

SOUTH DAKOTA
WATER PERMIT NO. 6090-3

Date of first receipt of application July 13, 1998.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 6090-3 to James A Feller, 20275 Canning Rd, Blunt SD 57522 authorizing the construction of a dam and the placing of water to beneficial use subject to the following limitations, conditions and qualifications:

1. Water Permit No. 6090-3 authorizes impoundment of 66 acre-feet of water from surface runoff in a dam located in the SW ¼ SE ¼ Section 16 with water impoundment in the N ½ NE ¼ Section 21 and SW ¼ SE ¼ Section 16; all in T111N-R76W.
2. The water appropriated shall be used for the purpose of supplying water for livestock use and may not exceed the amount of water needed for beneficial use for livestock watering purposes.
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. 6090-3 is August 21, 1998.
5. The date from which applicant may claim right is July 13, 1998.
6. One-fifth of the construction is to be completed on or before February 21, 2000.
7. All construction is to be completed on or before August 21, 2003.
8. Water is to be put to beneficial use on or before August 21, 2007.
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. 6090-3 authorizes a dam with storage capacity of 66 acre-feet of water and sufficient water annually to maintain the water level to the 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
John Hatch, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

SEP 10 1998

date



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. 10090-3 Hydrologic Unit 10140103
Basin Missouri River
Newspaper Capital Journal, Pierre, SD
(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.) _____

1. Name of Applicant James A Feller Phone 962-6207
(check one) ☒ Owner ☐ Tenant/lessee
Mailing Address 20275 Canning Rd, Blunt SD State 57522
(Street, RR, or Box) (City) (Zip Code)

2. Amount of water claimed _____ *CFS or _____ **GPM 66.0 ***AF
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet -- storage capacity of dam/dugout or annual use if applicable)

3. Source of water supply Runoff

4. Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) Water Impounded:
N 1/2 NE 1/4 Section 21 T.111N. R.76W, SW 1/4 SE 1/4 sec. 16-T111N-R76W
SW 1/4 SE 1/4 sec 16-111N-76W (dam fill) County Hughes

5. County or counties where water will be used Hughes

6. Annual period during which water is to be used Summer months Jan 1 - Dec 31

7. 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)

see Job plans.

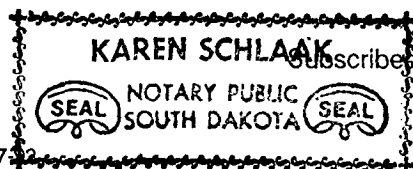
Attachments: Attach Form 2A if diversion is from a well or dugout, or if storage of water is proposed. Attach map and any other technical information. (see instructions)

STATE OF SOUTH DAKOTA)

County of Hughes)^{SS}

I, James A Feller, 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.

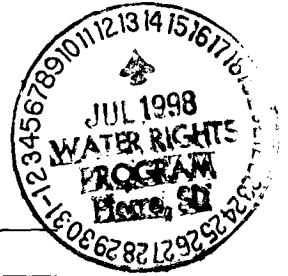
Signed James A Feller
Subscribed and sworn to before me this 13 day of July 19 98



KAREN SCHLAAK, Notary Public
My Commission Expires
April 1, 2001
Notary Public

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

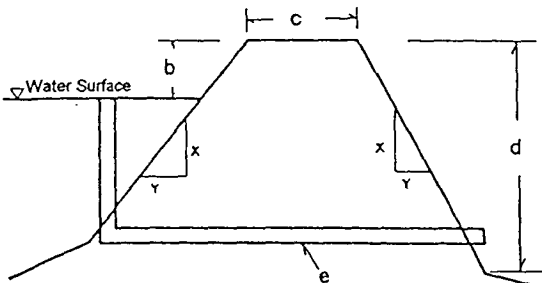
- a) Surface Dimensions _____ Depth _____
- b) Depth to water (ground surface to water level) _____

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 Paulsen / Tim Reedy
NRCS 316 So. Cotéau
Pierre, So. Dak



- b) Freeboard 3.0
- c) Crest Width 12.0
Crest Length 420
- d) Height 19.0
- e) Primary Outlet Capacity _____
If pipe, diameter 24"
- f) Secondary Spillway Capacity _____
Spillway Width 200'
- g) X & Y Slope
Upstream 3:1
Downstream 3:1
- h) Surface Area of Impoundment 16.4
- i) Storage 65.7 Acre Feet
- j) Drainage Area Above Dam 3,100 Acres

Water Rights Program -- File Documentation

NAME: James A Feller

ADDRESS: 20275 Canning Rd, Blunt SD

DATE: July 13, 1998 **COUNTY:** Hughes **TELEPHONE:** 962-6207

RE: Application for a 66 acre-feet storage dam received on July 13, 1998

COMMENTS:

James Feller delivered a water permit application for a storage dam located in Hughes county. Mr. Feller indicated that he owns the property immediately downstream from the proposed site on which another dam is located and that he owns the property in sections 16 and 21 that will be flooded by the proposed dam. Mr. Feller would also like to get the dam constructed this fall prior to freeze up.



Ron Duvall, Natural Resources Engineer
Water Rights Program

Missouri River

Hughes

County

LOCATION NOTICE

551-3

Dry Draw Number

1950

Program Year

ID # 1528

RECEIVED
DEC 1 1949

KNOW ALL MEN BY THESE PRESENTS:

That Lynn Beals whose post office is Elmer, South Dakota, Office of Citizens, the United States, above the age of 21 years, being in possession of the land covered by the above ACP farm serial number, of which the land upon which the works described below are to be constructed is a part, in Hughes County, South Dakota, availing him self of the right granted him under the provisions of Section 61.0133 South Dakota Code of 1939, has located and claims the right to construct a certain dam across a dry draw situated in the 1/4 of the SW 1/4 of Section 16 Township 111 Range 76, and has located and claims the right to construct ditches and flumes for the purpose of directing flood waters from said dam for irrigation of the land first above described and for Live Stock Purposes and claims the right of way across any land for the purpose of conveying water for said purposes.

Said locator claims for the above purpose 74.4 acre feet of water annually.

The location of the point of diversion of the reservoir is as follows:

From the _____

The ditch _____ will run in a _____ direction to and on said land for a distance of _____ feet.

Said location was made on the 15th day of November 1949
Witness my hand and seal this 15th day of November 1949

Lynn Beals
Locator

Herewith is enclosed one dollar for filing in the State Engineer's Office as required under Section 55.1206 of the South Dakota Code of 1939.

STATE OF SOUTH DAKOTA.

County of Hughes

On the 15th day of November 1949, before me Carl A. Winckler, a Notary Public in and for the County and State aforesaid, personally appeared Lynn Beals to me personally known to be the person who executed the foregoing instrument and acknowledged that he executed the same for the use and purposes therein set forth.

Witness my hand and official seal this _____ day of _____, 1949, as above written.

My commission expires FEB 1 1950

Carl A. Winckler
Notary Public

RECEIPT
Water Rights Program
South Dakota Department of Environment and Natural Resources

Nº 415818

Pierre, July 13, 19 98

RECEIVED OF James Feller, 20275 Canning Road, Blunt, SD 57529
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 _____	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 _____
Chief Engineer

John Hatch (Signature)

Estimating Flood Peaks and Volumes. USGS

Operator: Feller

Drainage Area = 4.85 sq. miles

Slope = 50 ft./mile

Soil Inf. Index = 3.33 inches (SEE PAGE 23)

Q2 =	62.66188	V2 =	49.67592
Q5 =	164.8256	V5 =	90.50586
Q10 =	268.9412	V10 =	128.7006
Q25 =	505.8224	V25 =	194.5024
Q50 =	726.7301	V50 =	255.6758
Q100 =	934.9048	V100 =	330.6068



Water Permit Application No. 6090-3
James A. Feller

Cat. 3 - Low Hazard Dam

Top of Dam Elev. - 99
P. Spillway Elev. - 94
2nd Spillway Elev. - 96
D/S Toe Elev. - 80

Height = 19 ft

Normal Storage Capacity - 66 Ac-Ft.
Int. Storage Capacity - 104 Ac-Ft.
Max Storage Capacity - 180 Ac-Ft.

Int. Storage Capacity x Eff Height = $104 \times 16 = 1664 < 3000$ ∴
25 year flood Minimum Spillway Design

From USGS WRI 80-80-"Tech. for Est. Flood Peaks ... in SD"

DA = 3100 acres = 4.8 mi.²
Slope = 50 ft/mile
SI = 3.33

$$\begin{aligned} Q_{25} &= 83.4 A^{.6} S^{.44} S_i^{-.72} \\ &= 83.4 (4.8)^{.6} (50)^{.44} (3.33)^{-.72} \\ &= 83.4 (2.56) (5.6) (0.42) \\ &= \underline{505 \text{ cfs}} \end{aligned}$$

$$\begin{aligned} Q_{100} &= 132 A^{.65} S^{.46} S_i^{-.67} \\ &= 132 (4.8)^{.65} (50)^{.46} (3.33)^{-.67} \\ &= 132 (2.77) (5.54) (0.45) \\ &= \underline{995 \text{ cfs}} \end{aligned}$$

Secondary Spillway Flow

$$\begin{aligned} Q &= C L H^{3/2} \quad C = 2.6 \quad L = 200' \text{ (Natural)} \\ &= 2.6 (200) (3)^{1.5} \quad H = 3' \\ &= \underline{2700 \text{ cfs}} \end{aligned}$$

Section 74:02:08:09

1. Topo Map - OK
2. Dam Axis Profile - OK
3. Dam X-Sec. - OK
4. Area-Capacity Data - OK
5. Outlet Details - OK
6. Spillway Discharge - OK
7. Spillway Details - OK
8. Specs. - Stt. NRCS - OK
9. EPP - N/A Cat. 3 - OK

NRCS Annual Yield

DA = 3100 Ac, CN = 78 ISO = 2

80% chance = 0.2
 $0.2 \times 3100/12 = \underline{52 \text{ Ac-Ft.}}$

50% chance = 0.5
 $0.5 \times 3100/12 = \underline{130 \text{ Ac-Ft.}}$

10% chance = 2.2
 $2.2 \times 3100/12 = \underline{570 \text{ Ac-Ft.}}$

1DAMS2 XEQ 06/04/98 STRUCTURE SITE ANALYSIS COMPUTER PROGRAM
REV 01/01/90 SCS TECHNICAL RELEASE 48, (USER MANUAL) DATED JAN. 1990
TIME 07:56:58

***** THIS PROGRAM IS IN TEST STATUS *****

***** 80-80 LIST OF INPUT DATA *****

DAMS2 01/01/90 FELLER DAM ROUTING 3/5/98

STRUCTURE FELL Location: HUGHES COUNTY

84.0	0.00	0.00
85.0	0.40	0.20
86.0	1.20	1.00
87.0	2.46	2.80
88.0	4.10	6.10
89.0	6.07	11.20
90.0	7.79	18.10
91.0	9.68	26.90
92.0	11.77	37.60
93.0	13.97	50.50
94.0	16.42	65.70
95.0	19.18	83.50
96.0 ⁹⁷	21.81	104.00 ¹³⁰
106.0 ^{99.00}	30.00	360.00 ^{206 180}

ENDTABLE

WSDATA 1A101 AC 78 3100.0 4.0
PDIRECT 1.0 3.5 4.50 4.50
PSDATA 1 80 24 "Barrel 0.025 85.0 ← outlet EL.
PSINLET ELEV 1.0 9.4248 94.0 ← P.S. Inlet EL.
POOLDATA ELEV 94.00 ← 36" Riser
ESCREST ELEV 96.0 ← E.S. EL.
ESDATA 28 150 0.030 3 0.035 5.0
BTMWIDTH FEET 200 ← BTM E.S. WIDTH
COMMENT
COMMENT Route a 10 year storm through the principal
COMMENT spillway and a 50 yr storm through the emergency spillway.
COMMENT Routed by Jim Reedy.
COMMENT
GO,DESIGN L TYPE2 24 TYPE2 24
ENDJOB

***** MESSAGE - DRAINAGE AREA FROM WSDATA CONTROL BEING CONVERTED FROM
ACRES TO SQUARE MILES FOR COMPUTATION PURPOSES.

1DAMS2 XEQ 06/04/98

REV 01/01/90 ROUTING 3/5/98

WSID = FELLER D

Route a 10 year storm through the principal

spillway and a 50 yr storm through the emergency spillway.

Routed by Jim Reedy.

1DAMS2 -----
XEQ 06/04/98 ROUTING 3/5/98 WSID= FELLER D
REV 01/01/90 Location: HUGHES COUNTY SUBW= 01
TIME 07:56:58

*****<***** BASIC DATA *****>*****
 ARID- SEMIARID CLIMATE AREA DESIGN CLASS A1 =LT 3000

STORM DISTRIBUTION-PSH 24 HOUR TYPE II RAINFALL DISTRIBUTION

STORM DISTRIBUTION ESH...24 HOUR TYPE II RAINFALL DISTRIBUTION

PRECIP.-	P-PS1 DAY 3.50	P-PS10 DAY .00	P-ES 4.50	P-FB 4.50
WSDATA-	CN 78.00	DA-SM 4.84	TC/L 4.00	-/H .00
SITEDATA-	PERM POOL .00	CREST PS 94.00	FP SED .00	QRF .00
	BASEFLOW .00	INITIAL EL .00	EXTRA VOL. .00	
PSDATA-	NO. COND. 1.00	COND L 80.00	D/W 24.00	-/H .00
	PS N .025	KE 1.00	WEIR L 9.42	TW EL 85.00
	2ND STG 94.00	ORF H .00	ORF L .00	START ES .00
CRESTS-	ES1 96.00	ES2 .00	ES3 .00	ES4 .00
				ES5 .00
EMG DATA-	SIDE SLOPE 3.00	EXIT N .035	EXIT SLOPE .050	
EMG DATA-	ES TYPE 28	ES LENGTH 150	ES ENTRANCE N .030	
BTM WIDTH-	BW1 200.00	BW2 .00	BW3 .00	BW4 .00
				BW5 .00

***** NOTE - THIS IS ONLY A PRELIMINARY EMG RATING CURVE OF DISCHARGE/FT
 OF WIDTH AND DOES NOT INCLUDE SIDESLOPE CORRECTION OR
 REVISED RATING USING ACTUAL EMG. CONFIGURATION.

EMG ID CODE	28	ELEVATION INCREMENT (FT)= 1.000	
DISCHARGES-Q1	Q2	Q3	Q4
1.945	6.521	12.910	20.820
Q5	Q6	Q7	Q8
29.958	40.250	51.489	63.701
Q9	Q10	Q11	Q12
76.768	90.623	105.246	120.608

1DAMS2 -----
 XEQ 06/04/98 ROUTING 3/5/98 WSID= FELLER D
 REV 01/01/90 Location: HUGHES COUNTY SUBW= 01
 TIME 07:56:58 SITE = FELL PASS= 1 PAGE= 2

CREST PS 94.00 FT 65.7 ACFT 16.42 AC .0 CFS

2ND STAGE	94.00 FT	65.7 ACFT	16.42 AC	.0 CFS
STARTING E	94.00 FT	65.7 ACFT	16.42 AC	.0 CFS

1DAMS2 -----

XEQ 06/04/98	ROUTING 3/5/98	WSID= FELLER D
REV 01/01/90	Location: HUGHES COUNTY	SUBW= 01
TIME 07:56:58	SITE = FELL	PAGE= 3
	PASS= 1	

ES CREST	96.00 FT	104.0 ACFT	21.81 AC	35.0 CFS
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PS STORAGE 38.3 ACFT BETWEEN ES CREST AND SED ACCUM ELEVATIONS

STARTING E	94.00 FT	65.7 ACFT	16.42 AC	.0 CFS
------------	----------	-----------	----------	--------

ELEVATION OF LOW POINT IS ZERO. NO CRITERIA CHECK MADE FOR
STRUCTURE CLASSIFICATION

SCS-ESH	D= 24.00 HR	P= 4.50 IN	Q= 2.29 IN	DA = 4.84 SM
	TC= 4.00 HR	CN= 78.00	VOL= 592.3 ACFT	

PEAK = 1389.5 CFS, AT 14.5 HRS.

SCS-FBH	D= 24.00 HR	P= 4.50 IN	Q= 2.29 IN	DA = 4.84 SM
	TC= 4.00 HR	CN= 78.00	VOL= 592.3 ACFT	

PEAK = 1389.5 CFS, AT 14.5 HRS.

RATING TABLE DEVELOPED, SITE = FELL
BY PROGRAM FOR PS AND EMG SPILLWAYS

RATING TABLE NUMBER 2

	ELEV FEET	Q-TOTAL CFS	Q-PS CFS	VOLUME AC-FT	AREA ACRE
1	94.00	.00	.00	65.70	16.42
2	94.27	4.20	4.20	70.59	17.18
3	94.55	11.89	11.89	75.47	17.94
4	94.82	21.83	21.83	80.36	18.69
5	95.10	33.62	33.62	85.51	19.44
6	95.21	33.81	33.81	87.82	19.73
7	95.32	34.00	34.00	90.13	20.03
8	95.44	34.18	34.18	92.44	20.33
9	95.55	34.37	34.37	94.75	20.62
10	95.66	34.55	34.55	97.07	20.92
11	95.77	34.73	34.73	99.38	21.22
12	95.89	34.91	34.91	101.69	21.51
13	96.00	35.09	35.09	104.00	21.81
14	96.50	231.25	35.88	116.80	22.22
15	97.00	428.45	36.65	129.60	22.63
16	97.90	1269.74	38.00	152.64	23.37
17	99.00	2688.62	39.59	180.80	24.27
18	101.00	6306.64	42.32	232.00	25.90
19	103.50	12374.85	45.51	296.00	27.95
20	106.00	19897.91	48.49	360.00	30.00

FULL CONDUIT FLOW, ELEV = 95.10 FT

ROUTED RESULTS	BTM WIDTH FT	MAX ELEV FT	VOL-MAX ACFT	AREA-MAX AC	EMG. HP FT	VOL-ES ACFT
SCS-ESH	200.0	97.97	154.4	23.4	1.97	30.4

PEAK - CFS	Q-PS	Q-ES	Q-TOT
DISCHARGE =	38.1	1321.1	1359.2

	CRITICAL DEPTH	CRITICAL VELOCITY	CRITICAL SLOPE-S/C	25% OF S/C
EMERGENCY SPILLWAY----	FT	FT/SEC	FT/FT	FT/FT
	1.10	5.91	.017	.024

	DURATION FLOW	ATTACK OE/B	SUMMATION VEL**2 DELTA T
EMERGENCY SPILLWAY----	HRS	ACFT/FT	(FT/SEC)**2 HRS
	15.9	2.5	360.6

EXIT CHANNEL FLOW SUPERCRITICAL: MAX VELOCITY= 8.13 FT/SEC
EXIT SLOPE = .050 FT/FT
FLOW DEPTH = .803

ROUTED RESULTS	BTM WIDTH	MAX ELEV	VOL-MAX	AREA-MAX	EMG. HP	VOL-ES
SCS-FBH	FT	FT	ACFT	AC	FT	ACFT
	200.0	97.97	154.4	23.4	1.97	50.4

PEAK - CFS	Q-PS	Q-ES	Q-TOT
DISCHARGE =	38.1	1321.1	1359.2

	CRITICAL DEPTH	CRITICAL VELOCITY	CRITICAL SLOPE-S/C	25% OF S/C
EMERGENCY SPILLWAY----	FT	FT/SEC	FT/FT	FT/FT
	1.10	5.91	.017	.024

	DURATION FLOW	ATTACK OE/B	SUMMATION VEL**2 DELTA T
EMERGENCY SPILLWAY----	HRS	ACFT/FT	(FT/SEC)**2 HRS
	15.9	2.5	360.6

EXIT CHANNEL FLOW SUPERCRITICAL: MAX VELOCITY= 8.13 FT/SEC
EXIT SLOPE = .050 FT/FT
FLOW DEPTH = .803

ROUTED RESULTS	BTM WIDTH	MAX ELEV	VOL-MAX	AREA-MAX	EMG. HP	VOL-ES
	FT	FT	ACFT	AC	FT	ACFT

***** MINIMUM DEPTH IN TR60 IS 3.000 FEET. *****
MINIMUM ES 200.0 99.00 180.8 24.3 3.00 76.8

DAMS2.....JOB NO. 1 COMPLETE

FELLER D ROUTING 3/5/98

0 SUBWATERSHED(S) ANALYZED

1 STRUCTURE(S) ANALYZED

2 HYDROGRAPHS ROUTED AT LOWEST SITE

0 TRIALS TO OBTAIN BOTTOM WIDTH FOR SPECIFIED VELOCITY(S)

DAMS2.....COMPUTATIONS COMPLETE

WATERSHED ID

RUN DATE

RUN TIME

FELLER D

06/04/98

07:56:58

>>>	SITE ID	SUBWS ID	SUBWS DA (SQ MI)	CURVE NO.	TC (HRS)	TOTAL DA (SQ MI)	TYPE DESIGN	STRUC CLASS	<<<
	FELL	01	4.84	78.	4.00	4.84	TR60	A1	

PASS NO.	DIA/ WIDTH (IN/FT)	ES CREST ELEV (FT)	BTM WIDTH (FT)	MAX HP (FT)	MAX ELEV (FT)	YARDAGE EMB (CY)	OE/B* (AF/FT)	EXIT* VELOCITY (FT/SEC)	TYPE HYD
1	24.0	96.00	200.00	3.00	99.00	0.	2.5	8.13	MINIMUM ES

* OE/B AND EXIT VELOCITY ARE BASED ON THE ROUTED HYDROGRAPH
AND WILL NOT RELATE TO THE MAX. ELEV.(TOP OF DAM),
WHICH IS SET BY MINIMUM DESIGN CRITERIA.

DAMS2.....SUMMARY TABLE 1 COMPLETED

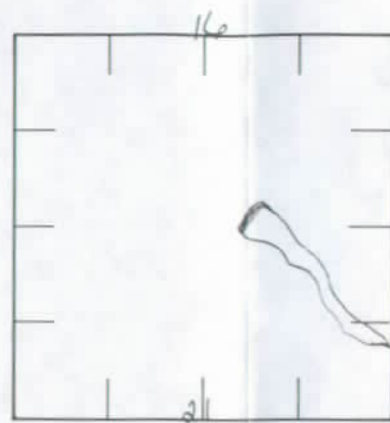
SCS DAMS2 VERSION 01/01/90
FELLER D FILES

INPUT = c:\eng\dams2\feller.dat
OUTPUT = c:\eng\dams2\feller.OUT

DATED 06/04/98 07:56:58

STRUCTURE DATA

DRAINAGE AREA	ANNUAL YIELD	PEAK RUNOFF	EMERG. SPLWY. CAPACITY	WATER DEPTH	SURFACE AREA	SEDIMENT STORAGE	TOTAL STORAGE
ACRES	AC. FT.	25-YR.	C.F.S.	FEET	ACRES	AC. FT.	AC. FT.
3,100	114	525	6.3	14	16.4		44.0

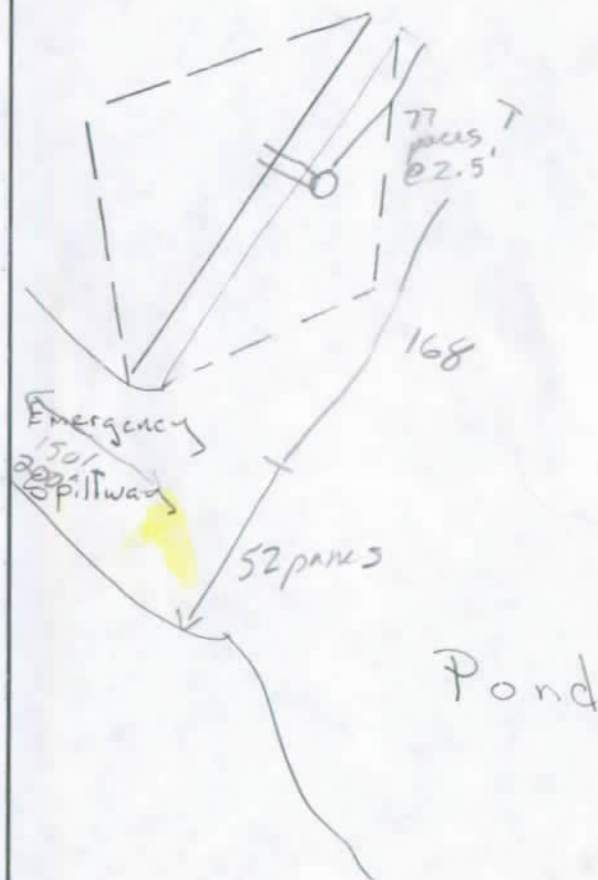


Sec. 16, T. 111 N., R. 76 W.
Hughes County

LOCATION

TABLE OF QUANTITIES

ITEM	UNIT	QUANTITY
Pond	Cu. yds	9,315
Stripping	Cu. yds	630
5% settlement	Cu. yds	466
Core Trench	Cu. yds	563
Total	Cu. yds	10,974
36" PE River w/ 24" slot (See Job Plan 5.3)	Ft	6
24" PE Plastic Pipe	Ft	80
Sand Seep Collar (See Job Plan 3.8)	Cu. yds	5.5
Timber Pipe Support (See Job Plan 4.0)	Ea.	1
Trash Rack and Baffle (See Job Plan 6.4)	Ea.	1



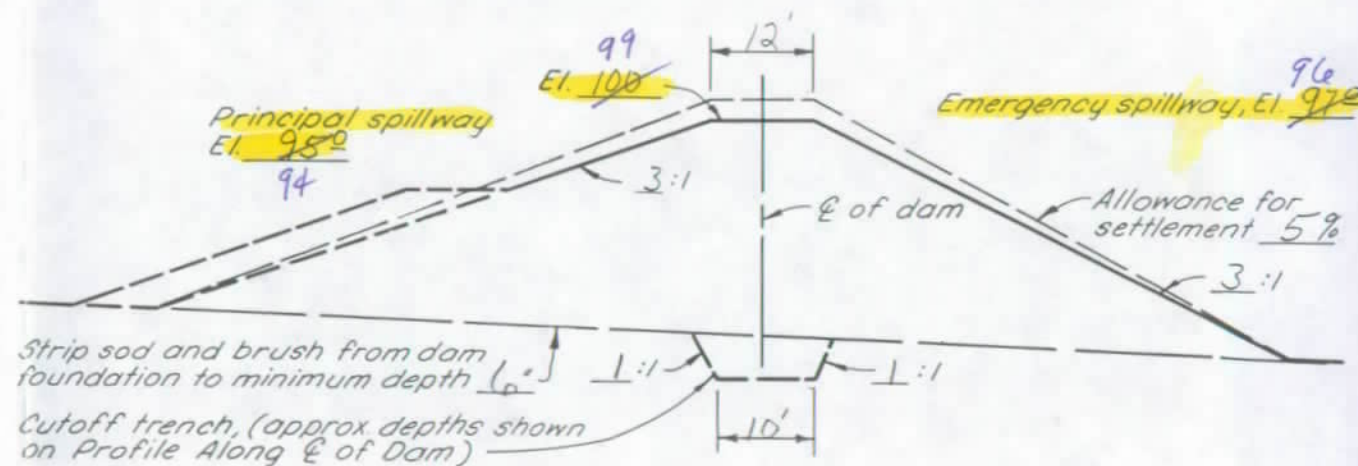
Class A

Hazard

SKETCH PLAN OF DAM AND RESERVOIR AREA

Approximate scale 1" = $\frac{1}{16}$ ft

REFERENCE: GUIDE PLAN NO. 1.0



TYPICAL CROSS SECTION OF DAM

S.D. CONSTRUCTION AND MATERIAL SPECIFICATIONS:

- SD-1 Clearing
- SD-7s Earth Fill Class-S
- SD-16 Timber Fabrication
- SD-55 Plastic Pipe
- SD-4 Stripping

EARTH DAM

OPERATOR: Jim Feller

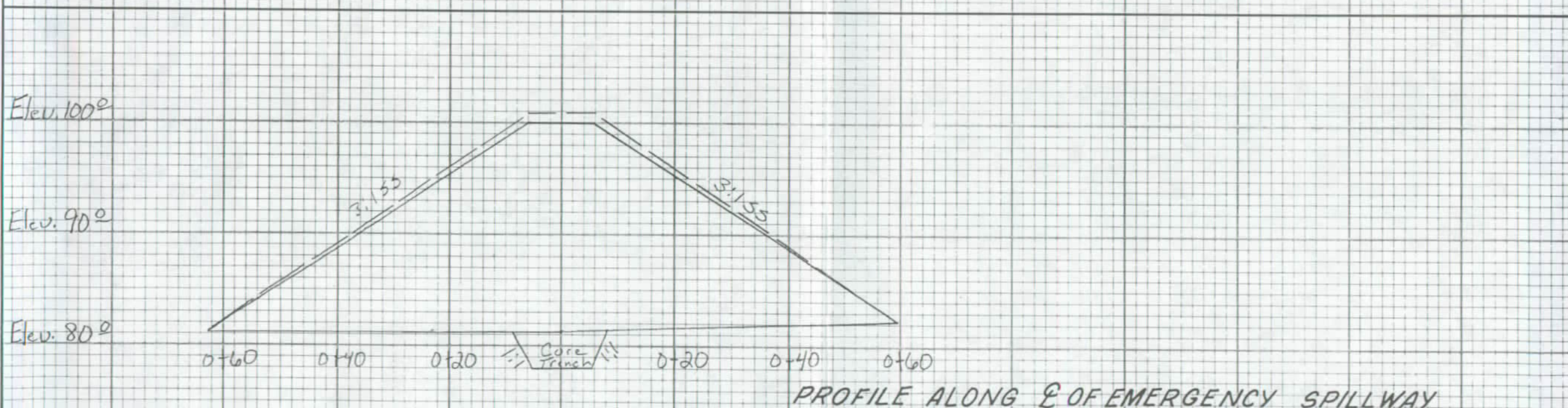
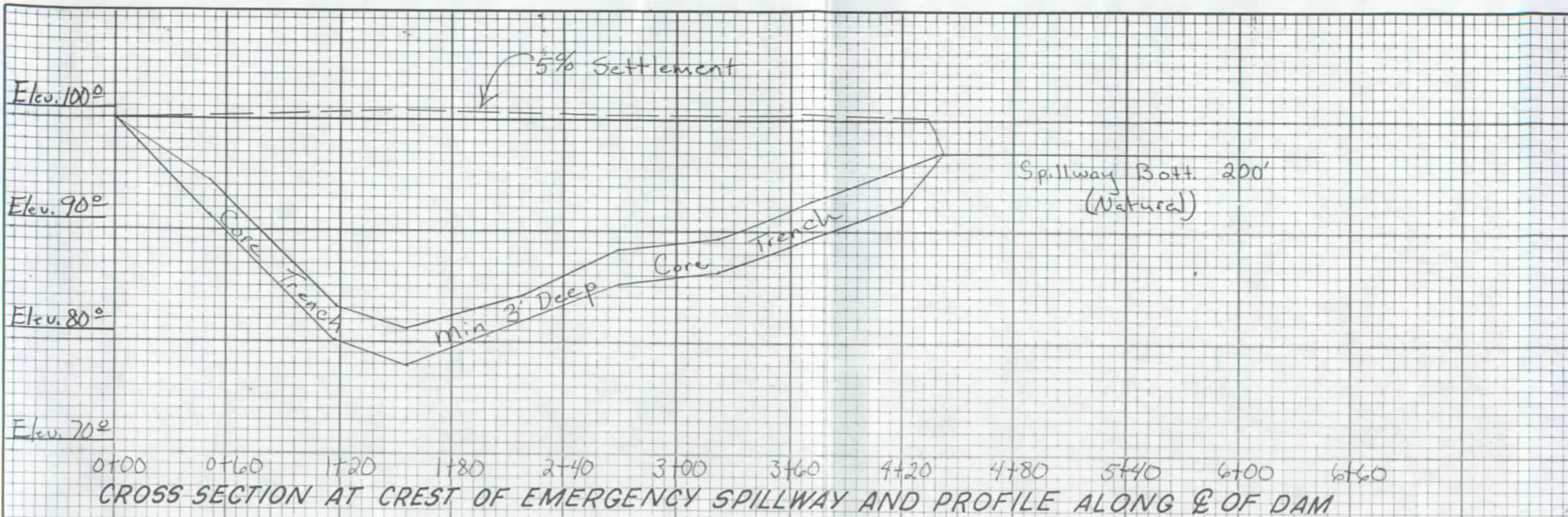
CONSERVATION DISTRICT: Hughes Co.

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Designed: K. Paulsen	Date: 6-98	Approved: [Signature]
Drawn: K. Paulsen	Date: 6-98	Title: [Signature]
Traced: _____	Sheet: _____	Drawing No. _____
Checked: _____	No. _____	of _____

JOB PLAN NO. 1.0

(Rev 4-73) 5 N-20 073 10/1

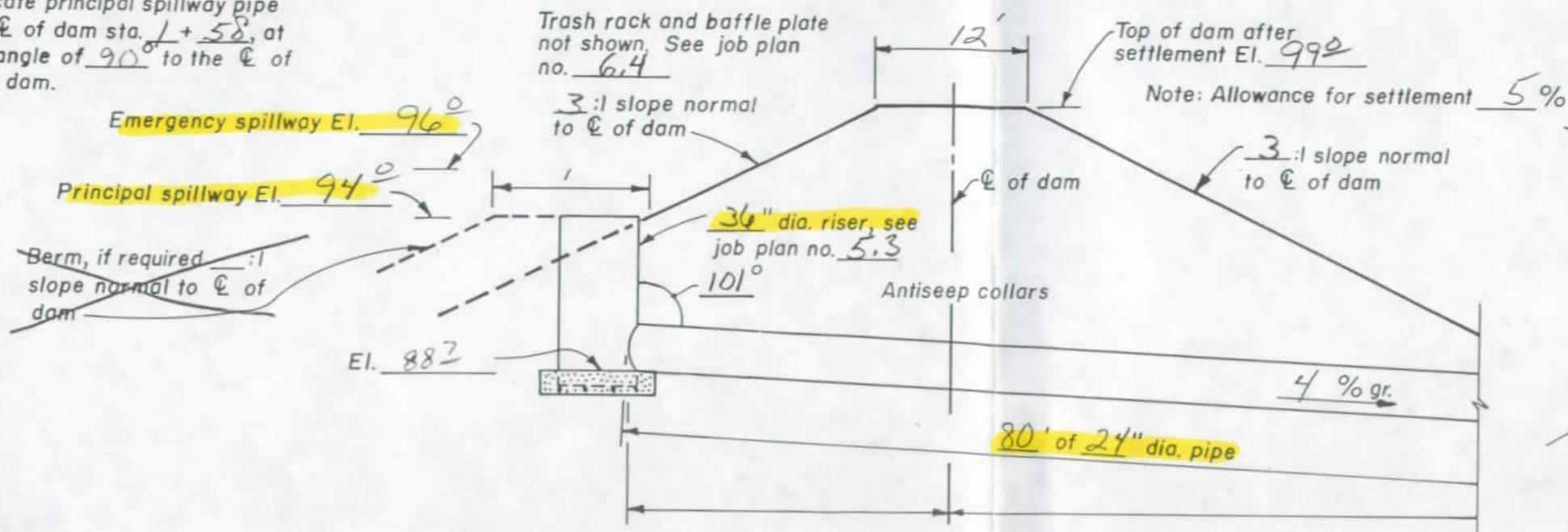


MAXIMUM CROSS SECTION OF DAM

SEDIMENT YIELD

ERODIBILITY AREA ACRES	GROSS RATE A.F./AC./YR.	DRAINAGE AREA ACRES	DELIVERY RATE %	DESIGN PERIOD YEARS	REQ'D. SEDIMENT VOLUME AC.FT.

Locate principal spillway pipe at C of dam sta. $L + 58$, at an angle of 90° to the C of the dam.



CROSS SECTION OF DAM ALONG C OF PRINCIPAL SPILLWAY
(Not to scale)

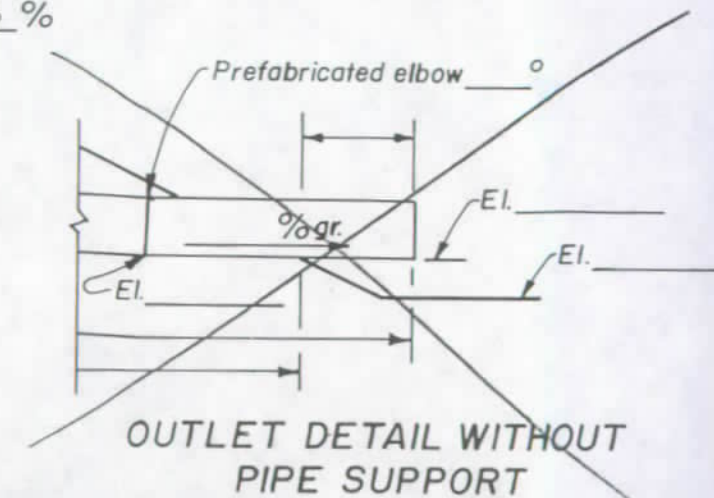
SPECIFICATION NOTES

1. ELBOW, IF REQUIRED, MAY BE FABRICATED BY CONTINUOUS WELDING SEPERATE PIPE SECTIONS OR BY FABRICATING A CONTINUOUS WELDED JOINT ON THE UPSTREAM END OF LAST SECTION OF PIPE.
2. PIPE WALL THICKNESS SHALL BE _____ GAGE OR _____ INCHES.

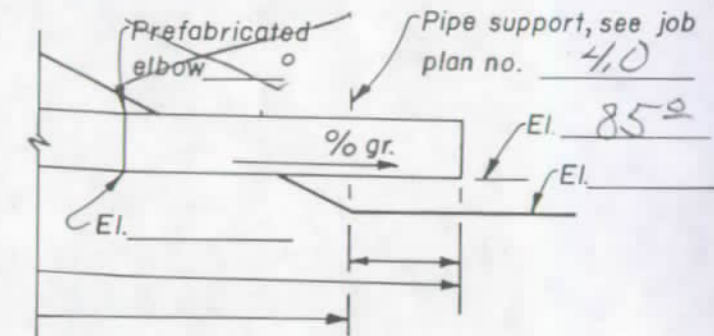
TABLE OF QUANTITIES

ITEM	UNIT	QUANTITY
See Job Plan No. 1		

APPLICABLE STANDARD S.C.S. SPECIFICATIONS



OUTLET DETAIL WITHOUT
PIPE SUPPORT



OUTLET DETAIL WITH
PIPE SUPPORT

Sec. 21, T. 111N, R. 76W
Hughes County

LOCATION

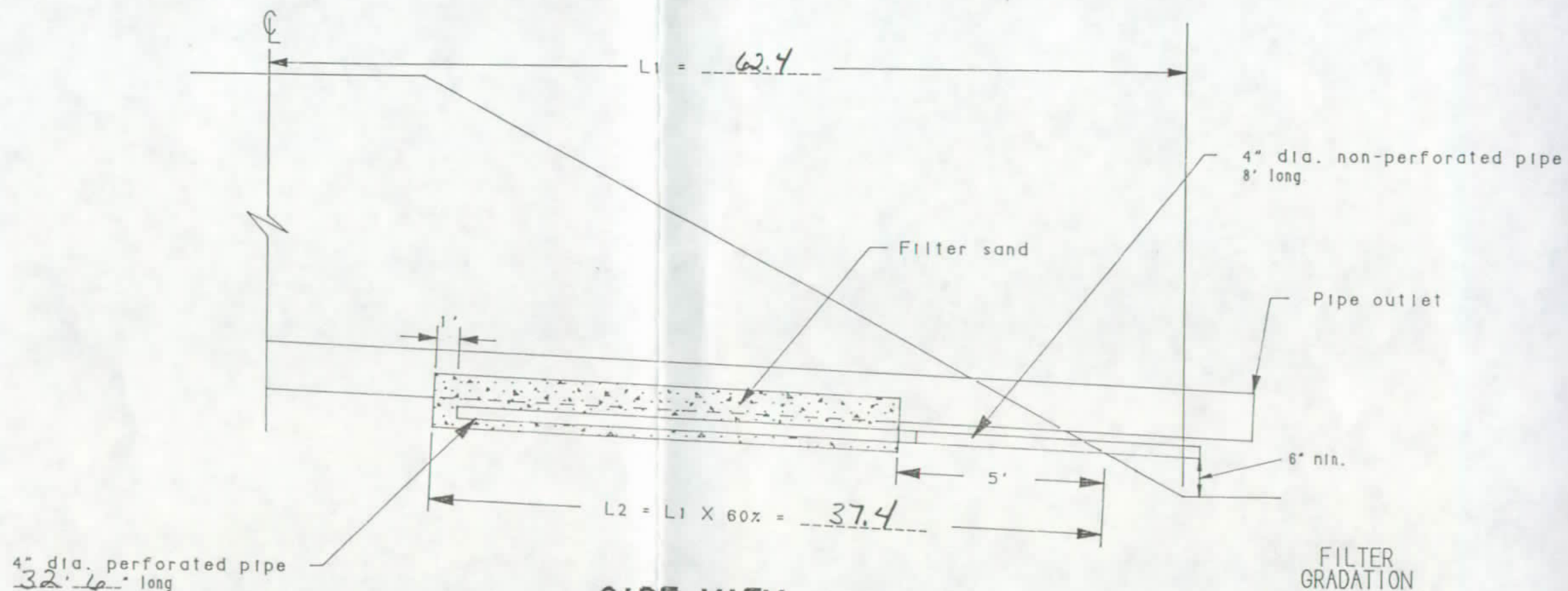
Plastic PE
CORRUGATED METAL PIPE
DROP INLET PRINCIPAL SPILLWAY

OPERATOR Jim Feller

CONSERVATION DISTRICT Hughes Co.

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Designed	Date	Approved by
Drawn		Title
Traced		Title
Checked	Sheet	Drawing No.
	No.	
	of	



SIDE VIEW

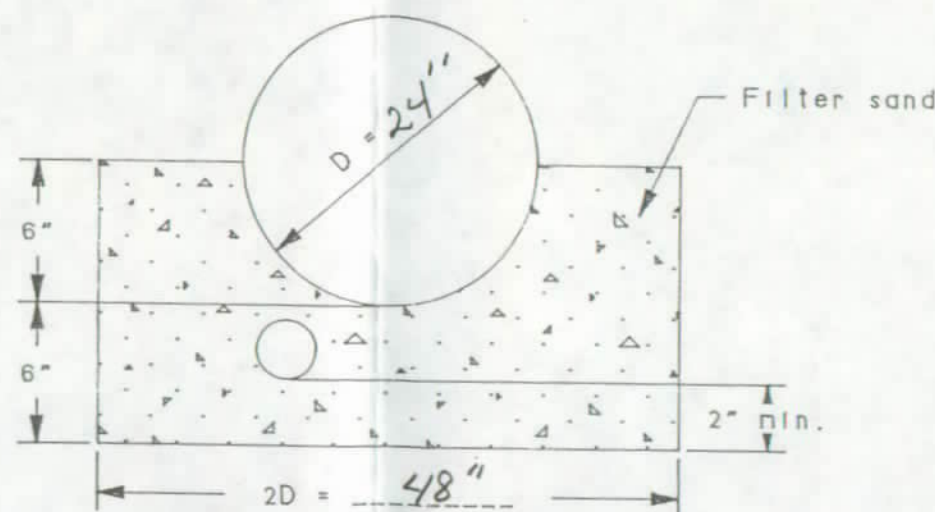
FILTER GRADATION

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

5.5 cu. yds

SAND ANTISEEP DRAIN

- NOTE:
1. THE 4" DIA. PIPE SHALL BE SDR 35 PVC, OR STRONGER
 2. PROVIDE AN ANIMAL GUARD ON DRAIN OUTLET PIPE. DRILL 2, 1/2" DIA. HOLES, ON ϕ 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).
 3. FILTER SAND WILL BE CLEAN PEA AGGREGATE OR CONCRETE SAND.

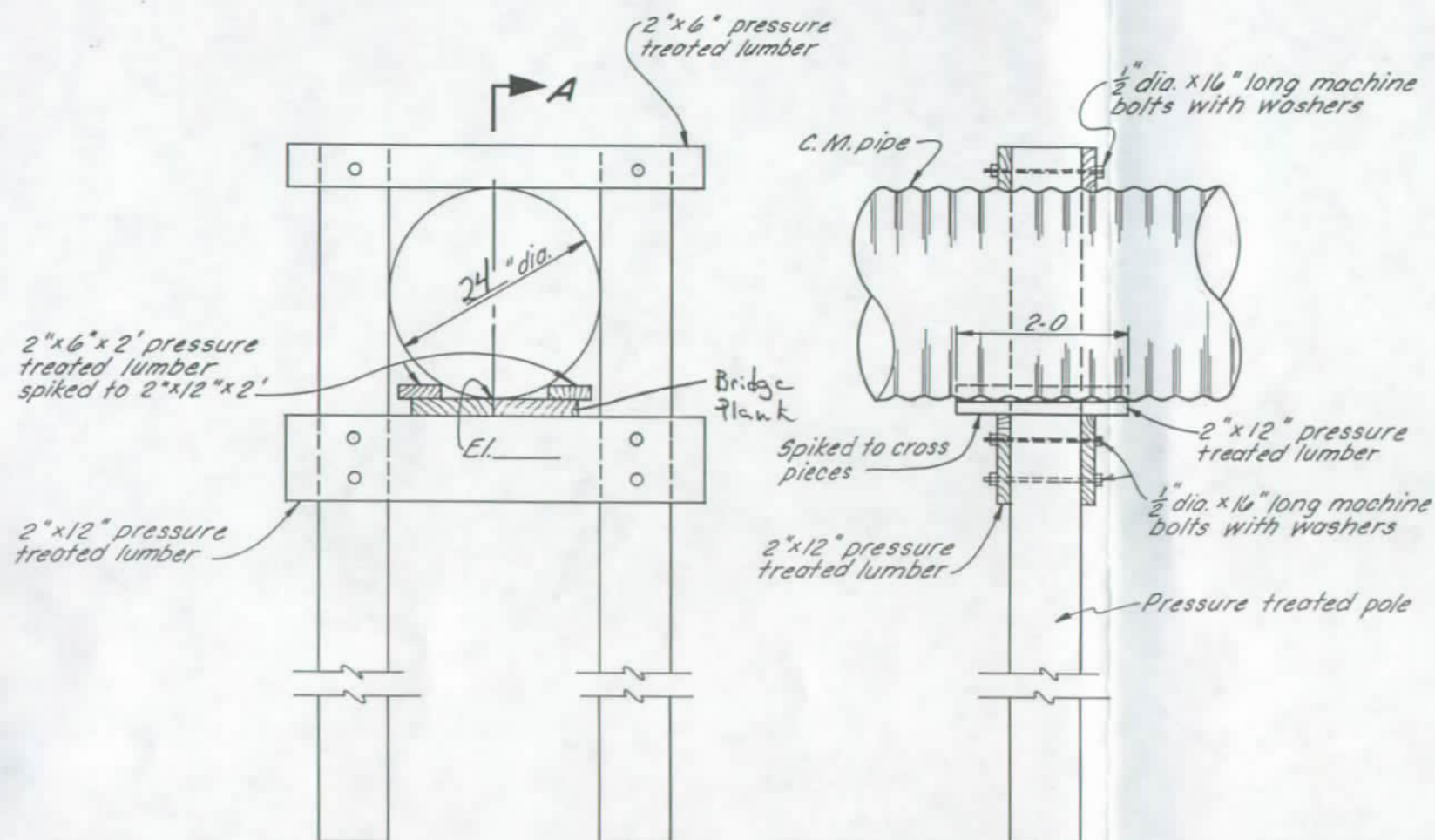


UPSTREAM VIEW

Rev. 3/96

JOB PLAN NO. 3.8-P

OPERATOR <u>Jim Feller</u>	
CONSERVATION DISTRICT <u>Hughes Co.</u>	
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	
Designed <u>K. Paulsen</u>	Date <u>6-98</u>
Drawn _____	Approved by _____
Traced _____	Title _____
Checked _____	Title _____
	Sheet No. _____
	Dwg. No. _____
	of _____



ELEVATION

SECTIONAL ELEVATION A-A

NOTES:

- HAND OR MACHINE TAMP BACKFILL THOROUGHLY AROUND FOOTINGS AND COLUMNS.

Also include bridge plank
16' to be buried into fill.

TABLE OF QUANTITIES

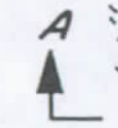
ITEM	LENGTH FOR 24" DIA. C.M. PIPE	UNIT	QUANTITY
PRESSURE TREATED POLE 10" DIA.	10-0	EACH	2
2" X 12" PRESSURE TREATED LUMBER	4-0	EACH	6
2" X 6" PRESSURE TREATED LUMBER	4-0	EACH	2
2" X 12" PRESSURE TREATED LUMBER	2-0	EACH	3
2" X 6" PRESSURE TREATED LUMBER	2-0	EACH	2
1/2" DIA. MACHINE BOLTS WITH NUTS	1-4	EACH	10
1/2" DIA. WASHERS		EACH	20

TIMBER PIPE SUPPORT

OPERATOR: Jim Feller
CONSERVATION DISTRICT: Hughes Co.

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Designed by K. Paulsen Date 6-98 Approved by _____
Drawn by _____ Title _____
Traced by _____ Title _____
Checked by _____ No. _____ Drawing No. _____



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.
36	4	I	STR.	10	4-6	45-0	30	6	5-0

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

[illegible]

PE
~~CM~~ PIPE RISER WITH
FABRICATED TEE

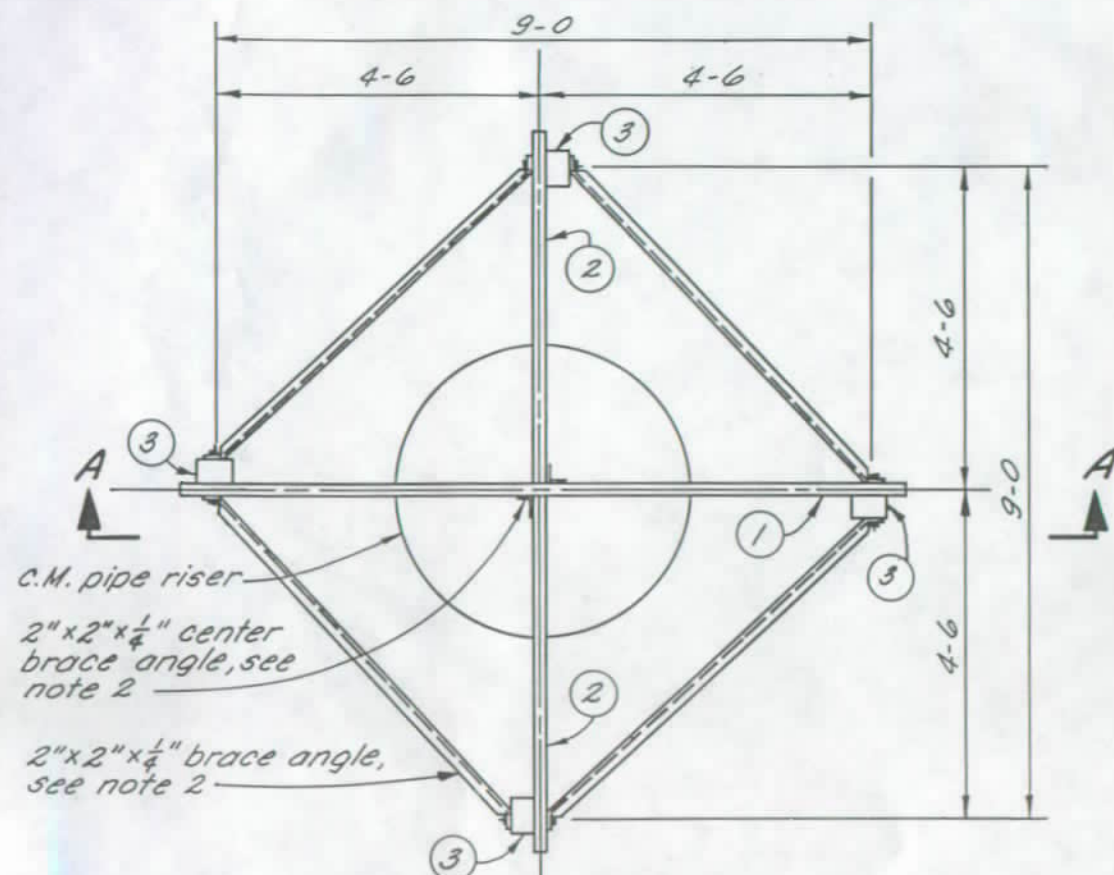
OPERATOR: Jim Feller
CONSERVATION DISTRICT: Hughes Co.

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Designed <u>Kevin Paulsen</u>	Date <u>6-98</u>	Approved by _____
Drawn _____	Title _____	
Traced _____	Title _____	
Checked _____	Sheet _____	Drawing No _____
	No _____	
	of _____	

JOB PLAN NO. 5.3

5,N-29,073.5-3C



PLAN VIEW

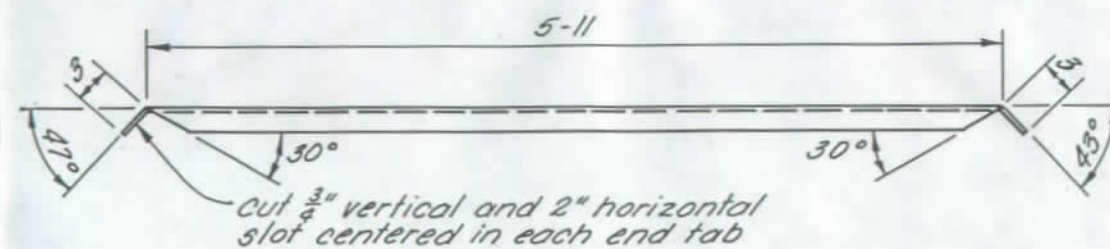
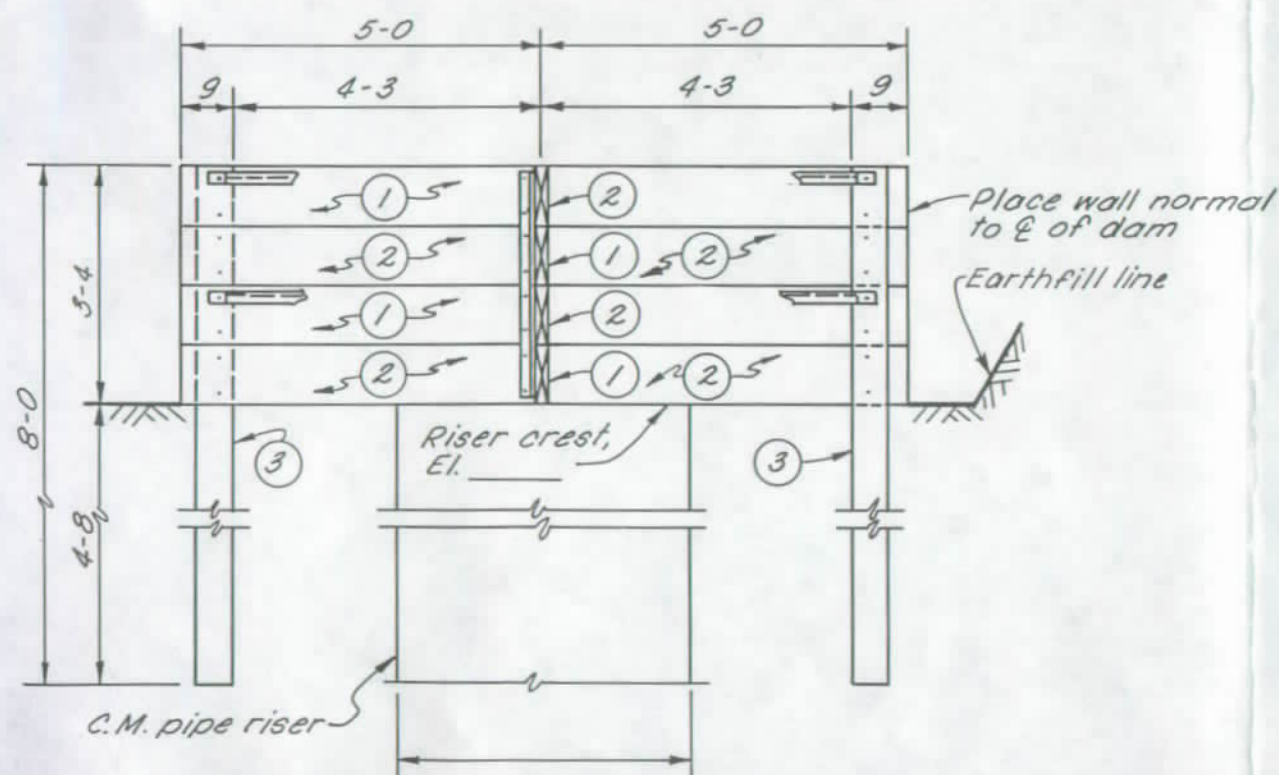


TABLE OF QUANTITIES

ITEM	MARK	NO. REQ'D.	QUANTITY
2" X 10" X 10' PRESSURE TREATED LUMBER	1	4	67 BD. FT.
2" X 10" X 4'-11" PRESSURE TREATED LUMBER	2	8	66 BD. FT.
4" X 6" X 8' PRESSURE TREATED POST	3	4	64 BD. FT.
2" X 2" X 1/4" X 6'-5" STEEL ANGLE		8	164 LB.
2" X 2" X 1/4" X 3'-2" STEEL ANGLE		2	20 LB.
5/8" X 8" STEEL BOLTS, NUTS, 2 WASHERS		32	32 SETS
1/2" X 3" STEEL BOLTS, NUTS, 2 WASHERS		32	32 SETS

NOTES:

- TO 4" X 6" POSTS (4 REQUIRED) BOLT 2" X 10" BOARDS USING TWO 5/8" X 8" BOLTS PER 2" X 10" BOARD. DO NOT PLACE BOLTS CLOSER THAN 1 1/2" FROM EDGE OF BOARD.
- FOR CENTER BRACE ANGLES DRILL 8 - 9/16" HOLES 5/8" FROM OUTER EDGE OF EACH LEG OF EACH ANGLE AND CENTERED 5 1/4" APART ALONG THE LEG.
- ATTACH BRACE ANGLES TO TOP BOLT ON TOP 2" X 10" BOARD AND TO TOP BOLT ON NEXT TO BOTTOM BOARD.

TRASH RACK AND BAFFLE
FOR RISER DIA. 36" THRU 60"

OPERATOR: Jim Feller
CONSERVATION DISTRICT: Hughes Co.

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Designed K. Paulsen Date 6-78 Approved by _____
Drawn _____ Title _____
Traced _____ Title _____
Checked _____ Sheet _____ Drawing No. _____
of _____

JOB PLAN NO. 6.4

5 N-29 0731-4a

Water Permit Application No. 6090-3
James A. Fuller

Cat. 3 - Low Hazard Dam

Top of Dam Elev. - 99
P. Spillway Elev. - 94
2nd Spillway Elev. - 96
D/S Toe Elev. - 80

Height = 19 ft

Normal Storage Capacity - 66 Ac-Ft.
Int. Storage Capacity - 104 Ac-Ft.
Max Storage Capacity - 180 Ac-Ft.

Int. Storage Capacity x Eff Height = $104 \times 16 = 1664 < 3000$ ∴
25 year flood Minimum Spillway Design

From USGS WRI 80-80-"Tech. for Est. Flood Peaks ... in SD"

DA = 3100 acres = 4.8 mi.²

Slope = 50 ft/mile

SI = 3.33

$$\begin{aligned} Q_{25} &= 83.4 A^{.65} S^{.46} S_i^{-.72} \\ &= 83.4 (4.8)^{.65} (50)^{.46} (3.33)^{-.72} \\ &= 83.4 (2.56) (5.6) (0.42) \\ &= \underline{505 \text{ cfs}} \end{aligned}$$

$$\begin{aligned} Q_{100} &= 132 A^{.65} S^{.46} S_i^{-.67} \\ &= 132 (4.8)^{.65} (50)^{.46} (3.33)^{-.67} \\ &= 132 (2.77) (5.54) (0.45) \\ &= \underline{995 \text{ cfs}} \end{aligned}$$

Secondary Spillway Flow

$$\begin{aligned} Q &= C L H^{3/2} \quad C = 2.6 \quad L = 200' \text{ (Natural)} \\ &= 2.6 (200) (3)^{1.5} \quad H = 3' \\ &= \underline{2700 \text{ cfs}} \end{aligned}$$

Section 74:02:08:09

1. Topo Map - OK
2. Dam Axis Profile - OK
3. Dam X-Sec. - OK
4. Area-Capacity Data - OK
5. Outlet Details - OK
6. Spillway Discharge - OK
7. Spillway Details - OK
8. Specs. - Std. NRCS - OK
9. EPP - N/A Cat. 3 - OK

NRCS Annual Yield

DA = 3100 Ac, CN = 78 ISO = 2

80% chance = 0.2

$$0.2 \times 3100/12 = \underline{52 \text{ Ac-Ft.}}$$

50% chance = 0.5

$$0.5 \times 3100/12 = \underline{130 \text{ Ac-Ft.}}$$

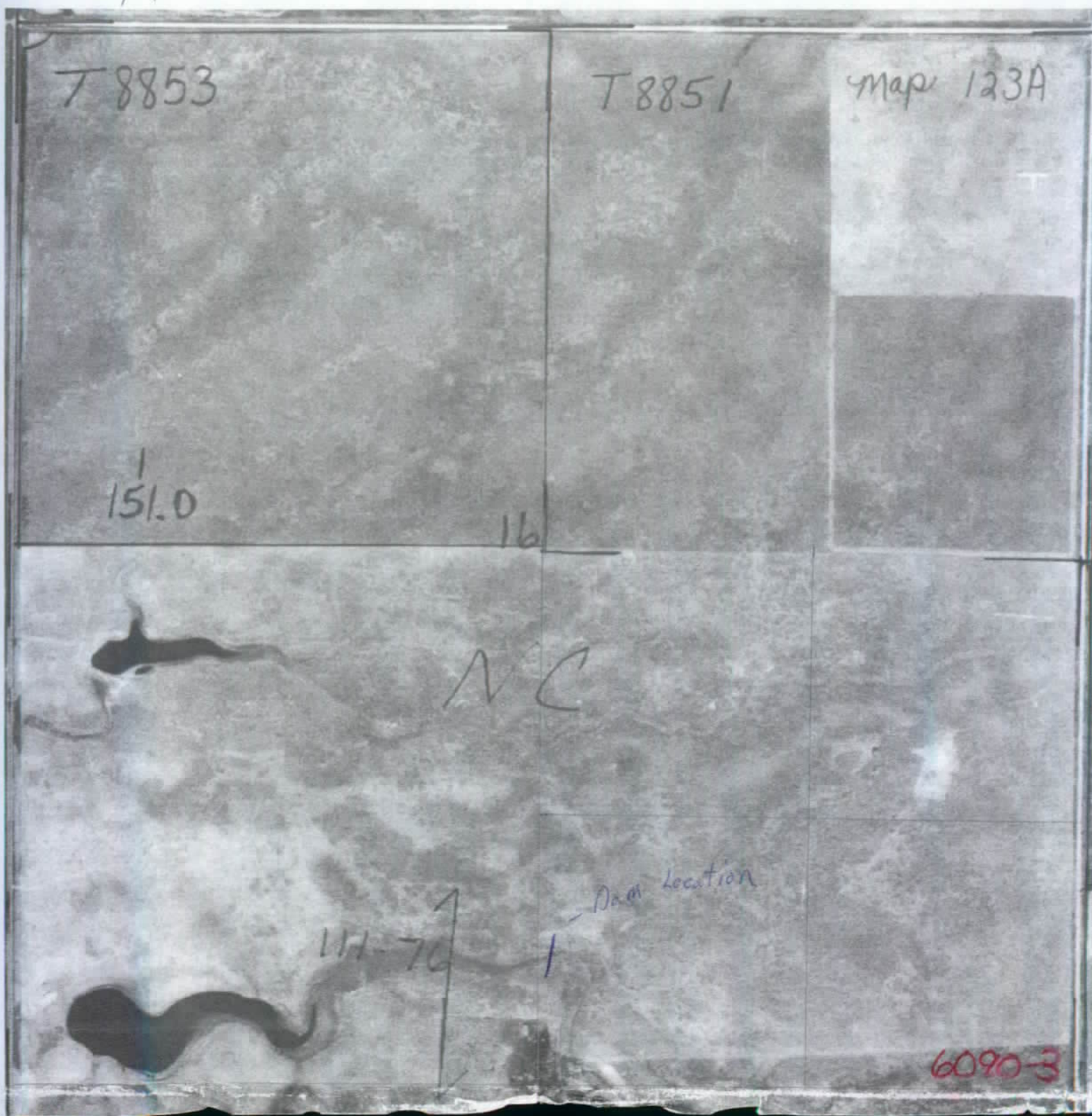
10% chance = 2.2

$$2.2 \times 3100/12 = \underline{570 \text{ Ac-Ft.}}$$

MAP NOT TO SCALE
THIS IS NOT AN OFFICIAL WETLAND MAP



Don J. Small
Natural Resources Engineer
7/13/98



NOT TO SCALE

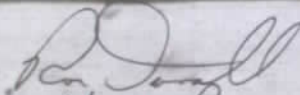

T8853

Map 123A

NC

21

T608


Natural Resources Engineer
7/13/98

NC

2
182.5

111-76

W/NHEL

6090-3



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

July 27, 1998

James A. Feller
20275 Canning Road
Blunt, SD 57522

Dear Mr. Feller:

We have reviewed the plans and specifications for your dam located in the SW ¼ SE ¼ of Section 16-T111N-R76W, in Hughes County. The plans and specifications as submitted are approved. Approval of the plans and specifications does not authorize construction of the project. Construction of the project may not begin until Water Permit Application No. 6090-3 is approved.

Our review was to determine compliance with the requirements of the Water Management Board Safety of Dams Rules, Chapter 74:02:08. Approval of these plans and specifications does not release you, as owner of the dam, from the responsibility for operating and maintaining the dam in good repair to ensure the safety of the dam.

The Feller Dam will be classified as a small size Category 3, Low Hazard dam with a dam height of 19 feet and a normal storage capacity of 66 acre-feet and a maximum storage capacity of 180 acre-feet.

If you have any questions, please feel free to contact us.

Sincerely,

Gale N. Selken, P.E.
Natural Resources Engineer IV
for John Hatch, Chief Engineer
Water Rights Program
(605) 773-3352

c: Kevin Paulsen, NRCS Pierre

REPORT ON
WATER PERMIT APPLICATION NO. 6090-3
James A. Feller
July 17, 1998

Water Permit Application No. 6090-3 has been filed by James A. Feller to impound 66 acre-feet of water from runoff by constructing a dam located in the SW $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 16-T111N-R76W, in Hughes County. The application also requests impoundment of sufficient water to maintain the reservoir at the outlet elevation. The water will be used for livestock watering.

Discussion:

The Feller Dam will be classified as a Category 3, Low Hazard dam. It has been designed by the Natural Resources Conservation Service. The plans and specifications have been reviewed and will be approved; however, construction of the dam can not begin until Water Permit Application No. 6090-3 is approved.

The Feller Dam will be 19 feet high with a normal storage capacity of 66 acre-feet with a reservoir level at the spillway elevation, and a maximum storage capacity of 180 acre-feet with a reservoir level at the top of dam elevation. A dam of this size and hazard classification is required to have a minimum spillway design capable of passing a 25-year frequency event.

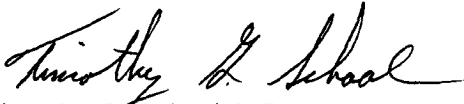
The dam is designed to have a CPE drop inlet structure with a 36 inch diameter riser and a 24 inch diameter barrel with 5 feet of available head as the primary spillway and a 200 foot wide natural earth secondary spillway with 3 feet of available head. The dam will have a drainage area of 3100 acres (4.8 square miles). A 25-year frequency event will produce a peak of approximately 500 cfs and a 100-year frequency event will produce a peak of approximately 1000 cfs. The 200 foot wide natural earth secondary spillway will have a capacity of approximately 2700 cfs.

The annual yield for this drainage area with a 10 percent chance of occurrence, or 1 out of 10 years, is expected to be 570 acre-feet. The annual yield with a 50 percent chance of occurrence, or 1 out of 2 years, is expected to be 130 acre-feet and the annual yield with a 80 percent chance of occurrence, or 8 out of 10 years, is expected to be 52 acre-feet.

The Feller Dam will be located in the SE $\frac{1}{4}$ of Section 16-T111N-R76W on Dehart Draw, a tributary to Medicine Knoll Creek about 2.5 miles upstream of the confluence of the tributary and Medicine Knoll Creek. There are no existing Water Permits/Rights located on Dehart Draw; however, Mr. Feller has another dam (SD ID No. 1528) located on Dehart Draw about one-half mile below the proposed dam. This dam is covered under Dry Draw Location Notice No. 551-3 and has a normal storage capacity of 55 acre-feet. Water Right No. 1585-3, Putnam Family Farms LTD., is located about one mile downstream of the confluence and appropriates 0.40 cfs from Medicine Knoll Creek to irrigate 28 acres. Water Right No. 1532-3, Jim Korkow, is located about three miles downstream of the confluence and appropriates 0.66 cfs from Medicine Knoll Creek to irrigate 55.6 acres.

Conclusions:

1. Water Permit Application No. 6090-3 should be approved since unappropriated water is available and approval should not have any adverse effect 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. 6090-3.



Timothy G. Schaal, P.E.

Natural Resources Engineer III

Approved by:



Gale N. Selken, P.E.

Natural Resources Engineer IV

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 6090-3, James A. Feller**

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Program, Department of Environment and Natural Resources concerning Water Permit Application No. 6090-3, James A. Feller, 20275 Canning Road, Blunt, SD 57522.

The Chief Engineer is recommending APPROVAL of Application No. 6090-3 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) it is in the public interest with the following qualifications:

1. Water Permit No. 6090-3 authorizes a dam with storage capacity of 66 acre feet of water and sufficient water annually to maintain the water level to the 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
July 24, 1998



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

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

July 27, 1998

James A. Feller
20275 Canning Road
Blunt, SD 57522

Dear Mr. Feller:

Water Permit Application No. 6090-3 for livestock watering 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 the application are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

Be sure to contact the above newspaper to authorize publication of your 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
www.state.sd.us/denr

July 27, 1998

Capital Journal
Box 878
Pierre, SD 57501-0878

ATTENTION: Legal Department

Enclosed is a Notice of Hearing on Application No. 6090-3 to Appropriate Water to be published twice. Please publish the first notice on August 4, 1998, with the second publication 7 days later.

The applicant must verify to you that the notice is to be published, before you make the first publication. **Please BILL the APPLICANT for the cost of publication.** The APPLICANT is James A. Feller, 20275 Canning Rd., Blunt, SD 57522 (Ph # (605) 962-6207).

Please send the Water Rights Program the first publication immediately. The publication is checked for accuracy so any corrections can be made in the second publication. You may use the form below or fax a copy of the first publication. Any fax should be sent to the attention of Karen Schlaak at (605) 773-4068. Publication errors can invalidate the public notice.

After the second publication, **please send us an affidavit or use the enclosed Proof of Publication form.** The applicant pays the cost of publication, but the Water Rights Program records require an affidavit or Proof of Publication. Delays in receiving the affidavit can be costly to the applicant.

Sincerely,


Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures

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

No. 6090-3

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

Date _____

We are in receipt of your letter of July 27, 1998, enclosing Notice of Hearing to Appropriate Water by Application No. 6090-3 which was first published in our issue of _____. **ENCLOSED IS A COPY OF THIS FIRST PUBLICATION.**

Name

Newspaper

struction to Newspaper - Publish first Notice on August 4, 1998, with the second publication 7 days later. The applicant is responsible for payment.

NOTICE OF APPLICATION NO. 6090-3 to Appropriate Water

Notice is given that James A Feller, 20275 Canning Road, Blunt SD 57522 has filed an application for a water permit to impound 66 acre-feet of water from surface runoff by construction a dam located in the SW ¼ SE ¼ Section 16 with water impounded in the N ½ NE ¼ Section 21 and SW ¼ SE ¼ Section 16; all in T111N-16W. This application requests impoundment of water sufficient to maintain the water level at the outlet elevation and is to be used for livestock watering.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 6090-3 because 1) appropriated 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 application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the chief engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider the application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and chief engineer. The applicant must file a petition if contesting the chief engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by August 21, 1998.

The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application, 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 Program address to request copies of information pertaining to this application. Nettie H. Myers, Secretary, Department of Environment and Natural Resources.

Form 8

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)

County of Hughes) SS

I, Peggy Warner

certify that the attached printed Notice was taken

from the Capital Journal

printed and published in Pierre

County of Hughes and

state of South Dakota. The notice was published

in the newspaper on the following two dates:

August 4, 1998

August 11, 1998

Cost of Printing \$38.48

Peggy Warner
(Signature)

Legal Ad Representative
(Title)

Aug. 12, 1998
(Date Signed)



No. 1848 2tdly 8/4, 8/11

NOTICE OF APPLICATION

NO. 6090-3

TO APPROPRIATE WATER

Notice is given that James A. Feller, 20275 Canning Road, Blunt SD 57522 has filed an application for a water permit to impound 66 acre-feet of water from surface runoff by construction a dam located in the SW 1/4 SE 1/4 Section 16 with water impounded in the N 1/2 NE 1/4 Section 21 and SW 1/4 SE 1/4 Section 16; all in T111N-R76W. This application requests impoundment of water sufficient to maintain the water level at the outlet elevation and is to be used for livestock watering.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 6090-3 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 application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the chief engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider the application. Notice of the hearing will be given to the applicant and any person filing a petition.

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but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application, 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 Program address to request copies of information pertaining to this application.

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
www.state.sd.us/denr

SEP 10 1998

James A. Feller
20275 Canning Rd.
Blunt, SD 57522

Dear Mr. Feller:

Enclosed is Water Permit No. 6090-3 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 may be made to your water permit usually without affecting the priority date. The location of a point of diversion may be changed or additional points of diversion may be approved if the water source remains unchanged; no additional water is appropriated; and, if irrigating, no additional land is irrigated. The change may be allowed without application or publication, if the Water Rights Program is contacted and the chief engineer makes a finding that the change does not increase the potential for interference with existing diversions.

A new water permit application is required to change water sources, increase the permitted diversion rate, or increase the irrigated acreage. If the application is approved, the water permit will receive a new priority date.



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

July 10, 2000

6090-3

James A. Feller
20275 Canning Rd.
Blunt, SD 57522

Dear Mr. Feller:

On May 11, 2000, the investigation of your water use system, including the extent of application of water to beneficial use, as developed under Water Permit No. 6090-3, was completed by Lynn Beck, a staff engineer with our program. Your final water right document, the water license, can now be issued.

State law requires that we charge a \$50.00 fee for the investigation and issuance of the water license. Upon receipt of the \$50.00 fee from you, we will complete processing your water license. The check or money order for the fee should be made payable to the "Water Rights Program".

Your licensed water right will be similar to a property right that can not be lost as long as the water use continues and you abide by the permit requirements.

If you have any questions regarding the water permit, investigation of your water use system or payment of the fee, please contact Genny McMath with our program at (605) 773-3352.

Sincerely,

Cheryl F. Frost
Secretary
Water Rights Program

RECEIPT

Water Rights Program

South Dakota Department of Environment and Natural Resources

N2 416587

Pierre, _____ July 14, 2000

RECEIVED OF James Feller, 20275 Canning Rd., Blunt, SD 57522
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. 6090-3 _____

Fee for Filing Transfer Form _____

Fee for Filing Extension Request _____

Fee for _____

(Any Other Work Provided by Law)

Total

50 00

By David Eschle
Chief Engineer

WATER PERMIT NO. 6090-3

Name of Applicant: **James A Feller**

Address: 20275 Canning Rd, Blunt SD 57522

Phone: **605 962-6207**

Amount of Water Claimed: 66 acre-feet

Total Acres: **NA**

Source of Water Supply: **runoff**

Water to be used for: **livestock water**

County: **Hughes**

Type of Waste Disposal System: **NA**

Location: 7 miles south of Blunt

PRIORITY

Date Received: 7-13-1998

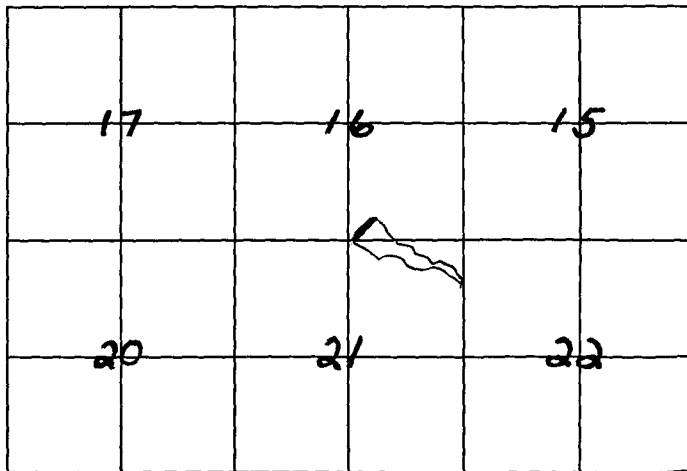
Fee: \$15

Corrected Application Received:

Period of Annual Use: **January 1 – December 31**

Remarks:

Diversion Point: SW ¼ SE ¼ Sec 16-T111N-R76W



Water Impounded: N ½ NE ¼ Sec 21; SW ¼ SE ¼
Sec 16; all in T111N-R76W

Depth of Well: NA

Well Driller:

Remarks:

Type of Map: aerial

Prepared by: **Ron Duvall**

Reviewed and the Number Assigned on: 7-13-1998

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____

WATER RIGHT NO. 6090-3



Lynn Beck

Lynn Beck
Natural Resources Engineer
DENR, Water Rights Program
June 19, 2000



South Dakota Department of
Environment and Natural Resources



Protecting South Dakota's Tomorrow ... Today

STATE OF SOUTH DAKOTA

WATER LICENSE NO. 6090-3

(1) James A Feller, 20275 Canning Rd, Blunt SD 57522 made Application No. 6090-3, July 13, 1998 for a water permit to impound 66 acre-feet of water from runoff, Hughes County, South Dakota for livestock watering purposes. Permit No. 6090-3, with a priority date of July 13, 1998 was approved August 21, 1998 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before August 21, 2003 and for the application to beneficial use of said water on or before August 21, 2007.

(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 66 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 (spillway) is 660 feet north and 2,640 feet west of the northwest corner of Section 16-T111N-R76W (SW ¼ SE ¼).

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

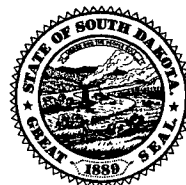
(4) Pursuant to South Dakota Water Law 46-5-30.1 James A Feller, 20275 Canning Rd, Blunt SD 57522 the holder and/or owner of Water Right No. 6090-3 is issued a license to appropriate water, the right to impound 66 acre-feet of water from runoff with sufficient water annually to maintain the water level to the outlet elevation with a priority date of July 13, 1998 from the location specified in (2) of this license for livestock watering. This license is subject to any limitations or qualifications listed in Water Right No. 6090-3 and subject to South Dakota State Law.

Garland Erbele

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

AUG 02 2000

date





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

AUG 02 2000

6090-3

James A. Feller
20275 Canning Rd.
Blunt, SD 57522

Dear Mr. Feller:

Enclosed is Water License No. 6090-3 and Receipt No. 416587 for \$50.00 which was assessed for an investigation and issuance of the license. Water License No. 6090-3 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