

# NOTICE OF MEETING

The regular meeting of the Incline Village General Improvement District will be held starting at **12 noon** on **Wednesday, August 28, 2019** in the Chateau, 955 Fairway Boulevard, Incline Village, Nevada.

- A. ROLL CALL OF THE IVGID BOARD OF TRUSTEES\*
- B. PUBLIC COMMENTS\* - Conducted in accordance with Nevada Revised Statutes Chapter 241.020 and limited to a maximum of three (3) minutes in duration.

**Public Comment Advisory Statement** – *A public body has a legitimate interest in conducting orderly meetings. IVGID may adopt and enforce reasonable restrictions on public comment to ensure the orderly conduct of a public meeting and orderly behavior on the part of persons attending the meeting. Public comment, as required by the Nevada Open Meeting Law, is an opportunity for people to publicly speak to the assembled Board of Trustees. Generally, it can be on any topic, whether or not it is included on the meeting agenda. In other cases, it may be limited to the topic at hand before the Board of Trustees. Public comment cannot be limited by point of view. That is, the public has the right to make negative comments as well as positive ones. However, public comment can be limited in duration and place of presentation. While content generally cannot be a limitation, all parties are asked to be polite and respectful in their comments and refrain from personal attacks. Willful disruption of the meeting is not allowed. Equally important is the understanding that this is the time for the public to express their respective views, and is not necessarily a question and answer period. This generally is not a time where the Board of Trustees responds or directs Staff to respond. If the Chair feels there is a question that needs to be responded to, the Chair may direct the General Manager to coordinate any such response at a subsequent time. Finally, please remember that just because something is stated in public comment that does not make the statement accurate, valid, or even appropriate. The law mitigates toward allowing comments, thus even nonsensical and outrageous statements can be made. However, the Chair may cut off public comment deemed in their judgment to be slanderous, offensive, inflammatory and/or willfully disruptive. Counsel has advised the Staff and the Board of Trustees not to respond to even the most ridiculous statements. Their non-response should not be seen as acquiescence or agreement just professional behavior on their part. IVGID appreciates the public taking the time to make public comment and will do its best to keep the lines of communication open.*

- C. APPROVAL OF AGENDA (*for possible action*)

*The Board of Trustees may make a motion for a flexible agenda which is defined as taking items on the agenda out of order; combining agenda items with other agenda items; removing items from the agenda; moving agenda items to an agenda of another meeting, or voting on items in a block.*

**-OR-**

*The Board of Trustees may make a motion to accept and follow the agenda as submitted/posted.*

- D. GENERAL BUSINESS (*for possible action*)
1. Review, Discuss, and Possibly Authorize Multiple Contracts for the Water Pump Station 2-1 Improvements Project; 2018/2019 Capital Improvement Project: Fund: Public Works; Division: Water; Project # 2299DI1702; Vendors: San Joaquin Electric Inc., in the amount of \$291,000 and Jacobs Engineering in the amount of \$25,000 (Requesting Staff Member: Director of Public Works Joe Pomroy) – **pages 3 - 7**

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**Incline Village General Improvement District**

*Incline Village General Improvement District is a fiscally responsible community partner which provides superior utility services and community oriented recreation programs and facilities with passion for the quality of life and our environment while investing in the Tahoe basin.*

893 Southwood Boulevard, Incline Village, Nevada 89451 • (775) 832-1100 • FAX (775) 832-1122

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# NOTICE OF MEETING

Agenda for the Board Meeting of August 28, 2019 - Page 2

2. Golf Cart Analysis – Lithium Battery Benefits versus Gas/Acid Batteries; (Requesting Staff Member: Director of Golf Darren Howard) – **pages 8 - 13**
- E. PUBLIC COMMENTS\* - Conducted in accordance with Nevada Revised Statutes Chapter 241.020 and limited to a maximum of three (3) minutes in duration; see **Public Comment Advisory Statement** above.
- F. ADJOURNMENT (*for possible action*)

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## CERTIFICATION OF POSTING OF THIS AGENDA

I hereby certify that on or before Friday, August 23, 2019 at 9:00 a.m., a copy of this agenda (IVGID Board of Trustees Session of August 28, 2019) was delivered to the post office addressed to the people who have requested to receive copies of IVGID's agendas; copies were either faxed or e-mailed to those people who have requested; and a copy was posted at the following seven locations within Incline Village/Crystal Bay in accordance with NRS 241.020:

1. IVGID Anne Vorderbruggen Building (Administrative Offices)
2. Incline Village Post Office
3. Crystal Bay Post Office
4. Raley's Shopping Center
5. Incline Village Branch of Washoe County Library
6. IVGID's Recreation Center
7. The Chateau at Incline Village

*/s/ Susan A. Herron, CMC*

Susan A. Herron, CMC

District Clerk (e-mail: sah@ivgid.org/phone # 775-832-1207)

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**Board of Trustees:** Kendra Wong, Chairwoman, Tim Callicrate, Peter Morris, Phil Horan, and Matthew Dent.

**Notes:** Items on the agenda may be taken out of order; combined with other items; removed from the agenda; moved to the agenda of another meeting; moved to or from the Consent Calendar section; or may be voted on in a block. Items with a specific time designation will not be heard prior to the stated time, but may be heard later. Those items followed by an asterisk (\*) are items on the agenda upon which the Board of Trustees will take no action. Members of the public who are disabled and require special accommodations or assistance at the meeting are requested to call IVGID at 832-1100 at least 24 hours prior to the meeting. Copies of the packets containing background information on agenda items are available for public inspection at the Incline Village Library.

**IVGID'S agenda packets are now available at IVGID's web site, [www.yourtahoeplace.com](http://www.yourtahoeplace.com); go to "Board Meetings and Agendas". A hard copy of the complete agenda packet is also available at IVGID's Administrative Offices located at 893 Southwood Boulevard, Incline Village, Nevada, 89451.**

\*NRS 241.020(2) and (10): 2. Except in an emergency, written notice of all meetings must be given at least 3 working days before the meeting ...10. As used in this section, "emergency" means an unforeseen circumstance which requires immediate action and includes, but is not limited to: (a) Disasters caused by fire, flood, earthquake or other natural causes; or (b) Any impairment of the health and safety of the public.

## MEMORANDUM

**TO:** Board of Trustees

**THROUGH:** Indra Winquest  
Interim General Manager

**FROM:** Joseph J. Pomroy, P.E.  
Director of Public Works

**SUBJECT:** Review, Discuss, and Possibly Authorize Multiple Contracts for the Water Pump Station 2-1 Improvements Project; 2018/2019 Capital Improvement Project: Fund: Public Works; Division: Water; Project # 2299DI1702; Vendors: San Joaquin Electric Inc., in the amount of \$291,000 and Jacobs Engineering in the amount of \$25,000

**STRATEGIC PLAN:** Long Range Principle 5 – Assets and Infrastructure

**DATE:** August 16, 2019

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### **I. RECOMMENDATION**

That the Board of Trustees moves to:

1. Award a construction contract to San Joaquin Electric Inc. in the amount of \$291,000 for the Water Pump Station 2-1 Improvements Project.
2. Authorize Chair and Secretary to execute the contract with San Joaquin Electric Inc., based on a review by General Counsel and Staff.
3. Authorize Staff to approve change orders to the construction contract for additional work not anticipated at this time of up to 10% of the project bid – \$29,000.
4. Authorize Staff to enter into an Additional Task Order with Jacobs Engineering totaling \$25,000 for services during construction of the project.

## **II. DISTRICT STRATEGIC PLAN**

Long Range Principle #5 – Assets and Infrastructure – The District will practice perpetual asset renewal, replacement, and improvement to provide safe and superior long term utility services and recreation activities.

- The District will maintain, renew, expand, and enhance District infrastructure to meet the capacity needs and desires of the community for future generations.
- The District will maintain, procure, and construct District assets to ensure safe and accessible operations for the public and the District's workforce.

## **III. BACKGROUND**

Water Pump Station 2-1 (WPS 2-1) is located at the Burnt Cedar Water Disinfection Plant (BCWDP) and pumps the disinfected potable drinking water into the water distribution system to serve Incline Village and Crystal Bay. WPS 2-1 was largely constructed in 1972 with minor upgrades in 1995 and 2012.

The electric motor control centers (MCCs) and switchgear at WPS 2-1 date to the original 1972 installation. This equipment does not meet modern OSHA requirements for Arc Flash safety and the MCCs and switchgear are at the end of their service life and are no longer supported by the respective manufacturers. The water pump station is mission critical to supplying drinking water to the community. Failure is unacceptable at this location.

In accordance with Board Policy 3.1.0., 0.15 Consent Calendar, this item is included on the Consent Calendar as it is routine business of the District and within the currently approved District Budget.

## **IV. BID RESULTS**

The District publicly advertised this project for bidding on July 5, 2019 and plan sets were acquired by interested bidders. One bid was received and opened on August 15, 2019. The bid results are as follows.

<b>Contractor</b>	<b>Bid Amount</b>
San Joaquin Electric	\$291,000

The lowest responsive bidder is San Joaquin Electric. Staff checked their reference projects listed in the bid submittal and they have successfully performed two projects for the District including a project at Burnt Cedar Water Disinfection Plant in 2019. If awarded, the project is scheduled to be substantially complete by March 30, 2020. The objective is to complete construction between February 1 and March 30, 2020 when water demands are low and impacts to system operations from construction are minimized.

**V. FINANCIAL IMPACT AND BUDGET**

The Water Pump Station 2-1 Improvements Project as bid is included in the 2018/2019 Capital Improvement Plan and has a total budget of \$700,000. The total construction phase project budget is estimated at \$350,000 and is within the budgeted CIP amount. There are also instrumentation and metering equipment that will be installed under this capital project during the fiscal year to improve functionality and data acquisition for Water Pump Station 2-1. Staff expects this work to not exceed \$75,000. Unspent funds at the end of the fiscal year will be placed in utility reserves.

**Total Construction Phase Project Budget**

<b>Construction Phase</b>	<b>Cost</b>
Construction Contract	\$291,000
10% Construction Contingency	\$29,000
Design Consultant Services During Construction	\$25,000
District Construction Management and Inspection	\$5,000
<b>Subtotal</b>	<b>\$350,000</b>

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August 16, 2019

## **VI. ALTERNATIVES**

None proposed.

## **VII. BUSINESS IMPACT**

This item is not a "rule" within the meaning of Nevada Revised Statutes, Chapter 237, and does not require a Business Impact Statement.



## Project Summary

<b>Project Number:</b>	2299DI1702		
<b>Title:</b>	Water Pump Station 2-1 Improvements		
<b>Asset Class:</b>	D - Capital Improvement - Existing Facilities		
<b>Division:</b>	99 - General Administration - Water		
<b>Budget Year:</b>	2019		
<b>Scenario Name:</b>	Main	<b>Active:</b>	Yes
<b>Budget Status:</b>	Data Entry		
<b>Locations:</b>			
<b>Project Something:</b>	DI - Distribution Infrastructure		

<b>Project Description</b>			
<p>Water Pump Station 2-1 (WPS 2-1) is located at the Burnt Cedar Water Disinfection Plant (BCWDP) and pumps the disinfected potable water into the water distribution system to serve Incline Village and Crystal Bay. There are four pumps located in the WPS. Three are rated at 2,200-gpm each and one is rated at 1,100-gpm. The maximum BCWDP capacity (water flow rate that can be disinfected and pumped) is 5,900-gpm (2 x 2,200-gpm and 1 x 1,100-gpm). This 5,900-gpm limit is set by regulatory permit, disinfection equipment capacities, and electrical service size. All four pumps are used year round in various combinations based on system demand.</p>			
<b>Project Internal Staff</b>			
<b>Project Justification</b>			
<p>WPS 2-1 is designed to provide the necessary flows to meet system demand with the largest pump out of service. If a 2,200-gpm pump fails, the remaining three pumps can supply the peak demand. However, an interesting problem arises if the 1,100-gpm pump fails. During 9 months of the year, one or two 2,200-gpm pumps can meet system demand. However, in the summer months and during peak snowmaking, there are extended periods that require maximum BCWDP capacity meaning three pumps in service (2 x 2,200-gpm and 1 x 1,110-gpm). If the 1,100-gpm pump fails and is out of service then the BCWDP cannot meet system demand. This is because WPS 2-1 cannot place the third 2,200-gpm pump into service because the BCWDP is not rated to produce a total of 6,600-gpm. Additionally, there is also a limitation in electrical service size and associated equipment that prevents three 2,200-gpm pumps from operating.</p> <p>WPS 2-1 was largely constructed in 1972 with minor upgrades in 1995 and 2012. The electric motor control centers (MCCs) and switchgear at WPS 2-1 date to the original 1972 installation. This equipment does not meet modern OSHA requirements for Arc Flash safety and the MCCs and switchgear is at the end of its service life and no longer supported by the respective manufacturers. Additionally, two of 2,200-gpm vertical turbine pumps also date to the original 1972 installation and are approaching the end of their service lives (the remaining 2,200-gpm pump dates to 1995 and the 1,100-gpm pump dates to 2012). This project will complete design and construction of the new MCCs and switchgear to replace the 1972 equipment, provide modern controls and safety enhancements to meet current regulations, as well as install a variable frequency drive to allow one of the 2,200-gpm pumps to operate at half speed to provide redundancy to the 1,100-gpm pump. Additionally, the project will replace the two remaining original 2,200-gpm pumps with new equipment.</p>			
<b>Forecast</b>			
<b>Budget Year</b>	<b>Total Expense</b>	<b>Total Revenue</b>	<b>Difference</b>
2019			
MCC and Switchgear Replacement Construction	700,000	0	700,000
Year Total	700,000	0	700,000
2021			
Vertical Turbine Pump Replacement (two 2,200-gpm pumps)	300,000	0	300,000
Year Total	300,000	0	300,000
	1,000,000	0	1,000,000
<b>Year Identified</b>	<b>Start Date</b>	<b>Project Partner</b>	<b>Manager</b>
			<b>Est. Completion Date</b>



# Golf Cart Analysis for Mountain Course

**Lithium Battery Benefits versus Gas/Acid Batteries**





## Environmental Impact

- Lithium batteries are environmentally friendly.
- Acid batteries have the potential to spill over time which has a negative impact on the environment.
- Lithium battery operated golf carts put off zero emissions into the air; acid batteries and gas carts emit emissions into the air.
- There is less impact on turf since lithium battery operated carts are 279 lbs. lighter than acid battery carts which translates into less turf damage.
- Lithium battery operated golf carts require NO water.
- WASTE NOT, GO GREEN!



## Cost Savings

- By tapping into cutting edge technology, lithium batteries use less energy and requires less out-of-wall power to charge than acid batteries.
- Charge in half the time so it is a dramatic energy cost savings as well as time savings.
- Consistent performance that does not fade over time. Virtually NO down time so less labor in repairs.
- After five years, the lithium battery still performs at same level as day one, five year unlimited warranty, so significant cost savings on battery replacement.
- Zero-Maintenance – lithium batteries require NO watering, NO checking of terminal post, and NO cleaning of batteries.

# Cost Savings

Built in timer for Off-Peak Rates - .03-.05 savings

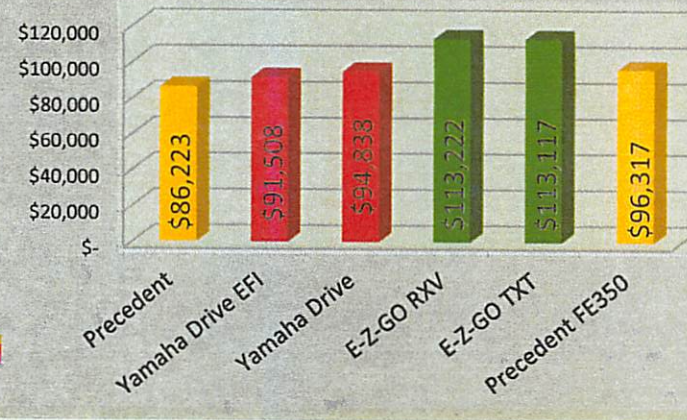
PEAK vs OFF-PEAK Savings	Hours to Charge	Fleet Size	Cost Savings Per Day	Peak Days May-Oct	Total Savings Per Year	60-mo / 72-mo Term	Total Fleet Savings
\$0.04	3.5	58	\$8.12	184	\$1,494	5	\$7,470
\$0.04	3.5	58	\$8.12	184	\$1,494	6	\$8,964

- 1 Fuel Economy reported is based off Club Car testing and the Yamaha Drive website
- 2 HP, torque and warranty reported were pulled from the Owner's Manuals and website specifications
- 3 Maintenance costs are calculated based off the Periodic Maintenance Schedule in each manufacturers' Owner's Manual
- 4 The hours for preventative maintenance are based off accepted warranty repair times for each maintenance item
- 5 Here are some highlights of the major servicing differences
  - Yamaha recommends greasing the clutches annually
  - Yamaha recommends replacing the transaxle oil every two years due to the wet brake.
  - Yamaha recommends inspection/replacement of the brake pads every four years, which requires disassembly of the transaxle
  - E-Z-GO recommends oil and oil filter service semi-annually
  - E-Z-GO recommends engine valve adjustments annually

Formula and Data to get to get to cost per term on next slide

## Gas Cart cost per term

Fuel and Maintenance Cost per Fleet per Term





## Summary

- ❖ Lithium batteries are better for the environment and better for the Mountain Golf Course.
- ❖ Lithium battery operated carts provide sustained power over a round of golf, a more consistent drive, and no noise pollution.
- ❖ Lithium batteries require less charging time than acid based batteries (50% less for full charge) and a one hour charge can bring a lithium battery up to 80%.
- ❖ Energy cost savings
- ❖ Better customer satisfaction through an enhanced cart experience
- ❖ Less cost over the term of fleet even though up-front cost is more
- ❖ Allows our employees to focus on the guest experience versus the repair and maintenance of the golf carts
- ❖ Better for our elevation and terrain
- ❖ Zero down time for battery issues
- ❖ Has been road tested by driving one completely around the Mountain Course six consecutive times and battery life was only reduced to 30%.
- ❖ Moving to lithium battery powered carts is a best practice in the golf industry.
- ❖ Waste Not, GO GREEN!