

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
IN-OFFICE REVIEW/BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATIONExam Date: 12/05/20231. Does this qualify for an in-office field exam (IDAPA 37.03.02.035.01.r)? X Y ___ N

- a. X Irrigation of 5 acres or less
 b. ___ Storage of up to 14.6 AF for stockwater purposes only
 c. ___ Any use other than irrigation or storage, if the combined diversion rate is 0.24 cfs or less
 d. X Other < >

2. Current Owner: **WTW REVOCABLE TRUST- William Withers**

Owner of Record Correct? ___ N

Address of Record Correct? ___ N

If No Explain:

3. Beneficial Use Fees have been paid: X Y ___ N Receipt No: C117180

4. Source: Tributary:

SOUTHFORK COEUR D'ALENE RIVER COEUR D'ALENE RIVERMethod of Determination: GIS and Tax lot data.Change in Source: ___ Y X N**B. OVERLAP REVIEW**1. Other water rights with the same place of use: X No Overlap

Water Right No.	Source	Purpose of Use	Basis
NONE	NA	NA	NA

Comments: There are no rights overlapping the permit place of use (POU).2. Other water rights with the same point of diversion: X NO Overlap

Water Right No.	Source	Purpose of Use	Basis
NONE	NA	NA	NA

Comments: There are no rights sharing the permit point of diversion (POD).**C. DIVERSION AND DELIVERY SYSTEM**

1. Location of Point(s) of Diversion:

Source	Govt. Lot	1/4	1/4	1/4	Sec.	Twp.	Rge.		County
Southfork CDA River			SW	NE	32	49N	02E	B.M.	SHOSHONE

Method of Determination: GIS and Tax lot data.Change in POD? ___ Y X N Amendment Required? ___ Y X N

2. Place of Use: IRRIGATION

TWP	RGE	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
49N	02E	32			0.9														0.9
		Lot #																	
Total Acres =																			0.9

Method of Determination: Shoshone County Maps, Shoshone County Warranty Deed 486329Wd, GIS, and TAXLOT DATAChange in POU? ___ Y X N Amendment Required? ___ Y X N

Place of Use: FIRE PROTECTION & DOMESTIC

TWP	RGE	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
49N	02E	32			X														X
		Lot #																	
Total Acres =																			X

Method of Determination: Shoshone County Maps, GIS, and TAXLOT DATAChange in POU? Y X N Amendment Required? Y X N

 Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable.

 X Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.

 X Aerial Photo Attached (required for irrigation of 10+ acres).

 Photo of Diversion and System Attached

3. Diversion Id No.*	Motor Make	HP	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
Screened inlet in River	Unknown	1.5	Unknown	Unknown	Unknown

*Code to correspond with No. on map and aerial photo

D. FLOW MEASUREMENTS

1. Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
NONE	NA	NA	NA	NA	NA	NA

2. Measurement Comments: The permit holder did not know the make/model of the pump, but stated that it is 1 ½ Hp. A maximum head of about 20 ft was estimated using the DRG map.

E. FLOW CALCULATIONS Additional Computation Sheets Attached

Measured Method:

A theoretical calculation and Administrative Memo #17 were used to determine a reasonable rate of diversion for irrigation.

$$Q = (1.5 \text{ Hp})(8.8)(0.80 \text{ efficiency})/(20 \text{ ft lift}) + (2.31)(45 \text{ psi}) = 0.09\text{cfs}$$

Theoretical Calculation= 0.09cfs

Permit allowed = 0.20cfs

Recommendation= 0.09 cfs (total including fire protection)

Comments:

Approximately 0.09cfs is possible with a 1 ½ Hp pump. According to Administrative memo #17 up to 0.03cfs per acre is standard for the irrigation of up to 5 acres. I am recommending a diversion rate of 0.03cfs for irrigation on the license. The permit holder stated that the water is delivered to a shop with a full bath and separate structure just south of the river with an RV hook up providing water to the RV the permit holder lives in. According to Administrative Memo #22, 0.06cfs and 1.2 AF is the standard rate and annual volume for 2 domestic Homes. According to the permit holder the full bath includes a lavatory (4 gpm), toilet (5 gpm) and shower (6 gpm), which would require a total maximum diversion rate of 15 gpm or 0.03 CFS, as per the Rural and Domestic Water Uses reference in the Field Examiners Handbook. I am recommending 0.06cfs for domestic use on the license.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = \underline{0.9\text{-acre} \times 3.0 \text{ AF} = 2.7 \text{ AF}}$$

I.R.

$$V = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = \underline{0.02\text{cfs} \times 230 \text{ days} \times 1.9835 = 9.1 \text{ AF}}$$

D.R.

$$V = \text{Smaller of } \begin{matrix} V \\ \text{I.R.} \end{matrix} \text{ and } \begin{matrix} V \\ \text{D.R.} \end{matrix} = \underline{2.7 \text{ AF}}$$

Comments:

This permit was issued for irrigation use from a natural stream/river source. According to the IDAPA Beneficial Use Examination Rules 37.03.02.35. 01j.viii a diversion volume is not required for irrigation if water is diverted from a natural flowing stream/river or spring.

G. PURPOSE OF USE

Irrigation X Y N # Stock NA Domestic # of Homes 1 home, 1 shop with full bath
 Change in Purpose of Use? Y X N

Method of Determination: Shoshone County Maps, GIS, and Tax lot Data

H. NARRATIVE/REMARKS/COMMENTS

This permit for the irrigation of 6 acres and 5 RV hookups qualifies for an in-office examination for license, as the developed area declared on the Proof of Beneficial Use is approximately 3 acres and 1 domestic residence. The permit holder submitted the Proof of Beneficial Use, received by IDWR on October 17, 2023, I was able to confirm approximately 0.9 acres of irrigation using aerial imagery (see figures 1 & 2). The GIS projection for the PLSS and imagery appears to be slightly offset. I contacted the Shoshone County Assessor to inquire if parcel RP49N02E322500 has any portion in the SENW quarter quarter. The county recorder explained that the entire subdivision the POU is within is in the south half of the northeast quarter and the north half of the southeast quarter of section 32 (no portion in the northwest quarter). I called the permit holder and sent him an email requesting additional information including photos of the development and a system diagram (figures 1-3, Google Earth & Shoshone County images emailed). Documentation was received via mail from the permit holder on December 27 2023, with aerial images outlining the irrigated areas. During conversations with the permit holder, he described the system as a 1 1/2 Hp pump with a fish screened intake in the river delivering water to 1 RV hookup (residence), 1 shop with full bath, and 3 hose bibs providing water to hoses and sprinklers for irrigation and fire protection. He could not recall the make/model of the pump or any further details and won't be back in Idaho for several months.

A theoretical calculation confirmed that the pump can provide a rate 0.09cfs (of the 0.20 cfs rate on the permit). As the diversion is from streamflow the irrigation volume was not reported on the license (IDAPA Rules 37.03.02.35. 01j.viii). According to Administrative Memo #22, 0.06cfs and 1.2 AF is the standard rate and annual volume for 2 domestic Homes. According to the permit holder the full bath includes a lavatory (4 gpm), toilet (5 gpm) and shower (6 gpm), which would require a total maximum diversion rate of 15 gpm or 0.03 CFS as per the Rural and Domestic Water Uses reference in the Field Examiners Handbook. I am recommending 0.06cfs and 1.2 AF annually for domestic use on the license. I am recommending the full calculated rate of 0.09cfs on the license for fire protection within the 13-acre parcel.

I am recommending the license be issued with a combined rate of 0.09cfs and conditions 004, 132, X31, X15, X16, and 227. Condition R62 was replaced with condition X31 at licensing, as the irrigated area is less than 1 acre.

Have conditions of permit approval been met? X Yes No

I. RECOMMENDATIONS

1. Recommended Amounts:

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
IRRIGATION	03/15 TO 10/31	0.03 CFS	NA-streamflow
DOMESTIC	01/01 TO 12/31	0.06 CFS	1.2 AF
FIRE PROTECTION	01/01 TO 12/31	0.09 CFS	NA
<u>Totals:</u>		0.09 CFS	

2. Recommended Amendments:

 Change P.D. as reflected above Add P.D. as reflected above X None
 Change P.U. as reflected above Add P.U. as reflected above X None

J. AUTHENTICATION- Bob Howe- Water Resource Agent

Field Examiner's



Date

3/27/24

Reviewer



Date

3/28/24



Figures 1 & 2- Google Earth 2022-Image of the parcel and areas developed surrounding outbuildings.



Figure 3- Shoshone County 2021-Image of the parcel.

Bob,

RECEIVED

JAN 02 2024

DEPARTMENT OF
WATER RESOURCES

DEC. 27TH

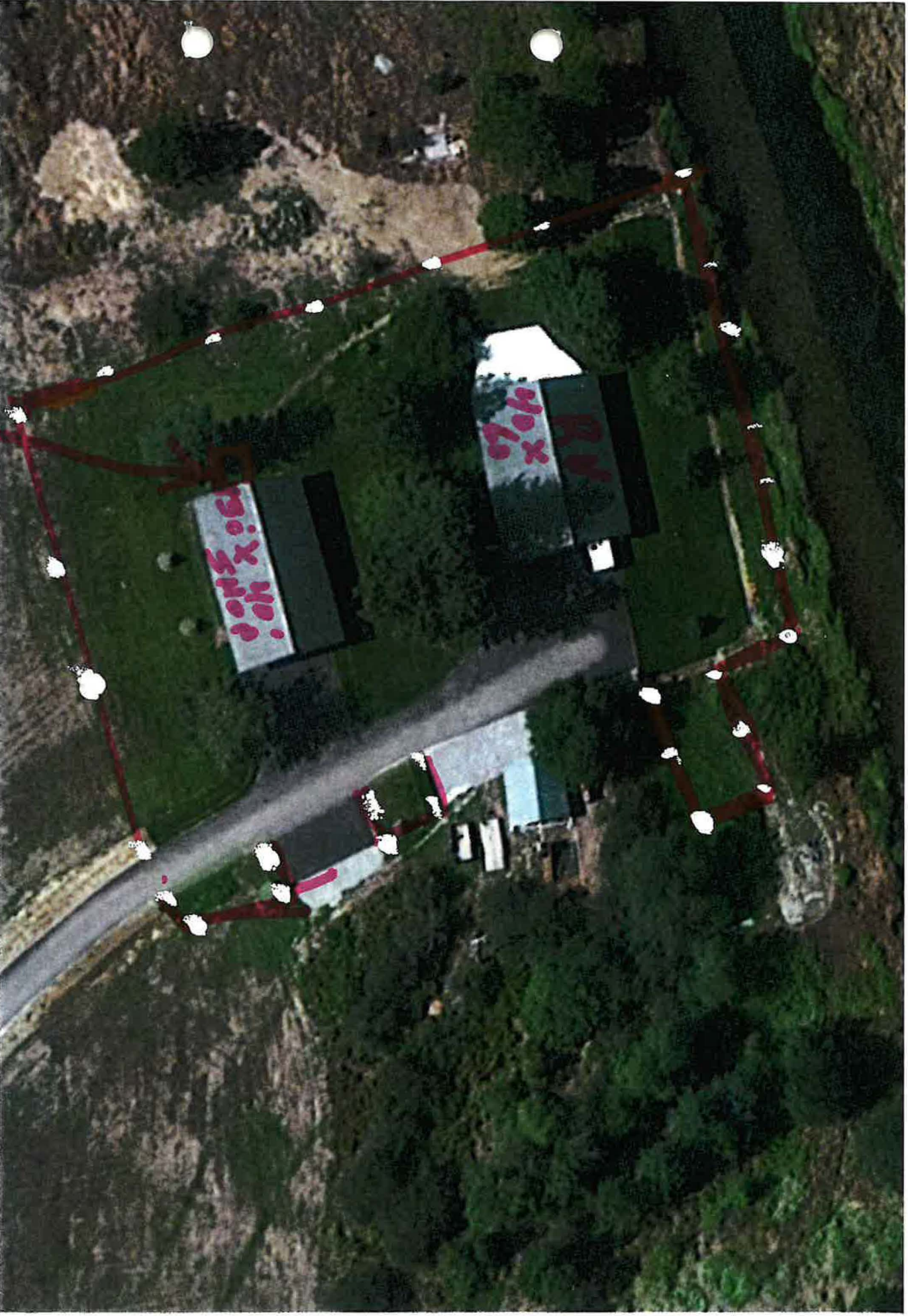
I HOPE THIS HELPS
YOU - PLEASE CALL IF
YOU NEED MORE INFO
ON MY PROPERTY, AND I
SURE HOPE YOU AND YOUR
FAMILY HAVE THE BEST
NEW YEAR.

WTW REVOCABLE TRUST

William T. ~~Witt~~ *Witt* *trustee*

9-1-9317

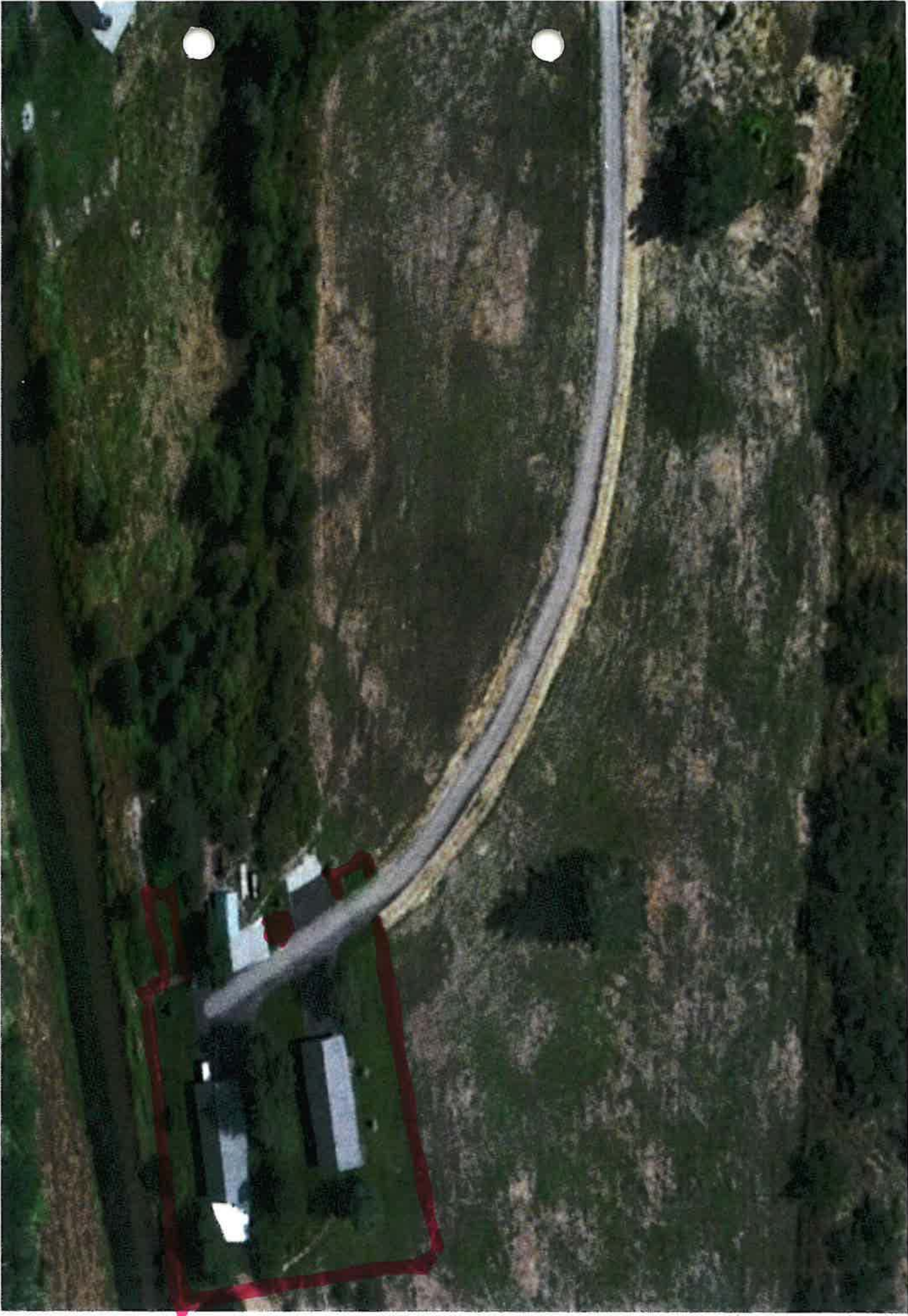
208-660-9417



6'x7'
BATH HOUSE

40x60
RV COVER

30x40
SHOP



I SURE HOPE
THIS HELPS.
808-660-9417

BOB, AGAIN AREA MARKED OUT,
CUTW/ BEVERAGE TRUST, WILLIAM

