Miller, Nick

From: Hans Carstensen [carsthliii@worldnet.att.net]
Sent: Saturday, October 27, 2007 3:35 PM
To: Miller, Nick
Cc: Brian Hamilton
Subject: FW: Measurement Devices

Approval
10/29 Telephone
&
1/30/08 Ltr-email

S41 1678-100-936.pdf S42 1678-100-937.pdf

Hi Nick,

Thanks very much for returning my call the other day. I greatly appreciate your assistance in this matter.

As promised, accompanying this message is the recent message from Brian Hamilton along with the drawings for the two measurement devices.

I would be grateful if you would let me know at your earliest convenience if these drawings will meet the IDWR requirements for the S-41 and S-42 diversions off the Salmon River. Once I hear back from you, I will proceed to get these drawings into the hands of a competent fabricator.

I look forward to hearing from you.

Kind regards,

Hans

-----Original Message-----
From: Brian Hamilton [mailto:bhamilton@pn.usbr.gov]
Sent: Thursday, October 18, 2007 4:43 PM
To: carsthliii@worldnet.att.net
Cc: wmbaker@custertel.net
Subject: RE: Measurement Devices

Hans -
attached are drawings for measuring devices for the S-41 and S-42 diversions.
I thought I had the 2 splitter designs for you also, but as I went through your file those drawings haven't come back from Boise yet. My draftsman is out today, so I thought I'd just send you these 2 as I'm going to be out for a few weeks on a Grand Canyon Float. Both of these structures are ramp flumes, probably would be best to make from steel. The other 2 measuring devices for the splitters are also ramp flumes, just smaller. I will also mail you a hard copy of the drawings.

S-41 would need to be installed about 40 yards downstream from the headgate, which is above the fish screen. Allowances would need to be made to credit you with about 0.8 cfs for the fish screen bypass.

S-42 would need to be installed about 50 yards downstream from the fish screen. The willows growing into the ditch from the fish screen downstream 100 yards should be trimmed out of the ditch to allow this structure to function correctly.

I have talked with Nick Miller from IDWR briefly about both of these measuring devices, and believe he is ok with the concept. You will need to send IDWR a copy of the drawing and a description of the proposed location (similar to what I've listed above), to get formal approval.

SNRA also wanted to see a copy of this information for a special use permit.

Any questions about the drawings, please give me a call. I will be out of cell range from 10/23 to 11/11. I will give you a flow table for these structures based on the as-built dimensions. If you'd like, I can try to come up when you install. I can also provide staff gages for these structures.

Thanks - BH

Brian Hamilton
US Bureau of Reclamation
102 S Warpath
Salmon ID 83467
208-756-1064
208-756-7431 cell

>>> "Hans Carstensen" <carsthliii@worldnet.att.net> 08/26/07 9:50 AM >>>
Hi Brian,

Just checking in to see how things are going on the measurement devices.

Terry told me that you were kind enough to come by and introduce yourself
when you were up here several weeks ago. Thanks for letting her know who you
were and what you were up to. She was pleased to meet you and she joins me
in expressing appreciation for your assistance with this project.

Regards,

Hans Carstensen

-----Original Message-----
From: Brian Hamilton [mailto:bhamilton@pn.usbr.gov]
Sent: Monday, July 02, 2007 10:43 AM
To: carsthliii@worldnet.att.net
Subject: Re: Measurement Devices

Hans - yes I did meet with Marc and looked at the 2 main ditches (S-41 and S-42) and the 2 places where the ditches split and come onto your property. I got some measurements that day and the next, but kind of overscheduled myself and didn't get everything I need. I am just on my way out the door to go back up to Stanley today, and will be up there Friday also and hopefully get all the measurements for your 4 spots on one of those 2 days. I will give Marc a call on my way up or stop by when I'm up there to let him know what's going on. As far as the next step, I'll hopefully knock out a proposed solution for you next week, and then we'll need to talk about whether thats the way you want to go, and then get your permits rolling with SNRA as well as IDWR's approval. Please call or email me if you haven't heard from me by the end of next week (7/13). Thanks - BH

>>> "Hans Carstensen" <carsthliii@worldnet.att.net> 06/29/07 5:54 AM >>>
Hi Brian,

I write to confirm my understanding based on conversations with our ranch foreman, Marc Kottraba, that you have met with Marc and visited the two ditches that irrigate our ranch in the Sawtooth Valley near Obsidian, Idaho. Marc has told me that the next steps in the process are for you to shoot the grades on the ditches and begin the process of designing the needed devices.

In my earlier e-mail message to you of several weeks ago, I requested your assistance in measuring for and designing two additional and

similar measuring devices for the ditches as, or just before they enter my property. Marc confirmed that you had discussed these with him, but I am uncertain as to the next steps for these.

I know that you are extremely busy with such projects for other ranchers over a wide area. As a result, I would ask only that you confirm the foregoing understandings by return e-mail message at your earliest convenience, and outline your recommended next steps for the second two devices.

In addition, please feel free to contact me by return e-mail or by cell phone at 617-827-7087 if you require anything from me with regard to these projects.

Thanks again for your assistance.

Kind regards,

Hans Carstensen

Miller, Nick

From: Miller, Nick
Sent: Friday, December 14, 2007 12:01 PM
To: Brian Hamilton (E-mail)
Subject: Hans Carstensen's Rights from S41 and S42

Brian:

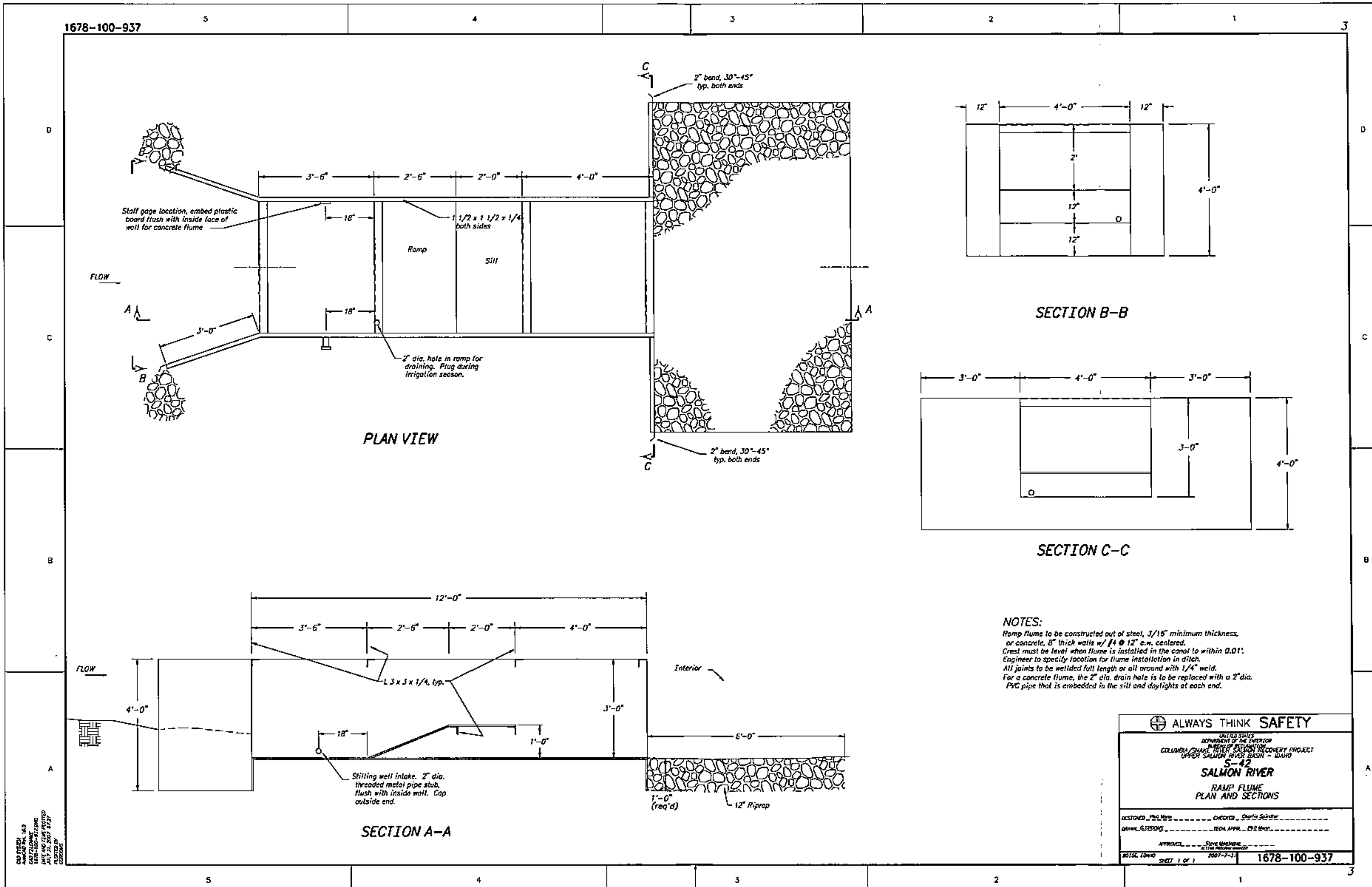
Hans has two rights out of those ditches. Each right can be diverted from either ditch (each right has two points of diversion), but the total of the two is limited to the max flow below.

71-4037 - 9.17cfs
71-2063 - 1.66 cfs
Total - 10.83 cfs from the river.

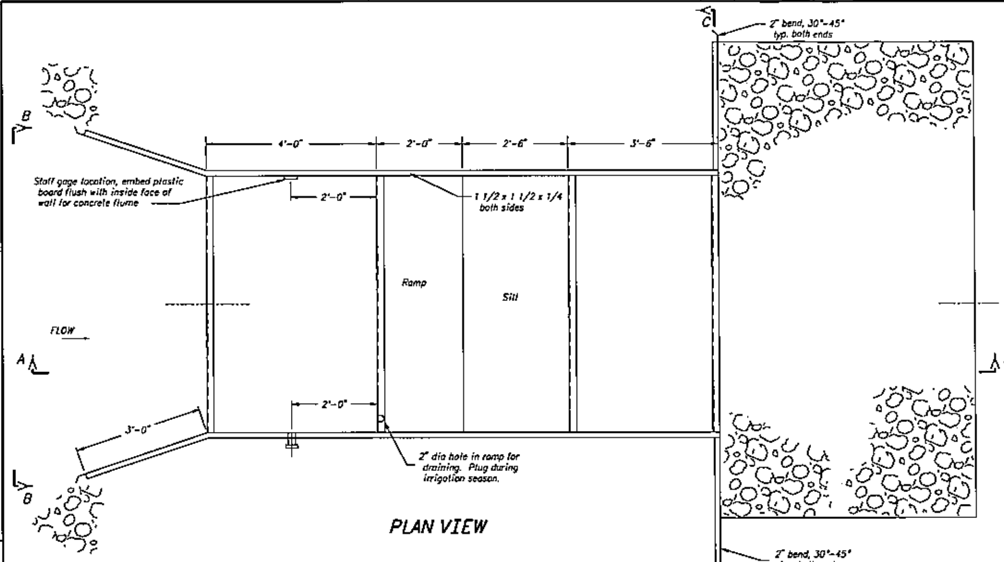
These rights also bear a condition stating: "4.36 CFS OF RIGHT NO. 71-04037 IS LIMITED TO USE FOR CONVEYANCE LOSSES IN DELIVERY OF THIS RIGHT [71-2063] AND 71-04037". This means that Hans can divert up to 10.83 cfs at the head, but he may only receive 6.47 cfs at his field. So, depending on how close the MD is to the field, you may be able to design for a max flow as low as 6.47 (assuming he will want to take his entire right from one ditch at any time).

Let me know if you have any questions.

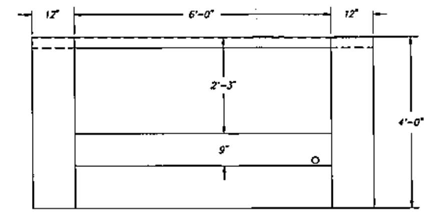
Nick Miller, P.E.
Staff Engineer
Water Distribution Section
Idaho Department of Water Resources
322E. Front St. Boise, ID 83720-0098
208-287-4956 (Office)
208-287-6700 (Fax)


1678-100-937
PLAN VIEW
2" bend, 30°-45° typ. both ends
Staff gage location, embed plastic board flush with inside face of wall for concrete flume
1 1/2 x 1 1/2 x 1/4 both sides
Ramp
Sill
FLOW
2" dia. hole in ramp for draining. Plug during irrigation season.
SECTION B-B
SECTION C-C
SECTION A-A
L 3 x 3 x 1/4, typ.
Interior
Stilling well intake. 2" dia. threaded metal pipe stub, flush with inside wall. Cap outside end.
1'-0" (req'd)
12" Riprap
NOTES:
Ramp flume to be constructed out of steel, 3/16" minimum thickness, or concrete, 8" thick walls w/ #4 @ 12" e.w. centered.
Crest must be level when flume is installed in the canal to within 0.01'.
Engineer to specify location for flume installation in ditch.
All joints to be welded full length or all around with 1/4" weld.
For a concrete flume, the 2" dia. drain hole is to be replaced with a 2" dia. PVC pipe that is embedded in the sill and daylights at each end.
ALWAYS THINK SAFETY
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
COLUMBIA/SNAKE RIVER SALMON RECOVERY PROJECT
UPPER SALMON RIVER BASIN - IDAHO
S-42
SALMON RIVER
RAMP FLUME
PLAN AND SECTIONS
BOISE, IDAHO
SHEET 1 OF 1
2007-7-31
1678-100-937

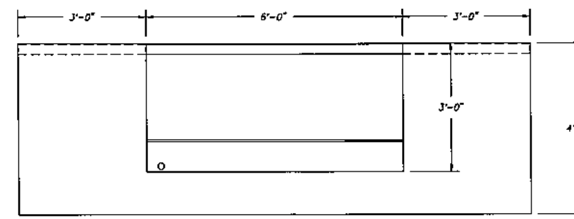
1678-100-936



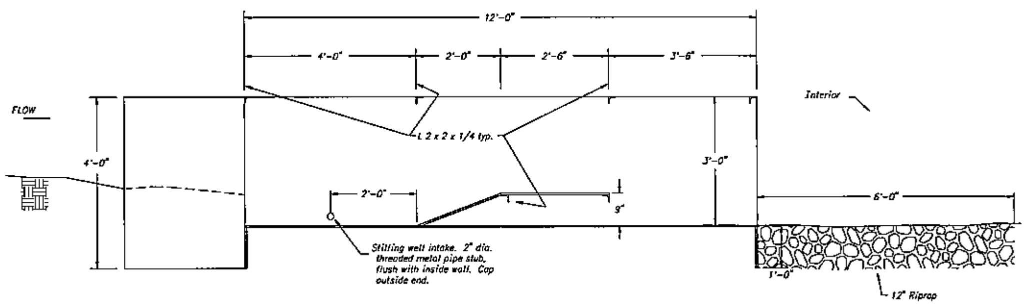
PLAN VIEW



SECTION B-B



SECTION C-C



SECTION A-A

NOTES:

Ramp flume to be constructed out of steel, 3/16" minimum thickness, or concrete, 8" thick walls w/ #4 @ 12" e.w. centered.
Crest must be level when flume is installed in the canal to within 0.01'.
Engineer to specify location for flume installation in ditch.
All joints to be welded full length or all around with 1/4" weld.
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UNITED STATES
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COLUMBIA/SNAKE RIVER SALMON RECOVERY PROJECT
UPPER SALMON RIVER BASIN – IDAHO

S-41
SALMON RIVER

RAMP FLUME
PLAN AND SECTIONS

DESIGNED Phil Mann CHECKED Charlie Spindler
DRAWN C.GROOMS TECH. APPR. Phil Mann
APPROVED Steve Meulleore, ACTING PROGRAM MANAGER

BOISE, IDAHO SHEET 1 OF 1 2007-7-31 1678-100-936