

WATER PERMIT NO. 6723-3

Name of Applicant: Marie O'Farrell

Address: 46548 144th St, Marvin SD 57251

Phone: 605 938-4221

Amount of Water Claimed: ³²
~~38.70~~ AF

Total Acres: NA

Source of Water Supply: runoff

Water to be used for: recreational, fish & wildlife propagation and domestic

County: Grant

Type of Waste Disposal System:

Location: 3 miles northwest of Marvin

PRIORITY Date Received: 5-10-06

Application/License Fee: \$200

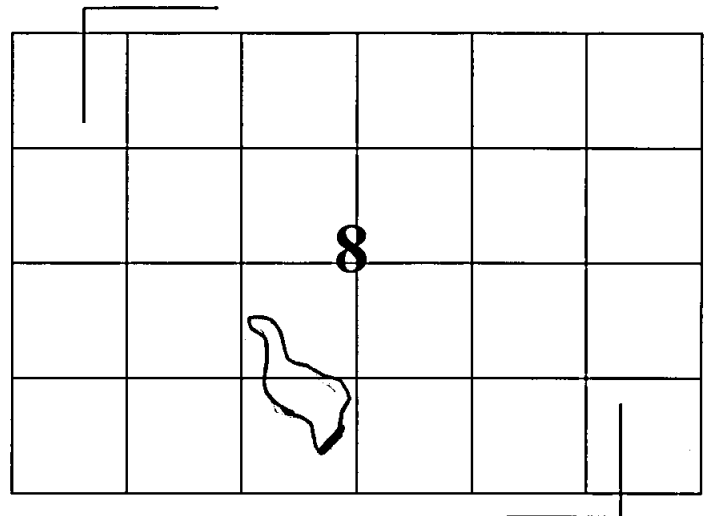
Corrected Application Received:

Period of Annual Use: January 1 – December 31

Remarks:

Diversion Point: SE ¼ SW ¼ Sec 8-T121N-R50W

Water Impounded: E ½ SW ¼ Sec 8-T121N-R50W



Depth of Well: NA

Well Driller:

Remarks:

Type of Map: aerial

Prepared by: David Konechne, PE

Reviewed and the Number Assigned on: 5-10-06

By: Karen Schlaak

Notice of Hearing - date to intervene: _____

Mail to:
Water Rights Program
Joe Foss Building
523 E. Capitol
Pierre, SD 57501-3181
(605) 773-3352

(office use only)
No. 6723-3 Hydrologic Unit 07020001
Basin Minnesota - Whetstone
Newspaper Grant Co. Review, Milbank

RECEIVED
MAY 10 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 _____ | |

Type of Application: (check one)

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

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

1. Name of Applicant Marie O'Farrell Phone (605) 938-4221
(check one) ☒ Owner ☐ Tenant/lessee
Mailing Address 46548 144th St. Marvin State SD 57251
(Street, RR, or Box and City) (Zip Code)
2. Amount of water claimed _____ *CFS or _____ **GPM 32 38.70 ***AF
(*Cubic Feet per Second) (**Gallons per Minute) (**Acre Feet - storage capacity of dam/dugout or annual use if applicable)
3. Source of water supply runoff from 506 acre watershed
4. Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) County Grant
Embankment in SE1/4SW1/4 Section 8, T. 121 N., R. 50 W. Water Impounded: EY2 SW1/4
Sec 8 - T121N - R50W
5. County or counties where water will be used Grant
6. Annual period during which water is to be used annually Jan. 1 - Dec 31
7. Give a description of the project. When available include any preliminary engineering report or other reports or information that will help explain the project. (Attach sheet if more space is needed)

Build 19.5 foot high embankment. See Engineer's design plans attached.

STATE OF SOUTH DAKOTA)

County of Roberts 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, Marie O'Farrell, 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 Marie O'Farrell

Subscribed and sworn to before me this 9th day of May 20 06

[Signature]

Notary Public signature

My commission expires 10/01/10

**SOUTH DAKOTA
WATER PERMIT NO. 6723-3**

Date of first receipt of application May 10, 2006.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 6723-3 to Marie O'Farrell, 46548 144th St, Marvin SD 57251 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. 6723-3 authorizes impoundment of 32 acre-feet of water from runoff by constructing a dam located in the SE ¼ SW ¼ Section 8 with water impounded in the E ½ SW ¼ Section 8; all in T121N-R50W.
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. 6723-3 is July 10, 2006.
5. The date from which applicant may claim right is May 10, 2006.
6. One-fifth of the construction is to be completed on or before January 10, 2009.
7. All construction is to be completed on or before July 10, 2011.
8. Water is to be put to beneficial use on or before July 10, 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. 6723-3 authorizes a dam with a storage capacity of 32 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

AUG 28 2006

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

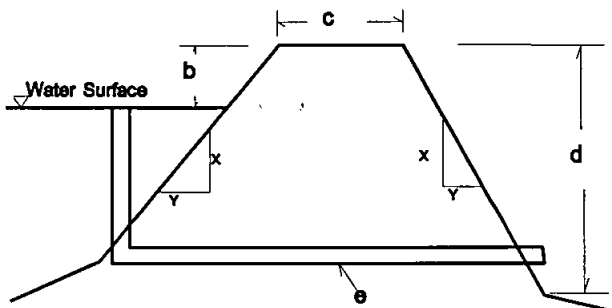
- a) Surface Dimensions _____ Depth _____
- b) Depth to water (ground surface to water level) _____

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:

Dave Konechne
Konechne Engineering
104 Capitol Hill Dr.
Pierre, SD 57501



- b) Freeboard _____ 3 feet
- c) Crest Width _____ 12 feet
Crest Length _____ 400 feet
- d) Height _____ 19.5 feet
- e) Primary Outlet Capacity _____ 34.5 cfs
If pipe, diameter _____ 24 inch
- f) Secondary Spillway Capacity _____ 5 cfs
Spillway Width _____ 150 feet
- g) X & Y Slope _____
Upstream _____ 1:3
Downstream _____ 1:3
- h) Surface Area of Impoundment _____ 6.2
- i) Storage _____ 38.7 Acre Feet
- j) Drainage Area Above Dam _____ 506.0 Acres

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date MAY 10, 20 06

RECEIVED OF J & M LAND COMPANY INC., 45548 144th st., Marvin SD 57251

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

Fee for Application for Permit No. <u>6723-3</u> to Appropriate Water, to construct and to put water to beneficial use	150	00
Fee for Application for Permit No. _____ to Appropriate Water for Future use		
Fee to retain Future Use Permit No. _____ after period of seven years.		
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. <u>6723-3</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.

By Darland Erbe
Chief Engineer gm

02430



Marie O'Farrell
Grant County



0 0.5 1 1.5 Miles

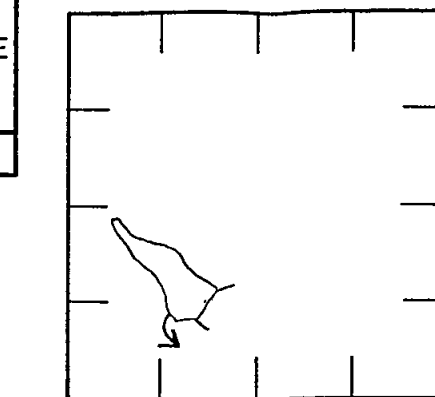
 **Proposed Pond**

Thomas L. Wickstrom
Fish & Wildlife Biologist
Thomas L. Wickstrom



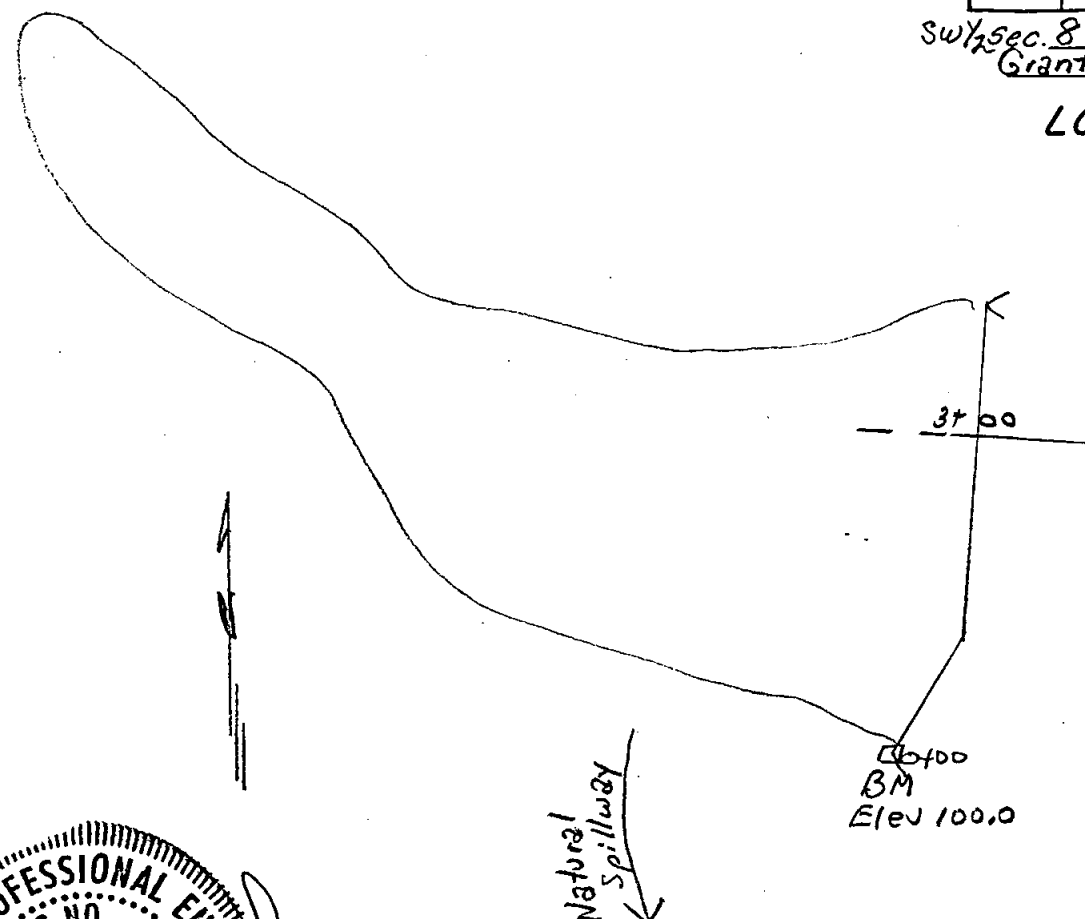
STRUCTURE DATA

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.
506	27.4	202	281	15	6.2	-	38.7



SW $\frac{1}{2}$ Sec. 8 T. 121 N R. 50 W
Grant County

LOCATION



SKETCH PLAN OF DAM AND RESERVOIR AREA

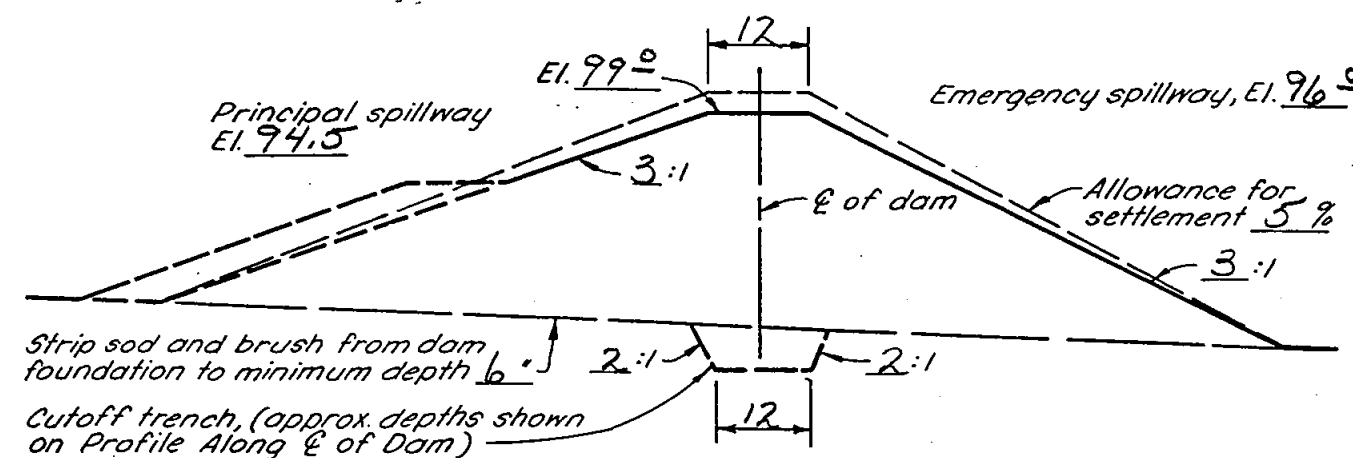
Approximate scale 1" = NA

REFERENCE: GUIDE PLAN NO. 1.0

USDA-SCS-LINCOLN, NEBR. 1973

8:30

TABLE OF QUANTITIES

[illegible]

TYPICAL CROSS SECTION OF DAM

S.D. CONSTRUCTION AND MATERIAL SPECIFICATIONS:

- SD-2 Clearing & Grubbing
- SD-7.5 Earth Fill
- SD-9 Drain Fill
- SD-12B concrete
- SD-13 Reinforcing Steel
- SD-19 PVC pipe
- SD-55A PE pipe
- SD-116 Timber Fabrication

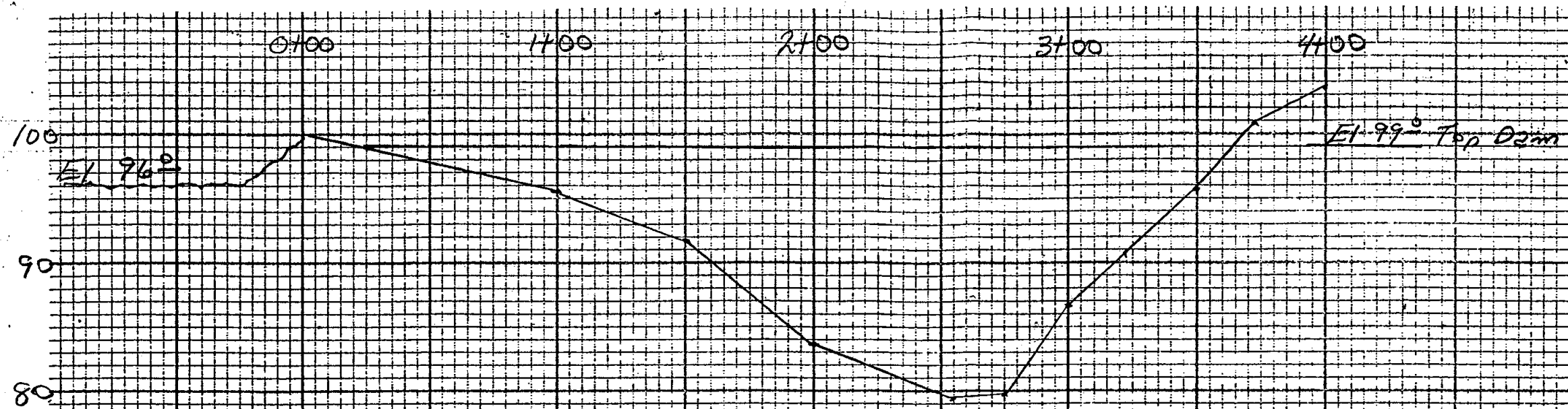
EARTH DAM

OPERATOR: Marty O'Farrell

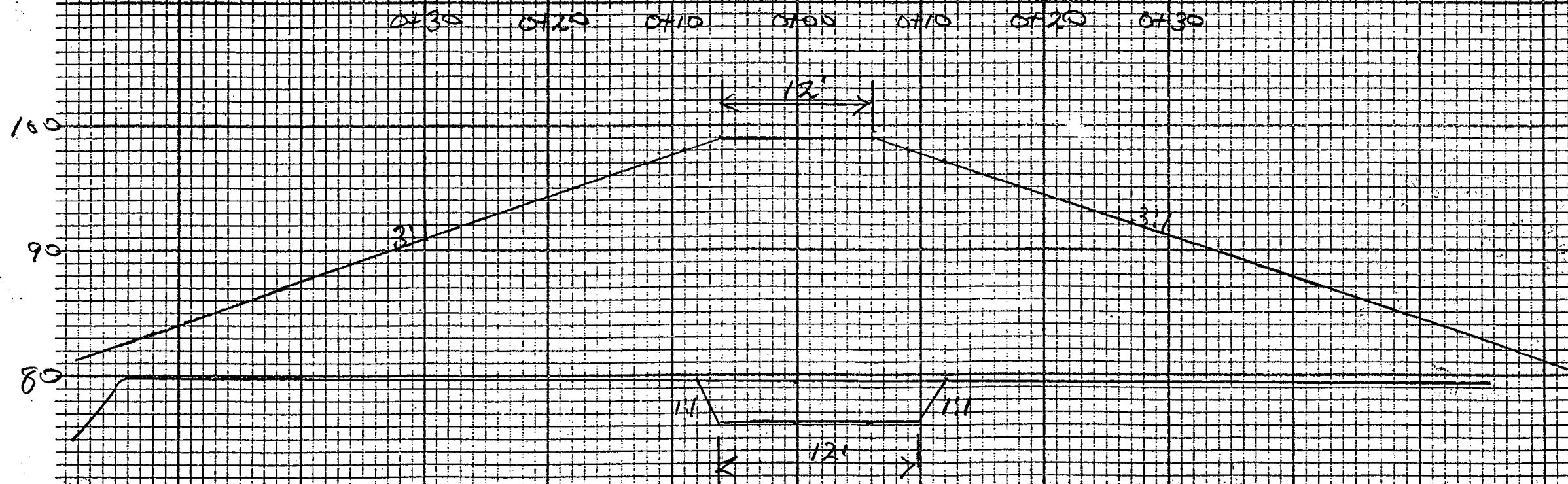
CONSERVATION DISTRICT: Grant Co

Class "A" Hazard

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



GROSS SECTION AT CREST OF EMERGENCY SPILLWAY AND PROFILE ALONG C OF DAM



Locate principal spillway pipe
at C of dam sta. $\underline{3} + \underline{00}$, at
an angle of $\underline{90^\circ}$ to the C of
the dam.

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

Top of dam after
settlement El. 99.0

Note: Allowance for settlement 5 %

Emergency spillway El. 96.0

3:1 slope normal
to $\mathbb{C}$ of dam

✓ 3: 1 slope normal
to $\odot$ of dam

Principal spillway El. 94.5

4/8" dia. riser, see
job plan no. 1010

Antiseep collars - sand
see p. 3.8

~~Berm, if required _____: 1
slope normal to $\mathbb{C}$ of
dam _____~~

El. 89-8

		11 % gr.
--	--	----------

90' of 24" dia. pipe

20'

64

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

SPECIFICATION NOTES

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

24 inch dia pipe shall be dual-wall equal to ADS N-12 with water tight joints.

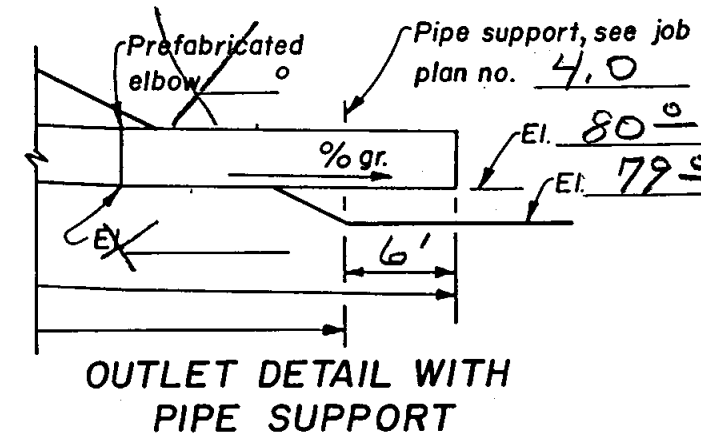
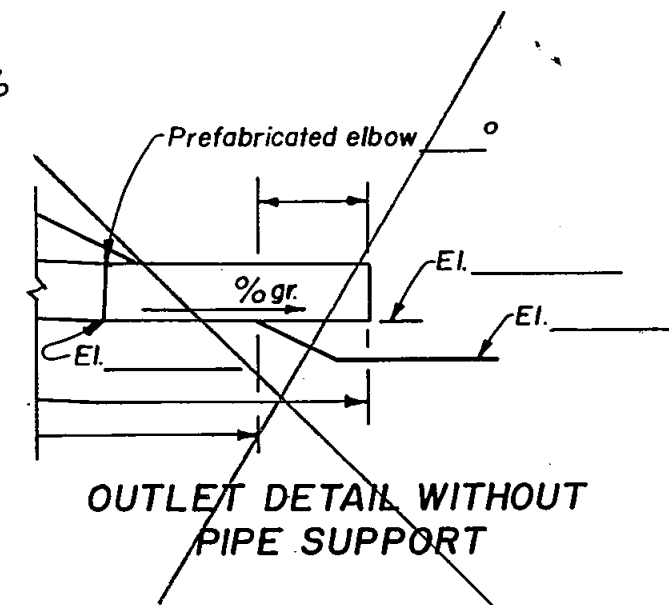
TABLE OF QUANTITIES

[illegible]

APPLICABLE STANDARD S.C.S. SPECIFICATIONS

REFERENCE: GUIDE PLAN NO. 2.0

Rev. 8/80
JOB PLAN NO. 2.0



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

LOCATION

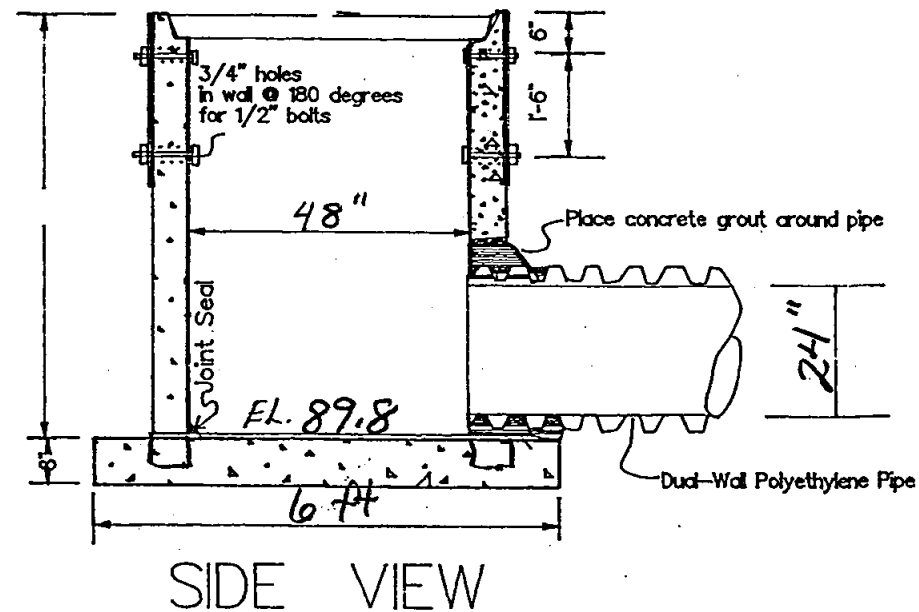
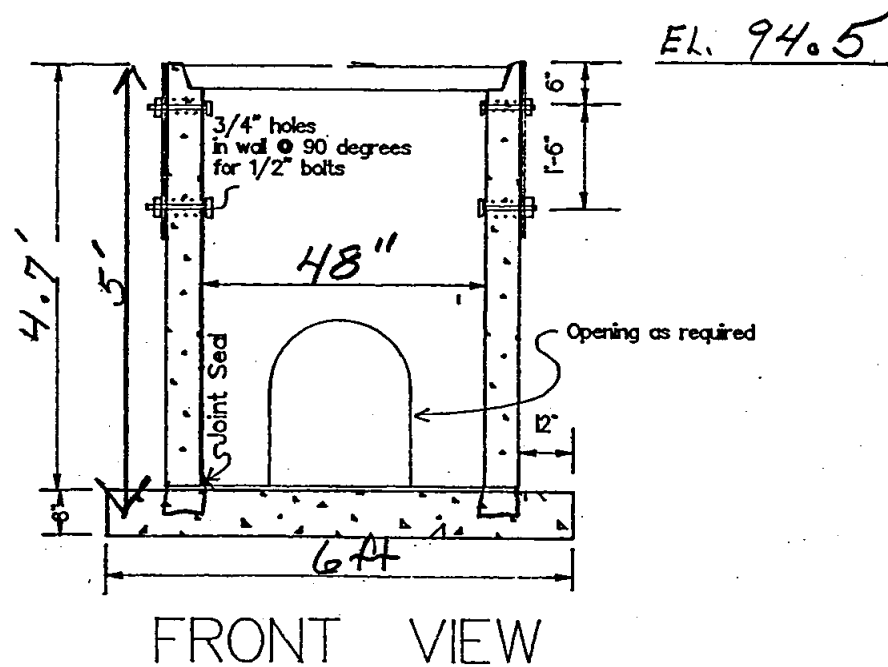
CORRUGATED METAL PIPE
DROP INLET PRINCIPAL SPILLWAY

OPERATOR Marty O'Farrell

CONSERVATION DISTRICT

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

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



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	5-0	50'	34	6	5-0

TABLE OF QUANTITIES

ITEM	UNIT	QUANTITY
CONCRETE	CU. YD.	0.9
REINFORCING STEEL	LB.	34

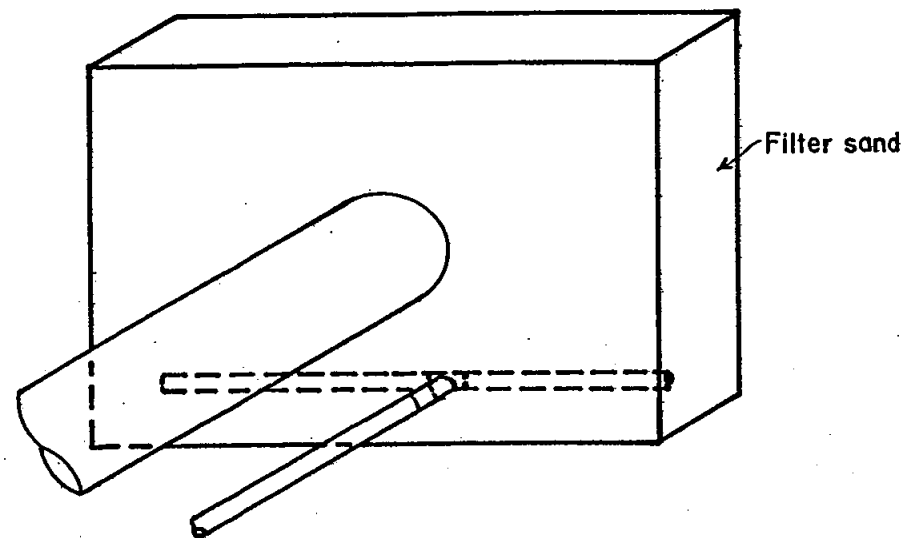
CONCRETE RISER
for Polyethylene Pipe

Marty O'Farrell

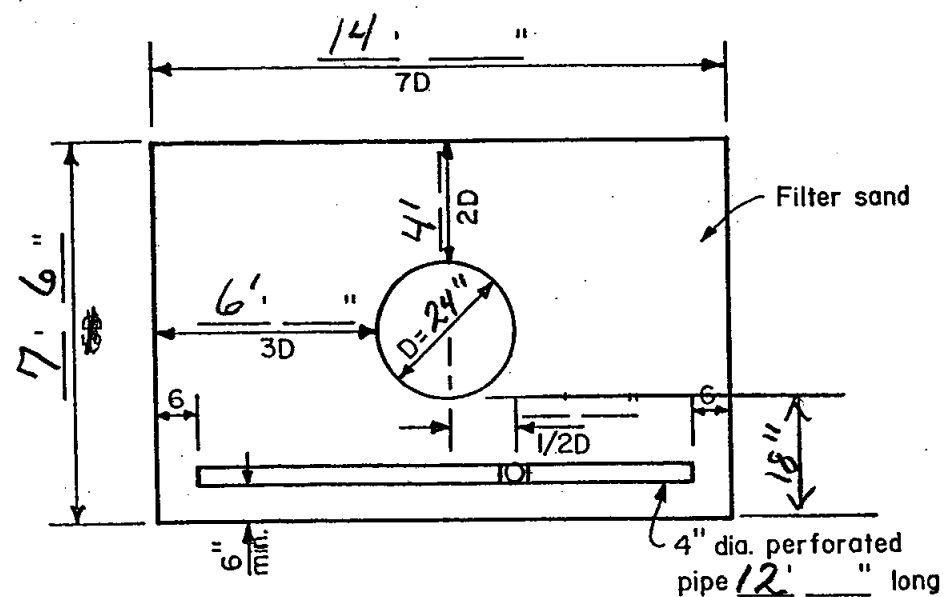
DESIGNED BY: D. Knepper
CHECKED BY: D. Knepper
DATE: _____
APPROVED BY: _____
TITLE: _____
SHEET: _____ OF _____
DATE: _____

Job Plan 10.0

Page 4 of 7



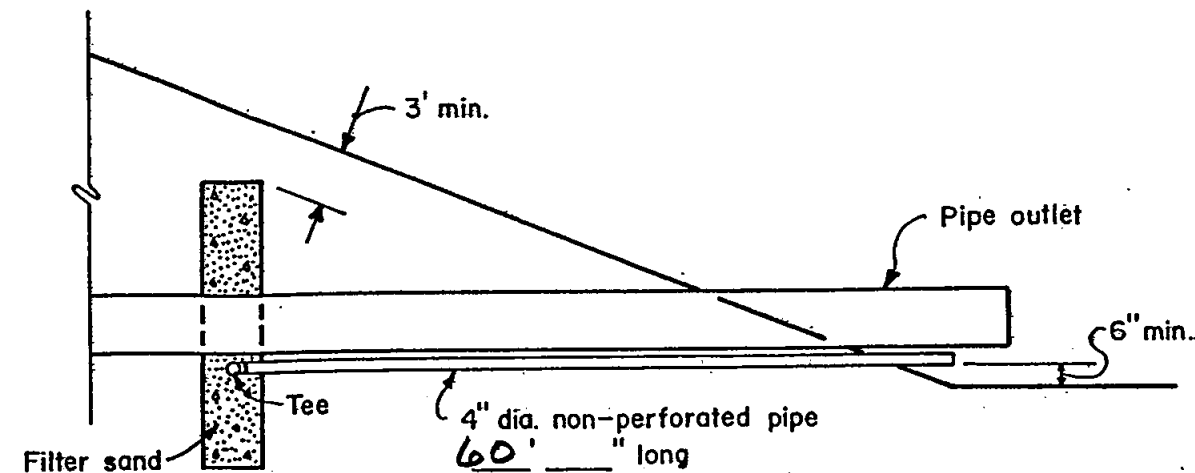
ISOMETRIC VIEW



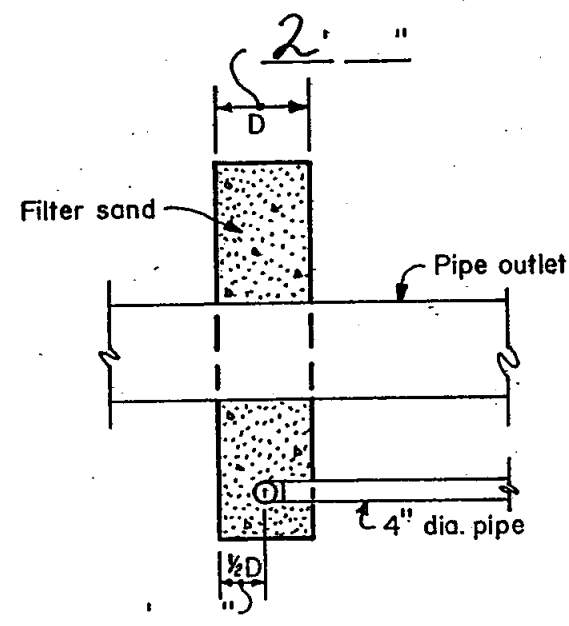
UPSTREAM VIEW

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 $\varnothing$ 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

7.7 cy

Sec. _____, T. _____, R. _____

_____ County

LOCATION

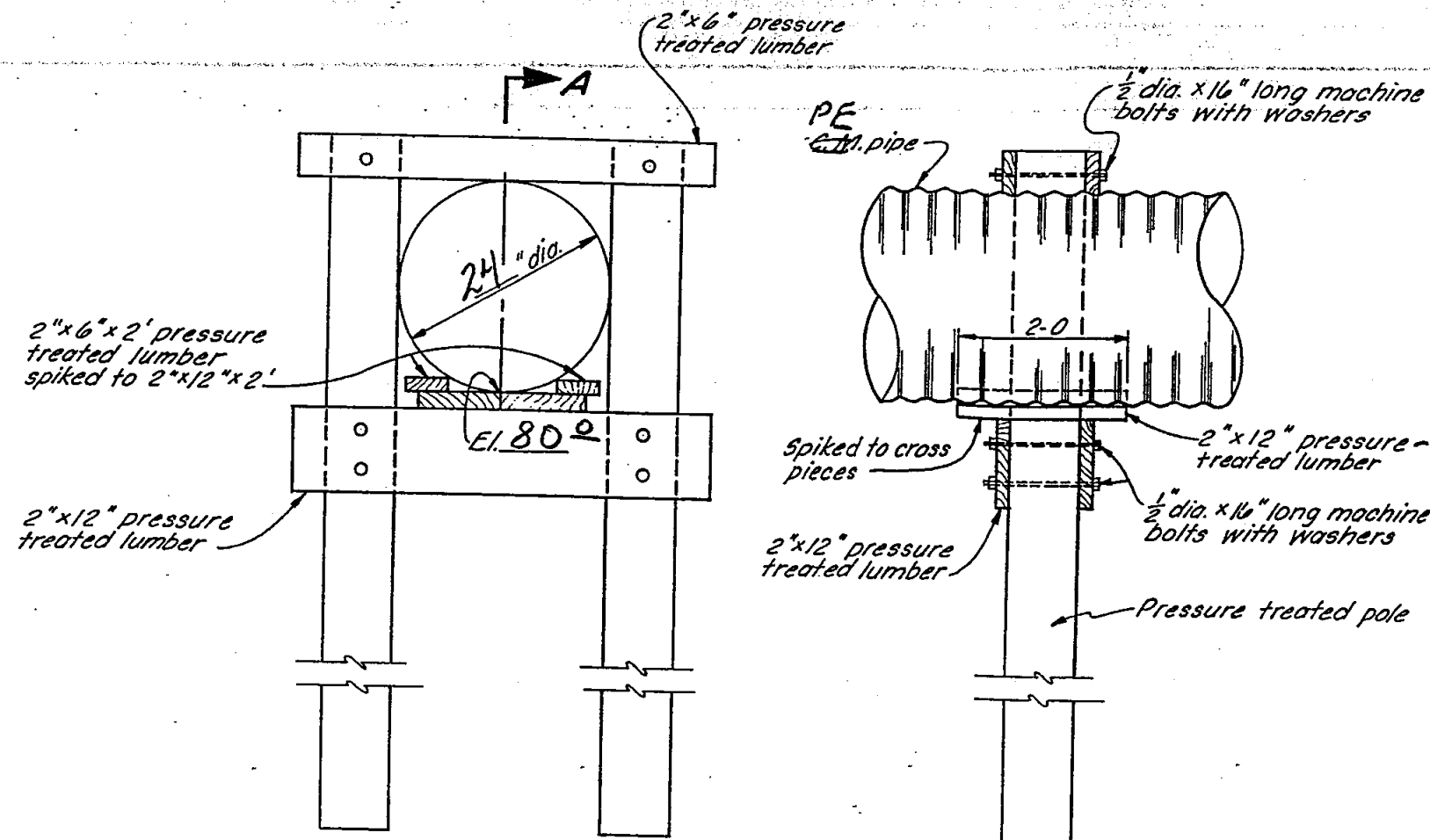
SAND ANTISEEP COLLAR

OPERATOR Marty O'Farrell

CONSERVATION DISTRICT _____

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

JOB PLAN NO. 3.8



ELEVATION

SECTIONAL ELEVATION A-A

TABLE OF QUANTITIES

ITEM	LENGTH FOR 24" DIA. PE PIPE	UNIT	QUANTITY
PRESSURE TREATED POLE 8" DIA.	8'	EACH	2
2" X 12" PRESSURE TREATED LUMBER	10'	EACH	2
2" X 6" PRESSURE TREATED LUMBER	5'	EACH	2
2" X 12" PRESSURE TREATED LUMBER	5'	EACH	2
2" X 6" PRESSURE TREATED LUMBER	2'	EACH	2
1/2" DIA. MACHINE BOLTS WITH NUTS	12"	EACH	6
1/2" DIA. WASHERS		EACH	

REFERENCE: GUIDE PLAN NO. 4.0

JOB PLAN NO. 4.0

NOTES:

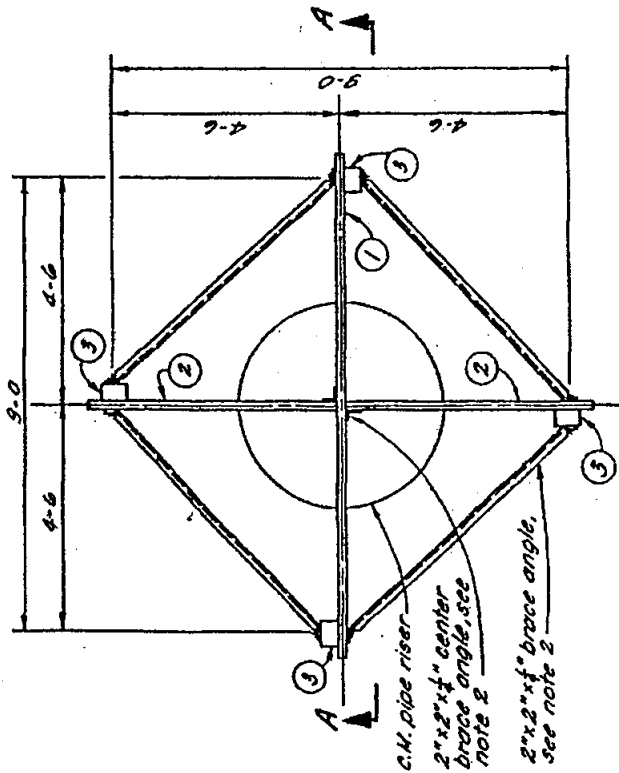
- HAND OR MACHINE TAMP BACKFILL THOROUGHLY AROUND FOOTINGS AND COLUMNS.

TIMBER PIPE SUPPORT

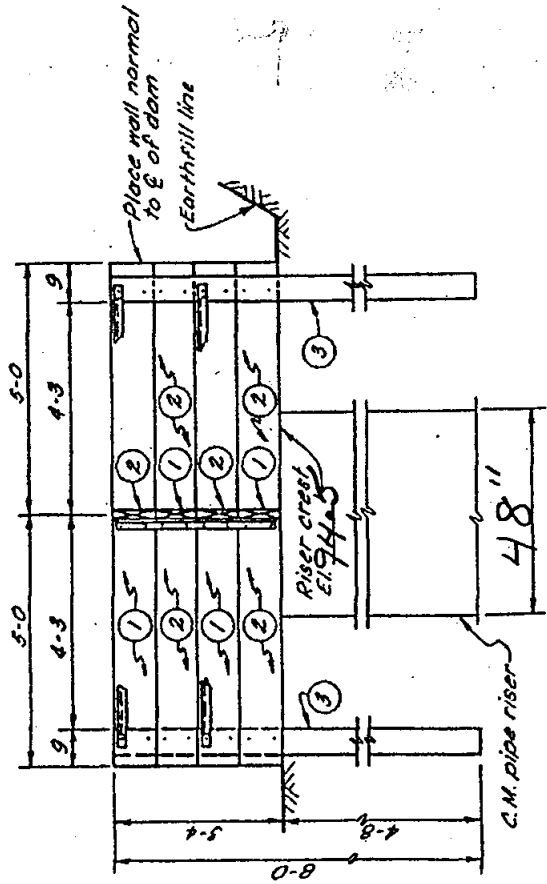
OPERATOR: Marty O'Farrell

CONSERVATION-DISTRICT: _____

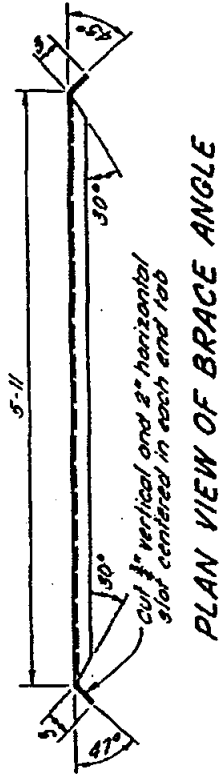
Designed _____	Date _____	Approved by _____
Drawn _____		Title _____
Traced _____		Title _____
Checked _____		Sheet _____
		Drawing No. _____



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 6 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: Marty O'Farrell

CONSERVATION DISTRICT: _____

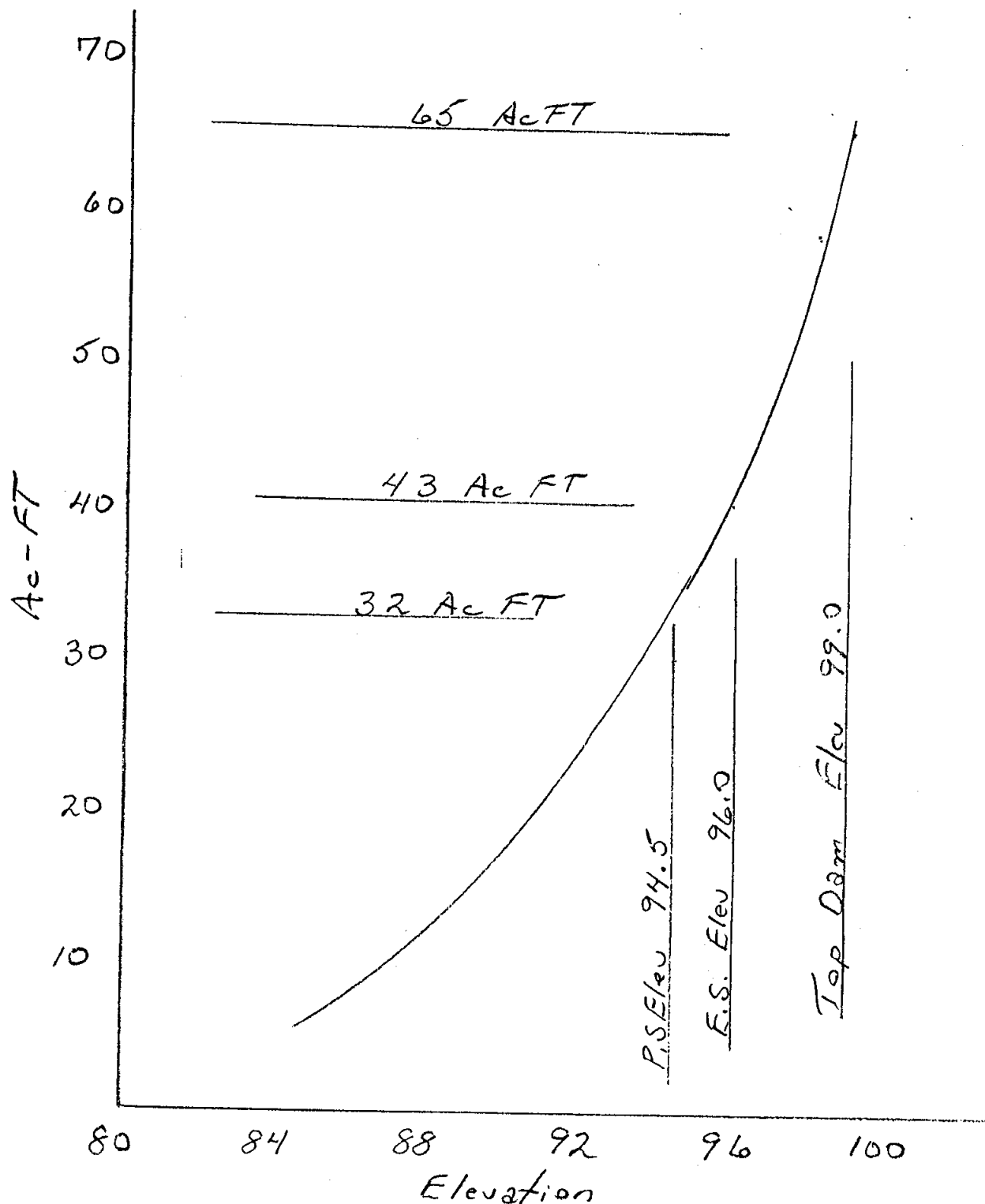
U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Designed	Checked	Drawn	Revised
By _____	By _____	By _____	By _____
Date _____	Date _____	Date _____	Date _____

JOB PLAN NO. 6.4

COMPUTATION SHEET

BY	DATE	PROJECT <i>Marty O'Farrell</i>	SHEET ____ OF ____
CHKD BY	DATE	FEATURE	
DETAILS <i>Sec 8, T12N, R50W Grant Co.</i>			



1*****

SITES XEQ 11/30/2005 WATER RESOURCE SITE ANALYSIS COMPUTER PROGRAM
VER 2000 (USER MANUAL - DATED MAY 2001)
TIME 11:03:37

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

SITES 05/01/2000 Marty O'Farrell 0.790625 H5
SAVMOV 0 101
SAVMOV 101 1 1
STRUCTURE Marty O'Farrell
79 0
80 .2
85 1.1
90 2.9
96 6.5
99 9.3
ENDTABLE
WSDATA 5A1 AC 75 506 12672 1.6
PDIRECT 2.5 .00 4.40
POOLDATA ELEV 94.5 94.5 79 78 SC
PSINLET 1 12.57
PSDATA 1 100 24 .009 79
ASDATA 41 200 150 3 .01 2
ASINSURF 41 .035
ASINLET 41 0.0 100 0.0 3
300 1
ENDTABLE
ASEXSURF 41 .035
.65 0
3
2 0
.02
ENDTABLE
ASEXIT 41 N 200
BTMWIDTH FEET 30
GRAPHICS I
GO,DESIGN HL TYPE2 24 TYPE2378 24
SAVMOV 2 101 1
ENDJOB

Drainage Area

***** 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 11/30/2005 Marty O'Farrell WSID=

VER 2000
TIME 11:03:37

Marty O'Farrell
SITE = S 1

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
2.50 0.00 0.00 4.40

WSDATA - CN DA-SM TC/L -/H QRF
75.00 0.79 12672.00 1.60 0.00

SITEDATA- PERM POOL CREST PS FP SED VALLEY FL 378?
94.50 94.50 0.00 78.00 YES

BASEFLOW INITIAL EL EXTRA VOL SITE TYPE
0.00 0.00 0.00 DESIGN

PSDATA - NO. COND COND L DIA/W -/H
1.00 100.00 24.00 0.00

PS N KE WEIR L TW EL
0.009 1.00 12.57 79.00

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 0.00 200.00 150

AUX.DATA - INLET N SIDE SLOPE EXIT N EXIT SLOPE ACTUAL AUX?
0.035 3.00 0.035 0.010 NO

BTM WIDTH - BW1 BW2 BW3 BW4 BW5
ft 30.00 0.00 0.00 0.00 0.00

AUXILIARY SPILLWAY RATING DEVELOPED USING WSPVRT.

1SITES

XEQ 11/30/2005
VER 2000
TIME 11:03:37

Marty O'Farrell
Marty O'Farrell
SITE = S 1

WSID=
SUBW= A
PASS= 1 PART= 2

PERM POOL 94.50 FT 32.5 ACFT 5.60 AC 0.0 CFS

CREST PS 94.50 FT 32.5 ACFT 5.60 AC 0.0 CFS
 SED ACCUM 94.50 FT 32.5 ACFT 5.60 AC 0.0 CFS
 START ELEV 94.50 FT 32.5 ACFT 5.60 AC 0.0 CFS
 NRCS-PSH D= 24.00 HR P= 2.50 IN Q= 0.65 IN DA= 0.79 SM
 TC= 3.71 HR CN= 75.00 VOL= 27.4 ACFT

PEAK = 60.0 CFS, AT 14.5 HRS.

ROUTED RESULT - HYD TYPE EMAX VOL-MAX AMAX QMAX
 NRCS-PSH 95.59 FT 38.9 ACFT 6.25 AC 44.2 CFS

PS STORAGE 6.4 ACFT, BETWEEN AUX. CREST AND SED. ACCUM ELEVATIONS.

DRAWDOWN (DDT) TEST 94.50 FT 32.5 ACFT 0.00 CFS
 CONTROL IS 0.000 DETENTION STORAGE

TIME = 1.15 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	94.50	0.00	0.00	0.00	32.48	5.60
2	94.85	8.03	8.03	0.00	34.47	5.81
3	95.20	22.72	22.72	0.00	36.53	6.02
4	95.55	41.75	41.75	0.00	38.67	6.23
FULL CONDUIT FLOW, ELEV = 95.90 FT						
5	95.90	64.27	64.27	0.00	40.88	6.44
6	96.28	65.03	65.03	0.00	43.43	6.77
7	96.67	65.76	65.76	0.00	46.13	7.13
8	97.06	66.47	66.47	0.00	48.96	7.49
9	97.45	67.18	67.18	0.00	51.94	7.85
10	97.84	67.89	67.89	0.00	55.06	8.21
11	98.22	68.58	68.58	0.00	58.31	8.58
12	98.61	69.27	69.27	0.00	61.71	8.94
13	99.00	69.95	69.95	0.00	65.25	9.30

1SITES _____
 XEQ 11/30/2005 Marty O'Farrell WSID=
 VER 2000 Marty O'Farrell SUBW= A
 TIME 11:03:37 SITE = S 1 PASS= 1 PART= 3

AUX. CREST 95.59 FT 38.9 ACFT 6.25 AC 44.2 CFS

PS STORAGE 6.4 ACFT, BETWEEN AUX. CREST AND SED. ACCUM ELEVATIONS.

START ELEV 94.50 FT 32.5 ACFT 5.60 AC 0.0 CFS

EFFECTIVE HEIGHT(H)= 16.6 FEET, PRODUCT= 645. (H * STORAGE AT CREST AUX.).

INPUT DESIGN CLASS = A1 = LT 3000. PRODUCT.

NRCS-FBH D= 24.00 HR P= 4.40 IN Q= 1.97 IN DA= 0.79 SM
TC= 3.71 HR CN= 75.00 VOL= 83.2 ACFT

PEAK = 202.4 CFS, AT 14.5 HRS.

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	94.50	0.00	0.00	0.00	32.48	5.60
2	94.62	1.63	1.63	0.00	33.15	5.67
3	94.74	4.62	4.62	0.00	33.84	5.74
4	94.86	8.48	8.48	0.00	34.54	5.82
5	94.98	13.06	13.06	0.00	35.25	5.89
6	95.10	18.25	18.25	0.00	35.96	5.96
7	95.22	23.99	23.99	0.00	36.68	6.03
8	95.34	30.23	30.23	0.00	37.42	6.11
9	95.46	36.93	36.93	0.00	38.16	6.18
10	95.59	44.07	44.07	0.00	38.91	6.25
11	95.69	52.26	50.52	1.74	39.56	6.31
12	95.79	60.74	57.26	3.48	40.21	6.38
FULL CONDUIT FLOW, ELEV = 95.90 FT						
13	95.90	69.48	64.27	5.21	40.88	6.44
14	96.05	74.83	64.59	10.24	41.88	6.55
15	96.21	82.39	64.88	17.51	42.91	6.69
16	96.49	102.95	65.41	37.54	44.82	6.95
17	96.83	137.55	66.04	71.51	47.25	7.27
18	97.45	226.35	67.18	159.17	51.94	7.85
19	98.22	377.07	68.58	308.49	58.31	8.58
20	99.00	575.42	69.95	505.47	65.25	9.30

SUMMARY OF AUXILIARY SPILLWAY SURFACE CONDITIONS USED IN COMPUTATIONS BY REACH

REACH	FROM STA (ft)	TO STA (ft)	SLOPE CURVE INDEX@	RETARDANCE COVER FACTOR	VEGETAL CODE (ft)	MAINT. DEPTH *	ROOTING LOCATION
1	50.	100.	-0.5	0.035	**	**	INLET
2	100.	200.	0.0	0.035	**	**	CREST

3 200. 400. 1.0 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 3 used in computing exit channel velocities.

DRAWDOWN USING FREEBOARD STORM FOLLOWS, STARTING AT ELEVATION 95.59 FT.

DRAWDOWN (DDT) TEST 94.50 FT 32.5 ACFT 0.00 CFS
CONTROL IS 0.000 DETENTION STORAGE

TIME = 1.31 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	30.0	97.08	49.1	7.5	1.50	10.2

PEAK - CFS	Q-PS	Q-AUX.	Q-TOT.
DISCHARGE =	66.5	106.7	173.2

	CRITICAL DEPTH	CRITICAL VELOCITY	CRITICAL SLOPE-Sc	25% OF Q Sc
AUXILIARY SPILLWAY	FT	FT/SEC	FT/FT	FT/FT
—	0.71	4.64	0.021	0.027

EFFECTIVE STRESS FOR STABILITY ANALYSIS OF AUX. EXIT CHANNEL

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

Aux. Discharge = 107. cfs; Bottom Width = 30. ft

REACH FROM TO SLOPE MANNING'S VELOCITY STRESS

NO.	STA	STA	%	n	ft/s	lb/ft^2
3	200.	400.	1.00	0.035	3.69	0.336

AUXILIARY SPILLWAY DURATION FLOW = 7.8 HOURS

ATTACK, OE/B = 0.8 ACFT/FT

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

EXIT CHANNEL FLOW SUBCRITICAL: MAX VELOCITY= 3.7 FT/SEC

EXIT SLOPE = 0.010 FT/FT

FLOW DEPTH = 0.9 FT

>>>> NHCP378 RUN - MINIMUM FLOW IN AUX. SPILLWAY FROM TR60
USING FORMULA WITHOUT 200 CFS MINIMUM LIMIT (211. CFS).

ROUTED	BTM WIDTH	MAX ELEV	VOL-MAX	AREA-MAX	AUX.-HP	VOL-AUX.
--------	-----------	----------	---------	----------	---------	----------

RESULTS	FT	FT	ACFT	AC	FT	ACFT
MIN. AUX.	30.0	97.73	54.2	8.1	2.14	15.3

PEAK - CFS Q-PS Q-AUX. Q-TOT.
DISCHARGE = 67.7 211.1 278.8

	CRITICAL	CRITICAL	CRITICAL	25% OF Q
	DEPTH	VELOCITY	SLOPE-Sc	Sc
AUXILIARY	FT	FT/SEC	FT/FT	FT/FT
SPILLWAY —	1.11	5.70	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 = 98.08.

ROUTED	BTM WIDTH	MAX ELEV	VOL-MAX	AREA-MAX	AUX.HP	VOL-AUX.
RESULTS	FT	FT	ACFT	AC	FT	ACFT
MINIMUM AUX.	30.0	98.08	57.1	8.4	2.50	18.2

PEAK - CFS Q-PS Q-AUX. Q-TOT.
DISCHARGES = 68.3 281.2 349.5

	CRITICAL	CRITICAL	CRITICAL	25% OF Q
	DEPTH	VELOCITY	SLOPE-Sc	Sc
AUXILIARY	FT	FT/SEC	FT/FT	FT/FT
SPILLWAY —	1.33	6.20	0.017	0.022

INFLOW HYD 1 PSH-PEAK = 44.19 CFS AT 15.87 HRS, LOCATION POINT
INFLOW HYD 1 FBH-PEAK = 173.19 CFS AT 15.16 HRS, LOCATION POINT
HYDOUT 1

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

Marty O'Farrell

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 0.79 75. 3.71 0.79 378NR 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 95.6 30.0 2.5 98.1 0. 0. 3.7 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\OFarrell\Sites-24.D2C

OUTPUT - DATED 11/30/2005 11:03:37

C:\data\Engineering\sites\OFarrell\Sites-24.OUT

GRAPHICS FILES GENERATED

OPTION "L" DATED 11/30/2005 11:03:37

C:\data\Engineering\sites\OFarrell\Sites-24.DRG

OPTION "P" DATED 11/30/2005 11:03:37

C:\data\Engineering\sites\OFarrell\Sites-24.DHY

OPTION "E" DATED 11/30/2005 11:03:37

C:\data\Engineering\sites\OFarrell\Sites-24.DEM

Water Permit Application No 6723-3
Marie O'Farrell

Top of Dam Elev. - 99
2nd Spillway Elev. - 96
P. Spillway Elev. - 94.5
Dis Emb Toe Elev. - 79.5

Cat. 3 - Low Hazard Dam

Ht = 19.5 ft

Normal Storage Capacity - 32 Acre-ft
Int. Storage Capacity - 43
Max. Storage Capacity - 65

Int Capacity x Est Ht. = $43 \times 16.5 = 709 < 3000 \therefore$ 25 yr
Minimum Spillway Design

From USGS WRI 98-4055 "Tech for Est. Peak-Flow... in 50"
Region A $P_{II} = 0.95$
DA = 506 Acre = 0.79 mi.²

$$Q_{25} = 218 CA^{.513} P_{II}^{4.80}$$

$$= 218 (0.79)^{.513} (0.95)^{4.80}$$

$$= 218 (0.8861) (0.7818)$$

$$= \underline{151 \text{ cfs}}$$

$$Q_{100} = 362 CA^{.521} P_{II}^{4.47}$$

$$= 362 (0.79)^{.521} (0.95)^{4.47}$$

$$= 362 (0.8844) (0.7951)$$

$$= \underline{255 \text{ cfs}}$$

Secondary Spillway Capacity

$$Q = C L H^{3/2}$$

$C = 2.6$
 $L = 150$
 $H = 3$

$$= 2.6 (150) (3)^{1.5}$$

$$= \underline{2026 \text{ cfs}}$$

NRCS Annual Yield
DA = 506 CH = 75 IS = 2 1/2

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

80% chance = 0.17
 $0.17 \times 506^{1/2} = \underline{7 \text{ Acre-ft}}$

50% chance = 0.46
 $0.46 \times 506^{1/2} = \underline{19 \text{ Acre-ft}}$

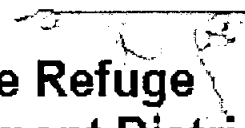
10% chance = 2.2
 $2.2 \times 506^{1/2} = \underline{93 \text{ Acre-ft}}$



Mountain
Prairie
Region **6**

U.S. Fish & Wildlife Service

Waubay National Wildlife Refuge and Wetland Management District



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Contact Us

Below is a list of personnel stationed at Waubay NWR. Included are their job titles and email address (if available). To acquire some information or have a question answered contact our staff directly. We'll be happy to assist you.

- **Larry Martin** (Project Leader)
email: Larry_D_Martin@fws.gov
Role: Oversees the entire complex and works on funding issues.
- **Doug Leschisin** (Refuge Manager)
email: Douglas_Leschisin@fws.gov
Responsible for all FWS lands in Day and Clark Counties.
- **Connie Mueller** (Asst. Manager)
email: Connie_Mueller@fws.gov
Role: Responsible for all FWS lands in Marshall and Roberts Counties.
- **Jarrold Lee** (Asst. Manager)
email: Jarrod_Lee@fws.gov
Role: Responsible for all FWS lands in Grant and Codington Counties.
- **Laura Hubers** (Wildlife Biologist)
email: Laura_Hubers@fws.gov
Role: Directs all biological studies on the refuge and district.
- **Dennis Okroi** (Administrative Assistant)
email: Dennis_Okroi@fws.gov
Role: Completes all the paperwork to keep us functioning.
- **Tom Wickstrom** (Private lands)
email: Thomas_Wickstrom@fws.gov
Role: Partners for Fish and Wildlife Representative.
- **Michael Dargatz** (Maintenance Worker)
email: Michael_dargatz@fws.gov
Role: Maintains equipment and vehicles, conducts habitat management activities.
- **Drew Ellis** (Tallgrass Prairie Coord.)
email: Drew_ellis@fws.gov
Role: Directs funding and protection of Tallgrass Prairie Wildlife Management Area.
- **Neal Hornseth** (Tractor Operator)
email: Neal_Hornseth@fws.gov
Role: Maintains equipment and vehicles, conducts habitat management activities.

Waubay National Wildlife Refuge
44401 134A St
Waubay, SD 57273
Phone: (605) 947-4521
Fax: (605) 947-4524

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Tom Wickstrom
Waubay National Wildlife Refuge
44401 134 A Street
Waubay, SD 57273-5301

April 11, 2006

Attached is one copy of approved plans and specifications for the Marty O'Farrell Dam located in Section 8, T121N, R50W, Grant County. The yardage is an estimate; final yardage will be available after staking the structure.

Also attached are:

- Stage – Storage curve
- Flood Routing using Sites method
- Field Topographic map with scale 1 inch = 100 ft
- Bid Form

Since minimum to no construction inspection is scheduled, it is imperative that a competent contractor be hired to construct the structure according to plans. A final checkout will be made to verify that the structure was constructed to elevations on the plans.

Cc: Tim Olson, GF&P, Foss Building
Without attachments

Dave Konechne
Konechne Engineering
104 Capitol Hill Dr.
Pierre, SD 57501

Water Rights Division -DENR
Conversation or File Documentation

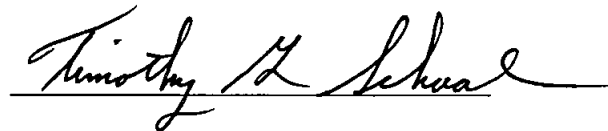
NAME OF PERSON OR FILE: Marie O'Farrell

ADDRESS: 46548 144th St., Marvin, SD 57251 COUNTY: Grant

DATE: June 09, 2006 TELEPHONE: XXXXXXX

RE: Storage capacity changed on application

I talked to Dave Konechne, from Konechne Engineering, about the storage capacity for the dam covered under Water Permit Application No. 6723-3. He agreed with me that the capacity of 37.8 acre-feet as listed on the application should be changed to 32 acre-feet, since the primary spillway elevation will be at elevation 94.5 (local datum). I told him we would make the necessary change to the application.

A handwritten signature in black ink, reading "Timothy G. Schaal", written over a horizontal line.

Timothy G. Schaal, P.E.
Natural Resources Engineering Specialist
Water Rights Program



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

June 12, 2006

Marie O'Farrell
46548 144th St.
Marvin, SD 57521

Dear Ms. O'Farrell:

We have reviewed the plans and specifications for your dam project located in the SE ¼ SW ¼ of Sec. 8-T121N-R50W, in Grant 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. 6723-3 is approved.

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

The O'Farrell Dam No.2 will be classified as a small size Category 3, Low Hazard dam with a dam height of 19.5 ft. and a normal storage capacity of 32 acre-feet and a maximum storage capacity of 65 acre-feet.

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

Sincerely,

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

c: Tom Wickstrom, Waubay NWR
Dave Konechne, Konechne Engineering

REPORT ON
WATER PERMIT APPLICATION No. 6723-3
Marie O'Farrell
June 9, 2006

Water Permit Application No. 6723-3 has been filed by Marie O'Farrell to impound 32 acre-feet of water by constructing a dam located in the SE ¼ SW ¼ of Section 8-T121N-R50W, in Grant 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. The US Fish and Wildlife Service 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. 6723-3 is approved.

The dam will be 19.5 feet high with a normal storage capacity of 32 acre-feet with a reservoir level at the primary spillway elevation, and a maximum storage capacity of 65 acre-feet with a reservoir level at the top of dam elevation. A dam of this size and hazard classification is required to have a minimum spillway design capable of passing a 25-year frequency event.

The dam has a drainage area of 506 acres or 0.79 square miles. The dam is designed to have a 48 inch diameter concrete drop inlet structure with a 24 inch barrel as the primary spillway and a 150 foot wide natural earth spillway. A 25 year frequency event produces a peak runoff of approximately 151 cfs and a 100 year frequency event produces a peak runoff of approximately 255 cfs. The earthen secondary spillway will have a capacity of approximately 2000 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 7 acre-feet. The annual yield with a 50 percent chance of occurrence, or 1 out of 2 years, is expected to be 19 acre-feet and the annual yield with a 10 percent chance, or 1 out of 10 years, is expected to be 65 acre-feet.

The O'Farrell Dam No. 2 will be located in the SE ¼ SW ¼ of Section 8-T121N-R50W on an unnamed tributary to the North Fork of the Whetstone River about 9.0 miles upstream of the confluence of the unnamed tributary and the Whetstone River. On September 12, 2005, Water Permit No. 6635-3 for Marie O'Farrell was approved for 34.6 ac-ft of storage in a dam located about one-half mile downstream of the proposed application. This dam has about 2.5 square miles of additional drainage area; therefore, approval of Water Permit Application No. 6723-3 should have little effect on Water Permit No. 6635-3. There are no other existing Water Permits/Rights located on the unnamed tributary between the proposed dam and the Whetstone River.

Conclusions:

1. Water Permit Application No. 6723-3 should be approved since unappropriated water is available and approval should not have any adverse effect on existing Water Permits/Rights.
2. If approved, the low flow bypass requirement for downstream domestic use should be a qualification on Water Permit Application No. 6723-3.



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



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 6723-3, Marie O'Farrell**

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. 6723-3, Marie O'Farrell, 46548 144th Street, Marvin SD 57251.

The Chief Engineer is recommending APPROVAL of Application No. 6723-3 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing rights, 3) the proposed use is a beneficial use and 4) it is in the public interest with the following qualifications:

1. Water Permit No. 6723-3 authorizes a dam with a storage capacity of 32 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
June 12, 2006

Printer's Affidavit of Publication

STATE OF SOUTH DAKOTA
COUNTY OF GRANT

} ss.

Holli Seehafer

of said County and State, being first duly sworn, on oath says that the Grant County Review is a legal weekly newspaper of general circulation, printed and published in Milbank, in said County of Grant and State of South Dakota, by Phyllis Justice, and has been such newspaper during the times hereinafter mentioned; that said newspaper is a legal newspaper; and that it has a bona fide circulation of more than two hundred copies weekly, and has been published within said County of Grant in the English language and has been admitted to the United States mail under second class mailing privilege, for at least one year next prior to the publication of the Notice herein mentioned, and has been printed wholly in an office maintained at the said place of publication, that I, the undersigned, _____ Advertising Manager _____ of said newspaper, in charge of the advertising department thereof, have personal knowledge of all the facts stated in this affidavit; that the advertisement headed Notice of

Application No. 6723-3 to Appropriate Water

_____ a printed copy of which, taken from the paper in which the same was published, is attached to this sheet and is made a part of this Affidavit, was published in said newspaper at least once each week for two successive weeks, on the day of each week on which the said newspaper was regularly published, to-wit:

<u>June 21 2006</u>	<u>20</u>
<u>June 28 2006</u>	<u>20</u>
<u>20</u>	<u>20</u>

That \$ 42.88, being the full amount of the fee charged for the publication of said Notice, inures to the benefit of the publisher of the Grant County Review; that no agreement or understanding for the division thereof has been made with any person, and that no part has been agreed to be paid to any person whomsoever.

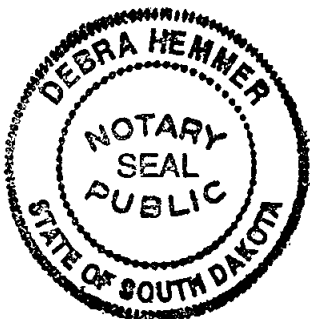
Holli Seehafer

Subscribed and sworn before me this 5th day of July 20 06

Debra L. Hemmer

Notary Public, Grant County, South Dakota

DEBRA HEMMER
Notary Public, GRANT COUNTY, S. DAK.
My Commission Expires OCT 27, 2009



RECEIVED
JUL - 7 2006
WATER RIGHTS
PROGRAM

NOTICE OF APPLICATION NO. 6723-3 to Appropriate Water

Notice is given that Marie O'Farrell, 46548 144 St., Marvin SD 57251 has filed an application for a water permit to impound 32 acre-feet of water from runoff by constructing a dam located in the SE 1/4 SW 1/4 Section 8 with water impounded in the E 1/2 SW 1/4 Section 8; all in T121N-R50W. 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. 6723-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on the application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider the application. Notice of the hearing will be given to the applicant and any person filing a petition.

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 July 10, 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.

June 21 _____ June 28 _____

Publication Fee	\$ <u>42.88</u>
Notarial Fee	\$ _____
Total	\$ <u>42.88</u>

Instruction to Newspaper - Publish first Notice on June 21, 2006 with the second publication 7 days later. The applicant is responsible for payment.

NOTICE OF APPLICATION NO. 6723-3 to Appropriate Water

Notice is given that Marie O'Farrell, 46548 144th St, Marvin SD 57251 has filed an application for a water permit to impound 32 acre-feet of water from runoff by constructing a dam located in the SE ¼ SW ¼ Section 8 with water impounded in the E ½ SW ¼ Section 8; all in T121N-R50W. 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. 6723-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on the application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider the application. Notice of the hearing will be given to the applicant and any person filing a petition.

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 July 10, 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.**

June 12, 2006

Marie O'Farrell
46548 144th St
Marvin SD 57251

Dear Ms. O'Farrell:

Water Permit Application No. 6723-3 for recreational, fish & wildlife propagation and domestic 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 Grant Co. Review printed at Milbank, SD (Ph # 605-432-4516). 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

c: Dave Konechne, Konechne Engineering
Tom Wickstrom, Waubay National Wildlife Refuge

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

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

June 12, 2006

Grant Co Reivew
PO Box 390
Milbank SD 57252-0390

ATTENTION: Legal Public Notice

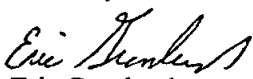
Enclosed is a Notice on Application No. 6723-3 to Appropriate Water to be published twice. Please publish the first notice on June 21, 2006 with the second publication 7 days later. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352.

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 Marie O'Farrell, 46548 144th St., Marvin SD (Ph # 605-938-4221).

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. 6723-3

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

Date _____

We are in receipt of your letter of June 12, 2006 enclosing Notice to Appropriate Water by Application No. 6723-3 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

AUG 28 2006

Marie O'Farrell
46548 144th St
Marvin SD 57251

Dear Ms. O'Farrell:

Enclosed is Water Permit No. 6723-3 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

**NOTICE OF COMPLETION OF WORKS AND
APPLICATION OF WATER TO BENEFICIAL USE**

Date 11-27-06

TO: Water Rights Program, DENR
523 E. Capitol
Pierre, SD 57501-3181

RECEIVED**NOV 29 2006**WATER RIGHTS
PROGRAM

FROM:

Marie O'Farrell
(name)46548 144th St
(address)Marvin S. Dak 57251
(city, state, zip)605-938-4221
(phone)

I have completed the construction of the water use system and I have put the water to beneficial use to the maximum extent it is going to be used.

Water Permit No. 6723-3 states that the water use system is to be constructed by July 10, 2011, and water is to be put to beneficial use by July 10, 2015.
(date) (date)

The water use system was completed on Nov 18, 2006.
(date)

Applying the water to beneficial use was completed on Nov 18, 2006.
(date)

You may schedule an investigation so that the water license may be issued.

Dr. M Land Co.Marie O'Farrell
(signature)

Permit No. 6723-3
Minnesota - Whetstone - 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, November 19, 2013, made a thorough examination of the water use system constructed by Marie O'Farrell of 46548 144th St., Marvin, SD 57251 holder of Permit No. 6723-3, bearing the priority date of May 10, 2006 authorizing the storage of 32 acre-feet of the waters of runoff for recreation, fish and wildlife propagation and domestic use purposes, in Grant County.

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

A. Works used to divert the water:

A 19.5 foot high earthen dam with a normal storage capacity of 32 acre-feet of water.

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

N/A

C. Works used to apply water to beneficial use:

A 19.5 foot high earthen dam with a normal storage capacity of 32 acre-feet of water.

The system is in the following condition good. The point of diversion is located 1100 ft. north and 2300 ft. east of the SW corner of Sec. 8-T121N-R50W, SE ¼ SW ¼, (Lat. 45.30060, Long. -96.95484). The works are capable of storing 32 acre-feet of water which is to be used for recreation, fish and wildlife propagation and domestic use. Water has been put to beneficial use to the maximum extent as follows:

A 19.5 foot high earthen dam with a normal storage capacity of 32 acre-feet of water.

and the license should be issued for 32 acre-feet of storage.

Applicable permit qualifications have been complied with: Yes X

Exceptions to compliance are: none Date Report Completed: January 7, 2014



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

REPORT ON INSPECTION OF PERMIT NO. 6723-3

DATE OF INSPECTION: November 19, 2013

NAME & ADDRESS OF PERMIT HOLDER: Marie O'Farrell, 46548 144th St., Marvin, SD 57251

DIVERSION POINT LEGAL LOCATION: 1100 ft. north and 2300 ft. east of the SW corner of Sec. 8-T121N-R50W, SE ¼ SW ¼, (Lat. 45.30060, Long. -96.95484).

DAM INFORMATION:

- 1) Height to crest 19.5 feet
- 2) Height to primary spillway 15 feet
- 3) Height to secondary spillway 16.5 feet
- 4) Crest width 12 feet
- 5) Crest length 400 feet
- 6) Spillway length XXX feet
- 7) Spillway width 150 feet
- 8) Approx. storage (Normal) 32 acre-feet
- 9) Approx. storage (Maximum) 65 acre-feet
- 10) Date constructed: 2006

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. 6723-3



Timothy G. Schaal

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

1/7/14



DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES

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



MAR 10 2014

6723-3

Marie O'Farrell
46548 144th St
Marvin SD 57251

Dear Ms. O'Farrell:

Enclosed is Water License No. 6723-3. This is the final water right document completing your process of obtaining a Water Right. Included with your license is a map prepared by the staff engineer who conducted the field investigation.

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,

Jeanne Goodman, Chief Engineer
Water Rights Program
(605) 773-3352

enclosures

STATE OF SOUTH DAKOTA

WATER LICENSE NO. 6723-3

(1) Marie O'Farrell, 46548 144th St, Marvin SD 57251 made Application No. 6723-3, May 10, 2006 for a water permit to impound 32 acre feet of water from runoff in a dam located in Grant County, South Dakota and used for fish & wildlife propagation, recreational use and domestic livestock watering purposes. Permit No. 6723-3, with a priority date of May 10, 2006 was approved July 10, 2006 and issued to the applicant for impoundment of water with construction of the storage dam to be completed on or before July 10, 2011 and the application to beneficial use of water on or before July 10, 2015.

(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to construction of the storage dam and is entitled to impound 32 acre feet of water for beneficial use with sufficient water annually to maintain the water level to the outlet elevation.

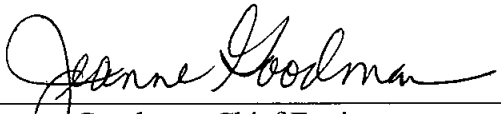
The location of the storage dam (spillway) is 1,100 feet north and 2,300 feet east of the SW corner of Section 8, T121N, R50W (SE ¼ SW ¼). Water is impounded in the E ½ SW ¼ Section 8, T121N, R50W.

(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 Marie O'Farrell, 46548 144th St, Marvin SD 57251 the holder and/or owner of Water Right No. 6723-3 is issued a license to impound 32 acre feet water from runoff in a storage dam with a priority date of May 10, 2006 from the location specified in (2) of this license. The water is used for fish and wildlife propagation, recreational use and domestic livestock watering purposes.

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 6723-3 and subject to the following qualifications:

- Water Right No. 6723-3 authorizes a dam with storage capacity of 32 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.



Jeanne Goodman, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

MAR 10 2014

date

