

SECTION I

GENERAL PROVISIONS

1.1 STANDARDS

The purpose of these Standards is to provide certain minimum requirements to be used in the design and drawing of plans for public improvements such as streets, stormwater, sewer and water facilities. In establishing such minimum requirements, these Standards can not anticipate every possible situation, exception and application by which a higher standard(s) that need be used as determined by good engineering practice by the Engineer of Record.

Additionally, adherence to these standards does not relieve or supersede a duty to comply with any and all development agreement conditions, conditions placed upon the map, conditions placed upon improvement plans, engineering bulletins and supplemental provisions as determined appropriate by the City Engineer.

Designs should strive to not only address initial functionality but to also consider ease of repair and long-term maintenance.

Required improvements shall be constructed in accordance with the applicable sections of these Improvement Standards including the latest edition of the California Standard Specifications, prepared by the State of California, Department of Transportation (hereinafter called "Standard Specifications"), applicable sections of the Hughson Municipal Code, and the special provisions prepared by the design engineer and approved by the City.

In case of conflict between the approved Special Provisions prepared by the design engineer and these Improvement Standards and/or the Standard Specifications, the approved Special Provisions shall take precedence and shall be used in lieu of such conflicting portions of these Improvement Standards and/or Standard Specifications. To supplement the above, the design engineer shall prepare necessary plans and profiles using accepted principles of civil engineering and using wherever applicable, the standard plans found in Section IV of these Improvement Standards.

The City may make modifications or additions to these standards when justified by special circumstances.

These Improvement Standards are published in accordance with Section 16.08.260 of the Hughson Municipal Code. All work done in the public rights of way shall conform to the current Improvement Standards.

Undergrounding of Utilities. Pursuant to HMC 12.08.030 and 12.08.100, all utilities of cable lines, phone lines, and electrical distribution lines shall be undergrounded. Above ground poles

shall not be allowed. All transformers and junction cabinets for electric, phone and cable shall be undergrounded in vaults.

All underground utilities shall be constructed prior to surfacing of streets or rights of way. The Developer shall be responsible for making payment as necessary with utility companies to insure that the necessary underground utilities are constructed.

Developers are advised to have their representatives contact the Engineer during design to insure conformance with these Improvement Standards.

Work requiring plans prepared by a registered engineer such as improvements for subdivisions, parcel maps and planned developments, shall conform to these Improvement Standards, even though reference to these Improvement Standards is not made on such plans. Work not requiring improvement plans prepared by a registered engineer shall conform to these Improvement Standards, and it shall be the responsibility of the Developer to determine such requirements.

Failure of the contractor to comply with the approved plans, specifications, or the procedures specified herein shall be deemed sufficient cause for the rejection by the City engineer of all or any portion of the work. The city engineer may cause rejected work to be remedied, removed or replaced, all at the sole expense of the contractor or developer.

1.2 PLANS AND SPECIFICATIONS

All improvement plans, specifications, and special provisions shall comply with the requirements of the approved or conditionally approved development plan and these Improvement Standards. Prior to beginning any construction and at least 60 days prior to the date on which a developer desires the City to present his/her final map of the development to the City Council, additionally the design engineer shall present completed improvement plans and specifications along with any required special provisions, to the City for approval.

Improvement Plans shall be the responsibility of the Developer and shall be submitted to and approved by the City prior to commencement of any work. The Improvement Plans shall be 24 inches by 36 inches in size. Review time will depend upon the nature, complexity, and completeness of submittals. Applicants are advised to allow at least 3 weeks on each submittal or resubmittals to receive review comments. Check lists are provided in Appendix B to aid in preparing complete submittals.. After approval, the Developer shall provide 3 sets of the approved plans to the City prior to commencement of work.

Changes to the signed Improvement Plans shall be permitted only upon prior approval of both the Design Engineer and the City Engineer. Reproducible (3 mil mylar or polyester) "As- Built" plans shall be furnished to the City upon completion of the work along with electronic copies in both Adobe PDF 200 dpi format and AutoCAD 2008 format or approved compatible format and their approval shall be prerequisite to final acceptance of the work by the City Council.

All "As-Built" or "Record" drawings shall be signed and sealed by the design engineer or land surveyor and shall be based upon a comprehensive physical land survey to verify the locations, completeness, and accuracy of all public improvements. This shall at a minimum include all inverts, top of rims, top of curb at all returns, low points, high points, grates, toe and top of bank on storm basins and as directed by the City Engineer.

The City of Hughson has established in December of 2006 a local Horizontal and Vertical Control. The datum used by the city is NAD83 and NAGVD29 is shown in the Horizontal and Vertical control Layout for the city of Hughson, California and will be the basis of all maps submitted to the city. A minimum of two (2) ties will be made to horizontal and vertical monuments.

1.3 DEFINITIONS

When used for the construction of any improvements within the City of Hughson, the appropriate definitions and terms listed in Section I of the Standard Specifications shall apply, with the following modifications.

Engineer The City acting either directly or through properly authorized agents.

Engineer's Estimate The list of estimated quantities of work to be performed in proposal form.

City Contractor The person(s), firm, partnership, or corporation entering into a contract with the City of Hughson for projects administered by the City.

Developers Contractor Means the Developer and his sub-contractors who have entered into an improvement agreement with the City of Hughson.

Standard Plans The standard plans of the City of Hughson.

Design Engineer The Civil Engineer retained by the Subdivider for the preparation of plans and specifications for the required improvement works.

Improvement Plans Plans of proposed improvements prepared by the design engineer, when they have been reviewed and signed by the City of the City of Hughson.

Specifications Directions, provisions and requirements contained herein as supplemented by the Standard Specifications and by such special provisions as may be necessary, pertaining to the method and manner of performing the work or to the qualities and quantities of materials involved. The special provisions of specific plans are instructions setting forth conditions or requirements peculiar to the project under consideration and covering work or materials not otherwise covered by the Standard Specifications or these Improvement Standards.

State As referenced to in the Standard Specifications shall mean the City of Hughson.

City The City of Hughson, located in Stanislaus County, California, and the City Council, employees or authorized agents acting for the City.

1.4 CONTROL OF THE WORK

All work performed and all materials furnished under these Improvement Standards shall be subject to inspection and review by the City. Such inspection and review of work and materials shall not relieve the Contractor of any of his obligations to complete the work specified. Work and materials not meeting these requirements shall be made good, and unsuitable work and materials shall be rejected.

The City shall have access to the work at all times and shall be furnished every reasonable facility for ascertaining that the methods, materials and workmanship are in accordance with the requirements and intent of these Improvement Standards. The Contractor or his authorized agent shall be in charge of and responsible for all phases of work while it is in progress.

The City shall be notified and contacted by the Contractor at least forty-eight (48) hours (two consecutive City business days) prior to beginning or re-starting any of the following stages of work and shall be notified when each of the stages has been completed. Subsequent stages shall not begin without authorization of the City.

Should the Contractor fail to so notify and contact the City, or otherwise proceeds without first obtaining written authorization by the City Engineer allowing work to proceed, then the cost of all subsequent inspection and testing necessary to ascertain that the work has met all the specified requirements shall be born by the Contractor or the work shall not be approved.

1. Roadway and ditch excavation, including the preparation of embankment areas and the placement of embankment materials.
2. Subgrade for the roadbed, upon which pavement, base, subbase or other material is placed.
3. Structural Excavation.
4. Placing culvert pipes, storm drains, sanitary sewer and water lines.
5. Placing structural back fill material.
6. Construction of forms or setting guide wires for all concrete work including concrete curbs.
7. Placing concrete.
8. Placement of any layer of sub-base, base or surfacing material, including the preparation of the sub-grade.

9. Final cleanup.

Other inspections to cover special provisions shall be requested by the Developer or City Contractor as need.

In addition to the above, the Contractor shall notify the City **at least 72 hours prior** to the close of business Friday, whenever improvement work is to be performed on Saturdays, Sundays or holidays, in order to obtain approval or provide inspection for such work and provide inspection.

The source of materials used for work performed under these Improvement Standards shall be approved by the City before delivery is made. The Contractor shall give the City sufficient written notice of sources of material so that such tests and inspections as the City deems necessary can be performed to determine that the materials comply with the specifications. Such tests shall be paid for by the Contractor, however, the City retains the right to perform verification testing. If the source is not already approved, the notice shall be provided not less than 10 working days prior to delivery of the material to the project. Only approved material that meets the specifications shall be used in the work. After approval, no material, which has in any way become unfit for use shall be used in the work.

All tests of materials and work to determine compliance with the approved specifications shall be in accordance with City approved methods and procedures. The contractor shall furnish to the City, without charge, samples of all materials to be used in the work. Samples of material from which tests are to be made shall be delivered under the supervision of the City, to a recognized laboratory or Design Engineer retained by the contractor.

Warranty

The developer, City Contractor or Utility shall inspect and repair all defective work done in the public rights-of-way for a period of one year from the date the work is accepted as complete by the Engineer. If subsequent repairs are required, such repair shall be warranted for a period of one year from the date the subsequent repairs were accepted by the City.

All warranty periods shall commence upon the date of final acceptance of applicable improvements by resolution of the City Council.