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SEC. 8.01 SURVEY MONUMENTS

Survey monuments shall be set in accordance with the following.

(1) MATERIALS AND WORKMANSHIP

- (a) Materials and workmanship shall conform to the requirements of the California Land Surveyors' Act and local standards and regulations. Section and quarter section corners shall be not less than 2" inside diameter galvanized iron pipe 30" long. The pipe is to be capped and marked in accordance with the instructions in Chapter IV of the 1973 Manual of Instructions prepared by the Bureau of Land Management. Section or quarter corners that are being set in asphalt surfaced county maintained roads shall be placed in a monument box. (Ref.: Plate 64 and 65 LDM)
- (b) Property corner and right-of-way monuments shall be galvanized iron pipes having an inside diameter of not less than 3/4" or 5/8" diameter reinforcing bars, either of which shall have a minimum length of 18". While railroad spikes may be used for centerline monuments in asphalt or chip seal surfaced private roads the use of copperweld monuments or equivalent is encouraged. When improvements are constructed with the back of sidewalk or curb near to or contiguous with the right-of-way line, a mark may be chiseled in the back of walk or top of curb on the extension of the side lot line produced to said back of walk/curb. In all cases, monuments shall be of sufficient length to ensure stability. (Ref.: Plate 66 LDM).
- (c) Monuments shall be driven vertically with their tops remaining 2" to 4" above the ground except within roadways where they shall be driven 1/2" below the traveled surface or recessed within monument boxes. In cultivated areas they shall be set at a proper depth for their protection. (Ref.: Plate 66 LDM)
- (d) Wooden stakes identifying the corner will be placed adjacent to the monument where practical. All set monuments shall be permanently marked with the Surveyor/Engineer's registration number.
- (e) Found monuments which are used to establish lines of the property being surveyed shall be rehabilitated to County standards when found in a perishable condition.

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SEC. 8.01(1) (Continued)

(f) When required, monument boxes shall be comparable to the "G5" monument box manufactured by Christy Concrete Products, fitted with a lid marked "Monument". All monument boxes must be capable of having a grade ring attached to accommodate pavement overlays.

(2) MONUMENTING PROPERTY LINES

(a) Monument the entire exterior boundary of the property and the corners of the lot or parcels being created. The maximum distance between monuments shall be 1000 feet. (For exceptions see Monumentation of Roads, Monumenting Easements, and Exceptions to Monumentation listed below).

(3) TIES TO EXISTING MONUMENTS

(a) Find and show on the map of the survey (with ties) all existing monuments in the immediate area which either have or might have a significant bearing on the confirmation or establishment of the lines of the property being surveyed. Identify on the map the monuments used for the basis of the bearings for the survey.

(4) MONUMENTATION OF ROADS (Public & Private)

(a) PARCEL MAPS

- 1. <u>Public Highway</u> Monument the right-of-way line of all fronting public highways at all angle points, beginning and end of curves and property line intersections with the right-of-way line. Monuments set to mark the intersection point of street centerlines or sectionalized land corners in asphalt surfaced County Service Area or County Maintained Roads will be placed in a monument box. (See 1.F.) (Ref.: Plate 65 LDM)
- 2. <u>Private Roads (Paved or Chip Sealed)</u> Monument either the centerline or both right-of-way lines at all angle points, beginning and end of curves and property line intersections with the centerline or right-of-way line.
- 3. Private Roads (Neither Paved Nor Chip Sealed) Monument one right-of-way line at all angle points, beginning and end of curves and property line intersections with the right-of-way line. Right-of-way monumentation may be provided in lieu of centerline monumentation when the centerline of this type road is also a parcel boundary.

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SEC. 8.01(4) (Continued)

(b) MAJOR SUBDIVISIONS

Public & Private Roads - Monument the right-of-way line of all existing public highways fronting the subdivision Monument the centerline of all new or existing public or private streets passing through the subdivision at all angle points, beginning and ending of curves and at the intersection point of street centerlines (new or existing). All intersections of centerlines shall be monumented with a monument set inside a monument box (See 1.F.). Monument the right-of-way line at property line intersection points. When improvements are constructed with the back of curb or walk near to or contiguous with the right-of-way line a chiseled mark may be made in the back the walk or on the top of the curb on the extension of the side The centerline of off-site dedications shall be lot line produced. monumented to the above standard. An additional monument and monument box shall be set as directed by the County Surveyor within sight distance of another monument box to provide for facile retracement of the centerline. (Note: It is recommended that all centerline points be monumented with a monument set inside a monument box.) (Ref.: Plate 65 LDM)

(5) MONUMENTING EASEMENTS (Existing and Proposed)

- (a) Monument easement lines rather than the property lines in situations where the easement is adjacent and within the property and it would not be appropriate or practical to set the monument on the property line because of flowing water, erosion, proposed construction, etc.
- (b) Monument the proposed property lines in situations where land is to be purchased or dedicated in fee for public use.
- (c) Monuments on easement lines other than those described in 1 and 2 above are not required unless they are needed to determine the setbacks for buildings or other permanent improvements.

(6) EXCEPTIONS TO MONUMENTATION POLICY

(a) Monuments are not required if they pertain only to a non-surveyed 5 acre, or larger, single remainder of a divided parcel conforming to the requirements of Section 66445(d)(2) of the Subdivision Map Act.

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SEC. 8.01(6) (Continued)

- (b) Monuments are not required if they would be in a State highway and the setting of the monuments would be contrary to State regulations.
- (c) Monuments are not required if they are not practical to set at their precise locations because of a fixed permanent improvement, such as a building or concrete sidewalk. In these situations, the intended location shall be appropriately marked by a chiseled cross or other distinctive and permanent engraving. Reference monuments may be set if required by field conditions. Show in appropriate manner on the map of the survey.
- (d) Monuments are not required if they are not practical to set at their precise location because of a substantial natural obstacle, such as a watercourse, tree or unstable bank. In these situations, an offset monument shall be provided at a suitable distance, such as the top of the bank of a watercourse. Reference monuments to inaccessible property corners shall be placed at a maximum 500 foot intervals along the property line and as close as is practical to the actual corner. Show in appropriate manner on the map of the survey.

NOTE: These guidelines are intended to present minimum monumentation standards. Surveyor/Engineer judgment should be exercised to determine the monuments and methods that will provide the most durable property corner monument. If the surveyor finds that the monumentation work specified in this policy is not possible or practical, and is not covered by the exceptions as described above, the surveyor should request an exemption and submit the justification with the initial map check prints.