

## STAGECOACH GENERAL IMPROVEMENT DISTRICT

SGID Office, 5000 Navajo Trail, Stagecoach NV 89429

Providing sufficient quantity and protecting the quality of water for Stagecoach Valley residents

### REGULAR MEETING

Thursday, March 9, 2023, 3:30 P.M.

#### MINUTES:

1. **Pledge of Allegiance** – James led the Pledge of Allegiance
2. **Roll Call** - \_\_ V. Aveiro \_\_ G. Ray \_\_ J. Moore \_\_ M. Gartenberg \_\_ J. Catanzarite  
All Board Members were present
3. **Public Participation** – There was none
4. **Approval of Agenda** – Vicki made the motion to approve the Agenda. Gene seconded. None opposed. Motion passed.
5. **Approve “Posting of Meeting” Document(s)** – Joe C. made a motion to approve the Posting of the Meeting Document as presented (see Att. A). Marjorie seconded. None opposed. Motion passed.
6. **Approve Block Items** – Joe C. made a motion to approve the Block Items as presented. Marjorie seconded. None opposed. Motion passed.
7. **Designate Auditor for FY 2022/2023 Audit** – Teri explains this is a requirement of the State of Nevada, Dept. of Taxation. Staff recommends designating Sciarani & Company as Auditor (See Att. B). Joe C. made a motion to Designate Sciarani and Co as Auditor for FY 2022/2023 Audit. Gene seconded. None opposed. Motion passed.
8. **Discussion and Decision regarding Lobby Enclosure Grant Application** – Tina explains that the submission of the Grant, (Att. C), to POOL/PACT for the Bullet-Resistant Glass, Barrel Bolts, and Lobby Enclosure is almost completed with the Window Speaker attachment expected in two months. The Grant total is approximately \$12,000. Further security measures for the office will include the locking of the office door leading to the Shop and employee parking. Gene moved that the Grant be submitted to Pool/Pact for the Bullet-Resistant Glass, Barrel Bolts, and Lobby Enclosure for approximately \$12,000. Marjorie seconded. None opposed. Motion passed.
9. **Discussion and Decision regarding Transferring funds from the Operating Account into a New CD at Washington Federal** – Tina explains that Washington Federal is currently offering 4.06% interest on a 13-month CD and 3.82% on a 7-month CD. Staff recommends to pull \$300,000 from the Operating Account and move it into a 13-month CD at Washington Federal, authorize the GID Asst. Manager, Tina Schmidt, or

Board Treasurer, Gene Ray, to execute the transaction. With minimal discussion, Marjorie motioned to pull \$300,000 from the Operating Account and move it into a 13-month CD at Washington Federal, authorize the GID Asst. Manager, Tina Schmidt, or Board Treasurer, Gene Ray, to execute the transaction. Gene seconded. None opposed. Motion passed.

10. **Appoint Delegate and Alternate for NvRWA Conference Annual Business Meeting** – Michael explains that at the Nevada Rural Water Association Annual Conference, the Board of Director's hold a quarterly Board Meeting. During the Annual NvRWA Membership meeting at the 2023 Annual Training and Technical Conference, each eligible member system is authorized to have one voting delegate and one alternate voting delegate. These delegates will be addressing and voting on all issues to come before the Association during the annual meeting. There will be 3 regular seats on the NvRWA Board up for election in March. Staff recommends that Michael Boney is designated as the SGID voting delegate and Joe Seng as the alternate for the 2023 Annual Nevada Rural Water Association Conference Membership Meeting. Jim asked Michael if he was going to the Conference. Mike said yes. Gene motioned to designate Michael Boney as the SGID voting Delegate and Joe Seng as the alternate for the 2023 Annual Nevada Rural Water Association Conference Membership Meeting. Vicki seconded. None opposed. Motion passed.
11. **Review of 3/4/23 Open Meeting Law Class** – Tina attended the Lyon County Open Meeting Law Class via ZOOM. Tina attended the meeting to have a couple of questions answered about OML. Does a 'NO' vote require an explanation when cast? Is it permissible for the Chair to only vote when it is necessary to break a tie? Tina's attendance discovered that a 'NO' vote doesn't require an explanation but an 'ABSTENTION' does. The Board Chair has the responsibility to enter a vote on each line item of the agenda. Other items found during the OML pertain to how a motion is to be made by the Board and time given during Public Comment. **No Action was necessary on this item. This was discussion only.**
12. **Revision to Board Policy** – Previous Board Meetings of SGID discussed the Open Meeting Law requirement of the Board Chair voting on Agenda items. Prior to February 2021 the Board Chair voted on Agenda Items. In the Board Meeting of Feb 2021, the Board voted to limit the Chair's voting to only in the need of breaking a tie. The SGID Board Policy (Att. D) does not have the requirements of the Board Chair's voting capacity. Staff recommends to the Board that one of the following statements be chosen to place in the Board Policy: 'A quorum must be present to constitute a Meeting and to deliberate by vote. All Board Members vote on items Agendized for Action' or 'A quorum must be present to constitute a Meeting and to deliberate by vote. All Board Members vote on items Agendized for Action with the exception of the Chair who only votes in the event of a tie'. Gene motioned to have the phrase, 'A quorum must be present to constitute a Meeting and to deliberate by vote. All Board Members vote on items Agendized for Action' added into the Board Policy. Vicki seconded. None opposed. Motion passed.
13. **Review and Possible Revision of Long Range Plan** – Every 2-years, the Long Range Plan, (Att E) must be reviewed. This evaluation period has some recommendations for

change. Gene recommends that in the '1 to 5 Year Plan' SECTION, Item 8, the wording be changed to 'Continue to evaluate and upgrade Radio – read Meter program. Staff recommends that 'Reviewed on Date' be added to the document. After a little discussion by the Board, Gene motioned to have the addition made to the '1 to 5 Year Plan' SECTION, Item 8, the wording be changed to 'Continue to evaluate and upgrade Radio – read Meter program and a 'Reviewed on Date, be added. Vicki seconded. None opposed. Motion passed.

14. **Discussion for possible Wants/Needs for upcoming FY 2023/2024 Budget** – Michael explained the need for the items on the Wants/Needs sheet, (Att F) for the upcoming Budget. There were no objections or additions to the Wants/Needs list. **No Action was necessary on this item. This was discussion only.**
  
15. **Review and Discussion regarding 2023 Rate Study** – Michael explained the rate study, (Att.G), that he completed for the water system. The rate study used budget numbers from the FY 21/22. These numbers were more in-line with standard operating for a budgeted year versus FY 22/23. Michael ran 3 options that would help the system work towards an evenly balanced budget. The first, Method 1, would ask for a reduction in the water allotment, from 25,000-gallons to 18,000-gallons, given for each meter fee. Then the residential meter fee would increase to \$67.00 per connection. The overage charge per 1,000-gallons would increase from \$3.00 to \$3.10. Commercial sized meters would increase slightly; from \$133.80 to \$167.50 for 2-inch meters. Overage rates would change to \$4.00/1,000-gallons for the first 25,000-gallons after the 18,000-gallons; \$4.50/1,000-gallons for the next 50,000-gallons; and \$5.00/1,000-gallons above 93,000-gallons. The calculations would leave a deficiency of \$266.00 for the budget year. Method 2; would ask for a reduction in the water allotment, from 25,000-gallons to 18,000-gallons, given for each meter fee. Then the residential meter fee would remain the same at \$65.00 per connection. The overage charge per 1,000-gallons would increase from \$3.00 to \$3.30. Commercial sized meters would increase slightly; from \$133.80 to \$167.50 for 2-inch meters. Overage rates would change to \$4.00/1,000-gallons for the first 25,000-gallons after the 18,000-gallons; \$4.50/1,000-gallons for the next 50,000-gallons; and \$5.00/1,000-gallons above 93,000-gallons. The calculations for Method 2 would have a surplus of \$354.00 for the budget year. A review of how SGID's current numbers for bringing in revenue were looked at. SGID's current rates of a \$65.00 meter fee, \$3.00/1,000-gallons after the 25,000-gallon allotment, commercial rates at \$133.80 for 2-inch meters with \$3.50/1,000-gallons for the first 25,000-gallons after the 25,000-gallons; \$4.00/1,000-gallons for the next 50,000-gallons; and \$5.00/1,000-gallons above 100,000-gallons leaves the SGID \$23,000 in deficit. Staff recommends that a new study be completed after the tentative budget numbers are determined for FY23/24. The Board agreed to have another rate study done using the Tentative Budget for reference. **No Action was necessary on this item. This was discussion only.**
  
16. **Information from Utility Supervisor** – Joe S. explained recent issues with the SCADA System. Sunlight reaching the solar panels to charge the batteries has been limited recently due to cloud cover. The result of this cloud cover drained a battery to the point of being useless. Sierra Controls replaced the battery and installed a Tender Unit on the battery. The Tender Unit will stop the battery from completely draining voltage.

When the sun is able to begin recharging the battery, the Tender Unit will allow the Solar Cells to continue their normal process. There has been no line breaks.

**Information Only**

**17. Information from Manager –**

Michael Informed the Board of the following:

- a. Upcoming Nevada Rural Water Assn. Conference – The annual NvRWA Conference in Reno. Joe S., Tony, and he would be attending the Conference and the office will remain open. The dates for the Conference are March 14-16 and Tony will be taking the Operator Certification Exam on Friday March 17.
- b. Insurance Claim filed on Road Boring Tool-A recently purchased, June 2022, boring tool was damaged in its initial use in September 2023. Repairs for the boring tool are estimated to be around \$2,254. An insurance claim was filed with the insurance carrier NPAIP.
- c. Training Classes attended by Staff – Trainings included are:
  - i. January:
    1. Tina attended PERS training – 4 hours
  - ii. February:
    1. Tony attended Distributor Operator and Math Training for 16 hours
    2. Mike attended USDA Funding Training for 2 hours
  - iii. March:
    1. Tony attended Distributor Operator Training for 2 hours
    2. Tina attended POOL Recruitment Training for 3 hours
    3. Open Meeting Law for 2.25 hours
    4. POOL Cyber Security for 1 hour

Review of Meetings attended either in person or via Zoom:

- a. 2/14/23 Planning Commission Meeting – Agenda items 8(e) and 8(f) discussed a Zoning Map Amendment request and a Merger and Re-subdivision/Tentative Subdivision Map, respectively, for Schaller Development. The planning commission deliberated and voted in a 3-3 tied vote on item 8(e). The motion to approve failed. This caused item 8(f) to be tabled, as approval of 8(e) was necessary to vote for approval or denial of the item.
- b. 2/16/23 BOCC Meeting – Agenda Item 6 has Tammy Hendrix sworn in as County Commissioner; Charles Lawson was appointed to the Debt Management Commission; Charlotte Guthrie, Chrystal White, Mindy Flarr, and John Fielding were appointed to the Lyon County Fair Board; the commissioners deliberated on terminating the lease at the Stagecoach Community Center with the present operator. The County would assume maintenance beginning April 1, 2023.
- c. 2/22/23 Flood Meeting at Stagecoach Community Ctr – Tina attended the meeting on behalf of the GID to present a map that showed areas of concern regarding flooding. Tina was thanked for placing the GID’s flooding concerns on a map that could be left behind.
- d. 3/1/23 Stagecoach Advisory Board – Members discussed the Community Center going back to the County. The county will still allow non-profits to use the Center at no charge. Andrew Haskins, County Manager, discussed the Lyon County Public Lands Bill and Drafts Map.
- e. 3/2/23 BOCC Meeting – The County Commissioners listened to the plans presented by Schaller Development. After deliberation, the Commissioners approved the motion to


make changes to the Zoning Map. In addition, Schaller agreed to make adjustments for the concerned residents on Silver Lane. The 8 2-acre parcels abutting the properties on Silver Lane would be adjusted to 4 4-acre lots for a smoother transition to the larger parcels on Silver Lane. Lyon County School District will purchase 2 new buildings for office use, located at the Middle School. Solid waste disposal will continue to be handled by Waste Management.

**No Action was necessary on this item. This was discussion only.**

- 18. **Pay Bills over \$5,000.00** – No bills over \$5,000 were needed to be signed.
- 19. **Director’s Suggestions for future Agenda Items** – There was none
- 20. **Public Participation** – There was none.
- 21. **Adjournment** – Gene made a motion to Adjourn. Marjorie seconded. None opposed. Motion passed.

**Meeting Adjourned at 4:58 PM**

**Minutes documented by Michael Boney:**  \_\_\_\_\_

**Respectfully Submitted:**  \_\_\_\_\_  
**Victoria L. Aveiro, Secretary**

**(Attachments are with the original Minutes located at the SGID Office)**

- Stagecoach General Improvement District Board of Trustees:**
- James Moore – Chairman*
  - Victoria L. Aveiro – Secretary*
  - Gene Ray – Treasurer*
  - Marjorie Gartenberg – Member at Large*
  - Joe Catanzarite – Member at Large*

# POSTING OF MEETING

## STAGECOACH GENERAL IMPROVEMENT DISTRICT

**Regular Meeting:** 3:30pm - Thursday, March 9, 2023  
SGID Office - 5000 Navajo Trl, Stagecoach, NV 89429

I posted the Agenda for the above referenced meeting at the following locations on the Dates and Times indicated:

- 1 SGID Office - 5000 Navajo Trl., Stagecoach, NV 89429
- 2 Stagecoach Market/Gas Station - 8970 US50, Stagecoach, NV 89429
- 4 Stagecoach Community Center - 8204 Hwy 50 W., Stagecoach, NV 89429
- 5 Stagecoach Junction - 5905 Apache Dr., Stagecoach, NV 89429

DATE	POSTED	TIME
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3/3/23	11:45 am	JH
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3/3/23	12:52 AM	
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3/3/23	12:58 AM	
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3/3/23	12:50 AM	
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Tony Weatherman

Printed Name

  
Signature





February 28, 2023

Stagecoach General Improvement District  
5000 Navajo Trail  
Stagecoach, NV 89429

We are pleased to submit this letter outlining our proposal to provide auditing services for the Stagecoach General Improvement District for fiscal year 2022/2023.

Sciarani & Co. recognizes our most important product is prompt and effective service of the highest quality. We have dedicated a substantial amount of time and resources to achieve this goal and to meet this high standard of quality required by our clients and our profession. We are also proud of the firm's dedication to continuing education in the governmental auditing field. In fact, Mr. Sciarani has passed the Advanced Single Audit Certificate Exam.

We are proposing to perform this year's audit engagement for fiscal year 2021/2022 at a bid price of \$9,500. This quoted price reflects no increase in fee price from last year. Governmental Accounting Standards Board has several new reporting standards and requirements that will require some additional time to be incur on your audit. In the event your District receives over \$750,000 in federal financial assistance during the current year, the performance of a Single Audit would be required and additional fees would be negotiated. However, we are not aware of any major federal grants being received by your District and do not anticipate the need to adjust this bid price.

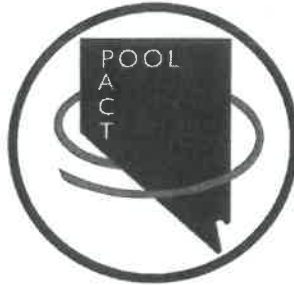
If you have any questions or desire a comprehensive outline of our firm's experience, qualifications, and audit approach, please do not hesitate to respond. Thank you for the opportunity to present this proposal.

Sincerely,

A handwritten signature in blue ink that reads "Sciarani &amp; Co." in a cursive style.

Jim A. Sciarani  
Audit Partner

ATT. B



**RISK MANAGEMENT GRANT APPLICATION APPROVAL**

**This approval form must be signed by both the department head and the member liaison and/or responsible board.**

Name/Description of Grant Purpose: Stagecoach General Improvement District  
To enclose the lobby of the office creating a secure environment for staff.

Signatures below attest that:

1. The purpose and objective of the grant application have been reviewed, approved, and needed by the applicant;
2. The member is able to fund its share (25%) of the project, program, or acquisition in the amount of: \$3,000; and
3. If the grant is approved, the funds will be used exclusively for the purposes outlined in the grant application.
4. If the total grant request is \$50,000 or more, member affirms it has complied with all applicable federal, state and local rules, including but not limited to the Local Govt Purchasing Act.
5. If the grant is approved, the entity or department will complete the applicable Loss Control Excellence section(s) within 30 days if it has not been completed within the last 3 years.

**Department Head Acknowledgment**

Teri A Hurt  
District Manager

\_\_\_\_\_  
Name and Title

Teri A Hurt  
Signature

Date: 3/19/23

**Board and/or Liaison Acknowledgment**

James Moore  
Board of Directors Chair

\_\_\_\_\_  
Name and Title

James Moore  
Signature

Date: 3/19/23



**STAGECOACH GENERAL IMPROVEMENT DISTRICT**  
**BOARD POLICY**

Adopted by Board of Trustees May 16, 1996  
Revised by SGID Board of Trustees December 8, 2022

ATT-D

1. The Board will consist of 5 Members: Chairman, Secretary, Treasurer and 2 additional Members.
2. Board Members will be elected to 4-year terms.
3. To be eligible, each Board Member must reside within the District and be a registered voter.
4. Meetings will be held monthly unless otherwise noted – more often if circumstances deem it necessary. Board Members are expected to attend every meeting.
5. Positions within the Board are nominated and voted on at the beginning of each year by the Board Members.
6. A Board Member’s resignation should be presented in writing to the Board.
7. A vacancy on the Board must be filled by a qualified elector of the District chosen and appointed by remaining Members of the Board after interviews and discussion.
8. An appointed Board Member assumes the same obligations and responsibilities as an elected Board Member until a successor in office is elected in the next biennial election.
9. See NRS 318.080 concerning dismissal.

Chain of command for Board and SGID Positions is as follows:

5 Board Members

Manager

Utility Supervisor

Assistant Manager

Water System Operations Specialist II

Administrative Assistant

Water System Operations Specialist I

Clerk / Typist

## BOARD MEMBER FIDUCIARY RESPONSIBILITIES

1. To exercise rights and powers for, and on behalf of, others with diligence and care.
  - A. Must understand rights and powers (authority) of a Board Member.
  - B. Should bring Customer concerns back to meetings.
2. To ensure that the water system receives, records and spends funds in accordance with modern accounting, purchasing and record-keeping standards.
  - A. Computer system should be kept up-to-date.
  - B. Must have yearly audit.
  - C. Board Treasurer must review and reconcile all SGID bank accounts monthly
  - D. Board must approve capital expenditures over \$5000.00. \*\*
3. To assure that water system revenues cover Operations plus Debt Service plus Reserves.
  - A. Should also include adequate contingency funds for emergencies.
  - B. Reserves should include Capital Improvement & Depreciation Funds.
4. To see that all records, minutes and notices are created, maintained and made available according to Federal and State laws.
  - A. Must have knowledgeable and effective Office Manager and employees. The Board is responsible for hiring, evaluating, and, if needed, firing the District Manager. The District Manager is responsible for all other employee hiring, evaluations, and, if needed, firing of the employee.
  - B. Board Members shall not make any promises as to raises, promotions or positions to any employee or prospective employee.
    1. Any member that does so shall be subject to censorship and removal from the Board by the Board of Lyon County Commissioners consistent with the procedure described in NRS 318.080(6).

\*\*Changed from \$500.00 May 20, 1999 by Board decision

## BOARD MEMBER LEGAL RESPONSIBILITIES

1. Board members must follow open meeting law provisions while in or out of the meeting. The provisions are found in NRS Chapter 241.
2. To carry out rules and regulations.
3. To ensure compliance with all applicable Federal, State and Local laws and ordinances.
4. To conduct business as a Board. Individual Members cannot contract, set policy or make decisions that are delegated to the Board by the governance documents.
  - A. Should keep rules and regulations, operations and emergency plans up-to-date.
  - B. Should have and maintain a Long Range Plan.
  - C. Must follow the Safe Drinking Water Act.
  - D. Should support lobbying for more realistic regulations.
  - E. Should encourage job-related training.
5. A quorum must be present to constitute a Meeting and to deliberate by vote. All Board Members vote on items agendized for Action.

Or

A quorum must be present to constitute a Meeting and to deliberate by vote. All Board Members vote on items agendized for Action with the exception of the Chair who only votes in the event of a tie.

(Some items may be duplicated in NRS 318)

## BOARD DUTIES IN ABSENCE OF BOARD OFFICERS

In cases of absence of Board Officers the following should apply:

Chair Absent	-	Secretary fills in
Secretary Absent	-	Treasurer fills in
Treasurer Absent	-	Member at Large fills in



# Stagecoach General Improvement District

## LONG RANGE PLAN

Adopted by the Board of Trustees on 03/12/1998

Revised and Approved on 04/11/2019

**Mission Statement:** *To Provide sufficient quantity and protect the quality of water for Stagecoach Valley residents.*

### Goals:

#### 1. Expand the existing Customer Base

- a. Include new sub-divisions and parcels into the District
- b. Encourage existing well owners to hook onto the District

#### 2. Protect existing water sources by regulations imposed through the Wellhead Protection Program

#### 3. Explore different possibilities / opportunities of other sources of water for the District

- a. Work with other Public Agencies whose service may be required to facilitate the production, transfer and delivery of potable water through an intertie pipeline.
- b. Encourage use of Stagecoach sub-basin for use as underground storage
- c. Utilization of treated wastewater recharge
- d. Gray water irrigation possibilities

#### 4. Wastewater Management Plan

- a. Enforce and maintain Denitrification Septic system Wastewater Management Program
- b. Work with other Public Agencies whose service may be required to facilitate and maintain the transfer and treatment of wastewater.
- c. Work with developers to build infrastructure at locations designated by the GID and to the specifications of the District

#### 5. Infrastructure Upgrades

- a. Drill and Equip new Well
- b. Construct an additional 500,000 gallon Storage Tank
- c. Complete Looping within the water distribution system
- d. Upgrade Telemetry making best use of developing technology
- e. System-wide installation of Radio-read Meters

#### 6. Financial Viability

- a. Maintain reasonable rates, while maintaining capacity
- b. Continue to fund Depreciation
- c. Continue to pursue high-yield investment options

#### 7. Continuous Yearly Review

- a. Ordinances
- b. Policies
- c. Programs

ATT. E

### **1 to 5 Year Plan:**

1. Project Growth in numbers and areas based on the number of existing water rights and how that will increase the number of parcels.
2. Work with Developers (and individuals) in extension of main water lines.
3. Continue working relationship with other Public Agencies.
4. Attend various County meetings (BOCC, Planning, Advisory Board) to stay informed on community sustainability and economic development within our District and surrounding areas. Identify areas of concern.
5. Work with District Engineer evaluating “alternatives” for additional water production options.
6. Begin discussion and examine possibility/feasibility of future wastewater facilities within the District.
7. Examine necessity of future water services / treatment plants etc. to meet future unfunded EPA mandates.
8. Continue Radio-read Meter program.

### **10 Year Plan:**

1. Drill and Equip new Production Well.
2. Construction of additional 500,000 gallon Storage Tank.
3. Complete Looping within the System.
4. Expand service to include new development south of the highway.
5. Expansion of Office / Boardroom facilities.

*Note: Items are not listed in order of priority*

*This Long Range Plan should be re-examined every 2 years*

G/L Account	Equipment	Quantity	Cost per Item	Price
1510 Utility Plant & Wells	Stenner Chlorinator	1	\$725.00	\$725.00
	CD Well Barbed Wire	1		\$0.00
1650 Other Fixed Assets	Colorimeter	1	\$620.00	\$620.00
	Generator	1	\$65,000.00	\$65,000.00
	Pitot Gauge	1	\$400.00	\$400.00
5556 Office Expense	Windows Upgrade	1		\$0.00
	QB Upgrade	1		\$0.00
	Backup Hard Drive	2	\$150.00	\$300.00
	Sound Bar	1	\$160.00	\$160.00
	Paint & Supplies	1	\$700.00	\$700.00
	Window Blinds	1		\$0.00
	Office Light Replacement	1		\$0.00
5464 Truck Expense	<sup>suspension</sup> Airbags for Truck	1	\$1,500.00	\$1,500.00
5571 Repairs & Maintenance	Tires for Golf Cart	4	\$93.75	\$375.00
	Tires for Generator	4	\$330.50	\$1,322.00
5470 Outside Services	Road Patches (Repairs & L.D.)	1	\$20,000.00	\$20,000.00
5563 Training & Travel	Cross Connection Control Class	1	\$1,400.00	\$1,400.00
5571 Repairs/Plant	New Door for CD Well	1		\$0.00
5559 Safety Supply	Fire Cabinet	1	\$1,284.00	\$1,284.00
5560 Operating Supply	Hand Truck	1	\$129.00	\$129.00
	Ladder	1	\$239.00	\$239.00
<b>Total</b>				<b>\$94,154.00</b>

ATT. F



# Stagecoach GID

## Rate Study

On February 22, 2023, a rate study was completed for the Stagecoach General Improvement District, (SGID). Items of interest for the rate study included: customer water usage, meter fee, water allotment included in the meter fee, water production, current meter fee, current water usage overage charge, and the FY 2021-2022 Budget.

The items above are pertinent in the formulation to determine a more accurate base fee and allotment for the meters and water usage overage charge. An average of customer water usage was used over the last five years. A five-year average was also used to determine an average water production.

The current fee structure is not recovering enough base fee revenue to cover depreciation costs for infrastructure replacement. The study also shows that the current cost per 1,000-gallon is low and should be increased.

### Customer Water Usage

Customer water usage is used to help determine the water usage overage charge.

The more water that is used for any purpose, mostly irrigation or swimming pools or customer leaks, increases the use of mechanical equipment causing higher electrical usage, unforeseen high bill costs causing more phone calls to/from the office. This cost, therefore, must be recovered from the water user. The more water allowed to flow through any meter, places wear and tear on the meter. The longer the meter is used, the less efficient the meter becomes in reading an accurate usage.

### Meter Fee

A meter fee is the amount of cost per connection used to cover the fixed costs in the yearly budget. Each residential customer pays an equal share to the yearly budget. The commercial meter fees are based on the number of equivalent residential meter outlets that can fit into a commercial meter outlet. This equivalent is usually multiplied by the residential meter fee to give the commercial meter fee.

The meter fees are determined as a result of the equal number of equivalents in the cross-sectional area compared to a meter with a  $\frac{3}{4}$ " diameter. For example, when comparing the cross-sectional area of a  $\frac{3}{4}$ " diameter meter to a  $1\frac{1}{2}$ " diameter meter, the following comparison is seen using substitution of  $x = \frac{3}{4}$ ", and the equation water operators use for Area:

*Standard Equation for Cross – Sectional Area:  $A = 0.785(D)^2$*

$$A_x = 0.785(x \text{ inches})^2 = 0.785x^2 - \text{square inches}$$

$$A_{2x} = 0.785(2x \text{ inches})^2 = 0.785(4x^2) - \text{square inches}$$

ATTG.

When comparing the cross-sectional areas between  $A_x$  and  $A_{2x}$ ,  $A_{2x}$  is 4 times larger in area than the  $A_x$ . *i.e.* This means that over the same flow time through the meters, the 1 ½" meter allows 4 times the volume to flow through it than the ¾" meter.

The larger the meter, the more demand placed on the water system.

## **Water Allotment Included in the Meter Fee**

The water allotment included in each meter fee helps customers out on the monthly cost of their water bill. However, the mechanical work and electrical cost to produce the allotment is not cost effective to the utility. For example, a utility with 1,000 water connections, a water allotment included in the meter fee of 10,000 gallons, and an overage of use charge of \$2.00/1,000 gallons of usage over the allotment, loses at least \$20 per connection per month if each connection exceeded the allotment.

Water allotments always work in favor of the customer and not the utility. The extra revenue on an allotment equal to zero (0), recovers the cost for the equipment. The cost for each amount of water passing through the meter can be recovered.

## **Water Production**

Water production is considered in the rate study to help determine the amount of water loss. When the ratio of customer usage and water production are considered, a water loss of less than 10% is preferred. This shows effective equipment on the system, low system leaks, and the utility is gathering the appropriate revenue.

## **Current Meter Fee**

The current meter fee is used to compare it with the calculated meter fee. The calculated meter fee is determined through the recovery of fixed costs.

The fixed costs are determined by the equipment/labor required to set up the system before a single drop of water is produced. Items that are included as a fixed cost are not limited to as follows: System insurance costs, telephones, publications & dues, credit card processing fees, professional services, contracts, operating supplies, travel and training, postage, street repairs, capital improvements, depreciation, and loans.

## **Current Water Usage Overage Charge**

The water usage overage charge on water is used to collect costs used to produce the water. The costs are called variable costs.

Variable costs are determined by the people/utilities/chemicals required to produce the first drop of water. Items that are included as a variable cost are but not limited to as follows: Salaries, retirement, overtime, chemicals, utilities, vehicle repair, and equipment repair.

## **FY 2021/2022 Budget**

The budget is used to determine how the fixed and variable costs are line itemed in the budget. The FY 2021/2022 Budget was used as a more appropriate year-to-year evaluation of the revenue and expenses for the water system.

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### **Depreciation**

Depreciation is used to fill in the costs between the revenue generated and the predicted expenses of the water system. Depreciation is usually looked at as a fake expense.

However, depreciation is the value of an asset that decreases over a fixed time frame until the asset is in need of replacement. This is a real expense. When the asset fails, the water system will look into the cost of replacement, whether new or remanufactured. This cost comes from the system account(s). In order to replace the costs, the water system recovers them through meter fees.

The yearly depreciation expense is calculated as a straight-line figure. In other words, the costs of the asset at purchase time divided by the number of years expected until replacement.

Using straight-line depreciation, the system is expected to collect the cost of the asset at purchase time.

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### **Method 1**

The goal for the rate study is to find a reasonable meter fee with an affordable allotment and overage charge.

Reasonable meter fees can be achieved through the equal pay of each connection. When service is ran to each lot in the service area, whether occupied or vacant, the owner of the lot is responsible for the equal pay of service. The collection of fees for all connections on the system strengthens a more stable budget.

The cost associated with each connection is based on the meter size for the lot. Each meter, of equal size, applies the same demand on the system over the same period. The larger the meter, the more demand is placed on the system over the same period compared to the smaller meter. This requires a higher meter fee for these larger meters to help balance the budget.

The following worksheet is taken from the rate study workbook. In order to recover the fixed costs of \$501,105, the meter fee for the 596 residential meters and 3 2-inch meters must reflect a fee that is equitable and based on how much demand the meter places on the system.

\$ 67.00 base for 3/4 meter					
Number of meters this size →	Meter Size	Area, in <sup>2</sup>	Equivalent 3/4 inch meters	Equivalent Number of 3/4 inch meters in system	Base Rate For Meter Size
596	0.75	0.44	1.00	596	\$ 67.00
0	1.00	0.79	1.78	0	\$ 100.50
0	1.50	1.77	4.00	0	\$ 134.00
3	2.00	3.14	7.11	21	\$ 167.50

The residential meter fee given above in conjunction with a \$3.10/1,000-gallon water usage overage charge will assist in balancing the budget on the residential users given an 18,000-gallon allotment. Commercial tiered fee users will have an increase in the Tier 1, Tier 2, and Tier 3 levels of usage. In order to balance the budget, the water usage overage charge would change to \$4.00/1,000-gallons for the first 25,000-gallons above the allotment, \$4.50/1,000-gallons for the next 50,000-gallons, and \$5.00/1,000-gallons above 100,000-gallons of total usage.

There is a possibility that this could cause users to decrease the amount of water used. This in turn will lower the amount of revenue coming in.

## Method 2

\$ 65.00 base for 3/4 meter					
Number of meters this size →	Meter Size	Area, in <sup>2</sup>	Equivalent 3/4 inch meters	Equivalent Number of 3/4 inch meters in system	Base Rate For Meter Size
596	0.75	0.44	1.00	596	\$ 65.00
0	1.00	0.79	1.78	0	\$ 97.50
0	1.50	1.77	4.00	0	\$ 130.00
3	2.00	3.14	7.11	21	\$ 162.50

The residential meter fee given above in conjunction with a \$3.30/1,000-gallon water usage overage charge will assist in balancing the budget on the residential users given a 18,000-gallon allotment. Commercial tiered fee users will have an increase in the Tier 1, Tier 2, and Tier 3 levels of usage. In order to balance the budget, the water usage overage charge would change to \$4.00/1,000-gallons for the first 25,000-gallons above the allotment, \$4.50/1,000-gallons for the next 50,000-gallons, and \$5.00/1,000-gallons above 100,000-gallons of total usage.

If the base fee is left at the current value and the allotment was lowered to 18,000-gallons, the result would be closely related to Method 1.

## Conclusion

Whichever method of fee change is used it is recommended that the change take place as a one-time change. The sooner the change is made, the sooner the system will be stable.

The depreciation line item in the budget is to show how much value the assets are losing each year. This total includes the Capital assets and the short-lived assets, assets with less than 15-years of life expectancy on them. The recovery of this value is important to the replacement costs of each asset.

Neither one of the examples above recover depreciation at 100%. For 100% recovery of depreciation, the base fee should be \$67.64. If the base fee is \$67.00, then about 99% of the depreciation is recovered. If the base fee is \$65.00, then about 94.5% for the depreciation is recovered.

In order to have an idea of a reasonable base fee, FY 2021/2022 was used to examine more reasonable budget numbers versus the FY 2022/2023 budget.

For a more reasonable number to be given on the meter fee, I would recommend that we use the FY 2023/2024 tentative budget numbers to calculate a more exact number for the next FY.

## Put Simply

### Fixed Costs Include:

- |                                    |                         |
|------------------------------------|-------------------------|
| 1. Health Insurance                | 11. Postage             |
| 2. Telephone                       | 12. Street Repair       |
| 3. Publications & Dues             | 13. Samples             |
| 4. System Insurance                | 14. License and Permits |
| 5. Credit Card Processing Fees     | 15. Equipment           |
| 6. Outside Services                | 16. Equipment Rental    |
| 7. Legal and Accounting            | 17. Operating Supplies  |
| 8. Repairs and Maintenance         | 18. Capital Improvement |
| 9. Departmental Operating Supplies | 19. Depreciation        |
| 10. Travel and Training            | 20. Plant Salaries      |

### Variable Costs Include:

- |                          |   |
|--------------------------|---|
| 1. Office Salaries       | 7. Fuel (Purchased on a Day-to-Day basis) |
| 2. Retirement            | 8. Chemical Supply                        |
| 3. Worker's Compensation | 9. Utilities                              |
| 4. Clothing              | 10. Vehicle Repair                        |
| 5. Medicare              |   |
| 6. Overtime Pay          |   |

Meter fees that are calculated and charged to the customer should cover the fixed costs.

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**Current Meter Fee** (Which includes 25,000-gallons) = \$65.00

Overage charges should cover the variable costs.

#### **Current Residential Water Usage Overage Charge:**

= \$3.00/1,000-gallons after 25,000-gallons

#### **Current Commercial Water Usage Overage Charge:**

= \$3.50/1,000-gallons for 26,000 to and including 50,000-gallons

= \$4.00/1,000-gallons for 51,000 to and including 100,000-gallons

= \$5.00/1,000-gallons for 101,000-gallons and above

Using current revenues calculated against FY 2021/2022 budgeted expenses; the deficit is equal to \$23,000.

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**Method 1:**

**Calculated Meter Fee (Which includes 18,000-gallons) = \$67.00**

Overage charges should cover the variable costs.

**Residential Water Usage Overage Charge:**

= \$3.10/1,000-gallons after 18,000-gallons

**Commercial Water Usage Overage Charge:**

= \$4.00/1,000-gallons for 19,000 to and including 43,000-gallons

= \$4.50/1,000-gallons for 44,000 to and including 93,000-gallons

= \$5.00/1,000-gallons for 94,000-gallons and above

Using current revenues calculated against FY 2021/2022 budgeted expenses; the deficit is equal to \$266.

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**Method 2:**

**Calculated Meter Fee (Which includes 18,000-gallons) = \$65.00**

Overage charges should cover the variable costs.

**Residential Water Usage Overage Charge:**

= \$3.30/1,000-gallons after 18,000-gallons

**Commercial Water Usage Overage Charge:**

= \$4.00/1,000-gallons for 19,000 to and including 43,000-gallons

= \$4.50/1,000-gallons for 44,000 to and including 93,000-gallons

= \$5.00/1,000-gallons for 94,000-gallons and above

Using current revenues calculated against FY 2021/2022 budgeted expenses; the surplus is equal to \$354.

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**\*\*These are options to meet a sustainable budget\*\***