

Item 12.A.2 Section 17-4045, Drainage Design Criteria



Appendix IV – Subdivision Requirements

17-4045. – Drainage: <u>Ddesign</u> and construction criteria.

Commentary: This section was mostly relocated to Section 17-5013, Design Criteria and Section 17-5014, Drainage Servitudes. It was inconsistent and misleading to have two separate sections for drainage design, with some of the information being related to servitudes and other information related to design of the drainage improvements. The only remaining paragraph in this Section 17-4045 provides a cross reference to the design standards in 17-5013.

- A. All drainage design shall be based on calculations of a ten-year 24-hour rainfall as determined by Technical Paper 40 published by the National Weather Service (currently 8.5 inches).comply with the design criteria in Section 17-5013.
- B. The natural drainage within a subdivision shall be followed in as far as economically feasible. Streets and lots shall be arranged so as to keep artificially relocated drainage canals to a minimum.
- C. Drainage pipe used shall meet the requirements of the Ascension Parish Subdivision Construction Specifications.
- D. Open canals shall have side slopes of three to one if not lined with concrete. Slope grades of one and one-half to one may be used as shown in drawings if concrete lining is utilized.
- E. The following servitude criteria shall be required for each ditch, canal, sewer collection line, and storm sewer:
 - 1. Proposed swale ditches with a maximum depth of 1.5' and with maximum side slopes of 5H:1V require a minimum seven and one-half foot servitude on each side of the centerline of the swale. Existing ditches that meet this dimensional criteria will not be required to provide additional servitude.
 - 2. Existing or Proposed ditches or canals with a top width less than 20 feet require a minimum of ten-foot servitude from the top bank on each side.
 - 3. Existing or Proposed ditches or canals with a top width greater than 20 feet require a minimum 15-foot servitude from the top bank of each side.
 - 4. Existing or Proposed ditches or canals with a top width greater than 30 feet require a minimum 20-foot servitude from the top bank on each side.
 - 5. Existing or Proposed ditches or canals with a top width in excess of 40 feet require a minimum of 25foot servitude on both sides.
 - 6. For subsurface drainage pipes smaller than 60" in diameter, a 7.5-foot drainage servitude is required on each side of the outer wall of the pipe.
 - 7. For drainage pipes 60" in diameter and larger and box culverts wider than 60", the servitude width shall be a minimum of four times the diameter of the pipe or width of the box culvert.
 - 8. For double runs of pipe or other special circumstances, the Drainage Department shall establish the width of servitude.
 - 9. Stormwater ponds/lakes require a 30-foot servitude from the inlet to the outlet of the pond/lake.
- F. When a proposed ditch must discharge into a major unlined canal, the subdivider shall be required to enclose the ditch, (under the access strip of the major canal), in a metal pipe. The pipe shall extend four feet into the canal beyond the side slope, and shall discharge into a concrete flume that extends a minimum of five feet into the bottom of the canal. Flume shall be constructed immediately after conduit is installed.



- G. Unless drainage channels are being dedicated or developed for recreational or other public or private open space use, the subdivider shall construct a five-foot chain link fence along channels referred to in Section 17-4045(E).
- H. The Designated Review Engineering Agency shall operate under the direction of and be subject to the control of and follow regulations established by the parish planning commission.
- I. Hydraulic calculations shall be stamped by a Professional Engineer and submitted with Construction Plans.
- J. Improvements on lots created along MAJOR drainage channels shall not encroach on the drainage servitude or right-of-way.

(SR07-01, 1/18/07; DC09-09, 12/17/09; SR12-10, 7/19/12; SR12-17, 2/7/13; DR14-06, 10/02/14; SR 17-01, 6/15/17, <<insert ordinance #, date>>)