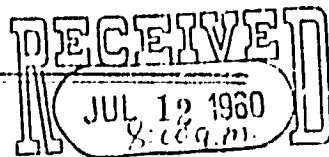


1. Considered _____, 19____
2. Name of Applicant _____
3. Post Office Address _____
4. Amount of water claimed _____
5. Source of water supply _____
6. Water to be used for _____
Acres to be irrigated _____
7. Water to be diverted and used in _____ County about
_____ miles _____ of _____.
8. Proof of Publication Received _____
 Not Received _____
9. Application Approved _____
 Subject to _____
 Not Approved _____
 Action deferred _____
10. Remarks:

Water Division No. 3

(Blanks to be filled by the Engineer for the W. R. C.)

No. 723-3Missouri RiverDistrict STATE WATER RESOURCES COMM.
PIERRE, SOUTH DAKOTA

APPLICATION FOR PERMIT To appropriate Water within the State of South Dakota

(NOTE—Draw a line through items not applicable.)

1. Name of applicant City of Eureka, South Dakota
Postoffice address Eureka, County McPherson, State South Dakota

I. If a corporation Municipal Corporation(a) Name of same City of Eureka

(b) Date and place of incorporation _____

(c) Amount of capital stock _____

(d) Amount paid in _____

(e) Names and addresses of directors Mayor & City Council, City of Eureka,South Dakota

(NOTE—A certified copy of articles of incorporation must accompany the application.)

II. Method of accomplishing the work and financial resources of the applicant:

(a) Method of accomplishing work (Whether by contract, employment of others, or by direct labor)

Completed

(b) Cash on hand, \$ _____

(c) Treasury stock, \$ _____

(d) Bonds to be issued, \$ _____

(e) Other resources, \$ _____

2. Name of diversion work Municipal Well No. 1 1 100 23. Amount of water claimed 0.20 cubic feet per second or 90 gallons/minute4. Source of water supply Lakota Sandstone formation5. Location of point of diversion In the S 1/2 Block 13 Original Town of Eureka; at a place
N 14° 00E, 1080' from the S 1/4 Corner S 35-T127N-R73W, 5th P. M. County _____6. Annual period or periods during which water is to be used Continuously

7. To be used for:

I. Irrigation or domestic use: Gravity, overhead sprinkling or combination system? _____

(a) Number of acres to be irrigated _____ acres.

(b) Legal subdivisions to be irrigated _____

(NOTE—A list of lands to be irrigated, giving each subdivision and fraction with acreage thereof, should be written here, or may be appended as a part of this application. Same must also be shown on accompanying map.)

(c) Statement as to domestic use (giving location, etc.) For all Municipal purposes in the
City of Eureka, South Dakota

II. Stockwatering, mining, milling, power, fish culture, fire protection and public recreation:

(a) Nature of use All Municipal purposes

(Name any of the above uses claimed)

(b) Amount of power to be generated _____ horse power.

Amount claimed for engine cooling _____

(c) Location of plant _____

(d) Method of developing power _____

(e) Point where water will be returned to stream _____

Map 112 550-3

8. Estimated cost of work:

(a) Head Gates, \$.....

(b) Pumping plant, \$.....

(c) Fluming, \$.....

(d) Canal-earth, \$.....

Rock, \$.....

(e) Other structures Artesian Well #1 \$20,000

Total, \$.....

2

\$7,000

9. Description of diversion works:

I. Nature of works: (Reservoir, dam, ditch, flume, pumping plant, etc.)

Flowing Artesian Well to ground storage reservoir & pumped to City System.

II. Dimensions of works.

(a) Dam: Height.....feet; length at bottom.....feet; length at top.....feet; thickness at bottom.....feet; thickness at top.....feet; slope at front water face.....; slope at back face.....material used in construction.....

(b) Reservoir: Capacity when filled.....acre feet. Surface area at highwater mark.....acres.

DEPTH AT OUTLET-Feet	SURFACE AREA AT EACH DEPTH AT OUTLET--ACRES	FEET	ACRE-Feet CAPACITY

(c)* Head gate: Width.....feet; height.....feet;
Material.....

(d) Canal: Total length.....miles.

LOCATION BELOW HEADGATE	DEPTH	BOTTOM WIDTH	WIDTH AT WATER-LINE	GRADE PER MILE
At.....Mile	feet	feet	feet	feet
At.....Mile	feet	feet	feet	feet
At.....Mile	feet	feet	feet	feet
At.....Mile	feet	feet	feet	feet
At.....Mile	feet	feet	feet	feet
At.....Mile	feet	feet	feet	feet

(Give dimensions where reductions in size are made.)

10. Time required for completion of work existing 1 years.

11. Time required for complete application of water to the proposed beneficial use 1 years.

12. Choice of newspaper for publication of notice of intention to appropriate The Northwest Blade, Eureka, South Dakota

STATE OF SOUTH DAKOTA

County of

ss.

I,, being first duly sworn on my oath depose and say: That my relation to the above described undertaking is that of owner, that I have read the above foregoing statement, examined the map accompanying the same, and that I know of my own personal knowledge that the matters therein stated and shown are true.

Subscribed and sworn to before me this 8th

Signed

day of

1960

Notary Public (or other qualified officer.)

W. F. McHURLEY

Notary Public, Richeson County, S. Dak.
My Commission Expires Dec. 16, 1967

*Each diversion must have a headgate or measuring device

Well #1

9. (Continued)

III. Well Specifications

(a) Hole and casing

Size of drill hole or excavation 5 inch Depth 2086
 Type of casing Steel Cemented
 5 inch outer (wood, concrete, steel, etc.)
 Size of casing 3 inch inner Thickness of casing unknown
 Length of casing 2060 + If collection gallery, length, size and depth of
 gallery

(b) Screens

Type of perforated screen perforated casing
 Size of perforated screen 3" 25+ feet
 (diameter) (length)
 Thickness of gravel pack none length of gravel pack

(c) Water Bearing Materials

Distance to water flowing Character of water bearing materials
 Lakota Formation

 Thickness of water bearing material unknown

(d) Pump and Motor

Type of pump Flowing Well
 (centrifugal, propeller, mixed flow, etc.)
 Name of pump size
 Kind of motor
 (gasoline, electric, diesel, etc.)
 Horsepower Name of Motor

(e) Complete well

Capacity 90 g.p.m. at drawdown of Estimated cost \$20,000.00+

(f) Owner of land upon which well is located City of Eureka

Name

Eureka, South Dakota

Address

(g) Distance to nearest existing wells

On same owner's property 10 rods to City Well No. 2
 On property owned by others unknown rods

Well #2

9. (Continued)

III. Well Specifications

(a) Hole and casing

Size of drill hole or excavation 15" for 515.5' - 12 3/4" for 1568.0' 2083.5' Depth

Type of casing Steel
10" d-510.9' (wood, concrete, steel, etc.)Size of casing 8" d-1531.1' Thickness of casing 8"-0.277" 10"-0.307"
10" d-510.9'

Length of casing 8"-1531.1' If collection gallery, length, size and depth of gallery

(b) Screens

Type of perforated screen Cook Stainless Steel No. 304, No 40 Slot

Size of perforated screen 8" (diameter), 41.77' (length)

Thickness of gravel pack, length of gravel pack

(c) Water Bearing Materials

Distance to water 2042.0' Character of water bearing materials Lakota Formation

Thickness of water bearing material 41.5'

(d) Pump and Motor

Type of pump Flowing at 345 G.P.M. T.D.H. -44'
(centrifugal, propeller, mixed flow, etc.)

Name of pump size

Kind of motor (gasoline, electric, diesel, etc.)

Horsepower Name of Motor

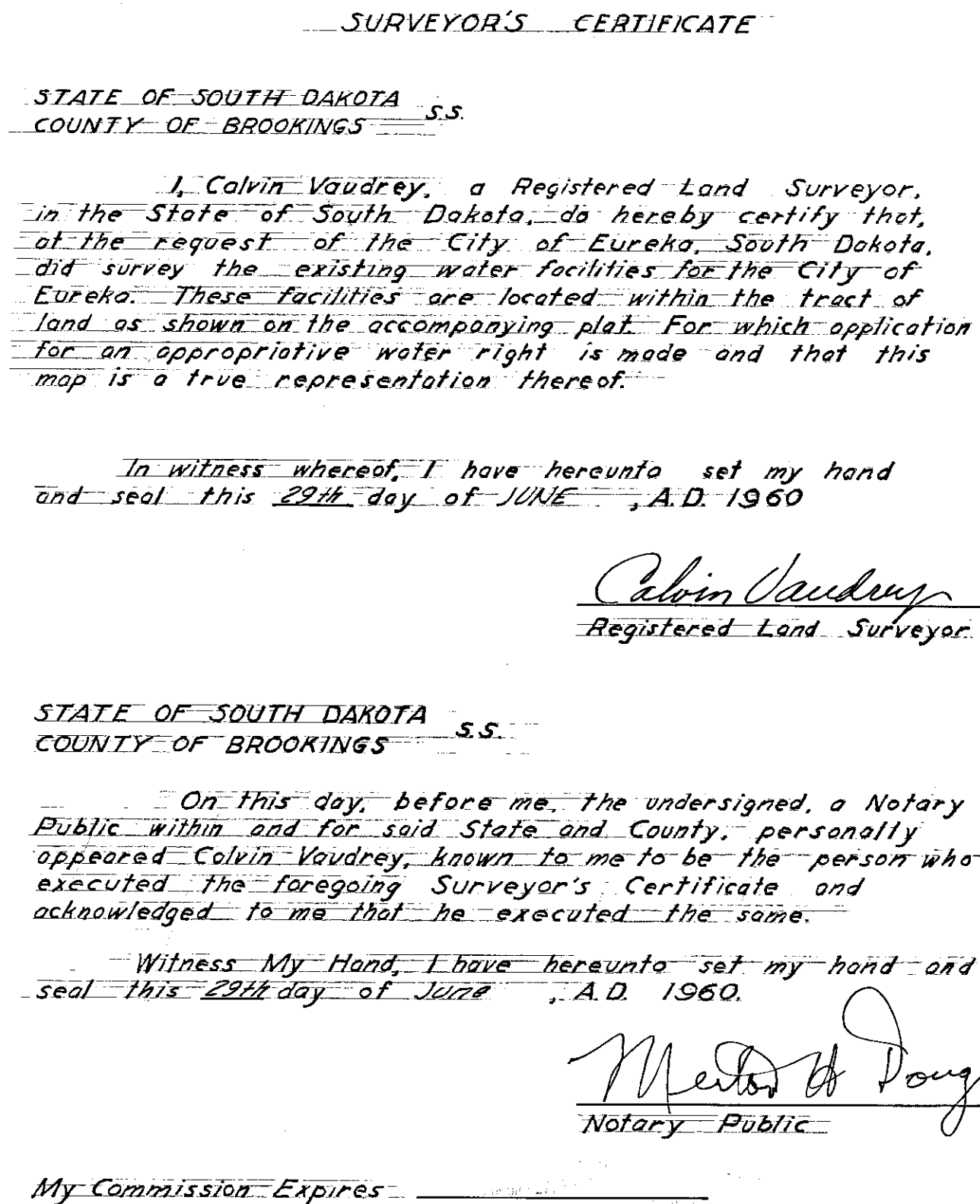
(e) Complete well

Capacity 345 G.P.M. at drawdown of Flowing Estimated cost \$57,000.00

(f) Owner of land upon which well is located City of Eureka
NameEureka, South Dakota
Address

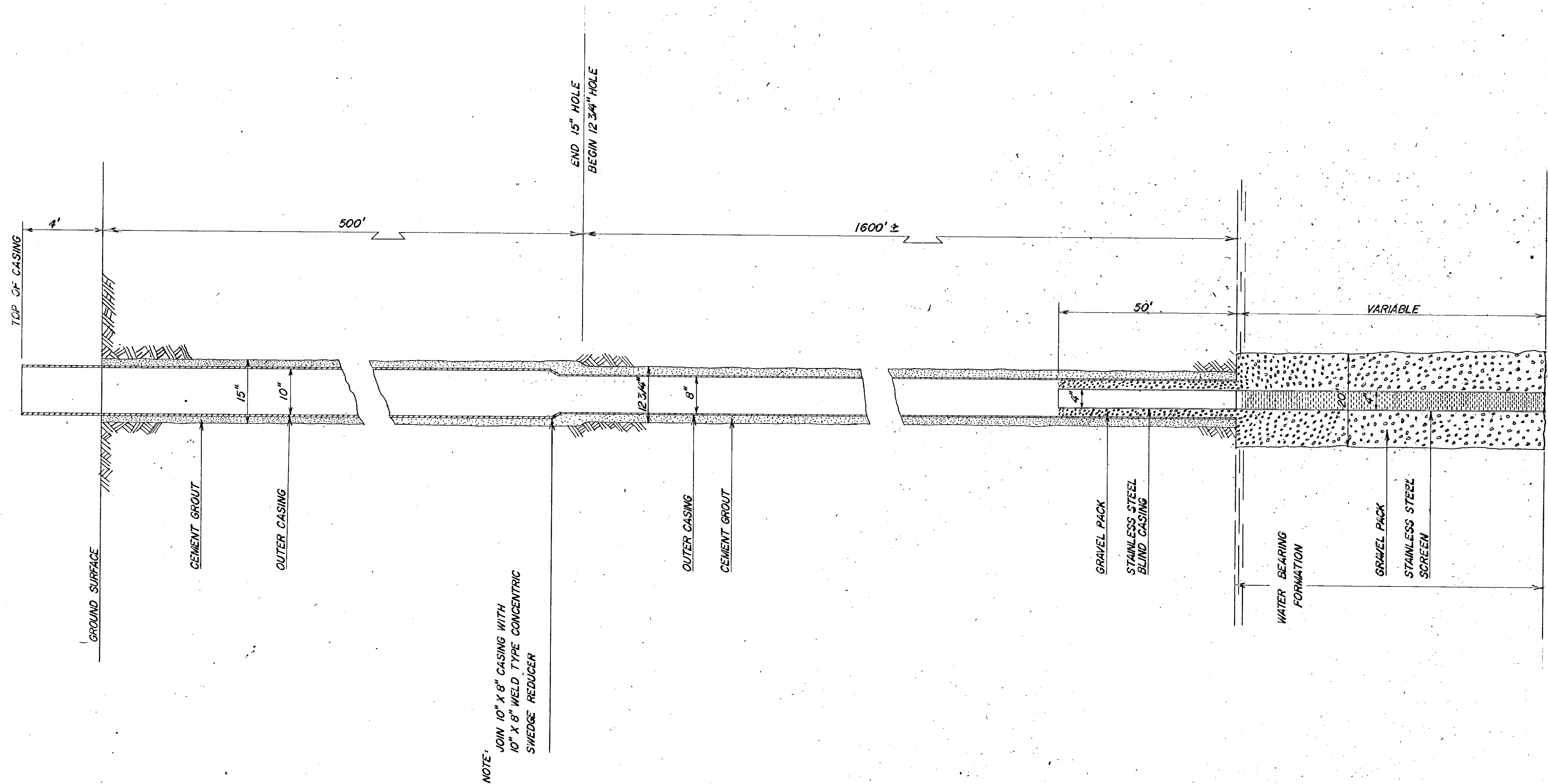
(g) Distance to nearest existing wells

On same owner's property 10 rods. On property owned by others rods



My Commission Expires _____

WATER RIGHTS MAP	
SHOWING DIVERSION LOCATION FOR PERMIT TO APPROPRIATE WATER	
J. T. BANNER & ASSOCIATES, ENGINEERS, BROOKINGS, SOUTH DAKOTA	
APPROVED _____ DATE _____	FOR _____
APPROVED _____ DATE _____	FOR J. T. BANNER & ASSOCIATES
CHECKED BY _____	DRAWN BY <i>D.H.W.</i>
DATE <i>JUNE 1980</i>	SHEET _____ OF _____



NOTE:
JOIN 10" X 8" CASING WITH
10" X 8" WELD TYPE CONCENTRIC
SWEDGE REDUCER

NO SCALE

WATER SUPPLY FACILITIES IMPROVEMENTS CITY OF EUREKA, SOUTH DAKOTA	
WELL CROSSSECTION	
J. T. BANNER & ASSOCIATES, ENGINEERS, BROOKINGS, SOUTH DAKOTA	
APPROVED	FOR
DATE	
APPROVED	FOR J. T. BANNER & ASSOCIATES
DATE	
CHECKED BY	DRAWN BY
DATE	SHEET 1 OF

Map # 550-3 (App # 723-3)

Remarks by State Water Resources Commission:

STATE OF SOUTH DAKOTA
County of Hughes } ss.

Pierre, South Dakota, November 9, 1966

This is to certify that the foregoing application was received by the Commission at 8:00 o'clock
9 m. on the 17 day of July, 1966.

State Water Resources Commission
By: Barnton Zinner
Chief Engineer, Executive Officer

Number of permit 723-3

Date of first receipt of application July 12, 1966

Date of return to applicant for correction, amendments or changes required as follows: _____, 19____

Date of receipt of corrected application _____, 19____

Date from which applicant may claim right July 12, 1966

Approved October 19, 1966, Recorded in Book 6 Page 134

This is to certify that we have examined the foregoing application for a permit to appropriate water of the State of South Dakota, and we hereby grant the same as stated herein, subject, however, to the following limitations and conditions:

1st. The equivalent of at least one-fifth of the work above specified is to be completed on or before _____

April 19, 1961

2nd. The whole of said work is to be completed on or before October 19, 1961

3rd. The limit of time for proof of beneficial use of water appropriated in accordance herewith is

September 17, 1963 EXTENSION APPD 3-11-64
October 12, 1961

4th. The water appropriated shall be used for the purpose of municipal use

5th. 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.

6th. The amount of the appropriation herein granted shall not exceed 0.967
cubic feet per second; neither shall it exceed the capacity of the above described system of diversion works, nor the least amount of water that experience may hereafter indicate as necessary for the production of crops in the exercise of the best husbandry; and further, said appropriation must be limited to not more than one-seventieth (1/70) of one cubic foot of water per second of time for each acre of land to which water is actually

used for municipal needs

and beneficially applied for irrigation on or before October 19, 1961; said water to be used during the following described annual period:

Continuously

Witness my hand this 9th day of November, 1966

State Water Resources Commission

By: George J. Zinner
Chief Engineer, Executive Officer

Certificate of Construction Issued March 16, 1964

Water License Issued March 16, 1964

STATE OF SOUTH DAKOTA

WATER LICENSE No. 723-3

WHEREAS, On the 12th day of July A. D. 1960
the City of Eureka

Mc Pherson County of Mc Pherson and State of
South Dakota 723-3 to us for a permit to use .96
 cubic feet per second of the waters of artesian ground water (Lakota)
 County of Mc Pherson, State of South Dakota, for Municipal
 purposes; and

WHEREAS, On the 9th day of November A. D. 1960
 Permit No. 723-3 was issued to said applicant... for the diversion of said water, and providing for the
 completion of the works of diversion therein described on or before the 19th day of
October A. D. 1961 and for the application to beneficial use of said
 water on or before the 17th day of September A. D. 1963
 and.

WHEREAS, On the 7th day of February A. D. 1964
 the holder... of said permit duly made proof of the completion of adequate works for the diversion of .76
723-3
 cubic feet per second of said waters, as evidenced by our Certificate No. 723-3
 dated March 16, 1964 confirming the completion of works of sufficient capacity for
.76
 diverting and conveying to the place of intended use .76 cubic feet per second of water, with date of
 priority of July 12, 1960 ~~and~~ and,

WHEREAS, On the 7th day of February A. D. 1964
 proof was duly made of the application to beneficial use of .76 cubic feet per second of said water;
to be used for municipal purposes in the City of Eureka

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 City of Eureka
of the holder and owner of said permit No. 723-3
a water right, dating from July 12, 1960 to the use of .76
cubic feet per second of the waters of artesian ground water (Lakota)
In the County of McPherson and State of South Dakota, or so much thereof as may be
necessary for the purposes hereinafter mentioned, to be diverted at a point N. 21° 30' E, 1070 Feet
from the SW Corner, Section 35, T127N, R73W.
and conducted ~~to and upon~~ through the city water distribution system

for the purpose of municipal use

subject, however, to the laws of the State of South Dakota applicable to a license for the use of the waters of the State, and subject, also to the local or community customs, rules and regulations which have been or may be adopted from time to time by a majority of the users from a common source of supply, canal or lateral from which such water may be taken, when such rules and regulations have for their object the economical use of such water.

WITNESS, My hand and seal of our office at Pierre, South Dakota,
this 16th day of March A. D. Ninety
Hundred and Sixty-Four

State Water Resources Commission

By:

J.W. GRIMES, Chief Engineer, Executive Officer

STATE OF SOUTH DAKOTA

Water License No. _____

To _____

Source of Supply _____

County _____

Am't _____ c. f. s.

Point of Diversion _____

Place of Use _____

Purpose _____

Date of Priority _____

Recorded _____

In Book _____ of _____ Page _____

Permit No. 723-3

Water Division No. 3 Missouri River Water District

Certificate of Completion of Works

TO ALL WHOM IT MAY CONCERN:

This is to Certify, That the City of Eureka

of _____, County of Mc Pherson, and ~~State of~~
State of South Dakota, the holder of Permit No. 723-3, Issued upon Application
 No. 723-3, bearing date of priority of July 12, 1960, authorizing the diversion of
.96 cu. ft. per second of the waters of artesian ground water (Lakota)
 County of Mc Pherson, State of South Dakota, at Well #2, at a point in
the S $\frac{1}{2}$ Block 13, original townsite at a point N 21° 30' E, 1070 Ft. from
the S $\frac{1}{4}$ Corner, Sec. 35, T127N, R73W municipal

purposes, has fully 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 .76 * cu. ft.
 per second of water; and that the lands proposed to be irrigated by the use of said water are described as follows,
 to-wit: to be used for municipal purposes for the City of Eureka.

* .76 cfs developed from Well #2, and Well #1 is abandoned,
 and will be plugged by the City.

Witness my hand this 16th day of March A. D. 1964

State Water Resources Commission

By:

J.W. GRIMES, Chief Engineer, Executive Officer

753-3

Form 5—Notice of Intention to Apply for Water

No. _____

on or before September 23 60
(First Publication _____, 19____)

APPROPRIATION OF WATER

Office of State Water Resources Commission,
August 12 1960
Pierre, S. Dak., _____, 19____

the City of Eureka XXXXXXXXXXXX

Notice is hereby given that _____ whose postoffice
XXXXXXXXXX address is _____ S. Dak., has made an application in accordance with

the provisions of the water laws of South Dakota for a permit to appropriate for beneficial use _____
XX ground water (Lakota)

cubic feet of water per second of time from the _____ through the
municipal wells #1 & 2

_____, the point of diversion of which is to be located on the _____
XXXXXXXXXXXXXXXX SN SE 35

bank of said stream in the _____ 1/4 of the _____ 1/4 of Section _____
127N 73W XXXXXXXX XXXXXXXX

Twp. _____ Range _____ Said water to be used for the purpose of providing irrigation on the fol-
XXXXXXXXXXXXXXXX

lowing described land:
municipal supplies for the City of Eureka

XXXXX XXXXX
and for _____ purposes.

This application will be taken up by the State Water Resources Commission at their office at Pierre for
consideration upon the 19th day of October 60 at 2 P.
1960 at _____ M. All interested persons
may appear and be heard.

Appropriate action will be taken by the Water Resources Commission after suitable time has elapsed for
the consideration of any or all information presented.

cc: Kenneth G. Herr - Publisher
Northwest Blade
Eureka, South Dakota

State Water Resources Commission
EURTON F. JONES
By: XXXXXXXXXXXXXXXXXXXX
Chief Engineer & Executive Assistant

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA }
 County Mc Pherson } ss.

Kenneth Herr being duly sworn, deposes and says the annexed printed copy of Notice of Intention to Appropriate Water was taken from the _____

Northwest Blade a newspaper which during the whole time of publication of said notice herein after stated, has been and is printed and published in the Northwest Blade Mc Pherson County of

Eureka, and State of South Dakota; that the said notice was published in said newspaper on the following dates:

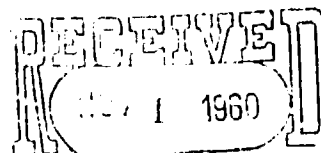
August 25th, 1960, Sept. 1, 1960, Sept. 8,
Sept. 15th, 1960

in each and every issue of the full number thereof, the first publication being made on the 25 day of August 1960 and the last publication on the 15 day of September 1960, upon which days or times of publication aforesaid the newspaper was regularly published, and that during the whole time of said publication he was Kenneth Herr the printer and publisher of the said newspaper.

Kenneth Herr

Subscribed and sworn to before me this 1 day of October A. D. 19 60

Notary Public _____ _____ County, S. D.



STATE WATER RESOURCES COMM.
 PIERRE, SOUTH DAKOTA

APPROPRIATION OF WATER

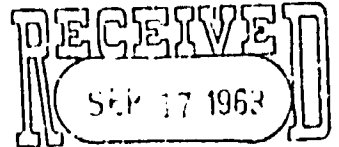
Office of State Water Resources Commission,
 Pierre, S. Dak., August 12, 1960.

Notice is hereby given that the City of Eureka, S. Dak. has made an application in accordance with the provisions of the water laws of South Dakota for a permit to appropriate for beneficial use .96 cubic feet of water per second of time from ground water (Lakota) through the Municipal Wells No. 1 and No. 2, the points of diversion of which are to be located in the SW $\frac{1}{4}$ of the SE $\frac{1}{4}$ of Section 35, Twp. 127 N., Range 73 W. Said water to be used for the purpose of providing municipal supplies for the City of Eureka.

This application will be taken up by the State Water Resources Commission at their office at Pierre for consideration upon the 19th day of October, 1960, at 2 P.M. All interested persons may appear and be heard.

Appropriate action will be taken by the Water Resources Commission after suitable time has elapsed for the consideration of any or all information presented.

State Water Resources Commission
 By: BURTON F. JONES
 Water Right Specialist

Permit No. 723-3Water Division No. 3STATE WATER RESOURCES COMM.
PIERRE, SOUTH DAKOTA

NOTICE OF COMPLETION OF WORKS

This blank must be filled out by the holder of permit and forwarded to the Executive Officer at least 60 days before the time set for completion of works

(P. O.) Eureka, South Dakota,(Date) September 16th, 1963,

TO THE STATE WATER RESOURCES COMMISSION
OF SOUTH DAKOTA, PIERRE:

DEAR SIR: Notice is hereby given of the completion of the works for the diversion of Municipal Well Numbers One and Two cu. ft. per second of the waters of the state from through the for all municipal purposes in the city and such other purposes as may meet in the premises in accordance with the terms and conditions of a certain permit heretofore issued by the Water Resources Commission of the State of South Dakota.

1. The name of the person or corporation holding said permit is City of Eureka, South Dakota, a municipal corporation,
2. The postoffice address of such person or the place of business of such corporation is Eureka, County of McPherson State of South Dakota
3. The number of such permit is 723-3 and the date set for the completion of such work is October 19th, 1961
4. Said water to be used for all municipal purposes.
5. Said works or diversion will be fully completed on the date set for such completion, and the amount of water which said works are capable of conducting to the place of intended use, in accordance with the plans accompanying the application for such permit, is .967 cubic feet per second.
6. The amount of land for which said water is available is six hundred forty acres, particularly described as follows: South one-half of section thirty-five--Township 127--Range 73 and the North one-half of Section Two--Township 126--73 McPherson County, S. D.

I hereby certify that the facts set forth in the above notice are true.

CITY OF EUREKA, McPherson County,
South Dakota,

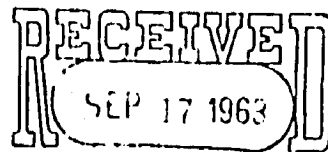
(Signature of Owners)

by

Mayor:

Municipal
Seal

Attest:
Auditor;

Permit No. 723-3Water Division No. 3 Water DistrictSTATE WATER RESOURCES COMM.
PIERRE, SOUTH DAKOTA

Notice of Application of Water to Beneficial Use

(This blank must be filled out by holder of permit and forwarded to the State Water Resources Commission at least sixty days before the time set for application of water.)

(P. O.) Eureka, South Dakota,(Date) September 16th, 1963,

TO THE STATE WATER RESOURCES COMMISSION OF SOUTH DAKOTA, PIERRE:

DEAR SIR: Notice is hereby given that on the _____ day of _____
19____, at Eureka County of McPherson State of South Dakota,
before _____ proof will be submitted on the application to beneficial use
(Examining Engineer or Officer)
of 967 cubic feet per second of the waters of Artesian Well numbers one and two
In accordance with the terms and conditions of Permit No. 723-3
heretofore issued by the Water Resources Commission of South Dakota.

- The name and postoffice address of the person or corporation holding said permit are _____
Eureka, South Dakota, a municipal corporation,
- The use to which said water has been applied is _____
All municipal purposes
- The amount applied to beneficial use is 100%
- The place where said water is used is (if for irrigation, give full and accurate description of the lands irrigated) Some of the water is used for lawns by private resident owners
- The name of the canal or ditch or other works by which said water is conducted to such place of use is _____
Waterworks from cities wells to private places and public places by water pipe.
- The right to take the water from such works is based upon permit No. 723-3
- The source of supply from which such water is diverted is Artesian Basin
- The date of priority which said user is prepared to establish is Prior to 1920
at the time the old well number one was drilled and in the year 1960 well
number two was drilled.

(Sign)

Mayor:

APPLICATION FOR EXTENSION OF TIME FOR COMPLETING WORKS

To the State Water Resources Commission
Pierre, South Dakota

February 7, 1964
(date)

Dear Sirs:

I hereby request that an extension of time from October 10, 1963
to September 10, 1964 be granted me for the completion of works to be done under Permit No.
22-1-2 and that the time for proof of beneficial use of water be extended to Sept. 10, 1964

Said works are located in Bl. Ph. 122 County and are described
as follows:

Location of headworks: In the SE 1/4 of the 35
of Section 35 Township 122 Range 72

E., B.H.M.

The water is to be used for the purpose of irrigation

The extension of time for the completion of these works is requested for the following reasons:
the water is needed for irrigation
on 122-1-2

APPROVED: March 11, 1964 Don E. Winget, Atty. Auditor
State Water Resources Commission Holder of Permit No. 22-1-2

By: Burton Jones
for Chief Engineer, Executive Officer

Permit No. 723-3Water Division No. 3 Mossouri R. Water District

Certificate of Examination of Works

Report of Examining Engineer

To the State Water Resources Commission, Pierre, South Dakota:

Dear Sirs: I hereby ~~certify~~ that in accordance with your letter of authorization dated _____1960, I have this day made a thorough examination of the diversion works constructed by _____City of Eureka, of _____McPherson County, South Dakota, holder of Permit No. 723-3, issuedupon Application No. 723-3, bearing date of priority of July 12, 1960, authorizing thediversion of 0.20 #1 cu. ft. per second of the waters of Ground water for Municipal

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

The diversion works comprise: #2 well ^{Flowing} w/ 510' of 10" steel casing cemented in and 1531' of 8" casing w/ a cock stainless steel No. 304 w/ 1/2" slot. Screen is 8" in dia. & 42' long. Total depth of hole is 2083.5' deep. Lakota Fm. #1 well has not been in operation since 1960. Shut in as much as possible; small leak drains into city Lake. Expect to plug #1 well in near future.

and the system is in the following condition: Good

The point of diversion is located Well #2 in 5 1/2 Block 12 at a point N 21° 30' E, 1370'
from the SW corner sec. 35 T127N R73W

The works are capable of diverting and conveying to the place of use 0.767 #2 cu. ft. per second of water, which is to be used for Municipal purposes

The legal sub-divisions to be irrigated are: _____

_____ comprising a total of _____ acres of land.

The domestic use intended comprises Municipal

The utilization for power, mining, or other beneficial uses comprises: _____

Witness my hand, this 17th day of February, A. D. 1960.

—SEAL—

William H. Miller
 Examining Engineer.

CITY OF EUREKA
SPECIFICATIONS
FOR
ARTESIAN WATER
WELL CONSTRUCTION
EUREKA, SOUTH DAKOTA

CITY COUNCIL

ALBERT BENDET, MAYOR

WILLIAM E. WENZEL, CITY AUDITOR

PAUL KRETSCHEMER, CITY ATTORNEY

J. T. BANNER & ASSOCIATES
LEGHOS BUILDING
BROOKINGS, SOUTH DAKOTA

T A B L E O F C O N T E N T S

<u>Section</u>	<u>Page</u>
Notice to Bidders	1
Instruction to Bidders	2
Proposal	5
General Conditions	9
Special Conditions	16
Detailed Specifications:	
Section "A" - Pilot Hole	19
Section "B" - Development of Permanent Well	21
Contract	28
Performance Bond	31

NOTICE TO BIDDERS

Notice is hereby given that the City of Eureka, South Dakota (hereinafter referred to as the City) will receive sealed competitive bids for the drilling and casing of a municipal Water Well. The proposed well will be drilled to the Dakota-Lakota formation and will consist of a 6" pilot hole reamed to proper size to receive 500 feet of 10" steel casing and approximately 1600 feet of 8" steel casing, grouted in place, under reaming of artesian water formation, installation of 4" stainless steel screen and 50 feet inner casing, gravel pack and other appurtenances.

The bids must be prepared on forms supplied by the City of Eureka and filed with the City Auditor at the City Hall in Eureka, South Dakota not later than _____ at which time and place all bids will be publicly opened and read aloud in the presence of bidders and their representatives. No bids will be received after the specified hour and date set for opening.

All bids must be accompanied either by certified check, cashier's check or draft payable to the City of Eureka, South Dakota, in the amount of five percent (5%) of the total sum of the bid, such check or draft to be issued either by a state or national bank domiciled within the State of South Dakota. The check will be retained by the City of Eureka as liquidating damages if the successful bidder refuses or fails to enter into a Contract and Performance Bond in accord with his bid, when notified of the award.

The proposed construction contract together with the plans and specifications for the construction work are available at the office of the Mayor, Eureka, South Dakota or J. T. Danner & Associates, Engineers, Legeros Building, Brookings, South Dakota, and may be obtained on request from the Engineers.

By virtue of statutory authority preference will be given to materials, products and supplies found or produced within the State of South Dakota.

Bids may not be withdrawn after the time fixed for opening them. The City of Eureka reserves the right to waive irregularities and to reject any or all bids.

BY ORDER OF THE MAYOR AND CITY COUNCIL, EUREKA, SOUTH DAKOTA

Albert Bender, Mayor

Dated this 18th day of January 1960

INSTRUCTIONS TO BIDDERS

Bidders will observe the following instructions together with those contained in the "Notice to Bidders".

IB-1 CONTRACT DOCUMENTS

The following are part and parcel of the Contract and whenever the word "Contract" appears herein the same shall be held to include all of these items:

- Notice to Bidders
- Instructions to Bidders
- Proposal Form
- Specifications
- Contract Form
- Contractor's Performance Bond Form
- Drawings

IB-2 DEFINITIONS

Wherever the words "Owner" or "City" are used herein, it shall mean the City of Eureka. Wherever the word "Bidder" is used in the documents, it shall mean each or any of the persons, partnerships, or corporations submitting proposals for the performance of the work covered by these specifications. Wherever the word "Contractor" is used herein, it shall mean the person, firm or corporation entering into the Contract for the performance of the work covered by these specifications. Wherever the term "Engineer" is used, it shall mean J. T. Banner & Associates, Consulting Engineers, Logeros Building, Brookings, South Dakota or their authorized representatives.

IB-3 PROPOSALS

Bids shall be made upon the form furnished herein with all items properly filled out; numerals shall be written in ink, and the signature of all persons signing shall be in longhand. The completed form shall be without interlineations, alterations or erasures.

Bids shall not contain any recapitulation of the work to be done, and alternative proposals will not be considered unless called for. No oral, telephonic or telegraphic proposals or modifications will be considered.

Before submitting a bid, bidders shall carefully examine the drawings read the specifications, and form and terms of the Contract, shall visit the site of the work, and shall fully inform themselves as to all existing conditions and limitations, and shall include in the bid a sum to cover the cost of all items included in the Contract. Making a bid creates a conclusive presumption that these things have been done.

All bids must be sealed, addressed to and deposited with the City Auditor, Eureka, South Dakota on or before the day and hour set for opening of bids in the advertised "Notice to Bidders". The bids must be endorsed on the outside with the title of the work and the name of the bidder.

IB-4 PROPOSAL GUARANTEE

Each proposal shall, as a guarantee of good faith on the part of the bidder, be accompanied by a certified check drawn on an acceptable bank domiciled in South Dakota in an amount of not less than five per cent (5%) of the total bid.

IB-5 WITHDRAWAL OF BID

Bids may be withdrawn by the bidder prior to, but not after, the time set for the opening of bids.

IB-6 INTERPRETATION OF DRAWINGS AND DOCUMENTS

Should a bidder find discrepancies in or omission from the Drawings or Specifications or should he be in doubt as to their meaning, he shall at once notify the Engineer; and if the point in question is not clearly and fully set forth, a written addendum or bulletin of instructions will be mailed or delivered to each person obtaining a set of Contract Documents as provided for in the "Notice to Bidders". Each person requesting an interpretation will be responsible for the delivery of his request to the Engineer. The Owner will not be bound by, nor responsible for, any other explanation or interpretations of the proposed documents than those given in writing as set forth in this paragraph. No oral instructions, interpretations or representations shall be binding upon the Owner.

IB-7 SUBSTITUTION FOR PATENTED AND SPECIFIED ARTICLES

Whenever in the Drawings or Specifications any material or process is indicated or specified by patent or proprietary name and/or by name of manufacturer, such specifications shall be deemed to be used for the purpose of facilitating description of the material and/or process desired, contractor may offer any material or process which shall be equal in every respect to that so indicated or specified; provided, however, that if the material, process or article offered by the Contractor is not, in the opinion of the Engineer, equal in every respect, then the Contractor must furnish the material, process or article specified or one that, in the opinion of the Engineer, is the equal thereof in every respect.

IB-8 AWARD OR REJECTION OF BIDS

The Owner reserves the right to reject any part or all of any and all bids and to waive any informalities in bids received.

IB-9 CONSIDERATION OF THE PROPOSALS IN AWARDDING OF CONTRACT

Promptly after the opening of the proposals a compilation of them will be prepared, and the certified checks of these bidders, who in the judgment of the Owner, should not be considered in making the award, will be returned. The other checks, except that of the successful bidder, will be returned as soon as a Contract is awarded or after a lapse of thirty (30) days of time from the opening of bids. Check of the successful bidder will be returned as soon as contract and bond are executed. The Contract will be awarded within thirty (30) days after the opening of bids unless all bids are rejected. The successful bidder will be required to execute the Contract and furnish the bond required within ten (10) days of receipt of the Notice of Award to him. Failure to do so shall be just cause for the annulment of the award and in the event of such annulment, the certified check of the bidder shall become the property of the City of Eureka. Award may then be made to another bidder or the Owner may call for other bids.

IB-10 COMPARISON OF BIDS

Proposals will be compared on the basis of the Engineer's Estimate of Quantities, which are included in the Proposal Form. The basis of payment will be actual quantities of work performed and accepted. If upon completion of the project, the actual quantities show either increase or decrease from the quantities shown in the Proposal, the unit prices submitted in the Proposal shall still prevail.

IB-11 QUALIFICATIONS OF BIDDERS

Experience, qualifications, responsibility and past performances are of major importance in this portion of the contemplated work.

Therefore, the Bidders must submit to the Engineer prior to the time set for opening bids the following information:

A list of wells of similar nature and magnitude in similar anticipated formations.

A statement of five years of continuous operation.

A statement of year, model, make and condition of equipment to be used.

A statement of experience and name of driller to be used on this project.

A statement that bidder has necessary new materials in stock or has them readily available without delay.

P R O P O S A L

HONORABLE MAYOR AND CITY COUNCIL
CITY OF EUREKA, SOUTH DAKOTA

The undersigned hereby proposes and agrees that he will enter into and perform the Contract attached hereto, and of which this Proposal forms a part, and will do the work therein described on the terms and conditions therein set forth; and furnish all the labor, materials, tools, equipment, transportation and services for said work in strict conformity with the Specifications, forming a part of the Contract Documents for the prices shown in the following schedule.

(Bids must include all items of Schedules A and B)

Item No.	Work or Material	SCHEDULE A
1	<u>Pilot Hole</u> --Drilling a 6 inch pilot hole through earth, sand, gravel, boulders, sandstone, shales, etc. to a depth of 2100 feet including all labor, material, tools and equipment required to drill the hole, collect drilling samples, perform electric logging of formations and analyze and test samples of drill cuttings.	
	For the lump sum of \$_____	
2	Add for each additional foot of Pilot Hole drilling required below a depth of 2100 feet as quoted in Item #1.	
	Add the unit cost of \$_____ per lin.ft.	
3	Deduct for each foot less than 2100 feet of pilot hole drilling required as quoted in Item # 1.	
	Deduct the unit cost of \$_____ per lin.ft.	

SCHEDULE B

- 1

For the lump sum of \$

- 2

For the lump sum of \$

- 3

For the unit price of \$ _____/ft.

- 4

For the unit price of \$

- 5

For the lump sum of \$

- 6

Add the unit cost of \$

- 7 Deduct for each foot of well developed to the bottom of 8 inch casing less than 1600 feet including reaming out pilot hole to approximately 12-3/4 inch diameter, furnishing, installing and cementing 8 inch casing.

Deduct the unit cost of \$_____per lin.ft.

.....

- 8 Add for each hour of test pumping over and above the 8 hour test period.

Add the unit cost of \$_____per hour

.....

The undersigned has examined the location of the proposed work, and is familiar with the Drawings and Specifications and all Contract Documents related thereto, and the local conditions at the place where the work is to be done.

The undersigned understands and agrees that the estimated quantities submitted herewith are approximate only, and that the basis of payment will be the actual quantities.

If awarded the Contract the undersigned hereby agrees to sign said Contract and furnish the necessary bonds within ten (10) days of receipt of the action of award of said Contract, and to begin work within twenty (20) calendar days from date of receipt of Notice to Proceed, and agrees to complete the work within one hundred (100) calendar days from date of receipt of Notice to Proceed.

The undersigned further agrees, that if awarded the Contract for the work included in this Proposal, to complete and deliver the work contemplated in accordance with the conditions set forth in the Contract Documents.

The undersigned has checked carefully all the above figures, and understands that the City of Eureka will not be responsible for any errors or omissions on the part of the undersigned in making up this bid.

Enclosed is a certified check in the sum of _____
(6_____).

words

Said check is made payable to the City of Eureka and is given as a guarantee that the Bidder will enter into the Contract and Performance Bond on the forms attached hereto, if awarded the work, and the amount thereof represents the agreed liquidated damages that the City of Eureka will sustain if the Bidder fails or refuses to enter into said Contract in which event said check shall be immediately paid to the City of Eureka and retained by it as payment of said liquidated damages and not as a penalty.

Unless otherwise required by law, the undersigned agrees that the City of Eureka has the right to hold all bids received for a period of thirty (30) days after date of opening thereof.

NAME

BY _____

TITLE _____

ADDRESS _____

TELEPHONE _____

DATED THIS _____ DAY OF _____ 196__.

S P E C I F I C A T I O N S

GC - GENERAL CONDITIONS

GC-1. SCOPE OF WORK

The work to be performed under this Contract consists of furnishing all materials, equipment, supplies, labor and transportation, and performing all work in accordance with the specifications and drawings. The work shall be complete and all work, material, and services not expressly called for in the specifications or not shown on the drawings, which may be necessary for complete and proper construction to carry out the contract in good faith shall be performed, furnished and installed by the Contractor at no increase in cost to the Owner.

GC-2. CONTRACTOR'S PERFORMANCE BOND

The Contractor shall furnish a bond acceptable to the Owner in amount not less than 100 per cent (100%) of the aggregate payments to be made under the Contract.

GC-3. SITE INVESTIGATION

The Contractor acknowledges that he has satisfied himself as to the nature and location of the work, the general and local conditions, particularly those bearing on transportation, handling and storage of materials, the character of the equipment and facilities needed during the prosecution of the work and all other matters which can in any way affect the work or the cost thereof under this Contract. Any failure of the Contractor to acquaint himself with the available information concerning these conditions will not relieve him from responsibility for estimating properly the difficulties or cost of successfully performing the work.

GC-4. STAKING OUT WORK

The work to be done will be staked by the Engineer for the Contractor. The Contractor shall, without cost to the Owner, provide such material and give such assistance as may be required by the Engineer.

GC-5. BENCH MARKS AND SURVEY STAKES

Bench marks and survey stakes shall be preserved by the Contractor and in case of their destruction or removal by him or his employees, they will be replaced by the Engineer at the Contractor's expense, and his sureties shall be liable therefor.

GC-6. LINES AND GRADES

All work done under this Contract shall be done to the lines and grades shown on the plans. The Contractor shall keep the Engineer informed, a reasonable time in advance of the time and places at which he wishes to do work, in order that lines and grades may be furnished and necessary measurements for record and payment may be made with the minimum of inconvenience to the Engineer and of delay to the Contractor.

GC-7. WORK DONE WITHOUT LINES OR GRADES

Any work done without being properly located and established by base lines, offset stakes, bench marks, or other basic reference points located, established or checked by the Engineer, or done without the supervision of an inspector or other representative of the Engineer, may be ordered removed and replaced at the Contractor's cost and expense.

GC-8. FIGURED DIMENSIONS TO GOVERN

Indicated dimensions, when given on the plans, shall be accurately followed, even though they differ from scaled measurements. No work shown on the plans, the dimensions of which are not indicated, shall be executed until the instructions have been obtained from the Engineer as to the dimensions to be used.

GC-9. CONTRACTOR TO CHECK PLANS AND SCHEDULES

The Contractor is required to check all dimensions and quantities on the plans and schedules given to him by the Engineer and shall notify the Engineer of any discrepancy between the plans and the conditions of the ground, or any error or omission in plans, or in the layout as given by stakes, points, or instructions, which he may discover in the course of the work. The Contractor will not be allowed to take advantage of any error or omission in the plans or contract documents, as full instructions will be furnished by the Engineer should such error or omission be discovered, and the Contractor shall carry out such instructions as if originally specified.

GC-10. DRAWINGS TO BE FURNISHED BY CONTRACTOR

The Contractor shall supply such working drawings and drawings of devices to be furnished under this Contract as are called for herein or as required by the Engineer, to make clear the details of construction and of devices. Unless otherwise herein specified, such drawings shall be submitted to the Engineer for his approval upon his request. Should any drawings furnished by the contractor not be approved by the Engineer, the Contractor shall make the revisions required and again submit them to the Engineer for approval. After due approval by the Engineer, these drawings shall become a part of this Contract and the work shall be done in conformity therewith. No such work shall be begun or devices purchased until the drawings covering it or them have been approved.

The approval by the Engineer of any drawing or any method of work proposed by the Contractor shall not relieve the Contractor of any of his responsibility for any errors therein, and shall not be regarded as any assumption of risk or liability by the Owner or any officer or employee thereof, and the Contractor shall have no claim under this Contract on account of the failure or inefficiency of any plan or method so approved. Such approval shall be considered to mean merely that the Engineer has no objection to the Contractor's using, upon his own full responsibility, the plan or method the Contractor proposes.

GC-11. AUTHORITY OF INSPECTORS

Inspectors shall be authorized by the Engineer to inspect all work done and all materials furnished. The inspector shall have full authority to reject materials or suspend work until any questions at issue can be referred to the Engineer. The Engineer and his inspectors shall have unrestricted access to all parts of the work at all times.

GC-12. DRAWINGS AND SPECIFICATIONS COOPERATIVE

The drawings and specifications shall be considered as cooperative and work and materials called for by one and not shown or mentioned on the other shall be done or furnished in as faithful and thorough a manner as though fully covered by both.

GC-13. CHARACTER OF WORK

The work shall be executed in the best and most workmanlike manner by qualified, careful and efficient mechanics, in strict accordance with the drawings and specifications.

GC-14. QUALITY OF MATERIALS

Except as otherwise specified all materials shall be of the best quality of their respective kinds.

GC-15. PROTECTION OF MATERIALS AND WORK

The Contractor shall, at all times carefully and properly protect all materials, both before and after being used on the job, and all work performed by him, and provide any special protection from weather deemed necessary without additional cost to the Owner.

GC-16. SUSPENSION FOR CLIMATIC CONDITIONS

The Engineer may order the Contractor to suspend any work that may be subject to damage due to climatic conditions. In such case an extension of time may be granted at the discretion of the Engineer.

GC-17. TESTS OF MATERIALS

All specified and required tests for approval of source of materials shall be made at the expense of the Contractor by a properly equipped laboratory of established reputation, whose work and testing facilities shall be approved by the Owner. Approval of materials based on acceptable tests will apply only while such materials as furnished equal or exceed the tested samples or test specimens in quality and minimum requirements. Any change in origin, method of preparation, or manufacture of such materials will require new tests and approval thereof. Reports of all tests shall be furnished to the Owner in as many certified counterparts as may be required by the said Owner.

GC-18. REMOVAL OF CONDEMNED MATERIALS OR WORK

The Contractor shall remove from the site of the work, without delay, all rejected and condemned materials or structures of any kind brought to or incorporated in the work, and upon his failure to do so, or to make satisfactory progress in so doing, within forty-eight (48) hours after the service of a written notice from the Engineer ordering such removal, the condemned materials or structures may be removed by the Owner and the cost of such removal be taken out of the money that may be due or may become due the Contractor on account of or by virtue of this Contract. No such rejected or condemned material shall again be offered for use by the Contractor under this or any other Contract under this project.

GC-19. DEDUCTIONS FOR UNCORRECTED WORK

If the Engineer deems it inexpedient to correct work injured or done not in accordance with the Contract, an equitable deduction from the contract price shall be made therefor.

GC-20. STORAGE OF MATERIALS

Materials shall be stored so as to insure the preservation of their quality and fitness for the work. Space needed for storage shall be provided by the Contractor at his expense.

GC-21. CLEANING UP

The Contractor shall not allow the site of the work to become littered with trash and waste materials, but shall maintain the same in a neat and orderly condition throughout the construction period. The Engineer shall have the right to determine what is or is not waste material or rubbish and manner and place of disposal. On or before the completion of the work the Contractor shall, without charge therefor, carefully clean out of all pits, pipes, chambers, or conduits and structure, and shall tear down and remove all temporary structures built by him, and shall remove all rubbish of all kinds from any of the tracts or grounds which he has occupied and shall leave them in first class condition.

GC-22. PUBLIC CONVENIENCE AND SAFETY

Prosecution of the work and storage of materials shall be handled so as to cause as little obstruction to public and private travel as is necessary.

GC-23. BARRICADES, WARNING SIGNS, ETC.

Highways, drives and streets closed to traffic shall be protected by effective barricades. All barricades and obstructions shall be illuminated at night. No direct payment shall be made for the construction and maintenance of barricades, directional signs and lights. The cost of these items shall be included in the prices bid for the various items of work included in the proposal.

GC-24. PRESERVATION AND RESTORATION OF PROPERTY

The Contractor shall be responsible for the preservation of all public and private property, trees, fences and other property in and adjacent to the work to be done under this contract; shall exert every precaution to prevent damage or injury thereto; and shall exercise the precautions necessary to prevent damage to pipes, cond units and other underground structures. When any damage or injury is done to public or private property by or on account of any act, omission, neglect or misconduct in the execution of the work, or in consequence of the non-execution thereof on the part of the Contractor, such damage or injury will be corrected by the Contractor and at the Contractor's expense.

GC-25. PATENTED DEVICES, MATERIALS AND PROCESSES

The Contractor shall hold and save the Owner harmless from liability of any patented article or appliance manufactured or used in the performance of this contract.

GC-26. SUB-LETTING OF CONTRACT

No part of this Contract, except for the manufacture of materials, may be sub-let without the approval of the Owner.

GC-27. PAYMENT FOR LABOR AND MATERIALS

The Contractor agrees that he will pay promptly for work, services, and labor and for sub-contractors and equipment employed on the work, and for all labor and materials incidental to the completion of the work. The showing of receipts for payment of labor and materials and payment of sub-contractors may be required by the Owner before any partial or final payment is allowed or made.

GC-28. INSURANCE

The Contractor shall maintain during the life of this Contract, adequate Workmen's Compensation Insurance for all his employees on the work, and in case any work is sub-let, the Contractor shall require the sub-contractor similarly to provide Workmen's Compensation Insurance for the latter's employees, unless such employees are covered by the protection afforded by the Contractor.

The Contractor shall maintain during the life of this Contract such public liability and property damage insurance as shall protect him and any sub-contractor performing work covered by this Contract, and the Owner for claims for damages for personal injury, including wrongful death, as well as from claims of property damages, which may arise from operations under this Contract, whether such operations be by himself or by any sub-contractor or anyone directly or indirectly employed by either of them.

GC-29. ACCIDENT PREVENTION

Federal and state laws relating to the public must be observed, and the Contractor shall at all times, whether or not so specifically directed by the Engineer, take necessary precautions to insure the protection of the public.

GC-30. DAMAGES

The Contractor hereby expressly binds himself to indemnify and save harmless the Owner against all suits or actions of every kind and nature brought or which may be brought against the Owner for and on account of any injuries or damages received or sustained by any person, firm or corporation, or persons, firms or corporations, in connection with or on account of the construction of the work under this Contract or by or in consequence of any negligence in connection with same or on account of the use of any improper or defective materials or on account of any poor workmanship or on account of any act of commission or omission of the Contractor or his, its or their sub-contractors, agents, servants, or employees, or for any cause arising out of the performance of this Contract.

GC-31. EXTRA WORK

The Contractor shall do any work, not herein provided for, which may be found necessary to carry out and complete the construction. The value of any such extra work shall be determined in one of the following ways; (a) by estimate and acceptance in a lump sum; (b) by unit prices agreed upon; (c) by actual cost plus 15%. In computing such actual cost, no interest, depreciation of plant overhead cost, or contingencies shall be included, but shall be taken to be allowed for in the said 15% which allowance shall include all profit.

GC-32. TESTING COMPLETED WORK

Before final acceptance, all parts of the work shall be tested and each part shall be in good condition, and working order or shall be placed in such condition and order at the expense of the Contractor. All tests of completed work required under this Contract shall be made under the direction of the Engineer by and at the expense of the Contractor, who shall repair at his own expense all damage resulting therefrom.

GC-33. PLACING WORK IN SERVICE

If desired by the Owner, portions of the work, as completed, may be placed in service, the Contractor to give proper access to the work for this purpose; but such use and operation shall not constitute an acceptance of the work, and the Contractor shall be liable for defects due to faulty construction until the entire work under this Contract is finally accepted.

GC-34. DEFECTIVE WORKMANSHIP AND MATERIALS

During a period of one year from and after the date of the final acceptance by the Owner of the work embraced by this Contract, the Contractor shall make all needed repairs arising out of defective workmanship or materials, or both, which in the judgment of the Owner, shall become necessary, during such period. If within ten days after the mailing of a notice in writing to the Contractor, or his agent, the said Contractor shall neglect to make, or undertake with due diligence to make the aforesaid repairs the Owner is hereby authorized to make such repairs at the

Contractor's expense; providing, however, that in case of an emergency where, in the judgement of the Owner, delay would cause serious loss or damage, repairs may be made without notice being sent to the Contractor and the Contractor shall pay the cost thereof.

GC-35. MONTHLY ESTIMATES AND PAYMENTS

On or about the first day of each month, the Engineer will make an approximate estimate of the value of work done and unused materials delivered for, and stored on the site of the work during the previous calendar month. After each such estimate shall have been approved by the Owner, the Owner shall pay the Contractor ninety per cent (90%) of the amount of such estimated sum on or before the twentieth day of said month.

GC-36. OWNER'S RIGHT TO DO WORK

If the Contractor should neglect to prosecute the work properly or fail to perform any provision of the Contract, the Owner, after three day's written notice to the Contractor, may without prejudice to any other remedy it may have, make good such deficiencies and may deduct the cost thereof from the payment then or thereafter due the Contractor.

GC-37. CONTRACTOR'S RESPONSIBILITY FOR WORK

Until the final acceptance of the work by the Engineer as evidenced in writing, the Contractor shall have charge and care thereof, and shall take every necessary precaution against injury or damage to any part thereof by action of the elements or from any other cause, whether arising from the execution or from the non-execution of the work. The Contractor shall rebuild, repair, restore and make good all injuries or damages to any portion of the work or materials occasioned by any of the above causes before its completion and acceptance, and shall bear the expense thereof.

SPECIAL CONDITIONS

SC-1. SCOPE OF WORK

The work to be performed under these specifications consists of furnishing of all materials, transportation, equipment, tools, supplies, and plant and the performance of all necessary skill and labor necessary for the complete and satisfactory construction, development, testing, disinfection and logging of the proposed artesian water supply well for the City of Eureka, South Dakota, as described in these specifications.

SC-2. PERMITS, CERTIFICATES, LAWS AND ORDINANCES

The Contractor shall, at his own expense, procure all permits, certificates, and licenses required of him by law for the execution of his work. He shall comply with all Federal, state and local laws, ordinances or rules and regulations relating to the performance of the work. The minimum specifications set forth by the State Water Resources Commission, Pierre, South Dakota shall be a part of these specifications by reference and are in full force and effect as if spread at length herein except for specific changes and requirements as set herein.

SC-3. LOCATION

The proposed well to be constructed hereunder is to be located on property owned by the City of Eureka. The more exact location is shown on the attached map.

SC-4. LOCAL CONDITIONS

The present city water supply is obtained from an artesian well which flows at a present rate of 80 gallons per minute. The depth of this well is 2084 feet and penetrates the Lakota sands according to local information. The log of this well is not available, however the following formation tops in the nearest deep wells to Eureka have been taken from "Special Report 1, Water Supply for the City of Eureka", by the State Geological Survey of South Dakota.

Oil Hunters #1 Raetzman (about 1365)
Brown County, N.E. $\frac{1}{4}$ S 33, T 125, R 65

0 -	200	Pierre	1345 - 1400	Millstone Grit
260 -	420	Niobrara		1355? Red Beds
420 -	660	Carlile	1400 - 1465	Maquoketa or Black River
660 -	700	Greenhorn		
700 -		Graneros	1460 -	Limestone
1050 -	1080	Dakota	1470 - 1500	Water bearing
1145 -		Top Fuson	1500 - 1522	Black River (T.D.)
1230 -	1300	Sundance		

Peppers #1 State
Walworth County NE $\frac{1}{4}$ 36 - T 123 - R 76

0 - 140	Glacial Till	2160 - 2240	Sundance
140 - 170	Glacial Till with Pierre Clay	2620 - 2740	Madison
170 - 200	Pierre	3137 - 3330	Englewood
960 - 1020	Niobrara	3330 - 3720	Limestone & dolomite
1065	Carlile	3720 - 3790	Black River
1490 - 1530	Greenhorn	3840	Upper Cambrian
1530 -	Graneros	3920 - 3922	Precambrian ("Granite")
1900 - 1960	Dakota		
1960 - 1990	Fuson		
1990 - 2100	Lakota		

Fray #1 Kranzler
Walworth County, NW $\frac{1}{4}$ NW $\frac{1}{4}$ S 14 - T 121 - R 77

0 - 500	No Cuttings	2170 -	Milestone Grit
750 - 850	Pierre	2310 - 2330	Minnelusa
850 - 940	Niobrara	2470 - 2480	Madison
940 - 1322	Carlile	3400 - 3500	Galena (Trenton)
1322 - 1350	Greenhorn	3500 - 3610	Decorah
1350 - 1712	Graneros	3615 - 3740	Black River
1712 - 1860	Dakota	3740 - 3750	St. Peter
1860 - 1920	Fuson	3751 - 3780	Upper Cambrian
1920 - 1935	Lakota	3780 - 3808	Pre-cambrian ("Granite")
1935 - 2170	Sundance		

This information regarding sub-surface conditions is intended to assist the contractor in preparing his bid. However, the owner does not guarantee its accuracy, nor that it is necessarily indicative of conditions to be encountered in sinking the well to be constructed hereunder, and the contractor shall satisfy himself regarding all local conditions affecting his work by personal investigation and neither the information contained in this section nor that derived from maps or plans, or from the owner or his agents or employers shall act to relieve the contractor from any responsibility hereunder or from fulfilling any and all of the terms and requirements of his contract.

SC-5. COMPETENT WORKMEN

The Contractor shall employ only competent workmen for the execution of his work and all such work shall be performed under direct supervision of a qualified well driller with previous experience in drilling similar wells and shall be approved by the Engineer.

SC-6. LIQUIDATED DAMAGES

The damages that may result from any delay in completion of the work, by the time agreed upon will be difficult of ascertainment. If the work, or any part thereof, is not completed on or before the date fixed for its completion by the terms of the Contract, the Contractor shall pay the City of Eureka the sum of forty-five dollars (\$45.00) per day for each calendar day's delay until the work is satisfactorily completed. Extension of the date of completion may be made by the City due to delays which are no fault of the Contractor.

SC-7. COMMENCEMENT, PROSECUTION AND COMPLETION OF WORK

The Contractor shall begin work within the time after receipt of Notice to Proceed and shall complete all work within the time stated in the Proposal. The capacity of the Contractor's plant and the forces employed shall be such as to insure the completion of the work within the specified period of time.

SC-8. BOUNDARIES OF WORK

The City shall provide rights of way for the work specified in the Contract and make suitable provisions for ingress and egress, and the Contractor shall not enter on or occupy with men, tools, equipment or material any ground outside the property specified without the written consent of the owner of such land. Other contractors and employees and authorized agents of the City or other agencies may, for all necessary purposes, enter upon the work and premises used by the Contractor. The Contractor shall conduct his work so as not to impede unnecessarily any work being done by others on or adjacent to the site.

SC-9. PROTECTION OF SITE

Excepting as otherwise provided herein, the Contractor shall protect all structures, walks, pipelines, trees, shrubs, lawns, fences etc., during the progress of the work; shall remove from the site all cuttings, drillings, debris and unused materials; and shall upon completion of the work, restore the site as nearly as possible to its original condition, including the replacement, at Contractor's sole expense, of any facility or landscaping which has been damaged beyond restoration or destroyed to its original condition. Water pumped from the well shall be conducted to Eureka Lake without damage or creation of a nuisance.

The Contractor shall exercise extreme caution to see that the drill hole will penetrate only the Lakota formation.

DETAILED SPECIFICATIONS

SECTION A - PILOT HOLE

A - 1. Scope. The work covered by this section of the specifications consists of drilling a pilot hole for the purpose of determining the underground water supply conditions which will yield approximately 300 gallons per minute. It is possible that this quantity can be obtained at a minimum depth of 2100 feet below the surface of the ground although a deeper hole may be necessary. The material that will be encountered is unknown but it is anticipated that the overburden is a glacial drift consisting of a silty till with gravel and boulders. The bedrock, known as the Lakota formation, consists of cemented and uncemented sand, silts and shales. If examination and analyses of the sandstone formations encountered indicate that a satisfactory quantity of water can be obtained then the pilot hole shall be developed into a permanent well. (See Section B).

A - 2. Location. The location of the pilot hole shall be as indicated on the Location Map. If the pilot hole at this location is abandoned then a second pilot hole shall be drilled at a location indicated by the Engineer.

A-- 3. Pilot Hole Construction. The pilot hole shall be 6" minimum diameter and shall be sunk by means of a rotary drill, or other approved equipment, to a depth of at least 2100 feet below the ground surface. The well driller shall save a sample of cuttings for approximately every five feet and place them in small sacks properly labeling same. Drilling shall be continued below a depth of 2,100 feet as required and approved by the Engineer.

A - 4. Log. The driller shall keep a complete drill record or log book of the formations encountered and the depth of same. A complete record of the hole obtained by using "electric logging" shall also be made. The electric logging equipment shall be capable of determining the porosity of the formations, thus indicating the possibility of obtaining a water supply from the respective formations. Tests and analyses of the drilling samples shall be made and the electric logging records shall be utilized to estimate the quantity of water that may be obtained from the formations encountered.

A - 5. Measurement and Payment.

A-5.1. Item 1, Schedule A. The Contractor will be paid a lump sum price (as quoted for Item 1 of Schedule A) for drilling a 6" pilot hole through earth, sand, gravel, boulders, sandstone, shales, etc. to a depth of 2100 feet. This lump sum price is to include all labor, material, tools, and equipment required to drill the hole, collect drilling samples, perform electric logging of formations, and analyze and test samples of drill cuttings.

A-5.2. Item 2, Schedule A. The Contractor will be paid the unit price quoted in Item 2 of Schedule A for each additional foot of drilling required below a depth of 2100 feet through earth, sand, gravel, boulders, sandstone, shales etc.; said unit price to include drilling hole, collecting drilling samples, performing electric logging of formations, and analyzing and testing samples of drill cuttings.

A-5.3. Item 3, Schedule A. The Contractor will deduct from his price the unit price quoted in Item 3 of Schedule A for each foot of drilling less than 2100 feet that may be required to complete the pilot hole work.

SECTION B - DEVELOPMENT OF PERMANENT WELL

B - 1. Scope. The work covered by this section of the specifications consists of developing the pilot hole by reaming it to approximately 15 inch diameter for the first 500 feet depth and to approximately 12-3/4 inch diameter to the top of the water bearing formation. An 8 inch casing will be installed extending from the top of the water bearing formation up to the 500 ft. level and a 10 inch casing installed from the 500 ft. level to the top of the well. The annular space between the hole and casing shall be grouted from the top of the water bearing formation to the surface of the ground. The water bearing formation shall be under-reamed and a 4 inch screen and 50 feet of blind casing installed and gravel packed. The well shall be tested, water samples taken and the well sterilized.

B - 2. Materials

B-2.1 - Casings

(a) Permanent outer casings shall be steel pipe conforming to A.S.T.M. Spec. A-53, furnished with plain ends for field welded joints. The steel pipe shall have the following minimum dimensions and weights.

The 10 inch casing shall be 10 inch I.D. steel pipe with plain ends beveled for field welded joints, of a minimum wall thickness of 0.37 inch and minimum weight of 34.24 lbs/ft.

The 8 inch casing shall be 8 inch I.D. steel pipe with plain ends beveled for field welded joints, of a minimum wall thickness of 0.277 inch and minimum weight of 24.69 lbs/ft.

(b) Permanent blind casing shall be No. 7 gauge stainless steel type 304 pipe, furnished with plain ends for field welded joints. The stainless steel pipe shall be 4 inch I. D.

B-2.2 - Screen. The screen to be furnished and installed hereunder shall be No. 7 gauge stainless steel pipe, type 304. The screen openings shall be of a non-continuous slot, shutter or louver type. The number and area of openings shall be such that the expected yield of the well may be developed with a minimum loss of head; however, the final sizing shall be determined after analysis of the material from the water bearing formation and the effective size of the gravel pack. The shape of openings or slots shall be designed as to prevent clogging and shall be free from jagged edges, irregularities, etc. that will accelerate clogging or corrosion.

The screen shall have adequate strength to resist the external forces that will be applied after it is installed and to minimize the likelihood of damage during the installation. The screen must have no

change of alignment at any of its joints after installation. The Contractor shall submit to the Engineer for approval, drawings and other information in writing, showing the design and method of construction of the screen. The screen shall be provided with such fittings of the same material as are necessary to connect to the 4 inch blind casing and to close the bottom. Well joints shall be electric arc welded, using stainless steel welding rod.

B - 3. Method of Developing the Permanent Well

B-3.1 - Drilling. The permanent development of the well shall be accomplished by reaming the pilot hole to an approximate diameter of 15 inches for a depth of 500 feet and to an approximate diameter of 12-3/4 inches to a depth of the top of the water bearing formation.

B-3.2 - Setting Outer Casing. The outer casing shall be installed as a continuous unit with welded joints. The 8" casing and 10" casing shall be joined together with a 10" X 8" veld type concentric sledge reducer. Casing centralizers shall be fixed to the outside of the casing along the full length, spaced at intervals of 50 feet to insure centering of the casing in the hole.

Jointing lengths of casing shall be accomplished by welding. All welding shall be done by operators who have been previously qualified by tests as prescribed in the American Welding Society Standard Qualification procedure to perform the type of work required.

The equipment shall be of a type which will produce proper current so that the operator may produce satisfactory welds. The welding machine shall be of 200-400 ampere, 25-40 volt capacity. Field welding shall be done by direct current.

The technique of welding employed, the appearance and quality of welds made shall conform to the American Welding Society Code for Arc Welding. All welds shall be complete and continuous for the circumference of the pipe and shall be water tight.

Surfaces to be welded shall be free from loose scale, rust, grease, paint and other foreign material except that mill scale which withstands vigorous wire brushing. Joint surfaces shall be free from fins and tears.

No welding shall be done when the temperature of the base metal is lower than 0°F. At temperatures between 32°F and 0°F. the surfaces of all areas within 3 inches of a point where a weld is started shall be heated until they are too hot to touch before welding is started.

All pipe shall be new, true to line and free from kinks and bends.

B-3.3 - Grouting. The annular space between the outer casing and the hole wall shall be filled with Portland cement grout. Grout shall be proportioned of cement and the minimum quantity of water (not over 6 gallons per cubic foot of cement) required to give a mixture of such consistency that it can be forced through the grout pipes. The mixture method of mixing and consistency of grout shall be approved by the Engineer.

Before proceeding with the placing of the grout the Contractor shall secure the engineer's approval of the method he proposes to use. No method will be approved that does not specify the forcing of grout from the bottom of the space to be grouted towards the surface. A suitable cement retainer, packer or plug shall be provided at the bottom of the casing so that grout will not leak through into the bottom of the well. The grouting shall be done continuously and in such a manner as will insure the entire filling of the annular space in one operation. To accomplish this, circulation shall first be established by pumping drilling fluid into the casing until it appears at the ground surface in the annular space between the casing and the hole wall. The neat cement grout shall be pumped continuously through the cement line (in the casing) until grout appears at the surface. The grout shall be allowed to set and cure for 72 hours before any drilling operations are continued. If quick setting cement is used, this may be reduced to 48 hours.

After the cement grout has cured 48 hours, the Contractor shall pump grout of the same consistency as originally used into the annular space between the casing and the wall of the hole to fill the slump area to the surface of the ground.

B-3.4 - Plumbness and Alignment. All holes shall be constructed and all casing set round, plumb and true to line as defined herein. To demonstrate the compliance of his work with this requirement, the contractor shall furnish all labor, tools and equipment and shall make the tests described herein in the manner prescribed by, and to the satisfaction of, the Engineer. Tests for plumbness and alignment must be made after the complete construction of the well and before its acceptance. Additional tests, however, are required to be made by the Contractor during the performance of the work. No specific payments shall be made by the Owner for making these tests.

The Contractor shall provide equipment to conduct Eastman single shot directional deviation surveys before adding each joint of drill pipe as the pilot hole is being drilled and as the reaming progresses. In any event the single shot survey shall be conducted at least each 30 feet during both procedures and the records furnished to the Engineer. The deviation from vertical shall not exceed 1 degree in the first 500 feet of the hole and shall not exceed 3 degrees thereafter.

Plumbness and alignment shall be tested by lowering into the well to a depth of 500 feet a section of pipe 40 feet long or a dummy of the same length. The outer diameter of the plumb shall not be more than $\frac{1}{2}$ inch smaller than the diameter of that part of the casing or hole being tested. If a dummy is used, it shall consist of a rigid spindle with three rings, each ring being 12 inches wide. The rings shall be truly cylindrical and shall be spaced one at each end of the dummy, and one ring in the center thereof. The central member of the dummy shall be rigid so that it will maintain the alignment of the axes of the rings.

Should the dummy fail to move freely throughout the length of the casing or hole to a depth of 500 feet, or should the well vary from the vertical in excess of two-thirds the smallest inside diameter of that part of the well being tested per 100 feet of depth, or beyond limitations of this test, the plumbness and alignment of the well shall be corrected by the Contractor at his own expense and, should he fail to correct such faulty alignment or plumbness, the Engineer may refuse to accept the well.

B-3.5 - Under-reaming Water Bearing Strata. The water bearing strata shall be under-reamed mechanically to a minimum diameter of 20 inches.

B-3.6 - Installing Screen and Blind Casing. When the under-reaming is completed, a 4 inch diameter screen of approved design as specified herein with a section of 4 inch diameter blank casing 50 feet long shall be placed concentrically in the hole.

B-3.7 - Gravel Wall. A wall of gravel shall then be placed concentrically around the screen by pumping it into the annular space between the 4" blank stainless steel casing and the 8" steel casing. The gravel shall extend from the bottom of the water bearing formation to the top of the 4" blank casing above the screen. The gravel shall contain not more than 2% calcarious materials and shall be well rounded. No crushed gravel will be acceptable. Gravel size and a sample shall be approved by the Engineer before installation.

B-3.8 - Capacity Test. Upon completion of the well an 8-hour pumping test shall be run with a test pump to clear the well and to determine the capacity and draw-down of the well. Any additional test pumping required over and above the 8-hour test will be paid for at the hourly rate quoted in the Unit Price Schedule.

a. Test Pump. The Contractor shall furnish a pump for these tests which shall be driven by an engine or some other means other than electric power. The pump shall be capable of delivering at least 400 gpm at 400 ft. head.

b. Test Rate. The well shall be pumped at a rate of 200 gpm to 400 gpm for eight hours; or at capacity of well whichever is less. The draw-down shall be determined for each rate of discharge. The eight-hour test period shall be a continuous operation without interruption unless authorized by the Engineer.

c. Equipment. The Contractor shall furnish all necessary instruments and gauges satisfactory to the Engineer, for measuring rate of flow from well, and determining static water level and draw-down with electric water level indicator.

d. Water Samples. During the pumping tests, the Contractor shall take such samples of the water, in approved containers, as is designated by the Engineer as being required for the necessary analysis. These samples shall be delivered to the Engineer with necessary information as to time of collection and rate of pumping and other data as the Engineer shall designate.

B-3.9 Disinfection. After the well has been completely constructed, it shall be thoroughly cleaned of all foreign substances, including tools, timbers, rope, debris of any kind, cement, oil, grease, joint dope and scum. The casing pipe shall be thoroughly swabbed, using alkalis if necessary, to remove oil, grease or joint dope. The well shall then be disinfected with a chlorine solution.

The chlorine solution used for disinfecting the well shall be of such volume and strength and shall be so applied that a concentration of at least 50 ppm. of chlorine shall be obtained in all parts of the well. Chlorine solution shall be prepared and applied in accordance with the directions of, and to the satisfaction of, the Engineer, and shall remain in the well for a period of at least two hours.

In the event that the test pump is installed after the well has been disinfected, all exterior parts of the test pump coming in contact with the water shall be dusted with a chlorine compound as directed by the Engineer.

B-3.10 - Samples and Records. The Contractor shall keep an accurate record of the location of the top and bottom of each stratum penetrated and shall save and deliver to the Engineer a sample of material taken from each 5 feet of drilling and at every change of formation.

The Contractor shall keep an accurate record as assembled of the order, number, size and lengths of the individual pieces of pipe installed in the well.

The Contractor shall also submit a daily report describing the nature of material encountered, the work done during each day, including the items of work accomplished, such as depth drilled, casing set, etc., the water level in the well at the beginning and end of each shift and such other pertinent data as he is requested to make a record of by the Engineer.

B-3.11 - Protection of Quality of Water. The Contractor shall maintain extreme caution to see that the drill hole does not extend below the bottom of the Lakota sands.

The Contractor shall take such precautions as are necessary or as may be required permanently to prevent contaminated water or water having undesirable physical or chemical characteristics from entering, through the opening made by the Contractor in drilling the well, the stratum from which the well is to draw its supply. He shall also take all necessary precautions during the construction period to prevent contaminated water, gasoline, etc., from entering the well either through the opening or by seepage through the ground surface.

In the event that the well becomes contaminated or that water having undesirable physical or chemical characteristics does enter the well due to the neglect of the contractor, he shall, at his own expense, perform such work or supply such casings, seals, sterilizing agents or other material as may be necessary to eliminate the contamination or shut off the undesirable water.

The Contractor shall exercise extreme care in the performance of his work in order to prevent the breakdown or caving in of strata overlying that from which the water is to be drawn. He shall develop, pump or bail the well by such methods as may be approved by the Engineer until the water pumped from the well shall be substantially free from sand and until the turbidity is less than 5 on the silica scale described in Standard Methods of Water Analysis.

B-3.12 - Temporary Capping. At all times during the progress of the work, the Contractor shall protect the well in such manner as effectively to prevent either tampering with the well or the entrance of foreign matter into it, and, upon its completion, he shall provide and set a substantial screwed, flanged or welded cap satisfactory to the Engineer.

B-3.13 - Abandonment of Well. In the event that the Contractor shall fail to sink the well to the depth specified or to such lesser depth as ordered by the Engineer, or should he abandon the well because of loss of tools or for any other cause, he shall, at his own cost, if requested and as directed by the Engineer, fill the abandoned hole with clay or clay and concrete and remove the casing. Salvaged material furnished by the Contractor shall remain his property.

B - 4. Payment

B-4.1 - Item 1, Schedule B. The Contractor will be paid the lump sum price (as quoted for Item 1 of Schedule B) for 500 feet of well developed to the depth of the 10 inch casing including reaming out pilot hole to approximately 15 inch diameter, furnishing, installing and cementing 10 inch casing, collecting water samples, sterilizing well and other appurtenances to complete the work.

B-4.2 - Item 2, Schedule B. The Contractor will be paid the lump sum price (as quoted for Item 2 of Schedule B) for 1600 feet of well developed to the depth of the 8 inch diameter casing including reaming out pilot hole to approximately 12-3/4 inch diameter, furnishing, installing and cementing 8 inch casing, collecting water samples, sterilizing well and other appurtenances to complete the work.

B-4.3 - Item 3, Schedule B. The Contractor will be paid the unit price quoted for Item 3 of Schedule B for the actual depth of water bearing strata that is under-reamed; said unit price to include under-reaming the water bearing strata, furnishing and installing 4 inch stainless steel screen and gravel wall and appurtenances to complete the setting.

B-4.4 - Item 4, Schedule B. The Contractor will be paid the unit price quoted for Item 4 of Schedule B for the actual footage of 4 inch blank stainless steel casing and gravel that is installed above the screen.

B-4.5 - Item 5, Schedule B. The Contractor will be paid the lump sum price quoted for Item 5 of Schedule B for an eight (8) hour capacity test; said lump sum price to include furnishing test pump and engine, including fuel and all necessary instruments and gauges.

B-4.6 - Item 6, Schedule B. The Contractor will be paid the unit price quoted for Item 6 of Schedule B for each additional foot of well developed to the bottom of the 8 inch casing over 1600 feet including reaming out pilot hole to approximately 12-3/4 inch diameter, furnishing, installing and cementing 8 inch casing, collecting water samples, sterilizing well and other appurtenances to complete the work.

B-4.7 - Item 7, Schedule B. The Contractor will deduct the unit price quoted for Item 7 of Schedule B for each foot of well developed to the bottom of the 8 inch casing less than 1600 feet including the reaming out of pilot hole to approximately 12-3/4 inch diameter, furnishing, installing and cementing 8 inch casing.

B-4.8 - Item 8, Schedule B. The Contractor will be paid the unit price quoted for Item 8 of Schedule B for each hour of test pumping over and above the 8 hour test period.

C O N T R A C T

THIS AGREEMENT made and entered into this _____ day
of _____, 1960, between the City of Eureka, South Dakota
and _____
_____ of _____ in the State of _____
hereinafter called the Contractor.

WITNESSETH that for and in consideration of the payments, covenants and agreements hereinafter mentioned to be made and performed by the parties hereto, the said parties hereby covenant and agree as follows:

That the Contractor at his own proper cost and expense, shall do all the work and furnish all labor, materials, equipment and tools necessary to construct in good workmanlike and substantial manner and to the satisfaction of the Engineer, the well construction included in the Proposal of the "Specifications for Artesian Water Well Construction, Eureka, South Dakota", dated January 1960. The Contractor shall perform the work in strict conformity with the specifications attached hereto, and the plans on file in the City Auditor's Office all of which plans and specifications are hereby made a part hereof with the same force and effect as if attached hereto or spread at length herein.

In consideration of the covenants and agreements to be kept and performed by the Contractor and for the faithful performance of this Contract and the completion of the work embraced herein according to the plans and specifications and conditions herein contained and referred to, the City of Eureka shall pay and the Contractor shall receive and accept as full compensation for everything furnished and done by the Contractor under this Contract and also for all loss or damage arising out of the nature of the work, the action of the elements or from any unforeseen contingencies or difficulties encountered in the prosecution of the work, the unit or lump sum prices stipulated in the Proposal.

Time shall be of the essence of this Contract on the part of the Contractor and it is hereby agreed by the parties hereto that in case all of the work called for under said Contract, in all parts and requirements, is not completed by and at the time herein mentioned or by and at such other time to which the period of completion may be extended, damages will be sustained by the City of Eureka, South Dakota, and that it is and will be difficult or impossible to ascertain and determine the actual damage which the City will sustain in the event of and by reason

of such delay and it is therefore agreed that said Contractor shall pay to the City of Eureka as liquidated damages and not as penalty, forty dollars (\$40.00) per day for each and every calendar day of the additional time in excess of the Contract time limit and any granted extension thereof, which said amount is hereby agreed upon as the damages that will be suffered by the City of Eureka, South Dakota, by such failure to complete the work within the time named; and the same shall be deducted from the amount due or to become due to the Contractor and such payments or deductions shall not in any degree release the Contractor from further obligations and penalties in respect to the fulfillment of the entire Contract, or any right which the City may have to claim, sue for and recover as compensation and damages for non-performance of this Contract. No charge will be made by the Contractor for hindrances or delays from any cause whatsoever in the progress of the work.

Said work shall be commenced within twenty (20) calendar days after Notice to Proceed and shall be completed within one hundred (100) calendar days after Notice to Proceed, PROVIDED, however, that should the Contractor be delayed in the prosecution of the work by act, neglect, or fault of the City of Eureka or by any damage caused by fire, flood or other casualty over which the Contractor has no control, then the time herein set for the completion of the work may be extended.

Monthly payments based upon approximate estimates of the amount of and value to the City of expenses incurred during the preceding month, as computed by the Engineer and approved by the City Council, shall be made to the Contractor during the progress of the work, provided that ten per cent (10%) of the amount of the estimated value of the work done shall be retained until the work is fully completed and accepted by the City of Eureka and this Contract in all respects fully performed by said Contractor. The making of said monthly payments by the City of Eureka shall not be construed as an acceptance on the part of the City of any part of the work done or materials furnished under this Contract but simply as payments on account, provided, also that such monthly estimates need not be paid unless the Contractor shall furnish the City of Eureka an affidavit showing a complete list of all just debts incurred, the amounts paid thereon and the amount owing by the Contractor on such debts, including labor, sub-contractors, materials, feed and fuel bills, board and grocery bills contracted or incurred in the performance of this Contract. Within a reasonable time after the acceptance of the work according to the Contract, the City of Eureka shall certify a final estimate based upon the quantities measured by the Engineer and computed according to the unit prices hereto attached, showing the total work done or required and the amount due the Contractor therefore. After deducting therefrom all provisions of this Contract, or as required by law, payment in full shall be made to the Contractor, provided, that before such final payment is made the City of Eureka may require the Contractor to show to its satisfaction that all just debts due to all laborers, mechanics,

material men and other persons who have supplied said Contractor, or any sub-contractor working under this Contract, feed and fuel bills, board and grocery bills, have been paid. All prior partial estimates and payments will be subject to correction in the final estimate and payments.

It is understood and agreed that the Notice to Bidder, Instructions to Bidders, all included requirements of the Proposal, Bond, Specifications and Drawings as hereto attached and/or referred to in said documents, form essential parts of this Contract, and they shall have the same force and effect as if spread at length herein.

Payment of the final estimate under this Contract, including the ten percent (10%) of partial estimates retained, as herein provided, shall not be due or payable until the Notice of the Completion and Acceptance of the work under this Contract shall have been given by publication and posting for the time and in the manner required by the laws of the State of South Dakota.

IN WITNESS WHEREOF, the City Council of the City of Eureka, South Dakota, has caused this agreement to be executed by its Mayor and sealed and attested by its Auditor in its behalf, and the Contractor has signed the same, the day and the year in this Contract first above written.

CITY OF EUREKA

By _____
Mayor

Attest:

City Auditor

Contractor

By _____

CONTRACTOR'S PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS, that we _____

_____ as Principal, and _____ as Surety, for valuable consideration, are held and firmly bound unto the City of Eureka, South Dakota, hereinafter called the Oblige, in the penal sum of _____ (\$_____) dollars, lawful money of the United States, well and truly to be paid unto said Oblige, for the payment of which we bind ourselves, our heirs, executors, and assigns, jointly and severally and firmly by these presents.

This obligation is made for the use of said Oblige and also for the use and benefit of all persons who may perform any work or labor or furnish any material in the execution of the Contract hereinafter mentioned.

The conditions of the foregoing obligations are such that, whereas, on the _____ day of _____, 1960, the said Principal signed and executed a written Contract with said Oblige for the construction of the artesian water well included in the Proposal of the "Specifications for Artesian Water Well Construction", dated January 1960, as set forth in detail in the Notice to Contractors, Proposal, Plans and Specifications referred to in said Contract, all of which are hereby made a part hereof as if written herein at length.

NOW THEREFORE, if the said Principal shall well and truly perform and complete said Contract in accordance with the terms of said Contract, Notice to Bidders, Instructions to Bidders, Proposal, Plans and Specifications, and comply with all requirements of law, and pay, as they become due and payable all just claims for work or labor performed, and material furnished in the execution of such Contract, then this obligation shall be null and void, otherwise it shall remain in full force and effect.

IN TESTIMONY WHEREOF we have hereunto subscribed our name and affixed our seals this _____ day of _____ 1960, A.D.

WITNESS:

Approved _____, 1960
City of Eureka

By _____

_____ (Seal)
_____ (Seal)

Licensed S. D. Agent

723-3
3249-3

CITY OF EUREKA

South Dakota 57437

OFFICE OF THE AUDITOR

TELEPHONE 605-284-2441

October 15, 1982

S. D. Department of Water and Natural Resources
Water Rights
Foss Building
Pierre, South Dakota 57501

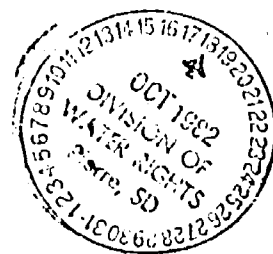
Dear Sir:

The Eureka City Council would like to know if the City of Eureka has exclusive water rights within the City limits of Eureka?

If Not, is it possible for the City to obtain exclusive water rights? If it is possible, please explain the procedure.

Sincerely,

Nancy Hemmingson
Nancy Hemmingson
City Auditor



723-3
3249-3

Water Rights Division
605 773-3352

723-3
2249-3

October 19, 1982

Nancy Hemmingson
Office of the Auditor
Box 655
Eureka SD 57437

Dear Ms. Hemmingson:

For your information on the City of Eureka's water rights, enclosed are
copies of the cities two permits.

Sincerely,

BETTY WESTLUND
Water Rights Specialist

BW:ks

enclosures

May 9, 1983

City of Eureka
Post Office Box 655
Eureka, South Dakota 57437

Dear Sir:

Your application dated May 5, 1983 for a new permit to appropriate 0.76 cfs of water from a well through the City Well #2 was received May 6, 1983.

We have not as of this date received the following information to further process your application.

- 1-The map enclosed must be signed by a licensed land surveyor or a South Dakota Registered Professional Engineer or by a government employee who prepares such maps as a regular part of his governmental employment. (Well located in Block 13, SW $\frac{1}{4}$ SE $\frac{1}{4}$, Section 35-T127N-R73W)
- 2-Statutes require that we charge \$150.00 filing fee.
- 3-A log of the well, signed by a South Dakota licensed well driller must be submitted with the application.
- 4-To maintain your priority date of May 6, 1983 on your application for permit to appropriate water, in accordance with SDCL 46-5-16, you will now have sixty days from the date of this letter to correct your application and/or have the above information submitted to this office.

Sincerely yours,

Betty Westlund
Water Rights Specialist

BW:ms
cc: Rob Kittay
Enc.



S P N

A DIVISION OF
SCHMUCKER, PAUL, NOHR and ASSOC.

HELMS and ASSOCIATES

CONSULTING ENGINEERS • LAND SURVEYORS

BOX 111

• ABERDEEN, S. D. 57401

BERKSHIRE PLAZA

• PHONE (605) 225-1212

405 8th AVENUE N. W.

May 13, 1983

Mr. Kevin Larson
Division of Water Rights
Joe Foss Building
Pierre, SD 57501

Re: Eureka, SD
Permit # 723-3
A-1075



Dear Kevin:

Enclosed please find two copies of the map signed by myself to be attached to the above referenced permit. After the well is completed we will submit an "as constructed drawing" of the new well.

It is my understanding that these items will satisfy the requirements of your departments letter dated May 9, 1983.

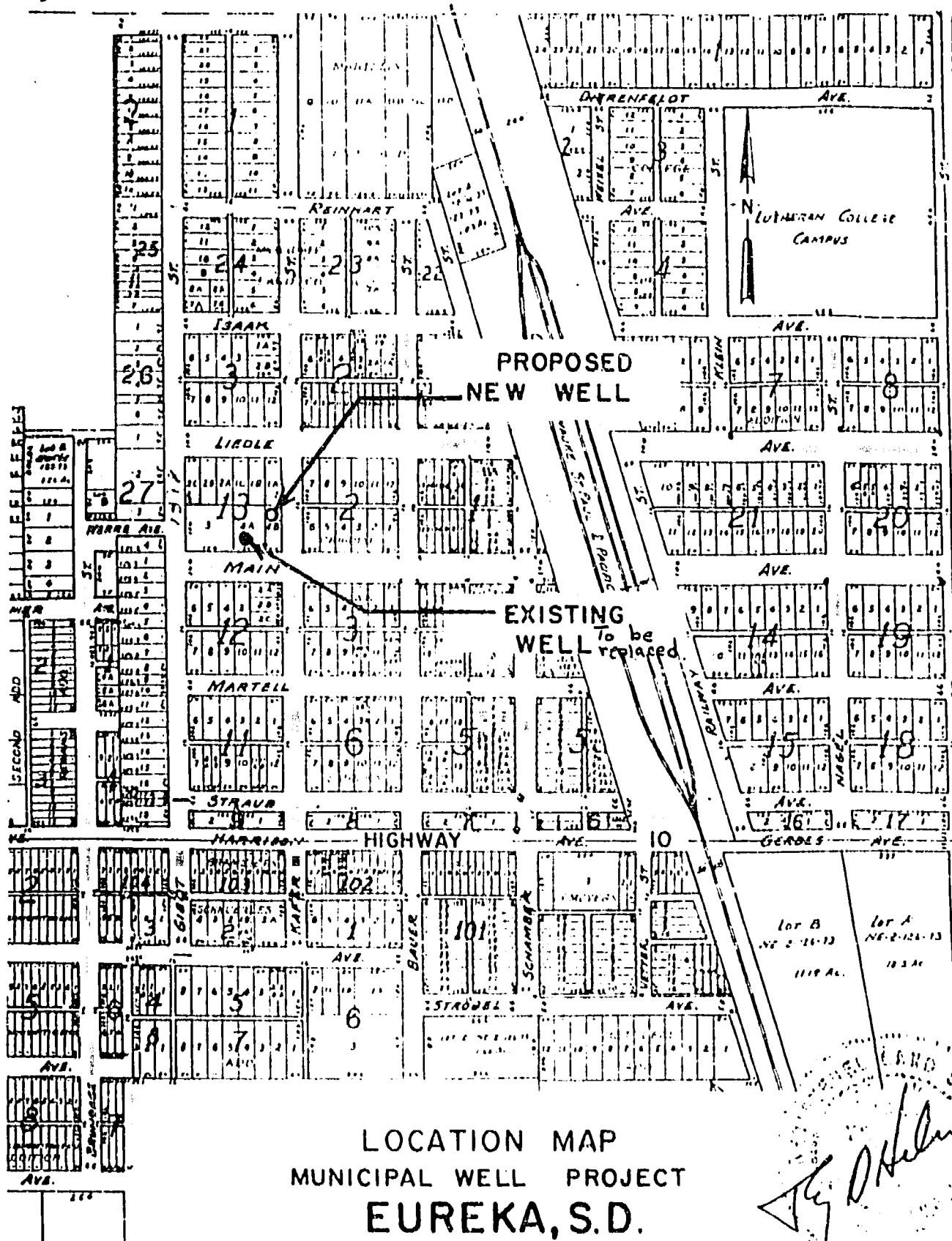
If you have any questions please contact this office.

Very truly yours,

Terry D Helms

TDH/ddh

CC: Nancy Hemmingson w/enclosure



LOCATION MAP
MUNICIPAL WELL PROJECT
EUREKA, S.D.

EXHIBIT 'A'

Water Rights Division - DWNR

File No. #723-3

Conversation or File Documentation

NAME OF PERSON OR FILE: City of Eureka (Helms & Associates)

ADDRESS: _____ COUNTY _____

DATE: 5-13-83 TELEPHONE 225-1212

RE: Application for replacement well (existing well #723-3)

COMMENTS: I talked to Terry Helms (he is consulting engineer for City of Eureka) He stated that the proposed well was to replace an existing well that did not produce. I told him all we would need was the signed map and an as constructed well log to put in the #723-3 file. No money will be needed.

File in Permit or other file as necessary. Use to document conversations and what the other party was told; why action or decision was made.

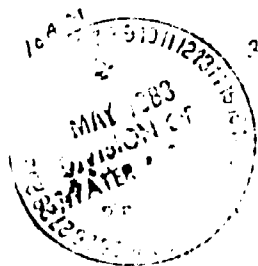
NAME: Kevin C. Larson

Form 2 - Application for Permit to Appropriate Water-Original (Includes Approval and Permit)

No. _____

Map No. _____ Water Division No. _____ District _____

Above for Office Use



APPLICATION FOR PERMIT To Appropriate Water within the State of South Dakota

Check one of the following:

New _____ Vested Right _____ Future Use _____

Change in Diversion X Additional Diversion _____ SEE PERMIT # 723-3

Change in Acreage _____ Additional Acreage _____

1. Name of Applicant City of Eureka, South Dakota Phone No. (605) 284-2441

Post Office Address PO BOX 655 Eureka State SD 57437
(Street, RR, or Box) (Town) (Zip Code)

If a corporation show date and place of incorporation _____

2. Method of accomplishing work (contract, employment of others, or by direct labor) Contract

3. Name of diversion work New well will replace existing well - (see map) under 723-3

4. Amount of water claimed (cubic feet per second) 0.76 cfs

5. Source of water supply Lakota Sandstone formation

6. Location of point of diversion (See attached drawing) S 1/2 of Block 13,
Original Town of Eureka SW 1/4 Sec. 35-T127N-R73W

County McPherson

7. Annual period or periods during which water is to be used Continuously

8. Use to be made of water, (irrigation, industrial, municipal, commercial, recreation, etc.) Recreation 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 N/A years.

11. Choice of county newspaper for publication of Notice of Intent to Appropriate Water Northwest Blade, Inc.

12. Principal Features of the Proposed Water Supply System. Eureka, SD

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

New well, existing distribution system.

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

C. Works proposed to apply water to beneficial use.

Estimated Total Cost \$ 60,000.00

Attachments: 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 McPherson) ss.

I, Willis Mehlhaff, Mayor the applicant, certify 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 Willis Mehlhaff MAYOR

Subscribed and sworn to before me this 5th day of May, 1983

Nancy A. Henningson
Notary Public (or other qualified officer) CITY AUDITOR

WATER RIGHT APPLICATION APPROVAL

The Water Management Board hereby approves Water Right Application No. _____

(Applicant)

(Post Office Address)

(State)

With the following qualifications

Date of first receipt of application _____, 19____

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

Date of receipt of corrected application _____, 19____

Approved _____, 19____, Recorded in Book _____ Page _____

WATER RIGHT PERMIT NO. _____

The Water Management Board hereby grants and issues this Water Right Permit No. _____ authorizing the construction of the water use system and the putting of water to beneficial use as stated in the Application and as qualified in the Water Right Application approval, subject, however, to the following limitations and conditions:

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

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 _____ 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 uses served, and if for irrigation purposes said appropriation must be limited to not more than 2 acre feet per acre per year and be limited to not more than one-seventieth (1/70) of one cubic foot of water per second of time for each acre of land to which water is actually and beneficially applied

for irrigation on or before _____, 19____; said water to be used during the following described annual period: _____

Witness my hand this _____ day of _____, 19____

THE WATER MANAGEMENT BOARD

By: _____
Chief Engineer, Water Rights

Certificate of Construction Issued _____, 19____

Water License Issued _____, 19____

D Well Information

- (1) Drill Hole, Diameter 4" larger, Depth 2088' ±
then casing.
- (2) Casing, Type steel, Diameter 4" or 6" I.D., Thickness 4"-0.237", 6"-0.280"
(wood, concrete, steel, etc)
- (3) Screen, Type Stainless Steel, Diameter 4" or 6" O.D., Length 96' ±
- (4) Gravel Pack, Thickness N/A, Length of gravel pack N/A

E. Dugout Information or Estimates

- (1) Surface dimensions, _____, Depth _____

F Fill out for Either a Well or a Dugout.

- (1) Water Bearing Materials. (Attach a copy of test well log)

Depth to top of water bearing material 2012' $\pm$

Depth to bottom of water bearing material 2088' $\pm$

Depth to water (ground surface to water level) flowing

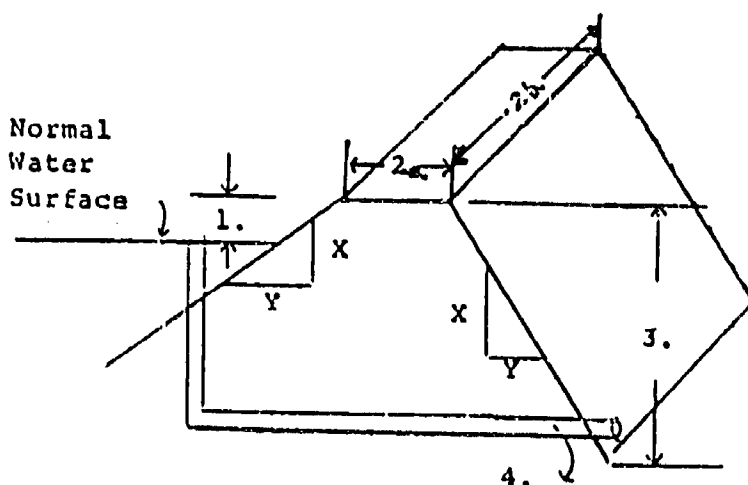
- (2) Distance to nearest existing household or livestock watering well.

On same owner's property _____ rds.

On property owned by others _____ rds.

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, length, maximum water depth, surface area, drainage area, storage capacity, dam slope, dimensions, location and size of outlet works, of each storage dam. The location of each water storage dam should be shown on the water right map.



1. Freeboard _____
2a. Crest width _____ b. length _____
3. Height of Dam _____
4. Outlet dimensions:
 Pipe diameter _____
 Spillway width _____
X & Y slope:
 Upstream _____
 Downstream _____
 Surface area of impoundment _____
 Drainage area above dam _____

723-3

CITY OF EUREKA

Box 655

South Dakota 57437

OFFICE OF THE AUDITOR
TELEPHONE 605/284-2441

August 9, 1983

Mr. John Hatch
Department of Water and Natural Resources
Joe Foss Building
Pierre, South Dakota 57501

Dear Mr. Hatch:

The Mayor and City Council of Eureka have asked me to write to you about an old artesian well and about the new artesian well.

On the older artesian well, drilled around 1960, the City Council would prefer not to abandon this well but plan to keep monitoring it and if it would ever show signs of leaking then the City would take the necessary steps to plug the well.

As for the new artesian well, drilled in July 1983, the City Council decided not to put a screen in this well. I understand that the City's new water rights permit should be changed to indicate this.

If you have any questions please contact either Mayor Willis Mehlhaff or myself.

Sincerely,

Nancy Hemmingson

Nancy Hemmingson
City Auditor



Division of Water Rights
605 773-3352

August 19, 1983

723-3

City of Eureka
ATTN: Nancy Hemmingson
Box 655
Eureka SD 57437

Dear Ms. Hemmingson:

This will acknowledge your letter about the City of Eureka's artesian well. The new well drilled by the City of Eureka in 1983 was a replacement for the well authorized under Water Permit No. 723-3. SDCL 46-6-27 as passed by the 1983 Legislature requires, if the owner of an existing well drills a replacement well and if the owner has no plan to use the existing well, the existing well is considered abandoned. The well owner shall plug the abandoned well within thirty days after the new well is ready for use. Any well that is to be used or is not considered abandoned shall be sealed or capped at the surface.

If the City wants to retain the well, the well will have to be controlled and the flow shut off. If the City retains the well and shuts off the flow, then before any use is made of the well a new water permit will be required.

Without the 1983 Law, when the City drilled a replacement well, any water rights to the old well were abandoned and State Statutes require abandoned wells to be plugged. The 1983 law provides the option of retaining the well, if the flow is shut off and the well is sealed or capped at the surface.

Please advise, if you have further questions.

Very truly yours,

JOHN HATCH, Chief Engineer
Water Rights Division

JH:ks

CITY OF EUREKA

Box 655

South Dakota 57437

OFFICE OF THE AUDITOR

TELEPHONE 605/234-2441

August 23, 1983

John Hatch, Chief Engineer
Water Rights Division
Department of Water and Natural Resources
Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501

Dear Mr. Hatch:

Please be advised that the City of Eureka would like to retain the old artesian well. The valve to this old well has been closed and the pipe has been capped.

Sincerely,

Nancy Hemmingson
Nancy Hemmingson
City Auditor

