

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 74-7346

Exam Date: 06/13/2024

1. Current Owner:
KURT W BIRD 56 LOWER TEXAS CREEK RD LEADORE ID 83464 OR
JANET E BIRD 56 LOWER TEXAS CREEK RD LEADORE ID 83464
2. Accompanied by: Cody Bird
Phone No: (208) 303-0280
Address: Same as current owner info.
Relationship to permit Holder: Son of permit holder

3. **SOURCE:**
WASTE WATER

Tributary
TEXAS CREEK

Method of Determination: Garmin Trek 20 GPS and GIS.

B. OVERLAP REVIEW

1. Other water rights with the same place of use: NO Overlap

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

Comments: There are no rights overlapping the permitted place of use (POU).

2. Other water rights with the same point-of-diversion: NO Overlap

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

Comments: There are no water rights sharing the permitted point of diversion (POD).

C. DIVERSION AND DELIVERY SYSTEM1. **LOCATION OF POINT(S) OF DIVERSION:**

WASTE WATER SE¼ SE¼, Sec. 15, Twp 15N, Rge 26E, B.M. LEMHI County

GIS Coordinates: N 44.62556, W 113.33478

Method of Determination: Garmin Trek 20 GPS, GIS, Google Earth, and Lemhi Tax Parcel Map.

PLACE OF USE: IRRIGATION

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
15N	26E	14							29	0.7									29.7

Total Acres: 29.7

Method of Determination: Field examination, GIS and tax parcel information. The area in the SENW (in red) was not included in the permitted place of use (POU). An application for amendment was mailed July 24, 2024, to the permit holder which was received signed with the fee payment on August 19, 2024..

3.
 - ☒ Delivery System Diagram Attached (required). Indicate all major components and distances between components.
 - ☒ Indicate weir size/pipe as applicable.
 - ☒ Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.
 - ☒ Aerial Photo Attached (required for irrigation of 10+ acres).
 - ☒ Photo of Diversion and System Attached

4.

Well or Diversion ID No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
Headgate-inlet pipe	BALDOR	10 x 2	F190220S886,F19012S722	Centrifugal	Unknown

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
FLOWMETER	ELECTROMAGNETIC FLOWMETER	GROWSMART	IM3000	Unknown	NA	NA

2. Measurements: Recorded 332.31 GPM at meter (see photo 2) with one of the 10 Hp centrifugal pumps running. The permit holder stated that they could get an additional 30 GPM when running both pumps simultaneously.

E. FLOW CALCULATIONS

Additional Computation Sheets Attached

Measured Method: Inline electromagnetic flowmeter.

Discharge Rate Observed= 332.31 GPM /448.83= **0.74cfs**

Permit Rate= 0.80cfs

BU Limited Rate= 0.59cfs

Recommended Rate= 0.59cfs

Comments: Although the system was recorded delivering a rate of 0.74cfs for the irrigation of approximately 32 at the time of the field examination, a GIS measurement of the POU during the development period from September 2011 to September 2013 was approximately 29.7 acres. Based on the standard rate of 0.02cfs/acre, a total rate of 0.59cfs is reasonable for the irrigation of 29.7 acres. I recommend the license be issued with a total rate of 0.59cfs, based on the beneficial use made during the development period.

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 29.7 \times 3.5 \text{ AF} = 104 \text{ AF annually}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.59\text{cfs} \times 246 \text{ days} \times 1.9835 = 287.9 \text{ AF}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 104 \text{ AF}$$

2. Volume Calculations for Other Uses: NA

Comments: Based on the field headgate requirement calculation above I recommend the license be issued with an annual volume of 104 AF.

G. NARRATIVE/REMARKS/COMMENTS

The Department received the Proof of Beneficial Use for permit 74-7346 on September 27, 2013, submitted and signed by the permit holder Kurt Bird. In section 5 of the proof the permit holder stated that the beneficial use was developed for the irrigation of 40 acres. On June 13, 2024, a field examination was conducted with Cody Bird, the permit holder's son as an escort. The source is wastewater which runs off fields southwest of the POU and collects in a ditch on the permit holder's property. The wastewater runs to the northeast where it is diverted through headgates to ditches which fill a bubbler in an enclosure where an intake for the 8" irrigation line leads to 2- 10Hp pumps on the south end of the POU. The discharge from the pumps is split into 2 4" aluminum lines that supply 2 handlines (one west and one east of the driveway) with sprinkler heads (see Figure 1-System Diagram). Wastewater not diverted at the headgates or being drawn into the intake line flows into Texas Creek. A Growsmart (IM3000) was installed and operational at the time of the examination. The rate observed was 0.74cfs (332.3 GPM) however only one of the 10 Hp pumps was running, Cody (escort) stated that an additional 30GPM can be pumped when using the pumps in concert.

Of the 40-acre place of use (POU) approximately 8 acres are undeveloped, occupied by structures and roadways, or are part of the pivot system west of the POU. Based on field observations and GIS measurement the beneficial use has been

developed for approximately 32 acres of the POU. However, the development period for the permit was from September 2011 to September 2013 and the GIS measurement of the 2013 NAIP imagery (Figure 2) was approximately 29.7 acres. Since that time the land was resurveyed and the fence line for the parcel was moved further north. A review of the Lemhi County tax parcel map, historical GIS imagery, and the original BLM survey plat confirmed that approximately 0.7 acres of irrigation in the SENW of section 14, not included in the permit, are being irrigated with the wastewater system. On August 19, 2024, the Department received the signed license amendment and fee payment from the permit holder, which added the area within the SENW of section 14.

The headgates and flowmeter installed meet the conditions of the permit. Based on the beneficial use developed, system capability documented, and the field headgate calculation in section F of this report I recommend the license be issued with a rate of 0.59cfs and an annual volume of 104 AF for the irrigation of 29.7 acres. I also recommend the license carry conditions, 176, R05, R02, 215, 198, and 004. Permit condition 01H should be replaced with condition R02 at licensing, as per current guidance.

Have conditions of permit approval been met? ☒ Yes ☐ No

H. RECOMMENDATIONS

1. Recommended Amounts

<u>Beneficial Use</u>	<u>Period of Use</u>	<u>Rate of Diversion</u>	<u>Annual Volume</u>
IRRIGATION	03/15 to 11/15	0.59 CFS	104 AF
<u>Totals:</u>		0.59 CFS	104 AF

2. Recommended Amendments

☐ Change P.D. as reflected above ☐ Add P.D. as reflected above ☒ None
☐ Change P.U. as reflected above ☒ Add P.U. as reflected above ☒ None

I. AUTHENTICATION

Bob Howe - Water Resource Agent

Field Examiner's Name Bob Howe Date 10/24/2024

Reviewer Cody Date 12/19/2025

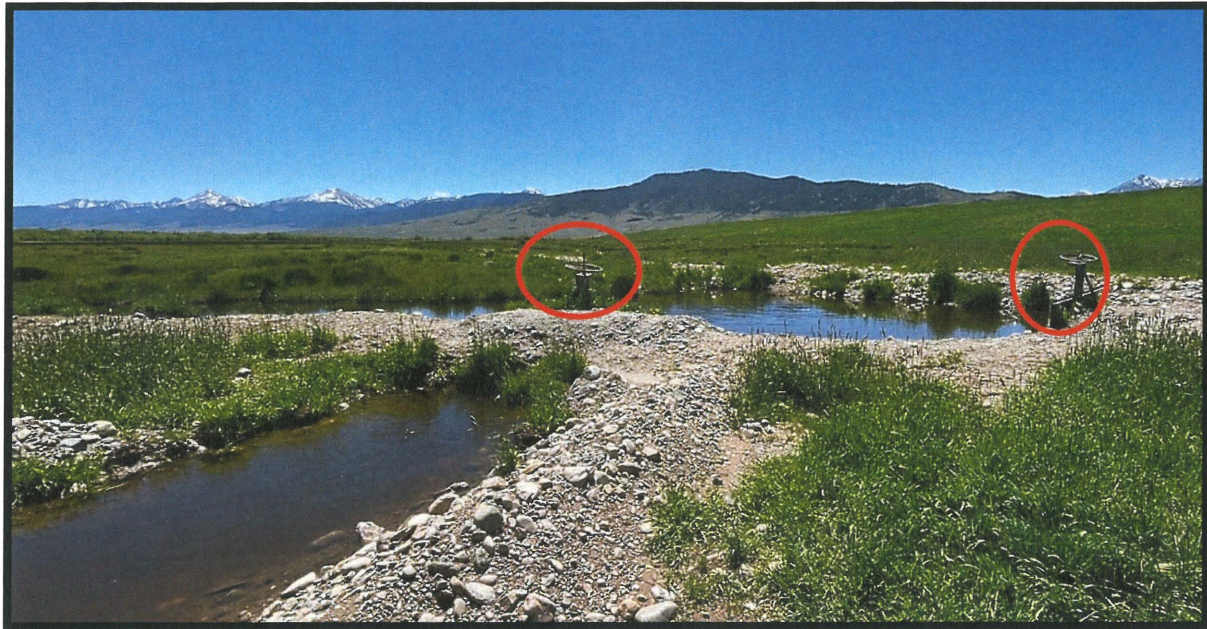


Photo 1- Facing South- Headgates for diverting from wastewater ditch are circled in red above.



Photo 2-(left) Enclosure surrounding bubbler (intake) located north about 50 yards north of the headgates on west side of wastewater ditch. Photo 3-(right) Bubbler with large screen overtop of 12" vertical pipe.

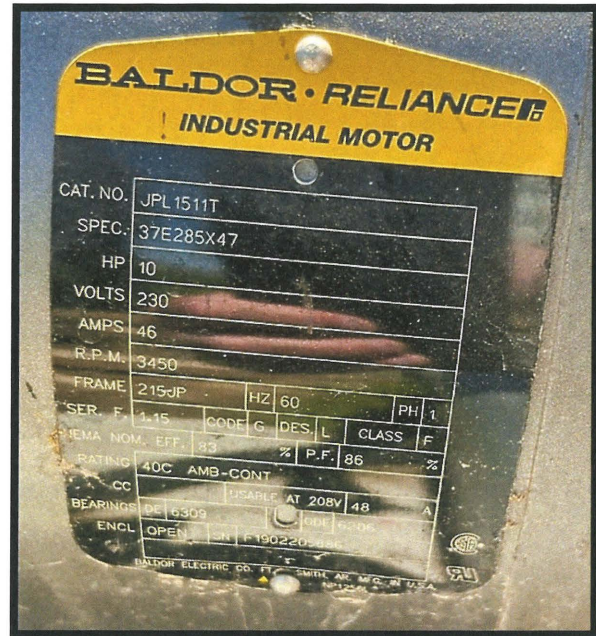


Photo 4-(upper left) Pump station with 2- 10Hp centrifugal pumps stacked with flowmeter at green flange.

Photo 5-(upper right) Pump specifications plate for upper motor (with orange pump).

Photo 6-(lower left) Lower motor with blue centrifugal pump. Photo7-(lower right) Motor Specifications plate for lower pump.

Photo 8- (lower center) Growsmart IM3000 flowmeter.

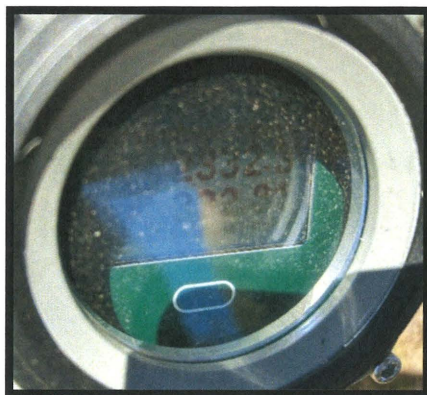
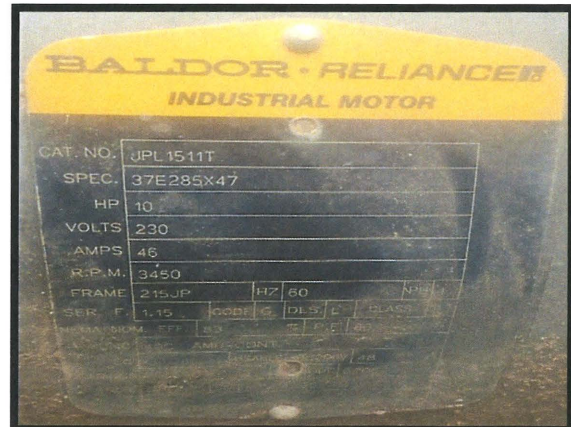




Photo 9-(above) At the North end of the POU facing south (west of driveway) the handline is visible in the center of the picture and the permit holders' home is visible in the background.

Photo 10-(below) Taken at the north end of the POU facing southwest (west of the driveway) the hand line runs ends at the far right near the edge of the pivot to the west.





Photo 11 (above)- Taken at the driveway near the center of the POU facing southeast. Handline in the background running north to south along the fence line.

Photo 12 (below)- Taken in the same position on driveway facing northeast. The hand line can be seen parallel to the fence line.



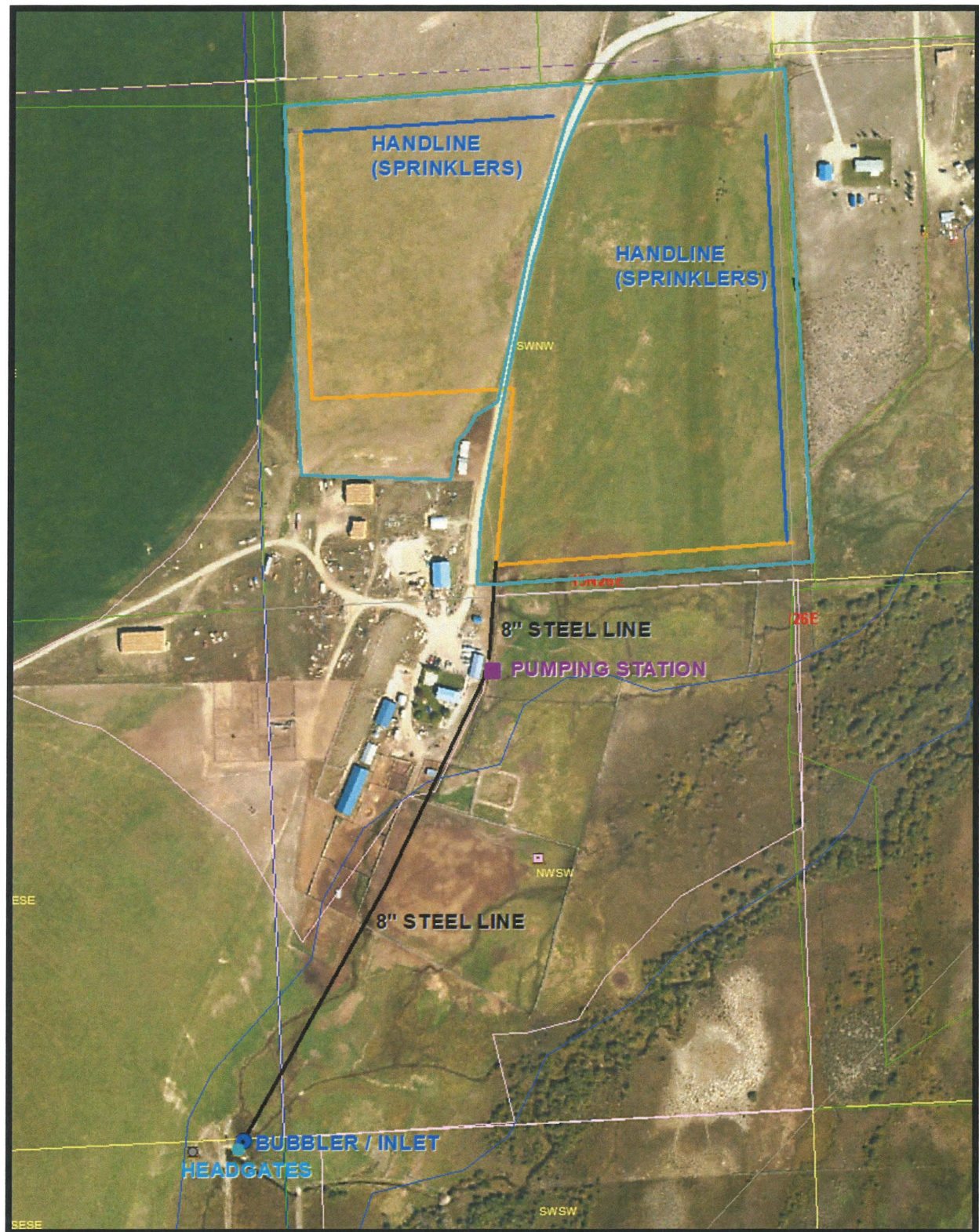


Figure 1- System Diagram- GIS NAIP 2023 Imagery-From headgates through ditches to intake in bubbler. The steel line conveys water to the pump station form which the 8" steel line conveys water to the north and is split into two 4" lines delivering to 2 handlines.

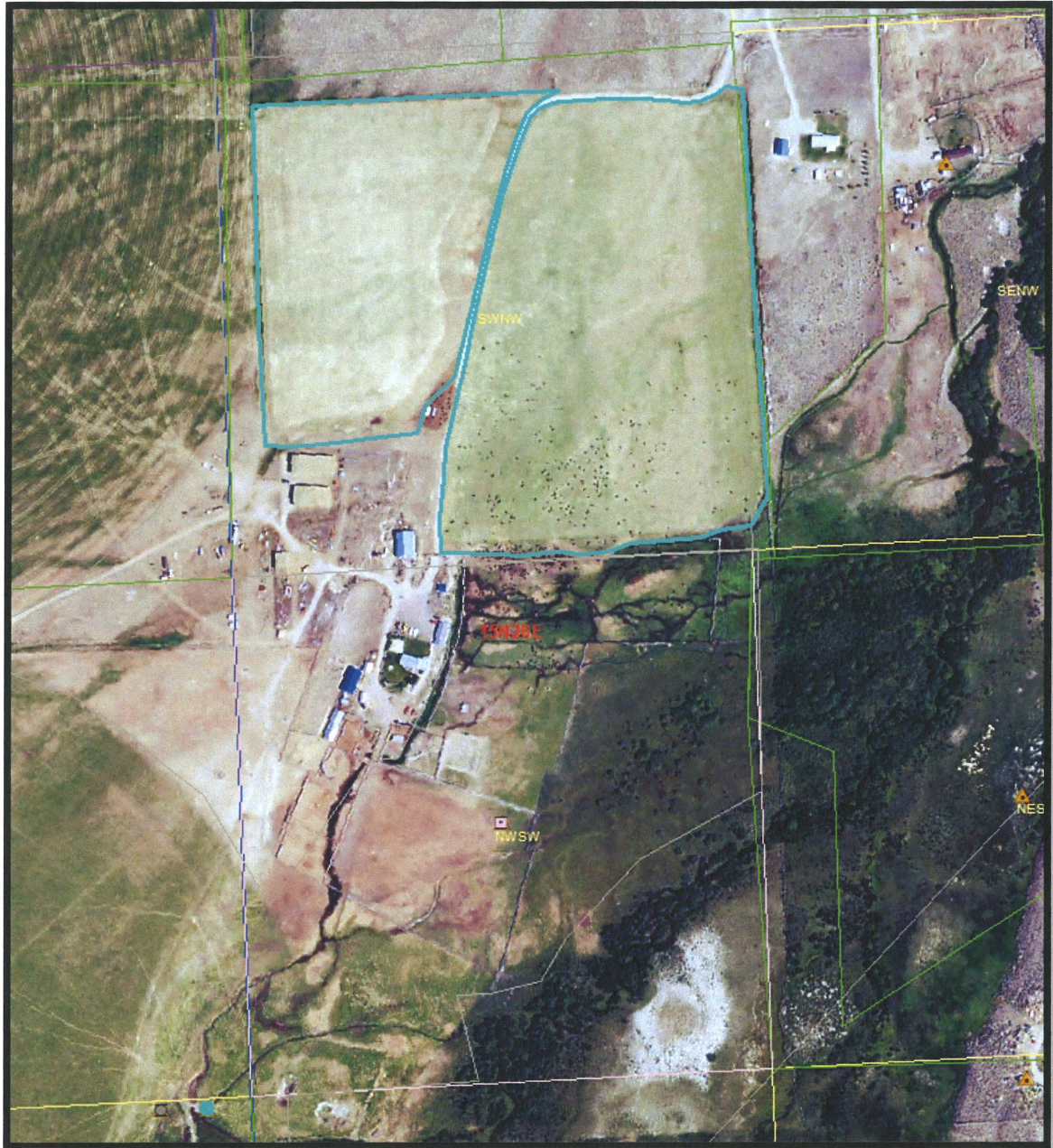


Figure 2 -GIS NAIP 2013 Imagery- POU during the development period, outlined in blue. POD is blue point in the southwest corner of the image.