CITY OF BLUE RIDGE
ORDINANCE 2023-0606-002

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF BLUE RIDGE, TEXAS, AMENDING BLUE RIDGE'S CODE OF ORDINANCES, CHAPTER 12 (UTILITIES), BY ADDING ARTICLE 12.04 BACKFLOW PREVENTION, AND ADDING ALL PERTAINING SECTIONS REGARDING BACKFLOW PREVENTION ASSEMBLIES, TO MODIFY CERTAIN BACKFLOW PREVENTION REGUATIONS TO BETTER PROTECT THE WATER SUPPLY OF THE CITY OF BLUE RIDGE FROM CONTAMINATION OR POLLUTION DUE TO BACKFLOW; PROVIDING A SAVINGS/REPEALING CLAUSE, SEVERABILITY CLAUSE, PENALTY CLAUSE AND AN EFFECTIVE DATE; AND PROVIDING FOR THE PUBLICATION OF THE CAPTION HEREOF.

WHEREAS, the City Council of the City of Blue Ridge, Texas ("City Council") finds the health and safety issues associated with backflow and cross-connections in the public water supply are important issues and concerns affecting the City of Blue Ridge ("City"); and

WHEREAS, the City Council has investigated and determined that the City of Blue Ridge requires backflow prevention to better protect the public water supply; and

WHEREAS, the City Council finds it is necessary to add Article 12.04 Backflow Prevention to the City of Blue Ridge's Code of Ordinances, as set forth below.

NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF BLUE RIDGE, TEXAS:

SECTION 1. Findings Incorporated. The findings set forth above are incorporated into the body of this Ordinance as if fully set forth herein.

SECTION 2. Addition to the Code of Ordinances, Article 12.04 Backflow Prevention under Chapter 12 (Utilities) is hereby added in its entirety as follows:

"CHAPTER 12
UTILITIES
ARTICLE 12.04 BACKFLOW PREVENTION

Section 12.04.001 Definitions

(a) Unless a provision of this Article explicitly states otherwise, the following terms and phrases, as used in this Article, shall have the meaning hereinafter designated.

Approved backflow prevention assembly or backflow assembly. An assembly to counteract backpressure or prevent backsiphonage that meets the standards contained in the Plumbing Code.

Atmospheric vacuum breaker backflow prevention device or atmospheric vacuum breaker or AVB. A device used to prevent backsiphonage in non-health hazard conditions. This device cannot be tested and cannot prevent backpressure backflow.

Backflow. The flow in the direction opposite to the normal flow or the introduction of any foreign liquids, gases, or substances into the water system of the City's water.

Backflow protection. A means of protection against backflow that shall be provided in accordance with the Plumbing Code.

Backpressure. Any elevation of pressure in the downstream piping system (by any means) above the supply pressure at the point of consideration which would cause, or tend to cause, a reversal of the normal direction of flow and the introduction of fluids, mixtures, or substances from any source other than the intended source.

Backsiphonage. The flow of water or other liquids, mixtures or substances into the distribution pipes of a potable water supply system from any source other than its intended source caused by a sudden reduction of pressure in the potable water supply system.

Commercial means any use other than a single-family residential structure that is less than 5,000 square feet in size. Commercial uses include all non-residential uses.

Completed Test Form means a test form that has been logged into a TCEQ-approved record keeping system for which all applicable fees have been paid to the Regulatory Authority.

Contaminants. Any foreign material, solid or liquid, not common to the potable water supply which makes or may make the water unfit or undesirable for human or animal consumption.

Cross connection. Any connection, physical or otherwise, between a potable water supply system and any plumbing fixture, or any tank, receptacle, equipment or device, through which it may be possible for any non-potable, used, unclean, polluted and contaminated water, or other substances, to enter into any part of such potable water system under any condition or set of conditions.

Cross-connection control assembly. Any assembly placed upon any connection, physical or otherwise, between a potable water supply system and any plumbing fixture, or any tank, receptacle, equipment or device, which is designed to prevent non-potable, used, unclean, polluted, and contaminated water, or other substances, from entering into any part of such potable water system under any condition or set of conditions.

Degree of hazard.
The low or high hazard classification that shall be attached to all actual or potential cross connections.

(1) *Health hazard.*

An actual or potential threat of contamination of a physical or toxic nature to the public potable water system or the consumer's potable water system that would be a danger to health.

(2) *High hazard.*

The classification assigned to an actual or potential cross connection that potentially could allow a substance that may cause illness or death to backflow into the potable water supply.

(3) *Low hazard.*

The classification assigned to an actual or potential cross connection that potentially could allow a substance that may be objectionable but not hazardous to one's health to backflow into the potable water supply.

(4) *Plumbing hazard.*

An internal or plumbing-type cross connection in a consumer's potable water system that may be either a pollution or a contamination-type hazard.

(5) *Pollution hazard.*

An actual or potential threat to the physical properties of the water system or the potability of the public or the consumer's potable water system but which would not constitute a health or system hazard, as defined. Maximum degree of intensity of pollution which the potable water system could be degraded under this definition would cause a nuisance or be aesthetically objectionable or could cause damage to the system or its appurtenances.

(6) *System hazard.*

An actual or potential threat of severe danger to the physical properties of the public or consumer's potable water supply or of a pollution or contamination that would have a detrimental effect on the quality of the potable water in the system.

Double check detector backflow prevention assembly or double check detector or DCDA.

An assembly composed of a line-size approved double check assembly with a bypass containing a specific water meter and an approved double check valve assembly. The meter shall register accurately for very low rates of flow.

Double check valve backflow prevention assembly or double check assembly or double check or DC.

An assembly which consists of two (2) independently acting, approved check valves, including tightly closing resilient seated shutoff valves

attached at each end of the assembly and fitted with properly located resilient seated test cocks.

Mobile unit.
Any operation which may have the potential to introduce contaminants into a potable water system from a mobile source. These include, but are not limited to, carpet-cleaning vehicles, water-hauling vehicles, street-cleaning vehicles, liquid-waste vehicles, power-wash operations and pest-control vehicles.

Pressure vacuum breaker backflow prevention assembly or pressure vacuum breaker or PVB.
An assembly which provides protection against backsiphonage, but does not provide adequate protection against backpressure backflow. The assembly is a combination of a single check valve with an AVB and can be used with downstream resilient seated shutoff valves. In addition, the assembly has suction and discharge gate valves and resilient seated test cocks which allow the full testing of the assembly.

Public water system or system.
Any public or privately owned water system which supplies water for public domestic use. The system will include all services, reservoirs, facilities, and any equipment use in the process of producing, treating, storing, or conveying water for public consumption.

Reclaimed water.
Wastewater, collected and treated at a wastewater treatment plant, which has been treated to a quality that meets or exceeds the requirements of the Texas Commission on Environmental Quality's chapter 210 authorization to the city.

Reduced pressure principle backflow prevention assembly or reduced pressure principle assembly or RPZ assembly or RPZ.
An assembly containing two (2) independently acting approved check valves together with a hydraulically operated, mechanically independent pressure differential relief valve located between the check valves and at the same time below the first check valve. The assembly shall include properly located resilient seated test cocks and a tightly closing resilient seated shutoff valve at the end of the assembly.

Reduced pressure principle detector backflow prevention assembly or reduced pressure detector or RPZDA.
An assembly composed of a line-size approved reduced pressure principle assembly with a bypass containing a specific water meter and an approved reduced pressure principle backflow prevention assembly. The meter shall register accurately for very low rates of flow.

RME G means Responsible Managing Employee General.

RME D means Responsible Managing Employee Dwelling.

SCR G means Sprinkler Certificate of Registration General.

SCR D means Sprinkler Certificate of Registration Dwelling.

Temporary Irrigation means irrigation not permanently installed underground.

Section 12.04.002 General Regulations

a) General. Any irrigation system that is connected to the potable water supply must be connected through a backflow prevention method approved by the Texas Commission on Environmental Quality (TCEQ). The backflow prevention device must be approved by the American Society of Sanitary Engineers, the Foundation for Cross-Connection Control and Hydraulic Research, the University of Southern California, the Uniform Plumbing Code; or any other laboratory that has equivalent capabilities for both the laboratory and field evaluation of backflow prevention assemblies. The backflow prevention device must be installed in accordance with the laboratory approval standards or if the approval does not include specific installation information, the manufacturer's current published recommendations.
   1. If conditions that present a health hazard exist, one of the following methods must be used to prevent backflow:
      i. An air gap may be used if a) there is an unobstructed physical separation; and b) the distance from the lowest point of the water supply outlet to the flood rim of the fixture or assembly into which the outlet discharges is at least one inch or twice the diameter of the water supply outlet, whichever is greater.
      ii. Reduced pressure principle backflow prevention assemblies may be used if a) the device is installed at a minimum of 12 inches above ground in a location that will ensure that the assembly will not be submerged; and b) drainage is provided for any water that may be discharged through the assembly relief valve.
      iii. Pressure vacuum breakers may be used if a) no back-pressure condition will occur; and b) the device is installed at a minimum of 12 inches above any downstream piping and the highest downstream opening. Pop-up sprinklers are measured from the retracted position from the top of the sprinkler.
      iv. Atmospheric vacuum breakers may be used if a) no back-pressure will be present; b) there are no shutoff valves downstream from the atmospheric vacuum breaker; c) the device is installed at a minimum of 6 inches above any downstream piping and the highest downstream opening. Pop-up sprinklers are measured from the retracted position from the top of the sprinkler; d) there is no continuous pressure on the supply side of the atmospheric vacuum breaker for more than 12 hours in any 24 hour period; e) a separate atmospheric vacuum breaker is installed on the discharge side of each irrigation control valve, between the vale and all the emission devices that the valve controls.
   2. Backflow prevention devices used in applications designated as health hazards must be tested upon installation and annually thereafter.
   3. If there are no conditions that present a health hazard, double check valve backflow prevention assemblies may be used to prevent backflow if the device is tested upon installation and test cocks are used for testing only.
   4. If a double check valve is installed below ground a) test cocks must be plugged, except when the double check valve is being tested; b) test cock plugs must be threaded,

watertight, and made of nonferrous material; c) a "y" type strainer is installed on the inlet side of the double check valve; d) there must be a minimum of 12 inch clearance between any fill material and the bottom of the double check valve to allow for testing and repair; e) there must be space on the side of the double check valve to test and repair the double check valve.

5. If an existing irrigation system without a backflow prevention assembly requires major maintenance, alteration, repair, or service, the system must be connected to the potable water supply through an approved, properly installed backflow prevention method before any major maintenance, alteration, repair, or service is performed.
6. If an irrigation system is connected to a potable water supply through a double check valve, pressure vacuum breaker, or reduced pressure principle backflow assembly and includes an automatic master valve on the system, the automatic master valve must be installed on the discharge side of the backflow prevention assembly.
7. The irrigation shall ensure the backflow prevention device is tested by a licensed backflow prevention assembly tester prior to being placed in service and the test results provided to the City and the irrigation system's owner or owner's representative within 10 business days of testing the backflow prevention device.
8. Each person provided water service by the City directly or indirectly shall permit the Regulatory Authority to enter such person's premises and buildings for the purpose of inspecting pipes and fixtures and the manner in which water is used to determine compliance with this Article. The Regulatory Authority's right of entry is a condition of the person's water service or connection to the City's public water system.
    i. The person shall promptly remove, at the person's sole expense, a security barrier or other obstacle to access by the Regulatory Authority to the person's premises.
    ii. In connection with action by the Regulatory Authority under this Article, a person with water service provided by the City commits an offense if the person: a) fails to remove a barrier or obstacle to access by the Regulatory Authority; or b) unreasonably delays access by the Regulatory Authority.
    iii. The Regulatory Authority may apply to the Municipal Court or other court of competent jurisdiction for a search warrant if: a) a person denies the Regulatory Authority access to a building, structure, property or a public or private potable system connected to the City's public water system; b) the Regulatory Authority has probable cause to believe there is a) a violation of this article or other enforcement order; b) a need to conduct a cross-connection inspection or cross-connection survey; or c) a threat to public health or safety.

b) At a minimum, a backflow prevention assembly shall be required in the following circumstances:

1) When a premises has any one (1) or more cross-connections.
2) When an appropriate cross-connection survey, Customer Service Inspection (CSI) report form has not been filed with the Regulatory Authority.
3) In all new non-residential/commercial construction, there shall be installed an approved backflow prevention assembly in the fire riser room or other location approved by the Regulatory Authority at the service connection. The type of backflow prevention assembly required will be commensurate with the degree of hazard as

determined by the Regulatory Authority in order to protect the water supply of the City from contamination or pollution.

4) In all new residential construction where plans are approved by the Regulatory Authority for an outdoor sprinkler system or swimming pool/spa/hot tub where water is supplied.
5) When reclaimed or auxiliary water is supplied to the site, an RPZ shall be installed on the potable water supply just inside the property line and before any branch connections and a double check backflow device shall be installed on the reclaimed or auxiliary water supply just inside the property line and before any branch connections.

Section 12.04.003 Installation Requirements

a) Backflow prevention assemblies shall be installed in accordance with the following requirements:
   1) Backflow prevention assemblies shall be installed in accordance with the plumbing code, commission rules, this Article and other relevant laws. The assembly installer shall obtain the required permits prior to installation and shall have the assembly inspected by the Regulatory Authority.
   2) When the Regulatory Authority requires a backflow prevention assembly to be installed at the point of delivery of potable, auxiliary and reclaimed water supplies, such installation of the assembly shall be before any branch in the line and on private property located just inside the boundary between the City right-of-way and the landowner's property. Other areas of installation of a backflow prevention assembly may be required when the Regulatory Authority deems it necessary in order to protect the water supply of the City from contamination or pollution.
   3) The assembly shall be protected from freezing and other severe weather conditions.
   4) All backflow prevention assemblies shall be of a type and model approved by the Regulatory Authority.
   5) Vertical installations of backflow prevention assemblies shall be approved in writing by the Regulatory Authority prior to installation.
   6) Backflow prevention assemblies that are larger than four (4) inches and are installed more than five (5) feet or higher above floor level shall be equipped with a rigidly and permanently installed scaffolding acceptable to the Regulatory Authority.
   7) Bypass lines are prohibited. Pipefittings which could be used for connecting a bypass line shall not be installed.
   8) Premises that require backflow prevention assemblies, where an uninterrupted, continuous water supply is critical shall be provided with two (2) assemblies installed in parallel for testing, maintenance or repair. They should be sized in such a manner that either assembly will provide the maximum flow required or desired.
   9) Lines shall be thoroughly flushed prior to installation. A strainer with blowout tapping may be required ahead of the backflow prevention assembly.
   10) Upon completion of installation, the Regulatory Authority shall be notified and all backflow prevention assemblies shall be inspected and tested. The original test report shall be signed by the tester; contain test gauge make, model, serial number, and calibration date; name of tester; state certification number of tester; facility name, address and telephone number; and, submitted to the Regulatory Authority.

b) A person commits an offense if the person installs a backflow prevention assembly in violation of this section.
c) A permits commits an offense if the person fails to notify the Regulatory Authority of installation, to inspect and test, or to report the test report in compliance with this Article.

Section 12.04.004 Multiple Connections

Any premises requiring multiple service connections for adequacy of supply and/or fire protection shall have a backflow prevention assembly on each service connection. The type of backflow prevention assembly required will be commensurate with the degree of potential hazard as determined by the Regulatory Authority in order to protect the water supply of the City from contamination or pollution.

Section 12.04.005 Connection of Mobile Units

a) The connection of a mobile unit to any potable water system is prohibited unless:
   1) Such connection is protected by an air gap or a reduced pressure principle assembly approved backflow prevention assembly; and
   2) There is an annual device testing of any backflow prevention assembly; and
   3) The Regulatory Authority has given approval prior to connection to any potable water system.
b) A person commits an offense if the person operates or causes to be operated a mobile unit in violation of this section.

Section 12.04.006 Fire Protection Systems

a) A double check valve assembly (DCVA) approved by the Regulatory Authority shall be the minimum protection required for fire sprinkler systems using piping material that is not approved for potable water use and/or that do not provide for periodic flow-through during each twenty-four-hour period, unless a variance has been issued in writing from the Regulatory Authority. A reduced pressure principle assembly (RPZ) shall be installed when any solution other than potable can be introduced into the sprinkler system, unless an air gap is used to protect a tank supplying the system.
b) All fire protection backflow devices shall be located in the fire riser room or other location approved by the Regulatory Authority. Only the Regulatory Authority shall by written approval grant a variance to this requirement.
c) Upon the approved installation of the DCVA, RPZ or approved backflow prevention assembly, a licensed fire line tester shall complete a cross-connection test report and submit the report to the Regulatory Authority as required by this Article.
d) All fire line backflow tester(s) will perform a forward flow test on the backflow assembly before it can be tested. Only the Regulatory Authority shall by written approval grant a variance to this requirement.
e) All fire line equipment, including piping and valves shall be installed by a state-license fire sprinkler system contractor. Only SCR G, RME G, SCR D and RME D (D is for dwelling only, not commercial) backflow prevention assembly testers may test and repair assemblies on fire lines if they are full-time employees of a fire line contractor. The State Fire Marshal's Office requires any person performing maintenance on fire lines shall be employed by an approved fire line contractor.
f) All fire protection backflow devices shall be located in the fire riser room or other location approved by the Regulatory Authority. Only the Regulatory Authority shall, by written

approval, grant a variance to the requirement. A variance will only be approved due to an absolute hardship due to the property and not for any other reason.

g) All fire line backflow tester(s) will perform a forward flow test on the backflow assembly before it can be tested. Only the Regulatory Authority shall, by written approval, grant a variance to this requirement.
h) All fire line equipment, including piping and valves, shall be installed by a state licensed fire sprinkler system contractor. Only SCR G, RME G, SCR D and RME D (D is for dwelling only, not commercial) backflow prevention assembly testers may test and repair assemblies on fire lines only if they are permanently full time employed/employees by an approved fire line contractor. The State Fire Marshal's Office requires any person performing maintenance on fire lines shall be employed by an approved fire line contractor.

Section 12.04.007 Fire Hydrant Protection

a) An approved double check valve assembly (DCVA) or reduced pressure principle assembly (RPZ) that has bee approved by the Regulatory Authority shall be required protection for fire hydrant water meters which are being used for a temporary water supply during any construction or other uses which would pose a potential hazard to the public water supply. An RPZ is required if any solution other than the potable water can be introduced into the system.
b) It is the responsibility of all persons engaging in the use and rental of a fire hydrant water meter to provide the reduced pressure principle assembly and to abide by the conditions of this Article. All fire hydrant meter rentals shall meet the current requirements, as provided by the City.
c) Only approved fire hydrant meters with approved backflow prevention assemblies are allowed to be used within the City Limits.

Section 12.04.008 Lawn Irrigation System

a) All lawn irrigation systems shall obtain a permit issued by the City for installation and repairs. Lawn irrigation systems shall be installed in compliance with the Plumbing Code, City irrigation regulations and this Article.
b) Interconnections of the potable water supply with a reclaim or auxiliary water source are required to have an RPZ backflow device installed immediately past the City meter before any branch connections or an approved air gap.
c) All commercial irrigation systems shall have an RPZ backflow device installed.
d) When an irrigation system is connected to a reclaimed or auxiliary water supply, a double check backflow prevention assembly shall be installed immediately past the City meter just outside the City right-of-way before any branch connections. The potable water supply to the site is required to have an RPZ backflow device installed immediately past the City meter just outside the City right-of-way before any branch connections.

Section 12.04.009 Testing of Assemblies

a) The Regulatory Authority shall inspect and/or test, or cause to be inspected and tested, all backflow prevention assemblies in each of the following circumstances:
    1) Immediately after installations;
    2) Whenever the assembly is moved;
    3) A minimum of once a year for all commercial fire protection assemblies providing protection against health hazards;

4) Premises that have been vacated and unoccupied for one (1) year, prior to re-occupancy; and
5) Immediately after repairs or replacement.

b) Backflow prevention assemblies may be required to be tested more frequently if the Regulatory Authority deems it necessary to protect the water supply of the City from contamination or pollution.
c) All backflow prevention assembly testing shall be performed by a certified backflow prevention assembly tester who is registered with the City's Regulatory Authority.
d) It is the responsibility of the property owner and the person in control of the premises to have all backflow prevention assemblies tested in accordance with this Article.
e) All results from backflow prevention assembly testing by a certified backflow prevention assembly tester shall be placed on a TCEQ approved form that shall be obtained by the tester on behalf of the City.
f) A person commits an offense if the person owns or is in control of any premises and fails or refuses to have the backflow prevention assemblies installed on said premises, inspected or tested as required by this section.
g) The City shall not be liable for damage to a backflow prevention assembly that occurs during testing.

Section 12.04.010 Maintenance of Assemblies

a) A person who owns, operates or manages premises in which required backflow prevention assemblies are installed shall maintain such assemblies in proper working order at all times, including repair as required, annual registration on a TCEQ approved form, provided by a certified tester, and payment of an annual nonrefundable administrative fee in an amount established by the City Council. All maintenance and repair of assemblies shall be done in accordance with all applicable regulations of the manufacturer and this Article.
b) Backflow prevention assemblies shall be maintained in a manner that allows them to be tested by a method that has been approved by the Regulatory Authority.
c) All records related to backflow prevention assembly installation, testing and repair shall be maintained on the premises for a minimum of three (3) years.
d) A person commits an offense if the person allows an unregistered tester to perform testing at their establishment.
e) A person commits an offense if a person fails to maintain backflow prevention assemblies in compliance with this section.
f) A person commits an offense if the person fails to comply with a repair order issued by the Regulatory Authority.
g) It is the responsibility of any person who owns or controls property to eliminate the possibility of thermal expansion if a closed system has been created by the installation of a backflow assembly.

Section 12.04.011 Installation Standards and Specifications

a) *Reduced pressure principal backflow prevention assemblies (RPZ's).* RPZs may be utilized at premises where a substance is handled that would be hazardous to health if introduced into the potable water system. The RPZ is normally used in locations where an air gap is impractical. The RPZ is effective against both back-siphonage and back-pressure.

1. RPZs shall be sized to provide an adequate supply of water and pressure for the premises being served. Flow characteristics are not standard. Consult manufacturer's specifications for specific performance data.
2. Premises where an uninterrupted water supply is critical should be provided with two (2) assemblies installed in parallel. Assemblies shall be sized in such a manner that either assembly will provide the minimum water requirements while the two (2) together will provide the maximum flow required.
3. The assembly shall be readily accessible for testing and maintenance and shall be located in an area where water damage to building or furnishings would not occur from relief valve discharge. The property owner assumes all responsibility for any damage caused by water discharge from an RPZ assembly. An approved air gap shall be located at the relief valve orifice of RPZ assemblies. This air gap shall be at least twice the inside diameter of the incoming supply line as measured vertically above the top rim of the drain, and in no case less than one (1) inch. An approved air gap funnel assembly may be used to direct minor discharges away from the assembly; this assembly will not control flow in a continuous relief situation. Drain lines to accommodate full relief valve discharge flow should be considered.
4. No part of a reduced pressure principle backflow prevention assembly shall be submerged in water or installed in a location subject to flooding. PRZs are typically to be installed above grade in well drained areas. The drain shall be of adequate capacity to carry the full rated flow of the assembly and shall be screened on both ends.
5. Enclosures shall be designed for ready access and sized to allow for the minimum clearances established below. Removable protective enclosures are typically installed on the smaller assemblies. Daylight drain ports shall be provided to accommodate full pressure discharge from the assembly.
6. Assemblies two (2) inches and smaller shall have at least six (6) inches clearance on both sides and on top of the assembly, and twelve (12) inches below and behind the assembly. All assemblies larger than two (2) inches shall have a minimum of twelve (12) inches on the back side, twenty-four (24) inches on the test cock side, and the relief valve opening shall be at least twelve (12) inches plus nominal size of assembly above the floor or highest possible water level. Headroom of six (6) feet zero (0) inches is required in vaults without a fully removable top. A minimum access opening of thirty-six (36) inches is required on all vault lids.
7. Vertical installation is prohibited.
8. All RPZ assemblies shall be tested in accordance with this Article. Tests are the responsibility of the assembly owner. The owner shall notify the Regulatory Authority upon installation of any backflow prevention assembly.
9. Variances from these specifications will be evaluated on a case-by-case basis. Any deviation shall be prohibited without prior written approval by the Regulatory Authority.

b) *Double check valve backflow prevention assemblies (DCs).* DCs may be utilized at premises where a substance is handled that would be objectionable but not hazardous to health if introduced into the potable water system.
   1. DCs shall be sized to provide an adequate supply of water and pressure for the premises being served. Consult manufacturer's specifications for specific performance data.

2. Premises where an uninterrupted water supply is critical should be provided with two (2) assemblies installed in parallel. Assemblies shall be sized in such a manner that either assembly will provide the minimum water requirements while the two (2) together will provide the maximum flow required.
3. The assembly shall be readily accessible with adequate room for testing and maintenance DCVAs may be installed below grade, providing all test cocks are fitted with non-ferrous brass pipe plugs. All vaults shall be well drained, constructed of suitable materials, and sized to allow for the minimum clearances established below.
4. Assemblies two (2) inches and small shall have at least twelve (12) inches of clearance below and six (6) inches on both sides of the assembly and, if located in a vault, the bottom of the assembly shall be not more than twenty-four (24) inches below grade. All assemblies larger than two (2) inches shall have a minimum clearance of twelve (12) inches on the back side, twenty-four (24) inches on the test cock side, and twelve (12) inches below the assembly. Headroom of six (6) feet zero (0) inches is required in vaults without a fully removable top. A minimum access opening of thirty-six (36) inches is required on all vault lids. "Y" pattern double check valve assemblies shall be installed so the checks are horizontal and the test cocks face upward. These clearance standards apply to all assemblies installed in vaults, enclosures, and meter boxes.
5. Vertical installations of DCVAs are only allowed on sizes up to and including four (4) to eight (8) inches that meet the following requirements:
   a) Internally spring-loaded check valves;
   b) Flow is upward through assembly;
   c) Manufacturer and University of Southern California's Foundation for Cross-Connection Control and Hydraulic Research states the assembly can be used in a vertical position;
   d) Approved by the Regulatory Authority.
6. All DCVAs shall be tested in accordance with this Article. Tests are the responsibility of the assembly owner. The owner shall notify the Regulatory Authority upon installation of any backflow prevention assembly.
7. Variances from these specifications will be evaluated on a case-by-case basis. Any deviation shall be prohibited without prior written approval of the Regulatory Authority.

c) Pressure vacuum breaker backflow prevention assemblies (PBVs). PVBs may be utilized at point-of-use protection only and where a substance is handled that would be objectionable but not hazardous to health if introduced into the potable water system. PVBs protect against backsiphonage only and shall not be installed where there is potential for backpressure.
   1. The assembly shall be installed a minimum of twelve (12) inches above the highest downstream piping.
   2. PVBs shall not be installed in an area subject to flooding or where damage would occur from water discharge.
   3. The assembly shall be readily accessible for testing and maintenance, with a minimum of clearance of twelve (12) inches all around the assembly.
   4. All PVBs shall be tested in compliance with this Article. Tests are the responsibility of the assembly owner. The owner shall notify the regulatory authority of installation of any backflow prevention assembly.

5. Variances from these specifications will be evaluated on a case-by-case basis. Any deviation shall be prohibited without prior written approval of the Regulatory Authority.

d) Spill-resistant pressure vacuum breaker backflow prevention assemblies (SVBs). SVBs may be utilized in all installations requiring a pressure vacuum breaker. SVBs shall comply with the installation requirements applicable for pressure vacuum breaker backflow prevention assemblies.

e) Air gap separation. Air gap separations provide maximum protection from backflow hazards and may be utilized at premises where a substance is handled that would be hazardous to health if introduced into the potable water system.
   1. An air gap separation shall be at least twice the diameter of the supply pipeline measured vertically above the top rim of the receiving vessel, and in no case less that one (1) inch. If splashing is a problem, tubular screens may be attached or the supply line may be cut at a forty-five degree (45°) angle. The air gap distance is measured from the bottom of the angle. Hoses are not allowed.
   2. Air gap separations shall not be altered in any way without prior approval from the Regulatory Authority and shall be available for inspection at all reasonable times.

Section 12.04.012 Registration of Certified Backflow Prevention Assembly Testers

a) No certified backflow assembly tester shall operate within the City without first registering with the Regulatory Authority. The Regulatory Authority shall determine whether an applicant is eligible for registration.

b) Each applicant for registration shall:
   1. Annually register with the Regulatory Authority;
   2. Provide evidence of commission certification;
   3. Provide evidence that testing equipment is able to maintain a calibration of plus or minus 0.2 psid accuracy; and
   4. Obtain and maintain in full force and effect for the duration of the registration period, and any extension thereof, at the applicant's sole expense, insurance coverage written on an occurrence basis, by companies authorized and admitted to do business in the state and rated A- or better by A.M. Best Company in the following typs and amounts:

	Type	Amount
1	Worker's compensation/employer's liability	Statutory $500,000.00/$500,000.00/ $500,000.00
2	Commercial general (public) liability insurance to include coverage for the following: a. Premises/operations b. Independent contractors c. Products/completed operations d. Contractual liability	Bodily injury and property damage of: $2,000,000.00 per occurrence, $5,000,000.00 general, aggregate or its equivalent in umbrella or excess liability coverage.

	e. Personal injury f. Explosion, collapse, underground g. Broad form property damage, to include fire legal liability	
*3.	Business automobile liability: a. Owned/leased vehicle b. Nonowned vehicles c. Hired vehicles	Combined single limit for bodily injury and property damage of $1,000,000.00 per occurrence or its equivalent.
*4.	Professional liability (claims made from)	$1,000,000.00 per claim to pay on behalf of the insured all sums which the insured shall become legally obligated to pay as damages by reason of any act, malpractice, error or omission in professional services.

*If Applicable.

a. Each applicant shall furnish a completed certificate of insurance evidencing such coverages that shall be completed by an agent authorized to bind the named underwriter and its company to the coverage, limits, and termination provisions shown thereon;
b. The Regulatory Authority reserves the right to modify required insurance coverage and limits when deemed necessary and prudent by the Regulatory Authority based upon charges in statutory law, court decisions, or circumstances surrounding this Article, but in no instance will the Regulatory Authority allow modifications whereupon the Regulatory Authority may incur increased risk.
c. Each applicant shall ensure that all insurance policies and certificates of insurance contain the following required provisions:
    i. Name the Regulatory Authority and its Council members, officers, employees, volunteers, agents and representatives as additional insureds with respect to the operations and activities of, or on behalf of, the named insured performing work under the provisions of this Article, with the exception of the professional liability and worker's compensation policies;
    ii. Insurance shall be deemed primary with respect to any insurance or self-insurance carried by the Regulatory Authority;
    iii. Provide for an endorsement that the "other insurance" clause shall not apply to the Regulatory Authority where the Regulatory Authority is an additional insured shown on the policy;
    iv. Worker's compensation and employer's coverage shall provide for a waive of subrogation in favor of the Regulatory Authority;
    v. Provide for notice to the Regulatory Authority in the event of any notice of cancellation, nonrenewal or material change in coverage and shall give such notices not less than thirty (30) days prior to the change, or ten (10) days notice for cancellation due to nonpayment of premiums, which notice must be accompanied by a replacement certificate of insurance.

d. Nothing herein contained shall be construed as limiting in any way the extent to which the applicant or certified backflow assembly tester may be held responsible for payments of damages to persons (including death) or property resulting from the applicant's or certified backflow assembly tester's performance of work under the provisions of this Article.

c) A registration shall remain in effect one (1) year from the date of registration provided that:
   1. The tester remains eligible for registration and certification; and
   2. Registration is not revoked by the Regulatory Authority.

d) After notice, the Regulatory Authority may suspend, and after notice and hearing, the Regulatory Authority may revoke a registration if the Regulatory Authority determines that the tester:
   1. Has falsely, incompletely or inaccurately reported assembly reports;
   2. Has used inaccurate gauges;
   3. Has used improper testing procedures;
   4. Has expired insurance;
   5. Is not in compliance with safety regulations;
   6. Has failed to register the serial numbers of his/her test kits or failed to calibrate gauges annually as required by this Article;
   7. Has on three or more times in a calendar year failed to return completed test forms to the Regulatory Authority wirhin the time period required by this Article; or
   8. Has violated any other provisions of this Section.
   9. Caused or intended to cause harm to the potable water system by failing to the test the backflow prevention assembly correctly and with integrity and reporting any issues, whether maintenance, operations, or otherwise where the backflow prevention assembly was/is at risk of failure to operate correctly.

e) The Regulatory Authority will maintain a current list of registered certified testers.

f) A person commits an offense if the person tests a backflow prevention assembly within the City without being certified by the Commission.

g) A person commits an offense if the person operates as a backflow prevention assembly tester within the City without registering with the Regulatory Authority.

Section 12.04.013 Certified Backflow Prevention Assembly Tester Responsibilities

a) A certified backflow prevention assembly tester shall:
   1. Register annually with the City;
   2. File the serial number of each of his/her test kits with the Regulatory Authority;
   3. Annually have each recorded test kit tested for accuracy and calibrated to maintain a two (2%) percent accuracy factor;
   4. Maintain testing equipment in proper working condition/calibration;
   5. Perform competent and accurate certifications on each backflow prevention assembly tested and shall submit complete original, signed and dated reports on the TCEQ approved forms;
   6. Report test results to the Regulatory Authority within ten (10) days of testing;
   7. Provide a copy of the completed test report to the property owners and/or persons in charge of any premises;
   8. Maintain testing and/or repair records for a minimum of three (3) years;
   9. Shall not change the design or operation characteristics of a backflow prevention assembly;

10. Shall not commingle backflow test gauges used on the reclaimed or auxiliary water system with the potable water system;
11. Notify the Regulatory Authority of any incorrectly installed or improper type of device for degree of hazard used;
12. Notify the Regulatory Authority of any missing assembly that is not requested to be tested by the owner or operator of the premises;
13. Notify the Regulatory Authority of a failed device immediately after it is tested;
14. Communicate all potential issues that may hinder an on-time test report submittal; and
15. When filling out the test report, an accurate location for the device is required and shall be added to the contact information for the person who was requesting the test.

Section 12.04.014 Backflow Fees and Charges

A person who owns, operates or manages premises where a backflow prevention assembly or assemblies are required shall annually register and pay an annual nonrefundable administrative fee for the registration of each health or high hazard backflow prevention assembly. The annual administrative fee charged for a backflow prevention assembly shall be per each separate device and shall be established by City Council. This annual administrative fee is to cover the administrative cost associated with the regulatory authority annually registering a backflow prevention assembly by obtaining, reviewing and maintaining the documentation required by this Article. Such fee may appear on the person's water utility statement. The Director of Public Works is authorized to collect such charges in a manner consistent with applicable provisions of the Code of Ordinances, and State Law.

SECTION 3: PENALTY A person who violates any provision of this Ordinance shall be subject to the penalties set forth in Section 1.01.009 of the Code of Ordinances, as it exists or may be amended.

SECTION 4: SAVINGS/REPEALING. The Code of Ordinance shall remain in full force and effect, save and except as amended by this or any other ordinance. All provisions of any ordinance in conflict with this Ordinance are hereby repealed, but such repeal shall not abate any pending prosecution for violation of the repealed ordinance, nor shall be repeal prevent prosecution from being commenced for any violation occurring prior to the repeal of the ordinance. Any remaining portions of conflicting ordinances shall remain in full force and effect.

SECTION 5: SEVERABILITY. Should any section, subsection, sentence, clause or phrase of this Ordinance be declared unconstitutional and/or invalid by a court of competent jurisdiction, it is expressly provided that any and all remaining portions of this Ordinance shall remain in full force and effect. The City Council hereby declares that it would have passed this Ordinance, and each section, subsection, clause or phrase thereof, regardless of whether any one or more sections, subsections, sentences, clauses or phrases is declared unconstitutional and/or invalid.

SECTION 6: EFFECTIVE DATE. This Ordinance shall become effective from and after its adoption and publication as required by law.

DULY PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF BLUE RIDGE, TEXAS on this the 6th day of June, 2023.

Rhonda Williams, Mayor

ATTEST:

Edie Sims, City Secretary