



Section 1

Overview

1.0 OVERVIEW

1.1 Purpose and Scope

- A. These Standards are intended as guidelines for applicants in preparing their plans and for the Town's review. These Standards shall apply to all improvements within the existing and proposed public right-of-way, for all improvements intended for maintenance by the Town, and for all other improvements for which the Friday Harbor Municipal Code (FHMC) requires approval.
- B. These Standards establish uniform requirements to promote the public safety, welfare, convenience, aesthetics and economical maintenance of public and private improvements.
- C. These Standards shall govern the design of new construction and improvements to all streets, sewer, stormwater, water lines and other utilities installed in the Town of Friday Harbor.
- D. These Standards are minimum design standards. Where minimum values are stated, greater values should be used where practical; where maximum values are stated, lesser values should be used where practical. It is expected that land surveyors, engineers, architects, and landscape architects will exercise best efforts to ensure that the project is designed in a manner consistent with the intent of these Standards.
- E. These Standards do not prohibit innovative efforts which could achieve the intent and purpose of these Engineering Design Standards through an alternative solution. Town staff shall review proposed alternatives and make a recommendation to Town Council. The Town shall have authority to grant a variance from the requirements of the Engineering Design Standards.
- F. If any part of these Standards is found to be invalid, all other non-conflicting parts shall remain in effect.

1.2 Definitions

- A. The following definitions apply to terms and abbreviations used throughout this manual. Additional terms applicable to specific aspects of design are defined at the beginning of other sections.
 - 1. **Applicant:** An individual or firm applying for design approval from the Town for a project.
 - 2. **APWA:** The American Public Works Association.
 - 3. **AWWA:** The American Water Works Association.
 - 4. **CDP:** The Town of Friday Harbor's Community Development and Planning Department.
 - 5. **Design Engineer:** The Developer's engineer that is a Washington State licensed engineer.
 - 6. **Design Variance:** A grant of relief from the requirements of this section that permits construction in a manner that would otherwise be prohibited by these design standards.
 - 7. **Developer:** Any Person or any entity who under takes to improve residential or non-residential property or subdivide any property. Refers to the owner (or financial

- sponsor) of a privately funded project. May also be taken to mean the owner's consulting architect, engineer or other agent.
8. **Downtown Core:** The area described in FHMC 17.08.125.
 9. **Director:** The Town of Friday Harbor's Public Works Director.
 10. **FHMC:** Town of Friday Harbor Municipal Code.
 11. **Half Street:** Street construction along edge of a development, utilizing a portion of the regular width of right-of-way and permitted as an interim facility pending construction of the other half of the street by the adjacent owner.
 12. **ITE:** Institute of Transportation Engineers.
 13. **MUTCD:** The U.S. Department of Transportation Manual on Uniform Traffic Control Devices.
 14. **Owner:** The legal owner of the property on which a project is to be constructed.
 15. **Planting Strip:** Hard surfaced or landscaped areas between travel or parking lanes and sidewalks. Planting Strips improve safety by separating vehicles and pedestrians.
 16. **Private Project:** A project which is to be constructed on privately-owned property.
 17. **Private Streets:** Streets which meet Town ordinances that are not controlled or maintained by the Town, and which serve no more than 4 users.
 18. **Public Project:** A project which is to be constructed within the public right-of-way or public property.
 19. **Public Works:** The Town of Friday' Public Works Department.
 20. **RCW:** Revised Code of Washington.
 21. **SEPA:** State Environmental Policy Act.
 22. **Specifications:** Defined as the most current versions of the following documents:
 - a. WSDOT Standard Specifications for Road, Bridge and Municipal Construction, latest edition.
 - b. Washington State MUTCD, latest edition adopted by the State of Washington.
 23. **Standards:** The Town of Friday Harbor Engineering Design Standards.
 24. **Standard Plans:** The Town of Friday Harbor Standard Plans set forth herein.
 25. **SWMMWW:** Washington State Department of Ecology's Stormwater Management Manual for Western Washington, dated July 2019.
 26. **Town:** Town of Friday Harbor.
 27. **Washington Administrative Code (WAC):** Current administrative regulations created by the State of Washington to carry out the laws passed by the State Legislature.
 28. **WSDOT:** Washington State Department of Transportation.
 29. **WSDOT Standard Plans:** The latest version of WSDOT Standard Plans Manual 21-01.

1.3 Improvements not covered by Engineering Design Standards

- A. Any improvements not covered by these Engineering Design Standards shall meet or exceed the design, detail, workmanship, and materials in accordance with the current editions of the following publications:
 1. WSDOT Standard Specifications for Road, Bridge, and Municipal Construction (M 41-10).
 2. WSDOT Standard Plans (M21-01).
 3. WSDOT Design Manual.
 4. WSDOT Hydraulics Manual.
 5. AWWA Standards.
 6. WSDOH Water System Design Manual.

7. U.S. Department of Transportation Manual on Uniform Traffic Control Devices (MUTCD).
8. A Policy on Geometric Design of Highways and Streets (AASHTO).
9. Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG). (Published by the U.S. Architectural and Transportation Barriers Compliance Board).
10. Washington State Department of Ecology Criteria for Sewage Works Design,
11. City and County Design Standards for the Construction of Urban and Rural Arterials and Collectors, Washington State. (WSDOT Local Agency Manual, Chapter 42.)

1.4 Design Variance Requests

- A. Design variance requests may be considered by the Town. Generally, a decision will be based upon serving the public's best interest and evidence that the request can meet the following criteria:
 - a. The request will achieve the intended result in a comparable or even superior design and a better quality of improvement;
 - b. The request will not adversely affect safety or operation;
 - c. The request will not adversely affect maintainability;
 - d. The request is permitted under federal, state, and local laws;
 - e. Uniform code compliance in conformance with the intent of these Standards, including appearance; and
 - f. Economic consideration of the request.
- B. To request a variance from these Design Standards, the Applicant shall submit a "Request for Design Variance" to the CDP. The Design Variance shall state the standard(s) to be varied, including the proposed variance(s) and the reason(s) for the request. Additional supporting information, plans or design data prepared by a professional engineer, licensed in the State of Washington should be included as needed or requested. Town staff will review the proposal and determine a recommendation to deny, grant, or grant with modifications. Town staff will present the recommendation for Town Council consideration. Town Council shall make their decision based upon the fulfillment of the criteria.
- C. Design variances shall be approved prior to construction. To the extent known, the variance should be proposed at the preliminary design stage and included for consideration during plan review and public hearing.

1.5 Pre-Development Meeting

- A. A Pre-Development Meeting is an opportunity for the Applicant to present the project and receive comment from various departments on adopted codes, policies, or laws of the Town of Friday Harbor. No development approvals are granted at the meeting.
- B. Pre-Development Meeting must be scheduled with the CDP.
- C. The following items are required for the Pre-Development Meeting:
 1. Completed Pre-Development Meeting application
 2. A pdf electronic file and two hard copies of the proposed site plan, to scale, depicting the following, as applicable:
 - a. Property lines

- b. Existing and proposed buildings, parking areas and other site improvements
 - c. Proposed driveways
 - d. Proposed connections to public sewer, storm drainage, and water
- 3. A pdf electronic file and two hard copies of the proposed building plans showing reasonable detail to assist Town staff in making recommendations to the Applicant.
- 4. For additional information regarding the Pre-Development Meeting contact the CDP.

D. See the Town's Fee Schedule for fees associated with the Pre-Development Meetings.

1.6 Applicant's Responsibility

- A. Applicants are responsible to acquire all permits and licenses necessary for the completion of the project. The Town of Friday Harbor will not be held responsible, financially or otherwise, for any delay or additional expenses the Applicant may incur due to Town requests for and review of, information necessary to issue permits and licenses.
- B. The Town makes no warranty or representation concerning review of the information, plans and documents submitted by Applicant. The Applicant is solely responsible, as a condition of permit issuance, to ensure that all design and construction is: (a) based upon reasonably acceptable engineering practices; (b) performed with due care and caution and (c) suitable for its intended purpose. Through review of information, plans and documents, the Town does not intend to create a special duty or relationship with the Applicant, Owner or others concerning the project.

1.7 Material Acceptance

- A. For public utilities or infrastructure construction, the Applicant shall provide the Town with a list of all materials used on the project prior to initiating construction. The materials shall meet Town specifications through supplier's verification, and materials testing reports or reports from an accredited materials testing lab.
- B. All reports, materials verifications and other documents submitted to the Town for acceptance shall be stamped and signed by a Professional Engineer licensed in the State of Washington.

1.8 Amendments to Engineering Design Standards

- A. The Town Council has the authority to approve all amendments to these Engineering Design Standards. Noted errors or suggested revisions to these Standards should be addressed to the Town.

1.9 Environmental Checklist - See FHMC Title 18.04

1.10 Transportation Analysis

- A. The Traffic Impact Analysis Outline is provided at the end of this section (Attachment 1.1). Specific scoping for the traffic analysis shall be determined by the Town either at the Pre-Development Meeting or during project review.
- B. Specific locations to be included in the analysis, boundaries of the study area, etc., will be determined by the Town.

- C. Trip generation shall be based on the current edition of the ITE Trip Generation Manual using the average trip rate. The regression equations will be used when average trip rates are not available. Trip generation for unusual land uses which are not found in the ITE Trip Generation Manual shall be estimated from similar types of uses, field studies of similar uses, or based on number of employees, deliveries, expected clientele, etc., as appropriate.
- D. Level of service calculation shall be conducted using methodologies presented in the current edition of the ITE Highway Capacity Manual. Level of service for intersections should be expressed in terms of stopped delay per vehicle. Worksheets/computer printouts of the capacity analysis should be included in the traffic impact analysis.
- E. Level of service calculations will typically be required at the major intersections which will be impacted by 10 or more total peak hour trips from the proposed development.
- F. The Town's adopted level of service is "D". Appropriate mitigation shall be proposed to maintain this level of service upon completion of the development. Exceptions to level of service "D" will be considered by the Town at those locations where the potential mitigation (such a traffic signal) is not reasonable or desirable.
- G. The applicant shall be responsible for the cost of the Traffic Impact Analysis, the review of the Traffic Impact Analysis, and any mitigation required to maintain the level of service of the affected transportation facilities.
- H. Based on the Traffic Impact Analysis, the Director may require additional street improvements or facilities as a condition of project approval.

1.11 Relationship to Other Town Ordinances

Project review shall include an analysis of the proposed project to determine compliance with the FHMC.

ATTACHMENT 1.1

TRAFFIC IMPACT ANALYSIS OUTLINE

The following describes a general outline for use in the preparation of traffic impact analyses for the Town of Friday Harbor. This outline is not intended to be all inclusive nor will all items be applicable for all types of development. The Town of Friday Harbor reserves the right to request additional information for unique or unusual developments.

I. INTRODUCTION/PROJECT DESCRIPTION

Elements to be included as part of narrative or as figure(s).

- Project name and proponent - Location of project
- Vicinity map
- Proposed uses, if known (e.g., names of stores)
- Project magnitude (square footage, number of units, etc.)
- Access locations
- Current and proposed zoning
- Description of current use of property
- Reduced copy of site plan (if available)
- Roadways/intersections to be impacted and reviewed in the analysis
- Horizon year of project (completion and occupancy); state phasing and time-frame if applicable
- Parking (if applicable)

II. INVENTORY OF EXISTING CONDITIONS

Elements to be included as part of narrative or as figure(s).

- Description of impacted streets in the area (number of lanes, width, pedestrian facilities, speed limit, lighting, etc.)
- Daily traffic volumes (if available), or estimated from peak hour counts
- Peak hour counts (as appropriate)
- Accident history (when required by the Town)
- Capacity analyses at critical intersections
- Transit service

III. DEVELOPMENT IMPACTS

Elements to be included as part of narrative or as figure(s).

- Trip generation
- Trip distribution/assignment
- Capacity analyses (with and without the project) at critical locations for the horizon year

- Projected daily traffic volumes and peak hour volumes (with and without the project) for the horizon year
- Need for turn storage lanes at access(es) (if appropriate)
- Other concerns (if applicable, such as cut-through traffic in residential areas)

IV. CONCLUSIONS/RECOMMENDATIONS

- Brief summary of above analyses with recommendations

V. MITIGATION

- Appropriate mitigation shall be proposed for those locations which fall below level of service “D” or a discussion of why mitigation would not be appropriate. Capacity analyses should typically be included for mitigated locations.

VI. OTHER

- Unusual developments may require analysis of off- peak hours, the AM peak hour, weekends, or ability to serve large trucks, for example, if deemed necessary by the Town. Studies performed as part of an EIS document may also require additional analysis.

One pdf electronic file and two hard copies of the traffic impact analysis shall be submitted to the Town.