

WATER PERMIT NO. 5863-3

Phone: 875-3356

Name of Applicant: Keith Krull

Post Office Address: 20850 318th Ave, Harrold SD 57536

Amount of Water Claimed: 106 acre-feet Total Acres: NA

Source of Water Supply: runoff

Water to be used for: fish & wildlife and livestock County: Hughes

Location: 16 miles south of Harrold

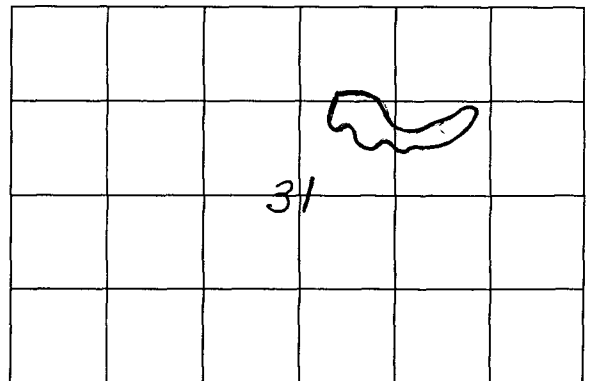
PRIORITY Date Received: 4-24-95 Fee: \$150.00

Corrected Application Received: _____ Period of Annual Use: Jan 1 - Dec 31

Remarks: _____

Diversion Point: W 1/2 NE 1/4 Sec 31-T110N-R74W

Water Impounded: W 1/2 NE 1/4, SE 1/4 NE 1/4
Sec 31-T110N-R74W



Well Log: Driller: _____ Licensed: YES _____ NO _____

Depth of Well: _____ REMARKS: _____

Type of Map: plat Prepared By: K. Paulsen Reviewed and the Number

Assigned on: 4-24-95 By: Karen Schlaak

FORM 2: Application for uses other than irrigation

(type or print)



Mail to:
Water Rights Division
Joe Foss Building
523 E Capitol
Pierre SD 57501-3181
605 773-3352

No. 5863-3 Hydrologic Unit 10140101
Basin Missouri River
Newspaper Capital Journal, PO Box 878, Pierre
(office use only)

Application For Permit To Appropriate Water Within The State Of South Dakota

Check use of water:

☐ Municipal ☐ Suburban Housing ☐ Recreational ☐ Institutional
☐ Rural Water System ☐ Commercial ☒ Fish & Wildlife ☐ Geothermal Heat
☐ Domestic ☐ Industrial ☒ Other Livestock
(over 18 gpm)

Type of Application: ☒ New ☐ Vested Right (Use predates Mar 2, 1955) ☐ Future Use Reservation
(check one) ☐ Place to Beneficial Use Water Reserved by Future Use Permit No. _____
☐ Amendment/Correction to Permit No. _____

Description of amendment/correction: (i.e. change diversion point(s), add diversion point(s), change use, etc.) _____

- Name of Applicant Keith Krull Phone 875-3356
(check one) ☒ Owner ☐ Tenant/lessee
Mailing Address 20850 318th Ave. Harrold State S.D. 57536
(Street, RR, or Box) (City) (Zip Code)
- Amount of water claimed _____ *CFS or _____ **GPM 107.5 ***AF 706.0
(*Cubic Feet per Second) (**Gallons per Minute) (**Acre Feet -- storage capacity of dam/dugout or annual use if applicable)
- Source of water supply Runoff
- Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) _____
W 1/2 NE 1/4 Sec. 31 T110N, R74W impounded area W 1/2 NE 1/4, SE 1/4 NE 1/4 Sect. 31
T110N-R74W County Hughes
- County or counties where water will be used Hughes
- Annual period during which water is to be used Year round Jan 1 - Dec 31
- Give a description of the project. When available include any preliminary engineering report or other reports or information that will help explain the project. (Attach sheet if more space is needed)

Pond will be constructed to provide livestock water and enhance wildlife production.

Attachments: Attach Form 2A if diversion is from a well or dugout, or if storage of water is proposed. Attach map and any other technical information. (see instructions)

STATE OF SOUTH DAKOTA)

County of Hughes)^{SS}

I, Keith Krull, the applicant, certify that I have read this application, have examined the attached map and that the matters stated are true and that I intend, and am able to complete the necessary construction.

Signed Keith Krull

Subscribed and sworn to before me this 24 day of April 19 95

Vicki Likaess
Notary Public

March 5, 1990

Supplemental Information

(type or print in ink)

1. Well Information - Proposed Construction

- a) Drill Hole Diameter _____ Depth _____
- b) Casing Type _____ Diameter _____ Thickness _____
- c) Screen Type _____ Diameter _____ Thickness _____
- d) Gravel Pack Thickness _____ Length of Gravel Pack _____
- e) Depth to Top of Water Bearing Material _____
- f) Depth to Water (ground surface to water level) _____
- g) Distance to nearest existing domestic well:
On applicants property _____ On property owned by others _____

2. Wastewater Disposal System Information

- a) Type of System (i.e. septic tank, drain field) _____
- b) System Capacity (gallons) _____ c) Year Constructed _____
- d) Connected to the City of _____ Sanitary System.

3. Dugout Information

- a) Surface Dimensions _____ Depth _____
- b) Depth to water (ground surface to water level) _____

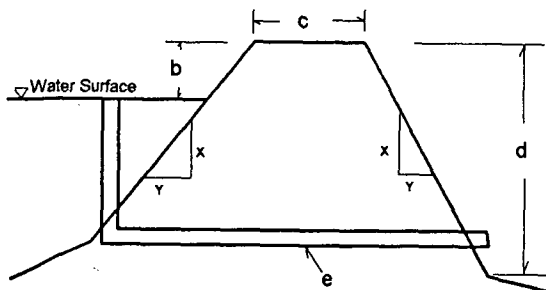


4. Water Storage Dams

If the proposed water use system contains one or more storage dams, please furnish the information requested below for each dam. The locations of the dams need to be shown on the map submitted with the application.

- a) If a private engineering firm or government agency was involved in the design of this dam, please give their name and address:

Kevin L. Paulsen (WRCS)
316 So. Coteau Pierre, SD



- b) Freeboard 5'
- c) Crest Width 12'
Crest Length 336'
- d) Height 24'
- e) Primary Outlet Capacity _____
If pipe, diameter 18" Riser 12" Barrel
- f) Secondary Spillway Capacity 562 cfs
Spillway Width 106'
- g) X & Y Slope
Upstream 3:1
Downstream 3:1
- h) Surface Area of Impoundment 13.0 Ac.
- i) Storage 107.5 Acre Feet
- j) Drainage Area Above Dam 2860 Acres

**SOUTH DAKOTA
WATER PERMIT NO. 5863-3**

Date of first receipt of application April 24, 1995.

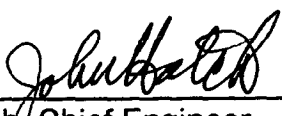
The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 5863-3 to Keith Krull, 20850 318th Ave, Harrold SD 57536 authorizing the construction of the water use system and the placing of water to beneficial use subject to the following limitations, conditions and qualifications:

1. Water Permit No. 5863-3 authorizes impoundment of 107.5 acre-feet of water from local runoff by constructing a dam located in the W 1/2 NE 1/4 Section 31 with water impounded in the W 1/2 NE 1/4, SE 1/4 NE 1/4 Section 31; all in T110N-R74W. This permit appropriates sufficient water annually to maintain the water level in the dam at the primary spillway (outlet) elevation.
2. The water appropriated shall be used for the purpose of supplying water for fish and wildlife production and livestock watering and may not exceed the amount of water needed for beneficial use.
3. The water is to be used during the following described annual period: January 1 - December 31.
4. The date of approval of Permit No. 5863-3 is July 10, 1995.
5. The date from which applicant may claim right is April 24, 1995.
6. One-fifth of the construction is to be completed on or before January 10, 1998.
7. All construction is to be completed on or before July 10, 2000.
8. Water is to be put to beneficial use on or before July 10, 2004.
9. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

1. Water Permit No. 5863-3 authorizes a dam with storage capacity of 107.5 acre-feet of water and sufficient water annually to maintain the water level to the primary spillway (outlet) elevation.
2. Low flows as needed for downstream domestic use, including livestock water and prior water rights must be by-passed.

WATER MANAGEMENT BOARD

By: 
John Hatch, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

JUL 12 1995

date

LOCATION NOTICE
FOR DAM/DUGOUT

Mail to: Water Rights Div.
DENR, Foss Bldg.
523 E. Capitol
Pierre, SD 57501-3181
(605) 773-3352

Hughes Co.
County

Location Notice No. (Office Use)

I, Keith Krull, of

Name

20850 318th Ave Harold, So. Dak. 57536
Address & Zip Code

Hughes
County

(check one) ☒ owner, ☐ operator, of the following described land, do hereby notify the Water Management Board of the State of South Dakota and all others concerned that I am exercising my right under SDCL 46-4, for construction of a (check one) ☒ dam, ☐ dugout for the purpose of impounding runoff waters for livestock watering purposes.
(type of use - livestock, recreation, etc.)

The following data is presented in compliance with SDCL 46-4-3 and 46-4-4.

(1) Date of:

(a) This notice 3-28-95

(b) Proposed construction 6-95

(2) Legal description of the land upon which the dam/dugout is located:

S 1/2 NE 1/4 Sec 31 T.110N. R.74W.
(describe to the nearest 40 acre subdivision)

(3) Location of the dam/dugout from a section corner:

3,100' West + 1,900' south of the Northwest corner of Sec. 31 110N. 74W.
(describe distance N.S.E.W. in feet from the corner)

(4) County Hughes

(5) Name of landowner Keith Krull

(6) Acre feet of water claimed annually 106 Ac. Ft.

Notes: If the storage of the proposed structure at the spillway crest or overflow elevation exceeds twenty five (25) acre feet, a water permit from the Water Management Board is required.

A location notice is required on a dugout only if the dugout captures surface waters.

Continue on other side



RECEIPT

414483

Division of Water Rights

South Dakota Department of Environment and Natural Resources

Pierre, _____ April 24, 19 95

RECEIVED OF Keith Krull, 20850 318th Ave., Harrold, SD 57536

the following amount in fees for services rendered as provided for by law:

Fee for Application for Permit No. <u>5813-3</u> to Appropriate Water, to construct and to put water to beneficial use _____	150	00
Fee for Application for Permit No. _____ to Appropriate Water, for Future Use _____		
Fee to retain Future Use Permit No. _____ after period of seven years.		
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. _____		
Fee for Filing Transfer Form _____		
Fee for Filing Extension Request _____		
Fee for _____		

(Any Other Work Provided by Law)	Total	150 00

By John Hatcher
Chief Engineer

Kieth Krull Dam Plans & Specs Review

5-10-95 LB

Top of Dam elevation	100.0
primary outlet,	95.0
emergency spillway	97.0
emergency spillway width	106.0'
embankment ht.	20.0'
primary outlet	4' of 36" riser and 90' of 12" pipe
	slope = 12% = .012'/1'

ISGS - Estimating Flood Peaks:

$$Q_{25} = 83.4 A^{0.44} S^{0.6} S_i^{-0.72}$$

$$= 83.4 (4.4688)^{.44} (52.80)^{.6} (3.51)^{-0.72}$$

$$= 705 \text{ cfs}$$

$$A = 2860 \text{ acres}$$

$$= 4.4688 \text{ mi}^2$$

$$S_i = 3.51$$

$$S = 0.011\% = 52.80' / 1\text{mi}$$

$$Q_{100} = 933 \text{ cfs}$$

Primary Spillway Capacity:

$$Q = a \sqrt{\frac{2gH}{1+K_m+K_pL}}$$

$$12.38 \text{ cfs to } 16.13 \text{ cfs}$$

$$L = 90$$

$$100 - 80.5 = 19.5$$

$$H = 92 - 80.5 = 11.5 \text{ } K_m = 0.5 \text{ } K_p = 0.1157$$

$$\text{center @ outlet end of pipe} = 80.5'$$

$$\text{top of pipe elevation} = 92.0'$$

Emergency Spillway Capacity

$$Q = CLH^{3/2} = 2.6 (106) (3)^{1.5} = 1432 \text{ cfs}$$

As a Channel

GRAPHICAL PEAK DISCHARGE METHOD

Version 2.00

Project : Keith Krull
 County : Hughes
 Subtitle :

State: SD

User: ELP
 Checked: _____

Date: 02-11-95
 Date: _____

Data: Drainage Area : 2860 * Acres
 Runoff Curve Number : 77
 Time of Concentration: 8.61 * Hours
 Rainfall Type : II
 Pond and Swamp Area : NONE

Storm Number	1	2	3	4	5	6	7
Frequency (Yrs)	1	2	5	10	25	50	100
24-hr Rainfall (in)	1.8	2.2	3	3.5	4.1	4.6	5.2
Ia/P Ratio	0.33	0.27	0.20	0.17	0.15	0.13	0.11
Runoff (in)	0.35	0.56 <i>133.4/Pa</i>	1.07	1.43	1.89	2.29	2.79
Unit Peak Discharge (cfs/acre/in)	0.092	0.096	0.101	0.102	0.104	0.105	0.106
Pond and Swamp Factor 0.0% Ponds Used	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Peak Discharge (cfs)	91	154	308	419	562	688	845

* - Value(s) provided from TR-55 system routines

$\frac{.005}{2853}$
 $\frac{.01}{1036}$
 $\frac{101}{Flow area = 345.0}$
 $V = 11.78$
 $P_w = 124.97$
 $Frond No. = 1.24$
 $\frac{.005}{8.27}$
 $\frac{.025-.030}{124.97}$
 0.87



TIME OF CONCENTRATION AND TRAVEL TIME

Version 2.00

Project : Keith Krull
 County : Hughes
 Subtitle:

State: SD

User: klp
 Checked: _____

Date: 02-11-95
 Date: _____

Flow Type	2 year rain	Length (ft)	Slope (ft/ft)	Surface code	n	Area (sq/ft)	Wp (ft)	Velocity (ft/sec)	Time (hr)
Sheet	1.2	150	.005	j					0.423
Sheet		150	.005	j					0.423
Shallow Concent'd		1000	.01	u					0.172
Shallow Concent'd		1000	.01	u					0.172
Open Channel		13350						1	3.708
Open Channel		13350						1	3.708

Time of Concentration = 3.61*
 =====

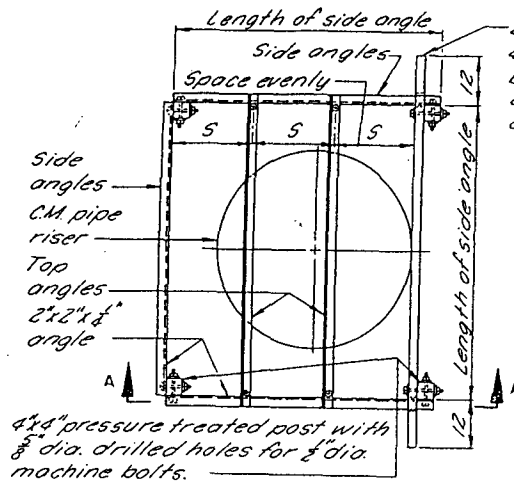
--- Sheet Flow Surface Codes ---

A Smooth Surface	F Grass, Dense
B Fallow (No Res.)	G Grass, Bermuda
C Cultivated < 20 % Res.	H Woods, Light
D Cultivated > 20 % Res.	I Woods, Dense
E Grass-Range, Short	J Range, Natural

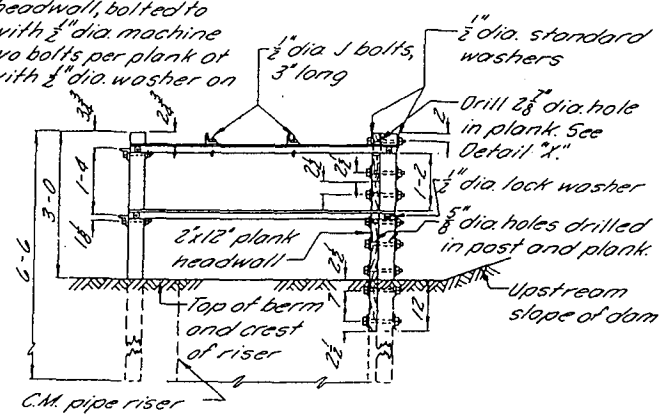
--- Shallow Concentrated ---
 --- Surface Codes ---
 P Paved
 U Unpaved

* - Generated for use by GRAPHIC method

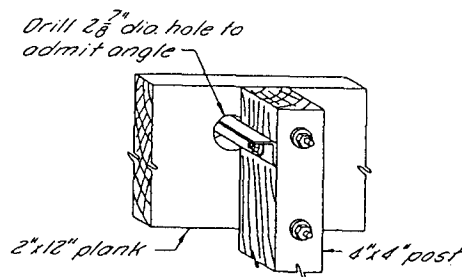




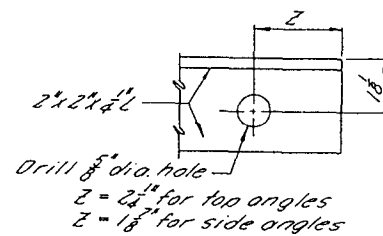
PLAN



SECTIONAL ELEVATION A-A



DETAIL "X"



DETAIL OF DRILL HOLES IN ANGLES

LIST OF MATERIALS

ITEM NO.	ITEM	QUANT.	LENGTHS FOR DIFFERENT RISER DIA.				
			12-15	18-21	24	30	36-42
1	PIPE, 1" DIA. STD. GALV.	10	4-0	4-6	5-0	5-6	6-0
2	PLAIN RODS, 1/2" DIA. FOR SIDES	6	2-9	2-9	2-9	2-9	2-9
3	PLAIN RODS, 1/2" DIA. FOR TOP	2	3-3	3-9	4-3	4-9	5-3
4	BOLTS, MACHINE, 1/2" DIA. GALV. 8" LONG	6					
5	WASHERS, 1/2" DIA. GALV.	12					
6	WASHERS, 1 3/8" DIA. GALV.	40					
7	LOCKNUTS, 1" DIA. GALV.	40					
8	POSTS, 4" X 4", TREATED	4	8-0	8-0	8-0	8-0	8-0
9	CROSS BRACE, 4" X 4", TREATED	1	3-4	3-10	4-4	4-10	5-4
10	PLANK, 2" X 12", TREATED	3	6-0	6-6	7-0	7-6	8-0
11	U-BOLT CLAMPS, 3/8" DIA.	16					

TABLE OF QUANTITIES

ITEM NO.	ITEM	UNIT	RISER DIAMETER				
			12-15	18-21	24	30	36-42
1	LUMBER, TREATED	BD.FT.	83	87	90	94	98
2	PIPE, 1" DIA. STD. GALV.	LIN.FT.	40-0	45-0	50-0	55-0	60-0
3	PLAIN RODS, 1/2" DIA.	LIN.FT.	23-0	24-0	25-0	26-0	27-0

NOTES:

1. DIMENSIONS ON PLANKS ARE NOMINAL. 4 1/2" DIA. PRESSURE TREATED ROUND POSTS MAY BE USED IN LIEU OF 4" X 4" POSTS SHOWN.
2. ALL PLANKS AND POSTS TO BE EITHER FULL DIMENSION OR SURFACED LUMBER, PRESSURE TREATED CONSTRUCTION GRADE DOUGLAS FIR (OR EQUAL).
3. NUTS, WASHERS AND BOLTS GALVANIZED; ANGLES GALVANIZED OR PAINTED AS PER SPECIFICATIONS
4. TRASH RACK MAY BE INSTALLED WITH OR WITHOUT BERM. IF INSTALLED WITHOUT BERM, UPSTREAM POSTS MUST BE LENGTHENED AS REQUIRED.

DETAILS OF TIMBER HEADWALL AND GUARDRAIL

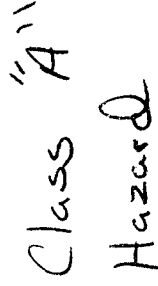
APPURTENANCES FOR C.M. PIPE DROP INLETS

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

COMPILED	CHECKED	DATE	DRAWING NO.
		8-65	50-19,000.40-4

TABLE OF QUANTITIES

LOCATION



SKETCH PLAN OF DAM AND RESERVOIR AREA

REFERENCE: GUIDE PLAN NO. 1.0

TYPICAL CROSS SECTION OF DAM

EARTH DAM

S.D. CONSTRUCTION AND MATERIAL SPECIFICATIONS:

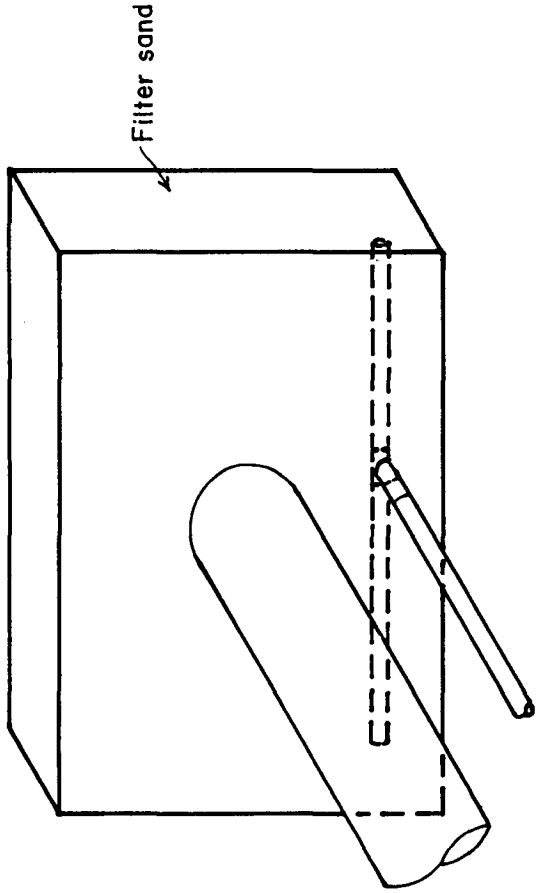
SD-1 Clearing
SD-73 Earthwork
SD-116 Timber Fabrication
SD-55
PE Corrugated Pipe

OPERATOR: Keith Knull
CONSERVATION DISTRICT: Hughes Co.

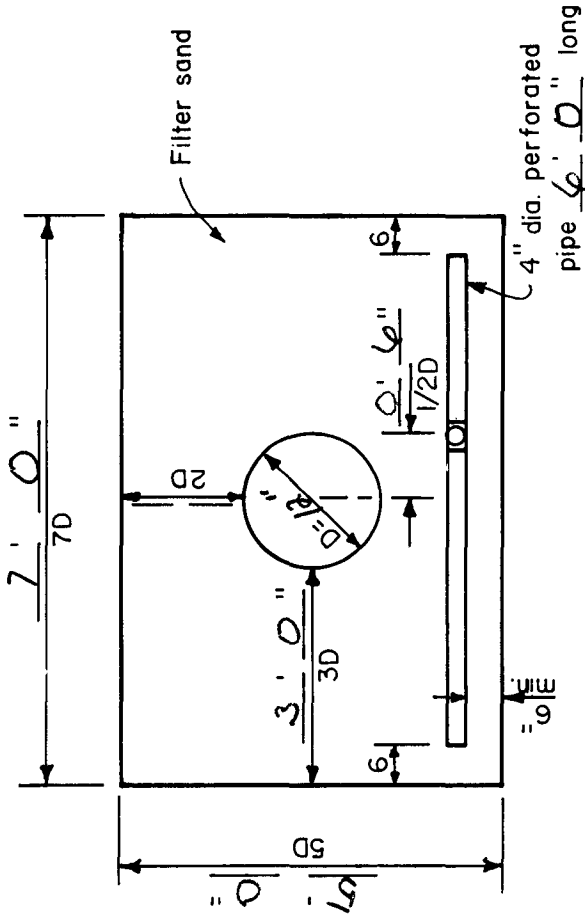
U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Designed	K. Paulsen	Date	2-95	Approved	K. Paulsen
Drawn	K. Paulsen		2-95	Title	103 E. 7
Traced				Title	
Checked				Sheet	Drawing No.
				No	

OPERATOR <u>Keith Krull</u>		Conservation District <u>Hughes Co.</u>	
U. S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE			
Designed <u>K. Paulsen</u>	Date <u>3-35</u>	Approved by _____	
		Title _____	
Drawn <u>K. Paulsen</u>	Title _____	Sheet _____	Drawing No. _____
		No. _____	of _____
Traced _____	Checked _____		



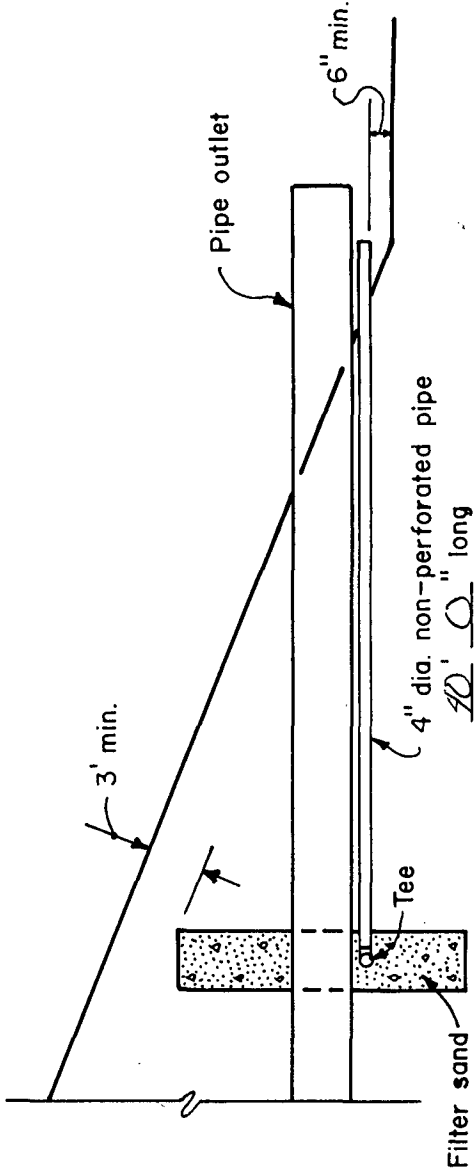
ISOMETRIC VIEW



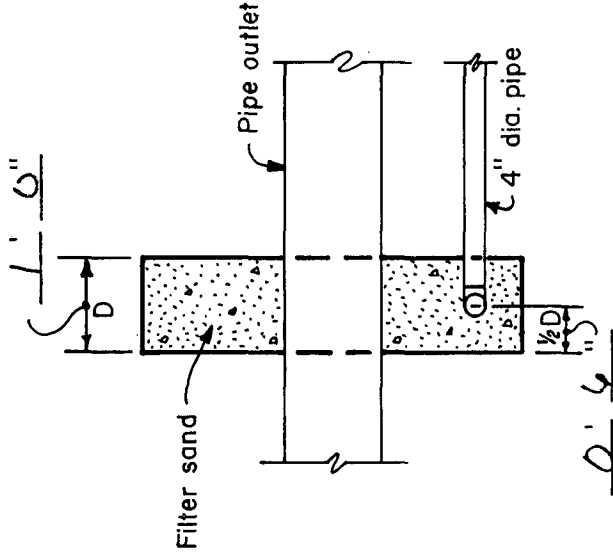
UPSTREAM VIEW

NOTE:

1. THE 4" DIA. PIPE SHALL BE ASTM D1785, SCHEDULE 40, PVC.
2. PROVIDE AN ANIMAL GUARD ON DRAIN OUTLET PIPE. DRILL 2, 1/2" DIA. HOLES, ON 6" FROM END OF PIPE AND PLACE A 3/8" DIA., 5 1/2" LONG GALVANIZED STEEL BOLT THRU THEM AND SECURE WITH A NUT (PLACE BOLT HORIZONTAL).



OUTLET DETAIL



SIDE VIEW

FILTER GRADATION	
SIEVE SIZE	PERCENT PASSING
3/8"	100
4	95-100
8	80-100
16	50-85
30	25-60
50	10-30
100	2-10

Sec. 31, T. 110N., R. 74W.

Hughes County

LOCATION

5.0x7.0x1.0
27 = 1.3 cyds

SAND ANTISEEP COLLAR

OPERATOR Keith Krull

CONSERVATION DISTRICT Hughes

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

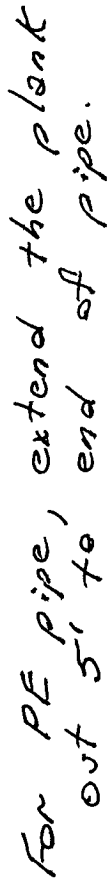
Designed by K. Paulsen

Drawn by K. Paulsen

Traced by K. Paulsen

Checked by K. Paulsen

JOB PLAN NO. 3.8



I. HAND OR MACHINE TAMP BACKFILL THOROUGHLY AROUND FOOTINGS AND COLUMNS. _____

SECTIONAL ELEVATION A-A

TIMBER PIPE SUPPORT

CONSERVATION DISTRICT: Hughes Co.

Designed <i>K. Paulsen</i>	Date <i>3-28</i>	Approved by _____	
		Title _____	
Drawn _____		Title _____	Drawing No. _____
		Sheet _____	No. _____
Traced _____			
Checked _____			

JOB PLAN NO. 4.0

5, N-29, 073.4a

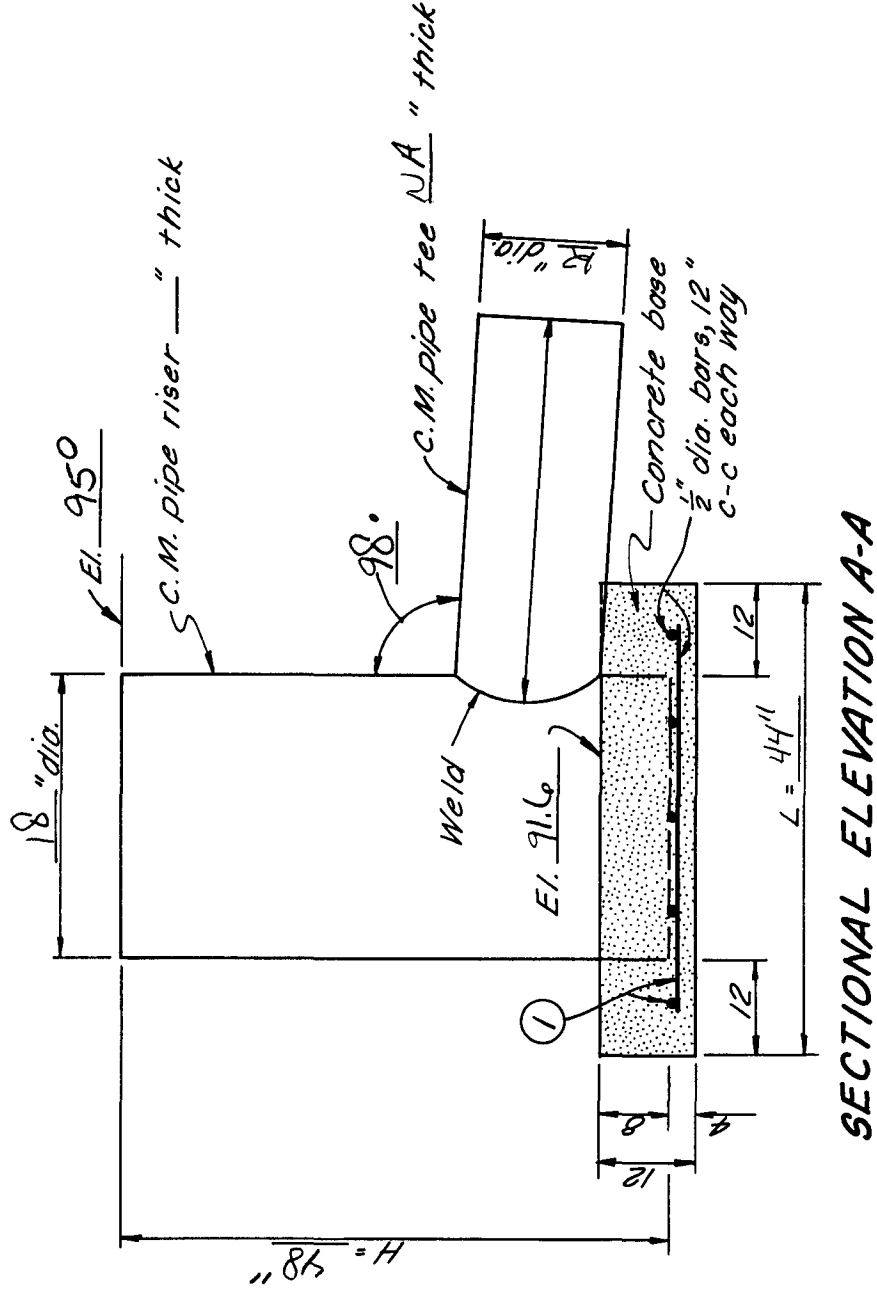
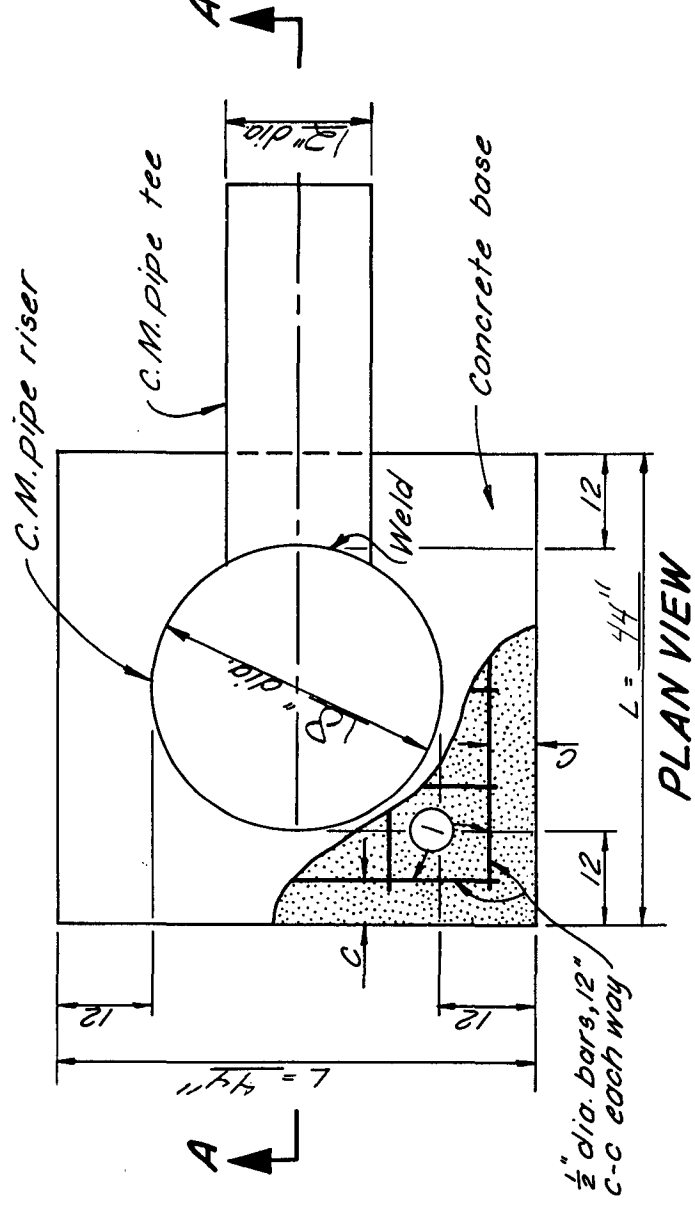
STEEL SCHEDULE

RISER DIA. IN.	BAR SIZE	MARK	TYPE	NO. REQ'D.	LENGTH FT.-IN.	TOTAL LENGTH FT.-IN.	TOTAL WT. LB.	C IN.	L FT.-IN.
18	4	1	STR.	8	3-0	24-0	16	3	3-6

TABLE OF QUANTITIES

ITEM	UNIT	QUANTITY
CONCRETE	CU. YD.	0.5
REINFORCING STEEL	LB.	

NOTE:



PE ~~PIPE~~ PIPE RISER WITH
FABRICATED TEE

OPERATOR: Keith Kewell

CONSERVATION DISTRICT: Hughes Co

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Designed: <u>K. Paulsen</u>	Date: <u>3-9-95</u>	Approved by: _____
-----------------------------	---------------------	--------------------

Drawn K. Paulsen 3.95

Title		Drawing No.	
Sheet	No	Sheet	No
Traced			
Checked			

JOB PLAN NO. 5.3

REFERENCE: GUIDE PLAN NO. 5.3

5.N-29,073.5-30

Report for Application No. 5863-3

Keith Krull

May 11, 1995

This application is for storage of 107.5 acre feet of water from local runoff by constructing a dam located in the W 1/2 NE 1/4 Section 31 and water will be impounded in the W 1/2 NE 1/4 Section 31; all in T110N-R74W. This application requests appropriation of sufficient water annually to maintain the water level in the dam at the primary spillway (outlet) elevation. The water is to be used for fish and wildlife production and livestock watering.

Discussion:

According to the hazard classification submitted with the application, the dam is a category 3, small size dam. A "Category 3 dam" is a low hazard dam whose failure may cause limited damage to agricultural lands or county and township roads or minimum economic loss. The dam will be 20 feet high (effective height of 17 feet) with a storage capacity of 107.5 acre-feet to the primary outlet elevation. The spillway is required to have a minimum capacity of passing a 25 year frequency event based on Safety of Dams Rule 74:02:08:07:01.

The drainage area of the proposed dam is 4.42 square miles (2830 acres) and has a peak inflow from a 25-year frequency event of 705 cubic feet of water per second (cfs). The dam is designed with a 106 foot wide emergency spillway with a capacity of 1432 cfs, and a primary outlet with a capacity of 16 cfs. The combined capacity exceeds the 100-year frequency event.

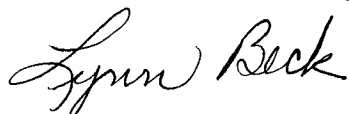
The plans and specifications have been approved for this project; although, construction can not start until Water Permit Application No. 5863-3 is approved. The primary spillway consists of an 18 inch diameter corrugated metal pipe overflow riser with a 90 foot, 12 inch, corrugated metal pipe barrel. A 106 foot wide earthen channel will operate as the emergency spillway.

The Keith Krull dam will be located on a tributary of South Chapelle Creek about 28 miles east of Pierre on state highway 34 and 1 mi. north of state highway 34. There are no existing water rights on the drainage downstream of the proposed dam.

Conclusions:

1. Water Permit Application No. 5863-3 should be approved since unappropriated water is available and approval will not have any adverse effects on existing Water Permits/Rights.

2. If approved, the low flow bypass requirement for downstream domestic use should be a qualification on Water Permit Application No. 5863-3.



Lynn Beck
Natural Resources Engineer III

Approved by:



Gale N. Selken, P.E.
Natural Resources Engineer IV

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 5863-3, Keith Krull**

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Division, Department of Environment and Natural Resources concerning Water Permit Application No. 5863-3, Keith Krull, 20850 318th Avenue, Harrold, SD 57536.

The Chief Engineer is recommending APPROVAL of Application No. 5863-3 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing rights, 3) the proposed use is a beneficial use and 4) in the public interest with the following qualifications:

1. Water Permit No. 5863-3 authorizes a dam with storage capacity of 107.5 acre-feet of water and sufficient water annually to maintain the water level to the primary spillway (outlet) elevation.
2. Low flows as needed for downstream domestic use, including livestock water and prior water rights must be by-passed.

See report on application for additional information.


FOR JOHN HATCH, Chief Engineer
June 15, 1995



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181

NOTE: TO BE SURE OF PUBLICATION ON
THE CORRECT DATES, CONTACT
THE NEWSPAPER RIGHT AWAY.

June 16, 195

Keith Krull
20850 318th Avenue
Harrold, SD 57536

Kip Krull
20834 318th Avenue
Harrold, SD 57536

Dear Mr. Krull:

Water Permit Application Nos. 5863-3 and 5864-3 for fish & wildlife and livestock watering use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice of hearing has been sent to the Publisher of the Capital Journal printed at Pierre, SD (Ph # 605-224-7301). For your information, a copy of the notice, the recommendation of the Chief Engineer and a report on your application are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

One of you needs to contact the above newspaper to authorize publication of the Notice of Hearing and to arrange for payment. Early contact with the paper can eliminate delays. The publisher has been instructed to publish your notice once each week for two consecutive weeks with the last publication to occur twenty days before the board meeting. The newspaper has been instructed to send us the Proof of Publication. We must receive Proof of Publication before action can be taken on the application.

Sincerely,

Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures

NOTE: If you plan to contest any part of the Chief Engineer's recommendation, you must file a petition pursuant to the procedures outlined in the attached notice of hearing. The Water Management Board will then consider your concerns during a hearing on the application.



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181

June 16, 1995

Capital Journal
PO Box 878
Pierre, SD 57501-0878

ATTENTION: Legal Department

Enclosed is a Notice of Hearing on Application Nos. 5863-3 and 5864-3 to be published twice. Please publish the first notice on June 23, 1995, with the second publication 7 days later.

The APPLICANTS MUST VERIFY TO YOU THAT THE NOTICE IS TO BE PUBLISHED, before you make the first publication. Please BILL the APPLICANTS for the cost of publication. The APPLICANTS are Keith Krull (No. 5863-3), 20850 318th Avenue, Harrold, SD 57536 (Ph # 605-875-3356) and Kip Krull (No. 5864-3), 20834 318th Avenue, Harrold, SD 57536 (Ph # 605-875-3349).

A copy of BOTH publications must be SENT to the WATER RIGHTS DIVISION. IMMEDIATELY return the FIRST publication with the FIRST Transmittal form on the bottom of this page. The first copy is needed to check the publication for errors so any corrections can be made in the second publication. Publication errors can invalidate the public notice and cause the applicants costly delays.

Please be sure the SECOND publication is returned IMMEDIATELY with the enclosed Proof of Publication form. DO NOT WAIT until the end of the month or the billing cycle. No action may be taken on the permit application until proof of publication has been received.

Sincerely,


Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures

-----CUT HERE-----

FIRST TRANSMITTAL NOTICE

TO: Eric Gronlund
Water Rights Division
Joe Foss Building
Pierre SD 57501-3181

No. _____

Date _____

We are in receipt of your letter of _____ enclosing Notice of Hearing to Appropriate Water by Application No. _____ which was first published in our issue of _____. ENCLOSED IS A COPY OF THIS FIRST PUBLICATION.

Name

Newspaper

Instruction to Newspaper - Publish first Notice on June 23, 1995, with the second publication 7 days later. The applicant is responsible for payment.

NOTICE OF APPLICATION NOS. 5863-3 and 5864-3 to Appropriate Water

Notice is given that Keith Krull, 20850 318th Avenue, Harrold, SD 57536 has filed an application for a water permit to impound 107.5 acre-feet of water from local runoff by constructing a dam located in the W 1/2 NE 1/4 Section 31 with water impounded in the W 1/2 NE 1/4, SE 1/4 NE 1/4 Section 31; all in T110N-R74W. This application requests appropriation of sufficient water annually to maintain the water level in the dam at the primary spillway (outlet) elevation. The water is to be used for fish and wildlife production and livestock watering.

Notice is given that Kip Krull, 20834 318th Avenue, Harrold, SD 57536 has filed an application for a water permit to impound 41.4 acre-feet of water from local runoff by constructing a dam located in the W 1/2 NE 1/4 Section 32 with water impounded in the NE 1/4 Section 32; all in T110N-R74W. This application requests appropriation of sufficient water annually to maintain the water level in the dam at the primary spillway (outlet) elevation. The water is to be used for fish and wildlife production and livestock watering.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application Nos. 5863-3 and 5864-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the chief engineer will act on the applications, as recommended, unless a petition is filed opposing the applications or the applicants file a petition contesting the chief engineer's recommendations. If a petition opposing the applications or contesting the recommendations is filed, then a hearing will be scheduled and the Water Management Board will consider the applications. Notice of the hearing will be given to the applicants and any person filing a petition.

Any person interested in opposing or supporting these applications or recommendations must file a written petition with the applicants and chief engineer. The applicants must file a petition if contesting the chief engineer's recommendations. The Chief Engineer's address is "Water Rights Division, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicants' mailing address is given above. A petition filed by either an interested person or the applicants must be filed by July 10, 1995.

The petition may be informal, but must include a statement describing the petitioner's interest in the applications, the petitioner's reasons for opposing or supporting the applications, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. Contact Eric Gronlund at the above Water Rights Division address to request copies of information pertaining to these applications. Nettie H. Myers, Secretary, Department of Environment and Natural Resources.

NOTICE OF APPLICATION**NOS. 5863-3 and 5864-3****to Appropriate Water**

Notice is given that Keith Krull, 20850 318th Avenue, Harrold, SD 57536 has filed an application for a water permit to impound 107.5 acre-feet of water from local runoff by constructing a dam located in the W 1/2 NE 1/4 Section 31 with water impounded in the W 1/2 NE 1/4, SE 1/4 NE 1/4 Section 31; all in T110N-R74W. This application requests appropriation of sufficient water annually to maintain the water level in the dam at the primary spillway (outlet) elevation. The water is to be used for fish and wildlife production and livestock watering.

Notice is given that Kip Krull, 20834 318th Avenue, Harrold, SD 57536 has filed an application for water permit to impound 41.4 acre-feet of water from local runoff by constructing a dam located in the W 1/2 NE 1/4 Section 32 with water impounded in the NE 1/4 Section 32; all in T110N-R74W. This application requests appropriation of sufficient water annually to maintain the water level in the dam at the primary spillway (outlet) elevation. The water is to be used for fish and wildlife production and livestock watering.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends AP-PROVAL of Application Nos. 5863-3 and 5864-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the chief engineer will act on the applications, as recommended, unless a petition is filed opposing the applications or the applicants file a petition contesting the chief engineer's recommendations. If a petition opposing the applications or contesting the recommendations is filed, then a hearing will be scheduled and the Water Management Board will consider the applications. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting these applications or recommendations must file a written petition with the applicants and chief engineer. The applicants must file a petition if contesting the chief engineer's recommendations. The Chief Engineer's address is "Water Rights Division, Foss Building, 523 E Capitol, Pierre, SD 57501 (605 773-3352)" and the applicants' mailing address is given above. A petition filed by either an interested person or the applicants must be filed by July 10, 1995.

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)

County of Hughes) SSI, Peggy Warner

certify that the attached printed Notice was

taken from the _____

Capital Journalprinted and published in PierreCounty of Hughes and State of

South Dakota. The notice was published in the newspaper on the following two dates:

June 23, 1995June 30, 1995Cost of Printing: \$46.92Peggy Warner
(Signature)Legal Ad Representative
(Title)July 3, 1995
(Date Signed)

The petition may be informal, but must include a statement describing the petitioner's interest in the applications, the petitioner's reasons for opposing or supporting the applications, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. Contact Eric Gronlund at the above Water Rights Division address to request copies of information pertaining to these applications. Nettie H. Myers, Secretary, Department of Environment and Natural Resources.



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181

JUL 12 1995

Keith Krull
20850 318th Avenue
Harrold, SD 57536

Dear Mr. Krull:

Enclosed is Water Permit No. 5863-3 authorizing construction of your water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

Also enclosed is Form 10, Notice of Completion of Works and Application of Water to Beneficial Use, which you are to complete and submit to the Chief Engineer when you have completed the system and/or have put the water to beneficial use. An inspection can then be scheduled so that the Water License may be issued, thus completing your acquisition of a Water Right.

Very truly yours,

JOHN HATCH, Chief Engineer
Water Rights Program
605 773-3352

enclosures

PLEASE NOTE: Certain changes can be made in your permit within the five year construction period, usually without affecting the priority date provided an application to amend your permit is made within the five year period - i.e. changes in location or number of diversion points (wells) or location of land to be irrigated. Well locations for wells into the same aquifer can be moved up to 660 feet without application.

Applications to amend a permit after the five year construction period will be assigned a new priority date. Applications to change water sources, to add lands or increase original diversion rates, if approved will usually receive the date of the new application as a priority date regardless of the five year construction period.



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181
www.state.sd.us/denr

January 20, 2000

5863-3
5864-3

Kip Krull
20850 318th Ave.
Harrold, SD 57536

Dear Mr. Krull:

The investigation of your water use systems was conducted on September 10, 1999, by Lynn Beck, staff engineer. The investigation included the extent of application of water to beneficial use, as developed under Water Permit Nos. 5863-3 and 5864-3. Your final water right documents, the Water Licenses, can now be issued.

Statutes require that we charge a \$50.00 fee per license (\$100.00 total) for the investigation and issuance of the Water Licenses. Upon receipt of the \$50.00 fee per license (\$100.00 total) from you, we will begin processing your Water Licenses.

**Please remit fee to:
Department of Environment & Natural Resources
Water Rights Program
523 E. Capitol
Pierre, SD 57501-3181**

Sincerely,

Cheryl F. Frost
Secretary
Water Rights Program
(605) 773-3352

NOTE: On check or money order, please specify your permit numbers. This will insure proper handling of the fee.



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181
www.state.sd.us/denr

April 26, 2000

Permit Nos. 5863-3
5864-3

REMINDER NOTICE

TO: Kip Krull
20850 318th Ave.
Harrold, SD 57536

FROM: Garland Erbele, Chief Engineer
Water Rights Program *Garland Erbele*

SUBJECT: Water License/Investigation Fee Requirement

On January 20, 2000, we advised you that a \$50.00 fee per license (\$100.00 total) is due for the completed investigation of Water Permit Nos. 5863-3 and 5864-3. The fee also covers issuance of your water licenses which are the final documents in obtaining and perfecting a water right.

To date, we have not received the \$50.00 fee per license (\$100.00 total); therefore, we can not issue the water licenses. Your licensed water rights will be similar to a property right that can not be lost as long as the water use continues and you abide by any permit requirements.

Please remit the fee as soon as possible to obtain your water licenses. In addition, South Dakota water law does not allow water to be diverted until the license fees are paid. To avoid jeopardizing your ability to use water, please send the fee to the following address:

Department of Environment and Natural Resources
Water Rights Program
523 E Capitol
Pierre SD 57501-3181

Thank you for your prompt response. If you have any questions or believe our records are in error, please contact Genny McMath at (605) 773-3352.

RECEIPT

Water Rights Program

South Dakota Department of Environment and Natural Resources

N2 416495

Pierre, _____ May 4, 2000

RECEIVED OF Keith Krull, 20850 - 318th Ave., Harrold, SD 57536
the following amount in fees for services rendered as provided for by law:

Fee for Application for Permit No. _____ to Appropriate Water, to construct
and to put water to beneficial use _____

Fee for Application for Permit No. _____ to Appropriate Water, for Future
Use _____

Fee to retain Future Use Permit No. _____ after period of seven years.

Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water
License No. 5863-3

Fee for Filing Transfer Form _____

Fee for Filing Extension Request _____

Fee for _____

(Any Other Work Provided by Law)

Total

50 00

50 00

By Maureen E. Eide
Chief Engineer

REPORT ON INSPECTION OF PERMIT NO. 5863-3

DATE OF INSPECTION: 9-10-99

Other permit(s) associated with the project: #

NAME & ADDRESS OF INSPECTION CONTACT: Kip Krull, 20834 318th Ave., Harrold, SD 57536

RELATIONSHIP TO PERMIT HOLDER, IF APPLICABLE: brother

NAME & ADDRESS OF PERMIT HOLDER: Keith Krull, 20850 318th Ave., Harrold, SD 57536

DIVERSION POINT LEGAL LOCATION: 1420' W and 1715' S of the NE corner Section 31, T110N, R74W in the SW¹/₄ NE¹/₄.

DAM INFORMATION:

- 1) Height to crest 20 feet
- 2) Height to primary spillway 15 feet
- 3) Height to secondary spillway 17 feet
- 4) Crest width 12 feet
- 5) Crest length 336 feet
- 6) Spillway length 220 feet
- 7) Spillway width 110 feet
- 8) Approx. storage 107.5 ac-ft
- 9) Approx. Storage to crest # ac-ft
- 10) Date constructed: 1995
- 11) Outlet tubes:
 - a) diameter 12 inches
 - b) type double wall black plastic
 - c) valved no
 - d) location on structure apprx. 135' S of the N. end of dam embankment.
- 12) Category of Dam 3, small size dam
- 13) Inspection Sheet Completed no

PERMIT QUALIFICATIONS AND REGULATIONS:

- 1) Special qualifications to permit being abided by yes
- 2) All structures, wells and lands on map yes

Permit No. 5863-3
Missouri River - Water District

Report Of Examination Of Works And/Or Application of Water To Beneficial Use

TO: Chief Engineer, Water Rights Program, DENR, Foss Bldg., Pierre, SD 57501

I have this day, **September 10, 1999** made a thorough examination of the water use system constructed by **Keith Krull** of **20850 318th Ave., Harrold, SD 57536** holder of Permit No. **5863-3**, bearing the priority of **April 24, 1995** authorizing the storage of **107.5** acre-feet of the waters of **local runoff** for **fish and wildlife production and livestock watering** purposes, in **Hughes** County.

I have to report on the conditions of the same as follows:

A. Works used to divert the water:

Category 3, small size dam 336' long and 20' in height to crest and 15' to primary spillway. Primary spillway is an 18" riser with a 12" barrel all double walled black plastic. The secondary spillway is an earthen spillway 110' wide and 220' long.

B. Works used to apply water to beneficial use:

Same as above.

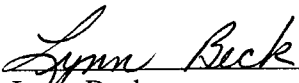
The system is in the following condition **good**. The point of diversion is located **1420' W and 1715' S of the NE corner Section 31, T110N, R74W**. The works are capable of diverting and storing **107.5** acre feet of water which is to be used for **fish and wildlife production and livestock watering**. Water has been put to beneficial use to the maximum extent as follows:

Water is impounded behind the dam in the SW¼ NE¼ and the SE¼ NE¼ all in Section 31, T110N, R74W.

the license should be issued for **107.5** acre-feet of storage.

Applicable permit qualifications have been complied with: **yes**

Exceptions to compliance are: **none**

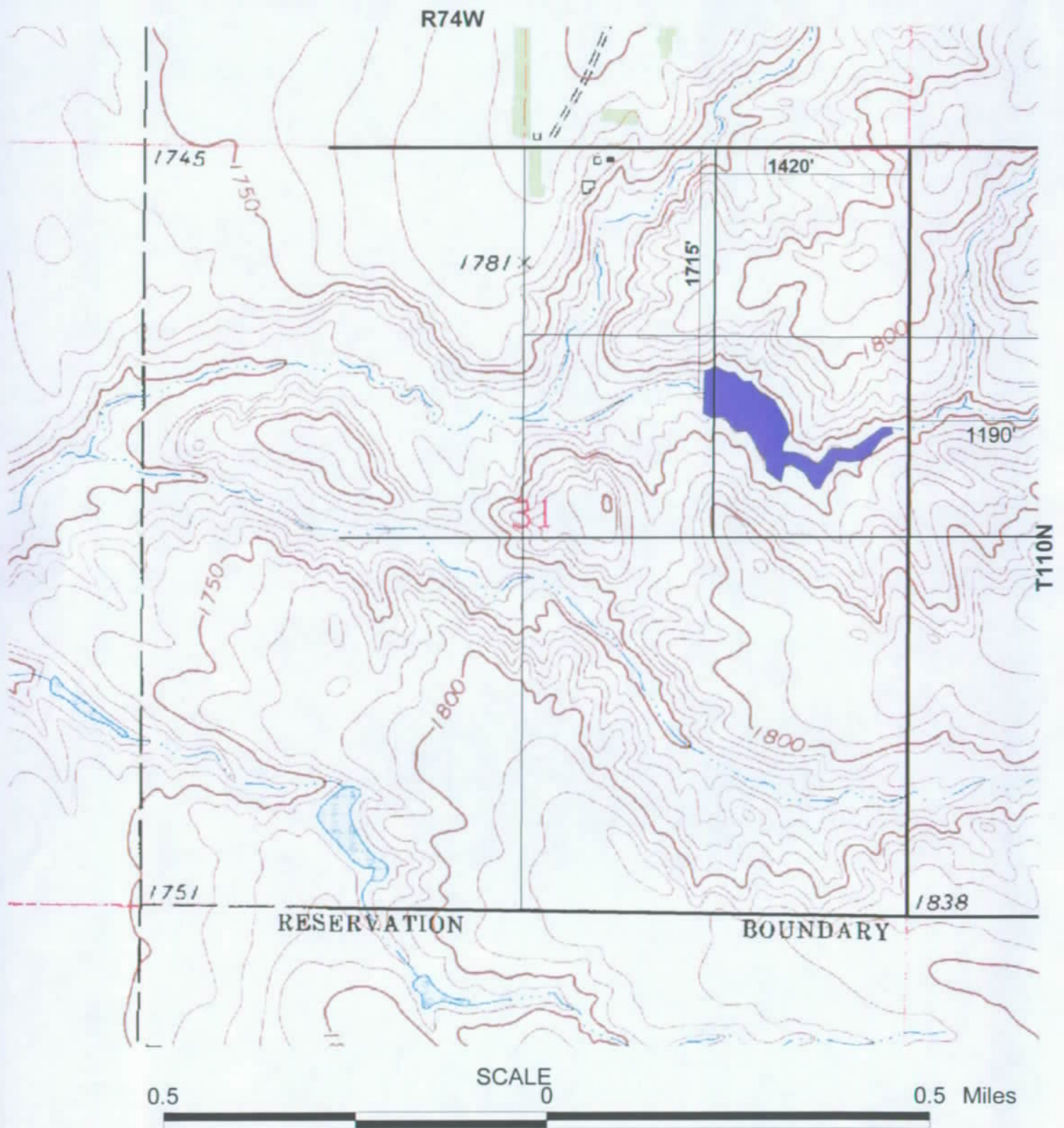


Lynn Beck
Natural Resources Engineer
DENR, Water Rights Program

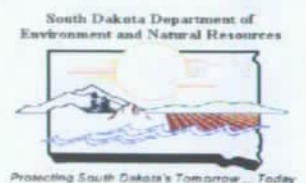
1-12-2000

Date

WATER RIGHT NO. 5863-3



Lynn Beck
Lynn Beck
Natural Resources Engineer
DENR, Water Rights Program
Sept. 24, 1999



STATE OF SOUTH DAKOTA

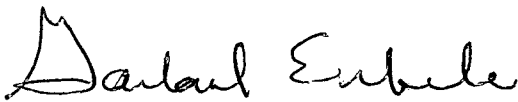
WATER LICENSE NO. 5863-3

(1) Keith Krull, 20850 318th Ave, Harrold SD 57536 made Application No. 5863-3, April 24, 1995 for a water permit to impound 107.5 acre-feet of water from runoff, Hughes County, South Dakota for fish & wildlife propagation and livestock watering purposes. Permit No. 5863-3, with a priority date of April 24, 1995 was approved July 10, 1995 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before July 10, 2000 and for the application to beneficial use of said water on or before July 10, 2004.

(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to completion of the construction of the storage dam and is entitled to impound 107.5 acre-feet of water for beneficial use with sufficient water annually to maintain the water level to the outlet elevation. The location of the storage dam is (spillway) 1,420 feet west and 1,715 feet south of the northeast corner of Section 31-T110N-R74W (SW ¼ NE ¼).

(3) The permit holder has complied with the provisions of South Dakota State Law relating to the application of water to beneficial use.

(4) Pursuant to South Dakota Water Law 46-5-30.1 Keith Krull, 20850 318th Ave, Harrold SD 57536 the holder and/or owner of Water Right No. 5863-3 is issued a license to appropriate water, the right to impound 107.5 acre-feet of water from runoff with sufficient water annually to maintain the water level to the outlet elevation with a priority date of April 24, 1995 from the location specified in (2) of this license for fish & wildlife propagation and livestock watering purposes. This license is subject to any limitations or qualifications listed in Water Right No. 5863-3 and subject to South Dakota State Law.



Garland Erbele, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

MAY 12 2000

date





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181
www.state.sd.us/denr

MAY 12 2000

5863-3

Keith Krull
20850 318th Ave.
Harrold, SD 57536

Dear Mr. Krull:

Enclosed is Water License No. 5863-3 and Receipt No. 416495 for \$50.00 which was assessed for an investigation and issuance of the license. Water License No. 5863-3 is the final document which completes the process of obtaining a water right.

As long as you use the water beneficially, as stated in the Water License, State Water Laws provide that you have a continuing right to use the water.

Sincerely,

Garland Erbele, Chief Engineer
Water Rights Program
(605) 773-3352

ks
enclosures