

## SECTION 2

### GENERAL REQUIREMENTS

- 2-1 PLANS BY AN APPROPRIATE ENGINEER - All plans and specifications for improvements, private and public, which are to be accepted for maintenance by the County and private, on-site drainage and grading shall be prepared by a Professional Engineer of the appropriate branch of engineering covering the work submitted.
- 2-2 APPROVED PLANS - Complete plans and specifications for all proposed streets, bikeways, grading, drainage facilities, sewerage, street lighting, water distribution systems, industrial developments, commercial developments, and subdivisions, including any necessary dedications, easements, and rights of entry, shall be submitted to the Department of Public Works for approval. The approval shall be substantiated by the signature of the Director prior to the beginning of construction of any such improvements. The Director will order any Contractor to cease work on any project if said Contractor does not have properly approved plans in his possession.
- 2-3 REFERENCE TO STANDARD SPECIFICATIONS AND DESIGN STANDARDS - The General Notes and Special Provisions of all plans shall include the following note:
- All construction and materials shall be in accordance with the latest edition of the Caltrans Standard Specifications and Highway Design and Traffic Manuals and the County of Sutter Design Standards.
- 2-4 WORK IN COUNTY RIGHTS OF WAY, EASEMENTS AND WATERWAYS - The following shall govern all work done within County rights-of-way, easements, and waterways:
- A. Possession of a complete set of County-approved engineered plans and an encroachment permit will be required for a Contractor, duly licensed by the State of California, to perform work specified on the plans in County rights-of-way, easements and waterways. The Contractor shall be bonded as required by the Director.
  - B. In lieu of the plans required in "A" above, minor work within County rights-of-way, easements and waterways may be performed in accordance with the following:

1. Minor work within street rights-of-way and easements may be performed with an encroachment permit.
2. Minor work has a value of less than \$5,000 and generally consists of such items as widening or constructing sidewalks adjacent to existing roadside curb and gutter, constructing driveways in existing curb and gutter, constructing asphalt concrete driveways, installing driveway culverts and utility related work which requires cutting the road surface.
3. The encroachment permit shall be issued in accordance with Division 2, Chapter 5.5 of the Streets and Highways Code of the State of California.
4. Work within street rights-of-way and easements consisting of street light installations or street light installations and minor work as described in No. 1 above shall be performed with an encroachment plan.
5. Encroachment plans shall be in accordance with all of the requirements of these standards except that Section 2-1, "Plans by an Appropriate Engineer," may be waived for the preparation of the encroachment plans.

2-5 IMPROVEMENT PLAN SUBMITTAL - The initial submittal of improvement plans to the Department of Public Works shall consist of the following:

- A. A minimum of three sets of plans, complete and in accordance with these Design Standards and the Standard Specifications, along with any required specifications, computation, test data, preliminary construction cost estimate, and other material requested by the Director.
- B. Two copies of the watershed map and drainage calculations in accordance with Section 5.
- C. Two additional copies of the street lighting plan to be used for block numbering on street name signs.
- D. One copy of the final "Conditions of Approval" and applicable exhibits for all rezones, subdivision approvals, variances, use permits, and any other discretionary planning actions for the subject development.

- E. A portion of the plan check and inspection fee in accordance with Section 2-7.
- F. The name, address and telephone number of the developer.
- G. Utility letters in accordance with Section 2-16.
- H. Copies of permits as required by other agencies.

Should there be required alterations or revisions to the plans as submitted, the Director will return one copy with the corrections marked or indicated thereon. If the plans submitted are not prepared in accordance with these Design Standards and the Standard Specifications or not in keeping with the standards of the profession, the Director may return them unmarked and unapproved.

- 2-6 IMPROVEMENT PLAN RESUBMITTAL - Plans being resubmitted shall consist of three complete sets of plans and revised studies as necessary. Additional sets may be required by the Director.

Plans being resubmitted containing revisions or alterations other than those required by the Director on previously corrected plans shall require the Professional Engineer to bring those revisions or alterations to the attention of the Director on another set of plans and color highlighting the revisions or alterations.

- 2-7 PLAN CHECK AND INSPECTION FEE - When improvement plans are initially submitted to the Department of Public Works for checking, a portion of the total plan check and inspection fee for the development will be required as a deposit to initiate checking of the plans.

Should the development not be carried to completion, any portion of the required deposit over and above the accumulated costs expended by the Department on the development will be refunded to the developer.

The Department of Public Works shall be notified of any change of billing address.

Required plan check and inspection fee payments shall be as set by Resolution of the Board of Supervisors.

- 2-8 PLAN APPROVAL - No plans will be approved nor construction authorized until such time as the Director signifies his approval by his signature on the set of plans and not unless such changes, corrections or additions are resubmitted to

the Director for approval as previously prescribed for the original plans. At such time as the Professional Engineer preparing the plans has made the necessary revisions and paid the remainder of the total plan check and inspection fee, the Director will sign the mylars in the space provided, after the Professional Engineer and all other approval agencies have signed them. The Director's approval is valid for a period of twelve months from the date of the Director's signature. Should work not commence within the twelve month period, the plans shall be resubmitted for reapproval prior to commencing construction.

Final asphalt concrete, aggregate base, and aggregate subbase quantities and calculations shall be submitted for all subdivision developments prior to approval.

2-9 FINAL PLANS REQUIRED - The Professional Engineer shall deliver the following number of sets of prints from the approved tracings to the Director:

- A. Subdivisions - Eight complete sets of plans, three additional sets of the street light plans only, and one set of reproducible fixed line mylar plans.
- B. Other Developments - Nine complete sets of plans.
- C. Developments containing drainage pipeline systems shall submit a 1 inch = 100 foot scale map of these systems.

Additional copies of improvement plans may be requested by the Director at his discretion, and these shall be furnished to the County without cost.

Copies of the final utility letter required by Section 2-16 shall be included within the approved plans delivered to the Director.

2-10 IMPROVEMENT PLAN REVISIONS DURING CONSTRUCTION - Should changes become necessary during construction, the Professional Engineer shall first obtain the consent of the Director and shall then resubmit the title sheet and the plan sheets affected for approval. The changes on the plans shall be made in the following manner:

- A. The original proposal shall not be eradicated from the plans but shall be lined out.
- B. In the event that eradicating the original proposal is necessary to maintain clarity of the plans, approval must first be obtained from the Director.

- C. The changes shall be clearly shown on the plans with the changes and approval noted on a revision signature block.
- D. The changes shall be identified by the revision number in a triangle delineated on the plans adjacent to the change and on the revision signature block.

Minor changes, which do not affect the basic design or contract, may be made upon the authorization of the Director, but said changes must be shown on "record" plans when the contract is complete.

The Director may order changes in the plans in order to complete the necessary facilities. Changes in the plans ordered by the Director shall conform to all of the above.

- 2-11 RECORD (AS-BUILT) PLANS - The Professional Engineer shall keep an accurate record of all approved deviations from the plans and shall provide five copies of these records to the Director upon completion of the work. Before the Director will approve the subdivision improvements as complete, the Professional Engineer shall submit final mylar record plans to the Department.

Certification by the Professional Engineer of the finished pad elevations and geotech certification of compaction of subdivision lots shall also be required prior to the final approval of the subdivision improvements.

- 2-12 CONFLICTS, ERRORS AND OMISSIONS - Excepted from approval are any features of the plans that are contrary to, in conflict with, or do not conform to any California State Law, conditions of approval, or generally accepted good engineering practice, in keeping with the standards of the profession, even though such errors, omissions or conflicts may have been overlooked in the Department of Public Works' review of the plans.

- 2-13 CHANGE IN PROFESSIONAL ENGINEER - If the developer elects to have a registered civil engineer or licensed land surveyor other than the engineer who prepared the plans provide the construction staking, he shall provide the Director in writing the name of the individual or firm one week prior to the staking of the project for construction. The Developer shall then be responsible for proving all construction, the preparation of revised plans for construction changes, and the preparation of "as-built" plans upon completion of the construction.

In the Developer's notification of a change in the firm providing construction staking, he shall acknowledge that he accepts responsibility for design changes and "as-built" information as noted above.

- 2-14 SEWER ANNEXATION REQUIREMENTS - When sanitary sewer plans are submitted for an area that is not within a sanitation or sewer maintenance district, said plans will not be approved until a request for annexation to the appropriate special district has been completed, unless otherwise approved by the Director. Annexation request forms and information relative to annexation procedures are available from the special district.
- 2-15 TUNNEL SAFETY REQUIREMENTS - Any boring or jacking operation of 100 foot or greater length and involving an opening greater than 30 inches in diameter is subject to the State of California Division of Industrial Safety's tunnel safety requirements. The Professional Engineer shall submit to the Division of Industrial, Safety plans and specifications applicable to the tunnel operation, with a letter requesting tunnel classification. This procedure is also recommended to avoid project delay if there is the possibility of any personnel entering the tunnel, regardless of diameter and length. The letter should identify the Public Works agency responsible for the project, and the agency's mailing address. The plans shall identify underground utilities and tanks or areas for storing fuel and toxic gases in the vicinity of the tunnel site. The request for classification should be submitted allowing ample time for the Division of Industrial Safety review in order that any special requirements can be included in the project plans and specifications. The Professional Engineer shall also attend the required pre-construction meeting.
- 2-16 EXISTING UTILITIES - All existing utilities are to be shown on the plans. In addition, the Professional Engineer shall submit prints of the preliminary and approved plans to the utility companies involved. This is necessary for the utilities to properly plan their relocation projects and needed additional facilities. Copies of the transmittal letters to the utility companies shall be provided to the Director. The transmittal letters shall indicate all utility pole conflicts which require relocation. The conflict shall be referenced to stationing and distance from centerline. In addition, the following note shall appear on the first page of the plans: No pavement work will occur within the road right-of-way prior to completion of utility pole relocation.
- 2-17 PARTIAL PLANS - Where the improvement plans submitted cover only a portion of ultimate development, the plans submitted shall be accompanied by the approved tentative plan or a study plan if there is no approved tentative plan showing topographic features of the ultimate development at an adequate scale to clearly show the proposed improvements.

- 2-18 OTHER AGENCY NOTIFICATIONS – The Professional Engineer is responsible for obtaining the approval and necessary permits of governmental or municipal agencies when their facilities are involved. The Professional Engineer shall obtain the approval of other affected agencies prior to the Director approving the plans.
- 2-19 INSPECTION REQUIREMENTS – Any improvement which the County will assume maintenance responsibility, shall be inspected during construction by the Director. Each phase of construction shall be inspected and approved prior to proceeding to subsequent phases.

Private on-site grading and drainage related to subdivision improvements shall be inspected during construction by the Director. The Developer shall hire a geotechnical engineer, approved by the Director, to monitor onsite earthwork. The geotechnical engineer shall certify compliance with earthwork plans and specifications. The Professional Engineer shall certify finished pad elevations.

Any improvements constructed without inspection as provided above or constructed contrary to the order or instructions of the Director will be deemed as not complying with the Standard Specifications and will not be accepted by Sutter County for maintenance purposes.

The Professional Engineer shall notify the Director when the Contractor first calls for grades and staking and shall provide the Director with a copy of all cut sheets.

Within ten days after receiving the request for final inspection, the Director shall inspect the work. The Contractor, Professional Engineer, and Developer will be notified in writing as to any particular defects or deficiencies to be remedied. The Contractor shall proceed to correct any such defects or deficiencies at the earliest possible date. At such time as the work has been completed, a second inspection shall be made by the Director to determine if the previously mentioned defects have been repaired, altered, and completed in accordance with the plans. At such time as the Director approves the work and accepts the work for Sutter County, the Contractor, Professional Engineer and Developer will be notified in writing as to the date of final approval and acceptance.

On assessment districts and projects where Sutter County participates in the costs thereof, quantities will be measured in the presence of the Director, Professional Engineer, and Contractor, and witnessed accordingly.

2-20 SPECIAL NOTICES AND PERMITS - The Professional Engineer shall be responsible for advising the Contractors to have the following notices and have in his possession the following permits and plans:

- A. Contractor shall be in receipt of official County approved plans prior to construction.
- B. Contractor shall notify all utility companies involved in the development prior to beginning of work.
- C. Contractor shall notify "Underground Service Alert" (phone 800-227-2600) two (2) working days in advance before any digging.
- D. Contractor shall be responsible for the protection of all existing monuments and/or other survey monuments and shall notify Sutter County's Director of Public Works of any damaged or removed County, State or Bureau of Reclamation monuments.
- E. Contractor shall notify Director upon application for permit and payment of required fees for sewer taps.
- F. The Contractor shall verify all street names with County Surveyor before ordering street signs.
- G. Unless specifically permitted on the plans, the Contractor shall be responsible for conducting his operation entirely outside of any floodplain boundaries. Floodplain boundaries shall be clearly delineated in the field prior to construction.
- H. Contractor shall be responsible for conducting his operation entirely outside of any no-grading area. These areas shall be clearly delineated in the field prior to construction.
- I. Where work is being done in an off-site easement, the Contractor shall notify the property owner 48 hours prior to commencing work.