

**PARISH OF ASCENSION**  
**OFFICE OF PLANNING AND DEVELOPMENT**  
**PLANNING DEPARTMENT**



Clint Cointment  
Parish President

## Memo

**To:** Parish Engineer and Reviewing Engineering Agency

**Subject:** Guidelines for Implementing Key Parts of the Ascension Parish Drainage Ordinance

**Date:** 2/14/2024

**Purpose:** The purpose of this memo is to provide consistent directions for the implementation of crucial components of the Ascension Parish Drainage Ordinance concerning conveyance analysis and downstream capacity analysis for proposed developments.

**Background:** Capacity analysis confirms the ability of ditches and/or structures to convey water downstream from the development to the nearest main outfall, while conveyance analysis assesses if the proposed development's modifications will affect the flow of water across the property compared to before the development.

### Capacity Analysis:

- The applicant's engineer is responsible for determining the capacity of existing downstream outfall facilities, such as ditches, canals, culverts, bridges, or other structures. The limits of the analysis are to the main outfall as identified by the Parish Engineer.
- The Parish Engineer's default definition of the main outfall is the Parish Adopted Laterals as noted on Exhibit A in Section 17-5010 of the Drainage Ordinance.
- Accepted software for capacity analysis includes HEC-RAS 1D, HEC-RAS 2D, HY-8, DOTD HYDRWIN, or any other standard hydraulic software. A detailed survey must support the analysis, documenting the downstream condition's flowline and design normal water surface elevations.
- The Parish may provide the latest HEC-RAS 2D hydraulic model (FMP Model) from the Floodplain Management Plan or flow rates and starting water surface elevations for storm events to aid in the analysis.
- The applicant's engineer is to incorporate the provided and/or determined boundary design flow rates and water surface elevations from the FMP Model into their model/design.

### Conveyance Analysis:

- Per the Drainage Ordinance, a continuous backwater model such as HEC-RAS is required to measure the impact of conveyance changes.
- The Drainage Impact Procedure states that the models need to go to a convenient location at least 200 ft or further downstream of the development boundary condition.
- The Parish Engineer's default definition of the convenient location is the Parish Adopted Laterals as noted on Exhibit A in Section 17-5010 of the Drainage Ordinance.
- Similar to the capacity analysis, the Parish may provide the FMP Model or flow rates and water surface elevations for storm events to support the analysis.

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- The applicant's engineer is to incorporate the provided and/or determined boundary design flow rates and water surface elevations from the FMP Model into their model/design.

**Additional Requirements for Subdivisions:**

- Subdivisions are subject to additional requirements regarding capacity and conveyance.
- The drainage design must align with the general drainage plan of the East Ascension Gravity Drainage District #1 and the West Ascension Gravity Drainage District.
- Adequate servitude width, determined by the Parish Engineer, must be provided. The Parish Engineer will utilize applicant's models or the FMP Model for consistency in determining servitude widths and design cross-sections.
- The Parish Engineer may specify offsite drainage requirements for subdivision approval.
- Subdividers are obligated to construct drainage structures to the ultimate finished width, based on the results from applicant's models or the FMP Model.

**Process for Engineers to Obtain the Parish's FMP Model**

- The Parish will release the FMP Model to those that requested them given they sign the Parish's FMP Data Release Form.

**Pipe Outfall Invert Elevations**

- The outfall pipes for proposed projects cannot be any lower than the downstream condition inverts (channels, box culverts, culverts, etc.)

**Conclusion:** Consistent adherence to these guidelines will ensure compliance with the Ascension Parish Drainage Ordinance and facilitate effective management of drainage within the parish.

**Recommended by:**

Shaun Sherrow, PE  
CSRS: Engineering Reviewing Agency

**Approved by:**

Eric M. Poche, PLA, APA LEED AP  
Director, Department of Planning and Zoning

**Approved by:**

Ron Savoy  
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