

WATER PERMIT NO. 5996-3

Name of Applicant: Myrl & Roy's Paving, Inc.

Address: 1300 N Bahnson Ave, Sioux Falls SD 57103-6195 Phone: 605 334-3204

Amount of Water Claimed: 30 acre-feet Total Acres: NA

Source of Water Supply: groundwater

Water to be used for: commercial County: Minnehaha

Type of Waste Disposal System: NA

Location: southeast of Sioux Falls

PRIORITY Date Received: 4-21-97

Fee: \$150

Corrected Application Received: 4-28-97

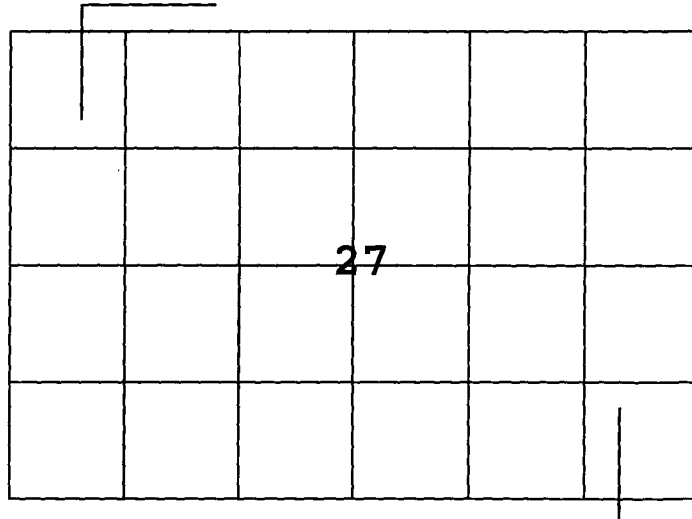
Period of Annual Use: April 1 - November 30

Remarks: To wash rock or sand & dust control at the facility. Water is pumped from quarry floor to ponds with a pump capacity of 250 gpm

Diversion Point: SW 1/4 SE 1/4

Sec 27-T101N-R48W

Land to be Irrigated:



Depth of Well:

Well Driller:

Remarks:

Type of Map: plat

Prepared by: Dennis C Wipf, P.E.

Reviewed and the Number Assigned on: 4-28-97

By: Karen Schlaak

Notice of Hearing - date to intervene: _____

**SOUTH DAKOTA
WATER PERMIT NO. 5996-3**

Date of first receipt of application April 21, 1997.

Date of return to applicant for corrections, amendments or changes April 23, 1997.

Date of receipt of corrected application April 28, 1997.

The Water Management Board approved Water Permit Application No. 5996-3 on July 9, 1997 for Myrl & Roy's Paving, Inc., 1300 N Bahnson Ave, Sioux Falls SD 57103-6195 authorizing the construction of the water use system and the placing of water to beneficial use subject to the following limitations, conditions and qualifications:

1. Water Permit No. 5996-3 authorizes impoundment of 30 acre-feet of water annually from local runoff into storage ponds. When necessary water will be pumped from the quarry floor at a rate of 250 gallons per minute into storage ponds all located in the W 1/2 SE 1/4 Section 27-T101N-R48W.
2. The water appropriated shall be used for the purpose of a rock and sand washing operation and for dust control around the facility and may not exceed the amount of water needed for beneficial use for commercial use .
3. The water is to be used during the following described annual period: April 1 - November 30.
4. The date from which applicant may claim right is April 21, 1997.
5. One-fifth of the construction is to be completed on or before January 9, 2000.
6. All construction is to be completed on or before July 9, 2002.
7. Water is to be put to beneficial use on or before July 9, 2006.
8. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATION

Monitoring records shall be maintained as set forth by Minnehaha County. Such records shall be submitted to the Chief Engineer annually.

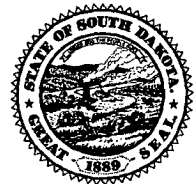
WATER MANAGEMENT BOARD

By: _____

John Hatch
John Hatch, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

AUG 8 1997

date



Mail to: Water Rights Program Joe Foss Building 523 E. Capitol Pierre, SD 57501-3181 (605) 773-3352	(office use only)
	No. <u>5996-3</u> Hydrologic Unit <u>10170203</u>
	Basin <u>Sioux River</u>
	Newspaper <u>The Argus Leader, Sioux Falls, SD</u>



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

Check use(s) of water:

☐ Municipal	☐ Suburban Housing	☐ Recreational	☐ Institutional
☐ Rural Water System	☐ Commercial	☐ Fish & Wildlife	☐ Geothermal Heat
☐ Domestic (over 18 gpm)	☐ Industrial	☒ Other	<u>Wash Aggregate & Dust Control</u>

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

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

- Name of Applicant Myrl & Roy's Paving, Inc. Phone (605) 334-3204
(check one) ☒ Owner ☐ Tenant/lessee
Mailing Address 1300 N. Bahnson Avenue, Sioux Falls State SD 57103-6195
(Street, RR. or Box) (Zip Code)
- Amount of water claimed pump rate from quarry to ponds 250 gpm *CFS or 30 **GPM AF ***AF
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable
- Source of water supply Runoff Water
- Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) The location of diversion of runoff water from quarry floor is as shown at 3600' East & 1300' North of SW corner 27-101-48. (~~SW 1/4~~ SE 1/4) W 1/2 County Minnehaha
- County or counties where water will be used Minnehaha
- Annual period during which water is to be used April - November 30
- Give a description of the project. When available include any preliminary engineering report or other reports or information that will help explain the project. (Attach sheet if more space is needed) Washing rock or sand for concrete and dust control around facility. Water is pumped from quarry floor to ponds utilized for storage. Ponds are not filled from water running into impoundments.

Attachments: Attach Form 2A if diversion is from a well or dugout, or if storage of water is proposed. Attach map and any other technical information. (see instructions)

STATE OF SOUTH DAKOTA)

County of Minnehaha SS

I, Dennis C. Wipf, the applicant, certify that I have read this application, have examined the attached map and that the matters stated are true and that I intend, and am able to complete the necessary construction.

Signed Dennis C. Wipf
Subscribed and sworn to before me this 17 day of April 1997

Allen R. Rippentrop
Notary Public
ALLEN R. RIPPENTROP, Notary Public
My Commission Expires Jan. 19, 2005

Supplemental Information

(type or print in ink)



1. Well Information - Proposed Construction

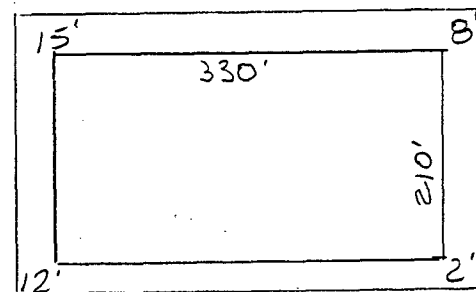
- a) Drill Hole Diameter _____ Depth _____
- b) Casing Type _____ Diameter _____ Thickness _____
- c) Screen Type _____ Diameter _____ Thickness _____
- d) Gravel Pack Thickness _____ Length of Gravel Pack _____
- e) Depth to Top of Water Bearing Material _____
- f) Depth to Water (ground surface to water level) _____
- g) Distance to nearest existing domestic well:
 On applicants property _____ On property owned by others _____

2. Wastewater Disposal System Information

- a) Type of System (i.e. septic tank, drain field) _____
- b) System Capacity (gallons) _____ c) Year Constructed _____
- d) Connected to the City of _____ Sanitary System.

3. Dugout Information

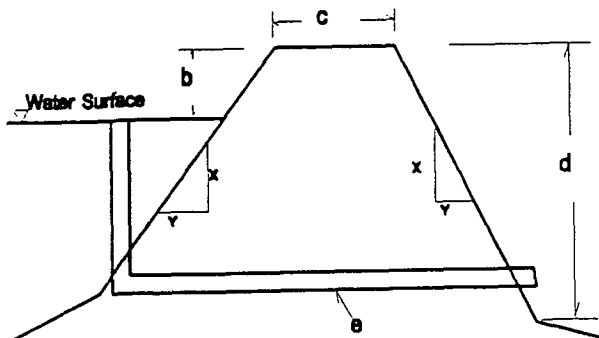
- a) Surface Dimensions 190x190+130x180 Depth 15' 1.07 Acres
- b) Depth to water (ground surface to water level) 1.5'



4. Water Storage Dams

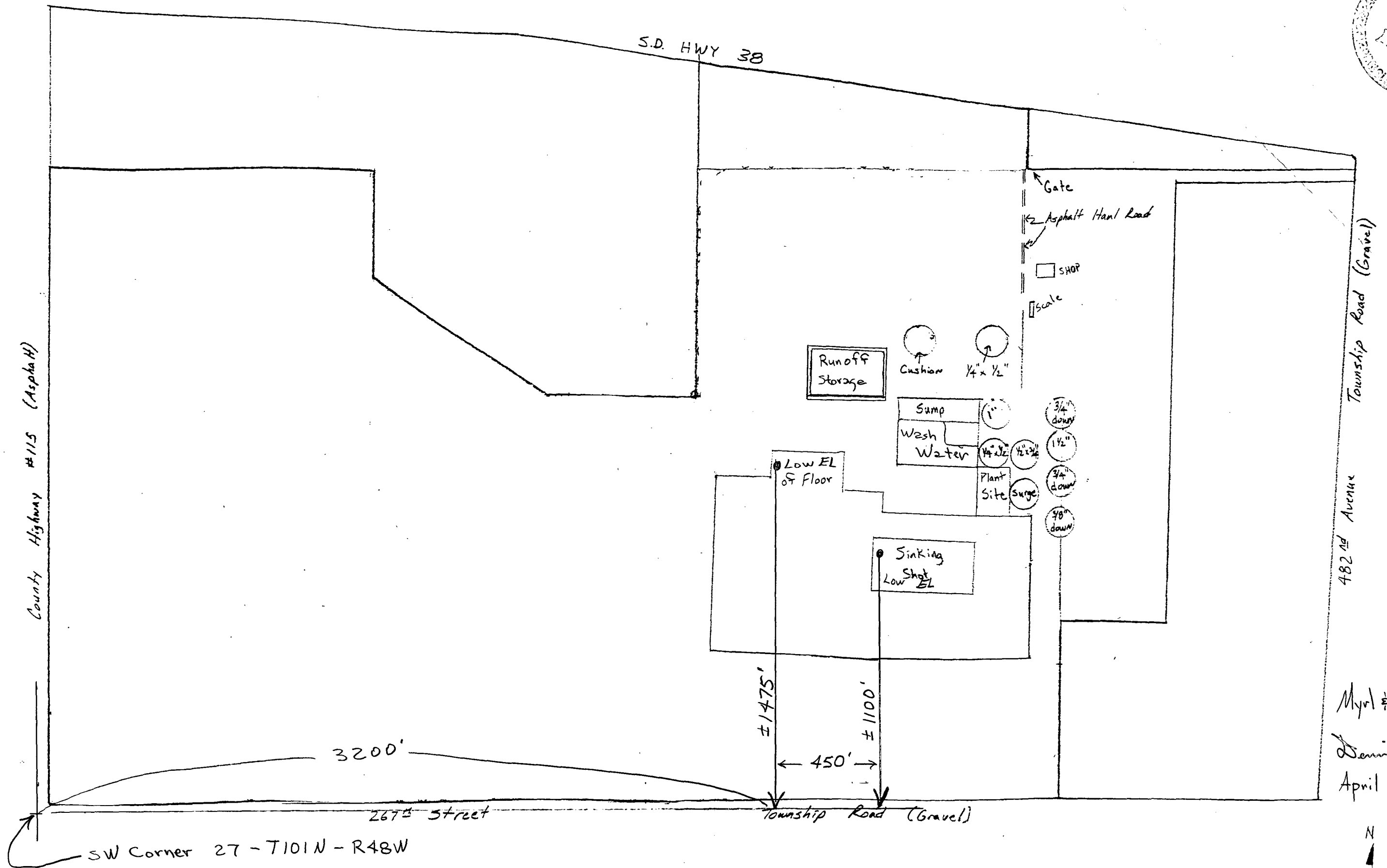
If the proposed water use system contains one or more storage dams, please furnish the information requested below for each dam. The locations of the dams need to be shown on the map submitted with the application.

- a) If a private engineering firm or government agency was involved in the design of this dam, please give their name and address:



- b) Freeboard 1.5'
- c) Crest Width 15'
 Crest Length 330'x210'
- d) Height 15', 8', 2', 12'
- e) Primary Outlet Capacity _____
 If pipe, diameter 12" CMP to be installed
- f) Secondary Spillway Capacity NA
 Spillway Width NA
- g) X & Y Slope
 Upstream x=1', y=2'
 Downstream x=1', y=3'
- h) Surface Area of Impoundment 1.6 acres
- i) Storage 20 Acre Feet
- j) Drainage Area Above Dam 0 Acres

OPERATIONAL PLAN

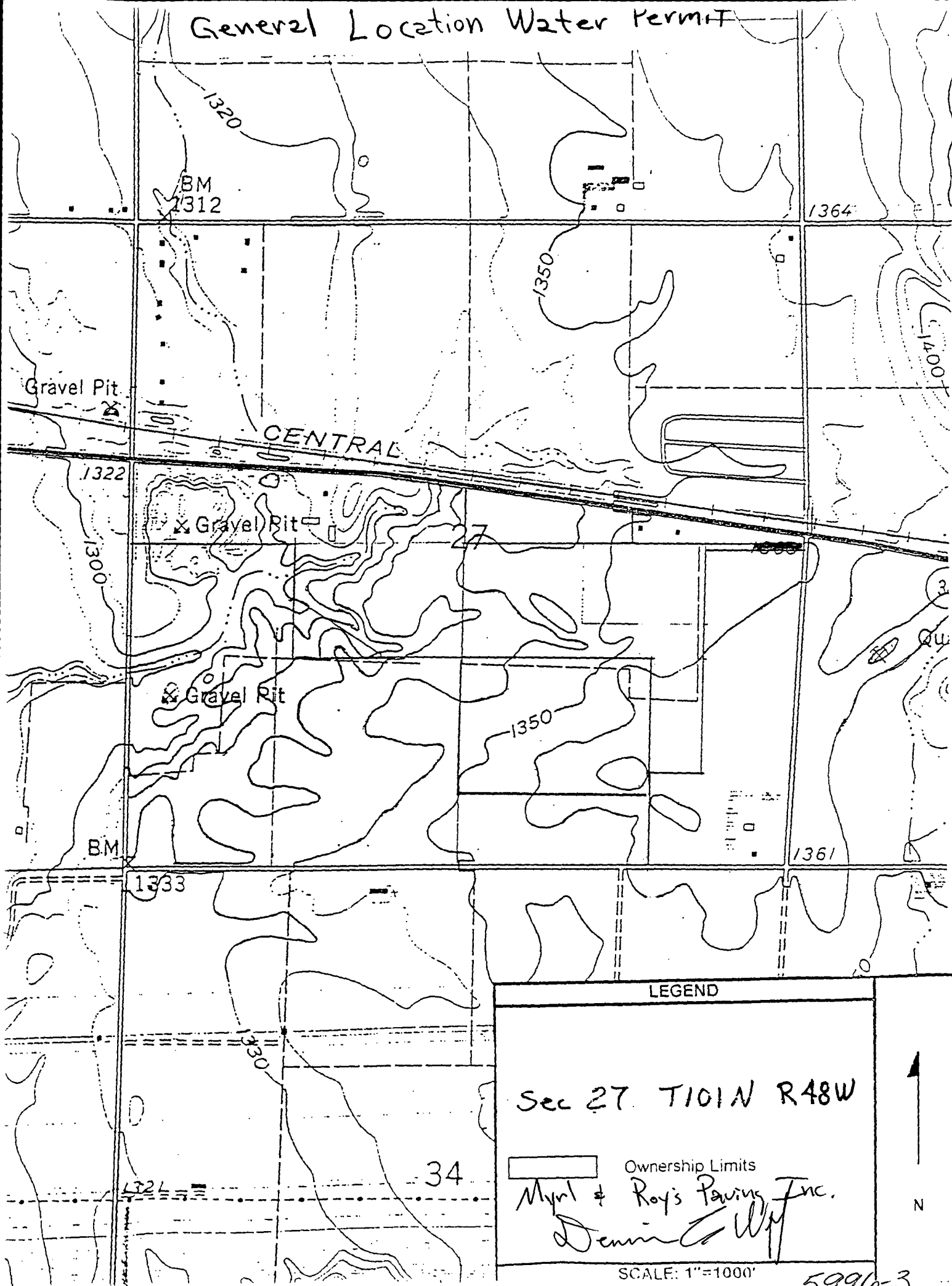


Myrl & Roy's Paving Inc.
Dennis Z. Wiff
April 9, 1997

N
Scale = 1" = 400'

5996-3

General Location Water Permit



LEGEND

Sec 27. T101N R48W

Ownership Limits
Myrl & Roy's Paving, Inc.
Dennis W. [unclear]

SCALE: 1"=1000'

5996-3



RECEIPT

415333

Division of Water Rights

South Dakota Department of Environment and Natural Resources

Pierre, _____ April 28, 1997

RECEIVED OF Myrl & Roy's Paving, Inc., 1300 N. Ehnson Ave., Sioux Falls, SD 57103

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

Fee for Application for Permit No. <u>5996-3</u> to Appropriate Water, to construct and to put water to beneficial use _____	150	00
Fee for Application for Permit No. _____ to Appropriate Water, for Future Use _____		
Fee to retain Future Use Permit No. _____ after period of seven years.		
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. _____		
Fee for Filing Transfer Form _____		
Fee for Filing Extension Request _____		
Fee for _____		

(Any Other Work Provided by Law)	Total	150 00

By John Hatch 
Chief Engineer

MYRL & ROY'S Paving, Inc.



Fax (605) 334-0468

1300 N. Bahnson Ave. Sioux Falls SD 57103

Phone (605) 334-3204

April 17, 1997

Ron Duvall
SD Dept of Environment & Nat'l Resources
Water Rights Program
Joe Foss Building
Pierre, SD 57501-3181



RE: Water Permit

Dear Mr. Duvall:

We are writing as follow up to our conversations on the telephone over the last couple weeks regarding the use of the runoff water at our East Sioux Quarry. We were unaware that a water rights permit is needed to pump and contain the runoff water for our wash operation and any dust control, which we have been doing since we've been at the site.

Enclosed you will find our application with an aerial photo, vicinity map and operation plan of our quarry. We believe you will have everything you need to approve this application. As we have noted, we plan on installing the standpipe when the water level is lower. Up to now we haven't needed to discharge any water from the runoff holding pond, but as a precautionary measure the standpipe would be good.

We further understand that if this application ends up in an hearing process, that the State will allow us to continue to operate and that if necessary a temporary permit would be issued. With our request for a county conditional use permit to expanded the boundaries the neighbors will be vocal.

Thanks for you help in this process.

Sincerely,
MYRL & ROY'S PAVING, INC.

Dennis C. Wipf, P.E.
Engineer-Estimator

Enclosures



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3181

April 23, 1997

Myrl & Roy's Paving, Inc.
Dennis C Wipf, Engineer
1300 N Bahnson Ave
Sioux Falls SD 57103

Dear Mr. Wipf:

Thank you for submitting the *Application for a Permit to Appropriate Water*. Before we can proceed with the application, a filing fee of \$150.00 is required. Also, what is the pump rate from the quarry to ponds?

If you have any questions, please contact me.

Sincerely,

Karen Schlaak
Water Rights Program
605 773-3352



Myrl & Roy's Paving, Inc.



Fax (605) 334-0468

1300 N. Bahnson Ave. Sioux Falls SD 57103

Phone (605) 334-3204

April 24, 1997

Karen Schlaak
DENR Water Rights Program
Joe Foss Building
523 East Capital
Pierre, SD 57501-3181



RE: Water Permit Sec 27 T101N R48W

Dear Ms. Schlaak:

We thought we had everything in the application, but we missed the filing fee, sorry about that.

The pumping from the quarry to the ponds, which is sporadic and depends upon the rain and snow melt. We use a pump that operates at about 250 gpm.

If you need any further information please let us know, thank you.

Sincerely,
MYRL & ROY'S PAVING, INC.

Dennis C. Wipf, P.E.
Engineer-Estimator

Enclosure

WATER PERMIT APPLICATION NO. 5996-3

MYRL & ROY'S PAVING, INC.

MAY 23, 1997

Water Permit Application No. 5996-3 proposes to impound 30 acre-feet of water annually from local runoff into storage ponds. Water is pumped from the quarry floor at a rate of 250 gallons per minute into storage ponds all located in the W $\frac{1}{2}$ SE $\frac{1}{4}$ Section 27, T101N-R48W. The water is for commercial use for rock and sand washing operation and for dust control around the facility.

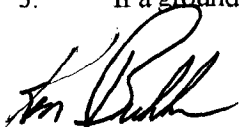
WATER SOURCE: Precipitation and local Runoff

This is an application to appropriate water for a current use of water at a Sioux Quartzite quarry. The Sioux Quartzite which is the Precambrian basement rock in the area, consists of a massive, pink and red colored, ortho-quartzite interbedded with mudstone and poorly cemented quartz sand. The quartzite is relatively impermeable but does supply numerous domestic wells where it contains joints, fractures, or sand lenses. The orientation and density of any joints or fractures are difficult to predict, therefore, the aquifer characteristics of the quartzite are highly variable, site specific and nearly impossible to predict. In general, the quartzite aquifer is under unconfined conditions. Although it is probable that this quarry's floor may be below the top of the aquifer, there is no apparent groundwater infiltration to the quarry (T.L. Kenyon, Leggette, Brashears & Graham, Inc., personal communication, 1997). It is possible that future work in the quarry may encounter an identifiable groundwater component to the water at the quarry floor. However, this application does not request an appropriation of groundwater. The source of water for this application is considered to be from precipitation falling directly on the quarry and local runoff.

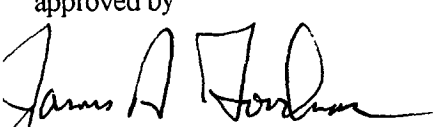
The drainage basin contributing runoff to this quarry is less than 200 acres and is essentially limited to the project area. This may not be a reliable source of water, particularly during periods of drier climatic conditions. Runoff not captured by the quarry would contribute to an ephemeral tributary of the Big Sioux River. There are no existing water rights located within this drainage basin. Any diminished flow in the Big Sioux River caused by this 30 acre-feet per year appropriation is insignificant.

CONCLUSIONS:

1. Application No. 5996-3 proposes to appropriate up to 30 acre-feet of water between April 1 and November 30. The source of water is local runoff.
2. When necessary, water will be pumped from the quarry floor at a rate of 250 gallons per minute. Accurate records should be kept of time and duration of pumping to address any disputes that may arise regarding any groundwater influence.
3. If a groundwater contribution becomes apparent with future work at the quarry, a new appropriation will be needed.


Ken Buhler
Natural Resources Engineer

approved by


James A. Goodman, P.E.
Natural Resources Engineer

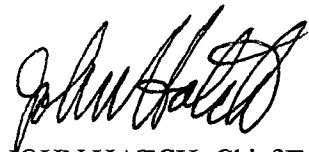
**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT APPLICATION NO.
5996-3, Myrl & Roy's Paving, Inc.**

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Program, Department of Environment and Natural Resources concerning Water Permit Application No. 5996-3, Myrl & Roy's Paving, Inc., %Dennis Wipf, 1300 North Bahnson Avenue, Sioux Falls, SD 57103-6195.

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

Records shall be maintained that documents the amount and time periods of diversions from the quarry. Such records shall be available to the Chief Engineer upon request.

See report on application for additional information.

A handwritten signature in black ink, appearing to read "John Hatch", written in a cursive style.

JOHN HATCH, Chief Engineer

June 2, 1997

Note: A new water permit is required if it is determined that groundwater is a contributing source to the water being diverted from the quarry.



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3181

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

June 3, 1997

Myrl & Roy's Paving, Inc.
%Dennis C. Wipf
1300 N. Bahnson Ave.
Sioux Falls, SD 57103-6195

Dear Mr. Wipf:

Water Permit Application No. 5996-3 for commercial use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice of hearing has been sent to the Publisher of the Argus Leader printed at Sioux Falls, SD (Ph # (605) 331-2200). For your information, a copy of the notice, the recommendation of the Chief Engineer and a report on the application are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

Be sure to contact the above newspaper to authorize publication of your Notice of Hearing and to arrange for payment. Early contact with the paper can eliminate delays. The publisher has been instructed to publish your notice once each week for two consecutive weeks with the last publication to occur twenty days before the board meeting. The newspaper has been instructed to send us the Proof of Publication. We must receive Proof of Publication before action can be taken on the application.

Sincerely,


Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures

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



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3181

June 3, 1997

The Argus Leader
P.O. Box 5034
Sioux Falls, SD 57117-5034

ATTENTION: Legal Department

Enclosed is a Notice of Hearing on Application No. 5996-3 to be published twice. Please publish the first notice on June 11, 1997, with the second publication 7 days later.

The APPLICANT MUST VERIFY TO YOU THAT THE NOTICE IS TO BE PUBLISHED, before you make the first publication. Please BILL the APPLICANT for the cost of publication. The APPLICANT is Myrl & Roy's Paving, Inc., %Dennis C. Wipf, 1300 N. Bahnson Ave., Sioux Falls, SD 57103-6195 (Ph # (605) 334-3204).

A copy of BOTH publications must be SENT to the WATER RIGHTS PROGRAM. IMMEDIATELY return the FIRST publication with the FIRST Transmittal form on the bottom of this page. The first copy is needed to check the publication for errors so any corrections can be made in the second publication. Publication errors can invalidate the public notice and cause the applicant costly delays.

Please be sure the SECOND publication is returned IMMEDIATELY with the enclosed Proof of Publication form. DO NOT WAIT until the end of the month or the billing cycle. No action may be taken on the permit application until proof of publication has been received.

Sincerely,

Eric Gronlund
Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures

-----CUT HERE-----

FIRST TRANSMITTAL NOTICE

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

No. 5996-3

Date _____

We are in receipt of your letter of 6/3/97 enclosing Notice of Hearing to Appropriate Water by Application No. 5996-3 which was first published in our issue of _____. ENCLOSED IS A COPY OF THIS FIRST PUBLICATION.

Name

Newspaper

Instruction to Newspaper - Publish first Notice on June 11, 1997, with the second publication 7 days later. The applicant is responsible for payment.

NOTICE OF HEARING ON WATER PERMIT APPLICATION NO. 5996-3 to Appropriate Water

Notice is given that Myrl & Roy's Paving, Inc., 1300 N Bahnson Avenue, Sioux Falls SD 57103-6195 has filed an application for a water permit to impound 30 acre-feet of water annually from local runoff into storage ponds.

When necessary, water will be pumped from the quarry floor at a rate of 250 gallons per minute into storage ponds all located in the W 1/2 SE 1/4 Section 27-T101N-R48W. The water is for commercial use for rock and sand washing operation and for dust control around the facility.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 5996-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest.

Any person interested in opposing or supporting this application must file a written petition with BOTH the applicant and Chief Engineer. The applicant must also file a petition if opposed to the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by June 30, 1997. The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained.

The Water Management Board will consider this application at 9:00 a.m., July 9, 1997, Floyd Matthew Training Center, Joe Foss Building, 523 East Capitol, Pierre, SD. The Chief Engineer's recommendation is not final or binding upon the Board. The Board is authorized to 1) approve, 2) approve with qualifications, 3) defer, or 4) deny this application based on the facts presented at the public hearing. The July 9, 1997, hearing date will be automatically delayed for at least 20 days upon written request to the Chief Engineer from the applicant or any interested person opposing the application. The request for an automatic delay must be filed by June 30, 1997.

Any hearing will be an adversary proceeding. Any person filing a petition and/or the applicant have the right to be represented by a lawyer and may present evidence or cross-examine witnesses according to SDCL 1-26. These and other due process rights will be forfeited if not exercised. Decisions of the Board may be appealed to the Circuit Court and State Supreme Court as provided by law. Contact Eric Gronlund by June 30, 1997, at the above Water Rights Program address to request copies of information pertaining to this application, to assure access to the hearing by the handicapped or to obtain an interpreter for the hearing impaired.

This application is made pursuant to SDCL 46-1-1 thru 46-1-9, 46-1-12 thru 46-1-16; 46-2-3.1, 46-2-9, 46-2-11, 46-2-13, 46-2-17; 46-2A-1 thru 46-2A-10, 46-2A-12, 46-2A-14, 46-2A-15, 46-2A-20, 46-2A-21; 46-5-1 thru 46-5-11, 46-5-13 thru 46-5-15, 46-5-24, 46-5-25, 46-5-30.2, 46-5-30.4, 46-5-31; 46-6-3, 46-6-3.1, 46-6-6.1, 46-6-10, 46-6-13, 46-6-14, 46-6-26; and Board Rules ARSD 74:02:01:01 thru 74:02:01:15. Nettie H. Myers, Secretary, Department of Environment and Natural Resources.

AFFIDAVIT OF PUBLICATION

STATE OF SOUTH DAKOTA

COUNTY OF MINNEHAHA } ss

Diana Reicher being duly sworn, says: That The Sioux Falls Argus Leader is, and during all the times hereinafter mentioned was, a daily legal newspaper as defined by SDCL 17-2-21, as amended published at Sioux Falls, Minnehaha County, South Dakota by Sioux Falls Newspapers, Inc.; that affiant is and during all of said times, was an employee of the publisher of such newspaper and has personal knowledge of the facts stated in this affidavit; that the notice, order or advertisement, a printed copy of which is hereto attached, was published in said newspaper upon

WED..	, the	11	day of	JUNE	1997,
WED.	, the	18	day of	JUNE	1997,
	, the		day of		1997,
	, the		day of		1997,
	, the		day of		1997,
	, the		day of		1997,
	, the		day of		1997,

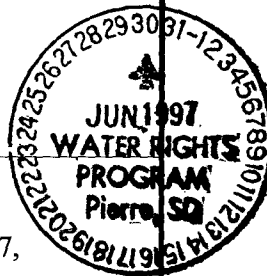
and that \$112.33 was charged for publishing the same including a \$5.00 affidavit fee.

D. Reicher

Subscribed and sworn to before me JUNE 26, 1997,

Judy Wiese
 Notary Public, South Dakota
 JUDY WIESE
 NOTARY PUBLIC
 SOUTH DAKOTA

My Commission expires November 3, 2000



NOTICE OF HEARING ON WATER PERMIT APPLICATION NO. 5996-3 to Appropriate Water

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The Water Management Board will consider this application at 9:00 a.m., July 9, 1997, Floyd Matthew Training Center, Joe Foss Building, 523 East Capitol, Pierre, SD. The Chief Engineer's recommendation is not final or binding upon the Board. The Board is authorized to 1) approve, 2) approve with qualifications, 3) defer, or 4) deny this application based on the facts presented at the public hearing. The July 9, 1997, hearing date will be automatically delayed for at least 20 days upon written request to the Chief Engineer from the applicant or any interested person opposing the application. The request for an automatic delay must be filed by June 30, 1997.

Any hearing will be an adversary proceeding. Any person filing a petition and/or the applicant have the right to be represented by a lawyer and may present evidence or cross-examine witnesses according to SDCL 1-26. These and other due process rights will be forfeited if not exercised. Decisions of the Board may be appealed to the Circuit Court and State Supreme Court as provided by law. Contact Eric Gronlund by June 30, 1997, at the above Water Rights Program address to request copies of information pertaining to this application, to assure access to the hearing by the handicapped or to obtain an interpreter for the hearing impaired.

This application is made pursuant to SDCL 46-1-1 thru 46-1-9, 46-1-12 thru 46-1-16; 46-2-3.1, 46-2-9, 46-2-11, 46-2-13, 46-2-17; 46-2A-1 thru 46-2A-10, 46-2A-12, 46-2A-14, 46-2A-15, 46-2A-20, 46-2A-21; 46-5-1 thru 46-5-11, 46-5-13 thru 46-5-15, 46-5-24, 46-5-25, 46-5-30.2, 46-5-30.4, 46-5-31; 46-6-3, 46-6-3.1, 46-6-6.1, 46-6-10, 46-6-13, 46-6-14, 46-6-26; and Board Rules

ARSD 74:02:01:01 thru 74:02:01:15.
 Nettie H. Myers, Secretary,
 Department of Environment and

Natural Resources
 1942 June 11, 18, 1997

**MYRL & ROY'S PAVING, INC.
ROWENA QUARRY
HYDROLOGIC STUDY**



Prepared for

Myrl & Roy's Paving, Inc.

June 16, 1997

LEGGETTTE, BRASHEARS & GRAHAM, INC.
1113 East 14th Street
Sioux Falls, SD 57104-5226
(605) 334-6000

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**MYRL & ROY'S PAVING INC.
ROWENA QUARRY**

HYDROLOGIC STUDY

INTRODUCTION

The purpose of this Study was to provide information regarding the degree to which the proposed Myrl & Roy's Paving, Inc. quarry expansion (Requested Area) has the potential to impact local surface water bodies and ground-water supplies. The Study included the following items.

- A review of existing geological information pertaining to the vicinity of the Requested Area to establish the geological setting of the study area.
- Identification of surface water bodies within a 1½-mile radius of the Requested Area.
- Compilation of an inventory of private and state-owned wells within a 1½-mile radius of the Requested Area, including the depth, elevation and location of each well, the static water level within each well, and the geologic unit in which each well is completed.
- Construction of a potentiometric surface map of the aquifer in the area, including indications of the direction of ground-water movement.
- Drilling and constructing five-150 foot deep monitoring wells.
- Performance of a 72-hour pumping test.

HYDROGEOLOGICAL SETTING OF THE STUDY AREA

The Requested Area (Figures 1 and 2) is located in an area where numerous outcrops of the Sioux Quartzite, the quarried material, are present. The Sioux Quartzite is a Precambrian-age pink to red silica-cemented quartzite. Layers of pipestone, sand and shale are reported to exist within the quartzite. The thickness of the quartzite is unknown in the area of the site but is widely assumed to be many hundreds or thousands of feet thick. Where the quartzite does not outcrop, it is covered by variable thicknesses of clay glacial till, glacial outwash, and the alluvium of the Big Sioux River floodplain.

Where possible, the glacial outwash and floodplain alluvium are the sources of water for the residences in the area. Where sufficient thicknesses of saturated alluvium are not present, water supply wells are drilled and completed in the Sioux Quartzite. The quartzite wells range generally in depth from 100 to 500 feet. Water within the quartzite appears to be primarily from fractures and joints, and secondarily from uncemented or poorly cemented layers within the quartzite. Based on the examination of aerial photos of the area the joint/fracture system in the vicinity of the Requested Area has a primary N 40-45° W orientation with a secondary/conjugate orientation of N 40-45° E.

The current Myrl & Roy's Paving, Inc. quarry pit is approximately 60 to 65 feet deep and covers approximately 17 acres. Occasionally, precipitation collects and is pumped out of the quarry pit; however, no ground water accumulates in the quarry pit.

SURFACE WATER BODIES

To provide information regarding the presence and location of surface water bodies within a 1½-mile radius of the Requested Area, the Brandon, S.Dak. - Iowa, 7.5 Minute Series, topographic map was reviewed (Figure 3), a recent aerial photo of the area was reviewed (Figure 2), and a ground-based visual reconnaissance of the area was performed. The area within the 1½-mile radius of the Requested Area encompasses areas to the west of the Big Sioux River and extends into Iowa; however, neither of these areas were included in the surface water body review.

Review of the topographic map, Figure 3, reveals the presence of two surface water bodies within a 1½-mile radius of the Requested Area. An unnamed quarry is located in SW¼ of Section 26, approximately 1 mile east of the Requested Area and is shown as containing surface water. The Big Sioux River is shown to be located 0.7 miles west of the Requested Area. The river flows to the south in the vicinity of the Requested Area. Several intermittent streams are shown to be located within the 1½-mile radius of the Requested Area. These streams generally flow to the west, draining into the river. The nearest intermittent stream is shown to be located in the SW¼ of the NW¼ of Section 27, approximately 0.3 miles northwest of the Requested Area.

Review of the aerial photo, Figure 2, confirms the existence of the surface water bodies shown on the topographic map. Additional surface water bodies identified on the aerial photo consist of: 1) various ponds located in the flood plain of the river and within 100 feet of the river, and 2) what appear to be two sewage lagoons located immediately southeast of the livestock confinement barn in the NE¼ of the NW¼ of Section 34, approximately 200 feet south of the southern property line of the Requested Area.

Ground-based visual reconnaissance confirmed the topographic and aerial photo information. Two additional surface water bodies were identified on the Requested Area property proximal to the quarry pit; water storage ponds which store water for use in quarrying operations.

WELL INVENTORY

Questionnaires regarding water wells were sent to 162 property owners in and around the study area. A copy of the questionnaire is attached in Appendix I. Ninety-five replies to the questionnaire were received. The South Dakota Department of Environment and Natural Resources - Water Rights Division (DENR), was contacted regarding registered water wells in the study area. Based on the results of the questionnaire and the information from the DENR, There are 46 known domestic water wells within the study area.

The well depth was reported for 37 of the 46 wells. Based on the depth and location of the wells, 24 of the 37 wells are completed primarily in the Sioux Quartzite, with the remainder being completed in alluvium/outwash or a combination of quartzite and alluvium/outwash. Of the 24 quartzite wells the well depth ranges from 114 to 525 feet with an average depth of 227 feet. The pump depth was listed for 13 of the 24 quartzite wells with a range of 40 to 300 feet and an average of 170 feet. The depth to water in the quartzite wells was listed for 11 of the 24 wells with a range of 12 to 365 feet and an average of 111 feet.

The reported well depth for the remainder of the 37 wells (13 alluvium/outwash wells) ranges from 21 to 90 feet with an average of 47 feet. The pump depth was listed for 8 of the 13 alluvium/outwash wells with a range of 6 to 80 feet and an average of 48 feet. The depth to water in the alluvium/outwash wells was listed for 7 of the 13 wells with a range of 18 to 50 feet and an average of 29 feet.

A tabulation of the results of the inventory, including (where known) depth, elevation and geologic unit in which each well is completed are presented in Table 1. Copies of the questionnaire replies are on file and available on request. A map depicting the well depths and inferred completion intervals is presented as Figure 4.

In addition to the wells identified in the well inventory, two exploratory borings performed by Myrl & Roy's Paving, Inc. were brought to our attention. The borings are located immediately west of the present quarry and were drilled to assess the quality of the rock materials in that area. The borings are approximately 75 feet deep and are filled with water to within approximately 3 to 5 feet of the ground surface. The drill cuttings were piled around the borehole so as to prevent surface water infiltration into the boreholes. The surface elevation of the borings was not surveyed; consequently, the elevation of the ground water in the borings was not determined. However, the elevation of the ground water in the borings appears to be generally consistent with the potentiometric map described below.

POTENTIOMETRIC MAP

The well owners that answered the questionnaire and indicated they would consent to having the water level in their well measured were contacted to arrange for the measurement. The static water level in 24 wells was measured over a three day period from April 30 to May 2, 1997. In wells where the water level was rising or falling, numerous measurements were obtained until a static level was reached; however, in some wells the pumping cycle was so short that a static level was not obtainable. During the period of the measurements, the location and elevation of the casing top in each well was surveyed relative to mean sea level by a registered land surveyor. A potentiometric map of the based on the measured water levels and the surveyed elevations in the accessible known wells is presented as Figure 5. The indicated groundwater flow is primarily to the west. The tabular data is presented in Table 2.

PUMPING TEST

To provide information regarding the potential influence that the proposed quarry expansion may have on local ground water, a pumping test was performed in the western portion of the Requested Area. To perform the pumping test, a series of five monitoring wells were installed as presented on Figure 6. It should be noted that the wells were installed in the western portion of the Requested Area in order to: 1) provide information within the actual footprint of the future quarry, and 2) provide information in the area between the Requested Area and the greatest concentration of private wells.

The wells were installed using the air-rotary drill rig owned and operated by the Myrl & Roy's Paving, Inc. The wells were advanced in a pattern along the primary and secondary/conjugate fracture directions to a depth of approximately 150 feet below grade (10 feet below the proposed final quarry depth). With the exception of a few feet of overburden consisting of topsoil and clay, the Sioux Quartzite was present to the terminal depth of the wells. The wells were constructed as "open hole completions" from 150 to 50 feet with 50 feet of four-inch PVC surface casing. The casing was cemented in place from the surface to approximately 48 feet below grade in accordance with the "Well Construction Standards - State of South Dakota". The top of the casing was surveyed for location and elevation by a registered land surveyor. The elevation data is presented on Figure 6.

The wells were allowed to set undisturbed for several days until measurements of the water levels in the wells indicated that the wells were equilibrated. An electric submersible pump was installed at 120 feet below grade (elevation 1220) in monitoring well MW-1 and the well was subjected to a preliminary rate test to estimate the rate for the pumping test. Based on the rate test, a pumping rate of ≈ 0.5 gallons per minute (gpm) was selected.

To record the ground-water levels during the pumping test, automated datalogging equipment was installed in the five on-site monitor wells and in the two wells on the Streich property located in the NW $\frac{1}{4}$ of the NW $\frac{1}{4}$ of Section 35. On May 19, 1997 datalogging equipment was installed in the Streich wells and MW-4. One of the Streich wells (#1144) is their water supply well and is reportedly 385 feet deep. The datalogger was set to record the ground-water level at five-minute intervals. The other Streich well (#1144a) is reportedly 28 feet deep. The datalogging equipment in Streich well #1144a and MW-4 was set to record the ground-water levels at $\frac{1}{2}$ -hour intervals. The

datalogging equipment recorded background ground-water level information in MW-4 and the Streich wells starting May 19, 1997. The datalogging equipment for wells #1144, #1144a and MW-4 was supplied by the South Dakota Geological Survey (SDGS) and was installed and operated with the assistance of Mr. Stan Pence of the South Dakota Association of Rural Water Systems.

Datalogging equipment was installed in MW-1, MW-2, MW-3 and MW-5 on June 2, the day of the pumping test. (The pumping test was originally scheduled to start on May 27 but was delayed due to rainy conditions.) The datalogging equipment in MW-2 and MW-3 was set to record the ground-water level and time whenever the ground-water level changed by 0.05 feet. The datalogging equipment in MW-5 and MW-1 was set to record the ground-water level and time whenever the ground-water level changed by 0.25 and 1 feet, respectively.

The pumping test commenced on June 2, 1997 at 14:30. The pumping rate was adjusted within the first 5 minutes to a rate of approximately 0.5 gpm, the lowest rate recommended for the pumping equipment. At 20:39 on June 2, 1997, 369.5 minutes into the pumping test, the ground-water level had receded to elevation 1229.46, and the pump was shut off. Over the remainder of the pumping portion of the test, the pump was periodically operated to maintain the ground-water elevation between approximately 1229 and 1239 (approximately 114 to 104 feet below grade). Seventy-two hours into the test, the cyclic pumping was terminated and the wells were allowed to equilibrate. The equilibration continued until 04:11 on June 6, 1997, when the ground-water level in MW-1 equilibrated to within 0.604 feet of the pre-pumping level.

DISCUSSION

Review of the well inventory reveals that there were no respondent wells within 1,000 feet of the boundaries of the Requested Area. The survey also revealed that the majority of the wells are completed within the Sioux Quartzite. The varying depths of the quartzite wells, from 114 to 525 feet, suggests that the quantity of available water within the quartzite is highly variable, which is consistent with fracture/joint permeability of the quartzite.

The near-surface elevation of the ground water in the two open test borings indicates that the quarry at its present stage of development has not had an adverse effect in the ground-water levels in the immediate vicinity of the quarry, even though the quarry has been in operation for 12 years.

These near-surface ground-water elevations, as well as the near-surface elevation of the ground water in the monitoring wells (at pre- and post-pumping conditions) indicates that the quarry is not currently adversely affecting the ground water in the area of the quarry. This is consistent with the lack of ground-water influx into the quarry pit.

Review of the pre-pumping test ground-water elevation data reveals that the Streich water supply well (#1144) experiences significant drawdown during its normal pumping cycle, despite its considerable depth of 385 feet (Graph 1). This is consistent with the low overall water supply capacity of the quartzite. Unfortunately, the datalogger in this well failed on three occasions, preventing the acquisition of data during and immediately after the pumping test. The pre-pumping test data from well #1144a reveals a pattern of apparently random ground-water elevation fluctuations of insignificant magnitude (0.5 feet). The water level data for well #1144a also shows what appears to be recharge from the rain events that occurred on May 23 through May 29, 1997 (Graph 2). The pre-pumping test data from MW-4 also reveals a fluctuations in the ground-water elevations; however, the pattern and timing of the fluctuations suggests that the fluctuation are lunar tidal responses. The water level data from MW-4 also shows what appears to be recharge from the late May rain events. The magnitude of the recharge response in well #1144a and MW-4 is similar in magnitude at approximately 0.5 feet each.

Review of the pumping test data shows that the 104 to 114 foot drawdown in MW-1 had no significant effect on the ground-water levels in MW-4 or MW-5, located 30 feet from MW-1, or on MW-2 or MW-3, located 300 feet from MW-1 (Graph 4). With the exception of increases in the elevation of the ground water in the wells, probably in response to recharge from the late May rainfall, the wells exhibited the same basic pattern of fluctuations apparent in the pre-pumping test data. Due to equipment malfunctions, no data was available for wells #1144 and #1144a during the pumping test.

Because no effect was noted in MW-2, MW-3, MW-4 or MW-5, attempts were made to estimate the transmissivity of the quartzite from the drawdown and recharge data from MW-1, the pumping well, alone. Review of the drawdown data (Graph 5 using the Jacobs Method), shows a steepening of the curve in the first 16 minutes of the test with a break point at 16 minutes. This is due to two factors; 1) the adjustment of the pumping rate down to 0.5 gpm, and 2) the drawdown reaching the bottom of the 4" casing and entering the 6½" open borehole. The curve is relatively

straight until 35 minutes into the test, when another break point occurs and the curve steepens. This break point and the following steeper curve are possibly the result of the expanding cone of depression encountering an impervious boundary or an area of reduced flow. When an impervious boundary or an area of reduced flow is encountered by the expanding cone of depression, the cone must deepen more rapidly to maintain the yield of the well. This results in the steeper curve after 35 minutes into the test. The increasing rate of drawdown between 35 and 369.5 minutes into the test (resulting in an ever-steepening curve) suggests that the distance from the wellbore to the flow boundary decreases with depth. This is consistent with the fractured and jointed nature of the Sioux Quartzite in which it could be expected that the fractures and joints would be more numerous and hydraulically conductive near the weathered surface than at depth. The calculation of a reliable transmissivity of the water-bearing formation requires that the time-drawdown plot be linear for a reasonable time. If linearity is not evident, a portion of the most linear portion of the curve prior to the effect of impervious boundaries must be selected. In this case, that portion of the curve is between 16 and 35 minutes time and 20 to 25 feet of drawdown. This portion of the curve will also result in a conservatively high calculated transmissivity value. Even though this time interval is too short to provide any reliable calculation of the transmissivity of the quartzite, the calculated transmissivity value is 66 gallons per foot per day, based on the log-cycle slope of the straight portion of the line (Δs) of 8 feet, a pumping rate (Q) of 0.5 gpm and the relationship $T=264Q/\Delta s$. It is not possible to calculate an estimate of the storage coefficient of the quartzite based only on data from the pumping well; data from observation wells is required. It can be qualitatively estimated; however, that the storage coefficient of the quartzite is very low based on the near zero conductivity of the quartzite matrix and the fracture/joint nature of the ground-water flow.

The estimation of transmissivity from the recovery data from MW-1 encounters the same problems as with the drawdown data. When the residual drawdown is plotted against the log of t/t' (t =time, in minutes since the pump started and t' = the time, in minutes, since the pump stopped), the plot is not linear and exhibits the same non-linear traits of the drawdown curve (Graph 6). The similarity of the shape of the curves is expected and suggests that the test conditions met the required standards and the measurements were taken carefully. When the same portion of the recovery curve is examined (20 to 25 feet of drawdown), the calculated transmissivity value is 1.65 gallons per foot per day, based on a Δs of 80 feet, a pumping rate (Q) of 0.5 gpm and the relationship $T=264Q/\Delta s$.

In a manner similar to the drawdown data, the storage coefficient cannot be estimated from the pumping well only; however, the same qualitative indication of a low storage coefficient is applicable. The raw pre- and pumping test data can be supplied on diskette upon request.

This indicates that wells installed in the quartzite would have to be very deep in order to produce sufficient water for household use and that the storage of water in the well bore is a very important factor. This also indicates that the cone of depression developed by a well in the quartzite would be very steep-sided and limited in its extent. In the case of the pumping test, the cone of depression did not extend 30 feet to MW-4 and MW-5.

The nature of the significant surface water bodies (intermittent streams and rivers are considered the significant surface water bodies; the water-filled quarry, sewage ponds and quarry ponds are not considered significant) indicates that they interact with the ground-water system, either as discharge or recharge points. None of the significant surface water bodies flows across the Requested Area, so any impacts to the flow volume of the significant surface water bodies would necessarily be related to ground-water impacts.

CONCLUSIONS

The water well survey data and the pumping test data both indicate that the Sioux Quartzite has both a low transmissivity and, while unqualified, a low storage coefficient which necessitates well depths in excess of 100 feet with well bore water storage in the range of 160 to 860 gallons. The low transmissivity and storage coefficient also result in a cone of depression that is steep-sided and limited in its extent. Because of the resultant shape of the cone of depression in the quartzite, it is not expected that the proposed quarry will develop a cone of depression that will affect the water wells in the vicinity of the Requested Area. As a safeguard, and in recognition of the variable nature of the quartzite, the ground-water elevations in current monitor well network will be measured periodically to provide warning of any such adverse impacts. If and when the monitor wells are destroyed by quarrying operations, they will be replaced as needed.

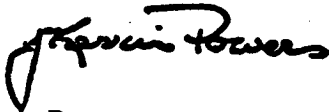
Because no adverse ground-water impacts are expected to occur, and the surface water impacts are dependent on ground-water impacts, no surface water impacts are expected.

LEGGETTE, BRASHEARS & GRAHAM, INC.



Tim Kenyon
Associate

Reviewed by:



J. Kevin Powers, CPG
Vice President

TK:llm

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MYRL ROYS PAVING, INC.
ROWENA QUARRY
ROWENA, SOUTH DAKOTA

Property Owner /Occupant Questionnaire Results

	Name	Address	City	Well	Location	Use of Well	Depth of Well (feet)	Dry	Depth of Pump (feet)	Depth to Water (feet)	When Installed	Who Installed	Diagram of Well	Accept. Quality	Problems w/ Quality	Quantity Accept.	Enter Property	Measure Water Level	Location of Septic
001	* Andai, Roger	48095 267th St.	Brandon, SD 57005	Y	SE corner	D	220	N	DK	DK	1993	Putzke Well Drilling	N	Y	N	Y	Y	Y	200' NW
1002	Anderberg, Rhett J	26668 Brownstone Ave.	Brandon, SD 57005	Y	N of house	none	DK	DK	DK	DK	DK	DK	N	DK	DK	Y	Y	Y	30' SE
003	Anderson, Clifford	26669 Brownstone Ave.	Brandon, SD 57005	N															
1004	Anderson, Gregory G	26663 Brownstone Ave.	Brandon, SD 57005	Y	by garage	none	DK	DK	DK	DK	DK	DK	DK	DK	DK	DK	Y	Y	200' NW
005	Anderson, Madeline	RR 1 Box 1598	Brandon, SD 57005	SEE RICHARD & MARY HARWIG															
006	Anderson, Norman & Mary	26673 Brownstone Ave.	Brandon, SD 57005	Y	front of house	D	30	Y	6	18	1970	DK	N	N	DK	Y	Y	Y	100' W
1007	Anway, Steven & Cleo	48180 Kim Circle	Brandon, SD 57005																
008	Archer, Ronald	26775 481st Ave	Brandon, SD 57005																
1009	Assam, Fred	530 S Phillips Ave.	Sioux Falls, SD 57102																
010	* Barclay, James	48097 Red Rock Dr.	Brandon, SD 57005	Y	SE corner	D	250	DK	DK	DK	1988	DK	N	Y	DK	Y	Y ^{/P}	Y ^{/P}	100' NW
1011	Baum, Michael	26602 481st Ave	Brandon, SD 57005																
012	* Beck, James	48069 267th St.	Brandon, SD 57005	Y	150 yds SW of house	D	170	N	170	DK	1942	DK	N	Y	N	Y	Y	Y	200 yds N
013	Bird, Donald & Angel	48193 Kim Circle	Brandon, SD 57005																
014	Blain, Charles F	48064 266th St.	Brandon, SD 57005																
015	Borders, L Patrick	1983 Finsbury Ct.	Cincinnati, OH 45230	N															
1016	Borkowski, Steven	26666 Douglas Ave.	Brandon, SD 57005																
017	Bossmann, James	48107 266th St.	Brandon, SD 57005	RETURNED BY MAILMAN (FORWARDING ORDER EXPIRED)															
1018	Bowers, Wilbur & Carolyn	48179 Kim Circle	Brandon, SD 57005	N															
019	Cahoy, Elmer	PO Box 405	Bonesteel, SD 57317																
1020	Chambers, Craig & Lynn	48257 265th St.	Brandon, SD 57005																
1021	Clauson, Norman	48281 Hwy 42	Brandon, SD 57005	Y	S of building	None	26	DK	DK	DK	1936	DK	N	DK	N	DK	Y	Y	150' NE
1022	Courtney, James	48289 Creekview Cir	Brandon, SD 57005	N															
1023	Covington, William Earl	RR 1 Box 770	Brandon, SD 57005	Y	40 yds -rear of house	D, I, O	DK	DK	DK	DK	DK	DK	N	Y	N	Y	Y	Y	80 yds SW
1024	Croon, Marvin	1800 Woodrow	Mission, TX 78572																
1025	Dahmen, Larry G.	212 W 17th St.	Sioux Falls, SD 57104																
1026	Dean, William	48181 Kim Circle	Brandon, SD 57005																
1027	Deno, Roger & Audrey	48188 Kim Circle	Brandon, SD 57005	N															
028	DeWitt, Daryl & Lori	48296 267th St.	Brandon, SD 57005	Y	N side of shelter belt	O	DK	DK	DK	DK	DK	DK	N	DK	DK	DK	Y	Y	100 yds S
1029	Dexter, Dale	48156 268th St.	Brandon, SD 57005																
1030	Deyoung, Pat & Debra	48199 Kim Circle	Brandon, SD 57005	N															
1031	* Dirksen, Dwane G.	48243 267th St.	Brandon, SD 57005	Y	12' from house	D	300	N	DK	NA	1984	Putzke Well Drilling	N	Y	N	Y	Y	Y	50' SW
1032	Dunham, Calvin L	26659 Douglas Ave.	Brandon, SD 57005																

MYRL ROYS PAVING, INC.
ROWENA QUARRY
ROWENA, SOUTH DAKOTA

Property Owner /Occupant Questionnaire Results

	Name	Address	City	Well	Location	Use of Well	Depth of Well (feet)	Dry	Depth of Pump (feet)	Depth to Water (feet)	When Installed	Who Installed	Diagram of Well	Accept. Quality	Problems w/ Quality	Quantity Accept.	Enter Property	Measure Water Level	Location of Septic
1033	Ecklund, Scott & Alison	48217 265th St.	Brandon, SD 57005	N															
1034	Edwards, Gary	RR 1 Box 448	Brandon, SD 57005																
1035	Egge, Todd & Joanne	48285 Creekview Cir	Brandon, SD 57005	N															
1036	Emery, Kevin & Virginia	48178 Kim Circle	Brandon, SD 57005	N															
1037	Everist, Ellen D	2801 S. Carter Pl.	Sioux Falls, SD 57105																
1038	Everist, L G Inc.	PO Box 5829	Sioux Falls, SD 57117	N															
1039	Farrell, Jeanne Perry Etal	520 W 10th St.	Sioux Falls, SD 57104																
1040	Fountain, Charles	26651 Douglas Ave.	Brandon, SD 57005	N															
1041	France, David & Kristi	RR 1 Box 620	Brandon, SD 57005																
1042	Fretty, Jacob Jr.	310 Krahmer Dr.	Fairmont, MN 56031																
1043	Funke, David & Nancy	48244 266th St.	Brandon, SD 57005																
1044	Funke, Raymond & Carol	48244 266th St.	Brandon, SD 57005																
1045	Funke, Richard & Barbara	48249 267th St	Brandon, SD 57005																
1046	* Gage Bros Concrete	4301 W 12th St.	Sioux Falls, SD 57106	N															
1047	Gascoigne, Gary	48186 Kim Circle	Brandon, SD 57005	N															
1048	Gillespie, Ronnie Lou	48265 E Hwy 42 Unit 111	Rowena, SD 57056																
1049	Gochanour Jr., Billie	48176 Kim Circle	Brandon, SD 57005	N															
1050	* Grimes, Raymond & Erlene	3804 E 25th St.	Sioux Falls, SD 57103	Y		D	88	N	78	23	1973	DK	DK	Y	N	Y	N	N	NE
1051	Grimmuis, Earl & Sandra	48258 268th St.	Brandon, SD 57005	Y	W of house	D, L	DK	N	DK	DK	DK	DK	N	Y	N	Y	Y	Y	300' W
1052	* Gulbrandson, Micheal	48103 Spring Valley Pl	Brandon, SD 57005	Y	20' W of front	D, I	150	N	DK	DK	1987	Lacey's Well Drilling	N	Y	N	Y	Y	Y	70' SW
1053	* Haak, Gerald	PO Box 66	Hills, MN 56138	Y	under windmill	L	70	N	70	50	1888	DK	N	Y	N	N	Y	Y	NA
1054	Hanson, Wayne	48174 Kim Circle	Brandon, SD 57005																
1055	Hanten, Maryln	RR 2 Box 7	Sioux Falls, SD 57103																
1056	Hanten, Patricia K	26618 481st Ave.	Brandon, SD 57005																
1057	Harr, Richard & Deborah	26507 483rd Ave.	Brandon, SD 57005	N															
1058	Harwig, Richard & Mary	48256 Hwy 42	Brandon, SD 57005	N															
1059	Hehenberger, Edward	48261 Highway 42	Brandon, SD 57005	N															
1060	Herbranson, Todd & Joelyn	26666 Brownstone Ave.	Brandon, SD 57005																
1061	Hildring, Janis A	1029 Cottonwood Dr.	Brandon, SD 57005	N															
1062	Hohn, Kevin & Guyla	PO Box 507	Wakefield, NE 68784																
1063	Howe, Frank & Joy	48106 Spring Valley Pl	Brandon, SD 57005	N															
1064	Hubert, Raymond	26654 483rd Ave.	Brandon, SD 57005	Y	house yard	D	120	N	NA	20	1917	DK	N	Y	N	Y	N	N	200' NE
1064a	Hubert, Raymond	26654 483rd Ave.	Brandon, SD 57005	Y	cattle yard	L	45	NA	NA	20	1887	DK	N	Y	N	Y	N	N	
1065	Hurd, James	26630 481st Ave	Brandon, SD 57005	N															

TABLE 1

LEGGETTE, BRASHEARS & GRAHAM, INC.

MYRL ROYS PAVING, INC.
ROWENA QUARRY
ROWENA, SOUTH DAKOTA

Property Owner /Occupant Questionnaire Results

	Name	Address	City	Well	Location	Use of Well	Depth of Well (feet)	Dry	Depth of Pump (feet)	Depth to Water (feet)	When Installed	Who Installed	Diagram of Well	Accept. Quality	Problems w/ Quality	Quantity Accept.	Enter Property	Measure Water Level	Location of Septic
1066	Iverson, Eva Etal	3600 S Willow #204	Sioux Falls, SD 57105	N															
1067	Jones, Chester R	26533 481st Ave.	Brandon, SD 57005																
1068	Jorgensen, Joyce	48184 Kim Circle	Brandon, SD 57005	N															
1069	*Kase, Arlan	25893 481st Ave	Brandon, SD 57005	Y	by the house	D, O	220	N	180	DK	1993	Putzke Well Drilling	N	Y	N	Y	Y	N, Putzke	100' NW
1070	Kaufman, Dave	48117 266th St.	Brandon, SD 57005																
1071	*Keenan, Curtis	26737 481st Ave	Brandon, SD 57005	Y	front	D	150	N	100	20	1977	Graves Well Drilling	N	Y	N	Y	Y	Y	100' W
1072	Kelman, Richard & Linda	RR 1 Box 910	Brandon, SD 57005	N															
1073	Kiesow, Kathleen	48174 Kim Circle	Brandon, SD 57005																
1074	Kjergaard, Arel & Mary Ann	RR 1 Box 98	Larchwood, IA 51241																
1075	Kjergaard, Hans & Madine	5001 E Linden Ln	Sioux Falls, SD 57103																
1076	Kjergaard, Marilyn	PO Box 121	Rowena, SD 57056																
1077	*Knebel, Tim	48124 Skyview Cr.	Brandon, SD 57005	Y	behind house	D, O	210	N	DK	DK	1985	Sioux Well Drilling	N	Y	N	Y	Y	Y	300' SW
1078	Kooker Development Corp	323 S Phillips Ave. #3	Sioux Falls, SD 57102	N															
1079	Kramer, Glen & Susan	RR 1 Box 320	Brandon, SD 57005																
1080	Krohn, Lou	115 Granite	Rowena, SD 57056																
1081	*Kroon, Marvin	48075 267th St.	Brandon, SD 57005	Y	15' E of garage	D, L, I	280	N	40	280	1986	Putzke Well Drilling	Y	Y	N	Y	Y	Y	100' W
1082	Kuhnert, Charles & Gloria	26652 Douglas Ave.	Brandon, SD 57005	N															
1083	Kuhnert, Jack A	RR 1 Box 890	Brandon, SD 57005																
1084	Kuhnert, Larry & Marlene	48135 265th St.	Brandon, SD 57005	Y	N side	D, L, I	254	N	250	20	1983	Putzke Well Drilling	N	Y	Y	Y	Y	Y	100' SW
1085	Kutter, Wayne	48177 Highway 42	Brandon, SD 57005																
1086	Kutter, Wayne & Barbara	RR 1 Box 85	New Effington, SD 57255																
1087	Larson, Helen M	850 Military Ave.	Fremont, NE 68025	RETURNED BY MAILMAN (NO FORWARDING ADDRESS)															
1088	*Lewis, Robert	48114 Skyview Cr.	Brandon, SD 57005	Y	S of house	D, I, O	150	N	100	12	1988	DK	N	Y	Y	Y	Y ^P	Y	130' NW
1089	Like, Timothy & Jennifer	48297 Creekview Cir	Brandon, SD 57005	N															
1090	List, Duane & Vickie	48194 Kim Circle	Brandon, SD 57005	N															
1091	Lorenzen, Gregory	48107 266th St.	Brandon, SD 57005																
1092	Mahon, Patrick & Karolee	48288 Creekview Cir	Brandon, SD 57005	N															
1093	McBeth, Michael	25807 N Kwanis Ave	Sioux Falls, SD 57107																
1094	McKinney, James L	RR 1 Box 325	Brandon, SD 57005																
1095	McKnight, Neil & Ronald	48088 266th St.	Brandon, SD 57005																
1096	McKnight, Ronald	48076 266th St.	Brandon, SD 57005																
1097	McMahon, Roger	26551 483rd Ave.	Brandon, SD 57005																
1098	Medema, Paul & Mary	26674 Brownstone Ave.	Brandon, SD 57005																
1099	Meinerts, Melvin	26605 482nd Ave	Brandon, SD 57005																

MYRL ROYS PAVING, INC.
ROWENA QUARRY
ROWENA, SOUTH DAKOTA

Property Owner /Occupant Questionnaire Results

	Name	Address	City	Well	Location	Use of Well	Depth of Well (feet)	Dry	Depth of Pump (feet)	Depth to Water (feet)	When Installed	Who installed	Diagram of Well	Accept. Quality	Problems w/ Quality	Quantity Accept.	Enter Property	Measure Water Level	Location of Septic
1100	Meigaard, A Russell	26537 481st Ave.	Brandon, SD 57005																
1101	Moller, Keith	1337 Geiser St.	Larchwood, IA 51241																
1102	Muhs, Jerry	48174 268th St.	Brandon, SD 57005	Y	5' W of house	D	40	DK	35	35	DK	DK	N	Y	Y	Y	Y	Y	DK
1103	* Mulder, Ardeen	48079 Red Rock Dr.	Brandon, SD 57005	Y	front of house	D	114	N	top	DK	1981	Don Graves Drilling	DK	Y	N	Y	Y	Y	100' W
1104	* Munson, Aaron & Janet	48054 266th St.	Brandon, SD 57005	Y	10' N of house	D, I	90	N	80	DK	1992	DK	N	Y	N	Y	Y/P	Y/P	160' SW
1105	Nelson, Orville C Trust	5009 Sweet Briar Dr.	Sioux Falls, SD 57106	N															
1106	* Nibbelink, William & Angela	PO Box 62	Flandreau, SD 57028	N															
1107	* Nicolai, Tim	48110 Skyview Cr.	Brandon, SD 57005	Y	S of house	D, L, I	32	N	27	DK	1990	Ed McQuisten	N	Y	N	Y	Y	Y	100' NW
1108	* Ode, Bob	RR 1	Brandon, SD 57005	Y		D, L, I	302	N	280	100	1987	Putzke Well Drilling	DK	Y	N	Y	Y	Y	600' W
1109	* Ode, Doug	48127 Hwy 42	Brandon, SD 57005	Y	100 yds E of house	D, L, O	300	N	DK	DK	1988	DK	N	Y	N	Y	Y	Y	100 yds W
1110	* Ode, Greg	48170 266th St.	Brandon, SD 57005	Y	50 yds E of home	D, L	315	N	DK	260	1988	DK	N	Y	N	Y	Y	Y	SW
1111	Overgaard, Elsie R	48258 Highway 42	Brandon, SD 57005	N															
1112	Paclik, Daryl	48073 Red Rock Dr.	Brandon, SD 57005	Y	S side of house	D, I	120	N	DK	DK	1994	Putzke Well Drilling	Y	Y	Y	Y	Y	Y	NE
1113	Paradeis, Suzanne	48177 Kim Circle	Brandon, SD 57005	N															
1114	* Parker, Dan	48119 Skyview Cr.	Brandon, SD 57005	Y	E of house	D, L, O	180	N	110	DK	1984	Sioux Well Drilling	N	Y	N	Y	Y/P	Y/P	100' SW
1115	Peterson, Barb	RR 1 Box 450	Brandon, SD 57005																
1116	Pfeifle, Jayde & Stephanie	48175 Kim Circle	Brandon, SD 57005	N															
1117	* Pieper, Roger	26722 481st Ave	Brandon, SD 57005	Y	20' W of front	D, O	39	N	DK	DK	1969	DK	N	Y	Y	Y	Y	Y	20' E, 5' N b/n house
1118	Poss, Darell	48196 Kim Circle	Brandon, SD 57005																
1119	Powell, Brian & Cynthia	48191 Kim Circle #20	Brandon, SD 57005																
1120	* Radio, William	26718 481st Ave	Brandon, SD 57005	Y	Rear center of lot	D	140	N	100	60-80	1981	Sioux Well Drilling	N	Y	N	Y	Y	Y	SW
1121	Rang, Brad & Connie	48198 Kim Circle	Brandon, SD 57005	N															
1122	Rich Bros Co.	PO Box 1185	Sioux Falls, SD 57101	DK															
1123	Ridgway, Tim	26770 481st. Ave.	Brandon, SD 57005	Y	S of house	D	160	N	DK	DK	1972	DK	N	Y	N	Y	Y	Y	45' SW
1124	Robbins, John Living Trust	26520 482nd Ave.	Brandon, SD 57005	N															
1125	Roe, Karen J	48282 Creekview Cir	Brandon, SD 57005																
1126	Roe, Paul & Theresa Butts	RR 1 Box 1588	Brandon, SD 57005	Y		I, O	DK	N	DK	DK	DK	DK	DK	NA	Y	NA	NA	NA	W
1127	Roemen, Leonard & Donna	48294 Creekview Cir	Brandon, SD 57005																
1128	Rohick, Robert & Taryl	304 Granite	Rowena, SD 57058																
1129	* Roozenboom, Lawrence	26725 481st Ave	Brandon, SD 57005	Y	N of house garage	D, O	24	N	23	18	1974	DK	N	Y	N	Y	Y	Y/P	100' SW
1130	Rowena Feed & Grain Inc.	PO Unit 4 Box 1	Rowena, SD 57058																
1131	Rowena United Methodist	26640 483rd Ave.	Brandon, SD 57005	N															
1132	* Rysavy, August & Joan	26543 481st Ave.	Brandon, SD 57005	Y	front of house	D, O	160	N	120	35	1985	Putzke Well Drilling	N	Y	Y	Y	Y	Y	100' W

TABLE 1
LEGGETTE, BRASHEARS & GRAHAM, INC.

MYRL ROYS PAVING, INC.
ROWENA QUARRY
ROWENA, SOUTH DAKOTA

Property Owner /Occupant Questionnaire Results

	Name	Address	City	Well	Location	Use of Well	Depth of Well (feet)	Dry	Depth of Pump (feet)	Depth to Water (feet)	When Installed	Who Installed	Diagram of Well	Accept. Quality	Problems w/ Quality	Quantity Accept.	Enter Property	Measure Water Level	Location of Septic
133	Schramm, Ronald	48275 Highway 42	Brandon, SD 57005	N															
134	Schuette, Dennis & Joan	48299 Creekview Cir	Brandon, SD 57005	N															
1135	Sioux Falls Gun Club Inc.	PO Box 944	Brandon, SD 57005																
138	Sioux Falls Real Estate	530 S. Phillips Ave.	Sioux Falls, SD 57102																
1137	Sioux Falls Tower, Inc.	500 S Phillips Ave.	Sioux Falls, SD 57102	N															
138	Skiles, Jack A	4700 Blazewood Dr.	Sioux Falls, SD 57103	N															
1139	* Soles, Ralph III	26728 482nd Ave	Brandon, SD 57005	Y	b/n house & barn	D, L	525	N	300	DK	1994	Putzke Well Drilling	N	Y	N	Y	Y	Y	125' NE
140	Sourars, Rebecca M Etal	520 W 10th St.	Sioux Falls, SD 57104	Y															
141	* Spaans, Jeffrey & Judith	26728 481st Ave	Brandon, SD 57005	Y	NW	D, L	21	N	DK	DK	DK	Graves Well Drilling	N	Y	N	Y	Y	Y ^{/P}	100' W
142	Spilrock Feeds, Inc.	PO Unit 4 Box 1	Rowena, SD 57058																
143	Strawbridge, Lawrence	48077 265th St.	Brandon, SD 57005	Y	near horse barn	L	DK	N	8	DK	DK	DK	N	Y	N	Y	Y	Y	300' N
1144	* Streich, Robert	26704 481st Ave.	Brandon, SD 57005	Y	back yard	D, L, O	385	N	215	365	1990	Putzke Well Drilling	N	Y	N	Y	Y ^{/P}	Y ^{/P}	75 yds N/20E
144a	* Streich, Robert	26704 481st Ave.	Brandon, SD 57005	Y	south	D, O	28	N		7	DK		N	Y	N	N	Y ^{/P}	Y ^{/P}	
1145	Styles, Linda	48195 Kim Circle	Brandon, SD 57005	N															
146	Tan Corp.	PO Box 1025	Sioux Falls, SD 57101	N															
1147	Theodosen, Mary Lou Trust	PO Box 217	Garretson, SD 57030	N															
148	Tobin Family Limited	RR 1 Box 10	Peirpont, SD 57468	N															
149	Tooley, Philip & Sandra	26668 Douglas Ave.	Brandon, SD 57005																
1150	Van Ginkel, Gerald	RR 1 Box 1582	Brandon, SD 57005																
1151	VanDyke, Calvin & Michelle	48190 Kim Circle	Brandon, SD 57005																
1152	* Vogel, Ervin	26604 481st Ave	Brandon, SD 57005	Y	NA	D	280	N	280	50	1974	NA	N	Y	NA	Y	N	N	70'
1153	Walter, Marlys	48224 266th St.	Brandon, SD 57005	N															
1154	Walth, Robert & Glenda	48197 Kim Circle	Brandon, SD 57005	N															
1155	Weber, Dennis & Mariann	RR 1 Box 300	Brandon, SD 57005																
1156	* Webster, Joseph & Dianne	26716 482nd Ave	Brandon, SD 57005	Y	50' NE of house	D, I	40	N	DK	DK	1976	DK	N	Y	N	Y	Y	Y	200' SW
1157	Wentworth, Dan R	48259 Hwy 42	Brandon, SD 57005	N															
1158	Wiebe, Victor & Dawn	PO Box 1	Rowena, SD 57058	Y	under deck	none	DK	DK	DK	DK	DK	DK	DK	DK	DK	DK	Y	only if restored	
1159	* Williams, James & Kara	48192 Kim Circle	Brandon, SD 57005	N															
1160	Wright, G Russell	26627 484th Ave.	Brandon, SD 57005	N															
1161	Wright, Patricia	26627 484th Ave.	Brandon, SD 57005																
1162	* Wright, R.J.	48198 267th Ave.	Brandon, SD 57005	Y	SE 1/4-27-101-48	D, L	70	N	65	36	1940's	DK	N	Y	N	Y	Y	Y	275' SW

Y = Yes

No

= Don't Know

NA = Not Available

D = Drinking

L = Livestock

I = Irrigation

O = Other

^{/P} = Request to be present

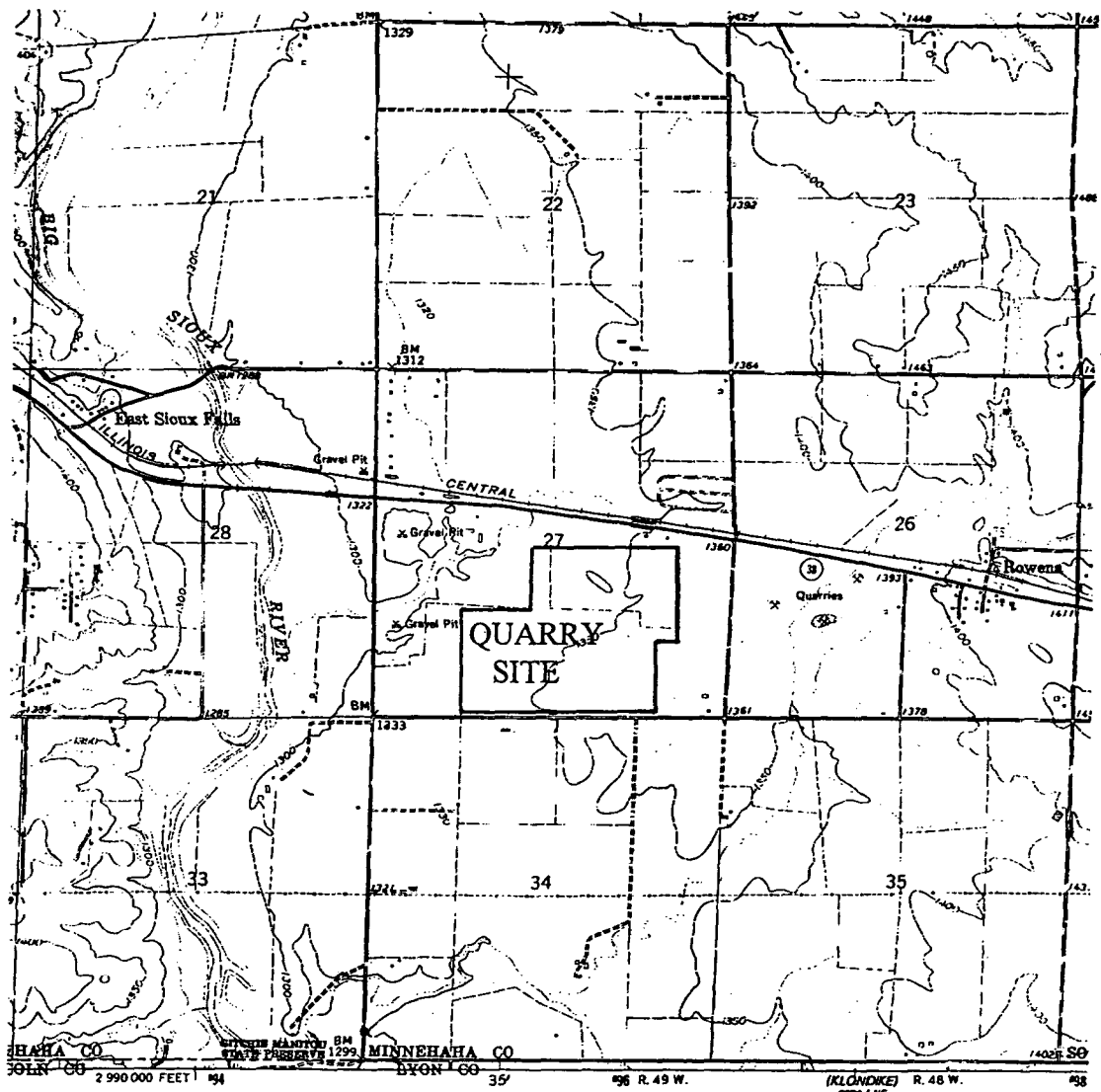
Table 2

**MYRL ROYS PAVING, INC.
ROWENA QUARRY
ROWENA, SOUTH DAKOTA**

Water Levels in Respondent Wells

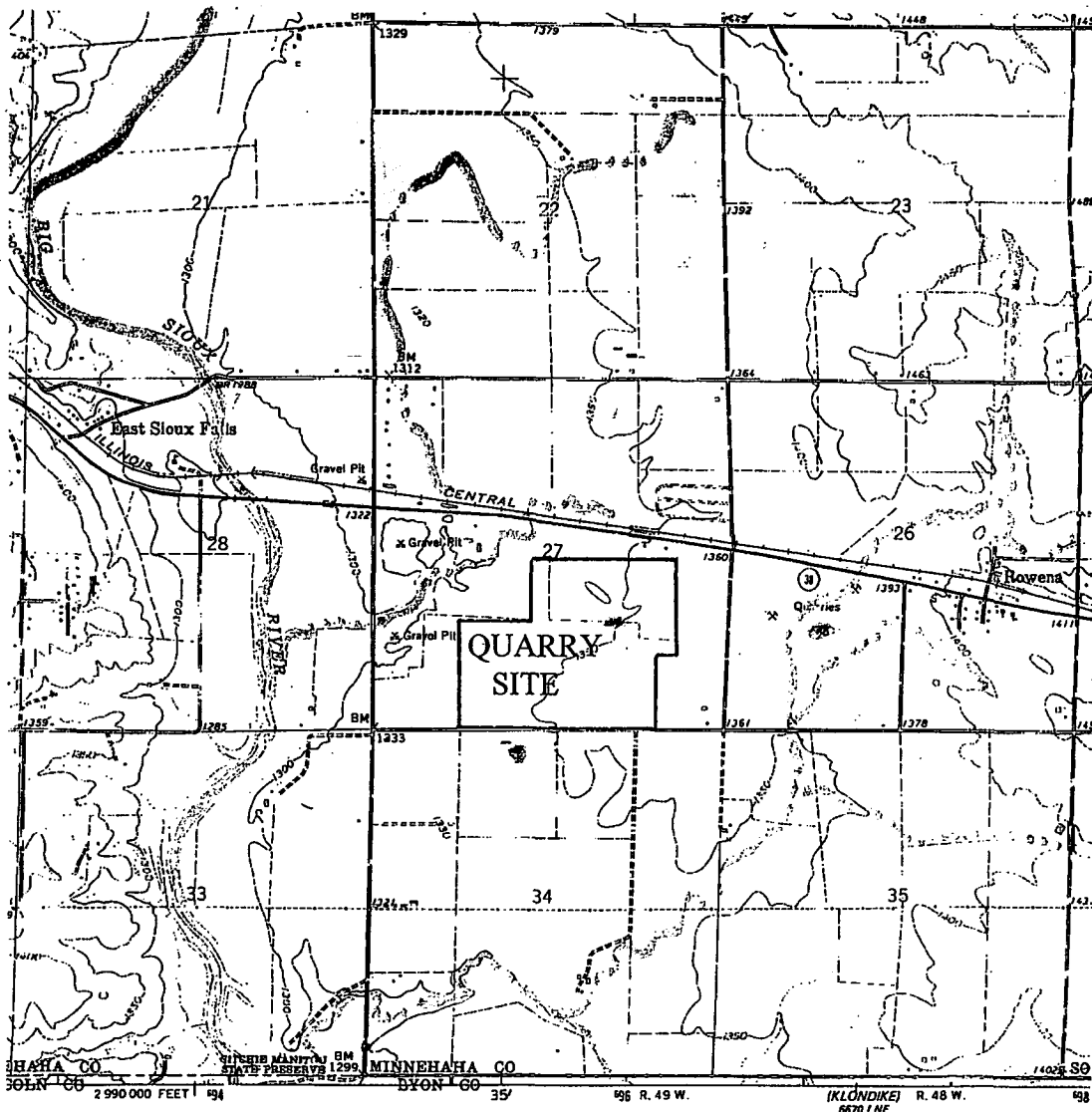
	Name	Address	Depth to Water	Elevation of Well	Elevation of Water	Comments
1	Andal, Roger	48095 267th St.	16.72	1318.5	1301.78	
10	Barclay, James	48097 Red Rock Dr.	24.68	1323.6	1298.92	
12	Beck, James	48069 267th St.				Not Accessible
31	Dirkson, Dwane G.	48243 267th St.	76.41	1380.5	1304.09	
50	Grimes, Raymond & Erlene	3804 E 25th St.				Access Denied
52	Gulbrandson, Micheal	48103 Spring Valley Pl				Couldn't Locate
53	Haak, Gerald	PO Box 66		1351.0		Obstruction @ 24.9
69	Kase, Arian	25893 481st Ave				Access Denied
71	Keenan, Curtis	26737 481st Ave	15.40	1317.8	1302.4	
1077	Knebel, Tim	48124 Skyview Cr.	21.10	1343.4	1322.3	
1081	Kroon, Marvin	48075 267th St.	-11.00	1307.8	1318.8	estimated
1088	Lewis, Robert	48114 Skyview Cr.	8.70	1326.6	1317.9	
1103	Mulder, Ardeen	48079 Red Rock Dr.	13.87	1316.2	1302.33	
1104	Munson, Aaron & Janet	48054 266th St.	28.81	1308.1	1279.29	
1107	Nicolai, Tim	48110 Skyview Cr.		1322.9		Couldn't Locate
1108	Ode, Bob	RR 1				Obstruction
1109	Ode, Doug	48127 Hwy 42	37.44	1325.2	1287.76	
1110	Ode, Greg	48170 266th St.				See 1108
1114	Parker, Dan	48119 Skyview Cr.	21.26	1339.0	1317.74	
1117	Pieper, Roger	26722 481st Ave	4.34	1322.8	1318.46	
1120	Radio, William	26718 481st Ave	4.95	1324.3	1319.35	
1129	Roozenboom, Lawrence	26725 481st Ave	12.98	1323.3	1310.32	
1132	Rysavy, August & Joan	26543 481st Ave.	16.19	1323.2	1307.01	
1139	Soles, Ralph III	26728 482nd Ave	45.08	1353.1	1308.02	
1141	Spaans, Jeffrey & Judith	26728 481st Ave	11.22	1324.7	1313.48	
1144	Streich, Robert	26704 481st Ave.	28.50	1329.1	1300.6	
1144A	Streich, Robert	concrete	6.20	1325.5	1319.3	
1152	Vogel, Ervin	26604 481st Ave				Access Denied
1156	Webster, Joseph & Dianne	26716 482nd Ave		1357.7		Not Accessible
1162	Wright, R.J.	48198 267th Ave.	24.11	1370.0	1345.89	
M&R	Quarry		28.91	1356.0	1327.09	
G1	G1		41.31	1321.5	1280.19	
G2	G2		6.36	1363.4	1357.04	
G6	G6		14.83	1295.3	1280.47	

N



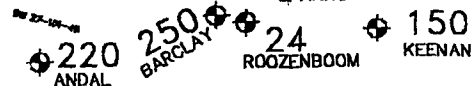
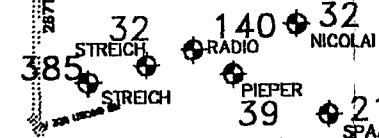
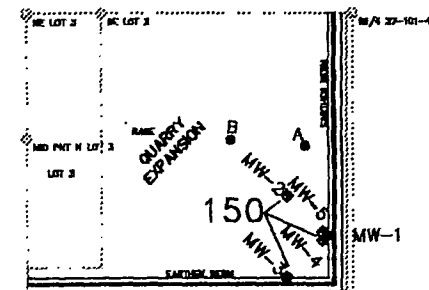
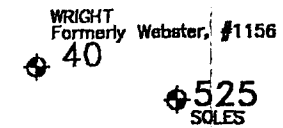
SHAWA CO. 2 990 000 FEET 194 30LN 00 2993 MANDOT B.M. STATE PRESERVE 1299 BYON 160 35' 496 R. 49 W. (KLONOKKE) R. 48 W. 4025 SO 498

DATE	REVISED	LEGGETTE, BRASHEARS & GRAHAM, INC. Professional Ground-Water and Environmental Services 1400 West Russell Street Sioux Falls, South Dakota 57104 (605) 334-6000	MYRL & ROY'S PAVING, INC. Rowena Quarry Rowena, SD
			SITE LOCATION MAP
		FILE: N/A	DATE: JUNE 1997
			FIGURE: 1



SURFACE WATER BODIES

DATE	REVISED	 LEGGETTE, BRASHEARS & GRAHAM, INC. Professional Ground-Water and Environmental Services 1400 West Russell Street Sioux Falls, South Dakota 57104 (605) 334-6000	MYRL & ROY'S PAVING, INC. Rowena Quarry Rowena, SD		
			SURFACE WATER LOCATIONS		
			FILE:	N/A	DATE: JUNE 1997
					FIGURE: 3



160
RYSAVY

BENCHMARK:
T 32B U.S.C. & G.S. STANDARD DISK.
ELEVATION = 133028
ADJUSTED NAVD 1988

21 Denotes alluvium completion well depth in feet
280 Denotes quartzite completion well depth in feet

FILE: M&RAREA2.DWG



LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Ground-Water
and Environmental Services
1400 West Russell Street
Sioux Falls, South Dakota 57104
(605) 334-6000

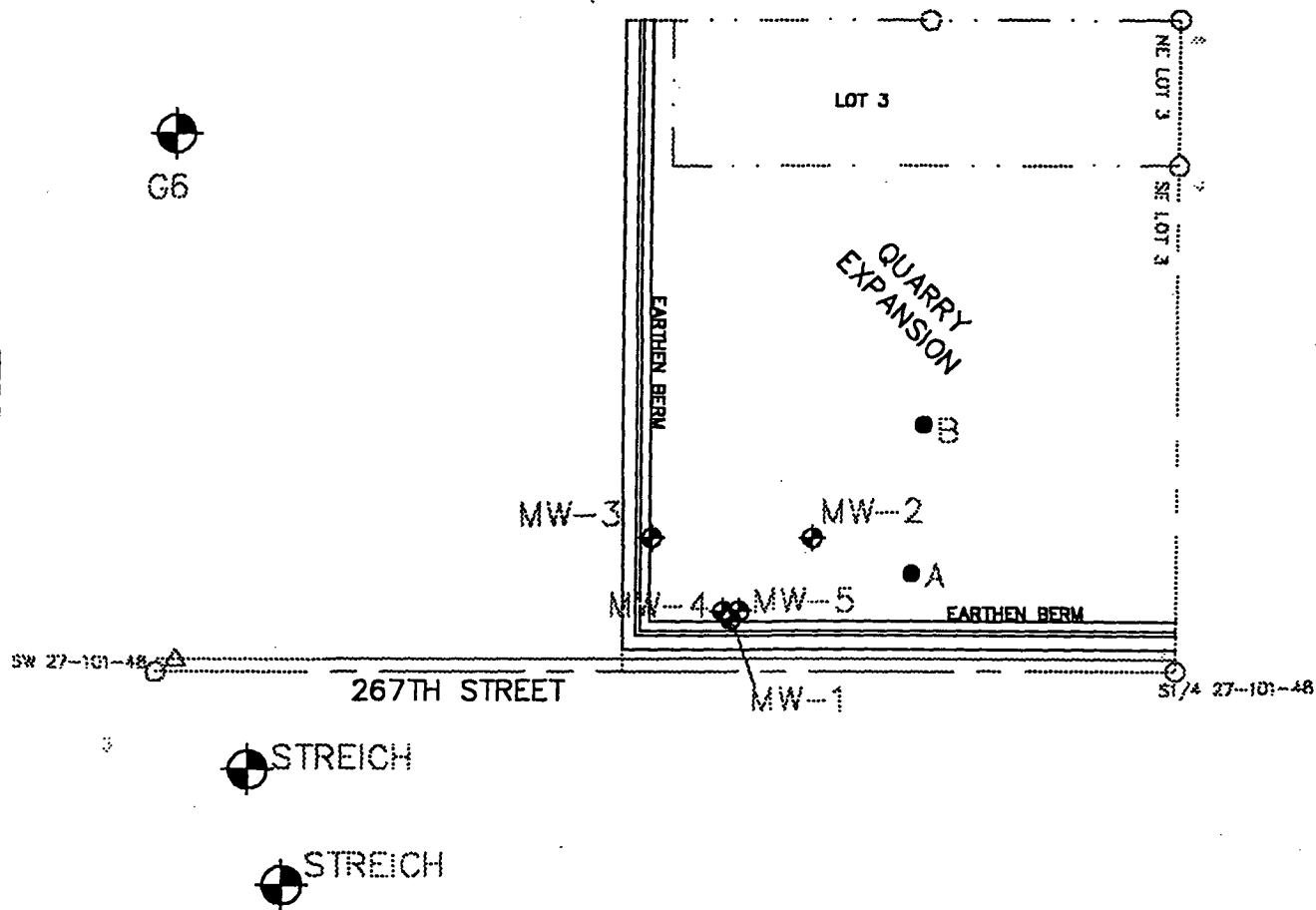
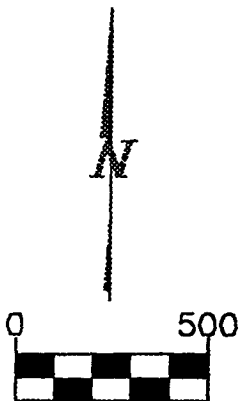
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BENCHMARK:
T 328 U.S.C. & G.S. STANDARD DISK.
ELEVATION = 1330.28
ADJUSTED NAVD 1988

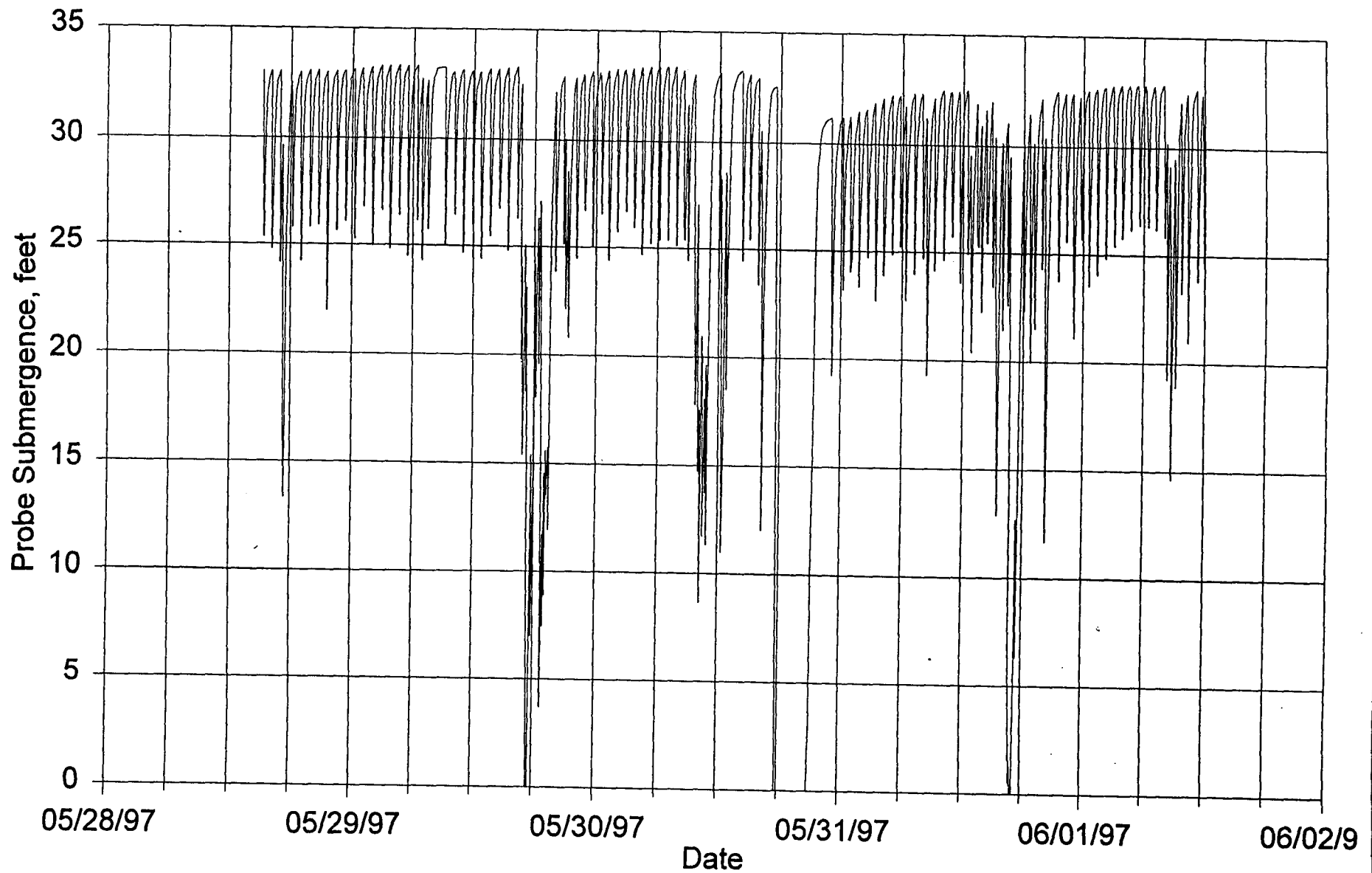
DATE	REVISED
JUNE 97	BJP

FILE:	M&RARE2.DWG	DATE:	JUNE 1997	FIGURE:	5
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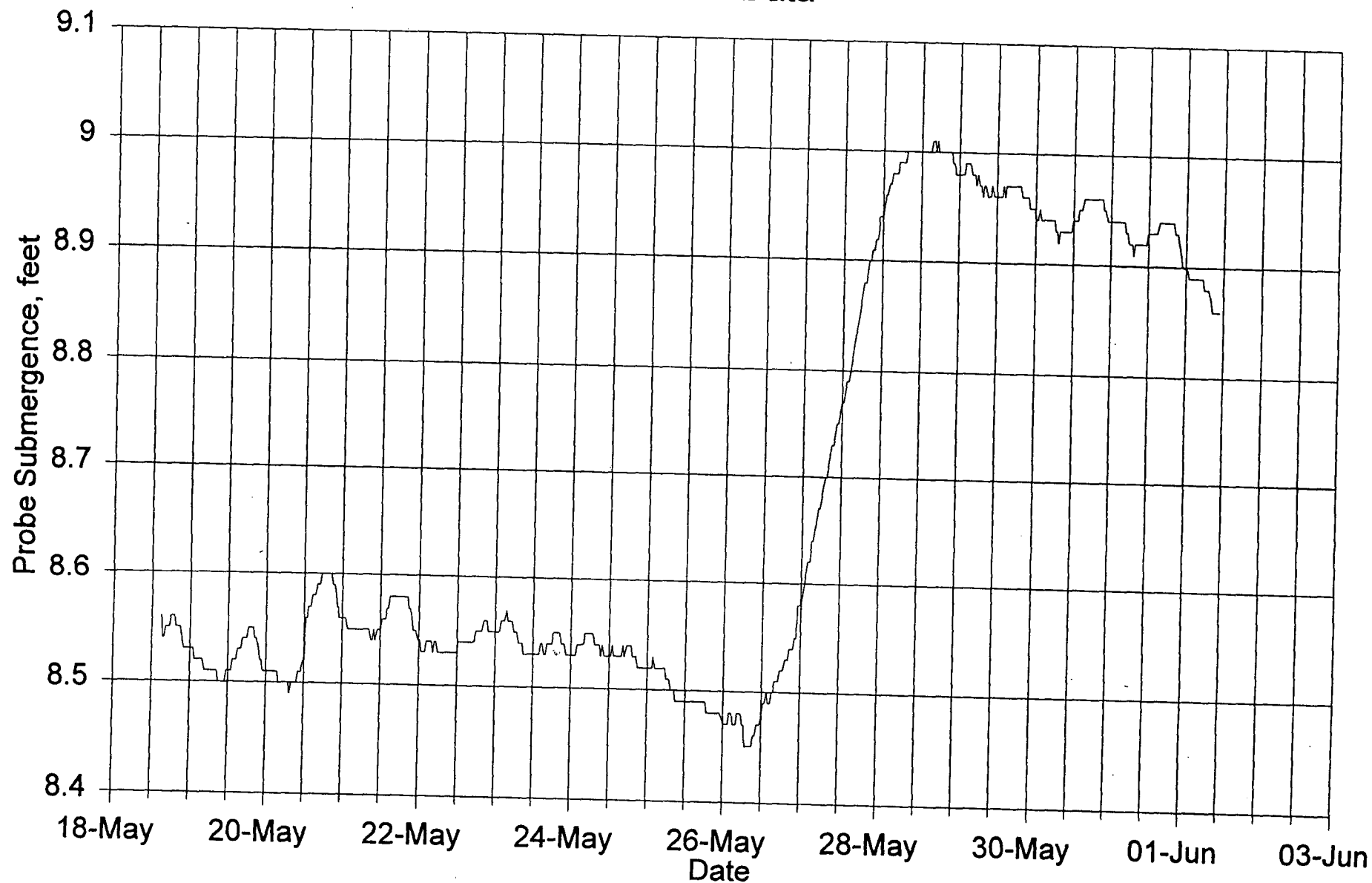


DATE	REVISED	LEGGETTE, BRASHEARS & GRAHAM, INC. Professional Ground-Water and Environmental Services 1400 West Russell Street Sioux Falls, South Dakota 57104 (605) 334-8000	MYRL & ROY'S PAVING, INC. ROWENA QUARRY ROWENA, SD		
8/97	BJP		REQUESTED AREA DETAIL MAP		
			FILE: M&R-DET.DWG	DATE: JUNE 97	FIGURE: 6

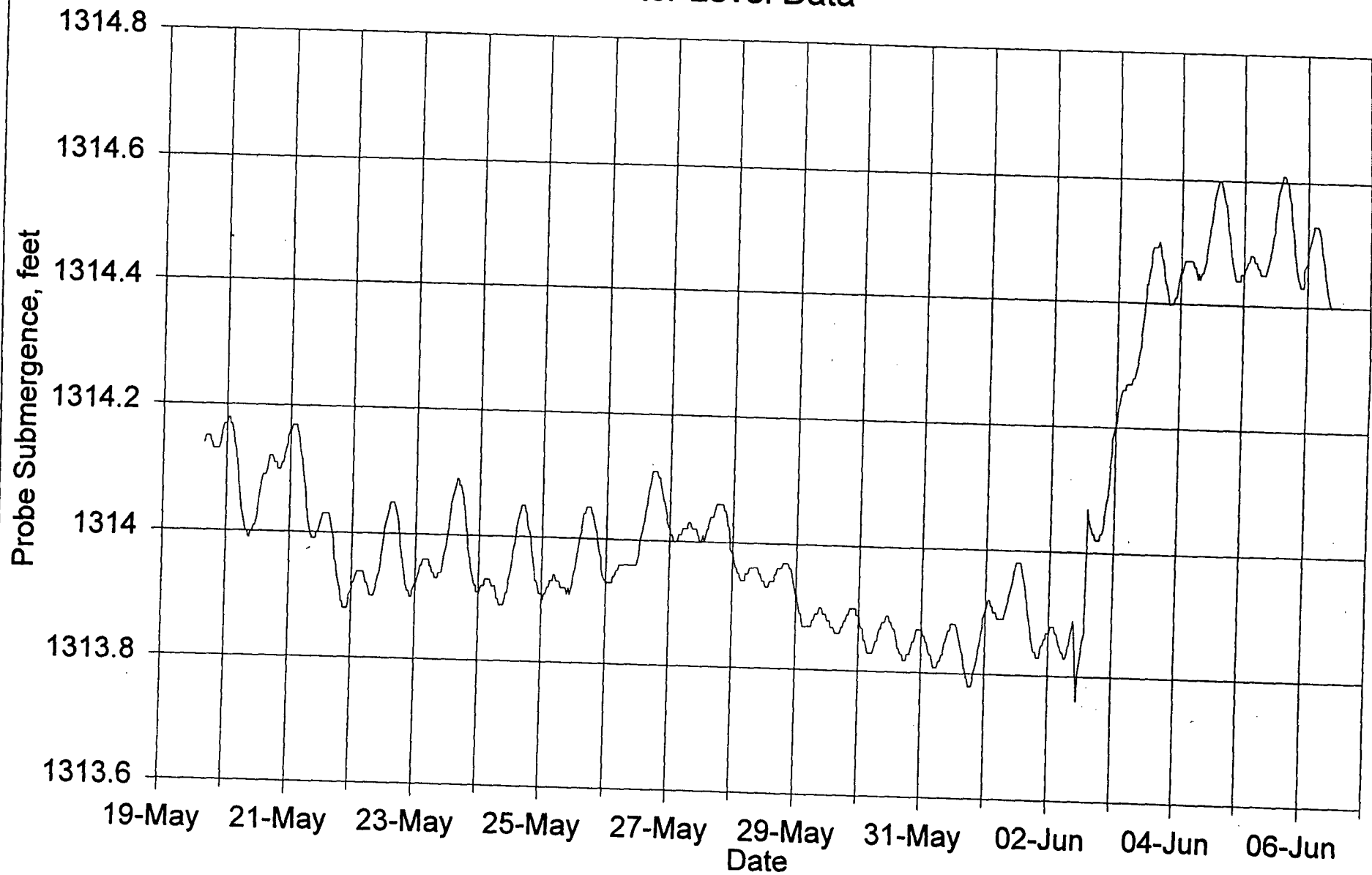
GRAPH 1, STREICH WELL #1144
Water Level Data



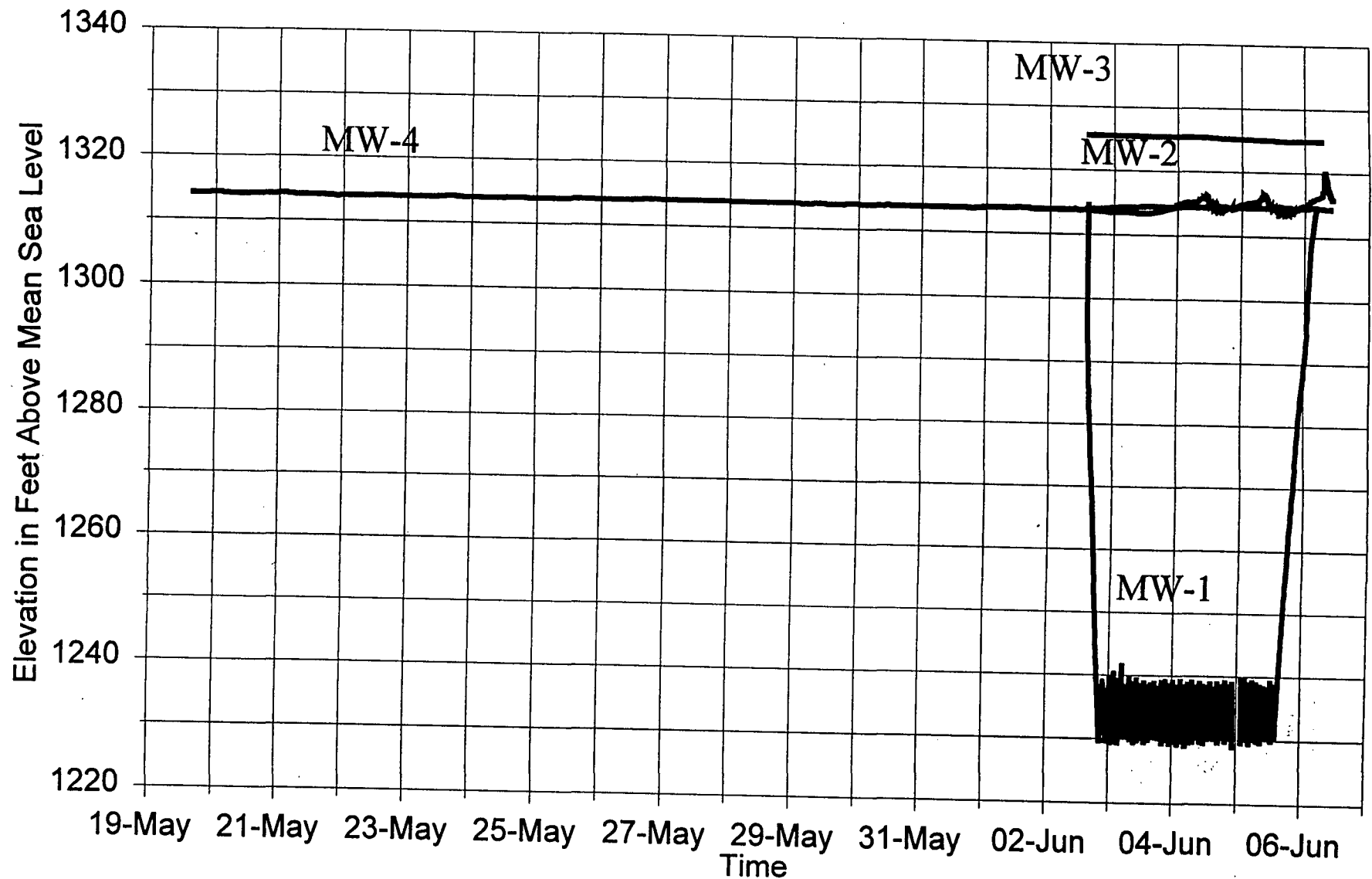
GRAPH 2, STREICH WELL #1144a
Water Level Data



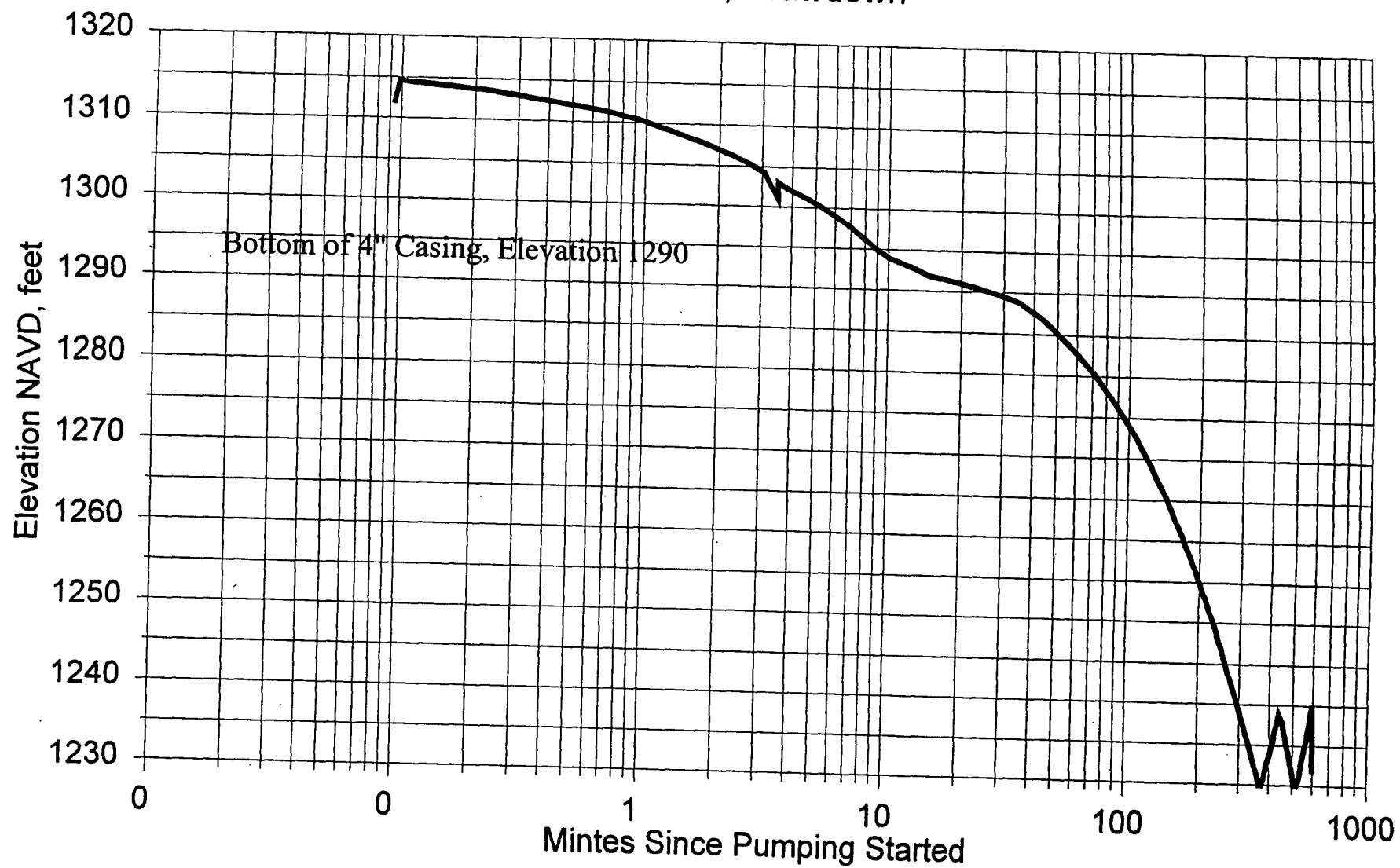
GRAPH 3, MW-4
Water Level Data



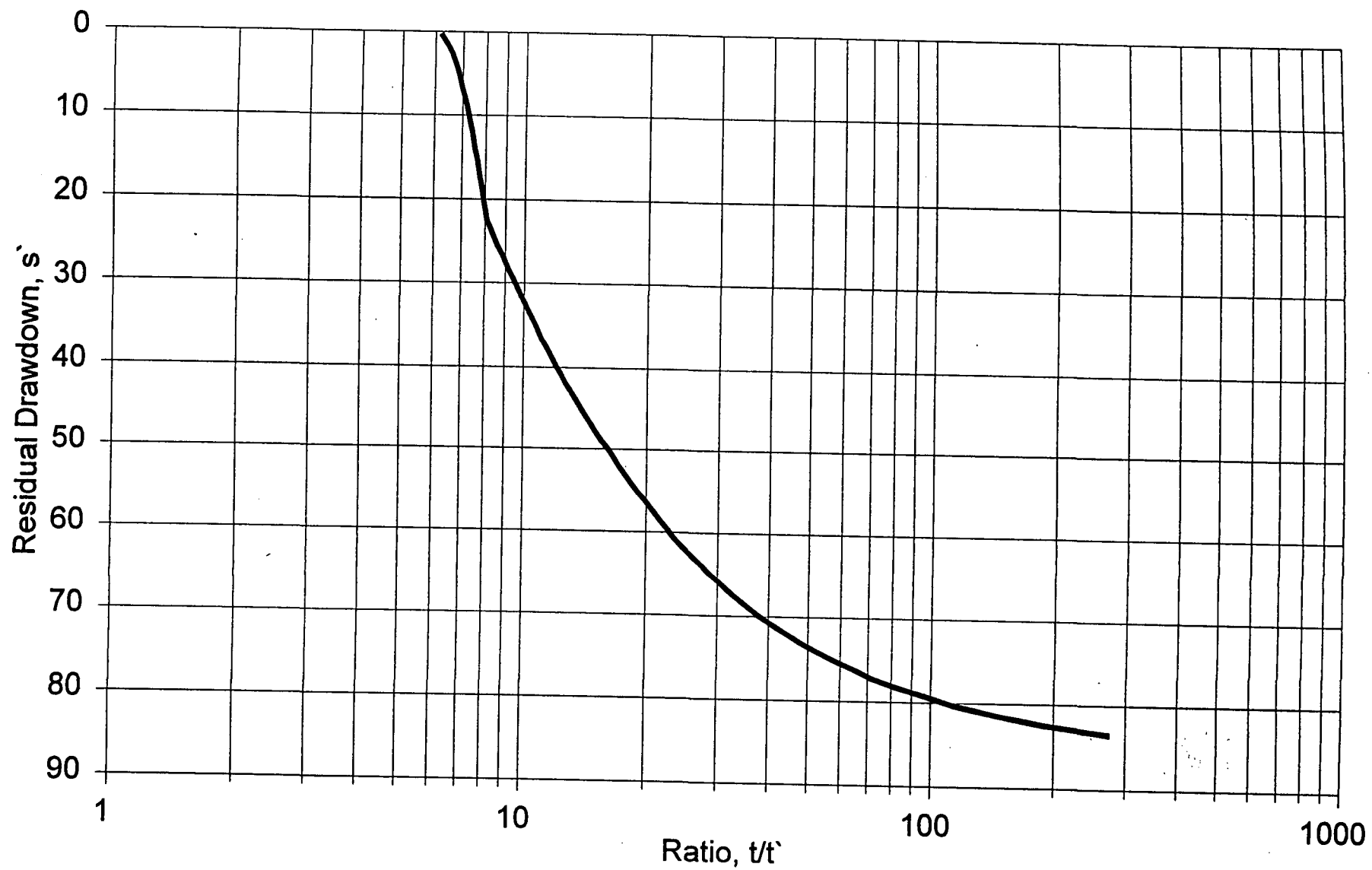
GRAPH 4, MW-1, MW-2, MW-3 and MW-4
Water Level Data



GRAPH 5, MW-1
Water Level Data, Drawdown



GRAPH 6, MW-1
Water Level Data, Recovery



LEGGETTE, BRASHEARS & GRAHAM, INC.

PROFESSIONAL GROUND-WATER
AND ENVIRONMENTAL SERVICES

1400 WEST RUSSELL STREET
SIOUX FALLS, SD 57104
605-334-6000
FAX 605-334-1830

W. JOHN SEIFERT, JR.
CHARLES W. KREITLER
JEFFREY B. LENNOX

DAVID A. WILEY
TERRANCE P. BRENNAN
W. THOMAS WEST
CARY G. PIETERICK
DAVID B. TERRY
WILLIAM B. KLEMT
THOMAS P. CUSACK
JOHN M. BENVEGNA
KENNETH D. VOGEL
ROBERT F. GOOD
ANDREW B. GRAHAM
TIMOTHY L. KENYON
EDWARD J. DESTEFANIS

April 8, 1997

Roger Andral
48095 267th Street
Brandon, SD 57005

Dear Mr. Andral:

Leggette, Brashears & Graham, Inc., a local professional ground-water consulting firm, is conducting a ground- and surface-water study in the area of your property. The study is being performed at the request of the Minnehaha County Planning and Zoning Department. Your assistance in completing the attached questionnaire to the best of your ability is essential in making sure the study is comprehensive and accurate.

Please return the questionnaire as soon as possible in the envelope provided. Thank you for your assistance.

Very truly yours,

LEGGETTE, BRASHEARS & GRAHAM, INC.



Tim Kenyon
Associate

TK:llm

RAMSEY, NEW JERSEY

ST. PAUL, MINNESOTA

TAMPA, FLORIDA

TRUMBULL, CONNECTICUT

WEST CHESTER, PENNSYLVANIA

NASHUA, NEW HAMPSHIRE

WHITE PLAINS, NEW YORK

AUSTIN, TEXAS

MADISON, WISCONSIN

HOUSTON, TEXAS

PROPERTY OWNER/OCCUPANT QUESTIONNAIRE

Question	Answer	Instructions
Do you have a water well on your property?	YES NO DON'T KNOW	circle the answer that applies
In general where is the well located on your property?	Location _____	insert location
What is the well used for?	Drinking, Livestock, Irrigation, Other _____	circle all that apply
How deep is the well?	Depth _____ DON'T KNOW	insert depth or circle DON'T KNOW
Has the well ever gone dry?	YES NO DON'T KNOW	circle the answer that applies
At what depth is the pump installed?	Depth _____ DON'T KNOW	insert depth or circle DON'T KNOW
What is the depth to water in the well?	Depth _____ DON'T KNOW	insert depth or circle DON'T KNOW
When was the well installed?	Date ____/____/____ DON'T KNOW	insert date (month/year) or circle DON'T KNOW
Who installed the well?	Name _____ DON'T KNOW	insert name of drilling company or circle DON'T KNOW
Do you have a diagram of the construction of your well?	YES NO DON'T KNOW	circle the answer that applies
Is the quality of the water from your well generally acceptable?	YES NO Reason(s) _____	circle the answer that applies, if NO, insert reason(s)
Have you ever experienced problems with the quality of the water from the well?	YES NO DON'T KNOW Details _____	circle the answer that applies, if YES, insert details
Is the quantity of the water from your well generally acceptable?	YES NO Reason(s) _____	circle the answer that applies, if NO, insert reason(s)
Is the County requiring that the elevation of wellheads and surface water bodies be surveyed. Do you grant permission to a Registered Land Surveyor to enter your property for such survey?	YES NO Reason(s) _____	circle the answer that applies, if NO, insert reason for denial
Is the County requiring that the static water level be measured on wells. Do you grant permission to Leggette, Brashears & Graham, Inc. to open your well and measure the water level?	YES NO Reason(s) _____	circle the answer that applies, if NO, insert reason for denial
Where is your septic system located in relation to your well?	Distance _____ N NE E SE S SW W NW	insert approximate distance and circle direction from system to well

Roger Andal
 195 267th Street
 Rapid City, SD 57005

Property Owner Signature: _____

Date: _____

QRYNHBR

Name	Address	City
Andal, Roger	48095 267th St.	Brandon, SD 57005
Anway, Steven & Cleo	48180 Kim Circle	Brandon, SD 57005
Archer, Ronald	26775 481st Ave	Brandon, SD 57005
Barclay, James	48097 Red Rock Dr.	Brandon, SD 57005
Baum, Michael	26602 481st Ave	Brandon, SD 57005
Beck, James	48069 267th St.	Brandon, SD 57005
Bird, Donald & Angel	49193 Kim Circle	Brandon, SD 57005
Bossman, James	48107 266th St.	Brandon, SD 57005
Bowers, Wilburt & Carolyn	48179 Kim Circle	Brandon, SD 57005
Case, Arlan	26705 25893 481st Ave	Brandon, SD 57005
Croon, Marvin	1800 Woodrow	Mission, TX 78572
Dean, William	48181 Kim Circle	Brandon, SD 57005
Deno, Roger & Audrey	48188 Kim Circle	Brandon, SD 57005
Dexter, Dale	48156 268th St.	Brandon, SD 57005
Deyoung, Pat & Debra	48199 Kim Circle	Brandon, SD 57005
Dirkson, Dwane G.	48243 267th St.	Brandon, SD 57005
Edwards, Gary	RR 1 Box 448	Brandon, SD 57005
Emery, Kevin & Virginia	48178 Kim Circle	Brandon, SD 57005
Funke, Richard & Barbara	48249 267th St	Brandon, SD 57005
Gascoigne, Gary	48186 Kim Circle	Brandon, SD 57005
Gochanour Jr., Billie	48176 Kim Circle	Brandon, SD 57005
Hanson, Wayne	48174 Kim Circle	Brandon, SD 57005
Hurd, James	26630 481st Ave	Brandon, SD 57005
Jorgensen, Joyce	48184 Kim Circle	Brandon, SD 57005
Kaufman, Dave	48117 266th St.	Brandon, SD 57005
Keenan, Curtis	26737 481st Ave	Brandon, SD 57005
Kiesow, Kathleen	48174 Kim Circle	Brandon, SD 57005
Knebel, Tim	48124 Skyview Cr.	Brandon, SD 57005
Kroon, Marvin	48075 267th St.	Brandon, SD 57005
Kutter, Wayne	48177 Highway 42	Brandon, SD 57005
Lewis, Robert	48114 Skyview Cr.	Brandon, SD 57005
List, Duane & Vickie	48194 Kim Circle	Brandon, SD 57005

✓ Not at this address

QRYNHBR

McBeth, Michael	25807 N Kiwanis Ave	Sioux Falls, SD 57107
Meinerts, Melvin	26605 482nd Ave	Brandon, SD 57005
Moller, Keith		Larchwood, IA 51241
Muhs, Jerry	48174 268th St.	Brandon, SD 57005
Mulder, Ardean	48079 Red rock Dr.	Brandon, SD 57005
Nicolai, Tim	48110 Skyview Cr.	Brandon, SD 57005
Nelson, Orville	5009 Sweet Briar Dr.	Sioux Falls, SD 57106
Ode, Bob	RR 1	Brandon, SD 57005
Ode, Doug	48127 Hwy 42	Brandon, SD 57005
Ode, Greg	48170 266th St.	Brandon, SD 57005
Paclik, Daryl	48073 Red Rock Dr.	Brandon, SD 57005
Paradeis, Suzanne	48177 Kim Circle	Brandon, SD 57005
Parker, Dan	48119 Skyview Cr.	Brandon, SD 57005
Peterson, Barb	RR 1 Box 450	Brandon, SD 57005
Pfeifle, Jayde & Stephanie	48175 Kim Circle	Brandon, SD 57005
Pieper, Roger	26722 481st Ave	Brandon, SD 57005
Poss, Darell	48196 Kim Circle	Brandon, SD 57005
Powell, Brian & Cynthia	48191 Kim Circle	Brandon, SD 57005
Radio, William	26718 481st Ave	Brandon, SD 57005
Rang, Brad & Connie	48198 Kim Circle	Brandon, SD 57005
Ridgway, Tim	26770 481st Ave.	Brandon, SD 57005
Roozenboom, Lawrence	26725 481st Ave	Brandon, SD 57005
Soles, Ralph III	26728 482nd Ave	Brandon, SD 57005
Spaans, Jeffery & Judith	26728 481st Ave	Brandon, SD 57005
Streich, Robert	26704 481st Ave.	Brandon, SD 57005
Styles, Linda	48195 Kim Circle	Brandon, SD 57005
VanDyke, Calvin & Michelle	48190 Kim Circle	Brandon, SD 57005
Vogel, Emie	26604 481st Ave	Brandon, SD 57005
Walth, Robert & Glenda	48197 Kim Circle	Brandon, SD 57005
Webster, Dianne	26716 482nd Ave	Brandon, SD 57005
Williams, James & Kara	48192 Kim Circle	Brandon, SD 57005
Wright, R.J.	48198 267th Ave.	Brandon, SD 57005

Quarry Neighbors #2

Name	Address	City
Anderberg, Rhett J	26668 Brownstone Ave.	Brandon, SD 57005
Anderson, Clifford	26669 Brownstone Ave.	Brandon, SD 57005
Anderson, Gregory G	26663 Brownstone Ave.	Brandon, SD 57005
Anderson, Madeline	RR 1 Box 1598	Brandon, SD 57005
Anderson, Norman & Mary	26673 Brownstone Ave.	Brandon, SD 57005
Blain, Charles F	48064 266th St.	Brandon, SD 57005
Borkowski, Steven	26666 Douglas Ave.	Brandon, SD 57005
Chambers, Craig & Lynn	48257 265th St.	Brandon, SD 57005
Clauson, Norman	48281 Hwy 42	Brandon, SD 57005
Courtney, James	48289 Creekview Cir	Brandon, SD 57005
Covington, William Earl	RR 1 Box 770	Brandon, SD 57005
DeWitt, Daryl & Lori	48296 267th St.	Brandon, SD 57005
Dunham, Calvin L	26659 Douglas Ave.	Brandon, SD 57005
Ecklund, Scott & Alison	48217 265th St.	Brandon, SD 57005
Edge, Todd & Joanne	48285 Creekview Cir	Brandon, SD 57005
Farrell, Jeanne Perry Etal	520 W 10th St.	Sioux Falls, SD 57104
Fountain, Charles	26651 Douglas Ave.	Brandon, SD 57005
France, David & Kristi	RR 1 Box 620	Brandon, SD 57005
Funke, David & Nancy	48244 266th St.	Brandon, SD 57005
Funke, Raymond & Carol	48244 266th St.	Brandon, SD 57005
Gillespie, Ronnie Lou	48265 E Hwy 42 Unit 111	Rowena, SD 57056
Grimmuis, Earl & Sandra	48258 268th St.	Brandon, SD 57005
Gulbrandson, Micheal	48103 Spring Valley Pl	Brandon, SD 57005
Hanten, Patricia K	26618 481st Ave.	Brandon, SD 57005
Harr, Richard & Deborah	26507 483rd Ave.	Brandon, SD 57005
Hehenberger, Edward	48261 Highway 42	Brandon, SD 57005
Herbranson, Todd & Joelyn	26666 Brownstone Ave.	Brandon, SD 57005
Hildring, Janis A	1029 Cottonwood Dr.	Brandon, SD 57005
Howe, Frank & Joy	48106 Spring Valley Pl	Brandon, SD 57005
Hubert, Raymond	26654 483rd Ave.	Brandon, SD 57005
Jones, Chester R	26533 481st Ave.	Brandon, SD 57005
Kielman, Richard & Linda	RR 1 Box 910	Brandon, SD 57005
Kjergaard, Marilyn	PO Box 121	Rowena, SD 57056
Kramer, Glen & Susan	RR 1 Box 320	Brandon, SD 57005
Krohn, Lou	115 Granite	Rowena, SD 57056
Kuhnert, Charles & Gloria	26652 Douglas Ave.	Brandon, SD 57005
Kuhnert, Jack A	RR 1 Box 890	Brandon, SD 57005
Kuhnert, Larry & Marlene	48135 265th St.	Brandon, SD 57005
Kike, Timothy & Jennifer	48297 Creekview Cir	Brandon, SD 57005
Korenzen, Gregory	48107 266th St.	Brandon, SD 57005
Lahon, Patrick & Karolee	48288 Creekview Cir	Brandon, SD 57005
McKinney, James L	RR 1 Box 325	Brandon, SD 57005
McKnight, Neil & Ronald	48088 266th St.	Brandon, SD 57005
McKnight, Ronald	48076 266th St.	Brandon, SD 57005
McMahon, Roger	26551 483rd Ave.	Brandon, SD 57005
Medema, Paul & Mary	26674 Brownstone Ave.	Brandon, SD 57005
Melgaard, A Russell	26537 481st Ave.	Brandon, SD 57005
Munson, Aaron & Janet	48054 266th St.	Brandon, SD 57005
Mvergaaard, Elsie R	48258 Highway 42	Brandon, SD 57005
Obbins, John Living Trust	26520 482nd Ave.	Brandon, SD 57005

Quarry Neighbors #2

Roe, Karen J	48282 Creekview Cir	Brandon, SD 57005
Roe, Paul & Theresa Butts	RR 1 Box 1588	Brandon, SD 57005
Roemen, Leonard & Donna	48294 Creekview Cir	Brandon, SD 57005
Rohlck, Robert & Taryl	304 Granite	Rowena, SD 57056
Rowena Feed & Grain Inc.	PO Unit 4 Box 1	Rowena, SD 57056
Rowena United Methodist	26640 483rd Ave.	Brandon, SD 57005
Rysavy, August & Joan	P.O. Box 184	Brandon, SD 57005
Schramm, Ronald	48275 Highway 42	Brandon, SD 57005
Schuette, Dennis & Joan	48299 Creekview Cir	Brandon, SD 57005
Spilrock Feeds, Inc.	PO Unit 4 Box 1	Rowena, SD 57056
Strawbridge, Lawrence	48077 265th St.	Brandon, SD 57005
Tooley, Philip & Sandra	26668 Douglas Ave.	Brandon, SD 57005
Van Ginkel, Gerald	RR 1 Box 1582	Brandon, SD 57005
Walter, Marlys	48224 266th St.	Brandon, SD 57005
Weber, Dennis & Mariann	RR 1 Box 300	Brandon, SD 57005
Wentworth, Dan R	48259 Hwy 42	Brandon, SD 57005
Wiebe, Victor & Dawn	PO Box 1	Rowena, SD 57056
Wright, G Russell	26627 484th Ave.	Brandon, SD 57005
Wright, Patricia	26627 484th Ave.	Brandon, SD 57005

TELL IT — TV MEMOS — VERIFY IT

James A. Goodman, P.E.
 Natural Resources Engineer DENR
 523 East Capital
 Pierre, SD 57501-3181

F
R
O
M

MYRL & ROY'S PAVING, INC.
 1300 N. Bahnson Ave.
 Sioux Falls, South Dakota 57103
 Telephone 334-3204

SUBJECT: Water Permit Sec 27, T101N, R48W

DATE 28 July 1997

FOLD

Enclosed you will find a copy of a letter
 written by David Queal, Planning Director to
 David Nelson, States Attorney. The contents of
 the ^{letter} discuss the inspection made at the
 referenced site. No groundwater was found.

PLEASE REPLY TO → SIGNED

Dennis C. Wiff P.E.



DATE

SIGNED

SEND PARTS 1 AND 3 INTACT. PART 3 WILL BE RETURNED WITH REPLY

**OFFICE OF
PLANNING & ZONING**
Minnehaha County Administration Building

415 N. Dakota Avenue
Sioux Falls, South Dakota 57104-2465
Fax: (605) 367-8314

July 24, 1997

David Nelson
States Attorney
Minnehaha County Administration Building
415 N Dakota Ave
Sioux Falls, SD 57104



Dear Mr. Nelson:

On July 21st, an on-site inspection was conducted on the property of Myrl & Roy's Paving, Inc. The property is located in Section 27-T101N-R48W which is the site of the company's quarry. The inspection was prompted by a complaint that groundwater was infiltrating the quarry and then being pumped from the quarry.

In December of 1984, the County Commission approved a conditional use to operate a quarry on the property in question. Several conditions were made a part of the conditional use, including the condition that the quarry shall not be dewatered if the excavation accidentally extends into the watertable.

The inspection was conducted on the morning of July 21st with the following individuals present: Jay Gilbertson, Manager of the East Dakota Water Development District; Tim Kenyon from the environmental engineering firm of Leggette, Brashears & Graham, Inc.; Patti Nohr, Myrl & Roy's; Rick Peterson, quarry manager; and myself.

An inspection of the quarry was conducted to determine if groundwater was entering the pit through the walls. A minimal accumulation of water was observed on the quarry floor. However, the walls of the quarry were dry. It was noted that the amount of rainfall in the area for the five days preceding the inspection was estimated at over two inches. The water which was observed in the pit appeared to be consistent with the precipitation which had fallen over the past several days.

Mr. Gilbertson observed layers of pipestone at two different levels in the quarry. He indicated that the pipestone would normally serve as a barrier to the downward movement of groundwater.

PLANNING
(605) 367-4204

ZONING
(605) 367-4205

BUILDING INSPECTION
(605) 367-4205

PARKS
(605) 582-2373

ENVIRONMENTAL
(605) 367-4204

David Nelson
July 24, 1997
Page 2

After reaching a layer of pipestone, the groundwater would then move laterally. Again, there was no evidence of groundwater entering the quarry from the pipestone layers.

Mr. Gilbertson concluded that there was no groundwater movement into the quarry at the time of the inspection.

It was noted that water was being pumped from the quarry on the day of the inspection. But since the water appeared to be from runoff, the operator is permitted under the conditional use to dewater the quarry as long as no off-site drainage problems are created.

Please contact me if you have any further questions.

Sincerely,

A handwritten signature in black ink, appearing to read "D. K. Queal", written in a cursive style.

David K. Queal
Planning Director

c: County Commission
Gail Eiesland
Ken McFarland
Jay Gilbertson
Patti Nohr



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3181

AUG 8 1997

Myrl & Roy's Paving, Inc.
%Dennis C. Wipf
1300 N. Bahnson Ave.
Sioux Falls, SD 57103-6195

Dear Mr. Wipf:

Enclosed is Water Permit No. 5996-3 authorizing construction of your water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

Also enclosed is Form 10, Notice of Completion of Works and Application of Water to Beneficial Use, which you are to complete and submit to the Chief Engineer when you have completed the system and/or have put the water to beneficial use. An inspection can then be scheduled so that the Water License may be issued, thus completing your acquisition of a Water Right.

Very truly yours,

JOHN HATCH, Chief Engineer
Water Rights Program
605 773-3352

enclosures

PLEASE NOTE: Certain changes may be made to your water permit usually without affecting the priority date. The location of a point of diversion may be changed or additional points of diversion may be approved if the water source remains unchanged; no additional water is appropriated; and, if irrigating, no additional land is irrigated. The change may be allowed without application or publication, if the Water Rights Program is contacted and the chief engineer makes a finding that the change does not increase the potential for interference with existing diversions.

A new water permit application is required to change water sources, increase the permitted diversion rate, or increase the irrigated acreage. If the application is approved, the water permit will receive a new priority date.

Permit No. 5996-3
Big Sioux River - Water District

Report of Examination of Works and/or Application of Water to Beneficial Use

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

I have this day, July 23, 2002, made a thorough examination of the water use system constructed by Myrl & Roy's Paving, Inc. of 1300 N. Bahnson Ave., Sioux Falls SD 57103-6195 holder of Permit No. 5996-3, bearing the priority of April 21, 1997 authorizing the diversion of 0.56 cu. ft. per second and the storage of 30 acre-feet of the waters of local runoff for industrial purposes, in Minnehaha County.

Inspection contact & relationship **Brent Peterson, Quarry Manager**
to permit holder, if applicable:

A. Works used to divert the water:

Pump and Motor: From quarry flow to storage pond.

- 1) Make Gorman Rupp submersible
- 2) Capacity 250 GPM
- 3) Horsepower rating 5 hp

Pump: From settling pond to sand and gravel washing operation.

- 1) Make Gorman Rupp
- 2) Model V6H4D31-B
- 3) Size 4'
- 4) Capacity 450 GPM

Motor:

- 1) Make Louis Allis
- 2) Model No. 5275155001
- 3) Horsepower rating 30 hp

Pond Information:

#1 Pond discharges to settling pond:

- 1) Crest length 350' x 200' feet
- 2) Depth 30 feet at the deepest point.
- 3) Approx. storage 15 ac-ft

#2 Pond discharges to last storage pond:

- 1) Crest length 250' x 50' feet
- 2) Depth 8 feet
- 3) Approx. storage 1 ac-ft

#3 Pond:

- 1) Height to crest 30 feet
- 2) Height to primary spillway 13.5 feet
- 3) Height to secondary spillway n.a. ft
- 4) Crest width 15 feet
- 5) Crest length 330' x 210' feet
- 6) Outlet tube, dia. 12 inches
- 7) Approx. storage 14 ac-ft

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

From quarry floor to pond #1:

- 1) Type rubber hose
- 2) Size 3 inches
- 3) Length 50 feet

From pond #1 to pond #2:

- 1) Type steel
- 2) Size 6 inches
- 3) Length 50 feet

From pond #2 to pond #3:

- 1) Type pvc
- 2) Size 8 inches
- 3) Length 50 feet

C. Works used to apply water to beneficial use: Sand and gravel washing operation.

D. Compliance with Permit Requirements:

- 1) Permit qualifications being abided by yes

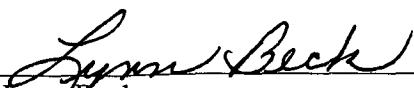
The system is in good condition with the point(s) of diversion located as follows: 1,300' N and 1,775' W of the SE corner in the SW¼ SE¼ and 1,580' N and 1,600' W of the SE corner in the NW¼ SE¼ all in Section 27-T101N-R48W. The works are capable of diverting and conveying to the place of use 0.56 cu. ft. per second of water and/or storing 30 acre-feet of water which is to be used for industrial purposes. Water has been put to beneficial use to the maximum extent as follows:

Sand and gravel washing operation and dust control at the facility.

The license should be issued for 0.56 cfs and 30 acre-feet of storage.

All structures, wells and lands on map yes

Comments or other permit(s) associated with the project:


Lynn Beck

Natural Resources Engineer Specialist
DENR, Water Rights Program

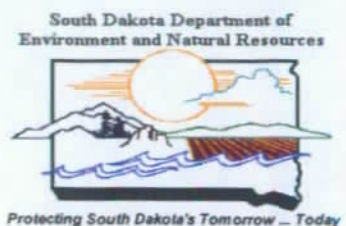
Date report completed: October 9, 2002

**WATER RIGHT NO. 5996-3
MYRIL & ROY'S PAVING, INC.**



Lynn Beck

**Lynn Beck
Natural Resources Engineer Specialist
DENR, Water Rights Program
October 9, 2002**





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

November 7, 2002

No. 5996-3

Myrl & Roy's Paving
Brent Peterson, Quarry Manager
1300 N Bahnson Ave
Sioux Falls SD 57103-6195

Dear Mr. Peterson:

On July 23, 2002 the investigation of your water use system, including the extent of application of water to beneficial use, as developed under Water Permit No. 5996-3, was completed by Lynn Beck, a staff engineer with our program. The final water right document, the water license, can now be issued.

State law requires that we charge a \$50.00 fee for the investigation and issuance of the water license. Upon receipt of the \$50.00 fee, we will complete processing your water license. The check or money order for the fee should be made payable to the "Water Rights Program".

A licensed water right will be similar to a property right that can not be lost as long as the water use continues and you abide by the permit requirements.

If you have any questions regarding the water permit, investigation of the water use system or payment of the fee, please contact Genny McMath with our program at (605) 773-3352.

Sincerely,

Karen Schlaak
Water Rights Program
(605) 773-3352

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date November 18, 20 02

RECEIVED OF Myrl & Roy's Paving Inc., 1300 North Johnson Ave., Sioux Falls SD 57103

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

Fee for Application for Permit No. _____ to Appropriate Water, to construct and to put water to beneficial use	50	00
Fee for Application for Permit No. _____ to Appropriate Water for Future use		
Fee to retain Future Use Permit No. _____ after period of seven years.		
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. <u>5996-3</u>		
Fee for Filing Transfer Form _____		
Fee for _____		
Fee for Issuing New Well Driller's License No. _____ for C.Y. _____		
Fee for Renewal of Well Driller's License No. _____ for C.Y. _____		
Fee for Issuing Well Pump Installer's License No. _____ for C.Y. _____		
Fee for Renewal of Well Pump Installer's License No. _____ for C.Y. _____		
(Any Other Work Provided by Law)	TOTAL	50.00

No.

000013

By

Darland White

Chief Engineer

gms



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

NOV 26 2002

5996-3

Myrl & Roy's Paving Inc.
1300 N Bahnson Ave
Sioux Falls SD 57103-6195

Dear Sir:

Enclosed is Water License No. 5996-3. This is the final water right document completing your process of obtaining a Water Right. Enclosed is Receipt No. 000348 in the amount of \$50.00 which you paid for the investigation and issuance of the Water License.

As long as you use the water beneficially, as stated in the Water License, State Water Laws provide that you have a continuing right to use the water.

Sincerely,

Garland Erbele, Chief Engineer
Water Rights Program
(605) 773-3352

enclosures

STATE OF SOUTH DAKOTA

WATER LICENSE NO. 5996-3

(1) Myrl & Roy's Paving, Inc., 1300 N Bahnson Ave, Sioux Falls SD 57103-6195 made Application No. 5996-3, April 21, 1997 for a water permit to impound 30 acre feet of water from runoff, Minnehaha County, South Dakota for commercial purposes. Permit No. 5996-3, with a priority date of April 21, 1997 was approved July 9, 1997 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before July 9, 2002 and for the application to beneficial use of water on or before July 9, 2006.

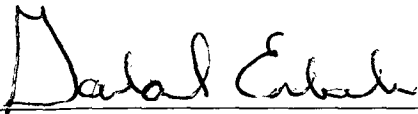
When necessary, water is pumped from quarry floor at a rate of 0.56 cubic feet of water per second (250 gallons per minute) into the storage ponds. The system is capable of diverting 450 gallons per minute from the storage ponds for the rock and gravel operation and for dust control around the facility.

(2) The water supply system has been completed and water applied to beneficial use in accordance with South Dakota State Law. Pursuant to South Dakota Codified Law 46-5-30.1, the holder and/or owner of Water Right No. 5996-3 is issued a license, bearing a priority date of April 21, 1997 to impound 30 acre feet of water from runoff for commercial use.

The diversion point for runoff is located 1,300 feet north and 1,775 feet west of the southeast corner (SW ¼ SE ¼) and the diversion point from the ponds for the washing operation is 1,580 feet north and 1,600 feet west of the southeast corner (NW ¼ SE ¼); all in Section 27-T101N-R48W.

(3) This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Permit No. 5996-3 including the following qualification:

- Monitoring records shall be maintained as set forth by Minnehaha County. Such records shall be submitted to the Chief Engineer annually.



Garland Erbele, Chief Engineer
Water Rights Program

Department of Environment and Natural Resources

NOV 26 2002

date



NOTICE OF TRANSFER OF OWNERSHIP

PAID

FEB - 3 2020

For assistance call (605) 773-3352

RECEIVED

ck# 231795

Mail to: PMB 2020
DENR - Water Rights Program
523 E Capitol Ave
Pierre, SD 57501-3182

FEB 03 2020

Water Right/Permit No. 5996-3

WATER RIGHTS
PROGRAM

Date: January 8, 2020

I/We request that Water Right/Permit No. 5996-3 formerly owned by:

Myrl & Roy's Paving Inc.

be transferred to:

New Owner Name: L. G. Everist, Inc.

Address: 350 S Main Ave, Suite 400

City, State, Zip Sioux Falls SD 57104 Telephone No. 605-334-5000

Title to the following described land(s)/property has been transferred as described above:

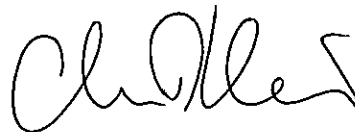
L. G. Everist, Inc. has purchased Myrl & Roy's Paving Inc.

☒ I understand that the validity of Water Right/Permit No. 5996-3 has not been determined by this transfer action. If I have any questions on validity, I understand that only the Water Management Board has the authority to determine if a water right/permit is valid (see note below.)

You are requested to file this "Notice of Transfer" in the appropriate file with the Water Rights Program, as evidence of the change of ownership.

A fee of Fifty Dollars (\$50.00) is included to cover the filing fee as required by SDCL 46-2-13.

I, Chris Klein, the new owner, certify that the above information is true and correct.



(signed by new owner)

NOTE: Water permits may be cancelled for nonconstruction after the five year construction period has expired. Once a water permit is developed and the water used, the permit becomes a right. A water right may be lost for three reasons:

1. Abandonment - no intent to use water and use is abandoned.
2. Forfeiture - no use of water for three year period without legal excuse.
3. For a third violation of a condition of a water permit/right.

5996-3

RECEIPT

WATER RIGHTS PROGRAM
 South Dakota Department of Environment and Natural Resources

Date February 3, 2020RECEIVED OF L G Everist Inc. 350 S Main Ave, Suite 400 Sioux Falls SD 57104

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

Fee for Application for Permit No. _____ to Appropriate Water, to construct and to put water to beneficial use	\$
Fee for Application for Permit No. _____ to Appropriate Water for Future use	\$
Fee to retain Future Use Permit No. _____ after period of seven years.	\$
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. _____	\$
Fee for Filing Transfer Form <u>5996-3</u>	\$50.00
Fee for _____	\$
Fee for Issuing New Well Driller's License No. _____	\$
Fee for Renewal of Well Driller's License No. _____	\$
Fee for Issuing Well Pump Installer's License No. _____	\$
Fee for Renewal of Well Pump Installer's License No. _____	\$
(Any Other Work Provided by Law)	
TOTAL	\$50.00

By Jeanne Goodman
 Chief Engineer *VM*

5996-3



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

February 4, 2020

4792-3
5996-3
7201-3
7787-3

Chris Klein
L G Everist Inc
350 S Main Ave Suite 400
Sioux Falls SD 57104

Dear Mr. Klein:

I am writing to acknowledge receipt of the transfer forms and filing fees you submitted for changing ownership in Water Right Nos. 4792-3 & 5996-3 and Water Permit Nos. 7201-3 & 7787-3.

The ownership changes have been completed. The above listed water rights and water permits formerly held by Myrl & Roy's Paving Inc are now listed under L G Everist Inc.

Enclosed for your records are receipts for the filing fees that were paid. If I can answer any questions for you, please let me know.

Sincerely,

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