

FIRST READING: _____
SECOND READING: _____
PUBLISHED: _____
PUBLISHED: _____
PASSED: _____

**CONSTRUCTION STANDARDS AND OPERATIONAL RESPONSIBILITIES FOR
SEWERAGE SYSTEMS AND FOR REUSE SYSTEMS**

A RESOLUTION TO DELETE CHAPTER 13.20 OF TITLE 13 OF THE OFFICIAL CODE OF HALL COUNTY, GEORGIA, ENTITLED "CONSTRUCTION STANDARDS AND OPERATIONAL RESPONSIBILITIES FOR WATER AND WASTEWATER SYSTEMS" AND TO SUBSTITUTE IN LIEU THEREOF A NEW CHAPTER 13.20 OF TITLE 13 OF THE OFFICIAL CODE OF HALL COUNTY, GEORGIA, TO BE ENTITLED "CONSTRUCTION STANDARDS AND OPERATIONAL RESPONSIBILITIES FOR SEWERAGE SYSTEMS AND FOR REUSE SYSTEMS"; TO PROVIDE FOR DEFINITIONS TO BE INCORPORATED INTO THE CHAPTER; TO SET FORTH THE RESPONSIBILITIES OF THE OWNER WITH REFERENCE TO THE SEWERAGE SYSTEM OR REUSE SYSTEM; TO PROVIDE FOR APPLICATION REQUIREMENTS, REVIEW OF PLANS FOR THE CONSTRUCTION OF A SEWERAGE SYSTEM OR REUSE SYSTEM AND SET FORTH THE FEE REQUIREMENTS FOR THE COST OF CONSTRUCTION INSPECTIONS; TO ADOPT STANDARD CONSTRUCTION PRACTICES FOR SEWERAGE SYSTEMS AND REUSE SYSTEMS; TO REQUIRE MINIMUM DESIGN STANDARDS FOR SEWERAGE SYSTEMS; TO ADOPT MINIMUM DESIGN STANDARDS FOR REUSE SYSTEMS; TO PROVIDE FOR BONDING, COUNTY ACCEPTANCE AND EASEMENTS; TO SET FORTH RESPONSIBILITY FOR OPERATION AND MAINTENANCE COSTS; TO PROVIDE FOR OPERATION OF SEWERAGE SYSTEMS AND REUSE SYSTEMS; TO PROVIDE FOR VIOLATIONS AND PENALTIES FOR FAILURE TO COMPLY WITH THE PROVISIONS OF THIS RESOLUTION; TO PROVIDE FOR AN EFFECTIVE DATE; TO REPEAL CONFLICTING RESOLUTIONS AND ORDINANCES; AND FOR OTHER PURPOSES.

WHEREAS, the Board of Commissioners of Hall County adopted by resolution on June 27, 1996, to become effective July 1, 1996, the codification of Resolutions, General Resolutions and Ordinances passed by the Board of Commissioners of Hall County as "The Official Code of Hall County, Georgia" 1996 edition published by Municipal Code Corporation; and further provided for the adoption and incorporation of any Resolution, General Resolution or Ordinance passed subsequent to July 1, 1996, to automatically become a part of The Official Code of Hall County, Georgia; and

WHEREAS, the “Construction Standards and Operation Responsibilities for Water and Wastewater Systems Resolution was adopted on June 17, 2002, and was codified as Chapter 13.20 of Title 13 of the Official Code of Hall County, Georgia;

WHEREAS, in order to comply with the state and federal regulations for the construction of sewerage systems and reuse systems, it is necessary for the Board of Commissioners of Hall County, Georgia, to delete Chapter 13.20 in its entirety and to substitute in lieu thereof a new Chapter 13.20 with provisions to comply with the state and federal guidelines for the construction of any Sewerage System and Reuse System to be used in Hall County; and

WHEREAS, the purposes of Chapter 13.20 shall be: to provide for definitions to be incorporated into the Chapter; to set forth the responsibilities of the owner with reference to the sewerage system or reuse system; to provide for application requirements, review of plans for the construction of a sewerage system or reuse system and set forth the fee requirements for the cost of construction inspections; to adopt standard construction practices for sewerage systems and reuse systems; to require minimum design standards for sewerage systems; to adopt minimum design standards for reuse systems; to provide for bonding, county acceptance and easements; to set forth responsibility for operation and maintenance costs; to provide for operation of sewerage systems and reuse systems; to provide for violations and penalties for failure to comply with the provisions of this resolution; to provide for an effective date; to repeal conflicting resolutions and ordinances; and for other purposes.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF HALL COUNTY, and it is hereby resolved by the authority of the same as follows:

1.

Chapter 13.20 of Title 13 of The Official Code of Hall County, Georgia, entitled “Construction Standards and Operational Responsibilities for Water and Wastewater Systems” is hereby deleted.

2.

Chapter 13.20 of Title 13 of the Official Code of Hall County, Georgia entitled “Construction Standards and Operational Responsibilities for Sewerage Systems and Reuse Systems” is hereby adopted. Said Chapter 13.20 of Title 13 of the Official Code of Hall County, Georgia, entitled “Construction Standards and Operational Responsibilities for Sewerage Systems and Wastewater Systems” is set forth in Exhibit “A”, a copy of which is attached hereto and made a part hereof as if Exhibit “A” were originally set forth in this Resolution.

3.

All Resolutions, or Ordinances, or parts thereof, in conflict with the terms of this Resolution are hereby repealed, but it is hereby provided that any resolution, ordinance or law, which may be applicable hereto and aid in carrying out and making effective the intent, purpose and provisions hereof, which shall be liberally construed to be in favor of Hall County, is hereby adopted as part hereof.

4.

If any paragraph, sub-paragraph, section, subsection, sentence, clause, phrase, or any portion of this Resolution shall be declared invalid or unconstitutional by any court of competent jurisdiction or if the provisions of any part of this Resolution as applied to any particular situation or set of circumstances shall be declared invalid or unconstitutional, such invalidity shall not be construed to affect the portions of this Resolution not so held to be invalid. It is hereby declared to be the intent of the Hall County Board of Commissioners to provide for separable and divisible parts, and it does hereby adopt any and all parts hereof as may not be held invalid for any reason.

This Resolution is hereby adopted this _____ day of _____, 2009, to become effective upon the _____ day of _____, 2009, the public health, safety, and general welfare demanding it.

HALL COUNTY BOARD OF COMMISSIONERS

By _____
Chairman

Commissioner

Commissioner

Commissioner

Commissioner

ATTEST:

**Clerk
(SEAL)**

Exhibit "A"

CHAPTER 13.20 CONSTRUCTION STANDARDS AND OPERATIONAL RESPONSIBILITIES FOR SEWERAGE SYSTEMS AND FOR REUSE SYSTEMS

Sections:

- 13.20.010 Definitions.
- 13.20.020 Responsibilities.
- 13.20.030 Application, Review and Fee Requirements.
- 13.20.040 Adoption of Standard Construction Practices.
- 13.20.050 Minimum Design Standards for Sewerage Systems.
- 13.20.060 Minimum Design Standards for Reuse Systems.
- 13.20.070 Bonding, County Acceptance and Easements.
- 13.20.080 Responsibility for Operation and Maintenance Costs.
- 13.20.090 Operation of Sewerage Systems and Reuse Systems.
- 13.20.100 Violations; Penalty.

13.20.010 Definitions.

The definitions set forth in Official Code of Hall County, Georgia § 13.10.1030 are hereby incorporated by reference. In addition, the following words, terms and phrases shall have the meaning ascribed to them when used in this Chapter except where the context clearly indicates a different meaning:

End User Equipment is not part of the Reuse System and is defined as all pipes and pumps needed to transport reuse water from the reuse meter to the point of use as well as Storage Ponds for the holding of reuse water by the reuse user. The Owner is responsible for the operation and costs of this equipment.

End User Fee is defined as the amount charged to each end reuse user of the reuse water system to pay for the ongoing cost of operating and maintaining the Reuse System and the administrative costs to administer distribution and other similar costs of the Reuse System.

Irrigate is defined as application of reuse water through hand-watering, sprinkling, sprinkler system, drip-irrigation system or other means of distribution.

Owner is defined as the owner of the property or his authorized agent as defined in Section 13.10.1030 of this Chapter.

Public Information Program is defined as a program available through seminar, video, printed material or whatever format the County may choose and is approved by EPD for educating reuse users and operators about reuse Systems.

Reject Water is defined as wastewater that does not meet the 3 NTU criteria.

Reserve is defined as a fund that maintains the balance of the user surcharges and is only used to pay for repair and eventual replacement of the Sewerage System and Reuse System, exclusive of normal operating and maintenance costs.

Reuse Area is defined as the irrigated area of any designated reuse user.

Reuse Water is defined as wastewater that has received treatment to urban water reuse standards, meets the treatment criteria specified in the publication set forth in § 13.20.040(B) of this Chapter, and is utilized at a reuse area or is sent to a permitted reuse user.

Reuse System is defined as the sewage treatment plant providing reuse water, the booster pump stations, and distribution pipes between the treatment plant and the end user equipment.

Reuse User is defined as any person who has successfully participated in the required public information program for utilizing reuse water and has signed the written reuse user agreement with the County for obtaining reuse water.

Runoff is defined as reuse water, which has been applied to a reuse area in sufficient amounts to cause the water to leave the irrigation area in the form of surface flow during and shortly after irrigation application.

Storage Pond is defined as an artificial impoundment designed and constructed in accordance with publication set forth in § 13.20.040(B) of this Chapter that is designed and maintained to store a specific volume of reclaimed water. For the purposes of this definition, a storage pond may also mean a storage tank constructed above, on, below, or partially below the ground surface that also meets the criteria in the publication set forth in § 13.20.040(B) of this Chapter.

User equipment is not part of the Sewerage System and Reuse System and is defined as all pipes and pumps needed to collect and transport the sewage to the sewage treatment plant. The Owner is responsible for the operation and costs of this equipment until such time as the Owner turns over responsibility to the County.

User charge is defined as the amount charged to each reuse user to pay for the ongoing cost of operating and maintaining the reuse system or sewerage system and the administrative costs to administer collections and other similar costs.

User surcharge is defined as the amount charged to each Sewerage System user and reuse user to cover short and long-range costs of repair and eventual upgrade of the Sewerage System and Reuse System. Sewerage System user surcharges and Reuse user surcharges will be accumulated in the reserve.

13.20.020 Responsibilities.

- A. When Hall County deems that a sewer system is warranted for the development, the Owner shall provide a Sewerage System and/or Reuse System that meets or exceeds reliability, maintainability, performance, operational cost-effectiveness, and parts availability factors as determined by the County and in accordance with the requirements of this Chapter and Chapter 13.10. The County reserves the right to specify an existing manufacturer and/or existing model numbers as minimum standards of these factors.
- B. For a Sewerage System, the Owner shall build a Sewerage System that, at 80 percent of capacity, will adequately handle the sewage processing needs of 100 percent of the pre-specified number of reuse users. The County reserves the right to use the remaining 20 percent of the capacity of the Sewerage System in any way that it sees fit, including contingency.
- C. The Owner is responsible for operation and maintenance of the Sewerage System and Reuse System, including all costs, unless the County accepts responsibility for operation and maintenance of the Sewerage System and Reuse System.
- D. All persons obtaining reuse water from a Reuse System must do so in accordance with:
 - 1. The permit of the County,
 - 2. Any written reuse user agreement between the County and the user of the reuse water, and
 - 3. The established public education program for the use of reuse water.

13.20.030 Application, Review and Fee Requirements.

- A. *Review.*

Prior to submission of the application permit and plans for the construction of a Sewerage System or Reuse System to the Hall County Planning Department and Building Inspections for final review, all documents shall be submitted to the Hall County Public Works and Utilities for preliminary review.

B. *Fee.*

The fee for inspections shall be as set in the Hall County Sewers and Sewage Disposal Fee Schedule as adopted by the Hall County Board of Commissioners and shall cover the cost of construction inspections of a Sewerage System or Reuse System performed by the Hall County Public Works and Utilities Department.

C. *Sewerage Systems.*

1. No unauthorized person(s) shall uncover, make any connections or opening into, use, alter, or disturb any public sewer or appurtenance thereof without first obtaining a written Building Sewer Permit from the Building Official.

2. *Classes of Building Sewer Permits.*

(a) There are two (2) classes of Building Sewer Permits:

(1) For residential and commercial service, and

(2) For service to establishments producing industrial wastewater.

(b) For either class of Building Sewer Permit, the owner(s) or an authorized representative shall make application on a form furnished by the County, which application shall be supplemented by any plans, specifications, or other information required by the County. In addition to the Building Sewer Permits described in this Section, all significant industrial users and other users, as determined by the Director or other sections of this Chapter shall obtain an industrial discharge permit as described in Chapter 13.10. of this Title.

(c) The Director may require a user of sewer services to provide information needed to determine compliance with this Chapter. For residential developments over ten (10) homes, commercial developments and industrial developments, this information shall be signed and sealed by a Professional Engineer licensed in the State of Georgia. These requirements may include:

(1) Wastewaters discharge peak rate and volume over a specified time period;

- (2) Chemical analyses of wastewaters;
- (3) Information on raw materials, processes and products affecting wastewater volume and quality;
- (4) Quantity and disposition of specific liquid, sludge, oil, solvent or other materials important to sewer use control;
- (5) A drawing of sewers on the user's property showing sewer and; if any; pretreatment facility location;
- (6) Details and descriptions of wastewater pretreatment facilities; and
- (7) Details and descriptions of systems to prevent and control the losses of materials through spills to the County's sewer.

D. *Reuse Systems.*

1. All permit applications for reuse water shall describe water uses requested by the applicant.
2. No unauthorized person(s) shall uncover, make any connections or opening into, use, alter, or disturb any reuse system or appurtenance thereof without first obtaining a written Building Sewer Permit from the Building Official.
3. Connections to the reuse pipe may occur only after the end reuse user has completed and signed the Reuse Water End User Application and had their participation in the Public Information Program documented by the County.
4. Any permit granted by the County is only for the Owner and does not transfer when there is a change in the ownership of the reuse user or any change in the tenancy of the property for which the permit is applicable.

13.20.040 Adoption of Standard Construction Practices.

A. For Sewerage Systems, the following publications are hereby incorporated by reference and are adopted as the standard construction practices for sewerage systems:

1. *Standard Construction Practices for Water and Wastewater Systems*, latest edition, Hall County, Georgia; and

2. *Minimum Design Standards for Community Sewerage Systems*, latest edition, United States Department of Housing and Urban Development.
- B. For Reuse Systems, the following publications are hereby incorporated by reference and are adopted as the standard construction practices for Reuse Systems:
1. *Standard Construction Practices for Reuse Systems*, latest edition, Hall County, Georgia; and
 2. *Guidelines for Water Reclamation and Urban Water Reuse*, latest edition, Georgia Department of Natural Resources.
- C. In the event any provisions of the documents above are in conflict with each other or the provisions of this Chapter, the more stringent standard shall be applied.

13.20.050 Minimum Design Standards for Sewerage Systems.

A. *Building Sewers And Connections.*

1. All costs and expenses incidental to the installation and connection of the building sewer shall be borne by the owner.
2. A separate and independent building sewer shall be provided for every building. However, where one building stands at the rear of another on an interior lot and no private sewer is available or can be constructed to the rear building through an adjoining alley, courtyard or driveway, then the front building sewer may be extended to the rear building and the whole considered as one building sewer. The County shall not be liable for any damage caused by or resulting from any such single connection aforementioned.
3. Old building sewers may be used in connection with new buildings only when they are found, on examination and test by the Building Official, to meet all requirements of this Chapter.
4. The size, slope, alignment, materials of construction of a building sewer, and the methods to be used in excavating, placing of the pipe, jointing, testing, and backfilling the trench, shall all conform to the requirements of the Building and Plumbing Codes and other applicable rules and regulations of the County. All work shall

conform to the applicable regulations of the Federal Occupational Safety and Health Administration. In the absence of code provisions or in amplification thereof, the materials and procedures set forth in appropriate specifications of the American Society of Testing Materials and Water Environment Federation Manual of Practice No. 9, as amended, shall apply.

5. Whenever possible, the building sewer shall be brought to the building at an elevation below the basement floor. In all buildings in which any building drain is too low to permit gravity flow to the public sewer, sanitary sewage carried by such building drain shall be lifted by an approved means and discharged to the building sewer.
6. No person(s) shall make connection of roof downspouts, foundation drains, areaway drains, or other sources of surface runoff or groundwater to a building sewer or building drain which in turn is connected directly or indirectly to a public sanitary sewer unless such connection is approved by the Director for purposes of disposal of polluted surface drainage.
7. The connection of the building sewer into the public sewer shall conform to the requirements of the Building and Plumbing Codes and other applicable rules and regulations of the County, or the procedures set forth in appropriate specifications of the American Society of Testing Materials and the Water Environment Federation Manual of Practice No. 9, as amended. All such connections shall be made watertight and verified by proper testing.
8. Cleanout required at point of connection.
 - (a) A sanitary sewer cleanout shall be installed on all building sewers as close as possible to the point at which County maintenance begins. This point shall be the curb line, the right of way line, the property line, or the easement line, whichever is applicable. Such cleanout shall be six (6) inches in diameter and shall have a brass cleanout plug.
 - (b) The installation and cost of such cleanout shall be borne by the owner at the time of development.
9. The applicant for the Building Sewer Permit shall notify the Director when the building sewer is ready for inspection and connection to the public sewer. The connection and testing shall be made under the supervision of the Director or his representative..

10. All sewer connections or "taps" shall be made exclusively by personnel of the County or their designee.
11. Connections to lines laid in streets; responsibility for chokes.
 - (a) Sewer connections or "taps" hereinafter made by the County to sewer lines laid in the streets shall run from the sewer line to the curb line of the street. When such connections or "taps" are made on outfall or interceptor sewer lines, or any sewer line other than one laid in the street, such "tap" shall extend for a distance of not more than twenty (20) feet from the line connected with or "tapped".
 - (b) The property owners, or persons using sanitary sewer service, shall be responsible for repairs due to sewer chokes when the sewer choke is beyond the curb line of the street or twenty (20) feet from the line connected with or tapped, whichever distance is closest to the sewer line. The County will make repairs and charge the cost thereof to the property owner or person using sanitary sewer service.
12. Connections--Fittings, equipment, and supervision.
 - (a) All connections to sewer pipes comprising the sewer system of the County shall be made with an insertion type "Y" or "T" fitting under the supervision of the Director.
 - (b) All fittings and other equipment used in such connections shall be approved by the Director before use in making any connection.
13. The County shall designate the size of all sewers, the grade and location of all manholes.
14. Property owners using sanitary sewer service pursuant to this Chapter shall furnish all right-of-way and easements needed for sewer construction and for use thereof.
15. Unless approved by the Hall County Public Works and Utilities Director, no person shall construct any sewer pipe or conduit for sewage in any street within four feet on each side of the center line of any sewer.

B. *Redundancy, Reliability of Sewerage System:*

1. Federal Environmental Protection Agency (EPA) Class I Reliability will be provided.
2. Unless authorized by the Director, pump stations, when required, shall have a minimum of three submersible type pumps, with two of the pumps jointly capable of pumping two and one-half times the estimated average daily flow.
3. Raw sewage screening and grit removal operations must have a minimum of two units, each having a capacity for two and one-half times the average daily flow.
4. Aeration basin operations must employ a minimum of two basins with equal volumes. If sequencing batch reactor (SBR) process is employed, then there will be three basins with equal volume, with two of the basins having 75 percent of the maximum month design flow.
5. *Activated sludge aeration:* If diffused aeration is used, then multiple blowers will be installed with remaining units capable of transferring 100 percent of the oxygen demand with the largest blower out of service; diffuses with multiple sections capable of transferring 110 percent of oxygen demand. If mechanical aerators are used, then multiple units are required in each basin. The remaining units must be capable of maintaining design oxygen transfer level with largest aerator out of service.
6. *Final clarifiers:* Multiple final clarifier units must be utilized with remaining units capable of handling 75 percent of the maximum month design flow.
7. *Chemical use:* Multiple chemical feeders must be used and must incorporate a backup unit.
8. *Filters:* Must utilize multiple filter units, with remaining units having 75 percent of the design maximum month flow when one unit is out of service and a second unit is in backwash.
9. *Disinfection:* Must utilize multiple disinfection units, with remaining units having 75 percent of the design maximum month flow when one unit is out of service. System must be designed to automatically switch over in case of failure. Ozonation systems and UV systems must have standby capabilities of 100 percent.

10. *Sludge Digester:* System must incorporate two sludge digester units, each with 75 percent capacity for the maximum month flow with sufficient volume to meet Class A pathogen destruction in accordance with the federal Environmental Protection Agency 503 regulations.
11. Must have multiple sludge pumps with remaining units capable of handling 75 percent of the design maximum month flow.
12. The Sewerage System must utilize best available technology, including, but not limited to reverse osmosis and ultraviolet disinfection. Best available technology practices are available through Hall County Public Works and Utilities.
13. The Sewerage System must be constructed within a secondary containment structure. The containment structure must have capacity equal to, or greater than, 110 percent of the volume of the largest vessel.

C. *Alarm systems, remote monitoring, and emergency power generation:*

1. The alarm system will be incorporated into the design, and the alarm system shall activate in the following circumstances:
 - a. Loss of normal power,
 - b. Failure of pumping systems,
 - c. Failure of disinfection systems, or
 - d. Excess turbidity.

The alarm system must have remote monitoring/autodialing capabilities.

2. Pump stations will be equipped with a monitoring system compatible with current County standards to relay alarm conditions to the County's designated monitoring center.
3. On-site Emergency power generation shall be capable of operating all pump stations, lift stations, operator's office, and one aeration blower. Emergency power generation shall switchover automatically in case of outage. Alternatively, the system may be equipped with dual feed power supply. The system must

switchover to the auxiliary feed automatically in the case of an outage.

D. *Pump stations:*

1. Pump stations shall meet the minimum design standards set forth by the most recent County Pump Station Guidelines. These guidelines are available through Hall County Public Works and Utilities.
2. Pump stations will have sumps capable of containing two hours of flow at the estimated average daily flow rate. The normal pumping cycle will be set so that no more than 15 minutes of the volume will be used during the normal pumping cycle.

E. *Storage/capacity requirements of sewage:*

1. Minimum storage of four weeks inclement weather shall be provided for reuse water or effluent.
2. Wastewater Treatment Works needs to be designed for a ten-year rainfall of 65 inches including the reuse water rate.
3. Maximum one and one-half inches of reuse water irrigation per week is allowed.

F. *Buffer requirements:*

Plant construction must comply with all federal, state and local buffer requirements, including, but not limited to:

1. Official Code of Hall County, Georgia Chapter 8.40 (Erosion and Sedimentation Protection), Chapter 8.170 (Stream Buffer Protection) and Chapter 17.225 (Protected Water Supply Watershed, Protected Groundwater Recharge Area, and Wetlands Protection Overlay Zoning) as well as any subsequent buffer requirements adopted into the Official Code of Hall County, Georgia;
2. The state buffer guidelines as found in *Guidelines for Slow-Rate Land Treatment of Wastewater*, latest Edition, Georgia Department of Natural Resources and *Guidelines for Water Reclamation and Urban Water Reuse*, latest Edition, Georgia Department of Natural Resources; and
3. All other applicable state and federal law.

In the event any requirements are in conflict, the more stringent standard shall be applied:

13.20.060 Minimum Design Standards for Reuse Systems.

A. Distribution System.

1. Each section of reuse pipe, shall be painted with Pantone 522C or 512C or other shade of purple accepted by the County over a minimum of 60% of the circumference of the pipeline except for any distinguishing marks of manufacture or product information which shall remain visible and unpainted.
2. Reuse water piping shall be wrapped in a Pantone 522C polyethylene tube wrap where required for cathodic protection (ANSI/AWWA C105/A21.5).
3. During the installation of the reuse water piping, a three (3") wide tape to say "REUSE WATER - NONPOTABLE" (purple with white or black lettering) is to be installed two (2") above the line during installation.
4. Reuse water pipe must maintain 3-foot horizontal separation and 18-inches vertical separation from both proposed and existing sanitary sewer force mains and water mains. Unless approved by the Hall County Public Works and Utilities Director, no person shall construct any reuse pipe or conduit for reuse water in any street within four feet on each side of the center line of any sewer.
5. All reuse water valves shall have square valve boxes with the words "RECLAIMED WATER" cast in the lid. All boxes must be painted on the inside and lid with Pantone 522C or 512 or other shade of purple accepted by the County. Valve boxes shall be Russco C2503 6.5" square. Standard round valve boxes are prohibited in the non-potable Reuse System.
6. All valves must be marked with a purple drivable marker 78 inches long and extend to the valve. The markers are not to protrude the finished surface grade more than three feet and no less than 18 inches above the finished grade. There must be a label on both sides of the marker with the following information: "REUSE WATER VALVE, DO NOT TAP, NON-POTABLE, BEFORE DIGGING CONTACT HALL COUNTY PUBLIC WORKS AND UTILITIES, PHONE # 770-531-6800."

7. There shall be no physical connection between the Reuse System and any other water supply. An isolation valve does not constitute a separation.
8. Reuse water may only be connected to “in the ground” sprinkler systems or to a non-standard hose bib located within a lockable meter box only where specifically approved by the County in the End Reuse User Agreement.
9. No above ground irrigation system using reuse water will be approved on residential sites.
10. All piping and pipelines carrying reuse water shall be color-coded Pantone Purple 522C using sunlight stable pigment.
11. All valves, hose bibs where allowed, and outlets shall be tagged and color-coded purple to differentiate reuse water from potable water. All reuse water valves and outlets shall be appropriately tagged or labeled “Do Not Drink” together with the equivalent standard international symbol to warn the public and employees that the water is not intended for drinking.
12. Where hose bibs are allowed, non-standard hose connections shall be used to preclude the interchange of hoses with the potable water system. Hose bibs are prohibited from residential customer sites.
13. Hose bibs must be installed underground within a lockable meter box. Cam Lock connection assemblies in small sizes (1/2 to 3/4 - inch) with lockable meter boxes will be required on all hose connections designated for reuse water.
14. Reuse water irrigation systems shall be designed, constructed and operated so as to minimize over spray onto impervious surfaces.
15. Runoff of reuse water into ditches or streams is prohibited.
16. Low trajectory nozzles, or other means to minimize aerosol formation, shall be used within 100 feet of outdoor public eating, drinking and bathing facilities. Irrigation systems should be designed so that spray does not go outside of the established boundaries.
17. All sites utilizing reuse water for irrigation such as golf courses, residential developments, parks and other public areas, are required to post visible signs at all entrance locations notifying the public of reuse water.

B. *New Service Installations/Meters and Meter Boxes.*

1. Reuse meters must be a Badger meter for reuse water, measuring in gallons consumed. To ensure identification of reuse water meters, the international color of Pantone 522C is located on the lid of the register. The register face, lid, shroud and meter bottom and the word "REUSE" is marked on the brass housing.
2. All reuse meters will be installed in a Carson-Brooks Plastics box. Meter box lids will be purple colors 1419, 1220 or 1324 and labeled "REUSE WATER".
3. All reuse meter installations must maintain a minimum of three (3) feet from the potable water meter.

C. *Drawings.*

As-Built drawings shall be provided to Hall County Public Works and Utilities upon completion of each phase of installation showing valve locations, storage ponds, tap locations, and size of taps.

D. *Storage Ponds.*

A reuse user may store reuse water on his property in a Storage Pond that is constructed and maintained in accordance with all standards for the same in local, state and federal law including any such standards set forth in the publications listed in Section 13.20.040(B) of this Chapter.

13.20.070 Bonding, County Acceptance and Easements.

- A. Owner must provide a security escrow account or bond to protect the public's interest in ensuring proper construction and ongoing maintenance of the system. The escrow account or bond will have a monetary value equal to 100 percent of the costs to install any related pipes, mechanical equipment, paving or other appurtenances deemed pertinent to the operation of the proposed Sewerage or Reuse System. This amount will be determined by Hall County Public Works and Utilities Director after review of design plans and construction documents. The escrow account or bond must be accepted by Hall County Board of Commissioners and held by the Board unless ownership of the Sewerage System and Reuse System is transferred to the County and all requirements of this Chapter are met.
- B. The County retains the right to audit the amount of the escrow or bond and the balance in the reserve to ensure they are being collected and disbursed in accordance with the objectives of this Chapter. The owner

shall pay for the costs of this audit and promptly remedy any discrepancies determined by the audit.

- C. The Sewerage System and Reuse System will be conveyed to Hall County, Georgia, along with the reserve balance and security escrow account and bond within 30 days after notice of final acceptance by the County. The owner will provide a reserve balance that is equal to 70 percent of the cost to replace the Sewerage System and Reuse System, except the land. An appraiser, chosen by the County, will determine the prevailing costs.
- D. Thirty (30) days prior to the County accepting responsibility for any Sewerage System and Reuse System, the Owner, at his expense, must use a professional engineering firm licensed in the State of Georgia to provide certification that the Sewerage System and Reuse System is in compliance with all design criteria, certification that the Sewerage System and Reuse System is in good working order and has no known maintenance problems or deficiencies, certification that the User Charges are sufficient to pay the operating costs of the Sewerage System and Reuse System, and certification that the Reserve Balance is adequate considering the past maintenance and current condition of the Sewerage System and Reuse System. The County will not accept ownership of the Sewerage System or Reuse System without said certification.
- E. The owner agrees to provide proof that adequate Sewerage System and Reuse System capacity exists to service the maximum number of pre-specified users.
- F. In no event shall the County accept ownership prior to the Sewerage System or Reuse System operating for a time period of at least five years after final platting, or 90 percent of the maximum pre-specified number of users, whichever the County desires.
- G. The Sewerage System and Reuse System, the land necessary for the proper operation of the Sewerage System and Reuse System and all required buffers shall be conveyed to the County fee simple in the form of a permanent easement certified by a registered surveyor in the State of Georgia. No obstruction shall be built, constructed, or planted that would inhibit access to the easements. Linear easements shall be a minimum of 30 feet in width.
- H. The owner must make the following certification prior to the County's acceptance: "The owner understands that this approval for providing Sewerage System and/or Reuse System for the development (or other name) named _____ and is not for general use by others unless specifically approved by the County as a modification. The pre-

specified number of users for this subdivision (or other name) is _____."

13.20.080 Responsibility for Operation and Maintenance Costs.

When the County accepts responsibility for operation and maintenance of the Sewerage System or the Reuse System, the residents whose property is served by the Sewerage System or the Reuse System become responsible for the costs of the System. For Sewerage Systems, operational costs, including maintenance, will be billed by the County to the residents in the form of a user charge and administrative fee as noted in Chapter 13.10. For Reuse Systems, the cost shall be billed at the rate established in the Hall County Sewers and Sewage Disposal Fee Schedule adopted by the Hall County Board of Commissioners. The Reuse Systems, the operational and maintenance costs as well as administrative fee shall be billed monthly, separate from sewer billing, based upon actual reuse water meter readings and may be amended from time to time to reflect actual operating costs.

13.20.090 Operation of Sewerage Systems and Reuse Systems.

A. *Sewerage Systems.*

Operation and maintenance of the Sewerage System must be performed by operators that have been duly certified by the State of Georgia for the duties to be performed by said person.

B. *Reuse Systems.*

1. Operation, maintenance of the Reuse System including valves, outlets, couplers, and sprinkler heads shall be performed:
 - a. By personnel whose participation in the Reuse Water Public Information Program has been documented;
 - b. By operators that have been duly certified by the State of Georgia for the duties to be performed by said person; and
 - c. Only in accordance with the terms of the written reuse user agreement between the reuse user and the County.
2. The reuse user must notify anyone who is working with, who may be around or who may come in contact with reuse water in the reuse area of the presence of reuse water and the reuse water's origin.

3. The only water other than reuse water that enters a storage pond shall be water that falls on the surface during a rain event or is transferred into the storage pond from other sources to supplement irrigation needs.
4. Unless in accordance with an NPDES or as a result of permitted use of reuse water, discharge of reuse waters to waters of the state are prohibited, including, but not limited to:
 - a. Overflow from storage ponds, and
 - b. Runoff from irrigation systems.
5. All reuse users must maintain the reuse water in accordance with all local, state and federal laws, including, but not limited to maintaining the 3 NTU criteria.
6. Any reuse water that does not meet the 3 NTU level must be returned to the County's sewerage system as reject water or transported to a permitted alternate disposal location as per the terms of the written reuse user agreement between the reuse user and the County.
7. The reuse user shall not allow reuse water:
 - a. To be used to fill swimming pools, hot tubs, spas, wading pools or other recreational contact systems;
 - b. To be used for human or animal consumption;
 - c. To be used to interconnect with another water source;
 - d. To be used to irrigate edible crops including gardens;
 - e. To be used to irrigate agricultural crops not intended for direct human consumption without specific authorization by the Director of Hall County Public Works and Utilities and EPD;
 - f. To be used for any purpose other than irrigation unless specifically authorized by Hall County Public Works and Utilities within the written reuse user agreement; or
 - g. To enter any dwelling unit.
8. Tank trucks and other portable equipment that is used to distribute reuse water shall be clearly identified with reuse or non-potable water signs.

9. The truck used to transport and distribute reuse water may not be used to transport potable water that is used for drinking water purposes.
10. Any truck used to transport and distribute reuse water must return any unused portion of their load back to the source facility and must not discharge it to a ditch or stream.
11. Malfunctioning irrigation systems and line breaks shall be repaired immediately.
12. All sites utilizing reuse water for irrigation such as golf courses, residential developments, parks and other public areas, are required to post visible signs at all entrance locations notifying the public of reuse water.
13. Runoff of reuse water into ditches or streams is prohibited.
14. No person shall be permitted to use reuse water unless in accordance with the written reuse user agreement between the reuse user and the County.
15. All reuse users must allow Hall County Public Works and Utilities to inspect their End User Equipment and upon first connection and anytime thereafter for operation in accordance with the provisions of this Chapter, the written reuse user agreement between the reuse user and the County and all applicable laws.
16. The reuse user shall maintain records of the utilization of any reuse water at least concerning the volume and quantity of reused water utilized obtained from the County and shall provide these records and otherwise permit inspection of the same by the County as requested.

13.20.100 Violations; Penalty.

Any person, firm, corporation, association or partnership violating any provision of this Chapter as the same exists, or as it may hereinafter be amended, or shall fail to do anything required by this Chapter as the same exists or as it may hereafter be amended, shall be guilty of a misdemeanor, amenable to the process of the Magistrate or State Court of Hall County, and upon conviction, shall be punished as provided in the Official Code of Hall County, Georgia Section 1.50.020 for each violation in the discretion of the Court.