

**WATER PERMIT NO. 2713-2**

Name of Applicant: **Richard Cone**

Address: **25530 313<sup>th</sup> Ave, Kennebec SD 57544**

Phone: **605 222-2214**

Amount of Water Claimed: **72 acre-feet storage**

Total Acres: **NA**

Source of Water Supply: **runoff**

Water to be used for: **fish & wildlife propagation, recreational use**

County: **Lyman**

Type of Waste Disposal System:

Location: **2 miles west of Presho**

**PRIORITY**

Date Received: **8-6-13**

Application/License Fee: **\$ 700.00**

Corrected Application Received:

Period of Annual Use: **Jan 1 – Dec 31**

Remarks:

Diversion Point: **NW 1/4 SE 1/4 Sec 18-T105N-  
R77W**

Land to be Irrigated: **NA**

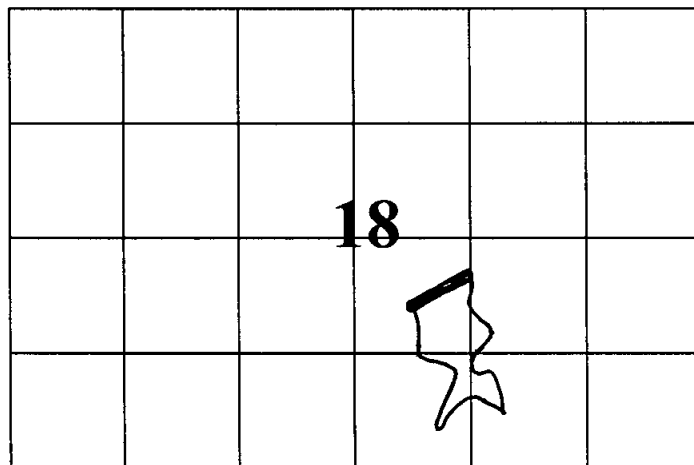
Depth of Well: **NA**

Well Driller:

Remarks:

Type of Map: **aerial**

Prepared by:



Reviewed and the Number Assigned on: **8-6-13**

By: **Karen Schlaak**

Notice of Hearing - date to intervene: \_\_\_\_\_

|                                                                                                                 |                                                                                      |
|-----------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| Mail to:<br>PMB 2020<br>DENR - Water Rights<br>523 E Capitol Ave<br>Pierre, SD 57501-3182<br>ph. (605) 773-3352 | No. <u>2713-3</u> (office use only)<br>Hydrologic Unit <u>10140101</u>               |
|                                                                                                                 | Basin <u>Missouri River</u> <u>605-895-6397</u>                                      |
|                                                                                                                 | Newspaper <u>Lyman Co. Herald Box 518 Pierre</u><br><u>605-224-7301</u> <u>57568</u> |
|                                                                                                                 | <u>Capital Journal Box 878 Pierre 57501</u>                                          |

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PROGRAM

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

### Check use(s) of water:

- |                                                 |                                           |                                                     |                                          |
|-------------------------------------------------|-------------------------------------------|-----------------------------------------------------|------------------------------------------|
| <input type="checkbox"/> Municipal              | <input type="checkbox"/> Suburban Housing | <input checked="" type="checkbox"/> Recreational    | <input type="checkbox"/> Institutional   |
| <input type="checkbox"/> Rural Water System     | <input type="checkbox"/> Commercial       | <input checked="" type="checkbox"/> Fish & Wildlife | <input type="checkbox"/> Geothermal Heat |
| <input type="checkbox"/> Domestic (over 18 gpm) | <input type="checkbox"/> Industrial       | <input type="checkbox"/> 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 to Appear on Water Permit Richard Cone

(check one) ☒ Owner ☐ Tenant/lessee ☐ Owner's Legal Agent

(name and complete address if different than above name)

Mailing Address 25530 313th Ave. Kennebec SD 57544  
(Address) (City) (State) (Zip Code)

Home Phone 605-869-2392 Cell 605-222-2214 Email dickcone@me.com

2. Amount of water claimed \_\_\_\_\_ \*CFS or \_\_\_\_\_ \*\*GPM 72 \*\*\*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 Dry draw surface runoff

4. Location of point of diversion Embankment in NW1/4SE1/4 section 18-T105N-R77W County Lyman

(example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)

If not a public water supply (e.g. municipal), will water be used outside of the area described above? ☒ Yes ☐ No

If "Yes," where will water be used? SE1/4 section 18-T105N-R77W :- Water Impounded  
(example - NW1/4 section 12-T104N-R53W)

5. County or counties where water will be used Lyman

6. Annual period during which water is to be used 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)

The project will involve constructing a new embankment to create a shallow water pond for recreation and fish and wildlife uses. The embankment height will be 14.2 feet with a principal water control structure consisting of a 48" CMP riser w/ 36" CMP outlet pipe. An 80' emergency spillway will also be constructed. Engineering plans and specifications are included with this application.

I, Richard Cone, the applicant, certify that I have read this application, have examined the attached map, and that the matters stated are true.

**SOUTH DAKOTA**  
**WATER PERMIT NO. 2713-2**

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Date of first receipt of application August 6, 2013.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 2713-2 to Richard Cone, 25530 313<sup>th</sup> Ave, Kennebec SD 57544 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. 2713-2 authorizes impoundment of 72 acre-feet of water from runoff by constructing a dam located in the NW 1/4 SE 1/4 Section 18 with water impounded in the SE 1/4 Section 18; all in T105N-R77W.
2. The water appropriated shall be used for fish and wildlife propagation, recreational use and livestock watering 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. 2713-2 is September 30, 2013.
5. The date from which applicant may claim right is August 6, 2013.
6. One-fifth of the construction is to be completed on or before March 30, 2016.
7. All construction is to be completed on or before September 30, 2018.
8. Water is to be put to beneficial use on or before September 30, 2022.
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. 2713-2 authorizes an impoundment with a storage capacity of 72 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: 

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

**OCT 09 2013**

date



## Supplemental Information

(type or print)

### 1. Well Information

(check one or both as applicable) ☐ Drilling new well(s) ☐ Using existing well(s)

a) If new wells, how many \_\_\_\_ Have test holes been drilled ☐ Yes ☐ No Drilled by \_\_\_\_  
(if yes, please provide copies of logs)

b) If existing wells, how many \_\_\_\_ Provide copy of log(s), if available. Drilled by \_\_\_\_

c) Well Depth \_\_\_\_ Depth to Top of Water Bearing Material \_\_\_\_ Depth to Water from Surface \_\_\_\_

d) Distance to nearest existing domestic well:

On applicant's 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  
(605)224-7092 Dave Konechne

b) Freeboard \_\_\_\_ 5.5'

c) Crest Width \_\_\_\_ 12.0'

Crest Length \_\_\_\_ 1,055'

d) Height \_\_\_\_ 14.2'

e) Primary Outlet Capacity \_\_\_\_ 101.6 cfs

If pipe, diameter 48" riser & 36" outlet

f) Secondary Spillway Capacity \_\_\_\_ 1,067 cfs

Spillway Width \_\_\_\_ 80'

g) X & Y Slope (e.g. 3 to 1 is a typical slope)

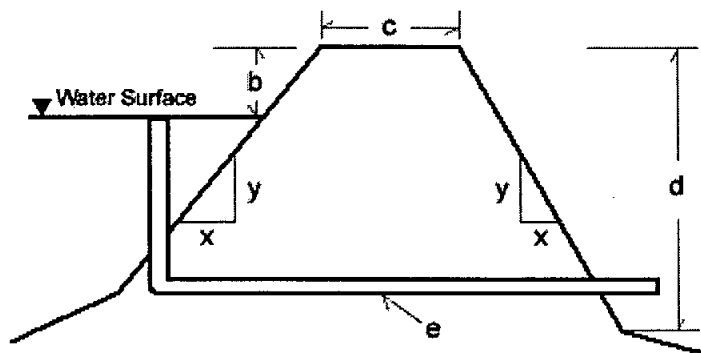
Upstream \_\_\_\_ 3:1

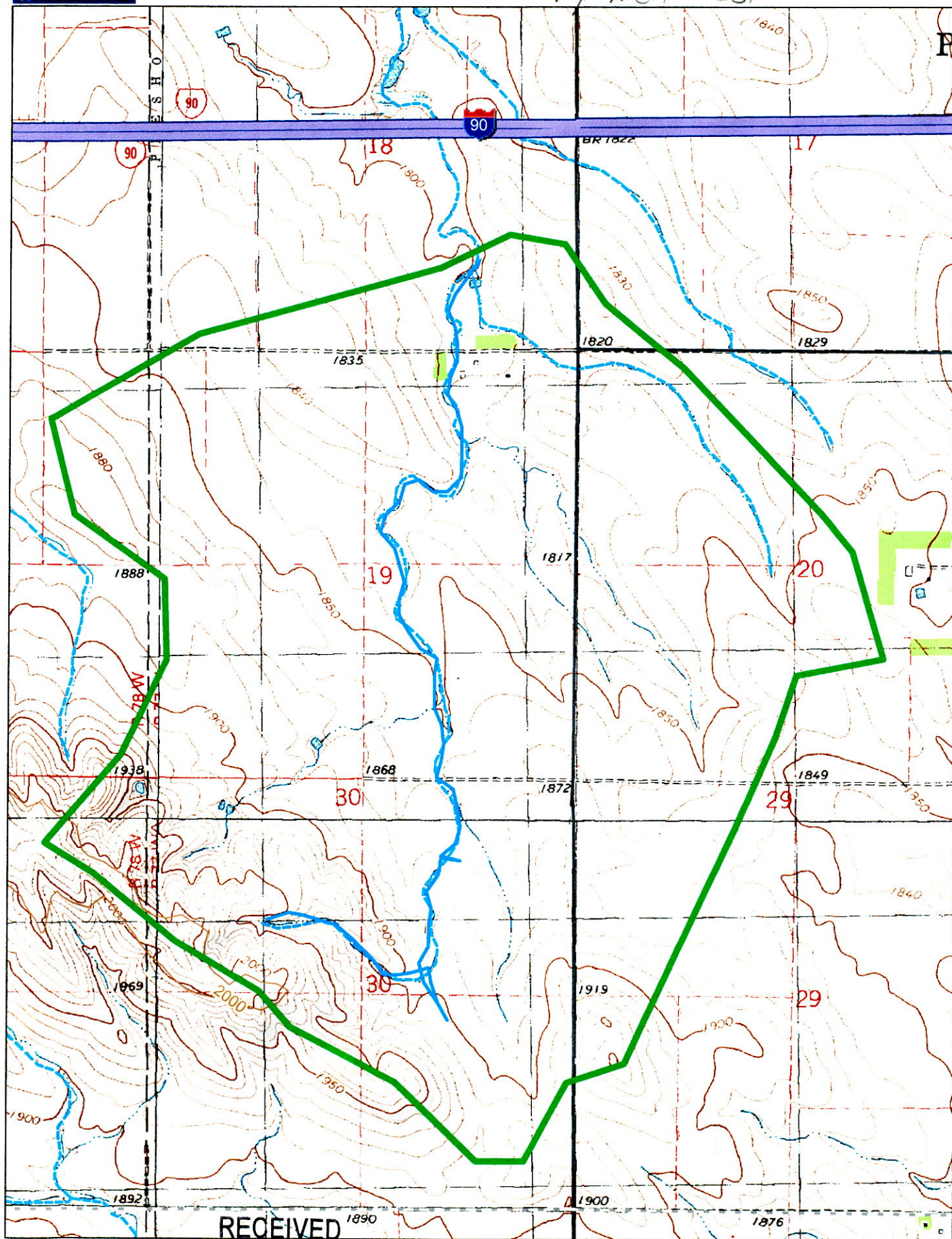
Downstream \_\_\_\_ 3:1

h) Surface Area of Impoundment \_\_\_\_ 19

i) Storage \_\_\_\_ 72.0 Acre Feet

j) Drainage Area Above Dam \_\_\_\_ 1,670.0 Acres





Data use subject to license.

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[www.delorme.com](http://www.delorme.com)

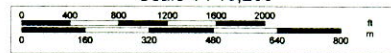
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Scale 1 : 19,200


$$1'' = 1,600.0 \text{ ft}$$

### Data Zoom 12-6

Name: Richard Cone, Michael Hochgesang, Galen Mears  
and Marcella Mears DBA Ag Connection  
Project Type: Wetland Created

County: Lyman



-  Project Boundary
-  Wetland Created
-  Embankment
-  Spillway
-  Borrow Site

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8 inches = 1 mile



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

Date 8/6, 20 13

RECEIVED OF Richard A Cone 425 E Missouri Ave # 3 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 | 500   | 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. _____            | 200   | 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 | 700 00 |

No. **06397**

By Jeane Goodman  
Chief Engineer

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1\*\*\*\*\*

SITES XEQ 06/12/2013 WATER RESOURCE SITE ANALYSIS COMPUTER PROGRAM  
VER 2005.1.05 (USER MANUAL - DATED DECEMBER 2005)  
TIME 12:03:21

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

|           |            |                     |          |       |
|-----------|------------|---------------------|----------|-------|
| SITES     | 01/01/2005 | Dick Cone 18-105-77 | 2.609375 | H5    |
| SAVMOV    | 0 101      |                     |          |       |
| SAVMOV    | 101 1      |                     |          | 1     |
| STRUCTURE |            |                     |          |       |
|           | 88         | 0                   |          |       |
|           | 95         | 13.6                |          |       |
|           | 97         | 20.5                |          |       |
|           | 100        | 35.5                |          |       |
|           | 102        | 45.1                |          |       |
| ENDTABLE  |            |                     |          |       |
| WSDATA    | 5A1 AC 84  | 1670 14572          | 2.6      |       |
| PDIRECT   |            |                     | 4.10     |       |
| POOLDATA  | ELEV 96.5  | 96.5                | 88       | 88 SC |
| PSINLET   | 1          | 12.56               |          |       |
| PSDATA    | 1 78       | 36                  | .025     | 89    |
| ASDATA    | 41 120 60  | 2                   | .06      | 2     |
| ASINSURF  | 41         | .035                |          |       |
| ASINLET   | 41 0.0     | 0.0 80              | 0.0      | 3     |
|           | 140        | 6                   |          |       |
| ENDTABLE  |            |                     |          |       |
| ASEXSURF  | 41         | .035                |          |       |
|           |            | .65                 | 0        |       |
|           |            | 3                   |          |       |
|           |            | 2                   | 0        |       |
|           |            | .02                 |          |       |
| ENDTABLE  |            |                     |          |       |
| ASEXIT    | 41 N       |                     | 60       |       |
| BTMWIDTH  | FEET 80    |                     |          |       |
| GRAPHICS  | I          |                     |          |       |
| GO,DESIGN | HL TYPE2   | 24                  | TYPE2378 | 24    |
| SAVMOV    | 2 101 1    |                     |          |       |
| ENDJOB    |            |                     |          |       |

\*\*\*\*\*

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

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

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

1SITES -----  
XEQ 06/12/2013 Dick Cone 18-105-77 WSID=  
VER 2005.1.05 SUBW= A  
TIME 12:03:21 SITE = S 1 PASS= 1 PART= 1

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

STORM DISTRIBUTION-PSH 24 HOUR TYPE II RAINFALL DISTRIBUTION

STORM DISTRIBUTION AUX. -24 HOUR TYPE II RAINFALL DISTRIBUTION

|                      |             |             |              |             |
|----------------------|-------------|-------------|--------------|-------------|
| PRECIP. - P-PS,1-DAY | P-PS,10-DAY | P-SD        | P-FB         |             |
| 2.20                 | 0.00        | 0.00        | 4.10         |             |
| WSDATA - CN          | DA-SM       | TC/L        | -/H          | QRF         |
| 84.00                | 2.61        | 14572.00    | 2.60         | 0.00        |
| SITEDATA- PERM POOL  | CREST PS    | FP SED      | VALLEY FL    | 378?        |
| 96.50                | 96.50       | 0.00        | 88.00        | 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                 | 78.00       | 36.00       | 0.00         |             |
| PS N                 | KE          | WEIR L      | TW EL        |             |
| 0.025                | 1.00        | 12.56       | 89.00        |             |
| 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        | 120.00      | 60           |             |
| AUX.DATA - INLET N   | SIDE SLOPE  | EXIT N      | EXIT SLOPE   | ACTUAL AUX? |
| 0.035                | 2.00        | 0.035       | 0.060        | NO          |
| BTM WIDTH - BW1      | BW2         | BW3         | BW4          | BW5         |
| ft 80.00             | 0.00        | 0.00        | 0.00         | 0.00        |

AUXILIARY SPILLWAY RATING DEVELOPED USING WSPVRT.

1SITES -----  
 XEQ 06/12/2013 Dick Cone 18-105-77 WSID=  
 VER 2005.1.05 SUBW= A  
 TIME 12:03:21 SITE = S 1 PASS= 1 PART= 2

MESSAGE ---- Climatic Index changed from 0.0 to 1.0 for this run.

|            |          |           |          |         |
|------------|----------|-----------|----------|---------|
| PERM POOL  | 96.50 FT | 71.9 ACFT | 18.77 AC | 0.0 CFS |
| CREST PS   | 96.50 FT | 71.9 ACFT | 18.77 AC | 0.0 CFS |
| SED ACCUM  | 96.50 FT | 71.9 ACFT | 18.77 AC | 0.0 CFS |
| START ELEV | 96.50 FT | 71.9 ACFT | 18.77 AC | 0.0 CFS |

NRCS-PSH      D= 24.00 HR      P= 2.20 IN      Q= 0.89 IN      DA= 2.61 SM  
TC= 2.46 HR      CN= 84.00      VOL= 123.8 ACFT

PEAK = 402.0 CFS, AT 13.5 HRS.

ROUTED RESULT - HYD TYPE      EMAX      VOL-MAX      AMAX      QMAX  
NRCS-PSH      99.08 FT      135.1 ACFT      30.89 AC      89.0 CFS

PS STORAGE 63.2 ACFT, BETWEEN AUX. CREST AND SED. ACCUM ELEVATIONS.

DRAWDOWN (DDT) TEST 96.50 FT      71.9 ACFT      0.00 CFS  
CONTROL IS 0.000 DETENTION STORAGE

DRAWDOWN TIME = 2.45 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.<br>FEET | Q-TOTAL<br>CFS | Q-PS<br>CFS | Q-AUX.<br>CFS | VOLUME<br>AC-FT                    | AREA<br>ACRE |
|----|---------------|----------------|-------------|---------------|------------------------------------|--------------|
| 1  | 96.50         | 0.00           | 0.00        | 0.00          | 71.88                              | 18.77        |
| 2  | 96.92         | 10.62          | 10.62       | 0.00          | 80.08                              | 20.23        |
| 3  | 97.34         | 30.03          | 30.03       | 0.00          | 88.98                              | 22.21        |
| 4  | 97.76         | 55.17          | 55.17       | 0.00          | 98.76                              | 24.31        |
|    |               |                |             |               | FULL CONDUIT FLOW, ELEV = 98.18 FT |              |
| 5  | 98.18         | 84.94          | 84.94       | 0.00          | 109.42                             | 26.41        |
| 6  | 98.66         | 87.18          | 87.18       | 0.00          | 122.60                             | 28.80        |
| 7  | 99.14         | 89.31          | 89.31       | 0.00          | 136.91                             | 31.18        |
| 8  | 99.61         | 91.39          | 91.39       | 0.00          | 152.36                             | 33.57        |
| 9  | 100.09        | 93.42          | 93.42       | 0.00          | 168.95                             | 35.94        |
| 10 | 100.57        | 95.41          | 95.41       | 0.00          | 186.65                             | 38.23        |
| 11 | 101.05        | 97.36          | 97.36       | 0.00          | 205.44                             | 40.52        |
| 12 | 101.52        | 99.27          | 99.27       | 0.00          | 225.32                             | 42.81        |
| 13 | 102.00        | 101.14         | 101.14      | 0.00          | 246.30                             | 45.10        |

1SITES -----  
XEQ 06/12/2013      Dick Cone 18-105-77      WSID=  
VER 2005.1.05      SUBW= A  
TIME 12:03:21      SITE = S 1      PASS= 1      PART= 3

AUX. CREST 99.08 FT      135.1 ACFT      30.89 AC      89.0 CFS

PS STORAGE 63.2 ACFT, BETWEEN AUX. CREST AND SED. ACCUM ELEVATIONS.

START ELEV 96.50 FT      71.9 ACFT      18.78 AC      0.0 CFS

EFFECTIVE HEIGHT(H)= 11.1 FEET, PRODUCT= 1496. (H \* STORAGE AT CREST AUX.).

INPUT DESIGN CLASS = A1 = LT 3000. PRODUCT.

NRCS-FBH      D= 24.00 HR      P= 4.10 IN      Q= 2.46 IN      DA= 2.61 SM  
                  TC= 2.46 HR      CN= 84.00      VOL= 342.3 ACFT

PEAK = 1161.1 CFS, AT 13.5 HRS.

\*\*\*\*\* WARNING - UPSTREAM END OF CREST 40. IS UPSTREAM OF THE  
                                          FIRST GROUND POINT 60. STATION.

\*\*\*\*\*

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

RATING TABLE NUMBER 2

|                                    | ELEV.<br>FEET | Q-TOTAL<br>CFS | Q-PS<br>CFS | Q-AUX.<br>CFS | VOLUME<br>AC-FT | AREA<br>ACRE |
|------------------------------------|---------------|----------------|-------------|---------------|-----------------|--------------|
| 1                                  | 96.50         | 0.00           | 0.00        | 0.00          | 71.88           | 18.77        |
| 2                                  | 96.92         | 10.62          | 10.62       | 0.00          | 80.08           | 20.23        |
| 3                                  | 97.34         | 30.03          | 30.03       | 0.00          | 88.98           | 22.21        |
| 4                                  | 97.76         | 55.17          | 55.17       | 0.00          | 98.76           | 24.31        |
| FULL CONDUIT FLOW, ELEV = 98.18 FT |               |                |             |               |                 |              |
| 5                                  | 98.18         | 84.94          | 84.94       | 0.00          | 109.42          | 26.41        |
| 6                                  | 98.29         | 85.52          | 85.52       | 0.00          | 112.41          | 26.97        |
| 7                                  | 98.41         | 86.03          | 86.03       | 0.00          | 115.46          | 27.53        |
| 8                                  | 98.52         | 86.54          | 86.54       | 0.00          | 118.57          | 28.09        |
| 9                                  | 98.63         | 87.05          | 87.05       | 0.00          | 121.75          | 28.65        |
| 10                                 | 98.74         | 87.55          | 87.55       | 0.00          | 124.99          | 29.21        |
| 11                                 | 98.85         | 88.06          | 88.06       | 0.00          | 128.29          | 29.77        |
| 12                                 | 98.97         | 88.55          | 88.55       | 0.00          | 131.65          | 30.33        |
| 13                                 | 99.08         | 89.05          | 89.05       | 0.00          | 135.08          | 30.89        |
| 14                                 | 99.22         | 96.66          | 89.69       | 6.96          | 139.65          | 31.62        |
| 15                                 | 99.37         | 104.26         | 90.33       | 13.93         | 144.32          | 32.35        |
| 16                                 | 99.63         | 136.52         | 91.47       | 45.05         | 153.00          | 33.66        |
| 17                                 | 99.95         | 203.12         | 92.84       | 110.28        | 164.08          | 35.27        |
| 18                                 | 100.54        | 391.19         | 95.29       | 295.91        | 185.52          | 38.09        |
| 19                                 | 101.27        | 708.13         | 98.26       | 609.87        | 214.63          | 41.59        |
| 20                                 | 102.00        | 1107.28        | 101.14      | 1006.14       | 246.30          | 45.10        |

\*\*\*\*\*

SUMMARY OF AUXILIARY SPILLWAY SURFACE CONDITIONS USED IN COMPUTATIONS BY REACH

| REACH | FROM<br>STA<br>(ft) | TO<br>STA<br>(ft) | SLOPE<br>(%) | RETARDANCE<br>CURVE<br>INDEX@ | VEGETAL<br>COVER<br>FACTOR | MAINT.<br>CODE | ROOTING<br>DEPTH<br>(ft) | REACH<br>LOCATION<br>* |
|-------|---------------------|-------------------|--------------|-------------------------------|----------------------------|----------------|--------------------------|------------------------|
| 1     | 40.                 | 120.              | 0.0          | 0.035                         | **                         | **             | **                       | CREST                  |
| 2     | 120.                | 180.              | 6.0          | 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 99.08 FT.

DRAWDOWN (DDT) TEST 96.50 FT 71.9 ACFT 0.00 CFS  
CONTROL IS 0.000 DETENTION STORAGE

DRAWDOWN TIME = 2.30 DAYS, TO 0.0 CFS (LIMIT = 10.00 DAYS)

| ROUTED RESULTS | BTM WIDTH<br>FT | MAX ELEV<br>FT | VOL-MAX<br>ACFT | AREA-MAX<br>AC | AUX.-HP<br>FT | VOL-AUX.<br>ACFT |
|----------------|-----------------|----------------|-----------------|----------------|---------------|------------------|
| NRCS-FBH       | 80.0            | 101.11         | 208.1           | 40.8           | 2.03          | 73.1             |

|             |      |        |        |
|-------------|------|--------|--------|
| PEAK - CFS  | Q-PS | Q-AUX. | Q-TOT. |
| DISCHARGE = | 97.6 | 539.8  | 637.5  |

|                           | CRITICAL<br>DEPTH<br>FT | CRITICAL<br>VELOCITY<br>FT/SEC | CRITICAL<br>SLOPE-Sc<br>FT/FT | 25% OF Q<br>Sc<br>FT/FT |
|---------------------------|-------------------------|--------------------------------|-------------------------------|-------------------------|
| AUXILIARY<br>SPILLWAY --- | 1.11                    | 5.90                           | 0.018                         | 0.024                   |

\*\*\*\*\*

EROSIONALLY EFFECTIVE STRESS FOR STABILITY ANALYSIS OF AUX. EXIT CHANNEL  
(Refer to Ag. Handbook 667, Chapt. 3, for allowable stresses.)

Aux. Spillway Discharge = 540. cfs; Bottom Width = 80. ft

| REACH<br>NO. | FROM<br>STA | TO<br>STA | SLOPE<br>% | MANNING'S<br>n | VELOCITY<br>ft/s | TOTAL<br>STRESS<br>lb/ft^2 | EFFECTIVE<br>STRESS<br>lb/ft^2 |
|--------------|-------------|-----------|------------|----------------|------------------|----------------------------|--------------------------------|
| 2            | 120.        | 180.      | 6.00       | 0.035          | 8.60             | 2.88                       | 1.753                          |

\*\*\*\*\*

AUXILIARY SPILLWAY DURATION FLOW = 13.3 HOURS  
ATTACK, OE/B = 2.1 ACFT/FT

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

EXIT CHANNEL FLOW SUPERCRITICAL: MAX VELOCITY= 8.6 FT/SEC  
EXIT SLOPE = 0.060 FT/FT  
FLOW DEPTH = 0.8 FT

>>>> NHCP378 RUN - MINIMUM DEPTH, DESIGN FLOW TO TOP OF DAM; 1.00 FT REQUIRED  
FOR THIS PASS. NEW TOP OF DAM ELEVATION = 102.11.

| ROUTED RESULTS | BTM WIDTH<br>FT | MAX ELEV<br>FT | VOL-MAX<br>ACFT | AREA-MAX<br>AC | AUX.HP<br>FT | VOL-AUX.<br>ACFT |
|----------------|-----------------|----------------|-----------------|----------------|--------------|------------------|
| MINIMUM AUX.   | 80.0            | 102.11         | 251.2           | 45.6           | 3.03         | 116.1            |

|              |       |        |        |
|--------------|-------|--------|--------|
| PEAK - CFS   | Q-PS  | Q-AUX. | Q-TOT. |
| DISCHARGES = | 101.6 | 1066.9 | 1168.4 |

|                           | CRITICAL<br>DEPTH<br>FT | CRITICAL<br>VELOCITY<br>FT/SEC | CRITICAL<br>SLOPE-Sc<br>FT/FT | 25% OF Q<br>Sc<br>FT/FT |
|---------------------------|-------------------------|--------------------------------|-------------------------------|-------------------------|
| AUXILIARY<br>SPILLWAY --- | 1.74                    | 7.34                           | 0.015                         | 0.020                   |

\*\*\*\*\* WARNING - SOLUTION EXCEEDED MAX. INPUT ELEVATION ( 102.00) BY 0.11 FT.

-----  
Inflow Hyd 1 PSH-Peak = 89.04 CFS at 16.93 hrs., Location Point  
Inflow Hyd 1 FBH-Peak = 637.46 CFS at 14.75 hrs., Location Point  
HYDOUT 1

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

Dick Cone 18-105-77

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<br>ID | SUBWS<br>ID | SUBWS DA<br>(SQ MI) | CURVE<br>NO. | TC<br>(HRS) | TOTAL DA<br>(SQ MI) | TYPE<br>DESIGN | STRUC<br>CLASS | <<< |
|-----|------------|-------------|---------------------|--------------|-------------|---------------------|----------------|----------------|-----|
|     | S 1        | A           | 2.61                | 84.          | 2.46        | 2.61                | 378CR          | A1             |     |

| PASS<br>NO. | DIA./<br>WIDTH<br>(IN/FT) | AUX.CREST<br>ELEV<br>(FT) | BTM.<br>WIDTH<br>(FT) | MAX.<br>HP<br>(FT) | MAX.<br>ELEV<br>(FT) | EMB.<br>VOL.<br>(CY) | INTEGR.*<br>DIST.<br>(FT) | EXIT*<br>VEL.<br>(FT/SEC) | TYPE<br>HYD |
|-------------|---------------------------|---------------------------|-----------------------|--------------------|----------------------|----------------------|---------------------------|---------------------------|-------------|
| 1           | 36.0                      | 99.1                      | 80.0                  | 3.0                | 102.1                | 0.                   | 0.                        | 8.6                       | 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 2005.1.05 ,01/01/2005  
FILES

INPUT = C:\cone\48-36cmp.D2C  
OUTPUT = C:\cone\48-36cmp.OUT  
DATED 06/12/2013 12:03:21

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

LOCATION NOTICE  
FOR DAM/DUGOUT

COPY

76076

Location Notice No. (Office Use)

I, Gloria Klotz

Name

Bill Ratzlaff

, of

12198-168<sup>th</sup> W Lakeville 55044 MN-55044 9755-24<sup>th</sup> Lakeville MN 55044  
Address & Zip Code

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

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

(1) Date of:

(a) This notice Dec 15-02

(b) Proposed construction Spring 03

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

SE 1/4 SE 1/4 7-105-77 Lyman Co

(describe to the nearest 40 acre subdivision, e.g. NE 1/4 SW 1/4 section 10-T98N-R65W)

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

1/8 mile NW of SE Corner 7-105-77 Lyman Co

(describe distance N.S.E.W. in feet from the section corner)

(4) County where dam/dugout is located Lyman

(5) Name of landowner SAME

(6) \*\*Acre feet of water claimed annually 5

\* A location notice is required for a dugout only if the dugout captures surface runoff.

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

-- Continue on other side --

RECEIVED

APR 18 2003

WATER RIGHTS  
PROGRAM

(7) Complete the following information for the proposed dam/dugout:

76076

\*Items to be completed for a dugout

\*a) Dam/Dugout designed by R.C. England & Sons Const.

b) Freeboard 3'

c) Crest Width 12'

Crest Length 137'

d) Height 11'

\*Depth, if Dugout \_\_\_\_\_

e) Outlet Dimensions 30" ~~30"~~ ~~30"~~

Pipe diameter 30"

Spillway width 150'

f) X & Y Slope: \_\_\_\_\_

Upstream 3:1

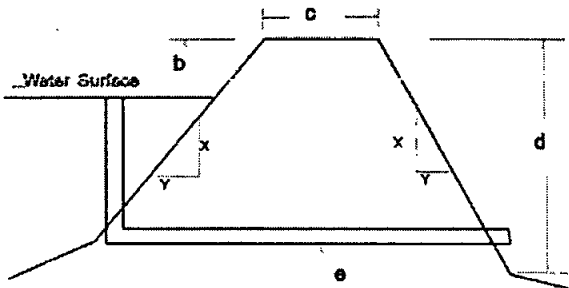
Downstream 3:1

\*g) Water surface area 3 Acre

\*h) Storage at spillway crest or overflow elevation  
(acre feet) 6

i) Maximum storage to top of dam crest  
(acre feet) 10'

\*j) Drainage area above dam/dugout  
(acres) 2660



Enclosed is ten dollars (\$10.00). The Water Management Board is requested to file this copy of the Location Notice in their official records. The original Location Notice has been filed (do not record) with the Register of Deeds of \_\_\_\_\_ County in accordance with SDCL 46-4-3.

Bull Lathoff Glen R. Lathoff (or)  
Owner

Locator

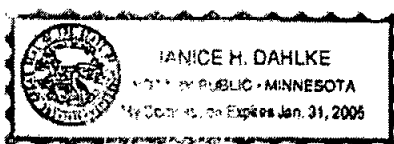
STATE OF SOUTH DAKOTA )  
COUNTY OF Scott ) SS

I, Bull Lathoff Glen R. Lathoff the applicant, certify that I have read this Location Notice and that the matters stated in this notice are true and that I intend, and am able to start construction within sixty days after the filing of this notice.

Signed Bull Lathoff Glen R. Lathoff

Subscribed and sworn to before me this 11th day of April, 2003

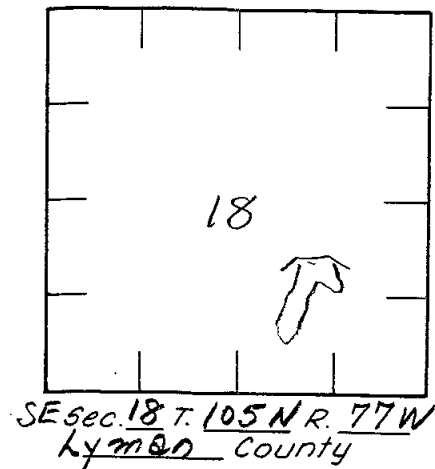
(seal)



Janice H. Dahlke  
Notary

## STRUCTURE DATA

| DRAINAGE<br>AREA<br>ACRES | ANNUAL<br>YIELD<br>80%<br>AC. FT. | PEAK<br>RUNOFF<br>Ac- <del>FT</del><br>25-YR. | EMERG.<br>SPLWY.<br>CAPACITY<br>C. F. S. | WATER<br>DEPTH<br>FEET | SURFACE<br>AREA<br>ACRES | SEDIMENT<br>STORAGE<br>AC. FT. | TOTAL<br>STORAGE<br>AC. FT. |
|---------------------------|-----------------------------------|-----------------------------------------------|------------------------------------------|------------------------|--------------------------|--------------------------------|-----------------------------|
| 1670                      | 61                                | 342                                           | 1067                                     | 8.5                    | 19                       | —                              | 72                          |

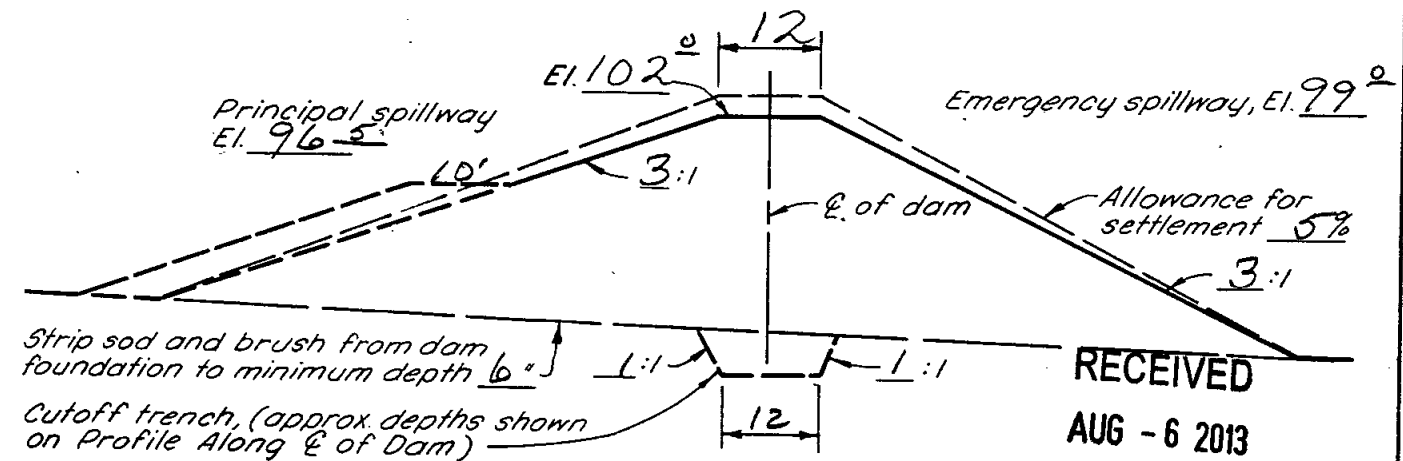


*LOCATION*

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

Emergency spillway 80 ft wide

## TABLE OF QUANTITIES

[illegible]

TYPICAL CROSS SECTION OF DAM

S.D. CONSTRUCTION AND MATERIAL SPECIFICATIONS:

SD-2 Cleaning  
SD-7s Earth Fill  
SD-9 Drain Fill  
SD-12B Concrete  
SD-15 CMP  
SD-16 Timber Fabrication  
SD-19 PVC drain

*EARTH DAM*

OPERATOR: Dick Cone

CONSERVATION DISTRICT: \_\_\_\_\_

Class "A" Hazard

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

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,

Locate principal spillway pipe 25' directed by Technician  
at C of dam sta. 5+\_\_\_\_, at  
an angle of \_\_\_\_ to the C of  
the dam. Trash rack and ba  
not shown. See jo  
no. 614

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

Top of dam after  
settlement El. 102<sup>2</sup>

Note: Allowance for settlement 5%

Emergency spillway El. 99<sup>o</sup>

Principal spillway El. 96<sup>5</sup>

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

3: 1 slope normal  
to  $\odot$  of dam —

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

72°

### Antiseep collars

✓ sand seep collar  
J.P. 3.8

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

2.8 % gr.

78' of 36" dia. pipe

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.

All CMP To be vinyl clad

Spiral

Corrugations may be

$$5x/ \quad 0 \sim 3x/$$

## TABLE OF QUANTITIES

[illegible]

APPLICABLE STANDARD S.C.S. SPECIFICATIONS

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---

---

The diagram illustrates a pipe outlet detail without a support. It shows a horizontal pipe section with a prefabricated elbow attached. The elbow is labeled "Prefabricated elbow" and has a degree symbol (°) next to it. The pipe is labeled "El." (Elevation). The connection point is labeled "gr." (grade). The diagram shows the pipe and elbow intersecting at a point, with the elbow extending upwards and to the right. The pipe continues horizontally to the left and right. The diagram is labeled "OUTLET DETAIL WITHOUT PIPE SUPPORT" at the bottom.

Prefabricated elbow

Pipe support, see job plan no. 4.0

% gr.

EI. 89'

EI. 88'

6'

OUTLET DETAIL WITH PIPE SUPPORT

Sec. \_\_\_\_\_, T. \_\_\_\_\_, R. \_\_\_\_\_  
 \_\_\_\_\_ County

**LOCATION**

CORRUGATED METAL PIPE  
DROP INLET PRINCIPAL SPILLWAY

OPERATOR Dick Cone

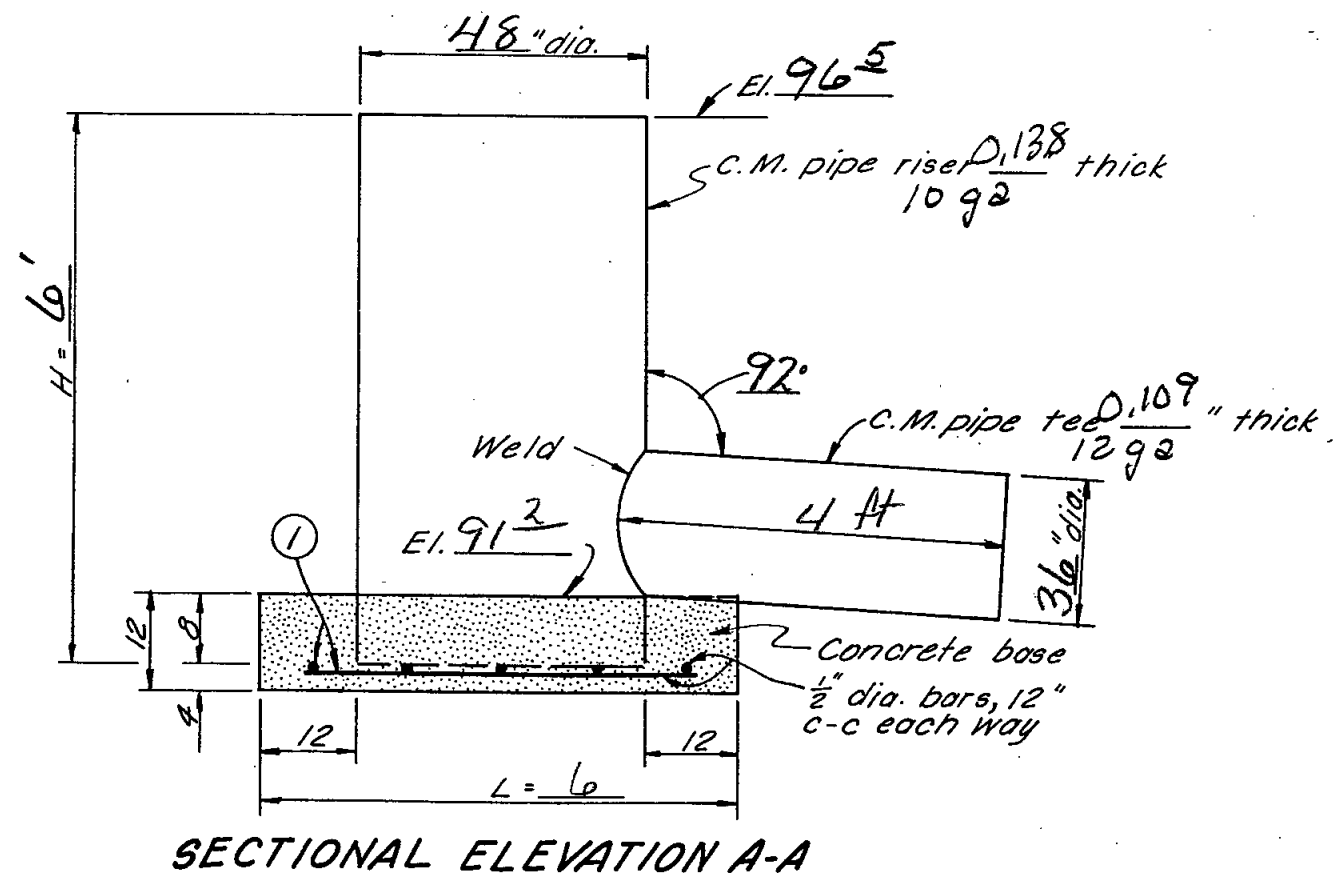
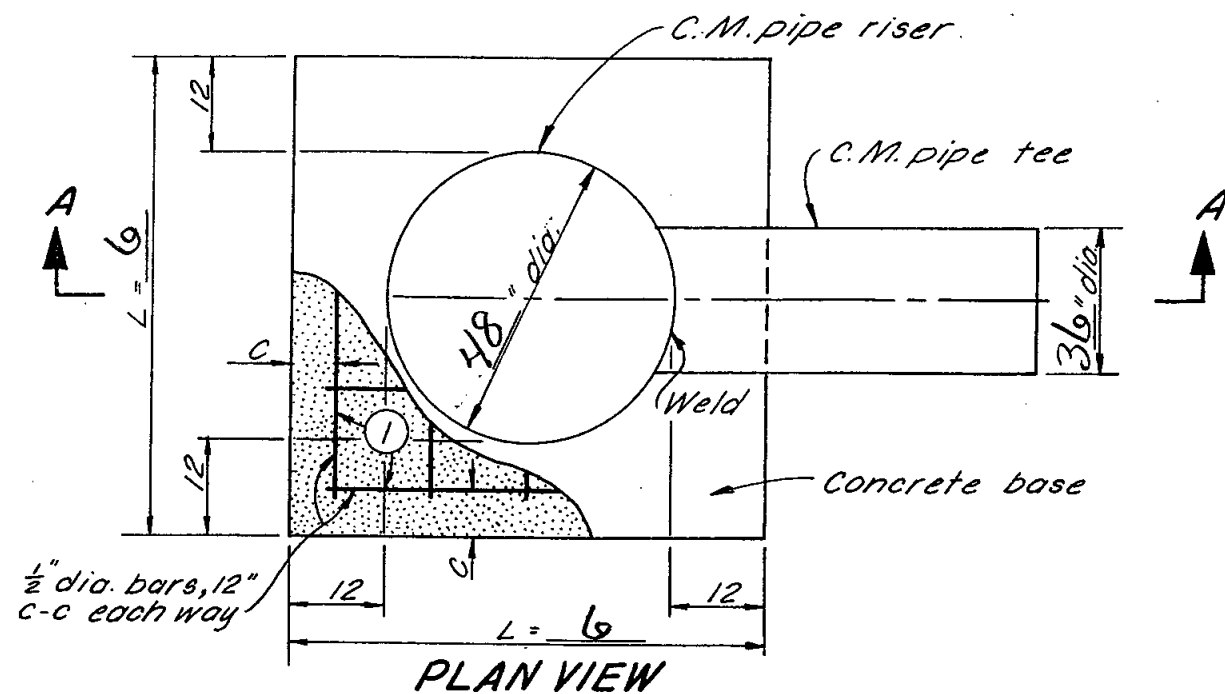
CONSERVATION DISTRICT

U. S. DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE

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

REFERENCE: GUIDE PLAN NO. 2.0

Rev. 8/80  
JOB PLAN NO. 2.0



### STEEL SCHEDULE

| RISER DIA. IN. | BAR SIZE | MARK | TYPE | NO. REQ'D. | LENGTH FT.-IN. | TOTAL LENGTH FT.-IN. | TOTAL WT. LB. | C IN. | L FT.-IN. |
|----------------|----------|------|------|------------|----------------|----------------------|---------------|-------|-----------|
| 48             | 4        | 1    | STR. | 12         | 5-6            | 66-0                 | 44            | 6     | 6         |

### TABLE OF QUANTITIES

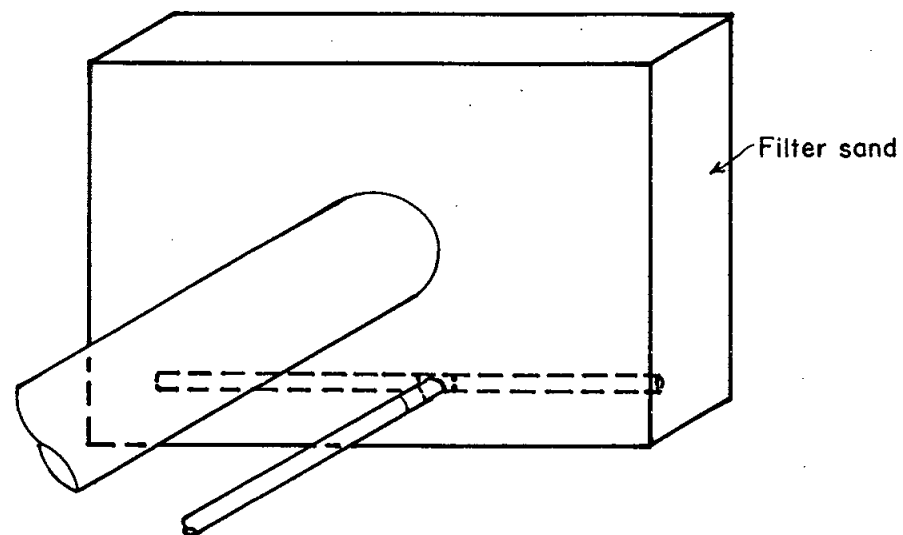
| ITEM              | UNIT    | QUANTITY |
|-------------------|---------|----------|
| CONCRETE          | CU. YD. | 1.3      |
| REINFORCING STEEL | LB.     | 44       |

NOTE:

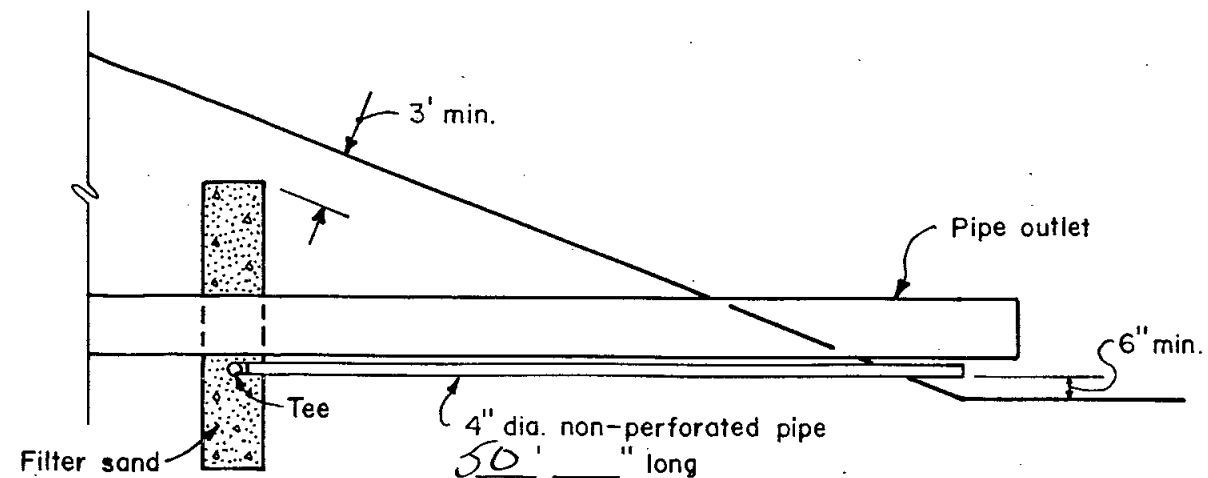
### C.M. PIPE RISER WITH FABRICATED TEE

OPERATOR: Dick Cone  
 CONSERVATION DISTRICT: \_\_\_\_\_

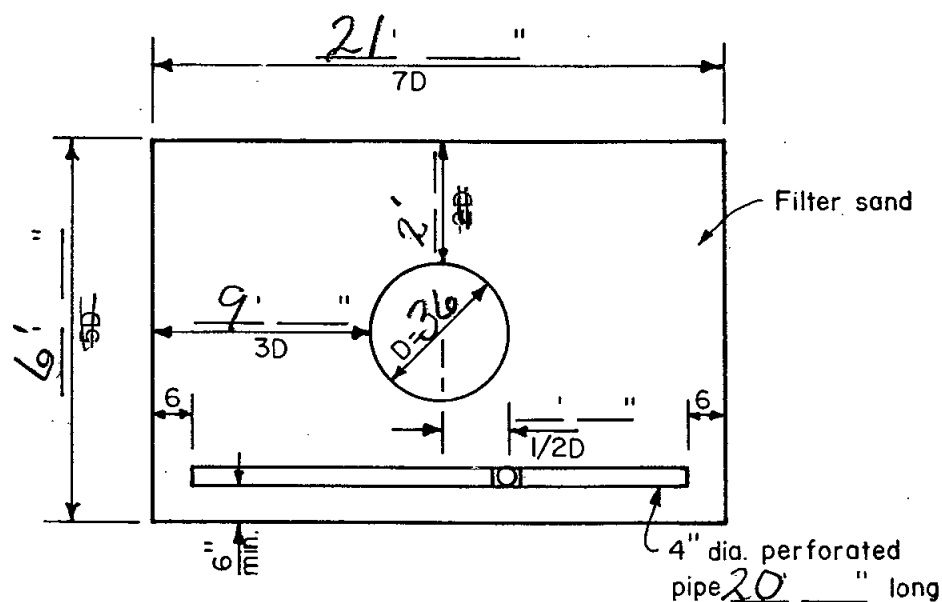
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| Designed..... | Date.....     | Approved by..... |
| Drawn.....    |               | Title.....       |
| Traced.....   |               | Title.....       |
| Checked.....  | Sheet No..... | Drawing No.....  |
|               | of.....       |  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



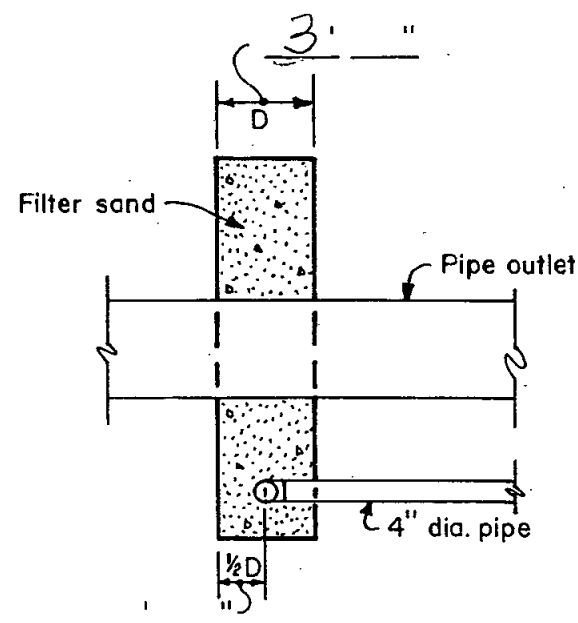
ISOMETRIC VIEW



OUTLET DETAIL



UPSTREAM VIEW



SIDE VIEW

**FILTER GRADATION**

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

see spec SD-9  
14 cy

Sec. \_\_\_\_\_, T. \_\_\_\_\_, R. \_\_\_\_\_

\_\_\_\_\_ County  
**LOCATION**

**SAND ANTISEEP COLLAR**

OPERATOR Dick Cane

CONSERVATION DISTRICT \_\_\_\_\_

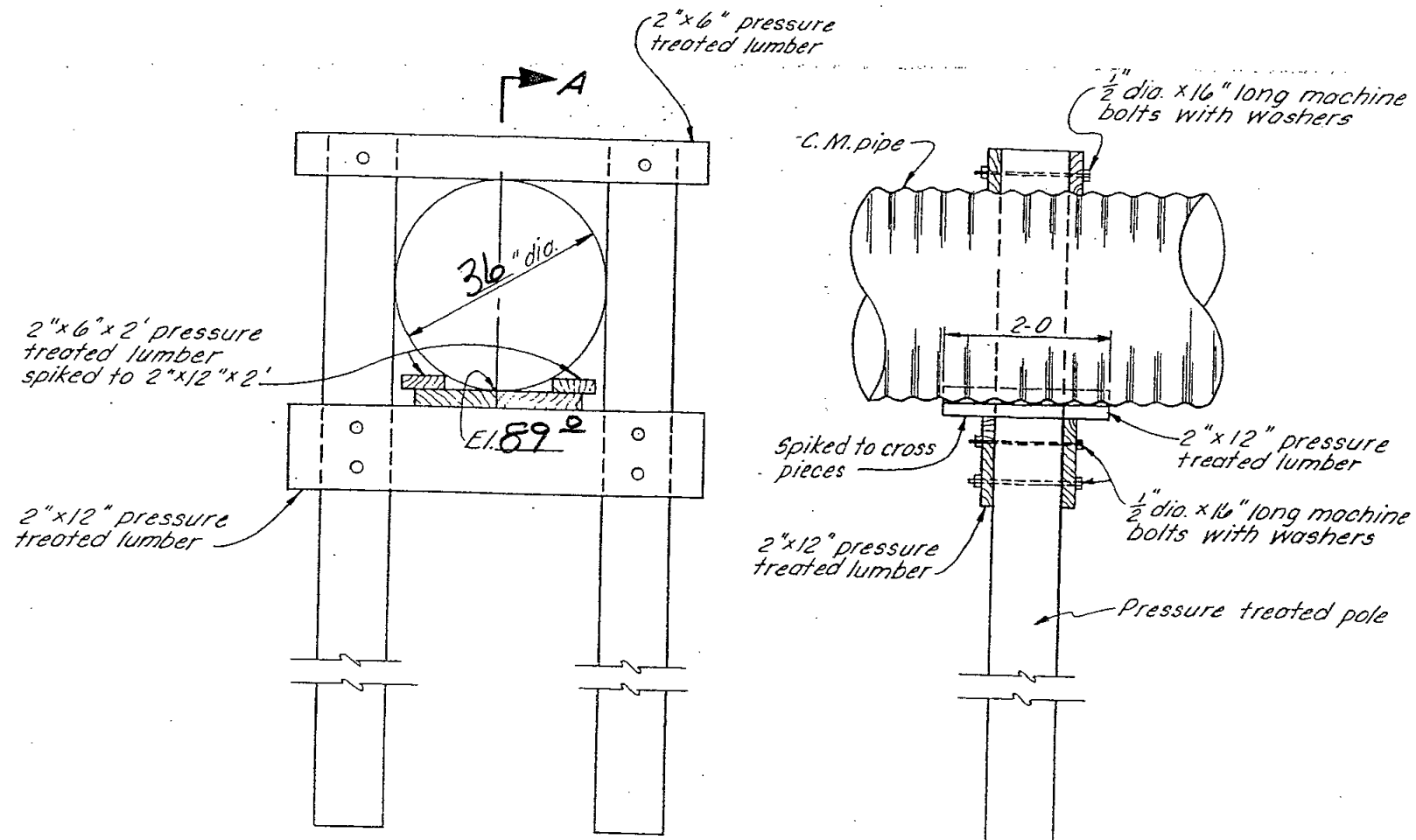
**U. S. DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE**

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

JOB PLAN NO. 3.8

**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  $\phi$  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).



ELEVATION
SECTIONAL ELEVATION A-A

TABLE OF QUANTITIES

| ITEM                              | LENGTH FOR 36" DIA. C.M. PIPE | UNIT | QUANTITY |
|-----------------------------------|-------------------------------|------|----------|
| PRESSURE TREATED POLE ____"DIA.   | 10-0                          | EACH | 2        |
| 2" X 12" PRESSURE TREATED LUMBER  | 5-0                           | EACH | 2        |
| 2" X 6" PRESSURE TREATED LUMBER   | 5-0                           | EACH | 2        |
| 2" X 12" PRESSURE TREATED LUMBER  | 2-0                           | EACH | 3        |
| 2" X 6" PRESSURE TREATED LUMBER   | 2-0                           | EACH | 2        |
| 1/2" DIA. MACHINE BOLTS WITH NUTS | 1-4                           | EACH | 10       |
| 1/2" DIA. WASHERS                 |                               | EACH | 20       |

NOTES:

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

TIMBER PIPE SUPPORT

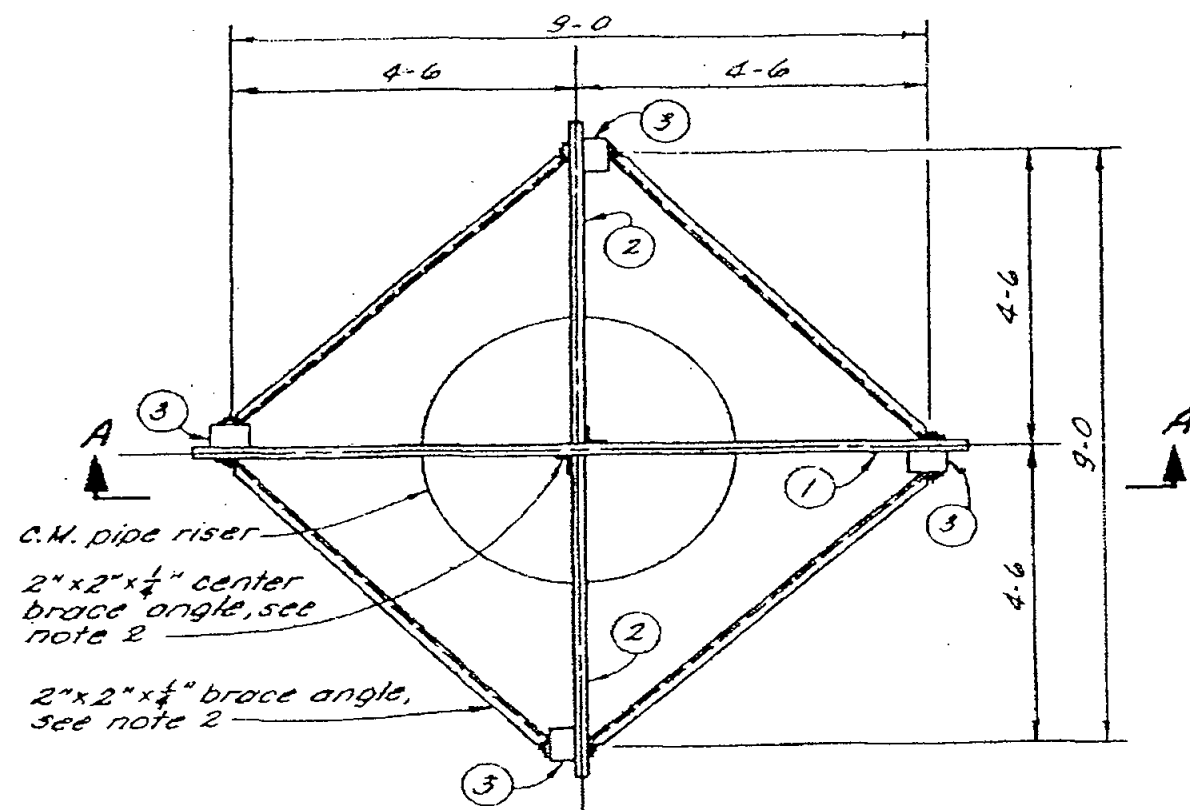
OPERATOR: Dick Cone

CONSERVATION DISTRICT: \_\_\_\_\_

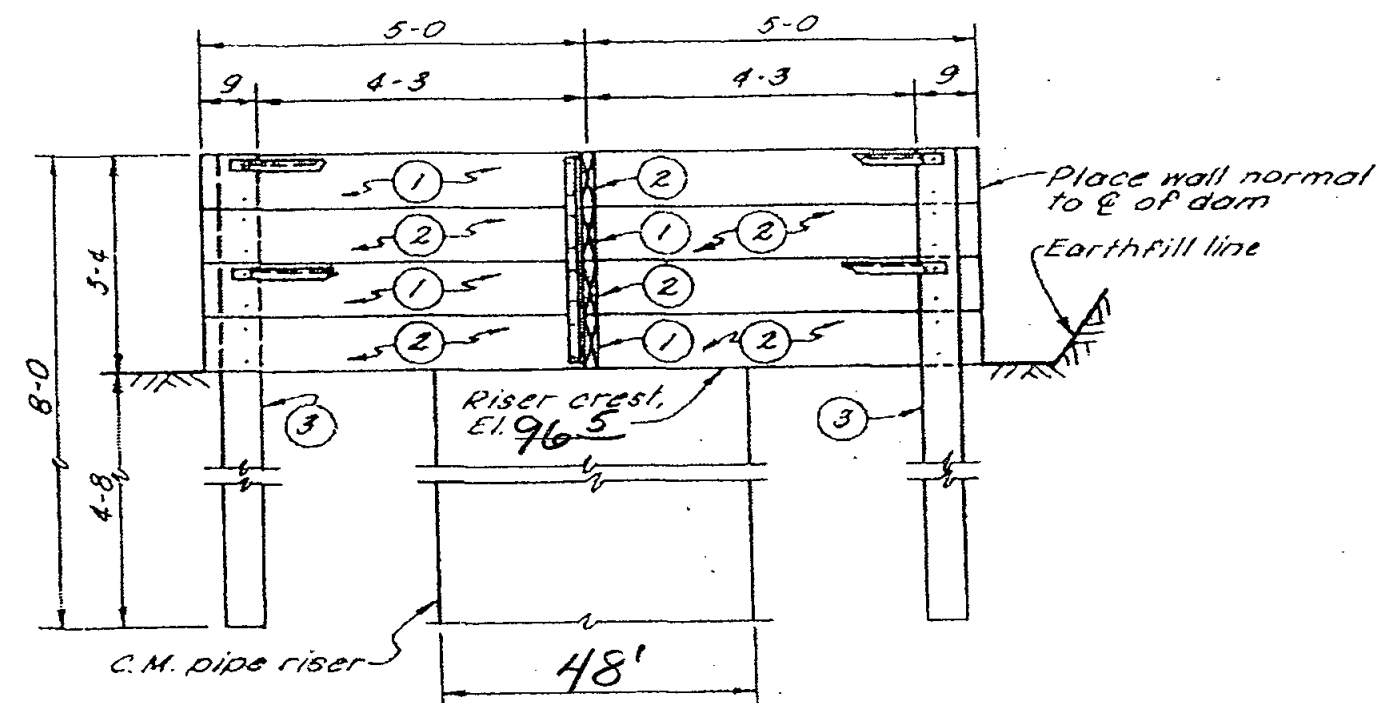
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| Designed _____ | Date _____  | Approved by _____ |
| Drawn _____    |             | Title _____       |
| Traced _____   |             | Title _____       |
| Checked _____  | Sheet _____ | Drawing No. _____ |
|                | No _____    |   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

REFERENCE: GUIDE PLAN NO. 4.0

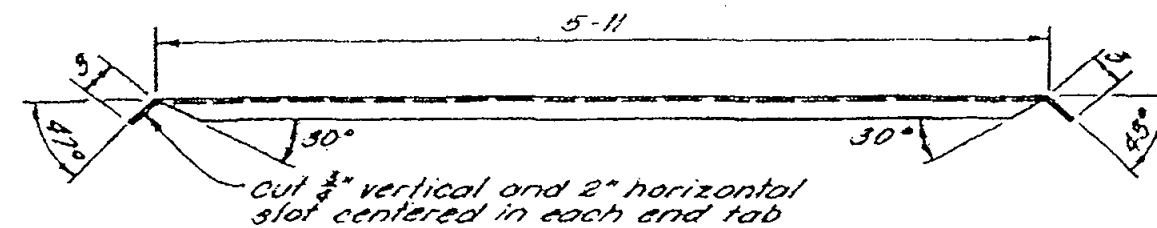
JOB PLAN NO. 4.0



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 $\frac{1}{4}$ " X 6'-5" STEEL ANGLE |      | 8          | 164 LB.    |
| 2" X 2" X $\frac{1}{4}$ " X 3'-2" STEEL ANGLE |      | 2          | 20 LB.     |
| 5/8" X 8" STEEL BOLTS, NUTS, 2 WASHERS        |      | 32         | 32 SETS    |
| 1/2" X 3" STEEL BOLTS, NUTS, 2 WASHERS        |      | 32         | 32 SETS    |

NOTES:

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

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

OPERATOR: Dick Cone

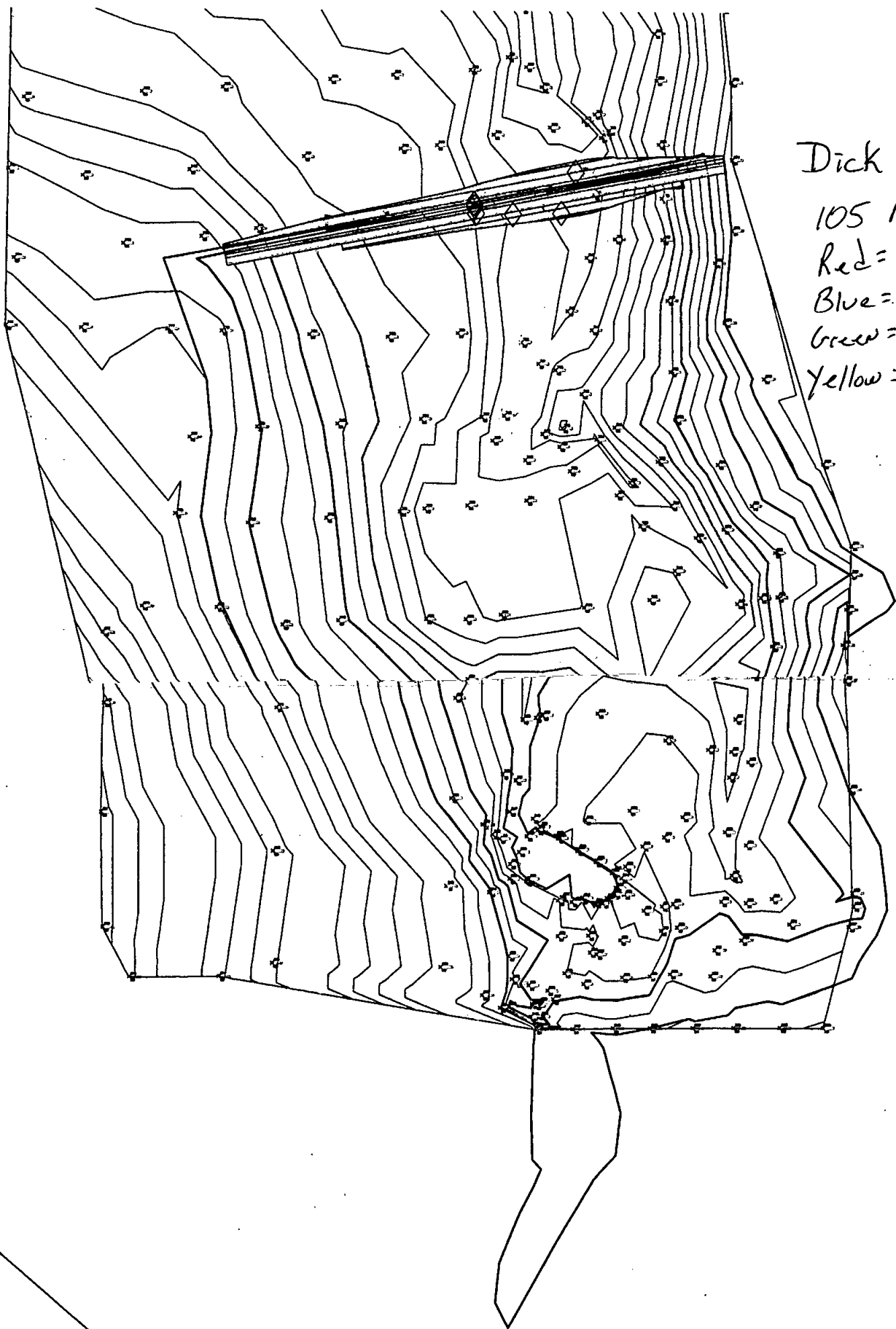
CONSERVATION DISTRICT: \_\_\_\_\_

U. S. DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE

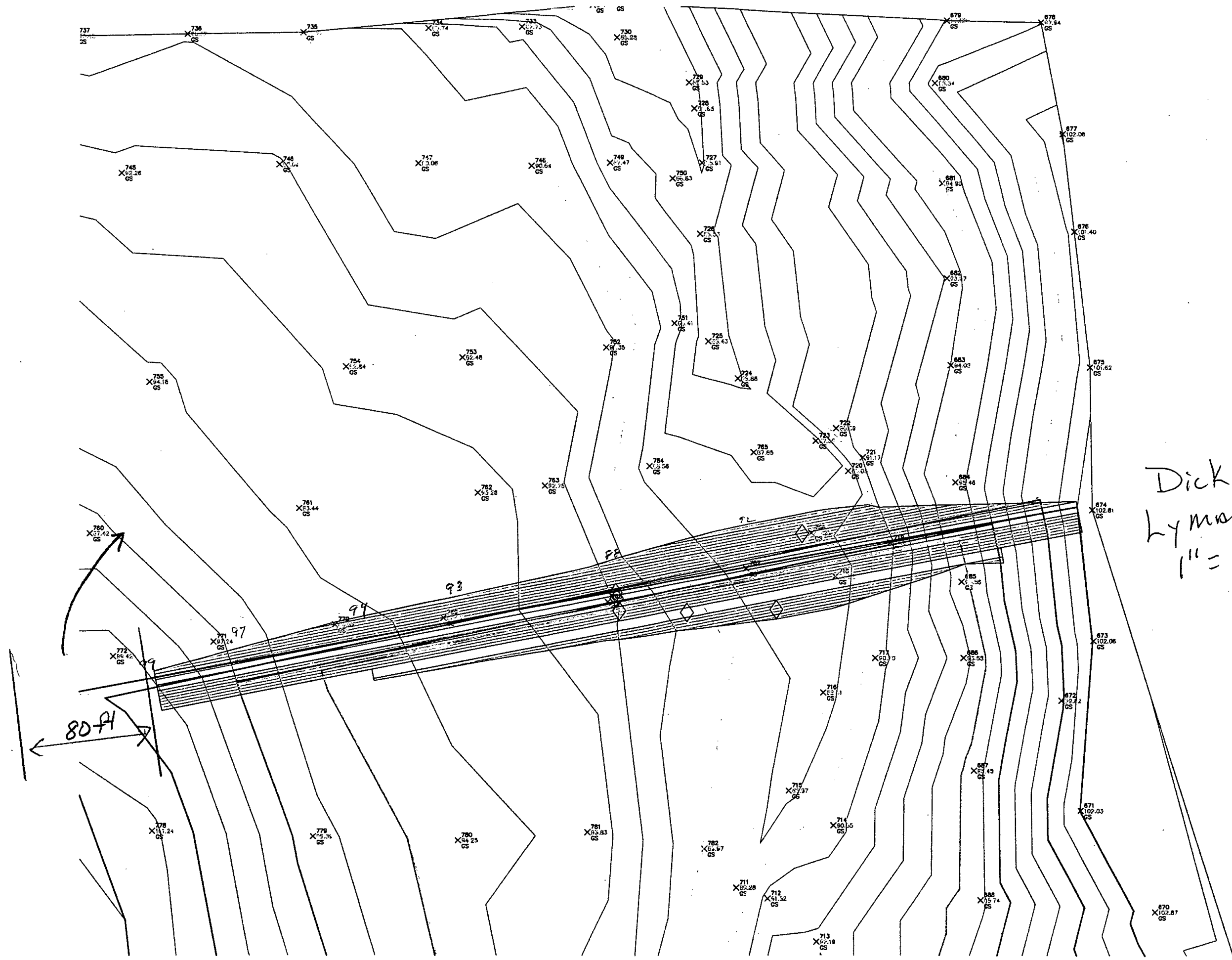
|                |            |                   |
|----------------|------------|-------------------|
| Designed _____ | Date _____ | Approved by _____ |
| Drawn _____    |            | Title _____       |
| Traced _____   |            | Time _____        |
| Checked _____  |            | Sheet _____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

JOB PLAN NO. 6.4

5, N-29, 073.6-40



Dick Cone, Lyman Co.  
105 N 77 W Sec 18, SE 1/4  
Red = Elev 1020 = 45.1 AC  
Blue = Elev 100.0 = 35.5 AC  
Green = Elev 97.0 = 20.5 AC  
Yellow = Elev 95.0 = 13.6 AC  
1" = 250'



Dick Cone  
Lyman Co.  
1" = 100'

Water Permit Application No 2713-2  
Richard Cone

Top of Dam Elev. - 102 ] Cont. 3 - Low Hazard Dam  
2nd Spillway Elev. - 99  
P. Spillway Elev. - 96.5 - Ht. = 14.2 ft  
Dis Elev. - 87.8

Normal Storage Capacity - 72 Ac-Ft  
Int. Storage Capacity - 135  
Max. Storage Capacity - 246

Int. Capacity x E.H. Ht = 135 x 11 = 1485 < 3000 ∴ 25 yr.  
Minimum Spilling Design

From USGS WRI 98-4055 "Tech. for Est. Flood Peaks ... in S.O."  
Region C DH = 2.60 m.

$$\begin{aligned} Q_{res} &= 207 CA^{.573} \\ &= 227 (2.6)^{.573} \\ &= \underline{358 cfs} \end{aligned} \quad \begin{aligned} Q_{res} &= 379 CA^{.566} \\ &= 379 (2.6)^{.566} \\ &= \underline{650 cfs} \end{aligned}$$

Secondary Spillway Capacity

$$\begin{aligned} Q &= CLH^{3/2} \quad C = 2.6 \\ &= 2.6 (80)^{1.5} \quad L = 80 \\ &= \underline{1080 cfs} \end{aligned}$$

NRCS Annual Yield

Section 74:02:08:09

1. Topo Map - OK
2. Dam Axis Profile - OK
3. Dam Max V. Sec. - OK
4. Area Capacity - OK
5. Outlet Details - OK
6. Spillway Rating - OK
7. Spillway Details - OK
8. Specs. - STD NRCS - OK
9. Equip. N/A C.B. - OK

DA = 1670 Ac CN = 84 ISO = 2

$$\begin{aligned} 80\% \text{ chance} &= 0.44 \\ 0.44 \times 1670/2 &= \underline{61 \text{ Ac-Ft}} \end{aligned}$$

$$\begin{aligned} 50\% \text{ chance} &= 1.0 \\ 1.0 \times 1670/2 &= \underline{139 \text{ Ac-Ft}} \end{aligned}$$

$$\begin{aligned} 10\% \text{ chance} &= 3.2 \\ 3.2 \times 1670/2 &= \underline{445 \text{ Ac-Ft}} \end{aligned}$$



**DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES**

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

denr.sd.gov

September 12, 2013

Richard Cone  
25530 313<sup>th</sup> Ave.  
Kennebec, SD 57544

Dear Mr. Cone:

We have reviewed the plans and specifications for your dam project located in the NW ¼ SE ¼ of Section 18-T105N-R77W, in Lyman County. The plans and specifications for the construction of the dam are approved. Approval of the plans and specifications does not authorize construction of the dam. The construction of the dam may not begin until Water Permit No. 2713-2 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 Cone Dam will be classified as a small size Category 3, Low Hazard dam with a dam height of 14.2 ft. and a normal storage capacity of 72 acre-feet and a maximum storage capacity of 246 acre-feet.

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

Sincerely,

  
for Timothy G. Schaal, P.E.  
Engineer IV  
for Jeanne Goodman, Chief Engineer  
Water Rights Program  
(605) 773-3352

c: Jesse Lisburg, USFWS, Pierre  
Dave Konechne, Pierre



**DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES**

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

[denr.sd.gov](http://denr.sd.gov)

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT  
APPLICATION NO. 2713-2, Richard Cone**

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. 2713-2, Richard Cone, 25530 313<sup>th</sup> Avenue, Kennebec SD 57544.

The Chief Engineer is recommending APPROVAL of Application No. 2713-2 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. 2713-2 authorizes an impoundment with a storage capacity of 72 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.

Jeanne Goodman, Chief Engineer  
September 12, 2013

REPORT ON  
WATER PERMIT APPLICATION No. 2713-2  
Richard Cone  
September 4, 2013

Water Permit Application No. 2713-2 has been filed by Richard Cone to impound 72 acre-feet of water from runoff by constructing a dam located in the NW  $\frac{1}{4}$  SE  $\frac{1}{4}$  of Section 18-T105N-R77W, in Lyman County. The application also requests impoundment of sufficient water to maintain water at the outlet elevation. The water will be used for fish and wildlife propagation, recreation and livestock water purposes.

Discussion:

The dam will be classified as a small size, Category 3, Low Hazard dam. The dam has been designed by the Konechne Engineering. The plans and specifications have been reviewed and will be approved; however, construction of the dam cannot begin until Water Permit Application No. 2713-2 is approved.

The dam will be 14.2 feet high with a normal storage capacity of 72 acre-feet with a reservoir level at the primary spillway elevation, and a maximum storage capacity of 246 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.

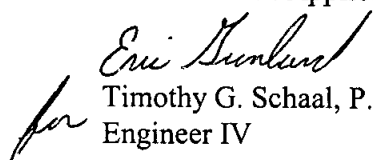
The dam has a drainage area of 1,670 acres or 2.60 square miles. The dam has a 48-inch diameter CMP riser with a 36 inch diameter CMP barrel with 5.5 feet of freeboard as the primary spillway, and an 80 foot wide earthcut spillway with 3.0 feet of available freeboard as the secondary spillway. A 25-year frequency event for this size drainage area produces a peak runoff of approximately 358 cfs, and a 100-year frequency event produces a peak runoff of approximately 650 cfs. The earthcut secondary spillway will have a capacity of approximately 1,080 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 61 acre-feet. The annual yield with a 50 percent chance of occurrence, or 1 out of 2 years, is expected to be 139 acre-feet, and the annual yield with a 10 percent chance, or 1 out of 10 years, is expected to be 445 acre-feet.

The Cone Dam will be located in the SE  $\frac{1}{4}$  of Section 18-T105N-R77W on an unnamed tributary to Medicine Creek, about one mile upstream of the confluence of the unnamed tributary and Medicine Creek. Location Notice No. 76076 was filed in April 2003 for a small 5 acre-foot dam located one mile downstream and just above the confluence of the unnamed tributary and Medicine Creek. Approval of Water Permit Application No. 2713-2 should not have any adverse effects on Location Notice No. 76076. There are no other existing Water Permits/Rights filed on the unnamed tributary between the proposed dam and the Medicine Creek.

Conclusions:

1. Water Permit Application No. 2713-2 should be approved since unappropriated water is available, and approval should not have any adverse effect on existing Water Permits/Rights.
2. If approved, the low flow bypass requirement for domestic use should be a qualification on Water Permit Application No. 2713-2.

  
Timothy G. Schaal, P.E.  
Engineer IV

**Publisher's Affidavit of Publication  
RECEIVED**

**SEP 20 2013**

**WATER RIGHTS  
PROGRAM**

STATE OF SOUTH DAKOTA )  
 )SS  
COUNTY OF LYMAN )

Connie Penny, of said county and state being duly sworn on her oath says: The Lyman County Herald is a weekly newspaper of general circulation and published in Presho, Lyman County, and State of South Dakota; and has been such newspaper during the times hereinafter mentioned; That said newspaper is a legal weekly, that it has a bonafide circulation of more than 200 copies weekly, that it has been published within said County of Lyman more than fifty-two successive weeks next prior to publication of the notice hereinafter mentioned and maintained at the place of publication; That I, the undersigned am editor of said newspaper, in charge of the advertising department thereof, and have personal knowledge of all the facts stated in this affidavit; that the advertisement headed:

Notice of Application No. 2713-2  
85 Lines

a printed copy of which is hereto attached and published in the said newspaper for 1 consecutive week(s).

The first publication of said notice in said newspaper aforesaid was on Wednesday, the 18 day of Sept, A.D., 2013 and that the succeeding publications were severally  
Wednesday, the \_\_\_\_\_ day of \_\_\_\_\_ A.D., 2013  
Wednesday, the \_\_\_\_\_ day of \_\_\_\_\_ A.D., 2013  
Wednesday, the \_\_\_\_\_ day of \_\_\_\_\_ A.D., 2013  
Wednesday, the \_\_\_\_\_ day of \_\_\_\_\_ A.D., 2013  
Wednesday, the \_\_\_\_\_ day of \_\_\_\_\_ A.D., 2013  
Wednesday, the \_\_\_\_\_ day of \_\_\_\_\_ A.D., 2013  
Wednesday, the \_\_\_\_\_ day of \_\_\_\_\_ A.D., 2013  
Wednesday, the \_\_\_\_\_ day of \_\_\_\_\_ A.D., 2013

and the last publication on Wednesday, the 18 day of Sept, 2013, that the full sum of fees charged for publishing the same, to-wit; the sum of \$ 27.14 insures solely to the editor of The Lyman County Herald. That no agreement or understanding for any division thereof had been made with any other person, and that no part thereof has been agreed to be paid to any person whatsoever.

Connie Penny  
Michael J. Sprenger



Subscribed and sworn to before me this 19 day of Sept., 2013

My Commission expires \_\_\_\_\_, 20\_\_\_\_  
**MICHAEL J. SPRENGER**  
**NOTARY PUBLIC - SOUTH DAKOTA**  
My Commission Expires  
**March 27, 2015**

**NOTICE OF  
APPLICATION  
NO. 2713-2 to  
Appropriate Water**

Notice is given that Richard Cone, 25530 313th Ave, Kennebec SD 57544 has filed an application for a water permit to impound 72 acre-feet of water from runoff by constructing a dam located in the NW 1/4 SE 1/4 Section 18 with water impounded in the SE 1/4 Section 18; all in T105N-R77W. 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 watering purposes.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 2713-2 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on this application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by September 30, 2013.

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.

Published once at the total approximate cost of \$27.14.

RECEIVED

SEP 23 2013

Form 8

WATER RIGHTS  
PROGRAM

## PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA )

County of Hughes ) SS

I, Marilynn Baker

certify that the attached printed Notice was  
taken

from the Capital Journal

printed and published in Pierre

County of Hughes and

state of South Dakota. The notice was  
published

in the newspaper on the following date:

9-18-13

Cost of Printing \$30.34

Marilynn Baker  
(Signature)

Bookkeeper  
(Title)

9-19-13  
(Date Signed)

water to the outlet  
elevation. The wa-  
ter is for fish and  
wildlife propaga-  
tion, recreational  
use and livestock  
watering pur-  
poses.

Pursuant to  
SDCL 46-2A-2,  
the Chief Engineer  
recommends AP-  
PROVAL of Appli-  
cation No. 2713-2  
because 1) unap-  
propriated water is  
available, 2) exist-  
ing rights will not  
be unlawfully im-  
paired, 3) it is a  
beneficial use of  
water, and 4) it is  
in the public inter-  
est. In accordance  
with SDCL  
46-2A-23, the  
Chief Engineer will  
act on this appli-  
cation, as recom-  
mended, unless a  
petition is filed op-  
posing the appli-  
cation or the appli-  
cant files a petition  
contesting the  
Chief Engineer's  
recommendation.  
If a petition oppos-  
ing the application  
or contesting the  
recommendation  
is filed, then a  
hearing will be  
scheduled and the  
Water Manage-  
ment Board will  
consider this ap-  
plication. Notice  
of the hearing will be  
given to the appli-  
cant and any per-  
son filing a peti-  
tion.

Any person inter-  
ested in oppos-  
ing or supporting this  
application or rec-  
ommendation  
must file a written  
petition with  
BOTH the appli-  
cant and Chief En-  
gineer. The appli-  
cant must file a  
petition if contest-  
ing the Chief En-  
gineer's recommen-  
dation. The Chief  
Engineer's ad-  
dresse 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 ei-  
ther an interested  
person or the ap-  
plicant must be  
filed by Septem-  
ber 30, 2013.

The petition may  
be informal, but  
must include a  
statement describ-  
ing the petitioner's  
interest in the ap-  
plication, the peti-  
tioner's reasons  
for opposing or

NOTICE OF  
APPLICATION  
NO. 2713-2 to  
Appropriate  
Water

Notice is given the petitioner or  
that Richard the petitioner's le-  
Cone, 25530 gal counsel, if le-  
313th Ave, Kenne- gal counsel is ob-  
bec SD 57544 tained. Contact  
has filed an appl- Eric Gronlund at  
cation for a water the above Water  
permit to impound Rights Program  
72 acre-feet of address to request  
water from runoff copies of informa-  
by constructing a tion pertaining to  
dam located in the this application.  
NW 1/4 SE 1/4 Steven M. Pinner,  
Section 16 with Secretary, Depart-  
water impounded ment of Environ-  
in the SE 1/4 Sec- ment and Natural  
tion 16, all In Resources.

T105N-R77W.  
This application Published once at  
requests impound- the total approxi-  
ment of sufficient mate cost of  
water to maintain \$30.34.



DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES

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

denr.sd.gov

September 12, 2013

Lyman County Herald  
PO Box 518  
Presho SD 57568

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 2713-2 to Appropriate Water. Please publish the notice once on September 18, 2013. 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 and arrange for payment. **Please BILL the APPLICANT for the cost of publication.** The APPLICANT is Richard Cone, 25530 313<sup>th</sup> Ave, Kennebec SD 57544 (Ph # 605-869-2392).

**Please send the Water Rights Program an affidavit or the enclosed Proof of Publication form immediately.**

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



DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES

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

[denr.sd.gov](http://denr.sd.gov)

September 12, 2013

Capital Journal  
PO Box 878  
Pierre SD 57501

ATTENTION: Legal Public Notice

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The applicant must verify to you that the notice is to be published and arrange for payment. **Please BILL the APPLICANT for the cost of publication.** The APPLICANT is Richard Cone, 25530 313<sup>th</sup> Ave, Kennebec SD 57544 (Ph # 605-869-2392).

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Sincerely,

Eric Gronlund  
Natural Resources Engineer  
605 773-3352

enclosures



**DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES**

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

denr.sd.gov

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

September 12, 2013

Richard Cone  
25530 313<sup>th</sup> Ave  
Kennebec SD 57544

Dear Mr. Cone:

Water Permit Application No. 2713-2 for recreation, fish & wildlife 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 Lyman County Herald printed at Presho SD (Ph # 605-895-6397) and the Capital Journal printed at Pierre SD (Ph # 605-224-7301). You will need to contact the newspaper(s) and authorize publication of this notice. For your information, a copy of the notice, the recommendation of the Chief Engineer and report on the application are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

Be sure to contact the above newspaper(s) to authorize publication of your Notice and to arrange for payment. Early contact with the paper(s) can eliminate delays. Upon receiving authorization from you, the publisher has been instructed to publish your notice. 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

cc: Jesse Lisburg, 420 S Garfield, Pierre, SD 57501  
Dave Konechne, 104 Capital Hill Dr, Pierre SD 57501

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

Instruction to Newspaper - Publish the Notice on September 18, 2013. The applicant is responsible for payment. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352 or email: Karen.schlaak@state.sd.us.

---

NOTICE OF APPLICATION NO. 2713-2 to Appropriate Water

Notice is given that Richard Cone, 25530 313<sup>th</sup> Ave, Kennebec SD 57544 has filed an application for a water permit to impound 72 acre-feet of water from runoff by constructing a dam located in the NW 1/4 SE 1/4 Section 18 with water impounded in the SE 1/4 Section 18; all in T105N-R77W. 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 watering purposes.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 2713-2 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on this application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

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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.

Published once at the total approximate cost of \_\_\_\_\_.



**DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES**

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

denr.sd.gov

OCT 09 2013

Richard Cone  
25530 313<sup>th</sup> Ave  
Kennebec SD 57544

Dear Mr. Cone:

Enclosed is Water Permit No. 2713-2 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,

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

enclosures

**Permit No. 2713-2**  
**Missouri River - Water District**

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

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

I have this day, **October 30, 2014**, made a thorough examination of the water use system constructed by **Richard Cone** of **25530 313<sup>th</sup> Ave., Kennebec, SD 57544** holder of Permit No. **2713-2**, bearing the priority of **August 6, 2013** authorizing the storage of **72** acre-feet of the waters of **runoff** for **fish & wildlife propagation, recreation and livestock water** purposes, in **Lyman** County.

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

A. Works used to divert the water:

**A 14.2 ft. high earthen dam with a normal storage capacity of 72 ac.-ft. of water.**

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

N/A

C. Works used to apply water to beneficial use:

**A 14.2 ft. high earthen dam with a normal storage capacity of 72 ac.-ft. of water.**

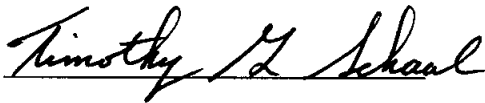
The system is in the following condition **good**. The point of diversion is located **1850 ft. north & 1700 ft. west of the SE corner of Sec. 18-T105N-R77W (NW ¼ SE ¼) (Lat. 43.89609, Long. -100.11216)**. The works are capable of storing **72** acre-feet of water which is to be used for **fish & wildlife propagation, recreation and livestock water**. Water has been put to beneficial use to the maximum extent as follows:

**A 14.2 ft. high earthen dam with a normal storage capacity of 72 ac.-ft. of water.**

and the license should be issued for **72** acre-feet of storage.

Applicable permit qualifications have been complied with: Yes **X**

Exceptions to compliance are: **none** Date Report Completed: **March 2, 2015**



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

**REPORT ON INSPECTION OF PERMIT NO. 2713-2**

DATE OF INSPECTION: October 30, 2014

NAME & ADDRESS OF PERMIT HOLDER: Richard Cone, 25530 313<sup>th</sup> Ave., Kennebec, SD 57544

DIVERSION POINT LEGAL LOCATION: 1850 ft. north & 1700 ft. west of the SE corner of Sec. 18-T105N-R77W (NW ¼ SE ¼) (Lat. 43.89609, Long. -100.11216).

**DAM INFORMATION:**

- 1) Height to crest 14.2 feet
- 2) Height to primary spillway 8.7 feet
- 3) Height to secondary spillway 11.2 feet
- 4) Crest width 12 feet
- 5) Crest length 1055 feet
- 6) Spillway length XXX feet
- 7) Spillway width 80 feet
- 8) Approx. storage (Normal) 72 acre-feet
- 9) Approx. storage (Maximum) 246 acre-feet
- 10) Date constructed: 2013

**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. 2713-2



*Timothy G. Schaal*

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

3/2/15



DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES

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

[denr.sd.gov](http://denr.sd.gov)

MAR 19 2015

2713-2

Richard Cone  
25530 313<sup>th</sup> Ave  
Kennebec SD 57544

Dear Mr. Cone:

Enclosed is Water License No. 2713-2. 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. 2713-2

(1) Richard Cone, 25530 313<sup>th</sup> Ave, Kennebec SD 57544 made Application No. 2713-2, August 6, 2013 for a water permit to impound 72 acre feet of runoff water by constructing a dam located in Lyman County, South Dakota for fish and wildlife propagation and livestock watering purposes. Permit No. 2713-2, with a priority date of August 6, 2013 was approved September 30, 2013 and issued to the applicant for impoundment of water with construction of the project to be completed on or before September 30, 2018 and for the application to beneficial use of said water on or before September 30, 2022.

(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to completion of the project and is entitled to impound 72 cubic feet of water per second for beneficial use.

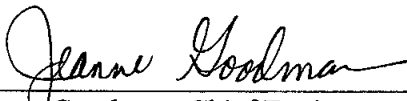
The location of the storage dam (spillway) is 1,850 feet north and 1,700 feet west of the SE corner of Section 18, T105N, R77W (NW ¼ SE ¼). Water is impounded in the SE ¼ Section 18, T105N, R77W.

(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 Richard Cone, 25530 313<sup>th</sup> Ave, Kennebec SD 57544 the holder and/or owner of Water Right No. 2713-2 is issued a license to appropriate water, the right to impound 72 acre feet of runoff water in a storage dam with a priority date of August 6, 2013 from the location specified in (2) of this license for fish and wildlife propagation and livestock watering purposes.

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 2713-2 and subject to the following qualifications:

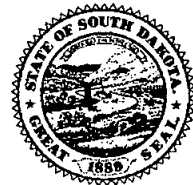
- Water Right No. 2713-2 authorizes an impoundment with a storage capacity of 72 acre feet of water and sufficient water annually to maintain the water level to the outlet elevation.
- Low flows as needed for downstream domestic use, including livestock water and prior water rights must be bypassed.

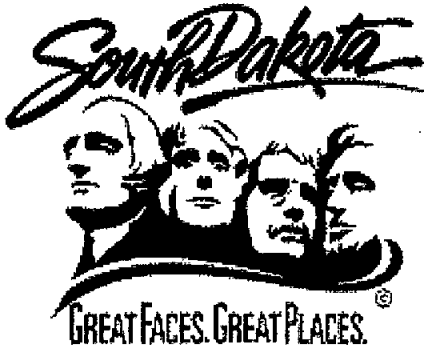


Jeanne Goodman, Chief Engineer  
Water Rights Program  
Department of Environment and Natural Resources

MAR 19 2015

date





DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES

JOE FOSS BUILDING  
PMB 2020  
523 EAST CAPITOL  
PIERRE SOUTH DAKOTA 57501-3182  
[www.denr.sd.gov](http://www.denr.sd.gov)

March 31, 2015

2713-2

Richard Cone  
110 Islay Ave  
Ft Pierre SD 57532 2371

Dear Mr. Cone:

Enclosed is your Water License No. 2713-2.

The correspondence was originally mailed to 25530 313<sup>th</sup> Ave, Kennebec, SD. The post office notified us that your address has changed and I will update our records accordingly.

If you have any questions, please contact me.

Sincerely,

A handwritten signature in cursive script that reads "Genny McMath".

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

enclosures