Application No. 17632
Permit No. $1342 \neq$
Certificate No. 19542

Stream Index, Page No. 1-24
Date filed $\theta$ tolu e $14 / 19.38$ O.talues 14, 1938
$\qquad$
$\qquad$
Returned to applicant
Date of approval...$\quad$ Fehrusany 1419.39
CONSTRUCTION
Date for beginning 7edruany 141940

Extended to $\qquad$
$\qquad$
Date for application of water etalon $1 / 441$
Extended to $\qquad$
$\qquad$
PROSECUTION OF WORK
Form "A" filed ... November 1 5, 1939
Form "B" filed ......Oct G 1940
Form "C" filed $\qquad$
FINAL PROOF
Blank mailed $12-3 /-4 / c$
Proof received $\qquad$
Date certificate issued $\qquad$
 munieritel lee.

FEES PAID

| Date | Amount | Receipt No. |
| :---: | :---: | :---: |
| $10 / 17 / 38$ | 10.00 | 23.508 |
| $2 / 21 / 39$ | 2.00 | 2.4068 |
| Total |  |  |
| $2 / 21 / 5 /$ | $\$ 1$ Cert. Fee | 1.682 |

FEES REFUNDED
$\qquad$
$\qquad$
Van dy pe in e.28.2 30 g. grown bear cree 4 2 Perernanen for
$\qquad$
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Form A
 to appropriate the public waters of the state of Oregon, began the actual construction of the works described therein on the $20-$ day of ..... Arucecher

Remarks:
up to the date of this statement, and any addjfional information which may tend to show the beginning of work in good faith.
$\qquad$
IN WITNESS WHEREOF, $I$ have hereunto set my hand this
$\qquad$ (Signature of Witness)

$\qquad$

$\qquad$
(Address)
(Address)
Fill out, detach, and mail to the State Engineer, Salem, Oregon, when construction work is begun. state printing dept.

Form B
Application No. 17632 NOTICE OF COMPLETION OF CONSTRUCTION

I, $\qquad$ City to appropriate the public waters of the state of Oregon, completed the construction of the works described therein on the $1=22$ day of ....echerfoe .................... in. 78

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.
$\qquad$


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


Form C
Application No. /76.32
NOTICE OF COMPLETE APPLICATION OF WATER TO A BENEFICIAL USE
I, $\qquad$ , the holder of Permit No. $10 \rightarrow 2 \rightarrow$ 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 $\qquad$ day of $\qquad$ 19.2 ?

Remarks: $\qquad$ If all of the water granted in the permit has not been fully applied to beneficial use, you should so state.
$\qquad$

$\qquad$

1. Name City of Astoria,

Bear Creek and Two Reservoirśáconstructed under application No. 17631

Columbia River
Tributary of
$\qquad$ 5. Priority date October 14,1938
4. Amount of water
3.0 cf s.
$3.0 \mathrm{cf}-$
6. Use $\qquad$ $\frac{1 /}{9-13}$ $7 \mathrm{~N} \cdot-$
Twp. $7 \mathrm{~N} \cdot$

7. Location of point of diversionS SP SW I S S
8. The description of land given below corresponds that found in your permit covering land to pe irrigated, or, if for other purposes, the place of use. In the blank column on the right, headed "No. acres actually irrigated", fill in the number of acres you hate irrigated in each of the tracts described:


## DESCRIPTION OF WORKS

 9. (a) If a dam has been constructed, give description: Height, $\qquad$ ft.; length on top,
length on bottom $\qquad$ ft.; material used and character of construction, Cap eh wakes (books formed by dams) 772000000 gallous. (b) Give description of headgate: Width, ...............ft; depth, ................f.; material used and character of construction, SElMa, SS $^{\text {S }}$ $\qquad$ $\square$

(c) Size of canal: Width on top (at waterline) $\qquad$ ft.; width on bottom, $\qquad$ ft.; depth of water,
ft.: grade, $\qquad$ ft. fall per $1,000 \mathrm{ft}$. Actual capacity, $\because=-\quad$ sec. -ft.
 huns l: Jfaoo coo Gallon Co paucity
(d) Pipe line: Description of intake, $\qquad$
$\qquad$
$\qquad$
Length of pipe $/ / .6 \kappa \%$. ft.; size at intake, $\qquad$ in.; size at $\qquad$ ft. from intake, in.; size at place of use, .............in. Difference in elevation between intake and place of use, $\not \subset 26=\mathrm{ft}$. Is grade uniform? $\qquad$ Actual capacity of pipe line, $\sqrt{2} \mathcal{Z} M / G D$, sect
Give general description: $\square$
Give genera
$\qquad$

## (e) Pumping plant: Give size and type of pump,

$\qquad$
Suction lift, ho u iss bris discharge lift,
$\qquad$ ft. Type of motor used
Horse power rating, H. P. Actual capacity: of pump;

sec.-ft:
10. During what months is water beneficially used? Al/ysac- foooooo Guseage Daily Cops.
11. State character of soil $\qquad$
Kind of crops raised 5300 Ssnulicis (uncter)
12. Does the accompanying map, filed with your application, show correctly the point of diversion, area of land irrigated, or place of use? $\qquad$
13. If not, wherein is such map in error? $\qquad$
$\qquad$
14. Domestic use: Give number of families aetuallyousing water at this time E E
15. If for power, mining, municipal, manufacturing, storage or any other purpose than irrigation, give extent and method of such use $\qquad$

## AFFIDAVIT OF APPROPRIATOR

STATE OF OREGON,
County of $\qquad$ Clatsop

I, .....Brewer A. Billie, City Manager, City of Astoria, Oregon being first duly sworn, deposit 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.
of $\qquad$ February 19451


Subscribed and sworn to before me this $\qquad$ day of $\qquad$
$\qquad$

Notary Public for Oregon
[Notarial Seal]
My commission expires $\qquad$

STATE OF OREGON,
County of .......clatsop
of
$\qquad$ Es and

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. $\qquad$ ; 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 neces-
 stated therein, that we havecarefully read such proof of appropriation, and that each and every statement contained therein if true to the best of our knowledge and belief.

## .



# mebbat of reason making tistection 

## (For ma se in repranontative of state Ingefieer) <br> I, <br> 

 an inspection of the works described herein and in Permit No 10. 134 , on the 90 $\qquad$ day of - Alp 195O, and found the foregoing statements and descriptions of works to be accurate. In my opinion the appropriation has been completed to the extent of $\qquad$ (Pumatht) et Fiber in and I recommend the issuance of water right certificate for this amount:
## Hand

NOTES TO TNEPECTORS
 \& fut by you, please return ale proof whiteout your signature, whit h a full report by letter.
 cousd-ieet or acre-seet)






CITY OF ASTORIA, OREGON


What lose herewith paying your invoices as listed below:
\& category crayon

-20
on Serzmey for
Oonctinction
Pro Argon 1320,
2.20

$$
p^{6^{3}} 2
$$

Receipt
no. 24068
sent 2/27/39
city of astoria


Mr. Bruce J. Clausen, City Engineer City of Astoria
1095 Duane Street
Astoria, Oregon 97103
Dear Sir:
During our recent inspection of the City's water supniy reservoirs, I noted a dense Escoth of bruci cnd mini trees on the embankments forming Midale end Wickiun Lake reservoira, particularly on the comstream saces. I sugcest wat this vegetation be removed. Removal, rinich is a wimajard meintence procedure, will prevent possible iormation of leatage peths by root intrusion into the 1111 , and vill allow vicuinl inspection for eny cracking, aliding or leakage winch might occur in the embankment.

With the exception of the partialiy deteriorated voocen cuivort in the outlet channel of the Wickiup Late spilliva, I noted no structural deficiencies. As you edvised me, materials arve been ordered for replacement of the cuivert.

Thank you for your conaideration.
Very truly yours,
G. I. OENRHOINZER

Engineer
GIO: whh

# February 13, 1951 

## City of Astoria <br> Astoria, Oregon

## Gentlemen:

If you will sign and date the enclosed final proof on its second sheet and return the proof to this office, together with the statutory certificate recording fee of $\$ 1.00$, a certificate confirming the right under your Permit No. 13424 may be issued for the appropriation of 3.0 cubic feet of water per second from Bear Greek and two reservoirs for mmicipal supply.

These figures indicate the extent and limit of your water right as provided by law, and mark the completed right.

In the interest of economy and due to the fact that your completed project was examined by a representative of this office, it is not considered necessary that your signature be made before a notary public, nor that the signatures of witnesses be affixed to the proof.

Very truly yours,


CHIS. E. STRICKIIN
State Engineer
Enclosure
Form 174

City Hapager iatoria, oregon
tear Hr. MeClean:
This ackowledgea receipt of your
letter: of October 31, with which you exbmitted Forms $C$, being notices of complets appilication of water under your Poraltel Mos. R-724 and 13424.

Puramant to your roports, and in lise With the general practice of this affice, a arrvey Wll be made sometime next year for the parpose of chocking the amount of weter naed min described in the permit. After this aurvey, proof may be made by you and certificate issued covering the actual use of water as found by the imapector.

In the miantime, the pernit which you bold will be valld and sufficient evidence of your meter right.

Very traly jours,
CRAS. E. ETRTCTHTH
State magineer

By
Ed X. Elumphroy; Ans't.

# THE CITY OF ASTORIA, OREGON <br> COMMISSIONERS: <br> AXEL WILLIAMS 

October 31, 1941

Mr. Chas. E. Stricklin State Engineer
Salem, Oregon

Dear Sir:


e
4.

Inclosed herewith is Notice of Complete
Application of Water under Permit No. 13424.
Yours very truly,
5. J.th Cleou

City Manager.

```
Hr. G. T. EcClean, City Manager
City of istoria
Astorie, Oregon
Dear Mr. McClean:
For your convenience in reporting complete application of water, or requesting an extension of tise under your Permit No. 13424, covering the use of 3 c.f.s. of water from Bear Creek and two reservoirs, I am enclosing herewith a form "C" and a blenic on which an application for en extension of time way be subaitted.
Coxplete application of water means the actual use of all the water under this permit wich it is intended to use at any time to the full extent of such intended use.
```

Very truly yours,
CHAS. E. ETRICRLIN
State Engineer

By
Ed F. Humphrey, Assistent

EXH:dy Sacl.

October 10, 1910

Clisy of Antoria
Antoria, Oregon
Centleanat Attemitions 0. T. Fecleen, City Mre
This acknotiedges recelipt of your letter of
Oetober 8th with which yous mallosed notions of the completion of construction under Permits Loil. P-724 and 13424.

These noticen have been filed and your perruita are in geod stending natil October 1, 194, rben, puder their terss, complote appilestion of water shorid be accoupliohed.

Very troly yoars,
GHS. Es SHRICKITM
State Enginear

D
HE
Ed K. Fhaphrey, Ansisterint

## Harch 2, 1959.

## City of Aetoria, Astoria, Oregon.

## Gentlemens

Herewith you will find Application No, 17682, Perwit Ho. 12424.

The application has been approved and recorded in this office.

## Jamaty 28, 1939

Ir. G. F. Heclern
City Engineer

- Aetoril, Oregon

Dear Sirs
Upon rechocking Application Ho. 17632 in the name of the city of Astoria, it is noted that only $\$ 10.00$ in fees was subuitted covering this application. The fees covering an appilication of this nature are computed as follows:


This leaves a balance due of $\$ 2,00$. Upon receipt of this amount, the matter of approval of your application by isenance of a pernit will be given attontion.

Very truly yours,
CBRS. B. STRICKLTI
State Engineer

By

October 31, 1938.

Wr. ©. T. EDCLem<br>City Endineer<br>Astorie, Oregon<br>Dear Mr. MeCleant

This ia to savise you thet I bave ceanized the revieed pinne of the Like Wickiup reaervoif and the Mudde Port reservoir atorage dama, anted October 27, 1938, abeets if and 12, and the revised pleat end specifications and wili acicnowledge reeedpt of your letter ciated October 30,1938 , relative to the deaigner of the spill mey capacity.

You are advised that the plans and mpecifications are approved by me purmuant to asction 47-702 Oregon Code 1930.

Yours very truly,

CHAS. E. STRICKWTI
Cx8: 5
Stete Fogineer.

Hr. G. F. YeCleen City Engineer Astoria, Oregon

Dear Mr. McCleanz
In accordiance with Section 47-702 Oregon Code 1930, the witer will make an examinktion of the proposed Middle Fork reservoir and Lake Wickfup reservoir on Tbursday, October 27.

Trust this date kill be satisfactory to you if not let me know.

Yours very truly,
CaAS. E. STRICKLII
State Fagineer

> By L. A. McAlisster, Ass't.

Lulca:fo

Wr. G. T. MeClean
City Engineer
AEtoria, Oregon
Dear Mr. McClean:
This is to advise that I have examined the plans and apecifications of the dame of the Hiddl. Fork reservoir and the Lake हickiup reservoir.

The law contemplates that before approval the State Engineer shall make an exawination of proposed works. Therefore, I will endeavor to have an exasination made of the aites sometime next week. You will be advised later of the deifnite date.

The specifications or the plans submitted do not show - log of materisis upon which the dars are to be constructed or the character of the material with wich the dams are to be constructed other than the rock specified.

It is noted from the specifications that the rock fill is to be compacted. I am yondering what plan you bave of compacting the rock. The specirications provide also that the earth fill can be compacted by means of a tractor. There is a question in wy mind as to whether or not the material can be compacted suificientiy by this method. If you will compute the weight of the tractor per square foot or inch, it will be relatively swill compared with the standard specifications. I am enclosing a copy of the geacral specifications of the Rock Creek Das which are somewhat standard specifications, and I would suggest that you give this matter careful considerstion, particularly the matter of construction of the earth embanionent. We cen discuss this more fully at the time of the inspection.

It is noted that the specifications provide for some preparation of the foundation before placing the earth fill. However, no provisions are made for a out-off trench. It is suggested that you give this matter careful consideration.

The spillmay is another ipportant detail and in comection therewith we would appreciate having the drainsge area, and if you have any records of the rm-off, we would appreciate being furnished with the aame. If you do not have these records, we would appreciate receiving your computations for determining the capacity of the spillway.

It is noted that you contemplate some rock in the earth fill. With the type of dan which you have designed, it is very imperative that the earth portion be placed very carefully and thet it is of suitable material. Usually all rocks in excess of 5 inches in diameter are removed before the earth portion of the dam is compacted, as the material cannot be rolled with rock larger than this diameter, and the amount of rock in the earth fill should be limited in order to pernit the securing of a maximum density after compaction and prevent stratification.

It is noted also that the up-stream face of your dam is designed with slopes of $2: 1$ and 2 各:1. This is a detail wich we will discuss after we have had an opportuaity to examine the aites and the materials on which the dams are to be constructed.

Very traly yours.

CHAS. B. STRICKLII
State Eagineer
CES:nfw

October 17, 1938.

City of Astorla, Astoria, Oregon.

Attentions Mr. G. T. McClean, City Engineer.
Centlement
Receipt iś hereky ecknowledged of your letter of October 12, With which you enclosed an application for a permit to construct two reservoirs to be known as the $H$ 保dile Reservoir and the Lake Tickiup Resorvir for the purposes of storing water from Bear Creek for municipal purposes in the City of Astoria and an application which I believe was intended to be a secondary application to accompany a reservoir application and to cover the appropilation of the stored water as described in the firgt application, together with fees in the amount of \$17.48. Receipt No. 25508 is enclosed.

The applications have bean filed and given Ho. R-176s1 and 17652 , respectively.

In order that the secondary spplication; namely, No. 17882 may cover the appropriation of water fron Bear Creek and the reservoirs as described under Application lio. R-17681, as I believe is intended by you, I bave partialiy filled out another appilcation blenk and an enclosing it berewith for your convenience in completing it by inserting under Iten 2 the amount of water for which you wish to apply in second-feet or gallons per nifute and by filling in under Iten 8 the place of use contemplated as to forty-acre tract, section, township and range, The proper etgnatures shonild also be attached. This applicetion has been endorsed so that in order to retain ite priority it mast be returned to thie office within thirty deys or on or before (loveaber 17, 1938.

You will be advised later concerning blue prints and specifications which were subaitted with the above applications.

Very truly yours,
CHAS. E. STRICKLIT, State Fagineer.

By
Ed K. Anmphrey, Assistant.
BKH:EB
nele.

## 且里里 0


#### Abstract

The renervoir in seetion 2，Townhip 7 Forth，Range 8 Weat， does not appear to have any vater Fight according to a notation on a map In application R－17631，the dar was built in 1911－13．Reportedly the dat vas raised approximately 16 feet in 1953 and the new capsoity is 700 aore fect．Stevens and Thompson reportedly did the engineering．


By<br>\[ \begin{aligned} \& Jerry W. Eggleston,<br>\& Engineer \end{aligned} \]

J. C. TEN BROOK

CITY MANAGER
JAMES O. CONVILL

October 12-1938


Mr. Chs. E. Strickling, State Engineer, salem, Oregon.

Dear sir:-
I am this day sending to you, under separate cover, copy of plan and specifications for the conattraction of two additional reservoirs in the BEAR CRESH headwaters.

Yon will note that the works proposed are an extension of the existing facilities of the City of Astoria and that these proposed reservoirs draw their storage waters from the same source as our present City of Astoria supply.

We realize that we have delayed considerable in forwarding this information to you but the assembly of final details was geld up until approval of the project by the P.W.A.
P.W.A. requirements are that we have full plans and specifications in their office by Oct. 15th. This will be complied with. They also require that we begin the construction work not later than Hov. 25 th . end, as it requires three weeks for bids to be advertised, we mast begin such advertisement very shortly in order to comply with the date for commencing work.

It is for this reason that we are asking for the earliest possible action on our applications for water storage and construction of the dams and reservoirs as shown by the pland and specifications.

The city of Astoria apparently has heres had a State Water Right on Bear Creek bat has been aging water therefrom since 1895 at which time they purchased the then existing water system from the Columbia Water Co.

## *APPLICATION FOR A PERMIT

# To Appropriate the Public Waters of the State of Oregon 

1, City of Astoria, a manicipal Corporation organized under the laws of the State of Oregon ${ }^{\text {(Name of applicant) }}$<br>of .-.- Astoria (Pos offle)<br>State of .... Oregon following described public waters of the State of Oregon, SUBJECT TO EXISTING RIGHTS:

If the applicant is a corporation, give date and place of incorporation ...Incorporated by an act
....filed. Wi.th the Secretary of state on Feb. 18-1891

1. The source of the proposed appropriation is .-.......Bear Cxaek
a tributary of .......C.OIumbia River.
2. The amount of water which the applicant intends to apply to beneficial use is ...t.orgge only
of 162,000,000 Gallons, atored in winter and balence of water to pasa cubic feet per second. down creet. One filling only of reservoirs
(If water is to be used from more than one source, give quantity from each)
**3. The use to which the water is to be applied is Manicipal Feter Snpply
(Irrigation, power, mining, manufacturing, domestic supplies, etc.)

 (Section or subdivision)
the S.W. corner of Sect. 18 T. 7 N. Re B W. WeMe.....being wi.thin the S.E. $\frac{1}{4}$ of


|  |  |
| :---: | :---: |
|  |  |

R. ..----................., W. M., in the county of
5. The No ditches but one 600 Ft . 12" pipe terminating in the S. F . $\frac{1}{4}$

 R. ......................, W. M., the proposed location being shown throughout on the accompanying map.

DESCRIPTION OF WORKS

 1. 20 Et 10 F't feet; material to be used and character of construction both dams to be lower hall

rock and brush, timber crib, etc., wasteway over or around dam)
(b) Description of headgate Midde Reservoir discharge from $12^{n}$ pipe and Iake Wickiup disoherged through $18^{\circ}$ pipo both into creek Iegaing into present operating reservolr lower down on creek
(c) If water is to be pumped give general description Ho (Size and type of pump)
(Size and type of engine or motor to be used, total head water is to be lifted, etc.)

* A different form of application is provided where storage works are contemplated. ** Appilications for permits to appropriate water for the generation of electricity, with the exception of municipalities, must be made to the
Hydroelectric Commission. Either of the above forms may be secured, without cost, together with instructions by addressing the State Engineer, Hydroelectric C
Salem, Oregon.

7. (a) Give dimensions at each point of canal where materially changed in size, stating miles from headgate. At headgate: width on top (at water line) feet; width on bottom
-........................... feet; depth of water $\qquad$
$\qquad$ feet fall per one thousand feet.
(b) $A t$
miles from headgate: width on top (at water line)
feet; width on bottom
feet; depth of water feet;
grade feet fall per one thousand feet.
(c) Length of pipe, $\qquad$ ft.; size at intake, in.; size at $f t$.
from intake $\qquad$ in.; size at place of use $\qquad$ in.; difference in elevation between intake and place of use, $\qquad$ ft. Is grade uniform? $\qquad$ Estimated capacity, sec. $f t$.
8. Location of area to be irrigated, or place of use ....Water for Manioipal use in Ast oria

(if more space required, attrach separate sheet)
(a) Character of soil
(b) Kind of crops raised

## Power or Mining Purposes-

9. (a) Total amount of power to be developed $\qquad$ theoretical horsepower.
(b) Quantity of water to be used for power sec. ft.
(c) Total fall to be utilized $\qquad$ feet.
(d) The nature of the works by means of which the power is to be developed
(e) Such works to be located in $\qquad$ (Legal subdivision) of Sec.

(f) Is water to be returned to any stream? ...- Yes
(g) If so, name stream and locate point of return A11 retnrued to Besrecreseat

(h) The use to which power is to be applied is
(i) The nature of the mines to be served

Municipal or Domestic Supply-
10. (a) To supply the city of Astoria, Oregon
Cletapp
County, having a present population of .-1,000
and an estimated populatoin of $\qquad$
(b) If for domestic use state number of families to be supplied
(Answer questions 11, 12, 13, and 14 in all cases)
11. Estimated cost of proposed works, $\$ 33,000,00$
12. Construction work will begin on or before Hov. 25-1938
13. Construction work will be completed on or before .........Oct. 25-1939
14. The water will be completely applied to the proposed use on or before .. Jun 17.
(1)

Signed in the presence of us as witnesses:
(2)




Dotocie. Nolingen.
Remarks: The City of Astoria now obteing its municipal water from Bear Creek through an 18" (increased in sections to 22") pipe I2 miles long to a gravity concrete dam on Bear creek where 100,000,000,gRIIng storage is carried. This gravity dam. is about il miles below Proposed Middle Reservoir and $2 \frac{1}{2}$ miles below Jake Wickiup Reservoir Proposed storage Fill be released es need into upper Bear greek in order to replace water dramifrom present reservoir.

## STATE OF OREGON, <br> County of Marion,

This is to certify that I have examined the foregoing application, together with the accompanying maps and data, and return the same for $\qquad$
$\qquad$
$\qquad$

In order to retain its priority, this application must be returned to the State Engineer, with corrections on or before $\qquad$ 193 $\qquad$
WITNESS my hand this ....-..........-......... day of ............................................ 193.........


This is to certify that I have examine the foregoing application and do hereby grant the same, SUBJECT TO EXISTING RIGHTS and the following limitations and conditions:

The right herein granted is limited to thedumount of water which can be applied to beneficial use and shall not exceed $\qquad$ cubic feet perssond measured at the point of diversion from the stream, or its equivalent in case of rotation with other water users, from $\qquad$

$\qquad$
and shall be subject to such reasonable rotation system as may be ordered by the proper state officer.
The priority date of this permit is $\qquad$
Actual construction work shall begin on or before $\qquad$ and shall thereafter be prosecuted with reasonable diligence and be completed on or before $\qquad$

Complete application of the water to the proposed use shall be made on or before $\qquad$ WITNESS my hand this $\qquad$ day of $\qquad$ 193. $\qquad$

STATE ENGINHER
Permits for power development are subject to the payment of annual fees as provided in sections 1 and 2, chapter 74, Oregon Laws 1933.

TO APPROPRIATE THE PUBLIC
WATERS OF THE STATE
OF OREGON

