

ST. TAMMANY PARISH COUNCIL

ORDINANCE

ORDINANCE CALENDAR NO: 4447

ORDINANCE COUNCIL SERIES NO: _____

COUNCIL SPONSOR: MR. GOULD

PROVIDED BY: COUNCIL ATTORNEY

INTRODUCED BY: MR. STEFANCIK

SECONDED BY: MR. GOULD

ON THE 2 DAY OF DECEMBER, 2010

ORDINANCE TO AMEND ST. TAMMANY PARISH CODE OF ORDINANCES, APPENDIX B, CHAPTER 40 SUBDIVISION REGULATORY ORDINANCE NO. 499, SECTION 40-061.01 HYDROLOGICAL STUDY AND PLAN, TO PROVIDE FOR ADDITIONAL REQUIREMENTS RELATIVE TO THE HYDROLOGICAL ANALYSIS REQUIRED TO BE SUBMITTED BY ALL DEVELOPERS OF NEW SUBDIVISION DEVELOPMENTS.

WHEREAS, in order to address the potential adverse drainage impacts of proposed subdivision developments on upstream and downstream properties, drainage watercourses and drainage facilities, the Planning Commission and Parish Council have determined that it is in the best interest of public health, safety and welfare to amend and reenact Section 40-061.01 of Subdivision Regulatory Ordinance No. 499 for the purpose of establishing additional requirements applicable to the hydrological analysis that is required to be submitted by all developers of new subdivision developments.

THE PARISH OF ST. TAMMANY HEREBY ORDAINS: that Appendix B, Chapter 40 Subdivision Regulatory Ordinance 499, Section 40-061.01 Hydrological Study and Plan, is hereby amended and reenacted to establish additional requirements that shall be applicable to the hydrological analysis that is required to be submitted by all developers of new subdivision developments, which shall be as follows:

APPENDIX B, CHAPTER 40
ST. TAMMANY PARISH CODE OF ORDINANCES
SUBDIVISION REGULATORY ORDINANCE NO. 499

SECTION 40-061.01 Hydrological Study and Plan

1. A hydrological study/plan shall be completed by a qualified hydrologist and shall be submitted by all developers of new subdivision developments.

2. For the purpose of this section, a qualified hydrologist shall be a state registered licensed civil engineer. All required drawings and hydrological analysis need to be stamped and certified (signature and date) by a civil engineer registered licensed in the State of Louisiana.

3. A hydrological analysis of both pre-development and post-development runoff shall be provided. The applicant shall also provide a water surface profile for 100 year, 50 year, 25 year and 10 year storm events. The hydrological analysis shall meet all applicable Parish Ordinances and the following requirements:

(a) The developer's engineer shall also study the effect of any proposed development on existing downstream drainage facilities outside the area of the development. Local drainage studies, together with any other appropriate study, shall serve as a guide to needed improvements as determined by the Department of Engineering.

(b) No development may be constructed or maintained so that surface waters from such development are collected and channeled downstream at such locations or at such volumes or velocities as to cause degradation, alteration or damage to lower adjacent properties.

(c) Where it is anticipated that the additional runoff incident to the development will increase the water surface profile downstream, the Parish shall withhold approval of the development until provisions have been made for the detention of storm water and resolution of such conditions in conformance with these requirements and the Department of Engineering. No development shall be approved unless the

necessary drainage will be provided to a drainage watercourse or facility that is adequate to receive the proposed drainage without adverse impact on downstream properties.

(d) No development may be constructed or maintained where such development would impede the flow of water from upstream properties across the property proposed to be developed. All drainage rights-of-way and culverts or other drainage facilities shall be large enough to accommodate runoff from the property proposed to be developed as well as upstream flow originating outside of the proposed development. All existing watercourses passing through the property of the proposed development shall be maintained to accommodate up to the 100 year storm events. Any proposed alteration or relocation of an existing watercourse or drainage facility may only be approved when the Department of Engineering has determined that any such proposal meets all applicable parish drainage requirements. The developer's engineer shall determine the necessary size of the drainage facilities, assuming conditions of maximum potential watershed development permitted by these regulations.

4. When a qualified hydrologist creates a study/plan for a particular drainage area, said study/plan must determine the effect(s), if any, of the proposed development on the drainage basin; and the qualified hydrologist shall present engineering proposals, if any, to certify that the rate of runoff will not be increased by the proposed development.

1. a. The Rational Method may be used for determining the storm water runoff when the contributing areas is less than or equal to 200 15 acres up to the time of concentration.

The runoff coefficient shall be selected by the design engineer and shall be appropriate for the subject property and must account for the duration and intensity of the rainfall event.

2. b. When the SCS method or equivalent is used, the following requirements shall apply:

1. Curve Numbers shall be those published by the Louisiana Department of Transportation and Development and/or the "National Engineering Handbook, Hydrology: Section 4, Chapters 6-12".

2. When using the SCS Method, adjustments requiring disclosure include but are not limited to:

(1) Changes to the 484 IUH coefficient in the peak flow equation

(2) Adjustments for ponding, imperviousness and channel improvements.

(3) Antecedent soil moisture condition

(4) Slope and sub area length over width ratio assumptions.

(5) Storm Intensity Distribution, but only if approved by the Parish Engineering Director

(6) Proper lag time equations

3. c. The Time of Concentration shall be determined for both pre- and post-conditions using methods accepted by the engineering community, e.g. "National Engineering Handbook, Hydrology: Section 4, Chapter 15," and appropriate for the conditions as approved by the Parish Engineer. If the lag method is used, the following restrictions shall apply:

1. The appropriate area slope and defined by lag equation shall be used.

2. Adjustments shall be made for channel improvements and impervious areas.

3. 5. Detention design shall be a part of the hydrologic study/plan and shall include detention pond(s) and metering structure(s). Linear detention within roadside ditches is not acceptable and shall not be included as storage areas in the drainage calculations. The plan shall be developed in accordance with the Department of Engineering's review and approval.

1. a. On site detention requirements may be waived or modified based on hydrological analysis of existing conditions, location of the development within the drainage basin and analysis assuring no negative effect within the basin of the waiver. A waiver is expressly prohibited for developments located within the upper one-third of the drainage basin, unless the runoff resulting from the development can be routed to a regional detention facility. After technical review, the Department of Engineering shall accept or reject the proposed waiver. The waiver will be presented to the planning commission for preliminary approval.

2. b. If a waiver is accepted pursuant to the previous paragraph, in lieu of on site detention, the developer shall be assessed a Drainage Fee. This fee shall be payable to the Parish or designated drainage

district for the sole purpose to make of making improvements to the affected drainage basin. The fee shall be due prior to the issuance of any work orders by the Parish.

3. c. The drainage fee shall be per acre, as follows:

A-1, A-2 and A-3 Subdivisions \$ 1,500.00

A-4 and A-5 Subdivisions \$ 2,000.00

A-6, Commercial and Industrial Subdivisions \$ 3,500.00

PUDS of same density as above subdivision designations shall follow the same fee structure. The fee shall be used solely for planning, acquisition and/or construction of regional detention facilities and/or system improvements within the affected basin.

4. d. All drainage structures shall be designed to provide for reductions in peak rate of runoff for all storm events up to the 100 year storm. The peak rate of runoff for the 25, 50 and 100 year storm shall be reduced by 25%. At no time shall the peak rate of runoff exceed that of the pre development conditions of the subject parcel. Calculations shall be provided for the 25, 50 and 100 year storm events that display the effects of a 2 and 24 hour duration.

5. e. Pre-development calculations shall be based on the "heavily forested" condition unless otherwise approved by the Department of Engineering.

6. f. No fill shall be placed in any flood zones designated as AO/AH or A1-A30, AE, VE, A or a Parish defined critical drainage area without an approved fill plan. All fill for residential home construction shall conform to Ordinance 2183- AA adopted July 5, 2001. Finished floor elevation shall be at least 6" 12" above nearest adjacent road and also conform to the rules and regulations promulgated by Federal Emergency Management Agency (FEMA) and National Flood Insurance Program (NFIP).

7. g. All subdivisions receiving Tentative approval prior to the effective date of this ordinance will be governed by the previous drainage requirements.

(amended per Ordinance No. 03- 0725, adopted August 7, 2003)

8. h. A subdivision development located within the boundaries of Gravity Drainage District No. 5 shall, at the same time, also submit its hydrological study and plan to the District for review and comment to the Parish Engineer. All costs associated with the review of the plans by the Drainage District shall be assessed to the developer. The District shall submit its comments to the Parish Engineer within 30 days of receipt of the plan. The Parish Engineer shall have final authority on approval of the proposed hydrological plan.

(created per Ordinance No. 04-0949, adopted September 2, 2004)

6. In the event of a conflict between any provision within this Section, or between a provision in this Section and any other drainage or flood control ordinance, the more stringent provision shall be applicable.

REPEAL: All ordinances or parts of Ordinances in conflict herewith are hereby repealed.

SEVERABILITY: If any provision of this Ordinance shall be held to be invalid, such invalidity shall not affect other provisions herein which can be given effect without the invalid provision and to this end the provisions of this Ordinance are hereby declared to be severable.

EFFECTIVE DATE: This Ordinance shall become effective fifteen (15) days after adoption.

MOVED FOR ADOPTION BY: _____ SECONDED BY: _____

WHEREUPON THIS ORDINANCE WAS SUBMITTED TO A VOTE AND RESULTED IN THE FOLLOWING:

YEAS: _____

NAYS: _____

ABSTAIN: _____

ABSENT: _____

THIS ORDINANCE WAS DECLARED DULY ADOPTED AT A REGULAR MEETING OF THE PARISH COUNCIL ON THE 1 DAY OF January, 2010; AND BECOMES ORDINANCE COUNCIL SERIES NO _____.

JERRY BINDER, COUNCIL CHAIRMAN

ATTEST:

THERESA L. FORD, COUNCIL CLERK

KEVIN DAVIS, PARISH PRESIDENT

Published Introduction: NOVEMBER 25, 2010

Published Adoption: _____, 2010

Delivered to Parish President: _____, 2010 at _____

Returned to Council Clerk: _____, 2010 at _____