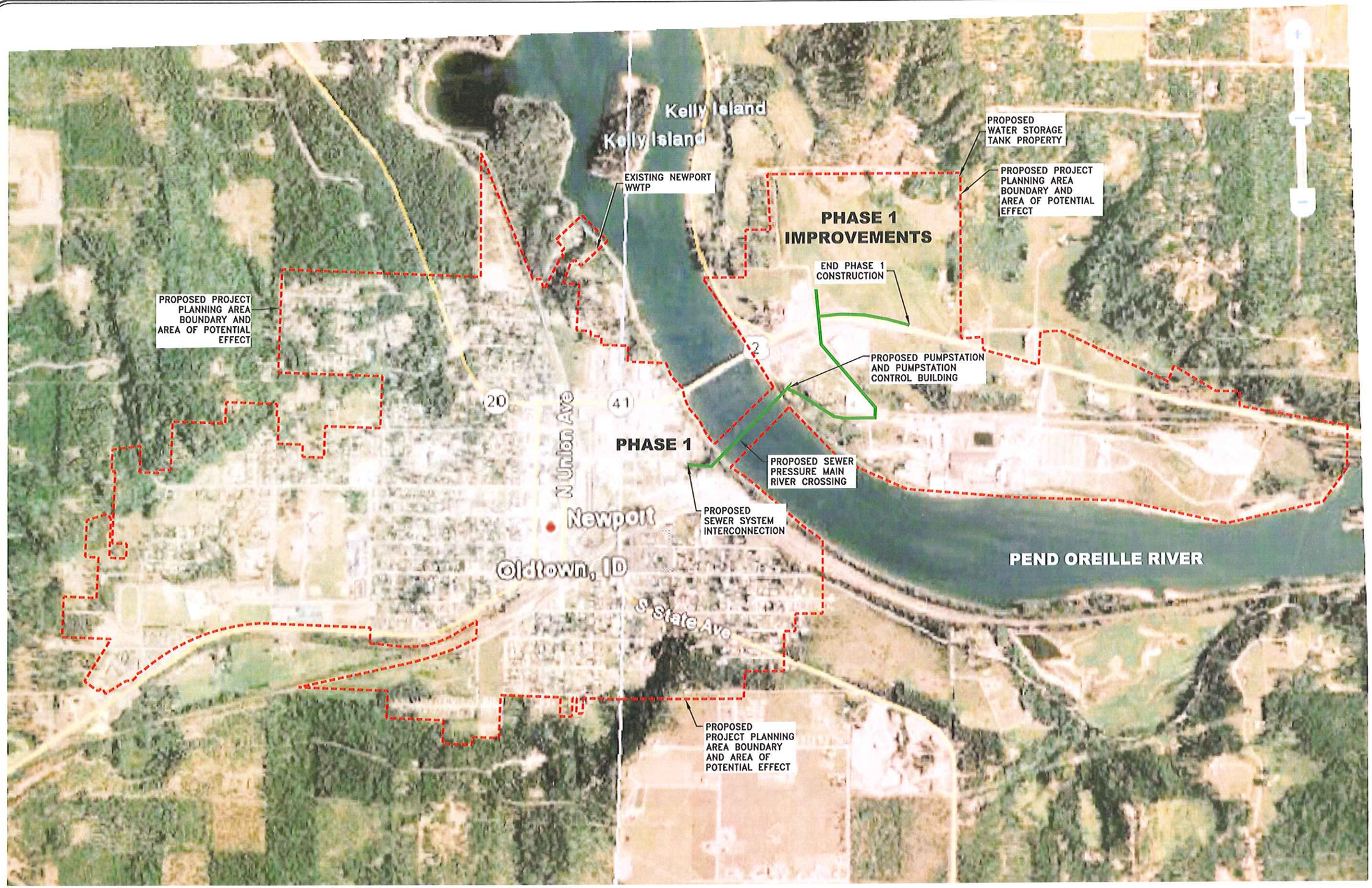
Phase 1 Consists of:

- Expanding the District's sewer system across the Pend Oreille River to a duplex lift station. The proposed sewer mains will then extend along Diamond Mill Loop Road and north to U.S. Highway 2 then east along U.S. Highway 2 approximately 1,200 ft. The gravity wastewater collection system will consist of 15", 12", 10" and 8" diameter PVC sewer mainlines. The proposed sewer mains will largely be

located within the Diamond Mill Loop Road Right-of-Way (ROW) and the U.S. Highway 2 ROW within the westerly portion of the Albeni area. An 8" PVC sewer main will also extend north approximately 360' along Selkirk Way to the existing businesses located north of U.S. Highway 2. The residences and businesses will be connected to sewer mainlines with 4" diameter PVC sewer service lines. The wastewater generated by the residences and businesses will flow downslope through the 4" service lines into the sewer mainlines. From mainlines the wastewater will flow to an 8' diameter sewer lift station where it will be pumped across the Pend Oreille River to the existing West Bonner Water and Sewer District gravity wastewater system. The proposed sewer extension project will also include construction of a 9'-4" x 16'-0" lift station control building and 9'-4" x 14'-0" x 6" thick concrete generator pad to be located adjacent to the sewer lift station. The sewer lift station and lift station control building will be located south of the Diamond Mill Loop Road and east of the existing boat launch. The sewer mainline crossing the Pend Oreille River will consist of a 12" diameter high density polyethylene (HDPE) pipe directionally bored approximately 25 feet under the river bed. The 12" HDPE pipe will act as casing for a 6" HDPE pressure sewer pipe. The wastewater will be pumped to a concrete sewer manhole located at the intersection of North Montana Avenue and East Second Street then flow to the existing City of Newport wastewater treatment facility for treatment and final disposal. See the attached Overall Site Plan for the proposed sewer lift station and sewer line locations. In order to mitigate the effects of a 100 year event on the proposed sewer system and pumpstation north of the Pend Oreille River, the lift station wet well will be constructed such that the manhole access will be 8" above the 100 year flood elevation. This will allow continued operation of the sewer system during a 100 year or lesser flood event. All manholes constructed within areas generally below the 100 year flood elevation will have lids extending to the Base Flood Elevation to prevent inundation.

Phase 2 Consists of:

- Extending the Phase 1 sewer line along Highway 2 to the intersection of the highway and the west edge of Section 19, and extending the Phase 1 Sewer line easterly along the BPA right-of-way approximately 3,500 ft. This phase NOT part of the proposed project at this time.



LINETYPE LEGEND

- PROPOSED PVC SEWER LINE
- PROPOSED PROJECT PLANNING AREA (PPPA) AND AREA OF POTENTIAL IMPACT (APE)

N

SCALE: NTS

NOTE:
THE PROPOSED PROJECT PLANNING AREA (PPPA) AND THE AREA OF POTENTIAL EFFECT (APE) COINCIDE AT ALL LOCATIONS.

PROFESSIONAL ENGINEER REGISTERED 3998 STATE OF IDAHO ERIC J. ELDENBURG

ENGINEER'S STAMP

No.	DATE	REVISION	DRN/CHK

James A. Sewell and Associates, LLC
CONSULTING ENGINEERS
NEWPORT, WASHINGTON, 99156
(509) 447-3626

SHEET TITLE: PROPOSED PROJECT PLANNING AREA AERIAL MAP

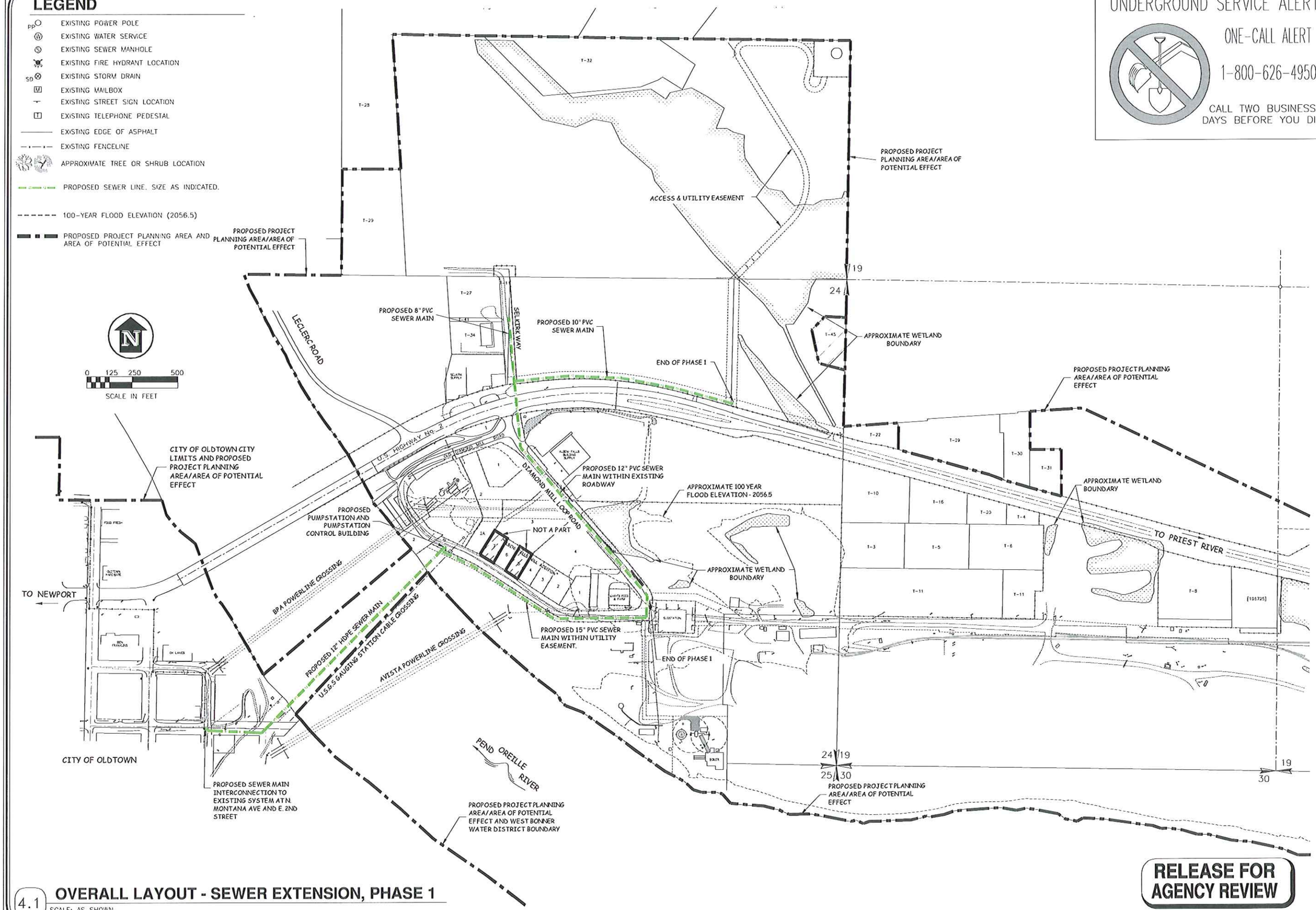
PROJECT: SEWER SYSTEM EXTENSION, 2012
WEST BONNER W&S DISTRICT
OLDTOWN, BONNER COUNTY, IDAHO

DATE:	11-16-12
SCALE:	AS SHOWN
DRAWN BY:	SJF
CHECKED BY:	EJE
FILE NAME:	Bonner Project 2
DATA No.:	23072-09-002

SHEET 1 OF 1

LEGEND

- EXISTING POWER POLE
- EXISTING WATER SERVICE
- EXISTING SEWER MANHOLE
- EXISTING FIRE HYDRANT LOCATION
- EXISTING STORM DRAIN
- EXISTING MAILBOX
- EXISTING STREET SIGN LOCATION
- EXISTING TELEPHONE PEDESTAL
- EXISTING EDGE OF ASPHALT
- EXISTING FENCELINE
- APPROXIMATE TREE OR SHRUB LOCATION
- PROPOSED SEWER LINE, SIZE AS INDICATED.
- 100-YEAR FLOOD ELEVATION (2056.5)
- PROPOSED PROJECT PLANNING AREA AND AREA OF POTENTIAL EFFECT



UNDERGROUND SERVICE ALERT

ONE-CALL ALERT

1-800-626-4950

CALL TWO BUSINESS DAYS BEFORE YOU DIG

RELEASE FOR AGENCY REVIEW

4.1 **OVERALL LAYOUT - SEWER EXTENSION, PHASE 1**

SCALE: AS SHOWN

ENGINEER'S STAMP

No.	DATE	REVISION	DRN/CHK
1	9-3-10	RELEASE FOR AGENCY REVIEW	JMB/KAK

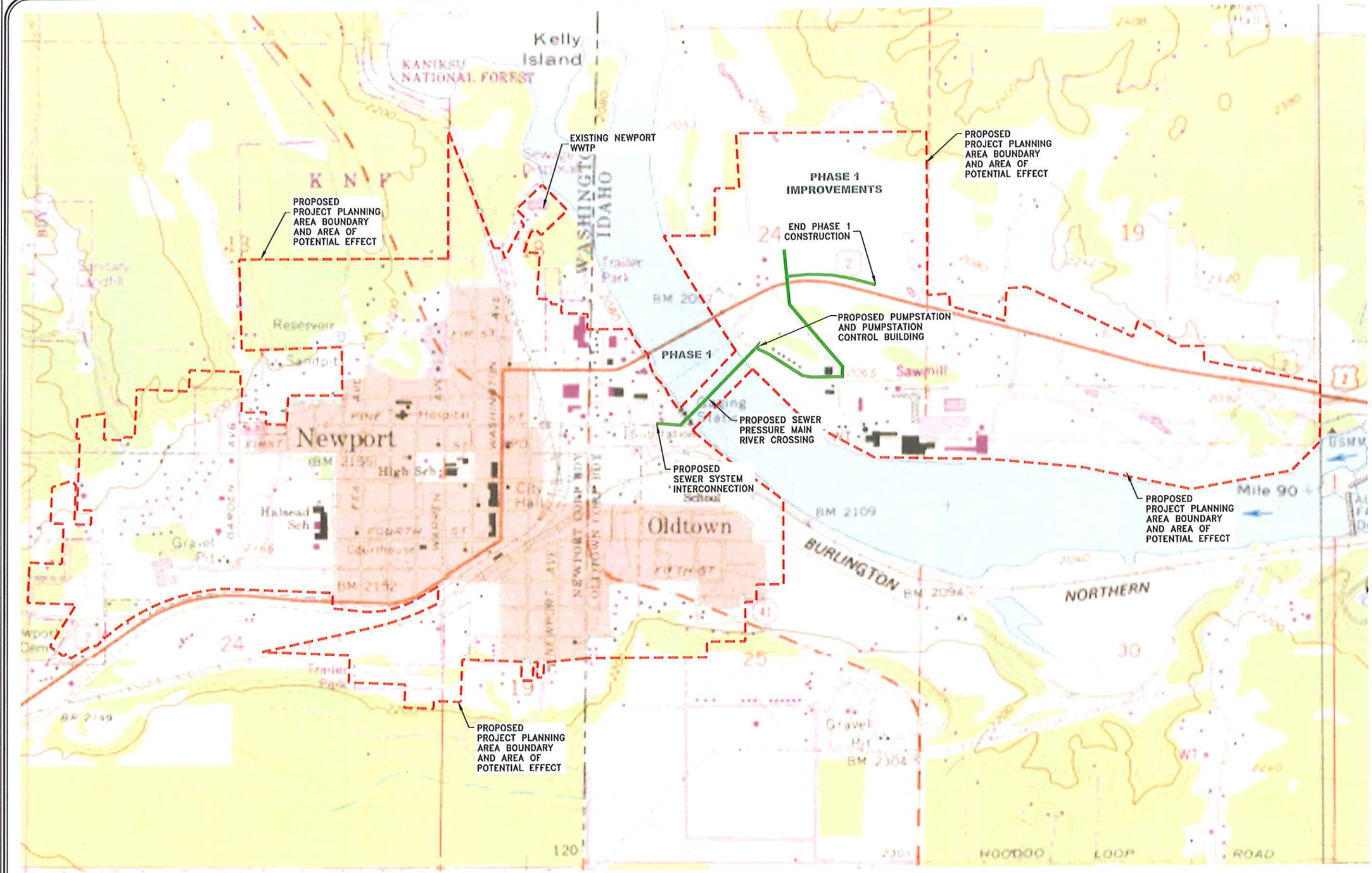
James A. Sewell and Associates, LLC
CONSULTING ENGINEERS
NEWPORT, WASHINGTON, 99156
(509) 447-3626

SHEET TITLE: SEWER SYSTEM OVERALL PLAN VIEW

PROJECT: SEWER SYSTEM EXTENSION, 2012
WEST BONNER W&S DISTRICT
OLDTOWN, BONNER COUNTY, IDAHO

DATE:	11-19-12
SCALE:	AS SHOWN
DRAWN BY:	JMB
CHECKED BY:	EJE
FILE NAME:	23072-09-002
DATA No.:	23072-09-002

SHEET 1 OF 1



LINETYPE LEGEND

- PROPOSED PVC SEWER LINE
- PROPOSED PROJECT PLANNING AREA AND AREA OF POTENTIAL IMPACT

SCALE: NTS

NOTE:
THE PROPOSED PROJECT PLANNING AREA AND THE AREA OF POTENTIAL EFFECT COINCIDE AT ALL LOCATIONS.

PROFESSIONAL ENGINEER REGISTERED 3998 STATE OF IDAHO ERIC J. ELDERBURG

ENGINEER'S STAMP

No.	DATE	REVISION	DRN/CHK

James A. Sewell and Associates, LLC
CONSULTING ENGINEERS
NEWPORT, WASHINGTON, 99156
(509) 447-3626

SHEET TITLE: PROPOSED PROJECT PLANNING AREA QUAD MAP

PROJECT: SEWER SYSTEM EXTENSION, 2012
WEST BONNER W&S DISTRICT
OLDTOWN, BONNER COUNTY, IDAHO

DATE:	11-26-12
SCALE:	AS SHOWN
DRAWN BY:	SJF
CHECKED BY:	EJE
FILE NAME:	Sewer Project 2
DATA No.:	23072-09-002

SHEET 1 OF 1

LE

SPECIAL FLOOD HAZAI
INUNDATION BY THE

The 1% annual chance flood (100-year flood
a 1% chance of being equaled or exceeded i
the area subject to flooding by the 1% annu
include Zones A, AE, AH, AO, AR, A99, V, and
elevation of the 1% annual chance flood.

ZONE A	No Base Flood Elevations
ZONE AE	Base Flood Elevations de
ZONE AH	Flood depths of 1 to 3 fe determined.
ZONE AO	Flood depths of 1 to 3 fe depths determined. For a
ZONE AR	Special Flood Hazard Are flood by a flood control s AR indicates that the fon protection from the 1% a
ZONE A99	Area to be protected fror protection system under
ZONE V	Coastal flood zone with v determined.
ZONE VE	Coastal flood zone with v determined.

FLOODWAY AREAS IN

The floodway is the channel of a stream plus
encroachment so that the 1% annual chance
flood heights.

OTHER FLOOD AREAS

ZONE X	Areas of 0.2% annual chanc average depths of less than mile; and areas protected by

OTHER AREAS

ZONE X	Areas determined to be outs
ZONE D	Areas in which flood hazards

COASTAL BARRIER RE

OTHERWISE PROTECT

CBRS areas and OPAs are normally located w
1% Annual Ch
0.2% Annual

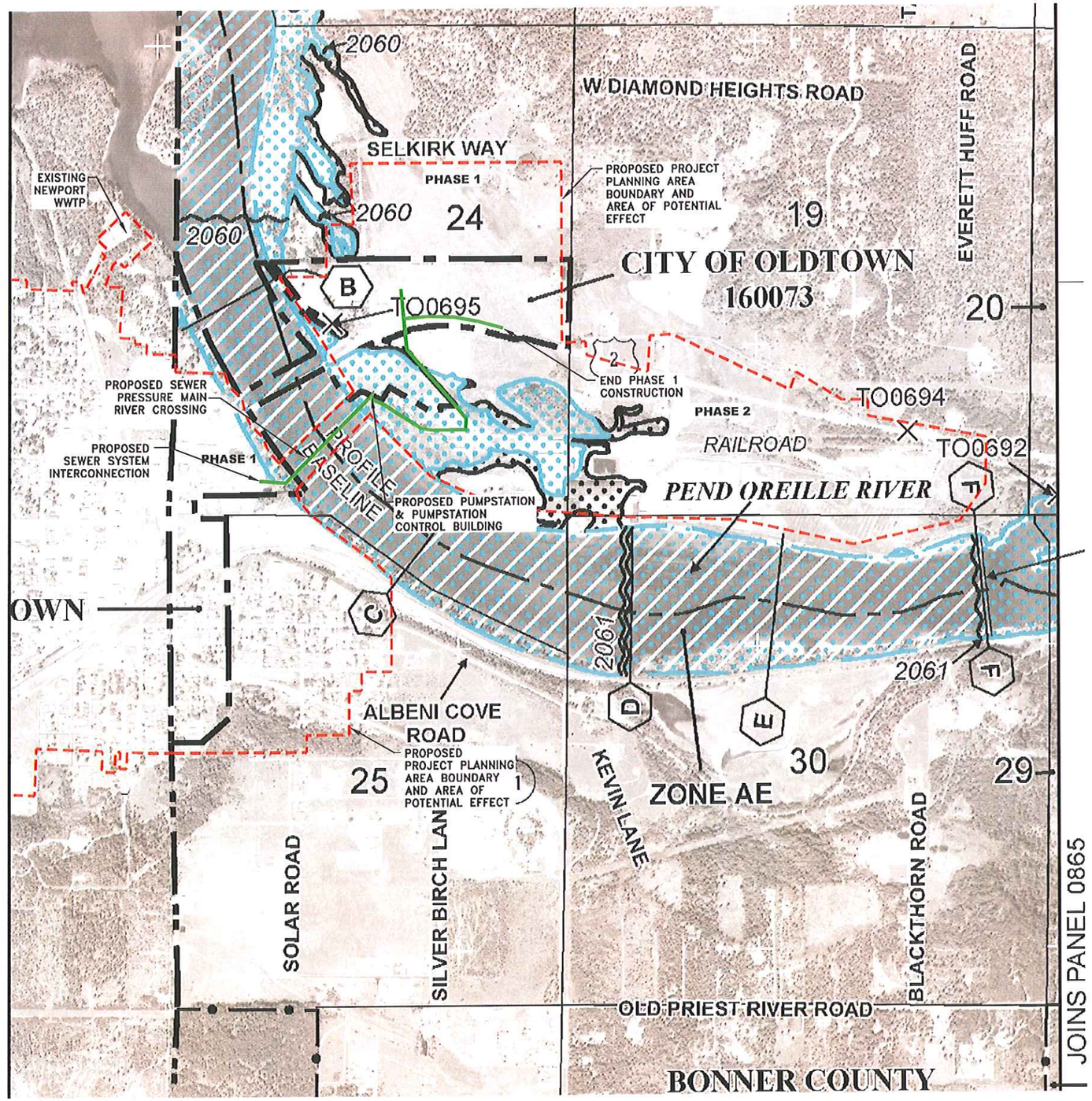
N

SCALE: NTS

NOTE:
THE PROPOSED PROJECT PLANNING AREA AND THE AREA OF POTENTIAL EFFECT COINCIDE AT ALL LOCATIONS.

LINETYPE LEGEND

- PROPOSED PVC SEWER LINE
- PROPOSED PROJECT PLANNING AREA AND AREA OF POTENTIAL EFFECT



ENGINEER'S STAMP

PROFESSIONAL ENGINEER REGISTERED 3998 STATE OF IDAHO ERIC J. ELDENBURG

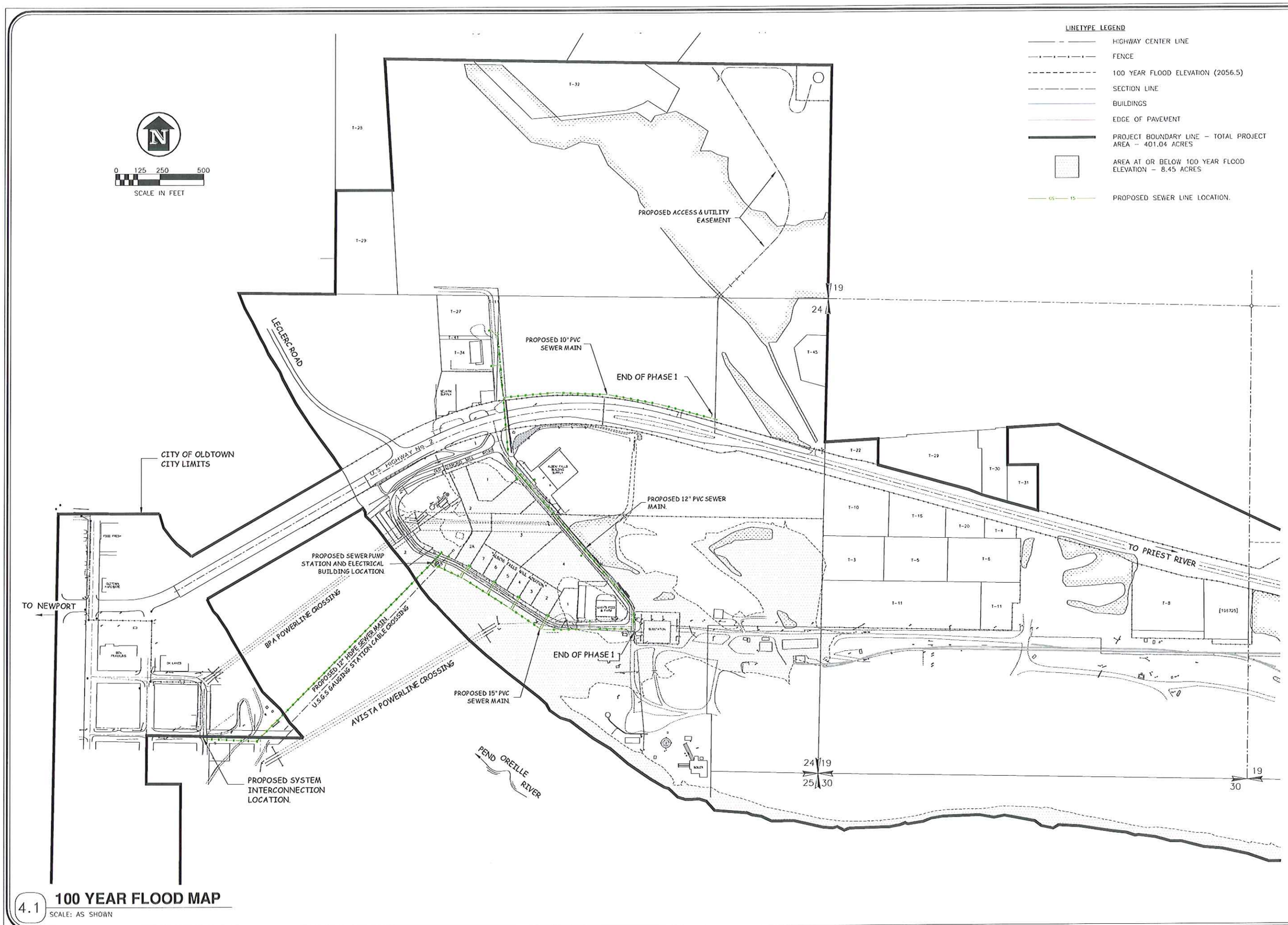
No.	DATE	REVISION	DRN/CHK

James A. Sewell and Associates, LLC
CONSULTING ENGINEERS
NEWPORT, WASHINGTON, 99156
(509) 447-3626

SHEET TITLE: PROPOSED PROJECT PLANNING AREA
BONNER COUNTY FEMA FIRMETTE
MAP NUMBER 16017C0850E
PROJECT: SEWER SYSTEM EXTENSION, 2012
WEST BONNER W&S DISTRICT
OLDTOWN, BONNER COUNTY, IDAHO

DATE:	11-16-12
SCALE:	AS SHOWN
DRAWN BY:	SJF
CHECKED BY:	EJE
FILE NAME:	[illegible]
DATA No.:	23072-09-002

SHEET 1 OF 1



4.1 **100 YEAR FLOOD MAP**

SCALE: AS SHOWN

ENGINEER'S STAMP

No.	DATE	REVISION	DRN/CHK

James A. Sewell and Associates, LLC

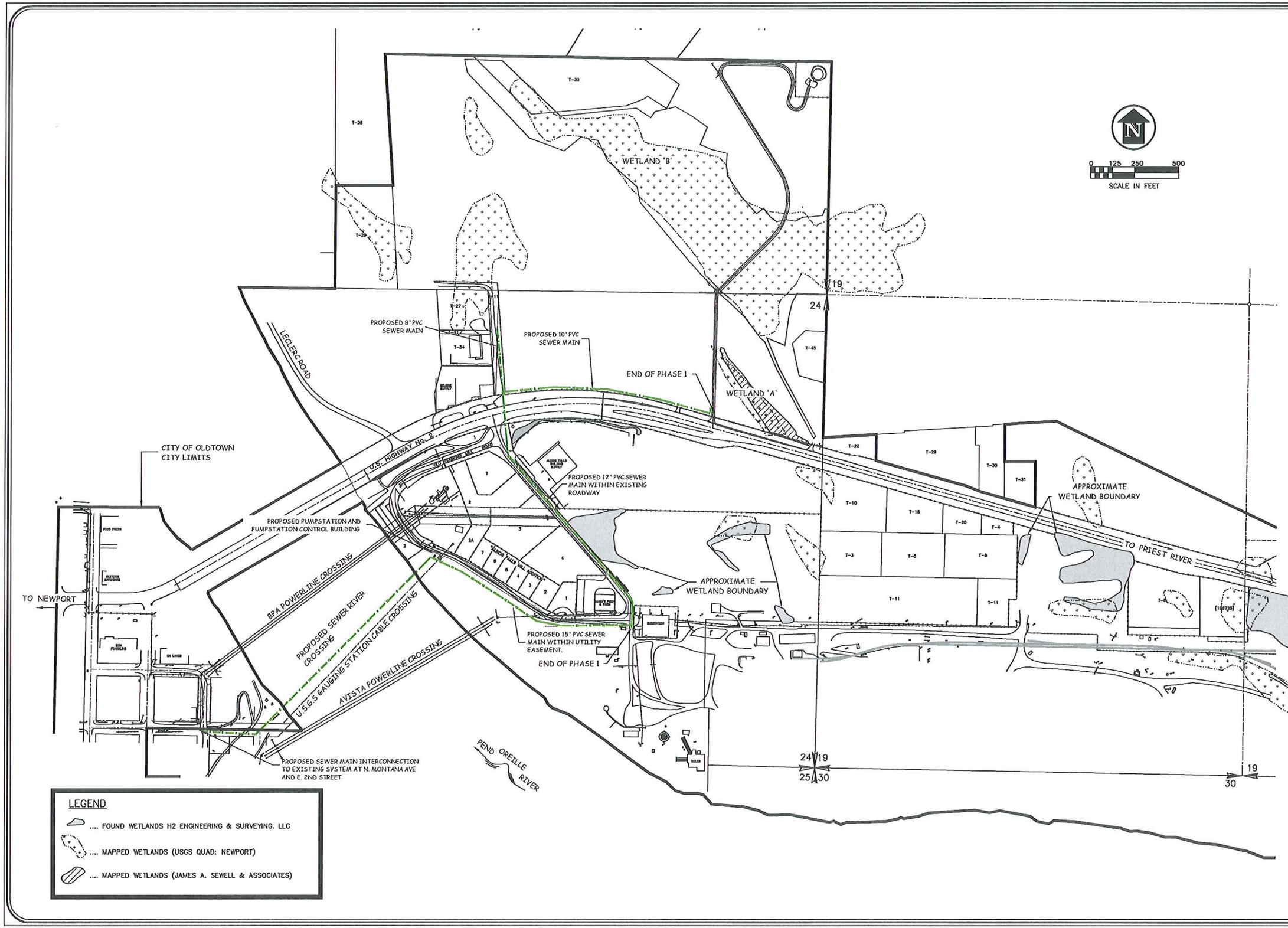
CONSULTING ENGINEERS
NEWPORT, WASHINGTON, 99156
(509) 447-3626

SHEET TITLE: 100 YEAR FLOOD MAP

PROJECT: SEWER SYSTEM EXTENSION, 2012
WEST BONNER W&S DISTRICT
OLDTOWN, BONNER COUNTY, IDAHO

DATE:	12-21-12
SCALE:	AS SHOWN
DRAWN BY:	JMB
CHECKED BY:	EJE
FILE NAME:	WBS BONNER
DATA No.:	23072-09-002

SHEET 1 OF 1



ENGINEER'S STAMP

No.	DATE	REVISION	DRN/CHK

James A. Sewell and Associates, LLC
CONSULTING ENGINEERS
NEWPORT, WASHINGTON, 99156
(509) 447-3626

SHEET TITLE: WETLAND COMPARISON MAP

PROJECT: SEWER SYSTEM EXTENSION, 2012
WEST BONNER W&S DISTRICT
OLDTOWN, BONNER COUNTY, IDAHO

DATE:	5-10-10
SCALE:	AS SHOWN
DRAWN BY:	JMB
CHECKED BY:	EJE
FILE NAME:	[illegible]
DATA No.:	23072-09-002

SHEET OF

Spencer Ferguson

From: Ed.Hagan@deq.idaho.gov
Sent: Wednesday, February 06, 2013 11:01 AM
To: Spencer Ferguson
Cc: Ester.Ceja@deq.idaho.gov
Subject: RE: West Bonner Sewer Extension Project Request for Comments

Mr. Ferguson,

Thank for the opportunity to comment on your project. Based on the information you provided there do not appear to be any potential adverse impacts to ground water quality because under anticipated operating conditions no potential sources of contamination are being created. Rather, the sewer line extension will remove or prevent future potential contaminant sources (septic systems) from potentially impacting ground water in the area.

If the project had the potential for impacting ground water, then hydrogeologic information such as depth to ground water, ground water flow direction, gradient, hydraulic conductivity, aquifer thickness, aquifer geology, and ground water quality could be necessary to evaluate the impacts of the project on the environment.

Sincerely,

Edward Hagan, PG
Ground Water Program Manager
Idaho Department of Environmental Quality
ed.hagan@deq.idaho.gov
208-373-0356
The information contained in this email may be privileged, confidential or otherwise protected from disclosure. All persons are advised that they may face penalties under state and federal law for sharing this information with unauthorized individuals. If you received this email in error, please reply to the sender that you have received this information in error. Also, please delete this email after replying to the sender.

From: Spencer Ferguson [mailto:sferguson@jasewell.com]
Sent: Tuesday, February 05, 2013 11:13 AM
To: Ed Hagan
Subject: West Bonner Sewer Extension Project Request for Comments

Mr. Hagan,

I am currently in the process of performing an environmental review for a proposed sewer system extension project within the Albeni area, located near Oldtown, Idaho. I would like to include your comments for mitigating potential impacts to groundwater quality, and any additional general comments on the project, in my environmental information document. I have attached a transmittal letter, project description, aerial and USGS maps, as well as an overall design site plan drawing. Feel free to let me know if you require additional information for your review or have an questions regarding the proposed project. I appreciate your time on this matter and look forward to hearing from you.

Thank you,

Spencer Ferguson, EIT
James A. Sewell & Associates, LLC
600-4th Street West
Newport, WA 99156
(509) 447-3626
(509) 447-2112 Fax

Spencer Ferguson

From: Lopez.Maria@epamail.epa.gov
Sent: Monday, February 11, 2013 10:31 AM
To: Spencer Ferguson
Cc: Werntz.James@epamail.epa.gov
Subject: West Bonner Sewer Extension Project

Mr. Ferguson,

Thank-you for the opportunity to provide comments regarding the West Bonner Sewer Extension Project. I have shared the information you provided to staff in our office. Our comments regarding the 404 aspects of the work are summarized below:

The project evaluation should include secondary impacts of development in and around the delineated and National Wetland Inventory (NWI) mapped wetlands within the Proposed Project Area/Area of Potential Effect. For example, the large wetland complex in the north half of Section 24 is bisected by a proposed access and utility easement. Any road or utility line constructed through wetlands requires a Clean Water Act (CWA) Section 404 permit from the U.S. Army Corps of Engineers. Permits require avoidance, minimization and mitigation for impacts to aquatic resources.

The project description mentions proposed residential and commercial properties. The proposed sewer collection system would serve these properties. Therefore, density and location of existing and proposed residential and commercial properties in relation to the wetlands, and the potential impacts should be described in the environmental review. Potential impacts to wetlands or other aquatic resources could be from dredging and/or filling (i.e., elimination of important aquatic resources), discharge of stormwater runoff, addition of impervious surfaces, and other cumulative impacts. Any known plans to avoid and minimize impacts to aquatic resources through development design, conservation easements, or public purchase of wetlands should be discussed.

Serving the existing properties with community sewer will correct the current water quality impacts to aquatic resources, but potential adverse impacts from future development should be included in the evaluation.

If you have any further questions regarding potential 404 issues please contact Carla Fromm at 208-378-5755.

Thank-you

Maria Lopez

Maria Lopez
Environmental Scientist
950 W. Bannock Street
Idaho Operations Office
Boise, ID 83702
(208) 378-5616

RECEIVED
JAN 18 2013
JAMES A. SEWELL
& ASSOCIATES LLC

IDAHO DEPARTMENT OF FISH AND GAME
PANHANDLE REGION
2885 West Kathleen Avenue
Coeur d' Alene, Idaho 83815

C.L. "Butch" Otter/Governor
Virgil Moore/Director

January 15, 2013

Mr. Spencer Ferguson, EIT
James A. Sewell & Associates, LLC
600-4th Street West
Newport, WA 99156

Dear Mr. Ferguson:

REFERENCE: WEST BONNER SEWER EXTENSION PROJECT

We have reviewed the information you provided regarding the proposed project to install a community-wide sewer collection system in the recently annexed "Albeni" area adjacent to Old Town. The purpose of these comments is to assist the decision-making authority by providing technical information addressing potential effects on wildlife and wildlife habitat and how any adverse effects might be mitigated. It is not the purpose of Idaho Department of Fish and Game to support or oppose this proposal.

A gravity sewer collection system will provide sewer service to the existing and proposed residential and commercial properties. The project will take place in two phases; however, only Phase One is being proposed at this time. Phase One includes expanding West Bonner Water and Sewer District's system across the Pend Oreille River to a new duplex lift station, extending sewer mains along road right-of-ways (primarily Diamond Mill Loop Road & Hwy 2), and all manholes constructed within areas below the 100-year flood elevation will have lids extended to the Base Flood Elevation to prevent inundation. The river crossing will consist of a 12" diameter high density polyethylene (HDPE) pipe directionally bored approximately 25 feet under the river bed.

The Pend Oreille River supports bull trout (ESA-Threatened) and is also listed as Critical Habitat for bull trout. Work activities for this project should ensure that water quality, fish and fish habitat, as well as the adjacent riparian habitat, receive maximum protection through all appropriate BMPs.

Thank you for the opportunity to comment.

Sincerely,

Charles E. Corsi
Regional Supervisor

CEC:MTB
C: Sharon Kiefer, IDFG Boise
USFWS, Spokane

File: Sewell & Associates West Bonner Sewer Extensioin

Public Health
Prevent. Promote. Protect.
Panhandle Health District

Panhandle Health District

Healthy People in Healthy Communities

Bonner County
Environmental Health
322 Marion
Sandpoint, ID 83864
Phone: 208-265-6384
Fax: 208-265-8550
www.phd1.idaho.gov

RECEIVED
MAR 06 2012
JAMES A. SEWELL
& ASSOCIATES LLC

March 5, 2012

James A. Sewell & Associates
Attn: Spencer Ferguson
600-4th Street West
Newport, WA 99156

Re: West Bonner Water System Extension Project; General comments

Dear Mr. Ferguson:

Thank you for soliciting the Panhandle Health Districts comments on the proposed water and sewer expansion project. Centralized sewers are generally preferred over onsite sewage disposal systems for two reasons. The first being that we know at some point septic systems will fail and have the potential to create real public health hazards by contaminating the grounds surface, the ground water and any nearby surface waters. Secondly, septic systems are privately owned and are often not maintained properly which can lead to a failure of the system.

The proposed expansion would service an area of Bonner County that has had 17 septic system failures dating from 1976 to present. As septic systems age the risk of failure increases for that reason we do not anticipate seeing less septic system failures.

To summarize the Panhandle Health District has no objections to the proposed project and would encourage project approval.

Sincerely,

John Dowling
Environmental Health Program Mgr.

Spencer Ferguson

From: John J. Dowling [JDowling@phd1.idaho.gov]
Sent: Tuesday, March 06, 2012 4:16 PM
To: Spencer Ferguson
Subject: West Bonner Expansion project

Spencer,

I reviewed our files for the total number of permits issued for Township 56 N, Range 6W, section 24. There has been a total of 20 permits issued for that area since permitting began in 1972. Of those 20 permits 14 were replacement permits. I hope that is what you were looking for, let me know if I can be of further assistance.

Thank you,

John Dowling
Environmental Program Manager
Panhandle Health District
322 Marion ave.
Sandpoint, Id 83864
208-265-6384

Privacy Disclaimer:

The information contained in this email may be privileged, confidential or otherwise protected from disclosure. All persons are advised that they may face penalties under state and federal law for sharing this information with unauthorized individuals. If you received this email in error, please reply to the sender that you have received this information in error. Also, please delete this email after replying to the sender.

jdowling@phd1.idaho.gov

STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

2110 Ironwood Parkway, Coeur d'Alene, ID 83814 (208) 769-1422

C. L. "Butch" Otter, Governor
Toni Hardesty, Director

April 15, 2011

Spencer Ferguson, EIT
J.A. Sewell & Associates
600 4th St W
Newport, WA 99156
sferguson@jasewell.com

Subject: **West Bonner Water & Sewer District, Water and Sewer System Extension Projects**, Idaho DEQ Comments on Environmental Impacts

Dear Spencer:

In your letter dated January 27, 2011, you requested comments from Idaho Department of Environmental Quality (DEQ) on the environmental impacts from the proposed drinking water and sewer systems' extension projects. The scope of the project is described in a summary attached to the January 27, 2011 letter. In addition, a report titled "Preliminary Engineering Report for the Water and Sewer Extension to the Albeni Area 2010- Phase 1, West Bonner Water & Sewer District, Oldtown, Idaho" dated August 30, 2010 prepared by Eric Eldenburg, P.E. of J.A. Sewell & Associates was submitted to DEQ on March 15, 2011 (P&S #11682). This report provides additional details on the project.

The proposed projects are needed to provide centralized water and sewer service to the east side of Pend Oreille River across from the community of Oldtown, Idaho so vacant land can be developed into residential lots. Existing residences and businesses will also be able to abandon their individual wells and individual on-site subsurface wastewater systems and connect into the new utilities. The 20-year design population for both water and sewer is about 171 equivalent resident units (ERU). The projects proposed and covered by this report are the following:

1. Construct two (2) wells to each to supply 500 gallons per minute (gpm) and a pump house.
2. Construct a 500,000 gallon above-ground welded steel drinking water storage tank.
3. Construct parallel 1,500-foot pipe borings 20 feet under the Pend Oreille River to install a 12-inch HDPE potable water line and a 12-inch HDPE carrier pipe for a 6-inch HDPE pressure sewer line.
4. Construct a duplex, submersible, concrete wet well lift station with 15 horsepower pumps capable of pumping at least 140 gpm.
5. Construct about 4,400 feet of gravity sewer collection consisting of 15-inch, 12-inch, 10-inch and 8-inch gravity sewer pipe with concrete manholes.
6. Construct about 10,700 feet of 12-inch, 10-inch and 8-inch water distribution lines with fire hydrants.

The following are the DEQ comments on the proposed drinking water and sewer system extensions, and the potential environmental impacts from the proposed projects related to storm water control and air quality issues:

Drinking Water and Sewer

DEQ will need to review and approve the report titled "Preliminary Engineering Report for the Water and Sewer Extension to the Albeni Area 2010 - Phase 1, West Bonner Water & Sewer District, Oldtown, Idaho" dated August 30, 2010 prepared by Eric Eldenburg, P.E. of J.A. Sewell & Associates. Once approved, this report will become the basis for the DEQ review of the plans and specifications (P&S) for the project. DEQ will need to approve the P&S for these projects prior to construction starting.

Surface Water Quality and Storm Water Control

Storm water controls will need to be developed that adequately protect surface waters and ground water from being impacted during and after construction. The local stormwater control authority should be contacted for details on the appropriate collection/treatment/disposal requirements. Control of sedimentation and erosion during construction activities must be achieved by the use of acceptable best management practices (BMPs) and is considered the responsibility of the owner/developer/contractor for the project. The project may require compliance with the Construction General Permit, a program administered by the U.S. Environmental Protection Agency. This requirement is designed to prevent pollution of waters of the U.S. during construction projects. More information on this requirement can be found at: http://yosemite.epa.gov/R10/WATER.NSF/NPDES+Permits/Region+10+CGP+resources/

This proposed project will cross wetlands with a drinking water line and access road to the proposed drinking water storage tank. The appropriate Army Corp of Engineers permit will be required before any work can be done across these wetlands. Appendix D of the above referenced preliminary engineering report discusses the wetlands.

Air Quality

There are no known or permitted major air pollution stationary sources located within the West Bonner Water and Sewer Extension Project area. The nearest permitted stationary source of air pollution is located approximately five (5) miles east of the project area.

Excluding the Greater Sandpoint Non-Attainment Area located approximately 22 miles east-northeast of the project area, Bonner County is classified as "Attainment" or "Unclassified" for all Criteria Pollutants.

Potential air quality impacts may arise with land clearing, demolition, construction and the subsequent operational phases of the project.

The project plans must incorporate reasonable controls on fugitive dust sources during all phases of the project. All reasonable precautions shall be taken to prevent particulate matter (dust) from becoming airborne, as required in IDAPA 58.01.01.651. A project specific dust control plan that incorporates adequate levels of control measures is encouraged.

Project plans should consider alternatives to open burning of vegetative (land clearing) debris. Mechanical processing of land clearing debris avoids generating smoke and offers the greatest flexibility for timely project progress. If open burning of land clearing debris is incorporated into the project plan, smoke management practices to protect air quality as described in IDAPA 20.02.01.071.03 and IDAPA 58.01.01.614.03 must be considered.

The project plan should describe the proper disposal of demolition and construction debris. Open burning of demolition or construction debris is not an allowable form of open burning as defined by IDAPA 58.01.01.600. Demolition and construction debris must be treated in accordance with solid waste regulations.

Depending on the facility's maximum capacity to emit an air pollutant under its physical and operational design, an air quality permit may be required as described in IDAPA 58.01.01.200-228. If a permit is required, it must be obtained prior to the construction phase of this project.

If you have any questions about air quality issues, please call Mark Boyle at 769-1422 or email him at mark.boyle@deq.idaho.gov. Thank you for the opportunity to provide input on these projects.

Sincerely,

John Tindall

John C. Tindall, P.E.
John.tindall@deq.idaho.gov

File in TRIM: West Bonner Water & Sewer District (P&S #11648)

c: Eric Eldenburg, P.E., J.A. Sewell, Newport eeldenburg@jasewell.com
Kevin Koesel, P.E., J.A. Sewell, Newport kkoesel@jasewell.com
Katy Baker-Casile, P.E., DEQ, Coeur d'Alene katy.baker@deq.idaho.gov
Ester Ceja, DEQ State Office, Boise ester.ceja@deq.idaho.gov
June Bergquist, DEQ, Coeur d'Alene june.bergquist@deq.idaho.gov
Mark Boyle, DEQ, Coeur d'Alene mark.boyle@deq.idaho.gov

PEND OREILLE
SUPERVISORY AREA
2550 Highway 2 West
Sandpoint ID 83864-7305
Phone (208) 263-5104
Fax: Area (208) 263-0724
Fax: District (208) 265-7263

IDAHO DEPARTMENT OF LANDS

GEORGE B. BACON – DIRECTOR
EQUAL OPPORTUNITY EMPLOYER

STATE BOARD OF LAND COMMISSIONERS
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Lawrence G. Wasden, Attorney General
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Tom Luna, Sup't of Public Instruction

RECEIVED
FEB 17 2011
JAMES A. SEWELL
& ASSOCIATES LLC

February 15, 2011

Spencer Ferguson
James A. Sewell & Associates, LLC
600 4th Street West
Newport, WA 99156

Dear Spencer,

Roger Jansson, Department of Lands Operations Chief for the northern half of the state, asked me to respond to your January 27, 2011 letter related to the West Bonner Water and Sewer Extension Project. I have reviewed the information you provided. The portion of the project that intersects Idaho Department of lands jurisdiction includes the plan to install two utility lines, one for potable water and the other for sewer, under the Pend Oreille River just upstream of the Highway 200 Bridge.

The Pend Oreille River is navigable-in-fact at this location and therefore the State of Idaho owns title to the riverbed. The West Bonner Water and Sewer District will need to obtain an easement for this use through the Idaho Department of Lands. Jim Brady, Navigable Waters Resource Specialist Senior, in our Sandpoint office can provide further information related to that. His phone number is 208-263-5104.

The Idaho Department of Water Resources (IDWR) regulates stream alterations on this segment of the river. IDWR should be consulted to see if a stream alteration permit will be required for this activity.

Your letter indicates that you are already in contact with the Idaho Department of Environmental Quality. It will be important to address any concerns they have related to the project.

Sincerely,

Edward Robinson
Area Manager
Pend Oreille Lake Area

Spencer Ferguson

From: Becker, Greg - Sandpoint, ID [Greg.Becker@id.usda.gov]
Sent: Tuesday, April 12, 2011 3:31 PM
To: Spencer Ferguson
Subject: RE: West Bonner Water and Sewer Extension Project

Spencer, thanks for the chance to review this. Looks like a significant project. The only concern that I could see that applied to us was the high frequency of hydric soils and wetlands. Your partnership with ACOE and general avoidance with line locations looks ideal.

Just out of curiosity: 1) What are the wall thicknesses/ SDR values of the lines crossing the river? 2) What is the protection from movement of the 6" line within the 12" sleeve?

Thanks,
Greg

From: Spencer Ferguson [mailto:sferguson@jasewell.com]
Sent: Tuesday, April 12, 2011 9:13 AM
To: Becker, Greg - Sandpoint, ID
Subject: West Bonner Water and Sewer Extension Project

Greg,

I have attached a project description for the West Bonner Water and Sewer extension project located in the Albeni area near Oldtown, ID. I have also attached a quad map, with the project area bounded in red, and an overall drawing of the proposed project. I would appreciate any information on potential impacts of the project on important farmland and prime rangeland and recommendations you may have for minimizing or avoiding these impacts.

Thanks,

SPENCER FERGUSON, EIT
James A. Sewell & Associates, LLC
600-4th Street West
Newport, WA 99156
(509) 447-3626
(509) 447-2112 Fax

Spencer Ferguson

From: McGown, Mary [Mary.McGown@idwr.idaho.gov]
Sent: Friday, April 15, 2011 12:16 PM
To: Spencer Ferguson
Cc: Bryan Quayle
Subject: RE: West Bonner Water and Sewer Extension Project
Attachments: West Bonner Water 4-11.pdf

Spencer,

Thank you for sending me the information about the West Bonner Water and Sewer Extension electronically. I am attaching an aerial photo of the site with the flood zones on it. Much of the proposed water and sewer project will be constructed in the 1% annual chance flood zone (AE zone). A floodplain development permit will be required from the City of Oldtown for development, including excavation and construction, in the AE (blue) zone.

The federal regulations are fairly vague on water and sewer system improvements. The Code of Federal Regulations says:
44 CFR 60.3(a)(5)[The community must] Require within flood-prone areas new and replacement water supply systems to be designed to minimize or eliminate infiltration of flood waters into the systems; and
44 CFR 60.3(a)(6) [The community must] Require within flood-prone areas (i) new and replacement sanitary sewage systems to be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters ...

In most instances these criteria can be met through careful system design. Pumping stations should have electrical panels elevated above the base flood elevation. Manholes should be raised above the base flood elevation or be equipped with seals to prevent leakage. These are the only criteria in the federal regulations. The state statute does not regulate sewer and water systems. The local jurisdiction may have additional conditions.

Mary G. McGown, Ph.D., CFM
State Floodplain Coordinator
Idaho Department of Water Resources
322 E. Front Street
P.O. Box 83720
Boise, ID 83720-0098
(208) 287-4928
(208) 287-6700 fax

From: Spencer Ferguson [mailto:sferguson@jasewell.com]
Sent: Friday, April 15, 2011 9:32 AM
To: McGown, Mary
Subject: West Bonner Water and Sewer Extension Project

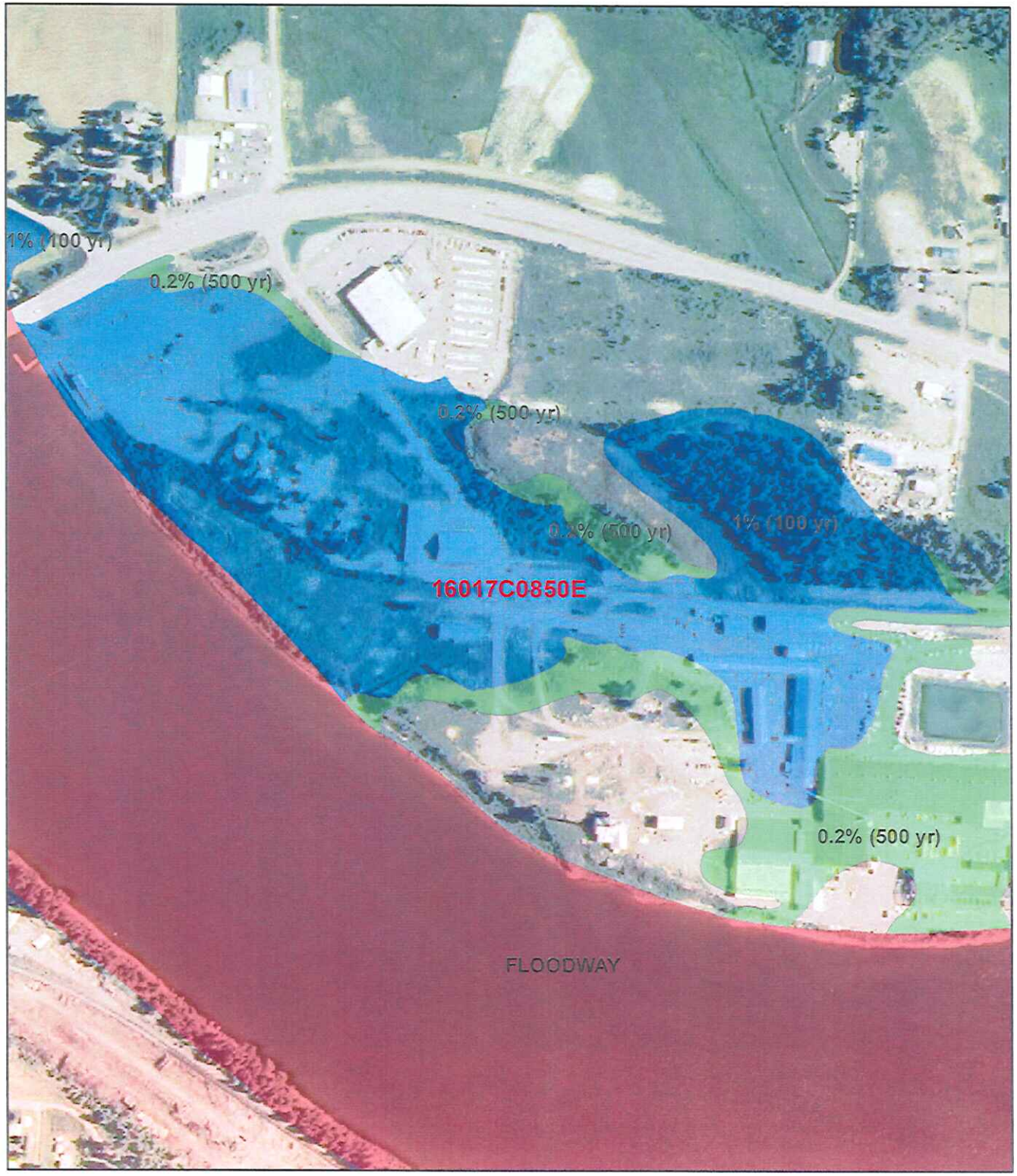
Mary,

I have attached a project description for the West Bonner Water and Sewer extension project located in the Albeni area near Oldtown, ID. I have also attached a quad map, with the project area bounded in red, an overall drawing of the proposed project, and a 100 year flood map of the project area. I would appreciate any comments for any potential

conflicts of the project to applicable state floodplain management and permitting regulations within the project area. I appreciate your quick response to my phone call and any comments you can offer on the project. Please let me know if I can provide you any additional information. Thank you very much for your time. Also, if you would please confirm you have received this email I would be grateful.

Thanks,

SPENCER FERGUSON, EIT
James A. Sewell & Associates, LLC
600-4th Street West
Newport, WA 99156
(509) 447-3626
(509) 447-2112 Fax



FIRM

FLOOD INSURANCE RATE MAP
BONNER COUNTY, IDAHO
AND INCORPORATED AREAS

PANEL 0850 OF 1475
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

COMMUNITY Bonner

NUMBER 160206

PANEL 0850

SUFFIX E

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER 16017C0850E
EFFECTIVE DATE 11/18/2009

Federal Emergency Management Agency

- Base Flood Elevation
- 0.2% (500 yr)
- A (Unknown)
- 1% (100 yr, AE)
- FLOODWAY
- AH
- AO (w/Depth)
- Scanned FIRM

Aerial Photography From 2009

0 0.035 0.07 0.14
Miles

N

Spencer Ferguson

From: Beardslee, Allen [Allen.Beardslee@idwr.idaho.gov]
Sent: Tuesday, May 24, 2011 9:01 AM
To: Spencer Ferguson
Subject: RE: Status of Solitation of Comments for the West Bonner Water and Sewer Extension Project

Spencer,

Regarding well construction for your West Bonner Water and Sewer Extension Project:

Well locations must meet Panhandle Health/DEQ & IDWR site separation distances & 0.280 inch wall casing must be used for public water supply requirements.

Water Rights must be acquired prior to the construction of a new well, unless granted permission from IDWR's regional manager. A copy of your request for comments was passed on to our Water Right Section.

If you wish to have a more formal reply for your records, please let me know and we can send you a letter.

Al Beardslee
Sr. Water Resource Agent
Northern Region IDWR

From: Spencer Ferguson [mailto:sferguson@jasewell.com]
Sent: Tuesday, May 24, 2011 7:22 AM
To: Beardslee, Allen
Subject: Status of Solitation of Comments for the West Bonner Water and Sewer Extension Project

Mr. Beardslee,

I wanted to touch base with you regarding the status of your comments for the West Bonner Water and Sewer Extension Project in Oldtown, Idaho. I am planning to include your comments in an Environmental Information Document which will be submitted to DEQ and would very much like a documented response from your office. Do you have an estimated date for completion of your review? Also, I have spoken with the project manager and it appears that the West Bonner Water and Sewer District has been working to acquire water rights for the proposed water wells but has not yet completed the process. Thank you very much for your time and let me know if I can provide you with further information.

Thanks again,

SPENCER FERGUSON, EIT
James A. Sewell & Associates, LLC
600-4th Street West
Newport, WA 99156
(509) 447-3626
(509) 447-2112 Fax

Spencer Ferguson

From: Bryon_Holt@fws.gov
Sent: Friday, October 29, 2010 2:31 PM
To: Spencer Ferguson
Subject: Re: West Bonner Water and Sewer Extension Project.

Spencer,

I apologize for my delay in responding to your email. Your understanding is correct.

****
Bryon Holt
U.S. Fish and Wildlife Service
Northern Idaho Field Office, Spokane, WA
Telephone: (509) 893-8014
Fax: (509) 891-6748
Blackberry: (509) 209-0711
email: bryon_holt@fws.gov
****

"Spencer Ferguson" <sferguson@jasewell.com>

"Spencer Ferguson" <sferguson@jasewell.com>

10/15/2010 07:24 AM

To<bryon_holt@fws.gov>
cc"Eric Eldenburg" <eeldenburg@jasewell.com>
SubjectWest Bonner Water and Sewer Extension Project.

Mr. Holt,

Per our telephone conversation on October 5, it is my understanding that the USFWS does not typically comment on Environmental Assessments. However as our project involves the Army Corps of Engineers, it is up to the Corps to determine whether or not the proposed project, specifically the borings under the Pend Oreille River bed, has the potential to affect local Bull Trout populations. It is my understanding that if the Corps determines the project to have potential for impacting the local Bull Trout populations, they would be required to conduct a Biological Assessment for the project area, and submit that to the USWFS for approval. I am writing to confirm that this is correct.

Thank you for your time,

SPENCER FERGUSON, EIT
James A. Sewell & Associates, LLC
600-4th Street West
Newport, WA 99156
(509) 447-3626
(509) 447-2112 Fax

RECEIVED
FEB 14 2011
JAMES A. SEWELL
& ASSOCIATES LLC

State of Idaho
DEPARTMENT OF WATER RESOURCES
322 East Front Street • P.O. Box 83720 • Boise, Idaho 83720-0098
Phone: (208) 287-4800 • Fax: (208) 287-6700 • Web Site: www.idwr.idaho.gov

C. L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Interim Director

February 10, 2011

Spencer Ferguson, EIT
James A. Sewell & Associates, LLC
600 4th Ave west
Newport, WA 99156

Re: West Bonner Water & Sewer Extension Project

Mr. Ferguson,

We recently received your letter regarding the proposed West Bonner Water & Sewer Extension Project. Your project summary indicated two new production wells will be constructed during this project. As these wells are anticipated to be part of a community water system, please contact the Idaho Department of Water Resources (IDWR) Well Construction Specialist in the Coeur D'Alene office (208-762-2800), Panhandle Health District, and the Idaho Department of Environmental Quality to determine regulatory requirements.

Your project summary indicated that some residences and businesses would be converted from individual production wells to the community water system being proposed. You may also encounter other unused wells during construction activities. Idaho code mandates that all unused wells be decommissioned. Please contact the IDWR Well Construction Specialist in the Coeur D'Alene office (208-762-2800) to determine regulatory requirements for decommissioning wells. Please reference the Idaho Administrative Procedures Act (IDAPA) 37.03.09 concerning the Rules and Standards for the Construction and Use of Wells in Idaho for written guidance.

Your project summary indicated that a new gravity sewer collection system will be installed in this project. For residences and businesses that elect to remain on a private production well, IDAPA 37.03.09 mandates a minimum separation distance from wells of 50 feet for gravity sewer main lines and 25 feet for secondary sewer lines. If this separation distance cannot be met, the well in question must be decommissioned and the well user connected to the community water system or another private well that meets the separation distance requirements. Please also contact Panhandle Health District and the Idaho Department of Environmental Quality to determine additional required separation distances for sewer lines.

Your project summary indicated the sewer and water lines will be constructed under the Pend Oreille River. If the Pend Oreille River channel, or any other stream channel, will be altered during this project please contact the IDWR Stream Channel Protection Program and the Army Corps of Engineers to determine regulatory requirements.

Our records do not indicate the presence of injection wells in the project area. However if your project involves collecting storm water from the street and distributing it to the subsurface with a dry well, infiltration trench, seepage bed, or similar feature, decommissioning an injection well, or if during construction activities you find an unused injection well please contact the IDWR Underground Injection Control (UIC) Program to determine regulatory requirements. Please reference the IDAPA 37.03.03 concerning the Rules and Standards for the Construction and Use of Injection Wells in Idaho for written guidance.

If you have any questions, feel free to contact me at (208) 287-4932.

Regards,

Matt Anders
Hydrogeologist, UIC Program

Spencer Ferguson

From: Eastman.Susan@epamail.epa.gov
Sent: Thursday, August 04, 2011 3:15 PM
To: Spencer Ferguson
Subject: Re: West Bonner Water and Sewer Extension Project

Attachments: R10 Sole Source Aquifer Checklist.doc

R10 Sole Source Aquifer Checkl...

The Oldtown area is not located in the review area of the federally designated sole source aquifer. FYI an area identified as "Tweedie" is just north of the review area. So if Tweedie is located south of your project you are out of the review area but this was a close one.

FYI for future reference I'm attaching the check list I ask project planners to submit to me for review and I'm also attaching the web site with GIS maps of the federally designated sole source aquifers.

(See attached file: R10 Sole Source Aquifer Checklist.doc)

http://yosemite.epa.gov/r10/water.nsf/Sole+Source+Aquifers/SSA

Susan Eastman, Environmental Scientist
EPA Region 10
1200 Sixth Ave. Suite 900, OWW-136
Seattle, WA. 98101
SDWA Tribal & CWA Indian Set Aside Program, Sole Source Aquifer Program, Source Water Protection and ID 106

206-553-6249
EASTMAN.SUSAN@EPA.GOV

From: "Spencer Ferguson" <sferguson@jasewell.com>
To: Susan Eastman/R10/USEPA/US@EPA
Cc: "Kevin Koesel" <kkoesel@jasewell.com>
Date: 08/04/2011 01:25 PM
Subject: West Bonner Water and Sewer Extension Project

Hello Susan,

Idaho Department of Environmental Quality has asked that I contact you with respect to commenting on a proposed water system extension project in which I am currently involved. The propose water system extension is located near Oldtown, Idaho. I would be grateful if you could comment on whether the proposed public water wells are located above the Spokane-Rathdrum Sole Source Aquifer or a streamflow source area. I would also appreciate any information/comments you can provide with respect to project compliance with applicable EPA standards. I have attached a project description for the West Bonner Water and Sewer extension project located in the Albeni area. I have also attached a quad map, with the project area bounded in red, an overall drawing of the proposed project, a 100 year flood map of the project area, and a proposed well construction plan view. I greatly appreciate any comments you can offer on the project. Please let me know if I can provide you any additional information. Thank you very much for your time. Also, if you would please confirm you have received this email I would be grateful.

Thanks,

Spencer Ferguson, EIT
James A. Sewell & Associates, LLC
600-4th Street West
Newport, WA 99156
(509) 447-3626
(509) 447-2112 Fax
[attachment "Project Description.pdf" deleted by Susan Eastman/R10/USEPA/US] [attachment "Quad 122809.jpg" deleted by Susan Eastman/R10/USEPA/US] [attachment "ALBENI-PRESENTATION MAP S2 - OVERALL SITE PLAN (1).pdf" deleted by Susan Eastman/R10/USEPA/US] [attachment "Exhibit 3 100 Year Flood Map.pdf" deleted by Susan Eastman/R10/USEPA/US] [attachment "Well Construction Plan.pdf" deleted by Susan Eastman/R10/USEPA/US]

Sole Source Aquifer Checklist

1. Location of Project and name of Sole Source Aquifer.

2. Project description and federal funding source (e.g., Federal Highway Administration, Housing and Urban Development etc)

3. Is there any increase of impervious surface? If so, what is the area?

4. Describe how storm water is currently treated on the site?

5. How will storm water be treated on this site during construction and after the project is complete?

6. Are there any underground storage tanks present or to be installed? Include details of such tanks.

7. Will there be any liquid or solid waste generated? If so how will it be disposed of?

8. What is the depth of excavation?

9. Are there any wells in the area that may provide direct routes for contaminates to access the aquifer and how close are they to the project?

10. Are there any hazardous waste sites in the project area....especially if the waste site has an underground plume with monitoring wells that may be disturbed? Include details.

11. Are there any deep pilings that may provide access to the aquifer?

12. Are Best Management Practices planned to address any possible risks or concerns?

13. Is there any other information that could be helpful in determining if this project may have an affect on the aquifer?

14. Does this Project include any improvements that may be beneficial to the aquifer, such as improvements to the wastewater treatment plan?

The EPA Sole Source Aquifer Program may request additional information if impacts to the aquifer are questionable after this information is submitted for review.

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C.L. "Butch" Otter
Governor of Idaho

Janet L. Gallimore
Executive Director

Administration
2205 Old Penitentiary Road
Boise, Idaho 83712-8250
Office (208) 334-2682
Fax: (208) 334-2774

Membership and Fund Development
2205 Old Penitentiary Road
Boise, Idaho 83712-8250
Office (208) 514-2310
Fax: (208) 334-2774

Archaeological Survey of Idaho
210 Main Street
Boise, Idaho 83702-7264
Office (208) 334-3847
Fax: (208) 334-2775

Historical Museum and Education Programs
610 North Julia Davis Drive
Boise, Idaho 83702-7695
Office (208) 334-2120
Fax: (208) 334-4059

Historic Preservation Office
210 Main Street
Boise, Idaho 83702-7264
Office (208) 334-3861
Fax: (208) 334-2775

Old Penitentiary & Historic Sites
2445 Old Penitentiary Road
Boise, Idaho 83712-8254
Office (208) 334-2844
Fax: (208) 334-3225
- Franklin Historic Site
- Pierce Courthouse
- Rock Creek Station & Stricker Homesite

Public Archives & Research Library
2205 Old Penitentiary Road
Boise, Idaho 83712-8250
Office (208) 334-3356
Fax: (208) 334-3198
- Public Archives
- Research Library
- Oral History

North Idaho Office
112 W. Fourth Street, Suite 7
Moscow, Idaho 83843
Office (208) 882-1540
Fax: (208) 882-1763

RECEIVED
JUL 0 2 2010
JAMES A. SEWELL & ASSOCIATES

June 29, 2010

Spencer Ferguson, EIT
James A. Sewell & Associates, LLC
600 4th Street West
Newport, Washington 99156

RE: Albeni Annex Water and Sewer Extension Project

Dear Spencer,

Thank you submitting the report documenting a cultural survey for the Albeni Annex Water and Sewer Extension project located near Oldtown, Idaho. The project will consist of five miles of new water and sewer lines installed in trenches excavated approximately four feet wide and six feet deep. In addition, two new wells will be drilled and a water tank will be installed. New water and sewer lines will connect with existing systems in Oldtown via a pipeline drilled beneath the Pend Oreille River.

Three historic properties have been identified within or partially within the Area of Potential Effect (APE): The Fidelity Lumber Company Great Northern Railroad Spur (Field No. AA-10-1), the Albeni Falls-Pine Street Transmission Line (17-17917), and the Pend Oreille River Sawmill shoreline features (17-17816). The Red Tree Winter Village Site Traditional Cultural Property (TCP) is reportedly within or partially within the APE. The TCP was not formally documented at the request of the Kalispel Tribe of Indians, and no archaeological evidence of the TCP was noted as a result of the survey.

Albeni Falls-Pine Street Transmission Line (17-17917) has been determined Not Eligible. While the Fidelity Lumber Company Great Northern Railroad Spur (Field No. AA-10-1) and the shoreline features of the Pend Oreille River Sawmill (17-17816) are not eligible individually, due to loss of integrity, both likely would contribute to the overall eligibility of the Pend Oreille River Sawmill. The full extent of the Pend Oreille River Sawmill remains unevaluated for eligibility to the National Register. However, we agree no individually significant cultural resources were identified within the APE, and cultural resources that may contribute to the eligibility of the historical sawmill site will not be affected by the proposed project, either directly or indirectly.

We appreciate your cooperation. If you should have any questions regarding these comments please feel free to contact me at 208-334-3847 or travis.pitkin@ishs.idaho.gov.

Sincerely,

Travis Pitkin
SHPO Archaeologist

Kalispel Tribe of Indians
P.O. Box 39
Usk, WA 99180

(509) 445-1147
(509) 445-1705 *fax*
www.kalispeltribe.com

RECEIVED
JUN 0 9 2010
JAMES A. SEWELL
& ASSOCIATES

8 June 2010

Mr. Spencer Ferguson, EIT
James A. Sewell & Associates, LLC.
600-4th Street West
Newport, WA 99156

Re: Commentary/Review Albeni Annex Water and Sewer Extension Project Archaeological Study Report

Dear Mr. Ferguson:

I received in yesterday's post and reviewed this morning the above mentioned report and I am providing you written comments in duplicate, please retain one copy for the project file and forward a copy to Idaho SHPO's office to meet their regulatory needs. The technical merits and analytical summary provided are sufficient, in my opinion, to form a fact based decision that meets the good faith standard and I as a cultural resources manager concur with the recommendations Ms. Sharley has provided you and your client. Namely, in the absence of definable and defensible NRHP listed or potentially eligible historic properties in proximity to the proposed action it is without an adverse affect and thus should proceed as designed with the usual inadvertent discovery clauses for the excavation contractor.

As to substantive comments, these are somewhat petty and fall under the rubric of factual clarification rather than a demand for redrafting the report.

1. Figure 7 dates from August 1936 and was taken by Allan H. Smith at the old powwow grounds (Frog Island) on the Kalispel Indian Reservation.
2. Page 9, the Kalispel place name "Red Tree" is presented in the old and unverified orthography that contains demonstrable phonological errors, a clarification notation is typically footnoted by authors as to this fact when they themselves lack the skill set to correct and/or present the linguistic data to contemporary standards. In the absence of that type of notation citing the source materials, wherein the original errors arise, is the appropriate and most narrative efficient action to include.
3. As to the Tribe's request to have the mill's frontage included in this terrestrial inventory: Ms. Sharely's report provides independent confirmation of a long feared opinion I have held that any tangible archaeological evidence of the proto-historic use of that land form as an alternate winter village loci has likely been erased by subsequent industrial uses. It's not that I take oral history as holy writ as often there are factual errors and misinterpretations associated with such data but seldom are place name associations gathered by multiple sources without merit. This is particularly true when cultural-ecological data analysis and parsing of parallel (field verified) data sets have been analyzed and indicate a high probability for a residential base camp

occurrence in that vicinity. This is a case where facts on the ground trump well thought out and arguably reasonable theoretical expectations.

In conclusion, albeit the identification and confirmation of prehistoric deposits within and/or adjacent to the project footprint are negative I must acknowledge and affirm that negative data is data nonetheless. You, your contractor, and client are to be commended for following through the cultural resources management processes in a timely and professional manner and for providing a durable relief for the Kalispel Tribe and residents of the Pend Oreille valley in terms of clarify the question about the absence/presence of recognizable archaeological deposits on north bank of the Pend Oreille River at the river mile 89. Follow up actions forthcoming; I shall be adding the above named report into our professional reading room catalog and remind you to retain a copy of this letter in your project file. I shall be appending these survey data into our spatial database for future project review procedures to improve our own efficiencies. As oft-as-not, a follow through federal participant will attempt to reinitiate the section 106 processing of the NHPA assuming that it and their particular needs have not been anticipated. To minimize such a redundant eventuality share with them, if need be, this and any corresponding SHPO input on this project. Again, thank you for doing a fine job and if there are any additional questions that I am able to answer for you please do not hesitate to call me at (509) 445-1147.

Sincerely yours,

Kevin J. Lyons
Cultural Resources Program Manager
Kalispel Natural Resources Department
Kalispel Tribe of Indians

Spencer Ferguson

From: Kevin Lyons [kjlyons@knrd.org]
Sent: Monday, February 22, 2010 9:31 AM
To: Spencer Ferguson
Subject: RE: Cultural and Historical Information

Mr. Ferguson:

Thank you for your email pertaining to this project. Two traditional cultural properties are co-located within the described bounds of your project area and there is a specific data gap relative to the related archaeological deposits. At your earliest opportunity, please have your cultural resources professional contact me for more specific input on data collection methods, scheduling, and types of necessary disclosure. Please also be mindful, there are CRM vendors within the marketplace I shall not work with when it comes to ethnographic matters due to their lack of skills and expertise in both the geographic and subject area. Based upon our past experiences with each other, I am sure you appreciate the seriousness of this response given how rarely I mention TCP issues for these types of projects.

Sincerely yours,
/s/
Kevin J. Lyons
Cultural Resources Program Manager
Kalispel Natural Resources Department
Kalispel Tribe of Indians

From: Spencer Ferguson [mailto:sferguson@jasewell.com]
Sent: Friday, February 19, 2010 7:57 AM
To: Kevin Lyons
Subject: Cultural and Historical Information

Mr. Lyons,

I am attempting to acquire information on areas of tribal cultural significance within the Albeni Falls area near Oldtown, Idaho as part of a project to install public water and sewer utilities within that area. I have attached a map showing the project area (bounded in red). I appreciate any information you can provide in this respect. Feel free to call me (509-447-3626) or email me if you require further information or have any questions. Thank you very much for your time.

SPENCER FERGUSON, EIT
James A. Sewell & Associates, LLC
600-4th Street West
Newport, WA 99156
(509) 447-3626
(509) 447-2112 Fax

Northwest Archaeological Associates, Inc.
Cultural Resources Management Services
5418 20th Avenue NW, Suite 200, Seattle, WA 98107

April 15, 2010

Mr. Kevin Lyons, Cultural Resources Program Manager
Kalispel Tribe of Indians, Natural Resources Department
P. O. Box 39
Usk, WA 99180

RE: Cultural Resources Assessment of the Albeni Annex Water and Sewer Project, Bonner County

Dear Mr. Lyons,

James A. Sewell and Associates of Newport, Washington, has contracted with Northwest Archaeological Associates, Inc. (NWAA) for cultural resources assessment of the Albeni Annex Water and Sewer Project. The proposed project is located in Oldtown, Idaho, in portions of Sections 19 and 30, Township 56 North, Range 5 West, and Section 24, Township 56 North, Range 6 West, Boise Meridian (see attached maps). Since the U.S. Army Corps of Engineers will provide project funding and approve project permits, the Albeni Annex Water and Sewer Project is subject to the National Historic Preservation Act of 1966, as amended (NHPA).

A private landowner in the Albeni Annex area of Oldtown is planning to develop a parcel of land into residential lots. Due to the density of the proposed residential development, community water distribution and sewer collection systems are needed. The proposed Albeni Annex Water and Sewer Project consists of approximately five miles of new water and sewer lines, to be installed in trenches, excavated approximately four feet wide and six feet deep. Two new wells will also be drilled, a water storage tank will be installed, and a pipeline will be drilled beneath the Pend Oreille River, connecting the new water and sewer lines with existing systems in Oldtown (see attched maps).

As noted in our recent emails to you, NWAA will be conducting field survey of the project area of potential effects (APE) as soon as possible, probably April 22 and 23, 2010. Fieldwork will include a 100 percent visual survey of the APE, as well as subsurface testing with a backhoe to examine subsurface deposits and determine if archaeological materials are present.

We are contacting you to inquire about historic properties, cultural resources, or traditional use areas, including traditional cultural properties (TCPs), that could be affected by the project. If the Kalispel Tribe has any cultural resource concerns, please let me know as soon as possible so we can include this information in our report. Thank you for scheduling a meeting with me prior to the fieldwork (3 p.m., Wed., April 21, at the Kalispel Tribe's Spokane office, Saranac Building, 25 W. Main, Spokane). We respect any concerns the Tribe may have about sharing sensitive information, and we will be happy to work with you in a way that respects those concerns. Thank you again for your assistance.

Sincerely,

Ann Sharley

Ann Sharley, MA, RPA
Archaeologist/Architectural Historian

Enclosures: Project location map, project map

Tel: (206) 781-1909
Cell: (509) 998-5074
Email: asharley@northwestarch.com

Kalispel Tribe of Indians
P.O. Box 39
Usk, WA 99180

(509) 445-1147
(509) 445-1705 *fax*
www.kalispeltribe.com

RECEIVED
DEC 17 2012
Department of Environmental Quality
State Water Quality Programs

13 December 2012

Ms. Ester Ceja
State of Idaho
Department of Environmental Quality
1410 North Hilton
Boise, ID 838706

Re: West Bonner Water & Sewer District Wastewater Project—Request for Comments for Preparation of an Environmental Information Document.

Dear Ms. Ceja:

Thank you for your letter dated 4 December 2012 pertaining to the above referenced matter. The project has been previously reviewed by me and the US Army Corps of Engineers regulatory division under the section 106 process of the National Historic Preservation Act of 1966, as amended. During that review, albeit ethno-linguistic datasets are associated with that landform set, no historic property issues could be defined as a result of a comprehensive survey of the project's area of potential effect. I was of the opinion then, as I am now, that the project proceeds as designed. As such the Kalispel Tribe of Indians shall not be submitting additional comments on this project. In closing I thank you for this opportunity to participate in the State's process.

Respectfully,

Kevin J. Lyons, M.A., Program Manager
Cultural Resources Management
kjlyons@knrd.org
www.knrd.org
v 509.445-1147
c 509-671-1692

Spencer Ferguson

From: Marty Taylor [mtaylor@jasewell.com]
Sent: Friday, June 03, 2011 10:16 AM
To: Eric Eldenburg; Spencer Ferguson; Kevin Koesel
Subject: FW: Valencia Bank credit a special condition of action # NWW-2010-664 West Bonner Sewer and Water

Attachments: NWW-2010-664_NWP_Verification letter.pdf

NWW-2010-664_NWP_Verification ...

Gentlemen:

Attached is the Corps authorization letter for the wetland fill and bore.

Note that this approval is valid until 3/18/12. Thereafter, all of the nationwide permits expire (they are all valid for five years beginning in 2007).

Several conditions were attached to the authorization that were sent to Lonnie only. It is critical to maintain compliance that the contractor adhere to these conditions. Let me know if I need to assist.

Prior to work commencing, the WBWSD will need to provide to the Corps proof of payment to the wetland bank for those "wetland credits."

Marty

Martin E. Taylor, AICP
Member -- American Institute of Certified Planners Land Use Planning, Design and Entitlements Wetland Delineations Project Management

James A. Sewell & Associates, LLC
Consulting Engineers, Surveyors and Land Use Planners
1205 Highway 2, Suite 101
Sandpoint, Idaho 83864
Office: 208-263-4160
Fax: 208-263-5229
Cell: 208-610-0465

-----Original Message-----
From: Reinhart, Mary E NWW [mailto:Mary.E.Reinhart@usace.army.mil]
Sent: Friday, June 03, 2011 9:46 AM
To: Martinez, Greg J NWW; valenciawetland@gmail.com
Cc: Marty Taylor
Subject: Valencia Bank credit a special condition of action # NWW-2010-664 West Bonner Sewer and Water

Good Morning Donna and Greg, West Bonner Sewer and Water District was authorized to perform work under NWP 12 and NWP 14. A special condition of that permit is that they must purchase 1.05 credits from the Valencia Trust prior to starting work. Work is proposed to begin this June.

If you have any questions please give me a call.
Thanks,
beth

Beth Reinhart
Regulatory Project Manager
Army Corps of Engineers

Coeur D'Alene Regulatory Office
2065 W Riverstone Dr., Ste 201
Coeur d'Alene, ID 83814
208 765-8971
208 765-8368 fax
mary.e.reinhart@usace.army.mil

DEPARTMENT OF THE ARMY
WALLA WALLA DISTRICT, CORPS OF ENGINEERS
COEUR D'ALENE REGULATORY OFFICE
2065 W. RIVERSTONE DR, STE 201
COEUR D'ALENE, ID 83814

REPLY TO
ATTENTION OF

June 3, 2011

Regulatory Division

SUBJECT: NWW-2010-664-C03

Mr. Lonnie Orr, Chairman
West Bonner Water and Sewer District
215 N Washington Ave.
Oldtown, ID 83822

Dear Mr. Orr:

We hereby verify that your proposed project is authorized in accordance with Department of Army (DA) **Nationwide Permit (NWP) No. 12 Utility Lines and NWP 14 Linear Transportation.** Work includes the total discharge of 750 cubic yards of gravel with a total impact to Waters of the US to include 0.30 acres of fill in wetlands. All work shall be done in accordance to the "Albeni Area Water and Sewer Extension Project, Oldtown, Bonner County, Idaho Environmental Assessment, dated March 21, 2011. Please refer to File Number NWW-2010-664-C03 in all future correspondence with our office regarding this project.

This project is located within Section 24 of Township 56 North, Range 6 West, in Oldtown, in Bonner County, Idaho.

DA permit authorization is necessary because your project will involve work and the discharge of dredged and/or fill material into Waters of the U.S., including wetlands under our regulatory jurisdiction. Specifically, the work would involve:

1. Directional boring under the Pend Oreille River for installation of sewer and water lines.
2. The discharge of fill in 0.30 acres of wetland to construct and access road to a water tower.

CONDITIONS

The regional and general permit conditions for NWP No. 12 and NWP No. 14 are available at on the Walla Walla District website at www.nww.usace.army.mil/html/offices/op/rf/2007NWPRegionalCondition_Idaho.pdf. You must comply with all regional and general conditions and the special conditions, listed below, for this verification letter to remain valid and to avoid possible enforcement actions.

The following Special Conditions include:

a. Provide a copy of the banking instrument to the Corps confirming the purchase of 1.05 functional units from the Valencia Trust prior to placing fill authorized in this letter.

b. The wetland boundaries shall be clearly marked with flagging or fencing prior to construction. No fill material shall be placed in wetlands except the wetland fill is specifically authorized and shown on the permit drawings

c. Do not discharge temporary fills or stockpile dredged or fill material in wetlands. Excess dredged or fill material must be spoiled in upland areas where it cannot reenter waters of the United States, including wetlands.

d. Permittee is responsible for all work done by any contractor. Permittee shall ensure any contractor who performs the work is informed of and follows all the terms and conditions of this authorization, including any Special Conditions listed above. Permittee shall also ensure these terms and conditions are incorporated into engineering plans and contract specifications.

e. The permittee understands and agrees that, if future operations by the U.S. require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the U.S. No claim shall be made against the U.S. on account of any such removal or alteration.

You must also comply with the conditions detailed in the Section 401 Water Quality Certification (WQC) issued by the Idaho Department of Environmental Quality (IDEQ) dated May 24, 2011, copy attached. The associated Regional Conditions for the WQC may also be accessed at the website provided above. If you should change the project activities or description described in your application, this NWP may not be valid; please contact us prior to starting work. If you have any questions regarding the conditions set forth in the Water Quality Certification, please contact IDEQ at (208) 769-1422.

This verification is valid until March 18, 2012, which is the date all of the existing Nationwide Permits will expire. If you have commenced or are under contract to commence this activity before March 18, 2012, you will have twelve (12) months from this date to complete the activity under the present terms and conditions of the above-referenced Nationwide Permits. In the event you have not commenced or completed construction of your project by this date, a new application or verification is required.

Attached to this verification of NWP No. 12 and NWP No. 14 are two copies of the Preliminary Jurisdictional Determination (JD) forms for Waters of the United States, including wetland(s), located within your project area. Please sign both copies and return one to the Corps at the address in the letterhead above. The other copy is for your records. The Preliminary JD is a non-binding action and shall remain in effect, unless a request for an Approved Jurisdictional Determination or new information supporting a revision is provided to this office. Enclosed you will also find a Request for Appeal form. Please note that since this jurisdictional determination is preliminary, it is subject to change and therefore is not an appealable action under the Corps of Engineers Administrative Appeal Procedures (33 CFR 331).

Please note, Nationwide Permit General Condition 26 (*Compliance Certification*) requires that every permittee who has received NWP verification must submit a signed certification regarding the completed work and any required mitigation. The enclosed

Compliance Certification form is enclosed for your convenience and must be completed and returned to us.

This letter of authorization does not convey any property rights, or any exclusive privileges and does not authorize any injury to property or excuse you from compliance with other Federal, State, or local statutes, ordinances, regulations, or requirements which may affect this work.

We are interested in your thoughts and opinions concerning the quality of service you received from the Walla Walla District, Corps of Engineers Regulatory Division. Please visit us online at www.nww.usace.army.mil/html/offices/op/rf/survey.asp, which will be automatically submitted to us. Alternatively, you may call and request a paper copy of the survey, which you may complete and return to us by mail or fax (208) 765-8368. For additional information about the Walla Walla Regulatory please visit us at www.nww.usace.army.mil/html/offices/op/rf/rfhome.asp.

Please contact me by telephone at (208) 765-8971, by mail at the address in the letterhead, or via e-mail at mary.e.reinhart@usace.army.mil if you have any questions or need additional information. A copy of this letter is being sent to the following individuals, for informational purposes.

Sincerely,

Beth Reinhart
Regulatory Project Manager
Coeur d'Alene Regulatory Office

Enclosure

Electronic Copies Furnished to Attached List:
Mr. Martin Taylor, Sewell and Associates, Sandpoint

Spencer Ferguson

From: Marty Taylor <mtaylor@jasewell.com>
Sent: Thursday, March 07, 2013 3:01 PM
To: Spencer Ferguson
Cc: Eric Eldenburg
Subject: FW: West Bonner Water & Sewer District

Our "old" NWP is good until June 2014.

Thanks.

Marty

Martin E. Taylor, AICP
Member - American Institute of Certified Planners Land Use Planning, Design and Entitlements Wetland Delineations Project Management

1205 Highway 2, Suite 101
Sandpoint, Idaho 83864
Phone: (208) 263-4160
Fax: (208) 263-5229
Cell: (208) 610-0465
www.jasewell.com

-----Original Message-----
From: Reinhart, Mary E NWW [mailto:Mary.E.Reinhart@usace.army.mil]
Sent: Thursday, March 07, 2013 2:31 PM
To: Marty Taylor
Subject: RE: West Bonner Water & Sewer District

Marty, let me clarify my previous e-mail. The two NWP's were issued June 3, 2011. At that time NWP's were authorized for two years. There was an automatic one year extension if work was started, considerable funds had been expended, the job was contracted, etc. Currently NWP's are authorized lifetime of the NWP before it expires (March 2017). We sure can keep you guessing.

-----Original Message-----
From: Marty Taylor [mailto:mtaylor@jasewell.com]
Sent: Thursday, March 07, 2013 1:55 PM
To: Reinhart, Mary E NWW
Cc: Eric Eldenburg; Spencer Ferguson
Subject: RE: West Bonner Water & Sewer District

Hi Beth:

Considering the current project construction schedule, I anticipate that the proposed water tank access road, construction of which requires the NWP 12 and 14 permits, will be complete prior to the 6/3/13 permit deadline. However, the proposed sewer main river boring is scheduled for August of this year in order to ensure dry soil conditions. Since the proposed project boring is scheduled to occur relatively close to the permit deadline, will it be necessary to reapply for a Section 10 permit from the ACOE? Considerable funds have been expended and the project is under contract.

Thanks.

Marty

Martin E. Taylor, AICP

Member - American Institute of Certified Planners

Land Use Planning, Design and Entitlements

Wetland Delineations

Project Management

James A. Sewell & Associates, LLC

1205 Highway 2, Suite 101

Sandpoint, Idaho 83864

Phone: (208) 263-4160

Fax: (208) 263-5229

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-----Original Message-----
From: Marty Taylor
Sent: Monday, April 23, 2012 2:30 PM
To: 'Reinhart, Mary E NWW'
Cc: Soule, Lester E NWS; 'Eric Eldenburg'
Subject: RE: West Bonner Water & Sewer District

Excellent news, Beth. Thanks.

I'll have to defer to Les and Eric on contract status and commencement of work.

Funds were spent to obtain the delineation, correct.

A June 2013 NWP expiration date works for us.

The Corps (Seattle; "public works" project?) is involved.

Marty

Martin E. Taylor, AICP

Member -- American Institute of Certified Planners

Land Use Planning, Design and Entitlements

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Project Management

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1205 Highway 2, Suite 101

Sandpoint, Idaho 83864

Office: 208-263-4160

Fax: 208-263-5229

Cell: 208-610-0465

-----Original Message-----

From: Reinhart, Mary E NWW [mailto:Mary.E.Reinhart@usace.army.mil]

Sent: Monday, April 23, 2012 8:15 AM

To: Marty Taylor

Cc: Soule, Lester E NWS

Subject: RE: West Bonner Water & Sewer District

Good Morning, is this work under contract? Has work been started? $$ was spent to get a delineation right? So I believe the NWP has not expired.
It will expire June 2013. Nationwide Permits cannot be extended, they must be re-authorized.

Please let me know of the Corps is going to be involved in this project.

Thanks,

Beth

-----Original Message-----

From: Marty Taylor [mailto:mtaylor@jasewell.com]

Sent: Friday, April 20, 2012 9:53 AM

To: Reinhart, Mary E NWW

Subject: West Bonner Water & Sewer District

Hi Beth:

Les Soule at the Corps (Seattle) is helping out the West Bonner folks and wanted to know if some kind of time extension was granted for
NWW-2010-664 (your letter, attached).

Is a time extension available?

Thanks.

Marty

Martin E. Taylor, AICP

Member -- American Institute of Certified Planners

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Spencer Ferguson

From: Ester.Ceja@deq.idaho.gov
Sent: Thursday, March 14, 2013 12:01 PM
To: mtaylor@jasewell.com
Cc: Spencer Ferguson; Eric Eldenburg
Subject: RE: Response to 3/11/13 DEQ comments

Marty,

Thanks for including me in your correspondence, but this information needs to be included in the revised EID that Spencer is working on completing. Once the revised EID is completed and submitted, I will review it in its entirety.

Thank you,
Ester

From: Marty Taylor [mailto:mtaylor@jasewell.com]
Sent: Thursday, March 14, 2013 12:21 PM
To: Reinhart, Mary E NWW; Ester Ceja
Cc: Spencer Ferguson; Eric Eldenburg
Subject: RE: Response to 3/11/13 DEQ comments

Thanks for the quick response, Beth.

Ester:
We appreciate your thorough review of the subject EID. Below is my response to your request for additional information, as well as Beth's concurrence with my analysis.

Thanks.

Marty

Martin E. Taylor, AICP
Member – *American Institute of Certified Planners*
Land Use Planning, Design and Entitlements
Wetland Delineations
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-----Original Message-----
From: Reinhart, Mary E NWW [mailto:Mary.E.Reinhart@usace.army.mil]
Sent: Thursday, March 14, 2013 10:46 AM
To: Marty Taylor
Cc: Ester.Ceja@deq.idaho.gov
Subject: RE: Response to 3/11/13 DEQ comments

Good Morning Marty, I concur with you summary of the Corps review and authorization of the West Bonner Water and Sewer project, including IDEQ's 401 certification.

Beth Reinhart
Regulatory Project Manager
Army Corps of Engineers
Coeur D'Alene Regulatory Office
2065 W Riverstone Dr., Ste 201
Coeur d'Alene, ID 83814
208 765-8971
208 765-8368 fax
mary.e.reinhart@usace.army.mil

-----Original Message-----
From: Marty Taylor [mailto:mtaylor@jasewell.com]
Sent: Tuesday, March 12, 2013 11:13 AM
To: Reinhart, Mary E NWW
Cc: Spencer Ferguson; Eric Eldenburg
Subject: Response to 3/11/13 DEQ comments

Hi Beth:

Pursuant to our 3/12/13 conversation, attached are the 3/11/13 DEQ comments on the wastewater EID. Also attached is your NWW verification and DEQ's 401 cert for the only wetlands affected by the project (the water tank access road on the Ward property).

DEQ Section C Alternatives comment
The 8/11/10 sewer and water plans set (sheet 4) depicts the river crossing boring locations. No wetlands are affected.

DEQ Section D Wetlands comment
The plans set depicts all identified wetlands and has been reviewed by the Corps. Attached is the FONSI confirming Corps review and acceptance of the project's EA.

In response to your previous request, I provided the plans set enabling you to review the project in its entirety, not just the water tank access road wetland crossing. You concluded at that time that affected wetlands were limited to the Ward property. Your conclusion was supported by the fact that all other wetlands within the planning area were to be avoided. That remains that case. In particular, sewer and water lines to be located along Old Diamond Mill Road are to be installed within the road prism (sheet 8) and thus do not affect wetlands. When you and I previously reviewed the plans set, we concluded that because no fill was proposed elsewhere, there was no need for a "non-jurisdictional" determination. Our work was limited to the water tank access road fill area subject to a JD and fill permit, as well as the Section 10 boring.

Regarding NWW approval, you confirmed that NWW-2010-664 benefits from a time extension to 6/3/14.

Miscellaneous Issues
DEQ requests that we provide any agency follow up documentation in response to DEQ's 3/11/13 request for additional information. Consequently, if you would please reply to my e-mail and confirm my understanding that all Corps review has occurred, that would be great.

If you need me to forward to you any additional documentation, please advise. I don't want to bury you with materials you're already received and reviewed.

Thanks.

Marty

Martin E. Taylor, AICP
Member – *American Institute of Certified Planners*

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STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

2110 Ironwood Parkway • Coeur d'Alene, Idaho 83814 • (208) 769-1422

C.L. "Butch" Otter, Governor
Toni Hardesty, Director

May 24, 2011

Mr. Lonnie Orr, Chairman
West Bonner Water and Sewer District
215 N. Washington Ave
Oldtown, ID 83822

RE: Final §401 Water Quality Certification for West Bonner Water and Sewer District Project; NWW 2010-664-C03

Dear Mr. Orr,

Enclosed is the final water quality certification for the West Bonner Water and Sewer District project. This certification was advertised for public comment for 21 days between April 25 and May 16, 2011. No comments were received and no substantive changes were made to the final certification. If you have any questions or concerns, please contact June Bergquist at 208.666.4605 or june.bergquist@deq.idaho.gov .

Sincerely,

Daniel Redline
Regional Administrator
Coeur d'Alene Regional Office

Enclosure

c: Beth Reinhart, Corps of Engineers - Coeur d'Alene Office
Martin E. Taylor, AICP James A. Sewell & Associates

James A Sewell & Assoc LLC

JUN 01 2011

Sandpoint, Idaho

Spencer Ferguson

From: Marty Taylor [mtaylor@jasewell.com]
Sent: Tuesday, May 31, 2011 10:16 AM
To: Reinhart, Mary E NWW
Cc: Eric Eidenburg; Spencer Ferguson
Subject: West Bonner Water and Sewer District Revised Joint App

Hi Beth:

Mailed to you 5/31/11 is a revised joint app (re-signed by the applicant) including that Section 10 bore, a revised report referencing same, and some corrected mapping. You already have the environmental eval, the engineering report and the arch recon, as well as the engineering plans set, so I didn't include those redundant documents.

I'm thinking that you should be good to go with the NWP-12/Section 10/PCN verification and authorization, particularly given your progress with the USFWS these past couple of weeks ("no effect").

Let me know how your review is coming along, please.

June at DEQ shared with me 401 Cert info, below.

Thanks.

Marty

Martin E. Taylor, AICP
Member – *American Institute of Certified Planners*
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Cell: 208-610-0465

From: June.Bergquist@deq.idaho.gov [mailto:June.Bergquist@deq.idaho.gov]
Sent: Tuesday, May 24, 2011 2:30 PM
To: Marty Taylor
Subject: RE: West Bonner W&S - Seattle District FONSI with EA

Hi Marty,
The final certification for West Bonner is up for signature and should be out the door in a day or two.
June

Finding of No Significant Impact

SECTION 595 of WRDA 99
WEST BONNER WATER AND SEWER SYSTEM EXTENSION PROJECT
OLDTOWN, IDAHO
April 2011

Project Summary

The U.S. Army Corps of Engineers, Seattle District (Corps), in cooperation with the project sponsor, the West Bonner Water and Sewer District (Sewer District), propose to install community wide water distribution and sewer collection systems on the east side of the Pend Oreille River in the site commonly known as the Albeni area. The Corps will cost share on the proposed project under the authority of Section 595 of the Water Resources Development Act (WRDA) of 1999.

The Albeni area is proposed for high density residential development. Currently there are several residences and businesses in the area, but most of the land is vacant. Existing residents rely completely on individual on-site sewer systems and water supplied by individual wells. To provide sewer service to the proposed residential lots, a gravity sewer collection system to direct wastewater to the existing Newport Wastewater Treatment Plant located on the west side of the Pend Oreille River is proposed. To provide water to the area, two new wells and an above ground water tank is also proposed.

The U.S. Army Corps of Engineers (Corps) has reviewed this project and has determined that the attached Environmental Assessment (EA) prepared by the West Bonner Water and Sewer District meets the requirements under 40 C.F.R. 1500-1508, the National Environmental Policy Act (NEPA). Federal participation in the review and acceptance of the EA was triggered by the fact that the Corps will be cost sharing the design of the project under Section 595 of WRDA 1999.

Alternatives

Several alternatives were considered to meet the project purpose and need including: the preferred alternative, the "no action" alternative, installation of individual drinking water wells, upgrade of existing well, water withdrawal from the Pend Oreille River, pipe water from Oldtown, upgrade existing water tank, install new pressure sewer collection system, upgrade existing sewer collection system, individual on-site treatment systems, and construction of a separate community waste water treatment system. Of the alternatives considered, the preferred alternative is proposed based on our review of the attached EA which describes the expected effects of construction of the proposed project because it can be reasonably implemented, meets the projects purpose and needs, avoids aesthetic impacts, and is consistent with protection of the nation's environment.

Preferred Alternative

The preferred alternative evaluated in the attached EA consists of expanding the sewer district's sewer collection system across the Pend Oreille River to a duplex lift station and extending north to U.S. Highway 2 and east along the highway approximately 1,600 feet. A pump station will pump the wastewater to the west side of the river through a pressure sewer line. The pressure sewer line will be installed beneath the Pend Oreille River bed and will connect to the existing Sewer District gravity collection system and on to the existing Newport Wastewater Treatment Plant. The pressure sewer line will be installed under the river using horizontal directional drilling to minimize disturbance. Water will be supplied by the construction of a 500,000 gallon above ground steel water tank located on a hill north of the Albeni area, and two 500 gallon per minute wells located near the river, and an associated pumphouse. The water distribution system will extend south to Highway 2, west along Highway 2, and southerly to the southwest portion of the Albeni area. The water distribution system will include crossing the Pend Oreille River and interconnecting with the existing water distribution system.

Summary of Environmental Impacts

The project represents some minor construction related impacts as well as some permanent modifications to an existing wetland area (subject to compensatory wetland mitigation). The Albeni area population is expected to continue growing with or without this project. Without implementation of an adequate wastewater collection and water distribution system, developers will continue to use individual on-site disposal systems that are not monitored, and many of which do not meet the requirements of the Idaho Department of Environmental Quality (IDEQ) and the Panhandle Health District. The existing, substandard on-site treatment units pose a potential public health and an environmental contamination risk to both surface and groundwater. The preferred alternative will have no effect on any Federally listed species. The preferred alternative will result in no impacts to any properties listed, proposed for listing, eligible for listing, or potentially eligible for listing in the National Register of Historic Places. Construction of the project could result in increased development within the floodplain, however only 2% of the total area is within the 100 yr flood plain. In addition, the proposed project is expected to be an improvement when compared to the possible effects of a 100 year flood event on the existing sewer system located within the 2% area. Areas near the proposed project site will be temporarily disturbed by proposed construction activities. Construction related impacts such as locally increased noise and particulate matter from exhaust and dust will be controlled to the maximum extent possible but minor impacts will occur. These impacts are considered temporary and pre-project conditions will reestablished, or be mitigated following construction. Thus, these impacts are not considered significant. Upon completion the project will provide a reliable sewage collection and treatment system that will function to decrease environmental contamination to area water resources.

Mitigation Measures

North of U.S. Highway 2, 0.32 acres of wetland fill associated with approximately 534 lineal feet of water tank access road construction will be mitigated via the purchase of wetland bank credits form the Valencia Wetland Bank. In construction areas that parallel wetlands care will be taken to avoid impacts through inadvertent drainage of seepage by restoring natural basin contours and

by backfilling any trenching adjacent to wetland areas. Measures under the National Pollutant Discharge Elimination System (NPDES) and Best Management Practices, such as minimizing ground disturbance, washing off-road equipment prior to entering construction sites, seeding, mulching, and fertilizing of disturbed areas to reduce weed establishment and prevent erosion will be implemented. An application requesting Nationwide Permit 12, verification and Preconstruction Notice authorization has been submitted to the Corps (Walla Walla District). This Nationwide Permit will also include Section10 regarding the pipeline crossing under the Pend Oreille River. Issuance of the Permit is still pending. All required permits will be obtained prior to project construction. No additional mitigation is proposed or warranted.

Coordination

The Sewer District has conducted public meetings for area residents as well as held monthly Board meetings that were open to the public. This project has been coordinated with resource agencies as detailed in the Environmental Assessment. The Corps of Engineers completed Section 106 consultation with the Kalispel Tribe and the Idaho State Historic Preservation Office. In view of the results documented in the cultural resources report the Corps has determined that no archaeological properties are present and the proposed project will have no adverse affect on any historic properties within the area of potential effects (APE). This coordination documentation has been added to the Environmental Assessment. The Corps will require an inadvertent discovery clause for the excavation contractor.

Conclusion

After evaluating the anticipated environmental, economic, and social effects of the proposed activity, it is my determination that construction of the proposed West Bonner Water and Sewer System Extension Project, Phase I does not constitute a major Federal action that would significantly affect the quality of the human environment. The proposed action has been coordinated with the appropriate resource agencies, and there are no unresolved issues. Therefore, preparation of an Environmental Impact Statement is not required.

18 May 201

Date

Anthony O. Wright
Colonel, Corps of Engineers
District Commander

JAMES A. SEWELL & ASSOCIATES, LLC

600-4th Street West
Newport, Washington 99156
(509) 447-3626 (208) 437-2641
(509) 447-2112 Fax

*Civil Engineering *Electrical Engineering *Land Surveying *Building Inspection * Land Use Planning

February 24, 2011

Idaho Department of Lands
2550 Highway 2 West
Sandpoint, ID 83864-7305

Attn: Jim Brady
Subj: West Bonner Water Sewer District
Ref: Easement Application for Utility Crossing Under Pend Oreille River

Dear Mr. Brady:

Enclosed please find one copy of the legal description and one copy of the easement map for the proposed utility crossing under the Pend Oreille River near Oldtown, Idaho. Also enclosed, please find a completed easement application signed by the West Bonner Water and Sewer District chairman and a check for $300 for payment of the application fee.

The easement will allow for installation of a 6" pressure sewer line with 12" casing and a 12" water distribution main under the Pend Oreille River. The sewer line casing pipe and the water distribution pipe will be installed under the Pend Oreille River using horizontal directional drilling. Once the 12" sewer casing is installed, the 6" pressure sewer line will be pulled inside the 12" casing pipe.

The sewer line will allow the City of Oldtown to extend sewer service to future developments located on the east side of the Pend Oreille River. The sewer line will transfer residential wastewater from the east side of the River to the existing City of Oldtown wastewater collection system on the west side of the River. The water line will provide a means to transfer water to and from the existing City of Oldtown water distribution system to and from future developments located on the east side of the River. Installation of the water and sewer line is necessary for expansion of the City of Oldtown to the east. The City is bordered on the west and north by the border with Washington. To the south the land rises dramatically and any expansion to the south would require construction of a new water pressure tier.

A digital copy of this letter and application package has been emailed to your email address.

If you have any questions please contact myself or Eric Eldenburg at our Newport office, 509-447-3626.

Sincerely,

JAMES A. SEWELL & ASSOCIATES, LLC

By _____
Travis Parry, E.I.T

Encl: Easement Legal Description and Map
Completed Easement Application
$300 Check for Application Fee

pc: Lonnie Orr, WBWSD, 215 N. Washington Ave., Oldtown, ID, 83822 w/encl
Sheila Gormley, City of Oldtown, 215 N. Washington Ave., Oldtown, ID, 83822 w/encl
Spencer Ferguson, JAS Newport Office w/encl
File w/encl

IDAHO DEPARTMENT OF LANDS

EASEMENT APPLICATION INSTRUCTIONS

Note: Before an easement application will be accepted, applicants must first contact the appropriate Idaho Department of Lands Supervisory Area Office. The IDL Supervisory Office will determine if the requested easement is viable. An easement application must then be completed and submitted to the IDL Supervisory Area Office. Easement applications are processed on a first come first serve basis. IDL review of a complete easement application package may take a minimum of 120 days. Incomplete applications and those requiring further information may take longer. Incomplete applications will be returned to the applicant.

When accepting applications for easements, the Idaho Department of Lands requires the following:

1. A signed and dated easement application.
2. Purpose of easement
3. A legal description of the easement — either metes and bounds or a centerline description with ties to one, and preferably two PLSS corners.
4. A map and one copy of the above legal description - paper.
5. A map and one copy of the above legal description - digital.
6. $100.00 non-refundable easement application fee — (Endowment Land Only — Not Submerged Land).

PROCEDURE

The procedure for acquiring an easement across state lands is as follows:

1. Contact the appropriate IDL Supervisory Area Office to determine if the proposed easement will be allowed based on the need, location, and amount of state land that will be encumbered by the easement and the costs involved.

2. If approved by the IDL Supervisory Area Office, the applicant will need to fill out and submit an easement application, which may be obtained from the Area office or online, and pay a non-refundable $100.00 application fee if across endowment lands.

3. Submit a hard copy of both the map and legal description. A digital copy must also be submitted. The legal description as an MS-Word file and the map as a pdf file.

APPLICATION

When the record of survey has been completed, submit the following documents to the Department of Lands Supervisory Area Office:

1) Complete and sign this easement application including the exact name(s) and address you wish to appear on the easement.

2) A full size copy of the map and a copy of the legal description. A digital copy of each will also need to be provided. The legal descriptions as an MS Word file, and a .pdf of the record of survey.

3) For easements across endowment land, the minimum consideration is $500.00, but may be more depending on the amount and value of state land encumbered. Applicant will be billed for the remainder of the easement compensation and appraisal fee, and before the final documents are issued. (http:/adm.idaho.gov/adminrules/rules/idapa20/0308. pdf)

4) For easements across submerged lands, the cost is a $300.00 one-time administrative fee for which the applicant will be billed. Additional information may be required as needed on a case by case basis.

APPLICATION INFORMATION

1. NAME: West Bonner Water and Sewer District d/b/a: _____

2. ADDRESS: 215 N. Washington Ave.

CITY, STATE, ZIP CODE: Oldtown, ID 83822

3. TELEPHONE: 208-437-3833

4. LEGAL DESCRIPTION (Section, Township, and Range) TO THE QUARTER-QUARTER SECTION: See Attached

5. COUNTY(ies): Bonner County

6. PURPOSE OF EASEMENT: Water and Sewer Pipeline Crossing

I HEREBY REQUEST AN EASEMENT FROM THE STATE OF IDAHO AND ACKNOWLEDGE THAT I UNDERSTAND MY OBLIGATIONS DESCRIBED HEREIN.

APPLICANT(S) SIGNATURE: [signature] DATE: 2/9/11

APPROVED BY AREA: _____ DATE: _____

REJECTED BY AREA: _____ DATE: _____

JAMES A. SEWELL & ASSOCIATES, LLC

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Newport, Washington 99156
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(509) 447-2112 Fax

*Civil Engineering *Electrical Engineering *Land Surveying *Building Inspection * Land Use Planning

UTILITY EASEMENT
Pend Oreille River Crossing to West Bonner Water and Sewer District
2-23-2011

A Tract of land for an access and utility easement located in Section 24, Township 56 North, Range 6 West, Boise Meridian, located in Bonner County, Idaho and being 80.00 feet in width, 40.00 feet on each side of the following described line:

Beginning at a point along the westerly ordinary high water line of the Pend Oreille River (said point bears N83°33'32"W, 3041.29 feet from the Southeast Corner of said Section 24. Said point also bears S88°57'48"E, 296.06 feet and N44°48'27"E, 131.38 feet from the Southwest Corner of Block 14 as shown on the Townsite of "Newport"); thence N44°48'27"E, 1083.10 feet to the easterly ordinary high water line of the said Pend Oreille River and the terminus of this easement (said terminus point bears S56°31'26"W, 2780.16 feet from the East Quarter Corner of said Section 24).

SECTION 24, TOWNSHIP 56 NORTH, RANGE 6 WEST, B.M.

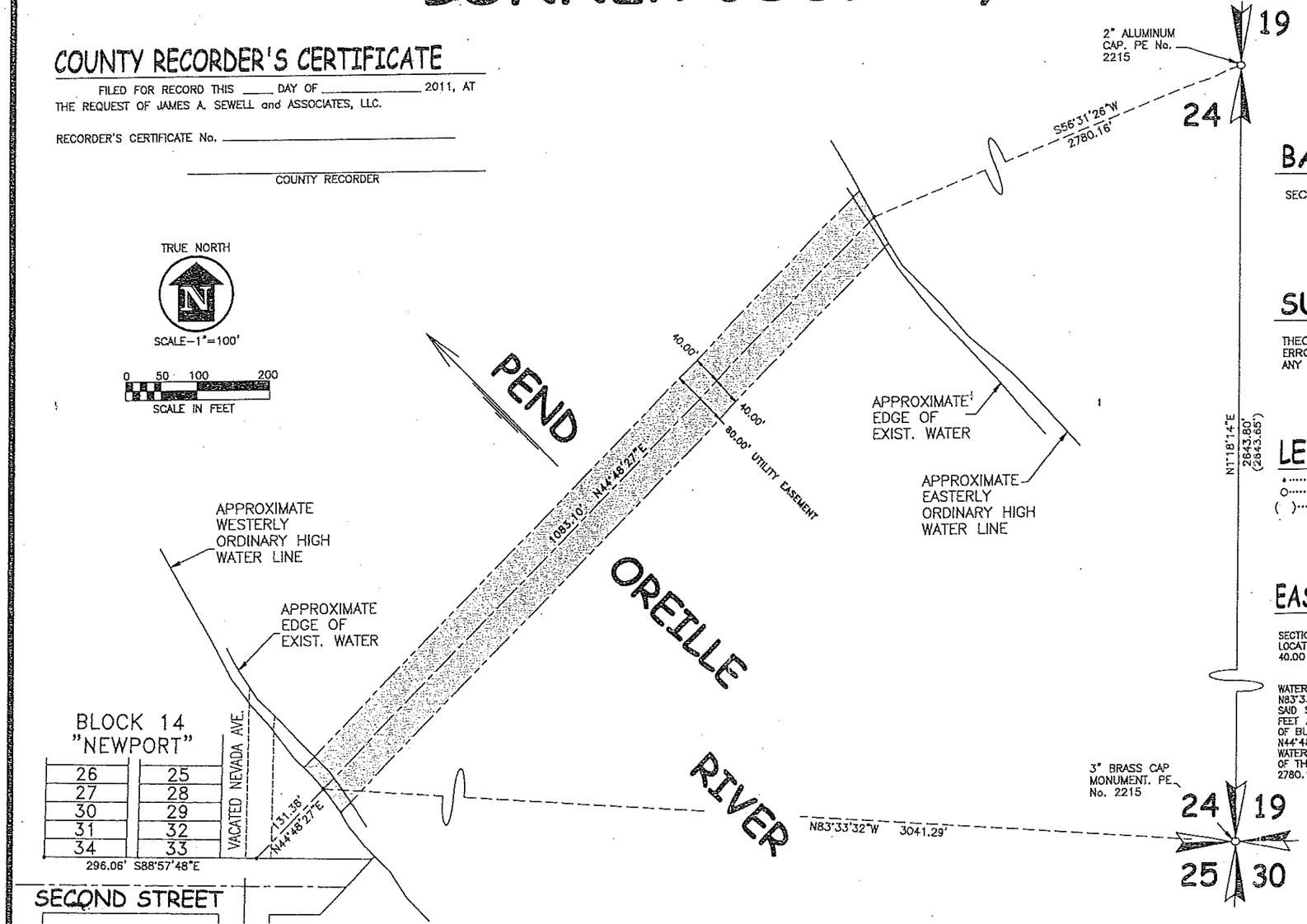
BONNER COUNTY, IDAHO

COUNTY RECORDER'S CERTIFICATE

FILED FOR RECORD THIS _____ DAY OF _____ 2011, AT THE REQUEST OF JAMES A. SEWELL and ASSOCIATES, LLC.

RECORDER'S CERTIFICATE No. _____

_____
COUNTY RECORDER



BASIS OF BEARING

ASSUMED N1°18'14"E ALONG THE EAST LINE OF SECTION 24.

SURVEYOR'S NOTE

THIS SURVEY WAS PERFORMED USING A 3 SECOND THEODOLITE WITH ELECTRONIC DISTANCE METER. THE LINEAR ERROR OF CLOSURE OF THE RANDOM TRAVERSE, PRIOR TO ANY ADJUSTMENT, MEETS OR EXCEDES STATE REQUIREMENTS.

LEGEND

•····· COMPUTED POINT, NOTHING SET
O····· FOUND CORNER AS NOTED.
( )··· INFORMATION AS SHOWN ON RECORD OF SURVEY INST. No. 655494 FILED BY PLS No. 6019 ON JULY 26th, 2004.

EASEMENT DESCRIPTION

A TRACT OF LAND FOR A UTILITY EASEMENT LOCATED IN SECTION 24, TOWNSHIP 56 NORTH, RANGE 6 WEST, BOISE MERIDIAN, LOCATED IN BONNER COUNTY, IDAHO AND BEING 80.00 FEET IN WIDTH, 40.00 FEET ON EACH SIDE OF THE FOLLOWING DESCRIBED LINE:

BEGINNING AT A POINT ALONG THE WESTERLY ORDINARY HIGH WATER LINE OF THE PEND OREILLE RIVER (SAID POINT BEARS N83°33'32"W, 3041.29 FEET FROM THE SOUTHEAST CORNER OF SAID SECTION 24. SAID POINT ALSO BEARS S88°57'48"E, 296.06 FEET AND N44°48'27"E, 131.38 FEET ALL FROM THE SOUTHWEST CORNER OF BLOCK 14 AS SHOWN ON THE TOWNSITE OF "NEWPORT"); THENCE N44°48'27"E, 1083.10 FEET TO THE EASTERLY ORDINARY HIGH WATER LINE OF SAID PEND OREILLE RIVER AND THE TERMINUS OF THIS EASEMENT (SAID TERMINUS POINT BEARS S56°31'26"W, 2780.16 FEET FROM THE EAST QUARTER CORNER OF SAID SECTION 24.

SURVEYOR'S CERTIFICATE

THIS MAP CORRECTLY REPRESENTS A SURVEY MADE BY ME OR UNDER MY DIRECTION IN CONFORMANCE WITH THE REQUIREMENTS OF THE "SURVEY RECORDING ACT" AT THE REQUEST OF WEST BONNER WATER AND SEWER DISTRICT.

PROFESSIONAL LAND SURVEYOR REGISTERED 6019 STATE OF IDAHO RANDY RAY HOISINGTON

DATE _____ RANDY R. HOISINGTON, PLS No. 6019

SECTION 24, TWP 56N, RNG 6W, B.M.

SHEET TITLE: SURVEY FOR WEST BONNER WATER AND SEWER DISTRICT

James A. Sewell and Associates, LLC
CONSULTING ENGINEERS
NEWPORT, WASHINGTON, 99156, (509)447-3626

DATE:	5-02-11
SCALE:	1"=100'
DRAWN:	BAD
CHECKED:	RRH
PROJ.NO.:	
CAD FILE NO.	8588-OREILLE-RIV.dwg
SHT	1 OF 1

MEMO

TO: SPENCER FERGUSON
FROM: ESTER CEJA – DEQ GRANT AND LOAN PROGRAM
SUBJECT: THREATENED/ENDANGERED SPECIES AND ESSENTIAL FISH HABITAT
DATE: MARCH 6, 2013

The U.S. Fish and Wildlife threatened and endangered species list dated 2/06/2013 was used for determining endangered and threatened species within Bonner County. The following species are listed as threatened within Bonner County:

1. **Bull Trout** – The species is both threatened and the Pend Oreille River is designated critical habitat for bull trout. The U.S. Army Corps of Engineers (ACOE) consulted with U.S. Fish and Wildlife Service (USFWS) on bull trout with respect to the proposed wastewater transmission line boring under the Pend Oreille River. Byon Holt with USFWS informed Mary Beth Reinhart with the ACOE (email dated 5/23/11) that the proposed boring project would have a "NO EFFECT" determination for bull trout. DEQ hereby determines based on the USFWS's determination, a determination of "NO EFFECT."

2. **Canada Lynx** – The Canadian Lynx reside in boreal forest landscapes and provide one or more of the following beneficial habitat elements including snowshoe hares for prey, abundant, large, woody debris piles that are used as dens, and winter snow conditions that are generally deep and fluffy for extended period of time. The proposed project location is located at an elevation of 2,134 feet along the Pend Oreille River in non-forested landscape with some residential, commercial, and industrial development. While lynx may travel through the area, the proposed project planning area does not include suitable habitat for the species. The new collection lines along the existing roadway will have "NO EFFECT" to Canadian Lynx.

3. **Grizzly Bear** – The presence of grizzly bear and their habitat exist in the Selkirk Mountains north of Albeni Falls. Albeni Falls is comprised of a non-forested minimally developed community along the Pend Oreille River at an elevation of 2,134 feet. The grizzly bear is not known to exist within the proposed project planning area and the installation of a new wastewater collection system will have "NO EFFECT" on the grizzly bear.

The following is listed as an Endangered Species:

1. **Selkirk Mountains Woodland Caribou** – The mountain (alpine; arboreal lichen winter feeding group) ecotype of woodland caribou is listed as endangered in the United States. Endangered mountain woodland caribou are present in the Selkirk Mountains of northern Idaho and northeastern Washington. This population occurs in high elevation (generally above 4,000 feet), steep terrain of the mountainous southeastern and east central portions of B.C. and, the Selkirk Mountains of northern Idaho and northeastern Washington. They primarily occupy old-growth western red cedar/hemlock and Engelmann spruce/subalpine fir forests that typically have high snow levels. Albeni Falls is comprised of a non-forested

minimally developed community along the Pend Oreille River at an elevation of 2,134 feet The proposed installation of wastewater collection lines within the roadway and existing right of way will have "NO EFFECT" to the Selkirk Mountains Woodland Caribou.

The following are listed as a candidate species and proposed species, respectively.

1. **North American Wolverine** - The North American Wolverine is a proposed species of which does not exist in the proposed project planning area. The proposed project will have a "NO EFFECT" on the wolverine species. Albeni Falls is comprised of a non-forested minimally developed community along the Pend Oreille River at an elevation of 2,134 feet. Wolverines distribution is restricted to high elevation, deep persistent, and reliable spring snow cover (April 15 to May 14) is the best overall predictor of wolverine occurrence in the contiguous U.S. (http://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=A0FA)

2. **Whitebark Pine** – The Whitebark pine is a 5 needle conifer species. The species occurs from approximately 2,950 at its northern limit in British Columbia up to 12,000 in the Sierra Nevada. The Whitebark Pine is typically found at or slightly lower than alpine timberline in the upper montane zone. In the U.S. it is primarily found on public lands. Albeni Falls is comprised of a non-forested minimally developed community along the Pend Oreille River at an elevation of 2,134 feet. The proposed project improvement of new wastewater collection lines within the roadway in the community of Albeni Falls will have "NO EFFECT" on Whitebark Pine.

The proposed project for the West Bonner WSD wastewater project includes connecting the community of Albeni Falls to the Oldtown/Newport regional wastewater system. This entails collection lines along the rights of way or center of existing roads within Albeni Falls; the boring of a wastewater pipeline below the Pend Oreille River so as not to impact bull trout and their critical habitat; and a lift station.

The proposed project will have NO EFFECT on the above listed species.

The West Bonner Water & Sewer District wastewater system improvements are not located within Essential Fish Habitat (EFH) for Salmon as identified in the attached EFH map and will have "NO EFFECT."

This species list was revised by the USFWS on 02/06/2013, and is valid for 90 days after 03/06/2013 .

U.S. Fish and Wildlife Service • Idaho Fish and Wildlife Office

CANDIDATE, PROPOSED AND LISTED SPECIES & PROPOSED AND DESIGNATED CRITICAL HABITAT IN IDAHO

	Herps	Birds		Mammals						Fish		Mollusks				Plants							
Common Name	Columbia Spotted Frog (Great Basin Population)	Greater Sage-Grouse	Yellow-Billed Cuckoo	Canada Lynx	Grizzly Bear	Northern Idaho Ground Squirrel	Selkirk Mountains Woodland Caribou	Southern Idaho Ground Squirrel	North American Wolverine	Bull Trout	Kootenai River White Sturgeon	Banbury Springs Lanx	Bliss Rapids Snail	Bruneau Hot Springsnail	Snake River Physa	Goose Creek Milkvetch	MacFarlane's Four-O'Clock	Packard's Milkvetch	Slickspot Peppergrass	Spalding's Catchfly	Ute Ladies'-Tresses	Water Howellia	Whitebark Pine
Scientific Name	*Rana luteiventris*	*Centrocercus urophasianus*	*Coccyzus americanus*	*Lynx canadensis*	*Ursus arctos horribilis*	*Spermophilus brunneus brunneus*	*Rangifer tarandus caribou*	*Spermophilus brunneus endemicus*	*Gulo gulo luscus*	*Salvelinus confluentus*	*Acipenser transmontanus*	*Lanx* sp.	*Taylorconcha serpenticola*	*Pyrgulopsis bruneauensis*	*Haitia (Physa) natricina*	*Astragalus anserinus*	*Mirabilis macfarlanei*	*Astragalus cusickii var. parkardiae*	*Lepidium papilliferum*	*Silene spaldingii*	*Spiranthes diluvialis*	*Howellia aquatilis*	*Pinus albicaulis*
Ada		C	C							T					E				P-PCH				
Adams		C		T		T		C	P	T-DCH													C
Bannock		C	C						P														
Bear Lake		C		T					P														C
Benewah				T					P	T-DCH										T		T	
Bingham		C	C						P												T		
Blaine		C	C	T					P	T-DCH													C
Boise			C	T					P	T-DCH													C
Bonner				T	T		E		P	T-DCH													C
Bonneville		C	C	T	T				P												T		C
Boundary				T-DCH	T		E-DCH		P	T-DCH	E-DCH												C
Butte		C		T					P	T-DCH													C
Camas		C		T					P	T-DCH													C
Canyon			C												E				P-PCH				
Caribou		C		T					P														C
Cassia		C	C												E	C							
Clark		C	C	T	T				P														C
Clearwater				T					P	T-DCH													C
Custer		C	C	T					P	T-DCH													C
Elmore		C	C	T					P	T-DCH			T		E				P-PCH				C
Franklin		C		T					P														
Fremont		C	C	T	T				P												T		C
Gem		C						C	P	T-DCH									P-PCH				C

Table Key: C = Candidate Species P= Proposed Species T=Threatened Species E=Endangered Species PCH= Proposed Critical Habitat DCH=Designated Critical Habitat

This species list was revised by the USFWS on 02/06/2013, and is valid for 90 days after 03/06/2013 .

U.S. Fish and Wildlife Service • Idaho Fish and Wildlife Office

CANDIDATE, PROPOSED AND LISTED SPECIES & PROPOSED AND DESIGNATED CRITICAL HABITAT IN IDAHO

	Herps	Birds		Mammals						Fish		Mollusks				Plants							
Common Name	Columbia Spotted Frog (Great Basin Population)	Greater Sage-Grouse	Yellow-Billed Cuckoo	Canada Lynx	Grizzly Bear	Northern Idaho Ground Squirrel	Selkirk Mountains Woodland Caribou	Southern Idaho Ground Squirrel	North American Wolverine	Bull Trout	Kootenai River White Sturgeon	Banbury Springs Lanx	Bliss Rapids Snail	Bruneau Hot Springsnail	Snake River Physa	Goose Creek Milkvetch	MacFarlane's Four-O'Clock	Packard's Milkvetch	Slickspot Peppergrass	Spalding's Catchfly	Ute Ladies'-Tresses	Water Howellia	Whitebark Pine
Scientific Name	*Rana luteiventris*	*Centrocercus urophasianus*	*Coccyzus americanus*	*Lynx canadensis*	*Ursus arctos horribilis*	*Spermophilus brunneus brunneus*	*Rangifer tarandus caribou*	*Spermophilus brunneus endemicus*	*Gulo gulo luscus*	*Salvelinus confluentus*	*Acipenser transmontanus*	*Lanx* sp.	*Taylorconcha serpenticola*	*Pyrgulopsis bruneauensis*	*Haitia (Physa) natricina*	*Astragalus anserinus*	*Mirabilis macfarlanei*	*Astragalus cusickii var. parkardiae*	*Lepidium papilliferum*	*Silene spaldingii*	*Spiranthes diluvialis*	*Howellia aquatilis*	*Pinus albicaulis*
Gooding		C										E	T		E								
Idaho			C	T					P	T-DCH							T			T			C
Jefferson		C	C	T					P												T		
Jerome		C											T		E								
Kootenai			C	T					P	T-DCH										T		T	
Latah			C	T					P											T		T	
Lemhi		C	C	T					P	T-DCH													
Lewis			C							T-DCH										T			
Lincoln		C																					
Madison		C	C	T					P												T		
Minidoka		C	C												E								
Nez Perce				T						T-DCH										T			
Oneida		C	C																				
Owyhee	C	C	C							T-DCH				E	E				P-PCH				
Payette		C						C		T					E			C	P-PCH				
Power		C																					
Shoshone				T					P	T-DCH										T		T	C
Teton				T	T				P														C
Twin Falls	C	C	C										T		E								
Valley				T		T			P	T-DCH													C
Washington		C				T		C	P	T-DCH					E								C

Table Key: C = Candidate Species P= Proposed Species T=Threatened Species E=Endangered Species PCH= Proposed Critical Habitat DCH=Designated Critical Habitat