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# General Information

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## A. Purpose

The SUDAS Design Manual has been prepared as a mechanism to implement uniform design standards, procedures, and regulations for the preparation of urban improvement construction plans. These improvements are those that meet any of the following:

1. Are initiated, designed, and constructed by or under the supervision of the jurisdiction as a public improvement and maintained by the jurisdiction.
2. Are initiated, designed, and constructed by the private owner/developer's private engineer and contractor. Upon acceptance of the improvements by the jurisdiction, the improvements are operated and maintained by the jurisdiction.

Those improvements that require review and approval by the jurisdiction, but will remain under private ownership, may be required to follow the SUDAS Design Manual. Each jurisdiction will decide if these types of improvements are to follow the SUDAS Design Manual.

## B. Definitions

See the SUDAS Standard Specifications (referred to as SUDAS Specifications) [Section 1010](#) for definitions and a list of abbreviations.

**Construction Inspector or Observer:** The person or persons appointed by either the project engineer or the jurisdictional engineer to inspect all materials used and all work done. Such inspection may extend to any or all parts of the work and to the preparation or manufacture of the materials to be used. The inspector is not authorized to revoke, alter, enlarge, or relax the provisions of the specifications. The inspector will keep the project engineer and the jurisdictional engineer informed as to the quality and progress of the work and the manner in which it is being done.

**Jurisdictional Engineer:** The licensed professional engineer designated by the jurisdiction to carry out the provisions of the SUDAS Design Manual and the jurisdiction's design supplement, if applicable.

**Project Engineer:** The licensed professional engineer who is legally responsible for the design and/or administration of the project.

## C. Intent of the SUDAS Design Manual

The values contained herein are considered fundamental concepts of basic design criteria that will serve as a framework for satisfactory design on new improvements. The project engineer is encouraged to develop the design based on this framework and tailored to particular situations that are consistent with the general purpose and intent of the design criteria through the exercise of sound engineering judgment. Situations may arise that require special considerations. Therefore, to eliminate hardships or problems, the jurisdiction may choose to vary the design criteria, procedures, and regulations. Jurisdictions may have a written design supplement that identifies specific modifications from this manual.

Should variances from the SUDAS Design Manual, or the jurisdiction's design supplement, be required, the reason for the variance should be documented by the project engineer and evaluated on a case-by-case basis by the jurisdictional engineer. Documentation could be included on the construction plans or as required by the jurisdiction.

The design standards as described for new improvements may not be attainable for restoration and rehabilitation projects. Each project of this type must be considered individually to determine if these design standards apply.

The SUDAS Design Manual and the jurisdiction's design supplement should be used for the preparation of all design plans for new improvements or major reconstruction submitted by the project engineer for jurisdictional review. The jurisdiction will review all submittals for general compliance with the specific design criteria, procedures, and regulations. Approval by the jurisdiction does not relieve the project engineer from the responsibility of ensuring that the calculations, design, and plans are accurate; complying with the SUDAS Design Manual; applying sound engineering judgement, and fitting the needs of a particular project.

The technical criteria not specifically addressed in the SUDAS Design Manual should follow the provisions of each jurisdiction's own policy or criteria and sound engineering practice. The design standards outlined in this manual are to be considered minimum design standards and a project constructed of entirely minimum standards may not be acceptable to the jurisdiction.

## **D. Organization of the Manual**

The SUDAS Design Manual is organized into chapters. The chapters include general information, report documentation, plan design, and federal and state requirements. The manual provides a compilation of readily available literature relevant to the design of urban facilities.

## **E. Jurisdiction and Agencies**

The SUDAS Design Manual and applicable design supplements apply to participating local governments except where superseded by state and federal requirements.

## **F. Amendment and Revisions**

The standards and criteria will be amended as new technology is developed and/or experience gained in the use of the SUDAS Design Manual indicates a need for revision. The revisions will be adopted and jurisdictional engineers will monitor the performance and effectiveness of the design standards and will recommend changes and/or amendments through the SUDAS program as needed. Updates to individual design supplements will be the responsibility of each jurisdiction, if applicable.

## **G. Enforcement Responsibility**

Each jurisdiction is responsible for enforcing the adopted provisions of the SUDAS Design Manual and their design supplement, if applicable.

## **H. Interpretation**

The jurisdiction will determine the interpretation and application of the SUDAS Design Manual and their design supplement. [Section 1B-1](#) includes classifications of improvements for a clearer understanding of general policy.

## **I. Innovation**

Nothing in the SUDAS Design Manual limits the designer's use of new and innovative technology. Each alternative proposed utilizing new or unproven technology must receive approval from the jurisdiction prior to implementation. Any materials meeting the technical specifications should be allowed unless specifically prohibited by the jurisdiction.