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FEB 16 2021

DEPARTMENT OF
WATER RESOURCES

February 11, 2021

Dan Nelson
Idaho Department of Water Resources
322 East Front Street
Boise, ID 83702-7371

Subject: 63-34160 – Application for Amendment for Licensing Purposes

Dear Dan:

Enclosed on behalf of the City of Boise is a signed Application for Amendment for Licensing Purposes for permit 63-34160. Included is a check for the \$100 filing fee.

Please contact me with any questions.

Sincerely,

Terry M. Scanlan

Terry M. Scanlan, P.E., P.G.
Principal Engineer/Hydrogeologist

Cc: Syd Dietrich – Boise Police Department (sdietrich@cityofboise.org)
Robin Lee-Beusan – Boise Public Works Department (rleebeusan@cityofboise.org)
John Roldan – Boise Public Works Department (jroldan@cityofboise.org)

Enclosures

SPF file number: 389.0980

Nelson, Dan

From: Nelson, Dan
Sent: Wednesday, February 03, 2021 1:13 PM
To: 'Terry Scanlan'
Subject: Amendment of Permit 63-34160
Attachments: Amendment and cover letter 63-34160.pdf

Hello Terry,

I wanted to let you know that you did a very good job on the field examination for permit 63-34160. I have attached the amendment for this permit and the cover letter that I sent to the City of Boise to this email. If you have any questions or concerns, please don't hesitate to contact me.

Respectfully,

Daniel Nelson
Water Right Analyst 3
Idaho Department of Water Resources
Telephone (208) 287-4856
Fax (208) 287-6700 (attn: Dan Nelson)



State of Idaho

DEPARTMENT OF WATER RESOURCES

322 E Front Street, Suite 648 • PO Box 83720 • Boise ID 83720-0098

Phone: (208) 287-4800 • Fax: (208) 287-6700

Website: idwr.idaho.gov • Email: idwrinfo@idwr.idaho.gov

BRAD LITTLE
Governor

GARY SPACKMAN
Director

February 3, 2021

CITY OF BOISE
PO BOX 500
BOISE ID 83701-0500

RE: Water Right Permit No. 63-34160

Dear Permit Holder:

The Idaho Department of Water Resources (Department) is reviewing the permit referenced above prior to issuing a water right license. By issuing a license, the Department confirms the extent of development that has been established in compliance with the terms of the permit.

On January 28, 2021, the Department received proof of beneficial use statement and a field report for water right 63-34160 from certified water right examiner Terry Scanlan from SPF Water Engineering.

The field report submitted by Scanlan states that place of use for this permit was developed in the NE $\frac{1}{4}$ SE $\frac{1}{4}$ and SE $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 31 in Township 2 North, Range 2 East. The permit states that the place of use was to developed in the SE $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 31 in Township 2 North, Range 2 East.

If the legal description on the permit does not match the legal description developed, then an amendment of the permit is required prior to licensing the permit. Therefore, an amendment is required to change the point of diversion on the permit before we can move forward with licensing the water right permit 63-34160.

The enclosed Application for Amendment form depicts the elements of the water right as they will appear on the license when issued. Please review the amendment form carefully. If you concur with the information presented, please sign and return the form with the \$100.00 filing fee within 14 days.

If you have any questions, please don't hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Daniel A. Nelson", with a long, sweeping horizontal line extending to the right.

Daniel A. Nelson
Analyst 3
Water Right Section
Idaho Department of Water Resources
Telephone # (208) 287-4856
Email – dan.nelson@idwr.idaho.gov

Enclosure(s): Application for Amendment with maps

cc Terry Scanlan, SPF Water Engineering by email

MEMORANDUM

TO: Water Right File 63-34160

FROM: Daniel Nelson – Analyst 3

DATE: January 27, 2021

SUBJECT: Licensing Review of Water Right 63-34160

The field exam for this right was performed by Certified Water Right Examiner Terry Scanlan of SPF Water Engineering. Mr. Scanlan recommended 0.06 cfs and 0.3 af for domestic purposes. Mr. Scanlan confirmed that the heating and cooling uses originally authorized by the permit were not developed. Mr. Scanlan also stated that no yard or landscaping has been developed for this permit

Review of Field Examination:

After reviewing Mr. Scanlan's field report, I agree with the diversion rates and volume recommended by Mr. Scanlan. All of the flow rates calculated and measured from the measurement device provided very similar flow rates of 26 to 28 gpm, both of which equate to 0.06 cfs. The one measurement made with the bucket and stop watch from the spigot is not a reasonable measurement, since it was measuring the amount of water coming from the pressure tanks and not directly from the well. The volumes were done using Department standards, so I also feel that was well done.

I also agree that an amendment is needed to cover the actual place of use, since one of the bathrooms was actually in the NESE of Section 31. I didn't try to exactly match the place of use shape file for the domestic use that was provided by Mr. Scanlan, because I wanted to include the entire footprint of the facility not just the areas using water. I also used the point of diversion location that was GPS'ed in from the Well Driller's Report.

A portion of the place of use falls within the borders of the Pleasant Valley Irrigation District Co. LTD, but this property doesn't appear to have any shares in that District.

Conditions:

Water right conditions WB5 should be carried forward to licensing.

Condition X10 should be replaced with condition 073. The Well Driller's Report shows that the temperature at the bottom of this well is 83 degrees, which is below the 85 degree Low Temperature Geothermal well definition. Condition X10 requires that the permit holder use the heat value of the low temperature geothermal source first. The well doesn't meet the definition of a Low Temperature Geothermal well, and the heating and cooling system was not developed as a result. Therefore there is no need for the X10 condition.

The temperature of this well is close enough to the Low Temperature Geothermal well definition that some assurance is needed if they ever need to replace or deepen this well that they don't intercept the Low Temperature Geothermal Water. They haven't developed the heating component of this right, so they cannot use the heat value of the water first if they did intercept the Low Temperature Geothermal Water, so condition 073 needs to be placed on the permit to prevent future use of the geothermal resource.

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

RECEIVED

JAN 28 2021

DEPARTMENT OF
WATER RESOURCES

A Beneficial Use Field Report is prepared by a water right examiner as the result of an examination to clearly confirm and establish the extent of the beneficial use of water established in connection with a permit during the development period authorized by the permit and any extensions of time previously approved.

A. GENERAL INFORMATIONPermit No. 63-34160

1. Owner City of Boise Phone No. 208-608-7150
 Current address 150 N Capital Blvd, PO Box 500, Boise, ID 83701-0500
2. Examiner's name Terry Scanlan, P.E., P.G., CWRE 129 EXAM DATE January 22 2021
3. Accompanied by Syd Dietrich and Robin Lee-Beusan Email rleebeusan@cityofboise.org
 Address 150 N Capital Blvd PO Box 500, Boise, ID 83701-0500
- Relationship to permit holder Boise Police Dept and Boise Public Works Phone No. 208-608-7474 (Beusan)
4. Source Ground Water tributary to NA

B. OVERLAP REVIEW

1. Other water rights with the same place of use None
2. Other water rights with the same source and point of diversion None

C. DIVERSION AND DELIVERY SYSTEM

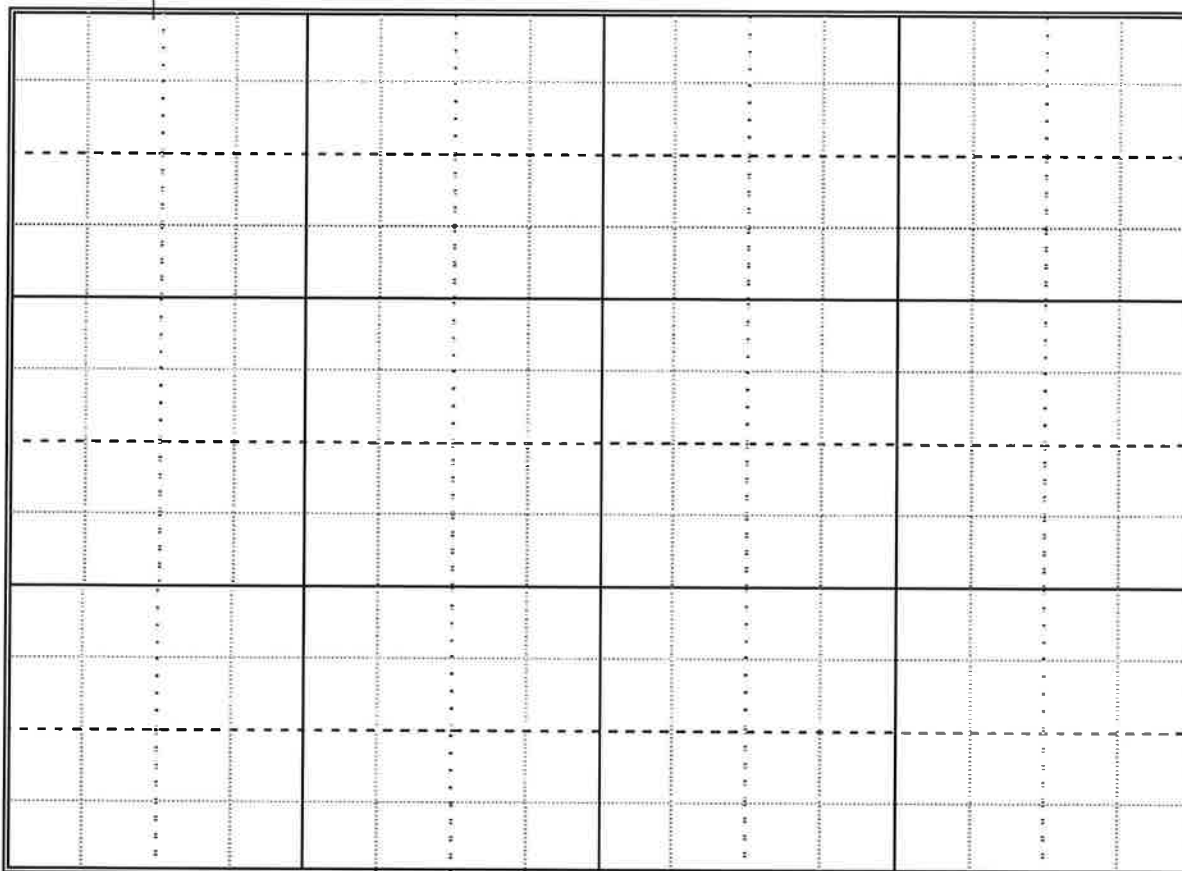
1. Point(s) of Diversion:

Ident. No.	Gov't Lot	¼	¼	¼	Sec	Twp	Rge	County	Method of Determination/Remarks
		SE	SE	SE	31	2N	2E	Ada	2019 aerial photo, BUFE
									Well Report Coordinates

2. Place(s) of Use: Method of determination 2019 aerial photo, BUFE

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
2N	2E	31													D			D	

3. **Delivery System Diagram:** Indicate all major components and distances between components. Indicate weir size/ditch size/pipe diameter (inside), as applicable. Use the space provided or ☒ see attached.



Scale: 1" = _____

- ☒ Copy of USGS Quadrangle attached showing location(s) of point(s) of diversion and place(s) of use (**required**)
☒ Aerial photo attached (required for irrigation of 10+ acres)
☒ Photo of diversion and system attached

4.

Well or Diversion Identification No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
Well	submersible	5	submersible	Franklin	Series V - 25 gpm

*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
flow meter	mechanical	Sensus	Omni	821811110	2-inch	new in 2017
bucket and stopwatch					5 gallon	

2. **Measurements:** _____

Flow meter 27 to 28 gpm (0.06 cfs) at 40 psi for approximately 10 minutes.

5-gallon bucket - 4.5 gallons/9 seconds x 60 seconds/1 minute = 30 gpm (0.07 cfs)

E. NARRATIVE/REMARKS/COMMENTS

Permit 63-34160 authorizes diversion of 0.08 cfs for domestic and heating uses and 0.01 cfs for cooling use, of which only domestic use has been developed and recommended for licensing.

The ground water system consists of a 6-inch well, 410 feet deep, equipped with a 5-hp submersible pump rated to produce 28 gpm at 450 feet TDH. The well was test pumped with 3 feet of drawdown at a rate of 96 gpm and pumping water level 350 feet. The well did not encounter low-temperature geothermal water. Water produced from the well is 82 degrees F.

The well pump discharges through a pitless adapter to a mechanical room in the administration building. From the mechanical room, water is supplied to bathrooms in the administration building, to a yard hydrant at the training house, and to satellite bathrooms and hose bib at the shooting range. Water from hydrants and hose bibs is used for pressure washing and general sanitation. There is no landscape irrigation use.

An amendment is required to add the satellite restroom building to the authorized place of use.

The Richard Linderer Memorial Firearms Range facility is used as a training range for the Boise Police Department and other local law enforcement agencies.

Attachment A: Permit Record and Proof of Beneficial Use

Attachment B: Topographical Map and 2019 aerial photo map

Attachment C: Well & Pump Information

Attachment D: Water System Plans

Attachment E: Exam Photos

Has the permit holder met all conditions of permit approval, including any mitigation requirements and/or measuring device installation requirements? ☒ Yes ☐ No If no, what must be done to meet the permit requirements?

F. FLOW CALCULATIONS☐ Additional computation sheets attached

Measured Method:

Flow Meter - 27-28 gpm for 10 minutes at 40 psi = 0.06 cfs

5-gallon bucket and stopwatch - 4.5 gallons in 9 seconds = 30 gpm = 0.07 cfs

Pump performance curve - 26 gpm at 60 psi to 28 gpm at 40 psi = 0.06 cfs

G. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

 $V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) =$ _____ $V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation Season}) \times 1.9835 =$ _____ $V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} =$ _____

2. Volume Calculations for Other Uses:

Domestic use of 10 gal/day/person (range use assumed to be comparable to "picknickers" on Non-Irrigation Requirement Worksheet). Typical occupancy is 20 staff and visitors per day, with an additional 200 visitors during events averaging once per month. Total volume = 10 gal/day/person((365 days x 20 persons/day)+(12 days x 200 persons/day)) = 97,000 gallons = 0.3 acre feet.

H. RECOMMENDATIONS

1. Recommended Amounts

Beneficial Use	Period of Use		Rate of Diversion Q (cfs)	Annual Volume V (afa)
	From	To		
Domestic	1/1	12/31	0.06 cfs	0.3 afa
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
Totals:			_____	_____

2. Recommended Amendments

- ☐ Change P.D. as reflected on page 1 ☐ Add P.D. as reflected on page 1 ☐ None
☐ Change P.U. as reflected on page 1 ☒ Add P.U. as reflected on page 1 ☐ Other

I. AUTHENTICATION

Field Examiner's Signature

Terry M. Scanlan

Date

January 26, 2021

Reviewer

Date



Attachment A
Permit Record, Proof of Beneficial Use

State of Idaho
Department of Water Resources
Permit to Appropriate Water
NO. 63-34160

RECEIVED

JAN 28 2021

DEPARTMENT OF
WATER RESOURCES

Priority: October 23, 2015

Maximum Diversion Rate: 0.08 CFS

This is to certify, that CITY OF BOISE
150 N CAPITAL BLVD
PO BOX 500
BOISE ID 83701

has applied for a permit to appropriate water from:

Source: GROUND WATER

and a permit is APPROVED for development of water as follows:

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>RATE OF DIVERSION</u>
DOMESTIC	01/01 to 12/31	0.08 CFS
HEATING	01/01 to 12/31	0.08 CFS
COOLING	01/01 to 12/31	0.01 CFS

LOCATION OF POINT(S) OF DIVERSION:GROUND WATER SE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 31, Twp 02N, Rge 02E, B.M. ADA CountyPLACE OF USE: DOMESTIC, HEATING, AND COOLING

Twp	Rge	Sec	NE	NW	SW	SE	Totals
02N	02E	31				X	

CONDITIONS OF APPROVAL

1. Proof of application of water to beneficial use shall be submitted on or before **February 01, 2021**.
2. Subject to all prior water rights.
3. Project construction shall commence within one year from the date of permit issuance and shall proceed diligently to completion unless it can be shown to the satisfaction of the Director of the Department of Water Resources that delays were due to circumstances over which the permit holder had no control.
4. Low temperature geothermal water diverted under this right shall not be used for domestic or cooling purposes unless it is first used for heating purposes.
5. Right holder shall comply with the drilling permit requirements of Section 42-235, Idaho Code and applicable Well Construction Rules of the Department.
6. Domestic use is for restrooms and drinking fountains at a police training range and does not include lawn, garden, landscape, or other types of irrigation.
7. Heating and cooling use is for space heating/cooling system at a police training range.

This permit is issued pursuant to the provisions of Section 42-204, Idaho Code.

Signed this 25th day of January, 2016.

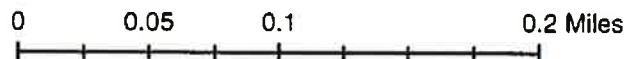
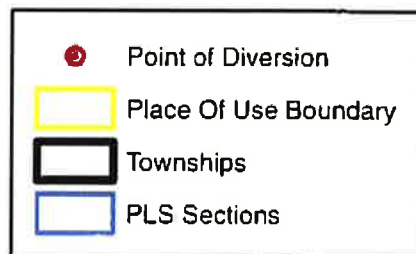
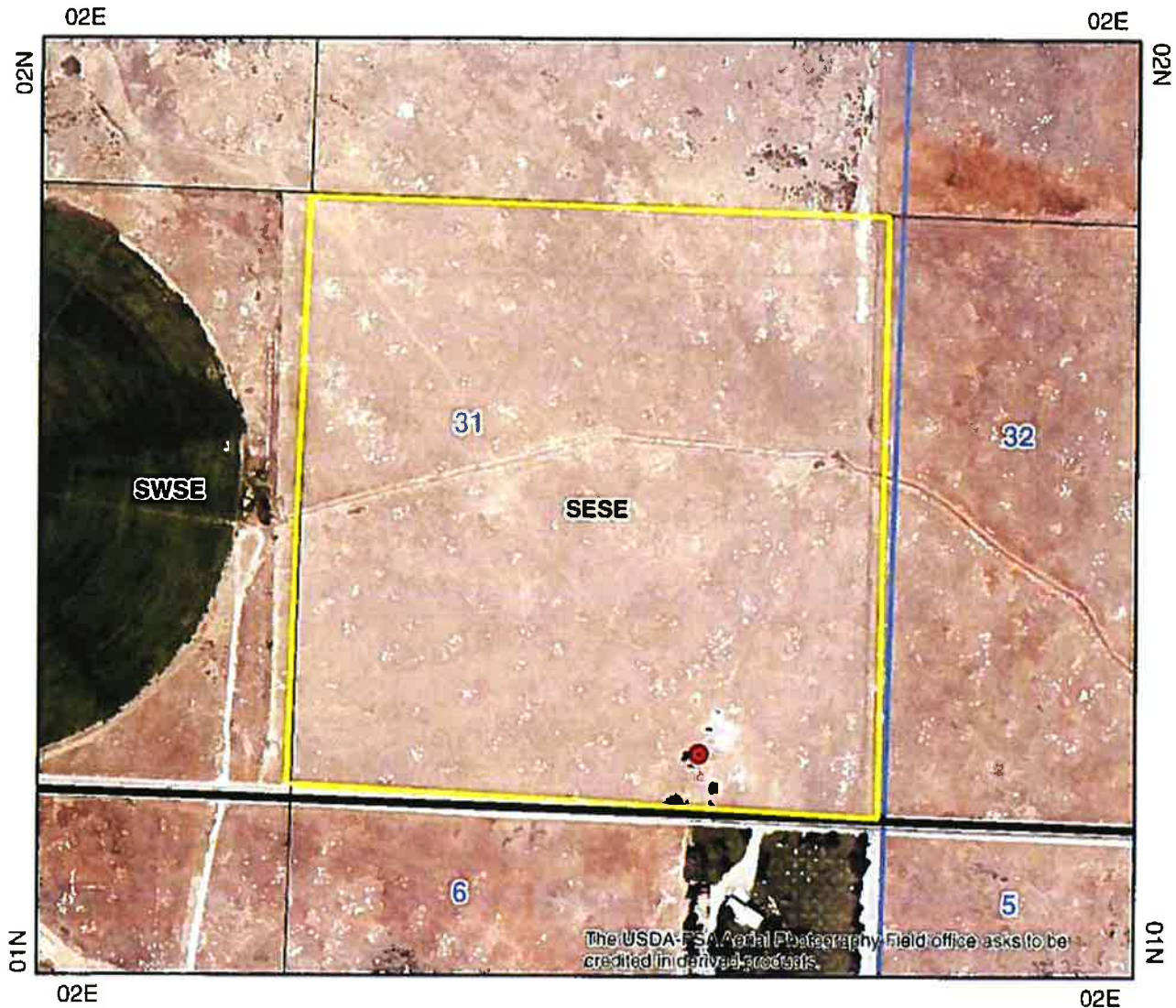

Nick Miller
Manager, IDWR Western Region

State of Idaho
Department of Water Resources

Attachment to Permit to Appropriate Water

63-34160

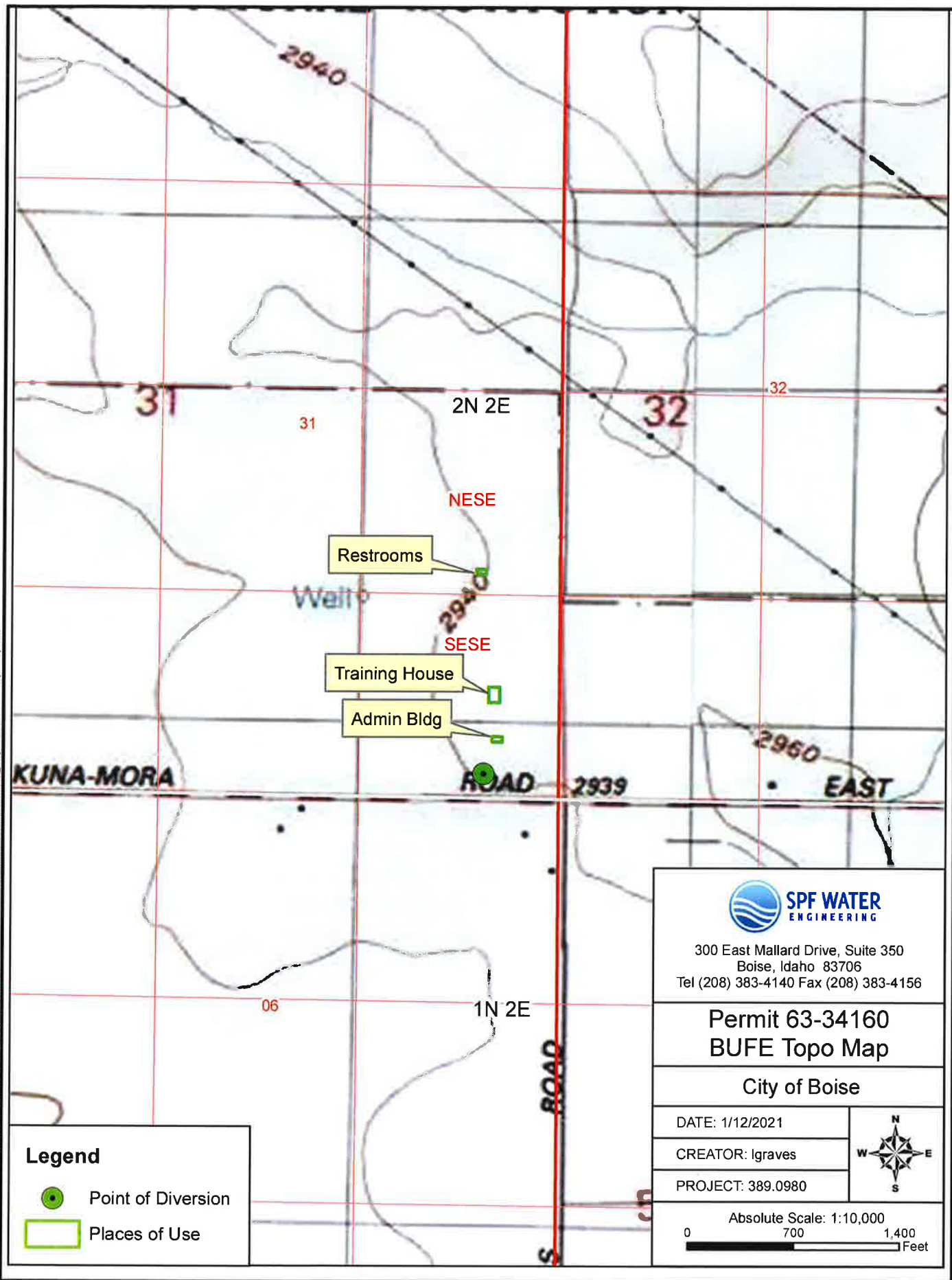
This map depicts the DOMESTIC, HEATING, and COOLING place of use boundary for this water right at the time of this approval and is attached to the approval document solely for illustrative purposes.



Attachment B
Topographical Map and 2019 Aerial Photo Map



Path: S:\PROJECTS\A thru D\Project\City of Boise_389\0980_Misc\Water Resource Services\PROJECT\GIS\Map\Project\BUFE Topo Map.mxd



300 East Mallard Drive, Suite 350
Boise, Idaho 83706
Tel (208) 383-4140 Fax (208) 383-4156

Permit 63-34160
BUFE Topo Map

City of Boise

DATE: 1/12/2021

CREATOR: lgraves

PROJECT: 389.0980



Absolute Scale: 1:10,000

0 700 1,400 Feet

Attachment C
Well & Pump Information

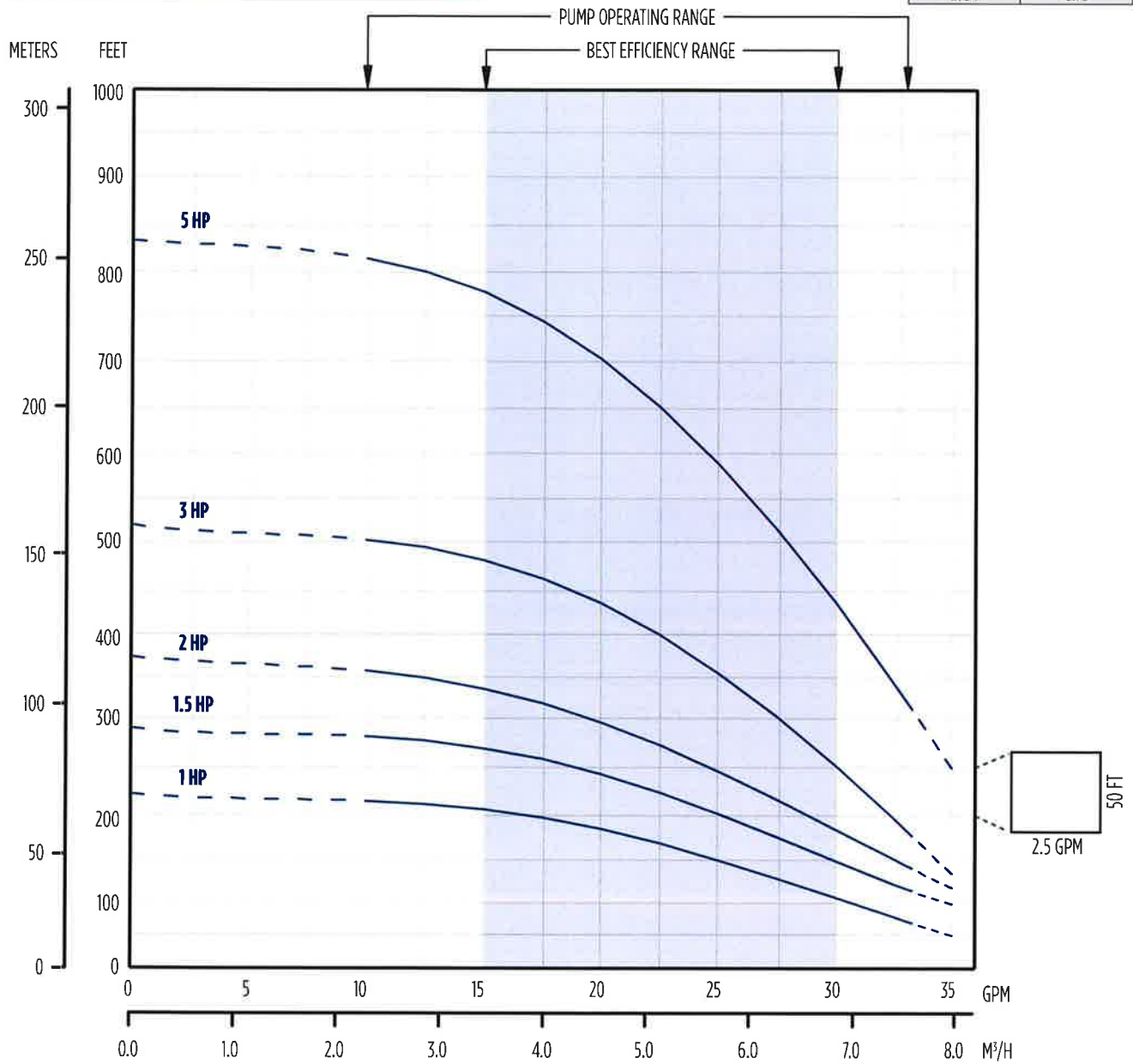
* Signature of Principal Driller and rig operator are required.

RECEIVED
OCT 10 2017
WATER RESOURCES
WESTERN REGION

4" SERIES V PUMPS - 25 GPM

PERFORMANCE

Basic Model	PEL Number
25S4	0.76





4" SERIES V PUMPS - 25 GPM

PERFORMANCE

HP	PSI	Depth to Pumping Water Level (Lift) in Feet. Shaded Areas Indicate Most Efficient Performance.																								Shut-Off (ft)
		20	40	60	80	100	120	140	160	180	200	240	260	300	360	400	440	480	500	600	700	800	900	1000		
1	0			35	33	31	28	26	24	21	17															222
	20		32	30	28	25	22	18	15																	
	30	32	29	27	25	22	19																			
	40	29	27	25	22	19																				
	50	26	24	21	16																					
	60	24	21	17																						
Shut-off PSI		87	79	70	61	53	44	35	27	18	10															
1.5	0						33	31	29	27	25	21	19													297
	20				32	30	28	26	24	22	19															
	30			32	30	28	26	24	22	19	16															
	40	33	32	29	27	25	23	21	19	15																
	50	32	29	27	25	23	21	18																		
	60	29	27	25	23	20	18																			
Shut-off PSI		120	111	103	94	85	77	68	59	51	42	25	16													
2	0							33	32	30	28	25	24	20												375
	20				34	33	31	29	28	26	25	21	20													
	30			34	33	31	29	28	26	24	23	19	17													
	40		34	33	31	29	28	26	24	23	21	17														
	50	33	32	30	29	27	26	24	22	20	18															
	60	32	30	28	27	26	24	22	20	18																
Shut-off PSI		154	145	136	128	119	110	102	93	84	76	58	50	32												
3	0								33	32	30	29	28	24	22	19	15									519
	20						33	32	32	31	30	28	27	25	22	19										
	30					33	32	32	31	30	29	27	26	24	20											
	40				33	32	32	31	30	29	28	26	25	22	18											
	50			33	32	31	31	30	29	28	27	24	23	21	15											
	60		33	32	31	31	30	29	28	26	25	23	22	19												
Shut-off PSI		216	207	199	190	181	173	164	155	147	138	121	112	95	69	52	34	17								
5	0												33	32	31	30	28	28	24	20						833
	20												33	32	30	30	28	27	26	22	17					
	30											33	33	31	30	28	27	26	25	21	15					
	40										33	32	32	31	29	28	27	25	24	20						
	50									33	33	32	31	30	28	27	25	24	23	19						
	60							33	33	32	31	31	30	28	26	25	23	22	18							
Shut-off PSI		352	343	326	317	309	300	291	283	274	257	248	231	205	187	170	153	144	101	58						

NOTES: Performance shown does not include friction loss in the drop pipe; All performance data is based on rated motor nameplate voltage

Attachment D
Water System Plans

CITY OF BOISE POLICE SHOOTING RANGE

5958 W KUNA MORA RD., KUNA, ID. 83634

SYMBOLS LEGEND

Building Section Identification		
Wall Section Identification		
Detail Identification		
Exterior Elevation Identification		
Interior Elevation Identification		
Driveway Identification		
Building Grid Identification		
Match Line Identification		
North Point		
Revision Identification		
Room Name and Number		
Door Number		
Wall Type		
Ceiling Height Identification		
Window Type		
Keynote		
Reference Keynote		
Equipment Reference		
Equipment Reference, OFCI or OFCI equipment		
Elevation Mark		

VICINITY MAP



PROJECT TEAM

Project Owner

CITY OF BOISE, CITY OF BOISE POLICE DEPT
501 N. 10TH ST. SUITE 200
BOISE, ID 83724
2025-2026

Contact: ALISON TATE
Email: atate@cityofboise.com

General Contractor

MECHANICAL GROUP OF COMPANIES, INC.
1000 S. 10TH ST. SUITE 200
BOISE, ID 83724
2025-2026

Contact: KIRSTIN DETTICH
Email: kdetrich@mechgroup.com

Architect

DAVID ARCHITECTS AND PLANNERS, CHARTERED
400 E. FULTON ST. SUITE 200
BOISE, ID 83724
2025-2026

Contact: JAY SHEPHERD
Email: jay@daavid.com

Civil Engineer

THE LAND GROUP
400 E. FULTON ST. SUITE 200
BOISE, ID 83724
2025-2026

Contact: JASON DOWNS
Email: jason@thelandgroup.com

Structural Engineer

HARRISON ENGINEERING
1000 S. 10TH ST. SUITE 200
BOISE, ID 83724
2025-2026

Contact: NATHAN HARRISON
Email: nathan@harrisoneng.com

Mechanical Engineer

FULCHER ENGINEERING
1000 S. 10TH ST. SUITE 200
BOISE, ID 83724
2025-2026

Contact: JEFF FULCHER
Email: jef@fulcher.com

Electrical Engineer

E2CO
1000 S. 10TH ST. SUITE 200
BOISE, ID 83724
2025-2026

Contact: JON VAN STONE
Email: jvanstone@e2co.com

DRAWING INDEX

GENERAL

- G001 PROJECT TEAM, VICINITY MAP, OVERALL DRAWING INDEX
- G002 ENERGY COMPLIANCE & FIRE & LIFE SAFETY SUMMARY

CIVIL

- C1 01 TOPOGRAPHIC MAP
- C1 02 TYPICAL SECTIONS & DETAILS
- C1 03 TYPICAL BERM SECTIONS & DETAILS
- C1 50 EROSION CONTROL PLAN
- C1 55 EROSION CONTROL DETAILS
- C1 90 OVERALL SITE PLAN
- C2 50 ENLARGED RIFLE & HANDGUN RANGE PLAN
- C2 51 ENLARGED ADMIN PARKING AREA PLAN
- C3 00 ENTRANCE ROAD PLAN AND PROFILE
- C3 01 ENTRANCE ROAD PLAN AND PROFILE
- C3 50 ROADWAY GRADING DETAIL & CULVERT SECTIONS
- C4 50 ENLARGED RIFLE & HANDGUN RANGE PLAN
- C4 51 ENLARGED ADMIN PARKING AREA PLAN
- C5 00 UTILITY PLAN
- C5 50 SEPTIC SYSTEM DETAILS

STRUCTURAL

- S1 01 TRAINING HOUSE
- S1 02 ADMIN BUILDING
- S1 03 SATELLITE BATHROOM
- S2 01 DETAILS
- S2 02 DETAILS
- S2 03 DETAILS

ARCHITECTURAL

- A1 01 SITE PLAN
- A1 02 ADMIN BUILDING
- A1 03 SATELLITE BATHROOM
- A1 04 TRAINING HOUSE
- A3 01 BUILDING SECTIONS
- A5 01 DETAILS
- A6 01 DOOR AND FRAME SCHEDULE

PLUMBING

- P1 0 PLUMBING SCHEDULES
- P1 1 WASTE AND VENT PLAN
- P1 2 DOMESTIC WATER PLAN
- P2 1 PLUMBING SPECIFICATIONS

MECHANICAL

- M1 0 MECHANICAL SCHEDULES
- M1 1 HVAC PLAN
- M2 1 MECHANICAL SPECIFICATIONS
- M3 1 MECHANICAL SPECIFICATIONS

ELECTRICAL

- E1 0 ELECTRICAL SYMBOLS AND SHEET INDEX
- E1 0 OVERALL ELECTRICAL SITE PLAN
- E1 1 ENLARGED SITE PLAN
- E1 2 ENLARGED SITE PLAN
- E1 3 ENLARGED SITE PLAN
- E1 4 ENLARGED SITE PLAN
- E2 0L ADMINISTRATION BUILDING LIGHTING PLAN
- E2 0MP ADMINISTRATION BUILDING MECHANICAL POWER PLAN
- E2 0P ADMINISTRATION BUILDING POWER PLAN
- E2 0S ADMINISTRATION BUILDING SPECIAL SYSTEMS PLAN
- E2 1L TRAINING HOUSE LIGHTING PLAN
- E2 1P TRAINING HOUSE POWER PLAN
- E2 2LMP SATELLITE BATHROOM LIGHTING & MECHANICAL POWER PLAN
- E2 2PS SATELLITE BATHROOM POWER & SPECIAL SYSTEM PLAN
- E3 0 ONE LINE DIAGRAM AND ELECTRICAL DETAILS
- E3 1 ELECTRICAL DETAILS
- E3 2 ELECTRICAL SCHEDULES
- E3 3 ELECTRICAL SCHEDULES
- E3 4 ELECTRICAL SCHEDULES
- E4 0 ELECTRICAL SPECIFICATIONS
- E4 1 ELECTRICAL SPECIFICATIONS
- E4 2 ELECTRICAL SPECIFICATIONS
- E4 3 ELECTRICAL SPECIFICATIONS

REVISIONS

DATE: 06/01/2018
PROJECT NO: 1545-00
SHEET: G001
PROJECT TEAM: VICINITY MAP, OVERALL DRAWING INDEX

DATE: 06/01/2018
PROJECT NO: 1545-00
SHEET: G001
PROJECT TEAM: VICINITY MAP, OVERALL DRAWING INDEX

DATE: 06/01/2018
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PROJECT TEAM: VICINITY MAP, OVERALL DRAWING INDEX

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PROJECT TEAM: VICINITY MAP, OVERALL DRAWING INDEX

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PROJECT NO: 1545-00
SHEET: G001
PROJECT TEAM: VICINITY MAP, OVERALL DRAWING INDEX

DATE: 06/01/2018
PROJECT NO: 1545-00
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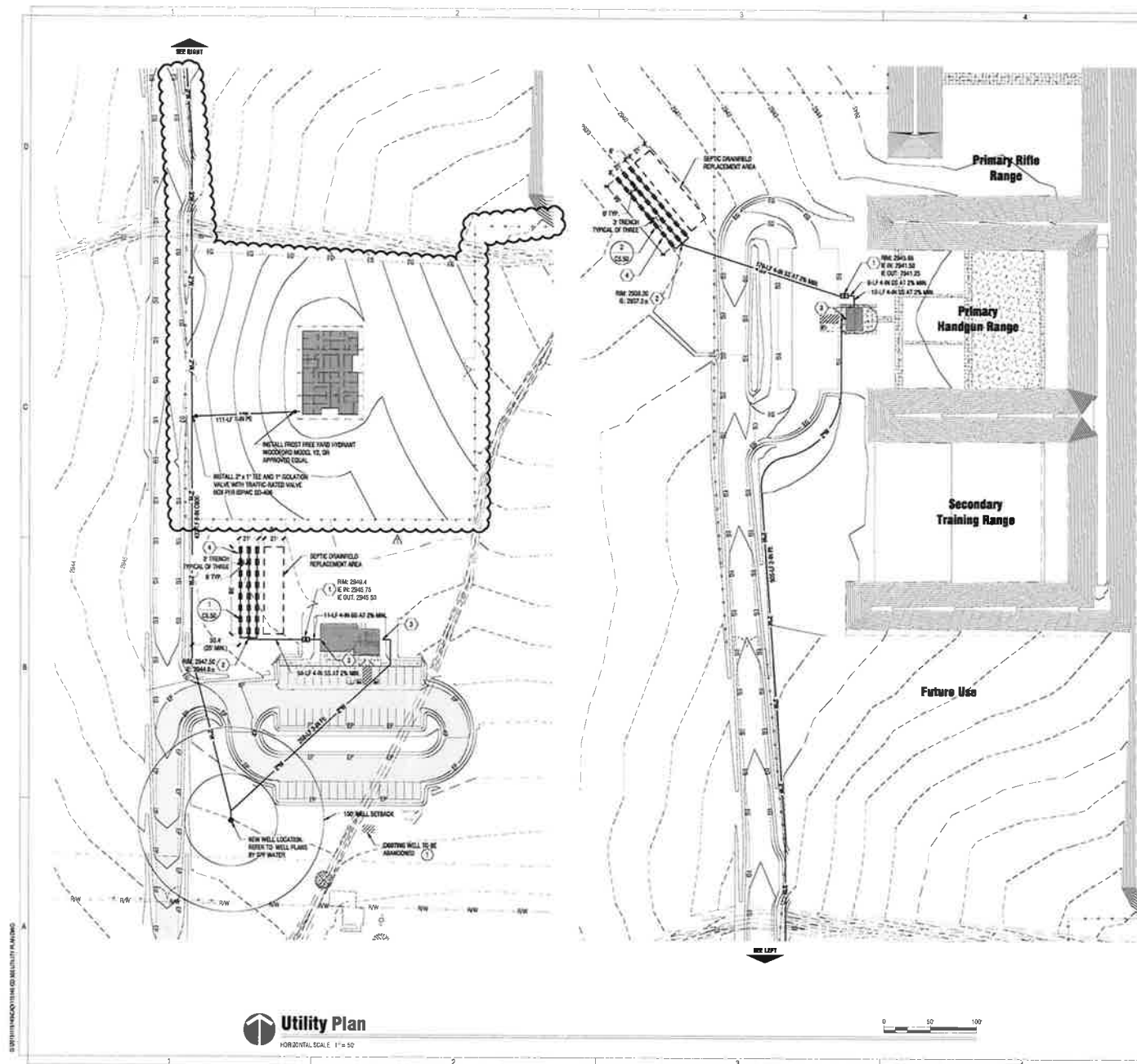
DATE: 06/01/2018
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**Septic Drainfield Notes:**

1. THE PRESERVATION OF THE ORIGINAL SOIL STRUCTURE IN THE DRAINAGE AREA IS ESSENTIAL TO MAINTAINING THE PERCOLATE CAPACITY OF THE SOIL. NO ACTIVITY OTHER THAN THE CONSTRUCTION OF THE SYSTEM IS PERMITTED WITHIN THE DRAINAGE AREA.
2. ALL CONSTRUCTION RELATED TO THE ONSITE WASTEWATER TREATMENT SHALL CONFORM TO THE RULES AND REQUIREMENTS OF THE CHAIRS DEPARTMENT OF ENVIRONMENTAL QUALITY AND CONSUMER DISTRICT HEALTH DEPARTMENT.
3. CONSTRUCTION MATERIALS AND METHODS SHALL BE PER THE CHAIRS STANDARDS FOR PUBLIC WORKS CONSTRUCTION AND AS SPECIFIED IN THESE PLANS.
4. FINAL APPROVAL AND ACCEPTANCE OF ALL SEWER CONSTRUCTION WILL BE BY CONSTRUCTION DISTRICT HEALTH DEPARTMENT.
5. DRIP FIELD SHALL BE CONSTRUCTED IN NATIVE SOILS (B-2). PERCOLATION RATE IS 0.4 GAL/DAY/SQ. DRAINAGE AND SYSTEM COMPONENTS ARE SIZED FOR 250 GPD.

Water Keynotes:

- 1 EXISTING WELL(S) MUST BE ABANDONED FROM DOMESTIC USE IN ACCORDANCE
WITH IDAHO DEPARTMENT OF WATER RESOURCE REQUIREMENTS

Sewer Keynotes:

- 1 INSTALL 1000-GALLON SEPTIC TANK. TANK SHALL BE TRAP-RAISED AND APPROVED FOR USE BY THE DAHD DEPARTMENT OF ENVIRONMENTAL QUALITY. PLACE TANK ON A COMPACTED 4" THICK LEVEL COURSE OF 3/4" MINUTE CINDER AGGREGATE CONFORMING TO THE SPWC FOR GRADATION AND COMPACTION.
- 1.1 RIM AND INVERT ELEVATIONS PER PLAN
- 2 SEWAGE DISTRIBUTION BOX
- 2.1 RIM AND INVERT ELEVATIONS PER PLAN
- 3 COORDINATE UTILITY CONTROLS BOX WITH BUILDING PLUMBING PLAN
- 3.1 SEWER MAINSHED TO BE CONSTRUCTED IN ACCORDANCE WITH CENTRAL DISTRICT HEALTH DEPARTMENT REQUIREMENTS AND DETAILS ON SHEET CS-50. CONSTRUCT THREE (3) 24" x 24" TRENCHES AS SHOWN ON PLAN

REVISIONS
 05/03/2018 ADA COUNTY
 COMMENTS/OWNER CHANGES



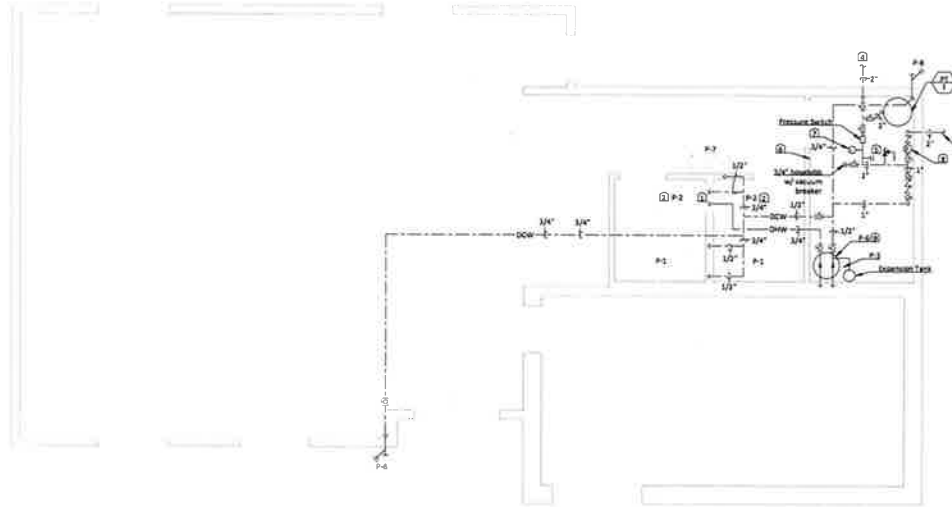
Art.
Antibiotics and Plasmids, Quarantined
408 E Parkcenter Blvd, Suite 203 Boise Idaho 83726

CITY OF BOISE POLICE
SHOOTING RANGE
5958 W KUNA MORA RD., KIMIA, ID. 83634

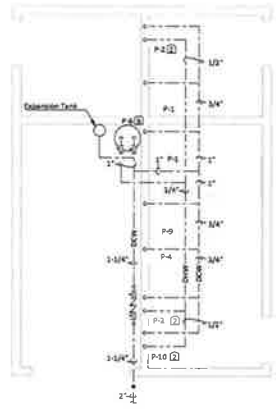
DATE	05-01-2016
PROJECT NO	115145.00
SHEET	

C5.00

UTILITY PLAN



Administration Building Domestic Water Plan
 SCALE: 1/4" = 1'-0"
 P1.2



Satellite Bathroom Domestic Water Plan
 SCALE: 1/4" = 1'-0"
 P1.2

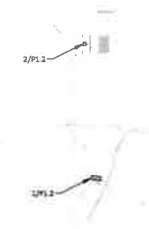
General Notes

1. All dimensions are in inches unless otherwise noted.
2. Coordinate all work with other trades.
3. Install all work per local codes as a minimum standard. Plans may reflect scope that exceed code requirements, install work per the higher standard.
4. Provide an approved fire stop assembly for any piping penetrating rated assemblies.
5. Reference architectural plans for mounting heights and locations of plumbing items.
6. Provide water hammer arrestors for all subvented valves and quick closing valves on lines over 1/2".

Keynotes

- 1. 1/2" CW down to 1/2"x1/2"x1/2" tee, run 1/2" CW to each P-2 lavatory, 3/4" DW down to 1/2"x3/4"x1/2" tee, run 1/2" DW to each P-2 lavatory, see 2/10.0 for detail.
- 2. 1" water supply from well. See civil plan for continuation.
- 3. 1" water supply to Satellite Bathroom. See civil for continuation.
- 4. Pressure relief valve set to 75 psi, pipe full size to floor drain.
- 5. Coordinate with well equipment.
- 6. Metal cases, liquid filled, pressure groups.
- 7. Displacement toilet water meter with turbine meter case displaying flow or gallons, conforming to ASME A13.1.
- 8. See 2/10.0 for water heater detail.

Keyplan



REVISIONS
 Add At #10 8/17/2016

FULCHER
 ARCHITECTS
 1000 S. Broadway Ave.
 Suite 200
 Boise, ID 83725
 Phone: (208) 333-8888
 Fax: (208) 333-8889
 www.fulcherarchitects.com

PROFESSIONAL ENGINEER
 LICENSE NO. 16682
 STATE OF IDAHO
 JAMES P. DAVIS
 8/10/16

ast.
 Architects and Planners, Chartered
 408 E. Yellowstone Blvd., Suite 205 Boise Idaho 83726

**CITY OF BOISE POLICE
 SHOOTING RANGE**
 5958 W KUNA MORA RD., KUNA, ID 83634

DATE: 06/01/2016
 PROJECT NO: 1545-00
 SHEET
P1.2
 DOMESTIC WATER
 PLAN

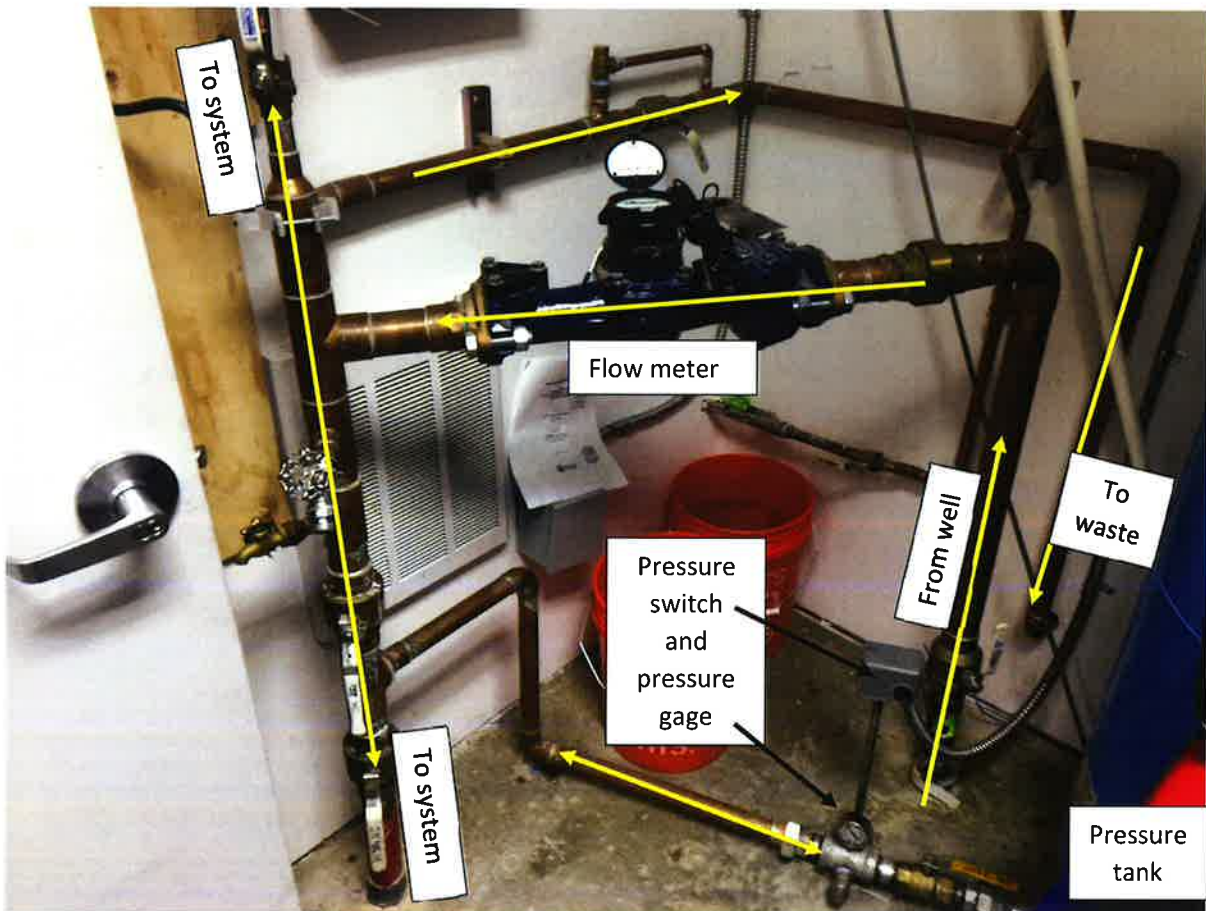
Attachment E
Exam Photos



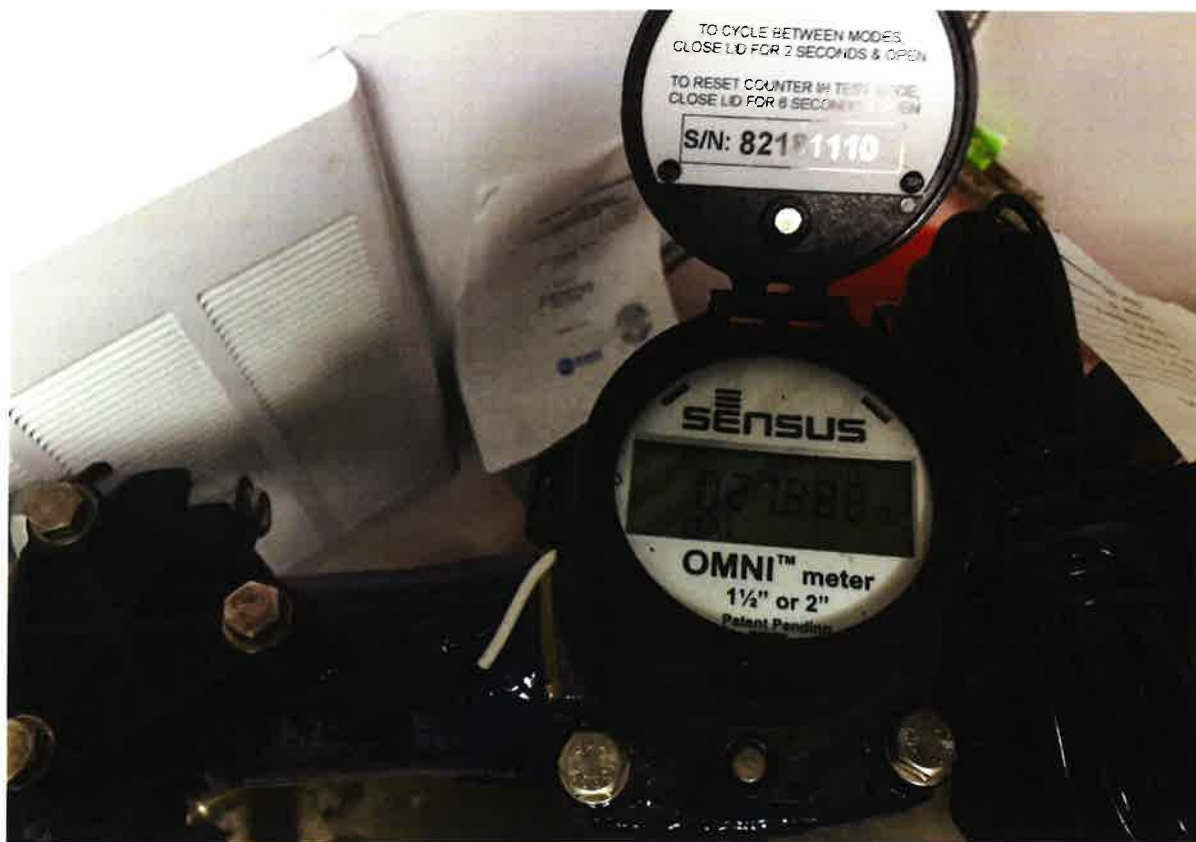
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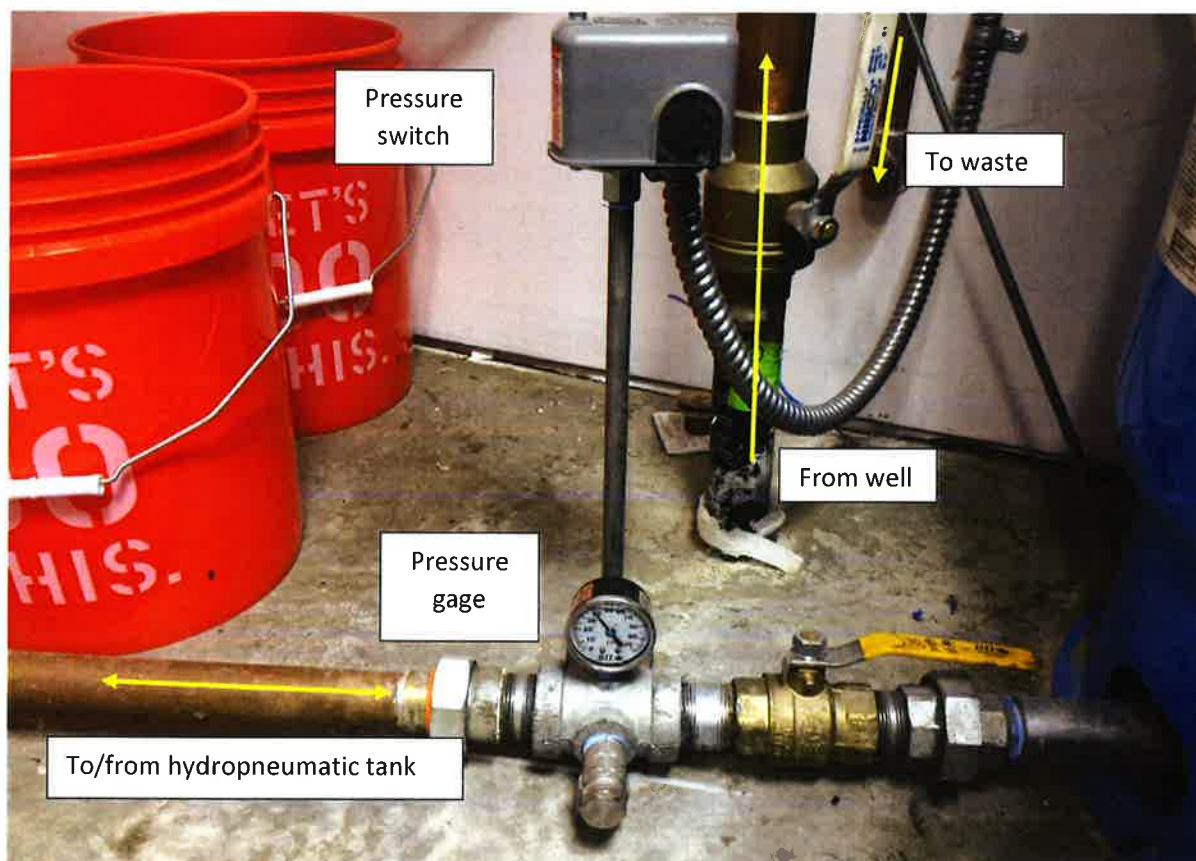
Well in foreground. Administration building (right) and training house (left) in background.



Mechanical room piping in administration building.



Sensus Omni flow meter. 28 gpm at 40 psi.



Pressure gage (40 psi). Pressure switch for pump control. Hydropneumatic tank for pump cycling.



Administration building restrooms and drinking fountains



Yard hydrant at training house



Satellite restroom building. Hose bib adjacent to roll up door.



Satellite restroom building.



Mechanical room at satellite restroom building.



SPF WATER
ENGINEERING

RECEIVED

JAN 28 2021

DEPARTMENT OF
WATER RESOURCES

January 26, 2021

Dan Nelson
Idaho Department of Water Resources
322 East Front Street
Boise, ID 83702-7371

Subject: 63-34160 – Proof of Beneficial Use and Beneficial Use Field Report

Dear Dan:

Enclosed on behalf of the City of Boise is a Statement of Completion for Submitting Proof of Beneficial Use and a Beneficial Use Field Report for permit 63-34160.

The permit authorizes 0.08 cfs for domestic and heating and 0.01 cfs for cooling from ground water at the Richard E. Linderer Memorial Firearms Range in Ada County. The exam found domestic use of 0.06 cfs. Heating and cooling uses were not developed. Low-temperature geothermal water was not developed; groundwater produced from the well has a temperature of 82°F.

A restroom facility is located in the NESE Section 31, outside of the authorized place of use in the SESE Section 31. An amendment to include domestic use in the NESE Section 31 will be required for licensing.

Please contact me with any questions.

Sincerely,

Terry M. Scanlan

Terry M. Scanlan, P.E., P.G.
Principal Engineer/Hydrogeologist

Cc: Syd Dietrich – Boise Police Department (sdietrich@cityofboise.org)
Robin Lee-Beusan – Boise Public Works Department (reebeusan@cityofboise.org)
John Roldan – Boise Public Works Department (jroldan@cityofboise.org)

Enclosures

SPF file number: 389.0980