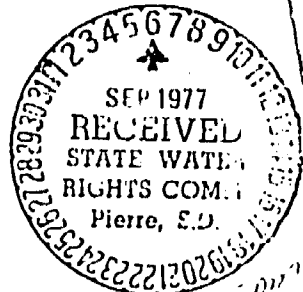


Water Right Number 4117-3

1. Considered 10-6, 19 77
2. Name of Applicant TOWN OF AGAR
3. Post Office Address _____
4. Amount of Water claimed .25
5. Source of Water supply 1900' DEEP WELL (DAKOTA)
6. Water to be used for MUNICIPAL
- Acres to be irrigated _____
7. Water to be diverted and used in SULLY County
about IN CITY LIMITS miles _____ of _____
8. Proof of Publication Received YES 9-30-77
Not Received _____
9. Application Approved _____
Subject to _____
Not Approved _____
Action Deferred _____

10. Remarks:

No. 4117-3Map No. 3350-3 Water Division No. 3 MISSOURI RIVER District
(Blanks to be filled by the Engineer for the W. R. C.)

APPLICATION FOR PERMIT

To Appropriately Water within the State of South Dakota

(NOTE - Draw a line through items not applicable)

1. Name of Applicant Town of Agar
 Postoffice address Agar, State South Dakota
 If a corporation show date and place of incorporation 1925 Agar, SD
2. Method of accomplishing work (contract, employment of others, or by direct labor) Contract
3. Name of diversion work Agar Municipal Well
4. Amount of water claimed (cubic feet per second) .25 cfs
5. Source of water supply Deep Well
6. Location of point of diversion 777' W & 320' N OF THE S 1/4 CORNER,
SECTION 23, T116N, R77W
 County Sully
7. Annual period or periods during which water is to be used year around
8. Use to be made of water. (irrigation, industrial, municipal, commercial, recreation, etc.) municipal
9. For irrigation use. Total number of acres to be irrigated _____

List below each forty-acre subdivision, or lot, or fraction thereof and show number of acres to be irrigated in each.

Land Description	No. Acres Irr.	Land Description	No. Acres Irr.

Attach sheet if more space is needed

10. Time required to complete construction of water supply system 1 years. Additional time required to complete application of water to the proposed beneficial use none years.
11. Choice of newspaper for Notice of Intent to Appropriately Water publication. Onida Watchman
12. Principal Features of the Proposed Water Supply System.

A. Works proposed to divert water from its natural source.

Deep Well

B. Works proposed to transport water to place of use.

well house, pumps, and pipeline to storage tank

C. Works proposed to apply water to beneficial use.

Existing city distribution system

Estimated Total Cost \$ 40,000.00Attachments. Attach Form 2A if diversion from a well or dugout, or if storage of water, is proposed. Attach map.
(See instructions concerning preparation.)

STATE OF SOUTH DAKOTA)

County of Sully) ss.Therese L. L. L. the applicant, certifies that I have read the foregoing application and have examined the attached map and that the matters therein stated are true and that I intend, and am able to complete the necessary construction.Signed Therese L. L. L.Subscribed and sworn to before me this 31 day of Aug 1977Therese L. L. L.
Notary Public (or other qualified officer)

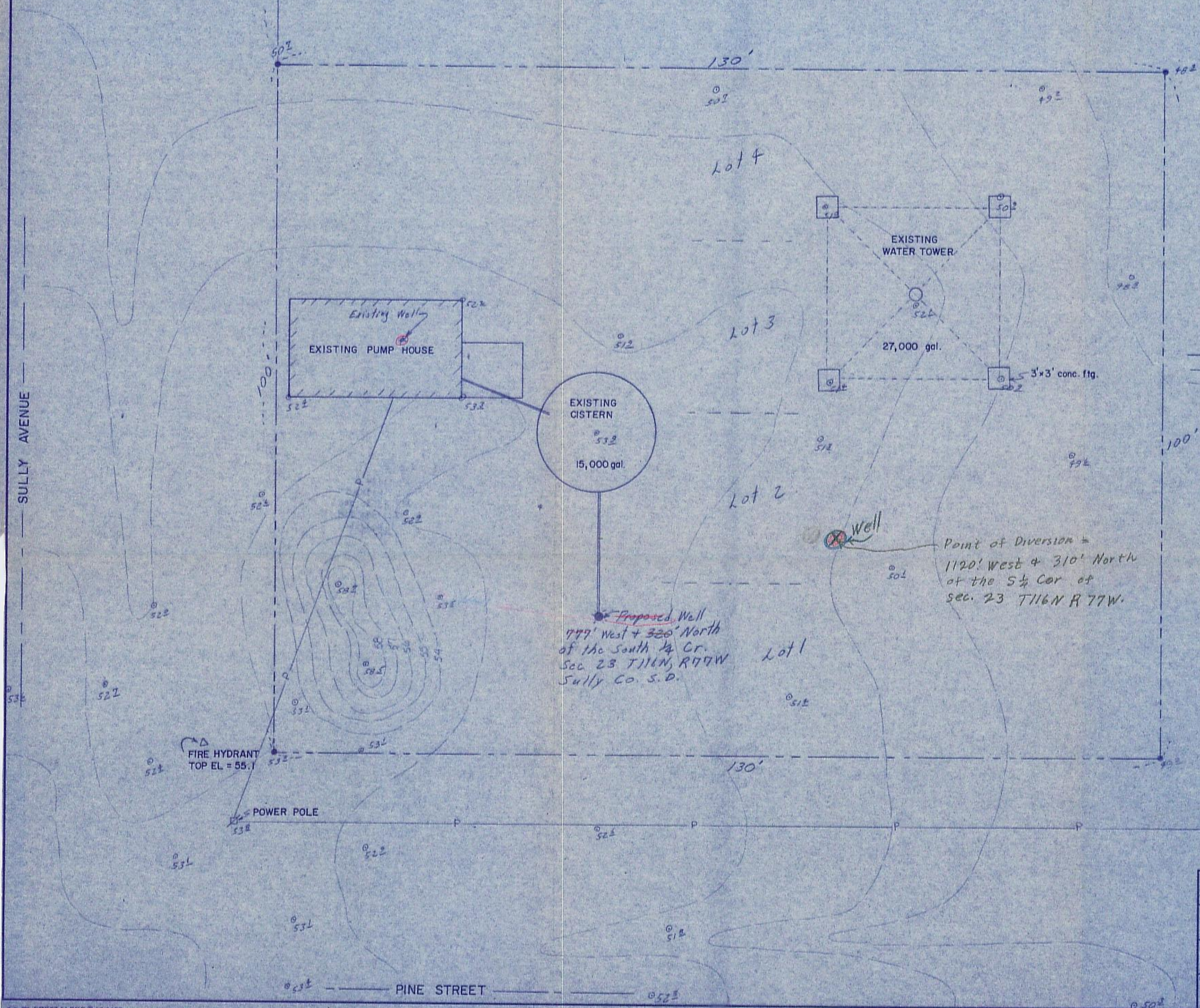
Stone 729 46'
South 1/4 Cr.
Sec 23 T116N, R77W
Sully Co. S.D.

Section Line

1493 1/4 to 1/4 Cr.

26 27
23 22
Section Cr.
T116N, R77W
Sully Co. S.D.

Block 4, Lots 1, 2, 3, & 4 Town of Agar
Located in SW 1/4 Sec. 23 T116N, R77W



LEGEND

- PROPERTY LINE
- POWER LINE
- CONTOUR LINE
- SPOT ELEVATION

U.S.G.S. B.M.
Cr. of Bank
E1 = 1851 328

Ronald A. Schubert
31 Aug 77

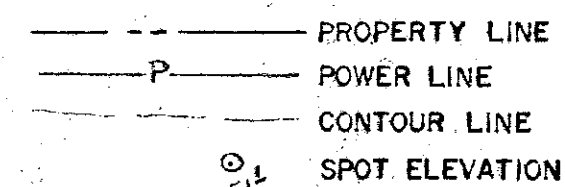
AGAR MUNICIPAL WELL		
AGAR, SOUTH DAKOTA	SCALE 1"=10'	DRAWN BY LKG
MID-STATE ENGINEERING, INC. CHAMBERLAIN, SOUTH DAKOTA	REVISOR RNG	
DATE SEPT. 1, 1977	APPROVED BY	DRAWING NUMBER

502

1443[±] to $\frac{1}{4}$ Cr.

26 27
23 22

Section Cr.
T116N, R 77W
Sully Co. S.D.



U.S.G.S. B.M.
Cr. of Bank.
E1. = 1851 328

Proposed Well
777' West + 320' North
of the South 1/4 Cr.
Sec 23 T116N, R177W
Sully Co. S.D.

AGAR MUNICIPAL WELL

AGAR, SOUTH DAKOTA

SCALE	DRAWN BY
1" = 10'	LKG
	REVISED
	BHS

MID-STATE ENGINEERING, INC.
CHAMBERLAIN, SOUTH DAKOTA

DATE
SEPT. 1, 1977

APPROVED BY

DRAWING NUMBER

K-Σ CRYSTALINE® 10 9457
ARCHITECTS' STANDARD FORM

MAP N° 3350-1 (APP N° 417.) MADE IN U.S.A.

WATER RIGHT APPLICATION APPROVAL

The Water Rights Commission hereby approves Water Right Application No. 4117-3

TOWN OF AGAR
(Applicant)

(Post Office Address)

SOUTH DAKOTA 57520 With the following modifications.
(State)

The ~~irrigation~~ well approved under this Permit is located near domestic wells which may obtain water from the same aquifer. The ~~irrigation~~ well owner, under this Permit, shall control his ~~irrigation~~ withdrawals so there is not a reduction of needed water supplies in adequate domestic wells.

Date of first receipt of application SEPTEMBER 6, 19 77

Date of return to applicant for correction, amendments or changes required —, 19 —

Date of receipt of corrected application —, 19 —

Approved OCTOBER 7, 19 77, Recorded in Book 19 Page 129

WATER RIGHT PERMIT NO. 4117-3

The Water Rights Commission hereby grants and issues this Water Right Permit No. 4117-3 authorizing the construction of the water use system and the putting of water to beneficial use as stated in the Application and as modified in the Water Right Application approval, subject, however, to the following limitations and conditions:

1. The date from which applicant may claim right is SEPTEMBER 6, 19 77
2. The equivalent of at least one-fifth of the work above specified is to be completed on or before APRIL 7, 19 78
3. The whole of said work is to be completed on or before OCTOBER 7, 19 78
4. The limit of time from proof of beneficial use of water appropriated in accordance herewith is OCTOBER 7, 19 78
5. The water appropriated shall be used for the purpose of MUNICIPAL USE

6. The prior right of all persons who, by compliance with the laws of the State of South Dakota, have acquired a right to the use of water must not be injuriously affected by this appropriation.

7. The amount of the appropriation herein granted shall not exceed 1.25 cubic feet per second; neither shall it exceed the capacity of the above described water supply system, nor shall it exceed the amount of water needed for ~~beneficial use~~ and if for the irrigation purposes, the appropriation must be limited to not more than 3 acre feet per acre per year and be limited to not more than 11.70 cubic feet of water per second of time for each acre of land to which water is
USED FOR MUNICIPAL PURPOSES
actually and beneficially applied on or before OCTOBER 7, 19 78; said water to be used during the following described annual period: CONTINUOUSLY

Witness my hand this 2ND day of NOVEMBER, 19 77

WATER RIGHTS COMMISSION

By: John Hatch
Chief Engineer, Executive Officer

Certificate of Construction Issued Dec 11 76, 19 77

Water License Issued Dec 11 76, 19 77

Exhibit "A"

JOHN PAUL GRIES

Consulting Geologist

230 ST. CHARLES STREET
RAPID CITY, SOUTH DAKOTA

GROUNDWATER POTENTIAL AT AGAR, SULLY COUNTY, SOUTH DAKOTA.

Based on deep water wells and oil tests in Hughes, Sully, Potter, and Hand Counties, a well at Agar will have roughly the following log down as far as the Madison limestone:

Top of Greenhorn limestone at	1200 feet
Dakota formation	1525 - 1900
Skull Creek shale	1900 - 2000
Fall River-Lakota formations	2000 - 2200
Minnelusa formation	2200 - 2300
Madison limestone	2300 - 2600

The upper part of the Dakota formation is broken sand and shale, the lower part is fairly clean sand. The original Agar well apparently bottomed in the clean lower member. The total dissolved solids is reported as about 1950 parts per million.

The Fall River-Lakota unit is estimated to be 200 feet in total thickness. The upper hundred feet more or less will be fine sand with some clay streaks, and the lower hundred feet will be much coarser -- what the local drillers call the "Sundance". That is the aquifer that got away from them at Onida some years ago. It will almost certainly have ample water under good head; the quality is estimated at 2000 ppm total solids.

There may be as much as 100 feet of Minnelusa beds at Agar, but if present, they will be dense limestones and red and black shales -- virtually without water potential.

There may be as much as 300 feet of Madison limestone. It has yielded water in every surrounding oil test where it was tested. For temperature, I'd estimate somewhere between 100 and 110 degrees. The quality will probably be at least 2000 ppm total solids.

In summary, there isn't much hope of improving the quality of water by going deeper than the old well, but greater quantities of water should be available. If quality is a serious factor, the State Geological Survey's suggestion of a search for water in the glacial drift is sound. An earth resistivity survey of the surrounding area, followed by a couple of test holes should indicate the feasibility of further search without too great an expenditure.

Respectfully submitted

August 30, 1977

J. P. Gries

Certified Professional Geologist #771

12. Principal Features of the Proposed Water Supply System (continued.)

D. Well Information or Estimates

(1) Drill Hole, Diameter 9" 5", Depth 0 - 600' 600' - 1900'

(2) Casing, Type Steel (wood, concrete, steel, etc) Diameter 6" I.D. 3" I.D. Thickness 0.28" 0.216"

(3) Perforated Screen.

Type Johnson, Diameter 3" I.D., Length field determined

(4) Gravel Pack. Thickness -, Length of gravel pack -

E. Dugout Information or Estimates.

(1) Surface dimensions N.A., Depth N.A.

F. Fill out for Either a Well or a Dugout.

(1) Water Bearing Materials. (Please attach a copy to test well log if available.)

Character of Water bearing materials See Attached Exhibit "A"

Depth to top of water bearing material _____

Depth to bottom of water bearing material _____

Thickness of water bearing material _____

Depth to water (gr. und surface to water level) _____

(2) Distance to nearest existing household or livestock watering wells.

On same owner's property 3 rds. On property owned by others - rds.
Existing City Well

G. Water Storage Dams.

If the proposed water use system contains one or more water storage dams, please show in the space below, the height, maximum water depth, surface area and storage capacity of each storage dam. The location of each water storage dam should be shown on the water right map.

N.A.

[Signature]
Signature of Applicant

HURON DRILLING INC DRILLERS LOG

116N 77W

PAGE NO. 1

City of Agar
JOB NAME

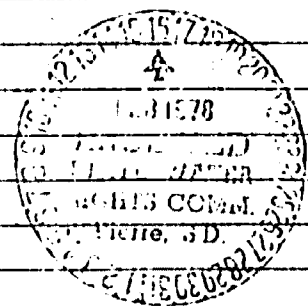
Agar, So. Dak.
LOCATION

12/20/77
DATE

Rig 9
RIG NO.

Tom Rothjen
FOREMAN

DEPTH	TIME	REMARKS
23		
43		
63		Blue clay @ 60
83		
103		Hard Rock @ 105
123		
143		
163		
183		Shale @ 190
203		
223		
243		
263		
283		
303		
323		
343		
363		
383		
403		
423		
443		
463		
483		
503		
523		
543		
563		
583		
603		
620		
640		
660		Chalk @ 660
680		
700		
720		
740		
760		
780		
800		Runned 6" Hole to 800 Ft.



116N 77W

HURON DRILLING INC DRILLERS LOG

PAGE NO. 2

JOB NAME		LOCATION	DATE	RIG NO.	FOREMAN
ft.	DEPTH	TIME	REMARKS		
1	820				
2	840				
3	860				
4	880		Codell G- 885		
5	900				
6	920				
7	940				
8	960				
9	980				
10	1000				
11	1020				
12	1040				
13	1060				
14	1080				
15	1100				
16	1120				
17	1140				
18	1160	4:55 PM	6" Hole with Reamer to 800 Ft.		
19	1180	5:25	Top of cement plug 1120-1140 Ft.		
20	1200	6:05	Gear Bit #1 - 4 3/4" V3 @ 1140 Ft.		
21	1220	6:30			
22	1240	6:53			
23	1260	7:20	1181-1190 Greenhorn (Hardshells)		
24	1280	7:42			
25	1300	8:00			
26	1320	8:23			
27	1340	9:10 AM	Rock Bit #2 4 3/4" V3 @ 1320		
28	1360	9:45			
29	1380	10:20			
30	1400	10:50			
31	1420	11:15			
32	1440	2:40 PM			
33	1460	3:10			
34	1480	3:45			
35	1500	4:15			
36	1520	4:50			
37	1540	5:25	Dakota top @ 1545		
38	1560	5:40	1545-1555 Good Sand		
39	1580	10:20 AM	1555-1560 Fair sand		
40	1600	10:40	Rock Bit #3 4 3/4" V-3 @ 1566		

Permit No. 4117-3

Water Diversion No. 3 Missouri River Water District

CERTIFICATE OF CONSTRUCTION

This is to Certify, That the Town of Agar

the holder of
Permit No. 4117-3, issued upon Application No. 4117-3, bearing date of priority of September 6, 1977, authorizing the diversion of 0.25 cu. ft. per second of the waters of groundwater (one well) County of Sully, State of South Dakota at a point 1120'W and 310'N of the SE corner of Section 23, T116N, R77W (CD)
for municipal

purposes, has 8 complied with the provisions of the laws of the State of South Dakota relating to proof of completion of the works of diversion set out and described in said Permit; that said works are found in satisfactory condition for diverting and conveying to the place of intended use 0.09 cu. ft. per second of water.

Date December 16, 1981


JOHN HATCH, Chief Engineer
Water Rights Division

STATE OF SOUTH DAKOTA

WATER LICENSE NO. 4117-3

(1) WHEREAS, On the 6th day of September A. D. 19 77
Town of Agar
 made Water Right Application No. 4117-3 for a permit to use 0.09 cubic feet per second of the waters of groundwater
 County of Sully, State of South Dakota, for municipal
purposes; and
 (2) WHEREAS, On the 7th day of October A. D. 19 77
 Permit No. 4117-3, with a date of priority of September 6, 1977
 was issued to said applicant for the diversion of said water, and provided for the completion of construction of the water supply system therein described on or before the 7th day of October A. D. 19 78 and for the application to beneficial use of said water on or before the 7th day of October A. D. 19 78

and:

(3) WHEREAS, It is hereby certified that the applicant has complied with the provisions of the laws of the State of South Dakota relating to completion of the construction of the water supply system and is entitled to divert 0.09 cubic feet per second of water for beneficial use and,

(4) WHEREAS, It is hereby certified that the applicant has complied with the provisions of the laws of the State of South Dakota relating to the application of water to beneficial use of the following extent,

water to be used in place for municipal purposes for the Town of Agar

(5) NOW, THEREFORE, By the virtue of the authority vested in us by the laws of the State of South Dakota, We hereby grant and confirm to the Town of Agar, South Dakota of _____ the holder _____ and owner _____ of said permit No. 4117-3 a water right, dating from September 6, 1977 to use of 0.09 cubic feet per second of the waters of groundwater (one well) in the County of Sully and State of South Dakota, or so much thereof as may be necessary for the purposes hereinbelow mentioned, to be diverted at a point 1120'W and 310'N of the SE corner of Section 23, T116N, R77W (CD) and conducted ~~to and upon~~ through the Town's distribution system for the purpose of municipal use

Subject to any limitations listed in Water Right Permit No. 4117-3 and subject to the laws of the State of South Dakota.

WITNESS, My hand and seal of our office at Pierre, South Dakota
this 16th day of February A. D.
Nineteen Hundred and Eighty-one

WATER MANAGEMENT BOARD

By:

John Hatch
Chief Engineer, Executive Officer

JOHN HATCH

Publish first publication, on or before September 15, 1977

NOTICE OF HEARING ON
APPLICATION TO APPROPRIATE WATER

Pierre, South Dakota 57501

September 3, 1977

Notice is hereby given that the town of Agar whose post office address is Agar, South Dakota, has made an application in accordance with the provisions of SDCL 46-1-1 thru 46-1-8; 46-2-9 thru 46-2-11; 46-5-1 thru 46-5-3, 46-5-10 thru 46-5-22, 46-5-41, 46-6-3, 46-6-5, 46-6-6.1, 46-6-10, 46-6-14 and Commission Rules ARSD 52:01:01:01 thru 52:01:01:13, for a permit to appropriate for beneficial use 0.25 cubic feet of water per second of time from ground water through the Agar Municipal Well, the point of diversion of which is to be located in the SE 1/4 SW 1/4

of Section 23, Twp. 116N Range 77W. Said water to be used for the purpose of providing ~~irrigation on portions of the following described land:~~

municipal water supplies for the town of Agar.

This Application No. 4117-3 will be considered by the Water Rights Commission at the Holiday Inn, Spearfish, SD upon the 6th day of October, 1977 at 10 A.M. The Commission is authorized to make a determination on this application at the hearing. All interested persons may appear and be heard. Any person who may be affected by a Commission decision who desires to present evidence or cross-examine witnesses according to SDCL 1-26 may notify the Commission in writing prior to the hearing or orally at the hearing.

WATER RIGHTS COMMISSION

JAMES WINTERTON
Water Rights Specialist

cc. Town of Agar, Agar, SD

NOTE: Final Proof of Publication must be received by the hearing date for the Commission to take action.

No. 4117-3

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)
County Sioux) ss.

I, Alice Olson hereby
certify that the annexed printed copy of Notice of Intent to Appropriate
Water was taken from the Omaha Watchman

A newspaper which during the whole time of publication of said notice
herein after stated, has been and is printed and published in the

City of Omaha

County of Sioux and State of South Dakota;
that the said notice was published in said newspaper on the following
two dates:

Thursday, Sept. 15, 1977

Thursday, Sept. 22, 1977

Alice Olson
(Signature)

Publisher
(Title)

Sept. 28, 1977
(Date Signed)

No. 4117-3
NOTICE OF HEARING ON
APPLICATION TO APPROPRIATE
WATER

Pierre, South Dakota 57501
September 8, 1977
Notice is hereby given that the
town of Agar, whose post office
address is Agar, South Dakota, has
made an application in accordance
with the provisions of SDCL 46-1-
8; 46-2-9 thru 46-2-11, 46-2-13;
46-5-1 thru 46-5-8, 46-5-10 thru
46-5-22, 46-5-41, 46-6-3, 46-6-
6, 46-6-8, 1, 46-6-10, 46-6-14
and Commission Rules ARSD 52:01:
01:01 thru 52:01:01:13, for a per-
mit to appropriate for beneficial
use 0.25 cubic feet of water per
second of time from ground water
through the Agar Municipal Well,
the point of diversion of which is
to be located in the SE $\frac{1}{4}$ SW $\frac{1}{4}$ of
Section 23, Twp. 116N Range 77W.
Said water to be used for the pur-
pose of providing municipal water
supplies for the town of Agar.

This Application No. 4117-3
will be considered by the Water
Rights Commission at the Holiday
Inn, Spearfish, SD upon the 6th
day of October, 1977 at 10 A.M.
The Commission is authorized to
make a determination on this
application at the hearing. All
interested persons may appear and
be heard. Any person who may be
affected by a Commission decision
who desires to present evidence or
cross-examine witnesses according
to SDCL 1-26 may notify the
Commission in writing prior to the
hearing or orally at the hearing.

WATER RIGHTS COMMISSION
s/ James Winterton
JAMES WINTERTON
Water Rights Specialist

33-34



RECEIPT

WATER RIGHTS COMMISSION
State of South Dakota

No 4 8586

PIERRE, December 15, 1981

RECEIVED OF Town of Agar, Agar, SD 57520
the following amount in fees for services rendered as provided for by law:

Fee for Application for Permit to Appropriate Water No. (examination, processing, recording and filing)		
Fee for inspecting Construction, and issuing Cert. of Construction No. 4117-3	50	00
Fee for inspecting Beneficial Use, and issuing Water License No. 4117-3		
Fee for issuing Location Certificate-Dry Draw, No.		
Fee for filing		
Fee for certified copy of		
Fee for Print copy of map		
Fee for Certifying		
Fee for		
(any other work as provided by law)		
TOTAL	50	00

WATER RIGHTS COMMISSION

By (John Hatch)
Chief Engineer, Executive Officer
JOHN HATCH

Permit No. 4117-3Water Division 3 Missouri River Water District

**REPORT OF EXAMINATION OF WORKS
AND/OR APPLICATION OF WATER TO BENEFICIAL USE**

TO: WATER RIGHTS, WATER MANAGEMENT BOARD / FOSS BLDG., PIERRE, SOUTH DAKOTA 57501

I have this day made a thorough examination of the water use system constructed by Town of
Agar of Agar, South Dakota. 57520 holder
 of Permit No. 4117-3, bearing date of priority of September 6th, 1977
 authorizing the diversion of .25 cu. ft. per second of the waters of One Well
 for Municipal purposes, in Sully County.

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

The Water Use System consists of,

A. Works used to divert the water:

3 1/2 p. submersible pump. Pumping 40 gpm.

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

Pipeline to System Storage Tank.

C. Works used to apply water to beneficial use.

Existing City distribution systemThe system is in the following condition: Good.The point of diversion is located 1120' W and 310' N of the S 1/4
Cor of Sec. 23, T116N R77W (60)The works are capable of diverting and conveying to the place of use .09
 cu. ft. per second of water which is to be used for Municipal Purposes

Water has been put to beneficial use to the maximum extent as follows: _____

comprising a total of _____ acres of land.

License for .09 cfs.Date March 5, 1981
LeRoy J. Mernaugh
 (Signature)