

Name Dr. Samuel Werner
~~Dr.~~ Merlin Sanitarium
Address Merlin, Oregon

Application No. 24337
Permit No. 19447
Certificate No. 22124

Stream Index, Page No. 15-78 H
See App. No. R-24336.

FEES PAID

Date	Amount	Receipt No.
<u>12/22/49</u>	<u>15.00</u>	<u>8581</u>
<u>12/28/49</u>	<u>10.00</u>	<u>8630</u>
	B. P. Fee	
<u>1-11-51</u>	\$1 Cert. Fee	<u>0.95-49</u>

FEES REFUNDED

Date	Amount	Check No.
------	--------	-----------

Date filed December 12, 1949
Priority December 12, 1949
Action suspended until 5-30-77

Returned to applicant
Date of approval September 29, 1950

CONSTRUCTION

Date for beginning September 29, 1951
Date for completion October 1, 1952
Extended to
Date for application of water October 1, 1952
Extended to

PROSECUTION OF WORK

Form "A" filed Commenced
Form "B" filed November 5, 1952
Form "C" filed December 22, 1953

FINAL PROOF

Blank mailed June 25, 1954
Proof received
Date certificate issued MAR 7 1957

ASSIGNMENTS

Date	To Whom	Address	Volume	Page
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REMARKS

1.0 cfs from an unnamed stream and reservoir to be constructed under App. No. R-24336, Per. No. R-1026 (Jumpoff Joe Cr. Watershed) for the irrigation of 30 ac. and maintenance of pool for recreation, being 0.75 cfs for irrig. and 0.25 cfs for recreation.

OCT 2 0 1952 CARD FOR B

OCT 14 1953 CARD FOR C

OWNERSHIP UPDATE

W.R.I.S.

Assembled 8-23-85 by [Signature]
Entered _____ by _____
Verified _____ by _____

NOTICE OF COMPLETION OF CONSTRUCTION

I, Samuel Werner M.D., the holder of Permit No. 19447,
to appropriate the public waters of the state of Oregon, completed the construction of the works described
therein on the 21st day of September, 1952

Remarks:

If the works have less capacity than described in the permit, or you have definitely abandoned part of the proposed development, you

should so state in order that our records may not be unnecessarily encumbered.

IN WITNESS WHEREOF, I have hereunto set my hand this 30th day of October, 1952.

Samuel Werner M.D.
(Signature of Applicant)

Merlin, Oregon
(Address)

Fill out, detach, and mail to the State Engineer, Salem, Oregon, when construction work is completed.

Form C

IMPORTANT—This form is a notice to the State Engineer that permittee is ready to make final proof to the extent to which the water has actually been applied to the intended use under the terms of the permit. Permittee is cautioned that Certificate of Water Right will be issued based on the extent of the quantity and use as determined by the final proof inspection and survey which will be made in response to the filing of this Form C.

NOTE: In the case of an irrigation permit, this Form C should not be mailed to the State Engineer until all of the land described in the permit, which it is intended to irrigate under this permit at any time, has actually been irrigated.
Fill out, detach and mail to the State Engineer, Salem, Oregon, when all of the water has been applied.

Application No. 24337

NOTICE OF COMPLETE APPLICATION OF WATER TO A BENEFICIAL USE

I, Samuel Werner, the holder of Permit No. 19447,
to appropriate the public waters of the state of Oregon, completely applied the waters to a beneficial use in
accordance with the terms of said permit, on the 1st day of October, 1953

Remarks:

IN WITNESS WHEREOF, I have hereunto set my hand this 21st day of December, 1953.

Samuel Werner
(Signature of Applicant)

Merlin, Oregon
(Address)



Oregon Water Resources Department
725 Summer Street NE, Suite A
Salem, Oregon 97301
(503) 986-0900
www.wrd.state.or.us

Ownership Update For Certificated Rights Only

NO FEES ARE REQUIRED TO SUBMIT THIS FORM

NOTICE: A certificate of water right typically stays with the land. In order to track water right ownership, the Department requests that this form be submitted to the Department. **To update multiple rights, a separate form is required for each right.**

If you have any questions about this form, please contact your local watermaster, or call the Water Resources Department at (503) 986-0900.

This form is not for Applications, Permits, Transfers, Groundwater Registrations, or Limited Licenses. To notify the Department of changes in ownership to these types of authorizations, an Assignment is required.

Current Landowner Information

Name: Jessica Galizia
Mailing Address: 5334 SE Milwaukie Ave
City: Portland State: OR Zip: 97202
Phone (Home): 541-200-4174 Work: _____ Other: _____

Property Description

County: Josephine Township: 35 S Range: 6 W Section: 28
Taxlot Number(s): 400

Street Address of water right property: 816 Medin Sanitarium Rd, AKA 816 Sanitarium Rd.

Water Right Information: Application: S-24337 Permit: S-19447 Certificate #: 22124

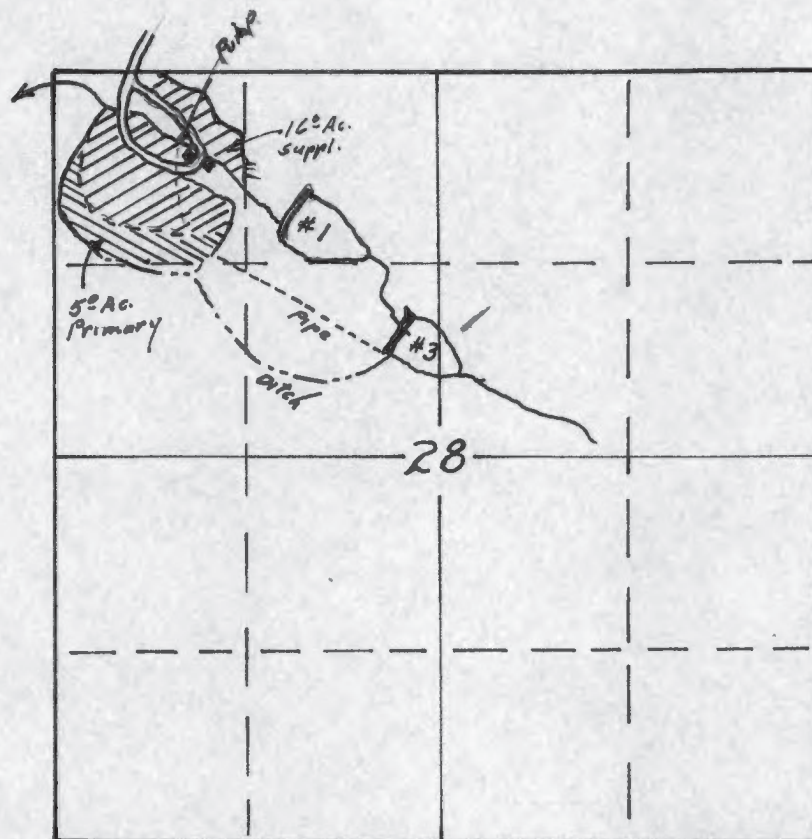
Are all the lands associated with this water right owned by the requester? Yes ☒ No ☐ If No, include a map showing the portion of the right involved.

Name of individual completing this form: Jessica Galizia Phone: 541-200-4174

Signature of requestor: [Signature] Date: 4-26-19

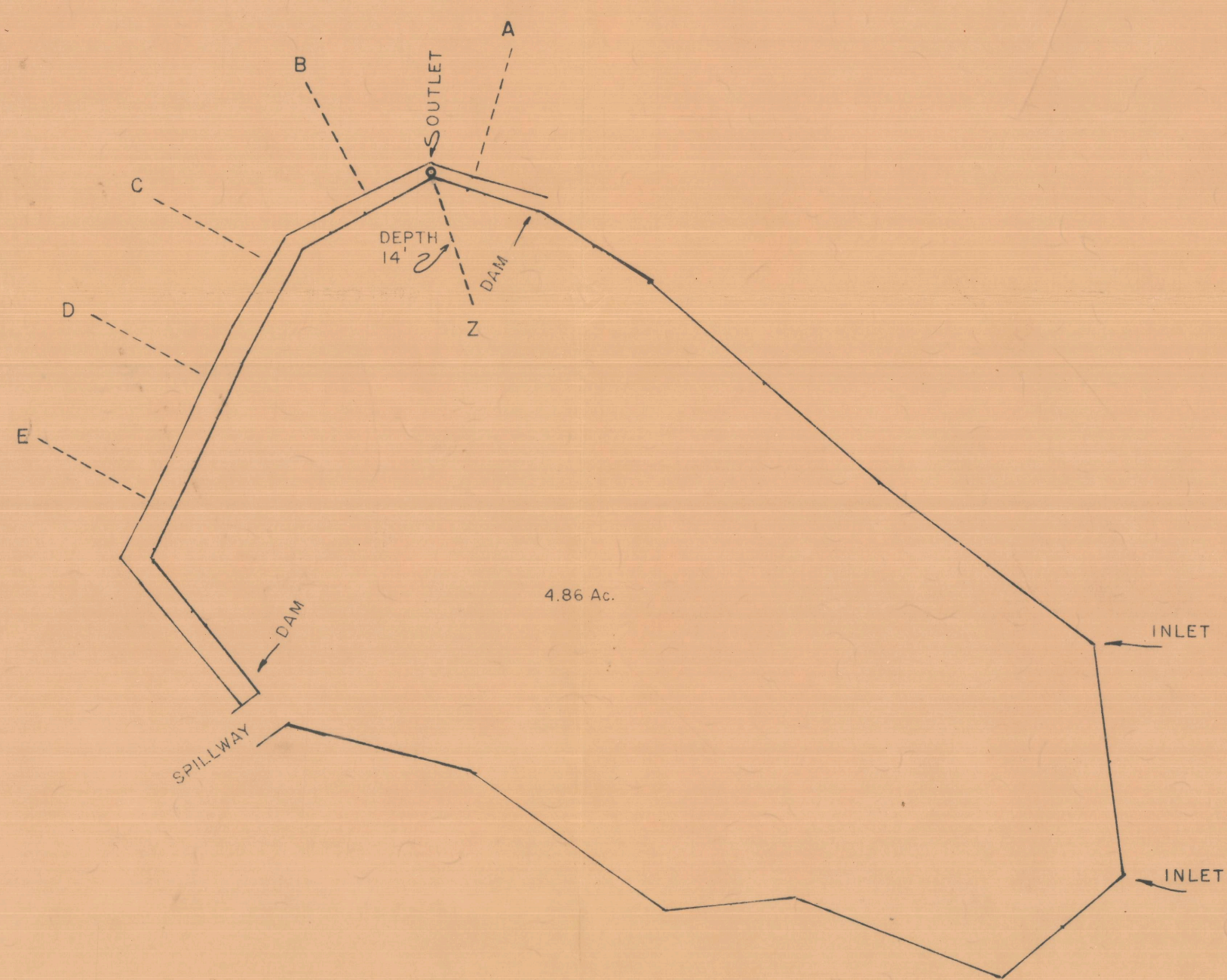
The Department does **not** change names on certificates. This form will be placed in the file for future reference only. The Department does not provide acknowledgement that this form has been received.

Twpr 35 South, Range 6 West.
scale 4" = 1 mile



Application No. R-39284, 39285
Permit No. R-3945, 29349

T.35S.R.6W.W.M.
SECTION 28



DR. SAMUEL WERNER RESERVOIR AND DAM AT THE MERLIN SANITARIUM



SCALE 1" = 100'
MAY 11, 1966

SEVEN CUBIC
FOOT PER SECOND
ALWAYS
BEHIND

COPY

June 8, 1973

R-24336
24337

R-39284
39285

R-43931
43932

Attig and Zimmerlund, Engineers
P. O. Box 339
Regue River, Oregon 97537

Dear Mr. Zimmerlund:

Would you please confirm that you are the construction
engineer for the completion of the Doctor Warner Reservoir?

Advise of your proposed construction schedule.

Very truly yours,

A. M. PETSKA
Engineer

AMP:gb

cc: Doctor Warner
Robert D. Steiner, Watermaster



STATE ENGINEER

WATER RESOURCES DEPARTMENT

1178 CHEMEKETA STREET N.E. • SALEM, OREGON • 97310 • Phone 378-3739

TOM McCALL
GOVERNOR

CHRIS L. WHEELER
State Engineer

January 8, 1973

File No.

Attig and Zimmerlund, Engineers
P. O. Box 339
Rogue River, Oregon 97537

Application No.

R-43931
43932

COPY

Dear Mr. Zimmerlund:

This is to confirm our inspection of January 4, 1973, regarding the "as built" plans and engineering report of the Doctor Werner Project.

As we discussed, your drawings should be complete and accurately portray what Doctor Werner has constructed. Your report should include a summation of all engineering tests conducted to determine the adequacy of the material used in construction, and state your opinion of the structure to perform as a dam. Regarding the earthen material used, as we discussed, you should open the fill to a depth of six or so feet, make a density determination, and if adequate, I do not feel that boring the embankment would be a necessity.

On my way to Salem, I stopped at Mr. Chickering's office in Eugene, and again discussed with him the requirements of the topographic map and the computation of area and compacity curves therefrom.

Very truly yours,

A. M. PETSKA
Engineer

AMP:gb

cc: Samuel Werner

COPY

December 19, 1972

Attig and Zimmerlund, Engineers
P. O. Box 339
Rogue River, Oregon 97537

R-43931
43932

Dear Mr. Zimmerlund:

I have enclosed copies of recent correspondence concerning the Doctor Werner Projects.

I hope to meet with you next week and further explain our requirements, and will advise in advance.

Very truly yours,

A. M. PETSKA
Engineer

AMP:gb

Enc.

CC: Dr. Samuel Werner

PHONE: 582-1466



STATE ENGINEER

WATER RESOURCES DEPARTMENT

1178 CHEMEKETA STREET N.E. • SALEM, OREGON • 97310 • Phone 378-3739

TOM McCALL
GOVERNOR

December 7, 1972

CHRIS L. WHEELER
State Engineer

File No.

R-24336
24337
R-39284
39285
R-43931
43932

Chickering and Associates
1190 West Seventh Avenue
Eugene, Oregon 97401

COPY

Attention: Mr. Chickering

Dear Sir:

This is to confirm our telephone conversation of December 6, 1972, regarding the Doctor Samuel Werner Project in Joseph County, and I have enclosed a copy of the letter to Doctor Werner of November 29, 1972.

As I indicated, it will be necessary that complete plans and certified reports be prepared by a registered, professional engineer covering the "as constructed" projects of Doctor Werner. This applies to those structures that are more than ten feet in height and impound more than 9.2 acre feet of water.

As I further indicated, we have no reservations to this survey being completed by aerial methods provided its accuracy is of first order.

I plan to be in the Grants Pass area sometime during the week of December 11 to 15, and I am tentatively planning on Wednesday the 13th. I will make firm appointments with you on Monday, December 11 by telephone.

Very truly yours,

A. M. PETSKA
Engineer

AMP:gb

Enc.

CC: Dr. Samuel Werner
Watermaster - Robert Steimer



STATE ENGINEER

WATER RESOURCES DEPARTMENT

1178 CHEMEKETA STREET N.E. • SALEM, OREGON • 97310 • Phone 378-3739

TOM McCALL
GOVERNOR

CHRIS L. WHEELER
State Engineer

November 29, 1972

File No. R-43931
39284
24336

Dr. Samuel Werner
Merlin Sanitarium
Merlin, Oregon

Copy

Dear Doctor Werner:

This is to confirm our telephone conversation of November 21, 1972 after my inspection of your reservoirs. I was quite surprised to find that you have built five reservoirs where only two are supposed to exist. As I advised you, it will be necessary that you file applications and supporting data for these reservoirs. Also, there will be further data required on your larger reservoir now under construction. For purposes of this discussion, I have numbered the reservoirs from one to five, and will identify them by their relative location, and advise you of our requirements on each.

Number One: This reservoir is covered by State Engineer's permit R1036, and State Engineer's certificate 22125. This dam is located immediately down stream of your residence and impounds 31.5 acre feet of water for irrigation. In the past, we have had discussions regarding the use of flash-boards. Reference my letter of May 25, 1966, and I repeat, "To provide the necessary hydraulic capacity, flash-boards are to be removed November 1 and are not to be installed until March 15 of the following year," and then the requirements as stipulated in my letter of May 25, 1966, are to be followed.

Number Two: This reservoir is covered by State Engineer's Permit R5062 and this permit is for 60 acre feet of storage for supplemental irrigation and fire protection. The permit further stipulates that the dam is to be built under the supervision of a registered, professional engineer. Plans and specifications were prepared by Tom R. Pearce, approved by the State Engineer, and Mr. Pearce indicated he would be supervising construction.

Dr. Samuel Werner
November 29, 1972
Page Two

The project "as constructed" deviates from the approved plans and specifications. Most of these deviations were approved by our office, with the stipulation that at the completion of construction, as built plans and certified engineers report would be required. Therefore, before the structure can be approved for the storage of water, it will be necessary that you submit "as constructed" drawings prepared by a registered, professional engineer. These drawings should accurately portray the structure you have built, complete in all details. Furthermore, the configuration of the reservoir basin has been altered by excavation to such a degree that the reservoir portrayed by the approved plans does not represent the structure that now exists. Therefore, a new topographical map is required with areas and capacity curves compiled therefrom. This map is to be of first order precision with a contour interval that accurately represents the topography. A report prepared and signed by your engineer attesting to the adequacy of the structure and appurtenances will accompany these drawings. This report will include a compilation of all tests by the engineer.

At the time of the inspection, I noted that a valve had been placed on the downstream of the conduit. This valve is to be removed.

Numbers Three, Four and Five: These reservoirs are located immediately below reservoir number two and none have benefit of State Engineer permits, nor has any application for permit been filed with this office. If you intend to utilize these structure to impound water, it will be necessary that you obtain State Engineer's permits prior to storage. Measurements made at the time of the inspection indicated that two of these three structures are over the statutory limits, and complete engineer drawings and a completion report as outlined, will be required. For your convenience in making these filings, I have enclosed three applications for permit to construct a reservoir and three applications for permit for appropriating water, together with the rules and regulations of the State Engineer.

If you will advise the name of your engineer, I will arrange an appointment to meet with him and yourself at the site to forth advise our requirements.

Very truly yours,

A.M. PETSKA
Engineer

AMP:gb
Enc.
cc: Watermaster

COPY

June 11, 1968

Robert B. Steimer
Watermaster, District 14
525 NW 5th Street
Grants Pass, Oregon 97526

Dear Mr. Steimer:

I am responding to your letter of June 6, 1968, particularly the last paragraph which has to do with raising the water of Dr. Werner's lower reservoir to an elevation two feet above the bottom of the spillway. I can not authorize this storage and your attention is directed to the third paragraph of my letter of May 25, 1966 which reads in part that the maximum water level in the lower reservoir should be no closer than two feet below the crest of the dam at the lowest point that yielded a crest width of eight feet. This two foot distance should not be encroached upon at any time.

Very truly yours,

CHRIS L. WHEELER
State Engineer

By
A. M. Petaka
Engineer

AME:pju
cc: Dr. Samuel Werner
Merlin, Oregon

STATE OF OREGON

COUNTY OF JOSEPHINE

CERTIFICATE OF WATER RIGHT

This Is to Certify, That DR. SAMUEL WIERNER

of Merlin Sanitarium, Merlin, State of Oregon, has made proof to the satisfaction of the STATE ENGINEER of Oregon, of a right to the use of the waters of unnamed stream & reservoir constructed under App. No. R-24336, Permit No. R-1036 a tributary of Jumpoff Joe Creek Watershed for the purpose of irrigation under Permit No. 19447 of the State Engineer, and that said right to the use of said waters has been perfected in accordance with the laws of Oregon; that the priority of the right hereby confirmed dates from December 12, 1949

that the amount of water to which such right is entitled and hereby confirmed, for the purposes aforesaid, is limited to an amount actually beneficially used for said purposes, and shall not exceed 0.4 cubic foot per second

or its equivalent in case of rotation, measured at the point of diversion from the stream. The point of diversion is located in the NE $\frac{1}{4}$ NW $\frac{1}{4}$, Section 21, Township 35 South, Range 6 West, W. M.

The amount of water used for irrigation, together with the amount secured under any other right existing for the same lands, shall be limited to one-fortieth of one cubic foot per second per acre, or its equivalent for each acre irrigated from direct flow and shall be further limited to a diversion of not to exceed $4\frac{1}{2}$ acre feet per acre for each acre irrigated during the irrigation season of each year, from April 2 to October 31, from direct flow and storage from reservoir constructed under Permit No. R-1036.

and shall conform to such reasonable rotation system as may be ordered by the proper state officer.

A description of the place of use under the right hereby confirmed, and to which such right is appurtenant, is as follows:

16.0 acres in the NW $\frac{1}{4}$ NW $\frac{1}{4}$
Section 28
Township 35 South, Range 6 West, W. M.

The right to the use of the water for the purposes aforesaid is restricted to the lands or place of use herein described.

WITNESS the signature of the State Engineer, affixed

this 7th day of March, 1957

LEWIS A. STANLEY
State Engineer

Recorded in State Record of Water Right Certificates, Volume 16, page 22124.

Memo

Fred Gustafson inspected
this project in Nov. 1956
& advises that satisfactory
repairs have been made to
the dam. He advises that
the capacity corresponds to the
31.5 a.f. listed in permit
now. & that the corrected
location as shown on Tom
Pearce's sketch is correct.

Ch.

WATER RESOURCES DEPARTMENT

ADDRESS ALL COMMUNICATIONS TO
TOM R. PEARCE, ENGINEER
COURT HOUSE
GRANTS PASS, OREGON

STATE OF OREGON
OFFICE OF
WATER DISTRICT NO. 16
GRANTS PASS, OREGON

WATERMASTER DISTRICT NO. 16
OREGON REGISTERED ENGINEER NO. 898
CALIFORNIA LICENSED SURVEYOR NO. 2301

July 16, 1954

RECEIVED
JUL 19 1954
STATE ENGINEER
SALEM, OREGON

Mr. Chas. E. Stricklin
State Engineer
303 State Office Building
Salem, Oregon

Re: Application No. 24337
Permit No. 19447 - R-1036
Dr. Samuel Werner

Dear Mr. Stricklin:

Enclosed are forms for Proof of Appropriation of Water in the name of Dr. Samuel Werner under permits No. 19447 and R-1036.

Report:

During July 15th, 1954, I made inspection of the works described in the proofs and found a 4 acre reservoir constructed, having a depth of water of about 20 feet at the lowest points. The dam had a length of crest of 450 feet and a width of 10 feet, with a 3 to 1 slope on the upper water surface side, and 1 to 1 slope on the lower side. There was a spillway carrying the water around the dam, being partly constructed of earth and continued with a concrete structure, being 6 feet in width and about 20 feet in length, and taking water around the dam. The conduit at the northerly end of the dam carries water through the dam. I was unable to see this conduit, but it appeared to be of concrete tiling about 8 or 10" in diameter. The outflow was in a pool of water which had been formed by the velocity of water from the conduit cutting a hole in the earth. This did not appear to be altogether safe. The water was conveyed from the outlet in to a ditch which was about 2 feet in width and 4 feet in depth, being a very slow grade for 200 feet until it reaches an irrigation ditch, described in the accompanying proof.

I made inspection of the lands which were being irrigated and found that the irrigation was being made by the use of 22 revolving sprays which were drawing about 5 gallons per minute each. I estimated there were 16 acres being irrigated. On the north side of the unnamed creek there was a small ditch constructed. The ground appeared to have been irrigated, although there was no crop, there were patches of green places.

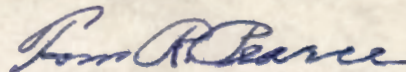
The object of this report is to call attention to the fact that the location of the dam and places of use as shown on the map which accompanied the application (apparently made by registered engineer No. 2016) is probably in error. The location of the legal subdivision for the irrigated land as shown on the permit is not on the property. The proof form did not give the location

Page -2-
Dr. Samuel Werner

of applicant's property, but records in the assessor's office show that applicant does not own the legal subdivision as described under item 8 of the proof form. The assessor's office asserted they would not accept the location of the reservoir as shown on map that accompanied the water application. Inasmuch as the reservoir has a capacity of from 40 to 60 acre feet and the dam is over 10 feet in height, it seems to me that there should be plans and specifications in regard to this development. Also the map of the acreage to be irrigated is apparently in error. This map failed to show any topography or location of pump or diversion dam, and was of very little use to me in the field. I have given considerable effort trying to get this straightened out, but believe that further study should be made before my sketch map, which I am sending to you, is considered as conclusive.

I have filled in the forms to the best of my ability, but do not make recommendations that certificates of water right be issued until further investigation is made.

Very truly yours,



Tom R. Pearce
Watermaster, District No. 16

TRP:rm

Enclosures

Permit No. 19447Application No. 24337County JOSEPHINE**Proof of Appropriation of Water**

1. Name Dr. Samuel Werner 2. Address Merlin Sanitarium, Merlin, Oregon
3. Source of supply unnamed stream and reservoir to be constructed under Application No. R-24336, Permit No. R-1036.
- Tributary of Jumpoff Joe Creek Watershed
4. Amount of water 1.0 ^{0.4} 5. Priority date December 12, 1949
- ~~irrigation and maintenance of pool for recreation, being 0.75 cfs for irrigation and 0.25 cfs for recreation.~~ 1/40.. or its equivalent for each acre irrigated from direct flow and shall be further limited to a diversion of not to exceed $\frac{1}{2}$ acre feet per acre for each acre irrigated during the irrigation season from April 2 to October 31 of each year from direct flow and storage from reservoir to be constructed under Permit No. R-1036.
7. Location of point of diversion NE $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 21 Tp. 35 S Rg. 6 W, W.M.
(Legal Subdivision)
8. The description of land given below corresponds to that shown in the permit covering land to be irrigated, or, if for other purposes, the place of use.

Township	Range	Section	Legal Subdivision	No. Acres Actually Irrigated
35 S	6 W	21 ?	NW $\frac{1}{4}$ NW $\frac{1}{4}$ 27.0	0
			NE $\frac{1}{4}$ NW $\frac{1}{4}$ 3.0 and pool	0
35 S	6 W	28	NW $\frac{1}{4}$ NW $\frac{1}{4}$	16.0

Land on which water is to be used is part of the property described by appropriator as follows:

DESCRIPTION OF WORKS

9. (a) If a dam has been constructed, give description: Height, 15 ft.; length on top, 450 ft.; length on bottom, 430 ft.; material used and character of construction, earth dam
- (b) Give description of headgate: Width, 1 ft.; depth, 1 ft.; material used and character of construction, 12 inch metal gate.
- (c) Size of canal: Width on top (at waterline), 1 ft.; width on bottom, 0.6 ft.; depth of water, 0.5 ft.; grade, 3 ft. fall per 1,000 ft. Actual capacity, 0.5 sec.-ft. Give general description: Earth ditch.
- (d) Pipe line: Description of intake, 3" pipe inserted in pool
- Length of pipe, 700 ft.; size at intake, 4 in.; size at 700 ft. from intake, 4 in.; size at place of use, 4 in. Difference in elevation between intake and place of use, 60 ft. with 40# pressure
- Is grade uniform? Yes Actual capacity of pipe line, 0.25 c.f.s. sec.-ft.
- Give general description: aluminum pipe. Also 880 ft. of 3" pipe with revolving sprays.
(Material: Steel, wrought, cast iron, wood stave, etc.)
- (e) Pumping plant: Give size and type of pump, 2" Cornell pump.
- Suction lift, 10 ft.; discharge lift, 50 ft. Type of motor used Electric
- Horsepower rating, 5.5 H. P. Actual capacity of pump, 0.25 sec.-ft. with 40# pressure
10. During what months is water beneficially used? April to Oct. 1
11. State character of soil Granite.
- Kind of crops raised Clover, garden and pasture.
12. Does the accompanying map, filed with your application, show correctly the point of diversion, area of land irrigated, or place of use? No.
13. If not, wherein is such map in error? Map erratic. See report.
14. Domestic use: Give number of families actually using water at this time
15. If for power, mining, municipal, manufacturing, storage or any other purpose than irrigation, give extent and method of such use

AFFIDAVIT OF APPROPRIATOR

STATE OF OREGON,

County of _____ } ss.

I, _____, being first duly sworn, depose and say that I have read the above and foregoing proof of appropriation of water; that I know the contents thereof, and that the facts therein stated are true.

IN WITNESS WHEREOF, I have hereunto set my hand this _____ day of _____, 19_____.

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

Notary Public for Oregon

[Notarial Seal]

My commission expires _____

AFFIDAVIT OF WITNESSES

STATE OF OREGON,

County of _____ } ss.

We, _____, and _____ of _____, being first duly sworn, depose and say that

we are well acquainted with the facts and conditions set forth in the foregoing statement relative to proof of appropriation of water under Permit No. _____, that we and each of us have been over and upon each tract described in said proof, and from such personal inspection have knowledge that all necessary ditches, dams and other diversion and distributing works have been constructed, and water used as stated therein; that we have carefully read such proof of appropriation, and that each and every statement contained therein is true to the best of our knowledge and belief.

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

Notary Public for Oregon

[Notarial Seal]

My commission expires _____

REPORT OF PERSON MAKING INSPECTION

(For use by Representative of State Engineer)

I, _____, do hereby certify that I have made an inspection of the works described herein and in Permit No. _____, on the _____ day of _____, 19____, and found the foregoing statements and descriptions of works to be accurate. In my opinion the appropriation has been completed to the extent of _____
(Quantity of water in second-feet or acre-feet)
and I recommend the issuance of water right certificate for this amount.

NOTICE TO INSPECTORS

If conditions do not justify the above report by you, please return the proof without your signature, with a full report by letter.

(Name)

(Title)

22124

County Josephine

Proof of Appropriation of Water

RECEIVED
JAN 11 1957
STATE ENGINEER
SALEM OREGON

1. Name Dr. Samuel Werner 2. Address Merlin Sanitarium, Merlin, Oregon
3. Source of supply unnamed stream and reservoir to be constructed under Application
No. R-24336, Permit No. R-1036
Tributary of Jumpoff Joe Creek Watershed
4. Amount of water 0.4 cfs 5. Priority date December 12, 1949
irrigation 1/40th - from direct flow and 4 1/2 a.f. - from direct flow and storage
6. Use /from reservoir constructed under Permit No. R-1036 - during the irrigation season
from April 2 to October 31 of each year.
7. Location of point of diversion NE 1/4 NW 1/4 Sec. 21, Twp. 35 S, Range 6 W, W. M.
(Legal Subdivision)
8. The description of land given below corresponds to that found in your permit covering land to be irrigated, or, if for other purposes, the place of use.

[illegible]

I have read the above and foregoing proof of appropriation of water; I know the contents thereof, and that the facts therein stated are true.

IN WITNESS WHEREOF, I have hereunto set my hand this 9th day of January,

19.57

Merlin Sanitarium Inc.
General Werner - Pres.

R-24336
24337

June 5, 1968

Robert B. Steimer
Watermaster, District 14
525 NW 5th Street
Grants Pass, Oregon 97526

Dear Bob,

Would you at your earliest convenience check the Samuel Werner Project and report as to what is going on.

Very truly yours,

CHRIS L. WHEELER
State Engineer

By
A. M. Petska
Engineer

AMP:pju

June 23, 1967

Mr. Tom R. Pearce, Engineer
1550 N.E. "A" Street
Grants Pass, Oregon 97526

Dear Mr. Pearce:

With reference to your letter of June 16, 1967 regarding the Werner Project and previous correspondence, in your first paragraph you indicate that drainage area of this project is approximately one-third of a square mile. I compute the peak flow for the conditions you outline at 100 cfs. With reference to Dr. Werner's computations, you must bear in mind that while the flood of December 1964 in some areas be considered a 100 year flood occurrence. This was not universally so. In fact, some streams barely made the 25 year occurrence. In view of the conditions, particularly with a fairly large reservoir immediately downstream, I could not justify approving a spillway that would pass less than 100 cfs with 2 feet of freeboard. While on the subject of the spillway, I would suggest you provide your design for an uncontrolled crest, as the use of flashboards to raise the water level in the summer will not be approved.

In your second paragraph, you indicate that there is installed an 8 inch steel pipe conduit probably without cutoffs. I would suggest that you check this. You further indicate the pipe will operate under a maximum head of 26 feet, with a draft tube head of 10 feet. Please advise as to the meaning of "draft tube head". You further indicate that an 8 inch steel pipe would carry about 3 second feet. I assume you mean under a static head of 26 feet; this is probably an excellent estimate, however, you must remember that this flow could not be expected to continue as the head on the pipe is falling as the reservoir is emptied. To adequately determine the length of time necessary to empty this reservoir, it would be necessary that you prepare an area and capacity curve, compute the flow of the pipe at varying heads, and then compute the discharge and the resulting contents in increments.

In your last paragraph, you indicate your purpose is to determine the economical feasibility of the project and to obtain data for plans and specifications. I am enclosing a copy of the Rules and Regulations of the State Engineer Relavent to Surface Water and your attention is drawn to pages 14 and 15 which indicate the information that is necessary to be provided on the plans and specifications. With reference to the economical feasibility

Tom R. Pearce

2

June 23, 1967

of the project, this is a matter that can only be determined by yourself and your client.

Very truly yours,

CHRIS L. WHEELER
State Engineer

By
A. M. Petaka
Engineer

AMP:sh

Enclosures

cc: Mr. Robert B. Steiner
Watermaster District #14

Dr. Samuel Werner

June 13, 1967

Dr. Samuel Werser, M.D.
752 N.W. 6th Street
Grants Pass, Oregon

Dear Dr. Werser:

With reference to your letter of June 8, 1967, as I recall, last year when I looked at your project, you had a small dam constructed, or partially constructed immediately above the major reservoir. I assume this is the dam site you speak of. My notes are rather sketchy regarding this inspection; however, I do recall that the fill encompassed a pine tree on the right abutment and that the area immediately below the dam was wet and swampy, and we speculated that it was due to an inadequate cutoff. Apparently, the trench you have excavated and backfilled may be accomplishing the purpose of cutting off the underseepage. However, if you will recall, I suggested that you retain the services of an engineer to direct these activities. With reference to your last sentence in the first paragraph, I have no authority to grant Mr. Pearce permission to go ahead. - If I would caution you that since this structure will be over the statutory limits, it will be necessary that plans and specifications be prepared and filed with the State Engineer as supporting data for applications for permits to construct a reservoir. These plans and specifications must have the written approval of the State Engineer prior initiating construction. These approved plans and specifications will be in force and effect when the permits are issued.

With reference to the size of the spillway, I am not aware of the little book you speak of; however, the spillway that will be accepted will be of that configuration that will pass the 100 year storm with 2 feet of freeboard.

When your engineer has firmed up his plans for the development of this project, if you will so advise I will schedule an immediate inspection of this project.

Very truly yours,

CHRIS L. WHEELER
State Engineer

By
A. M. Petaka
Engineer

AMP:sh

CC: Mr. Robert B. Steiner

March 14, 1967

Mr. Robert B. Steimer
Watermaster District #14
525 N.W. 5th Street
Grants Pass, Oregon 97526

Dear Mr. Steimer:

Would you please perform an inspection of the Samuel Werner Reservoir to ascertain if the flashboards are out of the spillway and if it is in a shape to pass the expected flood of the coming spring season?

You might advise Mr. Werner of the expected date that he may install his flashboards to retain water.

Very truly yours,

CHRIS L. WHEELER
State Engineer

By
A. M. Petska
Engineer

AMP:sh

R-24336
24337

November 1, 1966

Mr. Robert B. Steimer
525 N.W. 5th Street
Grants Pass, Oregon 97526

Dear Mr. Steimer:

Would you please perform an inspection of the Samuel
Werner Reservoir to ascertain if flashboards are out of the
spillway and if it is in a shape to pass the expected flood of
the coming season.

Very truly yours,

CHRIS L. WHEELER
State Engineer

By
A. M. Petska
Engineer

AMP:sh

May 23, 1966

Mr. Robert B. Steimer
Watermaster, District 14
525 N. W. 5th Street
Grants Pass, Oregon 97526

Dear Mr. Steimer:

This is with reference to your letter of May 23, 1966 regarding the Samuel Werner Reservoir. I am quite concerned with the differences that I find at this structure and what the plans and specifications show.

The plans for this dam specify a crest width of 15 feet. In most areas of this structure the crest falls far short of 15 feet. Furthermore, the downstream slope is to be 2:1. The slope you show is as steep as 1.2:1 but never less than 1.5:1. This dam has definitely not been constructed in accordance with the plans and specifications submitted by the applicant and as shown on the plans which were prepared by Ray N. Cruden in October of 1949.

I do not wish to create any undue hardship on Dr. Werner, however, I feel that in operating this structure close to the top creates a hazard, and in areas where the cross sectional of the dam has been reduced through faulty construction, the water level should at no time be closer than two feet to the crest. I believe I instructed you that the water level was to be two feet below the crest of the dam at the lowest point that yielded a crest width of 8 feet.

Furthermore, during the wintertime or the period from November through March or April, as local hydrological conditions govern, I feel that all the boards in the spillway should be removed.

I will perform another inspection of this project probably on Tuesday, June 7, 1966 and will telephone you from the airport.

Very truly yours,

CHRIS L. WHEELER
State Engineer

By

A. M. Petska
Engineer

AMP:jb

CC; Dr. Samuel Werner

R-24336
24337
W-26
May 18, 1966

INSPECTION REPORT

On Tuesday, May 17, 1966 in the company of Robert E. Steimer, Watermaster, District 14, I inspected the Dr. Werner Dam and found that he had not obeyed Mr. Petska's orders to lower the water surface to two feet of freeboard. Dr. Werner had removed one 2 x 4 from the spillway, but had neglected to remove any of the earth in front of the 2 x 4 so that the water could escape.

Previous to this inspection, Mr. Steimer in the company of Mrs. Werner had opened the dam outlet and the water surface had lowered approximately one-tenth of a foot. Prior to our inspection the conduit had been closed.

David B. Hall
Engineer

DBH:jb

MEMORANDUM

Werner Reservoir

H-24336

24337

W-26

5-19-66

During an inspection of another project on Monday, May 9, 1966, it was found that this reservoir is impounding water to within less than one-half foot of the crest of the dam at the low point. Dr. Werner was requested to lower the water surface to within two feet of the crest and the watermaster was instructed to see that this was carried out.

On Tuesday, May 17, 1966, David B. Hall of this office performed an inspection of this project and found that the instructions had not been complied with. Sometime prior to this latter inspection the watermaster, in the presence of Mrs. Werner, had partially opened the valve. However, the water level had been reduced to one-tenth less than on the date of this first inspection. Furthermore, only one 2 x 4 had been removed from the spillway flashboard section. The permit calls for the impoundment of water to within three feet of the crest and the plans call for the impoundment of water to within two feet of the crest.

This was pointed out to the State Engineer that a hazardous condition exists and that Dr. Werner is in violation of the terms of the permit and that instructions should be issued to the watermaster to take immediate action to draw the water level down in compliance with the plans and specifications and the permit.

Mr. Steiner was so advised by telephone this date.

A. M. Petaka
Engineer

cc: Robert B. Steiner
Chester Cummings

R-24336
24337

January 2, 1957

Dr. Samuel Werner
Merlin Sanitarium
Merlin, Oregon

Dear Dr. Werner:

With reference to your letter of recent date enclosed are the forms for making final proof of appropriation of water under your Permit Nos. 19447 and R-1036.

You should date and sign both forms at the bottom of the page and return them to this office together with the statutory certificate recording fee in the amount of \$2, being \$1 for each permit.

Very truly yours,

LEWIS A. STANLEY
State Engineer

By
Chris L. Wheeler, Assistant

CLW:ld
enc. final proofs

SAMUEL WERNER, M. D.

PHYSICIAN AND SURGEON

752 N.W. 6TH STREET

GRANTS PASS, OREGON

Grants Pass, Oregon.

December 3, 1956.

State Engineer,

Salem, Oregon.

RECEIVED
DEC 5 1956
STATE ENGINEER
SALEM, OREGON

Dear Sir:

As discussed with Mr. Gustafson authorization is hereby given to change the location on my reservoir and water rights applications R-24336 and 24337 from sec. 21, T 35 S, R 6W, W.M. to Sec. 28, T 35S, #6W, W.M.

Very truly yours,

Samuel Werner M.D.
Samuel Werner M.D.

W-26
R-21336
21337

November 15, 1936

Dr. Samuel Werner
752 N. W. Sixth Street
Grants Pass, Oregon

Dear Dr. Werner:

According to the location map prepared by Mr. Cruden, your reservoir and irrigated lands are in Sec. 21, T 35 S, R 6 W, W. M., more particularly in the NE $\frac{1}{4}$ NW $\frac{1}{4}$ and in the NW $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 21. Mr. Pearce states that the location, subject to confirmation by survey, should be in the NE $\frac{1}{4}$ NW $\frac{1}{4}$ and NW $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 28, T 35 S, R 6 W, W. M. and further states that the County Assessor confirmed that your deeded property does not include the lands described by Mr. Cruden. It appears that the error was in proper designation of the section number, not in location of the reservoir and irrigated lands within the section.

On my first trip through Grants Pass, I will stop either in your office or at Merlin to discuss your permits further.

Very truly yours,

LEWIS A. STANLEY
State Engineer

By
Fred D. Gustafson
Engineer

FDG:lac

W-26
R-24336
24337

October 25, 1956

Dr. Samuel Werner
752 N. W. Sixth Street
Grants Pass, Oregon

Dear Dr. Werner:

On August 5, 1955, a letter was written to you advising you that you had a choice of lowering the spillway of your reservoir to the extent that only 31.5 acre feet of water would be stored therein, as authorized in your Permit R-1036, or of filing new applications for permits to store and use for irrigation that amount of water in excess of 31.5 acre feet.

You further were advised that irregardless of your choice, since the reservoir was not constructed in accordance with the original plans, it would be necessary for you to have a registered engineer prepare plans showing the reservoir as constructed, the plans to provide the information outlined on Page 18 of the "Rules and Regulations of the State Engineer".

Will you please advise this office of your progress in obtaining the required plans. It is hoped that you will have a favorable report to submit, or that you immediately will take steps to procure the plans in order that it will not be necessary for this office to take further action as provided by law.

Very truly yours,

LEWIS A. STANLEY
State Engineer

By
Fred D. Gustafson
Engineer

FDG:lac

February 18, 1955

Samuel Werner, M. D.
752 N. W. 6th Street
Grants Pass, Oregon

Dear Dr. Werner:

This will acknowledge receipt of your letter of February 10, in regard to your Permits No. R-1036 and 19447. With reference to the location of your reservoir, the application and survey map which you submitted to accompany the reservoir application, as prepared by your engineer, Mr. Ray H. Creeden, listed the reservoir as being within the NE $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 21, T. 35 S., R. 6 W. Our subsequent inspection indicated that it was in the NE $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 28 as stated in your letter.

With reference to your reservoir storing more water than set out in the permit, it will be necessary for you to file new applications for a permit to store the additional water and for a permit to apply that additional water to beneficial use.

Both for the completion of your present permits and for the filing of the new applications, it will be necessary that you have a survey made correctly showing the location and plans of the dam and reservoir as actually constructed.

If you wish to call at the office regarding the requirements of such filing, one of the engineers will be glad to discuss the matter with you. With reference to the cutting occurring below the spillway, Mr. Schlapkohl of this office will make an inspection to determine the safety factor of the corrective work you have done or advise you as to what additional work will be required the next time he is in your area.

Very truly yours,

LEWIS A. STANLEY
State Engineer

By
Chris L. Wheeler, Assistant

CLW:bc

R-24336
24337

February 3, 1955

Dr. Samuel Werner
Merlin Sanitarium
Merlin, Oregon

Dear Dr. Werner:

A reply to our letter of August 31, 1954, would be appreciated so that action may be taken towards the completion of your Permits No. R-1036 and 19447.

Very truly yours,

LEWIS A. STANLEY
State Engineer

By
Robert D. Best, Assistant

RDB:bc

August 13, 1954

Dr. Samuel Werner
Merlin Sanitarium
Merlin, Oregon

Dear Dr. Werner:

A representative of this office recently visited your project for the purpose of making the final proof survey under Permit Numbers R-1036 and 19447.

He reports that the location of your project does not agree with the map which you submitted or description of the project as set out in the permits. He further reports that there is some question regarding the safety of your dam.

In order that the matter may be properly described, it is suggested that you have a new survey made as to the location of the project, and the actual quantity of water stored. It is the estimate of the field engineer this is in excess of 31.5 acre feet as set out in the permit. In which case in order for it to legally cover the additional storage, it will be necessary to make new applications.

It will also be appreciated if you will submit a legal description of the property involved copied word for word from your deed, abstract or contract.

Very truly yours,

CHAS. E. STRICKLIN
State Engineer

By
Chris L. Wheeler, Assistant

CLW:eh

R-24336 24377
R-25113 25114
26279
24684
14730

August 13, 1954

Mr. Tom R. Pearce
Watermaster District No. 16
County Court House
Grants Pass, Oregon

Dear Mr. Pearce:

This will acknowledge receipt of and thank you for your reports regarding:

Permit Nos. R-1036 and 19447 in the name of Dr. Samuel Werner
Permit Nos. R-1070 and 19761 in the name of Harry C. Rush
Permit No. 20626 in the name of Margaret A. Heald
Permit No. 19412 in the name of Guy H. Wahl
Permit No. 10730 in the name of Collin W. Campbell

Action in line with your suggestions will be taken by direct correspondence with the holders of the permits.

With reference to Permit No. 10730, this permit was confirmed by issuance of a certificate according to your recommendation, July 18, 1938.

Very truly yours,

CHAS. E. STRICKLIN
State Engineer

By

Chris L. Wheeler, Assistant

CLW:eh

January 5, 1954

Dr. Samuel Werner
Merlin Sanitarium
Merlin, Oregon

Dear Dr. Werner:

This will acknowledge receipt of your notice to the effect that complete application of water has been made under Permit No. 19447.

Pursuant to your report and in line with the general practice of this office, a survey will be made at a later date for the purpose of checking the amount of water used as described in the permit, including the acreage actually irrigated. After this survey, proof may be made and certificate issued covering the actual use of water as found by the engineer. Any lands described in the permit that have not been irrigated will be automatically eliminated from the water right.

In the meantime, the permit which you hold will be valid evidence of the water right.

Very truly yours,

Chas. E. Stricklin

CHAS. E. STRICKLIN
State Engineer

R-24336
& 24337

December 18, 1953

Dr. Samuel Werner
Physician and Surgeon
752 N. W. 6th Street
Grants Pass, Oregon

Dear Sir:

This will acknowledge the receipt of your form "C",
reporting on complete application of water to its proposed use.

Upon examination of this form it is noted that it was for
application No. R-24336, permit No. R-1036, instead of the application
No. 24337, permit No. 19447, on which this report is required.

Enclosed please find a new form "C" which should be completed
and returned at your earliest convenience and this letter is also to
advise you that the date upon complete application of water should have
been made was on or before October 1, 1953.

Very truly yours,

CHAS. E. STRICKLIN
State Engineer

By
Robert D. Best, Assistant

RDE:gx
Enc. 1

24337
R-24336

November 5, 1953

Mr. Samuel Werner, M. D.
Physician and Surgeon
752 N.W. 6th Street
Grants Pass, Oregon

Dear Doctor Werner:

In response to your letter of October 19 regarding your Permit Numbers R-1036 and 19447, please be advised that if you have irrigated all of the land described in the permit that it is your intention to do so and used the water in accordance with the terms of the permit, then all that is necessary for you to do at this time is to report this completion by filling out and returning the enclosed Form C, which is a duplicate of the one attached to the back of your permit.

Since your permits have already been issued, there would be no reason for submitting an application referred to in the second paragraph of your letter.

Very truly yours,

CHAS. E. STRICKLIN
State Engineer

By
Chris L. Wheeler, Assistant

CLW:eh
enc.

SAMUEL WERNER, M. D.

PHYSICIAN AND SURGEON

752 N. W. 7th SOUTH SIXTH STREET

GRANTS PASS, OREGON

W 26
R 24336
24337RECEIVED
OCT 20 1953
STATE ENGINEER
SALEM, OREGON

Grants Pass, Oregon.

October 19, 1953.

Mr. Charles E. Stricklin,
State Engineer, Water Resource Dept.
Salem, Oregon.

Dear Mr. Stricklin:

I recieved a card from you inquiring if I had used the water I stored in the reservoir. The answer is that I have used it for irrigation both using a sprinkeling system and flood irrigation.

I have the application for permit blank. "To appropriate the public waters of the state of Oregon" It seems to me that this applies more to a living stream, and wondered if you had a blank applying more to the use of water out of a reservoir. As you know that we catch the run off, and there is barely a trickle in the creek during the summer, and most of the summer not even ~~now~~ a trickle.

We have a head gate at the dam from which place we run the water down the creek to a sump behind a ~~st~~ steel reinforced concrete dam creating about a quarter acre feet of water. From there we have a five horsepower centrifical pump of about seventy feet head that pumps into a sprinkling pipe or 18 sprinklers. This covers about twelve acres which can be irrigated by sprinkling. In all under the present set up I should judge to be 20 acres altogether that could be irrigated including the area sprinkled.

If you have another form kindly let me know. If not I will try as soon as possible to complete this present form.

Very truly yours,

Samuel W. Werner M.D.

Grants Pass Set in Heart of Scenic Wonderland



24337

November 7, 1952

Dr. Samuel Werner
Merlin Sanitarium
Merlin, Oregon

Dear Dr. Werner:

This acknowledges receipt of Form B, being notice of the completion of construction under Permit No. 19447 in the name of Dr. Samuel Werner

This report has been filed with other matter pertaining to the water right, and the permit is in good standing until October 1, 1953, when under its terms, all the water which it is intended to use at any time should be used to the full extent intended.

Very truly yours,

Chas. E. Stricklin

CHAS. E. STRICKLIN
State Engineer

Form 119

24337

September 29, 1950

Dr. Samuel Werner
Merlin Sanitarium
Merlin, Oregon

Dear Mr. Werner:

Herewith you will find Application No. 24337, Permit
No. 19447, together with blueprint.

R-21336
21337

January 19, 1950

Dr. Samuel Werner
Merlin Sanitarium
Merlin, Oregon

Dear Dr. Werner:

After receipt of the required map as explained on Pages 6 and 8 of the enclosed copy of the Rules and Regulations of the State Engineer, your Applications No. R-21336 and No. 21337 can be placed in line for approval by issuance of permits.

When the map is submitted it should be accompanied by the legal description of the property on which you propose to use water copied word for word from your deed, abstract or contract.

Very truly yours,

CHAS. E. STRICKLIN
State Engineer

By
Ed E. Humphrey, Assistant

EKH:dh
Enc.

W 26
R-24336 ✓
24337

December 19, 1949

Mr. Ray N. Cruden
Registered Professional Engineer
P. O. Box 41
Grants Pass, Oregon

Dear Mr. Cruden:

As requested in your letter of December 16, 1949 there is enclosed herewith a letter approving the plans and specifications for the construction of the Dr. Samuel Werner dam as submitted by you. You will note that a carbon copy of the letter has been mailed to the P. M. A., Josephine County Committee.

It is doubtful whether this organization will grant the financial assistance on the basis of this letter alone. In other cases in other counties they have also required a statement from this office to the effect that a permit for the construction of the dam has been issued and all other requirements have been complied.

In checking into this matter I find that not all requirements for issuance of permits have been complied with. There is still due a payment of \$10.00 to complete payment of the fees, and a map showing the location of the lands to be irrigated with the water to be appropriated, is required to be submitted. These are requirements fixed by law and must be complied with.

The application was received here on December 12, 1949, which is too late and with the large number received each month does not allow sufficient time to be processed and for the permit to be issued. However, if you will send check for \$10.00 to cover fees remaining to be paid and submit the map of the lands to be irrigated we will furnish a statement to the effect that all requirements of this office have been met, on the basis of which, it is believed, the assistance will be granted.

Very truly yours,

CHAS. E. STRICKLIN
State Engineer

By
Ferd Schlapkohl, Assistant

FS:eg

W 26
R-24336 ✓
24337

December 19, 1949

Mr. Ray W. Cruden
Registered Professional Engineer
P. O. Box 41
Grants Pass, Oregon

Dear Mr. Cruden:

The plans and specifications for the construction of the Dr. Samuel Werner dam as submitted by you are approved pursuant to section 116-502, O. C. L. A.

Yours very truly,

CHAS. E. STRICKLIN
State Engineer

FS:eg

FINAL PROOF SURVEY FIELD CHECK LIST

Name: DR. SAMUEL WERNER Permit#: R-1036

Address: MERLIN SANITARIUM, MERLIN, OREGON

Township 35S Range 6 W. Section 28 Forty NE 1/4, NW 1/4 AND SE 1/4, NW 1/4

Use to which water is to be applied IRRIGATION

Location point of diversion (by coordinate system) N.W. COR. SEC. 28

BEARS N 61° 35' W 1960' FROM DIVERSION.

Flood Irrigation: SEE OVER

Ditches and canals: Width at top (max. waterline) _____; width at bottom _____; depth of water _____; grade _____ feet fall per 1000'; capacity _____ second feet.

Diversion: Describe diversion dam _____; headgate _____; weir _____; fishscreen _____; other _____

Pump and pipe or sprinkler systems:

Pump: Make _____; type _____; No. _____; intake size _____; discharge size _____; suction head _____; discharge head _____; G.P.M. rating _____; R.P.M. _____; pressure _____.

Power plant: Type _____; make _____; H.P. rating _____; R.P.M. _____.

Power connection: Direct connected unit _____; belt driven unit; size of drive pulley _____; driven pulley _____.

Distribution system: Main line: size _____; length _____; kind of pipe _____. Lateral lines: size _____; length _____; kind of pipe _____.

Sprinkler heads: Make _____; size of nozzles _____; # heads used _____; discharge of each _____ G.P.M.; operating pres. _____.

Reservoirs:

NE 1/4, NW 1/4 AND SE 1/4 NW 1/4
SEC. 28 T. 35 S. R. 6 W. W. M.

Name of reservoir WERNER; location _____;
surface area 4.86; maximum depth 14' AT OUTLET; mean depth UNK.;
acre feet stored UNK; proposed use IRRIGATION; source of
water to reservoir UNNAMED STREAM; dimensions of feed canal ^{MULTIPLE} CHANNEL;
location pt. of div. from stream SE. SIDE RESERVOIR; location of
diversion from reservoir N. 61° 35' W 1900' TO N.W. COR. SECTION 28,

Dams:

Location NE 1/4 NW 1/4 SEC 28 T. 35 S. R. 6 W. W. M., MEDLIN SANITARIUM
length of top 445' ±; length of bottom 400' ±; width 9 TO 17 FEET (SEE REMARKS,
(not less than 8 feet); height 24.75' (from ground to top at
centerline); upstream slope 2.7:1 (measure distance from
upstream top to toe, not steeper than 3:1); downstream slope 1.2:1 TO 1.5:1
(measure distance from downstream top to toe, not steeper than 2:1);
freeboard .5' (AS MEASURED 11 MAY 1966) (not less than 2 feet); construction material and
details EARTH FILL, DECOMPOSED GRANITE.

Spillways: (Must be around, not over dam. Must provide 2' free-
board at flood).

Drainage area in acres UNK; bottom width 5.8'; top width
5.8'; depth 4'; construction material CONCRETE.

Outlet:

(Asphalt dipped corrugated iron pipe of size to pass natural
flow.) (Not less than 2 concrete or metal "asphalt dipped"
cutoff collars spaced 10' apart.)

Location in dam ^{THRU BASE DAM} AT NORTH SIDE; size UNK; material UNK.

Other remarks:

1. SPILLWAY PARTIALLY CLOSED AT TIME OF SURVEY, 11 MAY 1966.
2. TOP WIDTH AT 50' INTERVALS: 12', 9', 10', 12.5', 14', 17', 16', 17', 16', 13'.
3. SLOPE DOWN STREAM: 66%, 71%, 81%, 67%, 73%.