

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

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. 63-331241. Owner Full Gospel Church Temple of Salvation IncPhone No. 208-794-1669Current address 251 W Lake Hazel Rd., Meridian, ID 836462. Examiner's name Cody ParkerEXAM DATE 08/08/173. Accompanied by Walter KinakhEmail walterkinakh@fgschurch.orgAddress SameRelationship to permit holder Vice PresidentPhone No. Same4. Source Groundwater

tributary to _____

B. OVERLAP REVIEW1. Other water rights with the same place of use 63-33122 (Permit)2. Other water rights with the same source and point of diversion Same**C. DIVERSION AND DELIVERY SYSTEM**

1. Point(s) of Diversion:

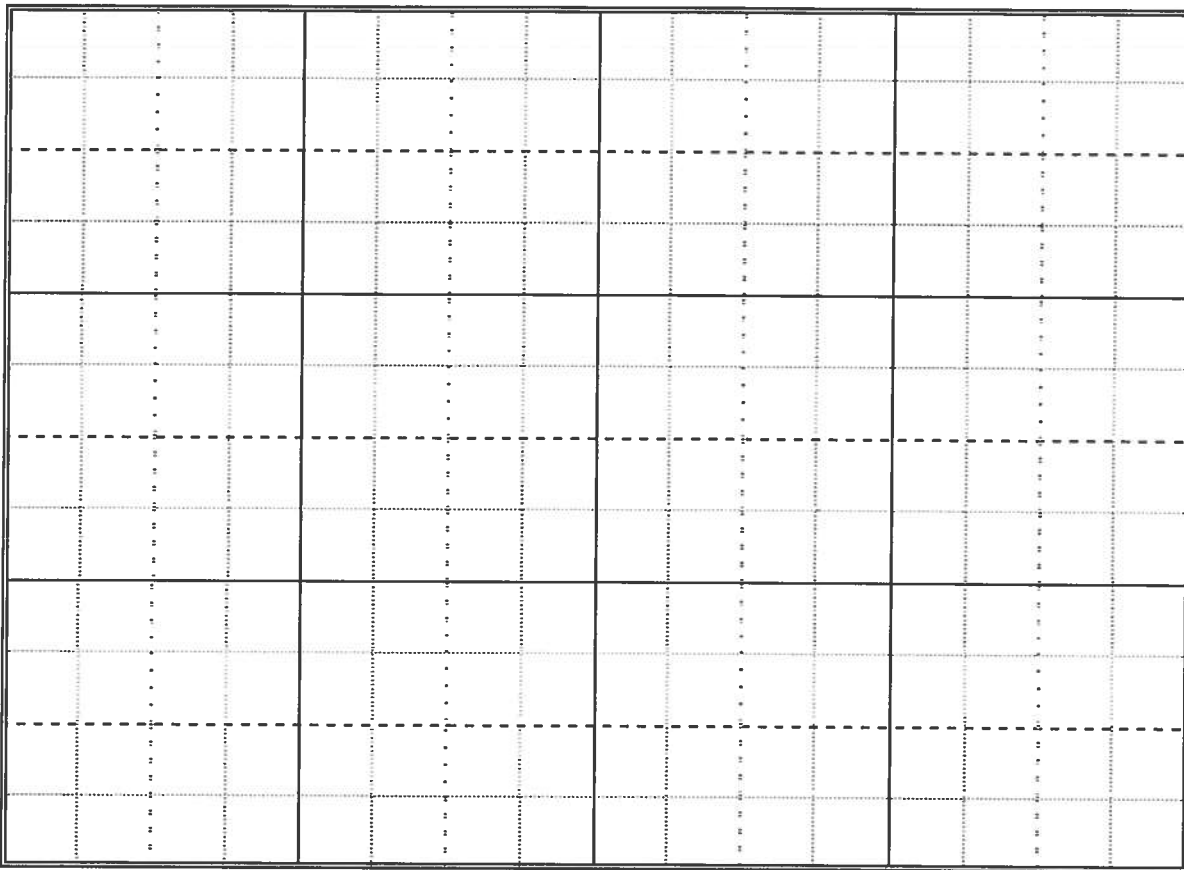
Ident. No.	Gov't Lot	¼	¼	¼	Sec	Twp	Rge	County	Method of Determination/Remarks
	1		NE	NE	01	02N	01W	ADA	Well Log, GPS

2. Place(s) of Use:

Method of determination _____

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
02N	01W	1	FP																
			L1																

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
D0057615	Franklin	100		Grundfos	1100S1000-3AA

*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

2. **Measurements:** _____

2 hydrants with 8" mainline to hydrants

Sprinkler system 4" line at 50 psi

This image shows a full page of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There is no handwriting or other markings on the paper.

[illegible]

F. FLOW CALCULATIONS☐ Additional computation sheets attached

Measured Method:

Theoretical => $Q = (8.8 \times 100 \times 0.7) / 270 = 2.28 \text{ cfs}$

Design Specs => 1050 gpm = 2.34 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:

No volume required for Fire Protection use per IDAPA BU Rule 35.01.j.iv

H. RECOMMENDATIONS

1. Recommended Amounts

Beneficial Use	Period of Use		Rate of Diversion Q (cfs)	Annual Volume V (afa)
	From	To		
Fire Protection	01/01	12/31	2.34 cfs	
Totals:			2.34 cfs	NA

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

Date 08/14/17

Reviewer

Date 9/11/17

SEAL

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NARRATIVE

Permit 63-33124 was approved on December 22, 2008 authorizing the diversion of 2.62 cfs from groundwater for fire protection use. Proof of beneficial use was submitted on November 13, 2014. On August 8, 2017 I (WRA Cody Parker) completed a site visit as part of the beneficial use field exam for this permit.

The point of diversion for this permit is a 12-inch diameter well, drilled to a depth of 298 feet with a water bearing zone from 242-298 feet below ground surface. GPS coordinates for the well are 43.54478 by -116.39709. The well is located in Gov Lot 1 (NENE) of Sec. 1, T02N, R01W, B.M., approximately 190 ft south of the church. There is no metal tag on the casing. However, the well log matching the well dimensions shows tag No. D0057615. There are two pumps set in the well. One is for domestic and irrigation use associated with a separate permit (No. 63-33122). The other supplies water to two separate fire hydrants on the property as well as the internal fire sprinkler system. The fire protection pump is a Grundfos pump (from the project manual provided by SPF) with a 100 hp Franklin motor. Water is diverted to holding tanks then through an 8" steel mainline at between 40 and 50 psi. There are two 8" risers leading to the hydrants; one is located to the south of the church and the other to the north. A 3rd 8" riser comes up in the south side of the building. The line tapers down to 4" and charges the sprinkler system at 50 psi.

The place of use for this permit is the church itself. The only other right associated with the building is permit no. 63-33122 (referenced above) which also uses the same well. Other than the permit, there are no other overlapping rights. The church is located within the same QQ as the point of diversion and is easily identified from aerial imagery.

A measurement could not be taken at the time of the exam as the system is totally buried, except at the hydrants. For this right, water is only to be used to fight an existing fire, which is exempt from the licensing requirements according to 42-201(3a). Therefore, precise quantification of the diversion rate seems unnecessary. The system seems to have been largely developed as it was designed. Lori Graves of SPF Engineering provided the system specifications and design drawings. The plans show the fire system was designed to operate at 1050 gpm using a 100-hp submersible pump. The system is designed to provide 750 gpm to the hydrants and 300 gpm to the internal sprinkler system simultaneously at 40–50 psi. Therefore, 1050 gpm (2.34 cfs) is probably reasonably close to the actual diversion rate of the system for fire suppression and is the rate I have recommended for the license. The right owner is free to use water at a higher diversion rate if they need it to fight an existing fire. Further, there is no annual diversion volume requirement for this use per IDAPA BU Exam Rule 35.01.j.iv.

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Figure 1 The well head for the POD. There is currently no metal tag welded to the casing, but a well log matching the dimensions of the well give a tag no. of D0057615.



Figure 2 The internal sprinkler system as it comes into the south side of the building from the 8" mainline outside.

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Figure 3 The fire hydrant at the north end of the property fed by an 8" mainline at 40 psi.

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Figure 4 The electronic control panel used to operate the Grundfos pump

State of Idaho
Department of Water Resources

Attachment to Water Right License

63-33124

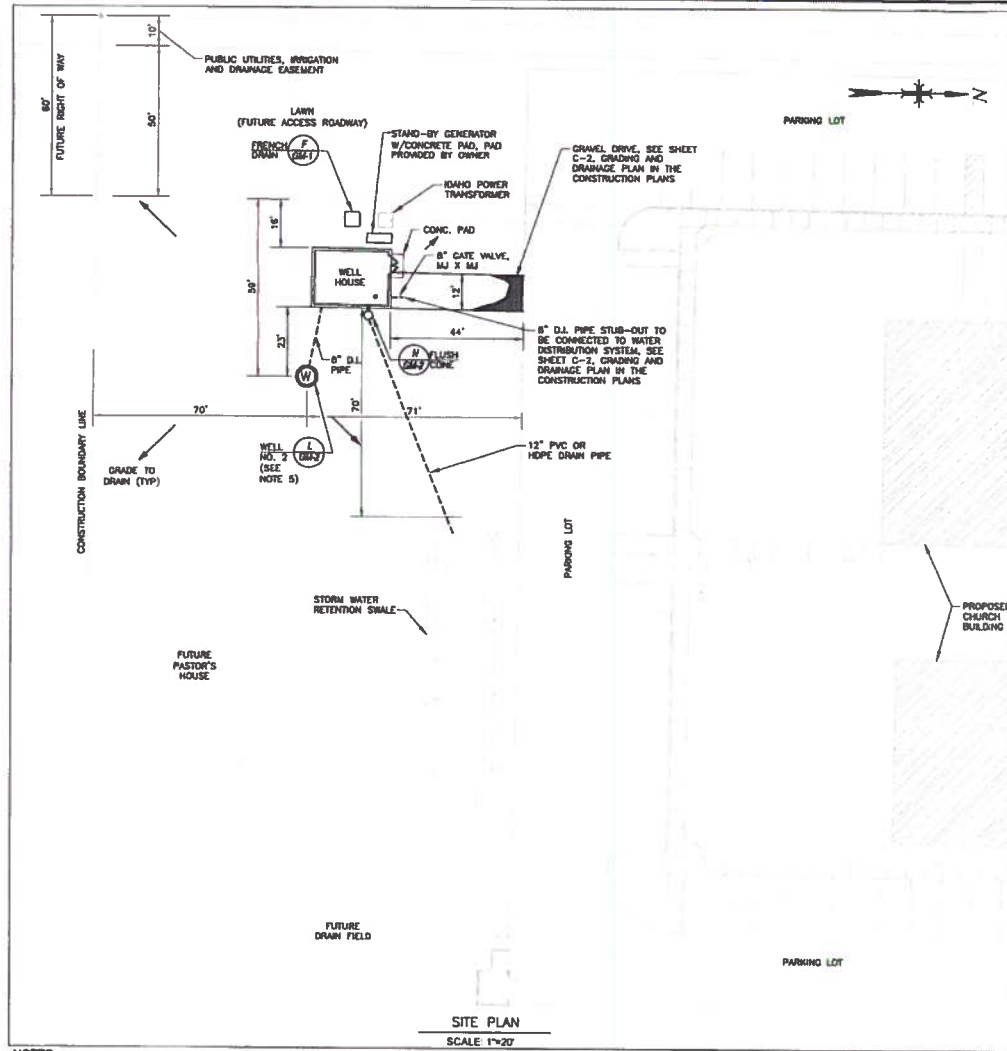
This map depicts the FIRE PROTECTION place of use boundary for this water right at the time of this approval and is attached to the approval document solely for illustrative purposes.



0 0.035 0.07 0.14 Miles

- Point of Diversion
- Place Of Use Boundary
- Townships
- PLS Sections





NOTES:

- CONTRACTOR SHALL CALL DOWNE (208-342-1583) TO MARK AND IDENTIFY UNDERGROUND UTILITIES PRIOR TO EXCAVATION.
- CONTRACTOR IS RESPONSIBLE FOR MAINTAINING SITE SECURITY AT ALL TIMES TO ENSURE NO UNAUTHORIZED ENTRY INTO SITE.
- CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND INSPECTIONS FOR PROJECT CONSTRUCTION.
- CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE W/ALL APPLICABLE SAFETY LAWS OF ANY JURISDICTIONAL AGENCY AND IS RESPONSIBLE FOR SAFE WORKING PRACTICES W/IN AND AROUND THE PROJECT SITE.
- CONTRACTOR TO PLACE WELL PUMPS, WESLEY TOOL, AND PIPES UNIT IN EXISTING WELL, SEE SPECIFICATION 11100 AND 11105.
- POLYETHYLENE ENCASE ALL BURIED METAL PIPING.
- ALL BURIED PIPING JOINTS SHALL HAVE THRUST BLOCKS, SEE DETAIL 6/GM-1.
- MINIMUM COVER OVER ALL PIPES IS 4 FEET (2 FEET FOR 12" DRAIN PIPE).
- SEE TRENCH DETAIL J/GM-2 AND SPECIFICATIONS.
- THE CONTRACTOR SHALL EXERCISE ALL POSSIBLE CAUTION TO PREVENT DAMAGE TO EXISTING STRUCTURES AND UTILITIES, WHETHER ABOVE GROUND OR UNDER GROUND. ANY EXISTING FEATURES DISTURBED DURING CONSTRUCTION SHALL BE REPLACED BY THE CONTRACTOR TO A CONDITION BETTER THAN OR EQUAL TO THE EXISTING CONDITION.
- NO WATER FACILITIES SHALL BE CONSTRUCTED PRIOR TO RECEIPT OF IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY (DEQ) APPROVAL.
- OWNER WILL PROVIDE ALL BUILDING STRUCTURAL WORK.
- FISHED FLOOR OF WELL HOUSE TO BE MINIMUM 6" ABOVE SURROUNDING GRADE.

Control Strategy	
No. 1 Pump/VFD	
Distribution System Pressure Set Points	Pump/VFD Operation
65 psi	Off
60 psi	Maintain
50 psi	On
No. 2 Pump/VFD	
Distribution System Pressure Set Points	Pump/VFD Operation
45 psi	Off
40 psi	Maintain
35 psi	On**
* No. 2 VFD turns off and turns on No. 1 VFD	
** No. 2 VFD turns on and turns off No. 1 VFD	
Note: All distribution system pressure set points and on/off/maintain set points shall be adjustable at VFD key pad	

1" = 10'
 IF THIS BAR DOES NOT MEASURE 1" THIS DRAWING IS NOT TO SCALE

No. 1 Pump System Curve				
Flow Description	Flow (gpm)	Pumping Water Level (ft bgs)	Total Dynamic Head (ft) @ 60 psi Distribution System Pressure	Total Dynamic Head (ft) @ 50 psi Distribution System Pressure
Peak Domestic Demand	54	102	241	218
Peak Irrigation Demand	36	101	240	217
Maximum Pump Production*	75	102	242	218
*Domestic and irrigation demands time will not occur at the same time				
No. 2 Pump System Curve				
Flow Description	Flow (gpm)	Pumping Water Level (ft bgs)	Total Dynamic Head (ft) @ 80 psi Distribution System Pressure	Total Dynamic Head (ft) @ 20 psi Distribution System Pressure
Fire Sprinkler	300	107	246	153
Fire Hydrant	750	120	281	169
Total Fire Flow	1,050	128	270	178

Pump Selection				
Description	Flow Range (gpm)	Type	HP	Remarks
No. 1 Pump	45-90	Submersible Turbine	7.5	VFD, Operate to maintain 65 - 50 psi discharge pressure
No. 2 Pump	220-1400	Submersible Turbine	100	VFD, Operate to maintain 50 - 40 psi discharge pressure

DESIGN CRITERIA

SPF WATER ENGINEERING
 300 East Mallard Drive, Suite 350
 Boise, Idaho 83706
 Tel (208) 383-4140 Fax (208) 383-4166

TEMPLE OF SALVATION WATER SYSTEM WELL HOUSE SITE PLAN

OWNER: TEMPLE OF SALVATION
 10400 OAKLAND ROAD, ST
 BOISE, IDAHO 83706
 PHONE: 208-383-4140
 PROJECT: PUMP & PIPING
 300 EAST MALLARD DRIVE, SUITE 350
 BOISE, IDAHO 83706
 PHONE: 208-383-4140



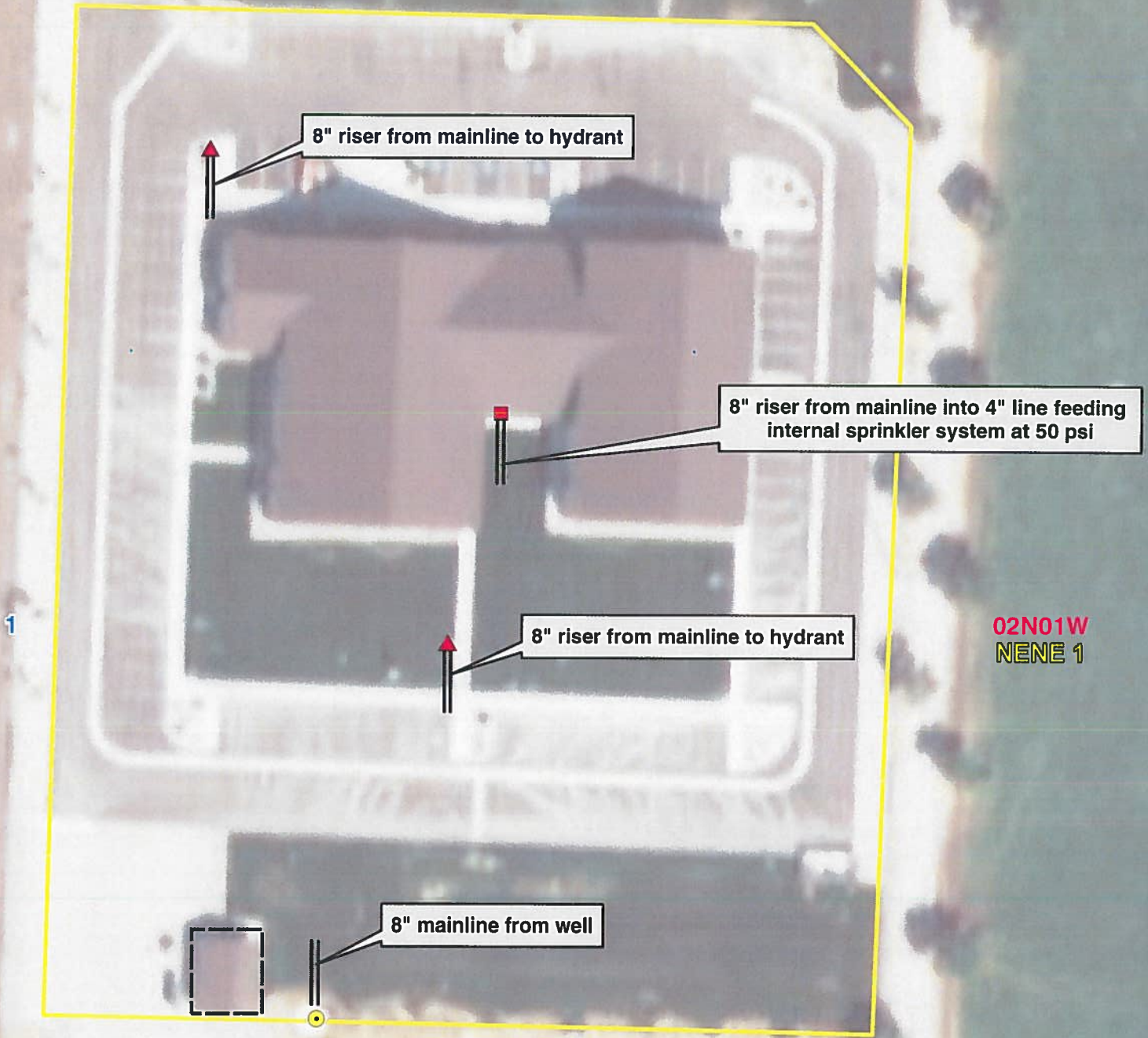
DRAWN BY: S.B.
 CHECKED BY: L.L.
 SCALE: AS SHOWN
 PLOT SCALE: 1" = 1'

DRAWING DIRECTORY
 1. VFD (NOT PROJECTED) (1.000)

REVISIONS
 1. 12/3/08 1:10:10 PM 12/3/08 1:10:10 PM 12/3/08 1:10:10 PM 12/3/08 1:10:10 PM 12/3/08 1:10:10 PM 12/3/08 1:10:10 PM

Beneficial Use Field Report

System Diagram



02N01W
NENE 1

-  Place of Use
-  Pump House
-  Water Supply Line
-  12" Diameter Well
-  Hydrant
-  Inlet to Internal Sprinkler System

0 0.0125 0.025 Miles



BasinSequence	Owner	Source	Use
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63-33124	FULL GOSP GROUND V FIRE PROTECTION
63-33251	BOISE PRO INDIAN CR IRRIGATION
63-33253	BOISE PRO TENMILE C IRRIGATION
63-372	BARKER RC BOISE RIVE IRRIGATION
63-373A	UNITED ST. BOISE RIVE IRRIGATION
63-7105	CITY OF MI GROUND V MUNICIPAL
63-7978	CITY OF MI GROUND V MUNICIPAL
63-8215	CITY OF KUGROUND V MUNICIPAL
63-8331	CITY OF MI GROUND V MUNICIPAL
63-8332	CITY OF MI GROUND V MUNICIPAL
63-9849	CITY OF MI GROUND V MUNICIPAL

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State of Idaho

DEPARTMENT OF WATER RESOURCES

Western Region • 2735 Airport Way • Boise, Idaho 83705-5082

Phone: (208) 334-2190 • Fax: (208) 334-2348 • Website: www.idwr.idaho.gov

C.L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

May 8, 2017

FULL GOSPELL SLAVIC CHURCH TEMPLE OF SALVATION INC
251 W LAKE HAZEL RD
MERIDIAN ID 83646

RE: Scheduling Field Exam for Water Right Permit No. 63-33124

Dear Permit Holder:

We are planning to conduct water right examinations in the vicinity of the above-referenced permit **this season**. An examination is needed to verify the water use in order to issue a water right license.

The above-referenced permit authorizes **2.62 cfs** of **GROUND WATER** for **fire protection** use(s). **If you have developed a beneficial use and still own the place of use property, please contact me at your earliest convenience to schedule an examination.**

If you did not develop a beneficial use of water under the permit during the beneficial use period, a license cannot be issued and the permit should be relinquished. If that use was developed, but have ceased using the water and you currently carry no interest in it, please relinquish the permit by submitting the enclosed Relinquishment of Permit form (no fee required).

If you did develop a beneficial use of water under the permit, but you no longer own the place of use property identified in the permit, please submit the enclosed Assignment of Permit form with the applicable \$25 processing fee.

Please contact me within the next thirty (30) days at (208) 334-2190 to either schedule an examination or submit a relinquishment or assignment form. If you no longer own the place of use property and/or do not respond to this letter, the department will work with the current property owner to issue a license or void the permit.

Sincerely,

Cody Parker
Water Resource Agent

Enclosures: Relinquishment of Permit form
Assignment of Permit form
Water Permit Report and Map