

ARTICLE 1. TITLE, SCOPE AND GENERAL CONDITIONS

1.0 GENERAL PROVISIONS

1.0.1 TITLE. These regulations shall be known as the Jackson County Water and Sewerage Authority (JCWSA or Authority) Standard Specifications and may be cited as such and shall be referred to herein as the Standard Specifications.

1.0.2 PURPOSE. The purpose of the Jackson County Water and Sewerage Standard Specifications is to establish a uniform standards adopted by the Authority Board for all customers and potential customers of the Authority to conform to and to establish guidelines for planning and design of proposed extensions.

1.0.3 APPLICABILITY. These Standard Specifications shall apply to the construction, alteration, removal, or repair of Authority facilities. These Standard Specifications shall apply to Authority contracts, customer/owner contracts, owner/developer contract and private contracts.

All work on Authority water and wastewater systems shall comply with these Standard Specifications, including the applicable standard detail drawings.

1.0.4 AUTHORITY REPRESENTATION. The Authority may appoint an engineer, construction inspector, or Authority employee to act on its behalf with respect to these Standard Specifications.

1.0.5 ALTERNATE MATERIALS AND METHODS OF CONSTRUCTION. The provisions of these Standard Specifications are not intended to prevent the use of materials or methods of construction not specifically prescribed by these procedures. The Authority will require that sufficient evidence or proof be submitted to substantiate quality and suitability of alternates. Alternate materials or methods shall not be used without written approval of the Authority.

1.0.6 MODIFICATIONS. When special conditions are encountered, the Authority may require modifications to, or deviations from these Standard Specifications to protect the interests of the Authority. In such cases the decision of the Authority shall be final. Modifications or deviations shall be in conformity with the intent and purpose of these Standard Specifications and shall not lessen any design requirement or any degree of system integrity. The Authority shall issue authorization for modifications or deviations to the Standard Specifications in writing.

1.0.7 TESTS. The contractor as required by these Standard Specifications shall perform testing. In cases where there is insufficient evidence of compliance with the provisions of these Standard Specifications, or evidence that any material or construction does not conform to these Standard Specifications, the Authority may direct the contractor to perform additional testing, at no cost to the Authority, as required to demonstrate compliance. Test methods will be as specified by these Standard Specifications or by other recognized test standards. If recognized and accepted test methods do not exist, the Authority will determine test procedures.

All testing will be performed by a testing agency approved by the Authority. A copy of all test reports shall be submitted directly to the Authority, by the testing agency. The contractor shall pay the cost of testing.

- 1.0.8 INTERPRETATION AND ENFORCEMENT.** The Authority, or an Authority appointed representative, will interpret and enforce these Standard Specifications. Interpretations issued by the Authority will be final.

If work is performed contrary to the provisions of these Standard Specifications, the Authority may order the work stopped by a written notice to persons engaged in the doing or causing such work to be done, and such persons will immediately stop work until authorized by the Authority to proceed.

- 1.0.9 LIABILITY.** The Authority assumes no responsibility for contractors constructing facilities for private developers, whether or not the Authority has consulted with the developer or inspected any such construction and whether or not such facilities may eventually be conveyed to the Authority for the maintenance of facilities and for their safety commences only when such facilities are actually conveyed to the Authority. Consultants to the Authority, including but not limited to the Authority's engineer and any contract operations firm, likewise assume no responsibility for the safety or sufficiency of any construction or work conducted by or for a private developer.

Where the Authority contracts with any contractor, the particular obligations of the Authority to that contractor shall be specified in the contract.

- 1.0.10 PROHIBITED ACTIONS.** No person, firm, or corporation shall construct, alter, repair, or improve, any Authority facilities, or permit the same, in violation of these Standard Specifications.

- 1.0.11 EMERGENCY WORK.** Contractors hired by the Authority to perform emergency work such as repair of pipeline leaks, shall comply with all applicable sections of these Standard Specifications, including insurance requirements. To ensure that contractors performing emergency work comply with the insurance requirements of these Standard Specifications, only pre-approved contractors will be allowed to perform emergency work within the Authority. Contractors performing emergency work shall not be required to obtain a permit prior to performing the work.

- 1.0.12 INSURANCE REQUIREMENTS.** The Contractor shall not commence work pursuant to any permit until he has obtained all insurance required by these Standard Specifications, nor shall the contractor allow any subcontractor to commence work until all similar insurance required of the subcontractor has been obtained and approved.

- 1. PUBLIC LIABILITY AND PROPERTY DAMAGE INSURANCE.** The contractor shall carry Comprehensive General Liability / Auto Liability insurance in the amount specified. All subcontractors shall be required to carry Comprehensive General Liability and Automobile Liability insurance in an amount equal to that required by the contractor.

Contractor agrees that it will indemnify and hold harmless the Authority, the Authority's engineer and all of their consultants, agents and employees from any loss, cost, damage, expense and liability including attorney's fees, by reason of property damage, personal injury, or both, arising out of or as a result of the contractor's work, or any negligent act or negligent failing to act, or on account of the

use of improper or defective materials, or on account of any poor workmanship or on account of any act of omission or commission in connection with the performance of work by contractor, its employees, agents and subcontractors. In any and all claims by or against the Authority, the Authority's engineer and their consultants, agents and employees, the indemnification obligation of this paragraph shall not be limited by any required policy of insurance.

2. PROOF OF INSURANCE. Prior to the commencement of any work under this contract, the contractor shall furnish to the Authority certificates of insurance to prove that all required insurance is in force, and shall require any subcontractor to submit similar evidence before undertaking work under this contract. Each insurance policy shall contain a clause providing that it shall not be canceled or materially altered without thirty (30) days written notice to the Authority. The Authority reserves the right to review the insurance coverage and to deny a permit if, in the Authority's sole discretion, such coverage is not adequate. Neither acceptance by the Authority of any insurance supplied by a contractor or subcontractor, nor failure to deny a permit due to inadequacy of insurance, shall relieve the contractor or subcontractors of their obligation to maintain the required insurance in full force during the period of time work is performed under the permit. Additional liability coverage for Owner and Engineer shall be provided by endorsement as additional insured on Contractor's General Liability Policy.

3. COVERAGES. Contractors shall maintain the following insurance requirements:

a. Worker's Compensation-statutory limits

b. Contractors General Liability.
Comprehensive General Liability (including Premises-Operations;
Independent Contractors' Protection; Products and Completed Operations;
Broad Form Property Damage):

Bodily Injury:	<u>\$1,000,000</u>	Each Occurrence
	<u>\$1,000,000</u>	Annual Aggregate, Products and Completed Operations

Property Damage:	<u>\$1,000,000</u>	Each Occurrence
	<u>\$1,000,000</u>	Annual Aggregate

Property Damage liability insurance shall provide Explosion, Collapse and Underground coverages where applicable.

Personal Injury, with employment exclusion deleted	<u>\$1,000,000</u>	Annual Aggregate
--	--------------------	------------------

c. Comprehensive Automobile Liability

Bodily Injury:	<u>\$1,000,000</u>	Each Person
	<u>\$1,000,000</u>	Each accident

Property Damage:	<u>\$1,000,000</u>	Each Occurrence
------------------	--------------------	-----------------

All coverage shall be continuously maintained to cover all liability, claims, demands and other obligations assumed by the Contractor pursuant to this agreement.

Contractors shall make application of acceptance by the Board to the Authority Manager in such form as specified by the Board. Time allowance shall be made to allow for evaluation by the Manager and approval by the Board at a regularly scheduled meeting prior to proceeding with any work.

1.1 CONDITIONS OF THE WORK

1.1.1 WORKING HOURS. All work completed under these Standard Specifications shall be performed during Regular Working hours which are 7:00 am to 6:00 pm, Monday through Friday. The Contractor shall not perform work outside of Regular Working Hours or on Saturday, Sunday or any Authority holiday without written consent of the Authority.

1.1.2 EMERGENCIES. When, in the opinion of the Authority, an emergency arises due to work under these Standard Specifications, and immediate action is necessary to protect public or private interests, the Authority may, with or without notice to the contractor or the developer, perform the required work to mitigate the emergency. The contractor or developer will pay for the cost of such work. The performance of emergency work by the Authority shall not relieve the contractor of responsibility for damages resulting from the performance of work under these Standard Specifications.

In the event of an emergency that threatens loss of life or extensive damage to the work or to adjoining property, the developer or contractor is authorized to take the necessary action to prevent such loss or damage.

1.1.3 DAILY CLEANUP. At all times during construction, the contractor shall maintain the site, partially finished structures, material stockpiles and other like areas fit a reasonable state of order and cleanliness.

1.1.4 FINAL CLEANUP. Upon completion of the work, the contractor shall remove from the project area all surplus and discarded materials, rubbish, and temporary structures, and leave the project area in a neat and presentable condition. The contractor shall restore all work that has been damaged by his operations.

The contractor shall inspect the interior of all manholes and catch basins within the construction limits for construction materials, dirt, stones, or other debris resulting from the activities of the contractor, and shall remove all debris found.

1.1.5 MAINTENANCE BOND. Developers shall provide a maintenance bond or Letter of Credit for 10% of the construction cost of the system for a period of one year to begin on the date of written acceptance by the Authority. The maintenance bond shall be on a form acceptable to the Authority.

1.1.6 AUTHORITY OF JCWSA. The JCWSA will have the authority to stop the work whenever such stoppage may be deemed necessary. The Authority will resolve all questions that arise as to the quality and acceptability of materials furnished, work performed, interpretation of the plans and specifications, and acceptable fulfillment of the requirements of these Standard Specifications.

1.1.7 AUTHORITY AND DUTIES OF INSPECTOR. The Authority inspector will inspect, and accept or reject, all work completed and all material furnished. Inspections may extend to any part of the work, and to the preparation, fabrication, or manufacture of the materials.

The inspector is not authorized to revoke, alter, or waive any requirements of these Standard Specifications.

The inspector shall not act as foreman or perform other duties for the contractor, nor interfere with the management of the work performed by the contractor. Instructions or advice given by the inspector will not be binding upon the Authority, or release the contractor from fulfilling the terms of these Standard Specifications.

The presence or absence of the inspector will not relieve the contractor of the responsibility of complying with these Standard Specifications. The inspector will at all times have reasonable and safe access to the work, and the contractor shall provide proper facilities for such access.

1.1.8 CONTRACTOR'S RESPONSIBILITY FOR WORK. The contractor shall be responsible for controlling and supervising the work. It shall be the responsibility of the contractor to ensure that all work is constructed in accordance with these Standard Specifications.

1.1.9 REMOVAL OF UNACCEPTABLE WORK. Work that does not conform to these Standard Specifications will be considered unacceptable work. Unacceptable work shall be immediately removed and/or otherwise corrected by the contractor.

1.1.10 SCHEDULING OF WORK. Work shall be accomplished in accordance with a schedule approved by the Authority. Deviations from the approved schedule shall be made only with written approval of the Authority.

1.1.11 SAMPLES AND TESTS. Sampling and testing will be in accordance with standard practices unless methods and procedures are otherwise set forth in these Standard Specifications.

The contractor shall furnish all samples, tests and reports required by the Authority to determine compliance of materials with these Standard Specifications. The contractor may be required to furnish a written statement identifying the origin, composition and process of manufacture of a material.

1.1.12 STORAGE OF MATERIALS. Materials shall be stored in a manner that insures the preservation of their quality and suitability for the work. Materials shall be stored only in locations approved by the Authority.

1.1.13 DEFECTIVE MATERIALS. Materials not in conformance with requirements of these Standard Specifications will be considered defective and will be rejected. Rejected materials shall be removed from the work site within 24 hours.

1.1.14 LOCAL LAWS, ORDINANCES AND CODES. The contractor shall comply with all current federal, state and local laws, codes and ordinances pertaining to the work being performed. The contractor shall obtain all necessary permits and approvals prior to commencement of the work.

1.1.15 PUBLIC CONVENIENCE AND SAFETY. The contractor shall erect the appropriate barricades, signs, or other safety measures, provide for adequate drainage and erosion control around the work, and take other necessary precautions to safeguard the work and the public.

Fire hydrants shall remain visible from the street and accessible to the Fire Department at all times. No obstructions shall be placed within ten (10) feet of a fire hydrant.

1.1.16 LOCATION OF EXISTING UTILITIES. The contractor shall have all underground utilities located by the appropriate utility company prior to commencing work. The contractor shall avoid unnecessary exposure of underground utilities and shall protect underground utilities from damage due to performance of the work. The contractor shall not hinder or interfere with any person engaged in the protection or operation of underground utilities.

The Authority will locate existing water and sewer system underground facilities for which it has ownership. The contractor shall request location of Authority facilities at least 48 hours prior to commencing excavation. Excavation shall not begin until the Authority has located pipelines and other facilities.

1.1.17 PROTECTION AND RESTORATION OF PROPERTY AND SURVEY MONUMENTS. The contractor shall prevent damage to public or private property adjacent to the work. The contractor at his expense shall restore property damaged by the contractor's operations. At least seventy-two (72) hours prior to commencing work the contractor shall give written notice to owners of property that may be affected by the contractor's operations.

The contractor shall protect and preserve existing survey monuments. Monuments disturbed or removed by the contractor shall be referenced and replaced by a Professional Land Surveyor registered in the State of Georgia, at the contractor's expense.

1.1.18 USE OF EXPLOSIVES. When blasting is permitted, the contractor shall use the utmost care to protect life and property. Blasting will be permitted only when approved in writing by the Authority. A licensed blasting contractor shall perform blasting.

Excessive blasting or overshooting will not be permitted. The Authority may order discontinuance of any method of blasting which leads to overshooting, is dangerous to the public, or destructive to property or to natural features.

1.1.19 PROTECTION OF STREAMS, LAKES AND RESERVOIRS. Contractor shall follow practices and standards of the Erosion and Sediment Control in Georgia. All necessary precautions shall be taken to prevent pollution of streams, lakes, and reservoirs with soil runoff, fuels, oils, bitumen's, calcium chloride, or other harmful materials. Contractor operations shall be conducted in a manner that prevents or minimizes the release of silt or other materials to drainages, streams, lakes and reservoirs. An erosion control plan shall be submitted to the appropriate reviewing agencies and permits obtained prior to starting work.

1.1.20 DUST CONTROL. The Contractor shall take the necessary steps to control dust arising from operations connected with the work. Sprinkling with water, or other approved methods shall control dust.

1.1.21 USE OF AUTHORITY WATER. The contractor may purchase, when available, reasonable amounts of water from the Authority for construction purposes. Water shall be obtained at points designated by the Authority. All water obtained from the Authority's system shall be equipped with a suitable backflow prevention device and metered by obtaining a meter from the Authority.

1.1.22 MAINTENANCE OF DRAINAGE. The contractor shall not prevent or obstruct the flow of water in street gutters or natural drainages, and shall utilize proper methods to maintain the flow of surface water while work is in progress.

1.1.23 INTERRUPTION OF SERVICES. Before starting work, the contractor shall plan and coordinate for the disconnection or interruption of all services including water, sewer, cable T.V., telephone, gas, and electric power. Disconnections or interruptions shall be made in accordance with the regulations of the utility that controls the supply of the service.

Authority approval shall be obtained a minimum of 48 hours prior to disconnection or interruption of water or sewer service. Twenty-four (24) hours prior to the interruption of service, the contractor shall provide written notice to all users whose service will be interrupted. No line shall be shut down for more than a four (4) hour period at one time.

1.1.24 EQUIPMENT OPERATED ON STREETS. Only pneumatic-tired equipment shall be permitted to operate over paved surfaces. The contractor shall be responsible for damage to the street surface resulting from his operations.

1.1.25 MATERIAL SUBMITTALS. The Contractor shall submit detailed information, specifications and drawings for each type of material or equipment proposed for incorporation into the work. The information submitted shall be in sufficient detail to demonstrate compliance with these Standard Specifications. Materials and equipment shall not be incorporated into the work until approved by the Authority.

1.1.26 OPERATION OF AUTHORITY SYSTEMS. Only Authority personnel shall operate Authority systems. Developers, contractors, private owners and other persons shall not operate Authority facilities including valves, fire hydrants, pumps and other system components.

1.2 APPROVALS AND INSPECTIONS

1.2.1 PROCEDURES FOR DEVELOPMENT OF WATER AND/OR WASTEWATER EXTENSIONS. The procedures for the development permit process as summarized below are also represented schematically Appendix A, Figure A-1 *JCWSA Developer Permit Process Flowchart*.

1.2.2 PRELIMINARY APPLICATION. The Developer shall complete a Preliminary Application Form (found in Appendix A, Figure A-2 *Water and/or Wastewater Preliminary Application*) and submit it to the Authority for water and/or wastewater service for the proposed development. The Developer shall provide all information as requested by the Authority Manager in order to clarify the nature and extent of the Developer's need for water and wastewater to serve the proposed development.

1.2.3 BOARD APPROVAL OF PRELIMINARY APPLICATION. If the development is anticipated to require more than 50,000 gallons per day of water, approval by the Authority Board is required. For developments less than 50,000 gallons per day, review and approval is by the Authority Manager. After review, the Authority Manager shall present the Developer's completed application to the Board (if required) with his recommendation for acceptance or denial. The Board shall then approve or deny the Developer's Preliminary Application.

- 1.2.4 SYSTEM ENGINEERING APPLICATION.** If the Preliminary Application is accepted by the Authority, the Developer shall then be authorized to continue with the approval process for water and/or wastewater service for his development. At this point the System Engineering Application (found in Appendix A, Figure A-3 *Jackson County Water and Sewerage Authority Water and/or Wastewater Extension Engineering Application*) shall be completed and submitted to for approval. The System Engineering Application must be submitted within six (6) months of the date of approval of the Preliminary Application and must also receive Authority approval before permission to begin construction is granted.

After completion of the application and approval process and following a preconstruction conference, a permit to proceed with construction will be granted. For wastewater systems, A *Wastewater Treatment Services Contract* (Appendix A, Figure A-6) is also required at this stage. After completion of the construction process the Developer shall submit application to the Authority Manager for acceptance of his completed water and/or wastewater system by the JCWSA.

- 1.2.5 APPLICATION FOR ACCEPTANCE** Applications for acceptance of constructed water/wastewater systems shall include but not be limited to the following items:

- A. Punch List - Following construction, JCWSA representatives will conduct a field inspection of new water/wastewater systems and issue a list of any items requiring modification or repair (punch list). Upon completion of all punch list items and receipt of the documents listed below, the project will be eligible for the Authority to issue the Initial Acceptance Letter.
- B. As-Built Plans - As-Built Plans are required in both hard copy and digital format. The digital As-Built Plans will be required in Autocad and ESRI shapefile format for inclusion in the Authority's Geographic Information System (GIS). Digital As-Built Plans submitted in AutoCAD format must be properly georeferenced, and will be converted into shapefile format by the Authority. These plans must include all construction and project details, and truly reflect the final project as it was constructed. This will be field verified through inspection by the Authority and certified as accepted by signature of the Chief Information Officer (CIO), to be included along with other certifying signatures, on the Final Acceptance Letter. The datum shall be the Georgia state plane coordinate system "NAD84".
- C. Easements - All easements duly prepared in a final form acceptable to the Authority Manager.
- D. Property title verification for easements.
- E. Maintenance/Warranty Bond – Developer shall submit a Maintenance/Warranty Bond valid for one calendar year to commence on the date of the Initial Acceptance Letter for the new system by the Authority. Amount of bond shall be set by the Authority Manager but shall not be less than ten (10%) percent of the total cost of the water and/or wastewater improvements plus erosion control facilities as defined by the EPD regulations and NPDES Storm Water Permit requirements.

OR

- F. Suitable Letter of Credit acceptable to the Authority Manager may be substituted for the Bond.

G. Final Punch List Inspection - Prior to the end of the one (1) year maintenance period, the Authority will conduct a comprehensive inspection and identify any deficiencies which require attention (Final Punch List). Once all deficiencies are corrected to the satisfaction of the Authority, the Final Acceptance Letter will be issued and the Maintenance/Warranty Bond will be released.

- 1.2.6 SUSPENSION OR REVOCATION OF PERMITS.** The Authority may suspend or revoke a permit issued under the provisions of these Standard Specifications if the permit was issued in error, or on the basis of incorrect information supplied by the applicant. In the event a permit is suspended or revoked, permit fees will not be refunded.
- 1.2.7 APPROVED PLANS.** The contractor shall keep one copy of the Authority Approved Plans on site at all times during the work. The Authority shall have access to the Contractor's Authority Approved Plans at all times during the work.
- 1.2.8 GA EPD, GA DOT, and JCUDC STANDARDS.** No part of this approval process is intended to relieve the developer of the responsibility to comply with applicable requirements of the Georgia Environmental Protection Division Department of Natural Resources, Georgia Department of Transportation, and Jackson County Unified Development Code, or any other appropriate regulatory agencies.
- 1.2.9 NPDES FOR STORMWATER MONITORING.** Prior to construction, Developer shall provide evidence that the NPDES for storm water monitoring has been submitted and the Comprehensive Monitoring Program (CMP) has been developed and monitoring is to be preformed and by whom.
- 1.2.11 CONSTRUCTION INSPECTION.** Any water or sewer system installed, as provided for herein, will be subject to inspection during construction by the Authority or its designee to insure compliance with approved construction plans.

It shall be the responsibility of the person performing the work to notify the Authority that such work is ready for inspection. Each request for inspection shall be filed at least twenty-four (24) hours and/or one (1) working day before such inspection is required unless otherwise required by these Standard Specifications. It shall be the responsibility of the person requesting inspections to provide access for proper inspection of the work.

On any system to be accepted for ownership and operation by the Authority, a final inspection will be made to accept or reject the work when completed. Evidence must be submitted to the Authority in writing indicating that the installation has been subjected to and has passed testing requirements as set out in these Standard Specifications before acceptance.

The Authority will give the contractor written notice of deficiencies noted during an inspection, and may order further construction to cease until all deficiencies are corrected. No partial inspections will be allowed unless prior written approval is granted by the Authority.

After written acceptance of any new installation by the Authority, a one-year maintenance period will begin in which the developer will be responsible for correcting any deficiencies in the system. During this period, the Developer is responsible for any water and sewer utility locates requested in the area of the new system. Prior to the end of this one-year period, the Developer shall perform an additional TV inspection at its expense. A

deficiencies list will be presented by the Authority to the developer for immediate correction. Release of bond or letter of credit will not be made until all deficiencies have been corrected.

1.2.12 ADDITIONAL INSPECTIONS AND RE-INSPECTIONS. The Authority may make or require additional other inspections if necessary to ascertain compliance with the provisions of these Standard Specifications. Re-inspection fees may be assessed when work requested to be inspected is incomplete, or when work does not comply with these Standard Specifications. Reinspection fees may also be assessed when approved plans are not readily available to the inspector or for failure to provide access at the scheduled time of inspection. When reinspection fees have been assessed, no additional inspection of the work will be performed until the required fees have been paid.

1.2.13 SYSTEM OWNERSHIP. Any water or sewer system tied to or served from a water supply or sewer system already owned, maintained or operated by the Authority will become the property of the Authority and will be maintained by the Authority after the specified maintenance period and Final Acceptance by the Authority.

Subject to the requirements set forth in applicable State Laws, a new or existing water system not served by an authority main may also be accepted by the Authority for ownership and operation after careful evaluation of the system by the Authority. Such systems may require certain corrections and/or adjustments to comply with these Standards and Specifications. Applications for transferring an existing water system to the Authority shall be made by the owners of such systems to the Authority Manager and submitted by the Manager to the Authority Board and legal counsel for review and possible ownership acceptance.

1.3 FEES

1.3.1 PRELIMINARY APPLICATION FEE. The Preliminary Application Fee shall be paid in full at the time the Preliminary Application is submitted for approval. Preliminary Application Fees will be paid initially and upon any re-submittals of Preliminary Applications.

1.3.2 SYSTEM ENGINEERING APPLICATION (PLAN REVIEW) FEE. The System Engineering Application fee shall be submitted to the Authority at the time the Application is dropped off. System Engineering Application fees for water systems, wastewater systems, and wastewater lift stations are listed in Appendix A.

1.3.3 WATER CONNECTION FEES. Water Connection Fees are paid to the JCWSA prior to submission of a building permit application to Jackson County. JCWSA will provide a receipt for the Water Connection Fee for the applicant to include with his Building Permit Application which is submitted to Jackson County (not JCWSA). Water Connection Fees are based on meter size and fireline requirements. Water Connection fees shall be charged for each development based on the Board's current fee structure which is based on Equivalent Residential Units (ERU's). The number of ERU's in a proposed development is calculated as follows:

- A. The actual number of residential units (houses apartments, etc.), each with a residential meter size of $\frac{3}{4}$ " with an instantaneous flow rating of 20 gpm and an average daily water demand of 300 gpd/ERU.

OR

- B. Calculation of the number of ERU's shall be made by dividing the "Safe Operation Flow Rate" for the meter in question (as listed in these standards) by 20 gpm and by dividing the maximum daily usage by 300 gpd and then using the larger of the two calculation results as the value for ERU's. In the event that service to a new development or industry will require substantial capital improvements to the Authority's Distribution or System additional impact fees may be assessed by the Authority on a case by case basis.

1.3.4 WASTEWATER CONNECTION FEES. Wastewater Connection Fees are paid at the time the System Engineering Application has been approved by the Authority and a Preconstruction Meeting has been scheduled. A *Wastewater Treatment Services Contract* (Appendix A, Figure A-6) is required to be executed at this time. Under no circumstances is any construction to begin prior to this contract being executed and appropriate connection fees paid. The number of ERU's in a proposed development is calculated as follows:

- A. For sewerage an ERU is established as an Average Daily Flow of 300 gpd. The sewer connection fee is calculated by dividing the average daily flows anticipated from the facility by 300 gpd and then multiplying that number by the standard connection fee per ERU (assuming the wastewater quality is consistent with Section 3.2.2 of this Standard). In the event that service to a new development or industry will require substantial capitol improvements to the Authority's Collection System (due either to wastewater quality or hydraulic peaking) additional impact fees may be assessed by the Authority on a case by case basis.

1.3.5 INVESTIGATION FEES. Work performed without the required Authority inspections shall be subject to investigation to verify compliance with these Standard Specifications. The Authority will determine the extent of the investigation. Fees for inspections and re-inspections will be determined by the Authority.

1.3.6 WATER AND WASTEWATER USAGE

- A. Water service may be provided to customers with or without wastewater service at the sole discretion of the Board.
- B. Wastewater service shall not be provided by the Jackson County Water and Sewerage Authority without water service also being purchased unless application for such is made to the Authority Manager and subsequently approved by the Board.
- C. Disconnection of water service for cause shall be defined as disconnection of both water and wastewater service.
- D. Disconnection of service for cause should include but not be limited to:
 - 1. Non payment of water or wastewater bill.
 - 2. Discharge of wastewater flow or strength in violation of EPD Rules and Regulations, JCWSA Sewer Use Ordinance and/or Pre-Treatment Ordinance.
 - 3. Violation of JCWSA Cross Connection and Backflow Prevention Program requirements.
 - 4. Violation of Jackson County's Plumbing Code requirements.

5. Other conditions set by the Authority Board.

1.4 PLANS AND SPECIFICATIONS

1.4.1 GENERAL. A Registered Professional Engineer, licensed to practice in the State of Georgia, shall prepare plans, computations and specifications for work covered by these Standard Specifications.

1.4.2 GENERAL PLAN REQUIREMENTS. Plans and specifications shall be drawn to scale and shall have sufficient clarity to indicate the location, nature, and extent of the work proposed.

Each set of construction drawings shall include an overall utility drawing, showing water, sanitary sewer, and storm sewers included in the project. The overall utility drawing shall show all of the pipe sizes, locations, connections to existing facilities and other pertinent information that would add to the overall understanding of the project.

The following items shall be shown on all plans:

1. Title Block.
2. Scale (1"=50' horizontal and 1"=5' vertical for plan and profile sheets).
3. Date and revision.
4. Name of professional engineer or firm.
5. Professional engineer's seal and signature.
6. Drawing numbers.
7. "Call Before You Dig" Note.
8. Statement:

All work shall be constructed to the Jackson County Water and Sewerage Authority Standard Specifications. This drawing has been reviewed and found to be in general compliance with these Standard Specifications and other Authority requirements. THE ENGINEERING DESIGN AND CONCEPT REMAINS THE RESPONSIBILITY OF THE PROFESSIONAL ENGINEER WHOSE STAMP AND SIGNATURE APPEAR HEREON.

Approved by: _____
Approved Title Date

1.4.3 PLAN SHEET REQUIREMENTS. All plan sheets shall contain the following information:

1. North arrow.
2. Property lines; indicate lots to be served by solid lines; other property lines dotted.
3. Ownership and/or subdivision information.

4. Street names and easements with width dimensions.
5. Existing utility lines (buried) location and depth water, gas, telephone, storm drain, irrigation ditches, sanitary sewers, and other pertinent details, i.e. houses, curbs, water courses, etc.

1.4.4 PROFILE SHEET REQUIREMENTS. All profile sheets shall contain the following information:

1. Vertical and horizontal grids with scales.
2. Ground surface existing (dotted) and proposed (solid).
3. Existing utilities where crossed.
4. Horizontal Controls and Benchmarks (GA State Plane, NAD 84 Datum).
5. Manhole invert and rim elevations.

1.4.5 SPECIFICATIONS AND SUPPORT DOCUMENTATION. The following shall be included with submitted construction plans:

1. Reference on plans to Authority Standard Specifications.
2. Use of Authority Standard Details where applicable.
3. Reference on plans to other agency Standard Specifications (DOT) that are required or proposed.
4. Where reference to other commonly available Standard Specifications will not suffice, copies of specifications are to be provided.
5. Copies of written approval from other affected agencies as required.
6. Landfill Certification Letter

1.5 DEFINITIONS AND ABBREVIATIONS.

1.5.1 DEFINITIONS. Whenever the following terms are used in these Standard Specifications, they will be defined as follows:

Standard Specifications shall refer to the body of directions, provisions, and requirements contained herein, describing the method or manner of construction, and the quality of materials furnished.

Authority Manager shall refer to the Jackson County Water and Sewerage Authority manager or his/her representative.

Board shall refer to the duly appointed Board of the Jackson County Water and Sewerage Authority.

Contractor shall refer to the utility contractor who meets the requirements as stated herein and is approved by the Board.

Developer shall refer to the person, firm corporation, association, partnership or designated agent who undertakes (or proposed to undertake) to construct or extend water or wastewater facilities to serve his or her proposed development.

EPD-Environmental Protection Division of the Georgia Dept. of Natural Resources shall refer to the organization that maintains regulatory purview over water and wastewater facilities owned by Jackson County Water and Sewerage Authority.

Equivalent Residential Unit (ERU) shall refer to the housing unit consisting of a single-family residential unit or equivalent in terms of water and/or wastewater usage.

Jackson County Water and Sewerage Authority shall refer to the political subdivision created by Act of the Georgia General Assembly.

Wastewater System shall refer to the Jackson County Water and Sewerage Authority wastewater system including treatment facilities, sanitary sewers and service taps, lift stations, forcemains and other appurtenances all owned and operated by the Board and under the management and day to day operation of the Authority Manager.

Water System shall refer to the Jackson County Water and Sewerage Authority water system including water distribution lines, booster pump stations, water storage tanks, service taps, fire hydrants, and other appurtenances all owned and operated by the Board and under management and day to day operation of the Authority Manager.

1.5.2 ABBREVIATIONS.

AASHTO shall mean the American Association of State Highway and Transportation Officials.

ACI shall mean the American Concrete Institute.

AISC shall mean the American Institute of Steel Construction.

ANSI shall mean the American National Standards Institute.

ASTM shall mean the American Society for Testing and Materials.

AWG shall mean the American Wire Gauge.

AWWA shall mean the American Water Works Association.

GA DOT shall mean the Georgia Department of Transportation.

GA EPD shall mean the Georgia Environmental Protection Division.

FCC shall mean the Federal Communications Commission.

GPCD shall mean gallons per capita per day.

GPD shall mean gallons per day

GPM shall mean gallons per minute.

GRC shall mean galvanized rigid conduit.

JC shall mean Jackson County

JCWSA shall mean Jackson County Water and Sewerage Authority

MGD shall mean million gallons per day.

MJ shall mean mechanical joint

NEC shall mean the National Electrical Code.

NEMA shall mean the National Electrical Manufacturers Association.

NFPA shall mean the National Fire Protection Association.

PVC shall mean polyvinyl chloride.

PSI shall mean pounds per square inch.

UBC shall mean the Uniform Building Code.

UDC shall mean the Jackson County Unified Development Code.

UPC shall mean the Uniform Plumbing Code.

UL shall mean Underwriters Laboratories, Inc.

USDA shall mean the United States Department of Agriculture.

- 1.5.3 TERMS.** Whenever, in these Standard Specifications, the words "as ordered", "as directed", "as required", "as permitted", "as allowed", or words or phrases of like import are used, it will be understood that the order, direction, requirement, permission, or allowance of the Authority is intended.

The words "approved", "reasonable", "suitable", "acceptable", "accepted", "properly", "satisfactory", or words of like effect and import, shall mean approved, reasonable, suitable, acceptable, accepted, proper, or satisfactory in the judgment of the Authority.

Whenever the word "Authority" is used in these Standard Specifications, it shall mean the Jackson County Water and Sewerage Authority or its designated representative.

- 1.5.4 SPECIFICATIONS BY REFERENCE.** All specifications, i.e., ASTM, ACI, etc. made a portion of these Standard Specifications by reference shall be the latest edition.

Throughout these Standard Specifications, any section referenced shall include all sub-sections of that section. Any portion of these Standard Specifications that may be applicable to any other section, whether referenced or not, shall apply.

*THIS PAGE
INTENTIONALLY
LEFT BLANK*