

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. 63-336691. Owner Corp of the Presiding Bishop of the Church of Jesus Christ of Latter Day Saints Phone No. (801) 240-4074Current address Real Estate Services Division, 50 e North Temple St, Salt Lake City, UT 84150-63202. Examiner's name Alexandra Clark (CWRE No.156) EXAM DATE 11/8/20173. Accompanied by Rob Tobiasson Email tobiassonrc@ldschurch.orgAddress 7355 N. Linder Rd, Meridian, ID 83646Relationship to permit holder Facility Manager Phone No. 208-501-44564. Source groundwater tributary to _____**B. OVERLAP REVIEW**1. Other water rights with the same place of use 63-4935; Settlers Irrigation District2. 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
	3		SE	NE	23	4N	1W	Ada	GPS data

2. Place(s) of Use: Method of determination GPS data; site visit; GIS mapping

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
4N	1W	23				X													
						L3													
4N	1W	23				5									2				7
						L3													

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 1					unknown, submersible pump

*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
Installed flow meter	Netafim	Octave		152032146		November 15, 2015

2. Measurements: _____

See Attachment C

See Attached narrative.

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

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?

[illegible]

F. FLOW CALCULATIONS☐ Additional computation sheets attachedMeasured Method:
See Attachment C**G. VOLUME CALCULATIONS**

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 7 \text{ ac} \times 4.5 \text{ ac-ft per acres} = 31.5 \text{ ac-ft}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation Season}) \times 1.9835 = 0.14 \text{ cfs} \times 260 \text{ days} \times 1.9835 = 72.2 \text{ ac-ft}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 31.5 \text{ ac-ft}$$

2. Volume Calculations for Other Uses:
See Attachment**H. RECOMMENDATIONS**

1. Recommended Amounts

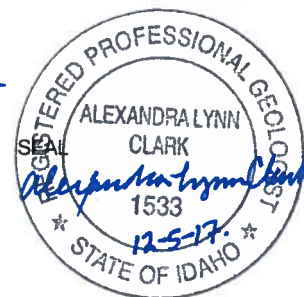
Beneficial Use	Period of Use		Rate of Diversion Q (cfs)	Annual Volume V (afa)
	From	To		
irrigation	3/1	11/15	0.14	31.5
diversion to storage	1/1	12/31	0.14	
aesthetic storage	1/1	12/31		5.0
irrigation storage	1/1	12/31		5.0
irrigation from storage	3/1	11/15		5.0
Totals:			0.14	36.5

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. AUTHENTICATIONField Examiner's Signature Alexandra Lynn Clark Date December 5, 2017

Reviewer _____ Date _____



Part E – Narrative

Permit 63-33669 sought 0.14 cfs from groundwater for seasonal irrigation and diversion to storage year-round; and storage of 12 ac-ft for aesthetic and irrigation use. The proposed season of use for irrigation was March 1 through November 15. Groundwater diversions under this right supplement a portion of water right decree 63-4935, which authorizes diversion of 0.25 cfs from waste water for seasonal irrigation use between March 1 and November 15. Settlers Irrigation District provides additional water to the site for irrigation.

Two membrane-lined ponds (located on the north side of the property and west of the temple) provide aesthetic and irrigation storage for the property. The upper pond (approximately 0.2 acres with 0.92 AF capacity) fills first, with overflow through a weir structure into the lower pond (approximately 0.4 acres with 3 AF capacity). Pond volumes were provided by Eric Mortenson from as-built information.

The ponds and irrigation system are configured to receive groundwater flow from an onsite well and surface water conveyance from the Settlers Irrigation District via Zinger Lateral. An 8-inch diameter well constructed in May 2015 was screened from 210 to 220 feet within the authorized target water-bearing zone (200 to 300 feet). The well was used to initially fill both ponds and is operated to maintain the levels and aesthetic quality of the ponds. Surface water and waste water in the Zinger Canal flow beneath the property in a pipeline; flow is controlled via manhole access on the east side of the property, and ties into the well discharge piping. The irrigation system control is housed within a mechanical room on the south side of the property. During the field exam on November 8, 2017, the well was operated at a flow rate of approximately 69 gpm (0.15 cfs) based on totalized meter readings (Attachment C). The above-ground irrigation system components, well, ponds, and place of use irrigation areas were documented during the field exam.

Current aerial images were not available for GIS use. The extent of irrigation was calculated by georeferencing a Google Earth image and digitizing irrigated areas in the ArcView environment.

Attachment A provides a copy of water right permit 63-33669

Attachment B provides a copy of the well drillers report

Attachment C provides flow calculations

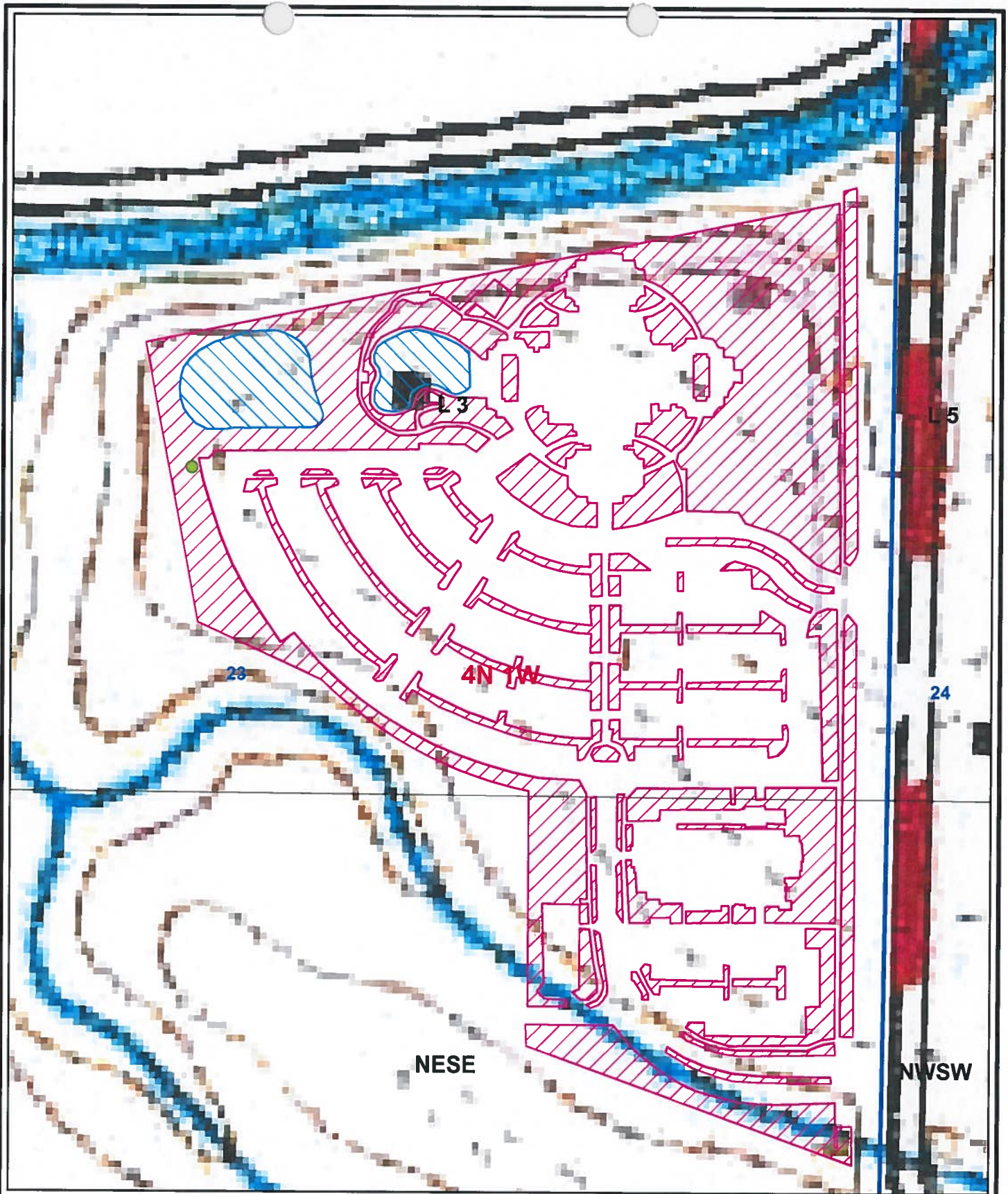
Attachment D is a topographic map and aerial photograph of the project area

Attachment E includes photographs taken during the field exam

Attachment F provides calculation of storage capacity

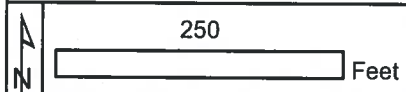
Attachment G provides a copy of the change-in-ownership form for water right 63-4935 (to be filed)

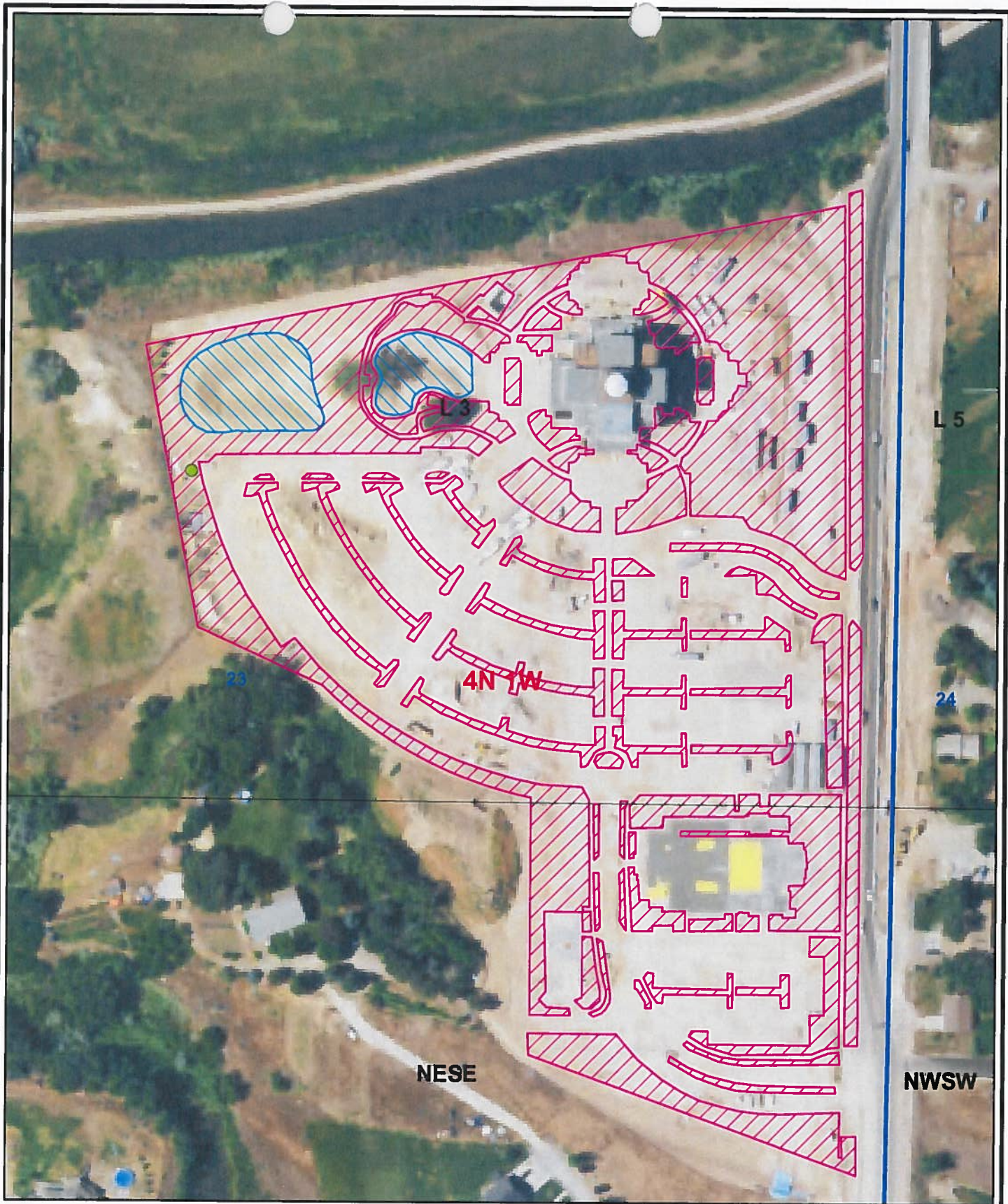
Attachment D. Topographic Map and Aerial Photo



- Point of Diversion
- ▨ Place of Use - ponds
- ▨ Place of Use - irrigation

Permit No. 63-33669
NRCS Ada County Topographic Mosaic





- Point of Diversion
- ▨ Place of Use - ponds
- ▨ Place of Use - irrigation

Permit No. 63-33669
2015 NAIP Imagery

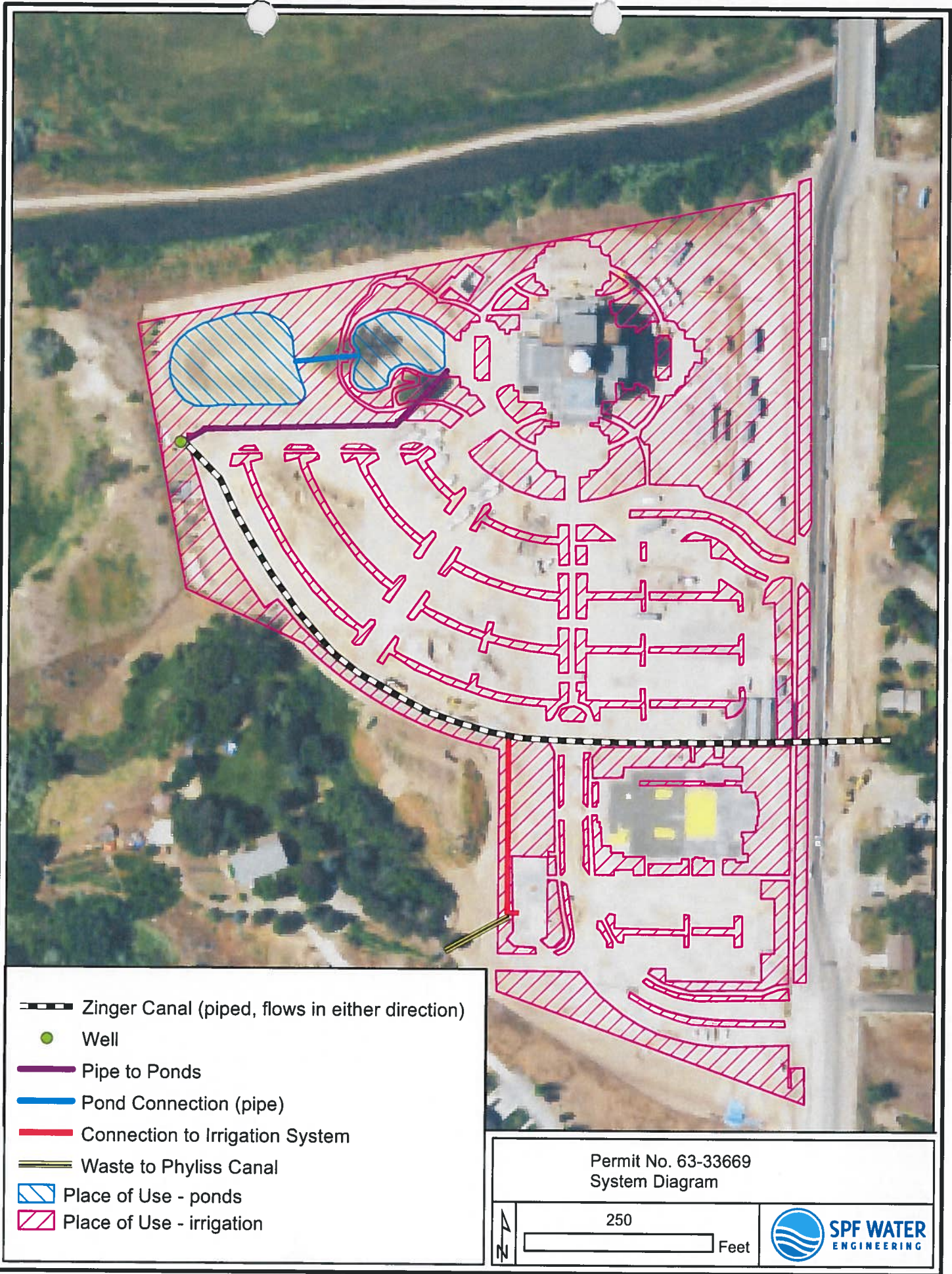


250

Feet



SPF WATER
ENGINEERING



Attachment A. Permit

State of Idaho
Department of Water Resources
Permit to Appropriate Water

NO. 63-33669

Priority: June 27, 2012

Maximum Diversion Rate: 0.14 CFS

This is to certify, that CORP OF THE PRESIDING BISHOP CHURCH OF JESUS CHRIST OF
LATTER DAY SAINTS REAL ESTATE SERVICES DIV
50 E NORTH TEMPLE ST
SALT LAKE CITY UT 84150-6320

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>	<u>ANNUAL VOLUME</u>
AESTHETIC STORAGE	01/01 to 12/31		12.0 AF
IRRIGATION FROM STORAGE	03/01 to 11/15		12.0 AF
DIVERSION TO STORAGE	01/01 to 12/31	0.14 CFS	
IRRIGATION	03/01 to 11/15	0.14 CFS	
IRRIGATION STORAGE	01/01 to 12/31		12.0 AF

LOCATION OF POINT(S) OF DIVERSION:

GROUND WATER L3 (SE1/4NE1/4) Sec. 23, Twp 04N, Rge 01W, B.M. ADA County

PLACE OF USE: AESTHETIC STORAGE

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
04N	01W	23				X													
						L3													

PLACE OF USE: IRRIGATION FROM STORAGE

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
04N	01W	23				5.0									2.0				7.0
						L3													

Total Acres: 7

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	
04N	01W	23				5.0									2.0				7.0
						L3													

Total Acres: 7

State of Idaho
Department of Water Resources
Permit to Appropriate Water
NO. 63-33669

PLACE OF USE: IRRIGATION STORAGE

Twp Rge Sec	NE				NW				SW				SE				Totals
	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
04N 01W 23				X													L 3

CONDITIONS OF APPROVAL

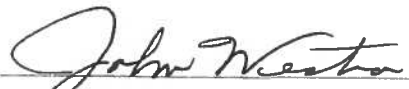
1. Proof of application of water to beneficial use shall be submitted on or before **October 01, 2017**.
2. Subject to all prior water rights.
3. Project construction shall commence within one year from the date of permit issuance and shall proceed diligently to completion unless it can be shown to the 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. Right holder shall comply with the drilling permit requirements of Section 42-235, Idaho Code and applicable Well Construction Rules of the Department.
5. After specific notification by the Department, the right holder shall install a suitable measuring device or shall enter into an agreement with the Department to use power records to determine the amount of water diverted and shall annually report the information to the Department.
6. This right when combined with all other rights shall provide no more than 0.02 cfs per acre nor more than 4.5 afa per acre at the field headgate for irrigation of the place of use.
7. If the surface water right(s) appurtenant to the place of use is abandoned, forfeited, sold, transferred, leased or used on any other place of use, this right to divert ground water shall not be used for irrigation purposes without an approved transfer pursuant to Section 42-222, Idaho Code, or approval of the Department if a transfer is not required.
8. To prevent injury to prior water rights appropriating water from the Boise River and/or the underlying shallow aquifer tributary to the Boise River, the new well used as a point of diversion for this water right located within Township 4N Range 1W Section 23 SENE shall be constructed and maintained with unperforated casing and sealed into the first significant confining layer located 200 feet or more below ground surface.
9. Water bearing zone to be appropriated is from 200 to 300 feet.
10. The one (1) pond established by the storage of water under this right shall not exceed a total capacity of 10 acre-feet or a total surface area of 0.8 acre.

State of Idaho
Department of Water Resources
Permit to Appropriate Water

NO. 63-33669

11. The right holder shall install and maintain an impermeable liner in the pond to eliminate seepage losses.
12. This right is limited to the irrigation of 7 acres within the authorized place of use in a single irrigation season.
13. The right holder shall make full beneficial use of all surface water rights available to the right holder for irrigation of the lands authorized to be irrigated under this right. The right holder shall limit the diversion of ground water under this right to those times when the surface water supply is not available or the surface water supply is not reasonably sufficient to irrigate the place of use authorized under this right.

This permit is issued pursuant to the provisions of Section 42-204, Idaho Code. Witness the signature of the Director, affixed at Boise, this 9th day of October, 20 12.


JOHN WESTRA, Western Regional Manager

Attachment B. Well Driller's Report

IDAHO DEPARTMENT OF WATER RESOURCES WELL DRILLER'S REPORT

1. WELL TAG NO. D 0068845

Drilling Permit No. 9168760-874817
Water right or injection well # _____

2. OWNER:

Name Corporation of the Presiding Bishop C of JC of LDS
Address c/o Jacobson Construction Co. Inc PO Box 27608
City Salt Lake City State UT Zip 84127

3. WELL LOCATION:

Twp. 4 North ☒ or South ☐ Rge. 1 East ☐ or West ☒
Sec. 23 1/4 SE 1/4 NE 1/4

Gov't Lot _____ County Ada
Lat. 43 ° 40.283 (Deg. and Decimal minutes)
Long. 116 ° 25.016 (Deg. and Decimal minutes)
Address of Well Site 7385/7345 N Linder Rd.

(Give at least name of road - Distance to Road or Landmark) City Meridian
Lot. _____ Blk. _____ Sub. Name _____

4. USE:

☐ Domestic ☐ Municipal ☐ Monitor ☒ Irrigation ☐ Thermal ☐ Injection
☐ Other _____

5. TYPE OF WORK:

☒ New well ☐ Replacement well ☐ Modify existing well
☐ Abandonment ☐ Other _____

6. DRILL METHOD:

☒ Air Rotary ☒ Mud Rotary ☐ Cable ☐ Other _____

7. SEALING PROCEDURES:

Seal material	From (ft)	To (ft)	Quantity (lbs or ft ³)	Placement method/procedure
ben/cem	10	201	129.6cuft	tremie
3/4 bentonite	0	10	600lbs	dry pour

8. CASING/LINER:

Diameter (nominal)	From (ft)	To (ft)	Gauge/Schedule	Material	Casing Liner	Threaded	Welded
8"	+2	210	.322	steel	☒	☐	☒
8"	220	225	.322	steel	☒	☐	☒
					☐	☐	☐
					☐	☐	☐

Was drive shoe used? ☐ Y ☒ N Shoe Depth(s) _____

9. PERFORATIONS/SCREENS:

Perforations ☐ Y ☐ N Method _____

Manufactured screen ☒ Y ☐ N Type alloy machine

Method of installation placed

From (ft)	To (ft)	Slot size	Number/ft	Diameter (nominal)	Material	Gauge or Schedule
210	220	.025	—	8"	stainless	

Length of Headpipe _____ Length of Tailpipe _____

Packer ☐ Y ☒ N Type _____

10. FILTER PACK:

Filter Material	From (ft)	To (ft)	Quantity (lbs or ft ³)	Placement method
8/12 silica	201	237	1400lbs	tremie

11. FLOWING ARTESIAN:

Flowing Artesian? ☐ Y ☒ N Artesian Pressure (PSIG) _____

Describe control device _____

12. STATIC WATER LEVEL and WELL TESTS:

Depth first water encountered (ft) 39ft Static water level (ft) 32.77

Water temp. (°F) 57degF Bottom hole temp. (°F) _____

Describe access port well cap

Well test:

Drawdown (feet)	Discharge or yield (gpm)	Test duration (minutes)
71.23	350	2.5

Test method:

Pump	Bailer	Air	Flowing artesian
☒	☐	☐	☐
☐	☐	☐	☐

Water quality test or comments: _____

13. LITHOLOGIC LOG and/or repairs or abandonment:

Bore Dia. (in)	From (ft)	To (ft)	Remarks, lithology or description of repairs or abandonment, water temp.	Water	
				Y	N
12"	0	1	top soil		X
"	1	6	hard brown clay		X
"	6	35	gravel and sand		X
"	35	39	tan clay		X
"	39	84	white sand	X	
"	84	126	tan clay		X
"	126	131	tan sand	X	
"	131	137	tan clay		X
"	137	158	coarse tan sand	X	
"	158	168	tan clay		X
"	168	171	tan sand	X	
"	171	179	tan clay		X
"	179	181	sand	X	
"	181	195	tan clay		X
"	195	197	tan sand	X	
"	197	205	tan clay		X
"	205	206	sand	X	
"	206	208	tan clay		X
"	208	229	tan sand	X	
"	229	230	tan clay		X
"	230	237	tan sand	X	
"	237	259	tan clay		X
"	259	260	tan sand	X	
"	260	265	tan clay		X
			backfilled to 237 with pee gravel		

RECEIVED

JUN 22 2015

WATER RESOURCES
WESTERN REGION

Completed Depth (Measurable) 237ft

Date Started: Apr 1, 2015

Date Completed: May 29, 2015

14. DRILLER'S CERTIFICATION:

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Company Name Coonse Well Drilling Co. No. 409

*Principal Driller [Signature] Date Jun 1, 2015

*Driller [Signature] Date Jun 1, 2015

*Operator II _____ Date _____

Operator I _____ Date _____

* Signature of Principal Driller and rig operator are required.

Attachment C. Flow Calculations

Attachment C. Flow Meter Readings**LDS Meridian Temple- Water Rights Field Exam (11-8-2017)**

Time	Totalizer Reading (gallons)	Instantaneous Flow Rate (gpm)	Calculated Flow Rate (totalizer), gpm
16:35	13600708	--	--
16:37	13600828	76.50	60
16:38	13600909	--	81
16:39	13600976	--	67
16:40	13601052	76.09	76
AVERAGE			69

Attachment F. Storage Volume Calculations

Total Storage Calculations

FILE NUMBER	63-33669
REVIEWER	R. Brown
DATE	12/5/2017

This spreadsheet has been designed by Idaho Department of Water Resources to estimate the total seepage, evaporation and fill capacity required for a pond.

User Input
Calculated value
Formula Explanations

Surface Area (AC.)	0.6	"Surface Area" is automatically carried over from the "Seepage Loss" sheet.
Average Pond Depth (FT.)	6	"Average Pond Depth" depicts the actual depth of the pond either measured or estimated. Note: If you know the maximum depth and not the average depth, the Field Examiner's Handbook suggests multiplying the maximum depth by 0.4 to get the average depth, or you can use any method that seems reasonable to attain average depth.
Pond Capacity (AF)	3.92	Pond Capacity is calculated by multiplying the Pond Surface Area by the Average Pond Depth. If you know the capacity, divide the capacity by surface area and enter the average pond depth in the space above. <i>Note: If pond capacity is determined using a method shown on the "Pond Capacity" sheet, the user may need to modify the value of "Pond Capacity" (cell B9) manually. Note that if the value is modified manually, the formula will be altered for future use.</i>
Multiple Fill Volume Above Initial Fill to Fulfill From Storage Needs- "Multiple Fills" (AF)	0	The "Multiple Fill Volume Above Initial Fill" is the acre-feet of water required to meet a <i>from storage</i> component if the <i>from storage</i> component exceeds a one time fill. This section should not include the amount of water needed to fill the pond initially or the amount of water needed to maintain the pond level due to evaporation or seepage. For example: if a pond has a capacity of 5 acre feet and 2.5 acre feet of seepage and evaporation, but the pond is used for irrigation that requires 10 acre feet of from storage for the irrigation use, then you would insert 5 acre feet into this location (10 acre feet needed - 5 acre feet from the initial fill = 5 acre feet of additional storage needed). <i>Note: You must have a "From Storage" component exceeding the initial fill on the permit to include a volume in this space.</i>
Estimated Seepage Loss (AF)	0.0	The "Estimated Seepage Loss" is automatically carried over from the "Seepage Loss" sheet.
Estimated Evaporation Loss (AF)	1.1	The "Estimated Evaporation Loss" is automatically carried over from the "Evaporation Loss" sheet.
Total Volume Required (AF)	5.0	The "Total Volume Required" is calculated by adding the Pond Capacity, Multiple Fills, Seepage Loss, and Evaporation Loss amounts to determine the total amount of storage required.

Evaporation Loss Calculations

This spreadsheet has been designed by Idaho Department of Water Resources to estimate the annual evaporation losses from a pond.

FILE NUMBER	63-33669
REVIEWER	R. Brown
DATE	12/5/2017

User Input
Calculated value
Formula Explanations

The acronyms used on the Kimberly Research Center website are defined below:
P = Precipitation
ET= Evapotranspiration
P _d = Precipitation deficit
P _d =ET-P

USING THIS SPREADSHEET

Use the link below to access the Kimberly Research Center website. This website provides the Precipitation Deficit for a station most representative of the pond under examination. The Precipitation Deficit is the total amount of free water surface evaporation minus the precipitation for a given area, which gives the total amount of evaporative losses incurred by the pond. There are several weather sites that are used throughout the state. IDWR staff can find the nearest site using Arc Map. The shape file containing the sites can be found at <X:/Spatial/Climate/ETIdahostations.shp>.

Instructions:

1. Use the link below to navigate to ET Idaho 2012.
2. Select the station which is most representative to your pond location.
3. Click Submit Query.
4. Under "Land Covers with Evapotranspiration Estimates," select "Open Water - Shallow Systems (ponds, streams)" or "Open Water - small stock ponds" depending on the pond size.
5. Click the link to "Precipitation Deficit."
6. Reference and copy (ctrl + C) the first subheading "Mean" values.
7. Click the "Paste Values from ET Idaho" button. The table will automatically enter a zero (0) for any negative precipitation deficit values.

Found at: <http://data.kimberly.uidaho.edu/ETIdaho/>

Precipitation Deficit

Station: Boise 7N (NWS 101017)

Month	mm/day ¹	Days per month	mm/Month
Jan	-1.34	31	0.00
Feb	-0.72	28	0.00
March	-0.29	31	0.00
April	1.09	30	32.70
May	1.77	31	54.87
June	3.33	30	99.90
July	4.41	31	136.71
August	3.81	31	118.11
September	2.28	30	68.40
October	0.89	31	27.59
November	-1.27	30	0.00
December	-1.76	31	0.00

PLEASE NOTE: The seasonal average for precipitation deficit should not be used for calculations because precipitation often exceeds evaporation during wetter months of the year. If the pond is kept full, excess precipitation during wetter months does not serve to refill the pond during drier months.

For example, see Sandpoint KSPT (NWS -- 108137), the annual precipitation deficit is -106 mm. However, April through September have positive precipitation deficit values. To properly estimate the annual volume of water necessary to refill a pond due to evaporation losses, the table will automatically enter a zero (0) for each month that the precipitation value is reported as a negative value.

As described above, precipitation offsets evaporation in winter months, so the net effect is that wintertime precipitation deficit is usually zero.

Total mm/year = 538.28

$$((538.28 \div 304.8) \times 0.60) = 1.1 \text{ AFA}$$

Seepage Loss Calculations

This spreadsheet has been designed by Idaho Department of Water Resources to estimate the total annual seepage losses from a pond.

FILE NUMBER	63-33669
REVIEWER	R. Brown
DATE	12/5/2017

User Input
Calculated value
Formula Explanations

INPUTS

Pond Surface Area (AC.)	0.6	AC.
-------------------------	-----	-----

Pond Surface Area (SQ. FT.)	26136	SQ. FT.
-----------------------------	-------	---------

I used the following method to obtain my Soil Classification information:	NRCS Web Soil Survey	
My Soil Classification is	Lined	
Suggested Seepage Rate (FT./DAY)	0.0000	FT./DAY

Formula: (Surface Area X Seepage Rate) X 7.48 = Gallons Per Day Loss
--

Convert to GPD	0	GPD
----------------	---	-----

Total Seepage Loss (AFA)	0.0	AFA
--------------------------	-----	-----

Though sand and gravel seepage rates may actually be higher, the maximum allowable rate is 0.2 ft/day, pursuant to Administrative Memo "Seepage Loss Standards for Ponds and Reservoirs."

Suggested Seepage Rates for Different Soil Types:
GW, GP, GM, GC, SW, SP and SM (silty sand, sand silt mixtures and gravel mixtures) = 0.2 ft per day
OL and ML (inorganic silts - very fine sands, silty, or clayey fine sands) = 0.02 ft per day
SC (clayey sands, sand clay mixtures) = 0.007 ft per day
CL (Low to medium plasticity clays) = 0.003 ft per day
MH, OH, PT and CH (high plasticity clays) = 0.0003 ft per day
LINED PONDS (liners can be chemical, fabric, or bentonite) = 0 ft per day
Ponds Intercepting Groundwater (excavated ponds filled by ground water) = 0 ft per day

PLEASE NOTE: The initial basis for the Suggested Seepage Rates in the table above is found on Page 16 of Seepage from Fish Ponds, Bulletin 599, August 1989 Alabama Agricultural experiment Station, Auburn University, Auburn University Alabama. If you don't know the soil type, please refer to the map provided at the NRCS Web Soil Survey (Tab #1), an ArcMap Soil Classification Map (Tab #1.1), or published NRCS Soil Survey (Tab #1.2). Use "0" if the pond fill relies on the water table.

Flow Rate into Pond (CFS)	0.14	The "Flow Rate into Pond" depicts the actual flow, either measured or estimated, into the pond. For offstream facilities, this will be equivalent to "diversion to storage" rate.
Highest Daily Evaporation Rate From Evaporation Tab. (mm/Day)	4.41	This number is carried over from the "Evaporation Loss" sheet. It is the highest recorded number in the "Precipitation Deficit Table".
Required Daily Maintenance Volume (AF/Day)	0.01	"Required Daily Maintenance Volume" is the maximum volume of water needed on any given day during the year to maintain pond volume. It is calculated by adding the highest daily evaporation loss to the average daily seepage loss in acre feet. The average daily seepage loss is calculated by dividing the "Estimated Seepage Loss" by 365 days. This is acceptable, since the seepage rate shouldn't vary throughout the season unless the pond completely freezes over during the winter months. The highest daily evaporation loss is calculated by dividing the Highest Daily Evaporation Rate by the 304.8 conversion factor and multiplying this number by the pond surface area to attain a combined daily acre feet requirement.
Minimum Maintenance Flow (CFS)	0.00	The "Minimum Maintenance Flow" is the minimum amount of flow required to maintain the level of the pond. This number is determined by dividing the "Maximum Required Daily Maintenance Volume" by 1.9835. This flow can be used to determine if the flow rate into the pond is adequate to maintain the pond level.
Days Required to Fill the Pond	15	The "Days Required to Fill the Pond" is calculated by dividing the "Pond Capacity" by the "Flow Rate" minus "Minimum Maintenance Flow" multiplied by 1.9835. This section will assist you in determining if the flow rate being diverted to the pond is adequate to fill the pond while maintaining the pond level. The length of time to fill the pond will help determine if the flow rate is adequate for the size of pond being proposed. If this number is approximately 6 months (180 days) or more, the reviewer should have a discussion with the applicant to make sure he/she understands that it will take a significant length of time to fill the pond.
Days Required to Fill the Pond at 13,000 Gallons per Day	126	Some water users may want to fill a pond under the 13,000 gallons per day domestic exemption. The "Days Required to Fill the Pond at 13,000 Gallons per Day" is calculated by converting the "Pond Capacity" and the "Required Daily Maintenance Volume" to gallons. The "Pond Capacity" is then divided by 13,000 gallons minus the "Required Daily Maintenance Volume" in gallons to determine the number of days to fill pond. If this number is approximately 6 months (180 days) or more, the reviewer should have a discussion with the applicant to make sure he/she understands that it will take a significant length of time to fill the pond. Negative values indicate that the supply of 13,000 gallons per day is not enough volume to overcome the required daily maintenance volume; the pond will never fill.

Attachment E. Field Exam Photographs (11-8-2017)

**Attachment E - LDS Meridian Temple – Permit 63-33669
(November 8, 2017) Field Exam Photograph Log**



Figure 1. Wellhead



Figure 2. Well controls

**Attachment E - LDS Meridian Temple – Permit 63-33669
(November 8, 2017) Field Exam Photograph Log**



Figure 3. Place of use – irrigated landscape area



Figure 4. Place of use- irrigated landscape area (looking east)

**Attachment E - LDS Meridian Temple – Permit 63-33669
(November 8, 2017) Field Exam Photograph Log**



Figure 5. Upper pond (looking southwest)



Figure 6. Lower pond (looking west)

**Attachment E - LDS Meridian Temple – Permit 63-33669
(November 8, 2017) Field Exam Photograph Log**



Figure 7. Weir (south side of upper pond)



Figure 8. Irrigation control room

Attachment G. Ownership Change Form

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

Notice of Change in Water Right Ownership

1. List the numbers of all water rights and/or adjudication claim records to be changed. If you only acquired a portion of the water right or adjudication claim, check "Yes" in the "Split?" column. If the water right is leased to the Water Supply Bank, check "Yes". If you are not sure if the water right is leased to the Water Supply Bank, see #6 of the instructions.

Water Right/Claim No.	Split?	Leased to Water Supply Bank?	Water Right/Claim No.	Split?	Leased to Water Supply Bank?
63-4935	Yes ☒	Yes ☐		Yes ☐	Yes ☐
	Yes ☐	Yes ☐		Yes ☐	Yes ☐
	Yes ☐	Yes ☐		Yes ☐	Yes ☐
	Yes ☐	Yes ☐		Yes ☐	Yes ☐
	Yes ☐	Yes ☐		Yes ☐	Yes ☐

2. Previous Owner's Name: _____

Name of current water right holder/claimant

3. New Owner(s)/Claimant(s):

Corp. of the Presiding Bishop of the Church of Jesus Christ of Latter Day Saints

New owner(s) as listed on the conveyance document

Name connector

☐ and

☐ or

☐ and/or

50 E. North Temple St.

Salt Lake City

UT

84150-6320

Mailing address

City

State

ZIP

(801) 240-4074

Telephone

Email

4. If the water rights and/or adjudication claims were split, how did the division occur?

☐ The water rights or claims were divided as specifically identified in a deed, contract, or other conveyance document.

☒ The water rights or claims were divided proportionately based on the portion of their place(s) of use acquired by the new owner.

5. Date you acquired the water rights and/or claims listed above: 2016

6. If the water right is leased to the Water Supply Bank changing ownership of a water right will reassign to the new owner any Water Supply Bank leases associated with the water right. Payment of revenue generated from any rental of a leased water right requires a completed IRS Form W-9 for payment to be issued to an owner. A new owner for a water right under lease shall supply a W-9. Water rights with multiple owners must specify a designated lessor, using a completed Lessor Designation form. Beginning in the calendar year following an acknowledged change in water right ownership, compensation for any rental will go to the new owner(s).

7. This form must be signed and submitted with the following **REQUIRED** items:

☒ A copy of the conveyance document – warranty deed, quitclaim deed, court decree, contract of sale, etc. The conveyance document must include a legal description of the property or description of the water right(s) if no land is conveyed.

☒ Plat map, survey map or aerial photograph which clearly shows the place of use and point of diversion for each water right and/or claim listed above (if necessary to clarify division of water rights or complex property descriptions).

☒ Filing fee (see instructions for further explanation):

o \$25 per *undivided* water right.

o \$100 per *split* water right.

o No fee is required for pending adjudication claims.

☐ If water right(s) are leased to the Water Supply Bank AND there are multiple owners, a Lessor Designation form is required.

☐ If water right(s) are leased to the Water Supply Bank, the individual owner or designated lessor must complete, sign and submit an IRS Form W-9.

8. Signature: _____

Signature of new owner/claimant

Title, if applicable

Date

Signature: _____

Signature of new owner/claimant

Title, if applicable

Date

For IDWR Office Use Only:

Received by _____ Date _____ Receipt No. _____ Receipt Amt. _____

Active in the Water Supply Bank? Yes ☐ No ☐

If yes, forward to the State Office for processing

W-9 received? Yes ☐ No ☐

Name on W-9 _____

Approved by _____

Processed by _____

Date _____

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