

## **Introduction**

This reference guide is intended to act as a brief outline to the development process of new sanitary wastewater collection systems within the James Island PSD (District). For our complete [Sanitary Wastewater System Design and Construction Standards](#), visit [jipsd.org](http://jipsd.org) and click on the link found under “Vendors/Contractors” on our homepage.

## **Getting Started**

It is recommended that the Developers, Designers, Planners, Engineers and others associated with implementing the project meet with the District’s Wastewater Superintendent to review plans and specifications and coordinate proposed projects with the District.

The Developer’s Design Engineer shall submit a preliminary review package to the District. The package shall include the following:

A. Two (2) sets of plans to include:

- Complete system design
- Location and width of all the District’s easements
- Indicate all roadway rights-of-way as either public or private
- Ownership of existing roadways (Town, City, County or State)
- Indicate the agency to operate and maintain proposed roadways
- Show all existing and proposed utility easements and rights-of-way and their ownership (SCE&G, Bell South, CWS, etc.)
- Evaluation of available unallocated wastewater capacity within existing receiving facilities

B. Two (2) sets of typed and bound or stapled Specifications signed, sealed and dated by the Design Engineer

C. Two (2) copies of all design computations signed, sealed and dated by the Design Engineer to include proposed pump station and gravity wastewater design calculations, Equivalent Residential Unit (ERU) calculations, and projected project build-out wastewater loading

D. Engineer’s estimate of wastewater facilities construction cost

E. Copy of Council of Governments 208 Plan Conformance Certification

## **Initial Design Review**

The District will review the materials submitted and will return a letter to the Developer’s Design Engineer with comments on the drawings, specifications, and pump station calculations (if any).

All comments must be addressed by the Design Engineer and revised plans/specifications should be submitted. The design review process will continue until the plans are to District standards.

## **Final Design Review- Preliminary Approval**

Once the Design Engineer has submitted (2) complete sets of Plans and Specifications satisfying all comments made by the District, the Design Engineer will be sent a final design letter noting conformance with District standards.

The letter will also include a list of fees associated with the development including impact, connection and administrative fees. NOTE: Impact and Administrative fees are due prior to obtaining a DHEC construction permit; connection fees may be paid at the time of connection to wastewater for each home.

## **Obtaining Final Approval**

Once Preliminary approval is received, the Developer's Design Engineer is to submit the following:

- A. Two (2) complete sets of Plans and Specifications reflecting corrections requested by the District. These will be checked by the District before any approval letters, willing and able letters or any permits are signed by the District.
- B. Two (2) additional copies of the Site Layout Plan to be used by the District.
- C. Final, approved copies of all applicable regulatory agency permits and certifications required for construction shall be provided to the District prior to obtaining final approval from the District.
- D. Proposed construction schedule and notification in writing of commencement of work seven (7) days prior to starting construction. Construction should be coordinated in advance with the District's Wastewater Superintendent.
- E. The developer's proposed utility contractor shall be on the District's list of approved utility contractors.
- F. At the District's option, a pre-construction conference may be required by the District depending upon the size and complexity of the proposed project. Attendees shall include at a minimum, the Design Engineer, the utility contractor's Project Manager and Site Superintendent. The District shall require copies of the Contractor's safety training certifications and insurance certificates prior to commencing construction.

NOTE: The District shall be provided one (1) set of complete material submittals and shop drawings for review and comment in compliance with the District's approved plans and specifications and the District's Design and Construction Guidelines. At the District's request, additional materials may be requested.

## **Construction**

Construction may begin after obtaining final approval from the District. From time-to-time, the District's Customer Liaison/System Inspector may visit the site along with other District personnel.

If at any time, a meeting with the District and the Developer and/or the Developer's Design Engineer is required, an appointment will be coordinated with the District's Wastewater Superintendent at (843) 762-5258.

## **Project Completion and Takeover (Prior to Final Inspection)**

The District requires the following items to be submitted by the Developer's Design Engineer as one package before a final inspection can be performed:

- A. Engineer's written certification that the sanitary wastewater system has been constructed in accordance with the District's approved Plans, Specifications, applicable permits and good engineer practice.
- B. Two (2) sets of prints of "**As Constructed Record Drawings**" (As-Builts). These drawings shall reflect all "as constructed" conditions for mains and wastewater lateral placement stamped by the engineer in the format that follows:
  - a. Show station marks at all valves, manholes, bends, wastewater services and air release valves.
  - b. Line lengths and termination points.
  - c. Valves are to be located by distance to two permanent reference points.
  - d. Indicate top elevation of manholes and invert elevation of manholes.
  - e. Reference benchmarks on drawings and tie to National Geodetic Vertical Datum of 1929 (NGVD29).
  - f. Show all recorded plat and easement information.
  - g. Drawings must be clearly legible and of good quality.

NOTE: The District will review the "As Constructed Record Drawings" **but the District is not responsible for the accuracy of record drawings**. If the drawings indicate inaccuracies, they will be returned to the Developer's Design Engineer for revisions and the system acceptance letter will not be issued until the drawings are acceptable.

- C. Two (2) copies of video of all new gravity lines on CD. Contact the District for current rates and availability to perform the video inspection.
- D. One (1) AutoCAD/State Plane disk. NOTE: Contact the District for the latest standards for digital data submission.
- E. All original closeout documents with proper signatures and notarization including:
  - a. Affidavit of Title
  - b. Affidavit of Property Transfer Fee (if applicable)
  - c. Bill of Sale
  - d. Contractor Guaranty and Warranty
  - e. Contractor's Affidavit and Final Waiver of Lien
  - f. Grant of Perpetual and Construction Easement
  - g. JIPSD Project Completion Engineer Questionnaire
  - h. Maintenance of Agreement Wastewater
  - i. Title to Real Estate (if applicable)
- F. Two (2) prints of the easement plats in the format that follows:
  - a. Each must have original signature and seal (no larger than 22"x34") as prepared in accordance with requirement set by the District and the RMC office.
  - b. Each is to be accompanied by a right-of-way easement instrument of conveyance.
  - c. The Developer shall be responsible for the recording of all easement documents and plats after final District approval.
  - d. The District will not accept compiled maps as land surveys.
  - e. The width of the easements for wastewater mains shall be a minimum of twenty (20) feet.
  - f. All wastewater mains within the easement shall be platted so as to provide equal distance on each side of the as-construction location of the main.
  - g. Plats cannot be accepted unless these requirements are met.
- G. The Developer pays the District the cash bond in the amount of 10% of the Design Engineer's certified final construction cost of the wastewater facilities to be deeded to the District.

## Final Inspection

Once the project closeout package has been submitted, contact the District's Wastewater Superintendent to schedule an on-site final inspection. For a complete list of what is included in the final inspection, please review the [Sanitary Wastewater System Design and Construction Standards](#), or visit [jipsd.org](http://jipsd.org) and click on the link found under "Vendors/Contractors" on our homepage.

After the final inspection, the District's Customer Liaison/System Inspector shall provide his/her written comments, as applicable, to the Developer's Design Engineer listing items requiring corrective action as observed during the inspection. All items requiring corrective action shall be corrected before contacting the District to conduct another inspection.

## Final Approval

The District will issue an acceptance letter to the SCDHEC with copies to all involved parties. Until such time as this letter is provided and SCDHEC issues a permit-to-operate allowing the systems to be placed in service, **NO CONNECTIONS TO THE SYSTEMS WILL BE PERMITTED.**

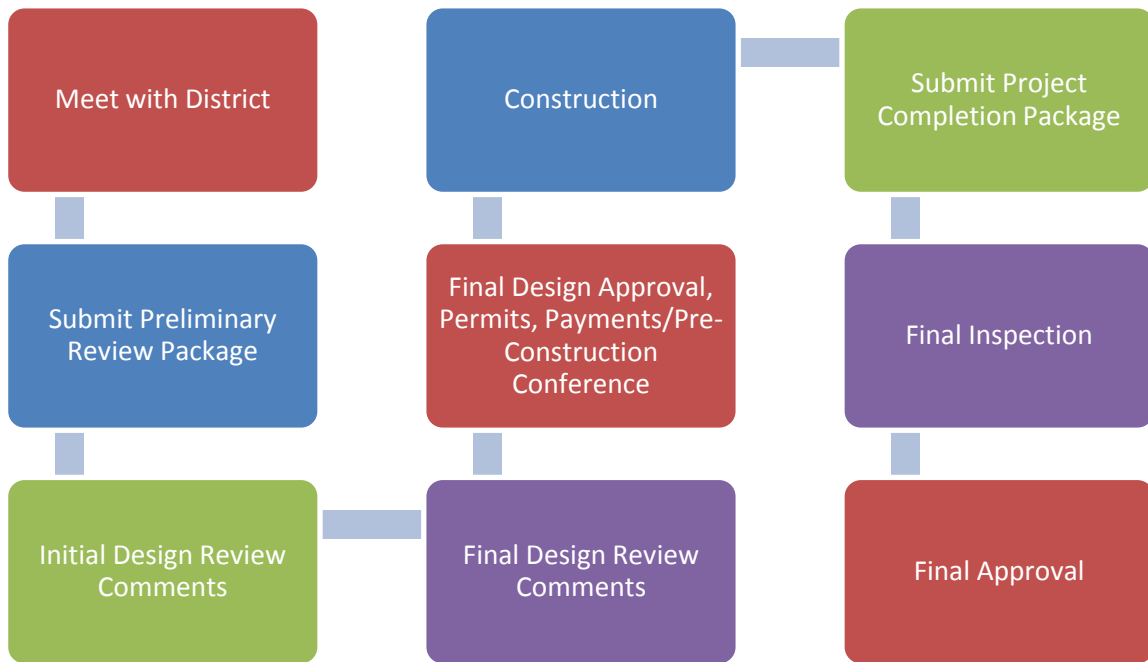


Figure: Developer's Process

**APPLICATION FOR PERMIT TO CONSTRUCT  
WASTEWATER COLLECTION AND TRANSMISSION FACILITIES  
JAMES ISLAND PUBLIC SERVICE DISTRICT  
1739 SIGNAL POINT ROAD                      PHONE: (843) 762-5258  
CHARLESTON, SC 29412                      FAX: (843) 762-5252**

1. Project Name: \_\_\_\_\_  
\_\_\_\_\_
2. Location (street address and TMS Number): \_\_\_\_\_  
\_\_\_\_\_
3. Parent Tract Plat/Deed Ref. (RMC Book/Page): \_\_\_\_\_
4. Application is hereby made, on behalf of the Developer whose name appears below, for a Permit to Construct (describe): \_\_\_\_\_  
\_\_\_\_\_
5. Developer's name, address, telephone and FAX numbers: \_\_\_\_\_  
\_\_\_\_\_
6. Name, address, telephone and FAX numbers of Project Engineer/Authorized Agent: \_\_\_\_\_  
\_\_\_\_\_
7. Total ADF Wastewater Loading generated by this Project shall not exceed: \_\_\_\_\_ GPD  
Maximum Peak Discharge Flow Rate \_\_\_\_\_ GPM
8. Is this part of a phased project? No \_\_\_\_\_ Yes \_\_\_\_\_ Phase \_\_\_\_\_ of \_\_\_\_\_
9. Is this project a revision to a previously permitted project? No \_\_\_\_\_ Yes \_\_\_\_\_  
Project name (if different from this project): \_\_\_\_\_  
JIPSD Permit Number: \_\_\_\_\_ Date: \_\_\_\_\_  
SCDHEC Permit Number: \_\_\_\_\_ Date: \_\_\_\_\_
10. Type of wastewater generated by project (Check one):  
Domestic \_\_\_\_\_ Process (Industrial) \_\_\_\_\_
11. A Complete Permit Application Package shall include the following items, as applicable:
  - A. \_\_\_\_\_ Application Fee; Ref. current JIPSD Fee Schedule.
  - B. \_\_\_\_\_ Transmittal letter detailing the submittal package.
  - C. \_\_\_\_\_ Copy of SCDHEC Application for Permit to Construct.
  - D. \_\_\_\_\_ Two (2) copies of the plans and Specifications signed, sealed and dated by the Project Engineer.
  - E. \_\_\_\_\_ Two (2) copies of the Project Engineering Report including hydraulic loading, pump station design calculations, pump curves, etc. The hydraulic loading shall be based upon SCDHEC "Guidelines for Unit Contributory Loadings to Wastewater Treatment Facilities" dated 1990.
  - F. \_\_\_\_\_ One (1) original and seven (7) copies of all applicable wastewater/forcemain easement plats and (if applicable) fee simple pump station plats plus one (1) original developer executed deed for each.
  - G. \_\_\_\_\_ One (1) copy of each permit/certification required from each agency having Project jurisdiction.

- H. \_\_\_\_\_ One (1) original and seven (7) copies of each Roadway Encroachment Permit Application required indicating the District as Applicant; submittals will be processed by the District.
- I. \_\_\_\_\_ I hereby agree to invite JIPSD to the preconstruction conference for the project.
- J. \_\_\_\_\_ I hereby agree that the JIPSD may issue a "stop work order" on the project if excessive complaints are received or for non-compliance of these guidelines.
- K. \_\_\_\_\_ I hereby certify my acceptance of responsibility for the design of these wastewater facilities.

Engineer's Name (Printed): \_\_\_\_\_  
Signature: \_\_\_\_\_  
S.C. Registration No.: \_\_\_\_\_

- L. \_\_\_\_\_ Prior to final District approval, I shall certify construction is complete in accordance with approved plans and specifications, to the best of my knowledge, information and belief as based upon periodic observations and final inspection for design compliance.

Engineer's Name (Printed): \_\_\_\_\_  
Signature: \_\_\_\_\_  
S.C. Registration No.: \_\_\_\_\_

- M. \_\_\_\_\_ I have read this application and agree to the requirements and conditions stated herein. I hereby agree to allow project site access to District personnel for the purpose of periodic construction observation. I also hereby designate the Project Engineer as my Authorized Agent in all matters pertaining to the design and construction of the Project wastewater facilities. I understand that before the project can be finalized and ownership transferred to the District, a cash bond must be paid in the amount of 10% of the cost of project. Further I acknowledge that no connection to the public wastewater shall be made until the Equivalent Residential Unit (ERU) fees have been paid.

Owner's Name (printed): \_\_\_\_\_  
Owner's Title: \_\_\_\_\_  
Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**JAMES ISLAND PUBLIC SERVICE DISTRICT  
PROJECT REVIEW CHECKLIST FOR NEW DEVELOPMENT**

JAMES ISLAND PUBLIC SERVICE DISTRICT PROJECT NUMBER: \_\_\_\_\_

LOCATION: \_\_\_\_\_

DATE: \_\_\_\_\_

TMS#: \_\_\_\_\_

Project Engineer: \_\_\_\_\_

Developer: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Phone #: \_\_\_\_\_

Phone #: \_\_\_\_\_

Fax #: \_\_\_\_\_

Fax #: \_\_\_\_\_

PRELIMINARY APPROVAL (IF REQUIRED):

APPROVED

DATE

A. 2 sets of Plans, Specifications and Engineering Reports

\_\_\_\_\_

\_\_\_\_\_

B. Transmittal Letter

\_\_\_\_\_

\_\_\_\_\_

C. District Permit Application

\_\_\_\_\_

\_\_\_\_\_

APPROVAL TO CONSTRUCT

A. Plans and Specification approved by The District

\_\_\_\_\_

\_\_\_\_\_

B. DHEC and other required agency Approvals submitted to the District

\_\_\_\_\_

\_\_\_\_\_

C. Construction Schedule (If required)

\_\_\_\_\_

\_\_\_\_\_

D. Notification of Date construction Will commence.

Date actually started: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

E. Roadway Encroachment Permits Approved

\_\_\_\_\_

\_\_\_\_\_

F. Wastewater Contract prepared and Submitted for execution

\_\_\_\_\_

\_\_\_\_\_

G. Payment of all applicable District Fees; Amount \$ \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

H. Preconstruction Conference; Date Scheduled: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

I. Identity of Resident Inspector

\_\_\_\_\_  
Phone #: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

J. Identity of Job Site Superintendent

\_\_\_\_\_

Phone #: \_\_\_\_\_

**JAMES ISLAND PUBLIC SERVICE DISTRICT  
O&M ACCEPTANCE CHECKLIST FOR NEW DEVELOPMENT**

	<u>APPROVED</u>	<u>DATE</u>
A. Project Engineer's Request for District and DHEC for Final Inspection. Actual date: _____	_____	_____
B. Project Engineer's Certification of Completion and Acceptance.	_____	_____
C. "As-Built" Drawings furnished and accepted.	_____	_____
D. Instrument(s) of Conveyance furnished To the District which applicable		
i. Title	_____	_____
ii. Bill of Sale	_____	_____
iii. Plats	_____	_____
E. Pump Station Site and/or Wastewater Easements Plat as applicable	_____	_____
F. Maintenance Bond valid through warranty Period		
i. Maintenance Agreement	_____	_____
G. Payment of all Outstanding District Fees; Amount \$_____	_____	_____
H. Contractor's Affidavit and Final Waiver of Liens _____	_____	_____
I. Project Completion Questionnaire	_____	_____
J. All Special Conditions of District and/or S.C. DHEC satisfied	_____	_____
K. District Final Inspection & Approval Date: _____	_____	_____
L. S.C. DHEC Permit to Operate Submitted; Date: _____	_____	_____
M. S.C. DOT/TOWN/COUNTY Encroachment Permit Conditions Satisfied; Date: _____	_____	_____
N. Date District Assumed O&M Responsibility: _____	_____	_____



**JAMES ISLAND PUBLIC SERVICE DISTRICT  
AS-BUILT DRAWING CHECK LIST**

James Island Public Service District Project Number: \_\_\_\_\_

Checked by: \_\_\_\_\_

Date: \_\_\_\_\_

	<u>APPROVED</u>	<u>DATE</u>
1. Lot Number (s) Ref S/D Plat	_____	_____
2. TMS Designations for each lot	_____	_____
3. Street Name (s) & R/W widths	_____	_____
4. Manholes Identified & Locations As-Built	_____	_____
5. Line invert and Top Elevations of Manholes	_____	_____
6. Manhole Stations As-Built	_____	_____
7. Service Fittings Stations on wastewater mains	_____	_____
8. Depth at R/W of Service Line Fittings	_____	_____
9. Main Station at R/W of Service Line Fittings	_____	_____
10. Service Line Distances	_____	_____
11. Reach Distances As-Built	_____	_____
12. Profile Grades As-Built	_____	_____
13. Contractor's I.D., Date Project Accepted for O&M	_____	_____
14. "Record Drawings" or "As-Built"	_____	_____
15. Project Engineer Seal & Certification	_____	_____
16. Equipment Operating Manuals (if applicable)	_____	_____
17. Pump Station Spare Parts (if applicable)	_____	_____