

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 63-34571

Exam Date: 04/21/2025

1. Current Owner:
WEST ADA SCHOOL DISTRICT C/O SPENCER MCLEAN
1303 E CENTRAL DR MERIDIAN ID 83642-7991

2. Accompanied by: TJ (Thomas Martin)
Phone No: **208-350-5210**
Address: 3650 N Owyhee Storm Ave, Meridian, ID 83646
Relationship to permit Holder: Representative

3. **SOURCE:**
GROUND WATER

Method of Determination: GARMIN GPS, GIS Imagery, and Ada County Tax Parcel Data.

B. OVERLAP REVIEW

1. Other water rights with the same place of use: YES Overlap

Water Right No.	Source	Purpose of Use	Basis
63-11629	GROUNDWATER	IRRIGATION	LICENSE
NAMPA/MERIDIAN IRR DIST RIGHTS	BOISE RIVER	IRRIGATION	LICENSE

Comments: This permit is for combined use with right 63-11629 with a maximum rate of 1.2cfs for the irrigation of 42 acres from GW supplemental to Nampa Meridian Irrigation District shares for the place of use (POU). 63-11629, Irrigation District rights, and Municipal rights fully overlap the POU.

2. Other water rights with the same point-of-diversion: YES Overlap

Water Right No.	Source	Purpose of Use	Basis
63-11629	GROUNDWATER	IRRIGATION	LICENSE

Comments: The permitted point of diversion (POD) is shared with overlapping right 63-11629.

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

GROUND WATER NW¼ SE¼, Sec. 32, Twp 04N, Rge 01W, B.M. ADA County

GPS COORDS: N 43.63815° W 116.47870°

Method of Determination: GARMIN GPS and GIS Imagery.

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	
04N	01W	32			0.8											14.0	13.0		27.8

Right Acre Limit: 42.0

Total Acres: 27.8

Method of Determination: GIS Imagery and Ada County Tax Parcel Data.

3.

Delivery System Diagram Attached (required). Indicate all major components and distances between components.

X 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

X 1:24,000 or greater.

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

X 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
---------------------------	------------	----	------------------	-----------	-----------------------------------

302999	Unknown	100	Unknown	Unknown	Unknown
--------	---------	-----	---------	---------	---------

D. FLOW MEASUREMENTS

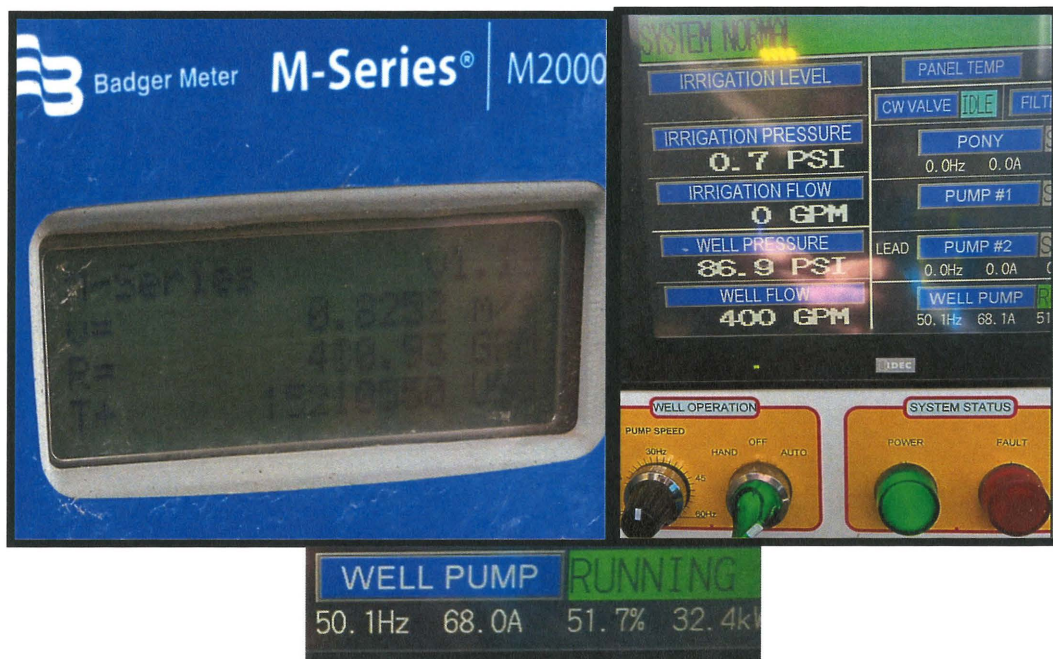
1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
Flowmeter	Inline	BadgerMeter	M2000	1707-424/5162238C	NA	NA

2. Measurements: An inline flowmeter with totalizer was installed by the permit holder.

E. FLOW CALCULATIONS

Measured Method: Documented the maximum rate operating multiple zones in 2 areas + additional zones until reaching 51% pump capacity at approximately 410GPM



Figures A,B, & C- observed rate max approx. 411GPM (left) with pump operating at 51.7% of capacity per VFD (right).

static water level = 18ft

Pump set Depth= unknown

WBZ= 75-205ft

Theoretical Calculation:

$$Q = (100 \text{ Hp})(8.8)(.80 \text{ eff}) / (200 \text{ lift in ft}) + (2.31) * (87 \text{ pressure psi}) = 1.75 \text{ cfs}$$

Documented Rate:

410.93GPM (Flowmeter)=51.7% capacity (VFD)

100% Capacity= 795 GPM= 1.77cfs max

Permitted Combined Rate= 2.04cfs for the irrigation of 42 acres (approx. 0.0486cfs/acre)

BU Limited Combined Rate= 1.35cfs for the irrigation of 27.8 acres (approx. 0.0486cfs/acre)

Rate Allocated via WR 63-11629= 1.20cfs

Recommended Rate= 0.15cfs for the irrigation of 27.8 acres

Comments/Recommendation: The system design specifications state that the proposed system should be capable of 900GPM (approx. 2.01cfs). During the field examination the escort ran the system programed to irrigate zones in 2 areas simultaneously, as stated in the proposed system specifications on the irrigation prints. Then additional zones in the 2 areas were manually opened until the system exceeded 50% of its capacity on the VFD control panel. Based on these observations the system is capable of approximately 1.79cfs, which is supported by the conservative rate calculation above

using moderate efficiency and maximum set depth for a submersible pump several feet in length. However, the GIS measurement for the irrigated areas within the POU is 27.8 acres, and the permitted rate per acre when combined with WR 63-11629 (alone 1.2cfs for 42 acres) is 2.04cfs for the irrigation of 42 acres, which is approximately 0.0486cfs/acre. At the permitted combined rate per acre the beneficial use developed is limited to 1.35cfs for the irrigation 27.8 acres. As WR 63-11629 has a maximum rate of 1.2cfs, the remaining combined rate allowed under this permit should be 0.15cfs. **I recommend the license is issued with a maximum rate of 0.15cfs for the irrigation of 27.8 acres.**

SS Comment – *The above recommendation seems to contemplate that the 1.20 cfs authorized under 63-11629 is fully consolidated to the 27.8 acres currently irrigated, which is not true.*

S. Storms:

Permit 63-34571 was applied for and approved at 0.84 cfs for irrigation of 42 acres, equating to a rate per acre of 0.02 cfs per acre. The permit fully overlapped the 42 acres authorized under existing right 63-11629 and the two rights combined would allow for a total rate per acre of 0.0486 cfs per acre, so long as the average use over a 24-hour period equates to 0.02 cfs per acre, as explained in condition No. 3 (turf grass condition) on the permit. Given only 27.8 acres were developed under permit 63-34571, the total rate authorized on the license should be $0.02 \text{ cfs/ac} \times 27.8 \text{ ac} = 0.56 \text{ cfs}$. This would equate to a total rate of 1.76 cfs between the two rights, which the system was determined to be capable of. Therefore, the recommended rate for 63-34571 should be **0.56 cfs**.

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 27.8 \text{ acres} \times 4.5\text{AFA} = 125.1 \text{ AF annually.}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.15\text{cfs} \times 260 \text{ days} \times 1.9835 = 77.4 \text{ AF}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = \mathbf{77.4 \text{ AF annually}}$$

2. Volume Calculations for Other Uses: NA

Comments/Recommendation: WR 63-11629 fully overlaps the permitted use and accounts for 1.20cfs for the irrigation of 42 acres with no stated annual volume. The proposed license should carry a condition limiting the combined rights to 125.1 AF annually (the headgate calculation for annual rate above). **I recommend that the license is issued with an annual volume of 77.4 AF, per the diversion rate based standard volume calculation above.**

G. NARRATIVE/REMARKS/COMMENTS

The Department received the Proof of Beneficial Use for permit 63-34571 on June 25, 2024, submitted and signed by Spencer McLean, Superintendent. In section 3 of the proof the permit holder stated that beneficial use was developed for the irrigation of 42 acres. On April 21, 2025, a field examination was conducted with Thomas "TJ" Martin, supervisor, as an escort. Permit 63-34571 is for irrigation from groundwater within the place of use (POU) overlapped by WR 63-11629, currently owned by the permit holder. WR 63-11629 was transferred to the permitted POU condensing the use from 60 acres of irrigation to a 42-acre PPU within a 78-acre parcel held by the permit holder (appurtenant to the permitted POU). Both WR 63-11629 and the permitted use are supplemental to surface water delivered by the Nampa Meridian Irrigation District through shares held by the permit holder. The combined groundwater uses under WR 63-11629 and permit 63-34571 provide approximately 0.0486cfs/acre to allow for irrigation under a watering schedule with time constraints due to the facilities use for school events.

The wellhead POD is southeast of the football field. Surface water is conveyed via the Eight-mile Lateral which is delivered by an integrated system using a pumping station in the NE corner of the pump house to the permitted POU using. At times when water is not available under the shares held by the permit holder a manual valve can be closed on the main line allowing the well pump to charge the system. The escort stated that water is diverted using a 100 Hp submersible pump at an unknown set depth which can run up to 8 zones with 6 large rotary sprinkler heads (6504 Rain Bird) per zone. A GIS measurement found approximately 27.8 acres of the 42-acre permit place of use (POU) is irrigated. TJ stated during the field examination that there are only 6" stub outs and control valve boxes installed in the field north of Achievement Dr., which has not been irrigated (see photos 25 & 26). For the field examination the escort activated zones in two areas simultaneously. Then zones in other areas were manually turned on until the system reached approximately 52% of capacity documented at the VFD control panel, with a maximum documented rate of approximately 411 GPM.

The documented use and theoretical calculation indicate the groundwater system is capable of diverting a rate

exceeding the proposed 0.0486cfs/acre irrigation rate (per section E of this report). However, the licensed rate and volume should be limited by the beneficial use developed and the proposed rate per acre permitted when combined with WR 63-11629 (0.0486cfs/acre) for the irrigation of 27.8 acres and an annual volume of 77.4 AF per the diversion rate limited calculation in section F of this report.

I recommend the license is issued with a text condition limiting the combined use to the statutory 0.02cfs/acre rate over a 24hr period, a text condition limiting the total annual volume to the field headgate standard, conditions 943, X35, 01M, and 103. Permit condition 121 should be replaced with license condition 103 at licensing. Conditions 046 and 26A should be removed at licensing, according to current guidance. Condition X27 should be removed prior to licensing as the use developed is less than the 42 acres described in WR 63-11629.

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	03/01 to 11/15	0.15 CFS	77.4 AF
<u>Totals:</u>		~~0.15 CFS~~ 0.56 CFS	77.4 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, Sr.

Field Examiner's Name Bob Howe Date June 10, 2025

Reviewer  Date 6/2/2020

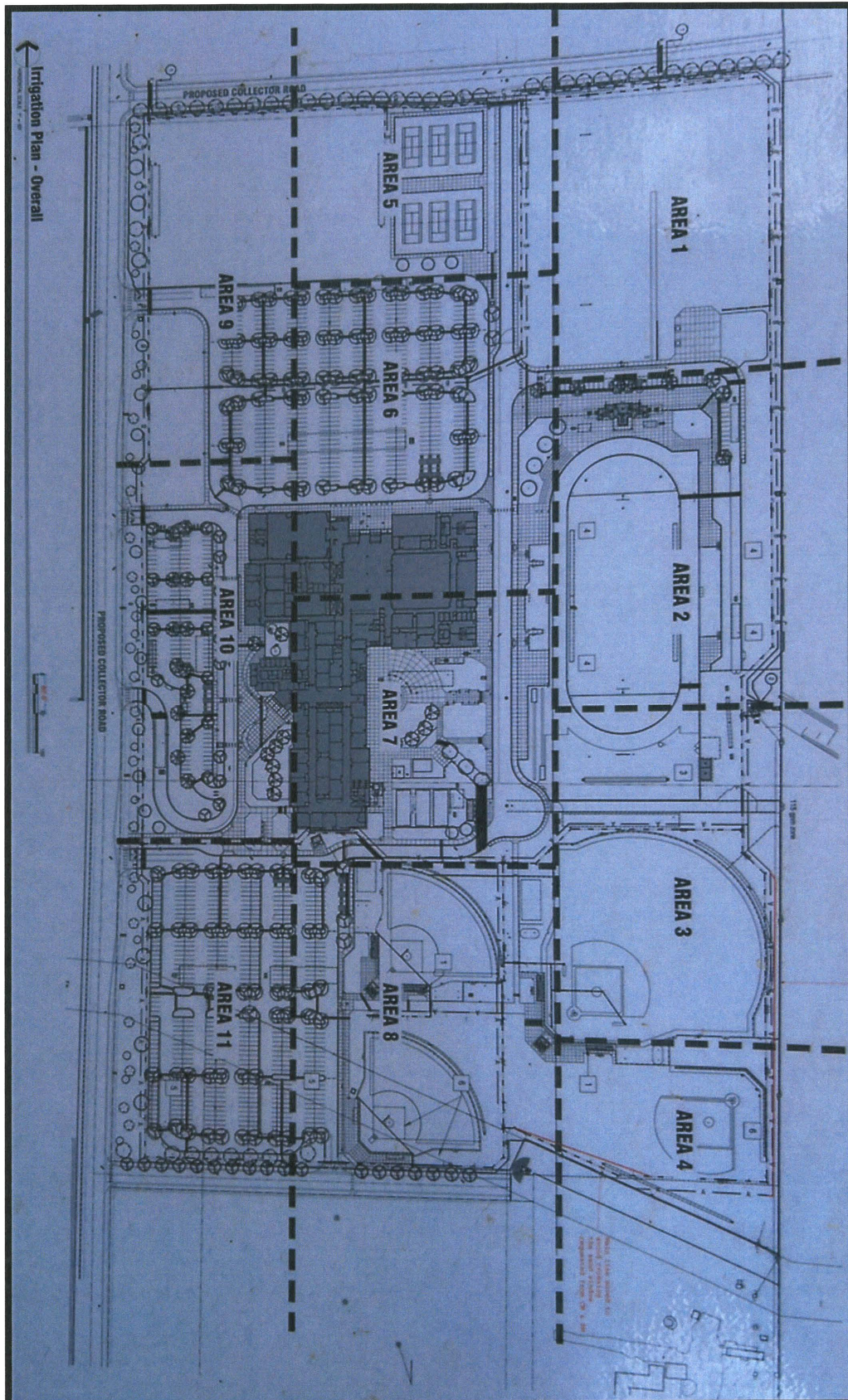


Photo 1- Irrigation Plan print. Areas Identified. Area 1-ran during examination with other areas manually forced on to reach permit rate. Area 1 has 42 zones with 6 large rotary sprinklers each. The system is set up to run 8 zones at a time (48 heads).

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 63-34571
Exam Date: 04/21/2025

1. Current Owner:
WEST ADA SCHOOL DISTRICT C/O SPENCER MCLEAN
1303 E CENTRAL DR MERIDIAN ID 83642-7991
2. Accompanied by: TJ (Thomas Martin)
Phone No: **208-350-5210**
Address: 3650 N Owyhee Storm Ave, Meridian, ID 83646
Relationship to permit Holder: Representative

3. SOURCE:
GROUND WATER

Method of Determination: GARMIN GPS, GIS Imagery, and Ada County Tax Parcel Data.

B. OVERLAP REVIEW

1. Other water rights with the same place of use: YES Overlap

Water Right No.	Source	Purpose of Use	Basis
63-11629	GROUNDWATER	IRRIGATION	LICENSE
NAMPA/MERIDIAN IRR DIST RIGHTS	BOISE RIVER	IRRIGATION	LICENSE

Comments: This permit is for combined use with right 63-11629 with a maximum rate of 1.2cfs for the irrigation of 42 acres from GW supplemental to Nampa Meridian Irrigation District shares for the place of use (POU). 63-11629, Irrigation District rights, and Municipal rights fully overlap the POU.

2. Other water rights with the same point-of-diversion: YES Overlap

Water Right No.	Source	Purpose of Use	Basis
63-11629	GROUNDWATER	IRRIGATION	LICENSE

Comments: The permitted point of diversion (POD) is shared with overlapping right 63-11629.

C. DIVERSION AND DELIVERY SYSTEM**1. LOCATION OF POINT(S) OF DIVERSION:**

GROUND WATER NW¼ SE¼, Sec. 32, Twp 04N, Rge 01W, B.M. ADA County

GPS COORDS: N 43.63815° W 116.47870°

Method of Determination: **GARMIN GPS and GIS Imagery.**

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	
04N	01W	32			0.8											14.0	13.0		27.8

Right Acre Limit: 42.0

Total Acres: 27.8

Method of Determination: GIS Imagery and Ada County Tax Parcel Data.

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

2

4.

Well or Diversion ID No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
302999	Unknown	100	Unknown	Unknown	Unknown

D. FLOW MEASUREMENTS

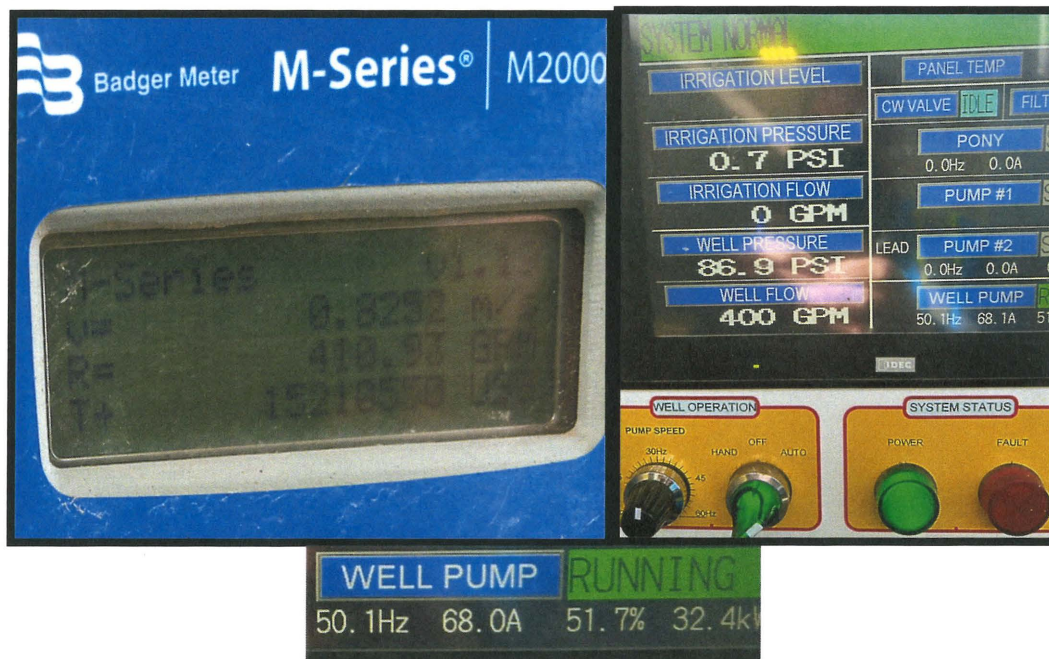
1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
Flowmeter	Inline	BadgerMeter	M2000	1707-424/5162238C	NA	NA

2. Measurements: An inline flowmeter with totalizer was installed by the permit holder.

E. FLOW CALCULATIONS

Measured Method: Documented the maximum rate operating multiple zones in 2 areas + additional zones until reaching 51% pump capacity at approximately 410GPM



Figures A,B, & C- observed rate max approx. 411GPM (left) with pump operating at 51.7% of capacity per VFD (right).

static water level = 18ft

Pump set Depth= unknown

WBZ= 75-205ft

Theoretical Calculation:

$$Q = (100 \text{ Hp})(8.8)(.80 \text{ eff})/(200 \text{ lift in ft}) + (2.31)*(87 \text{ pressure psi}) = 1.75 \text{ cfs}$$

Documented Rate:

410.93GPM (Flowmeter)=51.7% capacity (VFD)

100% Capacity= 795 GPM= 1.77cfs max

Permitted Combined Rate= 2.04cfs for the irrigation of 42 acres (approx. 0.0486cfs/acre)

BU Limited Combined Rate= 1.35cfs for the irrigation of 27.8 acres (approx. 0.0486cfs/acre)

Rate Allocated via WR 63-11629= 1.20cfs

Recommended Rate= 0.15cfs for the irrigation of 27.8 acres

Comments/Recommendation: The system design specifications state that the proposed system should be capable of 900GPM (approx. 2.01cfs). During the field examination the escort ran the system programed to irrigate zones in 2 areas simultaneously, as stated in the proposed system specifications on the irrigation prints. Then additional zones in the 2 areas were manually opened until the system exceeded 50% of its capacity on the VFD control panel. Based on these observations the system is capable of approximately 1.79cfs, which is supported by the conservative rate calculation above using moderate efficiency and maximum set depth for a submersible pump several feet in length. However, the GIS measurement for the irrigated areas within the POU is 27.8 acres, and the permitted rate per acre when combined with WR 63-11629 (alone 1.2cfs for 42 acres) is 2.04cfs for the irrigation of 42 acres, which is approximately 0.0486cfs/acre. At the permitted combined rate per acre the beneficial use developed is limited to 1.35cfs for the irrigation 27.8 acres. As WR 63-11629 has a maximum rate of 1.2cfs, the remaining combined rate allowed under this permit should be 0.15cfs. **I recommend the license is issued with a maximum rate of 0.15cfs for the irrigation of 27.8 acres.**

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 27.8 \text{ acres} \times 4.5 \text{ AFA} = 125.1 \text{ AF annually.}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.15 \text{ cfs} \times 260 \text{ days} \times 1.9835 = 77.4 \text{ AF}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = \mathbf{77.4 \text{ AF annually}}$$

2. Volume Calculations for Other Uses: NA

Comments/Recommendation: WR 63-11629 fully overlaps the permitted use and accounts for 1.20cfs for the irrigation of 42 acres with no stated annual volume. The proposed license should carry a condition limiting the combined rights to 125.1 AF annually (the headgate calculation for annual rate above). **I recommend that the license is issued with an annual volume of 77.4 AF, per the diversion rate based standard volume calculation above.**

G. NARRATIVE/REMARKS/COMMENTS

The Department received the Proof of Beneficial Use for permit 63-34571 on June 25, 2024, submitted and signed by Spencer McLean, Superintendent. In section 3 of the proof the permit holder stated that beneficial use was developed for the irrigation of 42 acres. On April 21, 2025, a field examination was conducted with Thomas "TJ" Martin, supervisor, as an escort. Permit 63-34571 is for irrigation from groundwater within the place of use (POU) overlapped by WR 63-11629, currently owned by the permit holder. WR 63-11629 was transferred to the permitted POU condensing the use from 60 acres of irrigation to a 42-acre PPU within a 78-acre parcel held by the permit holder (appurtenant to the permitted POU). Both WR 63-11629 and the permitted use are supplemental to surface water delivered by the Nampa Meridian Irrigation District through shares held by the permit holder. The combined groundwater uses under WR 63-11629 and permit 63-34571 provide approximately 0.0486cfs/acre to allow for irrigation under a watering schedule with time constraints due to the facilities use for school events.

The wellhead POD is southeast of the football field. Surface water is conveyed via the Eight-mile Lateral which is delivered by an integrated system using a pumping station in the NE corner of the pump house to the permitted POU using. At times when water is not available under the shares held by the permit holder a manual valve can be closed on the main line allowing the well pump to charge the system. The escort stated that water is diverted using a 100 Hp submersible pump at an unknown set depth which can run up to 8 zones with 6 large rotary sprinkler heads (6504 Rain Bird) per zone. A GIS measurement found approximately 27.8 acres of the 42-acre permit place of use (POU) is irrigated. TJ stated during the field examination that there are only 6" stub outs and control valve boxes installed in the field north of Achievement Dr., which has not been irrigated (see photos 25 & 26). For the field examination the escort activated zones in two areas simultaneously. Then zones in other areas were manually turned on until the system reached approximately 52% of capacity documented at the VFD control panel, with a maximum documented rate of approximately 411 GPM.

The documented use and theoretical calculation indicate the groundwater system is capable of diverting a rate exceeding the proposed 0.0486cfs/acre irrigation rate (per section E of this report). However, the licensed rate and volume should be limited by the beneficial use developed and the proposed rate per acre permitted when combined with WR 63-11629 (0.0486cfs/acre) for the irrigation of 27.8 acres and an annual volume of 77.4 AF per the diversion rate limited calculation in section F of this report.

I recommend the license is issued with a text condition limiting the combined use to the statutory 0.02cfs/acre rate over a 24hr period, a text condition limiting the total annual volume to the field headgate standard, conditions 943, X35, 01M, and 103. Permit condition 121 should be replaced with license condition 103 at licensing. Conditions 046 and 26A should be removed at licensing, according to current guidance. Condition X27 should be removed prior to licensing as the use developed is less than the 42 acres described in WR 63-11629.

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	03/01 to 11/15	0.15 CFS	77.4 AF
<u>Totals:</u>		0.15 CFS	77.4 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, Sr.

Field Examiner's Name Bob Howe Date June 10, 2025

Reviewer _____ Date _____

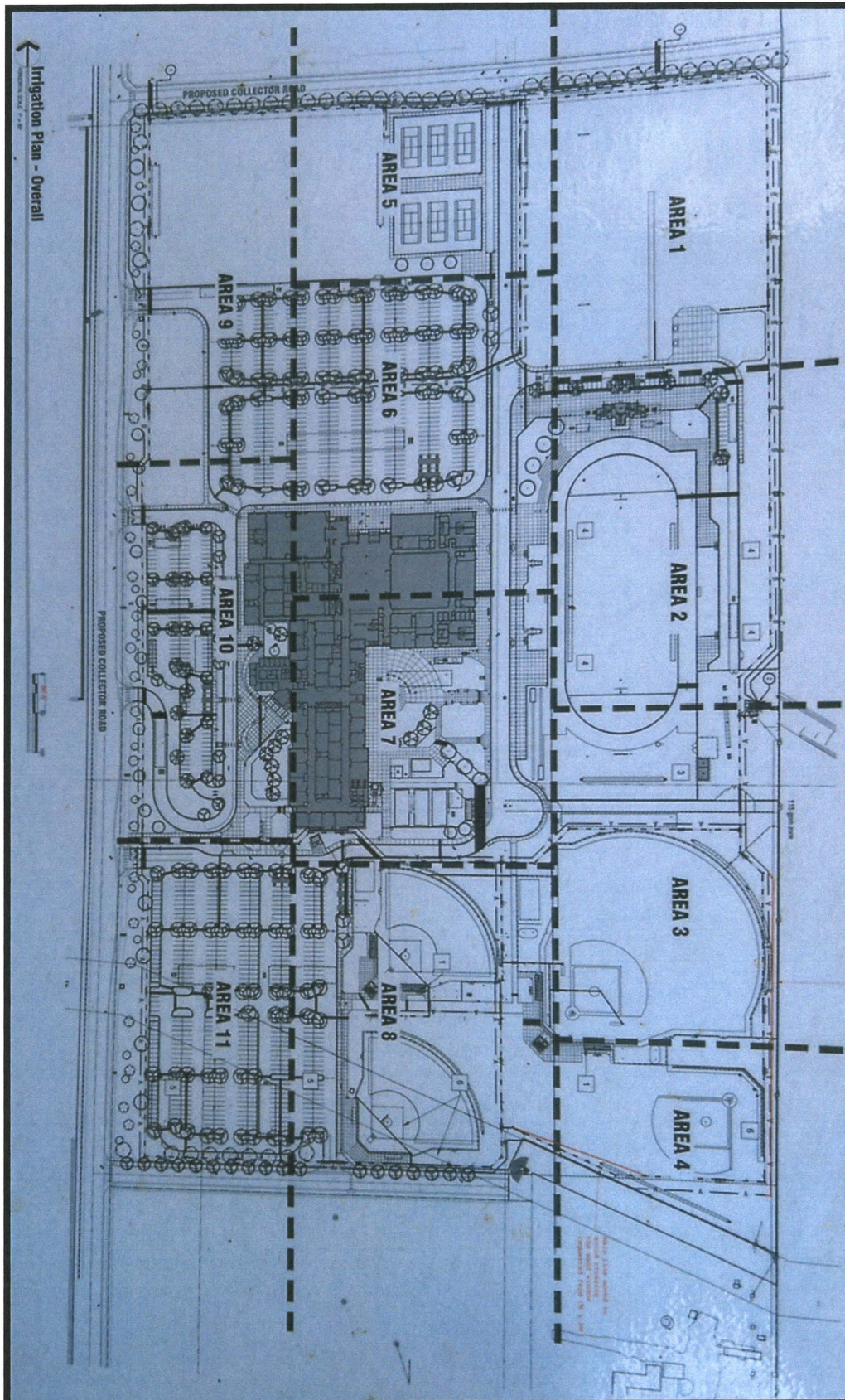


Photo 1- Irrigation Plan print. Areas Identified. Area 1-ran during examination with other areas manually forced on to reach permit rate. Area 1 has 42 zones with 6 large rotary sprinklers each. The system is set up to run 8 zones at a time (48 heads).

Irrigation Notes:

- A. SYSTEM DESIGN BASED ON THE ASSUMPTION OF THE AVAILABILITY OF 900 G.P.M. AND 90 P.S.I. AT THE SOURCE.
- B. CONTRACTOR TO VERIFY LOCATION OF ALL UTILITIES PRIOR TO INITIATION OF ANY DEMOLITION OR CONSTRUCTION OPERATIONS. ANY DAMAGE TO EXISTING UTILITIES SHALL BE CONTRACTOR'S RESPONSIBILITY.
- C. COORDINATE ALL IRRIGATION INSTALLATION OPERATIONS WITH CIVIL, MECHANICAL, AND ELECTRICAL ENGINEERING SHEETS.
- D. CONTRACTOR TO COORDINATE INSTALLATION OF IRRIGATION CONDUIT AND SLEEVES UNDER HARD SURFACES WITH RESPECTIVE CONTRACTORS.
- E. ALL SLEEVES TO BE INSTALLED AS PART OF IRRIGATION CONTRACT. APPROXIMATE LOCATION OF SLEEVES ARE SHOWN ON THE IRRIGATION PLAN. FIELD VERIFY LOCATION. ALL ENDS OF SLEEVES TO BE TAPED OR CAPPED AND MARKED WITH A 2" X 4" PAINTED STAKE EXTENDING TO 24" ABOVE GRADE. STAKES ARE NOT TO BE REMOVED UNTIL THE IRRIGATION SYSTEM IS COMPLETE. ALL SLEEVES SHALL EXTEND A MINIMUM OF 18" BEYOND BACK OF CURB OR EDGE OF PAVEMENT. PROVIDE COMPACTED BACKFILL.
- F. CONTRACTOR TO OBTAIN AND PAY FOR ALL PERMITS AND FEES REQUIRED FOR THIS WORK.
- G. IRRIGATION CONTROLLER(S) ARE TO BE LOCATED AS SHOWN ON PLAN. CONTROLLERS SHALL BE WIRED TO POWER SUPPLY BY A LICENSED ELECTRICIAN PER LOCAL CODES. IRRIGATION CONTRACTOR TO PROVIDE ALL REQUIRED CONNECTIONS TO 24 VOLT IRRIGATION CONTROL WIRE INSIDE THE BUILDINGS THROUGH APPROPRIATE SIZED CONDUIT.
- H. IRRIGATED AREAS CONTAINING VEGETATION WHICH POTENTIALLY MAY IMPEDE PERFORMANCE OF A POP-UP SPRINKLER ARE TO BE REPLACED WITH A 12" HIGH POP-UP SPRINKLER.
- I. ALL ELECTRICAL WORK TO MEET OR EXCEED N.E.C., STATE CODES, LOCAL CODES, AND MANUFACTURERS RECOMMENDATIONS.
- J. CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL ROCK AND DEBRIS BROUGHT

- K. TO THE SURFACE AS A RESULT OF TRENCHING OPERATIONS. CONTRACTOR SHALL REFER TO SPECIFICATIONS AND DETAIL DRAWINGS FOR ADDITIONAL REQUIREMENTS.
- L. ALL 24 VOLT POWER WIRES SHALL BE #14 AWG COPPER. ALL ABOVE GROUND 120 VOLT AND 24 VOLT WIRE SHALL BE IN PVC CONDUIT. ALL 24 VOLT WIRES SHALL BE TAPED TOGETHER AT TEN FOOT (10'-0") INTERVALS.
- M. INSTALLATION SHALL COMPLY WITH ALL NATIONAL, STATE, AND LOCAL LAWS AND ORDINANCES.
- N. IRRIGATION CONTRACTOR SHALL PROVIDE AN AS-BUILT IRRIGATION PLAN UPON COMPLETION OF INSTALLATION AND PRIOR TO FINAL PAYMENT.
- O. THE ENTIRE SYSTEM SHALL BE GUARANTEED TO BE COMPLETE AND PERFECT IN EVERY DETAIL FOR A PERIOD OF ONE YEAR FROM THE DATE OF ITS ACCEPTANCE. REPAIR OR REPLACEMENT OF ANY DEFECTS OCCURRING WITHIN THAT YEAR SHALL BE FREE OF EXPENSE TO THE OWNER.
- P. AS PART OF THIS CONTRACT, PERFORM AT NO EXTRA COST WINTERIZATION AND SPRING START UP OF THE SYSTEM DURING THE GUARANTEE PERIOD.
- Q. ALL MATERIALS SHALL BE NEW AND WITHOUT FLAWS OR DEFECTS OF THE QUALITY AND PERFORMANCE SPECIFIED, AND SHALL MEET THE REQUIREMENTS OF THIS SYSTEM. USE MATERIALS AS SPECIFIED, NO SUBSTITUTIONS SHALL BE PERMITTED WITHOUT PRIOR WRITTEN PERMISSION OF THE OWNER.
- R. IRRIGATION CONTRACTOR SHALL MAKE NECESSARY MINOR FIELD ADJUSTMENTS TO SPRINKLER NOZZLES, SPRINKLERS, PIPE, AND OTHER IRRIGATION EQUIPMENT LOCATIONS TO FIT THE AS-BUILT SITE. ADJUST HEAD AND PIPE LOCATIONS AS REQUIRED TO AVOID DAMAGING EXISTING TREE ROOTS. ADJUSTMENTS SHALL ENSURE HEAD TO HEAD COVERAGE.
- S. IRRIGATION PIPING LAYOUT IS SCHEMATIC. WHERE LINES ARE SHOWN BELOW PAVEMENT ADJACENT TO LANDSCAPE AREAS, THEY ARE TO BE LOCATED IN THE LANDSCAPE AREA UNLESS SHOWN WITH A SLEEVE SYMBOL.
- T. LOCATION OF EXISTING EQUIPMENT ARE SCHEMATIC IN NATURE. FIELD VERIFY ALL

- U. BASE AND EXISTING IRRIGATION ELEMENTS AND CONDITIONS PRIOR TO CONSTRUCTION AND PROVIDE NECESSARY ADJUSTMENTS.
- V. ALL MAIN LINE FITTINGS SHALL BE LEEMCO DUCTILE IRON PUSH ON TYPE AND ARE TO BE JOINED USING LEEMCO JOINT RESTRAINT SYSTEMS. INSTALL PER MANUFACTURERS RECOMMENDATIONS.
- W. IN THE EVENT OF A DISCREPANCY, IMMEDIATELY NOTIFY THE LANDSCAPE ARCHITECT.
- X. PROVIDE AND INSTALL GROUNDING ALONG THE TWO WIRE PATH PER MANUFACTURERS RECOMMENDATIONS.
- Y. CONTRACTOR SHALL SCHEDULE A MEETING WITH LANDSCAPE ARCHITECT AND OWNERS REPRESENTATIVE PRIOR TO INSTALLATION OF IRRIGATION CONTROL SYSTEM TO DETERMINE PROCEDURES OF INSTALLATION OF IRRIGATION CONTROL SYSTEM.
- Z. REFER TO SHEET L1.00 FOR SITE WORK PHASING AND ALTERNATES, AND COORDINATION WITH WORK BY OTHERS.
- PIPE VELOCITIES SHALL NOT EXCEED 5 FT/SEC.

Wiring Legend

- | | |
|-------|---|
| — A — | SOUTH CAMPUS: 14-GAUGE CONTROLLER WIRE PATH PER SPECIFICATION SECTION 32.84.00. COIL 36" OF EXTRA WIRE IN EVERY VALVE BOX. COLOR: YELLOW |
| — B — | NORTH CAMPUS: 14-GAUGE CONTROLLER WIRE PATH PER SPECIFICATION SECTION 32.84.00. COIL 36" OF EXTRA WIRE IN EVERY VALVE BOX. COLOR: BLUE |
| — C — | FUTURE SCHOOL SITE: 14-GAUGE CONTROLLER WIRE PATH PER SPECIFICATION SECTION 32.84.00. PROVIDE 60" OF EXTRA WIRE AT BOTH ENDS, NEATLY COIL IN VALVE BOX. COLOR: ORANGE |

Keynotes:

1. FIELD LOCATE 10" PVC SERVICE FROM PUMP STATION. CONNECT MAINLINE TO SERVICE AND CONTINUE AS SHOWN ON PLANS. REFER TO SPF PLANS AND SPECIFICATIONS FOR PUMP STATION AND WELL CONFIGURATION.
2. INSTALL ADDITIONAL SLEEVE IN THIS LOCATION FOR FUTURE USE, SIZE AND LISTED ON PLANS. DOCUMENT LOCATION ON AS-BUILT DRAWINGS.
3. INSTALL 6" MAINLINE TO THIS APPROXIMATE LOCATION FOR FUTURE CONTINUATION. INSTALL MAINLINE, ISOLATION VALVE, AND CAP MAINLINE. DOCUMENT LOCATION ON AS-BUILT DRAWINGS.
4. INSTALL IRRIGATION CONTROLLER IN A METAL ENCLOSURE IN THIS APPROXIMATE LOCATION. IRRIGATION CONTRACTOR SHALL PROVIDE ALL REQUIRED ELECTRICAL CONNECTIONS REQUIRED FOR A FULLY OPERATIONAL SYSTEM. CONTRACTOR SHALL CONNECT ALL LOW VOLTAGE AND 120 VOLT POWER WIRES.
5. IRRIGATION SHOWN IN HARDSCAPE FOR GRAPHICAL PURPOSES ONLY. INSTALL IRRIGATION IN LANDSCAPE AREA WITHIN 18" OF BACK OF CURB OR WALK.
6. FIELD LOCATE 3/4" CONNECTION BY MECHANICAL FOR GREEN HOUSE IRRIGATION SYSTEM AND MAKE NECESSARY CONNECTION AS REQUIRED.

OWYHEE HIGH SCHOOL
WEST ADA SCHOOL DISTRICT #2
 USTICK ROAD
 MERIDIAN, IDAHO 83646

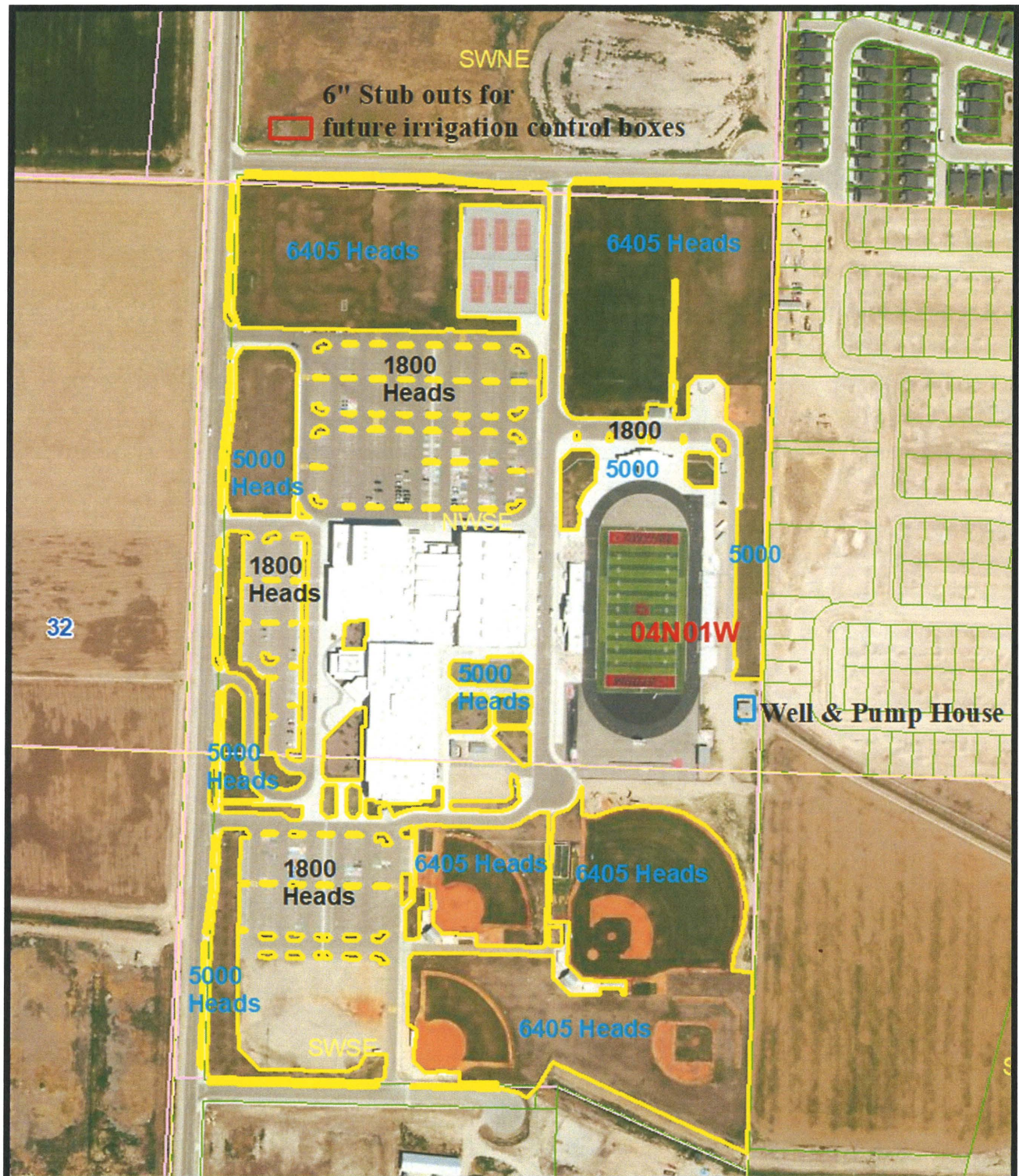
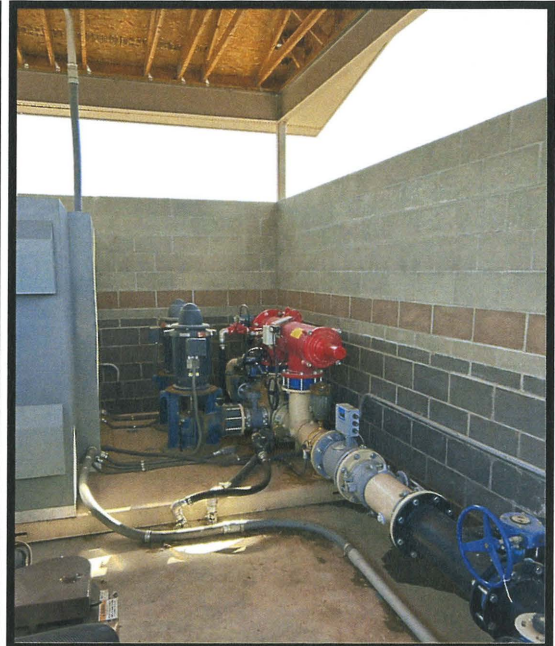


Figure 1- 2023 NAIP GIS Imagery- Irrigated areas outline in yellow. The well and pump house (blue) are labeled to the eastern extent. The 6" PVC stub outs to future irrigation control boxes (red) are outlined in the northern extent.

UL 508A LISTED ICP ENCLOSURE FILE#: E210861			
END USER:	SILVERCREEK: OWYHEE HIGH SCHOOL		
PERFORMANCE:	900 GPM @ 90 PSI		
PANEL SERIAL #:	20191018-11854		
PANEL MODEL #:	NMC2X230-483-SS-DPP-MAC-A125DPP-2XMTL-2XCK-DVDT-JTVOPF-CW-USF-PLCME-HG100		
SKID SERIAL #:	20190144		
SKID MODEL #:	T#C2T030D00900-090S84B483INS-8		
DATE:	10.30.19		
DUTY:	CONTINUOUS/INTERMITTENT		
VOLTS:	480	UL FLA (100%):	262
PHASE:	3	MAX NEC AMPS:	251
HZ:	60	MAX AMB °C:	40°
PONY VFD DRIVE, MOTOR, & PUMP INFO.			
MODEL #:	ACS550-U1-024A-2		
SERIAL #:	2190602808		
VFD MAX HP:	7.5	VFD MAX AMPS:	13.8
MOTOR MAKE:	CENTRIPRO	MODEL:	85GS75
HP:	7.5	PHASE:	3
VOLTS:	460	AMPS:	11
PUMP MAKE:	GOULDS	MODEL:	85GS75
GPM:	100	TDH:	220'
MAIN VFD DRIVE, MOTOR, & PUMP INFO.			
MODEL #:	ACS550-U1-045A-4		
SERIAL #:	2193503105		
VFD MAX HP:	60	VFD MAX AMPS:	45
MOTOR & PUMP #1 & #2 INFO.			
MOTOR MAKE:	US	MODEL:	H03082A1FB-WVNU
HP:	30	PHASE:	3
VOLTS:	460	AMPS:	40
PUMP MAKE:	GOULDS	MODEL:	9RCLC 6STG
GPM:	450	TDH:	220'
WELL VFD DRIVE INFO.			
MODEL #:	ACS550-U1-157A-4		
SERIAL #:	2181904407		
VFD MAX HP:	125	VFD MAX AMPS:	157
MOTOR MAKE:	SEE MOTOR	MODEL:	
HP:	100	PHASE:	3
VOLTS:	460	AMPS:	124
PUMP MAKE:	SEE PUMP	MODEL:	
GPM:	unknown	TDH:	unknown

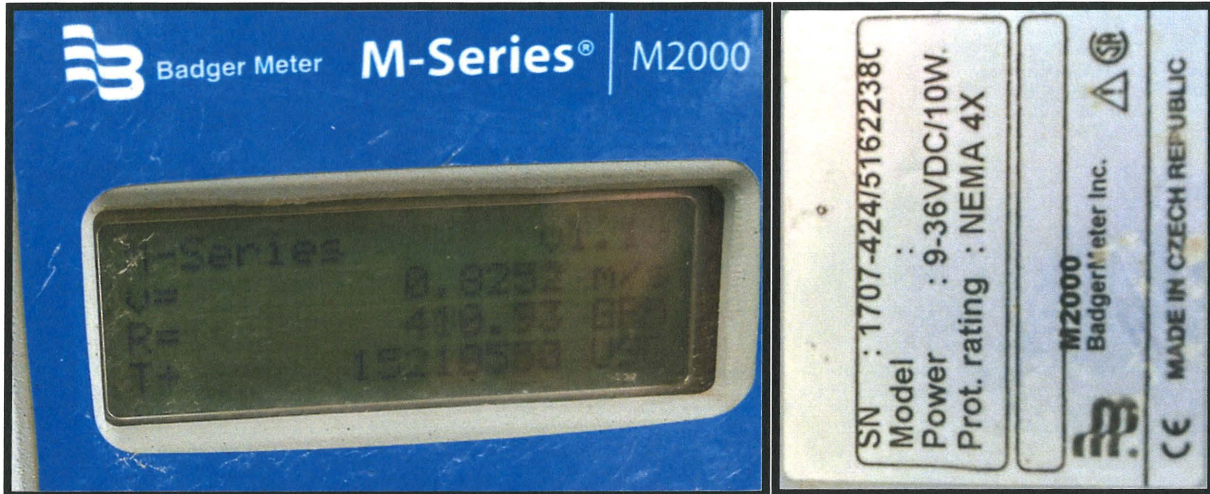
Photo 4- Pump & System specs. located inside the VFD Door. Submersible pump is 100 Hp. Surface water is pumped by 2 30 Hp Goulds pumps



Photos 5 & 6- The ground water well in the foreground with the twin 30 Hp surface water pumps (red pumps) in the background with the surface water flowmeter to the right of them(right image), at the southeast corner of the pump house. A manual shutoff valve between the flow meters can be opened to allow the system to be charged by the well.



Photo 7- Escort opening the valve on the left of the groundwater flowmeter prior to charging the system for the field examination.



Photos 8a & 8b- Groundwater flowmeter with maximum rate of 410.93 GPM observed with system running at approximately 51% of capacity (left image) and the specification tag on the groundwater flowmeter (right image).



Photos 9 & 10- GPS Coordinates for the well head (left image). Two irrigation timers controlling distribution throughout the POU on the north wall of the pump house (right image).



Photos 11 & 12- Rain Bird 6504 head (left image), as found throughout the rugby, soccer, baseball, and softball fields. Rain Bird 5000 (right image) as found throughout the smaller lawn areas and the landscaping surrounding the school.



Photos 13 & 14- Rain Bird 1800 heads found in the mow strips (left image) and landscape beds in the parking lots (right image).



Photo 15- Taken at the northwest corner of the soccer and rugby fields facing south along W Owyhee Storm Ave.



Photo 16- Taken at the southern extent of the south parking lot facing north.



Photo 17- Taken at parking lot south of the school facing east with landscaped islands in the foreground, lawn and landscaped areas surrounding the school in the background.



Photo 18- Taken at the southeast corner of the rugby field facing north.



Photo 19- Taken at the northeast corner of the softball field.



Photo 20- The baseball fields west of the softball field.



Photo 20- Taken at the southwest corner of the baseball fields facing east.



Photo 21- Taken at the southwest corner of the baseball fields facing west.



Photo 22- Taken at the southeast corner of the tennis courts with the sprinklers running in the soccer field to the west.



Photo 23- Taken at the north end of the breezeway along the eastern extent of the POU with the pumphouse in the background.



Photo 24- Taken at the south end of the event field facing northwest. The rugby field is in the background on the left.



Photo 25- Taken at the northeast corner of N Owyhee Storm Ave & Achievement Dr. Facing east. The field is mostly overgrown with bunch grass and weeds. No sprinkler heads could be identified in the field or mow strip.



Photo 26- At the corner identified above, facing north. The 6" stub out valves are in the right of the image and the control valves for the future irrigation system are installed. However, the escort noted during the examination that there is no irrigation in this area yet.