

# CITY OF ELY

501 Mill Street Ely, Nevada 89301  
City Hall (775) 289-2430  
Fax (775) 289-1463

## **REPORT**

DATE: May 11, 2020  
TO: Mayor Robertson and City Council Members  
FROM: City Clerk Jennifer Lee

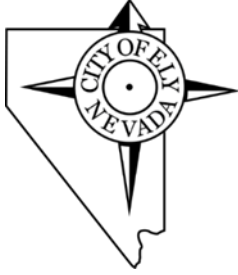
## **STATE REGULATIONS**

May 4<sup>th</sup> I received approval of the City of Ely's Water Conservation Plan from the Nevada Division of Water Resources; the letter noted city-wide installation of water meters will be necessary in the future to be compliant with NRS 540 revisions requiring water audits.

## **GRANTS**

USDA Rural Development announced May 5<sup>th</sup> that 2.8 million dollars in grant funding will be available to water and wastewater systems in Nevada; the City's water operator Raul Naranjo has recommended we apply for monies to refurbish the Waste Water Treatment Plant clarifier and will provide us the needed information for our application.

May 11<sup>th</sup> the Advisory Council on Historic Preservation (ACHP) noticed the City that it will not participate in the consultation regarding the 1910 Murry Street Sewer line. Upon receipt of ACHP's notice, the City can now move forward with the final Environmental Assessment steps and put the CDBG Murry Street Sewer Upgrade project Phases I and II out to bid in June.



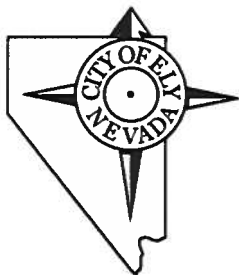
# CITY OF ELY

501 Mill Street, Ely, Nevada 89301  
City Hall (775) 289-2430 - Fax (775) 289-1463

## New Justice Center Complex Will Serve Fees

<b>Will Serve Fee Breakdown:</b>
New 3" Water Tap = \$28,000.00
Additional DFU = 417 DFU x \$87.50 per unit = \$36,487.50
Total Will Serve Fees = \$64,487.50

\*City of Ely is an equal opportunity provider and employer\*



# CITY OF ELY

501 Mill Street Ely, Nevada 89301  
City Hall (775) 289-2430  
Fax (775) 289-1463

May 11, 2020, 2020

**TO: MAYOR ROBERTSON AND CITY COUNCIL MEMBERS**  
**FROM: MIKE CRACRAFT**  
**PUBLIC WORKS APRIL 2020 REPORT**

- PUBLIC WORKS

1. COVID-19:

- a) Per Governor's Order, playgrounds have remained closed; citizens have been respectful of signage and there have been no issues.
- b) Daily communications with employees regarding new developments.
- c) Salaried City employees **volunteered** their time and hung banners Downtown over the weekend honoring WPHS graduating class of 2020.

2. NEW PROJECTS:

- a) The City Road Department owes White Pine County's Road Department 74 hours. White Pine County has contacted the City to help with crack sealing in Ruth next week.
- b) I've contacted Rope Ashworth with Tri County Weed regarding the weed abatement grant the City received; he stated spray application will begin in June after he's done with his weed inventory.

- PARKS

Parks are up and running. Just a reminder, the Cemetery and Broadbent Park are manually watered every other day.

- CEMETERY

During April we had 2 services and the Cemetery Crew did an excellent job. Sprinkler systems are up and running and there were no issues from the winter.

- RECYCLING CENTER

We're continuing to collect aluminum and non-ferrous metal; current market conditions attached.

- CITY HALL

We're preparing City Hall for reopening by installing a dutch door next to the front counter and plexiglass, along with other measures.

- MAINTENANCE

We are servicing all equipment.

**Mike Cracraft**  
**Public Works Supervisor**

The City of Ely is an equal opportunity provider and employer.



Moving Recycling Forward™

City of Ely  
1003 Lacawana Road  
Ely, NV 89301

April 2020

Dear Jennifer Lee,

Below is the current pricing on all materials from your facility for April delivered to Interwest Paper, please let me know if you have any questions on any materials or logistics.

Mixed Recycling Loads:

Baled OCC	\$20.00 per ton
Baled OP – Office Paper	\$40.00 per ton
Baled Mixed Paper	\$35.00 per ton
Baled PET #1	\$15.00 per ton
Baled HDPE #2 Natural	\$100.00 per ton
Baled HDPE #2 Colored	\$20.00 per ton
Bales Mixed Rigids #1-7 Plastics	\$(65.00) per ton
Bales LDPE B Grade Film	\$(40.00) per ton
Bales PP Produce Crates	\$60.00 per ton
UBC Aluminum Cans - Baled	\$0.25 per lb
UBC Aluminum Cans - Rebale	\$0.20 per lb
Steel Cans - Baled	\$15.00 per ton

Thank you for allowing me the opportunity to provide services to your location. Please do not hesitate to call with any questions.

Thank you,



**Beau Peck**

Director of Sales and Marketing  
Interwest Paper, Inc - The Pro Recycling Group  
(801) 381-3990 - Cell  
(801) 266-3610 - Office  
beau@interwestpaper.com  
[www.interwestpaper.com](http://www.interwestpaper.com)



## City of Ely

### Wastewater Treatment Plant

### **Septic Waste Hauler Guidelines**

#### Discharge Requirements

The discharge of all hauled wastes must be performed at the designated area: Wastewater Treatment Plant, WWTP Lackawanna Rd. Discharge to the City sewer system at any other location is prohibited. Discharges may be performed from 8am – 5pm, Monday - Friday.

Hauled wastes are subject to sampling by the City. The hauler may be required to suspend the discharging of wastes until the analysis is complete. The City reserves the right to refuse permission to dump any load.

Permit holders must maintain their account with the City in current status. Any user not paying their City account by the date stipulated in the account bill will not be allowed further use of the dump station until such time as the account is paid in full.

All wastes shall be declared on the discharge forms provided and shall not contain a prohibited discharge. Each user must present a completed dump slip, accurately listing each source of the load, prior to disposal.

Approval to dispose of any material other than residual septic tank waste and approved portable toilet wastes must be requested in advance of bringing in the load for disposal, and written consent must be given by the Public Works Director or his designated agent before that waste will be accepted for disposal.

#### Septic Limitations

The following types of waste will not be accepted for disposal at the Wastewater Treatment Plant: industrial or business wastes, including wastes from any sand/oil separators, grease traps, hot tanks, dip or batch tanks, or any other tank, pit, pond, or container used to hold wastes or products used in a business or related purpose; wastes from other than domestic residential use.

Any waste that may cause pass-through of pollutants or interfere with the wastewater treatment plant operations, or that violates Federal, State, or local restrictions, shall not be discharged to the City of Ely wastewater treatment system.

The hauler is prohibited from discharging prohibited materials include wastes containing

- fats, wax, grease, or oils of petroleum origin, whether emulsified or not
- any liquids, solids, or gases that can create fire, explosion, or health hazard
- any substances capable of causing obstructions or other interferences with proper operation of the sewer system
- any pollutant that will cause a pass-through of pollutants to occur, or an interference with the City wastewater treatment facility's operations or sludge use and/or disposal practices
- any wastes, sludge, screenings, or other residues from business or industrial wastes, or the pretreatment of business or industrial wastes
- detergents, surface active agents, or other substances that may cause excessive foaming in the municipal wastewater system; ammonia, ammonia salts, or other chelating agents that will produce metallic complexes that interfere with the municipal wastewater system
- material considered a hazardous waste under the Resource Conservation and Recovery Act (R.C.R.A.), or materials that are toxic, hazardous, radioactive, or infectious medical wastes.

#### Disposal Procedure

The septic tank dump facility is located at:

Wastewater Treatment Plant

Open Monday – Friday 8am – 5pm

WWTP Lackawanna Rd  
Ely NV 89301

Phones: (WWTP) 775-289-2150 (City Office) 775-289-2430

Please contact facility prior to dumping, the facility has limited staff and we need to make sure that someone is available to assist you.

Once at WWTP you must contact one of the operators, they will direct you to the disposal site.

You must use a discharge hose; no tank tipping will be allowed.

If spillage outside of the containment area occurs, the driver must IMMEDIATELY notify the WWTP personnel. The spiller shall utilize their pumper truck to pick up the waste so it can be discharged into the proper area. The septic hauler will be liable for any cleanup costs incurred due to release of septic wastes outside of the dump station containment area.

Leave a copy of your manifest with the operator assisting you.

The last septic truck to use the dump facility will be held responsible for any spills not cleaned up. If you find spillage at the facility upon arrival, notify WWTP staff BEFORE you commence dumping.

## Ely City Code

### Title 10 – Water and Sewer

#### 10-1-3-7: PROHIBITED DISCHARGES:

A. All Sewers: Sewage, waste or any matter having any of the following characteristics shall, under no conditions, be discharged into, be placed where they might find their way into, or be allowed to run, leak, or escape into any part of the sewer system including:

1. Ashes, cinders, sand, earth, coal, rubbish or any matter which is chemically or physically stable for at least five (5) days at twenty degrees Centigrade (20°C) or which would form a deposit or obstruction or damage or reduce the capacity of sewer into which it was placed.
2. Liquids, gases, or solids or any matter which after entrance into a sewer might reasonably be expected to form into flammable, explosive or poisonous liquids, gases or solids.
3. Liquid matter of any nature containing suspended solids in excess of one thousand (1,000) parts per million.
4. Matter of any nature containing five (5) day biochemical oxygen demand in excess of three hundred (300) parts per million or any petroleum products.
5. Animal or vegetable greases, oils or matter containing animal or vegetable greases or oil of any nature in excess of three hundred (300) parts per million. Grease trap and further methods of pretreatment necessary to reduce the grease loading to acceptable levels shall be employed by the user before the liquid enters the sewerage fixtures.
6. Liquid matter with a hydrogen ion (pH) concentration, below 5.5 or above 9.0 measured at the point where discharge enters the sewer main.
7. Any matter that would be poisonous to or inhibit the organisms associated with any sewage treatment process, and which in the opinion of the department, might interfere with the satisfactory operation of any treatment facility or any portion of the sewer system.

Upon obtaining the written approval of the director, sewage wastes or other matters herein excluded may be discharged into the sewage system upon the payment to city of the additional costs for processing the same as hereinafter provided and set forth.

B. Storm Drains: In addition to the matter excluded in subsection A of this section, all other matter of any nature shall be excluded from pipes and ditches designated by the director as storm drains, excepting only surface drainage waters. All drainage waters shall be directed into storm drains only under the authorization and direction of the director.

C. Sanitary Sewers: In addition to the matter excluded heretofore, all surface drainage water (inflow) shall be excluded from all parts of the city sewer system. (Ord. 453, 11-29-1990)



## Questions, Answers, and Resources

# Water Service Metering

### **Why should I install meters?**

Water systems should install a meter at every direct service line connected to the main water distribution pipe. Meters offer a huge variety of benefits for any water supplier, including data that allow for an understanding of how much water the system uses and loses. This valuable information can lead to financial savings for the utility and customers, more fair customer rates, more effective leak mitigation strategies, and just generally better water use data. Additionally, water systems must set conservation goals and record water losses, as required under NRS 540. It's much easier and more accurate to accomplish these tasks while looking at historical water usage from service meters.

Service meters also give customers information to help them understand their individual consumption patterns. Depending on the type of meter, they can provide instantaneous, hourly, daily, weekly, monthly, seasonal, and annual information that tells the story of water efficiency.

### **How will meters help reduce leaks?**

Unlike many western states, the State of Nevada does not have a set level of acceptable distribution system losses. However, NRS 540 does require water suppliers to set goals for an acceptable level of leakage, and to monitor, report, and progress towards those goals. The national average for water loss is around 16%, and suppliers are encouraged to work towards a goal of less than 10% loss.

Installing and collecting information from source and service meters lets water suppliers determine how large that quantity lost is, and which connections or parts of the system may be contributing to those losses. Meters can also alert system managers to a leak immediately when one occurs. Meter data help justify how suppliers and their customers are efficiently using the water resources of the state.

### **Are there other benefits related to meters?**

Yes. Meter installation can add more revenue if rates are based on actual consumption (the more water homeowners use, the more they pay). It is up to the water supplier to determine how they want to use the meters as a tool to pay for needed improvements, maintenance and operation of the water system. Additionally, NRS 540.14(1)(i) requires a supplier of water to consider tiered customer rate structures to promote the conservation of water. Such rate structures are not possible without effective metering.

Water rates are more equitable when based on usage. For systems using a flat rate, customers who use a small amount of water subsidize the people who use a lot of water. Water production costs the utility money in pumping and electrical costs, as well as general wear and tear on the system. By basing charges on usage, large water users pay their fair share of the costs.

### **Who pays for service meters and how do I bill my customers?**

The water system, not the customer, is responsible for metering the system. One option is to fund the meter installation with reserve funds. If you haven't saved the necessary funds, consider a loan. Your water system will probably need to adjust water rates to repay the loan. Installing all the meters at one time will reduce costs to the customer by reducing mobilization costs of the contractor.

### **How much do meters cost and can I get funding?**

Most water systems report paying \$800 to \$1,200 per connection for labor and materials. The Nevada Division of Environmental Protection administers both grant and loan programs that may help pay for meter installation. More information can be found at <https://ndep.nv.gov/water/financing-infrastructure>.

We don't recommend billing customers for a one-time cost of the installation. It may be difficult for them to afford the unanticipated cost. If you do pass the cost on to customers, very low-income homeowners may be able to borrow the cost of materials and labor needed to install a meter from USDA Rural Development at 1 percent interest.

### **What type of meter should I install?**

That depends on the goals you have for collecting accurate information, ease in collecting data, or in reducing non-revenue water. Avoid going with the cheapest meter. A reduced lifespan and poor performance or inaccurate readings will offset the initial cost savings. If you want to

capture the lowest flows for improved accuracy and reduced non-revenue water, choose technology that meets those goals. **There are two categories of meters.** Both pass water through gears in the register, which move the measuring element and record motion on odometer-style wheels. **Positive displacement meters** function by displacing the volume of water moving through a chamber with a rotor inside. **Velocity (non-displacement) meters** function by measuring the velocity of flow through a meter chamber, which converts speed into volume.

You can find manufacturers or vendors online, ask your certified water system operator, or inquire with a nearby larger water utility. You will not find residential-type meters in big chain suppliers like Home Depot or Lowes.

Whatever meters you choose, try to use the same meter type and vendor. Mixing types and vendors will make it more difficult for you to take meter readings for billing and reporting purposes, and may result in errors that lead to unrealistic water loss percentages.

### **Are there considerations for residential connections?**

There are several types of meters for residential connections. Most homes require a 5/8-inch meter but, if demand is high, a home could require a larger 3/4 or 1-inch meter. Larger residential meters tend to be less sensitive to the lower flows common within homes.

**Manual-read meters** require walking to each property, opening the meter box lid, looking at the meter and recording the numbers from the register. While less expensive to purchase, reading meters can be time consuming and labor intensive. Additionally, errors are more likely when manually reading, recording, or transferring data.

**Remote reading** equipment and software cost more initially, but reduce the time it takes to read meters and often offer enhanced features that customers appreciate. For example, they help to avoid high water bills by detecting leaks more quickly, give customers more control and provide more accurate and reliable information. For these reasons, they may improve trust in the water system.

### **Are there standards for meters?**

Yes. You must select, install, operate, calibrate, and maintain meters according to industry standards, manufacturer information, or both. The American Water Works Association (AWWA) sets standards for manufacturing water meters, which must meet minimum specifications for residential use. For information, consult the [\*AWWA M6 Manual – Water Meters- Selection, Installation, Testing and Maintenance\*](#). Create an installation schematic to ensure consistency

with industry standards. Don't forget to include proper drainage of valve boxes and surrounding area.

### Where should I install the meters?

Most meters are outdoors at the property line, near the curb or street. Some are indoors, usually in a customer's basement. There are advantages to both, though most utilities prefer outdoor meters.

	Outdoor Meters	Indoor Meters
Pro	<ul style="list-style-type: none"> <li>• A meter at the property line will detect leaks that occur on a customer's property.</li> <li>• They can install shut-off valves and cross connection devices in the same box as the meter.</li> <li>• They provide easy access for meter reading, replacement, and maintenance without entering a customer's home</li> </ul>	<ul style="list-style-type: none"> <li>• May be less expensive to install while trying to avoid disrupting or needing to repair landscaping.</li> <li>• Provide protection from the elements.</li> </ul>
Con	<ul style="list-style-type: none"> <li>• Higher labor installation costs due to disruption and repair of landscaping or need for frost protection.</li> <li>• Winter weather may limit reading frequency.</li> </ul>	<ul style="list-style-type: none"> <li>• Must enter the customer's home to read, replace and maintain the meter.</li> <li>• More difficult to locate outdoor leaks on private property.</li> <li>• Leaks on private property will increase water-loss values because indoor meters won't account for outside leaks.</li> </ul>

### How can I find service lines?

- A regional office may have pipe schematics on file for your water system.
- Use a plumber to locate the water lines.
- Once found, upgrade your service area maps, take pictures, and use GPS to record locations.

### Who can install service meters?

First, ensure **sanitary conditions** during installation. Don't ask homeowners to install their own meters because that could put the entire water system at risk of water contamination. Hire a contractor with experience working on water systems. We're aware that some water systems required each homeowner to hire their own licensed contractor or plumber, but this option is not preferred because each homeowner must figure out how to locate their waterline, who to hire, which meter to choose, where to install it, and how to report water-use data for billing and reporting purposes. It would be much easier to hire one licensed contractor who has experience working on water systems, has all necessary equipment onsite to do the job, and uses the same type of meter.

### **What if a homeowner won't allow us to install a meter?**

Your covenants, bylaws, or ordinances should provide waterline easements up to the property line that enable you to perform maintenance on the service connection, including meter installation. Beyond that property line, any leaks are the property owner's responsibility.

Most water systems own the meter and have the right to select, install, operate, inspect, calibrate, and maintain it as needed. If a customer won't allow you to install a meter you can use:

**Covenants**, bylaws, or ordinances that allow you to shutoff service if a customer refuses to allow meter installation or tampers with a meter.

**Two different rates:** Unmetered customers would pay higher rates because the option of unlimited use costs more. Other utilities, such as cellphones, offer the same option.

### **What should we consider as our contractor installs meters?**

**Shutoff valve:** This important device will allow you to turn water off to a property during an emergency or if customers don't pay their water bill.

**Backflow prevention device:** These devices protect the distribution system from backflow incidents that might occur on properties with swimming pools, boiler heaters or automatic sprinkler systems.

**Replace old or lead service lines:** Consider replacing deteriorated service lines or parts and service lines that contain lead.

**Frost protection:** Depending on location, you may need to install special frost-protection devices.

## How often should I read meters?

We highly recommend that water suppliers base customer bills on usage and collect data monthly. Newer technology meters can record data to the hour, helping you and your customers identify abnormal water use almost immediately and alerting them if they have a leak on their property.

## How often should I replace service meters?

Plan to replace meters based on your metering objectives, goals for accurate water use, and improved customer service, especially if you want more features and a better return on investment from a business perspective. Many manufacturers offer 15 to 20 year warranties. However, some water systems replace meters sooner to take advantage of new technological advances, reduce non-revenue water, and better understand customers' water use.

(This Water Service Metering guidance was adapted from Washington State DOH, 2018)

## Need more information?

### Funding a Water Metering Project

- [Nevada Division of Environmental Protection, Infrastructure Financing Loans](#)
- [US EPA, Water Infrastructure Finance and Innovation Act](#)
- [The Essential Guide to Financing Smart Water Projects](#)

### Water Metering Case Studies

- [City of Merced, CA](#)
- [Water Online, multiple available case studies](#)

### Smart Metering, Advanced Metering Infrastructure (AMI), Automatic Meter Reading (AMR)

- [Exploring the Energy Benefits of Advanced Water Metering](#)
- [Intelligent Metering for Urban Water: A Review](#)
- [Static Water Meters and Increasing Revenue](#)

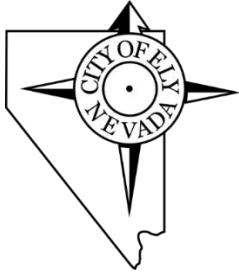
## **Pricing of Water Services**

- [US EPA, Pricing and Affordability of Water Services](#)

## **Other References**

Washington State Department of Health (DOH). *Questions & Answers, Water Service Meter Requirement*. DOH 331-595. June 2018.

<https://www.doh.wa.gov/Portals/1/Documents/Pubs/331-595.pdf>



# CITY OF ELY

501 Mill Street Ely, Nevada 89301

City Hall (775) 289-2430

Fax (775) 289-1463

**Date:** May 6, 2020

**To:** Mayor Robertson  
City Council Members  
Utilities Board Members

**From:** Carl Siemer

**Subject:** Monthly Report – April 2020 Water & Sewer

## DIGS

- 1122 S. Bell Avenue

## SEWER RODDING

- 922 Ave. I
- 838 Ave. H

## WELLS:

- RW-7 running about 1,900 GPM
- 17<sup>TH</sup> & M well running at 1,400 GPM
- 10<sup>th</sup> & M well still in auto

## MISC:

- Monthly coliform samples complete
- Monthly meter reads complete
- Still working on NDOT locates for the Aultman job
- Exercising valves in preparation for NDOT project
- Non-Payment shut offs will be done by end of week