

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

DRAFT BENEFICIAL USE FIELD REPORT (missing information; info requested via email)

A. GENERAL INFORMATION

Permit No: **85-7659**
And 85-7661

Exam Date: 5/29/2012

1. Current Owner: US DEPT OF ENERGY
BONNEVILLE POWER
PO BOX 3621 TRF 3
PORTLAND OR 97208-3621
(503)230-5572
2. Accompanied by: Aaron Penney
Phone No: (208)790-1876, (208)621-3504, wk (208)843-7384 Ext 3504
Address: 18985 Hubbard Gulch, Juliaetta, ID 83535
Relationship to Permit Holder: Assistant Hatchery Manager, Nez Perce Tribal Hatchery
Email: aaronp@nezperce.org

This facility is a cooperative project between Bonneville Power Administration and the Nez Perce Tribe.

3. SOURCE

TRIBUTARY

85-7659:

LAPWAI CREEK

CLEARWATER RIVER

85-7661:

GROUNDWATER

B. OVERLAP REVIEW

1. **Other water rights with the same place of use:** 85-7659 & 85-7661 (same owner, with the same beneficial uses)
2. **Other water rights with the same point of diversion:** None. 85-7659 is a surface water source from the Lapwai Creek, and 85-7661 is a groundwater source that co-mingles with the same system in the Head Tank, prior to being discharged into the (2) fish propagation ponds/tanks. Other PODs within the same QQ are for Domestic use, with different POU's.

C. DIVERSION AND DELIVERY SYSTEM

1. LOCATION OF POINT(S) OF DIVERSION:

85-7659

LAPWAI CREEK L13 SE1/4SE1/4 Sec. 22, Twp 36N, Rge 04W, B.M. NEZ PERCE County

85-7661

GROUND WATER L13 SE1/4SE1/4 Sec. 22, Twp 36N, Rge 04W, B.M. NEZ PERCE County

Method of Determination: Garmin GPS Map 76S, ArcMap esri and 2004 – 2013 Imagery.

2.

OVERLAPPING POU For both: 85-85-7659 and 85-7661:

PLACE OF USE: FISH PROPAGATION STORAGE

Twp	Rge	Sec	NE				NW				SW				SE				Totals
36N	04W	22	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
																		X	
																		L 13	

PLACE OF USE: FISH PROPAGATION

Twp	Rge	Sec	NE				NW				SW				SE				Totals
36N	04W	22	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
																		X	
																		L 13	
																		L14*	

**L14 will need to be manually added to license under this use, since AdHoc seems to only add one lot for the SESE QQ.*

PLACE OF USE: DIVERSION TO STORAGE

Twp	Rge	Sec	NE				NW				SW				SE				Totals
36N	04W	22	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
																		X	
																		L 13	

No amendment is required for adding the Govt. Lot number to the POD and POUs listed above.

Method of Determination: Garmin GPS Map 76S, ArcMap esri and 2004 – 2013 Imagery.

3. ☒ Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable.
- ☐ Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.
- ☒ Aerial Photo Attached (required for irrigation of 10+ acres).
- ☒ Photo of Diversion and System Attached

4.

<u>Well or Diversion</u>	<u>Motor Make</u>	<u>Hp</u>	<u>Motor Serial No.</u>	<u>Pump Make</u>	<u>Pump Serial No. or Discharge</u>
<u>ID No.*</u>					<u>Size</u>

85-7659

No Tag (ran out of them) **INSERT HERE**

4. (continued)

Well or Diversion
ID No.*

Motor Make

Hp

Motor Serial No.

Pump Make

Pump Serial No. or Discharge
Size

85-7661

A0016962 submersible Franklin 60 Hp motor serial 03E19-20-0118, Christensen pump serial #422250 model #8RJHC, 8 inch discharge to an 8 inch flow meter (unknown make, serial #, since cap was missing)

*Code to correspond with No. on map and aerial photo

Booster Pump at 85-7659: INSERT HERE

Booster Pumps in the Head Tank: INSERT HERE

D. FLOW MEASUREMENTS

1.

Measurement
Equipment

Type

Make

Model No.

Serial No.

Size

Calib. Date

87-7659: waiting on flow records from the operator. INSERT HERE

87-7661: 8 inch flow meter (cap removed, so make and serial # were unavailable). Waiting on flow records from operator, due to meter was in a pit, and not easy to read.

2. Measurements:

85-7659:

6 inch pipe conversation (for pipe at the screened intake at the river): 0.98 cfs

INSERT HERE

85-7661:

12 inch pipe conversation from the well to the Head Tank =3.93 cfs

Theoretical (using the average static level in the area of 6 ft + 10ft for the lift):

$(8.8 \times 60 \text{ Hp} \times 0.7 \text{ eff}) / [16 \text{ ft} + (\text{___ psi} \times 2.31)] = \text{INSERT HERE}$

E. FLOW CALCULATIONS

FLOW RECORDS (INSERT HERE)

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation: N/A

2. Volume Calculations for Other Uses:

85-7659 and 85-7661 Fish Propagation Storage:

Same Ponds (ArcMap calculated ponds size to be 0.3 acre) X 2 ft average depth = 0.6 af

85-7659

Fish Propagation: 10/1 – 7/14

Fish Propagation: 7/15 – 9/30

85-7661:

Fish Propagation: 1/1 – 12/31

INSERT HERE

G. NARRATIVE/REMARKS/COMMENTS ADD PUMP INFO

At the 85-7659 POD there is a 6 inch screened intake with back-up pump location (they rent a pump on a need be basis, for this location, if it is needed to help pull water out). It is then diverted to a concrete sump collector with a gridded top, then piped through buried 12 inch pipe to another concrete pit collection chamber which has 3 pumps, with 1,000 gpm capability (this is the Head Tank), then discharged to (2) fish propagation ponds/tanks, with each of them averaging 2 ft deep, with the maximum depth of 7 ft. There is a buried 12 inch pipe that acts as an overflow and or drain, with effluent being discharged back to the creek.

The POD for 85-7661 is a groundwater source was drilled according to the permit application, in 1997 by Staco Well Services (no well log could be found for any wells drilled 1996 – 1997 with that legal). It has a 12 inch casing that extends 14 inches above ground level, and is 679 ft deep. It has a submersible Franklin 60 Hp motor serial # 03E19-20-0118, Christensen pump serial # 422250, model # 8RJHC, with an 8 inch discharge to an 8 inch flow meter (which has no cap, therefore no information on the make and serial #). It discharges to an 8 inch buried pipe (unknown type) that discharges into the Head Tank. Here it can co-mingle with the surface water source from 85-7659 within the Head Tank, or pumped independently and then discharged to the (2) fish propagation ponds/tanks.

POU for 85-7659 and 85-7661: Both share the same property where the entire plant is located (Fish Propagation), and the same (2) ponds/tanks (Fish Propagation Storage), and distribution system from the Head Tank to the (2) ponds/tanks, and the 12 inch overflow system discharging to the creek.

This facility is a cooperative project between Bonneville Power Administration and the Nez Perce Tribe. Beneficial use is for Chinook salmon restoration with the rearing and release of 500,000 fall Chinook salmon fingerlings or smolts for the Clearwater River Subbasin.

The Tax Lot information updated on 12/9/2012 confirms that the Bureau of Indian Affairs Trust Land PO Box 365 Lapwai, ID 83540 owns the property where the POU and POD are located. The physical address is: 23975 Thunder Hill Rd., Lapwai, ID 83540.

Have conditions of permit approval been met? ☒ X Yes ☐ No

H. RECOMMENDATIONS

1. 85-7659 Recommended Amounts

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
FISH PROPAGATION STORAGE	1/01 to 12/31		0.60 AF*
FISH PROPAGATION	10/01 to 7/14	0.00 CFS	
FISH PROPAGATION	7/15 to 9/30	0.00 CFS	
DIVERSION TO STORAGE	10/01 to 7/14	0.00 CFS	
DIVERSION TO STORAGE	7/15 to 9/30	0.00 CFS	
<u>Totals:</u>		0.00 CFS	

1. 85-7661 Recommended Amounts

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
FISH PROPAGATION STORAGE	1/01 to 12/31		0.60 AF*
FISH PROPAGATION	1/01 to 12/31	0.00 CFS	
DIVERSION TO STORAGE	1/01 to 12/31	0.00 CFS	
<u>Totals:</u>		0.00 CFS	

**Combined limit of 0.60 AF with water right 85-7661 (same fish propagation ponds/tanks).*

2. Recommended Amendments

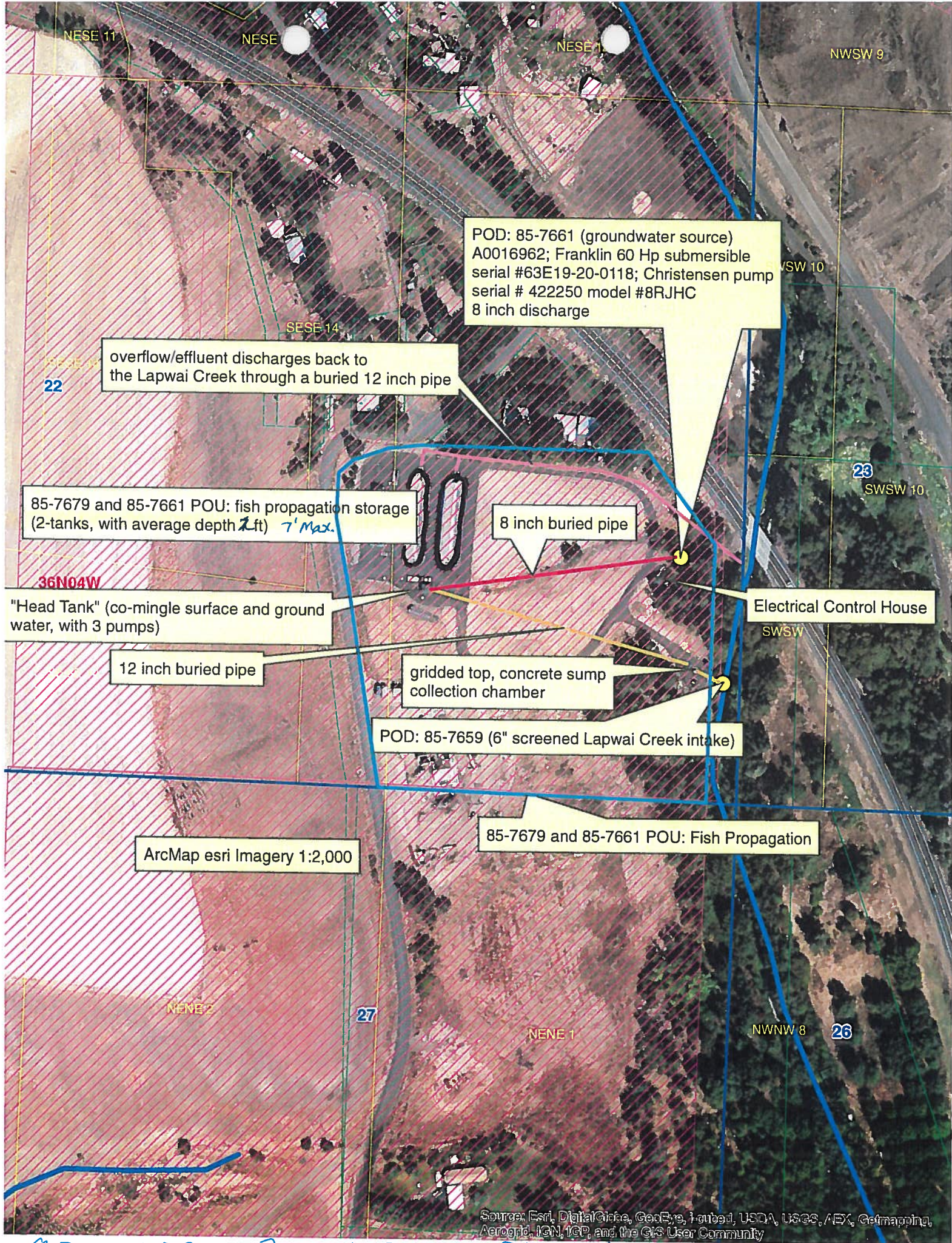
☐ Change P.D. as reflected above ☐ Add P.D. as reflected above ☒ None

☐ Change P.U. as reflected above ☐ Add P.U. as reflected above ☐ Other

No amendment is required for adding the Govt. Lot number to the POD and POUs listed above.

I. AUTHENTICATION

Field Examiner's Name _____ Date _____



POD: 85-7661 (groundwater source)
A0016962; Franklin 60 Hp submersible
serial #63E19-20-0118; Christensen pump
serial # 422250 model #8RJHC
8 inch discharge

overflow/effluent discharges back to
the Lapwai Creek through a buried 12 inch pipe

85-7679 and 85-7661 POU: fish propagation storage
(2-tanks, with average depth 2 ft) 7' Max.

8 inch buried pipe

"Head Tank" (co-mingle surface and ground
water, with 3 pumps)

12 inch buried pipe

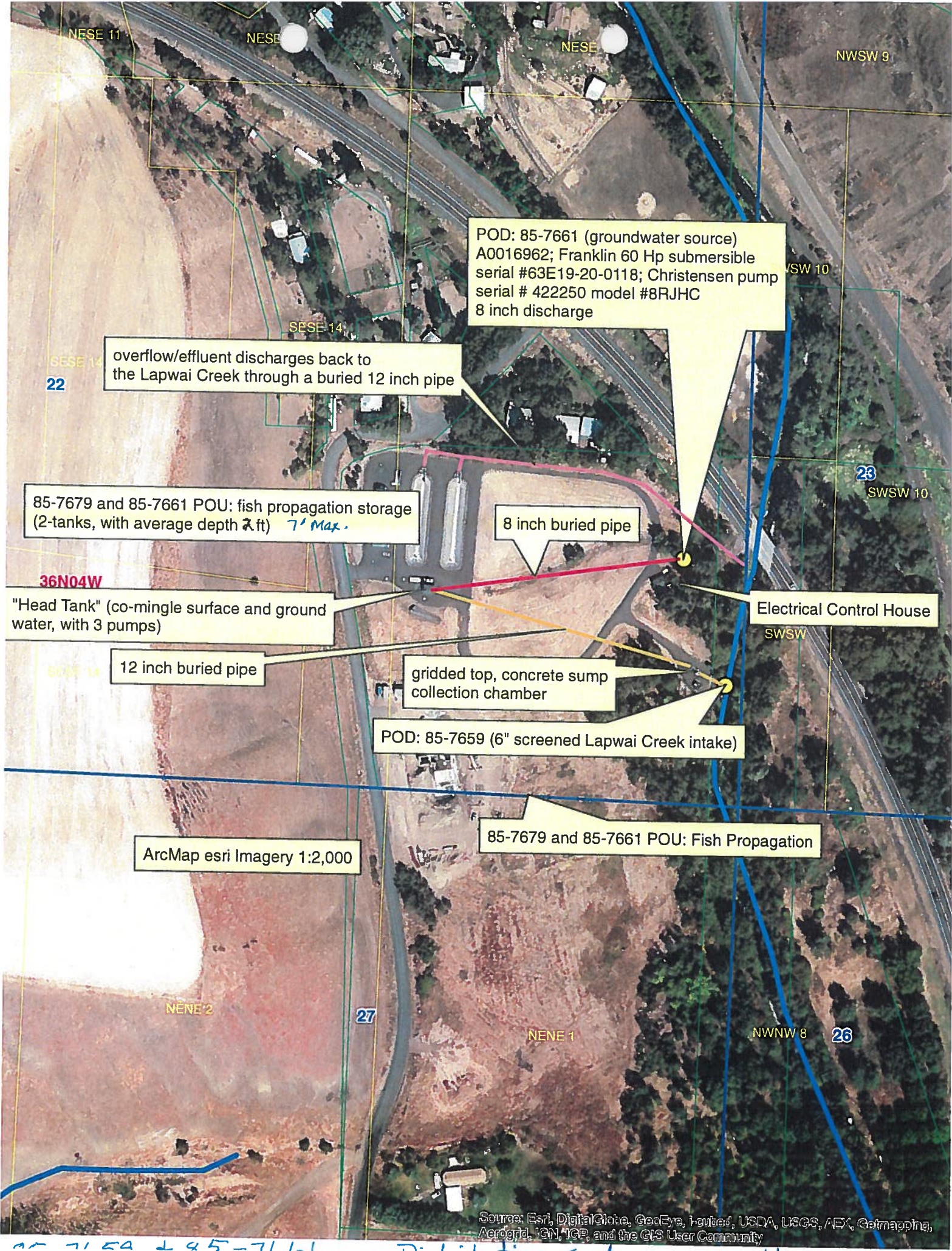
gridded top, concrete sump
collection chamber

Electrical Control House

POD: 85-7659 (6" screened Lapwai Creek intake)

ArcMap esri Imagery 1:2,000

85-7679 and 85-7661 POU: Fish Propagation



POD: 85-7661 (groundwater source)
A0016962; Franklin 60 Hp submersible
serial #63E19-20-0118; Christensen pump
serial # 422250 model #8RJHC
8 inch discharge

overflow/effluent discharges back to
the Lapwai Creek through a buried 12 inch pipe

85-7679 and 85-7661 POU: fish propagation storage
(2-tanks, with average depth 7 ft) *7' Max.*

8 inch buried pipe

36N04W
"Head Tank" (co-mingle surface and ground
water, with 3 pumps)

12 inch buried pipe

gridded top, concrete sump
collection chamber

Electrical Control House

POD: 85-7659 (6" screened Lapwai Creek intake)

ArcMap esri Imagery 1:2,000

85-7679 and 85-7661 POU: Fish Propagation





05/29/2012

85-7659

POD:
6"
screen
intake



Intake
at
Lapwai
Creek

05/29/2012

85-71.59

S. Hemerway



85-7659
PDD
6"
intake

concrete
sump
collection
chamber

05/29/2012



inside
the
collection
chamber

05/29/2012

85-7659

S. Hemerikau



Head
Tank
where
surface
+
ground-
water
can
flow
thru to
tanks,
or
so-nix
+ then
flow
to
fish
prop.
tanks



85-7659 + 85-7661

S. Hemerway



85-7659 + 85-7661

S. Hemenway



85-7661
 POD
 Add 16962
 8"
 discharge
 Franklin
 60 Hp.
 03E19-20-
 0118
 Christens
 pump,
 Ser.#
 422250
 Model #
 8RJHC

05/29/2012



8"
 flow-
 meter
 (cap
 missing
 unknown
 make +
 ser. #)

8"
 discharge
 to
 8"
 buried
 pipe to
 the
 Head
 Tank

05/29/2012

85-7661

S. Hemerway



85-7661

S. Hemerway



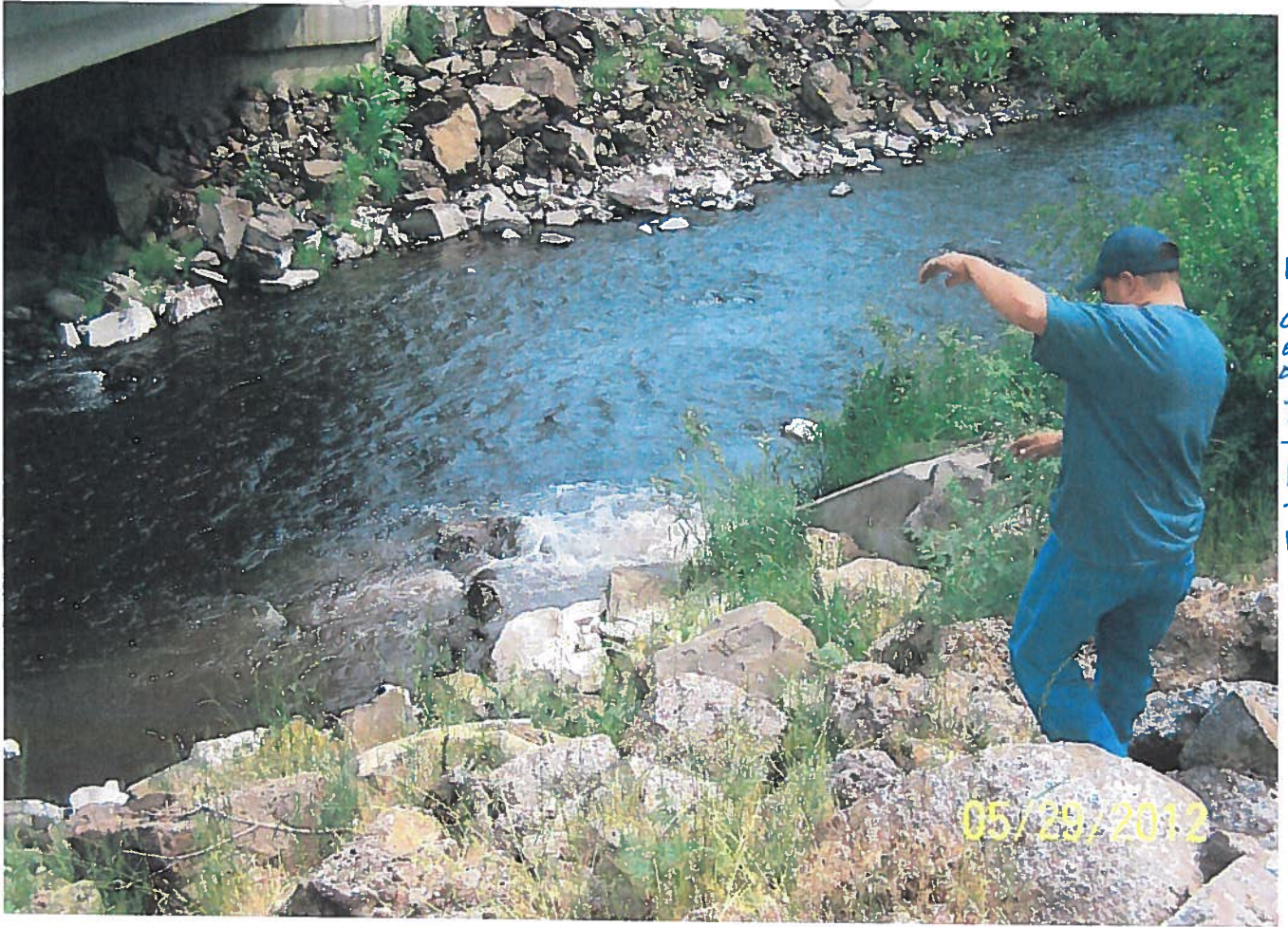
overflow
to
12" buried
pipe

POU:
85-7659
+
85-7661

from the
head
tank,
(2)
fish
pass
storage
ponds
0.3
acre
total
with
average
depth
of 2'
+
max.
depth
of
7'

85-7659 + 85-7661

Si. Hemerway



12"
discharge
on
overflow
from
tanks
back
to the
river

85-7659 + 85-7661

S. Hernanway

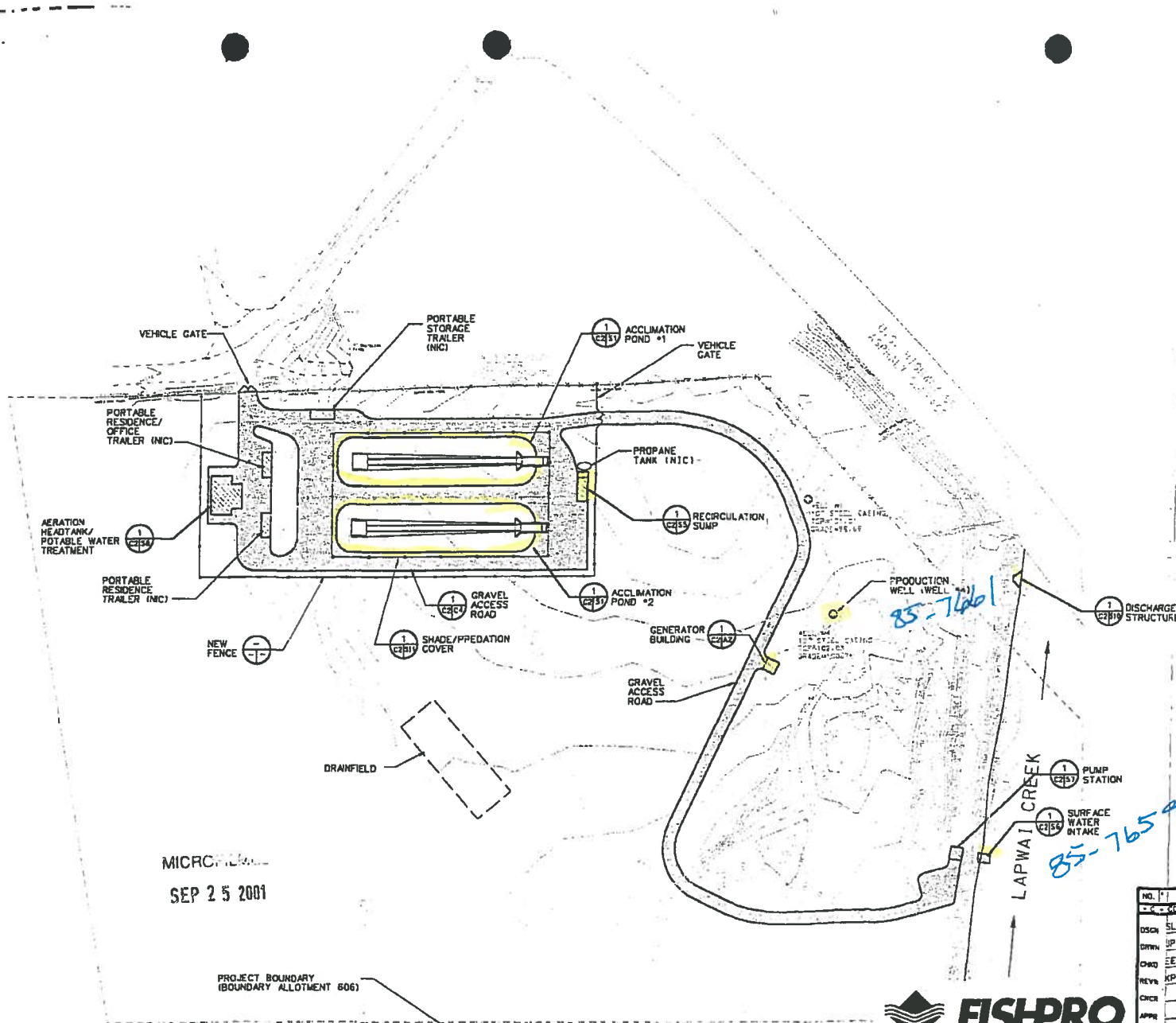
OFFICE WERE PLOTTED:

OFFICE WERE REVISION:

DATE AND TIME OF LAST REVISION:

DATE AND TIME OF PLOT:

FILENAME: NPLC019.DGN

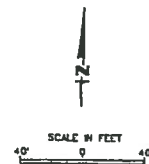


MICROFILM

SEP 25 2001

PROJECT BOUNDARY
(BOUNDARY ALLOTMENT 606)

Number of Units: 2
Avg. Dimensions: 38x160x7'
Total Proposed Volume: 26,316cf



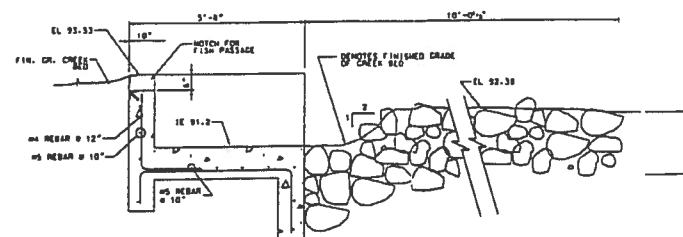
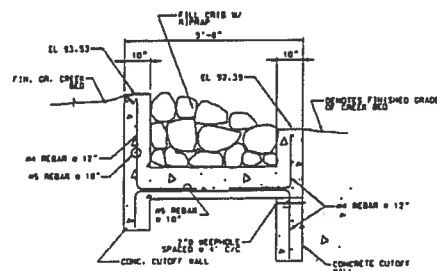
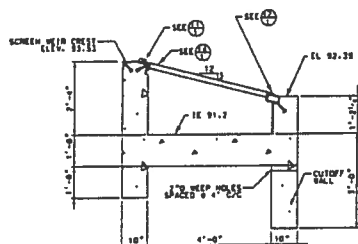
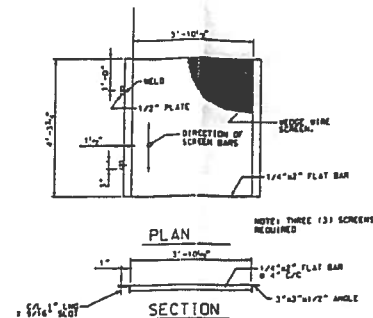
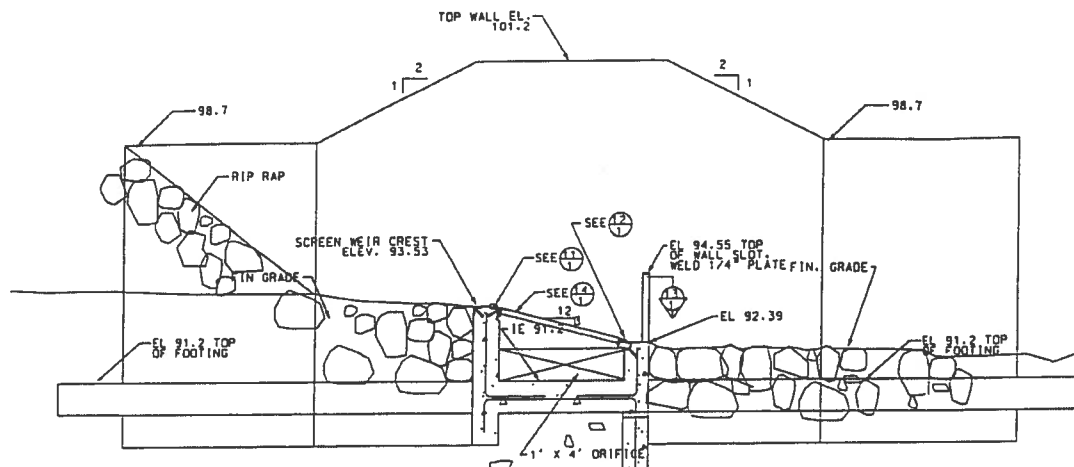
FOR REVIEW ONLY
NOT FOR CONSTRUCTION

NO.	1	COMPUTER REVISION ONLY	BY	DATE	APPROVED
DESIGN	SLS				
DRAWN	JPL				
CHECKED	EED				
REVIEWED	KPF				
DATE	05/03/99				

UNITED STATES DEPARTMENT OF ENERGY			
BONNEVILLE POWER ADMINISTRATION			
NEZ PERCE TRIBAL HATCHERY PROGRAM			
NORTH LAPWAI VALLEY			
SITE PLAN			
Sheet	Page	Size	Revision
4	4	4"	C2







FOR REVIEW ONLY
NOT FOR CONSTRUCTION

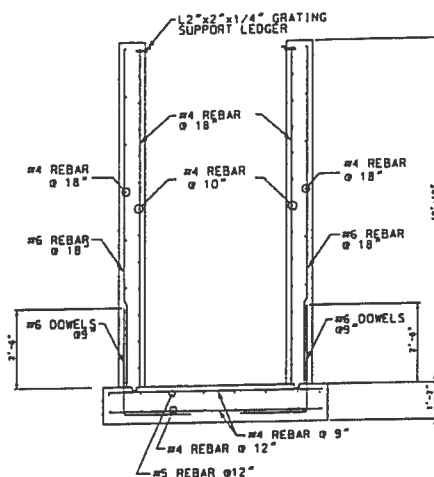
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1	CONTRACTOR	2.4.99	CONTRACTOR
2	DESIGN	3.1.99	DESIGN
3	REVIEW	3.1.99	REVIEW
4	APPROVE	3.1.99	APPROVE
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DESIGN	SLS
DRAWN	JPL
CHECKED	EED
REVIEW	KPF
ENGINEER	
APPROVE	

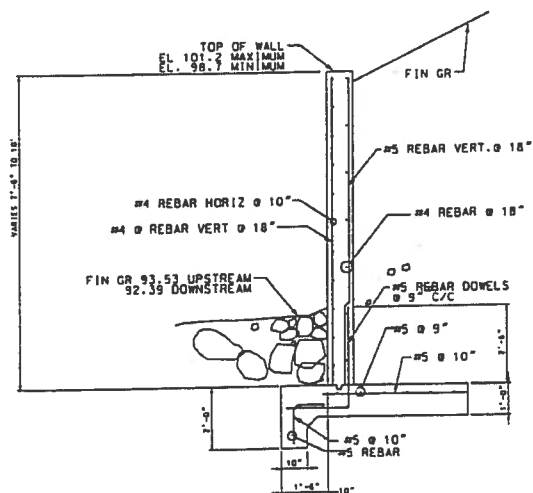
UNITED STATES DEPARTMENT OF ENERGY
BONNEVILLE POWER ADMINISTRATION
NEZ PERCE TRIBAL HATCHERY PROGRAM
NORTH LAPWAI VALLEY
INTAKE & PUMP STATION
SECTIONS AND DETAILS

Serial	Page	Size	Sheet	Revised
		A1	S7	

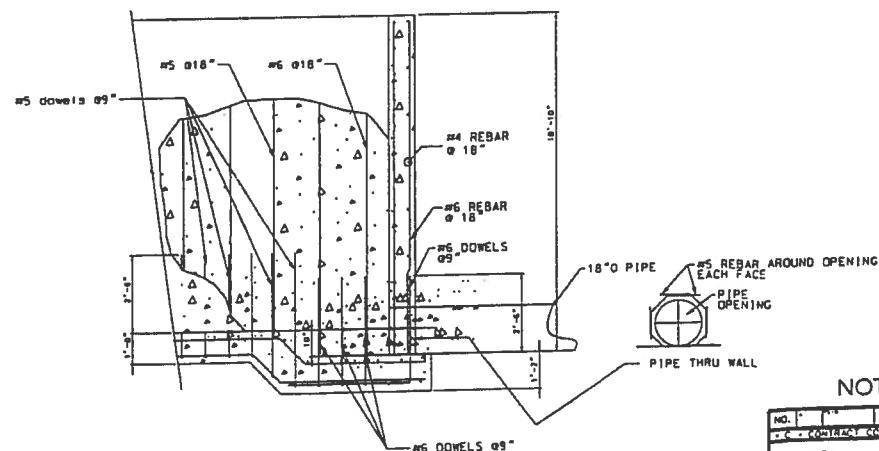




DETAILS



DETAIL



DETAIL

9
XX|XX

FOR REVIEW ONLY
NOT FOR CONSTRUCTION

NO.	1	COMPUTER REVISION ONLY		BY	DATE	APPROVED
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DESIGN	SL5	UNITED STATES DEPARTMENT OF ENERGY				
		BONNEVILLE POWER ADMINISTRATION				
OWNER	JPL	HEADQUARTERS OFFICE, SALT LAKE CITY, UTAH				
CHRGD	EED	NEZ PERCE TRIBAL HATCHERY PROGRAM				
REVISED	KPF	NORTH LAPWAI VALLEY				
CHGR		INTAKE & PUMP STATION				
APPRO		SECTIONS				
DATE	05/03/99	Series	Page	Size	Sheet	Revision



Hemenway, Sandy

From: Hemenway, Sandy
Sent: Thursday, March 27, 2014 6:11 AM
To: 'Aaron Penney'
Cc: Hemenway, Sandy
Subject: RE: for hatchery off Hwy 12, 85-7659 US Dept of Energy, Bonneville Power (fish propagation)

Aaron,

This intake is for the the hatchery off of Hwy 12, on Thunderhill Rd. Lapwai Creek is the source.

Thanks,

Sandy

From: Hemenway, Sandy [<mailto:Sandy.Hemenway@idwr.idaho.gov>]
Sent: Thursday, March 20, 2014 6:55 AM
To: Hemenway, Sandy; aaronp@nezperce.org
Subject: RE: US Dept of Energy, Bonneville Power (fish propagation)

Hi again,

In my notes from the field examination, I was told that there is a back-up pump that is rented in the event water is needed to pull water out of the river. I know this pump is usually rented, but do you know what make/model and Hp it usually is?

Also, at the 6 inch intake, are the pumps in the Head Tank used to pump water from the river, or is it normally a gravity flow system from the 6 inch intake to the Head Tank, and then pumped into the (2) fish propagation ponds/tanks? If there is a separate pump for the 6 inch intake river source that is used all the time, could you give the make/model and Hp?

Sorry for the gaps in information.

Thanks,
Sandy Hemenway
Sr. Water Resource Agent
IDWR State Office, Boise
(208)287-4920
Sandy.hemenway@idwr.idaho.gov

Hemenway, Sandy

From: Hemenway, Sandy
Sent: Saturday, March 15, 2014 9:36 AM
To: aaronp@nezperce.org
Cc: Hemenway, Sandy
Subject: RE: 85-7659 and 85-7661 US Dept of Energy, Bonneville Power (fish propagation off Thunder Hill Rd, North Lapwai Valley project)
Attachments: DOC008.pdf
Importance: High

Aaron,

Here is a map of the distribution system for these two water rights, as I am interpreting it. The gaps in my narrative is:

- (1) The location, make, model, Hp of the back-up pump.
- (2) Make, model, Hp of each of the 3 pumps in the "Head Tank."
- (3) Make, model, and locations for the flow meters,
- (4) From the well to the Head Tank, I was told it is 8 inch buried pipe. What kind of pipe?
- (5) From the Lapwai Creek intake, the collection chamber to the Head Tank is a 12 inch buried pipe. What kind of pipe?
- (6) And the questions below.

Sorry for all the emails.

Again, I thank you for all your time, and I look forward to hearing back from you within the next 2 weeks.

Sincerely,

Sandy Hemenway
Sr. Water Resource Agent
IDWR State Office, Boise
(208)287-4920
Sandy.hemenway@idwr.idaho.gov

From: Hemenway, Sandy
Sent: Friday, March 14, 2014 1:35 PM
To: aaronp@nezperce.org
Cc: Hemenway, Sandy
Subject: 85-7659 and 85-7661 US Dept of Energy, Bonneville Power (fish propagation off Thunder Hill Rd, North Lapwai Valley project)

Hi Aaron,

I have attached pictures for this next fish propagation site, to help assist in answering the following questions:

- (1) Do you have flow records or have an estimate of the volume used for this facility during a normal season? If so could you please submit it?
- (2) Please submit a copy of the maintenance schedule, if there is one.
- (3) Please submit a copy of the Number, Size of the fish, Type of fish, and Dates fish are stocked to the tanks for a routine year.

- (4) Can you describe any techniques that are used to improve the fish growth and reproduction i.e. nutrients added to the water.
- (5) How long does it take to fill all the tanks?
- (6) How many exchanges/turnovers take place within 24 hours?
- (7) Do you have flow records from the surface water source? If so, can I have a copy? If not, what if the gpm this main pump or the backup runs at, and for what time period?
- (8) Do you have flow records from the well? If so, can I have a copy? If not, what is the gpm this well normally runs at, and for what time period?
- (9) Do you know what psi the system runs at?
- (10) What is the purpose of adding groundwater to the propagation tanks, when there is already a surface water source? Can you explain in detail?
- (11) Do you know the average depth that the tanks/ponds are maintained at (the high water mark indicated in the pictures)?
- (12) The system for the surface water system was a little unclear. I know that there is a 6 inch screened intake to the concrete sump with a 12 inch pipe that runs to 3 pumps with 1,000 gpm capability to the propagation ponds, with a 12 inch discharge to the creek. My questions are these: (a) what are the make/model and Hp of the 3 pumps, and (b) is there anything that you can add to the description of this system that would make the narrative flow better?

Please submit the above information within 2 weeks, so I can complete the licensing process. To expedite the process, please scan and send information back as an email attachment, otherwise you can mail it to the address below.

Thanks so much,

Sandy Hemenway
Sr. Water Resource Agent
IDWR State Office, Boise
PO Box 83720
Boise, ID 83720-0098
(208)287-4920
Sandy.hemenway@idwr.idaho.gov

Hemenway, Sandy

From: Hemenway, Sandy
Sent: Friday, March 14, 2014 1:35 PM
To: aaronp@nezperce.org
Cc: Hemenway, Sandy
Subject: 85-7659 and 85-7661 US Dept of Energy, Bonneville Power (fish propagation off Thunder Hill Rd, North Lapwai Valley project)
Attachments: DOC007.pdf

Hi Aaron,

I have attached pictures for this next fish propagation site, to help assist in answering the following questions:

- (1) Do you have flow records or have an estimate of the volume used for this facility during a normal season? If so could you please submit it?
- (2) Please submit a copy of the maintenance schedule, if there is one.
- (3) Please submit a copy of the Number, Size of the fish, Type of fish, and Dates fish are stocked to the tanks for a routine year.
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- (9) Do you know what psi the system runs at?
- (10) What is the purpose of adding groundwater to the propagation tanks, when there is already a surface water source? Can you explain in detail?
- (11) Do you know the average depth that the tanks/ponds are maintained at (the high water mark indicated in the pictures)?
- (12) The system for the surface water system was a little unclear. I know that there is a 6 inch screened intake to the concrete sump with a 12 inch pipe that runs to 3 pumps with 1,000 gpm capability to the propagation ponds, with a 12 inch discharge to the creek. My questions are these: (a) what are the make/model and Hp of the 3 pumps, and (b) is there anything that you can add to the description of this system that would make the narrative flow better?

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Thanks so much,

Sandy Hemenway
Sr. Water Resource Agent
IDWR State Office, Boise
PO Box 83720
Boise, ID 83720-0098
(208)287-4920
Sandy.hemenway@idwr.idaho.gov