

State of Idaho
Department of Water Resources
Permit to Appropriate Water
NO. 96-09241

Priority: July 15, 2005

Maximum Diversion Volume: 4.0 AF

This is to certify, that JIM CARROLL
1847 GARFIELD BAY CUTOFF RD
SAGLE ID 83860

has applied for a permit to appropriate water from:

Source: UNNAMED STREAM **Tributary:** LAKE PEND OREILLE

and a permit is APPROVED for development of water as follows:

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>ANNUAL VOLUME</u>
WILDLIFE STORAGE	01/01 to 12/31	4.0 AF

LOCATION OF POINT OF DIVERSION:

UNNAMED STREAM NW¼ NE¼ Sec. 22, Twp 56N, Rge 01W, B.M. BONNER County

PLACE OF USE: WILDLIFE STORAGE

Twp Rge Sec	NE				NW				SW				SE				
	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	Totals
56N 01W 22		X															

CONDITIONS OF APPROVAL

1. Proof of application of water to beneficial use shall be submitted on or before **September 01, 2007**.
2. Subject to all prior water rights.
3. Project construction shall commence within one year from the date of permit issuance and shall proceed diligently to completion unless it can be shown to the satisfaction of the Director of the Department of Water Resources that delays were due to circumstances over which the permit holder had no control.

This permit is issued pursuant to the provisions of Section 42-204, Idaho Code. Witness the signature of the Director, affixed at Boise, this 2nd day of September, 2005.


for KARL J DREHER, Director

FORM 202
12-99
RECEIVED

SEP 02 2005

Department of Water Resources

12133

Ident. No. 96-9241

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES**APPLICATION FOR PERMIT**

To appropriate the public waters of the State of Idaho

RECEIVED

JUL 13 2005

IDWR/North

1. Name of Applicant JIM CARROLL Phone 208-263-6002
Mailing address 1847 GARFIELD BAY CUTOFF RD, SAGLE ID 83860
2. Source of water supply UNNAMED SEASONAL which is a tributary of LAKE POND ORVILLE
3. Location of point of diversion is Township 56N Range 1W Sec. 22, in the NE 1/4, NW 1/4, NE 1/4, Govt. Lot _____, B.M., BONNER County;
additional points of diversion if any: NAP
4. Water will be used for the following purposes:
Amount 4 AC-FT for WILDLIFE STORAGE purposes from 1-1 to 12-31 (both dates inclusive)
(cfs or acre-feet per annum)
Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)
Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)
Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)
Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)
Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)
5. Total quantity to be appropriated is (a) _____ and/or (b) 4 AC-FT
cubic feet per second acre feet per annum
6. Proposed diverting works:
a. Describe type and size of devices used to divert water from the source SEE ATTACHMENT 404 PERMIT MATERIALS
- b. Height of storage dam 6 FEET feet; active reservoir capacity 4 AC-FT acre-feet; total reservoir capacity 4 AC-FT acre-feet
- c. Proposed well diameter is _____ inches; proposed depth of well is NAP feet
- d. Is ground water with a temperature of greater than 85°F being sought? NO
- e. If well is already drilled, when? NAP; Drilling firm _____;
Well was drilled for (well owner) _____; Drilling Permit No. _____
7. Time required for completion of works and application of water to proposed beneficial use is 2 years (minimum 1 year)
8. Description of proposed uses (if irrigation only, go to item 9):
a. Hydropower; show total feet of head and proposed capacity in kW. _____
b. Stockwatering; list number and kind of livestock. _____
c. Municipal; show name of municipality. _____
d. Domestic; show number of households. _____
e. Other; describe fully. WILDLIFE HABITAT

96-9241

3. Description of place of use:

- a. If water is for irrigation, indicate acreage in each subdivision in the tabulation below.
- b. If water is used for other purposes, place a symbol of the use (example: D for Domestic) in the corresponding place of use below. See instructions for standard symbols.

TWP	RGE	SEC	NE				NW				SW				SE				TOTALS
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
56N	1W	22		W															4 AC-FT

Total number of acres to be irrigated 010. Describe any other water rights used for the same purposes as described above. NAP11. a. Who owns the property at the point of diversion? JIM CARROLLb. Who owns the land to be irrigated or place of use? JIM CARROLLc. If the property is owned by a person other than the applicant, describe the arrangement enabling the applicant to make this filing: NAP12. Remarks: COOPERATIVE EFFORT OF THE NATURAL RESOURCE CONSERVATION SERVICE, THE IDAHO DEPT. OF FISH AND GAME, AND THE PRIVATE LANDOWNER13. **MAP OF PROPOSED PROJECT REQUIRED** - Attach an 8½"x11" map clearly identifying the proposed point of diversion, place of use, section #, township & range. (A photocopy of a USGS 7.5 minute topographic quadrangle map is preferred.)

BE IT KNOWN that the undersigned hereby makes this application for permit to appropriate the public waters of the State of Idaho as herein set forth.

SEE ATTACHMENT
404 PERMIT
MATERIALS

 Signature of Applicant (and title, if applicable)

Received by db Date 7/15/05 Time 9:50a Preliminary check by db Date 7/15/05

Fee \$ 100.00 Receipted by db # N067042

Publication prepared by db Date 7/27/05 Published in Boone Co Daily Bee 8/4/05

Publication approved db Date 8/3/05

T56N R1W Section 22



Place of Use



Point of Diversion



**NOW
STARTING
RIGHT
SIDE OF
FILE**



State of Idaho

DEPARTMENT OF WATER RESOURCES

322 East Front Street, P.O. Box 83720, Boise, ID 83720-0098

Phone: (208) 287-4800 Fax: (208) 287-6700 Web Site: www.idwr.idaho.gov.

DIRK KEMPTHORNE
Governor

KARL J. DREHER
Director

September 6, 2005

JIM CARROLL
1847 GARFIELD BAY CUTOFF RD
SAGLE ID 83860

RE: Permit No. 96-9241

Permit Approval Notice

Dear Permit Holder:

The Department of Water Resources has issued the enclosed permit authorizing you to establish a new water right. Please be sure to thoroughly review the conditions of approval and remarks listed on your permit.

The permit is a PRELIMINARY ORDER issued by the Department pursuant to Section 67-5243, Idaho Code. It can and will become a final order without further action by the Department unless a party petitions for reconsideration or files an exception and/or brief within fourteen (14) days of the service date as described in the enclosed information sheet.

As a permit owner you must commence the excavation or construction of the diverting works within one year of the date the permit was issued, and you must proceed diligently until the project is completed. The date shown under condition no. 1 is the date when the project must be completed.

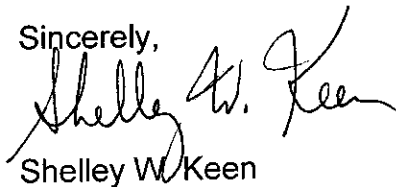
The Department will send you a 'Proof Due Notice' approximately 60 days prior to the above referenced date requesting you to file either a Proof of Beneficial Use form or a Request for Extension of Time form.

Please note that a separate stream channel alteration permit must be obtained from the Department prior to any activity in the stream channel other than construction or maintenance of the diversion structure for your water right(s). Applications for stream channel alteration permits must be filed at least sixty days prior to the commencement of work in the stream.

Also, please note that water right owners are required to report any change of water right ownership and/or mailing address to the Department within 120 days of the change. Failure to report these changes could result in a \$100 late filing fee. Contact any office of the Department or visit the Department's homepage on the Internet to obtain the proper forms and instructions.

If you have any questions, please contact me at 208-287-4947.

Sincerely,

A handwritten signature in black ink, appearing to read "Shelley W. Keen". The signature is fluid and cursive, with the first name "Shelley" being the most prominent part.

Shelley W. Keen

Water Rights Supervisor

SWK:klt

Enclosure(s)

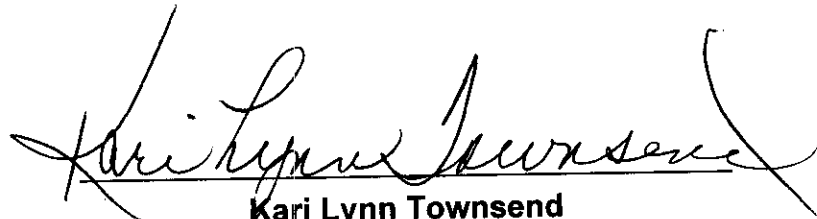
CERTIFICATE OF SERVICE

I hereby certify that on September 6, 2005 I mailed a true and correct copy, postage prepaid, of the foregoing PRELIMINARY ORDER(Approved Permit) to the person(s) listed below:

RE: WATER RIGHT NO.

96-9241

**JIM CARROLL
1847 GARFIELD BAY CUTOFF RD
SAGLE ID 83860**



**Kari Lynn Townsend
Secretary**

**EXPLANATORY INFORMATION
TO ACCOMPANY A
PRELIMINARY ORDER**

(To be used in connection with actions when a hearing was not held)

(Required by Rule of Procedure 730.02)

The accompanying order or approved document is a "**Preliminary Order**" issued by the department pursuant to section 67-5243, Idaho Code. It can and will become a final order without further action of the Department of Water Resources ("department") unless a party petitions for reconsideration, files an exception and brief, or requests a hearing as further described below.

PETITION FOR RECONSIDERATION

Any party may file a petition for reconsideration of a preliminary order with the department within fourteen (14) days of the service date of this order. The department will act on a petition for reconsideration within twenty-one (21) days of its receipt, or the petition will be considered denied by operation of law. See Section 67-5243(3) Idaho Code.

EXCEPTIONS AND BRIEFS

Within fourteen (14) days after (a) the service date of a preliminary order, (b) the service date of a denial of a petition for reconsideration from this preliminary order, or (c) the failure within twenty-one (21) days to grant or deny a petition for reconsideration from this preliminary order, any party may in writing support or take exceptions to any part of a preliminary order and may file briefs in support of the party's position on any issue in the proceeding with the Director. Otherwise, this preliminary order will become a final order of the agency.

REQUEST FOR HEARING

Unless a right to a hearing before the Department or the Water Resource Board is otherwise provided by statute, any person aggrieved by any final decision, determination, order or action of the Director of the Department and who has not previously been afforded an opportunity for a hearing on the matter may request a hearing pursuant to section 42-1701A(3), Idaho Code. A written petition contesting the action of the Director and requesting a hearing shall be filed within fifteen (15) days after receipt of the denial or conditional approval.

ORAL ARGUMENT

If the Director grants a petition to review the preliminary order, the Director shall allow all parties an opportunity to file briefs in support of or taking exceptions to the preliminary order and may schedule oral argument in the matter before issuing a final order. If oral arguments are to be heard, the Director will within a reasonable time period notify each party of the place, date and hour for the argument of the case. Unless the Director orders otherwise, all oral arguments will be heard in Boise, Idaho.

SEARCHED
SERIALIZED
INDEXED
FILED

CERTIFICATE OF SERVICE

All exceptions, briefs, requests for oral argument and any other matters filed with the Director in connection with the preliminary order shall be served on all other parties to the proceedings in accordance with IDAPA Rules 37.01.01302 and 37.01.01303 (Rules of Procedure 302 and 303).

FINAL ORDER

The Director will issue a final order within fifty-six (56) days of receipt of the written briefs, oral argument or response to briefs, whichever is later, unless waived by the parties or for good cause shown. The Director may remand the matter for further evidentiary hearings if further factual development of the record is necessary before issuing a final order. The department will serve a copy of the final order on all parties of record.

Section 67-5246(5), Idaho Code, provides as follows:

Unless a different date is stated in a final order, the order is effective fourteen (14) days after its issuance if a party has not filed a petition for reconsideration. If a party has filed a petition for reconsideration with the agency head, the final order becomes effective when:

- (a) the petition for reconsideration is disposed of, or
- (b) the petition is deemed denied because the agency head did not dispose of the petition within twenty-one (21) days.

APPEAL OF FINAL ORDER TO DISTRICT COURT

Pursuant to sections 67-5270 and 67-5272, Idaho Code, if this preliminary order becomes final, any party aggrieved by the final order or orders previously issued in this case may appeal the final order and all previously issued orders in this case to district court by filing a petition in the district court of the county in which:

- i. A hearing was held,
- ii. The final agency action was taken,
- iii. The party seeking review of the order resides, or
- iv. The real property or personal property that was the subject of the agency action is located.

The appeal must be filed within twenty-eight (28) days of this preliminary order becoming final. See section 67-5273, Idaho Code. The filing of an appeal to district court does not itself stay the effectiveness or enforcement of the order under appeal.

M E M O R A N D U M

Date: September 02, 2005
To: Water Right File 96-9241
From: eretelle
Re: permit review

No overlap or protest.

No moratorium or water district.

Recommend approval as suggested by IDWR Northern.

AFFIDAVIT OF PUBLICATION

STATE OF IDAHO)
) ss.
County of Bonner)

Sherilyn Jones, 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 Notice of Application.
My business address is P.O. Box 159, Sandpoint, Idaho.

2. I am the Book Keeper 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 2 consecutive weeks, commencing on the 4 day of Aug, 2005 and ending on the 11 day of Aug, 2005.

Sherilyn Jones

SUBSCRIBED AND SWORN to before me, the undersigned Notary Public, this 11 day of August, 2005.

Carolyn L. Inge
Notary Public
Residing at: Sandpoint
Comm. Exp.: 8/06



The following application(s) have been filed to appropriate the public waters of the State of Idaho:

96-9240

PEND OREILLE LTD
HCR 61 BOX 169
BONNERS FERRY ID 83805
Point(s) of Diversion SWSW S16 T57N R01E BONNER County
Source GROUND WATER
Use: MUNICIPAL 01/01 To 12/31 0.5 CFS
Total Diversion: 0.5 CFS
Date Filed: 07/18/2005
Place Of Use: MUNICIPAL
Remark: Municipal use is for applicants service area

96-9241

JIM CARROLL
1847 GARFIELD BAY CUTOFF RD
SAGLE ID 83860
Point(s) of Diversion NWNE S22 T56N R01W BONNER County
Source UNNAMED STREAM Tributary To LAKE PEND OREILLE
Use: WILDLIFE STORAGE 01/01 To 12/31 4 AFA
Total Diversion: 4 AFA
Date Filed: 07/15/2005
Place Of Use: WILDLIFE STORAGE 56N R01W S22 WNE

96-9242

JIM CARROLL
1847 GARFIELD BAY CUTOFF RD
SAGLE ID 83860
Point(s) of Diversion NENE S22 T56N R01W BONNER County
Source UNNAMED STREAM Tributary To LAKE PEND OREILLE
Use: WILDLIFE STORAGE 01/01 To 12/31 24 AFA
Total Diversion: 24 AFA
Date Filed: 07/15/2005
Place Of Use: WILDLIFE STORAGE T56N R01W S22 NWNE

96-9243

TERESA A DAY
2413 TWIN CREEK RD
CLARK FORK ID 83811
Point(s) of Diversion L4 (NWNW) S1 T54N R02E BONNER County
Source DELYLE CREEK Tributary To TWIN CREEK
Use: POWER 01/01 To 12/31 0.17 CFS
Use: DOMESTIC 01/01 To 12/31 0.02 CFS
Total Diversion: 0.18 CFS
Date Filed: 07/13/2005
Place Of Use: DOMESTIC T54N R02E S1 NWNW Lot 4
Place Of Use: POWER - same as DOMESTIC
Remark: Domestic use is for one home.

Permits will be subject to all prior water rights. Protests may be submitted based on the criteria of Sec 42-203A, Idaho Code.

Any protest against the approval of this application must be filed with the Director, Dept. of Water Resource, Northern Region, 1910 Northwest Blvd, Suite 210, Coeur D' Alene ID 83814 together with a protest fee of \$25.00 for each application on or before 08/22/2005. The protestant must also send a copy of the protest to the applicant.

KARL J DREHER, Director
Legal 7143

August 4, 11, 2005

7143

The following application(s) have been filed to appropriate the public waters of the State of Idaho:

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96-9241

JIM CARROLL
1847 GARFIELD BAY CUTOFF RD
SAGLE ID 83860
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Use: WILDLIFE STORAGE 01/01 To 12/31 4 AFA
Total Diversion: 4 AFA
Date Filed: 07/15/2005
Place Of Use: WILDLIFE STORAGE 56N R01W S22 NWNE

96-9242

JIM CARROLL
1847 GARFIELD BAY CUTOFF RD
SAGLE ID 83860
Point(s) of Diversion NENE S22 T56N R01W BONNER County
Source UNNAMED STREAM Tributary To LAKE PEND OREILLE
Use: WILDLIFE STORAGE 01/01 To 12/31 24 AFA
Total Diversion: 24 AFA
Date Filed: 07/15/2005
Place Of Use: WILDLIFE STORAGE T56N R01W S22 NENE

96-9243

TERESA A DAY
2413 TWIN CREEK RD
CLARK FORK ID 83811
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KARL J DREHER, Director Published August 4 and 11, 2005



State of Idaho

DEPARTMENT OF WATER RESOURCES

NORTHERN REGION, Suite No. 210 • 1910 Northwest Blvd. • Coeur d'Alene, Idaho 83814-2615
(208) 769-1450

DIRK KEMPTHORNE
GOVERNOR

KARL J. DREHER
DIRECTOR

July 27, 2005

PLEASE FAX A PROOF BEFORE PUBLICATION

Thanks, Dianne

SHERI JONES
LEGAL NOTICE DEPARTMENT
BONNER COUNTY DAILY BEE
PO BOX 159
SANDPOINT ID 83864

RE: Application for Permit No. 96-9240, 96-9241, 96-9242 and 96-9243

Dear Sheri:

Enclosed you will find a legal notice which we wish to have published in your newspaper on the dates indicated, August 4 and 11, 2005, (once a week for two consecutive weekly issues). If you cannot publish the notice on the proposed dates, please contact us immediately.

An affidavit of publication must be submitted to the Department along with the publication bill. Please send the affidavit and bill to this office before 08/22/2005. Your cooperation is GREATLY appreciated. It's always a pleasure to work with you.

Sincerely

Dianne

Dianne Ball
Administrative Assistant

Ball, Dianne

From: Ball, Dianne
Sent: Wednesday, July 27, 2005 3:41 PM
To: Legal Notices-Bonner Co Daily Bee (E-mail)
Subject: Legal Notice for publication on August 4 and 11, 2005 - WRs 96-9240,41,42,43

Good afternoon, Sheri,

I am attaching a cover letter requesting publication of a legal notice on August 4 and 11, 2005. Also attached is the legal notice.

If you have ANY questions, please call me at 208-769-1450.

PLEASE FAX A PROOF COPY BEFORE PUBLICATION.

As always, it is a pleasure to work with you, and have a wonderful evening. Stay cool if you can!

Dianne

*Dianne Ball
Administrative Assistant
Idaho Dept of Water Resources
1910 Northwest Blvd., Suite 210
Coeur d'Alene, ID 83814
Phone (208)769-1450 FAX (208)769-1454*



CoverLetter



LegalNotice

7-27-05 BCDB e-ma 7-27-05 BCDB e-ma.



State of Idaho
DEPARTMENT OF WATER RESOURCES

NORTHERN REGION, Suite No. 210 • 1910 Northwest Blvd. • Coeur d'Alene, Idaho 83814-2615
(208) 769-1450

DIRK KEMPTHORNE
GOVERNOR

KARL J. DREHER
DIRECTOR

July 27, 2005

JIM CARROLL
1847 GARFIELD BAY CUTOFF RD
SAGLE ID 83860

RE: Applications for Permit Nos 96-9241 and 96-9242

Dear Applicant(s):

The Department of Water Resources acknowledges receipt of your water right applications. Please refer to the above referenced numbers in all future correspondence regarding this application.

A legal notice of the application has been prepared and is scheduled for publication in the Bonner County Daily Bee on August 4 and 11, 2005. Submittal of protests to this application will be allowed for a period ending ten days after the second publication.

If the application is protested you will be sent a copy of the protest(s). All protests must be resolved before the application can be considered for approval. If the protest(s) cannot be resolved voluntarily, the Department will conduct a conference and/or hearing on the matter.

If the applications are not protested, they will be forwarded to our State Office in Boise for final processing. The State Office will notify you of any action taken on the application and will send you a copy of the permit if approved. A typical processing time for an unprotested application is about eight to twelve weeks.

Please feel free to contact this office if you have any questions.

Sincerely,

Gregory J. Taylor
Senior Water Resource Agent

Enclosure(s) – Receipt No. N017042 for your records



State of Idaho
DEPARTMENT OF WATER RESOURCES

NORTHERN REGION, Suite No. 210 • 1910 Northwest Blvd. • Coeur d'Alene, Idaho 83814-2615
(208) 769-1450

DIRK KEMPTHORNE
GOVERNOR

KARL J. DREHER
DIRECTOR

July 21, 2005

MARY TERRA-BERNS
IDAHO DEPARTMENT OF FISH AND GAME
2750 KATHLEEN AVE.
COEUR D'ALENE, ID 83815

FAXED TO MARY 7/21/05

12 pages total

Re: Water Permit Application No. 96-9241 AND 96-9242

Dear Mary:

The Department of Water Resources is seeking written comment and/or recommendations from your agency regarding the above referenced water right application. A copy of the application follows for your reference.

This office can publish notice of the application as soon as the initial review is completed; therefore, your prompt response to this request is appreciated. If your agency desires to formally protest the approval of this application, you may do so after the notice is published by filing a written protest along with a \$25.00 filing fee within 10 days after final publication.

* We are sending this to you for your comments, and would appreciate receiving your comments by no later than **August 12, 2005**. If we do not hear from you by that date, we will assume that no comment from you means you have no objection to, concerns about, or conditions pertaining to the issuance of this permit.

You may send comments by regular mail to the address above, by FAX to 769-1454, or by e-mail to Dianne.Ball@idwr.idaho.gov.

Please contact this office if you have any questions regarding the application.

Sincerely,

Dianne

Dianne Ball
Administrative Assistant

(PS. Same map for both)



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
WALLA WALLA DISTRICT, CORPS OF ENGINEERS
COEUR D'ALENE REGULATORY OFFICE
IDAHO PANHANDLE NATIONAL FOREST BUILDING
3815 SCHREIBER WAY
COEUR D'ALENE ID 83815-8363

JUL 12 2005
IDAHO FISH & GAME

July 1, 2005

Regulatory Division

SUBJECT: NWW No. 051600079

Mr. Jim Carrol
1847 Garfield Bay Cut Off Rd.
Sagle, Idaho 83860

Dear Mr. Carrol:

Your proposed discharge of 3,000 cubic yards of native material in an unnamed tributary of Pend Oreille Lake, including adjacent wetlands, to create open water ponds and improve wetland habitat is authorized under the terms and conditions of Department of the Army Nationwide Permit (NWP) 27 (33 CFR 330, Appendix A). This authorization requires your project to be constructed as shown on the enclosed drawings and in compliance with the terms and conditions of the enclosed nationwide permit and the special conditions below. Your project is located in Sec. 22, T.56N., R.1W., B.M., Bonner County, Idaho.

- a. Work shall be done in the dry or lowest water conditions of summer and fall to minimize sedimentation.
- b. Silt curtains and other appropriate erosion controls shall be used as necessary to prevent the contribution of sediment down slope from the areas disturbed by the project. Silt curtains shall be maintained in place until exposed soils are vegetated and stable.

Please carefully review these conditions. If you cannot meet these conditions, this NWP verification is not valid. If you change the project description in your permit application, this NWP may not be valid and you should contact us before starting work. We have enclosed a Compliance Certification for you to sign and return when you have completed your project.

This verification is valid for 2 years from the date of this letter. If you start or are under contract to start this activity before this date, you will have an additional 12 months to complete the activity under the present terms and conditions of this NWP.

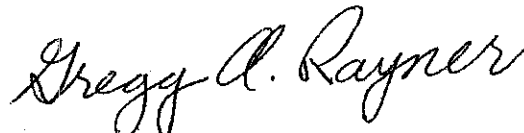
This authorization applies only to Department of the Army permits administered by the Corps of Engineers. Your project may also require permits from other Federal, state, and local agencies.

We have enclosed our approved jurisdictional determination for your project. This determination identifies waters of the United States on your project site that are subject to jurisdiction under Section 404 of the Clean Water Act. This jurisdictional determination is valid for a period of 5 years from the date of this letter unless new information warrants revision of the determination before the expiration date. We are enclosing an appeals form, which explains the options you have if you do not agree with this approved jurisdictional determination. If you decide to appeal this determination, you need to send the appeals form to the Division Engineer, Northwestern Division, so he receives it within 60 days of this letter. If you have new information you want us to consider, you may send it to the Regulatory Division, Walla Walla District, at the letterhead address before you file the appeal.

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. If you have Internet access and are interested in letting us know how we are doing, you can complete an electronic version of our Customer Service Survey form on our web site at: <http://per2.nwp.usace.army.mil/survey.html> which will be automatically submitted to us. Alternatively, you may call and request a paper copy of the survey so you may complete and return to us by mail or fax.

If you have any questions concerning this authorization or Corps jurisdiction, please contact me at 208-765-7256. A copy of this letter is being sent to the Idaho Department of Fish & Game, 2750 Kathleen Ave, Coeur d'Alene, ID 83814.

Sincerely,



Gregg A. Rayner
Regulatory Project Manager

Enclosures: Drawings, nationwide permit conditions, compliance certification, approved jurisdictional determination, appeals form



IDAHO FISH & GAME

PANHANDLE REGION
2750 Kathleen Avenue
Coeur d'Alene, Idaho 83815

Dirk Kempthorne / Governor
Steven M. Huffaker / Director

Mr. Gregg Rayner
Regulatory Project Manager
U.S. Army Corps of Engineers
3815 Schreiber Way
Coeur d'Alene, ID 83815

23 June 2005

Dear Mr. Rayner:

Attached please find the *Joint Application for Permits* to enhance wetlands and improve wildlife habitat on private property owned by Mr. Jim Carroll in southern Bonner County. The project is a joint effort of the Natural Resources Conservation Service WHIP program, the Idaho Department of Fish and Game HIP program and the private land owner.

Wetland #1 is currently an approximately 1-acre degraded emergent wetland dominated by reed canary grass and subject to intermittent horse grazing. We propose to construct a small shallow water impoundment that will increase the total wetland area to two acres. The project will benefit wildlife by stabilizing and extending the hydric period, creating some new open water areas, maintaining or increasing the extent of shallow emergent areas, and eliminating grazing of the wetland.

Wetland #2 was historically created and maintained by beaver activity. Several years ago the beaver were illegally killed. Since that time the beaver dam has failed and beavers have not re-colonized the basin. We propose to replace the now defunct beaver dam with an earth-filled dam and water control structure. The project will re-flood and slightly increase the extent of the basin to its historical condition including restoration of emergent, shrub-scrub, and forested wetlands in their historical proportions. The project will benefit wildlife by restoring a diversity of permanent open and shallow water habitats that were lost when the beaver dam failed.

Mike Doherty of your office visited the project site last year to discuss our plans for the site and informally concurred with the direction we were proposing. Attached is the formal application to obtain the required permits to proceed with the project. Please feel free to contact me at 769-1414 if you have any questions. Thank you for your assistance.

Sincerely,

David J. Leptich
Regional Wildlife Habitat Biologist

JOINT APPLICATION FOR PERMITS
U.S. ARMY CORPS OF ENGINEERS
IDAHO DEPARTMENT OF WATER RESOURCES
IDAHO DEPARTMENT OF LANDS

**DO NOT START WORK UNTIL YOU
RECEIVE PERMITS FROM BOTH THE
CORPS AND THE STATE.**

This application may be used to apply for both a Department of the Army permit from the U.S. Army Corps of Engineers (Corps) and for State of Idaho permits. Department of the Army permits are required by Section 10 of the Rivers and Harbors Act of 1899 for any structures or work in or affecting navigable waters of the United States and by Section 404 of the Clean Water Act for discharges of dredged or fill material into waters of the United States, including their adjacent wetlands. State permits are required under the State of Idaho, Stream Channel Protection Act (Title 42, Chapter 38, Idaho Code) and the Idaho Lake Protection Act, Section 58-142 et. seq., Idaho Code. **Routine Uses:** Information provided on this form will be used in evaluating the application. Disclosure of requested information is voluntary. If information is not provided, however, the permit application cannot be processed nor can permits be issued. Applicants should send this completed application, along with one set of good reproducible drawings showing the location and character of the proposed project, to both the Corps of Engineers and the State of Idaho. **NOTE: DRAWINGS NO LARGER THAN 8-1/2 X 11 INCHES IN SIZE.** The Applicant Information pamphlet provides instructions and a checklist for completing the drawings.

1. Corps of Engineers # _____ Date Received _____	2a. Department of Water Resources # _____ Date Received _____ Fee Rec'd By: _____ Receipt # _____	2b. Department of Lands # _____ Date Received _____ Fee Rec'd By: _____ Receipt # _____
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PLEASE TYPE OR PRINT

3. Applicant <u>JIM CARROL</u>	4. Authorized Agent <u>DAVID LEPTICH</u>
Mailing Address <u>1847 GARFIELD BAY CUTOFF RD.</u>	Mailing Address <u>IDAHO DEPT. OF FISH + GAME</u>
<u>SAGLE ID 83860</u>	<u>2750 KATHLEEN AVE. COA, ID 83</u>
Area _____ Area _____ Work Phone () _____ Home (208) <u>263-6002</u>	Area _____ Area _____ Work Phone (208) <u>769-1414</u> Home () _____
Fax Number _____	Fax Number <u>208-769-1418</u>
Email Address _____	Email Address <u>dleptich@idfg.idaho.gov</u>
5. Location where proposed activity exists or will occur.	Tax Assessor's Description _____
Waterway <u>UNNAMED</u>	
<u>1/3 mile N.W. FROM GARFIELD ID</u>	
Distance/Direction from nearest city or town County/State <u>83860 SAGLE / BONNER CO.</u>	1/4 1/4 Section <u>22</u> Township <u>56N</u> Range <u>1W</u>
Zip Code _____ Local jurisdiction (city or county) _____	UTM Coordinate Grid _____ Zone _____ Northing _____ Easting _____
Directions to the site <u>FROM TOWN OF GARFIELD PROLOGEN ≈ 1/3 MILES N.W. ON</u>	
6. Describe Project (Work below the ordinary high water mark or in wetlands). <u>GARFIELD BAY CUTOFF RD + TAKE DRIVEWAY ON</u>	
<u>#1 CREATE PERMANENT OPEN WATER POND/WETLAND FROM SEASONAL WETLAND</u>	
<u>BY SHALLOW WATER IMPOUNDMENT WITH STATIC ELEVATION PRINCIPAL SPILL</u>	
<u>#2 RESTORE HISTORICAL BEAVER POND THROUGH A PLACEMENT OF</u>	
<u>EARTHEN DAM AND WATER CONTROL STRUCTURE</u>	
Construction methods and equipment: <u>EARTHEN EMBANKMENT DAMS SEE ATTACHED</u>	
<u>DRAWINGS</u>	

Length of project along the stream or extension into lake or reservoir: #1 40' X 200' #2 40' X 200'

COMPLETE THE FOLLOWING FOR DISCHARGES OF DREDGED OR FILL MATERIAL.

Volume dredged or fill material to be placed waterward of ordinary high water mark (BOTH TEMPORARY AND PERMANENT)? _____
(cubic yards)

Will fill be placed in wetlands? YES If yes, area: 0.3 (acres). Type of fill material: NATIVE 3000
(i.e. sand, rock, clay, concrete, etc.)

Will dredging be required waterward of the ordinary high water mark or in wetlands? YES If yes, volume: 3000 (cubic yards)

Type of dredged material NATIVE

Disposal site for dredged material: DAM FILL Method of dredging: BULLDOZER / EXCAVATOR

Method to control turbidity and sedimentation: DRY SEASON CONSTRUCTION

Is project located in a mapped floodway? NO If yes, complete the Engineering "No-Rise" certification form.

7. Purpose and intended use: Commercial Public Private Other Describe _____
Reason for project WILDLIFE / WETLANDS HABITAT IMPROVEMENT
8. Proposed Starting Date 8/05 Estimated Duration 90 DAYS
9. List portions of the project that are complete with month and year of completion NAP
Label this work on your drawings.

10. Names, addresses, and telephone numbers of adjoining property owners, lessees, etc., whose property also adjoins the waterway.

DOUG + JANET HUME
P.O. BOX 2301
HAYDEN, LK ID
83835

SEE ATTACHED
E-MAIL

☐ Check here if the alteration is located on endowment lands administered by the Idaho Department of Lands

11. LEGAL OWNER IF OTHER THAN APPLICANT

Name NAP Phone Work () _____
Mailing Address _____ Home () _____
City, State, Zip Code _____

12. List applications, approvals, or certifications from other Federal, state, or local agencies for work described in this application.

Issuing Agency	Type of Approval	Identification No.	Date of Application	Date of Approval
<u>NAP</u>				

13. Has any agency denied approval for the proposed activity? Yes No (If "Yes" explain)

14. Other comments/information:

PROPOSED PROJECT IS A 3-WAY PARTNERSHIP EFFORT OF
THE IDAHO DEPT OF FISH + GAME, THE NATURAL RESOURCES CONSERVATION
SERVICE AND THE PRIVATE LANDOWNER. WE ARE CONSIDERING
OPTIONAL "WHISTLE TUBE" TYPE PRIMARY SPILLWAY TO INCREASE
WATER LEVEL CONTROL

15. Application is hereby made for a permit or permits to authorize the activities described herein. I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief, such information is true, complete, and accurate. I further certify that I possess the authority to undertake the proposed activities. I hereby grant to the agencies to which this application is made, the right to come upon the above-described location to inspect the proposed or completed work.

James E. Carroll JAMES E. CARROLL 6/15/05
Signature of Applicant (ORIGINAL SIGNATURE REQUIRED) Printed Name Date

16. If you wish to designate an authorized agent, complete item 4 and the following information.

I hereby designate DAVE LEPTICH to act as my agent in matters related to this permit application. I understand that if a Federal permit is issued, I must sign the permit.

Dave Leptich 6-15-05 James E. Carroll 6/15/05
Original Signature of Authorized Agent Date Original Signature of Applicant Date

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly falsifies, conceals, or covers up by any trick, scheme, or device 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 statement or entry, shall be fined not more than \$10,000 or imprisoned not more than 5 years or both.

DO NOT SEND CORPS PROCESSING FEE WITH APPLICATION.

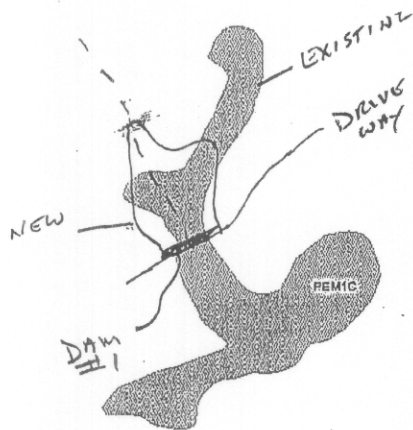
SEND IDAHO DEPARTMENT OF WATER RESOURCES OR IDAHO DEPARTMENT OF LANDS FILING FEE WITH APPLICATION



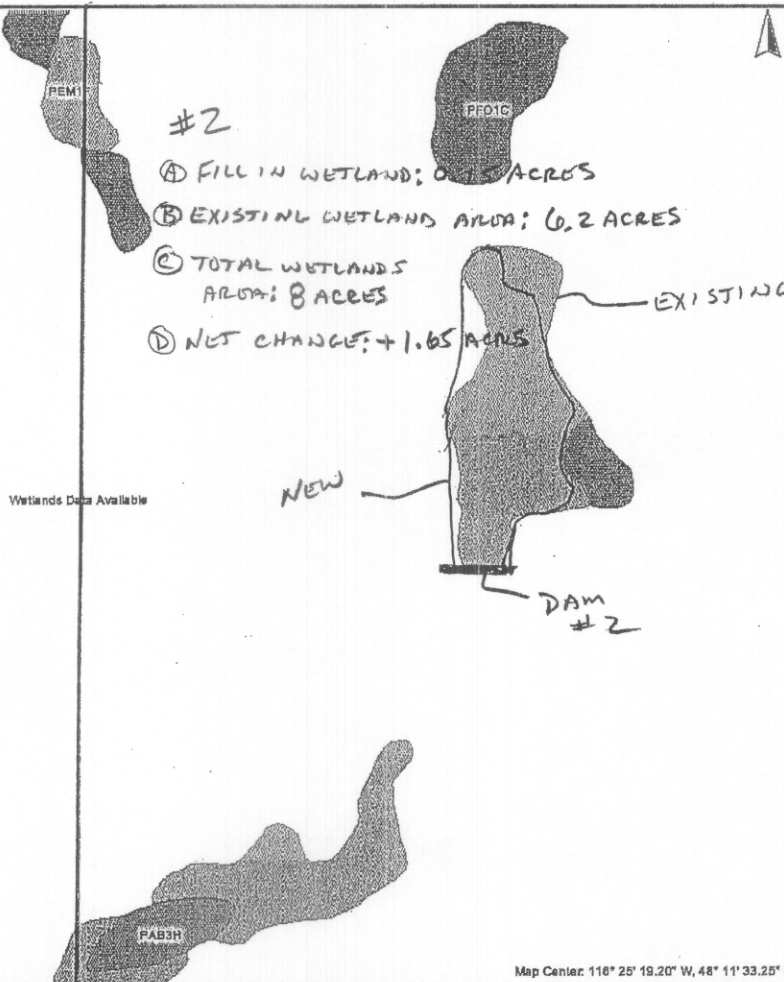
U.S. Fish & Wildlife Service

Jim Carrol Ponds

- #1
- Ⓐ FILL IN WETLAND: 0.15 ACRES
 - Ⓑ EXISTING WETLAND AREA: 1 ACRES
 - Ⓒ TOTAL WETLANDS AREA: 2 ACRES
 - Ⓓ NET CHANGE: +0.85 ACRES



- #2
- Ⓐ FILL IN WETLAND: 0.15 ACRES
 - Ⓑ EXISTING WETLAND AREA: 6.2 ACRES
 - Ⓒ TOTAL WETLANDS AREA: 8 ACRES
 - Ⓓ NET CHANGE: +1.65 ACRES



- CONUS Cities
- CONUS States 100K
- Lower 48 Wetland Polygons
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine
- Lower 48 Available Wetland Data
- No Wetlands Data Available
- Wetlands Data

PROJECT TOTALS

- Ⓐ FILL IN WETLANDS: 0.3 ACRES
- Ⓑ EXISTING WETLAND ACRES: 7.2 ACRES
- Ⓒ TOTAL WETLAND ACRES: 10 ACRES
- Ⓓ NET CHANGE: +2.5 ACRES

This map is a user generated static output from an Internet mapping site and is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION.

Map Center: 116° 25' 19.20" W, 48° 11' 33.25" N



Map Scale
Unavailable (unprojected data)

Leptich,David

From: Jim Carroll [idaz7@cox.net]
Sent: Tuesday, June 14, 2005 9:05 PM
To: Leptich,David
Subject: Fw: Garfield Bay Pond Restoration

—— Original Message ——

From: Jan Hume
To: Jim Carroll
Sent: Thursday, May 05, 2005 6:29 AM
Subject: Re: Garfield Bay Pond Restoration

We have reviewed the Garfield Bay Pond Restoration and received a letter from Dave Leptich stating that our rights as a property owner will not be reduced. We also understand that we will have no financial responsibility. The pond should be a plus for you, the wildlife, and us. This letter gives you and those involved in the project our permission to proceed.

We will be in Colorado for the summer but would enjoy meeting you one of these days.

Doug and Janet Hume

——Original Message——

From: Jim Carroll <idaz7@cox.net>
To: Jan Hume <djhume@imbris.com>
Cc: Leptich,David <dleptich@idfg.idaho.gov>
Date: Friday, March 18, 2005 9:19 PM
Subject: Re: Garfield Bay Pond Restoration

Dear Doug and Janet,

Thank you so much for responding to our mail. As the point person for the agencies helping, David is well informed in all areas. We will be up there for a few days in May [15th- 18th] for our daughter's graduation from U of I in Moscow and then from about June 1st for the summer. Hopefully, we can get together to discuss any questions you may have. Of course please do not hesitate to ask anything in the meantime.

Sincerely,

Jim and Bev

—— Original Message ——

From: Jan Hume
To: idaz7@cox.net
Sent: Friday, March 18, 2005 5:54 PM
Subject: Garfield Bay Pond Restoration

Dear Jim and Beverly,

We received your letter. It is nice to meet our neighbors via the mail.

While I was on the phone today with David Leptich, your attorney in Sandpoint called. I told him the pond restoration appeared to be of benefit to both of us. However, we want to view the area before a letter is sent to you.

6/15/2005

We have owned the property for 30+ years and have had trees killed by a large lake made by the beavers. That property now belongs to my ex-husband and is across the main road. David said the beavers could return after the pond restoration was complete. If they do return, we are at their mercy and that is my concern. We will be out of town until April 12. Sometime after that date David will go with us to look at the wetland site, and then we will be in touch with you.

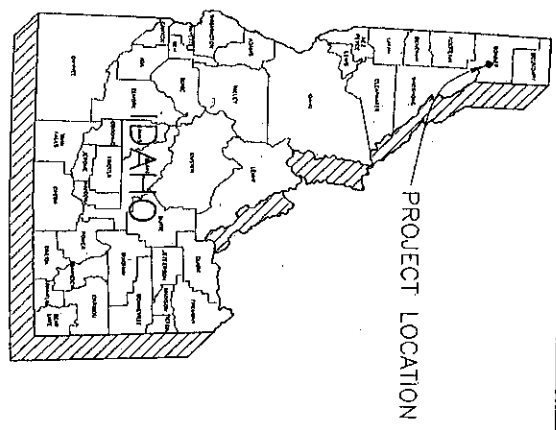
Sincerely,

Doug and Janet Hume

6/15/2005

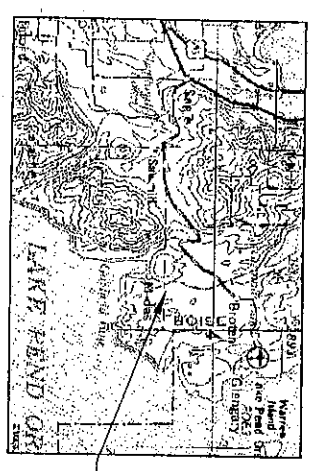


Contractor Copy



JIM CARROL - WHIP

USDA - NRCS
1500 HIGHWAY 2, ROOM 306
SANDPOINT, IDAHO 83864-1794



PROJECT LOCATION

USGS TOPOGRAPHIC QUADRANGLE
TALACHE, IDAHO
NTS, CONTOUR INTERVAL 40 Feet
SEC. 22, T.56N., R.1W.

REVIEW AND ACCEPTANCE

The drawings and construction specifications for this project have been reviewed with me and are accepted by me. I acknowledge that any modification of the plans without approval by NRCS may result in disapproval of this installation. I hereby acknowledge receipt of the enclosed plans and specifications.

Owner/Sponsor

Date

INDEX OF DRAWINGS

SHEET NO.	TITLE
1	LOCATION MAP / ACCEPTANCE
2	SITE SPECIFIC MAP/PLAN
3	DAM DETAILS

LOCATION OF UTILITIES

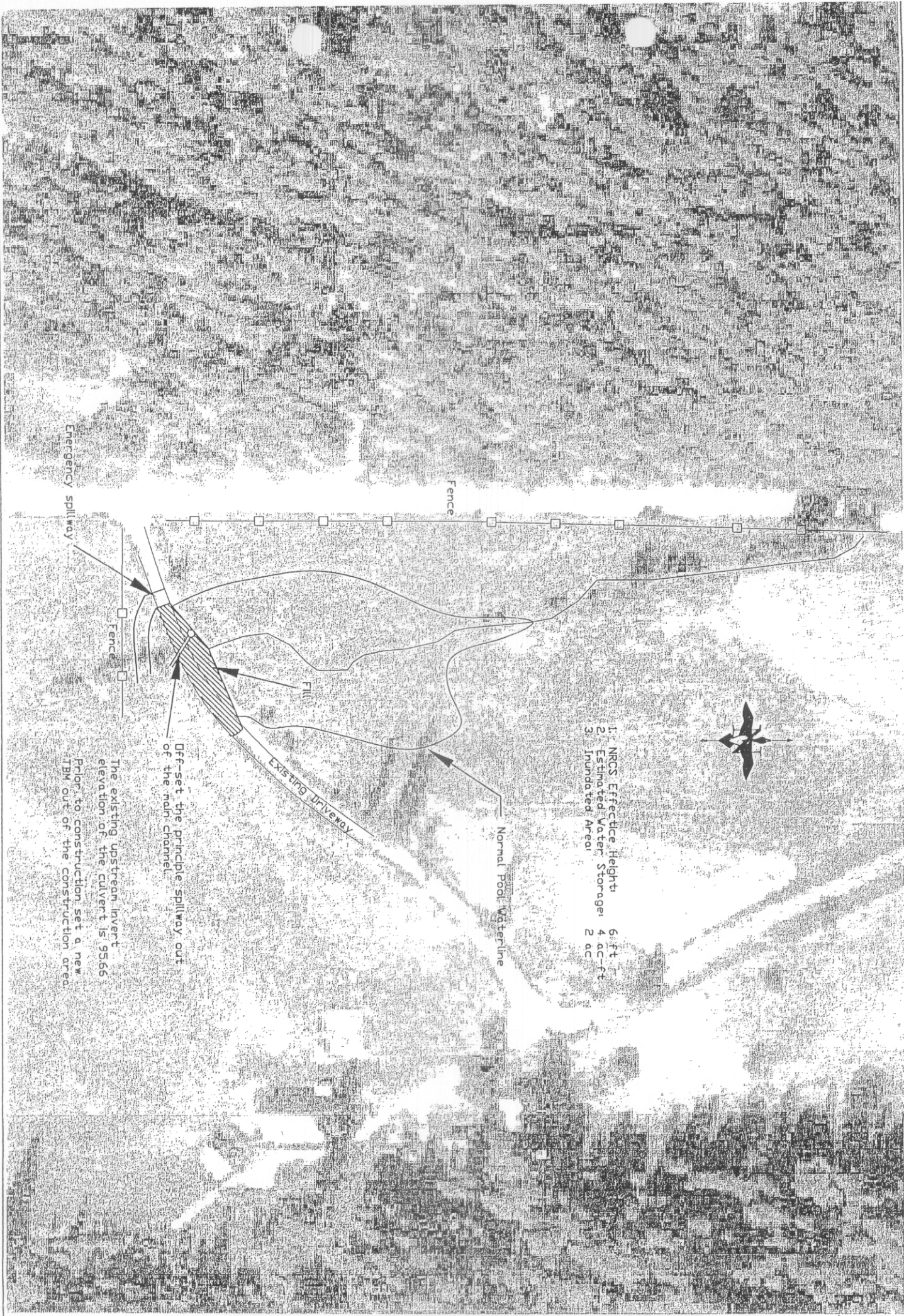
No representation is made as to the existence or non-existence of any utilities, public or private, except as shown on the drawings. Where buried utilities are shown on the drawings, the location and depth is approximate. The exact location and depth must be determined by the utility company prior to any excavation in the vicinity of the utility.

Designed	MDURHAM	DATE	3/05
Drawn	MDURHAM		3/05
Checked			
Approved			
Title			

JIM CARROL - WHIP POND
BONNER COUNTY
JOB CLASS II



File Name	Carroll.dwg
Drawing No.	1
SHEET	NO 1 OF 3



 Natural Resources Conservation Service	JIM CARROL - WHIP POND		DATE
	BONNER COUNTY		3/05
	JOB CLASS II		
	Designed	MDurham	3/05
	Drawn	MDurham	3/05
	Checked		
	Approved		
	Title		

File Name

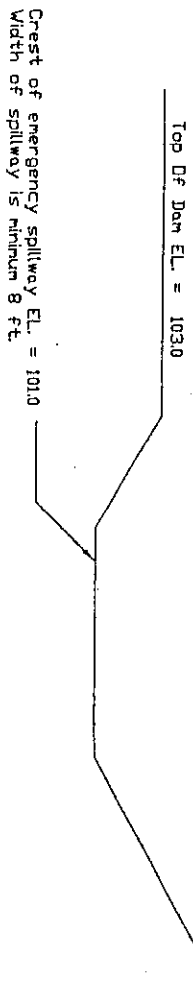
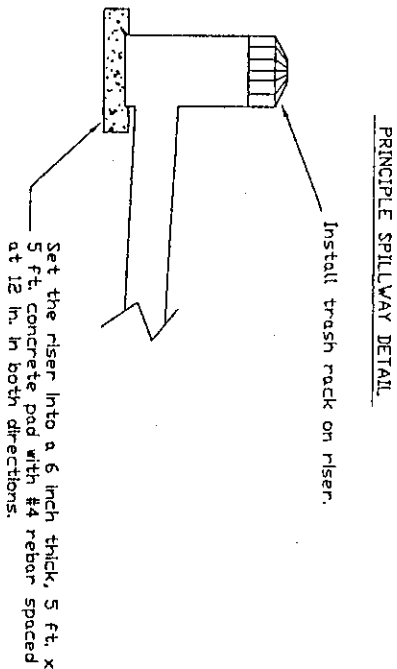
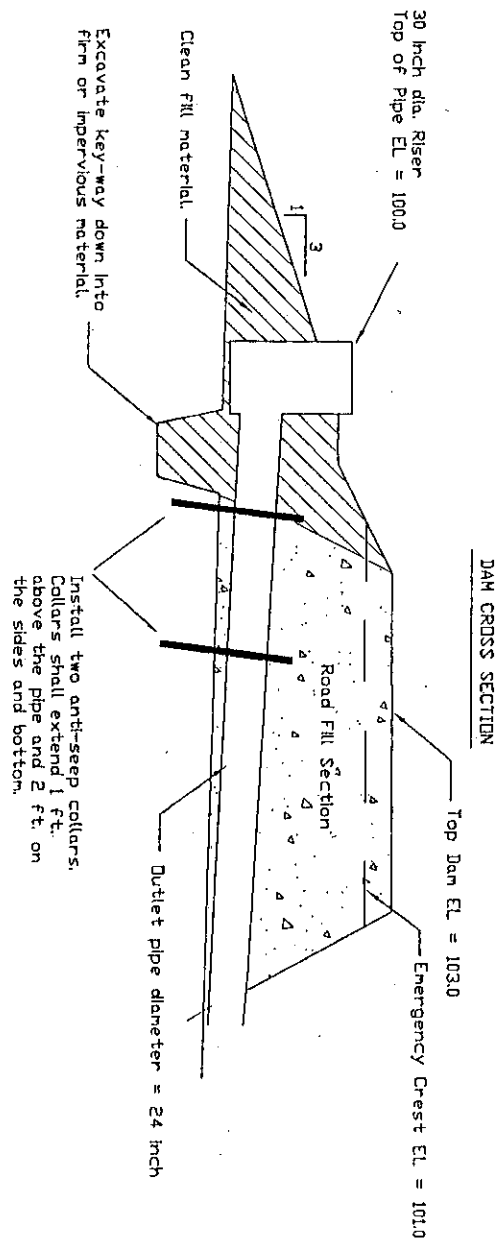
Carroll.dwg

Drawing No.

2

SHEET

NO 2 of 3



Designed	MDurham	DATE	3/05
Drawn	MDurham		3/05
Checked			
Approved			
Title			

JIM CARROL - WHIP POND
BONNER COUNTY
JOB CLASS II



File Name
Carroll.dwg
Drawing No. 3

SHEET
NO 3 OF 3

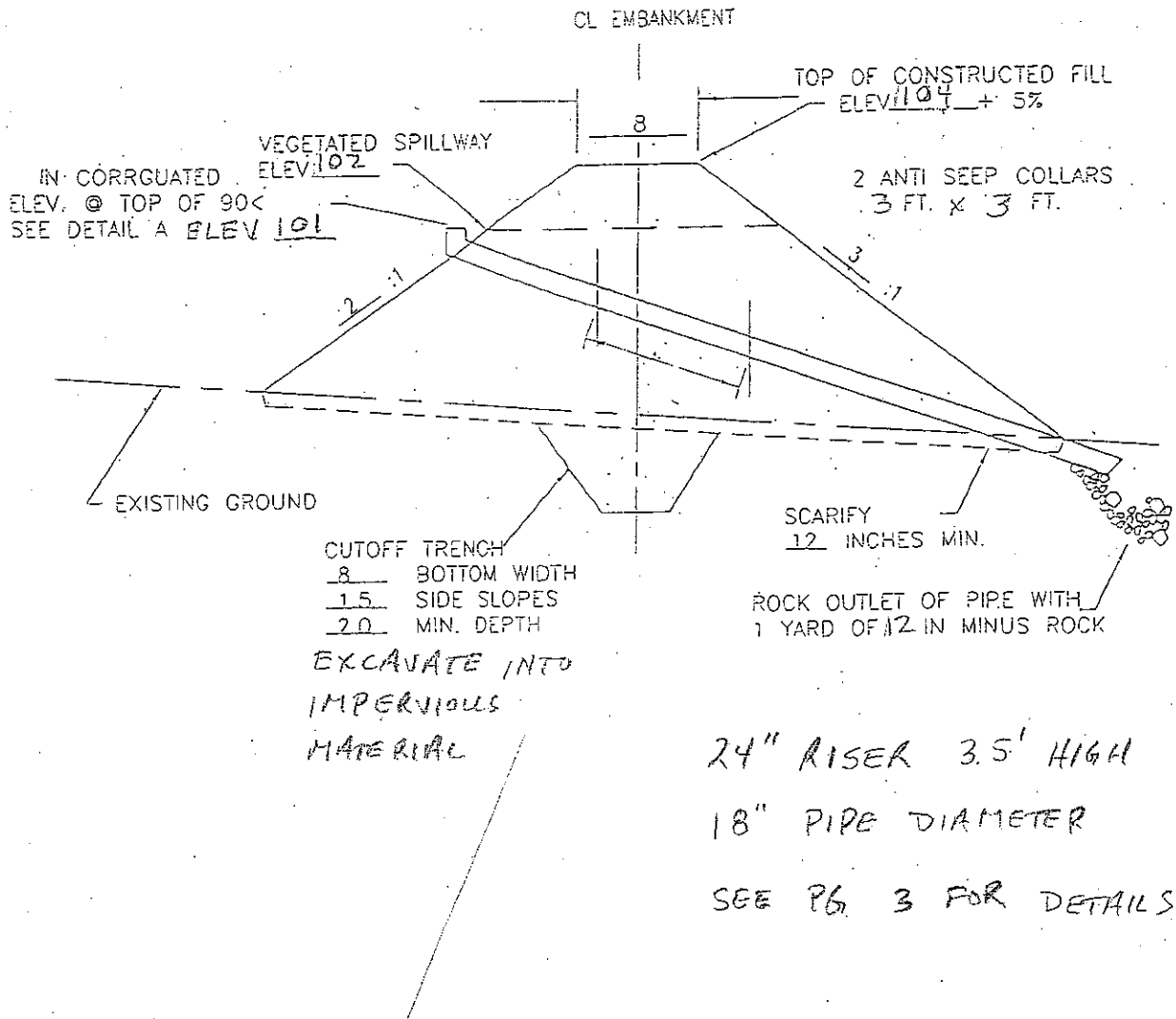


Natural Resources Conservation Service
United States Department of Agriculture

Designed <u>M. DUVAL</u>	Date <u>4/5/05</u>	File Name <u>CARROLL</u>
Drawn _____		Drawing Name <u>Bourne Pond</u>
Checked _____		<u>00/00/00 00:00</u>
Approved _____		

BEAVER
POND

CROSS SECTION OF EMBANKMENT



NOTES:

- (1) This standard drawing requires supporting technical documentation prior to use and must be adopted to the specific site.
 - (2) The upper 6-inches of soil within the embankment and vegetated spillway limits shall be stripped and stockpiled for reuse.
 - (3) Disturbed areas and slopes will be seeded to grass upon completion.
 - (4) The exit channel of the vegetated spillway shall extend a minimum of 10 feet beyond the downstream toe of the embankment slope.
 - (5) The constructed height of the embankment shall be at least 5% greater than the designed height.
 - (6) Anti-Seep Collars shall have a watertight connection to pipe and collar material shall be compatible with pipe materials.
- Drawing not to scale.

The diagram illustrates a road cross-section with three main components: an inlet channel, a level section, and an outlet channel. The inlet channel on the left has a 2% slope. The level section in the middle is 10 feet wide. The outlet channel on the right has a 2% slope. The top of the dike is indicated by a line. Elevation 1 is marked on the left side of the inlet channel.

Diagram illustrating the cross-section of an embankment with the following dimensions and labels:

- EXISTING GROUND LINE
- TOP OF EMBANKMENT
- 1.5:1 (Slope ratio on the left)
- 1.7 (Vertical height of the embankment)
- 1.5:1 (Slope ratio on the right)
- 8 (Width of the base)
- STRIPPING LINE 12 INCHES MIN.

NOTES:

- (1) This standard drawing requires supporting technical documentation prior to use and must be adapted to the specific site.
- (2) Disturbed areas and slopes will be seeded to grass upon completion.
- (3) The exit channel of the vegetated spillway shall extend a minimum of 10 feet beyond the downstream toe of the embankment slope.

Drawing not to scale.



Designed <u>M. Duval</u> ^{Date} <u>4/5/15</u>	File Name <u>CAROL</u>
Drawn _____	Drawing Name <u>DE ABC</u>
Checked _____	<u>00/00/00 00:00</u>
Approved _____	Sheet <u>6</u> of <u>16</u>

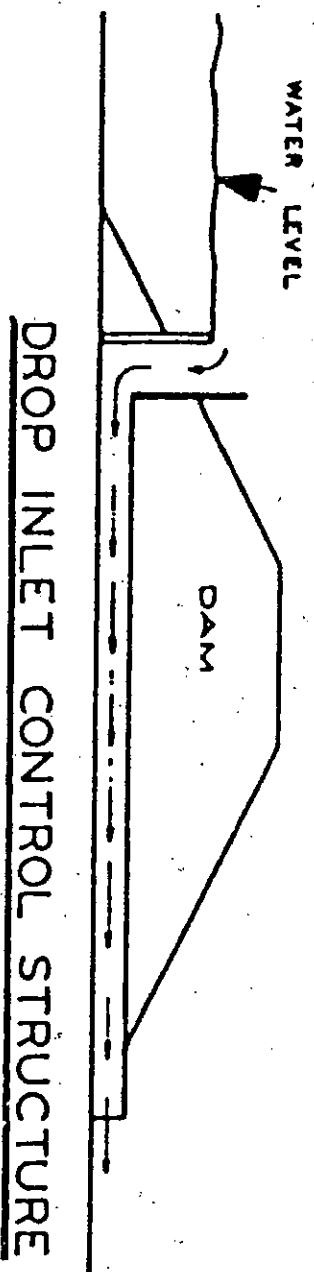
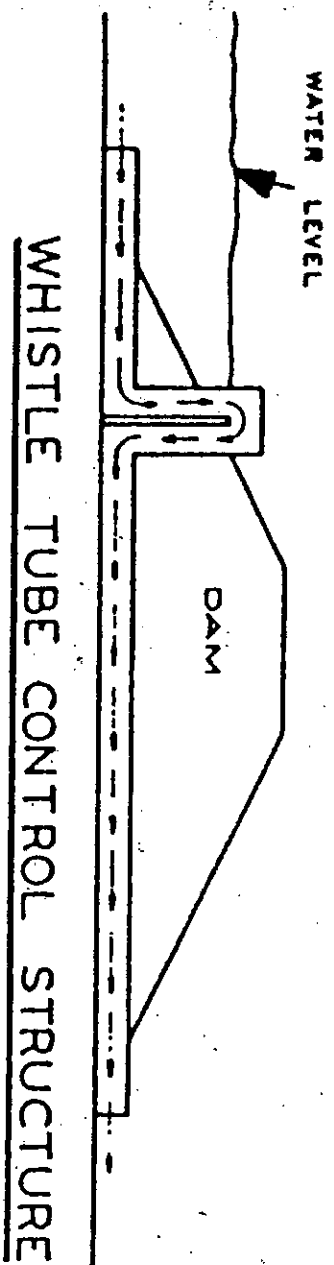


Figure 2.13 General design of water-level control structures (Anderson 1985).

U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE
IDAHO

OPERATION AND MAINTENANCE WORKSHEET
POND
CODE 378

Landowner/Operator Jim Carrol
Job Location Sec. 22, T. 56 N., R. 1 W.
County Bonner SWCD Bonner Farm/Tract No. N/A
Referral No. WHIP Prepared By MDurham Date 3/30/05

OPERATION AND MAINTENANCE ITEMS

A properly operated and maintained Pond is an asset to your farm. This structure was designed and installed to provide stored water for beneficial use. The estimated life span of this installation is at least 15 years. The life of this installation can be assured and usually increased by developing and carrying out a good operation and maintenance program.

This practice will require you to perform periodic operation to maintain satisfactory performance. Here are some recommendations to help you develop a good operation and maintenance program:

- ⇒ Periodically inspect the spillways and control gates for proper functioning for their ability to maintain the water level to design elevations. Immediately remove any blockage or obstructions in spillways.
- ⇒ Maintain vigorous growth of vegetative coverings. This includes reseeding, fertilization, and application of herbicides when necessary. Fertilize the established stand with at least 200 lbs of 21-0-0 per acre or equivalent annually or as needed to maintain a uniform vigorous stand. Periodic mowing may also be needed to control height.
- ⇒ If fences are installed, they shall be maintained to prevent unauthorized or livestock entry.
- ⇒ Immediately repair any vandalism, vehicular, or livestock damage to any earthfills, spillways, outlets or other appurtenance.
- ⇒ Removal of debris that may accumulate at the Pond and immediately upstream or downstream from the basin.
- ⇒ Make sure all structure drains are functional and soil is not being transported through the drainage system. The screens and/or rodent guards shall also be kept in place.
- ⇒ Eradicate or otherwise remove all rodents or burrowing animals and repair any damage caused by their activity.

NATURAL RESOURCES CONSERVATION SERVICE
Idaho
CONSTRUCTION SPECIFICATIONS
FOR
POND (Embankment)

Jim Carrol
(Owner/Operator)

WHIP Pond
(Project Title)

GENERAL

Installation shall be in accordance with an approved design and plan. Details of construction shown on the drawings but not included herein are considered as a part of this specification. Construction activities shall be in accordance with applicable OSHA regulations.

SITE PREPARATION

Clearing and Stripping. Area to be occupied by the embankment and borrow areas must be cleared of all trees, brush, logs, and sod. The ponded area shall be cleared as noted on the drawings.

Embankment Foundation. All channel banks and sharp breaks shall be sloped to no steeper than 1 horizontal to 1 vertical. All topsoil containing excessive amounts of organic matter shall be removed. Loose earth shall not be left on the foundation area to a depth in excess of 6 inches above undisturbed foundation material. The surface of the foundation area shall be thoroughly scarified before placement of the embankment material.

EXCAVATION

Cutoff Trench. The cutoff trench shall be excavated to the lines and grades shown on the drawings or as staked in the field. The trench shall be kept free of standing water during backfill operations.

Spillway. The completed spillway excavation shall conform to the grades, bottom width and side slopes shown on the drawings.

Outlet Conduit. Trench excavation for installation of an outlet conduit shall be made in original ground or in compacted fill provided the bottom of the trench is at or near undisturbed foundation.

Excess Material. Excavated material excess to construction requirements may be hauled from the site or placed and shaped behind a berm width equal to the pond depth, but not less than 12 feet from the edge of the excavation.

COMPACTED EARTHFILL AND BACKFILL

Fill Material. Fill materials shall be obtained from required excavations for constructing the work and approved borrow areas. The selection, blending, routing, and disposition of materials within the embankment shall be subject to the approval of the technician. Fill materials shall contain no frozen soil, sod, brush, roots, or other perishable or unsuitable material. Cobbles and rock fragments having a maximum dimension of more than six inches are unsuitable and shall be removed from the required fills.

Placement. The placing and spreading of the fill material shall start at the lowest point of the foundation. The fill shall be brought up in approximately horizontal layers parallel to the axis of the dam and of such thickness that the required compaction can be obtained with the equipment used. Fill placed around structures will be brought up at approximately uniform height on all sides of the structure.

Moisture. The moisture content of fill material shall be maintained within the limits required to prevent the adherence of the fill material to the treads/tracks of equipment and ensure the crushing and blending of the soil clods.

Generally when soil material is squeezed in the hand it will retain a ball shape, but there will not be free water on the surface. Where practicable the material shall be brought to the proper water content in the borrow pit before excavation. Supplemental water, when required, may be applied by sprinkling the materials on the fill. Uniform distribution of the moisture shall be obtained by discing, blading or other approved method prior to compaction.

COMPACTION METHODS

Compaction shall meet the requirements of the method designated and described below:

1. Sheepsfoot roller - The maximum layer thickness shall be 8 inches before compaction. The roller shall have staggered, uniformly spaced tamping feet and be equipped with suitable cleaners. The weight of the roller shall be not less than 2,500 pounds per foot of width. The maximum speed of the compaction equipment shall be 3 miles per hour. The entire surface of each layer placed shall receive six passes of this equipment to attain the necessary compaction. Adjustment in the number of passes may be necessary during construction.
2. Pneumatic tired equipment - The maximum layer thickness before compaction shall be six inches. A loaded scraper or wheel tractor maybe considered a pneumatic roller. The wheels of this equipment must pass over 95 percent of the surface of each lift before a new lift is placed.
3. Track laying equipment (Bulldozer) The maximum layer thickness compaction shall be 4 inches. The tracks of the equipment must pass over 95 percent of the surface of each lift before a new lift is placed.

Compliance with compaction requirements will be determined by observation of performance for methods 1, 2, and 3. Fill not meeting the specified requirements shall be reworked or removed and replaced with acceptable fill.

EQUIPMENT OPERATION

Heavy compaction equipment shall not be operated within 2 feet of any structure. Hand directed tampers or compactors shall be used on areas not accessible to heavy compaction equipment and within 2 feet of any structure. Fills compacted in this manner shall be placed in layers not greater than 4 inches in thickness before compaction and shall meet the same density requirements as for adjacent areas.

The passage of heavy equipment will not be allowed over any type of conduit until the compacted backfill has been placed a minimum of two feet over the top of the pipe.

Compaction of backfill adjacent to structures shall not be started for at least the following minimum time interval after placement of concrete:

Walls & Counterforts	10 days
Antiseep collars, conduits, and cantilever outlet bents	3 days

CONCRETE

Concrete work under these specifications shall be constructed to the dimensions, lines, and grades as shown on the drawings. The subgrade for concrete shall be prepared as shown on the drawings or as directed by the technician.

Concrete compressive strength shall be at least 4000 psi at 28 days. The mix shall be in accordance with ASTM C 94 and this specification. When requested by the Technician the supplier shall furnish design mix and cylinder break test data.

Cement shall be low alkali Type II Portland cement.

Coarse aggregate shall be maximum size of 1-1/2 inches per designations of ASTM C 33.

Air entrainment conforming to the requirements of ASTM C 260, shall be used. The air content shall be 5 to 7 percent.

Forms shall conform to the shapes, lines, and dimensions as shown on the drawings. They shall be braced and/or tied together so as to

maintain position and shape and; be sufficiently tight to prevent leakage of mortar. Forms shall be thoroughly oiled or wetted and cleaned of debris prior to placement of concrete. Forms shall not be removed without the approval of the Technician.

Reinforcing steel shall be deformed bars and be free from rust, oil, grease, paint or other deleterious matter. Items to be embedded in the concrete shall be positioned accurately and firmly anchored to prevent displacement during placement of concrete.

Placement. The concrete shall be deposited as closely as possible to its final position and shall be worked into the corners and angles of the forms and around all reinforcement and embedded items in a manner to prevent segregation of aggregates or excessive laitance. Consolidation of concrete may be accomplished by means of internal type mechanical vibrators, rodding, spading, or hand tamping.

Construction joints shall be provided as shown in the plans or as approved by the engineer. Joints shall be thoroughly cleaned and laitance removed before a new pour is made. Each joint shall be wetted immediately before the placing of new concrete.

Finishing. After the concrete has been consolidated, the unformed surfaces shall be given a wood float finish. Immediately after form removal, formed surfaces shall be cleaned of all defective concrete and effectively repaired. Snap ties shall be removed and the holes mortared.

Protection and Curing. Concrete shall be prevented from drying for a curing period of at least 7 days after it is placed. Exposed surfaces shall be kept continuously moist for the entire period. For formed surfaces, the protection may be accomplished by leaving the forms in place and keeping them wet for the entire curing period. Moisture shall be maintained by sprinkling, flooding, or fog spraying or by covering with continuously moistened canvas, cloth mats, straw, earth, or other approved material. In lieu of water curing, the concrete shall be cured by spraying with an approved

sealing compound. The sealing compounds shall be applied as soon as practicable after the concrete is finished. All surfaces shall be kept moist until the compound is applied.

Concreting- in Cold Weather. Before any concrete is placed, all ice, snow and frost shall be completely removed from all surfaces to be in contact with the new concrete and the temperature of these surfaces shall be raised to as close as may be practical to the temperature of the new concrete that is to be placed thereon. No concrete shall be placed on a frozen subgrade or on one that contains frozen materials. Concrete shall not be mixed or placed when daily minimum atmospheric temperature is less than 40 degrees F., unless facilities are provided to ensure the adequate protection of the concrete. Temperature of the concrete at the time of placing shall not be less than 50 degrees F. nor more than 90 degrees F. The temperature of all aggregates and mixing water shall be not more than 100 degrees F. when introduced into the mixer. The use of accelerators or antifreeze compounds will not be allowed.

CONDUITS

Conduits shall be of the type and size as shown on the drawings. Pipe shall be new. Any damage to protective coatings shall be repaired prior to backfilling. Repairs shall be in accordance with manufactures recommendations. Conduits shall be firmly and uniformly bedded throughout its length and shall be installed to the lines and grades shown on the drawings and/or staked in the field.

Cutoff collars or a filter diaphragm shall be installed at the locations, to the dimensions and of the materials as shown on the drawings. Metal cutoff collars, when specified, shall be of at least 12 gage or thicker metal, be galvanized or have a coating consisting of one coat of coal-tar primer followed by hot coat of coal-tar enamel and finished with Kraft paper or coat of water resistant whitewash. Plastic tape suitable for coating buried steel pipe may also be used. All welds shall be cleaned and coated as above.

FENCING

Posts may be galvanized steel or wood. Steel posts should be a minimum of 6.5 feet long and wood posts a minimum of 7.5 feet long. Wood posts shall be cedar, redwood, or other decay resistant wood or treated with Dinitrochlorophenol or creosote. Minimum top diameter for wood posts is 4 inches. All posts shall be firmly set into the ground, braced at all corners and turns, and spaced as shown on the drawings, but not to exceed 20 feet.

Wire. Barbed wire shall be a minimum of two strands of 12-1/2 gage, galvanized wire. Woven wire shall be galvanized, aluminum or plastic coated. Top and bottom wires shall be a minimum of 11 gage and intermediate line and stay wires shall be a minimum of 14-1/2 gage.

Hardware. Wire ties, clamps, staples, and related fence hardware shall have equivalent coating to the fencing being installed.

Pole or timber fence equivalent to standard barbed wire fence in usefulness and durability may be used as an alternate when authorized by the responsible technician.

SEEDING

Seed the embankment, borrow areas, spillway and other disturbed areas, and a minimum 12 foot border around the ponded area, unless suitable vegetation already exists. Seedbed preparation, seed mixture, fertilizer, mulch, and application rates shall be in accordance with the attached ADDITIONAL SPECIFICATION for "Seeding".

RIPRAP

Rock for riprap shall be angular, dense, sound, and free from cracks, seams, and other defects conducive to accelerated weathering. The rock shall be well graded so that the installed riprap will consist of a dense layer of interlocked rock.

Bedding material when specified shall consist of a sand-gravel mixture such as would be used in a concrete mix.

CLEAN-UP

Cleared material, sod, and unsuitable soil shall be removed from the construction site or otherwise disposed of so that runoff water will not carry it into the reservoir or spillway area. Waste earth material shall be smoothed and seeded.

CONSTRUCTION CHECKS

The Contractor shall provide timely notice and allow inspection by the Technician at the following times: 1) After clearing and excavation of the foundation area and cutoff trench for any embankment fill that is designed for water storage and prior to placement of any fill. 2) After installation of the outlet conduit, cutoff collars and/or drainage diaphragm and prior to placement of fill around the conduit. 3) At least once during the construction of the embankment fill.

ADDITIONAL SPECIFICATIONS