

WATER PERMIT NO. 2595-2

Name of Applicant: **Thomas E & Diane R Bown**

Address: **20351 N Hwy 1804, Pierre SD** Phone: **605 945-0038**

Amount of Water Claimed: **113 AF** Total Acres: **NA**

Source of Water Supply: **unnamed tributary to Brush Creek**

Water to be used for: **fish & wildlife propagation, recreation, livestock** County: **Stanley**

Type of Waste Disposal System:

Location: **2 miles south of Mission Ridge**

PRIORITY Date Received: **7-11-06**

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

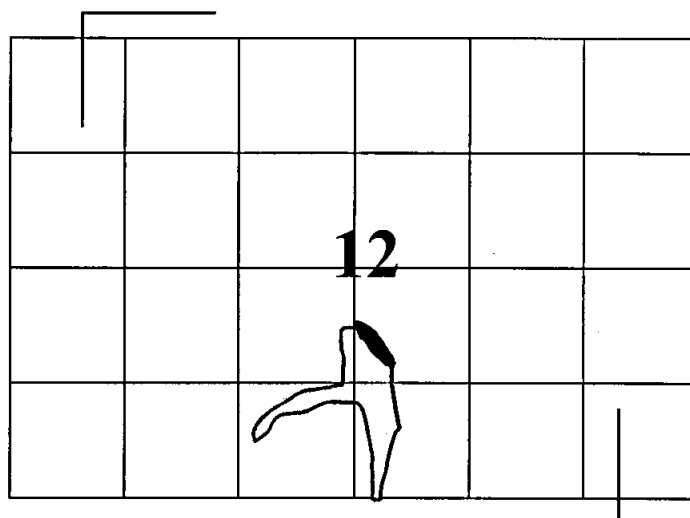
Corrected Application Received: **7-21-06**

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

Remarks:

Diversion Point: **NW ¼ SE ¼ Sec 12-T8N-R27E**

Water Impounded: **W ½ SE ¼, E ½ SW ¼ Sec 12-T8N-R27E**



Depth of Well: **NA**

Well Driller:

Remarks:

Type of Map: **topo**

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

Reviewed and the Number Assigned on: **7-24-06**

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. 2595-2 (office use only)
Hydrologic Unit 10/30/02
Basin Missouri River
Newspaper Capital Journal, Pierre

RECEIVED
JUL 11 2006
WATER RIGHTS
PROGRAM

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 stockwater

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 Thomas E. & Diane R. Bown Phone (605) 945-0038
(check one) ☒ Owner ☐ Tenant/lessee
Mailing Address 20351 N. Hwy 1804 Pierre State SD, 57501
(Street, RR. or Box and City) (Zip Code)
- Amount of water claimed _____ *CFS or _____ **GPM 113.0 ***AF
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable)
- Source of water supply Un-named tributary to Brush Creek
- Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)
NW1/4SE1/4 section 12 T8N, R27E Water Impounded: W 1/2 SE 1/4, E 1/2 SW 1/4
Sec 12- T8N- R27E County Stanley
- County or counties where water will be used Stanley
- 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)

Reconstruction of a breached dam to provide stockwater, as well as fish & wildlife habitat

STATE OF SOUTH DAKOTA)

County of Hughes 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, Thomas E. Bown, 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 Thomas E. Bown
Subscribed and sworn to before me this 11th day of July 19 2006

Tim Olson
Notary Public

My commission expires May 18, 2007

**SOUTH DAKOTA
WATER PERMIT NO. 2595-2**

Date of first receipt of application July 11, 2006.

Date of return to applicant for corrections, amendments or changes July 13, 2006.

Date of receipt of corrected application July 21, 2006.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 2595-2 to Thomas E & Diane R Bown, 20351 N Hwy 1804, Pierre SD 57501 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. 2595-2 authorizes impoundment of 113 acre-feet of water from an unnamed tributary to Brush Creek by constructing a dam located in the NW ¼ SE ¼ Section 12 with water impounded in the W ½ SE ¼, E ½ SW ¼ Section 12; all in T8N-R27E.
2. The water appropriated shall be used for the purpose of fish and wildlife propagation, recreational use and livestock water purposes 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. 2595-2 is September 5, 2006.
5. The date from which applicant may claim right is July 11, 2006.
6. One-fifth of the construction is to be completed on or before March 5, 2009.
7. All construction is to be completed on or before September 5, 2011.
8. Water is to be put to beneficial use on or before September 5, 2015.
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. 2595-2 authorizes a dam with a storage capacity of 113 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

SEP 13 2006

date



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 _____ 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 3 ft
- c) Crest Width 12 ft
Crest Length 1084 ft
- d) Height 30.8 ft
- e) Primary Outlet Capacity 80.36 cfs
If pipe, diameter 48"riser w/ 24" barrel
- f) Secondary Spillway Capacity 1404 cfs
Spillway Width 120 ft
- g) X & Y Slope _____
Upstream 3:1
Downstream 3:1
- h) Surface Area of Impoundment 19.4 acres
- i) Storage 113.0 Acre Feet
- j) Drainage Area Above Dam 1500 Acres

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date July 13, 20 06

RECEIVED OF Thomas E Bown, 20351 N hwy 1804, Pierre SD 57501

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

Fee for Application for Permit No. <u>2595-2</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. _____		
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	150.00

No.

02509

By Darland Ebel
Chief Engineer gr

RECEIPT
WATER RIGHTS PROGRAM
South Dakota Department of Environment and Natural Resources

Date July 21, 2006

RECEIVED OF Thomas Egan, 20351 N Hwy 1804, Pierre 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. <u>2595-2</u>		
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	50.00

No.

02515

By

David E. Ebel
Chief Engineer
gon

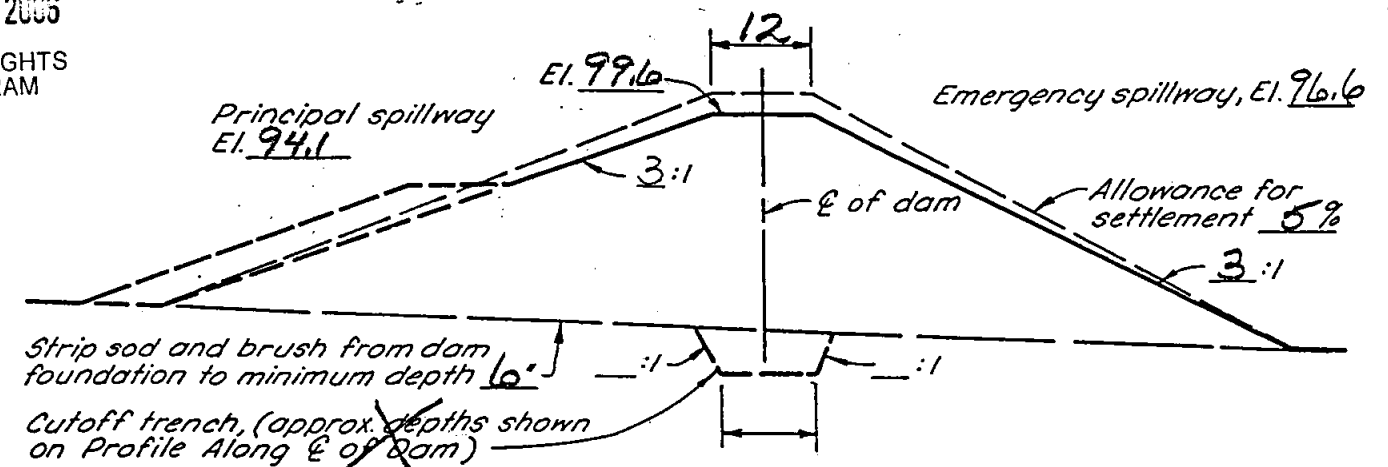
T. E. Olsen

10:15

LOCATION

[illegible]

WATER RIGHTS
PROGRAM



TYPICAL CROSS SECTION OF DAM

S.D. CONSTRUCTION AND MATERIAL SPECIFICATIONS:

SD-2 Cleaning & Grubbing
SD-7s Earth Fill
SD-9 Drain Fill
SD-12A Concrete
SD-13 Reinforcing Steel
SD-16 Timber Fabrication
SD-55A Corrugated Polyethylene Pipe

EARTH DAM

OPERATOR: Tom Bown
CONSERVATION DISTRICT: Stanley

Class "A" Hazard

Date		Approved by	
Designed <u>Konechne</u>		Title	
Drawn		Title	
Traced		Sheet	Drawing No.
Checked		No	

SKETCH PLAN OF DAM AND RESERVOIR AREA

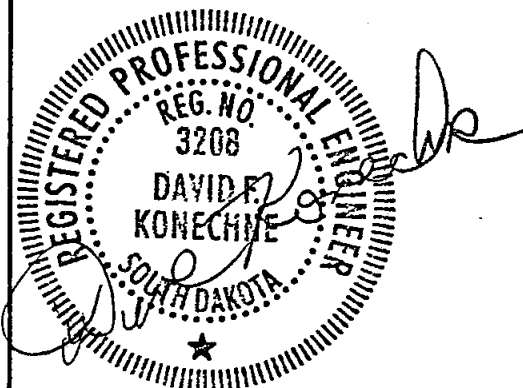
Approximate scale 1" = _____

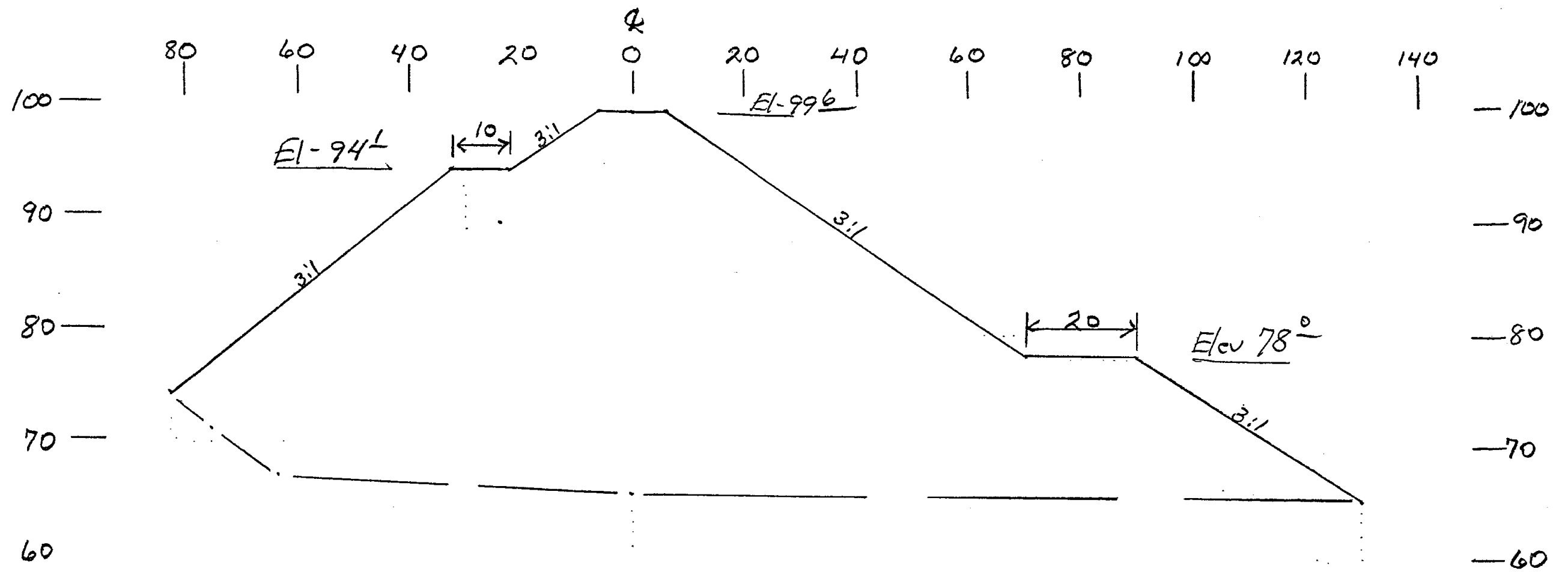
REFERENCE: GUIDE PLAN NO. 1.0

JOB PLAN NO. 1.0

USDA-SCS-LINCOLN, NEBR. 1973

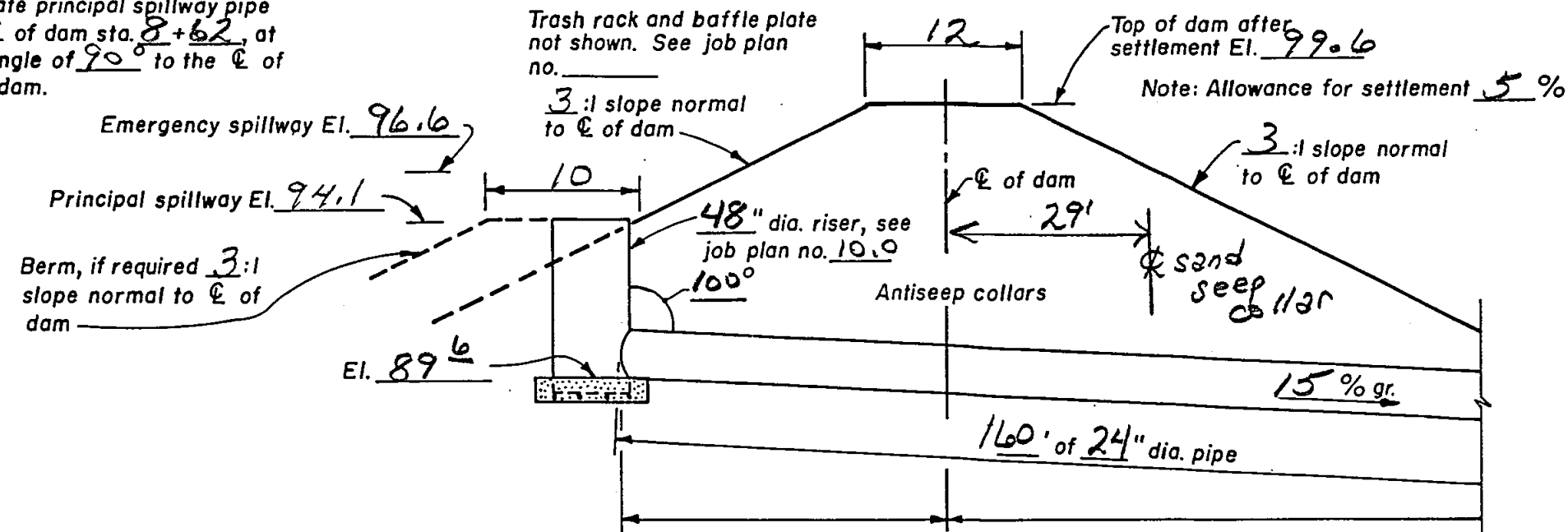
(Rev. 4-73) 5, N-29, 073.1a(1,





Tom Bown

Locate principal spillway pipe at $\mathcal{C}$ of dam sta. 8+62, at an angle of 90° to the $\mathcal{C}$ of the dam.



CROSS SECTION OF DAM ALONG $\mathcal{C}$ OF PRINCIPAL SPILLWAY
(Not to scale)

SPECIFICATION NOTES

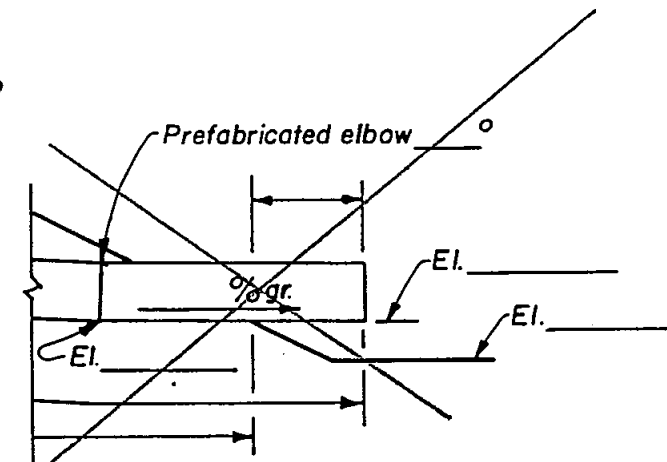
- ELBOW, IF REQUIRED, MAY BE FABRICATED BY CONTINUOUS WELDING SEPARATE PIPE SECTIONS OR BY FABRICATING A CONTINUOUS WELDED JOINT ON THE UPSTREAM END OF LAST SECTION OF PIPE.
- PIPE WALL THICKNESS SHALL BE _____ GAGE OR _____ INCHES.

*Pipe shall be dual-wall
Polyethylene with water
tight couplings similar to
ADS N-12 pipe*

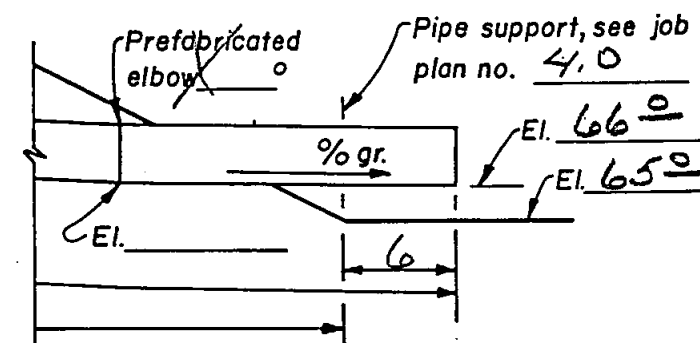
TABLE OF QUANTITIES

ITEM	UNIT	QUANTITY

APPLICABLE STANDARD S.C.S. SPECIFICATIONS



OUTLET DETAIL WITHOUT
PIPE SUPPORT



OUTLET DETAIL WITH
PIPE SUPPORT

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

LOCATION

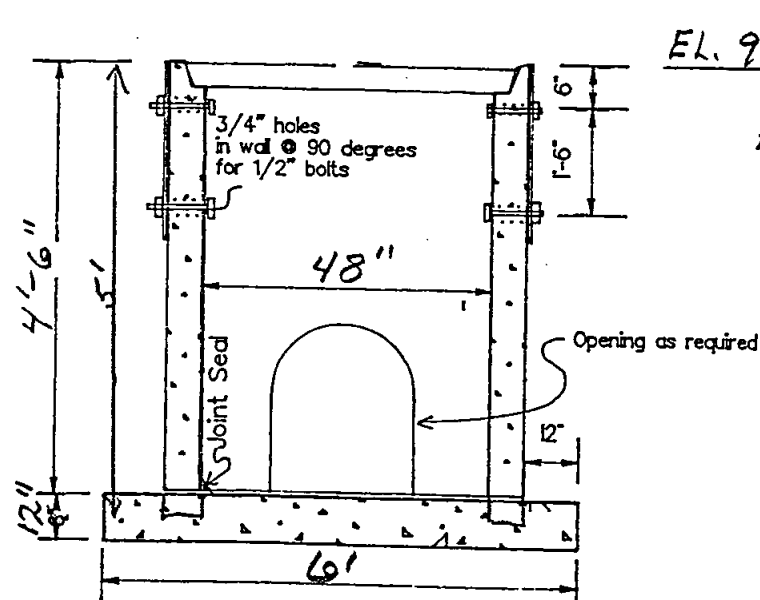
CORRUGATED METAL PIPE DROP INLET PRINCIPAL SPILLWAY

OPERATOR Tom Bown

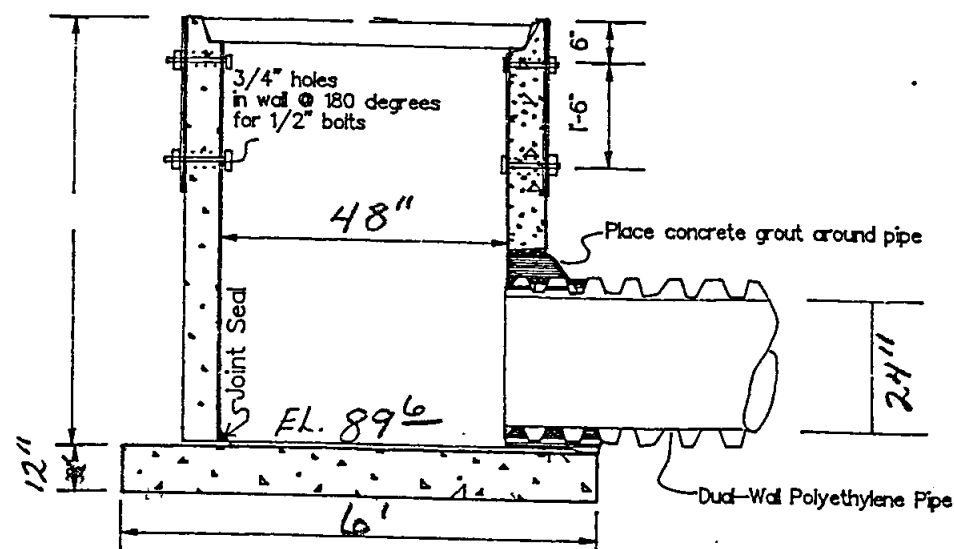
CONSERVATION DISTRICT _____

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

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



FRONT VIEW



SIDE VIEW

Note: Anti-Vortex Baffle
Use 2 3/8" thick steel plate
6 ft long by 2 1/2 ft high
fastened to concrete riser
with angle iron.

CONSTRUCTION NOTES:

- 1- Reinforced concrete pipe shall meet ASTM C-478.
- 2- Polyethylene pipe shall be equal to ADS N-12 or equal.
- 3- Provide holes in concrete pipe for lifting lugs.
- 4- ~~Alternative to~~ concrete base is poured in place concrete base

STEEL SCHEDULE .67

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.
48	4	1	STR.	10	5-5	55	37	6	

TABLE OF QUANTITIES

ITEM	UNIT	QUANTITY
CONCRETE	CU. YD.	1.4
REINFORCING STEEL	LB.	37

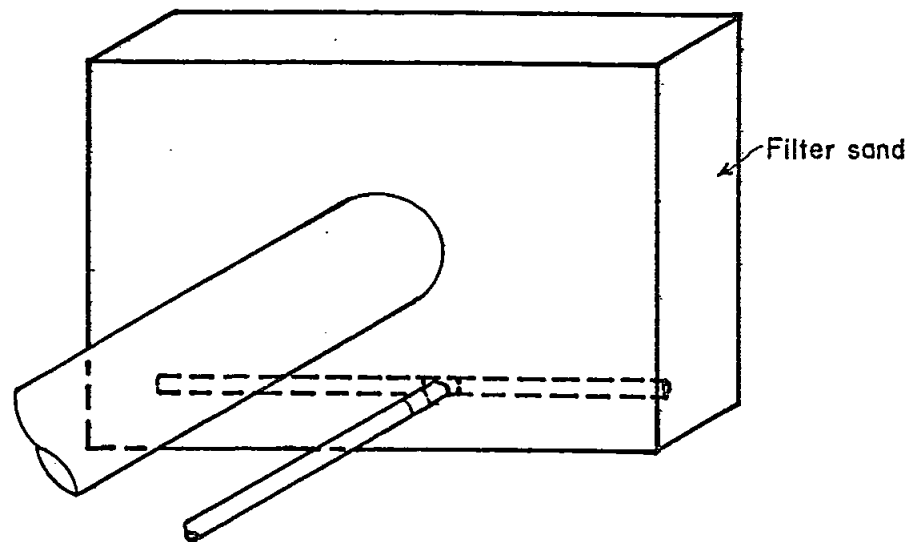
CONCRETE RISER
for Polyethylene Pipe

Tom Bown

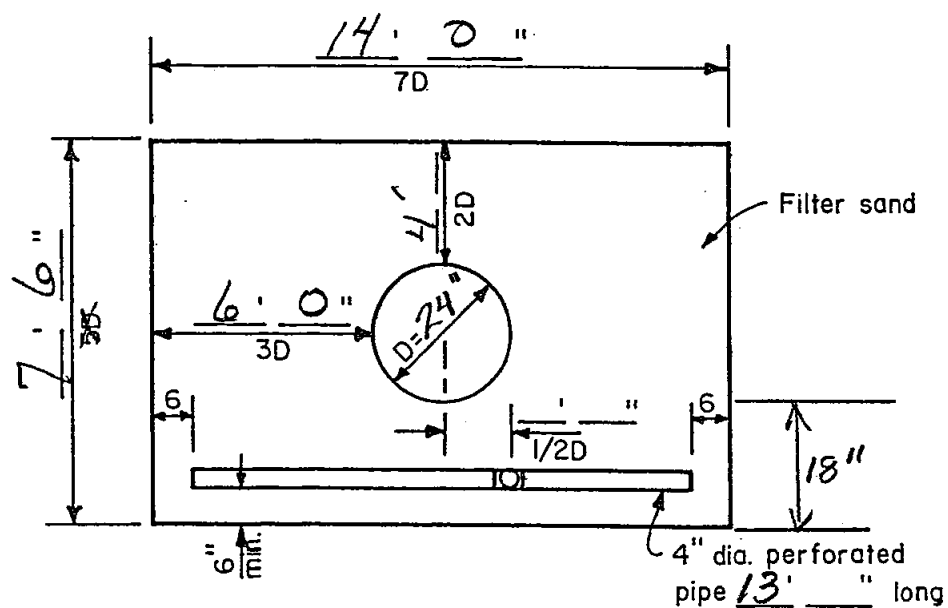
DESIGNED BY: J. K. Smith
CHECKED BY: J. K. Smith
DATE: 10/10/00

APPROVED BY: _____
TITLE: _____
SHEET OF: 1
JOB NO.: 10.0

Job Plan 10.0



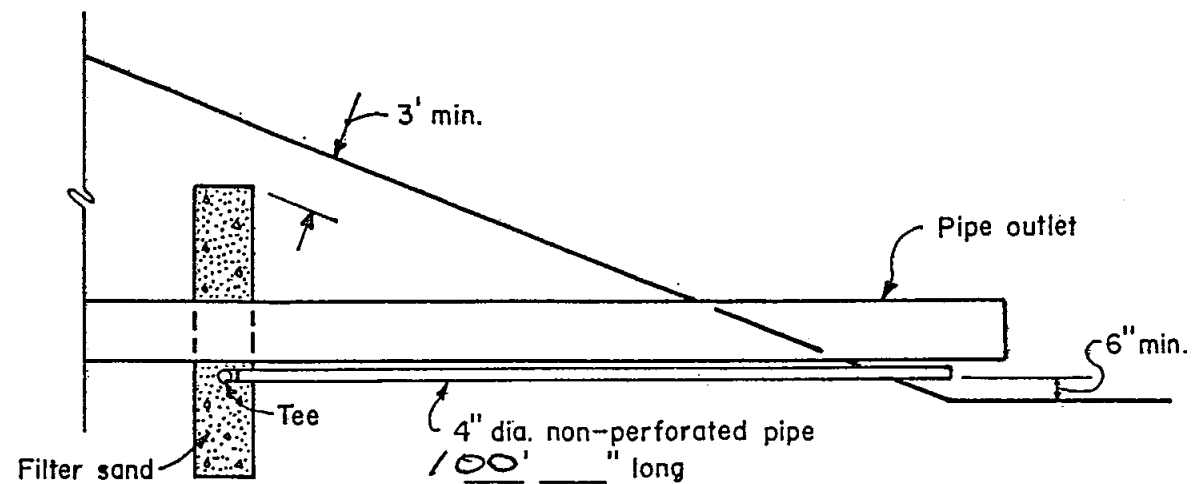
ISOMETRIC VIEW



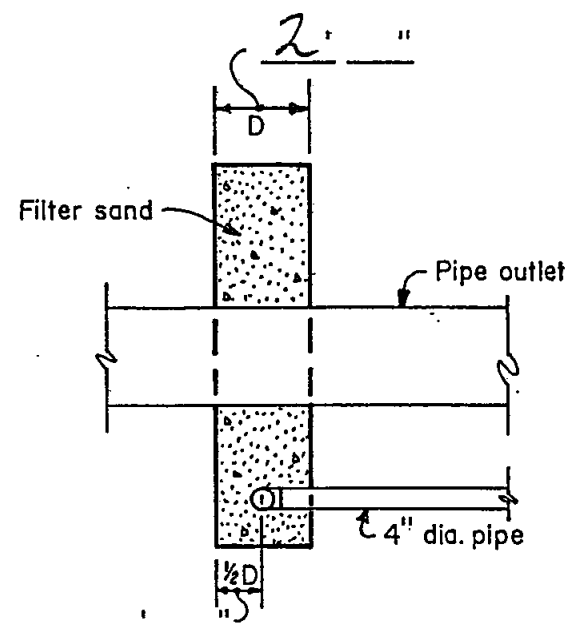
UPSTREAM VIEW

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

use gradation on spec sheet

8 cu yd

Sec. _____, T. _____, R. _____

_____ County

LOCATION

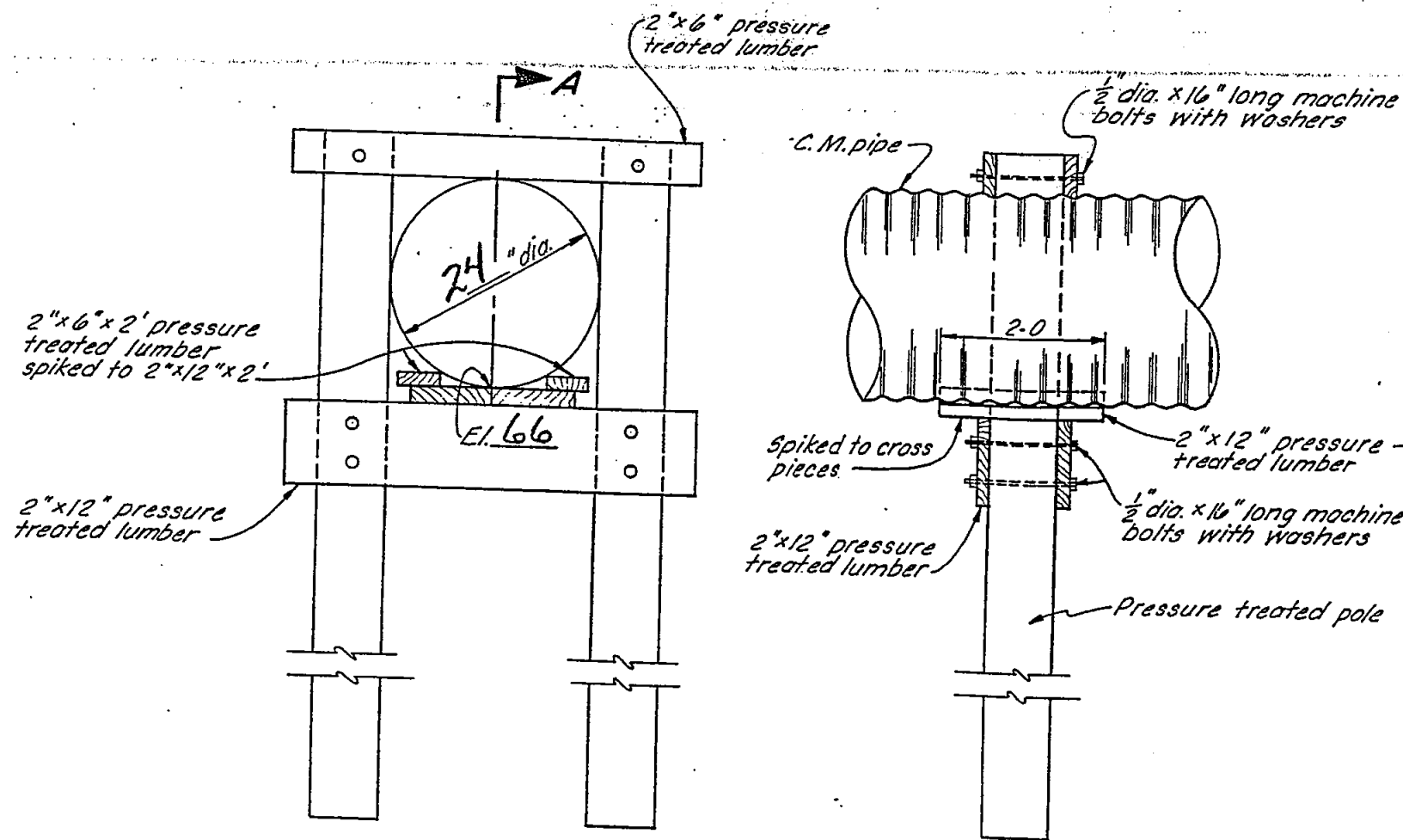
SAND ANTISEEP COLLAR

OPERATOR Tom Bown

CONSERVATION DISTRICT _____

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

JOB PLAN NO. 3.8



ELEVATION

SECTIONAL ELEVATION A-A

NOTES:

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

TABLE OF QUANTITIES

ITEM	LENGTH FOR 24" DIA. C.M. PIPE	UNIT	QUANTITY
PRESSURE TREATED POLE 8" DIA.	10 ft	EACH	2
2" X 12" PRESSURE TREATED LUMBER	12	EACH	2
2" X 6" PRESSURE TREATED LUMBER	4	EACH	2
2" X 12" PRESSURE TREATED LUMBER	4	EACH	2
2" X 6" PRESSURE TREATED LUMBER	2'	EACH	2
1/2" DIA. MACHINE BOLTS WITH NUTS	6	EACH	14"
1/2" DIA. WASHERS		EACH	

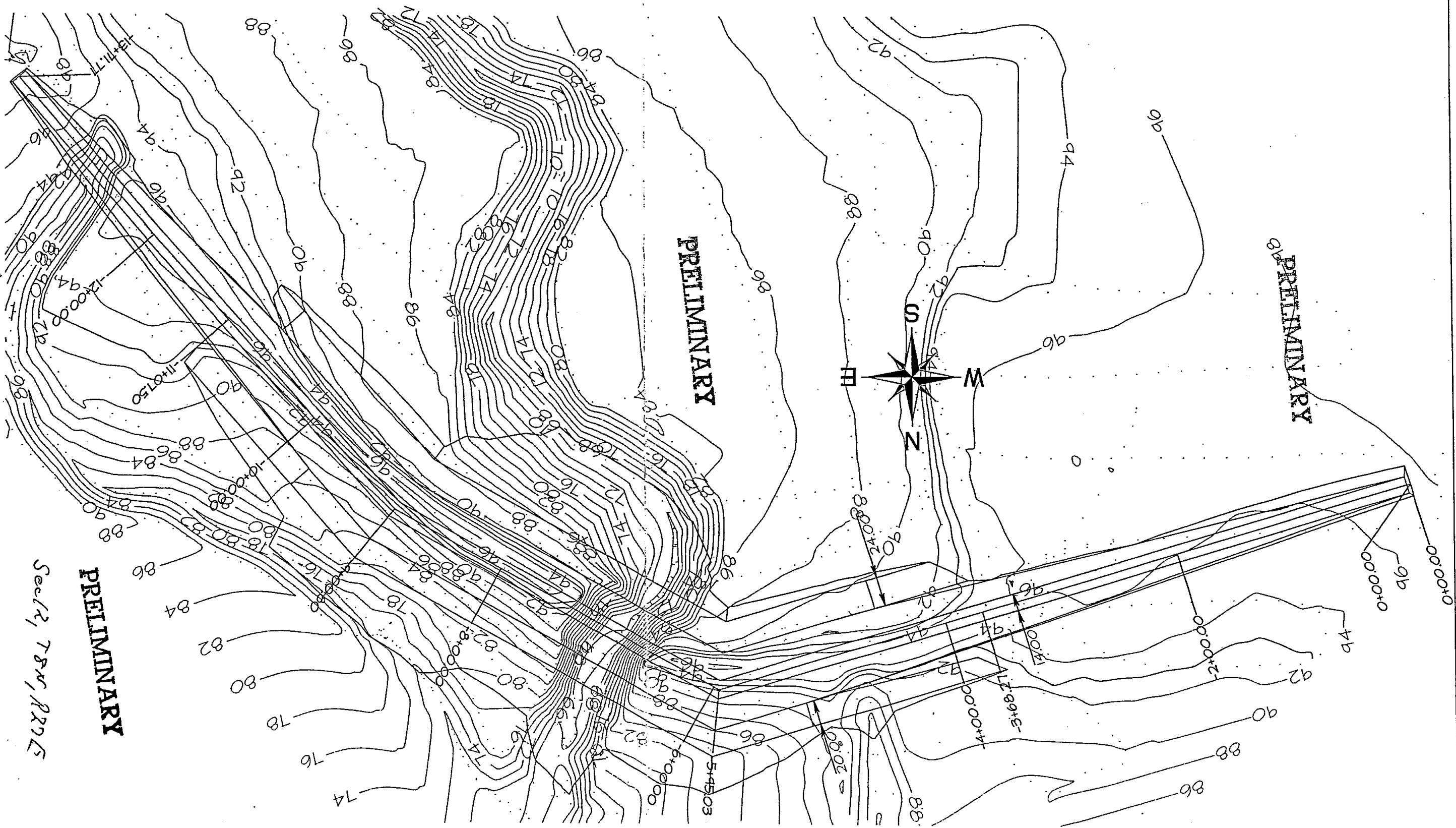
REFERENCE: GUIDE PLAN NO. 4.0

JOB PLAN NO. 4.0

TIMBER PIPE SUPPORT

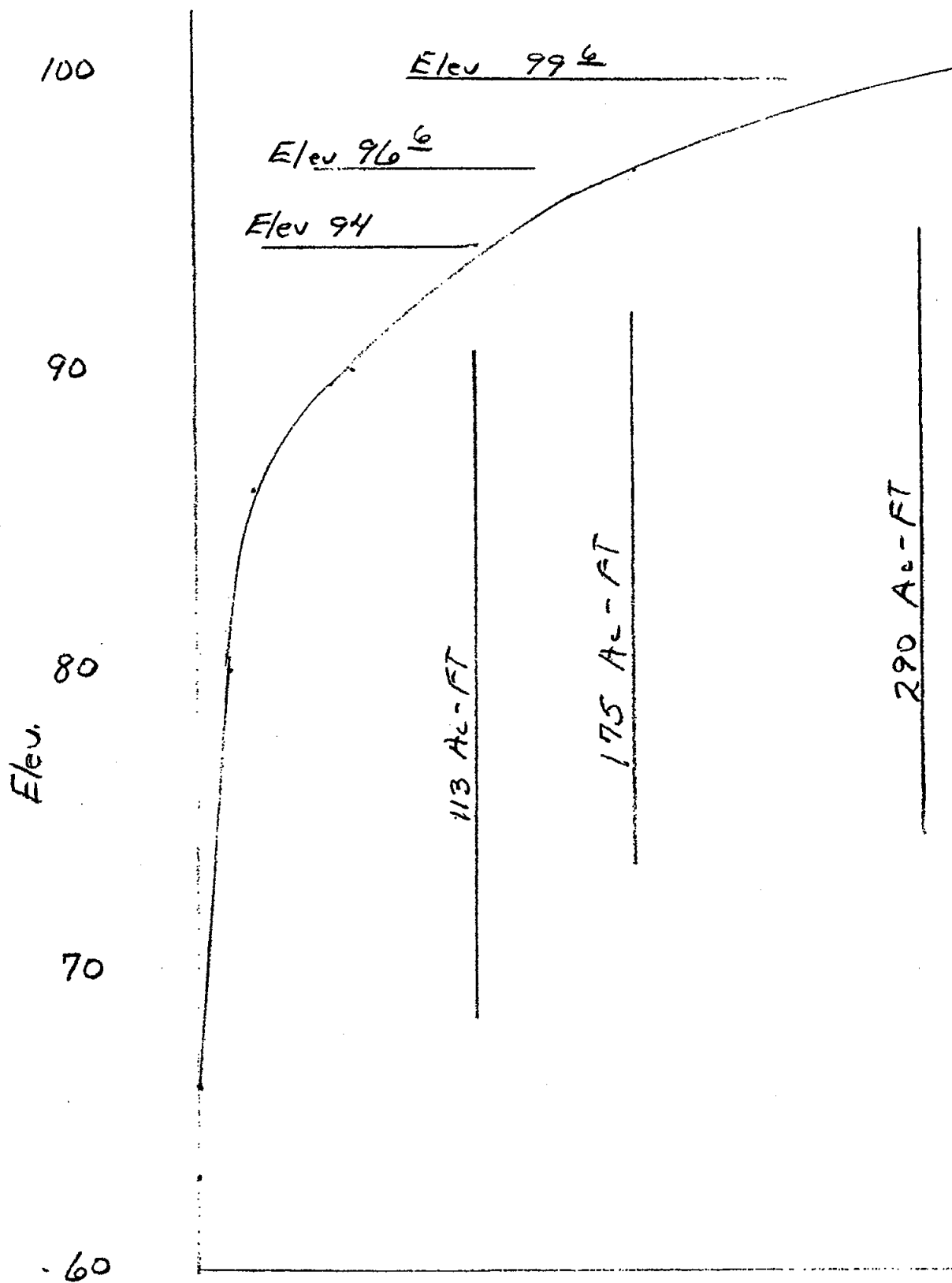
OPERATOR: <u>Tom Bown</u>	
CONSERVATION-DISTRICT: _____	
Designed _____	Approved by _____
Drawn _____	Title _____
Traced _____	Title _____
Checked _____	Sheet No. _____
	Drawing No. _____

5, N-29, 073.4a



COMPUTATION SHEET

BY	DATE	PROJECT <i>Tom Bown</i>	SHEET ____ OF ____
CHKD BY	DATE	FEATURE	
DETAILS			



Tom Bown Sec 12, T8N, R27E

SITES XEQ 06/09/2006 WATER RESOURCE SITE ANALYSIS COMPUTER PROGRAM
VER 2000 (USER MANUAL - DATED MAY 2001)
TIME 10:29:02

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

SITES 05/01/2000 2.34375 H5
SAVMOV 0 101
SAVMOV 101 1 1
STRUCTURE
66 0
80 1.2
86 3.7
90 10.6
94 19.1 Acres
96 25.8
100 49.1
ENDTABLE
WSDATA 5A1 AC 84 1500 11600 4.4
PDIRECT 2.1 .00 4.00
POOLDATA ELEV 94.1 94.1 66 64 SC
PSINLET 1 12.56
PSDATA 1 155 24 pipe dia .009 66
ASDATA 41 200 20 2 .1 2
ASINSURF 41 .035
ASINLET 41 0.0 0.0 100 0.0 3
150 15
ENDTABLE
ASEXSURF 41 .035
.65 0
3
2 0
.02
ENDTABLE
ASEXIT 41 N 100
BTMWIDTH FEET 120
GRAPHICS 1
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 06/09/2006
VER 2000
TIME 10:29:02

SITE = S 1

WSID=
SUBW= A
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
2.10	0.00	0.00	4.00

WSDATA - CN	DA-SM	TC/L	-/H	QRF
84.00	2.34	11600.00	4.40	0.00

SITEDATA- PERM POOL	CREST PS	FP SED	VALLEY FL	378?
94.10	94.10	0.00	64.00	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	155.00	24.00	0.00

PS N	KE	WEIR L	TW EL
0.009	1.00	12.56	66.00

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	200.00	20

AUX.DATA - INLET N	SIDE SLOPE	EXIT N	EXIT SLOPE	ACTUAL AUX?
0.035	2.00	0.035	0.100	NO

BTM WIDTH - BW1	BW2	BW3	BW4	BW5
ft 120.00	0.00	0.00	0.00	0.00

AUXILIARY SPILLWAY RATING DEVELOPED USING WSPVRT.

1SITES _____

XEQ 06/09/2006
VER 2000
TIME 10:29:02

SITE = S 1

WSID=
SUBW= A
PASS= 1 PART= 2

PERM POOL 94.10 FT 113.0 ACFT 19.43 AC 0.0 CFS

CREST PS 94.10 FT 113.0 ACFT 19.43 AC 0.0 CFS
 SED ACCUM 94.10 FT 113.0 ACFT 19.43 AC 0.0 CFS
 START ELEV 94.10 FT 113.0 ACFT 19.43 AC 0.0 CFS
 NRCS-PSH D= 24.00 HR P= 2.10 IN Q= 0.82 IN DA= 2.34 SM
 TC= 1.57 HR CN= 84.00 VOL= 102.0 ACFT

PEAK = 457.7 CFS, AT 13.0 HRS.

ROUTED RESULT - HYD TYPE EMAX VOL-MAX AMAX QMAX
 NRCS-PSH 96.35 FT 165.4 ACFT 27.85 AC 81.2 CFS

PS STORAGE 52.4 ACFT, BETWEEN AUX. CREST AND SED. ACCUM ELEVATIONS.

DRAWDOWN (DDT) TEST 94.10 FT 113.0 ACFT 0.00 CFS
 CONTROL IS 0.000 DETENTION STORAGE

TIME = 3.01 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	94.10	0.00	0.00	0.00	113.03	19.43
2	94.51	10.04	10.04	0.00	121.18	20.79
3	94.91	28.41	28.41	0.00	129.88	22.15
4	95.32	52.19	52.19	0.00	139.13	23.51
FULL CONDUIT FLOW, ELEV = 95.72 FT						
5	95.72	80.36	80.36	0.00	148.93	24.87
6	96.26	81.08	81.08	0.00	162.79	27.29
7	96.79	81.79	81.79	0.00	178.22	30.41
8	97.33	82.50	82.50	0.00	195.32	33.52
9	97.86	83.20	83.20	0.00	214.08	36.64
10	98.40	83.90	83.90	0.00	234.51	39.75
11	98.93	84.59	84.59	0.00	256.61	42.87
12	99.47	85.27	85.27	0.00	280.37	45.98
13	100.00	85.95	85.95	0.00	305.80	49.10

1SITES _____
 XEQ 06/09/2006 WSID=
 VER 2000 SUBW= A
 TIME 10:29:02 SITE = S 1 PASS= 1 PART= 3

AUX. CREST 96.35 FT 165.4 ACFT 27.85 AC 81.2 CFS

PS STORAGE 52.4 ACFT, BETWEEN AUX. CREST AND SED. ACCUM ELEVATIONS.

START ELEV 94.10 FT 113.1 ACFT 19.44 AC 0.0 CFS

EFFECTIVE HEIGHT(H)= 30.4 FEET, PRODUCT= 5022. (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= 2.37 IN DA= 2.34 SM
TC= 1.57 HR CN= 84.00 VOL= 296.4 ACFT

PEAK = 1377.6 CFS, AT 13.0 HRS.

***** WARNING - UPSTREAM END OF CREST 100. IS UPSTREAM OF THE
FIRST GROUND POINT 180. 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	94.10	0.00	0.00	0.00	113.03	19.43
2	94.51	10.04	10.04	0.00	121.18	20.79
3	94.91	28.41	28.41	0.00	129.88	22.15
4	95.32	52.19	52.19	0.00	139.13	23.51
FULL CONDUIT FLOW, ELEV = 95.72 FT						
5	95.72	80.36	80.36	0.00	148.93	24.87
6	95.80	80.47	80.47	0.00	150.90	25.13
7	95.88	80.57	80.57	0.00	152.90	25.39
8	95.96	80.68	80.68	0.00	154.91	25.66
9	96.04	80.79	80.79	0.00	156.95	26.01
10	96.12	80.89	80.89	0.00	159.02	26.47
11	96.19	81.00	81.00	0.00	161.12	26.93
12	96.27	81.10	81.10	0.00	163.26	27.39
13	96.35	81.21	81.21	0.00	165.44	27.85
14	96.53	93.63	81.45	12.18	170.62	28.91
15	96.72	106.49	81.70	24.80	175.99	29.98
16	97.05	178.82	82.13	96.69	186.15	31.89
17	97.45	318.20	82.66	235.53	199.41	34.23
18	98.18	715.08	83.61	631.47	225.93	38.48
19	99.09	1370.73	84.79	1285.94	263.44	43.79
20	100.00	2207.58	85.95	2121.63	305.80	49.10

SUMMARY OF AUXILIARY SPILLWAY SURFACE CONDITIONS USED IN COMPUTATIONS BY REACH

	REACH	FROM	TO	SLOPE	RETARDANCE	VEGETAL	MAINT.	ROOTING	REACH
	STA	STA	CURVE	COVER	CODE	DEPTH	LOCATION		
	(ft)	(ft)	(%)	INDEX@	FACTOR	(ft)	*		
1	100.	200.	0.0	0.035	**	**	**	CREST	
2	200.	300.	10.0	0.035	0.65	3	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 96.35 FT.

DRAWDOWN (DDT) TEST 94.10 FT 113.0 ACFT 0.00 CFS
CONTROL IS 0.000 DETENTION STORAGE

TIME = 3.03 DAYS, TO 0.0 CFS (LIMIT = 10.00 DAYS)

ROUTED	BTM WIDTH	MAX ELEV	VOL-MAX	AREA-MAX	AUX.-HP	VOL-AUX.
RESULTS	FT	FT	ACFT	AC	FT	ACFT
NRCS-FBH	120.0	98.22	227.5	38.7	1.87	62.1

PEAK - CFS Q-PS Q-AUX. Q-TOT.
DISCHARGE = 83.7 659.4 743.1

	CRITICAL	CRITICAL	CRITICAL	25% OF Q
	DEPTH	VELOCITY	SLOPE-Sc	Sc
AUXILIARY	FT	FT/SEC	FT/FT	FT/FT
SPILLWAY —	0.97	5.55	0.018	0.025

EFFECTIVE STRESS FOR STABILITY ANALYSIS OF AUX. EXIT CHANNEL

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

Aux. Discharge = 659. cfs; Bottom Width = 120. ft

REACH FROM TO SLOPE MANNING'S VELOCITY STRESS

NO.	STA	STA	%	n	ft/s	lb/ft^2
2	200.	300.	10.00	0.035	9.31	2.219

AUXILIARY SPILLWAY DURATION FLOW = 12.7 HOURS

ATTACK, OE/B = 1.3 ACFT/FT

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

EXIT CHANNEL FLOW SUPERCRITICAL: MAX VELOCITY= 9.3 FT/SEC

EXIT SLOPE = 0.100 FT/FT

FLOW DEPTH = 0.6 FT

>>>>> NHCP378 RUN - MINIMUM DEPTH, CREST AUX. TO TOP OF DAM IS 2.00 FT.
NEW TOP OF DAM ELEVATION = 98.35.

ROUTED	BTM WIDTH	MAX ELEV	VOL-MAX	AREA-MAX	AUX.HP	VOL-AUX.
RESULTS	FT	FT	ACFT	AC	FT	ACFT
MINIMUM AUX.	120.0	98.35	233.2	39.6	2.01	67.7

PEAK - CFS Q-PS Q-AUX. Q-TOT.
DISCHARGES = 83.9 757.8 841.6

	CRITICAL	CRITICAL	CRITICAL	25% OF Q
	DEPTH	VELOCITY	SLOPE-Sc	Sc
AUXILIARY	FT	FT/SEC	FT/FT	FT/FT
SPILLWAY —	1.07	5.81	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 = 99.22.

ROUTED	BTM WIDTH	MAX ELEV	VOL-MAX	AREA-MAX	AUX.HP	VOL-AUX.
RESULTS	FT	FT	ACFT	AC	FT	ACFT
MINIMUM AUX.	120.0	99.22	269.5	44.6	2.87	104.0

PEAK - CFS Q-PS Q-AUX. Q-TOT.
DISCHARGES = 85.0 1404.6 1489.6

	CRITICAL	CRITICAL	CRITICAL	25% OF Q
	DEPTH	VELOCITY	SLOPE-Sc	Sc
AUXILIARY	FT	FT/SEC	FT/FT	FT/FT
SPILLWAY —	1.61	7.10	0.016	0.021

INFLOW HYD 1 PSH-PEAK = 81.20 CFS AT 15.59 HRS, LOCATION POINT

INFLOW HYD 1 FBH-PEAK = 743.08 CFS AT 13.86 HRS, LOCATION POINT
HYDOUT 1

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

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	2.34	84.	1.57	2.34	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	24.0	96.3	120.0	2.9	99.2	0.	0.	9.3	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\bown\bown-48-24.D2C

OUTPUT - DATED 06/09/2006 10:29:02
C:\data\Engineering\sites\bown\bown-48-24.OUT

GRAPHICS FILES GENERATED

OPTION "L" DATED 06/09/2006 10:29:02
C:\data\Engineering\sites\bown\bown-48-24.DRG

OPTION "P" DATED 06/09/2006 10:29:02
C:\data\Engineering\sites\bown\bown-48-24.DHY

OPTION "E" DATED 06/09/2006 10:29:02
C:\data\Engineering\sites\bown\bown-48-24.DEM

Water Permit Application No. 2595-2
Thomas E. & Diane R. Bown

Top of Dam Elev. - 99.6
2nd Spillway Elev. - 96.6
P. Spillway Elev. - 94.1
Dis Emb. Toe Elev. - 68.8

Cat. 3 - Low Hazard Dam

Ht. = 30.8

Normal Storage Capacity - 113 Ac-Ft
Int. Storage Capacity - 175 Ac-Ft
Max. Storage Capacity - 290 Ac-Ft

Int. Capacity x Eff. Ht. = $175 \times 27.8 = 4865 > 3000 \therefore 50 \text{ yr}$
Minimum Spillway Design

From USGS WRZ 98-4055 "Tech. Serv. Est. Peak Flows ... in 50"
CA = 1500 Ac = 2.34 mi²
Region C

$$Q_{50} = 286 CA^{.570}$$

$$= 286 (2.34)^{.570}$$

$$= \underline{465 \text{ cfs}}$$

$$Q_{100} = 379 CA^{.566}$$

$$= 379 (2.34)^{.566}$$

$$= \underline{615 \text{ cfs}}$$

Secondary Spillway

$$Q = CLH^{3/2}$$

$$= 2.6 (120 \times 3)^{1.5}$$

$$= \underline{1620 \text{ cfs}}$$

C = 2.6
L = 120
H = 3

Section 74:02:08:09

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. EPP - N/A Cat. 3 - OK

NRCS Annual Yield

DA = 1500 Ac CN = 84 ISO = 2

80% chance = 0.44
 $0.44 \times 1500^{1/2} = \underline{55 \text{ Ac-Ft}}$

50% chance = 1.0
 $1.0 \times 1500^{1/2} = \underline{125 \text{ Ac-Ft}}$

10% chance = 3.4
 $3.4 \times 1500^{1/2} = \underline{425 \text{ Ac-Ft}}$



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

July 13, 2006

Thomas E & Diane R Bown
20351 N Hwy 1804
Pierre SD 57501

Dear Mr. & Mrs. Bown:

Thank you for submitting the *Application for a Permit to Appropriate Water* for a dam in Stanley County. In order to complete the application the following is required.

We have received a \$150 application filing fee. In addition to the application filing fee, the Water Rights Program collects the \$50 licensing fee at the time of filing. Please submit \$50 for the licensing of the water permit.

If you have any questions, please contact me.

Sincerely,

Karen Schlaak

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



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

August 8, 2006

Thomas E. & Diane R. Bown
20351 N. Hwy 1804
Pierre, SD 57501

Dear Mr. & Mrs. Bown:

We have reviewed the plans and specifications for your dam project located in the NW¼ SE¼ of Sec. 12-T8N-R27E, in Stanley County. The plans and specifications for the construction of your 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. 2595-2 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 Bown Dam will be classified as a small size Category 3, Low Hazard dam with a dam height of 31 ft. and a normal storage capacity of 113 acre-feet and a maximum storage capacity of 290 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. 2595-2
Thomas E. & Diane R. Bown
July 26, 2006

Water Permit Application No. 2595-2 has been filed by Thomas E. & Diane R. Bown to impound 113 acre-feet of water by reconstructing a dam located in the NW ¼ SE ¼ of Section 12-T8N-R27E, in Stanley County. The application also requests impoundment of sufficient water to maintain water at the outlet elevation. The water will be used for recreation, fish and wildlife production and livestock watering purposes.

Discussion:

The dam will be classified as a small size, Category 3, Low Hazard dam. Konechne Engineering has designed the dam. The plans and specifications have been reviewed and will be approved; however, construction of the dam can not begin until Water Permit Application No. 2595-2 is approved.

The dam will be 31 feet high with a normal storage capacity of 113 acre-feet with a reservoir level at the primary spillway elevation, and a maximum storage capacity of 290 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 1500 acres or 2.34 square miles. The dam is designed to have a 48 inch diameter concrete drop inlet structure with a 24 inch HDPE barrel as the primary spillway and a 120 foot wide earthcut spillway. A 50 year frequency event produces a peak runoff of approximately 465 cfs and a 100 year frequency event produces a peak runoff of approximately 615 cfs. The earthcut secondary spillway will have a capacity of approximately 1620 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 55 acre-feet. The annual yield with a 50 percent chance of occurrence, or 1 out of 2 years, is expected to be 125 acre-feet and the annual yield with a 10 percent chance, or 1 out of 10 years, is expected to be 425 acre-feet.

The Bown Dam is located in the NW ¼ SE ¼ of Section 12-T8N-R27E on an unnamed tributary to the Brush Creek about 3.0 miles upstream of the confluence of the unnamed tributary and Brush Creek and 8 miles upstream of the confluence of Brush Creek and the Cheyenne River/Lake Oahe. There are no existing Water Permits/Rights located on the unnamed tributary or Brush Creek between the proposed dam and Lake Oahe.

Conclusions:

1. Water Permit Application No. 2595-2 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 downstream domestic use should be a qualification on Water Permit Application No. 2595-2.



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



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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PIERRE, SOUTH DAKOTA 57501-3182
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**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 2595-2, Thomas E & Diane R Bown**

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. 2595-2, Thomas E & Diane R Bown, 20351 N Hwy 1804, Pierre SD 57501.

The Chief Engineer is recommending APPROVAL of Application No. 2595-2 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. 2595-2 authorizes a dam with a storage capacity of 113 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
August 7, 2006



Capital Journal

AFFIDAVIT OF PUBLICATION

State of South Dakota, County of Hughes

Hope L. Walsh 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 Notice of Application No-2595-2

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

<u>August 16</u>	20 <u>06</u>	_____	20 _____
_____	20 _____	_____	20 _____
<u>August 23</u>	20 <u>06</u>	_____	20 _____
_____	20 _____	_____	20 _____
_____	20 _____	_____	20 _____

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: \$ 44.46.

Signed: Hope L. Walsh

subscribed and sworn to before me this 29 day of August 2006

Margie Baker

Notary Public in and for the County of Hughes, South Dakota.
My Commission expires 2-19, 2009

RECEIVED
AUG 30 2006
WATER RIGHTS
PROGRAM

SNAXLP

No. 7858

2tdly 8/16, 8/23

**NOTICE OF APPLICATION
NO. 2595-2**

to Appropriate Water

Notice is given that Thomas E. and Dian R. Bown, 20351 N. Hwy 1804, Pierre, S.D. 57501, has filed an application for a water permit to impound 113 acre-feet of water from an unnamed tributary to Brush Creek by constructing a dam located in the NW 1/4 SE 1/4 Section 12 with water impounded in the W 1/2 SE 1/4, E 1/2 SW 1/4 Section 12; all in T8N-R27E. This application requests impoundment of sufficient water to maintain water to the outlet elevation. The water is for fish and wildlife propagation, recreational use and livestock water purposes.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 2595-2 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 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 applicant. Notice of 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, S.D. 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 September 5, 2006.

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

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

August 8, 2006

Thomas E & Diane R Bown
20351 N Hwy 1804
Pierre SD 57501

Dear Mr. & Ms. Bown:

Water Permit Application No. 2595-2 for fish & wildlife propagation, recreation, livestock 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 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 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.



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

August 8, 2006

Capital Journal
PO Box 878
Pierre SD 57501

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 2595-2 to Appropriate Water to be published twice. Please publish the first notice on August 16, 2006 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.

Please **BILL** the **APPLICANT** for the cost of publication. The **APPLICANT** is Thomas E & Diane R Bown, 20351 N Hwy 1804, Pierre (Ph # 605-945-0038).

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. 2595-2

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

Date _____

We are in receipt of your letter of August 8, 2006 enclosing Notice to Appropriate Water by Application No. 2595-2 which was first published in our issue of _____. ENCLOSED IS A COPY OF THIS FIRST PUBLICATION.

Name

Newspaper

Instruction to Newspaper - Publish first Notice on August 16, 2006 with the second publication 7 days later. The applicant is responsible for payment.

NOTICE OF APPLICATION NO. 2595-2 to Appropriate Water

Notice is given that Thomas E & Diane R Bown, 20351 N Hwy 1804, Pierre SD 57501 has filed an application for a water permit to impound 113 acre-feet of water from an unnamed tributary to Brush Creek by constructing a dam located in the NW ¼ SE ¼ Section 12 with water impounded in the W ½ SE ¼, E ½ SW ¼ Section 12; all in T8N-R27E. This application requests impoundment of sufficient water to maintain water to the outlet elevation. The water is for fish and wildlife propagation, recreational use and livestock water purposes.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 2595-2 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 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 September 5, 2006.

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**

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PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

SEP 13 2008

Thomas E & Diane R Bown
20351 N Hwy 1804
Pierre SD 57501

Dear Mr. & Ms. Bown:

Enclosed is Water Permit No. 2595-2 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