405.06. The County Engineer or County Planner should be notified of any significant changes to the construction plans or final plat.

405.07. Procedures for amending or the resubdividing of an existing subdivision.

405.07-01 An in the newspaper must be ran 15 days prior to the hearing.

405.07-02 After the public hearing is held, the Board of Supervisors must approve the revised plat.

SECTION 406: MINOR SUBDIVISIONS

406.01. <u>Platting</u>. Minor subdivisions shall meet the platting requirements, unless exempted by Section 405.01. Further, the proposed subdivision shall comply with Section 404.

406.02. <u>Review.</u> Minor subdivisions shall be reviewed by the Planning Department Staff and approved by the Board of Supervisors. The Planning Department Staff will determine whether a plat needs to be filed. The Department will take into consideration the site distances on the driveways.

406.03. All land divisions off of a root parcel are cumulative. Once the threshold for a major subdivision has been reached, the entire root parcel will have to be platted as a major subdivision. For purposes of these regulations, a root parcel is the property described in the legal description in the deed of the property when it was purchased.

ARTICLE V

REQUIRED IMPROVEMENTS AND DESIGN STANDARDS

SECTION 500 IMPROVEMENTS IN SUBDIVISIONS

500.01: Before the county can assume the responsibility for maintaining the dedicated streets constructed within a subdivision, the owner or owners of the subdivision must ensure that the following improvements are constructed according to the specifications set forth in these regulations.

500.02: All services for utilities must be made available for each lot in such a way that will eliminate disturbing the street pavement and drainage structures when connections are made.

500.03: Upon completion of construction of any utilities or improvements, one set of complete final plans, dated, signed, and certified by the engineer in charge must be filed with the county engineer and the Planning Department. These plans must show all features as actually installed, including materials, size, location, depth or elevation, numbers, ends of lines, connections, valves, storm sewer drains, inlets, and all other pertinent information.

500.04: All tests necessary to insure that the following improvements are in compliance with these regulations are the responsibility of the developer.

500.05: At the time construction begins on any of the improvements required by these regulations, the developer or his agent must notify the county engineer.

SECTION 501 STREETS

501.01. The county engineer and Planning Department will review the street system for the proposed subdivision and classify all proposed streets in one of the following categories:

- (1) Collector Streets that carry traffic from local streets to arterial streets or highways, including the principal entrance streets of the subdivision.
- (2) Local Streets that are used primarily for access to abutting properties.
- 501.02. Right-of-way Widths, Setback Lines, and Sight Distances. The following are minimum right-of-way widths, setback lines from right-of-way, and sight distances for collector and local streets.

Type of Street	Minimum Right-of-way Widths	Minimum Building Setback	Minimum Stopping Sight Distance
Collector	60 feet	30 feet	600 feet*
Local Open Ditch Curb and Gutter	60 feet 50 feet	25 feet 25 feet	400 feet*

^{*} All safe stopping sight distances shall be based on current posted speed limit. In lieu of a posted speed limit, 55 mph shall be used for sight distance calculations. In no instance shall the distance be less than the minimum shown here.

501.03. Street name signs and traffic signs shall be installed and provided by the subdivider immediately following completion of street construction.

501.04. Typical Section of Streets and Roads with Surface Ditches:

	Collector	<u>Local</u>
Minimum width of roadway out-to-out of shoulders	34 ft	28 ft.
Fore slopes and back slopes from edge to shoulder to ditch flow line, no steeper than	3:1 slope	3:1 slope
Back slope from ditch flow line to top of cut	3:1 slope	3:1 slope
4. Minimum depth of ditch from edge of shoulder to flow line	2 ft0 in	1 ft6 in.
5. Minimum width of shoulders	5 ft	4 ft.
6. Minimum slope of shoulders to ditch	1/2" per ft	1/2" per ft.
7. Minimum gradient, flow line of		

open ditch0.4%0.4%
8. Maximum gradient of roadway profile10%15%
9. Minimum width of base course26 ft22 ft.
10. Minimum width of pavement24 ft20 ft.
11. Minimum radii of pavement at intersections35 ft
Minimum radii of outside pavement edge at dead end turnaround circle42 ft.
501.05: Typical Section of Streets with Curbs and Gutters:
Minimum width of streets, (back-to-back of curbs) a. Local or Dead-end Streets27 ft. b. Collector Streets33 ft. c. Major Thoroughfares48 ft.
2. Minimum gradient of street profile0.4%
3. Minimum curb and gutter gradient0.4%
4. Minimum radii of curbs and gutter at intersection30 ft.
5. Minimum width of shoulders behind curb4 ft.
6. Minimum slope of shoulders to curb1/2 in. per ft.
7. Minimum radii of turnaround dead-end street42 ft
501.06: Pavement Design: Pavement design for the subdivision will be as for

5 llows:

- (1) The minimum subgrade for pavement construction must have a California Bearing Ratio (CBR) of ten (10) or better. This will require that a subgrade soil profile be performed at an interval of 500 feet along each road way. The County Engineer will be notified and present when the soil profile is performed.
- (2) The minimum pavement design thickness for local, collector, and cul-de-sac streets and alleys must be one of the following:
 - (a) An eight-inch (8") clay- gravel base. The wearing surface must be a two-inch (2") hot mix asphaltic surface.
 - A four-inch (4") bituminous pavement (black base). The wearing surface must be a one and one-half inch (1 1/2") hot mix.
- (3) A minimum compaction of 95% of a standard proctor density is required on the subgrade and 100% on the base.
- (4) All clay-gravel base courses must meet Class 4-Group B specifications.
- (5) All design, construction, and materials must conform to the appropriate sections or subsections of the latest edition of Mississippi Standard Specifications for State Aid Road and Bridge

Construction, as indicated by the County Engineer.

- (6) The developer or his engineer is required to contact the County Engineer at each stage of roadway construction to verify that the appropriate materials are being used and the appropriate testing is being performed. It is a specific requirement that granular base material be tested for compaction and the base be proof rolled immediately prior to the placement of the asphalt surface. All testing must be performed in the presence of the County Engineer.
- 501.07: If curb and gutter are installed, they must meet the specifications recommended by the county engineer.
- 501.08: The arrangement of streets in a subdivision must either provide for the continuation of existing principal streets in surrounding areas; or, conform to a plan for the neighborhood as a whole that has been devised to meet an unusual situation such as topography or other conditions that make continuation of existing streets impractical. Such a neighborhood plan must be prepared by the developer and is subject to approval by the Board of Supervisors.
- 501.09: No trees or shrubs will be permitted to be planted at street intersections; however, controlled planting of shrubs and trees on public property, provided that plantings do not interfere with proper drainage and maintenance or obstruct vision required for public safety, may be permitted.
- 501.09.1 All subdivision signs entrance signs must be located 10 feet outside of all existing or proposed County right-of-ways.
- 501.10: Street jogs with centerline offsets of less than one hundred twenty-five (125) feet should be avoided.
- 501.11: A tangent of at least one hundred (100) feet must be introduced between reverse curves on collector streets. Horizontal curves on collector streets must have a minimum of a three hundred and fifty (350) foot radius computed from the centerline. Horizontal curves on local streets must have a minimum of a two hundred and fifty (250) foot radius computed from the centerline.
- 501.12: Streets must be laid out so as to intersect as nearly as possible at right angles, and no street may intersect any other street at less than (60) sixty degrees.
- 501.13: Property lines at street intersections must be rounded with a radius of ten (10) feet or with a greater radius when the county engineer deems it necessary. The county engineer may require comparable cutoffs or chords in place of rounded corners. A comparable chord shall be considered a chord or line connecting the points of tangency of the radius it is replacing.
- 501.14: Half streets will be prohibited in such cases where there exists a half-street contiguous thereto. Wherever a half-street is adjacent to a tract to be subdivided, the other half of the street will be platted within such tract.
- 501.15: Permanent dead-end streets must not be longer than one thousand (1000) feet and must be provided at the closed end with a turnaround having a paved surface diameter of at least (84) eighty four feet and a street property line diameter of at least (116) one hundred sixteen feet.
- 501.16: No street names may be used which will duplicate or be confused with the names of existing streets. Street names should be cleared with the E-911 Address Systems office before being used. Street names will be subject to the approval of the Board of Supervisors.
- 501.17. Street grades of local streets must not exceed ten (10) percent or be less than five-tenths (0.5) of one (1) percent. Street grades of collector streets and major thoroughfares must not exceed seven (7) percent. Grades approaching intersections must not exceed five (5) percent for a distance of not less than eighty-five (85) feet from the centerline of said intersecting streets.
- 501.18. All roads must be cored by the Developer's Engineer with the core results being submitted to the County Engineer for review before being accepted by the County. The County Engineer must be

notified when asphalt operations begin.

501.19. All Subdivisions shall have two entrance/exit points, unless all proposed lots front upon an existing public road or the proposed subdivision is adjacent to another subdivision and the streets are connected.

501.20. Sight Triangles at Street Intersections:

501.20-01 Whenever two streets intersect, unobstructed cross-visibility shall be provided between the heights of three (3) and seven (7) feet above the grade elevation of the roadways within sight triangles at each corner of the intersecting roadways. Each sight triangle shall be measured from a point where the curb or edge-of-pavement line for the intersecting roadways meet, to a point 30 feet behind one roadway's curb or edge-of-pavement line, to a point along the other roadway's curb or edge-of-pavement line located 30 feet from the original point.

501.20-02 Within the sight triangles, no fence, wall, sign, earthworks, hedge, shrub, or other structure or planting shall be located, maintained, or permitted to grow between the heights of three (3) and seven (7) feet above the grade elevation of the adjacent road. Public safety and utility devices (such as street lights street signs and telephones poles) and trees less than 12 inches in diameter are exempt from these standards, provided their number and location is limited and the limbs and foliage of any such trees are trimmed, so as to ensure provision of the required unobstructed cross-visibility.

SECTION 502 MONUMENTS

502.01: Monuments must be placed at all major corners along the boundary of the subdivision. These monuments should consist of a four (4) inch by four (4) inch concrete post not less than thirty (30) inches in length.

502.02: Markers must be placed at all corners or changes in alignment in lot boundaries and at all block corners, angle points, or curves in street right-of-way boundary lines. The markers should consist of a reinforcing rod or iron pipe of not less than one-half (1/2) inch in diameter and not less than twenty-four (24) inches in length.

502.03: All monuments or markers should be set with the top flush with the finished grade. When necessary to prevent disturbance, the monument should be sunk underground and referenced to permanent landmarks.

SECTION 503 EASEMENTS

503.01. Easements across lots or centered on rear or side lot lines must be provided for utilities where necessary and must be at least fifteen (15) feet wide at ground level with an additional six (6) foot wide overhang on each side from twelve (12) feet above ground and up, or a width designated by the county engineer.

503.02. Where easements intersect or sharp changes in alignment are necessary, corners must be cut off sufficiently to permit equipment access as determined by the county engineer.

503.03. No fences, buildings, paving, or plotting will be permitted in easements.

503.04. Any overhanging limbs, shrubbery, or vegetation of any kind may be removed from within the limits of easements at the sole discretion of the maintenance personnel of the utilities installed or to be installed in or above the easements.

503.05. Where a subdivision is traversed by a watercourse, drainage way, channel, or stream, there must be provided a storm water easement or drainage right-of-way conforming substantially with the lines of such watercourse or an accepted canal or drainage course, and any further width of construction as will be adequate for drainage purposes.

SECTION 504 BLOCKS

- 504.01. The lengths, widths, and shapes of blocks should be determined with due regard to:
 - 504.01-01. Building sites that are suitable for the special needs of the uses contemplated.
 - 504.01-02. Convenient access, circulation, control and safety of street traffic
 - 504.01-03. Limitation and opportunities of topography
- 504.02. As a usual practice, block lengths should not exceed sixteen hundred (1,600) feet or be less than four hundred (400) feet.

SECTION 505 ALLEYS

- 505.01. Alleys must be provided in commercial or industrial subdivisions, however, the county engineer, following consultation with the Planning Department, may recommend waiving this requirement where other definite and assured provisions are made for service access, such as off-street loading and parking consistent with and adequate for the uses proposed.
- 505.02. The right-of-way width of an alley in commercial and industrial areas must be a minimum of twenty-five (25) feet.
- 505.03. Alley intersections and sharp changes in alignment should be avoided, but where necessary, corners may be cut off sufficiently to permit safe vehicular movement.
- 505.04. Dead-end alleys should be avoided where possible, but if unavoidable, must be provided with a turnaround having an outside roadway diameter of at least (84) eighty four feet and a right-of-way diameter at least (116) one hundred sixteen feet. The county engineer and the Planning Department may recommend to the Board of Supervisors a larger turnaround when it is determined necessary to provide adequate turnaround space.
- 505.05. Alleys are not required in residential areas.

SECTION 506 LOTS

- 506.01. All subdivisions must be surveyed and laid out in such a manner that each and every lot intended for sale abuts a dedicated public street or road.
- 506.02. Zero lot line patio/garden homes shall have no minimum setback on one side and ten (10) feet on the opposite side except that on corner lots the minimum side yard of the corner side shall be fifteen (15) feet. Where adjacent zero lot line dwellings are to be constructed against a common lot line, the builder or developer must provide for a perpetual wall maintenance easement of five (5) feet in width along the adjacent lot and parallel with such wall.
- 506.03. Lots may not contain less than sixty five hundred (6,500) square feet or be less than (50) fifty feet wide at the building setback line except in the case of zero lot line patio/garden homes. Zero lot line lots shall, in no case, be less than three thousand (3,000) square feet or be less than (35) thirty-five feet wide at the building setback line.

SECTION 507 FLOODPLAIN AREAS

507.01. Land subject to flooding with a frequency of a one hundred (100) year flood must not be subdivided unless precautionary measures are taken to eliminate or minimize flood hazards. All building grades must be raised to an elevation equal to or above the maximum flood elevation or a one

hundred (100) year flood calculated for the area in which the proposed subdivision is situated. This is provided however; that no fill must be made, or any subdivision constructed, which will increase flood hazards to other lands, or in any manner impede or restrict the flow of water in a flood situation. All areas, which will remain subject to the flooding after the subdivision is constructed, must be delineated on the final plat.

507.02. All utilities and facilities, such as water, sewer, gas, and electrical systems, must be located, elevated or constructed to eliminate or minimize flood damage; and adequate drainage must be provided so as to reduce exposure to flood hazards.

SECTION 508 LOCATION OF UTILITIES

508.01. Where possible no utilities including water, sewer, power, gas, cable television, or telephone lines shall be laid under the planned paved roadway.

508.02. Utilities shall be located either on the outer top bank of ditches, 5 feet from outer edge of the right-of-way or in utility easements. Crossings must be with borings or casings only.

SECTION 509 WATER SYSTEM

509.01. All dead-end mains must be equipped with an approved outlet sufficient to periodically flush the main.

509.02. The water system should be designed so that the calculated pressure within the system, at maximum use flows, is not less than twenty (20) pounds per square inch at any curb stop.

509.03. Individual water wells may be used only if written approval is obtained from the Lamar County Health Department.

509.04. In the event that the proposed subdivision is located within or abuts an existing water district or association, the water system within the subdivision should be connected to such water district or association, and must conform to the specifications of such water district or association. The water system constructed within the subdivision must meet the minimum requirements of these regulations or the water district specifications, whichever is more restrictive.

509.05. In the event the proposed subdivision is near or adjacent to an existing municipal water system, but not within an existing water district or association, every effort should be made by the developer to connect the water system of the proposed subdivision with that of the municipality. If the proposed subdivision abuts any municipality and is outside an existing water association, or if the subdivision is to be connected to a municipal system, the water system within the subdivision must conform to the specifications required by that municipality as if the subdivision were within the corporate limits of such a municipality. In any event, the water system constructed within the subdivision must meet the minimum requirements of these regulations.

509.06. In subdivisions with a water system designed for fire protection, the materials for the water mains must conform to the following requirements:

- 1. <u>Ductile Iron Pipe:</u> Ductile iron pipe must have a minimum diameter of six (6) inches and conform to the latest revisions of the American Water Works Association (AWWA) specification C106 or C108, Class 150.
- 2. <u>PVC Pipe:</u> PVC pipe must have a minimum diameter of six (6) inches and must conform to the latest AWWA specification C900.

509.07. In subdivisions with water systems not designed for fire protection, the material for water mains must conform to the following requirements:

- 1. Ductile Iron Pipe: See Section 508.06.
- 2. <u>PVC Pipe</u>: All PVC pipe must conform to the latest commercial standards published by the U.S. Department of Commerce and carries the seal of acceptance of the National Sanitation Foundation for use in domestic water systems. The wall thickness of the pipe specified shall be governed by ASTM-D2241 for standard dimensions ratios (SDR) and the SDR must not be greater than twenty-six (26). Operating pressures of all PVC pipe must not exceed two-thirds (2/3) of the rated working pressure pipe used.
- 509.08. Services in subdivisions receiving their water supply from existing municipalities or utility districts must be in accordance with municipal or utility district specifications. In the event that the municipality or utility district specifications are less than those specified in these regulations the requirements of these regulations will apply.
- 509.09. Services in subdivisions not covered by Section 508.09 above must consist of the following: A corporation stop must be provided at the main with three-fourth (3/4) inch flexible copper tubing or a high-molecular weight plastic tubing must run from the main to the lot line and terminate with a compatible curb stop.
- 509.10. Hydrostatic tests must be performed on the new water system with a pressure of one hundred fifty (150) pounds per square inch for twenty-four (24) hours. Before any or all of the work is placed in service, the system must be disinfected and redisinfected as necessary until chlorine-free samples are found to meet Mississippi State Board of Health standards as to bacteriological quality. Samples for the tests must be taken from remote parts of the system.

SECTION 510 SANITARY SEWERS

- 510.01. Sanitary sewer facilities will be provided in all subdivisions and must conform to all applicable state and local laws pertaining to sewage collection and treatment.
- 510.02. In the event the proposed subdivision is near or adjacent to an existing sewer system, every effort should be made by the developer to connect the sewer system of the proposed subdivision with that of the existing system. If the proposed subdivision abuts any municipal or utility district or if the subdivision is to be connected to a municipal or other existing system, the sewer system within the subdivision must conform to the specifications required by that existing system or municipality as if the subdivision were within its legal bounds. In any event, the sewer system constructed within the subdivision must at least meet the minimum requirements of these regulations.
- 510.03. All sewer pipes must be concrete, vitrified clay, cast iron, plastic, or other type approved by the county engineer. Sewer pipe installed with trench depth up to and including ten (10) feet will be standard strength; and for trench depth greater than ten (10) feet, extra strength pipe must be used.
- 510.04. The minimum diameter pipe for sanitary sewers is eight (8) inches. Minimum diameter service pipe for house connection is four (4) inches for single-family dwellings and six (6) inches for multi-family dwellings. House connections must be stubbed out to each property or lot line before street construction and plugged with extended sewer stub marker tape from pipe to surface.
- 510.05. All joints must be either gasket joint or other type as approved by the county engineer.
- 510.06. The following are the minimum slopes that will be allowed; however, slopes greater than these are desirable.

Minimum Slope in Feet Per Sewer Size One Hundred (100) Feet

8-inch 0.400
10-inch 0.280
12-inch 0.220
14-inch 0.170
15-inch 0.150
16-inch 0.140
18-inch 0.120
21-inch 0.100
24-inch 0.080
27-inch 0.067
30-inch 0.058
36-inch 0.046

- 510.07. Manholes must be no more than four hundred (400) feet apart, must be placed at each change in alignment or grade, and must be provided with traffic-grade cast-iron lids and frames.
- 510.08. There is a minimum ten (10) foot separation between all parallel sanitary sewer and water mains, except as otherwise approved by the county engineer.
- 510.09. Any sewer mains exposed through ditches must be Class 150 cast iron for mains or cast-iron soil pipe for services.
- 510.10. Infiltration in any section of sewer main must not exceed three hundred (300) gallons per inch of pipe diameter, per mile, per day.
- 510.11. In the event that oversize sewer mains must be installed within the proposed subdivision to serve other areas, appropriate arrangements for construction must be made between the subdivider and the county prior to installation.

SECTION 511 STORM DRAINAGE

- 511.01. Materials and construction must conform to Mississippi Standard Specifications for State Aid Road and Bridge Construction.
- 511.02. Drainage Structures must be sized using the rational formula and calculated by a licensed engineer for the State of Mississippi. However, the minimum allowable design shall be a fifty (50) year storm frequency or other design as recommended by the county engineer.
- 511.03. Reinforced concrete headwalls of precast flared end sections must be provided on fifteen (15) inch pipe and larger. The minimum diameter for storm drain pipe must be fifteen (15) inches and when used as a culvert the length must be such that the ends project at least four (4) feet beyond the edge of the pavement or to the edge of the fill slope. Concrete culverts are required for cross drains and must be a minimum of Class III reinforced concrete. Other storm drains or culverts that are not cross drains can either be RCP or Corrugated HDPE pipe.
- 511.04. Adequate protection of ditch inverts and side slopes must be provided to prevent erosion. On ditch slopes greater than 3%, special ditch treatment such as concrete paving or rip-rap will be required

SECTION 512 GENERAL GRADING

512.01. Grading and centerline gradients must be in accordance with plans and profiles recommended by the county engineer.

- 512.02. Areas to be graded by cutting or filling must be rough graded to within two-tenths (0.2) of a foot of the accepted elevation after necessary allowance has been made for the thickness of topsoil, paved areas, and other installations.
- 512.03. Final cross sections and profiles of streets and other installations must conform to grades recommended by the county engineer. Elevations must be based on mean sea level.
- 512.04. All timber, logs, trees, brush, vegetation, and other rubbish must be removed or otherwise disposed of in accordance with the rules and regulations of the Mississippi Bureau of Pollution Control so as to leave areas that have been disturbed with a neat and finished appearance.

SECTION 513 <u>EROSION AND SEDIMENT CONTROL</u>

- 513.01. Installation of the above improvements must be done in such a manner as to provide for the most effective control of erosion and sediment. Practical combinations of the following technical principles must be used.
 - 513.01-01. The smallest practical area of land must be exposed at any one time during development.
 - 513.01-02. When land is exposed during development, the exposure must be kept to the shortest practical period of time.
 - 513.01-03. Temporary vegetation and/or mulching must be used to protect critical areas exposed during development.
 - 513.01-04. Sediment basins (debris basins, desilting basins, or silt traps) must be installed and maintained to remove sediment from runoff waters from land undergoing development.
 - 513.01-05. Provisions must be made to effectively accommodate the runoff caused by changed soil conditions during and after development.
 - 513.01-06. Permanent final vegetation and structures must be installed as soon as practical in the development.
 - 513.01-07. The development plan must be fitted to the topography and soils so as to create the least possible erosions.
 - 513.01-08. Whenever feasible, natural vegetation must be retained and protected.

ARTICLE VI

LEGAL PROVISIONS, PENALTIES, FEES, AND AMENDMENTS

SECTION 600 AMENDMENTS

The Board of Supervisors may from time to time adopt amendments that will tend to increase the effectiveness of these Subdivision Regulations. The Subdivision Regulations may be revised or amended by the Board of Supervisors after giving adequate public notice as required by law for conducting a public meeting.

- 600.01. <u>AMENDMENTS TO THE SUBDIVISION REGULATIONS</u>. In its review of the text amendments, the Board shall pay reasonable regard to:
 - 600.01-01 The most recently adopted Lamar County Comprehensive Plan.