

H.P HOUTZ ARBITRATION MEASURING BOX REQUIREMENTS

In the matter of the application of
H.P. Houtz, ET. AL.; for the arbitration of
the claims to the use of water of
Rock Creek and its Tributaries.

" ...THAT ALL WATER HEREIN AWARDED SHALL BE MEASURED IN A BOX OR FLUME PLACED AT THE HEAD OF EVERY DITCH, THROUGH WHICH THE SAME IS TO BE CONVEYED OF THE LENGTH OF 8 & $\frac{1}{2}$ FEET WITH A FALL OF $\frac{1}{2}$ INCH TO SAID BOX, THE WATER AT NO TIME IN SAID BOX TO BE MORE THAN 6 INCHES IN DEPTH AT THE HEAD THEREOF AND WITHOUT PRESSURE EXCEPT THE NATURAL FLOW OF THE STREAM; SAID BOX TO BE PLACED ON A SOLID FOUNDATION AND CONSTRUCTED OF 2 INCH LUMBER, AND NO CLAIMANT HEREIN TO WHOM WATER IS HEREIN AWARDED SHALL AFTER THE PRESENT SEASON OF 1890 RECEIVE THE WATER HEREIN AWARDED TO HIM UNTIL HIS CLAIM SHALL HAVE BEEN IN EVERY RESPECT COMPLIED WITH; THAT THE RIGHT TO THE USE OF WATER HEREIN CONVEYED TO DIFFERENT CLAIMANTS SHALL DATE FROM THE DATE OF APPROPRIATION BY THEM EACH RESPECTIVELY, AND THAT NO CLAIMANTS' RIGHT, SUBSEQUENT IN TIME, SHALL BE PERMITTED TO USE THE WATER HEREIN AWARDED TO HIM UNTIL THE RIGHT OF EACH AND EVERY PRIOR APPROPRIATOR SHALL HAVE BEEN SUPPLIED; PROVIDED THAT AT THE TIME THE PRIOR APPROPRIATOR SHALL BE USING SAID WATER FOR A USEFUL AND BENEFICIAL PURPOSE, BUT IF SAID USEFUL AND BENEFICIAL PURPOSE DOES NOT EXIST THEN THE WATER HEREIN AWARDED TO SAID PRIOR APPROPRIATOR AND APPROPRIATORS SHALL BE SUBJECT TO USE BY THE SUBSEQUENT APPROPRIATORS ACCORDING TO THE DATE OF THEIR APPROPRIATIONS RESPECTIVELY...."

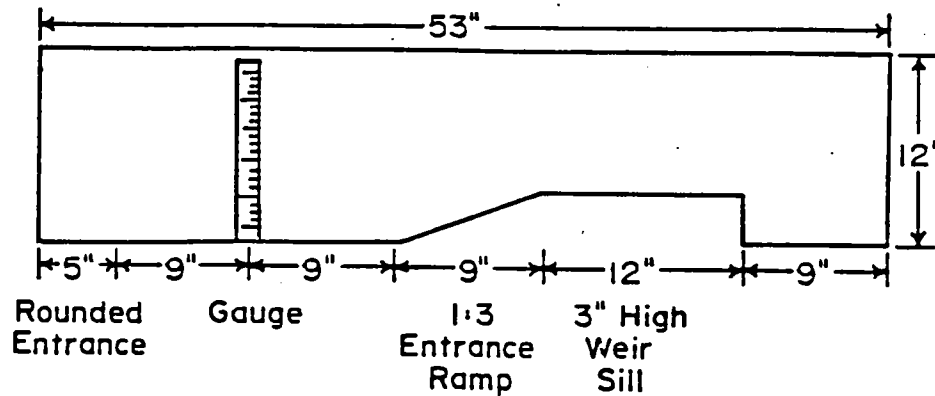
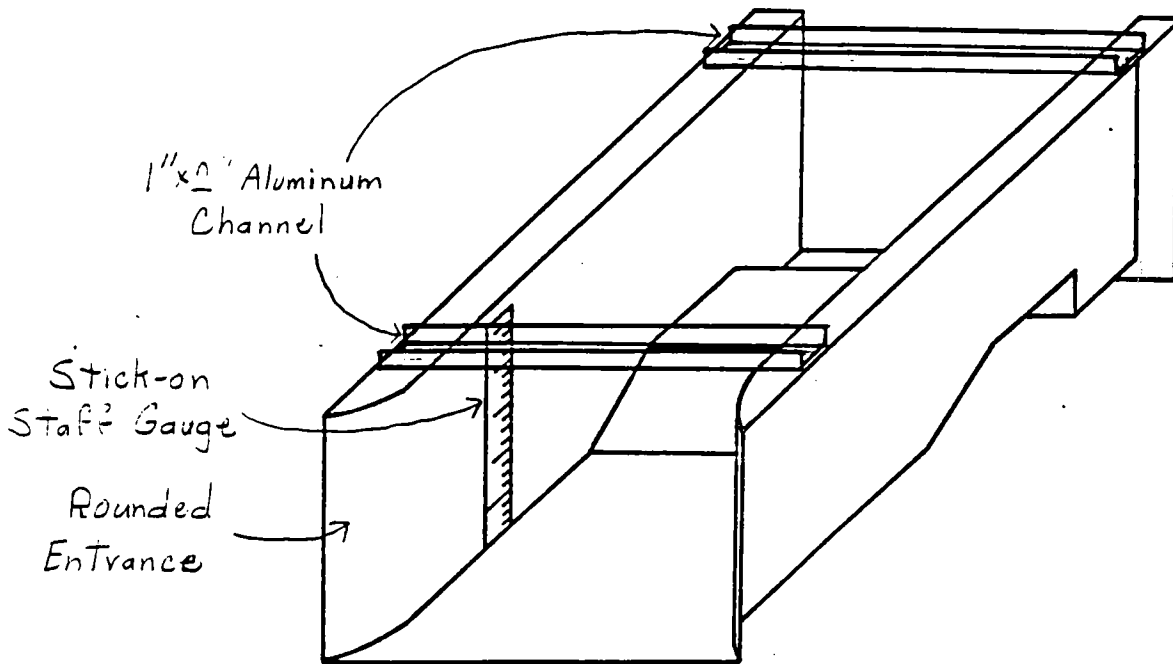
Filed and Recorded in Book "B" of Judgments, Page 206, County of Oneida, June 6, 1903.

IDWR MEASUREMENT SURVEY			
DITCH	INCHES PER ARBITRATION	IDWR MEASUREMENT	PERCENT DIFFERENCE
BENCH DITCH	445"	350"	21.3%
U.S. DITCH	350"	227"	35.1%
LOWER WEST D.	No Box	81"	
BUDGE DITCH	65"	50"	23.1%
TYLER DITCH	114"	73"	36.0%
ADSHEAD DITCH	160"	116"	27.5%

Average of these ditches for Rockland area = 28.6%
 Measurements taken AUG. & SEPT. 1994.

1-20-97
Tom Trout
USDA-ARS
Kimberly, ID

15" RECTANGULAR BROAD-CRESTED WEIR FLUME



Weir Width = 15"
Range: 0.1 - 2.5cfs

Available from:
Honkers Supreme
269 1/2 Addison Ave. W
Twin Falls, ID 83301
208-734-2060
(Cost \approx \$300)

Discharge Table
15" Rectangular Broad Crested Weir Flume

Gage Reading		Flow Rate	
mm	ft	cfs	L/s
20	0.07	0.06	1.7
25	0.08	0.09	2.4
30	0.10	0.11	3.2
35	0.12	0.15	4.2
40	0.13	0.18	5.1
45	0.15	0.22	6.2
50	0.16	0.26	7.3
55	0.18	0.30	8.5
60	0.20	0.35	9.8
65	0.21	0.39	11.1
70	0.23	0.44	12.5
75	0.25	0.49	14.0
80	0.26	0.55	15.5
85	0.28	0.60	17.1
90	0.30	0.66	18.7
95	0.31	0.72	20.4
100	0.33	0.78	22.1
105	0.35	0.84	23.9
110	0.36	0.91	25.7
115	0.38	0.98	27.6
120	0.39	1.04	29.5
125	0.41	1.11	31.5
130	0.43	1.19	33.6
135	0.44	1.26	35.6
140	0.46	1.34	37.8
145	0.48	1.41	39.9
150	0.49	1.49	42.2
155	0.51	1.57	44.4
160	0.53	1.65	46.7
165	0.54	1.73	49.1
170	0.56	1.82	51.5
175	0.58	1.90	53.9
180	0.59	1.99	56.4
185	0.61	2.08	58.9
190	0.63	2.17	61.4
195	0.64	2.26	64.0
200	0.66	2.36	66.7

$$Q(L/s) = 0.0144 h(mm)^{1.593}$$