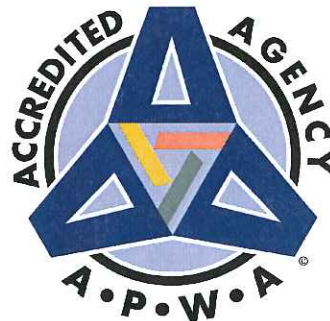


**CITY OF ANACORTES
ENGINEERING DEPARTMENT**

CHAPTER 1

GENERAL CONSIDERATIONS



CHAPTER 1 – GENERAL REQUIREMENTS

TABLE OF CONTENTS

<u>Item:</u>	<u>Description:</u>	<u>Page:</u>
GEN-01	General	G-2
GEN-02	Definitions	G-2
GEN-03	References	G-4
GEN-04	Governmental Agency Requirements	G-6
GEN-05	Deviations	G-6
GEN-06	Errors and Omissions	G-6
GEN-07	Plan Approval	G-7
GEN-08	Owner, Developer, Engineer Legal Responsibility	G-7
GEN-09	Change Orders	G-7
GEN-10	Hours of Work	G-7
GEN-11	Work Zone Safety	G-7
GEN-12	Traffic Control	G-8
GEN-13	Inspections	G-8
GEN-14	Drawing of Record	G-8
GEN-15	City of Anacortes Datum	G-9
GEN-16	Engineering and Development Service Fees	G-9

CHAPTER G1 – GENERAL REQUIREMENTS

GEN-01 GENERAL

These Engineering Standards set forth minimum standards for the planning, design, and construction of water distribution systems, sanitary sewer systems, storm drain system, streets and erosion control measures.

These standards do not include design of special facilities, such as Pump Stations or Reservoirs. These special facilities require unique facilities which will be subject to individual review by the City of Anacortes Engineering Water Works Department.

Although these standards are intended to apply to physical development within the City of Anacortes utility service area, the standards will not apply for all situations. Compliance with these standards does not relieve the designer of the responsibility to apply conservative and sound professional judgment. These are minimum standards and are intended to assist, but not substitute for competent work by design professionals. The City of Anacortes may at it's sole discretion due to special conditions and/or environmental constraints, require more stringent site specific design than would normally be directed under these standards.

Following these standards to design the City of Anacortes Utility system will help ensure a timely review of the proposed project.

GEN-02 DEFINITIONS

The following terms are in addition or revised from the definitions as stated in Section 1 of the current WSDOT specifications for Roads, Bridges and Municipal Construction:

“Contractor”

The person, partnership, firm or corporation contracting to do the work under these documents. The term shall also include the Contractor's agents, employees and subcontractors.

“Details or Additional Drawings”

All details or drawings prepared to further explain or amplify the plans, or for the revisions of the same, all as herein provided.

“Developer”

Any individual, company, partnership, joint venture, corporation, association, society or group that has made, or intends to make, application to the City of Anacortes for permission to construct a water system connection, or extension, to the City of Anacortes Water System.

“Engineer”

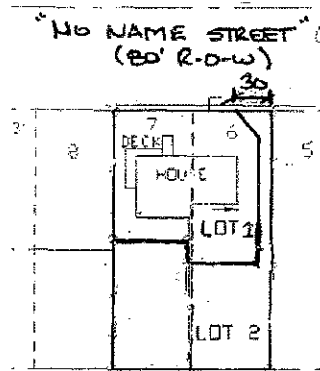
The City of Anacortes City Engineer or a duly authorized assistant, which includes, Assistant City Engineer, Project Manager, Public Works Inspector, Consultant Engineer and/or Inspector.

“Equipment”

The machinery, accessories, appurtenances and manufactured articles to be furnished and/or installed under this project.

“Extreme of Property”

Extreme is intended to include to the furthest property line extended to the Right-of-Way.



“Material or Materials”

These words shall be construed to embrace the machinery, manufactured articles, materials of construction (fabricated or otherwise) and any other classes of material to be furnished in connection with this project.

“Or equal”

Any manufactured article, material, method, or work which, in the opinion of the Engineer, equally desirable or suitable for the purposes intended in these standards as compared with similar articles specifically mentioned herein.

“Plans”

All official drawings or reproductions of drawings made or to be made pertaining to the work provided for the permit or developer extension agreement.

“Project”

The structure or improvement to be constructed in whole or in part.

“Reference Specifications”

Reference specifications shall mean the technical specifications of the other agencies incorporated or referred to herein.

“Specifications”

The specifications shall mean the prescribed directions, requirements, explanations, terms and provisions pertaining to the various features of the work to be done, or means and method of performance. They also include directions, requirements, and explanations as set forth on the plans.

“Standard Details”

City of Anacortes standard detail drawings, AWWA standard details, APWA Standard detail drawings

“Standard Specifications”

Current version of the Standard Specifications for Road, Bridge and Municipal Construction, English edition, Washington State Department of Transportation and the American Public Works Association including all amendments.

“Words and Phrases”

Whenever the words, “as directed”, “as required”, “as permitted”, or words of like effect are used, it shall be understood that the direction, requirements or permission of the Engineer is intended. The words, “sufficient”, “necessary”, “proper”, and the like shall mean sufficient, necessary or proper in the judgment of the Engineer. The words, “approved”, “acceptable”, “satisfactory”, or words of like imports shall mean approved by or acceptable to the Engineer.

“Work”

The work necessary to manufacture and deliver machinery, equipment and material and/or the furnishing of all labor, tools, material, equipment, construction equipment, working drawings, submittals for approval, As-builts (Drawings of Record), where required, and other necessities for the construction or erection of the structures shown and called for in the plans, specifications and permit/Developer Extension Agreement, and the act of constructing or erecting said structures complete.

GEN-03 REFERENCES

Whenever references are made to the standards, specifications, or other published data of the various national, regional, or local organizations, such organizations may be referred to by their acronym or abbreviation only. As a guide to the user, the following acronyms or abbreviations, which may appear, shall have the meanings indicated herein;

AASHTO	American Association of the State Highway and Transportation Officials
ANSI	American National Standards Institute, Inc.
WSDOT	Washington State Department of Transportation
APWA	American Public Works Association
ASTM	American Society for Testing and Materials
AWWA	American Water Works Association
DOH	Department of Health
WAC	Washington Administrative Code
SFCCOA	State Fire Code, as adopted by the COA, current version
RCW	Revised Code of Washington
DOE	Department of Ecology
COA	City of Anacortes
AMC	Anacortes Municipal Code
MUTCD	Manual Uniform Traffic Control Devices

GEN-03.1 City of Anacortes

- Anacortes Municipal Code
- Drainage Code Chapter 13 and Ordinance #2441
- Anacortes 2007 Storm Water Comprehensive Plan
- South March Point Annexation Comprehensive Drainage Study
- Subdivision Code Chapter 16
- Zoning Code Chapter 17
- Anacortes Comprehensive Land Use Plan
- Anacortes Shoreline Master Plan
- Anacortes 1992 Comprehensive Sewer Plan

- Anacortes 1996 Comprehensive Sewer Plan Update Service to March Point
- Anacortes March Point Service Area Sewer System Pre-design Report
- Anacortes 2007 Transportation Plan
- Non-motorized Transportation Plan

GEN-03.2 Other Regulatory

- Chapter 136-40 WAC – Standards of Good Practice – Accommodation of Utilities on County Road

GEN-03.3 Primary Technical

Except when these Standards provide otherwise, engineering design and construction methods and materials must comply with current editions of these **Washington State Department of Transportation (WSDOT) publications:**

- WSDOT Standard Specifications for Road, Bridge and Municipal Construction including the American Public Works Association (APWA) Supplement (Referred to throughout as WSDOT/APWA Specifications)
- WSDOT/APWA Standard Plans
- WSDOT Design Manual
- WSDOT Hydraulics Manual
- WSDOT Traffic Manual
- WSDOT Utilities Manual
- WSDOT Construction Manual

GEN-03.4 OTHER TECHNICAL

These Standards also cite certain provisions of the following documents:

- DOE Criteria for Sewage Works Design Manual published by the Washington State Department of Ecology.
- Residential Streets, 2nd Edition, published jointly by the American Society of Civil Engineers, National Association of Home Builders, and the Urban Land Institute.
- International Uniform Building Code
- WSDOT Local Agency Guidelines
- WSDOT Guidelines for Urban Arterial Program
- Design criteria of federal agencies including the Federal Housing Administration, Department of Housing and Urban Development and the Federal Highway Administration, Department of Transportation
- AASHTO A Policy on Geometric Design of Highways and Streets, American Association of State Highway and Transportation Officials, current version
- AASHTO Roadside Design Guide
- Manual on Uniform Traffic Control Devices (MUTCD), U.S. Department of Transportation as amended by WSDOT.

- Department of Ecology (DOE) Storm Water Program Guidance Manual for Puget Sound Basin (Volume 1 and 2)
- Department of Ecology (DOE) Storm Water Management Manual for the Puget Sound Basin
- King County Surface Water Design Manual
- American Water Works Association Standards (AWWA)
- American Public Works Association Standards (APWA)
- Facts and Findings from Anacortes City Council

GEN-04 GOVERNMENTAL AGENCY REQUIREMENTS

All construction on City, County or State Roads or Right-of-Way shall be done in accordance with the agency's standards and requirements and in accordance with the franchise and/or permit requirements. The Contractor is responsible to determine these requirements prior to construction.

Where conflict exists between these Standards and permit requirements, the most stringent permit requirements shall take precedence.

GEN-05 DEVIATIONS

GEN-05.1 General

The Developer may propose a deviation from the standards. A non-standard system may take longer to review. The Developer acknowledges these risks when submitting a non-standard system for review.

GEN-05.2 Deviation Criteria

Requests for deviations which are site or project specific, shall be reviewed by the City of Anacortes Public Works Engineering Department. The City's decision to grant, deny, or modify the proposed deviation shall be based upon evidence that the deviation request meets the following criteria:

- A. The change will achieve the intended result through a comparable or even superior design; and
- B. The change will not adversely affect safety and/or operation; and
- C. The change will not adversely affect long-term reliability and maintainability.

GEN-06 ERRORS AND OMISSIONS

Any errors or omissions in the approved plans or information used as a basis for such approvals may constitute grounds for withdrawal of any approvals and/or stoppage of any or all of the permitted work, as determined by the City of Anacortes. It shall be the responsibility of the Developer to show cause why such work should continue, and make such changes in plans that may be required by the City of Anacortes before the plans are reapproved.

GEN-07 PLAN APPROVAL

All plan sheets approved by the Public Works Department shall have the following approval block.

<p>This plan sheet is approved for construction in accordance with the City of Anacortes ordinances and policies. Actual conformance of the design with applicable laws is the sole responsibility of the professional engineer, whose name and stamp appear on this sheet. Acquiring, complying with, and providing mitigation for all Federal, State County, and Local laws, permits, and mandates, including but not limited to the Endangered Species Act, Federal Wetland Permit, State Department of Fisheries Hydraulics Permit, Federal Flood Plain Permits, National Pollutant Discharge Elimination System Permits is the responsibility of the Developer, Landowner, and their Engineer. The issuance of this permit shall not be construed as proof of compliance with applicable laws and permit requirements.</p>	
City Engineer	Date
<p>This approval will expire in one year from the date noted above.</p>	

GEN-08 OWNER, DEVELOPER, ENGINEER LEGAL RESPONSIBILITY

The property owner, developer, and professional engineer whose stamp appears on the plan sheet must comply with applicable Federal, State, County, and Local laws, permits, and mandates, including, but not limited to, those referenced in these Engineering Standards.

GEN-09 CHANGE ORDERS

The construction contractor may not deviate from the approved plan without an approved Change Order. The contractor must submit a Change Order request to the City Engineer who may require revised drawings stamped by the design engineer.

GEN-10 HOURS OF WORK

The City of Anacortes Ordinance #2316 allows work to take place between the hours of 7:00 am to 10:00 pm, Monday to Sunday.

It is the policy of the City of Anacortes that any construction work within the Central Business District shall take place after 5:00 pm to minimize the impacts to the downtown businesses.

GEN-11 WORK ZONE SAFETY

Maintain a safe, hazard-free worksite and pedestrian routes around the worksite.

GEN-12 TRAFFIC CONTROL

The construction contractor may not start work without a City Engineer approved Traffic Control Plan. Traffic Control Plans must comply with work zone standards of the *Manual on Uniform Traffic Control Devices* (MUTCD).

GEN-13 INSPECTIONS

City Project Managers, Assistants, and Inspectors have construction inspection and approval authority. The City may issue stop work orders and other penalties when inspection finds the work is not in compliance with these Standards or other lawful directives. Additionally, the City may require removal of unacceptable work.

The contractor must:

- Keep an approved set of plans and permits at the job site.
- Call one week in advance to schedule a storm or sanitary sewer video inspection.
- Call 48 hours in advance for all other public works inspections.
- Provide proof of acceptable test results for work or materials, if requested.
- Complete the physical work, including cleanup, and submit as-built records before calling for a final inspection.

GEN-14 DRAWING OF RECORD

As-built drawings shall be provided in two submittals prior to acceptance of any road, structure or facility for maintenance by the City of Anacortes. Such drawings shall describe any and all revisions or additions to the above plans. All revisions or additions shall be provided on the construction drawings that were approved for construction, no exception.

GEN-13.1 First Submittal: Construction Acceptance Phase

The Engineer of Record is required to attend the Final Site Inspection and provide a set of Preliminary As-built drawings to use as a reference during the site inspection. Discrepancies discovered during the inspection will be noted on the plans

Once the Site Inspection is complete and necessary revisions are made, the Engineer of Record will submit to the City of Anacortes Public Works Engineering Department (Project Manager), a (1) one set of As-builts (24x36 black line paper) for the City's review and approval. Approval by the Engineering Department is required prior to any construction acceptance.

GEN-13.2 Final Drawing of Record

Upon approval of the As-built drawings, the Engineer of Record shall submit;

- (1) one complete set of good quality reproducible plan set in Mylar form, stamped by a Professional Engineer, licensed in the State of Washington and;
- (1) electronic record that meets Washington State APWA CADD Standards in AutoCAD version 2002, minimum.

