

**MINIMUM STANDARDS MANUAL
FOR THE PRACTICE OF
LAND SURVEYING IN SOUTH CAROLINA**

STATE OF SOUTH CAROLINA

**CODE OF REGULATIONS
CHAPTER 49, ARTICLE 4.
Regulations 400-490**

Effective May 7, 1991

**Board of Registration for Professional
Engineers and Land Surveyors
Division of Professional and Occupational Licensing
S.C. Department of Labor, Licensing and Regulation**

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**BOARD OF REGISTRATION FOR
PROFESSIONAL ENGINEERS AND LAND SURVEYORS**

CHAPTER 49

Statutory Authority: 1976 Code Section 40-22-130

**Article 4. Minimum Standards Manual for the Practice
of Land Surveying in South Carolina**

Final regulations pertaining to minimum standards for the practice of land surveying in South Carolina were approved by the legislature on May 7, 1991.

These regulations replace existing Article 3, Regulations 20-29, and are renumbered as Article 4, Regulations 400-490.

These regulations revised and added clarification to existing regulations. The clarifications will assist land surveyors in meeting the needs of the public so that surveyed properties can be readily understood and will assist others who deal with real property such as those in legal, banking, and real estate professions. Classifications of surveys and required standards for different types of surveys are more accurately defined. Additional information is provided for methods of marking property boundaries, also proper certifications for maps and plats. Additional regulations will also assist Clerks of Court/Register of Mesne Conveyance in various counties in South Carolina in receiving and accepting for recording maps that are in compliance with appropriate standards and statutory requirements.

Official notification was mailed by the Board to all Registered Land Surveyors July 23, 1991, with the enforcement effective September 30, 1991. Since that date each and every registrant has been provided a copy. **Registered Professional Land Surveyors are charged with having knowledge of and complying with these regulations.**

Copies of these regulations have also been provided to all Clerks of Court/Register of Mesne Conveyance in South Carolina.

Questions may be directed to be Board Office:

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**South Carolina Code of Regulations
Chapter 49**

Statutory Authority: 1976 Code (As Amended, 1976) 40-22-130

Article 4

**Minimum Standards Manual
For the Practice of Land Surveying in South Carolina**

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**SOUTH CAROLINA STATE BOARD OF REGISTRATION
FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS**

CHAPTER 49

Statutory Authority: 1976 Code Section 40-21-110

**Article 4. Minimum Standards Manual for the Practice
of Land Surveying in South Carolina**

These regulations replace existing Article 3, Regulations 20-29, and are renumbered as Article 4, Regulations 400-490.

§ 49-400. Purpose.

A. These regulations are intended to establish a minimum standards manual for the practice of land surveying in South Carolina.

(1) The standards set forth are to promote uniform requirements for and accurate surveys by land surveyors practicing in South Carolina.

(2) The established guidelines will assist a land surveyor in meeting the needs of his clients so that surveyed properties henceforth can be readily located, mapped and described in a definitive and easily understood manner.

B. These regulations are also intended to provide guidelines that will assist property owners and others who deal with real property such as those in the legal, banking, and real estate professions.

(1) The manual should be of value to property owners in South Carolina when engaging the services of qualified surveyors to establish corners, boundaries and maps of their respective properties.

(2) The manual should assist the Clerks of Court in the various counties of South Carolina in receiving and accepting for recordation maps that are in compliance with appropriate standards and statutory requirements.

§ 49-410. Compliance.

A. All Registered Land Surveyors shall comply with these regulations governing minimum standards for the practice of land surveying in South Carolina.

B. A land surveyor who practices land surveying in South Carolina in violation of the minimum standards contained in this manual, on complaint in writing, sworn to by the complainant and submitted to the Board of Registration for Professional Engineers and Land Surveyors, shall be notified of the complaint and afforded an opportunity to be heard before the Board.

C. The repeated failure to adhere to minimum standards for land surveying as contained in this manual may be considered as prima facie evidence of misconduct in the practice of land surveying on the part of a Registered Land Surveyor.

D. The Board will investigate information from Clerks of Court, clients, individuals, and land owners if in the Board's opinion a land surveyor appears to have performed land surveying which is not in compliance with this manual. When a land surveyor obligates himself and contracts to survey real property in South Carolina by virtue of his registration and the license granted him by this State, he accepts the responsibility to comply with minimum standards prescribed by this manual.

E. The Board shall provide for each Registered Land Surveyor and for each Clerk of Court in this State a copy of the Minimum Standards Manual for the Practice of Land Surveying in South Carolina. Copies will be made available, upon request, for other State officials and the general public.

§ 49-420. General.

A. For the purpose of these regulations, the following terms or words are defined as meaning:

(1) The term "**Board**" shall mean the South Carolina State Board of Registration for Professional Engineers and Land Surveyors.

(2) The term "**manual**" shall mean the Minimum Standards Manual for the Practice of Land Surveying in South Carolina.

(3) The term "**minimum standards**" shall mean the minimum standards for the practice of land surveying.

(4) The terms "**land surveyor**", "**Registered Land Surveyor**" or "**Professional Land Surveyor**" shall mean a surveying practitioner duly registered by the Board for the practice of land surveying in the State of South Carolina.

(5) The terms "**Clerk of Court**" and "**Register of Mesne Conveyance**" shall refer to the office in the county having responsibility for recording plats and deeds.

(6) The term "**seal**" shall mean the raised embossed seal of a Registered Land Surveyor.

(7) The term "**accurate**" shall mean that degree of accuracy consistent with the standards and tolerances specified in this manual.

B. The proper execution of land surveying and mapping procedures and all other details of a land survey are the direct responsibility of the Registered Land Surveyor whose raised embossed seal and original personal signature shall appear on the plat to be recorded. The fact that a map is approved by a planning department or accepted by Clerk of Court for recordation in no way relieves the land surveyor whose seal appears upon the drawing of the full responsibility to make certain that the plats meet the requirements of this manual.

C. The original plat or map shall remain in the possession of the land surveyor whose seal appears thereon. It should, therefore, be professionally and accurately prepared as a permanent record and after prints or copies have been made for recordation or other purposes the original plat should be carefully preserved by the land surveyor or his firm along with the land surveyor's original field notes, calculations, and work sheets. Such material, in original form, is to be made available when required either by the Board or by the courts.

D. The words "course" and "bearing" are used interchangeably in this manual.

E. Where survey requirements are more stringent than those set forth herein, the land surveyor shall comply with those standards as mandated by federal, state, or local governmental requirements.

F. Surveys which are performed for a specific stated purpose other than boundary surveys as defined herein shall be permitted where unusual conditions make it impractical or impossible to perform the survey to the standards set forth herein, provided the purpose and conditions shall be clearly stated on the survey drawing. This section is not to be used in any way to circumvent the standards in this manual on a survey which can be performed to these standards.

G. Additions or deletions to survey drawings by other than the signing party or parties is prohibited without written consent of the signing party or parties.

H. The land surveyor shall comply with the minimum survey classifications noted herein but has the option to negotiate with each client an agreement for a higher classification.

I. Typical sample maps which represent acceptable practice under the minimum standards set forth in this manual are included in Appendixes (A) General Property Survey, (B) Closing/Loan or Mortgage Survey, (C) Topographical Survey, (D) "Site" Survey, and (E) Property Description. These examples are guidelines to be used by land surveyors in the preparation of their drawings and should not be used solely in place of the text contained herein. They may be used by Clerks of Court in evaluating maps submitted to them for recordation and by property owners in determining the level and quality of workmanship to which they are entitled. Variations in curve data and vicinity maps are acceptable options. Most planning departments require a preliminary plat stage for subdivision before final plats are submitted for recordation; therefore, local requirements should be referred to in such matters.

§ 49-430. Nomenclature.

A. In land surveying work, it is acceptable to employ abbreviations and symbols. When use of such abbreviations and symbols are necessary, the following are acceptable and may be employed in land surveying work in South Carolina:

(1) Acres:	AC
(2) Angle:	Ang
(3) Avenue:	AV
(4) Azimuth:	Az
(5) Bench Mark:	BM
(6) Catch Basin:	CB
(7) Calculated Course(s):	CC
(8) Calculated Distance:	CD
(9) Curb Face:	CF or FOC
(10) Curb and Gutter:	CG
(11) Chord:	CH
(12) Center Line:	CL or C/L or \mathcal{C}
(13) Concrete Monument, New:	Conc. N.
(14) Concrete Monument, Old:	Conc. O.
(15) Cosine:	Cos
(16) Degree of Curve:	D
(17) Deed Book:	DB
(18) Deflection Angle:	Defl Ang
(19) Departure:	Dep
(20) Drill Hole:	DH
(21) Delta Angle or Defl. Angle at	P.I. or Central Angle: Δ or I
(22) Double Meridian Distance:	DMD
(23) Easement:	ESMT.
(24) East:	E
(25) Error of Closure:	EC
(26) Elevation:	EL
(27) Edge of Pavement:	EP
(28) Foot:	Ft.
(29) Found:	Fd
(30) Gutter:	Gut
(31) Highway:	Hwy
(32) Invert Elevation:	I.E. or Inv.
(33) Iron Pipe, Set:	IPS
(34) Iron Pipe, Found:	IPF
(35) Length of Curve:	L or Arc
(36) Latitude:	Lat
(37) Long Chord:	LC

(38) Magnetic course:	MC
(39) Manhole:	MH
(40) Mile:	Mi
(41) Marker:	Mk
(42) Monument:	Mon
(43) Nail and Cap:	N & C
(44) North:	N
(45) North American Datum 1927:	NAD 27
(46) North American Datum 1983:	NAD 83
(47) North American Vertical Datum 1988:	NAVD 88
(48) National Geodetic Survey:	NGS
(49) National Geodetic Vertical Datum 1929:	NGVD
(50) Offset:	O.S. OR O/S
(51) Perimeter:	P
(52) Pavement:	Pave
(53) Pk Nail:	PK
(54) Plat Book:	PB
(55) Point of Curvature:	PC
(56) Point of Compound Curve:	PCC
(57) Point on Curve:	POC
(58) Point of Intersection:	P.O.I. or P.I.
(59) Point of Tangent:	POT
(60) Point of Reverse Curvature:	PRC
(61) Point on Tangency:	PT
(62) Point:	Pt
(63) Private:	Pvt
(64) Property Line:	PL
(65) Radius:	R
(66) Reference Point:	RP
(67) Railroad:	RR
(68) Reinforced Concrete Pipe:	RCP
(69) Register of Mesne Conveyance:	RMC
(70) Railway:	Rwy
(71) Right of way:	R/W
(72) South:	S
(73) SC State Plane Coordinate-North Zone NAD 27:	SC SPCN 27
(74) SC State Plane Coordinate-South Zone NAD 27:	SC SPCS 27
(75) SC State Plane Coordinate NAD 83:	SC SPC 83
(76) South Carolina Geodetic Survey:	SCGS
(77) Sine:	Sin
(78) Square:	Sq
(79) Square Feet:	SF ² or FT ²
(80) Street:	St
(81) Station:	Sta
(82) Stake:	Stk
(83) Tangent of Curve:	T
(84) Tangent:	Tan
(85) Tack:	Tk
(86) Traverse:	Tra
(87) Track:	Trk
(88) US Bureau of Standards:	USBS
(89) Vertical:	Vert

- | | |
|-------------------|----|
| (90) West: | W |
| (91) Wood: | Wd |
| (92) Symbols: | |
| (a) Degree: | ° |
| (b) Minute: | ' |
| (c) Second: | " |
| (d) Foot or Feet: | ' |

B. The following are acceptable abbreviations for metric measures:

- | | |
|-------------------|----------------|
| (1) Area: | A |
| (2) Centimeter: | CM. |
| (3) Decimeter: | DM. |
| (4) Hectare: | HA. |
| (5) Kilometer: | KM. |
| (6) Meter: | M |
| (7) Millimeter: | MM. |
| (8) Square Meter: | M ² |

C. Definitions: The following definitions and terminology shall be used in land descriptions:

- (1) **Boundary Line:** Any line bounding an area or dividing separate properties; adequately dimensioned and described. Such lines may be straight, irregular, circular, or spiral.
- (2) **Beginning:** A well defined, readily located, and permanent point or monument that is the starting point for a metes and bounds description; and also is the final point of such description.
- (3) **Convey:** The act of transferring title or rights to a property.
- (4) **Grantor:** A person or party conveying property or rights to a grantee.
- (5) **Grantee:** A person or party receiving title or rights to property.
- (6) **Title:** A written claim or right which constitutes a just and legal cause of exclusive possession.
- (7) **Metes and Bounds Description:** A description in which the boundary lines start from a given point are described by listing the direction, distance, and description of corners of the lines forming this boundary; in succession and adjoining owners.
- (8) **Description by Lot Number:** A description which identifies a lot or tract of land by reference to a recorded plat and by book and page number together with other pertinent information.
- (9) **Recorded:** Placed on record in the office of the Clerk of Court or Register of Mesne Conveyance for the county in which all or part of the land lies.
- (10) **Coordinate Description:** A description of lands in which the angle points or other points in the boundary are each referred to by grid coordinates on the South Carolina or similar coordinate system.
- (11) **Grid Coordinates:** Distances measured at right angles to each other in a rectangular system having two base lines at right angles to each other.
- (12) **Survey:** The orderly process of determining data relating to the physical characteristics of the earth, which may be further defined according to the type of data obtained, the methods and instruments used, and the purpose(s) to be served.

- (13) **Boundary Survey:** A survey, the primary purpose of which may include, but is not limited to, the determining of the perimeters of a parcel or tract of land by establishing or reestablishing corners, monuments, and boundary lines for the purpose of describing, or platting or dividing the parcel.
- (14) **Closing/Loan or Mortgage Survey:** A boundary survey of a parcel or lot which includes all improvements obvious and apparent found on the property, to be used in the preparation of a mortgage, loan or deed document.
- (15) **Topographical Survey:** A survey of the natural and selected man-made features of a part of the earth's surface by remote sensing and/or ground measurements to determine horizontal and vertical spatial relations.
- (16) **Compiled Map:** A map drawn from previously recorded documents, photographic material or tax maps which represent the general configuration of the parcel where partial or no actual surveying has been performed by the land surveyor preparing the map.
- (17) **"Site" Survey:** A survey performed to obtain horizontal and/or vertical dimensional data so that the constructed facility may be located and delineated.
- (18) **Geodetic Survey:** A survey of areas and points affected by and taking into account the curvature of the earth and astronomic observations.
- (19) **Hydrographic Survey:** A survey having for its principal purpose the determination of data relating to bodies of water, and which may consist of the determination of one or several of the following classes of data; depth of water and configuration of bottom; directions and force of current; heights and times and water stages; and location of fixed objects for survey and navigation purposes.
- (20) **Corner:** A point on a land boundary.
- (21) **Monument:** A shaft of ferrous metal, concrete, stone or concrete and metal; placed to designate a fixed point; placed near vertically in the earth; designed for maximum permanency, placed by a land surveyor to mark corners.
- (22) **Witness Monument:** Any monument that does not occupy the same defined position as the corner itself, but whose relationship to the corner is established.
- (23) **Reference Point:** Any defined position that is or can be established in relation to another defined position.
- (24) **Benchmark:** A relatively permanent material object, natural or artificial, bearing a marked point whose elevation above or below an adopted datum is known.
- (25) **Plat:** A diagram drawn to scale showing all essential data pertaining to the boundaries and subdivisions of a tract of land, as determined by survey.
- (26) **Map:** A representation on a plane surface, at an established scale, of the physical features of a part or the whole of the earth's surface, by the use of signs and symbols.
- (27) **Map of Survey, Plat of Survey, or other Similar Titles:** Any drawing of a parcel or tract of real property used for the purpose of depicting the results of a field survey. Each survey drawing shall state the type of survey it depicts as defined in this manual.

§ 49-440. Classification of Surveys.

A. The accuracy of the measurements for a survey shall be based upon the character of the land, the type of survey and the current use of the land. Unadjusted Ratio of Precision permissible shall be no less than the errors of closure prescribed below.

B. On the basis of the size and character of the land, boundary surveys for conveying, mapping, or describing property shall be classified as follows:

(1)(Class A) **Urban Land Surveys:** Urban surveys include land properties which lie within or adjoin city or town limits, or other high valued properties. These lands usually justify higher surveying accuracy. Bearings shall be shown in degrees, minutes and seconds and distances shall be shown to hundredths of a foot.

(2)(Class B) **Suburban Land Surveys:** Suburban surveys include properties surrounding the urban area of a town or city. The land represented by these surveys is often valuable, but more important it is land whose value is by definition rapidly increasing. Bearings shall be shown in degrees, minutes and seconds and distances shall be shown to hundredths of a foot.

(3)(Class C) **Rural Land Surveys:** Rural surveys include properties located outside suburban properties. Bearings shall be shown in degrees and minutes or less and distances shall be shown to hundredths of a foot.

(4)(Class D) **Farm and Timber Land Surveys:** Timber surveys include properties located throughout the State and represent land which may be cultivated; may provide space for farm houses and buildings; or may be employed as timber land. Bearings shall be shown in degrees and minutes or less and distances to the nearest tenth of a foot or less.

(5)(Class E) **Vertical Control Surveys:** Surveys involving vertical control (leveling) for land areas where a common datum is necessary shall be classified on the basis of accuracy.

(a) Urban Control: Control loops employed for commercial, industrial, or urban land surveys shall be executed with a precision or error of closure not to exceed in feet 0.04 times the square root of the number of miles of the level circuit.

(b) Other: Other leveling surveys shall be conducted with a precision or error of closure not to exceed in feet 0.10 times the square root of the number of miles of the level circuit.

C. Table of Classifications:

<u>Classification</u>	A Urban Surveys	B Suburban Surveys	C Rural Surveys	D Farm & Timber Surveys Unadjusted
Closure (Minimum)	1:10000	1:7500	1:5000	1:3000
Angular Closure (Maximum)	$15''\sqrt{N}$	$20''\sqrt{N}$	$30''\sqrt{N}$	$50''\sqrt{N}$
Location of Improvements, Structures, Paving, Etc.: (Tie Measurement)	$\pm 0.1'$	$\pm 0.2'$	$\pm 1.0'$	$\pm 2.0'$

N = Number of Points in Traverse

§ 49-450. Plats and Platting.

A. A plat, as defined by this manual, is an accurate graphical representation, neatly lettered and properly dimensioned, report of a survey made by a Registered Land Surveyor of a finite piece of land property, including pertinent data and appropriate information.

B. A land survey requiring a plat should be accurately presented and should reveal all of the pertinent information developed by the survey. The plat is a valuable asset to a client and/or land owner in developing property; in locating buildings and improvements; for subdividing; and in transferring or selling property.

§ 49-460. Survey Types and Requirements.

A. **General Property Surveys:** The following general requirements apply to all survey types included in this manual.

(1) The size of the plat should conform with the requirements of the Clerk of Court or the Register of Mesne Conveyance of the county in which the plat is to be recorded with minimum size to be eight and one-half inches by eleven inches. Due to the reduction of plats, in almost all county offices, care should be given to selection of pen size and character size, so data will be legible.

(2) A plat shall be a print or tracing, sealed with the land surveyor's impression seal, and signed by the Registered Land Surveyor.

(3) All survey plats shall have a title and contain the following information:

- (a) The embossed seal and the signature of the Registered Land Surveyor responsible for the full conduct of the survey;
- (b) A location map and/or adequate descriptive location of the property surveyed;
- (c) The state, county and/or city in which the property is located;
- (d) The name of the owner, company or agent of the property who requested the survey document;
- (e) The date the survey was completed;
- (f) A graphic scale;
- (g) A numerical scale;
- (h) The name, registration number and address of the land surveyor.
- (i) A certification executed by the Registered Land Surveyor which will contain a statement of the class of the survey performed as follows:

"I hereby state that to the best of my knowledge, information, and belief, the survey shown hereon was made in accordance with the requirements of the Minimum Standards Manual for the Practice of Land Surveying in South Carolina, and meets or exceeds the requirements for a Class ____ survey as specified therein."

- (j) The area of the parcel of tract surveyed will be shown consistent with the class of survey or at least to the nearest one-hundredth (0.01) of an acre.
- (k) At least one corner of the property surveyed shall be referenced so as to form a tie-line which can be used to help establish or verify the correct location of the property.
- (l) The distances to the nearest intersections of a street or right-of-way shall be shown on the survey document.
- (m) The North arrow shall be shown and shall be accurately correlated with the courses so that it is accurately positioned and designated as astronomic, grid or magnetic, with date if different from date of plat.
- (n) All property lines shall be defined by bearings and horizontal distances and plotted to scale indicated on the plat.
- (o) Bearings and distances shall be shown consistent with the class of the survey.

- (p) The Registered Land Surveyor shall retrace the boundaries of the property he is surveying and set or reset monuments or corners consistent with the class of survey and accepted practices of boundary retracement. All monuments found or placed must be described on the survey drawing with data given to show their location upon the ground in relation to the boundary lines. When a property corner cannot be set, a witness monument shall be placed and so noted on the survey document.
- (q) All new or re-established corners shall be:
 - 1. Metal, concrete, or other durable material and detectable with conventional instruments for finding ferrous or magnetic objects;
 - 2. No less than 1/2 inch in diameter for metal corners and 4 inches in diameter for concrete;
 - 3. No less than 24 inches in length;
 - 4. In place prior to the signing, sealing and issuance of the plat.
- (r) Where a boundary is formed by a curved line, the curve will be defined by curve data to include the radius, delta arc length and the long chord, by course and distance. The curve may also be defined as a traverse of chords around curve. Chord shall be defined by course and distance.
- (s) All known or discovered encroachments or projections onto or from adjoining property or abutting streets must be indicated with the extent of such encroachment or projections, if required, shown or noted on the survey document.
- (t) Visible easements and rights-of-way on the site, obvious and apparent or known to the surveyor, shall be shown and shall include their widths, if known.
- (u) Cemeteries and burial ground located within the premises surveyed shall be located and shown upon the drawing if obvious and apparent, or if knowledge of their existence and location is furnished to the land surveyor.
- (v) Lot and block numbers and/or the full names of adjoining land owners, and the names and/or numbers of principal highways, roads, streets or railroads, shall be shown on the plat, with their rights-of-way. The plat book and page number of the subdivision as recorded by the Register of Mesne Conveyance or Clerk of Court of the county where the survey document is recorded should be included.
 - 1. Visible easements and rights-of-way which cross or form a boundary of property being surveyed, or other pertinent details of the site which are obvious, apparent, or known to the surveyor, shall be plotted to the scale as shown in the title block and defined by name and width, if known.
 - 2. Control corners, monuments or property corners, on adjoining properties, used in the establishment or verification of property corners, shall be identified, located and defined, by course and distance, to an accuracy, consistent with the class of survey.
- (w) Boundaries formed by water courses shall be located and plotted to scale as shown in the title.
- (x) If calculated lines are not shown, traverse lines and/or off-set lines used to close water course boundaries shall be shown, plotted to scale, and defined by course and distance. Note 'Creek the line' where applicable.
- (y) Maps prepared partially or entirely from reference or source data, such as compiled maps, do not represent land surveys as defined herein, and shall not be sealed or signed. Compiled maps shall be clearly marked as such. Only plats reporting a complete ground survey of a property shall be sealed or signed as land surveys.
- (z) Compiled maps must have a prominently displayed statement that the said document does not represent a land survey and is unsuitable for deeding of property or recordation.

B. Closing/Loan or Mortgage Surveys: In addition to the requirements set forth in Section 49-460 A., General Property Surveys, the following applies to closing/loan or mortgage surveys:

- (1) If a survey is all or a portion of a lot which is part of or adjoining a recorded subdivision, lot and block numbers or other designations including those of adjoining lots must be shown on the drawing.
- (2) Structures shall be dimensioned to show size and location in relation to the boundary.
- (3) Location distances are to be measured perpendicular from the closest side and front lines.
- (4) Types of construction may be noted.
- (5) Physical features obvious and apparent to the surveyor such as storm drains, power lines, etc. on the subject property shall be shown and plotted to scale.
- (6) Accuracy requirements of residential lots shall be consistent with the class of survey or a maximum closure of 0.05 foot, whichever is less restrictive.
- (7) A certification shall be executed by the Registered Land Surveyor which will contain a statement of the class of survey performed as follows:

"I hereby state that to the best of my knowledge, information, and belief, the survey shown herein was made in accordance with the requirements of the Minimum Standards Manual for the Practice of Land Surveying in South Carolina, and meets or exceeds the requirements for a Class _____ survey as specified therein; also there are no visible encroachments or projections other than shown."

C. Topographical Surveys: The following applies to topographical surveys:

- (1) Structures shall be shown in relation to the boundary.
- (2) Physical features obvious and apparent to the land surveyor such as storm drains, sanitary sewers, power lines, gas lines and water lines on the subject property shall be shown and plotted to scale.
- (3) Elevations may be shown as spot elevations and/or contours.
- (4) Contour intervals shall be noted.
- (5) The vertical and horizontal error of contour lines and physical features shown shall not exceed one-half the contour interval.
- (6) An on-site temporary bench mark shall be established with reference to datum, preferably NGVD and plotted to scale as shown on the title.
- (7) The following items from Section 49-460 A. (3) shall be used when a general property survey is not made in conjunction with the topographic survey:
a through h, l through n, r through v-l, w and x.

D. "Site" Surveys: In addition to all of the requirements set forth in Section 49-460 A., General Property Surveys, the following applies to "Site" surveys:

- (1) If a survey is all, or a portion of a lot which is part of or adjoining a recorded subdivision, the lot and block numbers or other designations including those of adjoining lots must be shown on the drawing.
- (2) Structures shall be dimensioned to show size and location in relation to the boundary.
- (3) Location distances are to be measured perpendicular from the closest side line and front line.
- (4) Type of construction may be noted.
- (5) Physical features obvious and apparent to the land surveyor shall be shown and plotted to scale.
- (6) A certification shall be executed by the Registered Land Surveyor which will contain a statement of the class of survey performed as follows:

"I hereby state that to the best of my knowledge, information, and belief, the survey shown herein was made in accordance with the requirements of the Minimum Standards Manual for the Practice of Land Surveying in South Carolina, and meets or exceeds the requirements for a Class _____ survey as specified therein; also there are no visible encroachments or projections other than shown."

E. Subdivision Surveys: In addition to the requirements set forth above in Section 49-460 A., General Property Surveys, the following applies to subdivision surveys: A subdivision for the purpose of this manual shall be defined as any partitioning of land that divides one parcel or tract into two or more parcels or tracts. Surveys of parcels described by metes and bounds within a tract of land shall show the relationship of those parcels to at least two established identifiable real property corners by bearings and distances consistent with the class of survey. For subdivision survey plats which do not reflect bounds of the previous parcel, a statement shall be provided to clearly indicate that a subdivision or resubdivision of property has occurred.

§ 49-470. Methods of Marking Property Boundaries.

A. Corner Tree: "X" and three(3) chops on the sides where the line enters and leaves the tree.

B. Corner Witness Tree: One(1) blaze and three(3) chops or three(3) chops facing the corner.

C. Side Line Tree: Two(2) chops facing the property line.

D. Property Line Tree or Center Line Tree: One(1) blaze and two(2) chops, at points where the line enters and leaves the tree.

E. Inaccessible Point: In the event a corner cannot be marked or monumented, one or more witness monuments or metal stakes shall be placed on the boundary line and described by bearings and/or distances so that the inaccessible point may be located accurately on the ground.

F. Boundary Monument or Witness Monument: It is recommended that every new boundary monument or witness monument be identified with a durable marker or cap bearing the name of the surveying company or the land surveyor in responsible charge of the survey. In the event the location falls on pavement, concrete, or other material where it cannot be marked with a cap, it is permissible to use spikes or scribes in or on the surface.

§ 49-480. Land Descriptions.

A. Land Description: A land description is the detailed statement of appropriate information necessary to locate, relocate, or define the boundaries of a certain area or tract of land.

(1) A land description can be part of a land survey and can be used in connection with the preparation of deeds or similar documents.

(2) It is the land surveyor's responsibility to make certain that the land surveyor's description is complete and proper. The fact that some element or object which should be described is not included in the above does not justify the land surveyor's omitting it from his description.

B. Preparing a Description: In a land survey the land description may be prepared by the land surveyor. The writing of a deed is the practice of Law and is not the practice of land surveying. In a description the full name, address and signature of the land surveyor, his registration number and seal, the date the land description was prepared, and the date of survey from which the information was procured, or the book and page number of the recorded map or deed, if it is used in preparing the description, shall appear as part of the document. A typical land description which represents acceptable practice under the minimum standards set forth in this manual is included in Appendix (E).

C. Types of Land Descriptions and Their Content: In describing a lot located in a subdivision by number; the plat or map must be referenced with the name of the subdivision, the land surveyor's name, the date, the township and the general location of the property. In addition, the book and page number in which the particular lot is recorded shall be included.

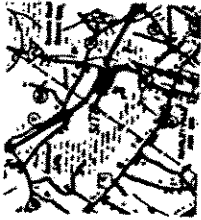
D. Metes and Bounds Description: A metes and bounds description shall include the general location of the tract or lot with sufficient accuracy such that the tract can be readily located on the ground. This is commonly known as a "being clause" and it should also include the source of title of the tract or lot. The point of beginning must be selected such that it can be readily and accurately located from some previously established monument or corner of record and can be readily described. The description shall include the names of adjoining property owners on all lines and at all points. The monument or marker at each corner shall be described. A metes and bounds description shall describe all courses in logical sequence around a tract or lot in a clockwise direction such that the ending point is the beginning point. All lines adjacent to streets, roads, or other rights-of-way shall be referenced to these and all pertinent distances and curve data shall be listed in addition to the parcel's area.

§ 49-490. Instruments and Apparatus.

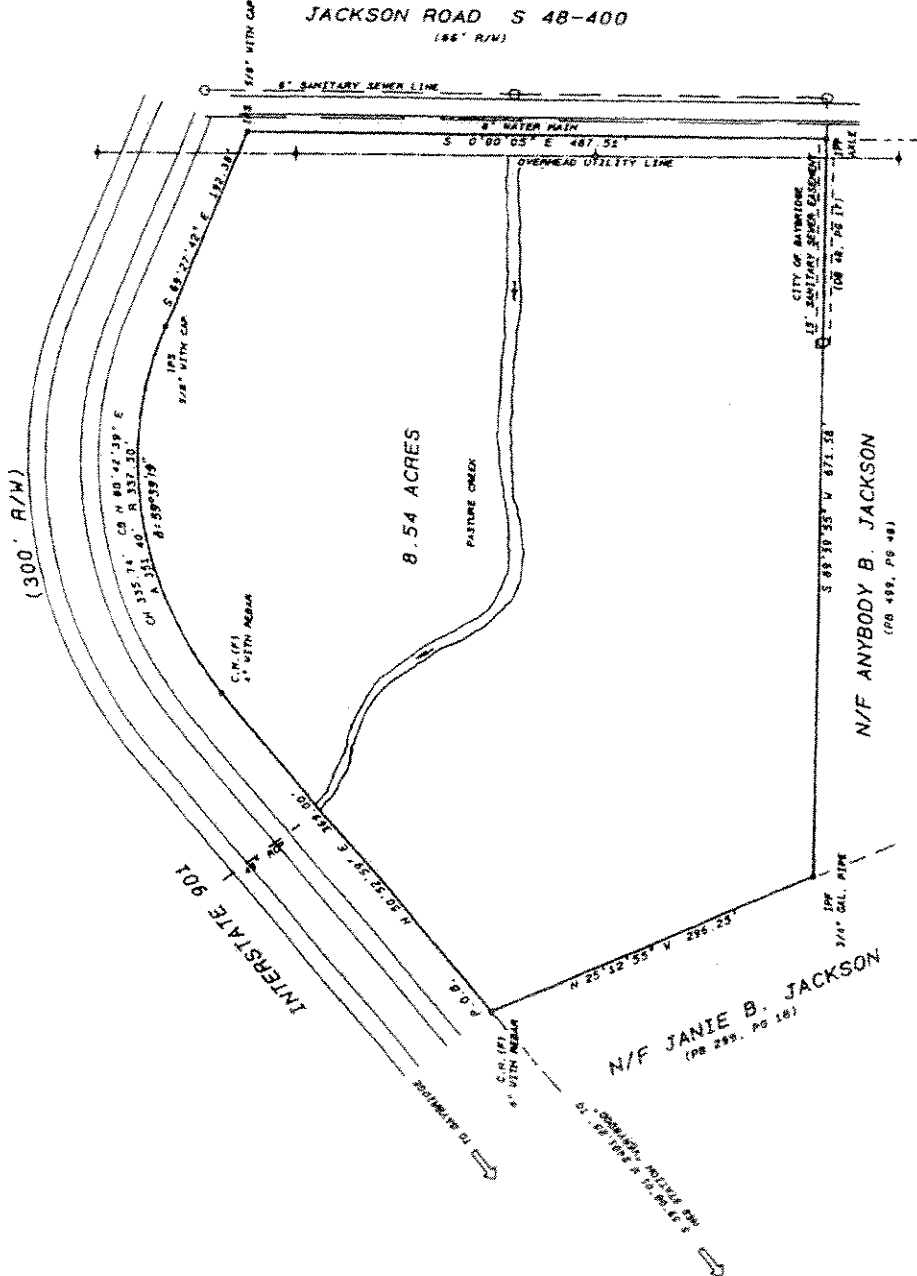
A. Surveyor's Instruments: Land surveying in South Carolina shall be conducted in the field with a properly adjusted instrument appropriate to the tolerance of work being performed. The instrument shall be tested at regular intervals and adjusted to maintain its optimum accuracy.

B. Tapes: All tapes shall be of alloy or carbon steel and shall be certified as USBS quality with a known coefficient of temperature and tension corrections, and graduated in feet and decimal parts of a foot or calibrated to another tape or means that has been certified by the USBS or NGS.

C. Baselines: Baselines have been established by NGS throughout the state for the purpose of calibrating electronic distance measuring devices. Some of these baselines have 100' monuments to calibrate tapes. Registered land surveyors shall utilize these baselines to insure calibration of their electronic measuring equipment and tapes. Calibration records for each instrument and tapes shall be maintained by the Registered Land Surveyor and shall be made available when required by the Board or the courts.



LOCATION MAP



David S. Sutor
ANYBODY SURVEYOR, PLS 0000

BOUNDARY SURVEY FOR ANYBODY B. JACKSON JACKSON COUNTY, SOUTH CAROLINA

SCALE: 1" = 100'
NOVEMBER 1, 1990
THE SAME BEING SHOWN AS 8.54 ACRES ON A PLAT FOR ANYBODY B. JACKSON, DATED OCTOBER 1, 1989, BY ALL SURVEYORS & ASSOCIATES, AND RECORDED IN THE REC. OFFICE FOR JACKSON COUNTY IN PLAT BOOK 1889, BY THE STATE OF SOUTH CAROLINA, HEREBY STATE TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, THE SURVEY SHOWN HEREON WAS MADE IN ACCORDANCE WITH THE REQUIREMENTS OF THE MINIMUM STANDARDS MANUAL FOR THE PRACTICE OF LAND SURVEYING IN SOUTH CAROLINA, AND THAT I HAVE COMPLIED WITH THE REQUIREMENTS FOR A CLASS B SURVEY AS SPECIFIED THEREIN. ALSO THERE ARE NO ENCUMBRANCES OR INTERESTS OF ANY KIND AFFECTING THE PROPERTY OTHER THAN THOSE SHOWN. ALSO I HAVE CONSULTED THE FEDERAL INSURANCE MAPS AND INFORMATION FLOOD HAZARD MAP #20129 2223 B, EFFECTIVE DATE JUNE 15, 1981, AND FOUND THE SUBJECT PROPERTY TO BE IN A FLOOD ZONE.

ALL SURVEYORS & ASSOCIATES
5146 JACKSON RD. - PO BOX 0000 - ANYWHERE, SC - 29000 - (803) 333-3333

N/F JANIE B. JACKSON
(PB 299, PG 18)

N/F ANYBODY B. JACKSON
(PB 499, PG 48)

6



SCALE: 1" = 30'

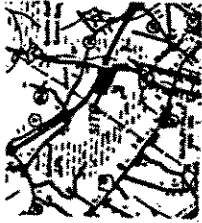
OCTOBER 29, 1990

I HEREBY STATE TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF THE SURVEY SHOWN HEREON WAS MADE IN ACCORDANCE WITH THE REQUIREMENTS OF THE MINIMUM STANDARDS MANUAL FOR THE PRACTICE OF LAND SURVEYING IN SOUTH CAROLINA, AND MEETS OR EXCEEDS THE REQUIREMENTS FOR A CLASS B SURVEY AS SPECIFIED THEREIN, ALSO THERE ARE NO ENCROACHMENTS, PROJECTIONS, OR SETBACKS AFFECTING THE PROPERTY OTHER THAN THOSE SHOWN.

ALL SURVEYORS & ASSOCIATES

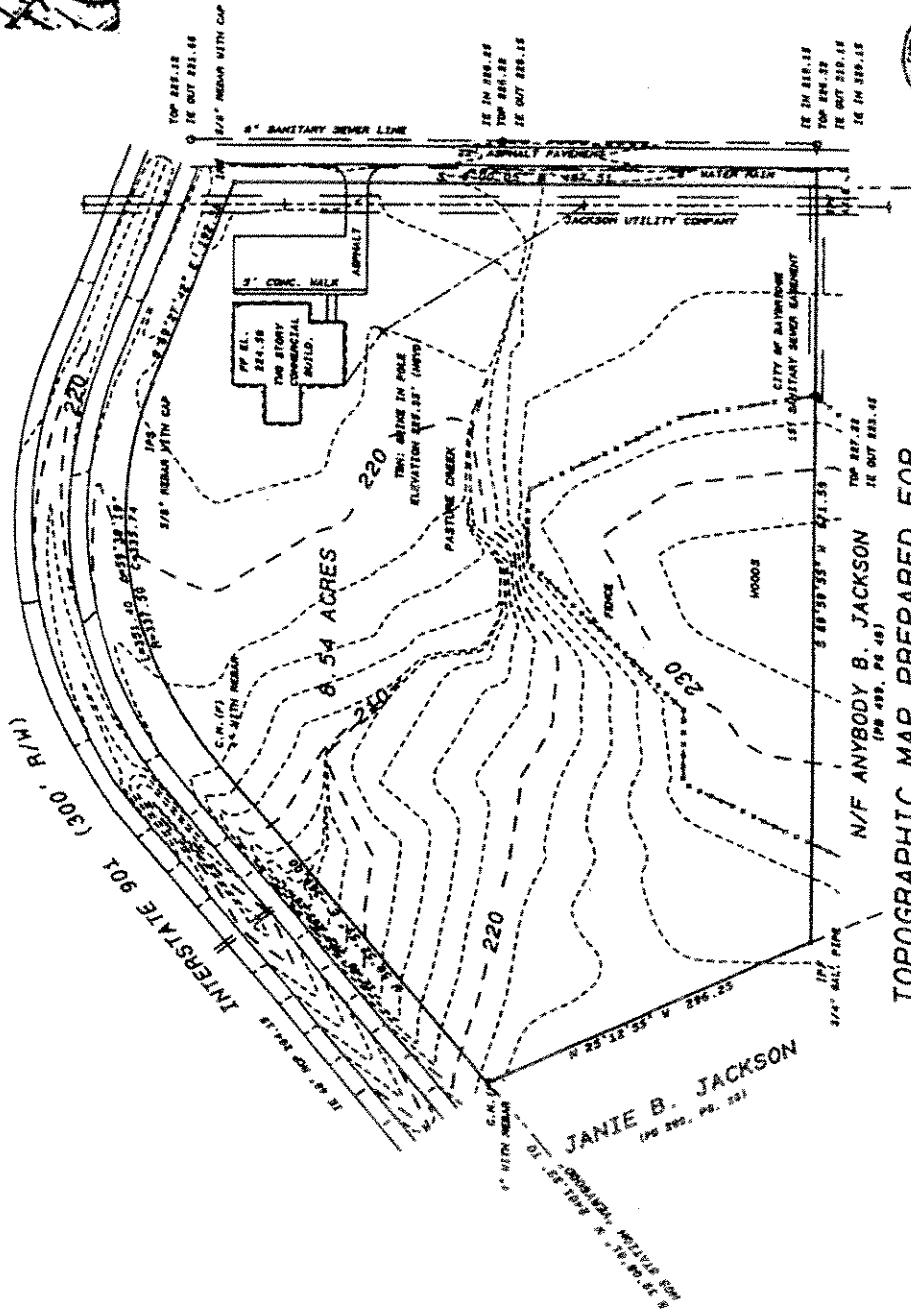
5146 JACKSON RD. - PO BOX 0000 - ANYWHERE, SC - 29000 - (803) 333-3333

Appendix C - Revised: 1/10/92



LOCATION MAP

JACKSON ROAD S 48-400
(164' R/W)



S. C. S. B. E. & L. S. CORP.
TOPOGRAPHIC MAP PREPARED FOR
JACKSON COUNTY, SOUTH CAROLINA

SCALE: 1" = 100' CONTOUR INTERVAL: 2'

REFERENCE: PLAT FOR ANYBODY B. JACKSON, DATED OCTOBER 1, 1989, BY ALL SURVEYORS & ASSOCIATES, AND RECORDED IN THE REC OFFICE OF JACKSON COUNTY IN PLAT BOOK 499 AT PAGE 118.

ALL SURVEYORS & ASSOCIATES

5148 JACKSON RD. - PO BOX 0000 - ANYWHERE, SC - 29000 - (803) 333-3333

Anygood Surveyor
ANYGOOD SURVEYOR, PLS 0000

ELEVATIONS ARE BASED ON NBS MONUMENT "VERYWOOD" WITH AN ELEVATION OF 335.82' (NAD83) AT THE NORTHWEST QUADRANT OF THE INTERSECTION OF I-901 AND JACKSON ROAD.

LOCATION MAP

ST. MARY, MD.

(300' R/W)

8.54 ACRES

PASTURE GREEN

N/F ANYBODY B. JACKSON

(1984, 1985, 1986)

SITE SURVEY FOR

S. C. S. B. E. & L S. CORP.

JACKSON COUNTY, SOUTH CAROLINA

SCALE: 1" = 100'

[illegible]

ALL SURVEYORS & ASSOCIATES

5146 JACKSON RD. - PO BOX 0800 - ANYWHERE, SC - 29000 - (803) 333-3333



7635

ANYGOOD SURVEYOR, PLS 0000

NOVEMBER 1, 1990

PROPERTY DESCRIPTION

ALL THAT CERTAIN PIECE, PARCEL OR LOT OF LAND, LYING AND BEING IN JACKSON COUNTY, STATE OF SOUTH CAROLINA, BEING LOCATED AT THE SOUTHWEST CORNER OF THE INTERSECTION OF INTERSTATE 901 AND JACKSON ROAD (S-48-400) AND BEING MORE FULLY SHOWN AND DESIGNATED ON A BOUNDARY SURVEY FOR ANYBODY B. JACKSON, BY ALL SURVEYORS & ASSOCIATES, DATED NOVEMBER 1, 1990, AND RECORDED IN THE RMC OFFICE FOR JACKSON COUNTY IN PLAT BOOK , AT PAGE , AND HAVING THE FOLLOWING METES AND BOUNDS, TO WIT:

BEGINNING AT A CONCRETE MONUMENT ON THE SOUTHERN R/W OF INTERSTATE 901 AND NOTED AS P.D.B., LOCATED $N39^{\circ}08'01"E$ 2401.25' FROM NGS STATION "VERYGOOD", AND RUNNING IN AN EASTERLY DIRECTION ALONG THE SOUTHERN R/W OF INTERSTATE 901 $N50^{\circ}52'01"E$ FOR A DISTANCE OF 369.00' TO A CONCRETE MONUMENT, THENCE CONTINUING ALONG THE R/W IN AN EASTERLY DIRECTION AROUND A CURVE WITH AN ARC DISTANCE OF 351.40', HAVING A RADIUS OF 337.50' AND A CHORD OF $N80^{\circ}42'39"E$ 335.74' TO AN IRON PIN, THENCE TURNING AND CONTINUING ALONG THE R/W $S69^{\circ}27'42"E$ FOR A DISTANCE OF 192.38' TO AN IRON PIN AT THE WEASTERN R/W OF JACKSON ROAD, THENCE TURNING AND RUNNING ALONG SAID R/W OF JACKSON ROAD $S0^{\circ}00'05"E$ FOR A DISTANCE OF 487.51' TO AN AXLE AT THE PROPERTY OF N/F ANYBODY B. JACKSON, THENCE TURNING AND RUNNING ALONG THE PROPERTY OF N/F ANYBODY B. JACKSON $S89^{\circ}59'55"W$ FOR A DISTANCE OF 671.58' TO AN IRON PIN AT THE PROPERTY OF N/F JANIE B. JACKSON, THEN TURNING AND RUNNING ALONG THE PROPERTY OF N/F JANIE B. JACKSON $N25^{\circ}12'55"W$ FOR A DISTANCE OF 296.25' TO THE POINT OF BEGINNING AND CONTAINING 8.54 ACRES.

SAID PROPERTY AS DESCRIBED IS SUBJECT TO A 15' CITY OF BAYBRIDGE SANITARY SEWER EASEMENT CENTERED ON THE SOUTHERN MOST PROPERTY LINE. SAID EASEMENT COMMENCES AT THE SOUTHEAST CORNER AND RUNS ALONG SAID PROPERTY LINE FOR APPROXIMATELY 185' TO AN EXISTING MANHOLE.

ALL SURVEYORS & ASSOCIATES
5146 JACKSON ROAD
P.O. BOX 0000
ANYWHERE, S.C. 29000
Anygood Surveyor
ANYGOOD SURVEYOR, PLS #0000



SEAL