

WATER PERMIT NO. 5786-3

Phone: 232-4211

Name of Applicant: Dakota Dunes Golf Course

Post Office Address: RR 1, Box 93B, Dakota Dunes

Amount of Water Claimed: 1.53 add'l Total Acres: no add'l (173)

Source of Water Supply: 2 wells and a dugout

Water to be used for: irrigation County: Union

About _____ miles _____ of _____

PRIORITY Date Received: 8-27-93 Fee: \$225.00 Remarks: Increase the

diversion rate authorized by Permit No. 5438-3

Corrected Application Received: _____ Period of Annual Use: April 1 - Oct 31

WATER QUALITY APPROVAL RECEIVED: 5-14-90 APPROVED/CONDITIONAL (Circle one)

WI-1 Description same as Application YES _____ NO _____ REMARKS: _____

Diversion Point: SE 1/4 NE 1/4 Sec 34,

SE 1/4 SE 1/4 Sec 27; all in T89N-R48W

Land to be Irrigated: SW 1/4, SE 1/4 Sec 27,

NW 1/4 NW 1/4, E 1/2 NW 1/4, NE 1/4 Sec 34,

W 1/2 SW 1/4, SE 1/4 SW 1/4, Sec 26, Lot 3 & 4

Sec 35; all in T89N-R48W

28		27		26	
				dugout	
33		34	⊗	35	

Well Log: Driller: _____ Licensed YES _____ NO _____

Depth of Well: 110' & 152' REMARKS: _____

Type of Map: plat PREPARED BY: Greg Johnston Reviewed and the Number

Assigned on: 8-30-93 By: Karen Schlaak

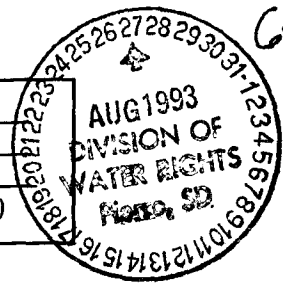
FORM 2: Application for irrigation in South Dakota

(type or print)

Mail to:
Water Rights Division
Joe Foss Building
523 E Capitol
Pierre SD 57501-3181
605 773-3352

No. 5786-3 Hydrologic Unit 10170101
Basin Missouri
Newspaper Elk Point Leader-Courier

(office use only)



Application For Soil/Water Compatibility Permit And Permit To Appropriate Water

Type of Application: ☒ New ☐ Vested Right ☐ Amendment/Correction to Permit No. 5438-3
(check one) (Use predates Mar 2, 1955)

Description of amendment/correction: (i.e. acreage change, change diversion point(s), add diversion point(s), etc.)
Applicant requesting 3 acre-ft/acre due to sandy, porous soils. 3 acre-ft/acre is maximum allowable as stipulated in SDCL 46-5-6.

- Name of Applicant Dakota Dunes Golf Course Phone 232-4211
960 South Dakota Dunes Ave (check one) ☒ Owner ☐ Tenant/lessee
Mailing Address RR1 Box 938 Dakota Dunes State SD 57049
(Street, RR, or Box) (City) (Zip Code)
- Amount of water claimed 1.53 *CFS or **GPM ***AF Total Acreage
(*Cubic Feet per Second) (**Gallons per Minute) (***Acre Feet -- storage capacity of dam/dugout if applicable)
- Source of water supply 2 wells - New well located in the SE1/4 NE1/4 Section 34-
- Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)
T89N-R48W and an existing well located in SE1/4 SE1/4 Section 27-T89N-
R48W County Union
- County or counties where water will be used Union
- Annual period during which water is to be used April 1 - October 31
- List below each forty acre subdivision, or lot, or fraction thereof and show number of acres to be irrigated in each.
(Attach sheet if more space is needed)

Land Description	Acres	Land Description	Acres
<u>See attachment</u>			

- Type of Irrigation: Gravity: Towline: Center Pivot: Gun: Other (Specify): ☒ sprinkler system
- Crops to be irrigated: Grass
- Give a description of the project. (Attach sheet if more space is needed)

Permit No. 5438-3 appropriates 2.47 cfs to be diverted from a dugout for irrigation of the golf course. This application proposes to increase the rate of diversion from the dugout to 4.00 cfs (1800 gpm) to irrigate 173 acres on the golf course. In addition, the golf course will be allowed to apply three acre-feet per year. Water can only be applied for 15 hrs. per day at a diversion rate of 4.0 cfs.

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

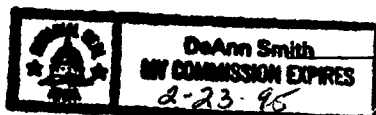
STATE OF SOUTH DAKOTA)

County of)^{ss}

I, DOUG HAUSMAN, CGCS, the applicant, certify that I have read this application and examined the attached maps, that the water sample, if needed, has been taken by the required procedures and has not been adulterated or tampered with and is representative of the water to be used, and that the matters stated in this application are true and correct.

Signed Douglas Hausman

Subscribed and sworn to before me this 18th day of August 19 93



DeAnn Smith
Notary Public

Lands Irrigated

All in Section 27-T89N-R48W:

NW1/4 SW1/4 = 5 acres
NE1/4 SW1/4 = 5 acres
SW1/4 SW1/4 = 8 acres
SE1/4 SW1/4 = 7 acres
NW1/4 SE1/4 = 3 acres
NE1/4 SE1/4 = 8 acres
SW1/4 SE1/4 = 9 acres
SE1/4 SE1/4 = 4 acres

All in Section 34-T89N-R48W:

NW1/4 NW1/4 = 6 acres
NE1/4 NW1/4 = 13 acres
SE1/4 NW1/4 = 6 acres
NW1/4 NE1/4 = 13 acres
NE1/4 NE1/4 = 12 acres
SW1/4 NE1/4 = 11 acres
SE1/4 NE1/4 = 9 acres

All in Section 35-T89N-R48W:

Lot 3 (NW1/4 NW1/4 and SW1/4 NW1/4) = 11 acres
Lot 4 (NE1/4 NW1/4 and SE1/4 NW1/4) = 20 acres

TOTAL = 173 acres

All in Section 26-T89N-R48W

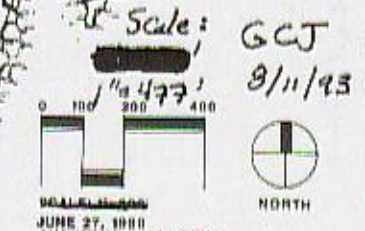
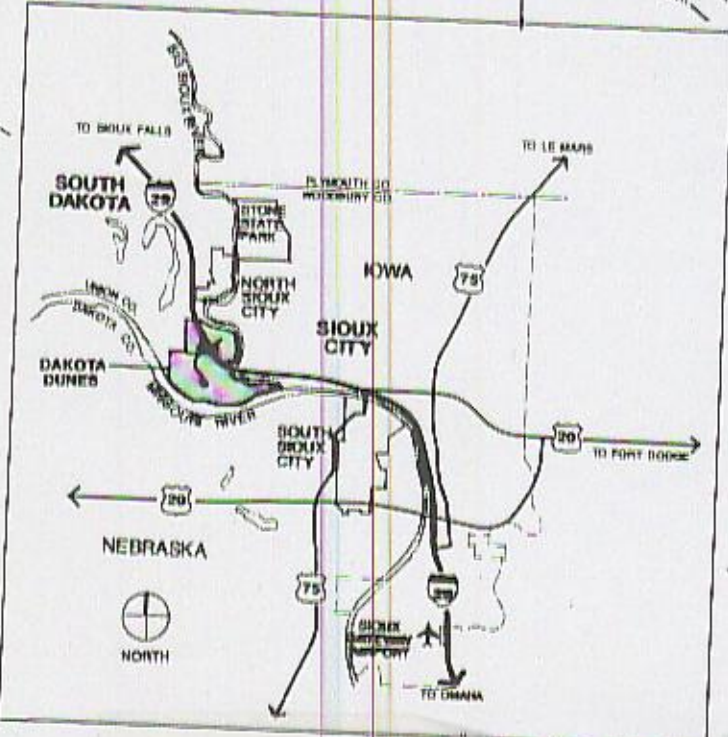
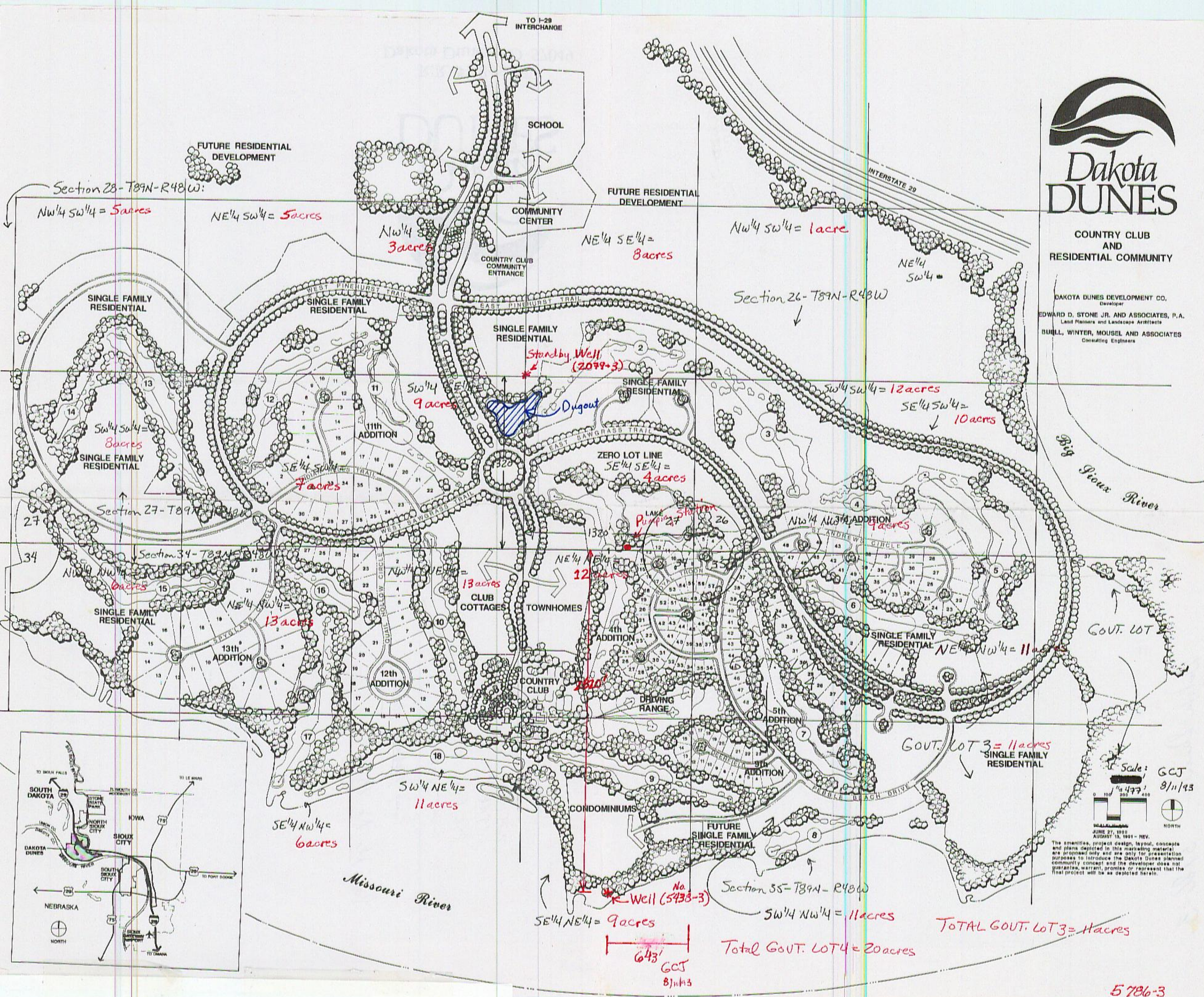
*NW1/4 SW1/4 = 1 Acre
SW1/4 SW1/4 = 12 Acres
SE1/4 SW1/4 = 10 Acres*





COUNTRY CLUB
AND
RESIDENTIAL COMMUNITY

DAKOTA DUNES DEVELOPMENT CO.
Developer
EDWARD D. STONE JR. AND ASSOCIATES, P.A.
Land Planners and Landscape Architects
BULL, WINTER, MOUSEL AND ASSOCIATES
Consulting Engineers



The owner, project design, layout, concepts and plans depicted in this marketing material are proposed only and are only for presentation purposes to introduce the Dakota Dunes planned community concept and the developer does not guarantee, warrant, promise or represent that the final project will be as depicted herein.

NO. 5438-3 (2079-3)
DAKOTA DUNES GOLF COURSE
drawn by:
Gregory C. Johnston
Natural Resources Engineer
Water Rights Division
DENR 8/11/93

Lands Irrigated

All in Section 27-T89N-R48W:
NW 1/4 SW 1/4 = 5 acres
NE 1/4 SW 1/4 = 5 acres
SW 1/4 SW 1/4 = 8 acres
SE 1/4 SW 1/4 = 7 acres
NW 1/4 SE 1/4 = 3 acres
NE 1/4 SE 1/4 = 8 acres
SW 1/4 SE 1/4 = 9 acres
SE 1/4 SE 1/4 = 4 acres

All in Section 34-T89N-R48W:
NW 1/4 NW 1/4 = 6 acres
NE 1/4 NW 1/4 = 13 acres
SE 1/4 NW 1/4 = 6 acres
NW 1/4 NE 1/4 = 13 acres
NE 1/4 NE 1/4 = 12 acres
SW 1/4 NE 1/4 = 11 acres
SE 1/4 NE 1/4 = 9 acres

All in Section 35-T89N-R48W:
Lot 3 (NW 1/4 NW 1/4 and SW 1/4 NW 1/4) = 11 acres
Lot 4 (NE 1/4 NW 1/4 and SE 1/4 NW 1/4) = 20 acres
TOTAL = 173 acres

All in Section 26-T89N-R48W
NWSW = 1 acre
SW SW = 12 acres
SE SW = 10 acres

643' GCS 8/11/93

Total GOUT. LOT 4 = 20 acres

TOTAL GOUT. LOT 3 = 11 acres

5786-3

**SOUTH DAKOTA
WATER PERMIT NO. 5786-3 FOR IRRIGATION**

Date of first receipt of application August 27, 1993.

Date Soil/Water Compatibility Permit received May 24, 1990.

The Water Management Board approved Water Permit Application No. 5786-3 on December 1, 1993 for Dakota Dunes Golf Course, 960 South Dakota Dunes Ave, Dakota Dunes SD 57049 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. 5786-3 increases the authorized diversion rate from a dugout by 1.53 cubic feet of water per second (cfs) to irrigate land authorized by Water Permit No. 5438-3. Water Permit Nos. 2079-3 and 5438-3, combined, appropriate 4.50 cfs from two wells located in the SE 1/4 NE 1/4 Section 34 and the SE 1/4 SE 1/4 Section 27 to irrigate 173 acres located in the S 1/2 Section 27, S 1/2 SW 1/4, NW 1/4 SW 1/4 Section 26, N 1/2 Section 34; NW 1/4 (Government Lots 3 & 4) Section 35; all in T89N-R48W. The water is diverted to a lake (dugout) (approximate storage capacity of 41.4 acre feet) located in the S 1/2 SE 1/4 Section 27-T89N-R48W. This permit proposes to increase the water diverted from the dugout from 2.47 cfs to 4.00 cfs (1.53 additional cfs). This permit authorizes an annual volume of three acre-feet per acre to be delivered to the land.
2. The amount of the appropriation may not exceed 3 acre feet annually for each acre of land to which water is actually and beneficially applied for irrigation. The water is to be used during the following described annual period: April 1 - October 31.
3. The date from which applicant may claim right is August 27, 1993.
4. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

1. Approval of Permit No. 5786-3 limits the diversion rate from the 41.4 acre-feet storage dugout authorized by Permit No. 5438-3 to a maximum of 4.00 cfs for irrigation with the number of hours of irrigation per day not to exceed 15 hours.
2. Pursuant to SDCL 46-5-6, Permit No. 5786-3 authorizes diversion of up to three acre-feet per acre delivered to the land because of the soil type of the irrigated acreage.
3. This permit is approved subject to the irrigation water use questionnaire being submitted each year.
4. The wells approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.

WATER MANAGEMENT BOARD

By: 
John Hatch, Chief Engineer
Water Rights Division
Department of Environment and Natural Resources

FEB 1 1994
date

Water Rights Division -DENR
Conversation or File Documentation

NAME OF PERSON OR FILE: Dakota Dunes Golf Course - c/o Doug Hausman

ADDRESS: RR1, Box 93B, Dakota Dunes, SD 57049

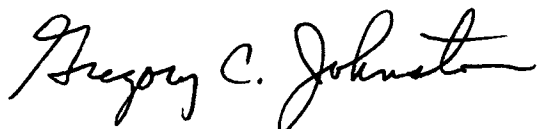
COUNTY: Union

DATE: 8/11/93

TELEPHONE: 232-3001

RE: Location of dugout for water supply to golf course

COMMENTS: Doug Hausman, manager of the golf course, returned my call of 8/10/93 and we discussed the location of the dugout being used on the golf course. The original application for No. 5438-3 had the dugout located in the SE1/4 SE1/4 of Section 27-T89N-R48W and it was to contain an estimated 41.4 acre-feet of water. The actual dugout being used is located in the SE1/4 SE1/4 and the SW1/4 SE1/4 of Section 27-T89N-R48W. This dugout is within 660' of the legal location given for the intended dugout and contains an estimated 40 acre-feet of water. In addition, I spoke to Doug about applying for additional water being diverted from the dugout. Presently, the golf course is capable of diverting 1800 gpm (4.5 cfs) from the dugout through the pumping station. Permit No. 5438-3 appropriated only 2.47 cfs (1112 gpm) from the dugout. I'll send an application form for an additional 688 gpm (1.53 cfs) to be diverted from the dugout as well as increase the annual amount of water to be applied to 3 acre-feet per year. 173 acres are irrigated on the golf course; therefore, the 1800 gpm exceeds the statutory limit of 1 cfs for 70 acres. As a result of this, 1800 gpm can only be run through the irrigation system to irrigate the 173 acres for 15 hours a day. G C J 8/11/93



Gregory C. Johnston
Natural Resources Engineer



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

August 12, 1993

Doug Hausman
Dakota Dunes Golf Course
RR 1, Box 93B
Dakota Dunes, SD 57049

Dear Mr. Hausman:

This letter is in reference to our conversation on August 11, 1993, concerning the amount of water diverted from the dugout at the Dakota Dunes Golf Course. Water Permit No. 5438-3 appropriates 2.47 cfs (1112 gpm) from the dugout for irrigation of 173 acres on the golf course. The system is capable of diverting 1800 gpm (4.00 cfs) from the dugout. Although the system may only be run at 1800 gpm for a few hours a day, it is necessary that this amount be permitted for use by the golf course. The maximum amount of time that 4.0 cfs (1800 gpm) can be pumped from the dugout is 15 hours daily. The reason for this is that the statutory limit for irrigation is 1 cfs (450 gpm) for every 70 acres. For the 173 acres the limit is 2.47 cfs (1112 gpm); therefore, the amount diverted is time-weighted over a 24 hour period and is $(1112 \text{ gpm} / 1800 \text{ gpm}) \times 24 \text{ hrs. per day} = 14.8$ or 15 hours maximum daily at the 1800 gpm (4.0 cfs) diversion rate.

Enclosed is an application form and instruction sheet. Please complete and notarize the form and return it with a \$225 fee.

Your attention regarding this matter is appreciated, and if you have any questions, please feel free to contact me.

Sincerely,

Gregory C. Johnston
Natural Resources Engineer
Water Rights Division
(605) 773-3352

enclosures

RECEIPT

413873

Division of Water Rights

South Dakota Department of Environment and Natural Resources

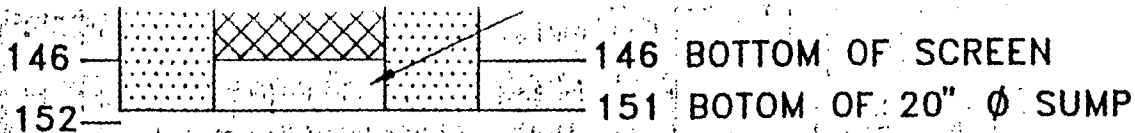
Pierre, August 27, 19 93

RECEIVED OF Dakota Dunes Country Club, Inc., 960 S Dakota Dunes Blvd., Dakota Dunes, SD
the following amount in fees for services rendered as provided for by law: 57049

Fee for Application for Permit No. <u>5786-3</u> to Appropriate Water, to construct and to put water to beneficial use _____	225	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	225 00

By John Hatch
Chief Engineer



IRRIGATION WELL PROFILE (90-1)

SCALE: NTS

TEST WELL REPORT

City and State North Sioux City, South Dakota Date 1-4-90
 Contract Dakota Dunes Driller Jim Rentschler
 Test No. 90-1 Helpers Tabor Miller
 Static Water Level Est. 20'

Test Log

0	4	Silty sand
4	15	Fine brown sand
15	20	Fine brown/blue sand
20	29	Medium blue sand
29	30	Sandy clay
30	37	Medium blue sand
37	45	Coarse sand, some gravel with clay
45	50	Blue clay with sand and gravel
50	55	Medium sand, some coarse, trace of clay
55	60	Coarse sand and gravel and lignite some boulders
60	92	Boulders coarse sand and gravel with lignite
92	95	Coarse and fine sand and gravel
95	105	Coarse and fine sand and gravel
105	105 1/2	Limestone
105 1/2	107	Coarse sand and gravel
107	125	Gravel and coarse sand
125	146	Gravel, coarse sand boulders
146	152	Blue clay with limestone and sand

DATE	REVISION	SHEET TITLE

SITE MAP AND
WELL PROFILE

Compatibility Permit and Permit To Appropriate Water

Supplemental Information

Irrigation Well

(type or print in ink)

1. Well Information - Proposed construction

- a) Drill Hole Diameter 32 inches Depth 151 feet
- b) Casing Type Steel Diameter 20 inches Thickness 0.375 inch
- c) Screen Type Stainless Steel Diameter 20 inches Thickness 0.375 inch
- d) Gravel Pack Thickness 6 inches Length of Gravel Pack 56 feet
- e) Depth to Top of Water Bearing Material 60 feet
- f) Depth to Water (ground surface to water level) 20 feet
- g) Distance to nearest existing domestic well:
On applicants property 4,200 feet On property owned by others 7,400 feet

2. Dugout Information Estimates

- a) Surface Dimensions Irregular (41.4 AC A) Depth 8-10 feet
- b) Depth to water (ground surface to water level) 10 feet

3. Water Storage Dams

If the proposed water use system contains one or more storage dams, please furnish the information requested below. The locations of each dam should 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 _____

c) Crest Width _____

Crest Length _____

d) Height _____

e) Primary Outlet Capacity _____
If Pipe, diameter _____

f) Secondary Spillway Capacity _____
Spillway width _____

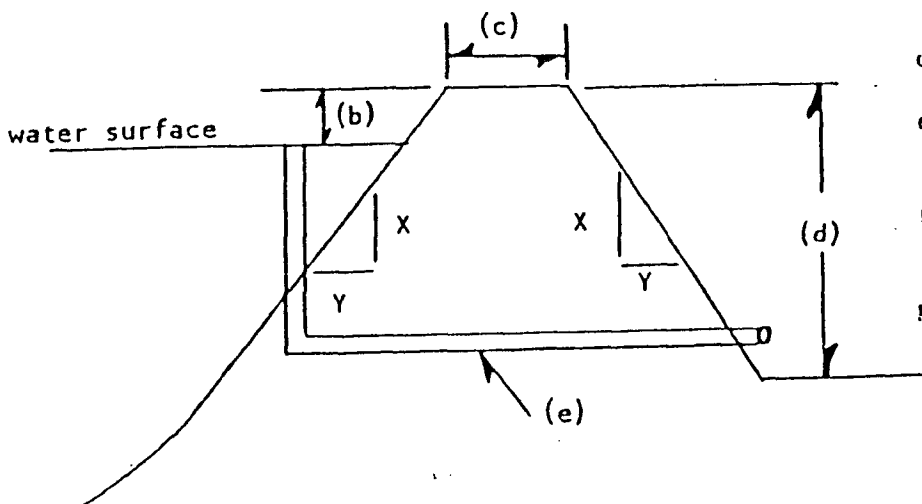
g) X & Y Slope
Upstream _____

Downstream _____

Surface Area of Impoundment _____

Storage _____ acre feet

Drainage area above dam _____



Signature of Applicant _____

BOWL ASSEMBLY
Material Specifications

PART	STANDARD BOWL	ALL IRON BOWL	STANDARD BRONZE BOWL	ZINCLESS BRONZE BOWL	NI-RESIST BOWL	TYPE 316 S. S. BOWL
Discharge Adapter Discharge Nozzle Suction Case	Class 30 Cast Iron A48-30		Brz. B584-836	Brz. Alloy No. 927	1B-Ni-Resist A436-1B	Gr. CF8M S.S. A744-CF8M
Intermediate	(1) Enamelled Class 30 Cast Iron A48-30		Brz. B584-836	Brz. Alloy No. 927	1B-Ni-Resist A436-1B	Gr. CF8M S.S. A744-CF8M
Bowl Bearing	(1) Brz. B505-836	Babbitt- Graphalloy	(1) Brz. B505-836	Brz. B584-937		Babbitt- Graphalloy
Stud/Bolt	Steel A193-B7/A325-1		18-8 Stainless Steel A193-B8			316 S. S. A193-B8M
Nut	Steel A563-C		18-8 Stainless Steel A 194-8			316- S. S. A194-8M
Impeller	Brz. B584-836	Class 30 Cast Iron A48-30	Brz. B584-836	Brz. Alloy No. 927	1B-Ni-Resist A436-1B	Gr. CF8M-S.S. A744-CF8M
Impeller Collet	416 Stainless Steel A582-416			316 Stainless Steel A269-316		
Impeller Key	303 Stainless Steel A582-303					316 S. S. A276-316
Wear Ring	(1) Brz. B505-836	Class 30 Cast Iron A48-30	Brz. B505-836	Brz. B584-937		316 S.S. A744-CF8M
Sand Collar (1)	Rubber	-----	Rubber	Rubber		-----
Suction Case Plug	Cast Iron	-----	18-8 Stainless Steel			-----
Pump Shaft	410 Stainless Steel A276-410			303 Stainless Steel A582-303		316 S. S. A276-316
Shaft Coupling	Steel A108-12L14			304 Stainless Steel A276-304		316 S. S. A276-316

NOTES: (1) For bowls larger than 19", the intermediates are not enamelled. The bearing, wear ring, and sand collar are B505-932 bronze.

NOTES: Material designations listed in this specification are typical for chemical composition only. Physical and chemical tests and other requirements are not included.

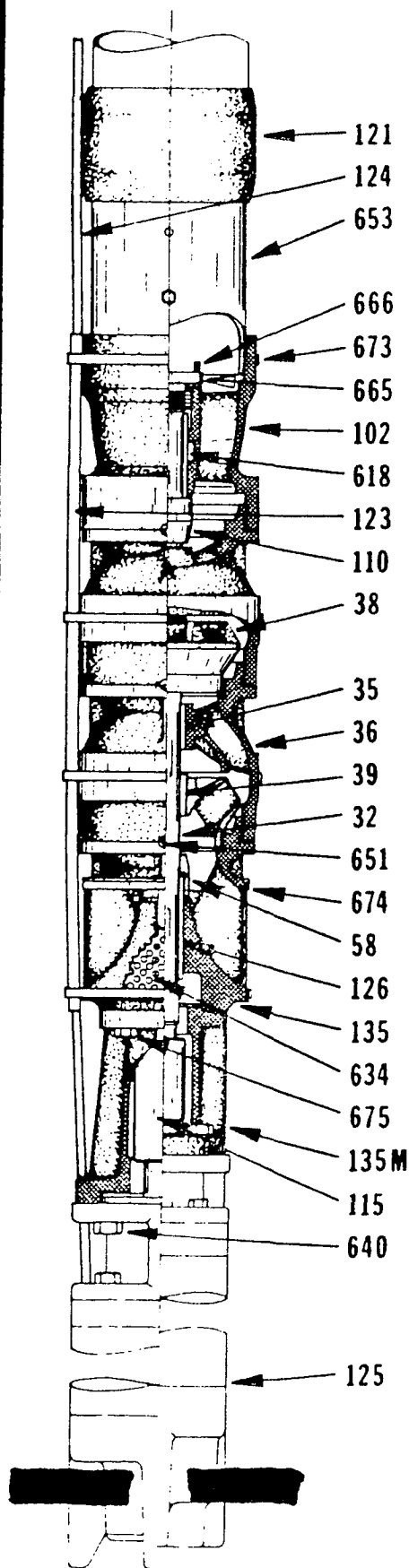


LAYNE & BOWLER, INC.
MEMPHIS, TENN. 38108

SECTIONAL DRAWING

SUBMERSIBLE BOWL ASSEMBLY

SECTION: 3400
DWG. NO.: 8511-B24C
DATE: JAN. 1, 1984
SUPERSEDES:

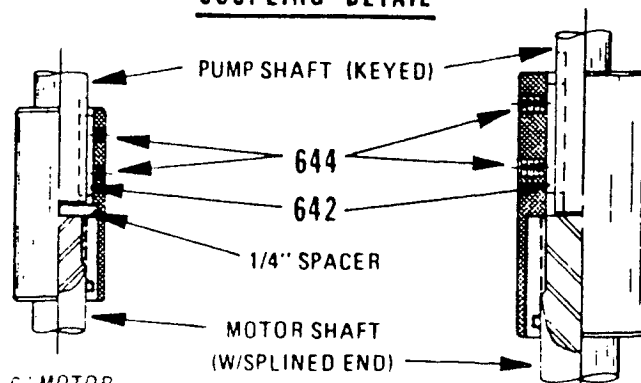


ITEM NO.	PART NAME	MATERIAL	
		STD.	OPTIONAL
660	BOWL ASSEMBLY	----	
32	IMPELLER SHAFT	410 SS	
35	BEARING, INTERMEDIATE	BRONZE	
36	INTERMEDIATE	C.I. CI. 30	
38	IMPELLER	BRONZE	
39	COLLET	STN. STL.	
58	SAND COLLAR	RUBBER	
102	DISCHARGE CASE, SUBMO	C.I. CI. 30	
110	SAND COLLAR, DISCHARGE CASE	RUBBER	
115	SUBMO MOTOR COUPLING	STN. STL.	
121	PIPE COUPLING (SUBMO)	STEEL	
123	MOTOR LEADS SHIELD	GLV. STL.	
124	REMOVEABLE MOTOR LEADS	----	
125	SUBMERSIBLE MOTOR	----	
126	BEARING, SUCTION ADAPTOR	BRONZE	
135	SUCTION ADAPTOR	C.I. CI. 30	
135M	MOTOR ADAPTOR	C.I. CI. 30	
618	BEARING, DISCHARGE CASE	BRONZE	
634	SCREEN, SUCTION ADAPTOR	STN. STL.	
640	FASTENER, MOTOR/BOWL ASSEMBLY	STN. STL.	
642	SUBMO KEY, PUMP SHAFT	STN. STL.	
644	SET SCREW, COUPLING	STN. STL.	
651	FASTENER, JOINT LOCKING	ALUM.	
653	CHECK VALVE	STEEL	
665	UPTHRUST CAP, SUBMO	BRONZE	
666	LOCK SCREW, UPTHURST CAP	STN. STL.	
673	STRAPS & BUCKLES (SHIELD TO BOWL)	STN. STL.	
674	FREE END CLAMPS (SCREEN TO BOWL)	STN. STL.	
675	FASTENER, MOTOR ADPT./SUCTION ADPT.	STEEL	

▲ DOES NOT APPLY TO ALL AVAILABLE 6" & 8" SUBMERSIBLE MOTORS.

● OPTIONAL--FURNISHED ONLY WHEN SPECIFIED. PIPE COUPLING (121) FURNISHED WITH CHECK VALVE ONLY.

COUPLING DETAIL



CURVE NO.
18-146
9-1-78

No. Stages	Eff. Change	MATERIAL	Eff. Change
1	-2	IMP.—C.I.	-1
2	0	IMP.—NI-RI	-2
3		BOWL—BRZ.	-1
4		BOWL—NI-R.	-1

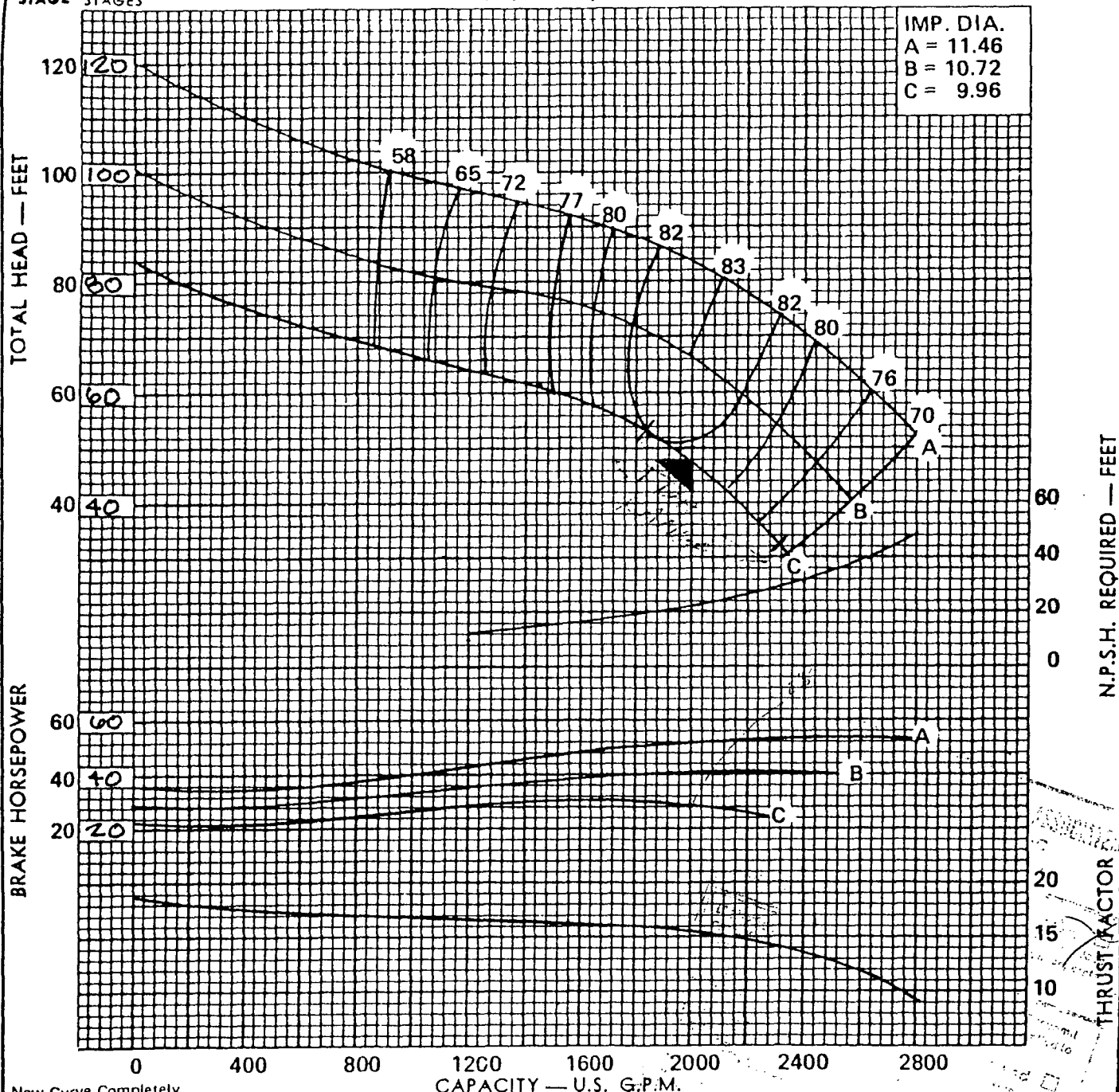
14 TLC

1770 R.P.M.

SINGLE STAGE LAB PERFORMANCE WITH STANDARD MATERIALS. EFFICIENCY SHOWN FOR 2 OR MORE STAGES. HORSE POWER SHOWN FOR ONE STAGE BASED ON 2 STAGE EFFICIENCY. CORRECTIONS SHOULD BE MADE FOR STAGES AND MATERIAL.

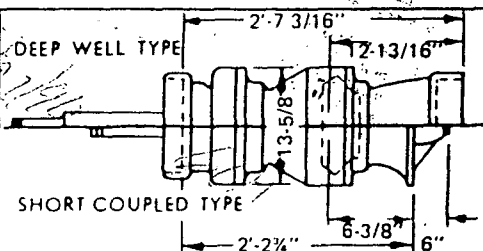
DAKOTA DUNES DEVELOPMENT CO. WELL 90-1

ONE (1)
STAGE STAGES



New Curve Completely

EYE AREA — SQ. IN.	= 34.26	IMPELLER WT.—LBS.	= 32.1
WR ² PER IMPELLER	= 2.72 LB.-FT. ²	ONE STAGE WT.—LBS.	= 435
MAX. SPHERE SIZE	= 1.25 in.	ADD'L STAGE WT.—LBS.	= 164
MAX. NO. STD. STAGES	= 7	IMPELLER NUMBER	= 7T13
MAX. OPERATING P.S.I.	= 390	DISCH. SIZES	= 10, 12
STD. LATERAL	= 0.78 in.	SUCTION SIZES	= 10
STD. SHAFT DIA.	= 1.937 in.	MAX. LATERAL	= 1.26 in.
MAX. SHAFT DIA.	= 2.187 in.	BOWL CONN.	FLANGED—COLLETS
MIN. SUBMERGENCE	= 36 in.	ADD 13	" PER ADDITIONAL STAGE.



**PUMP SUBMITTAL FORM
IRRIGATION WELL**

1. Rated speed - 1800 RPM
2. Rated total pump head - ~~48~~ ⁵³ 32 ~~45~~
3. Rated horsepower at design - 30.3 HP
4. Pump efficiency at design - 80%
5. Shut off head - 84'
6. Column piping, type of joints - 12" diameter x .500 wall, threaded and coupled, random lengths *FLANGED TO PUMP*
7. Line shafting - none
8. Spacing of line shaft bearing - none
9. Manufacturer of motor - Hitachi or Plueger - *submitted separately*
10. Type of motor - Submersible
11. Horsepower of motor - 40 HP
12. Efficiency of motor - 83.5%
13. Guaranteed wire-to-water efficiency - 58.4%
14. Pump - Layne & Bowler 14 TLC-1 stage

WELL WINTER MOUSEL AND ASSOCIATES 866 BENSON BUILDING SIOUX CITY, IOWA 51101	
Approved ☐	Approved as Corrected ☒
If checked above, fabricator's approval is required. Approval does not authorize changes to drawings unless stated in separate letter or Change Order.	
If checked above, fabrication will be undertaken. Result will corrected unless otherwise stated. Changes shall be limited to items shown.	
Review & Approval ☐	Not Approved ☐
Reviewing is only for conformance with the design concept of the Project and compliance with the information given in the Contract Documents. The Contractor is responsible for dimensions to be confirmed and corrected at the site for information that pertains only to the fabrication process or to the means, methods, technique and sequence of construction and for building in accordance with the Contract Documents.	
9/22/96	GCM

*Please confirm if
pump will operate @ 32' TDH
or two head condition.*



PROJECT Dakota Dunes Well TypePROJECT NO. 14490CONTRACTOR LAYNE WESTERDADDRESS P.O. Box 11067, OMAHA NE.

(FOR A/E's USE ONLY)

TO:

ENGINEER ☐

CONTRACTOR ☐

MANUFACTURER ☐

JOB SUPERINTENDENT ☐

FIELD ENGINEER ☐

SHOP DRAWING FILE ☐

OWNER ☐

DATE 9/22/90 BY GCM

TRANSMITTAL NO. 122

FIRST SUBMITTAL X

RESUBMITTAL X/1

PREVIOUS NO. 121

SECTION NUMBER	DESCRIPTION OF EQUIPMENT	MANUFACTURER	DRAWING OR DATA NUMBER	ACTION TAKEN
<u>2580</u>	<u>PUMP</u>	<u>LAYNE</u>	<u>14TLC</u>	<u>B.</u>
<u>2580</u>	<u>PUMP</u>	<u>LAYNE</u>	<u>12THC</u>	<u>D.</u>
	<u>PREVIOUS SUBMITTAL INDICATED TDH TO 32 FT.</u>			
	<u>DEPENDING ON POINT OF DISCHARGE TDH WILL</u>			
	<u>BE EITHER 32 FT OR 53 FT w/ 53 FT BEING</u>			
	<u>THE PREVELANT POINT OF DISCHARGE.</u>			

(SPACE BELOW FOR ARCHITECT/ENGINEER)

The above Shop Drawings, Product Data, and/or Samples are returned with action as designated above in accordance with the following legend:

A - Approved

B - Approved as Noted or Corrected

C - Revise and Resubmit

D - Not Approved

REMARKS CAN 14TLC OPERATE @ 32-35 FT IF WE IMPOSE HEAD?

12THC HAS TO

LARGE OF FLOW DROP FOR

CHANGE IN HEAD.

DATE 9/22/90 BY GCM

SHOP DRAWING TRANSMITTAL

BUELL & WINTER CONSULTING ENGINEERS

666 BENSON BUILDING SIOUX CITY IOWA 51101 712-258-4202



OLD WELL PERMIT 2079-3

7' - 7 1/2" ϕ x 23 D.

$$\left(\frac{7.625}{4}\right)^2 \pi = 45.66 \times 1.9167 = 87.5 \text{ C.F.}$$

$$\begin{array}{r} \times 7.48 \\ \hline 654.6 \text{ GAL.} \end{array}$$

10:12:15 START

2 ~ 12

3 min 15 1/2"

4 20"

4:25 O.F.

~~4:25~~

10,000

= 650 GAL

15.38

$\times 4.167$

64 min

WELL MOTOR - U.S. ELECTRIC (DIV. OF EMERSON)

50 HP. 3 PH 230/460 124/62 AMP

FRAME 326 TP WP1 1765 RPM

TYPE RU

402463-1306 (152)

PUMP - WESTERN LAND ROLLER - INGERSOLL RAND

SER No. 8904580

HASTINGS, NE

7 STAGE BOWL 10 JK

IMPELLER 7H7.7C

HEAD No. 6WFDL (

BOWL HYDRAULIC PERFORMANCE BASED ON STANDARD MATERIALS OF CONSTRUCTION (INCLUDING PORCELAIN LINED BOWLS) AND HANDLING CLEAR, FRESH, NONAERATED WATER FREE OF FOREIGN MATERIALS.

CHANGE IN EFFICIENCY	
NO. OF STAGES	NO. OF POINTS
1	-4
2	-2
3	-1
4	0



Ingersoll-Rand
HASTINGS DIV.

APW

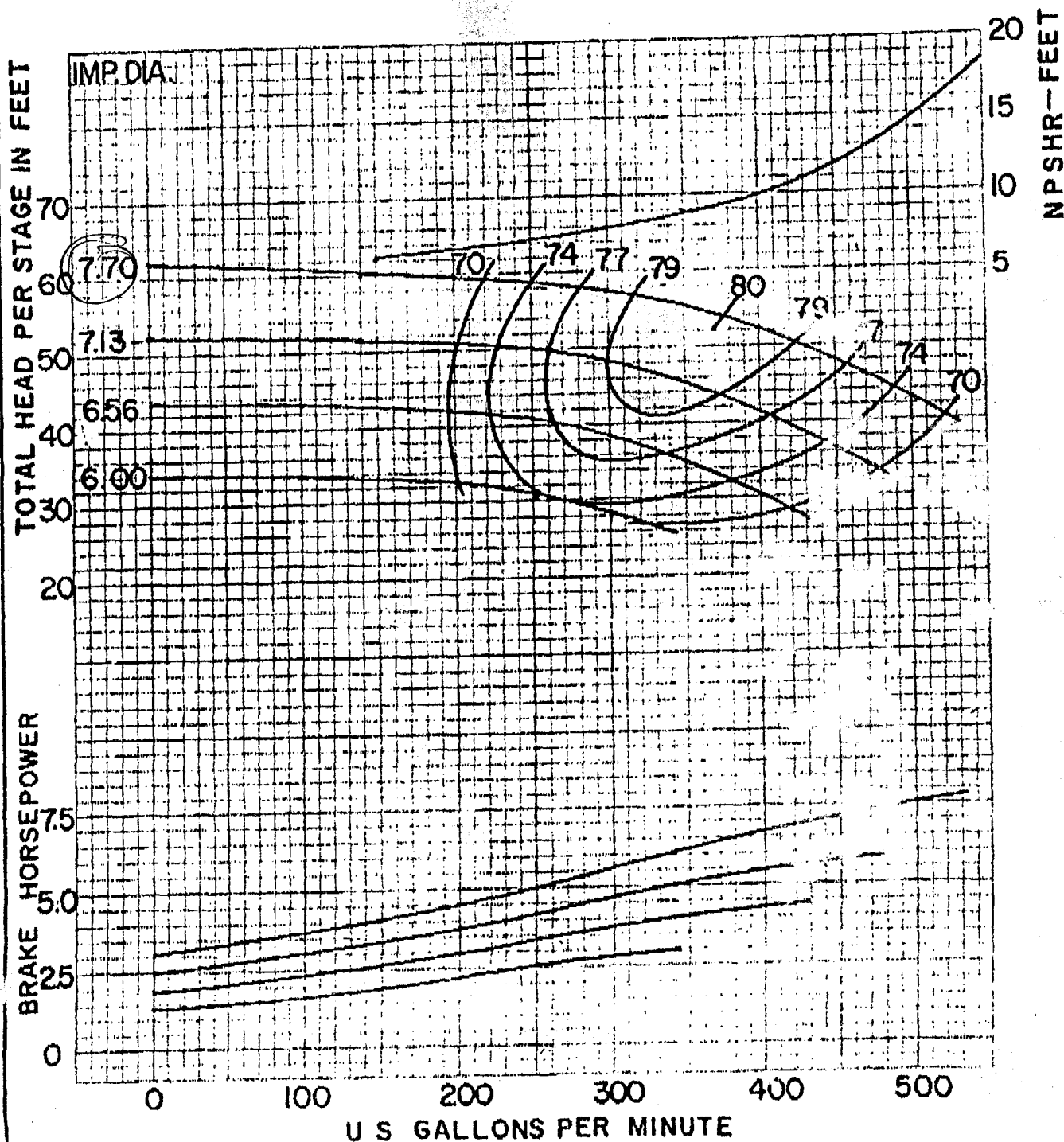
10JKH

1770

R. P. M.

ENCLOSED IMPELLER

FOR NON-LINED BOWLS, MULTIPLY HEAD AND EFFICIENCY BY .97



3 IN.²

CURVE NO. EC - 1107
DATE 4-14-81

REPORT ON APPLICATION NO. 5786-3
for Dakota Dunes Golf Course
October 4, 1993

Application No. 5786-3 proposes to increase the authorized diversion rate from a dugout by 1.53 cfs to irrigate land authorized by Water Permit No. 5438-3. Water Permit No. 2079-3 and No. 5438-3, combined, appropriates 4.5 cfs from two wells located in the SE 1/4 NE 1/4 of section 34 and the SE 1/4 SE 1/4 of section 27 to irrigate 173 acres located in the S 1/2 of section 27, S 1/2 SW 1/4, NW 1/4 SW 1/4 of section 26, N 1/2 of section 34; NW 1/4 (Government Lots 3 & 4) of section 35; all in T89N R48W in Union County. Water is diverted to a lake (dugout) (approximately 41.4 acre feet storage capacity) located in the S 1/2 SE 1/4 of section 27, T89N R48W. This application proposes to increase the rate of water diverted from the dugout from 2.47 cfs to 4.0 cfs (an additional 1.53 cfs). This application also requests an annual volume increase from two acre feet to three acre feet delivered to the land for irrigation.

AQUIFER - MISSOURI ELK POINT (M-EP)

The Missouri Elk Point is a an alluvium mantled outwash (sand and gravel) under predominantly water table conditions in this area. The aquifer underlies 99,400 acres and contains an estimated 1.5 million acre feet of recoverable water in storage in Union County (Hedges, 1982). The aquifer extends into Clay to the west and is hydraulically connected to the Big Sioux South aquifer, the Lower Vermillion Missouri aquifer and the Dakota Formation which it directly overlies. The aquifer is also hydraulically connected to the Big Sioux and Missouri Rivers.

The Division of Water Rights monitors 28 observation wells completed into the Missouri Elk Point aquifer. These wells all show good response to climatic conditions, that is, rising water levels during wet years and gradually declining water levels during dry years. The water level record indicates that the aquifer is capable of sustaining additional withdrawals (Water Rights, 1993).

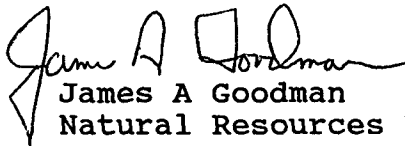
REVIEW OF EXISTING WATER PERMITS/RIGHTS

There are no other existing water permits/rights in this immediate area. The closest diversion (about 1/2 mile east) is Water Permit No. 5437-3 which is also for Dakota Dunes (water supply). The wells are all very near the shore of the Missouri River and drawdown caused by pumping is not expected to be significant. Interference is not a concern. These are existing wells and have been in use with no apparent problems.

CONCLUSIONS

1. Water is available from the Missouri Elk Point aquifer.

2. Interference is not expected to be a concern. This is a prolific aquifer, under water table conditions and very near the Missouri River which will supply water to well.
3. This application requests authorization to divert an additional 1.53 cfs from the pond. Applying water at this rate will allow the watering of the golf course during nonuse periods and enable the course to put on the amount of water normally put on in 24 hours in 15 hours. Also this application requests the use of 3 acre feet per acre instead of the statutory limit of 2 acre feet per acre. This can be allowed by SDCL 46-5-6. The applicant indicates that the soils are porous and sandy and the volume of water needs to be increased.
4. Approval of this application will allow this permit to be licensed for irrigation of 173 acres, a diversion of 4.5 cfs combined from two wells to a 41.4 acre feet dugout and a diversion of 4.0 cfs from the dugout for irrigation of the 173 acres. This would reflect the system as built.


James A Goodman
Natural Resources Engineer

BIBLIOGRAPHY

Hedges, L.S., etal, 1982, Evaluation of Ground-Water Resources Eastern SD and Upper Big Sioux River, SD and Iowa, for US Army Corps of Engineers, SD DENR, SDGS, Vermillion, SD, 57069.

Water Rights, 1993, Unpublished Observation Well Records for Union County, SD DENR, Division of Water Rights, Pierre, SD, 57501.

RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 5786-3, Dakota Dunes Golf Course

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Division, Department of Environment and Natural Resources concerning Water Permit Application No. 5786-3, Dakota Dunes Golf Course, c/o Doug Hausman, RR 1 Box 93B, Dakota Dunes, SD 57049.

The Chief Engineer is recommending APPROVAL of Application No. 5786-3 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing rights, 3) the proposed use is a beneficial use and 4) in the public interest with the following qualifications:

1. Approval of Permit No. 5786-3 limits the diversion rate from the 41.4 acre-feet storage dugout authorized by Permit No. 5438-3 to a maximum of 4.00 cfs for irrigation with the number of hours of irrigation per day not to exceed 15 hours.
2. Pursuant to SDCL 46-5-6, Permit No. 5786-3 authorizes diversion of up to three acre-feet per acre delivered to the land because of the soil type of the irrigated acreage.
3. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.
4. The wells approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.

See report on application for additional information.



JOHN HATCH, Chief Engineer
October 14, 1993



**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.

October 15, 1993

Doug Hausman
Dakota Dunes Golf Course
RR 1 Box 93B
Dakota Dunes, SD 57049

Dear Mr. Hausman:

Water Permit Application No. 5786-3 for irrigation 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 Elk Point Leader-Courier printed at Elk Point, SD (Ph # 356-2632). 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

October 15, 1993

Elk Point Leader-Courier
Box 310
Elk Point, SD 57025

ATTENTION: Legal Department

Enclosed is a Notice of Hearing on Application No. 5786-3 to be published twice. Please publish the first notice on October 28, 1993, 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 Dakota Dunes Golf Course, RR 1 Box 93B, Dakota Dunes, SD 57049 (Ph # 232-4211).

A copy of BOTH publications must be SENT to the WATER RIGHTS DIVISION. 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
Natural Resources Engineer
605 773-3352

enclosures

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

FIRST TRANSMITTAL NOTICE

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

No. _____

Date _____

We are in receipt of your letter of _____ enclosing Notice of Hearing to Appropriate Water by Application No. _____ 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 October 28, 1993, with the second publication 7 days later. The applicant is responsible for payment.

NOTICE OF HEARING on Application No. 5786-3 to Appropriate Water

960 South Dakota Dunes

Notice is given that Dakota Dunes Golf Course, ~~located in the~~ Dakota Dunes, SD 57049 has filed an application for a water permit to increase the authorized diversion rate from a dugout by 1.53 cubic feet of water per second (cfs) to irrigate land authorized by Water Permit No. 5438-3. Water Permit Nos. 2079-3 and 5438-3, combined, appropriate 4.50 cfs from two wells located in the SE 1/4 NE 1/4 Section 34 and the SE 1/4 SE 1/4 Section 27 to irrigate 173 acres located in the S 1/2 Section 27, S 1/2 SW 1/4, NW 1/4 SW 1/4 Section 26, N 1/2 Section 34; NW 1/4 (Government Lots 3 & 4) Section 35; all in T89N-R48W. The water is diverted to a lake (dugout) [approximate storage capacity of 41.4 acre-feet] located in the S 1/2 SE 1/4 Section 27-T89N-R48W. This application proposes to increase the water diverted from the dugout from 2.47 cfs to 4.00 cfs (1.53 additional cfs). This application also proposes to authorize an annual volume of three acre-feet per acre to be delivered to the land.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 5786-3 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 Division, 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 November 22, 1993. 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 10:00 a.m., December 1, 1993, 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 December 1, 1993, 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 November 22, 1993.

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 November 22, 1993, at the above Water Rights Division 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. Robert E. Roberts, Secretary, Department of Environment and Natural Resources.

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)
 County of union) ss



I, Lester E. Emerson

certify that the attached printed Notice was

taken from the The Leader-Courier

printed and published in Elk Point, S. D.

County of Union and State of

South Dakota. The notice was published in
 the newspaper on the following two c

October 28, 1993

November 4, 1993

Cost of Printing: 59 47

Lester E. Emerson
 (Signature)

Publisher-Editor

(Title)

November 4 1993

(Date Signed)

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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. Robert E. Roberts, Secretary, Department of Environment and Natural Resources.

Pub. Oct. 28 and Nov. 4

**NOTICE OF HEARING ON
 APPLICATION NO. 5786-3
 TO APPROPRIATE WATER**

Notice is given that Dakota Dunes Golf course, 960 South Dakota Dunes Blvd., Dakota Dunes, SD 57049 has filed an application for a water permit to increase the authorized diversion rate from a dugout by 1.53 cubic feet of water per second (cfs) to irrigate land authorized by Water Permit No. 5438-3. Water Permit Nos. 2079-3 and 5438-3, combined, appropriate 4.50 cfs from two wells located in the SE ¼ NE ¼ Section 34 and the SE ¼ SE ¼ Section 27 to irrigate 173 acres located in the S ½ Section 27, S ½ SW ¼, NW ¼ SW ¼ Section 26, N ½ Section 34; NW ¼ (Government Lots 3 & 4) Section 35; all in T89N-R48W. The water is diverted to a lake (dugout) [approximate storage capacity of 41.4 acre-feet] located in the S ½ SE ¼ Section 27-T89N-R48W. This application proposes to increase the water diverted from the dugout from 2.47 cfs to 4.00 cfs (1.53 additional cfs). This application also proposes to authorize an annual volume of three acre-feet per acre to be delivered to the land.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 5786-3 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 Division, 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 November 22, 1993. 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 10:00 a.m., December 1, 1993, 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



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

FEB 1 1994

Doug Hausman
Dakota Dunes Golf Course
RR 1 Box 93B
Dakota Dunes, SD 57049

Dear Mr. Hausman:

Enclosed is Water Permit No. 5786-3 authorizing your water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

The final inspection has been completed on this Permit, and we are ready to issue the Water License. Statutes require we charge \$50 for the inspection and issuance of the final papers. Upon receipt of this amount the Water License will be sent to you.

Very truly yours,

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

enclosures

5786-3

REPORT ON INSPECTION OF PERMIT NO. 5438-3

DATE: 6/23/93

Other permit(s) associated with the project: Incorporate No. 2079-3

DIVERSION POINT LEGAL LOCATION: 2 wells - Well No. 1 (No. 2079-3) is located 1320'N and 1320'W of the SE corner of Section 27 and Well No. 2 (No. 5438-3) is located 643'W and 2620'S of the NE corner of Section 34; both in T89N-R48W

WELL INFORMATION:

- 1) Well Drilling Firm: Unknown/Jim Rentschler
- 2) No. of Wells 2
- 3) Depth(s) 110/152 feet
- 4) Well log is available Y/N N/Y
- 5) Comment: Well under No. 2079-3 is standby well

Screen:

- 1) Type cement asbestos/ stainless steel - 120 slot
- 2) Length 39/30 feet
- 3) Static water level 11/10 feet

Pump:

- 1) Make Western Land Roller/Layne Western
- 2) Model 8904580/14 TLC
- 3) Size 7/14
- 4) Capacity 650/2030 GPM

Motor:

- 1) Make US Electric/Hitachi
- 2) Model No. 326 TP/unknown
- 3) Horsepower rating 50/40 hp

Casing:

- 1) Diameter 17.75/20 inches
- 2) Length 62/132 feet
- 3) Type cement asbestos/stainless steel

DISTRIBUTION LINES OR CANALS:

- 1) Type PVC 2) Size 14/10 inches 3) Length 110/1288 feet

SYSTEM TYPE:

System includes 620 Toro Model 674 and 50 Toro Model No. 655 sprinkler heads for irrigation of 18 hole golf course all computer-controlled with Toro system. The pump station consists of three pumps, 2 - Model No. 616 F with 50 Hp motors and a third - Model No. 410F with a 15 HP motor capable of pumping 1800 gpm to the irrigation system throughout the gold course. There is a dugout located in the SW1/4 SE1/4 and the SE1/4 SE1/4 of Section 27-T89N-R48W from which water is diverted via the pumping station to the golf course. This dugout contains 40 acre-feet of water.

CHEMIGATION EQUIPMENT:

- 1) Does chemigate Y/N Y
- 2) Main line check valve Y/N Y

- 3) Inspection port/air relief Y/N Y
- 4) Low pressure drain Y/N Y
- 5) Discharge is 20' from source Y/N Y
- 6) Interlock type Mechanical
- 7) Injection pump type Piston
- 8) Injection check valve Y/N Y
- 9) Injection line check valve or positive displacement pump Y/N Y
- 10) All chemigation equipment appears to be installed in the proper position and complies with chemigation laws and rules Y/N Y
- 11) Comments : Injects surfactant into irrigation lines from the pumping station

PERMIT QUALIFICATIONS AND REGULATIONS:

- 1) Soil and water permit lands agree with lands being irrigated and lands listed on permit Y/N Y
- 2) Special qualifications to permit being abided by Y/N Y
- 3) All structures, wells and lands on map Y/N Y
- 4) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period Y/N Y

The system has a capacity to irrigate at 4.0 cfs (1800 gpm) and this exceeds the statutory limit of 1 cfs per 70 acres of irrigated land. Therefore, if diverting at a capacity of 4.00 cfs (1800 gpm), the system would be limited to a maximum of 15 hours of irrigation daily.

5786-3

Permit No. **5438-3 (Inc. 2079-3)**
Big Sioux River - Water District

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

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

I have this day made a thorough examination of the water use system constructed by Dakota Dunes Golf Course of RR1 Box 93B holder of Permit No. 5438-3/2079-3, bearing the priority of April 12, 1990/January 28, 1975 authorizing the diversion of 2.5/2.0 (4.5 total) cu. ft. per second of the waters of The Missouri-Elk Point Aquifer for irrigation purposes, in Union County.

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

A. Works used to divert the water:

2 wells - Well No. 1 is 110' deep with 62' of 17.75" asbestos concrete casing and 39' of cement asbestos screen, Western Land Roller Pump, Model No. 8904580, 7", 650 GPM, US Electric Motor, Model 326 TP, 50 HP; Well No. 2 is 152' deep with 132' of 20' stainless steel casing and 30' of 20" 120 slot sized stainless steel screen, Layne Western Pump, Model 14TLC, 14", 2030 GPM, Hitachi Motor, unknown model no., 40 HP

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

110' of 14" and 1288' of 10" PVC pipe

C. Works used to apply water to beneficial use:

Automated Irrigation system for 18 hole golf course - System includes 620 Toro Model No. 674 and 50 Toro Model No. 655 sprinkler heads. The pump station consists of three pumps, 2 are Model No. 616F with 50 Hp motors and the third is a Model No. 410F with 15 HP motor, 1800 GPM capacity to the irrigation system throughout the golf course. A dugout located in the SW1/4 SE1/4 and the SE1/4 SE1/4 of Section 27 supplies water to the pumping station - dugout contains 40 acre-feet of water.

The system is in the following condition excellent. The points of diversion are located Well No. 1 is 1320'N and 1320'W of the SE corner of Section 27 and Well No. 2 is 643'W and 2620'S of the NE corner of Section 34; both in T89N-R48W. The works are capable of diverting and conveying to the place of use 4.00 cfs of water and/or storing 40 acre-feet of water which is to be used for irrigation. Water has been put to beneficial use to the maximum extent as follows:

<u>All in Section 27-T89N-R48W:</u>	<u>All in Section 26-T89N-R48W:</u>
<u>NW1/4 SW1/4 = 5 acres</u>	<u>NW1/4 SW1/4 = 1 acre</u>
<u>NE1/4 SW1/4 = 5 acres</u>	<u>SW1/4 SW1/4 = 12 acres</u>
<u>SW1/4 SW1/4 = 8 acres</u>	<u>SE1/4 SW1/4 = 10 acres</u>
<u>SE1/4 SW1/4 = 7 acres</u>	
<u>NW1/4 SE1/4 = 3 acres</u>	<u>All in Section 35-T89N-R48W:</u>
<u>NE1/4 SE1/4 = 8 acres</u>	<u>Lot 4 = 20 acres</u>
<u>SW1/4 SE1/4 = 9 acres</u>	<u>Lot 3 = 11 acres</u>
<u>SE1/4 SE1/4 = 4 acres</u>	

All in Section 34-T89N-R48W:

NW1/4 NW1/4 = 6 acres
NE1/4 NW1/4 = 13 acres
SE1/4 NW1/4 = 6 acres
NW1/4 NE1/4 = 13 acres
NE1/4 NE1/4 = 12 acres

Section 34-T89N-R48W continued

SW1/4 NE1/4 = 11 acres

SE1/4 NE1/4 = 9 acres

comprising a total of 173 acres of land and the license should be issued for 4.50 cfs (from wells) and 4.00 cfs from the pumping station (limited to 15 hrs per day of pumping at 4.00 cfs) and/or 40 acre-feet of storage.

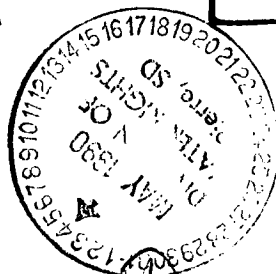
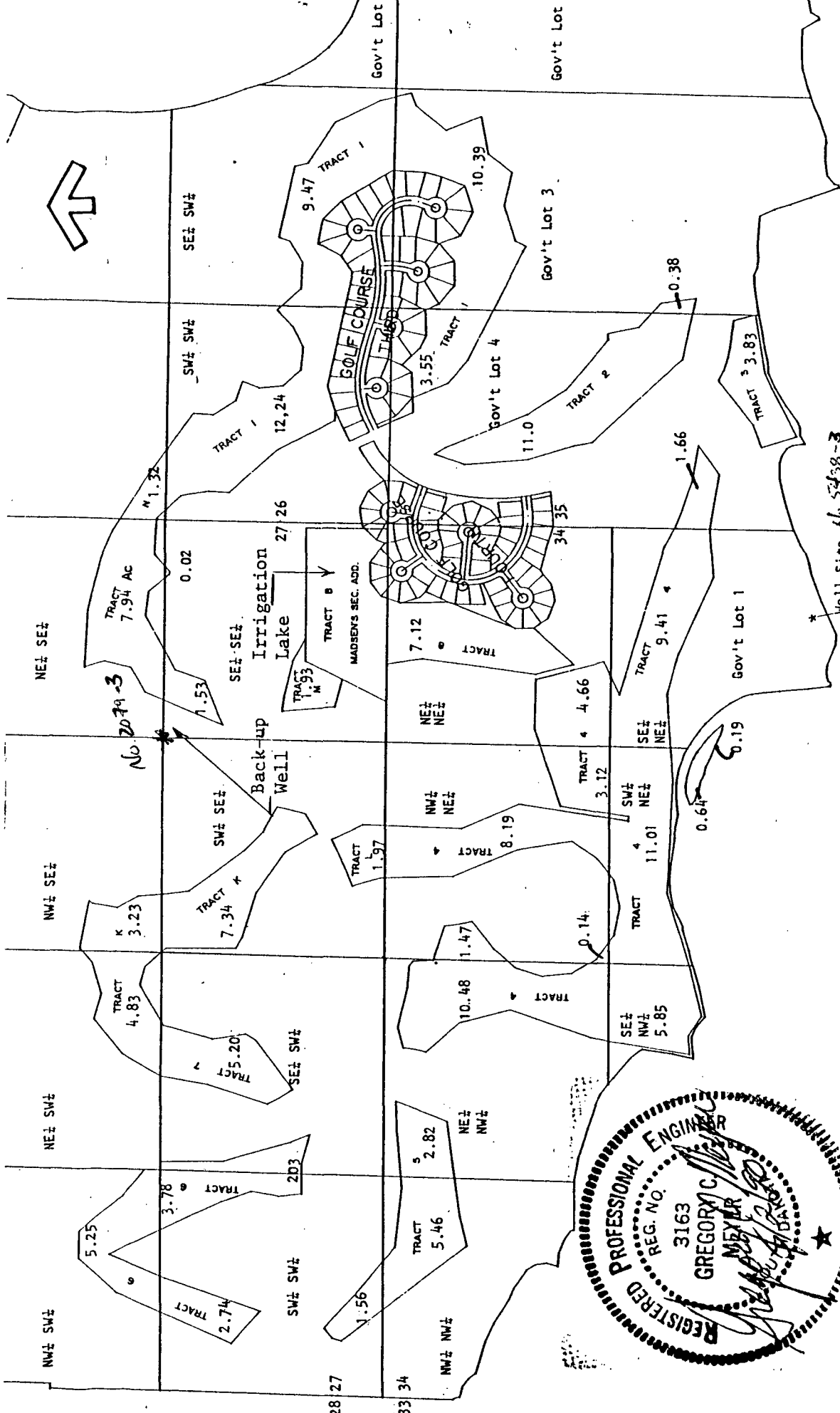
Applicable permit qualifications have been complied with: Yes ☒ No

Exceptions to compliance are: None

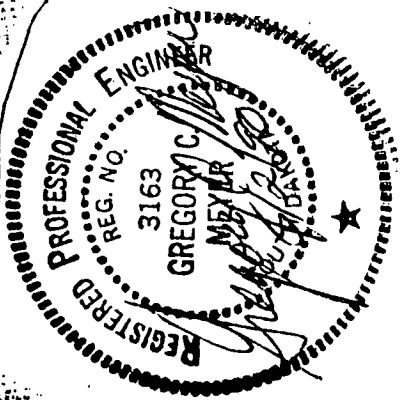
Date: 6/23/93



Gregory C. Johnston
Natural Resources Engineer
DENR, Water Rights Division



Checked 6/23/93
 Gregory C. Johnston (Gregory C. Johnston)
 Application Map
 Dakota Dunes Golf Course



DAKOTA DUNES GOLF COURSE TRACT LAYOUT
 Not to Scale

SCHIEUER

STATE OF SOUTH DAKOTA

WATER LICENSE NO. 5786-3

(1) Dakota Dunes Golf Course, 960 South Dakota Dunes Ave., Dakota Dunes, SD 57049 made Application No. 5786-3, August 27, 1993 for a water permit to divert 1.53 additional cubic feet of water per second (cfs) from an existing dugout, Union County, South Dakota to irrigate land authorized by Water Permit No. 5438-3. Permit No. 5786-3, with a priority date of August 27, 1993 was approved December 1, 1993 and issued to the applicant for diversion of water with construction of the described water supply system completed and the application to beneficial use of said water completed.

- Water Permit No. 2079-3, with a priority date of January 28, 1975, authorizes diversion of 2.64 cfs from a well located in the SE¼ Section 27 to irrigate 185 acres in the SE¼ Section 27 & NW¼ SW¼ Section 26, T89N, R48W.
- Water Permit No. 5438-3, with a priority date of January 28, 1975 (2.0 cfs) and April 12, 1990 (2.5 cfs), amended Water Permit No. 2079-3 by changing the location of irrigated acreage, adding a diversion point and increasing the diversion rate from the proposed well. No. 5438-3 allows diversion of water from the proposed well to a 41.4 acre feet lake (dugout) with application of water from the lake to the land at a rate of 2.47 cfs. The original well (under No. 2079-3) will be used as a backup.

The applicable portions of Water Permit Nos. 2079-3 and 5438-3 are being incorporated into this water license. Priority dates are as follows: **January 28, 1975 - 2.0 cfs (well); April 12, 1990 - 2.5 cfs (wells) & 2.47 cfs (lake); August 27, 1993 - 1.53 cfs (lake).**

(2) It is certified that the applicant has complied with the provisions of South Dakota State Law relating to completion of the construction of the water supply system and is entitled to divert 4.50 cubic feet of water per second from two wells to a 40 acre-feet lake with diversion of 4.00* cfs from the lake to the irrigated acres for beneficial use. The location of the diversion points are Well #1 (backup well) 1,320'N and 1,320'W of the SE corner of Section 27 (center of SE¼); Well #2 (main well) - 643'W and 2,620'S of the NE corner of Section 34 (SE¼ NE¼); lake - SW¼ SE¼ and SE¼ SE¼ Section 27, all in T89N, R48W.

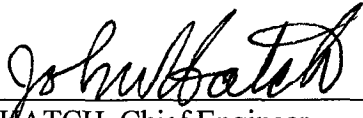
***diversion of 4.00 cfs from the lake to the irrigated acreage must not exceed 15 hours per day**

(3) The applicant has complied with the provisions of South Dakota State Law relating to the application of water to beneficial use to irrigate the following **173 acres - all in T89N, R48W:**

Section 26		Section 27		Section 34		Section 35	
NW¼ SW¼	1 acre	NW¼ SW¼	5 acres	NW¼ NW¼	6 acres	Lot 3	11 acres
SW¼ SW¼	12 acres	NE¼ SW¼	5 acres	NE¼ NW¼	13 acres	Lot 4	20 acres
SE¼ SW¼	10 acres	SW¼ SW¼	8 acres	SE¼ NW¼	6 acres		
		SE¼ SW¼	7 acres				
		NW¼ SE¼	3 acres	NW¼ NE¼	13 acres		
		NE¼ SE¼	8 acres	NE¼ NE¼	12 acres		
		SW¼ SE¼	9 acres	SW¼ NE¼	11 acres		
		SE¼ SE¼	4 acres	SE¼ NE¼	9 acres		

continued

(4) Pursuant to South Dakota Water Law 46-5-30.1 Dakota Dunes Golf Course, 960 South Dakota Dunes Ave., Dakota Dunes, SD 57049 the holder and/or owner of Incorporated Water Permit No. 5786-3 is issued a license to appropriate water, the right to use 4.50 cubic feet of water per second from ground water (two wells) to a 40 acre feet lake with diversion of 4.00 cfs from the lake to the irrigated acreage with priority dates of January 28, 1975 (2.0 cfs - well); April 12, 1990 (2.5 cfs - well; & 2.47 cfs - lake); and August 27, 1993 (1.53 cfs - lake) from the locations specified in (2) of this license. The water to be conducted to and upon lands specified in (3) of this license for the purpose of irrigation. This license is subject to any limitations or qualifications listed in Incorporated Water Permit No. 5786-3 and subject to South Dakota State Law.



JOHN HATCH, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

APR 23 1998

date



RECEIPT

414060

Division of Water Rights

South Dakota Department of Environment and Natural Resources

Pierre, February 28, 19 94

RECEIVED OF Dakota Dunes Country Club, Inc., 960 S Dakota Dunes Blvd, Dakota Dunes, SD

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

57400

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. <u>5786-3</u>	50	00
Fee for Filing Transfer Form _____		
Fee for Filing Extension Request _____		
Fee for _____		

(Any Other Work Provided by Law)	Total	50 00

By John Hatch
Chief Engineer



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

APR 23 1998

5786-3

Dakota Dunes Golf Course
%Doug Hausman
960 South Dakota Dunes Ave.
Dakota Dunes, SD 57049

Dear Mr. Hausman:

Enclosed is Water License No. 5786-3. This is the final water right document completing your process of obtaining a Water Right. Enclosed is Receipt No. 414060 in the amount of \$50.00 which you paid for the investigation and issuance of the Water License.

For your information SDCL 46-6-27 requires that if the owner of an existing well, such as the well authorized by Water Right No. 5786-3, constructs a replacement well and does not plan to use the old well, the old well is considered abandoned and must be plugged. Also, any well that is being used or is not considered abandoned must be valved and controlled, if flowing, or sealed and capped so that no leaking occurs either underground or at the surface.

As long as you use the water beneficially, as stated in the Water License, the State Water Laws provide that you have a continuing right to use the water. If you have any questions, please contact our office.

Very truly yours,

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

gm
enclosures

NOTE: The applicable portions of Water Permit Nos. 2079-3 and 5438-3 are being incorporated into this water license.