

March 23, 2005

James Joyner
Walla Walla District Corps of Engineers
Idaho Falls Regulatory Office
900 North Skyline Drive, Suite A
Idaho Falls, ID 83402

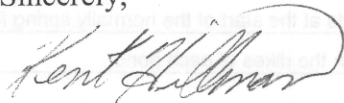
Dear Mr. Joyner

Enclosed is a permit request from property located one mile south of Driggs, ID on Teton Creek. This project will restore flow in the main Teton Creek channel by removing a plug of gravel and woody debris, while protecting existing riparian vegetation. Also gravel debris will be removed near the Rails to Trails bike path where the banks of the streambed have been altered. Along with the main channel, bioengineering techniques will be done on the small, south channel to protect eroding banks. The south channel is fed by three spring ponds that need restored by removing sediment and installing water control structures. All of the work will be fenced off from cattle and watering facilities installed on the property to ensure the highest protection.

This project is an NRCS approved project. A planning meeting for this project was conducted in the summer of 2004 with participation from Department of Environmental Quality, Soil Conservation Commission, Idaho Department of Fish and Game, Idaho Department of Water Resources, and Army Corps of Engineers.

Thank you for your time in considering our project permit request.

Sincerely,



Kent Hillman



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 lands. 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. **Route 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 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.

Corps of Engineers # _____	2a. Department of Water Resources # _____	2b. Department of Lands # _____	RECEIVED 28 March 2005 Regulatory Division IDAHO FALLS
Date Received _____	Date Received _____	Date Received _____	
Fee Rec'd By: _____	Receipt # _____	Fee Rec'd By: _____	Receipt # _____

PLEASE TYPE OR PRINT

a. Applicant <u>Elva Hillman LLP</u>	4. a. Authorized Agent <u>Kent Hillman</u>
b. Mailing Address <u>PO Box 81</u> <u>Driggs, ID 83422</u>	b. Mailing Address _____
c. Work Phone (208) <u>709-5415</u> Home (208) <u>354-2748</u>	c. Work Phone () _____ Home () _____
d. Fax Number _____	d. Fax Number _____
e. Email Address _____	e. Email Address _____

Location where proposed activity exists or will occur. _____

5. e. Tax Assessor's Description _____

a. Waterway <u>Teton Creek</u> <u>1 mile south of Driggs, ID</u>	NE1/4 NW1/4 <u>2</u> 4N <u>45E</u>
b. Distance/Direction from nearest city or town <u>83422 Teton County Idaho</u>	f. 1/4 1/4 Section Township Range
c. Zip Code <u>Local jurisdiction (city or county)</u>	g. UTM Coordinate Grid _____
	Zone Northing Easting

d. Directions to the site South 1 mile from Driggs on Hwy 33. Located on Teton Creek downstream from Rails to Trails bike path bridge.

a. Describe Project (Work below the ordinary high water mark or in wetlands). This project will restore flow in the main Teton Creek channel by removing a plug of gravel and woody debris, about 700 LF long, (site 11/12), existing riparian vegetation will be protected. A channel cross section, typical of between the two bridges, will be constructed following removing debris, where needed, included 300LF in a upstream altered reach of streambed, (site #1)

Also this project will protect eroding banks of a small, south channel, that is the south edge of the flood plain, and has been damaged by high flows that overtopped the main channel banks, with several types of bio engineered practices. Three existing ponds at the start of the normally spring fed south channel will be restored by removing sediment, and installing water control structures., and new outlet pipes in the dikes of each pond.

To protect the restoration fences and watering facilities will be installed.

b. Construction methods and equipment A Excavator will gather, sort, and load the logs and woody debris into trucks for transport to a safe burn or bury area. The excavator will also gather and load gravel debris from channel restoration into dump trucks, which haul the material to a safe area above normal HWL. The south channel bank protection will be installed with a backhoe and hand labor. Rock will be hauled by a truck to the site.

c. Length of project along the stream or extension into lake or reservoir: Restore 980 LF of main channel, plus protect 900 LF of south channel banks

d. Size and flow capacity of proposed bridge or culvert and area of drainage served (sq. miles): (Idaho Department of Water Resources requirement.) _____

COMPLETE THE FOLLOWING FOR DISCHARGES OF DREDGED OR FILL MATERIAL

a. Volume dredged or fill material to be placed waterward of the ordinary high water mark (BOTH TEMPORARY AND PERMANENT)?	<u>200</u> (cubic yards)
b. Will fill be placed in wetlands? <u>no</u> If yes, area: _____ (acres) Type of fill material: <u>rock and willow planting</u> (i.e. sand, rock, clay, concrete, etc.)	
c. Will dredging be required waterward of the ordinary high water mark or in wetlands? <u>Yes</u> If yes, volume <u>3900</u> (cubic yards)	
d. Type of dredged material <u>Gravel and large woody debris that is blocking the channel</u>	
e. Disposal site for dredged material: <u>Upland location, above normal WL</u> Method of dredging: <u>Excavate with track hoe, transport with truck</u>	
f. Method to control turbidity and sedimentation: <u>Work will be done during low flow period</u>	
g. Is project located in a mapped floodway? _____ If yes, complete the Engineering "No-Rise" certification form.	

8.a. Purpose and intended use: Commercial ☐ Public ☐ Private ☒ Other ☐ De ☐ a ☐

b. Reason for project _____

9. Proposed Starting Date 2005 Estimated Duration _____

10. List portions of the project that are complete with month and year of completion
Label this work on your drawings. _____

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

Lazy Two Ranch, INC (C/O Robert E Griggs, Jr.) PO Box 314 Driggs, ID 83422 (208) 354-2227

Ronald Lau PO Box 45 Driggs, ID 83422 (208) 354-8286

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

12. LEGAL OWNER IF OTHER THAN APPLICANT

a. Name _____ d. Phone Work () _____

b. Mailing Address _____ Home () _____

c. City, State, Zip Code _____

13. 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
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

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

15. Other comments/information: This is a Natural Resources Conservation Service approved project and design. A planning meeting was put together by

the Natural Resources Conservation Service in the summer of 2004 with participation from Department of Environmental Quality, Soil Conservation

Commission, Idaho Department of Fish and Game, Idaho Department of Water Resources, and Army Corps of Engineers. Also Friends of the Teton River

and Teton Regional Land Trust have an interest in the project.

16. 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 and completed work.

Signature of Applicant (ORIGINAL SIGNATURE REQUIRED)

Printed Name

Date

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

I hereby designate _____ 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.

Original Signature of Authorized Agent

Date

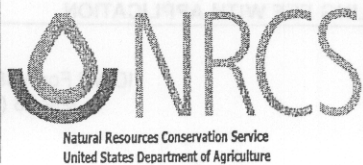
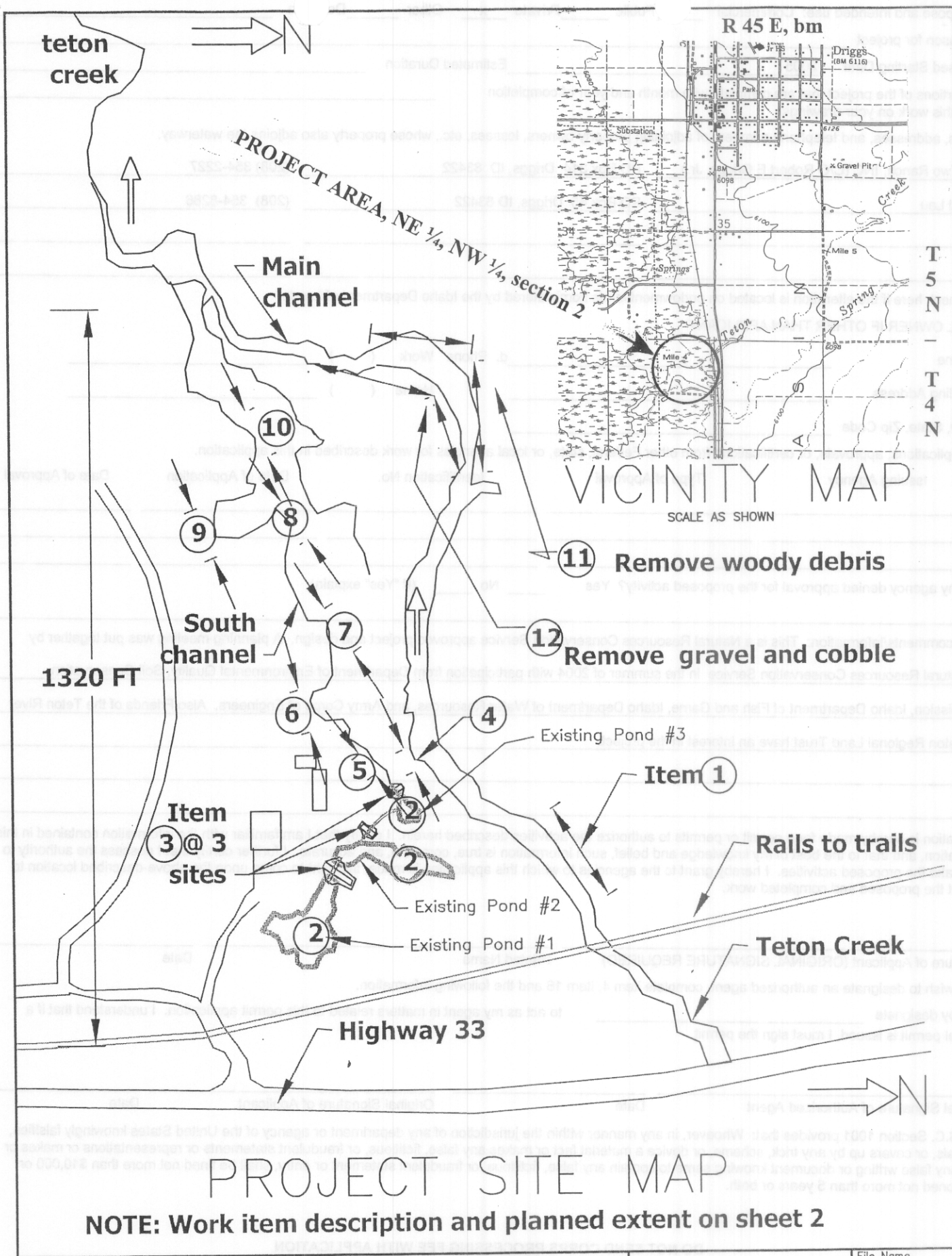
Original Signature of Applicant

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.

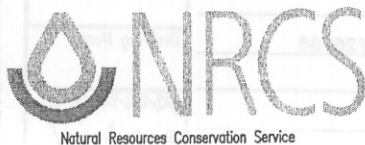
DO NOT SEND CORPS PROCESSING FEE WITH APPLICATION

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



**HILLMAN RANCH
TETON CREEK
RESTORATION
Teton SCD Driggs, ID**

Designed _____	Date _____	File Name _____
Drawn <u>rel</u> 02/26/05		Drawing Name _____
Checked _____		<u>00/00/00</u> 00:00
Approved _____		Sheet <u>1</u> of <u>11</u>



HILLMAN RANCH
TETON CREEK
RESTORATION
Teton SCD Driggs, ID

Designed _____
Date _____
Drawn _____
Checked _____
Approved _____

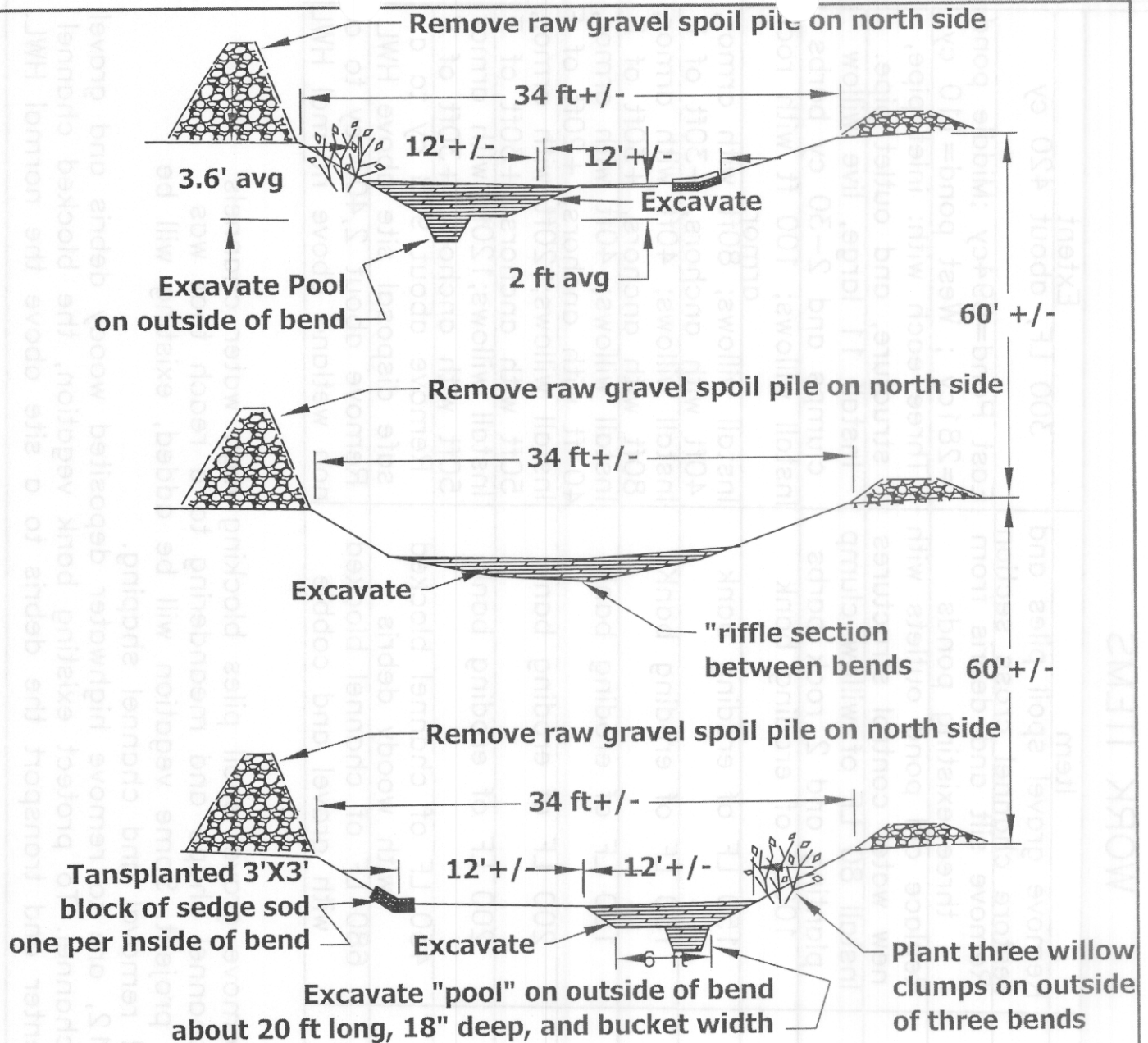
File Name _____
Drawing Name _____
00/00/00 00:00

WORK ITEMS

Item number	Item	Extent
1	Remove gravel spoil piles and restore channel cross section	300 LF, about 420 cy
2	Remove silt and debris from three existing ponds	East Pond=694cy ;Middle pond =281cy ; West pond=110 cy
3	Replace old pond outlets with new water control structures	Three each with: inlet pipe, structure, and outlet pipe.
4	Install 80 LF of willow clump planting and 2 rock barbs	Install 11 large, live willow clumps and 2-30 cy barbs
5	100LF of eroding bank	Install willows; 100 ft with rock armor
6	150 LF of eroding bank	Install willows; 80ft with armor, 40ft with anchors, +30ft of F
7	150 LF of eroding bank	Install willows; 40ft with armor, 80ft with anchors, +30ft of F
8	100 LF of eroding bank	Install willows; 40ft with armor, 40 ft with anchors, +20ft of F
9	200 LF of eroding bank	Install willows;120ft with armor, 50ft with anchors, +30ft of F
10	200 LF of eroding bank	Install willows;120ft with armor 50ft with anchors, +30ft of F
11	450 LF of channel blocked with woody debris	Remove about 978 cy to a safe disposal site above HWL
12	680 LF of channel blocked with gravel and cobble	Remove about 2,400 cy to a non wetland above normal HWL

NOTE:

- A. Item number 1, is to remove gravel spoil piles blocking high water channels and to restore some channel shape and meandering to a reach that was altered by a upstream project. Some vegetation will be added, existing will be protected during gravel removal and channel shaping.
- B. Item numbers 11 and 12, are to remove highwater deposited woody debris and gravel from the creek main channel. To protect existing bank vegetation, the blocked channel area will be used to enter and transport the debris to a site above the normal HWL.

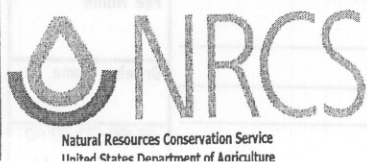


DESIGN CROSS SECTIONS Item 1

Debris removal reach

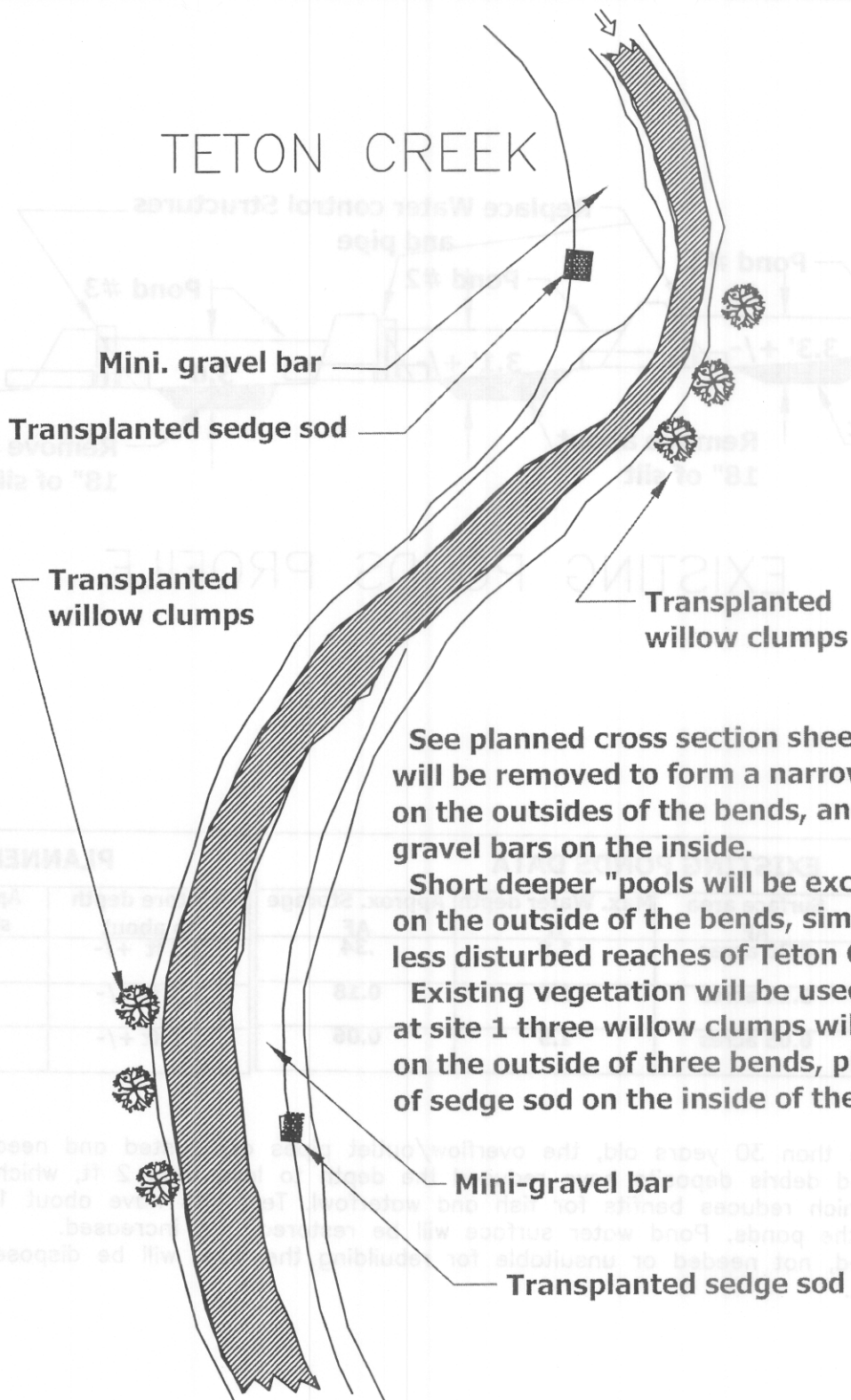
NOTE:

- (1) Total length about 300 ft, 420 cy of excavating and hauling gravel from the channel and spoil piles. Plus nine live willow clumps, and three big sedge sod plugs transplanted into the banks.
- (2) Some of the south side has spoil to be removed, where it will not damage existing trees.
- (3) Channel alignment and cuts will be marked on site for construction
- (4) Work is planned for no streamflow time of year in this reach.



**HILLMAN RANCH
TETON CREEK
RESTORATION**
Teton SCD Driggs, ID

Designed _____	Date _____	File Name _____
Drawn <u>rel</u> 08/26/04		Drawing Name _____
Checked _____		00/00/00 00:00
Approved _____		Sheet 3 of 11



See planned cross section sheet; gravel will be removed to form a narrow channel on the outsides of the bends, and mini gravel bars on the inside.

Short deeper "pools will be excavated on the outside of the bends, similar to less disturbed reaches of Teton Creek

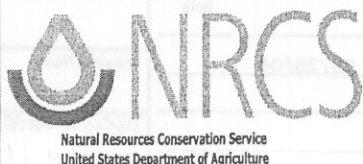
Existing vegetation will be used plus at site 1 three willow clumps will be planted on the outside of three bends, plus a plug of sedge sod on the inside of the bend.

Mini-gravel bar

Transplanted sedge sod

SAMPLE PLAN VIEW

Project channel restoration in the gravel and debris removal reaches, of site #1 and site 11-12. Site #1 only needs the willow clumps and sedge sod treatment.

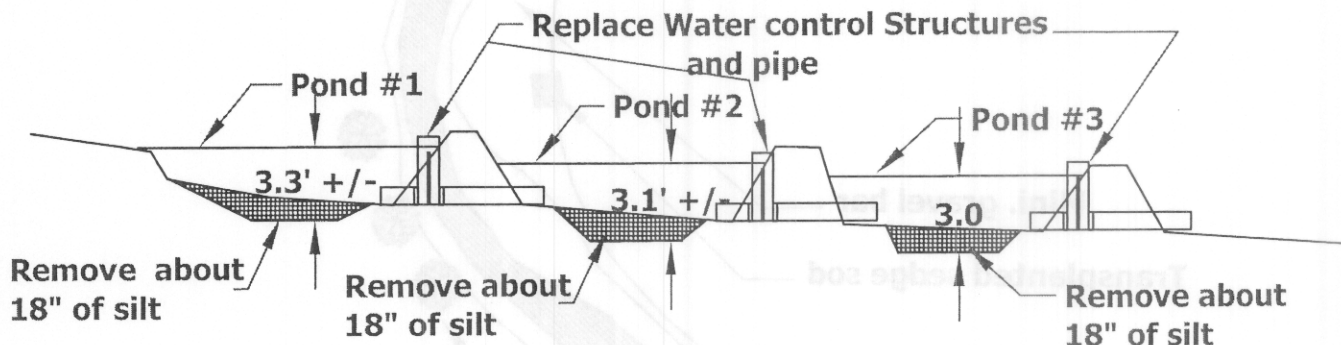


**HILLMAN RANCH
TETON CREEK
RESTORATION**
Teton SCD Driggs, ID

Designed _____	Date _____
Drawn <u>rel</u> 08/26/04	Drawing Name _____
Checked _____	00/00/00 00:00
Approved _____	Sheet <u>1</u> of <u>11</u>

File Name _____
Drawing Name _____
00/00/00 00:00
Sheet 1 of 11

REV

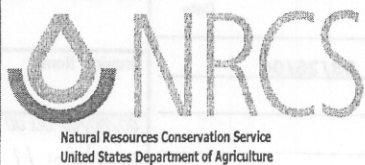


EXISTING PONDS PROFILE

EXISTING PONDS DATA				PLANNED	
Pond No.	Surface area AF	Max. Water depth ft	Approx. Storage AF	Restore depth to about	Approx. pond storage AF
1	0.30 acres	1.8	.34	3.3 ft +/-	0.57
2	0.14 acres	1.6	0.18	3.1 ft +/-	0.29
3	0.05 acres	1.5	0.06	3.0 ft +/-	0.10

NOTE:

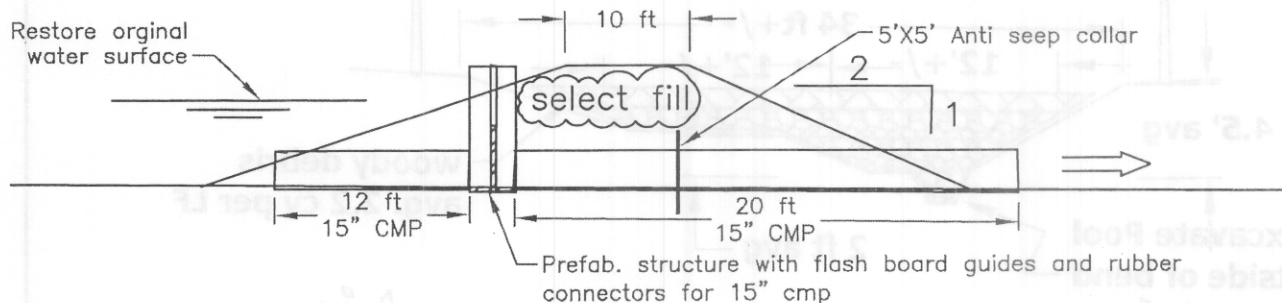
Ponds are more than 30 years old, the overflow/outlet pipes are rusted and need replaced. Years of silt and debris deposits have reduced the depth to less than 2 ft, which promotes weed growth, which reduces benefits for fish and waterfowl. Test pits have about 18" of silt in the bottom of the ponds. Pond water surface will be restored, not increased. Material, removed, not needed or unsuitable for rebuilding the dike, will be disposed of above the normal HWL.



**HILLMAN RANCH
TETON CREEK
RESTORATION**
Teton SCD Driags. ID

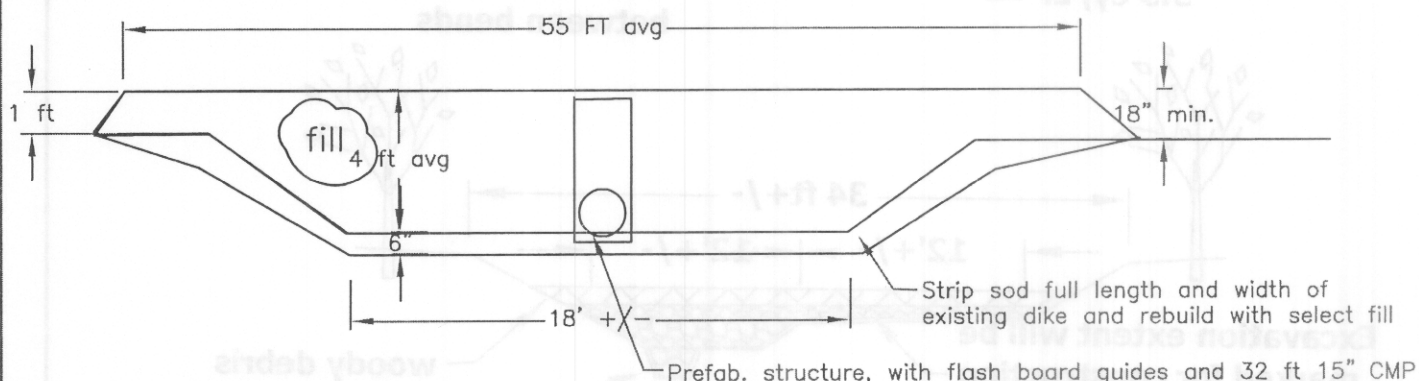
Designed _____	Date _____	File Name _____
Drawn <u>rel</u> 08/26/04		Drawing Name _____
Checked _____		00/00/00 00:00
Approved _____		Sheet 5 of 11

REV



WATER CONTROL STRUCTURE CROSS SECTION

not to scale



TYPICAL WATER CONTROL STRUCTURE DETAIL

not to scale

NOTE:

These three old ponds have lost much of their wildlife benefits from silt deposits. Test pits show about 18 inches of silt. The material removed, will be disposed of or used in upland area's above the normal HWL.

Spring flow and the normal annual water table fluctuations raises the water level in these ponds, restoring their original capacity will improve the habitat for waterfowl, and other wildlife.

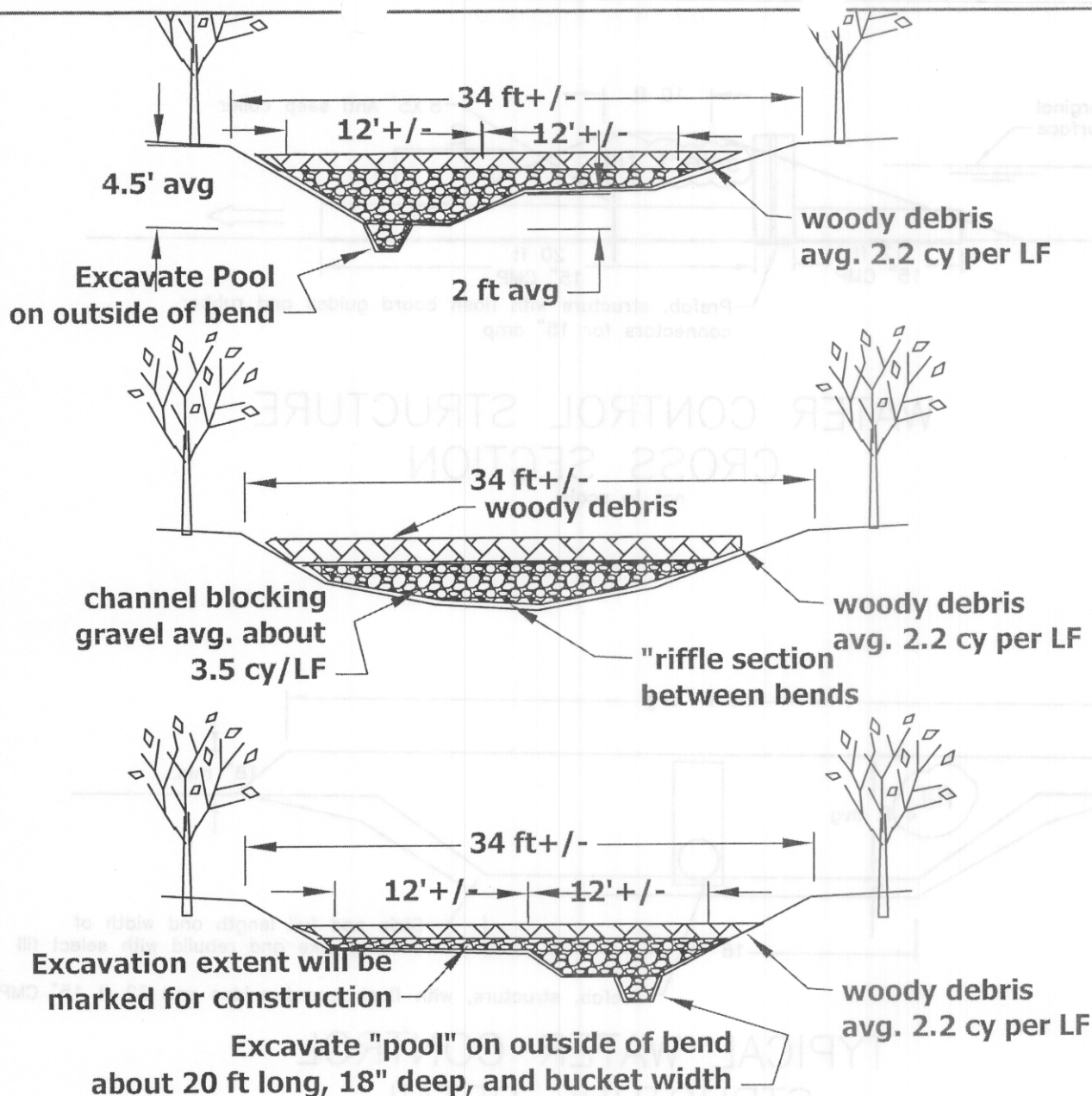
A fence will exclude livestock from this wetland restoration portion of the project.



HILLMAN RANCH
TETON CREEK
RESTORATION
Driggs ID Teton SCD

Designed _____	Date _____	File Name _____
Drawn _____		Drawing Name _____
Checked _____		00/00/00 00:00
Approved _____		

REV
03/22

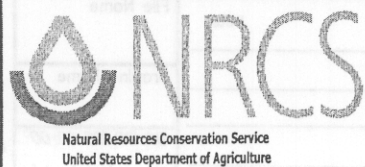


DESIGN CROSS SECTIONS

Project Items 11-12

NOTE:

- (1) To protect existing trees and riparian vegetation, on each side of the channel, the logs and woody debris, (Item 11), will be removed first, using the channel route during the dry channel part of the year, in this reach of Teton Creek.
- (2) The excess gravel (Item 12) will then be removed, starting at the downstream end and proceeding upstream, restoring a channel cross section, that will be deeper, and not suitable for transporting excess gravel out of the reach, to a site above normal high water and/or wetland.



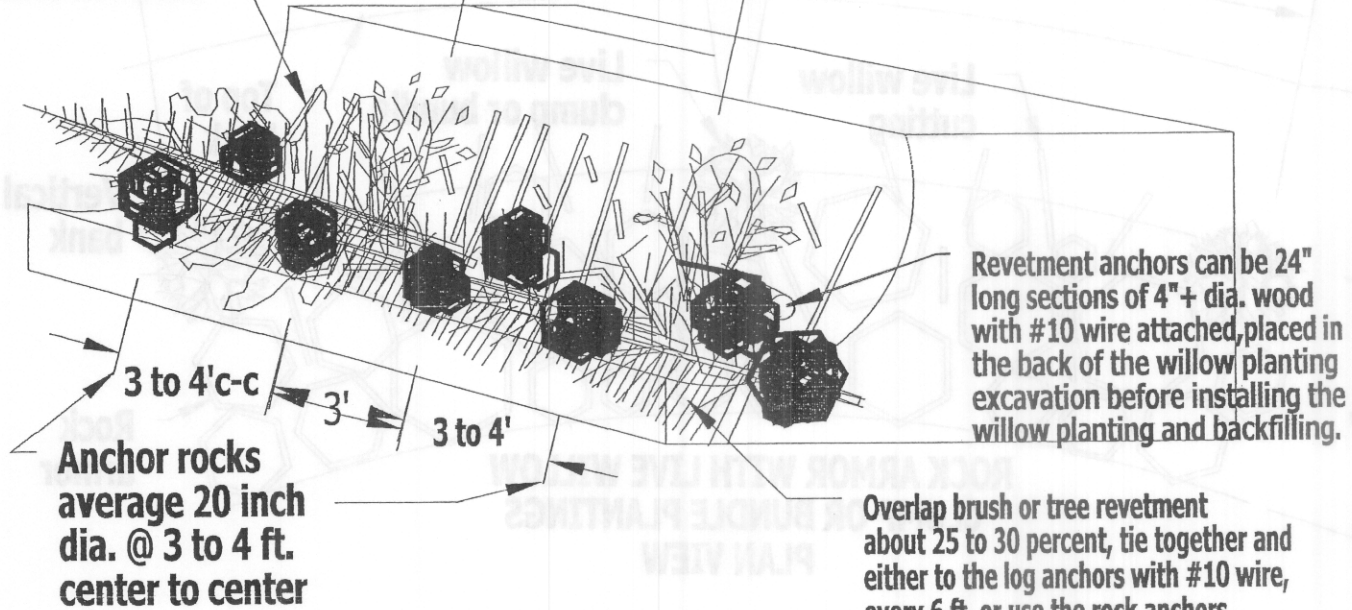
**HILLMAN RANCH
TETON CREEK
RESTORATION
Teton SCD Driaas, ID**

Designed _____	Date _____	File Name _____
Drawn <u>rel</u> 08/26/04		Drawing Name _____
Checked _____		00/00/00 00:00
Approved _____		Sheet 7 of 11

Install live stakes at 24 inch diamond spacing between the vertical bundles

6' c-c

Live willow clumps or bundles

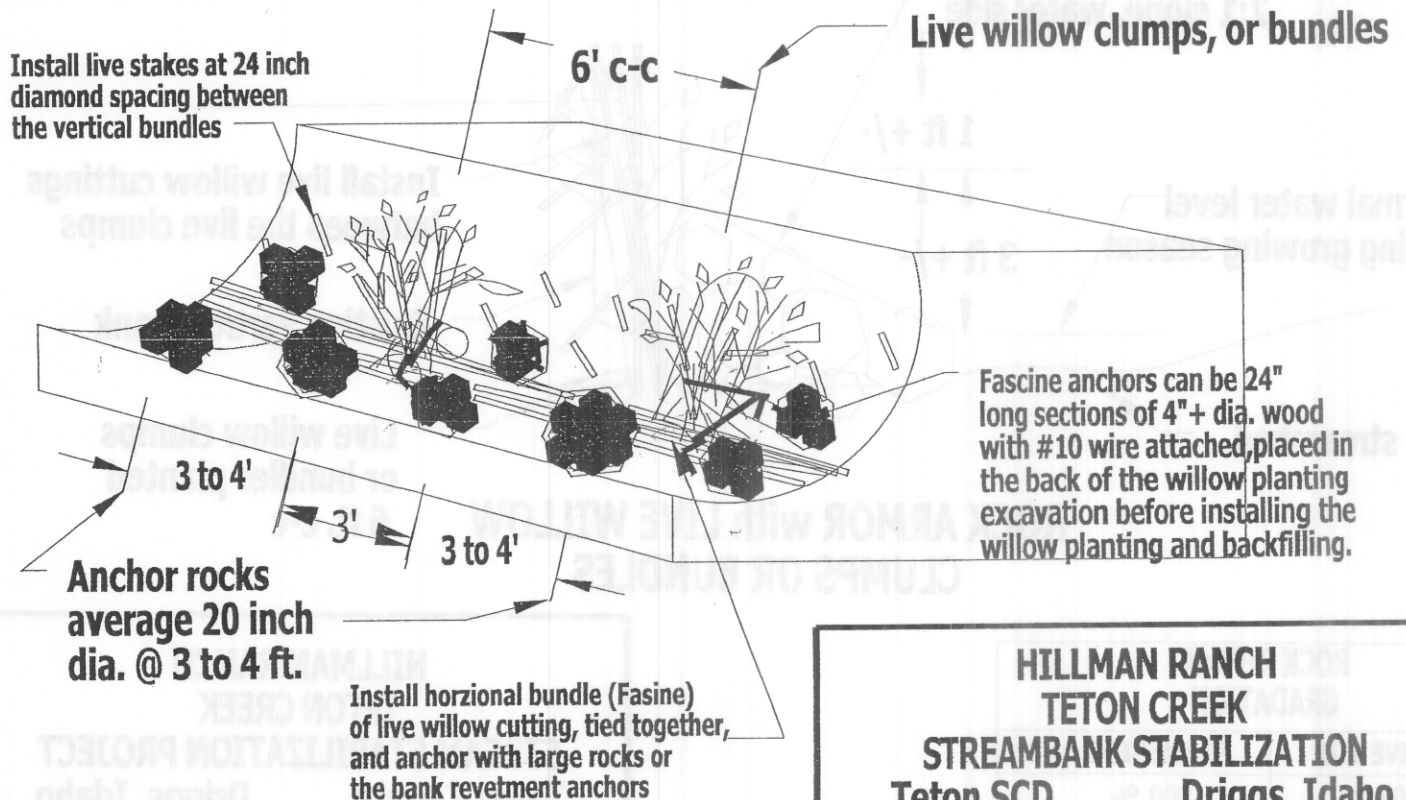


BRUSH OR TREE REVETMENT WITH VERTICAL LIVE WILLOW CLUMPS OR BUNDLES AND ANCHOR ROCKS

Install live stakes at 24 inch diamond spacing between the vertical bundles

6' c-c

Live willow clumps, or bundles



Anchor rocks
average 20 inch
dia. @ 3 to 4 ft.

Install horizontal bundle (Fascine)
of live willow cutting, tied together,
and anchor with large rocks or
the bank revetment anchors

Fascine anchors can be 24"
long sections of 4" + dia. wood
with #10 wire attached, placed in
the back of the willow planting
excavation before installing the
willow planting and backfilling.

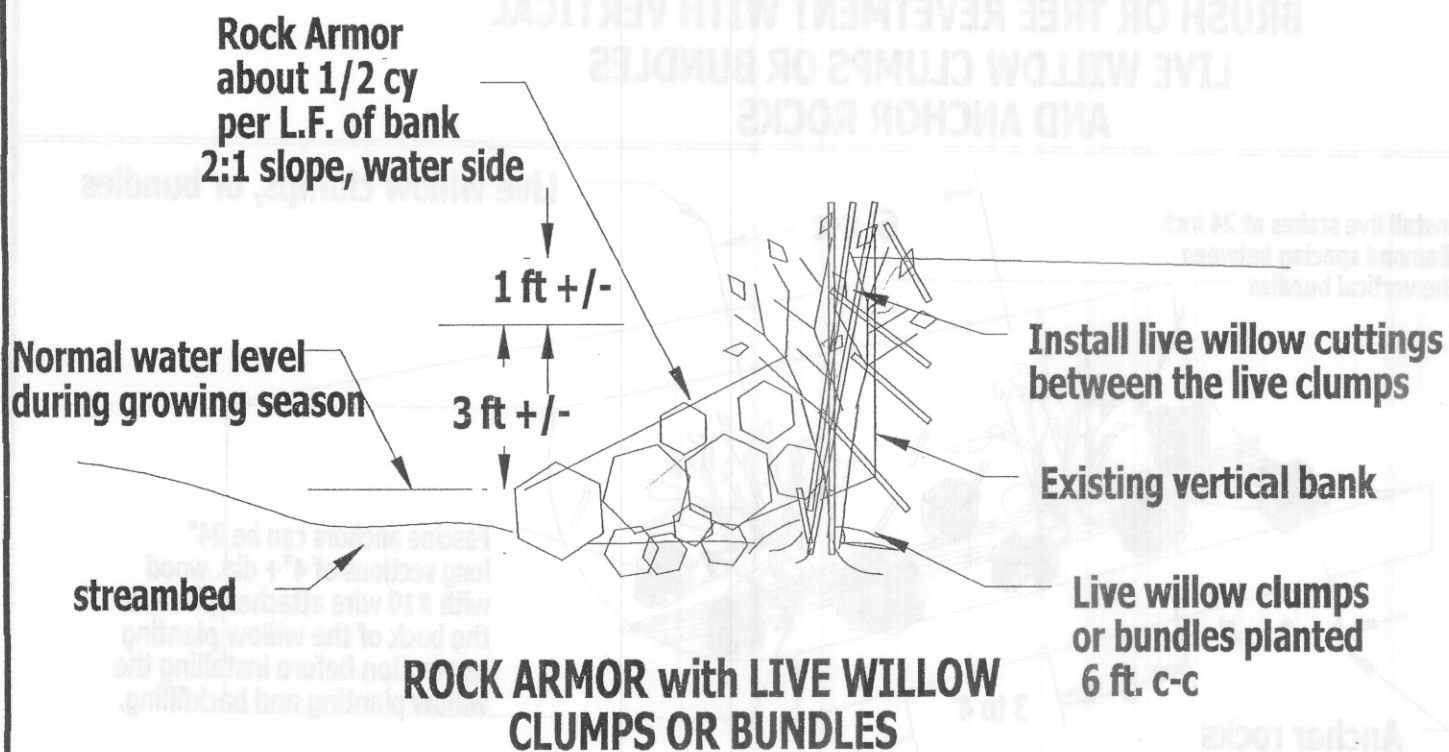
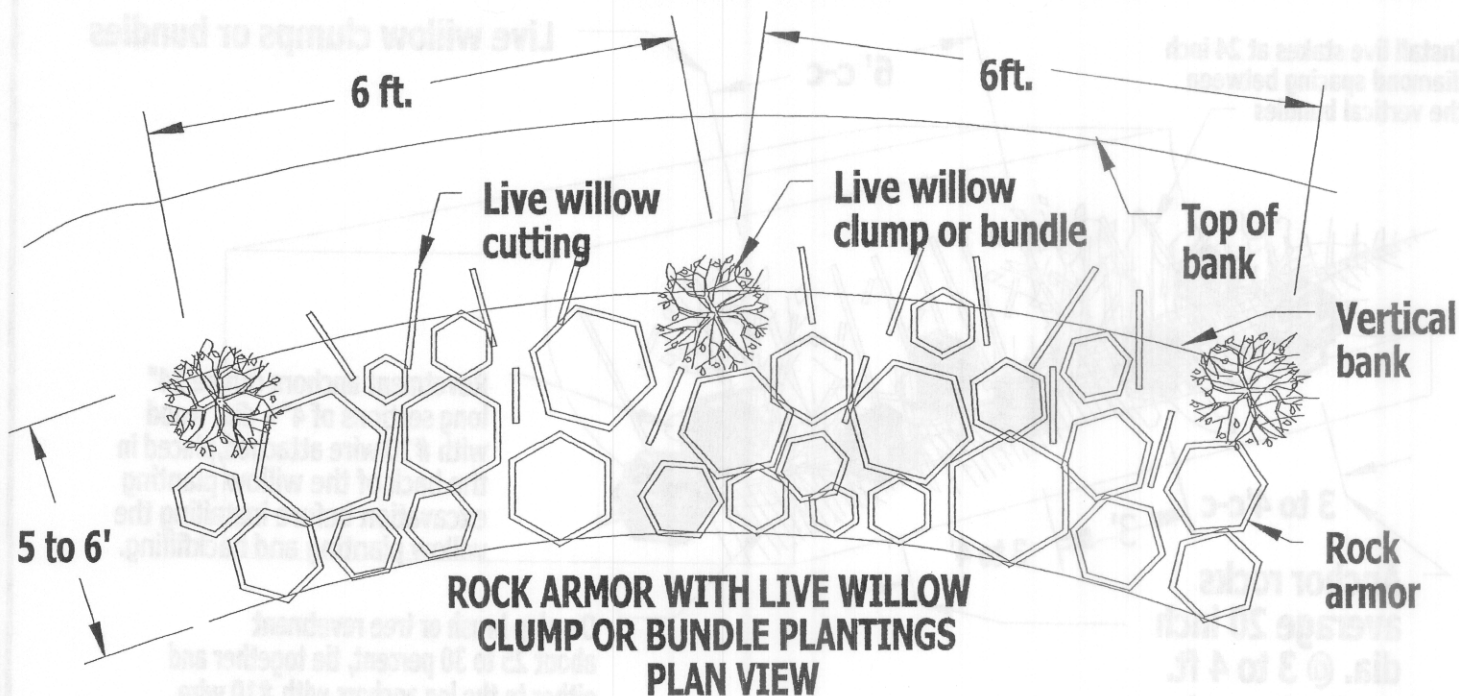
LIVE FASCINE REVETMENT WITH VERTICAL LIVE WILLOW CLUMPS OR BUNDLES AND ANCHOR ROCKS

**HILLMAN RANCH
TETON CREEK
STREAMBANK STABILIZATION
Teton SCD Driggs, Idaho**

NATURAL RESOURCES CONSERVATION SERVICE

drawn by rel
date

sheet 8
of 11



ROCK RIPRAP GRADATION

SEIVE SIZE	% PASSING
30 inch	100 %
24	65---100 %
18	42----77 %
12	20---50 %
6	0---20 %

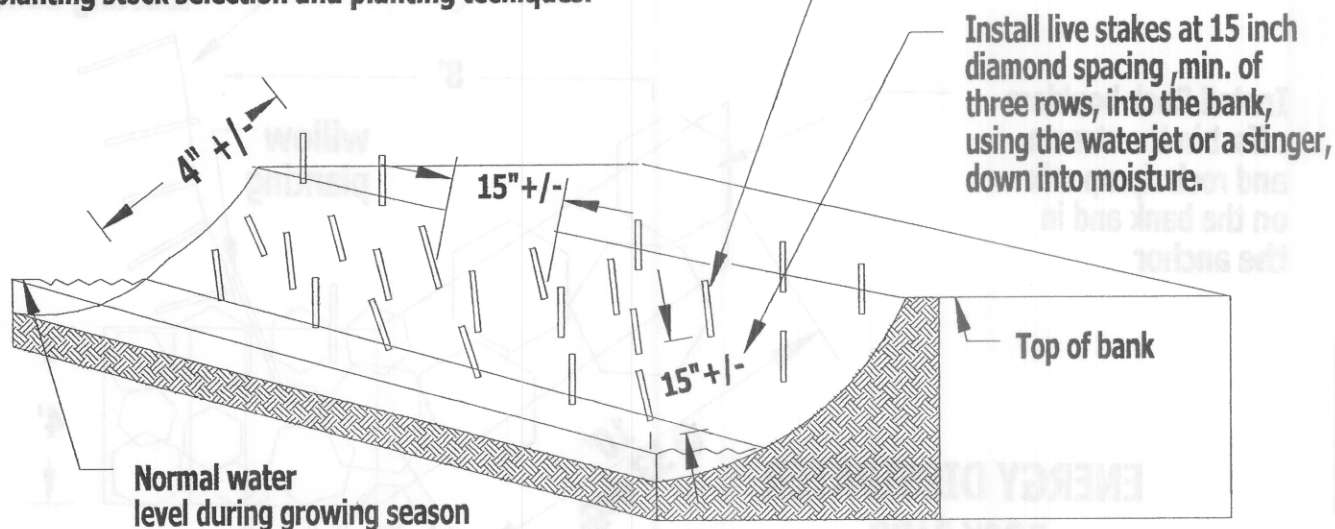
**HILLMAN RANCH
TETON CREEK
STREAM STABILIZATION PROJECT
Teton County Driggs, Idaho**

NATURAL RESOURCES CONSERVATION SERVICE

drawn by rel
date:

sheet 7
of 11

Install select willow cuttings, planted into; water jet, power auger, or punch bar holes, 2 1/2 to 3 ft. min. deep holes. Refer to THE PRACTICAL STREAMBANK BIOENGINEERING GUIDE for planting stock selection and planting techniques.

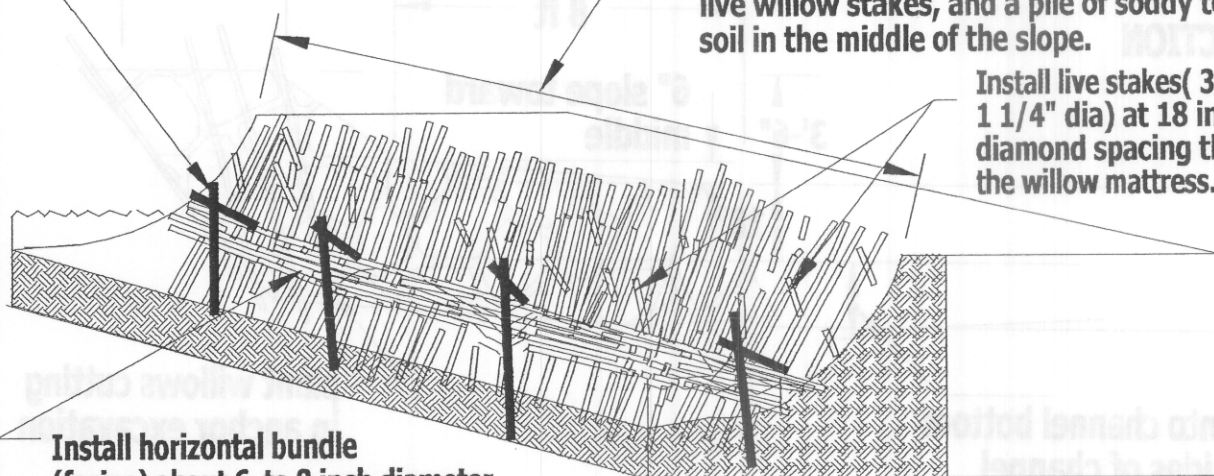


LIVE WILLOW POLE PLANTING TREATMENT

ANCHOR STAKES-install a average of a pair of 2" dia. stakes every 3 ft. to 4 ft, to hold the fascine at the low water line and to bind the fascine and willow mattress together, tie with jute rope.

Install a 4 inch thick layer of cut willows, on a sloped bank and anchor with fascine, live willow stakes, and a pile of soddy top soil in the middle of the slope.

Install live stakes (3/4" to 1 1/4" dia) at 18 inch diamond spacing through the willow mattress.



Install horizontal bundle (fascine) about 6 to 8 inch diameter, of live willow cuttings, tied together and anchored with a pair of large live cutting/stakes, every 3 ft to 4 ft, center to center.

LIVE BRUSH MATTRESS TREATMENT ANCHORED WITH STAKES AND A FASCINE REVETMENT

HILLMAN RANCH
TETON CREEK
STREAM STABILIZATION
Teton SCD Driggs, Idaho

NATURAL RESOURCES CONSERVATION SERVICE

drawn by rel
date:

sheet 10
of 11

STREAM

FLOW

Existing bank

Install Rock boulders
offset in the stream
and rock riprap mix
on the bank and in
the anchor

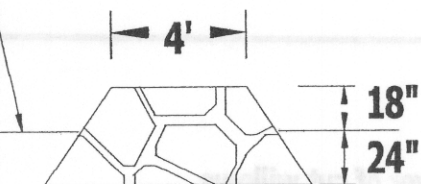
willow
planting

ENERGY DISSIPATER

ROCK BARB

SCALE: as shown

avg bottom



CROSS SECTION

@ 10'
@ 53 deg.

6'

5'

anchor into
bank

8 ft

6" slope toward
middle

3'-6"

18"

3'-6"

Anchor 24" into channel bottom
and 5' into sides of channel

plant willows cutting
in anchor excavation

ROCK BARB DESIGN CROSS SECTION

SCALE: as shown

NOTE: about 15 cy per barb

HILLMAN RANCH
TETON CREEK
ROCK RIPRAP BARB STRUCTURE
Teton SCD Driggs, Idaho

NATURAL RESOURCES CONSERVATION SERVICE

drawn by rel
date:

sheet 1/
of 11