

WATER PERMIT NO. 2638-2

Name of Applicant: **Bergeson Family Ltd Partnership**

Address: **Box 387, Ft. Pierre SD 57532**

Phone: **605 223-2368**

Amount of Water Claimed: **60 acre-feet**

Total Acres: **NA**

Source of Water Supply: **runoff – unnamed trib to Frozen Man Creek**

Water to be used for: **fish & wildlife, recreation and livestock water**

County: **Stanley**

Type of Waste Disposal System:

Location: **5 miles north of Hayes**

PRIORITY

Date Received: **10-1-08**

Application/License Fee: **\$200**

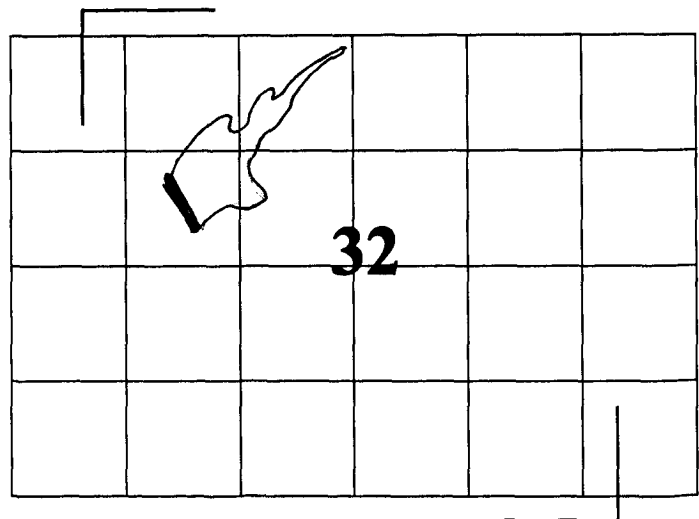
Corrected Application Received:

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

Remarks: **Reconstruct a breached dam**

Diversion Point: **SW ¼ NW ¼ Sec 32-T6N-R26E**

Water Impounded: **NW ¼ Sec 32-T6N-R26E**



Depth of Well: **NA**

Well Driller: :

Remarks:

Type of Map: **aerial**

Prepared by: **Tim Olson, GF&P**

Reviewed and the Number Assigned on: **10-1-08**

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____

FORM 2: Application for uses other than irrigation
(type or print)

Mail to: Water Rights Program Joe Foss Building 523 E. Capitol Pierre, SD 57501-3181 (605) 773-3352	No. <u>2638-2</u> (office use only) Hydrologic Unit <u>10140102</u>
	Basin <u>Bad River</u>
	Newspaper <u>Capitol Journal PO Box 878</u>
	<u>605-224-7301</u> <u>Pierre 57501</u>

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

Check use(s) of water:

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

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 Bergeson Family Ltd. Partnership Phone 650-223-2368
(check one) ☐ Owner ☐ Tenant/lessee
Mailing Address Box 387, Ft Pierre State SD 57532
(Street, RR, or Box and City) (Zip Code)
- Amount of water claimed _____ *CFS or _____ **GPM 60 ***AF
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable)
- Source of water supply Unnamed tributary to Frozen Man Creek
- Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) SW1/4 NW1/4 Sec 32 T6N R26E
water impounded: NW1/4 Sec 32 T6N R 26E
County Stanley County
- County or counties where water will be used Stanley County
- Annual period during which water is to be used Year around 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)

Project is a reconstruction of an existing breached dam. Project includes raising existing grade and installation of larger primary and secondary spillways in order to meet current design standards (see attached plans & specifications provided by engineer).

STATE OF SOUTH DAKOTA)

County of Stanley SS

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)

I, Daniel Bergeson Ruth Inman, 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.

Applicant's signature Daniel Bergeson Ruth Inman

Subscribed and sworn to before me this 19 day of Sept 20 08

Pauline Paul
Notary Public signature

My commission expires
April 7, 2011

**SOUTH DAKOTA
WATER PERMIT NO. 2638-2**

Date of first receipt of application October 1, 2008.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 2638-2 to Bergeson Family Ltd, Partnership, c/o Daniel Bergeson, Box 387, Ft. Pierre SD 57532 authorizing the construction of the dam and the placing of water to beneficial use subject to the following limitations, conditions and qualifications:

1. Water Permit No. 2638-2 authorizes impoundment of 60 acre-feet of water from an unnamed tributary to Frozen Man Creek by reconstructing a dam located in the SW 1/4 NW 1/4 Section 32 with water impounded in the NW 1/4 Section 32; all in T6N-R26E.
2. The water appropriated shall be used for the purpose of fish and wildlife propagation, recreation and livestock water 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. 2638-2 is November 24, 2008.
5. The date from which applicant may claim right is October 1, 2008.
6. One-fifth of the construction is to be completed on or before May 24, 2011.
7. All construction is to be completed on or before November 24, 2013.
8. Water is to be put to beneficial use on or before November 24, 2017.
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. 2638-2 authorizes a dam with a storage capacity of 60.0 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.

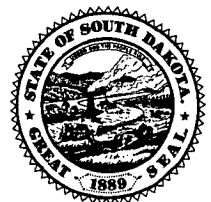
WATER MANAGEMENT BOARD

By: Garland Erbele

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

DEC 04 2008

date



(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 _____ 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) _____ Year Constructed _____
- c) Connected to the City of _____ Sanitary System _____

3. Dugout Information

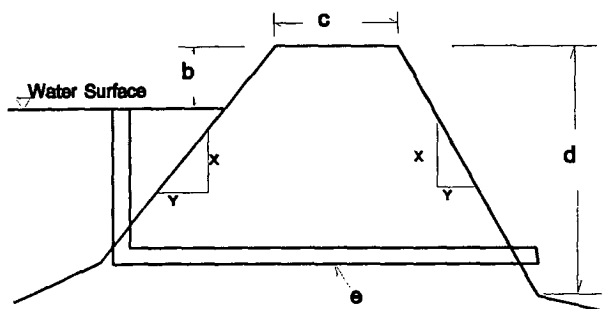
- a) Surface Dimensions _____ Depth _____
- b) Depth to water (ground surface to water level) _____

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:

Konechne Engineering
104 Capitol Hill Dr
Pierre, SD 57501

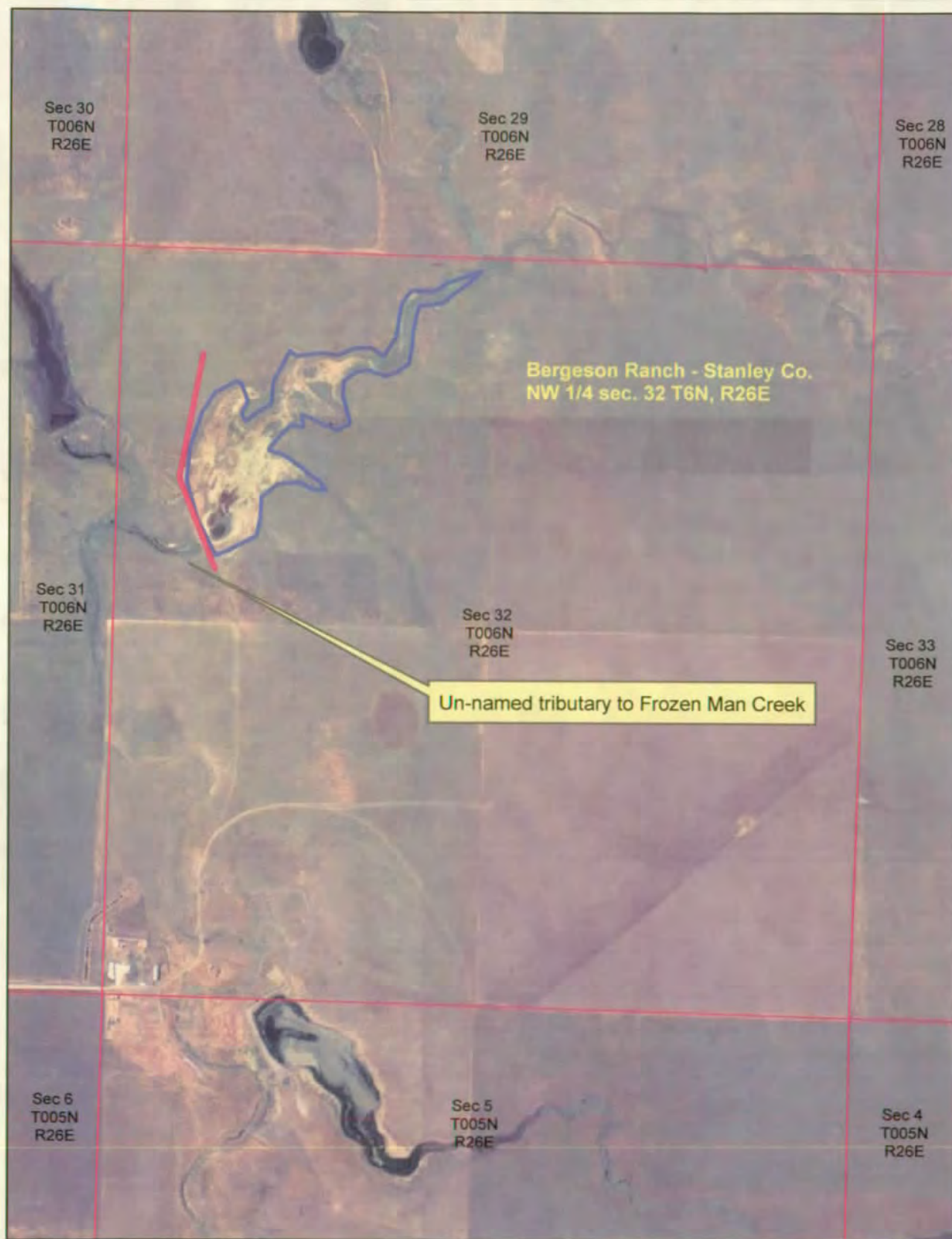


- b) Freeboard 9'
- c) Crest Width 12'
Crest Length 1650'
- d) Height 18'
- e) Primary Outlet Capacity 331 cfs
If pipe, diameter 72" Riser & 60" Barrel
- f) Secondary Spillway Capacity 612 cfs
Spillway Width 100'
- g) X & Y Slope _____
Upstream 3:1
Downstream 3:1
- h) Surface Area of Impoundment 20.5
- i) Storage 60 Acre Feet
- j) Drainage Area Above Dam 3923 Acres

Bergeson Family Ltd. Partnership Pond Restoration
SW1/4 NW1/4 Sec 32 T6N, R26E
Stanley County

Point of diversion located approx. 2145 feet southeast of the northwest corner of section 32 T6N R26E

Storage is 60 acre-feet and surface area at fsl is 20.5 acres



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South Dakota Department of Environment and Natural Resources

Date 10/1, 2008

RECEIVED OF Bergeson Family Partnership LLP PO Box 387 Fort Pierre SD 57532

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

Fee for Application for Permit No. <u>2638-2</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. <u>2638-2</u>	50	00
Fee for Filing Transfer Form _____		
Fee for _____		
Fee for Issuing New Well Driller's License No. _____ for C.Y. _____		
Fee for Renewal of Well Driller's License No. _____ for C.Y. _____		
Fee for Issuing Well Pump Installer's License No. _____ for C.Y. _____		
Fee for Renewal of Well Pump Installer's License No. _____ for C.Y. _____		
(Any Other Work Provided by Law)	TOTAL	200 00

No.

03, 08

By

Jamal Zuhale
Chief Engineer

P&S Review 10/22/08 TGS

Water Permit Application No. 2638-2
Bergeson Family Ltd. Partnership

Top of Dam Elev. - 109
2nd Spillway Elev. - 106
P. Spillway Elev. - 100
Dis Emb. Toe Elev. - 91

Cat. 3 - Low Hazard Dam

Ht. = 18 ft.

Normal Storage Capacity - 60 Ac-Ft
Int. Storage Capacity - 267
Max. Storage Capacity - 458

Int. Capacity x Eff Ht. = $267 \times 16 = 4272 \div 3000 \therefore 50\text{yr}$
Minimum Spillway Design

From USGS WRI 98-4055 "Tech. for Est Peak Flows ... in 50"
Region C $DA = 6.13 \text{ mi}^2$

$$\begin{aligned} Q_{50} &= 286(CA)^{.570} \\ &= 286(6.13)^{.570} \\ &= 286(2.8109) \\ &= \underline{804 \text{ cfs}} \end{aligned}$$

$$\begin{aligned} Q_{100} &= 379(CA)^{.566} \\ &= 379(6.13)^{.566} \\ &= 379(2.7906) \\ &= \underline{1060 \text{ cfs}} \end{aligned}$$

Secondary Spillway Capacity

$$\begin{aligned} Q &= CLH^{3/2} \quad C=2.6 \\ &= (2.6)(100)(3)^{1.5} \quad L=100 \\ &= \underline{1350 \text{ cfs}} \quad H=3 \end{aligned}$$

NRCS Annual Yield

Section 74:02:08:09

$DA = 3923 \text{ ac} - ISD = 2 \quad CN = 80$

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

$$\begin{aligned} 80\% \text{ chance} &= 0.26 \\ 0.26 \times 3923^{3/2} &= \underline{85 \text{ Ac-Ft}} \end{aligned}$$

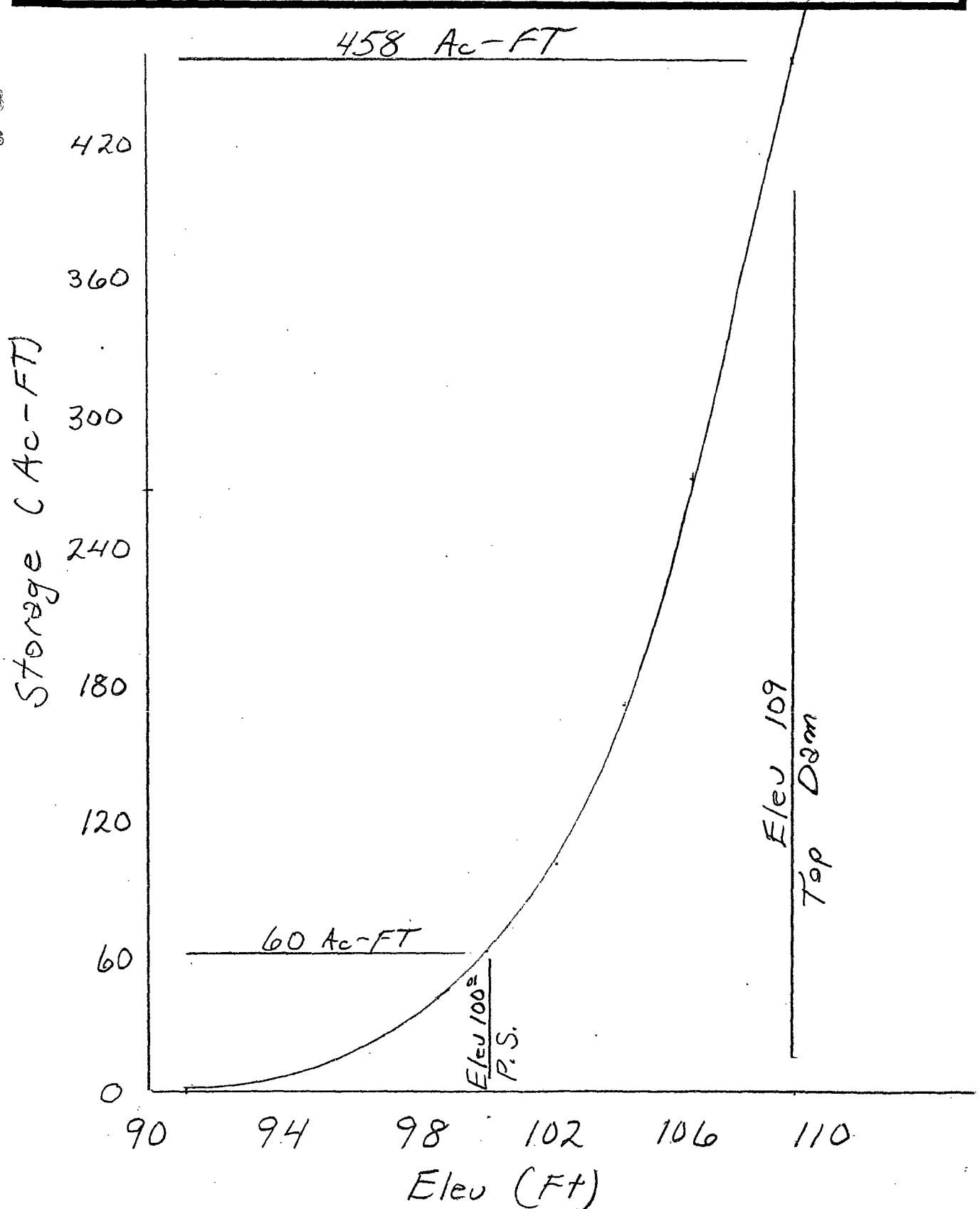
$$\begin{aligned} 50\% \text{ chance} &= 0.64 \\ 0.64 \times 3923^{3/2} &= \underline{210 \text{ Ac-Ft}} \end{aligned}$$

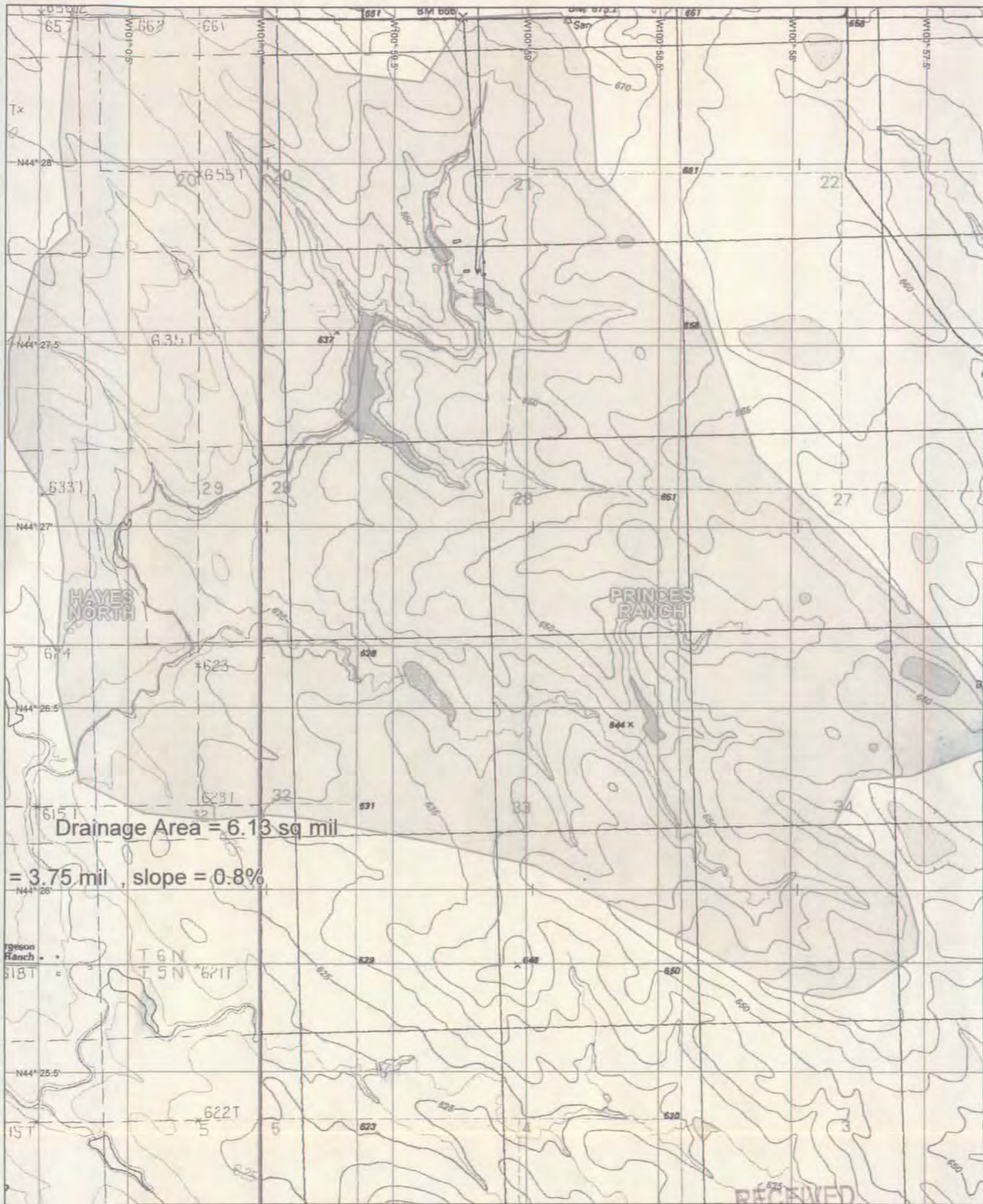
$$\begin{aligned} 10\% \text{ chance} &= 2.50 \\ 2.50 \times 3923^{3/2} &= \underline{817 \text{ Ac-Ft}} \end{aligned}$$

COMPUTATION SHEET

BY	DATE	PROJECT <i>Dan Bergerson</i>	SHEET ____ OF ____
CHKD BY	DATE	FEATURE <i>Sec 32, T6N, R26E</i>	
DETAILS			

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1*****
 SITES XEQ 08/07/2008 WATER RESOURCE SITE ANALYSIS COMPUTER PROGRAM
 VER 2000 (USER MANUAL - DATED MAY 2001)
 TIME 14:46:11

RECEIVED

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

08/07/2008

SITES 05/01/2000 Dan Bergerson 6.1296875 H5
 SAVMOV 0 101
 SAVMOV 101 1 1
 STRUCTURE

WATER RIGHTS
 PROGRAM

91 0
 92 .6
 96 6.1
 98 10.2
 100 20.5
 104 32
 105 50
 106 70
 108 80

72-60
 PS @ 100
 EM @ 106
 TD @ 109

ENDTABLE
 WSDATA 5A1 AC 80 3923 19800 .8
 PDIRECT 3.4 .00 4.00
 POOLDATA ELEV 100 100 90 90 SC
 PSINLET 1 18.84
 PSDATA 1 86 60 .025 92
 ASDATA 41 100 80 2 .05 2
 ASINSURF 41 .035
 ASINLET 41 0.0 0.0 100 0.0 3
 200 5

ENDTABLE
 ASEXSURF 41 .035
 .65 0
 2
 2 0
 .02

ENDTABLE
 ASEXIT 41 N 100
 BTMWIDTH FEET 100
 GRAPHICS I
 GO,DESIGN HL TYPE2 24 TYPE2378 24
 SAVMOV 2 101 1
 ENDJOB

 ***** MESSAGE - ALTERNATE STRUCTURE ID (S 1) BEING USED
 SINCE USER DID NOT INPUT AN ID.

***** MESSAGE - ALTERNATE SUBWATERSHED ID (A) BEING USED SINCE
 USER DID NOT INPUT AN ID.

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

1SITES -----
 XEQ 08/07/2008 Dan Bergerson WSID=
 VER 2000 SUBW= A
 TIME 14:46:11 SITE = S 1 PASS= 1 PART= 1

***** BASIC DATA *****
 CLIMATE AREA - NOT DEFINED DESIGN CLASS A1 = LT 3000.

STORM DISTRIBUTION-PSH 24 HOUR TYPE II RAINFALL DISTRIBUTION

STORM DISTRIBUTION AUX. -24 HOUR TYPE II RAINFALL DISTRIBUTION

PRECIP. - P-PS,1-DAY P-PS,10-DAY P-SD P-FB
 3.40 0.00 0.00 4.00

WSDATA - CN DA-SM TC/L -/H QRF
 80.00 6.13 19800.00 0.80 0.00

SITEDATA- PERM POOL CREST PS FP SED VALLEY FL 378?
 100.00 100.00 0.00 90.00 YES

BASEFLOW INITIAL EL EXTRA VOL SITE TYPE
 0.00 0.00 0.00 DESIGN

PSDATA - NO. COND COND L DIA/W -/H
 1.00 86.00 60.00 0.00

PS N KE WEIR L TW EL
 0.025 1.00 18.84 92.00

2ND STG ORF H ORF L START AUX.
 0.00 0.00 0.00 0.00

ASCRESTS - AUX.1 AUX.2 AUX.3 AUX.4 AUX.5
 0.00 0.00 0.00 0.00 0.00

AUX.DATA - REF.NO. RETARD. Ci TIE STATION INLET LENGTH
 41 0.00 100.00 80

AUX.DATA - INLET N SIDE SLOPE EXIT N EXIT SLOPE ACTUAL AUX?
 0.035 2.00 0.035 0.050 NO

BTM WIDTH - BW1 BW2 BW3 BW4 BW5
 ft 100.00 0.00 0.00 0.00 0.00

AUXILIARY SPILLWAY RATING DEVELOPED USING WSPVRT.

1SITES -----
 XEQ 08/07/2008 Dan Bergerson WSID=
 VER 2000 SUBW= A
 TIME 14:46:11 SITE = S 1 PASS= 1 PART= 2

PERM POOL 100.00 FT 60.7 ACFT 20.50 AC 0.0 CFS

CREST PS 100.00 FT 60.7 ACFT 20.50 AC 0.0 CFS

SED ACCUM 100.00 FT 60.7 ACFT 20.50 AC 0.0 CFS

START ELEV 100.00 FT 60.7 ACFT 20.50 AC 0.0 CFS

NRCS-PSH D= 24.00 HR P= 3.40 IN Q= 1.56 IN DA= 6.13 SM
TC= 6.45 HR CN= 80.00 VOL= 509.1 ACFT

PEAK = 813.7 CFS, AT 16.1 HRS.

ROUTED RESULT - HYD TYPE EMAX VOL-MAX AMAX QMAX
NRCS-PSH 106.00 FT 267.0 ACFT 70.02 AC 331.3 CFS

PS STORAGE 206.3 ACFT, BETWEEN AUX. CREST AND SED. ACCUM ELEVATIONS.

DRAWDOWN (DDT) TEST 100.00 FT 60.7 ACFT 0.00 CFS
CONTROL IS 0.000 DETENTION STORAGE

TIME = 2.16 DAYS, TO 0.0 CFS (LIMIT = 10.00 DAYS)

RATING TABLE DEVELOPED, SITE = S 1:
BY PROGRAM FOR PS AND AUX. SPILLWAYS
AUX. RATING USED WSPVRT METHOD.

RATING TABLE NUMBER 1

	ELEV. FEET	Q-TOTAL CFS	Q-PS CFS	Q-AUX. CFS	VOLUME AC-FT	AREA ACRE
1	100.00	0.00	0.00	0.00	60.70	20.50
2	100.73	36.58	36.58	0.00	76.48	22.60
3	101.46	103.45	103.45	0.00	93.79	24.71
4	102.20	190.06	190.06	0.00	112.65	26.81
FULL CONDUIT FLOW, ELEV = 102.93 FT						
5	102.93	292.61	292.61	0.00	133.05	28.92
6	103.56	301.08	301.08	0.00	151.96	30.74
7	104.20	309.22	309.22	0.00	172.32	35.53
8	104.83	317.16	317.16	0.00	198.46	46.94
9	105.46	324.90	324.90	0.00	232.05	59.28
→ 10	106.10	332.46	332.46	0.00	273.58	70.49
11	106.73	339.86	339.86	0.00	319.28	73.66
12	107.37	347.09	347.09	0.00	366.98	76.83
13	108.00	354.18	354.18	0.00	416.70	80.00

- @ E.S. of 106

1SITES

XEQ 08/07/2008

Dan Bergerson

WSID=

VER 2000

SUBW= A

TIME 14:46:11

SITE = S 1

PASS= 1 PART= 3

AUX. CREST 106.00 FT 267.0 ACFT 70.02 AC 331.3 CFS

PS STORAGE 206.3 ACFT, BETWEEN AUX. CREST AND SED. ACCUM ELEVATIONS.

START ELEV 100.00 FT 60.7 ACFT 20.50 AC 0.0 CFS

EFFECTIVE HEIGHT(H)= 16.0 FEET, PRODUCT= 4274. (H * STORAGE AT CREST AUX.).

INPUT DESIGN CLASS = A1 = LT 3000. PRODUCT.

***** WARNING - NHCP-378 CRITERIA DOES NOT APPLY WHEN THE EFFECTIVE HEIGHT IS OVER 35 FEET OR THE PRODUCT IS 3000 OR GREATER.

NRCS-FBH D= 24.00 HR P= 4.00 IN Q= 2.04 IN DA= 6.13 SM
TC= 6.45 HR CN= 80.00 VOL= 667.4 ACFT

PEAK = 1080.8 CFS, AT 16.1 HRS.

***** WARNING - UPSTREAM END OF CREST 0. IS UPSTREAM OF THE FIRST GROUND POINT 20. STATION.

RATING TABLE DEVELOPED, SITE = S 1:
BY PROGRAM FOR PS AND AUX. SPILLWAYS
AUX. RATING USED WSPVRT METHOD.

RATING TABLE NUMBER 2

	ELEV. FEET	Q-TOTAL CFS	Q-PS CFS	Q-AUX. CFS	VOLUME AC-FT	AREA ACRE
1	100.00	0.00	0.00	0.00	60.70	20.50
2	100.73	36.58	36.58	0.00	76.48	22.60
3	101.46	103.45	103.45	0.00	93.79	24.71
4	102.20	190.06	190.06	0.00	112.65	26.81
FULL CONDUIT FLOW, ELEV = 102.93 FT						
5	102.93	292.61	292.61	0.00	133.05	28.92
6	103.31	297.81	297.81	0.00	144.38	30.02
7	103.70	302.84	302.84	0.00	156.14	31.13
8	104.08	307.77	307.77	0.00	168.38	33.47
9	104.47	312.63	312.63	0.00	182.58	40.40
10	104.85	317.42	317.42	0.00	199.45	47.32
11	105.24	322.13	322.13	0.00	219.04	54.71
12	105.62	326.78	326.78	0.00	241.56	62.41
13	106.00	331.36	331.36	0.00	267.04	70.02
14	106.10	338.09	332.54	5.55	274.05	70.52
15	106.20	344.81	333.72	11.10	281.11	71.02
16	106.38	359.71	335.82	23.89	293.95	71.92
17	106.60	398.54	338.37	60.17	309.85	73.02
18	107.00	512.56	342.96	169.60	339.38	75.01
19	107.50	706.55	348.62	357.94	377.42	77.51
20	108.00	958.34	354.18	604.16	416.70	80.00

SUMMARY OF AUXILIARY SPILLWAY SURFACE CONDITIONS USED IN COMPUTATIONS BY REACH

REACH	FROM STA (ft)	TO STA (ft)	SLOPE (%)	RETARDANCE CURVE INDEX@	COVER FACTOR	VEGETAL CODE	MAINT. DEPTH (ft)	ROOTING LOCATION *
1	0.	100.	0.0	0.035	**	**	**	CREST
2	100.	200.	5.0	0.035	0.65	2	2.0	EXIT !

@ The program interprets retardance curve index entries of less than 1 as Manning's n values.

* Upper case indicates a reach of constructed spillway channel.

** The program does not use vegetal cover factor, maintenance code, and rooting depth for inlet and crest reaches in computations.

! Reach 2 used in computing exit channel velocities.

DRAWDOWN USING FREEBOARD STORM FOLLOWS, STARTING AT ELEVATION 106.00 FT.

DRAWDOWN (DDT) TEST 100.00 FT 60.7 ACFT 0.00 CFS
CONTROL IS 0.000 DETENTION STORAGE

TIME = 2.55 DAYS, TO 0.0 CFS (LIMIT = 10.00 DAYS)

ROUTED RESULTS	BTM FT	WIDTH FT	MAX ELEV ACFT	VOL-MAX AC	AREA-MAX FT ACFT	AUX.-HP	VOL-AUX.
NRCS-FBH	100.0	107.02	340.5	75.1	1.01	73.4	

PEAK - CFS Q-PS Q-AUX. Q-TOT.
DISCHARGE = 343.1 174.9 518.0

	CRITICAL DEPTH FT	CRITICAL VELOCITY FT/SEC	CRITICAL SLOPE-Sc FT/FT	25% OF Q Sc FT/FT
AUXILIARY SPILLWAY —	0.45	3.81	0.023	0.032

EFFECTIVE STRESS FOR STABILITY ANALYSIS OF AUX. EXIT CHANNEL

(Refer to Ag. Handbook 667, Chapt. 3, for allowable stresses.)

Aux. Discharge = 175. cfs; Bottom Width = 100. ft

REACH FROM TO SLOPE MANNING'S VELOCITY STRESS

NO.	STA	STA	%	n	ft/s	lb/ft^2
2	100.	200.	5.00	0.035	4.79	0.225

AUXILIARY SPILLWAY DURATION FLOW = 10.4 HOURS
ATTACK, OE/B = 0.7 ACFT/FT

***** MESSAGE - NHCP378 CRITERIA USED BUT AUXILIARY SPILLWAY RATING NOT BASED ON ASFILE RATINGS.

EXIT CHANNEL FLOW SUPERCRITICAL: MAX VELOCITY= 4.8 FT/SEC

EXIT SLOPE = 0.050 FT/FT
FLOW DEPTH = 0.4 FT

>>>> NHCP378 RUN - MINIMUM FLOW IN AUX. SPILLWAY FROM TR60
USING FORMULA WITHOUT 200 CFS MINIMUM LIMIT (579. CFS).

ROUTED	BTM	WIDTH	MAX	ELEV	VOL-MAX	AREA-MAX	AUX.-HP	VOL-AUX.
RESULTS	FT	FT	ACFT	AC	FT	ACFT		
MIN. AUX.	100.0	107.95	412.7	79.8	1.95	145.7		

PEAK - CFS Q-PS Q-AUX. Q-TOT.
DISCHARGE = 353.6 579.4 933.0

	CRITICAL	CRITICAL	CRITICAL	25% OF Q
	DEPTH	VELOCITY	SLOPE-Sc	Sc
AUXILIARY	FT	FT/SEC	FT/FT	FT/FT
SPILLWAY —	1.01	5.64	0.018	0.024

>>>> NHCP378 RUN - MINIMUM DEPTH, CREST AUX. TO TOP OF DAM IS 2.00 FT.
NEW TOP OF DAM ELEVATION = 108.00.

ROUTED	BTM	WIDTH	MAX	ELEV	VOL-MAX	AREA-MAX	AUX.HP	VOL-AUX.
RESULTS	FT	FT	ACFT	AC	FT	ACFT		
MINIMUM AUX.	100.0	108.00	417.1	80.0	2.00	150.0		

PEAK - CFS Q-PS Q-AUX. Q-TOT.
DISCHARGES = 354.2 606.6 960.8

	CRITICAL	CRITICAL	CRITICAL	25% OF Q
	DEPTH	VELOCITY	SLOPE-Sc	Sc
AUXILIARY	FT	FT/SEC	FT/FT	FT/FT
SPILLWAY —	1.04	5.72	0.018	0.024

>>>> NHCP378 RUN - MINIMUM DEPTH, DESIGN FLOW TO TOP OF DAM; 1.00 FT REQUIRED
FOR THIS PASS. NEW TOP OF DAM ELEVATION = 108.02.

ROUTED	BTM	WIDTH	MAX	ELEV	VOL-MAX	AREA-MAX	AUX.HP	VOL-AUX.
RESULTS	FT	FT	ACFT	AC	FT	ACFT		
MINIMUM AUX.	100.0	108.02	418.0	80.1	2.01	151.0		

PEAK - CFS Q-PS Q-AUX. Q-TOT.
DISCHARGES = 354.4 612.4 966.8

	CRITICAL	CRITICAL	CRITICAL	25% OF Q
	DEPTH	VELOCITY	SLOPE-Sc	Sc
AUXILIARY	FT	FT/SEC	FT/FT	FT/FT
SPILLWAY —	1.04	5.74	0.018	0.024

***** WARNING - SOLUTION EXCEEDED MAX. INPUT ELEVATION (108.00) BY 0.02 FT.

INFLOW HYD 1 PSH-PEAK = 331.27 CFS AT 20.87 HRS, LOCATION POINT

INFLOW HYD 1 FBH-PEAK = 518.03 CFS AT 20.00 HRS, LOCATION POINT
HYDOUT 1

1SITES.....JOB NO. 1 COMPLETE.

Dan Bergerson

0 SUBWATERSHED(S) ANALYZED.

1 STRUCTURE(S) ANALYZED.

2 HYDROGRAPHS ROUTED AT LOWEST SITE.

0 TRIALS TO OBTAIN BOTTOM WIDTH FOR SPECIFIED STRESS OR VELOCITY.

SITES.....COMPUTATIONS COMPLETE

>>>	SITE	SUBWS	SUBWS	DA	CURVE	TC	TOTAL	DA	TYPE	STRUC	<<<
	ID	ID	(SQ MI)	NO.	(HRS)	(SQ MI)	DESIGN	CLASS			
	S 1	A	6.13	80.	6.45	6.13	378CR	A1			

PASS	DIA./	AUX.	CREST	BTM.	MAX.	MAX.	EMB.	INTEGR.*	EXIT*	TYPE
NO.	WIDTH	ELEV	WIDTH	HP	ELEV	VOL.	DIST.	VEL.	HYD	
	(IN/FT)	(FT)	(FT)	(FT)	(FT)	(CY)	(FT)	(FT/SEC)		
1	60.0	106.0	100.0	2.0	108.0	0.	0.	4.8	MIN.	AUX.

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

SITES.....SUMMARY TABLE 1 COMPLETED.

NRCS SITES VERSION 2000 ,05/01/2000
FILES

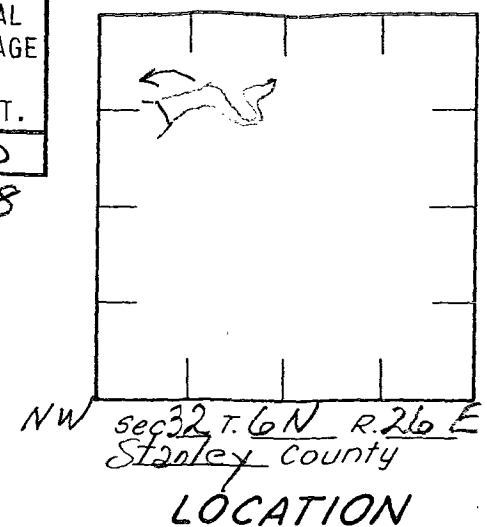
INPUT

C:\data\Engineering\sites\Bergerson32\72-60-10yrEM100.D2C

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.
3923	510	1080	612	9	20.5	—	60

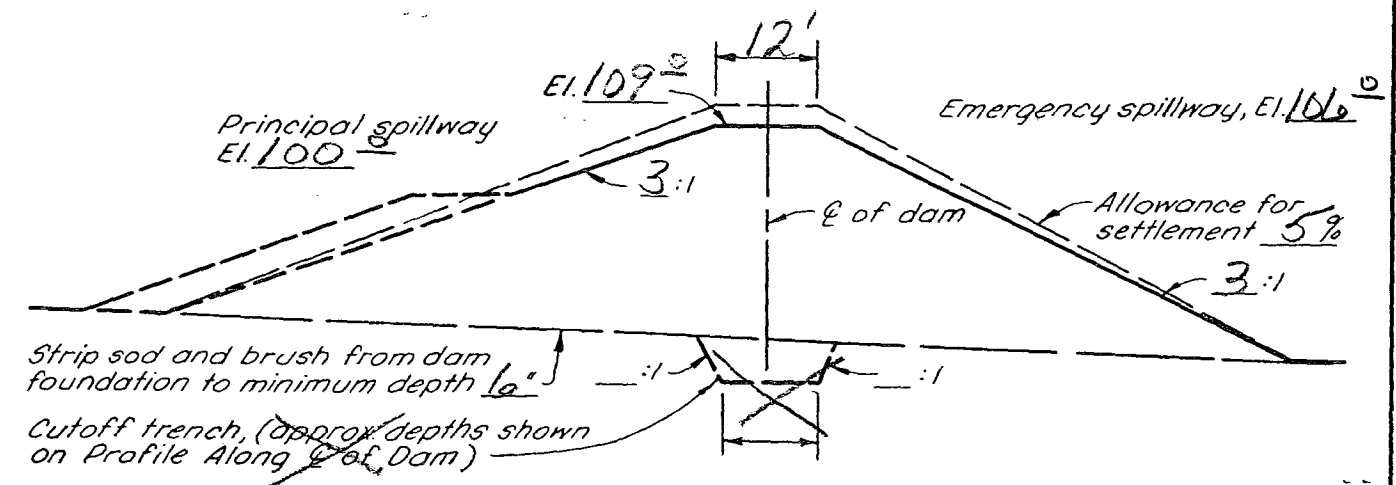
Top Dam 458



NOTE: Since minimum inspection will be performed, it is necessary to hire a competent contractor.

TABLE OF QUANTITIES

ITEM	UNIT	QUANTITY
8 ft 72" dia Riser w/4 ft 60" dia Stub	ea	1
60" dia CMP	lin Ft	98
Sand Seep Collar	cy	68
Concrete	cy	2.4
Timber Anti-Vortex	ea	1
Timber Pipe Support	ea	1
Estimate Earth Fill (to be determined when staked)	cy	12,000



TYPICAL CROSS SECTION OF DAM



SKETCH PLAN OF DAM AND RESERVOIR AREA
Approximate scale 1" = _____

REFERENCE: GUIDE PLAN NO. 1.0

S.D. CONSTRUCTION AND MATERIAL SPECIFICATIONS:

- SD-2 Clearing
- SD-7s Earth Fill
- SD-9 Drain Fill
- SD-12B Concrete
- SD-15 CMP
- SD-16 Timber Fabrication

EARTH DAM

OPERATOR: Dan Bergerson

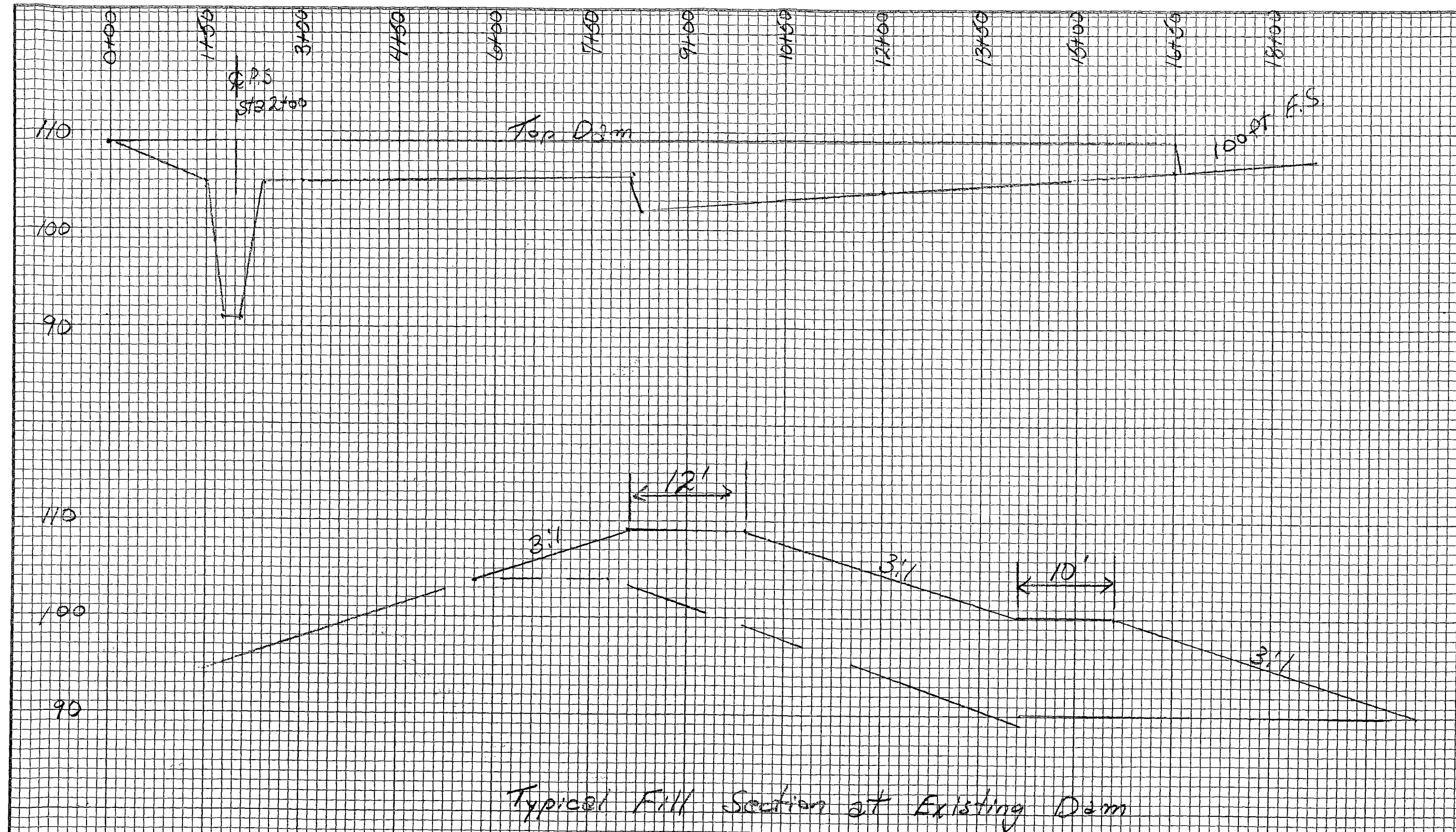
CONSERVATION DISTRICT: _____

Designed _____	Date _____	Approved by _____

Drawn _____	_____	Title _____
Traced _____	_____	Title _____
Checked _____	_____	Sheet _____
		Drawing No. _____

JOB PLAN NO. 1.0

(Rev. 4-73) 5, N-29, 073.1a(1)



Date	_____
Designed	_____
Drawn	_____
Checked	_____
Approved	_____
Don Bergerson	
CAD file: NE900-10-002a.dwg	
Drawing No. _____	
Sheet	of _____

Locate principal spillway pipe at $\mathbb{C}$ of dam sta. $2 + 00$, at an angle of 90° to the $\mathbb{C}$ of the dam.

Trash rack and baffle plate
not shown. See job plan
no. 6.4

Top of dam after
settlement El. 109⁰

Note: Allowance for settlement 5 %

Emergency spillway El. 106⁰

3:1 slope normal
to C of dam —

✓ 3 : slope normal
to ϕ of dam

Principal spillway El. 100

72" dia. riser, see
job plan no. 5.3

Antiseep collars

Berm, if required 3:1
slope normal to C of
dam _____

El. 92-7

102' of 60" dia. pipe

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

Prefabricated elbow

El.

El.

0 gr.

OUTLET DETAIL WITHOUT
PIPE SUPPORT

Prefabricated elbow ____°

Pipe support, see job plan no. 4.0

El. 92°

El. 91°

6

OUTLET DETAIL WITH
PIPE SUPPORT

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 10 GAGE OR 0.138 INCHES.

All pipe to be vinyl clad

All pipe to be spiral or double riveted with caulked seam (see spec SD-15)

TABLE OF QUANTITIES

[illegible]

APPLICABLE STANDARD S.C.S. SPECIFICATIONS

Sec. _____, T. _____, R. _____
_____ County

LOCATION

CORRUGATED METAL PIPE
DROP INLET PRINCIPAL SPILLWAY

OPERATOR Dan Bergerson

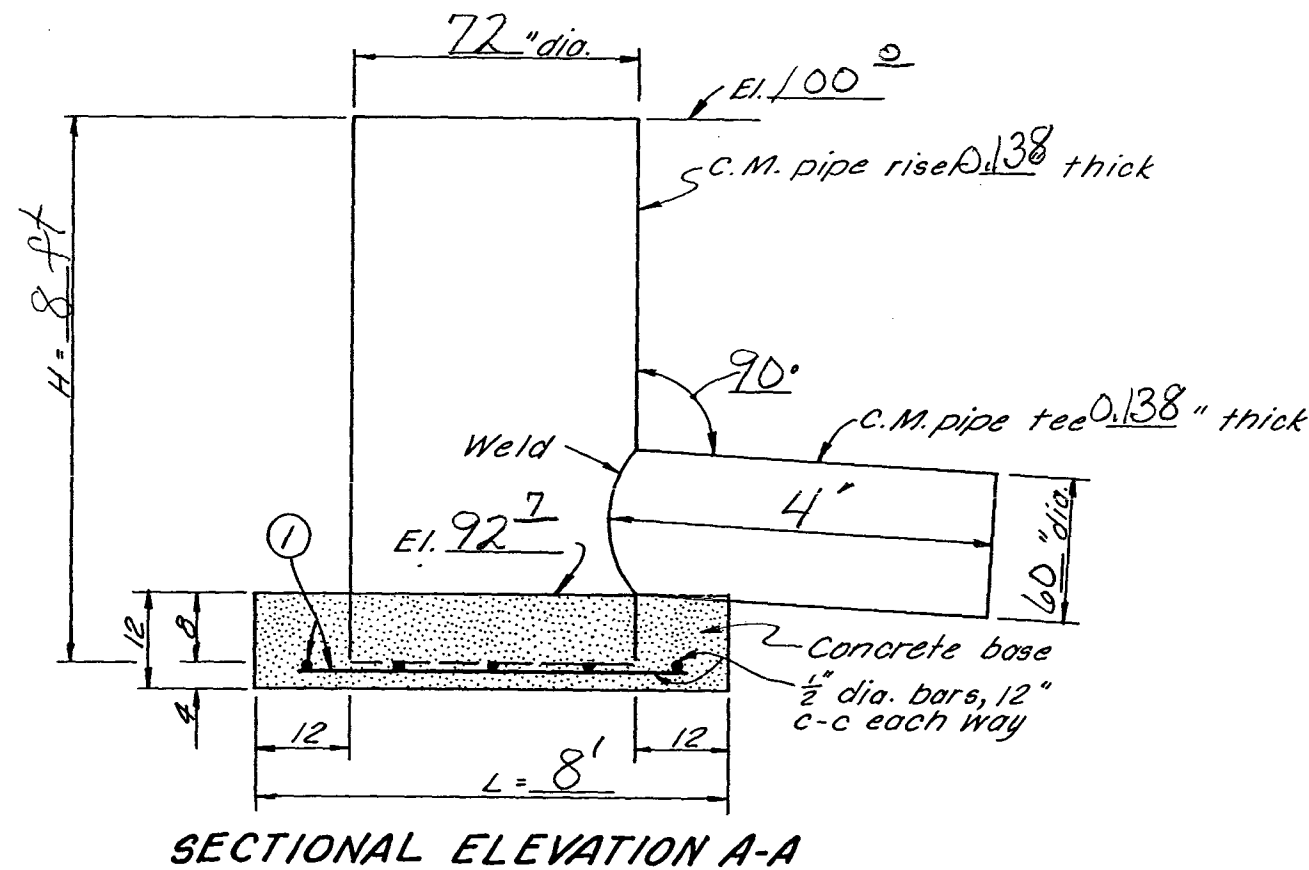
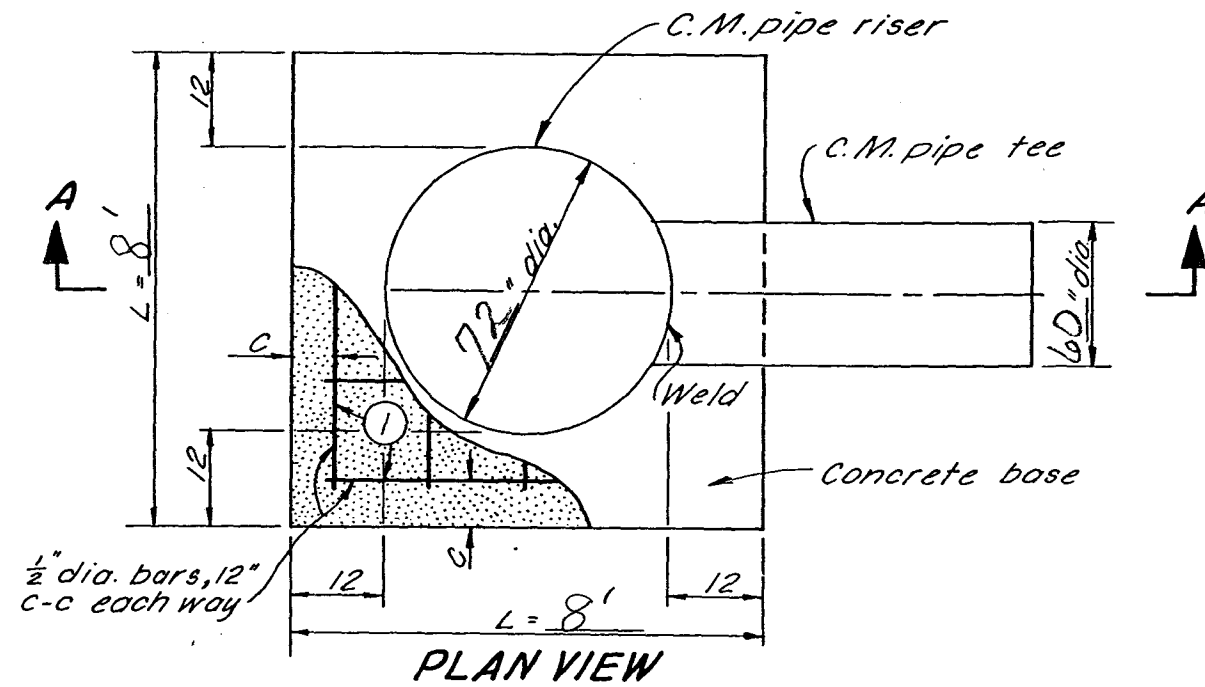
CONSERVATION DISTRICT

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

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

REFERENCE: GUIDE PLAN NO. 2.0

Rev. 8/80
JOB PLAN NO. 2.0



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.
72	4	1	STR.	16	7-5	120-0	80	6	8-0

TABLE OF QUANTITIES

ITEM	UNIT	QUANTITY
CONCRETE	CU. YD.	2.4
REINFORCING STEEL	LB.	80

NOTE:

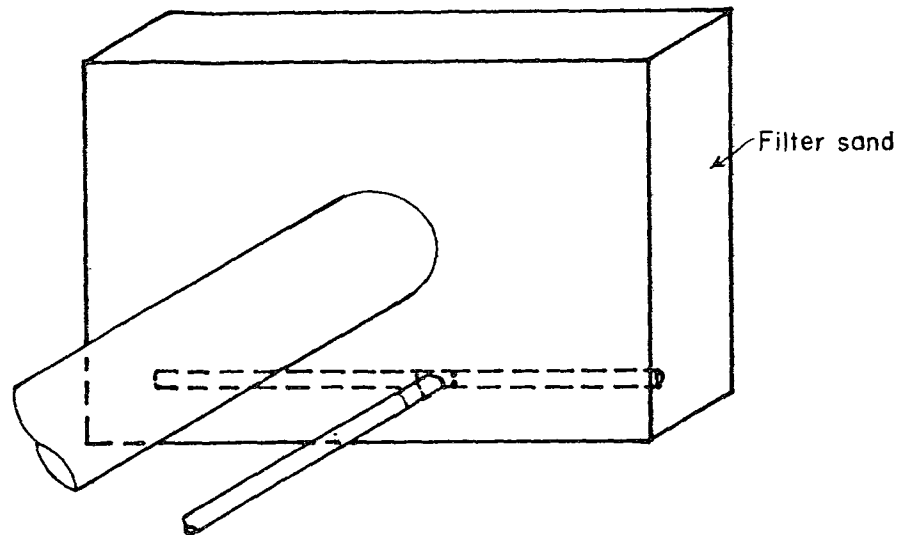
C.M. PIPE RISER WITH FABRICATED TEE

OPERATOR: <u>Dan Bergerson</u>	
CONSERVATION DISTRICT: _____	
U. S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	
Designed _____	Date _____
Drawn _____	Approved by _____
Traced _____	Title _____
Checked _____	Sheet _____
	Drawing No. _____

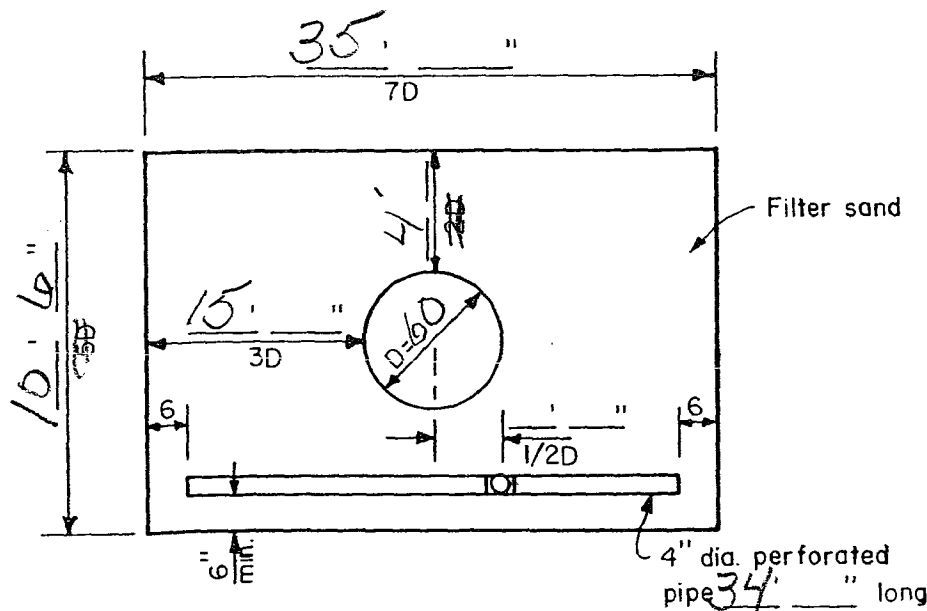
REFERENCE: GUIDE PLAN NO. 5.3

JOB PLAN NO. 5.3

5,N-29,073.5-30



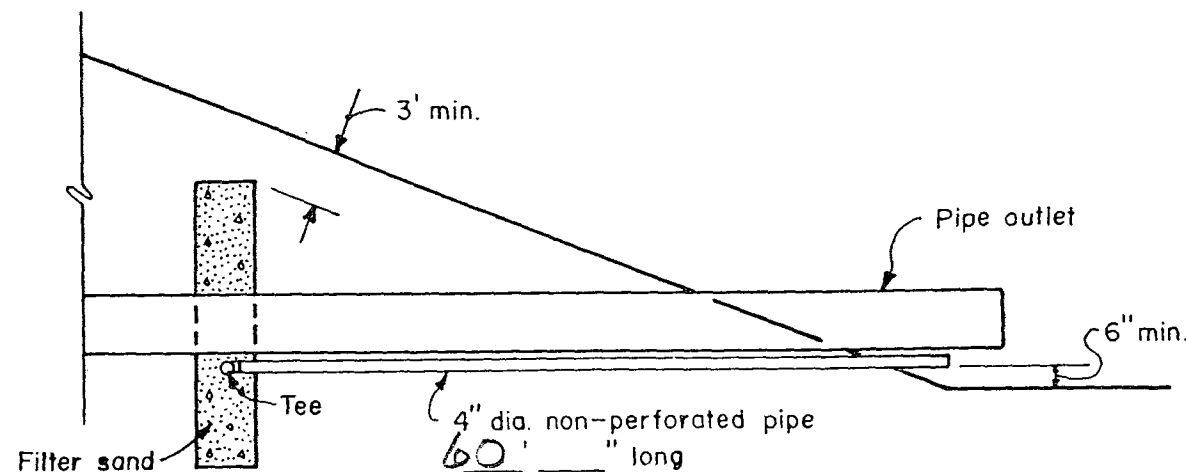
ISOMETRIC VIEW



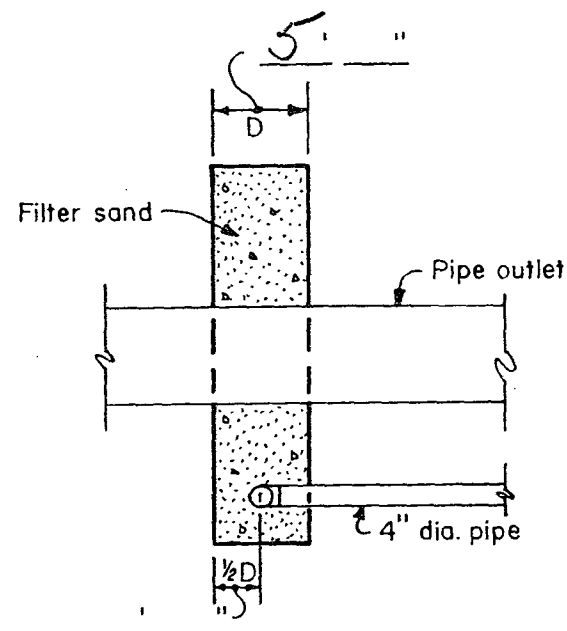
UPSTREAM VIEW

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 $\pm$ 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

see spec SD-9
68 cy

Sec. _____, T. _____, R. _____

_____ County

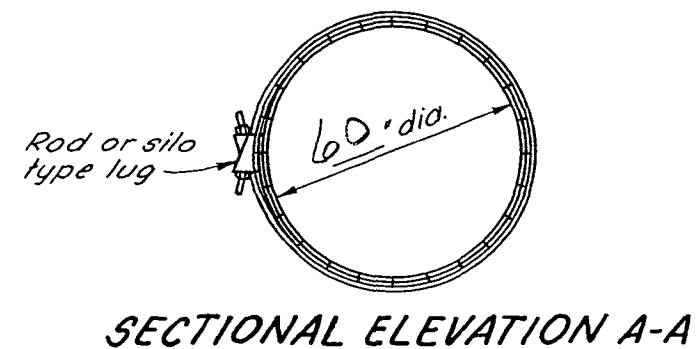
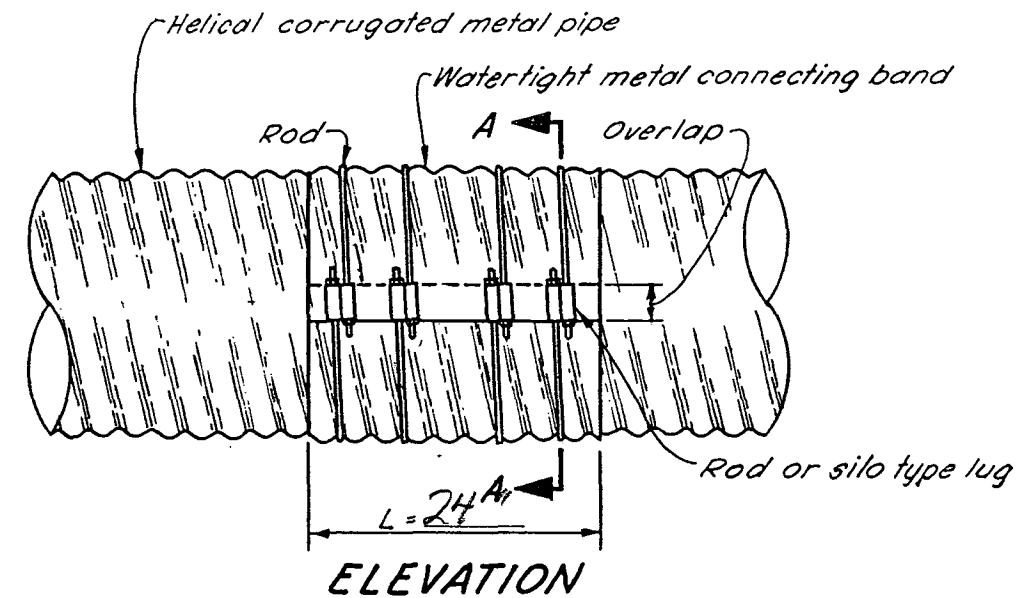
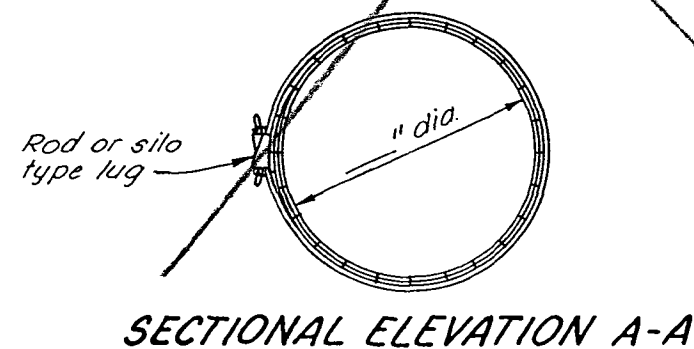
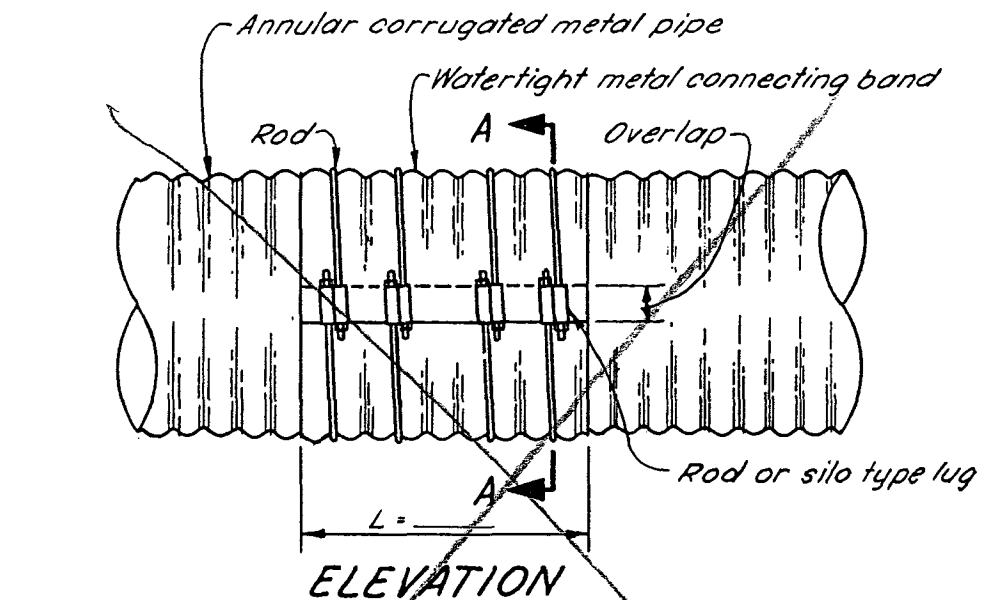
LOCATION

SAND ANTISEEP COLLAR

OPERATOR Dan Bergerson

CONSERVATION DISTRICT _____

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



DIMENSIONS AND QUANTITIES

PIPE DIA. INCHES	MINIMUM "L" INCHES	APPROX. OVERLAP INCHES	NUMBER OF RODS & LUGS	MINIMUM ROD DIA. IN.	NEOPRENE GASKET WIDTH INCHES	ASPHALT MASTIC GAL.
6-18	12	2	2	1/2	12	1/2
21-30	24	3	4	1/2	12	1 1/2
36-48	24	6	4	1/2	12	2

60 24 6 4 1/2 12 2

NOTES:

1. WATERTIGHTNESS WILL BE OBTAINED BY USE OF (1) 3/8" THICK NEOPRENE GASKET (WIDTH AS SHOWN) OR (2) ASPHALT MASTIC SEALING MATERIAL TO COVER FULL WIDTH OF BAND.
2. CROSS OUT BAND AND QUANTITIES NOT APPLICABLE.

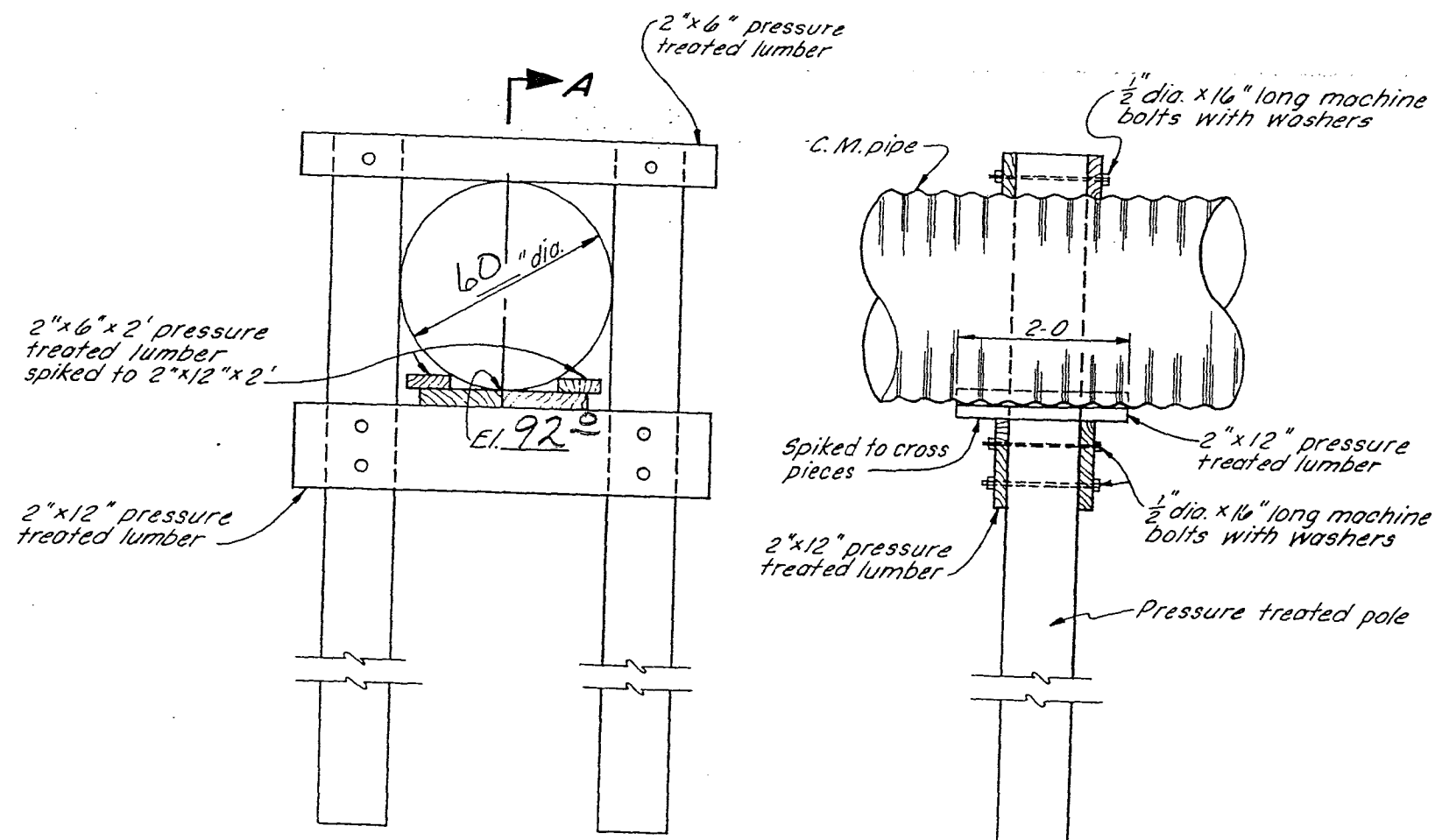
WATERTIGHT CONNECTING BAND FOR ANNULAR AND HELICAL CORRUGATED METAL PIPE

OPERATOR: Dan Bergerson

CONSERVATION DISTRICT: _____

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Date _____ Approved by _____
 Designed _____ Title _____
 Drawn _____ Title _____



ELEVATION

SECTIONAL ELEVATION A-A

TABLE OF QUANTITIES

ITEM	LENGTH FOR 60" DIA. C.M. PIPE	UNIT	QUANTITY
PRESSURE TREATED POLE 10" DIA.	12-0	EACH	2
2" X 12" PRESSURE TREATED LUMBER	8-0	EACH	2
2" X 6" PRESSURE TREATED LUMBER	8-0	EACH	2
2" X 12" PRESSURE TREATED LUMBER	2-0	EACH	4
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

REFERENCE: GUIDE PLAN NO. 4.0

NOTES:

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

TIMBER PIPE SUPPORT

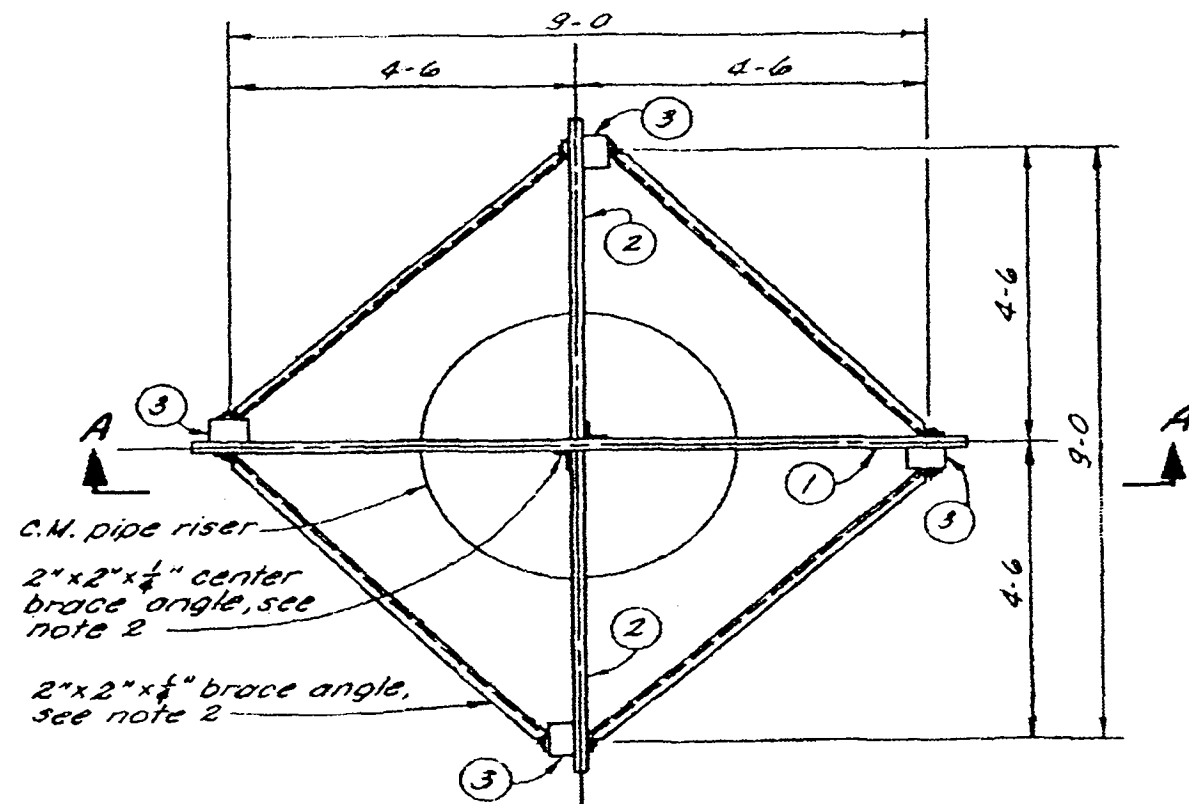
OPERATOR: Dan Bergerson

CONSERVATION DISTRICT: _____

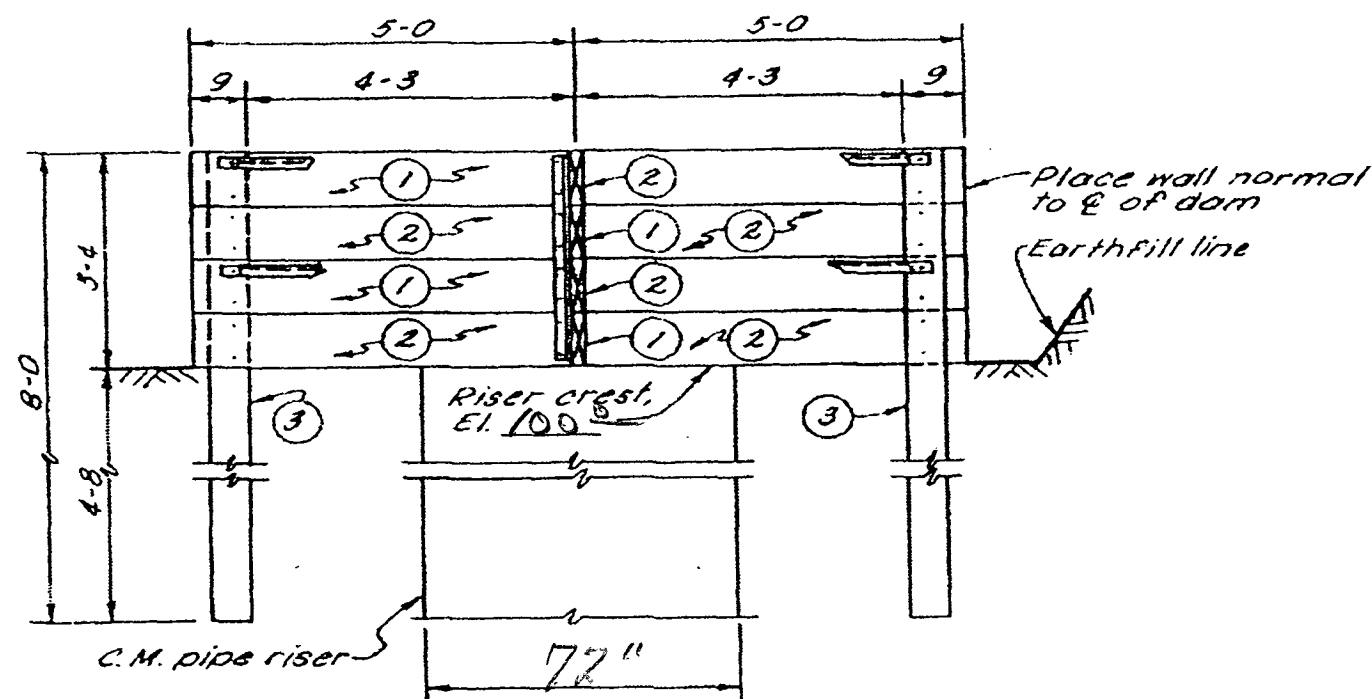
Designed.....	Date.....	Approved by.....
Drawn.....		Title.....
Traced.....		Title.....
Checked.....	Sheet No. of.....	Drawing No.

JOB PLAN NO. 4.0

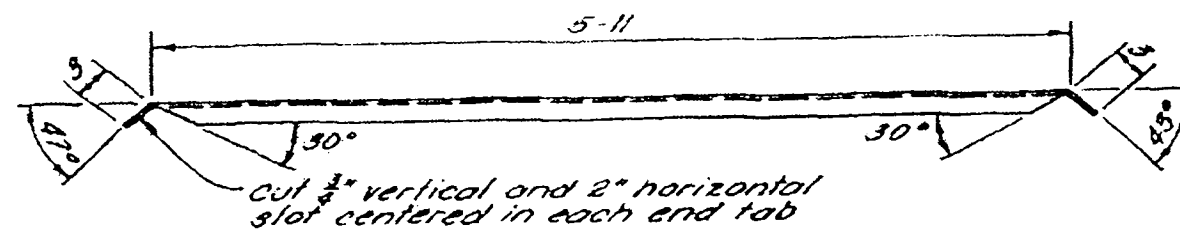
5, N-29,073.4a



PLAN VIEW



SECTIONAL ELEVATION A-A



PLAN VIEW OF BRACE ANGLE

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:

1. 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.
2. 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.
3. 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: Don Bengerson
CONSERVATION DISTRICT: _____

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

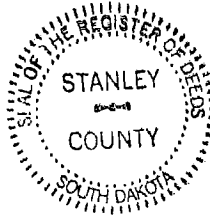
Designed _____ Date _____
Drawn _____ Title _____
Traced _____
Checked _____

JOB PLAN NO. 6.4

5, N-29, 073.6-40

#08-1006

Document prepared by:
Tim Olson
SD Game, Fish and Parks
523 E. Capitol Ave.
Pierre, SD 57501
(605) 773-3658



State of South Dakota }
SS
County of Stanley }

Filed for record this 1st day of Oct., 2008
At 3:00 PM and recorded in Book 304 of
Miscellaneous on pages 656-657.

[Signature]
Register of Deeds

Deputy

Fee \$12.00

AGREEMENT AND GRANT OF EASEMENTS

This AGREEMENT AND GRANT OF EASEMENTS is made by and between Frank Miller of 810 Verendrye Drive, Ft. Pierre, SD 57532, hereafter referred to as GRANTOR, and the Bergeson Family Partnership, LLP c/o Daniel Bergeson of P.O. Box 387, Ft. Pierre, SD 57532 and/or Ruth Inman of 129 River Road, Pierre, SD 57501 hereafter referred to as GRANTEES.

Consideration for this agreement is \$1 and other valuable consideration, receipt of which is acknowledged by GRANTOR. In consideration thereof the parties agree as follows:

GRANTOR is the owner in fee of real property situated in Stanley County, South Dakota and described as: NE¼ Sec. 32 T6N, R26E and SE¼ Sec. 29 T6N, R26E which property is hereafter referred to as PROPERTY.

Due to an stock dam renovation project by the GRANTEES, in cooperation with the South Dakota Department of Game, Fish and Parks located on GRANTEES downstream property in the NW¼ Sec. 32 T6N, R26E and need for additional easements to facilitate said project, GRANTOR grants and conveys to the GRANTEE additional rights and easements on GRANTOR's PROPERTY as provided herein.

GRANTOR grants and conveys to GRANTEE the right to temporarily flood certain portions of GRANTOR's PROPERTY as described above in perpetuity or until project is abandoned as per South Dakota water law and regulation. Temporary flooding of PROPERTY during rare and extreme runoff events may extend to an elevation approximately 7 feet higher than the channel bottom elevation at the property boundary fences located in the vicinity of the northeast corner of the NW¼ Sec. 32 T6N, R26E. This is same elevation as the top of the reconstructed dam structure. Elevation of the normal full dam pool will be approximately 2 feet lower than the channel bottom elevation at the same location and will not impound water on GRANTOR'S PROPERTY.

GRANTOR, for the consideration stated herein, for himself and for his heirs, successors, and assigns, expressly waives and releases GRANTEE and its assigns or representatives from any and all claims they may have for damages which may have occurred or which in the future may occur by reason of construction or maintenance of any of the facilities and structures contemplated by the renovation project and as permitted by this agreement by reason of flooding,

overflow, or the depositing of material resulting from said flooding or overflow.

The covenants, agreements, and obligations herein contained shall extend to, bind and inure to the benefit of the parties hereto and their respective personal representatives, heirs, successors and assigns.

IN WITNESS WHEREOF, the GRANTOR and the GRANTEE have executed this Agreement as of the day affixed to this Agreement.

GRANTOR

Frank Miller executed this 26 day of September, 2008.
Frank Miller

GRANTEE

Daniel Bergeson executed this 26 day of Sept., 2008.
Daniel Bergeson

GRANTEE

Ruth Inman executed this 26th day of September, 2008.
Ruth Inman

STATE OF SOUTH DAKOTA

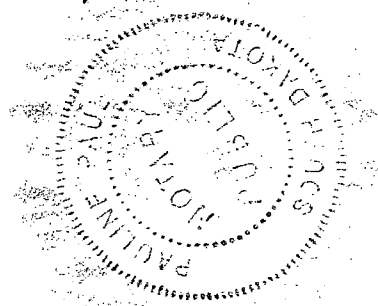
COUNTY OF Stanley)SS

On this the 26 day of September, 2008, before me, the undersigned officer, personally appeared Frank Miller, Daniel Bergeson and Ruth Inman known to me or satisfactorily proven to be the persons whose names are subscribed to the within instrument and acknowledged that they executed the same for the purposes therein contained.

In WITNESS WHEREOF, I hereunto set my hand and official seal.

(NOTARY SEAL)

Pauline Paul
Notary Public, South Dakota
Commission expires: April 7, 2011





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

October 28, 2008

Bergeson Family Ltd Partnership
c/o Daniel Bergeson
PO Box 387
Ft. Pierre, SD 57532

Dear Mr. Bergeson:

We have reviewed the plans and specifications for your dam project located in the SW ¼ NW ¼ of Sec. 32-T6N-R26E, in Stanley County. The plans and specifications for the construction of the dam are approved. Approval of the plans and specifications does not authorize construction of the dam. The construction of the dam may not begin until Water Permit No. 2638-2 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 dam will be classified as a small size Category 3, Low Hazard dam with a dam height of 18 ft. and a normal storage capacity of 60 acre-feet and a maximum storage capacity of 458 acre-feet.

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

Sincerely,

Timothy G. Schaal, P.E.
Natural Resources Engineering Specialist
for Garland Erbele, Chief Engineer
Water Rights Program
(605) 773-3352

c: Tim Olson, GF&P
Dave Konechne

REPORT ON
WATER PERMIT APPLICATION NO. 2638-2
Bergeson Family Ltd. Partnership
October 22, 2008

Water Permit Application No. 2638-2 has been filed by the Bergeson Family Ltd. Partnership, c/o Daniel Bergeson, to impound 60 acre-feet of water from runoff by reconstructing a dam located in the SW ¼ NW ¼ of Section 32-T6N-R26E, in Stanley County. The application also requests impoundment of sufficient water to maintain water to the outlet elevation. The water will be used for fish and wildlife production, recreation and livestock water purposes.

Discussion:

The dam will be classified as a small size, Category 3, Low Hazard dam. The dam has been designed by Konechne Engineering. The plans and specifications have been reviewed and will be approved; however, construction of the dam can not begin until Water Permit Application No. 2638-2 is approved.

The dam will be 18 feet high with a normal storage capacity of 60 acre-feet with a reservoir level at the primary spillway elevation, and a maximum storage capacity of 458 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 50-year frequency event.

The dam has a drainage area of 3923 acres or 6.13 square miles. The dam is designed to have a 72 inch diameter CMP riser with a 60 inch diameter CMP barrel and 9.0 feet of freeboard as the primary spillway, and a 100 foot wide earthcut secondary spillway with 3 feet of freeboard. A 50 year frequency event produces a peak runoff of approximately 800 cfs and a 100 year frequency event produces a peak runoff of approximately 1060 cfs. The earthcut spillway will have a capacity of approximately 1350 cfs.

The annual yield for this drainage area with an 80 percent chance of occurrence, or 8 out of 10 years, is expected to be 85 acre-feet. The annual yield with a 50 percent chance of occurrence, or 1 out of 2 years, is expected to be 210 acre-feet and the annual yield with a 10 percent chance, or 1 out of 10 years, is expected to be 817 acre-feet.

The Bergeson Dam will be located in the SW ¼ NW ¼ of Section 32-T6N-R26E on an unnamed tributary to Frozen Man Creek, about 1.5 miles upstream of the confluence of the unnamed tributary and Frozen Man Creek. The Department of Game, Fish and Parks holds Water Right No. 562-2 for storage of 150 acre-feet of water in Hayes Dam, which is located on Frozen Man Creek about 6 miles downstream of the Bergeson Dam. Hayes Dam has a drainage area of approximately 50 square miles and the repair of Bergeson Dam should not have any adverse effect on Hayes Dam. There are no other existing Water Permits/Rights filed on the unnamed tributary or Frozen Man Creek between the proposed dam and Hayes Dam. The applicant has filed a temporary flood easement for property located in the NE ¼ of Sec. 32-T6N-R26E that may be temporarily flooded during runoff events and spillway operations.

Conclusions:

1. Water Permit Application No. 2638-2 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 domestic use should be a qualification on Water Permit Application No. 2638-2.



Timothy G. Schaal, P.E.
Natural Resources Engineering Specialist



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 2638-2, Bergeson Family Ltd. Partnership**

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. 2638-2, Bergeson Family Ltd. Partnership, c/o Daniel Bergeson, PO Box 387, Ft. Pierre SD 57532.

The Chief Engineer is recommending APPROVAL of Application No. 2638-2 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. 2638-2 authorizes a dam with a storage capacity of 60.0 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.

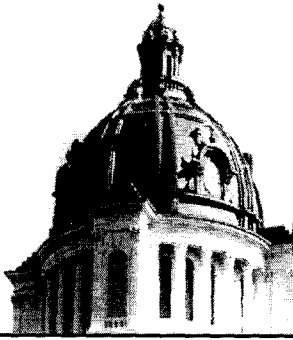
See report on application for additional information.

Garland Erbele, Chief Engineer
October 28, 2008

RECEIVED

NOV 25 2008

WATER RIGHTS
PROGRAM



Capital Journal

AFFIDAVIT OF PUBLICATION

State of South Dakota, County of Hughes

Virginia Jones of said county, being, first duly sworn, on oath, says: That he/she is the publisher or an employee of the publisher of the Capital Journal, a daily newspaper published in the City of Pierre in said County of Hughes and State of South Dakota; that he/she has full and personal knowledge of the facts herein stated, that said newspaper is a legal newspaper as defined in SDCL 17-2-2.1 through 17-2-2.4 inclusive, that said newspaper has been published within the said County of Hughes and State of South Dakota, for at least one year next prior to the first publication of the attached public notice, and that the legal/display advertisement headed Application No. 2638-2 Water

a printed copy of which, taken from the paper in which the same was published, and which is hereto attached and made a part of this affidavit, was published in said newspaper for 2 successive week(s) to wit:

<u>Nov. 4</u>	<u>20 08</u>	<u>20</u>
<u>Nov. 13</u>	<u>20 08</u>	<u>20</u>
<u> </u>	<u>20</u>	<u>20</u>
<u> </u>	<u>20</u>	<u>20</u>
<u> </u>	<u>20</u>	<u>20</u>

That the full amount of the fee charged for the publication of the attached public notice inures to the sole benefit of the publisher or publishers; that no agreement or understanding for the division thereof has been made with any other person, and that no part thereof has been agreed to be paid to any person whomsoever; that the fees charged for the publication thereof are: \$34.69.

Signed: Virginia Jones

subscribed and sworn to before me this 24 day of November 20 08

May L Baker

Notary Public in and for the County of Hughes, South Dakota.
My Commission expires 2-19, 20 09

600
Public
Notices

SNAXLP 9534
2tdly 11/6, 11/13
**NOTICE OF
APPLICATION
NO. 2638-2 to
Appropriate
Water**

Notice is given that Bergeson Family Ltd. Partnership, c/o Daniel Bergeson, PO Box 387, Ft. Pierre SD 57532 has filed an application for a water permit to impound 60 acre-feet of water from an unnamed tributary to Frozen Man Creek by reconstructing a dam located in the SW 1/4 NW 1/4 Section 32 with water impounded in the NW 1/4 Section 32, all in T6N-R26E. This application requests impoundment of sufficient water to maintain water to the outlet elevation. The water is for fish and wildlife propagation, recreation and livestock water purposes.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 2638-2 because 1) unappropri-

ated 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 this 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 this 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 November 24, 2008.

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. Steven M. Pirner, Secretary, Department of Environment and Natural Resources.



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

October 29, 2008

Capital Journal
PO Box 878
Pierre SD 57501

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 2638-2 to Appropriate Water to be published twice. Please publish the first notice on November 6, 2008 with the second publication 7 days later. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352.

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 Bergeson Family Ltd. Partnership c/o Daniel Bergeson, PO Box 387, Fort Pierre SD 57532 (Ph # 605-223-2368).

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. 2638-2

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

Date _____

We are in receipt of your letter of October 29, 2008 enclosing Notice to Appropriate Water by Application No. 2638-2 which was first published in our issue of _____. **ENCLOSED IS A COPY OF THIS FIRST PUBLICATION.**

Name

Newspaper



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

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

October 29, 2008

Bergeson Family Ltd Partnership
c/o Daniel Bergeson
PO Box 387
Fort Pierre SD 57532

Dear Mr. Bergeson:

Water Permit Application No. 2638-2 for fish & wildlife use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Publisher of the Capital Journal printed at Pierre SD (Ph # 605-224-7301). You will need to contact the newspaper and authorize publication of this notice. For your information, a copy of the notice, the recommendation of the Chief Engineer and 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 and to arrange for payment. Early contact with the paper can eliminate delays. Upon receiving authorization, the publisher has been instructed to publish your notice once each week for two consecutive weeks. The newspaper has also 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.

Instruction to Newspaper - Publish first Notice on November 6, 2008 with the second publication 7 days later. The applicant is responsible for payment.

NOTICE OF APPLICATION NO. 2638-2 to Appropriate Water

Notice is given that Bergeson Family Ltd. Partnership, c/o Daniel Bergeson, PO Box 387, Ft. Pierre SD 57532 has filed an application for a water permit to impound 60 acre-feet of water from an unnamed tributary to Frozen Man Creek by reconstructing a dam located in the SW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 32 with water impounded in the NW $\frac{1}{4}$ Section 32; all in T6N-R26E. This application requests impoundment of sufficient water to maintain water to the outlet elevation. The water is for fish and wildlife propagation, recreation and livestock water purposes.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 2638-2 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 this 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 this 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 November 24, 2008.

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. Steven M. Pirner, Secretary, Department of Environment and Natural Resources.



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

DEC 04 2020

Bergeson Family Ltd Partnership
c/o Daniel Bergeson
PO Box 387
Fort Pierre SD 57532

Dear Mr. Bergeson:

Enclosed is Water Permit No. 2638-2 authorizing construction of your water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

Form 10, *Notice of Completion of Works and Application of Water to Beneficial Use*, is enclosed. Please return this completed form after you have finished the system and have put the water to beneficial use. An investigation can then be scheduled so the water license may be issued, thus completing the acquisition of a water right.

An informational sheet *Common Water Right Questions?* is also enclosed. This sheet is intended to answer some of the questions associated with obtaining and keeping a water right.

Sincerely,

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

enclosures

Permit No. 2638-2
Bad 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, October 30, 2012, made a thorough examination of the water use system constructed by Bergeson Family Ltd. Partnership of Box 387, Ft. Pierre, SD 57532 holder of Permit No. 2638-2, bearing the priority of October 1, 2008 authorizing the storage of 60 acre-feet of the waters of runoff-unnamed trib. To Frozen Man Creek for fish and wildlife propagation, recreation and livestock water purposes, in Stanley County.

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

A. Works used to divert the water:

An 18 ft. high earth dam with a normal storage capacity of 60 ac-ft.

B. Works used to transport water to place of use:

N/A

C. Works used to apply water to beneficial use:

An 18 ft. high earth dam with a normal storage capacity of 60 ac-ft.

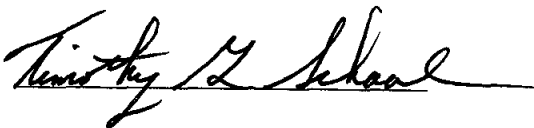
The system is in the following condition good. The point of diversion is located 1850 ft. south & 600 ft. east of the NW corner of Sec. 32-T6N-R26E (SW ¼ NW ¼) (Lat. 44.43929 & Long. -101.01225). The works are capable of storing 60 acre-feet of water which is to be used for fish and wildlife propagation, recreation and livestock water. Water has been put to beneficial use to the maximum extent as follows:

An 18 ft. high earth dam with a normal storage capacity of 60 ac-ft.

and the license should be issued for 60 acre-feet of storage.

Applicable permit qualifications have been complied with: Yes X

Exceptions to compliance are: none Date Report Completed: January 15, 2013



Timothy G. Schaal, P.E.
Engineer IV
SD DENR, Water Rights Program

REPORT ON INSPECTION OF PERMIT NO. 2638-2

DATE OF INSPECTION: October 30, 2012

NAME & ADDRESS OF PERMIT HOLDER: Bergeson Family Ltd. Partnership, PO Box 387
Ft. Pierre, SD 57532

DIVERSION POINT LEGAL LOCATION: 1850 ft. south & 600 ft. east of the NW corner of
Sec. 32-T6N-R26E (SW ¼ NW ¼) (Lat. 44.43929 & Long. -101.01225).

DAM INFORMATION:

- 1) Height to crest 18 feet
- 2) Height to primary spillway 9 feet
- 3) Height to secondary spillway 15 feet
- 4) Crest width 12 feet
- 5) Crest length 1650 feet
- 6) Spillway length XXX feet
- 7) Spillway width 100 feet
- 8) Approx. storage (Normal) 60 acre-feet
- 9) Approx. storage (Maximum) 458 acre-feet
- 10) Date constructed: 2008

PERMIT QUALIFICATIONS AND REGULATIONS:

- 1) Soil and water permit lands agree with lands being irrigated and lands listed on permit N/A
- 2) Special qualifications to permit being abided by yes
- 3) All structures, wells and lands on map yes
- 4) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period N/A

Water Permit Application No. 2638-2



Timothy G. Schaal

Timothy G. Schaal, P.E.
Engineer IV
SD DENR, Water Rights Program

11/15/13



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov

FEB 18 2013

2638-2

Daniel Bergeson
Bergeson Family Ltd Partnership
PO Box 387
Ft Pierre SD 57532

Dear Mr. Bergeson:

Enclosed is Water License No. 2638-2 authorizing impoundment of water for fish and wildlife propagation, recreation and livestock water purposes. Water License No. 2638-2 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

enclosures

STATE OF SOUTH DAKOTA

WATER LICENSE NO. 2638-2

(1) Bergeson Family Ltd Partnership, PO Box 387, Ft Pierre SD 57532 made Application No. 2638-2, October 1, 2008 for a water permit to impound 60 acre feet of water from an unnamed tributary to Frozen Man Creek, Stanley County, South Dakota for fish and wildlife propagation, recreation and livestock water purposes. Permit No. 2638-2, with a priority date of October 1, 2008 was approved November 24, 2008 and issued to the applicant for impoundment of water with construction of the described storage dam to be completed on or before November 24, 2013 and for the application to beneficial use of said water on or before November 24, 2017.

(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 60 cubic feet of water per second for beneficial use.

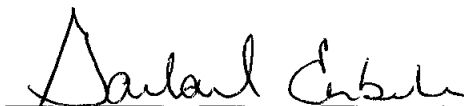
The location of the storage dam (spillway) is located 1,850 feet south and 600 feet east of the NW corner of Section 32, T6N, R26E (SW ¼ NW ¼). Water is impounded in the W ½ NW ¼ and NE ¼ NW ¼ Section 32.

(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 Bergeson Family Ltd Partnership, PO Box 387, Ft Pierre SD 57532 the holder and/or owner of Water Right No. 2638-2 is issued a license to appropriate water, the right to impound 60 acre feet of water from an unnamed tributary to Frozen Man Creek with a priority date of October 1, 2008 from the location specified in (2) of this license for fish and wildlife propagation, recreation and livestock water purposes.

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 2638-2 and subject to the following qualifications:

- Water Right No. 2638-2 authorizes a dam with a storage capacity of 60 acre feet of water and sufficient water annually to maintain the water level to the outlet elevation.
- Low flows as needed for downstream domestic use, including livestock water and prior water rights must be bypassed.



Garland Erbele, Chief Engineer
Water Rights Program

Department of Environment and Natural Resources

FEB 18 2013

date





DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

March 8, 2013

No. 2638-2

Roger Inman
29567 201st St
Pierre SD 57501

Dear Mr. Inman:

Enclosed is a partially completed "Notice of Transfer" form for use in filing an ownership change on Water Right No. 2638-2. The water right is currently listed in the name of Bergeson Family Ltd Partnership.

The transfer form should be checked over for accuracy and signed by the new owner. Upon completion, return the form to our office with a required filing fee of \$50.00.

South Dakota Water Law 46-5-30.3 requires Notice of any sale, grant, lease, conveyance or other transfer of a water permit or water right to appropriate water to be filed with this office within ninety days.

If you have any questions, please contact me.

Sincerely,

Karen Schlaak

Karen Schlaak
Water Rights Program
605 773-3352
email: karen.schlaak@state.sd.us

enclosure

NOTICE OF TRANSFER OF OWNERSHIP

RECEIVED

To: Chief Engineer
Water Rights Program, DENR
523 E. Capitol
Pierre, SD 57501-3181

MAY - 2 2013

WATER RIGHTS
PROGRAM

No. 2638-2

Date: 4-30-2013

I/We request that Water Right/Permit No. 2638-2

formerly owned by: Bergeson Family Ltd Partnership

be transferred to: (name & address) Roger Inman, 29567 201st St, Pierre SD 57501

Telephone No. 605 2802964

Title to the following described land(s)/property has been transferred as described above:

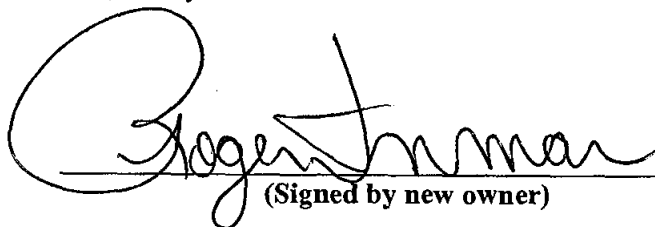
60 acre-feet storage dam located in the SW 1/4 NW 1/4 Sec 32-T6N-R26E

I/We understand that the validity of Water Right/Permit No. 2638-2 has not been determined by this transfer action. If I/We have any questions on validity, I/We understand that only the Water Management Board has the authority to determine if a water permit/right is valid (see note).

You are requested to file this "Notice of Transfer" in the appropriate file with the Water Rights Program, as evidence of the change of ownership.

A fee of Fifty Dollars (\$50.00) is required to cover the filing fees as required under SDCL 46-2-13. This form must be signed by the new owner.

I/We Roger Inman, the new owner, certify that the above information is true and correct.


(Signed by new owner)

NOTE: Water permits may be cancelled for nonconstruction after the five year construction period has expired. Once a water permit is developed and the water used, the permit becomes a right. A water right may be lost for three reasons:

1. Abandonment - no intent to use water and use is abandoned.
2. Forfeiture - no use of water for three year period without legal excuse.
3. For a third violation of a condition of a water permit/right.

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 5/2, 20 13

RECEIVED OF Roger Inman 29567 201st St Bierre SD 57501

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	50	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 <u>2638-2</u>		
Fee for _____		
Fee for Issuing New Well Driller's License No. _____ for C.Y. _____		
Fee for Renewal of Well Driller's License No. _____ for C.Y. _____		
Fee for Issuing Well Pump Installer's License No. _____ for C.Y. _____	50	00
Fee for Renewal of Well Pump Installer's License No. _____ for C.Y. _____		
(Any Other Work Provided by Law)	TOTAL	50 00

No. **06322**

By James Goodman
Chief Engineer



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
PMB 2020
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3182
www.denr.sd.gov

May 2, 2013

2638-2

Roger Inman
29567 201st St
Pierre SD 57501

Dear Mr. Inman

I am writing to acknowledge receipt of the transfer form and filing fee you submitted for changing ownership on Water Right No. 2638-2.

The ownership change has been completed. The water right formerly held by Bergeson Family Ltd Partnership is now listed in your name.

Enclosed for your records is Receipt No. 06322 in the amount of \$50 which you paid for filing the ownership change. If you have any questions, please contact me.

Sincerely,

A handwritten signature in black ink that reads "Genny McMath". The signature is written in a cursive, flowing style.

Genny McMath
Water Rights Program
(605) 773-3352
email: genny.mcmath@state.sd.us

enclosure

Top of Dam - 109.0
Em Sp: 11 - 106.0
Pin. Sp: 11 - 100.0

Scale 1" = 100'

Elev. (Ft)	Area (Ac)
91.0	0
92.0	0.6
96.0	6.1
100.0	20.5
104.0	32
106.0	70

NOTE: Bench Mark
Top of 1"x2" Hub by Tree
Elev. 106.0

Dan Bergerson
Sec 32, T6N, R26E
Stanley County