

CITY OF PORT ORCHARD Public Works Department

CITY HALL • 216 Prospect Street, Port Orchard, WA
98366

(360) 876-4991 • FAX (360) 876-4980

DEVELOPER'S HANDBOOK, 2004

Welcome to the City of Port Orchard. The 2004 version of the Developer's handbook is designed to provide the necessary guidance for development within the City. It will answer typical questions that a developer needs to know.

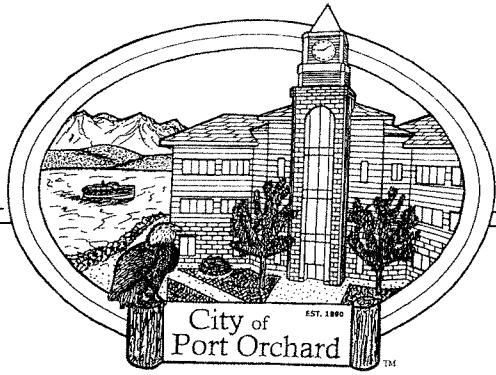
Port Orchard is a small city and is proud of its community. Growth is continuing, and we want to work together to protect our quality of life. We are a family-oriented community, and we welcome our new neighbors. However, with growth come challenges. The challenge is placed upon you, as a developer, to develop a project that will enhance our neighborhoods through your addition to it.

We want to grow in an intelligent manner and not pay too high a price for the sake of "progress".

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It is the Contractor/Developer's responsibility to check with the City of Port Orchard Public Works Office to make sure they have the latest update of the Developer's Handbook.



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23 August 2007

To: All Developers

RE: Connections and Cost to Telemetry

As part of your development requirements, new water and sewer major system (i.e. new reservoirs or lift stations) will be connected into the City of Port Orchard's Telemetry System. The cost for this connection will be borne by the developers as part of the development costs.

A handwritten signature in dark ink, appearing to read "Maher M. Abed".

Maher M. Abed, P.E.
Public Works Director

1. City Staff Organization

The City of Port Orchard is governed by the Mayor and a City Council of seven elected officials. The elected body develops the ordinances and sets the policies that the City staff implements. The Department Heads answer to the Mayor.

There are five Department Heads in the City and these are the Police Chief, City Treasurer, City Clerk, City Planner, and Public Works Director. The Planner supervises the Associate Planner and Code Enforcement Officer. The Public Works Director is also the City Engineer and Building Official. The Public Works Director supervises the Building Official and Public Works Foreman. Included in Public Works are the water, sewer, street, parks, and facilities. Fire District #7 provides Fire Marshall services for the City.

The Developer will typically coordinate between three departments: Planning, Public Works, and Fire. The Planning Department enforces the land use codes, such as zoning, landscaping, views, critical areas, and signs. The Fire Marshall enforces the Fire Code; there is close cooperation between the Fire and Building Departments. The City Clerk issues the addresses. The Finance Department collects water and sewer connection fees, if they are required. No permit will be issued without an address, and applicable utility fees have to be paid when the building permit is issued.

The Planning Department will assist the Developer in any land use issue. The planning staff will process land use applications such as rezones and variances. They also implement the Shoreline Management Program, provide staff support to the Planning Commission, and review all building permits for compliance to the land use rules. A pre-application meeting with the planning staff is strongly recommended.

The Building Inspector performs the plan review and field inspections. He inspects projects to assure compliance with the appropriate building codes, except the electrical code. The Building Inspector is not a quality control inspector of a project manager for the owner. The Health District has jurisdiction over the on-site sewer systems.

The Public Works Manager supervises the clerical staff and oversees the processing of the various applications. Typically, the staff will call the applicant when a permit is ready to be issued.

Before any project, the City staff will review the proposal with the Developer to help eliminate any potential conflicts with the Codes or Ordinances.

The Planning and Public Works staff is located in City Hall, 216 Prospect Street. Office hours are 8:00AM to 4:30 PM, Monday through Friday. Land use applications and permit applications will not be received or issued after 4:00PM. No money will be taken after 4:00 PM. The office telephone number is (360) 876-4991, and the fax is (360) 876-4980.

2. Land Use Actions

The City administers the zoning ordinance, shoreline management program, building codes, stormwater program, and the critical areas ordinance.

The City Zoning Ordinance and other ordinances are available for sale at the Public Works Department and is also located on the City's website at www.cityofportorchard.us

If the designated land use for the property in question is not applicable for the proposed project, the Developer can apply to the Planning Commission for the necessary land use action. Typically, this will be a Special Use Permit, Variance, or a Rezone. The Planning Commission is comprised of eight citizens appointed by the City Council. After the required public meeting, the Planning Commission will send the application and their recommendation to the City Council. However, in the case of a variance request, the Planning Commission is the deciding body. The City Council will hold a public hearing on the application. The Council can accept, reject or modify the recommendation of the Planning Commission.

All subdivision proposals shall go before both the Planning Commission and the City Council.

If the applicant desires to seek a vacation of a street, the City Clerk can provide the application. The application fee is \$100. The City typically will not vacate right of way if there is any possibility of the future use of that property.

In addition to established ordinances, the City has special studies for selected areas, such as the Tremont Street corridor, Blackjack Creek and Ross Creek.

Applicants should obtain copies of the following ordinances, if they apply to a project: Zoning Ordinance, Critical Area Ordinance, Sign Code, and View Ordinance.

Parking requirements are prescribed in the Zoning Ordinance and summarized as follows: Parking stall dimensions are 9 ft wide and 20 ft deep. Compact parking stall dimensions are 8' wide and 16 ft deep. Up to 40% of the parking stalls may be compact stalls. Handicap parking stall dimensions are 12 ft – 6 in wide (including the 5 ft wide striped access) and 20 ft deep.

Pre-application meetings are strongly recommended.

Enclosed are the following:

- Ordinance 1702: Subdivisions
- Resolution 1670: Street Vacations
- Resolution 1482: Bethel Avenue ROW
- Resolution 1926: Melcher Street and Pottery Ave ROW

Title 16

SUBDIVISIONS

Chapters:

16.04 Subdivisions

Chapter 16.04**SUBDIVISIONS**

Sections:

- 16.04.010 Purpose.
- 16.04.020 Jurisdiction.
- 16.04.030 Conflicting provisions.
- 16.04.040 Definitions.
- 16.04.050 Adopted.
- 16.04.060 Applicability.
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- 16.04.100 Short subdivision – Application.
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- 16.04.210 Final plat – Application – Bond in lieu of construction.
- 16.04.220 Final plat – Signing and recording.
- 16.04.230 Final plat – Written approval of subdivision – Recording.
- 16.04.240 Time limit.
- 16.04.250 Vacating procedures.
- 16.04.260 Violations – Penalty.

16.04.010 Purpose.

The purpose of this chapter is to regulate the subdivision of land within the city limits of Port Orchard and to require accurate legal descriptions and uniform monumenting of subdivisions. The controls, standards and procedures set forth in this chapter shall serve to minimize any expected negative impact of the proposed property use and has as its purpose the improvement of the area for public good. The city council of the city of Port Orchard deems these regulations to be essential to

the protection of the public health, safety and general welfare, and the adoption thereof to be in the public interest. (Ord. 1702 § 1, 1997).

16.04.020 Jurisdiction.

These subdivision regulations shall apply to all subdivision of land within the corporate limits of the city of Port Orchard. The provisions and standards contained in this chapter shall be deemed to be minimum standards with which compliance is essential to the permitted uses, and shall not be construed as limiting the legislative discretion of the city council to further restrict the permissive uses or to withhold or revoke permits for uses where, notwithstanding the existence of the minimum standards herein set forth, the promotion or protection of the public health, safety and welfare bears a substantial relation to such withholding, denial or revocation of permits or uses. (Ord. 1702 § 2, 1997).

16.04.030 Conflicting provisions.

It is not intended by this chapter to interfere with or abrogate or annul any easements, covenants, or other agreements between parties. Where this chapter imposes a greater restriction upon the use of buildings, or land or requires larger spaces than is imposed or required by other resolutions, rules, or regulations or by easements, covenants, or other agreements, the provisions of this chapter shall govern. (Ord. 1702 § 3, 1997).

16.04.040 Definitions.

Whenever the following words and phrases appear in this chapter they shall be given the meaning attributed to them by this section. When not inconsistent with the context, words used in the present tense shall include the future; the singular shall include the plural, and the plural the singular; the word “shall” is always mandatory, the word “may” indicates a use of discretion in making a decision.

“Alley” is a strip of land dedicated to public use providing vehicular and pedestrian access to the rear side of properties which abut and are served by a public road.

“City” is the city of Port Orchard, Washington, and all the territory within its existing and future corporate limits.

“City council” is the legislative authority of the city of Port Orchard.

"Comprehensive plan" is the current comprehensive plan of the city of Port Orchard approved by the city council.

"Cul-de-sac" is a road closed at one end by a circular area of sufficient size for turning large vehicles around.

"Dedication" is the deliberate appropriation of land by an owner for any general and public uses, reserving to himself no other rights than such as are compatible with the full exercise and enjoyment of the public uses to which the property has been devoted. The intention to dedicate shall be evidenced by the owner by the presentment for filing of a final plat or short plat showing the dedication thereon; and, the acceptance by the public shall be evidenced by the approval of such plat for filing by the appropriate governmental unit.

"Final plat" is the final drawing of the subdivision and dedication prepared for filing for record with the county auditor and containing all elements and requirements set forth in the state subdivision statute (Chapter 58.17 RCW) and in this chapter.

"Lot" is a fractional part of subdivided lands having fixed boundaries, being of sufficient area and dimension to meet minimum zoning requirements for width and area. The term shall include tracts or parcels.

"Planning commission" is the commission appointed pursuant to the Chapter 2.20 POMC.

"Plat" is a map or representation of a subdivision, showing thereon the division of a tract or parcel of land into lots, blocks, streets, and alleys or other divisions and dedications.

"Preliminary plat" is a neat and approximate drawing of a proposed subdivision showing the general layout of streets and alleys, lots, blocks, and restrictive covenants to be applicable to the subdivision, and other elements of a plat or subdivision which shall furnish a basis for the approval or disapproval of the general layout of a subdivision.

"Property owner" means those individuals, corporation, or entity who own or have an invested contractual interest in the property.

"Road" or "street" is a public or approved private right-of-way which provides vehicular circulation or principal means of access to abutting properties.

"Short plat" is the map or representation of the short subdivision.

"Short subdivision" is the division of land into four or less lots, tracts, parcels, sites or subdivisions for the purpose of sale or lease.

"Subdivision" is the division or redivision of land and the transfer of ownership into five or more lots, tracts, parcels, sites or divisions for the purpose of sale or lease and shall include all resubdivision of land. (Ord. 1702 § 4, 1997).

16.04.050 Adopted.

In order that land may be subdivided in accordance with these purposes and policies, the following subdivision regulations are hereby adopted. (Ord. 1702 § 5, 1997).

16.04.060 Applicability.

Whenever any subdivision of land is proposed, before any contract is made for the sale of any part thereof, and before any permit for the erection of a structure in such proposed subdivision shall be granted, the subdividing owner, or his authorized agent, shall apply for and secure approval of such proposed subdivision in accordance with standards and procedures as set forth in this chapter. Every subdivision of land within the corporate limits of the city of Port Orchard shall proceed in compliance with this chapter. (Ord. 1702 § 6, 1997).

16.04.070 Exemptions.

The provisions of this chapter shall not apply to the following:

- (1) Any cemetery or burial plot, which is used for that purpose;
- (2) Any division of land not containing a dedication, in which the smallest lot created by the division exceeds 1/128 of a section of land or five acres;
- (3) Any division of land made by testamentary provision, the law of descent, or upon court order;
- (4) Mobile home parks;
- (5) A division made for the purpose of adjusting boundary lines which does not create any additional lot, tract, parcel, site, or division nor create any lot, tract, parcel, site, or division to meet minimum requirements for width and area for a building site. (Ord. 1702 § 7, 1997).

16.04.080 Concomitant agreement.

Any application for a subdivision of any property may be subject to the signing of a concomitant agreement as a condition to the granting of the subdivision. The agreement shall serve to minimize the

expected negative impact of the proposed subdivision and has as its purpose the improvement of the area for public good. The agreement shall include any condition of approval the city finds necessary to protect the public health, safety or general welfare. Wherever such a concomitant agreement is signed, it shall be filed and recorded with the office of the Kitsap County auditor and officially entered as a covenant upon the land. The applicant may be required to pay the cost of the preparation of the agreement. (Ord. 1702 § 8, 1997).

16.04.090 Administration.

The city engineer or the city engineer's designee is vested with the duty of administering subdivision and platting regulations within the corporate areas of the city and may prepare and require the use of such forms as are essential to their administration. (Ord. 1702 § 9, 1997).

16.04.100 Short subdivision – Application.

The property owner or his authorized agent, desiring to subdivide land into four or fewer lots shall file with the city a petition signed and acknowledged by him, on forms provided by the city and shall be full and complete, including such data as may be prescribed by the city. Each proposal shall be delineated in sufficient detail so that the plat is clearly defined. Required information shall include but shall not be limited to:

- (1) Three signed copies of the application and all related material.
- (2) The legal description of the area to be subdivided.
- (3) Legal descriptions for each new parcel being created. A legal description shall include all existing easements and newly created easements within the developed structure of the legal itself. All legal descriptions shall be written in a manner which is acceptable to the city engineer.
- (4) Drawings to scale that describe exactly and legally the property being short platted.
 - (a) The name of any adjacent subdivisions;
 - (b) Lines marking the original boundaries of the site and the proposed lots. All dimensions shall coincide with the legal description;
 - (c) Dimensions, names, and locations of existing roads and ways within or adjacent to the tract;

(d) Location of existing structures with respect to all existing and proposed property boundaries;

(e) North arrow;

(f) Scale;

(g) Seal and signature of professional land surveyor who prepared drawings. (This requirement may be waived by the city engineer.)

(5) The proposed source of water and means of sewage disposal. The city engineer shall have the proposed short subdivision reviewed to assure that all lots conform to all state and local requirements. If it is determined that the proposed short subdivision application contains sufficient elements and data to furnish a basis for approval or disapproval, a file number shall be affixed to the application along with the date of receipt and promptly forwarded to the city engineer. Copies of the application shall be forwarded to the city clerk, fire authority, police chief and any state or federal agency having jurisdiction over the proposal, for review and comment. (Ord. 1702 § 10, 1997).

16.04.110 Short subdivision – Recording of final plat.

The city engineer shall sign and date all approved short subdivisions and return the approved final short plat to the subdivider. The subdivider shall then file the short plat with Kitsap County. (Ord. 1702 § 11, 1997).

16.04.120 Short subdivision – Auditor.

The short plat shall not be deemed approved until so filed. One copy of the recorded plat shall be returned to the city for its files. (Ord. 1702 § 12, 1997).

16.04.130 Short subdivision – Resubdivision requirements.

(1) The area included in an approved short subdivision shall not be further subdivided in any manner within a period of five years from when the final plat has been approved and filed.

(2) The city engineer may approve an amendment to an existing short plat which has been approved and filed for less than the required five years, if the total number of proposed lots do not exceed four and there is no significant adverse action as a result of the amendment. Procedures for a short plat amendment are the same as those for the short subdivision. (Ord. 1702 § 13, 1997).

16.04.140 Preliminary plat – Application.

(1) The property owner, or authorized agent, desiring to subdivide land into five or more lots, shall file with the city a petition signed and acknowledged by him/her on forms provided by the city and shall be full and complete, including such data as may be prescribed by the city engineer.

(2) Each subdivision shall be delineated in sufficient detail so that the plat is clearly defined. Preliminary plat requirements shall include but shall not be limited to:

(a) The legal description of the property or area to be subdivided, legal descriptions for each new parcel being created and shall include all existing easements and newly created easements within the developed structure of the legal itself.

(b) A complete and detailed written statement of the intended use of the land.

(c) Scaled drawings which include survey data compiled as a result of a survey made by a registered land surveyor, site plan, area map, traffic circulation plans and any other plans and drawings deemed necessary for evaluation. (Ord. 1702 § 14, 1997).

16.04.150 Preliminary plat – Property owners list.

A list of property owners within 300 feet of the exterior boundaries of the subject property and their addresses, shall be furnished by the applicant. Said list shall be obtained from the Kitsap County assessor. (Ord. 1702 § 15, 1997).

16.04.160 Preliminary plat – Filing fee.

Whenever an application for a subdivision is filed, a fee as determined by resolution, shall be paid for the purpose of defraying the costs incidental to the proceedings. (Ord. 1702 § 16, 1997).

16.04.170 Preliminary plat – File number.

Upon receipt of an application for a subdivision, the city shall review the proposal to assure that all lots conform to all state and local requirements. If it is determined that the proposed preliminary plat application contains sufficient elements and data to furnish a basis for approval or disapproval, a file number shall be affixed to the application along with the date of receipt. (Ord. 1702 § 17, 1997).

16.04.180 Preliminary plat – Planning commission public meeting.

(1) Upon the proper filing of a preliminary plat application, the planning commission shall give proper notice and hold a public meeting at the time and date set forth in the notice.

(2) The commission shall consider the facts of the proposal, and any other competent facts pertaining to the subject property or to the properties adjacent to or in the vicinity thereof. The commission shall evaluate the preliminary plat proposal for the purpose of determining if it is in furtherance of the health, safety, and general welfare of the community and that the public use and interest will be served by the platting of such subdivision. The commission shall make written recommendations to the council regarding the subdivision of the property and file the same with the city clerk. Conditions of approval shall be precisely recited in the planning commission's report and shall include recommended improvements, if any. Such recommendations shall be submitted to the city council not later than 14 days following action by the planning commission. The recommendation shall be in writing and shall include findings of fact and conclusions to support the recommendation.

(3) A written report of the commission's decision shall be mailed to the petitioner at the address shown on his petition. (Ord. 1910 § 1, 2003; Ord. 1702 § 18, 1997).

16.04.190 Preliminary plat – City council public hearing.

Upon receipt of the recommendation of the planning commission on any preliminary plat, the city council shall at its next meeting set the date for the public hearing where it shall consider the recommendations of the planning commission and may adopt or reject the recommendations of the planning commission based on the record established at the public hearing. Notice of the time and place of the hearing shall be published once in a newspaper of general circulation within the city, not less than 10 days nor more than 30 days prior to the hearing date. The city shall put the notice in the newspaper. Notice shall also be mailed to all owners of record of the properties within 300 feet of the exterior boundaries of the subject property, not less than 10 days prior to the hearing date. If the proposed subdivision is adjacent to the right-of-way of any state highway, notice shall be given to

the State Department of Transportation, or its successor; and the State Department of Ecology, if the proposed subdivision lies within an environmentally sensitive area. The city shall mail the notice to property owners. The applicant shall be responsible for the list's accuracy. The decision of the city council shall be in writing and shall include findings of fact and conclusions to support the decision. (Ord. 1910 § 2, 2003; Ord. 1702 § 19, 1997).

16.04.200 Preliminary plat – City council decision.

(1) Hearings for which notice has been given in accordance with the provisions herein may be continued for good cause and verbal notice to those present of the date, time, and place to which such hearing is continued shall be deemed sufficient notice.

(2) A petition, which has been disapproved by the council, cannot be resubmitted to the commission within one year of the date of disapproval.

(3) Appeal from Decision of the City Council. The decision of the city council shall be the final determination of the city and may be appealed to the superior court in accordance with the Land Use Petition Act, Chapter 36.70C RCW as amended. (Ord. 1910 § 3, 2003; Ord. 1702 § 20, 1997).

16.04.210 Final plat – Application – Bond in lieu of construction.

Within five years following the approval of the preliminary plat the applicant shall file with the city engineer an application for final approval of a subdivision plat. The application shall:

(1) Be made on forms provided by the city and signed by the owner of record and shall be full and complete, together with a fee as established by resolution.

(2) Be accompanied by three sets of as-built drawings of all improvements.

(3) Comply in all respects with the preliminary plat as approved. In lieu of the completion of the actual construction of any required improvements prior to the approval of a final plat, the city may accept a bond, in an amount and with surety and conditions to it, or other secure method, providing for and securing to the city the actual construction and installation of such improvements within a time limit as specified by the city council and expressed in the bonds. In addition, the city council may require other methods of security, including

the posting of a bond securing to the city the successful operation of improvements for an appropriate period of time up to two years after final approval. The city engineer is authorized to enforce bonds as approved by the city council.

(4) Be presented to the city engineer at least four weeks prior to a regular meeting of city council. The date of the regular meeting on approval of the final plat shall constitute the official submittal date of the plat for the purposes of these regulations.

(5) Be accompanied by all formal irrevocable offers of dedications to the public of, but not limited to, all streets, utilities, parks, and easements in a form approved by the city attorney. The subdivision plat shall be marked with a notation indicating the formal offers of dedication. A full covenant and warranty deed to all land to be dedicated to the public in proper form for recording, together with a title policy.

(6) A certificate bearing the typed or printed names of all persons having an interest in the subdivided land, signed by the said persons and acknowledged by them before a notary public, consenting to the subdivision of the said land and reciting a dedication by them of all land shown on the plat to be dedicated for public uses and a waiver by them and their successors of all claims for damages against any governmental authority arising from the construction and maintenance of public facilities and public property within the subdivision. (Ord. 1910 § 4, 2003; Ord. 1702 § 21, 1997).

16.04.220 Final plat – Signing and recording.

(1) Subsequent to the resolution of the city council, three paper copies of the construction plans, and one copy of the original of the subdivision plat on tracing cloth and/or reproducible mylar shall be submitted to the city engineer for final review. No final approval shall be endorsed on the plat until a review has indicated that all the requirements of the preliminary plat as approved have been satisfied.

(2) When the city engineer finds that all conditions of the resolution have been satisfied, he/she shall sign the tracing cloth and/or reproducible mylar original of the subdivision plat. (Ord. 1910 § 5, 2003; Ord. 1702 § 22, 1997).

16.04.230 Final plat – Written approval of subdivision – Recording.

(1) When the city council finds that the subdivision proposed for final plat approval conforms to all terms of the preliminary plat, as approved, and that said subdivision meets the requirements of this chapter, other applicable state laws, and local ordinances which were in effect at the time of the preliminary plat approval, it shall suitably inscribe and execute its written approval on the face of the plat. The city shall make a formal written finding of fact that the proposed subdivision or short subdivision is in conformity with any applicable zoning ordinance or other land use controls. The original of said final plat shall be filed for record with the county auditor. Simultaneously with the filing of the plat, the city clerk shall record the agreement of dedication and any other legal documents as shall be required to be recorded. One paper copy shall be furnished to the city engineer. One paper copy shall be filed with the county assessor. Any lots in a final plat filed for record shall be valid land use, notwithstanding any change in zoning laws, for a period of five years from the date of filing. A subdivision shall be governed by the terms of approval of the final plat, and the statutes, ordinances and regulations in effect at the time of approval for a period of five years after final plat approval unless the city council finds that a change in conditions creates a serious threat to the public health or safety in the subdivision.

(2) Any decision approving or disapproving a plat shall be reviewable under Chapter 36.70C RCW. (Ord. 1910 § 6, 2003; Ord. 1702 § 23, 1997).

16.04.240 Time limit.

Preliminary plats of any proposed subdivision and dedication shall be approved, disapproved, or returned to the applicant for modification or correction within 90 days from date of filing thereof unless the applicant consents to an extension of such time period; provided, that if an environmental impact statement is required as provided in RCW 43.21C.030, the 90-day period shall not include the time spent preparing and circulating the environmental impact statement by the city. Final plats and short plats shall be approved, disapproved, or returned to the applicant within 30 days from the date of filing thereof, unless the applicant consents to an extension of such time period. A

final plat meeting all requirements of this chapter shall be submitted to the legislative body of the city, town, or county for approval within five years of the date of preliminary plat approval. An applicant who files a written request with the city council at least 30 days before the expiration of this five-year period shall be granted one one-year extension upon a showing that the applicant has attempted in good faith to submit the final plat within the five-year period. (Ord. 1910 § 7, 2003; Ord. 1702 § 24, 1997).

16.04.250 Vacating procedures.

The city council establishes the following procedure to process a petition to vacate a right-of-way:

(1) The petition to vacate a right-of-way shall be accompanied by a petition fee as set by council resolution.

(2) The petition to vacate a right-of-way shall be accompanied by a certified check that provides for one-half the cost of the value of the land. The value of the land will be based on square foot valuations as set by council resolution.

(3) The city clerk will not process the petition without the conditions set out in subsections (1) and (2) having been fulfilled.

(4) The city council reserves the right to require an appraisal be completed at the expense of the petitioner. At the council's prerogative, the appraisal shall be completed by either a certified or noncertified appraiser and approved by the council. If the council requires an appraisal and the appraisal exceeds the valuations as set by council resolution, the petitioner shall provide the city with the additional required funds. If the appraisal determines the cost is less than the established values, the city will reimburse the difference based on the amount of the certified check and the appraised value.

(5) The city will hold the certified check for a maximum of six months after the council approves the vacation. If by that time, the petitioner has not completed the transaction, the petitioner shall forfeit the certified check. The city treasurer shall cash the check and deposit the funds in the appropriate city fund.

(6) The cost of the petition fees and appraisal shall not be credited towards the cost of the right-of-way. (Ord. 1513, 1991).

16.04.260 Violations – Penalty.

(1) Any person, firm, corporation or association or any agent of any person, firm, corporation or association who violates any provision of this chapter relating to the sale, offer for sale, lease or transfer of any lot, tract or parcel of land shall be guilty of a civil infraction and each sale, offer for sale, lease or transfer of each separate lot, tract, or parcel of land in violation of any provisions of this chapter shall be deemed a separate and distinct offense.

(2) Whenever any parcel of land is divided into five or more lots, tracts, or parcels of land and any person, firm or corporation or any agent of any of them sells or transfers, or offers or advertises for sale or transfer, any such lot, tract, or parcel without having a final plat of such subdivision filed for record, the city attorney shall commence an action to restrain and enjoin further subdivisions or sales, or transfers, or offers of sale or transfer and compel compliance with all provisions of this chapter. The costs of such action shall be taxed against the person, firm, corporation or agent selling or transferring the property.

(3) Any person who violates any court order of injunction issued pursuant to this chapter shall be subject to a fine of not more than \$5,000 or imprisonment for not more than 90 days or both.

(4) In the enforcement of this chapter, the city attorney may accept an assurance of discontinuance of any act or practice deemed in violation of this chapter from any person engaging in, or who has engaged in such act or practice. Any such assurance shall be in writing and be filed with and subject to the approval of the superior court of the county in which the alleged violation occurs. A violation of such assurance shall constitute prima facie proof of a violation of this chapter. (Ord. 1702 § 25, 1997).

RESOLUTION NO. 1670 ✓

A RESOLUTION OF THE CITY OF PORT ORCHARD, WASHINGTON
SUPERSEDING RESOLUTION NO. 1638 AND RESOLUTION NO. 1573
AND ADOPTING A STREET/ALLEY VACATION POLICY AND FEES

WHEREAS, RCW 35.79 sets forth statutory provisions for street vacations, and

WHEREAS, the City Council is the guardian of all public property and has an obligation to review each request to vacate public right-of-way, and

WHEREAS, it is the desire of the City Council to establish policies setting consistent basic standards which will serve as a guide for property owners, city staff and elected officials.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF PORT ORCHARD DOES HEREBY RESOLVE:

THAT the following is hereby adopted as the City of Port Orchard

STREET/ALLEY VACATION POLICY

It is the policy of the City of Port Orchard to grant vacation of street/alley right-of-way when it is determined that such property is not needed presently or in the future for public access including vehicular, pedestrian and/or visual access.

Section 1. A Petition to Vacate shall be submitted to the City Clerk's Office. City staff shall review petition prior to acceptance to confirm all information, fees and attachments are included.

Section 2. The accepted petition shall be transmitted to the Street/Alley Committee and the City Engineer for administrative review and recommendation. Each proposed vacation shall be considered on its own merit, however, the Review Standards contained herein (Section 4) shall be used as base review criteria.

Section 3. After administrative review, the Clerk's Office shall prepare a draft resolution for Council consideration setting date and time for a Public Hearing on the Petition to Vacate. Such Public Hearing shall not be more than sixty (60) days and not less than twenty (20) days after date of passage of such Resolution.

Section 4. REVIEW STANDARDS. The following are standards which shall constitute the base for the review of each petition to vacate. The review process shall not be limited by these delineated standards. Other factors may be considered which are unique to a specific action.

- a. The right-of-way must be determined to have no foreseeable or possible public use.
- b. State law (R.C.W. 35.79) "No city or town shall be authorized to have authority to vacate such street, or alley, or any parts thereof if any portion thereof abuts on a body of salt or fresh water unless such

vacation be sought to enable the city, town, port district, or state to acquire the property for port purposes, boat moorage, or launching sites, recreational, viewpoint, park, or educational purposes, or other public uses. This proviso shall not apply to industrial zoned property."

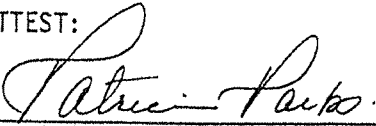
- c. The removal of public access does not adversely affect access to other property(s). No vacation will be allowed if such action land locks any existing parcel, lot of record, or tract.
- d. The vacation of the property does not adversely affect utilities such as water, sewer, storm, electric and others.
- e. The enlarging of property area does not create potential or actual land uses that are inconsistent with city growth plans and goals.
- f. The City receives the fullest monetary amount allowed by law.
- g. The petition should contain the approval of all the abutting property owners and proof of ownership must accompany the petition.
- h. There has been a public hearing as set forth by RCW 35.79, with adjacent property owners receiving notification.

Section 5. **FEES:** All actions to petition for vacation of public right-of-way shall be subject the following fees:

- a. Application Fee: The application fee to submit a Petition to Vacate Public Right-of-Way shall be \$100.00. This is a non-refundable fee and shall be paid by the petitioner. In the event the administrative cost to process a Petition to Vacate exceeds \$100.00, the petitioner will be accessed additional fees.
- b. Compensation for vacated property: The petition to vacate public right-of-way shall be accompanied by a certified check that provides for one-half the value of the land. The value of the land will be based on the following square foot valuations: Residential: \$5.00; Commercial: \$10.00; and, Industrial: \$10.00. In lieu of a certified check based on the estimated values, the petitioner may submit a certified check based on an appraisal. The appraisal must be included with the petition. The City reserves the right to accept or reject the submitted appraisal. If the Petition is denied the certified check will be returned to the petitioner.

PASSED by the City Council of the City of Port Orchard, APPROVED by the Mayor and attested by the Clerk in authentication of such passage this 27th day of June, 1994.

ATTEST:


Patricia Parks, City Clerk


LESLIE J. WEATHERILL, MAYOR

RESOLUTION NO. 1482

A RESOLUTION OF THE CITY OF PORT ORCHARD,
WASHINGTON ESTABLISHING A REQUIREMENT FOR
ADDITIONAL RIGHT OF WAY FROM COMMERCIAL
DEVELOPMENTS.

WHEREAS, the City of Port Orchard strives to plan
for the future needs of the community, and

WHEREAS, the City of Port Orchard anticipates the
eventual widening of Bethel Road,

THEREFORE BE IT RESOLVED THAT THE CITY COUNCIL OF
THE CITY OF PORT ORCHARD, HEREBY RESOLVES AND ESTABLISHES THE
FOLLOWING:

Future applications to reclassify land use of
property along Bethel Avenue from its intersection with State
Highway 160 to the south City limits will be reviewed as to
the future impact upon Bethel Avenue.

If appropriate, the City Council will require
additional right of way to be dedicated to the City as a
condition of the land use reclassification. The additional
right of way will be 20 feet wide for the length of the
property abutting Bethel Avenue and will be used for the
eventual widening of the road.

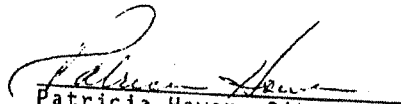
If the City Council requires right of way
dedication, the property transfer shall be completed prior to
passing of the ordinance allowing the land use
reclassification.

If the property reverts back to its original land
use, the City shall retain the dedicated property.

PASSED by the City Council of the City of
Port Orchard, APPROVED by the Mayor and attested by the
Clerk in authentication of such passage this 25th day of
April, 1988.


LESLIE J. WEATHERILL, MAYOR

ATTEST:


Patricia Hower, City Clerk

RESOLUTION NO. 1926

A RESOLUTION OF THE CITY OF PORT ORCHARD, WASHINGTON, REPEALING RESOLUTION NO. 1656 AND REESTABLISHING A POLICY TO MITIGATE THE IMPACTS OF GROWTH ON EXISTING ROADS OF MELCHER STREET AND POTTERY AVENUE.

WHEREAS, the City of Port Orchard carefully reviews land use applications and seeks to minimize the impacts caused by increased density; and

WHEREAS, the city has established standard road sections to assure safe travelway; and

WHEREAS, the increased land use density causes increased traffic which can exceed the capacity of the existing roads; and

WHEREAS, the roads of Melcher Street and Pottery Avenue will have to be improved to meet the traffic demands of increased land use density; now, therefore,

THE CITY COUNCIL OF THE CITY OF PORT ORCHARD HEREBY RESOLVES AS FOLLOWS:

SECTION 1. The following is the city's policy to mitigate the impacts of growth on existing roads of Melcher Street and Pottery Avenue.


- (1) Melcher Street between Sherman Avenue and Pottery Avenue will be designated a collector road after the adjacent area is substantially developed.
- (2) Pottery Avenue between Melcher Street and Tremont Street will be designated a collector road after the adjacent area is substantially developed.
- (3) Whenever a parcel of property which abuts the two described segments of Melcher Street and Pottery Avenue is granted a short plat, subdivision, or land use reclassification action, the following policies will apply:
 - (a) Each property adjacent to this section of Melcher Street will dedicate a strip of property 15 feet wide along this road to be public right of way. The total width of the collector road shall be a minimum of 60 feet. The dedication of land will allow the street to be developed to its full width.
 - (b) Each property adjacent to this section of Pottery Avenue will dedicate a strip of property along this road to be public right of way. The total width of the collector road shall be a minimum of 60 feet. The dedication of land will allow the street to be developed to its full width.

SECTION 2. REPEALER. Resolution No. 1656 is hereby repealed in its entirety.

PASSED by the City Council of the City of Port Orchard, APPROVED by the Mayor and attested by the Clerk in authentication of such passage this 12th day of March 2001.


LESLIE J. WEATHERILL, MAYOR

ATTEST:


Patricia Parks, City Clerk

3. Building Permits

The City enforces the 2003 edition of the International Building Codes (IBC). The Building Inspector does the plan reviews and the compliance inspections. The Public Works Director is the Building Official who supervises the Inspector.

Building permit applications are obtained at the Public Works Department, 876-4991. Incomplete applications cannot be processed. Plan Review fees are typically paid prior to formal Plan Review.

Once the applicant has completed the application, the City Planner will review it for zoning and land use compliance. The Building Inspector will review it for code compliance. The item of the review depends on the complexity of the project. Upon completion of the review, the applicant will be called and asked to come to City Hall to pay for the permit. Construction can commence as soon as the permit is paid. The staff will post the permit after it is typed.

Water and sewer utility fees shall be paid at the time of building permit issuance.

The telephone number for the inspector is 876-4991, and the office hours are 8:00 AM to 4:30 PM, Monday through Friday.

**Call 24 hours before
inspections**

Enclosed are the following:

Schedule of Building Permit Fees
Schedule of Excavation Permit Fees
Schedule of Residential Plumbing and Mechanical Permit Fees
Schedule of Commercial Plumbing and Mechanical Permit Fees

TABLE 1-A BUILDING PERMIT FEES
Plan Review Fee is 65% of Total Building Fee

TOTAL VALUATION	FEES
\$1 to \$500	\$25.15
\$501 to \$2,000	\$25.15 for the first \$500 plus \$3.25 for each additional \$100, or fraction thereof, to and including \$2,000
\$2,001 to \$25,000	\$74.10 for the first \$2,000 plus \$15 for each additional \$1,000, or fraction thereof, to and including \$25,000
\$25,001 to \$50,000	\$418.64 for the first \$25,000 plus \$10.80 for each additional \$1,000, or fraction thereof, to and including \$50,000
\$50,001 to \$100,000	\$688.80 for the first \$50,000 plus \$7.50 for each additional \$1,000, or fraction thereof, to and including \$100,000
\$100,001 to \$500,000	\$1,063.30 for the first \$100,000 plus \$6.00 for each additional \$1,000, or fraction thereof, to and including \$500,000
\$500,001 to \$1,000,000	\$3,459.40 for the first \$500,000 plus \$5.10 for each additional \$1,000, or fraction thereof, to and including \$1,000,000
\$1,000,001 and up	\$6,001.35 for the first \$1,000,000 plus \$3.65 for each additional \$1,000, or fraction thereof
Other Inspections and Fees:	
1. Inspections outside normal business hours (minimum charge, two hours).....	\$47.00/hour ¹
2. Re-inspection fees assessed under provision of Section 305.8.....	\$47.00/hour ¹
3. Inspections for which no fee is specifically indicated (minimum charge, one-half hour).....	\$47.00/hour ¹
4. Additional plan review required by changes, additions, or revision to plans (minimum charge, one-half hour).....	\$47.00/hour ¹
5. For use of outside consultants for plan checking and inspections, or both.....	Actual Costs ²

¹Or the total hourly cost to the jurisdiction, whichever is the greatest. The cost shall include supervision, overhead, equipment, hourly wages, and fringe benefits of the employees involved.

²Actual costs include administrative and overhead costs.

Notes: Signs- \$50.00 + \$4.50 State Fee

Fire Alarms – Calculate using construction value.

Fire Sprinklers – Calculate using construction value.

Remember, State fees for duplexes, triplexes, apartments, etc. calculate differently (see page 1-9).

Resolution No. 2047: Establishing the Building Valuation for the City Building Codes; passed 1 December 2003.

APPENDIX J

GRADING

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.

SECTION J101 GENERAL

J101.1 Scope. The provisions of this chapter apply to grading, excavation and earthwork construction, including fills and embankments. Where conflicts occur between the technical requirements of this chapter and the soils report, the soils report shall govern.

J101.2 Flood hazard areas. The provisions of this chapter shall not apply to grading, excavation and earthwork construction, including fills and embankments, in floodways within flood hazard areas established in Section 1612.3 unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed work will not result in any increase in the level of the base flood.

SECTION J102 DEFINITIONS

J102.1 Definitions. For the purposes of this appendix chapter, the terms, phrases and words listed in this section and their derivatives shall have the indicated meanings.

BENCH. A relatively level step excavated into earth material on which fill is to be placed.

COMPACTION. The densification of a fill by mechanical means.

CUT. See Excavation.

DOWN DRAIN. A device for collecting water from a swale or ditch located on or above a slope, and safely delivering it to an approved drainage facility

EROSION. The wearing away of the ground surface as a result of the movement of wind, water or ice.

EXCAVATION. The removal of earth material by artificial means, also referred to as a cut.

FILL. Deposition of earth materials by artificial means.

GRADE. The vertical location of the ground surface.

GRADE, EXISTING. The grade prior to grading.

GRADE, FINISHED. The grade of the site at the conclusion of all grading efforts.

GRADING. An excavation or fill or combination thereof.

KEY. A compacted fill placed in a trench excavated in earth material beneath the toe of a slope.

All slope references in the chapter have been modified to show the horizontal:vertical relationship.

SLOPE. An inclined surface, the inclination of which is expressed as a ratio of horizontal distance to vertical distance.

TERRACE. A relatively level step constructed in the face of a graded slope for drainage and maintenance purposes.

SECTION J103 PERMITS REQUIRED

J103.1 Permits required. Except as exempted in Section J103.2, no grading shall be performed without first having obtained a permit therefor from the building official. A grading permit does not include the construction of retaining walls or other structures.

J103.2 Exemptions. A grading permit shall not be required for the following:

1. Grading in an isolated, self-contained area, provided there is no danger to the public, and that such grading will not adversely affect adjoining properties.
2. Excavation for construction of a structure permitted under this code.
3. Cemetery graves.
4. Refuse disposal sites controlled by other regulations.
5. Excavations for wells, or trenches for utilities.
6. Mining, quarrying, excavating, processing or stockpiling rock, sand, gravel, aggregate or clay controlled by other regulations, provided such operations do not affect the lateral support of, or significantly increase stresses in, soil on adjoining properties.
7. Exploratory excavations performed under the direction of a registered design professional. This phrase was added to assure that the "exploratory excavation" is not to begin construction of a building prior to receiving a permit for the sole purpose of preparing a soils report.

Exemption from the permit requirements of this appendix shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction.

SECTION J104 PERMIT APPLICATION AND SUBMITTALS

J104.1 Submittal requirements. In addition to the provisions of Section 105.3, the applicant shall state the estimated quantities of excavation and fill.

J104.2 Site plan requirements. In addition to the provisions of Section 106, a grading plan shall show the existing grade and finished grade in contour intervals of sufficient clarity to indicate the nature and extent of the work and show in detail that it complies with the requirements of this code. Drafting requirements were deleted here. The plans shall show the existing grade on adjoining properties in sufficient detail to identify

how grade changes will conform to the requirements of this code.

J104.3 Soils report. A soils report prepared by registered design professionals shall be provided which shall identify the nature and distribution of existing soils; conclusions and recommendations for grading procedures; soil design criteria for any structures or embankments required to accomplish the proposed grading; and, where necessary, slope stability studies, and recommendations and conclusions regarding site geology.

Exception: A soils report is not required where the building official determines that the nature of the work applied for is such that a report is not necessary.

J104.4 Liquefaction study. For sites with mapped maximum considered earthquake spectral response accelerations at short periods (S_s) greater than 0.5g as determined by Section 1615, a study of the liquefaction potential of the site shall be provided, and the recommendations incorporated in the plans.

Exception: A liquefaction study is not required where the building official determines from established local data that the liquefaction potential is low.

SECTION J105 INSPECTIONS

J105.1 General. Most of this section was deleted or simplified. Inspections shall be governed by Section 109 of this code.

J105.2 Special inspections. The special inspection requirements of Section 1704.7 shall apply to work performed under a grading permit where required by the building official.

SECTION J106 EXCAVATIONS

J106.1 Maximum slope. The slope of cut surfaces shall be no steeper than is safe for the intended use, and shall be no steeper than 2 horizontal to 1 vertical (50 percent) unless the applicant furnishes a soils report justifying a steeper slope.

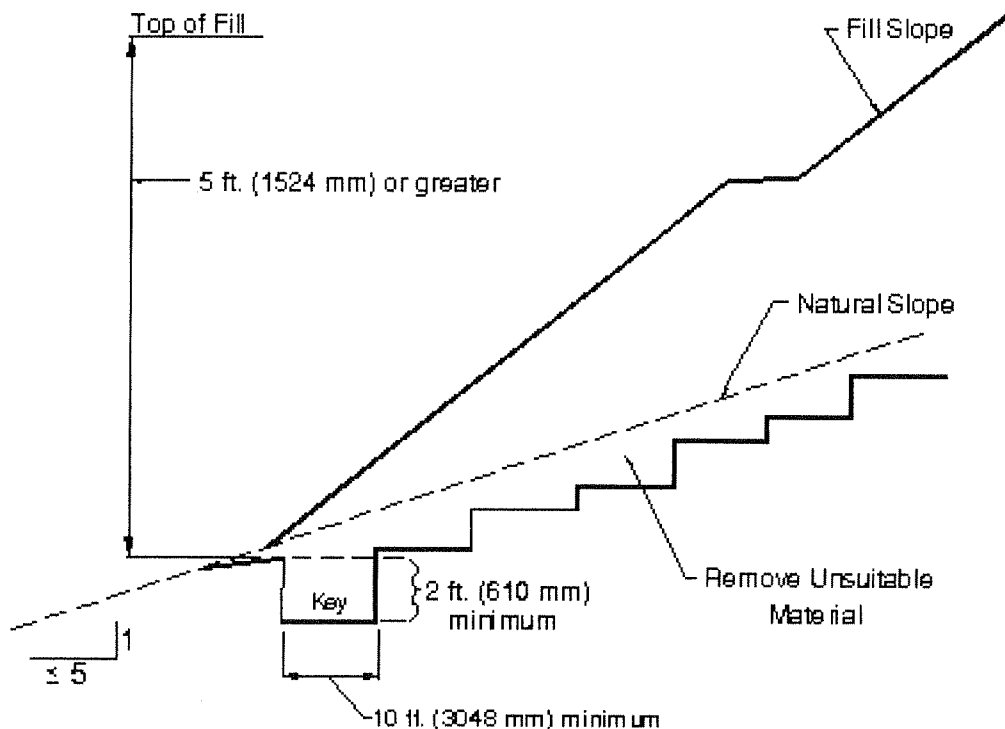
Exceptions:

1. A cut surface may be at a slope of 1.5 horizontal to 1 vertical (67 percent) provided that all the following are met:
 - 1.1. It is not intended to support structures or surcharges.
 - 1.2. It is adequately protected against erosion.
 - 1.3. It is no more than 8 feet (2438 mm) in height.
 - 1.4. It is approved by the building official.
2. A cut surface in bedrock shall be permitted to be at a slope of 1 horizontal to 1 vertical (100 percent).

SECTION J107 FILLS

J107.1 General. Unless otherwise recommended in the soils report, fills shall conform to provisions of this section.

J107.2 Surface preparation. The ground surface shall be prepared to receive fill by removing vegetation, topsoil and other unsuitable materials, and scarifying the ground to provide a bond with the fill material.



For SI: 1 foot = 304.8 mm

FIGURE J107.3
BENCHING DETAILS

J107.3 Benching. Where existing grade is at a slope steeper than 5 horizontal to 1 vertical (20 percent) and the depth of the fill exceeds 5 feet (1524 mm) benching shall be provided in accordance with Figure J107.3. A key shall be provided which is at least 10 feet (3048 mm) in width and 2 feet (610 mm) in depth.

J107.4 Fill material. Fill material shall not include organic, frozen or other deleterious materials. No rock or similar irreducible material greater than 12 inches (305 mm) in any dimension shall be included in fills.

J107.5 Compaction. All fill material shall be compacted to 90 percent of maximum density as determined by ASTM D1557, Modified Proctor, in lifts not exceeding 12 inches (305 mm) in depth.

J107.6 Maximum slope. The slope of fill surfaces shall be no steeper than is safe for the intended use. Fill slopes steeper than 2 horizontal to 1 vertical (50 percent) shall be justified by soils reports or engineering data.

SECTION J108 SETBACKS

J108.1 General. Cut and fill slopes shall be set back from the property lines in accordance with this section. Setback dimensions shall be measured perpendicular to the property line and shall be as shown in Figure J108.1, unless substantiating data is submitted justifying reduced setbacks.

J108.2 Top of slope. The setback at the top of a cut slope shall not be less than that shown in Figure J108.1, or than is required to accommodate any required interceptor drains, whichever is greater.

J108.3 Slope protection. Where required to protect adjacent properties at the toe of a slope from adverse effects of the grading, additional protection, approved by the building official,

shall be included. Such protection may include but shall not be limited to:

1. Setbacks greater than those required by Figure J108.1.
2. Provisions for retaining walls or similar construction.
3. Erosion protection of the fill slopes.
4. Provision for the control of surface waters.

SECTION J109 DRAINAGE AND TERRACING

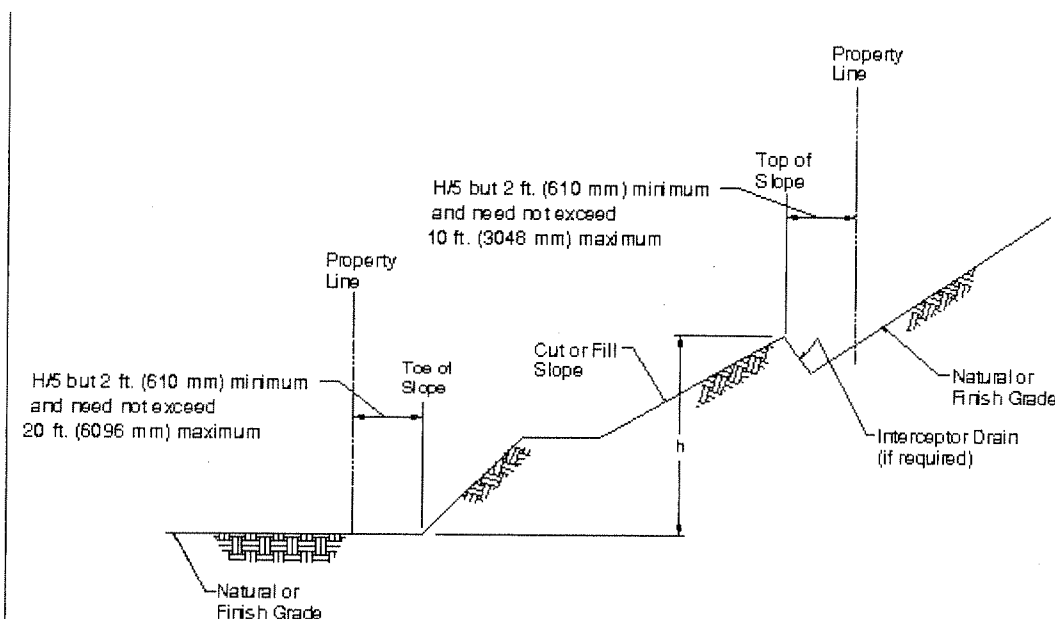
J109.1 General. Unless otherwise recommended by a registered design professional, drainage facilities and terracing shall be provided in accordance with the requirements of this section.

Exception: Drainage facilities and terracing need not be provided where the ground slope is not steeper than 3 horizontal to 1 vertical (33 percent).

J109.2 Terraces. Terraces at least 6 feet (1829 mm) in width shall be established at not more than 30-foot (9144 mm) vertical intervals on all cut or fill slopes to control surface drainage and debris. Suitable access shall be provided to allow for cleaning and maintenance.

Where more than two terraces are required, one terrace, located at approximately mid-height, shall be at least 12 feet (3658 mm) in width.

Swales or ditches shall be provided on terraces. They shall have a minimum gradient of 20 horizontal to 1 vertical (5 percent) and shall be paved with concrete not less than 3 inches (76 mm) in thickness, or with other materials suitable to the application. They shall have a minimum depth of 12 inches (305 mm) and a minimum width of 5 feet (1524 mm).



For SI: 1 foot = 304.8 mm

FIGURE J108.1
DRAINAGE DIMENSIONS

A single run of swale or ditch shall not collect runoff from a tributary area exceeding 13,500 square feet (1256 m²) (projected) without discharging into a down drain.

J109.3 Interceptor drains. Interceptor drains shall be installed along the top of cut slopes receiving drainage from a tributary width greater than 40 feet, measured horizontally. They shall have a minimum depth of 1 foot (305 mm) and a minimum width of 3 feet (915 mm). The slope shall be approved by the building official, but shall not be less than 50 horizontal to 1 vertical (2 percent). The drain shall be paved with concrete not less than 3 inches (76 mm) in thickness, or by other materials suitable to the application. Discharge from the drain shall be accomplished in a manner to prevent erosion and shall be approved by the building official.

J109.4 Drainage across property lines. Drainage across property lines shall not exceed that which existed prior to grading. Excess or concentrated drainage shall be contained on site or directed to an approved drainage facility. Erosion of the ground in the area of discharge shall be prevented by installation of nonerosive down drains or other devices.

SECTION J110 EROSION CONTROL

J110.1 General. The faces of cut and fill slopes shall be prepared and maintained to control erosion. This control shall be permitted to consist of effective planting.

Exception: Erosion control measures need not be provided on cut slopes not subject to erosion due to the erosion-resistant character of the materials.

Erosion control for the slopes shall be installed as soon as practicable and prior to calling for final inspection.

J110.2 Other devices. Where necessary, check dams, cribbing, riprap or other devices or methods shall be employed to control erosion and provide safety.

SECTION J111 REFERENCED STANDARDS

ASTM D 1557-00	Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort [56,000 ft-lb/ft ³ (2,700kN-m/m ³)].	J107.6
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TABLE A-33-A—GRADING PLAN REVIEW FEES

50 cubic yards (38.2 m ³) or less	No fee
51 to 100 cubic yards (40 m ³ to 76.5 m ³)	\$23.50
101 to 1,000 cubic yards (77.2 m ³ to 764.6 m ³)	37.00
1,001 to 10,000 cubic yards (765.3 m ³ to 7645.5 m ³)	49.25
10,001 to 100,000 cubic yards (7646.3 m ³ to 76 455 m ³)—\$49.25 for the first 10,000 cubic yards (7645.5 m ³), plus \$24.50 for each additional 10,000 yards (7645.5 m ³) or fraction thereof.	
100,001 to 200,000 cubic yards (76 456 m ³ to 152 911 m ³)—\$269.75 for the first 100,000 cubic yards (76 455 m ³), plus \$13.25 for each additional 10,000 cubic yards (7645.5 m ³) or fraction thereof.	
200,001 cubic yards (152 912 m ³) or more—\$402.25 for the first 200,000 cubic yards (152 911 m ³), plus \$7.25 for each additional 10,000 cubic yards (7645.5 m ³) or fraction thereof.	
Other Fees:	
Additional plan review required by changes, additions or revisions to approved plans (minimum charge—one-half hour)	\$50.50 per hour*

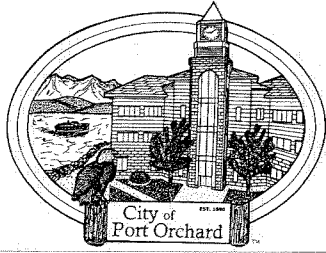
*Or the total hourly cost to the jurisdiction, whichever is the greatest. This cost shall include supervision, overhead, equipment, hourly wages and fringe benefits of the employees involved.

TABLE A-33-B—GRADING PERMIT FEES¹

50 cubic yards (38.2 m ³) or less	\$23.50
51 to 100 cubic yards (40 m ³ to 76.5 m ³)	37.00
101 to 1,000 cubic yards (77.2 m ³ to 764.6 m ³)—\$37.00 for the first 100 cubic yards (76.5 m ³) plus \$17.50 for each additional 100 cubic yards (76.5 m ³) or fraction thereof.	
1,001 to 10,000 cubic yards (765.3 m ³ to 7645.5 m ³)—\$194.50 for the first 1,000 cubic yards (764.6 m ³), plus \$14.50 for each additional 1,000 cubic yards (764.6 m ³) or fraction thereof.	
10,001 to 100,000 cubic yards (7646.3 m ³ to 76 455 m ³)—\$325.00 for the first 10,000 cubic yards (7645.5 m ³), plus \$66.00 for each additional 10,000 cubic yards (7645.5 m ³) or fraction thereof.	
100,001 cubic yards (76 456 m ³) or more—\$919.00 for the first 100,000 cubic yards (76 455 m ³), plus \$36.50 for each additional 10,000 cubic yards (7645.5 m ³) or fraction thereof.	
Other Inspections and Fees:	
1. Inspections outside of normal business hours (minimum charge—two hours)	\$50.50 per hour ²
2. Reinspection fees assessed under provisions of Section 108.8	
3. Inspections for which no fee is specifically indicated (minimum charge—one-half hour)	\$50.50 per hour ²

¹The fee for a grading permit authorizing additional work to that under a valid permit shall be the difference between the fee paid for the original permit and the fee shown for the entire project.

²Or the total hourly cost to the jurisdiction, whichever is the greatest. This cost shall include supervision, overhead, equipment, hourly wages and fringe benefits of the employees involved.



216 Prospect Street Port
Orchard, WA 98366

(360) 876-4991 Fax (360) 876-4980

Residential Fixture Count Form

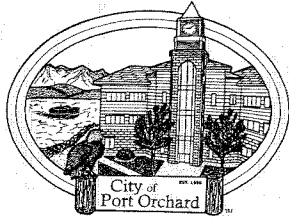
Check off each plumbing and mechanical fixture that applies to your permit and fill in the quantity

Address of Project:

Permit #:

Quantity	Fixture Type	Residential Plumbing Fixtures	Fee	Totals
	Plumbing Issue Fee	Plumbing Permit Base Fee	\$23.50	
	Clothes Washer	Clothes Washer	\$7.00	
	Dishwasher	Dishwasher	\$7.00	
	Drain	Floor Drain	\$7.00	
	Hose Bibb	Hose Bibbs	\$1.00	
	Lawn Sprinkler	Lawn Sprinkler w/backflow	\$7.00	
	Sinks	Sink (Lavatory, Kitchen, Mop)	\$7.00	
	Tub/Shower	Tub with or without shower	\$7.00	
	Water Closet	Toilet; Bidet or Urinal	\$7.00	
	Water Heater	Water Heater	\$7.00	
	Other			
			Total	\$

Quantity	Fixture Type	Residential Mechanical Fixtures	Fee	Totals
	Mechanical Issue Fee	Mechanical Permit Base Fee	\$23.50	
	Fan	Bath Fan and or Exhaust Fan	\$7.25	
	Clothes Dryer	Clothes Dryer w/exhaust	\$10.65	
	Cook Stove	Cook Stove w/exhaust	\$10.65	
	Fireplace - Gas	Fireplace - Gas or Gas log inserts	\$12.00	
	Fireplace - Wood	Fireplace - Wood or Wood Stove	\$12.00	
	Electric Furnace	Furnace Electric or Heat Pump	\$14.80	
	LP Gas Furnace	Furnace Propane +/-Ducting	\$14.80	
	Nat. Gas Furnace	Furnace Natural Gas +/-Ducting	\$14.80	
	Water Heater Gas	Gas WH Vent and Combustion Air	\$10.65	
	Gas Pipe System	Gas Pipe System LPG/Natural/Oil	\$10.00	
	LP Tank	Propane Fuel Tank Under 2000 Gallons	\$10.65	
	Other			
			Total	\$



216 Prospect Street
Port Orchard, WA 98366
(360) 876-4991 Fax (360) 876-4980

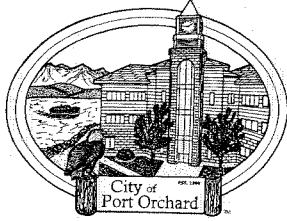
Commercial Mechanical Fixture Count Form

Check off each mechanical fixture that applies to your permit and fill in the quantity

Address of Project:

Permit #:

Quantity	Fixture Type	Commercial Mechanical Fixtures	Fee	Totals
	Mechanical Issue Fee	Mechanical Permit Base Fee	\$23.50	
	C-AIR-HANDLING	Air-Handling Unit > 10,000 CFM	\$18.10	
	C-AIR HANDLING	Air-Handling Unit < 10,000 CFM	\$14.80	
	C-CLASS 1 HOOD	Class 1 Hood & Duct Systems	\$10.65	
	C-CLASS 2 HOOD	Class 2 Hood & Duct Systems	\$10.65	
	C-COMPRESSORS	Compressors	\$14.70	
	C-DUCT CHANGE	Ducting Change without New Furnace	\$13.70	
	C-EVAPORATIVE	Evaporative Coolers, permanently installed	\$10.65	
	C-FAN	Bath Fan and/or Exhaust Fan	\$7.25	
	C-FURNACE	Commercial Furnace & Ducting < 100,000 btu	\$14.80	
	C-FURNACE>100K	Commercial Furnace & Ducting > 100,000 btu	\$18.20	
	C-GAS OUTLETS	Gas Outlets in excess of the first 4	\$2.00	
	C-GASPIPE SYSTEM	Gaspipe System LPG/NATL/OIL (first 4 outlets)	\$10.00	
	C-MECH EQUIP	Miscellaneous Mechanical Equipment	\$10.65	
	C-MECH PUMPS	Mechanical System Pumps (Misc)	\$10.65	
	C-RADIANT HEATER	Radiant Heat Units (wall, ceiling, floor, recessed, etc.)	\$10.65	
	C-UNIT HEAT	Unit Heater Suspended or Floor Mount	\$14.80	
	C-WATER HEATER	Gas Water Heater Vent & Combustion Air	\$10.65	
	GAS/H2O/FURNACE	Combo/Gaspipe/H2OHTR/Furnace	\$35.45	
	WOOD STOVE 2	Wood Stove 2nd and up	\$12.00	
	Other			
			Total	\$



216 Prospect Street
Port Orchard, WA 98366
(360) 876-4991 Fax (360) 876-4980

Commercial Plumbing Fixture Count Form

Check off each plumbing fixture that applies to your permit and fill in the quantity

Address of Project:

Permit #:

Quantity	Fixture Type	Commercial Plumbing Fixtures	Fee	Totals
	Plumbing Issue Fee	Plumbing Permit Base Fee	\$23.50	
	C-DRAIN PIPE CHA	Drainage Pipe or Vent Pipe Re	\$9.80	
	C-BACKFLOW PREV	Backflow protective device 2 inches or less	\$9.80	
	C-BACKFLOW PREV	Backflow protective device larger than 2 inches	\$15.00	
	C-CLOTHES WASHER	Clothes Washing Machine	\$9.80	
	C-DISH WASHER	Dish Washer	\$9.80	
	C-DRINKING FOUNTAIN	Drinking Fountain	\$9.80	
	C-FLOOR DRAIN	Floor Drain	\$9.80	
	C-FLOOR SINK	Floor Sink and /or Indirect Washer	\$9.80	
	C-HOSE BIBBS	Hose Bibbs, each	\$1.00	
	C-INTER-GREASE	Grease Interceptor	\$9.80	
	C-INTERCEPT-INDUSTRIAL	Industrial/Sand Oil Interceptor	\$9.80	
	C-LAWN SPRINKLER	Lawn Sprinkler System with Backflow Device	\$9.80	
	C-MED GAS ADD Outlet	Medical Gas, each additional outlet in excess of first 5	\$5.00	
	C-MEDICAL GAS	Medical gas system up to 5 outlets	\$50.00	
	C-MISC PLUMBING	Miscellaneous Plumbing fixture	\$9.80	
	C-ROOF DRAIN	Roof Drain	\$9.80	
	C-SHAMPOO SINK	Shampoo Sink w/interceptor	\$9.80	
	C-SINK	Sink (Lavatory, Kitchen, Mop, or Bar Sink (each))	\$9.80	
	C-TUB/SHOWER	Tub and/or Shower or both	\$9.80	
	C-WATER CLOSET	Water Closet and/or Urinal	\$9.80	
	C-WATER HEATER	Water Heater	\$9.80	
	C-WATER PIPE CHA	Water Pipe Repair and/or Alteration	\$9.80	
	KITCHEN SINK	Kitchen Sink +/-Garbage Disposal	\$9.80	
	MED EQUIP	Medical Equipment/Kidney Machine	\$9.80	
	MOP SINK	Mop Sink	\$9.80	
	SINK-COMPARTMENT	Multi - Compartment Sink	\$9.80	
	SINK LAVATORY	Sink/Lavatory/Bar Sink	\$9.80	
	TOILET	Toilet/Water Closet/Bidet/Urinal	\$9.80	
	Other			
			Total	\$

4. Utility Policy

The City provides water and sewer services to properties within the city limits. At the time of the building application, the applicant should request the utility work sheet be completed in order to determine the fees. Prior to connection to the water system and/or sewer system, the utility connection fees have to be paid.

The City can provide water and sewer service outside the corporate limits if the City Council approves the connection. The out-of-city account must pay all fees and is charged a 50% surcharge on the bi-monthly billing.

The Kitsap County Health District has jurisdiction over on-site systems such as drainfields and mound systems.

Enclosed is the following:

Ordinance 1799: Water/Sewer Rates

Ordinance 1852: Reimbursement for Utility Extensions

Policy: Sewer Service Abandonment

ORDINANCE NO. 010-05

AN ORDINANCE OF THE CITY OF PORT ORCHARD, WASHINGTON AMENDING PORT ORCHARD MUNICIPAL CODE 13.04 TO AMEND REGULATIONS PROVIDING FOR THE CONTROL, MANAGEMENT, MAINTENANCE AND USE OF PUBLIC AND PRIVATE WATER AND SEWER SYSTEMS AND PROVIDING RATES FOR CONNECTION AND USE OF SUCH SYSTEMS.

FOLLOWS: THE CITY COUNCIL OF THE CITY OF PORT ORCHARD, WASHINGTON DOES ORDAIN AS

SECTION 1. Effective Date. This ordinance shall be effective July 1, 2005.

SECTION 2. Port Orchard Municipal Code 13.04.010 is amended to read as follows:

13.04.010 Bimonthly Water Rates. Water rates are based on a monthly rate and are billed on a bimonthly schedule. The water rates, as calculated bimonthly, are shown below:

(1) BASIC CHARGE (cost for the first 5,000 gallons bimonthly)

SIZE OF SERVICE	BIMONTHLY RATE
3/4"	\$15.00
1"	\$16.00
1 1/2"	\$19.00
2"	\$22.00
3"	\$28.00
4"	\$40.00
6"	\$58.00
8"	\$82.00
10"	\$106.00

(2) CONSUMPTION CHARGE (cost above basic consumption)

RATE 1 0 to 5,000 gallons	Basic Charge
RATE 2 5,000-50,000 gallons	RATE 1 plus \$ 1.65/1,000 gal
RATE 3 50,001- 100,000 gallons	RATE 1 plus RATE 2 plus \$ 1.75/1,000 gal
RATE 4 100,001- 150,000 gallons	RATE 1 plus RATE 2 plus RATE 3 plus \$ 1.85/1,000 gal
RATE 5 In excess of 150,000 gallons	RATE 1 plus RATE 2 plus RATE 3 plus RATE 4 plus \$1.95/1,000 gal

(3) FIRE HYDRANT SERVICE

Schools	\$10.00 per hydrant
Private Service	\$20.00 per hydrant

(4) TEMPORARY CONSTRUCTION

One Day Service	\$ 1.65/1,000 gallons or \$15.00 whichever is greater
-----------------	--

Construction Account	As Metered
0-50,000 gallons	\$1.65/1,000 gallons
50,001-100,000 gallons	\$1.75/1,000 gallons
100,001-150,000 gallons	\$1.85/1,000 gallons
In excess of 150,000 gallons	\$1.95/1,000 gallons

(5) **MULTIPLE CONNECTIONS:** Multiple Connections are where more than one customer is being served through a master meter and the billing is based on the flow through such master meter. The minimum bimonthly billing of the basic charge is determined by the number of customers multiplied by the rate of \$15.00. The consumption charge will be computed by subtracting the amount equal to the number of customers multiplied by 5,000 gallons from the total gallonage consumed. The rate of the consumption above the basic will be \$ 1.65 per 1,000 gallons up to 50,000 gallons, \$1.75 per 1,000 gallons from 50,001 to 100,000 gallons, \$1.85 per 1,000 gallons from 100,001 to 150,000 gallons and \$1.95 per 1,000 gallons in excess of 150,000 gallons.

(6) **PROPERTIES OUTSIDE CITY LIMITS:** Properties served outside the city limits shall have a 50% surcharge on the monthly rate.

SECTION 3. Port Orchard Municipal Code 13.04.020 is amended to read as follows:

13.04.020 Bimonthly Sewer Rates.

(1) Sewer rates are based on a monthly rate and are billed on a bimonthly schedule. The sewer rates, as calculated bimonthly, are shown as follows:

DESCRIPTION	CLASS
Single Family residence	1
Mobile Home on single parcel	1
Business	2
Professional	2
Churches	3
Hotels, Motel	4
Rest Homes, Care Centers	4
Kitsap County Jail	4
Apartments	5
Mobile Home Parks	5
Schools	6
Kitsap County Courthouse (Main Complex)	7
Restaurants	8
Laundromats	9
Taverns	10
Car Dealerships	11
Post Office	12
Grocery Stores	13
Bowling Alley	14
Boat Marina	14
Health Maintenance Organizations	14
Work Release & Juvenile Facilities	14
Kitsap County Public Works Building	14
Car Washes	15
Beauty Shops and Barber Shops	16
Day Care	17
Gas Stations	18
Assisted Living Units	19

(2) BIMONTHLY RATES:

Class 1 \$ 72.00

Class 2 \$ 72.00 for each business with a fixture
 \$ 18.00 for each business, with an employee present, without a fixture
 \$ 72.00 for each floor of an office building or retail complex that has a public or community bathroom

Class 2 shall be subject to the following surcharge, based on store/office interior size:

Category	Size of store/office	Surcharge
Small	Less than 15,000 s.f.	None
Medium	15,000 to 30,000 s.f.	\$72.00
Large	More than 30,000 s.f.	\$144.00

Class 3 \$ 72.00 for the church, plus *
 \$ 72.00 for the rectory, plus *
 \$ 72.00 for the annex
 *Class 6 for educational parochial schools

Class 4 Base fee of \$72.00 plus \$ 18.00 per unit

Class 5 \$ 72.00 per dwelling unit

Class 6 \$ 2.70 for each pupil, teacher, maintenance and administrative person

Class 7 \$ 2,808.00

Class 8 Based on the seating capacity as determined by the Building Official

Description	Seating capacity	Rate
Espresso Bar	Not Applicable	\$ 72.00
Deli	0	\$108.00
Small	1 to 50	\$216.00
Medium	51 to 150	\$324.00
Large	More than 150	\$432.00

The classification of Espresso Bar includes similar food preparation businesses, which do not require the cooking of food or the maintenance of kitchen equipment.

Class 9 Base fee of \$36.00 plus \$18.00 per washing machine
 Laundromats with less than 4 washing machines are considered Class 2. Dry Cleaners without washing machines are Class 2.

Class 10 \$ 180.00

Class 11 \$72.00 for sales and administrative office, plus \$ 72.00 for service department, plus

\$72.00 for car washing when the water is used to determine cost sharing for the sewer treatment plant.

Class 12 \$252.00

Class 13 Basic Fee of \$36.00 plus the following surcharges:

Description	Surcharge
Basic Store	\$ 36.00
Bakery	\$ 36.00
Wetted Down Produce	\$ 72.00
Food Disposal	\$ 72.00
Meat Cutting Area	\$ 144.00

Class 14 Base Fee of \$36.00 plus \$36.00 for each Equivalent Residential Unit (ERU) as determined for the cost sharing formula for the sewer treatment plant.

Class 15 Base Fee of \$36.00 plus \$108.00 per car washing bay.

Class 16 \$72.00

Class 17 Basic Fee of \$144.00 plus the following surcharges:

Description	Surcharge
Less than 5 children	-0-
6 to 25 children	\$72.00
More than 25 children	Class 6 rates

Class 18 \$72.00 for gasoline retail, which could include service bay
\$72.00 for non-automotive retail

Class 19 Base fee of \$72.00 plus
\$72.00 per unit with private kitchen
\$18.00 per unit without private kitchen, studio apartment

- Special Notes:
- (a) Home occupations will not be charged additional sewer fee.
 - (b) For a combination of classes in one business, the highest rate will be selected.
 - (c) In the event that an established rate class does not accurately reflect the impact on the sewer system, the City Engineer may determine the specific monthly rate.
 - (d) Water accounts, which serve a marina pier and do not have a connection to the sewer, shall not be charged a sewer bill. A sewer bill will be charged and based on winter consumption if the water meter serves both the marina pier and any facility or pump station that is connected to the sewer system. For billing purposes, live-a-boards will not be considered as a dwelling unit.
 - (e) Properties served which are outside the city limits shall have a 50% surcharge on the monthly rates.

SECTION 4. Port Orchard Municipal Code 13.04.030 is amended to read as follows:

13.04.030 Water Fees.

(1) Connection Fees: Connection fees are designed to mitigate the impact of new water demands on the existing water system. Connection fees apply to new construction, changes in use, and building modifications that increase the total number of ERU's. The Connection Fee shall be the larger of the two calculation methods:

(a) Fixture Count Method:

For a single-family residence and apartments, the connection fee is \$1,562.13 per dwelling unit.

For commercial units, offices, motels, convalescent centers and other nonresidential uses, the connection fee is \$1,562.13 per ten fixtures or portion thereof.

For all other structures that are served by municipal water, the connection fee is \$1,562.13 per ten fixtures or portion thereof.

A fixture is any fixture as defined in the Uniform Plumbing Code except water heaters, floor drains used for emergency overflows only, drinking fountains if non-continuous flows and extra fixtures attached to existing or regular fixtures such as bed pan washers, showers over tubs and hose attachments on sinks.

(b) Water Consumption Method:

For a single-family residence and apartments, the connection fee is \$1,562.13 per dwelling unit.

For non-residential accounts, connection fee is \$1,562.13 per ERU. The ERU is defined as 180 gallons per day of metered water consumption. The ERU consumption is based upon metered water consumption or comparison to similar accounts when metered water consumption data is not readily available.

The Water Connection Fee shall be adjusted on November 1 of each year to reflect inflation based on the CPI-U of Seattle.

(2) INSTALLATION FEE: Installation fees are designed to reimburse the utility for the cost required to connect the new service to the water main.

The labor installation fee is a flat fee plus sales tax based on the size of the water meter for service lines less than 25 feet:

Installed by city employees:

METER SIZE	FEES
3/4"	\$ 1,000 + cost of meter and associated materials
1"	\$ 1,200 + cost of meter and associated materials
1 1/2"	\$ 1,500 + cost of meter and associated materials
2"	\$ 2,000 + cost of meter and associated materials
Larger Meters	Estimated on a case by case basis

If the water service line exceeds 25 feet, or if the proposed construction is unusually difficult the

If the service is connected by other than city employees, the inspection fee of \$50 per meter will be charged. All materials shall comply with the requirements of the city. If the city supplies any materials, the cost of these, plus overhead and sales tax will be paid by the customer. If the installation is satisfactory, the city shall connect the meter if it is 1" or less in size. Larger meters shall be installed by the contractor.

(3) FEES IN LIEU OF ASSESSMENT: Fees in lieu of assessment shall be charged on new accounts unless exempted as explained below:

(a) The property has previously participated in a water local improvement district and there are records to verify this.

(b) The City Council exempts the property from the fees in lieu of assessment because improvements on the property have substantially improved the water system.

(c) The Agreement for Purchase and Sale of Assets of McCormick Water Company, Inc. waives the city fee in lieu of assessment for water services. These are the services within McCormick Woods, Campus Station and McCormick 620.

Fees in lieu of assessment shall be based on the zone and termini method, as prescribed by law, used in Local Improvement District #63.

(4) PAYMENT: All installation fees and fees in lieu of assessment shall be paid in full prior to any issuance of permits and the physical connection of the private service line to the water system.

SECTION 5. Port Orchard Municipal Code 13.04.040 is amended to read as follows:

13.04.040 Sewer Capital Facility Charge.

(1) Sewer Capital Facility Charge is designed to mitigate the impact of new demands on the existing sewer system and to require new users to pay their fair share of the value of the sanitary sewer system. The Sewer Capital Facilities Charge applies to new construction, changes in use, and building modifications that increase the total number of equivalent residential units (ERU's). An ERU is 180 gallons per day for nonresidential connections. An ERU for residential connections is one single family dwelling unit, whether detached or attached and configured as an apartment unit, condominium unit, townhouse unit or any other configuration. The ERU consumption is based upon metered water consumption or comparison to similar accounts when metered water consumption data is not readily available

(2) The Sewer Capital Facility Charge consists of two components; the General Facility Fee, and the Wastewater Treatment Facility Fee. The General Facility Fee is \$2,770.00 per ERU. The Wastewater Treatment Facility Fee is \$3,230.00 per ERU. Provided, however, the properties within Divisions 1 through 10, inclusively, of the McCormick Woods Land Company shall have a Wastewater Treatment Fee of \$791.25 per ERU.

(3) The Sewer Capital Facility Charge shall be paid before connecting to the City Sanitary Sewer System, or before changing the use, or increasing the total ERU count above the amount for which a Sewer Capital Facility Charge has been paid. If work is to be done that requires a Sewer Capital Facility Charge, it shall be paid before a permit shall be issued.

(4) If, after connection of a nonresidential service, the actual sewer usage has increased or the property use expanded so that there is a greater number of ERU's being used on the property than for which the Sewer Capital Facility Charge was paid, the property owner shall pay to the City an additional Sewer Capital Facility Charge based upon the new or expanded use. The additional

Sewer Capital Facility Charge shall be based upon the charge rate in effect at the time the increased use is requested and/or detected, whichever first occurs.

(5) A credit against the Sewer Capital Facilities Charge may be applied for those property owners that paid their assessments in full through a local improvement district formed by the City where such local improvement district is formed to finance the construction of any of the improvements that are a basis for calculating the value of the Sewer Capital Facilities Charge. The credit shall be equal to the amount of the property owner's principal assessment, not including interest and penalties. The credit shall be applied at the time of payment of the Sewer Capital Facilities Charge and shall not be used to reduce any assessments in the local improvement district.

(6) A credit against the Sewer Capital Facilities Charge may be applied for those property owners that construct at their own expense any of the improvements that are a basis for calculating the value of the Sewer Capital Facilities Charge or for those property owners that pay a latecomer's fee toward those same improvements. The credit shall be the smaller of the following:

a. That portion of the design and construction costs of latecomer's agreement that are directly applicable to the construction of the improvements that are a basis for the value of the Sewer Capital Facilities Charge; or

b. That proportionate amount of the Sewer Capital Facilities Charge that is attributable to the sewer facilities either constructed by the property owner or paid through a latecomer's fee.

(7) The above provisions notwithstanding, the amount of credit shall not exceed the amount of the Sewer Capital Facilities Charge for the property to which the credit is being applied.

(8) At the time the Sewer Capital Facilities Charge is paid, an inspection fee shall be paid. The inspection fee is \$50 per lateral connection to the main.

(9) All materials shall comply with the requirements of the city. If the city supplies any materials, the cost of these plus overhead and sales tax will be paid by the customer.

SECTION 6. Port Orchard Municipal Code 13.04.050 is amended to read as follows:

13.04.050 Billing.

(1) The water and/or sewer charges shall be billed by the City Treasurer bimonthly on the last day of the bimonthly period, to the property owner. The charges and rates shall be due to the Treasurer, who is authorized and empowered to collect and receipt for such payments, on the first day of the month following the receipt of services.

(2) Charges remaining unpaid 30 days after the due date shall be considered delinquent and shall be subject to an additional charge of ten percent of the unpaid balance as a penalty.

(3) When a water and/or sewer bill shall become delinquent and a city employee must go to the premise during normal working hours for the purpose of hanging a written notice on the door, there shall be a ten-dollar charge added to the account.

(4) If the delinquent water and/or sewer charges remain unpaid over a period of thirty days after the due and payable date, service will be discontinued by turnoff. Service will not resume thereafter until the delinquent charges and penalties, together with a turn-off fee, have been paid in full. The turn-off fee shall be \$20.00, unless the same account should become delinquent during a twelve-month period. On a second occurrence, the turn-off fee shall be \$30.00. On the third occurrence and each subsequent occurrence, the turn-off fee shall be \$40.00.

(5) Where both water and sewer delinquent charges are involved, the customer shall not be billed double penalties.

SECTION 7. Port Orchard Municipal Code 13.04.055 is amended to read as follows:

13.04.055 Miscellaneous Charges.

(1) The charge for turning on or shutting off service, other than the regular City Hall business hours, and anytime on weekends or holiday, shall be \$75.00.

(2) In order for a landlord to shut-off a tenant's water, the landlord must be the responsible party for the account, the landlord must sign a hold harmless agreement, and pay a \$10.00 service charge. The City will give advance notice at the service address of at least 8 hours, or such greater time as is required by law.

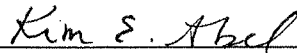
(3) When a closing agent requests, by law, a final billing of utility services to real property being sold, the utility shall provide the requesting party with a written estimated or actual final billing. There will be a service fee of \$20.00 charged for each request.

SECTION 8. Port Orchard Municipal Code 13.04.070 is hereby repealed.

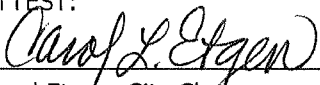
SECTION 9. Savings Clause. Port Orchard Municipal Code 13.04, which is amended by this ordinance, shall remain in force and effect in its present format until the effective date of this ordinance.

SECTION 10. Severability. If any section, subsection, sentence, clause, or phrase of this ordinance or amendment thereto, or its application to any person or circumstances is held invalid, the remainder or application to other persons or circumstances shall not be affected.

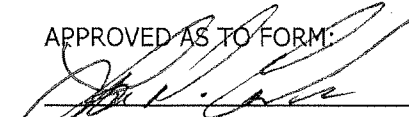
PASSED by the City Council of the City of Port Orchard, APPROVED by the Mayor and attested by the Clerk in authentication of such passage this 23rd day of May 2005.




Kim Abel, MAYOR

ATTEST:


Carol Etgen, City Clerk

APPROVED AS TO FORM:


Loren Combs, City Attorney

SPONSORED BY:


Ron Rider Councilmember

ORDINANCE NO. 1852

AN ORDINANCE OF THE CITY OF PORT ORCHARD, WASHINGTON, RELATING TO THE REIMBURSEMENT PROCEDURE FOR THE CONSTRUCTION OF ROADS AND STORMWATER SYSTEMS, AND THE EXTENSION OF WATER AND SANITARY SEWER MAINS, AND REPEALING ORDINANCES 1385 AND 1587.

THE CITY COUNCIL OF THE CITY OF PORT ORCHARD, WASHINGTON, DOES HEREBY ORDAIN AS FOLLOWS:

SECTION 1. Prior to the construction of an extension of a road, stormwater system, sewer line or water main, the person or persons contemplating the construction shall submit to the City of Port Orchard a notarized statement containing the following information:

- (1) An itemized statement showing the anticipated total cost of the work;
- (2) The total area and front footage of property currently paying the cost of work;
- (3) The total area and front footage of property physically capable of being served by the proposed utility line (including 2);
- (4) The names and permanent mailing address of all property owners covered by (2) and (3) above.

Upon receipt of the above information by the City, it shall be verified by the City Engineer and, if found accurate, shall be reported to the City Council. A copy thereof shall be forwarded, by regular mail, to all property owners listed in (2) and (3) above, together with the City Engineer's estimate of the proposed cost of said improvement to each of the properties to be potentially benefited. Also included will be a statement as to whether or not the said property owners will be required to connect to the said utility extension upon its completion and a statement of the probable costs of said connection or hookup.

SECTION 2. Thereafter, the City Council shall set a date for a public hearing on the improvement and the equitable proration of the cost of said improvement to the properties to be potentially benefited. Following the closing of the public hearing, the City Council may enter into a contract between the City and the property owners paying the cost of the extension or construction under the provisions of RCW 35.91.020. The contract shall provide that thereafter, when any property which is specified in the contract and did not contribute to the original cost of the main or extension is connected thereto, the prorated construction costs chargeable to the benefited and specified properties will be paid to the Developer before the connection to the utility is allowed by the City. The contract shall be referred to as the Developer's Agreement.

SECTION 3. During construction, the Developer shall keep the City informed on the construction progress and cost status of the utility work. Upon completion of the work specified in the Developer's Agreement, the Developer shall provide the City an itemized accounting of all expenses that shall be reimbursed through the Agreement. Included in this accounting shall be copies of all invoices of costs incurred. If the actual construction cost differ from the estimate by ten percent (10%), the Council may call for a new public hearing to amend the proposed prorated costs and/or amend the listing of affected properties.

SECTION 4. Once the Mayor has signed the Agreement, the Developer is required to have the signed Developer's Agreement recorded on the titles of each piece of property specific in the agreement, at the expense of the Developer. The Agreement will be considered null and void if it has not been submitted to Kitsap County to be recorded as required within thirty days of the effective date of the Agreement.

SECTION 5. The owner of the property that is required to pay the prorated construction costs chargeable to his property as hereinabove provided shall pay the said charge to the City. The City shall forward those prorated construction costs to the Developer's last known address of record. Prior to connecting to the utility, the owner of property specified in the Developer's Agreement shall pay all connection fees, cost reimbursements to the City and fees in lieu of assessments associated with the utility.

SECTION 6. A base fee of two hundred dollars (\$200.00) shall be collected by the City Treasurer from the party contemplating construction at the time the request is submitted to the Engineer. The final fee shall be an additional twenty-five dollars (\$25.00) for each tax account parcel listed in the approved Developer's Agreement. The final fee shall be paid prior to the Mayor's signature on the approved Developer's Agreement.

SECTION 7. The Developer is responsible for providing the City with a valid mailing address throughout the duration of the Developer's Agreement. The City shall send the prorated construction costs to the Developer's mailing address by certified mail. Any prorated construction costs being returned by the postal service for any reasons shall be forfeited to the City six months from the date of the return of the mailing.

SECTION 8. In case of the death of the Developer during the duration of the Developer's Agreement, the City will forward the prorated construction costs as directed by the estate of the Developer. The City will only send the prorated construction costs to one location. It is the responsibility of the Developer's estate to make any further distributions of the prorated construction costs.


SECTION 9. If any provision of this ordinance, or its application to any person or circumstance is found to be invalid, the remainder of the ordinance, or the application of the provision to other persons or circumstances is not affected.

SECTION 10. Ordinance Nos. 1385 and 1587 are hereby repealed in their entirety as of the effective date of this ordinance.

PASSED by the City Council of the City of Port Orchard, signed by the Mayor and attested by the Clerk in authentication of such passage this day of 25th day of March 2002


LESLIE J. WEATHERILL, MAYOR

ATTEST:

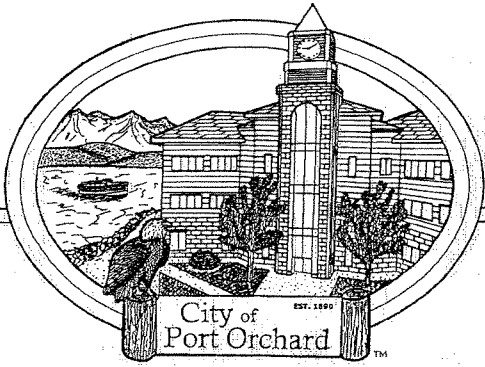

Patricia Parks, City Clerk

APPROVED AS TO FORM:

City Attorney

Sponsored by:

Robert Geiger, Councilman



CITY OF PORT ORCHARD Public Works Department

CITY HALL • 216 Prospect Street, Port Orchard, WA 98366
(360) 876-4991 • FAX (360) 876-4980

2 March 2004

RE: Sewer Service Abandonment

A property will continue to be responsible for its sanitary sewer bills until the structure is either disconnected from the sewer main or the sewer service line is abandoned.

Prior to abandoning a sewer service, the rate payer needs to contact the City's Water-Sewer Billing Department at (360) 876-4407. Bills will continue until there is a Discontinuance of Service signed, the work is inspected by the City, and the abandonment or disconnection is consistent with City requirements.

Upon inspection and notification to the Water-Sewer billing department, sewer charges will cease as of the first day of the following month.

SEWER SERVICE ABANDONMENT

All abandoned sewer services shall be inspected by the City. Sewer service abandonment requires the following:

- The service line is abandoned at the property line.
- The service line for non-plastic lines is opened at the property line and blocked with a concrete plug. The concrete plug consists of inserting a burlap bag six inches into the pipe and then concrete is inserted between the bag and pipe opening.
- The service line with a plastic pipe can be blocked, by gluing on a plastic cap manufactured to fit the existing pipe.

It is the property owner's responsibility to mark and maintain the marking to show the service line location for future use.

DISCONNECTION OF SERVICE

A disconnection of service is when the house or structure remains, but sewer service is terminated. To be relieved of the responsibility of the sewer bill, the property owner has to do the following:

- All the toilets are removed from their bases and the sewer connection is plugged with a concrete plug. The concrete plug consists of inserting a burlap bag six inches into the pipe and the concrete is inserted between the bag and pipe opening.

The work has to be inspected by the City, and the property owner is responsible for any future blockages that may be caused by the concrete plug.

Disconnecting the water will not relieve the rate payer of the sewer bill.

Upon inspection and notification to the Water-Sewer billing department, sewer charges will cease as of the first day of the following month.

5. Water Systems Standards

The City complies with the standards of the American Public Works Association (APWA) and the Department of Health.

Water mains within the City's system are Class 50 ductile iron. If the main serves a fire hydrant, the minimum pipe diameter shall be 8 inches. Class 52 and larger diameter pipe will be required if site conditions require it.

McCormick Woods shall use class 900 PVC for water mains.

Gate valves shall be installed at least every 800 feet.

Water meters shall be SENSUS and shall read in gallons. All water meters shall be touch read models.

All new mains will be disinfected and tested by the Health Department prior to acceptance by the City. The City will actually take the sample for Health Department testing.

All new mains will be pressured tested to APWA. The minimum test shall be 175 pounds for 15 minutes.

The Fire District must approve all fire hydrant selections and placement prior to construction. Storz couplings are required on all hydrants.

Backflow prevention devices shall be installed in accordance with state requirements.

Enclosed are the following drawings:

- Typical Excavation and Cross Section
- Typical Thrust Block Placement
- Typical Water Valve Setting
- Typical Hydrant Installation
- Typical Blowoff Assembly
- Typical Water Service Connection
- Typical Double Water Service Connection

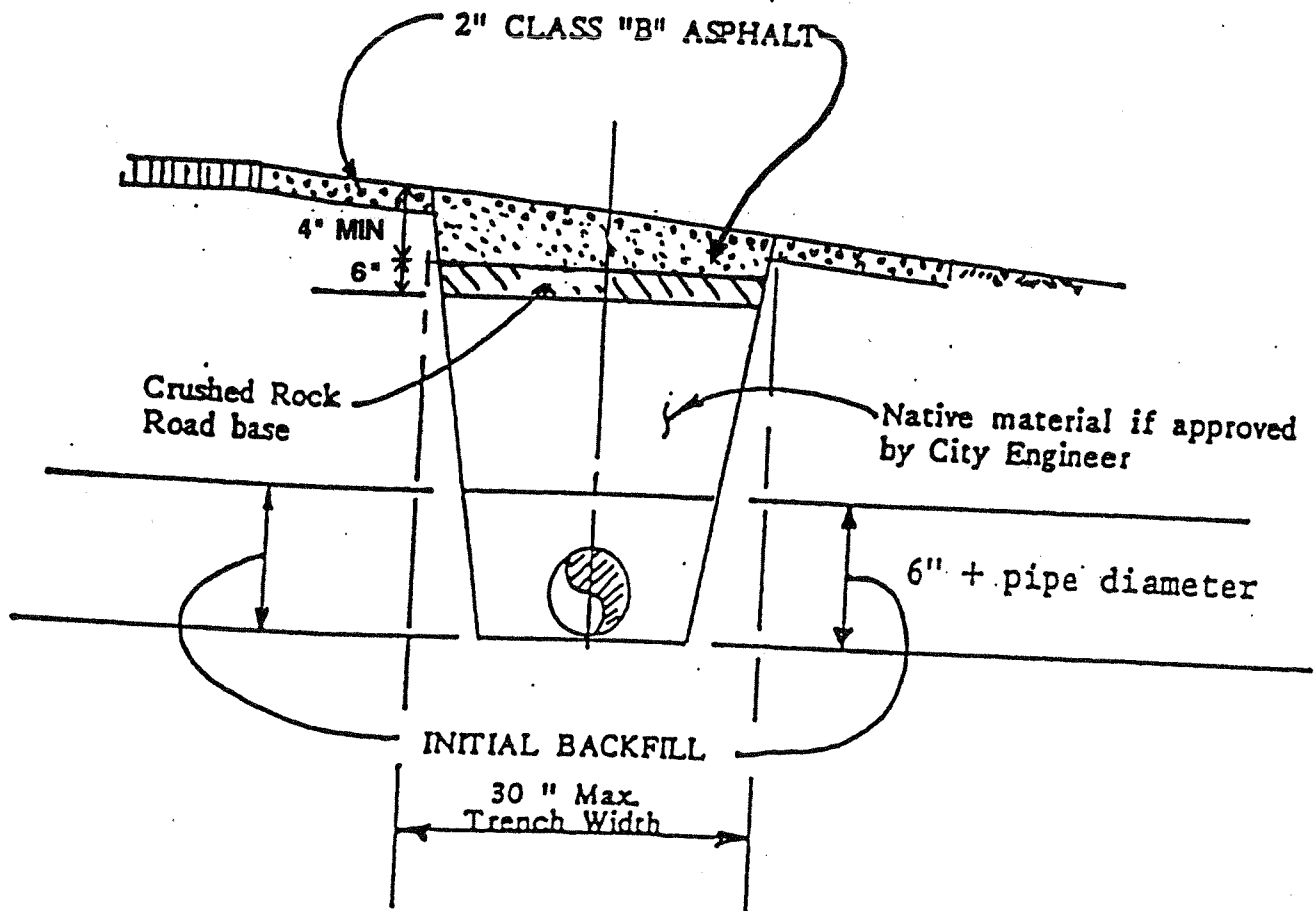
Temporary construction accounts can be established with the following rules:

1. A construction account will allow a contractor to use water without paying connection fees.
2. A contractor will initiate a construction account by signing a utility request and provide a deposit. The deposit will be as follows.

3" Hydrant Meter and Valve	\$1200
1 ½" Meter	\$ 500
1" Meter	\$ 350
¾" Meter Assembly	\$ 300
Minimum Deposit	\$ 300
Hydrant Valve	\$ 500
Temporary Sales Office	\$ 50 - Water
	\$ 50 - Sewer
Wrench	\$ 50

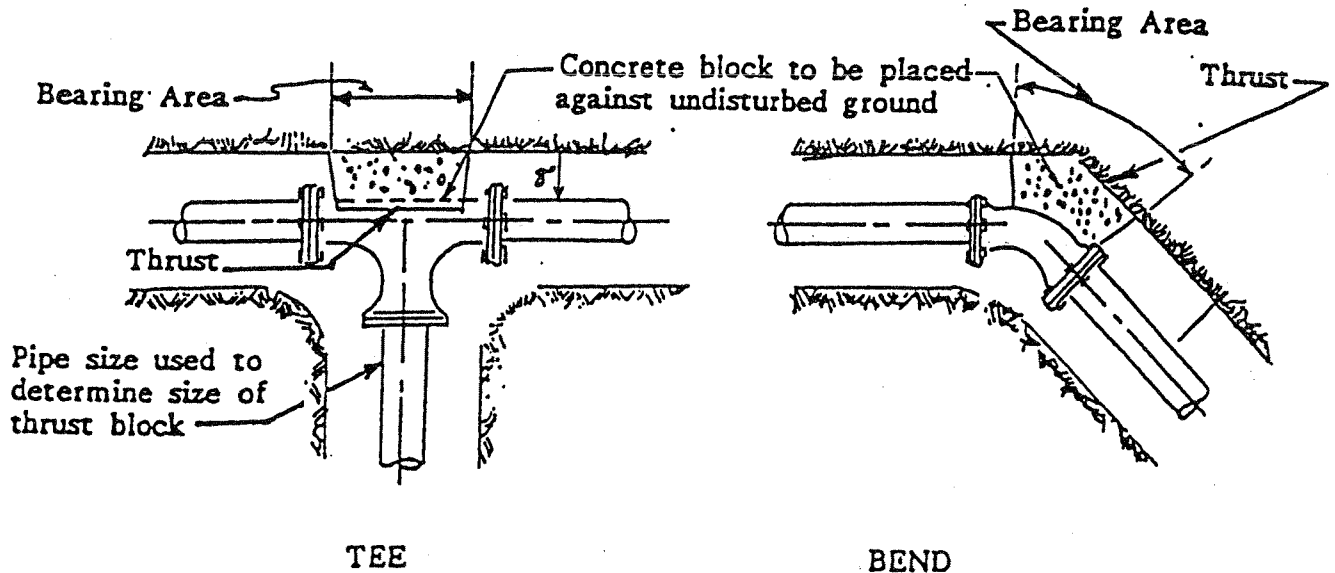
3. The Public Works Shop will provide the appropriate meter (upon proof of deposit) to the contractor within 24 hours of request. The following information will be recorded; meter number, reading, and any additional equipment.
4. The contractor will be billed at the end of water use. They must pay for all water consumption before their deposit is returned.
5. If the contractor is initiating water service for a residential home they are constructing, all appropriate work order fees must be paid prior to release of meter. The contractor will be billed solely for construction water at the established rate. The contractor's construction water account will be converted to residential service upon approved sewer inspection. Contractor will be told to have new owners sign one upon completed closing of home sale.
6. In the case of a one-day water usage request, no deposit is required, as no meter will be released. Contractor will be billed \$15.00 for one day unmetered water use. Contractor will have to coordinate with the shop to obtain this water.
7. Upon necessity the City may retrieve the construction meter with minimum notification. If the meter is not returned the Certificate of Occupancy and/or final plat approval will be held up.
8. This information form is to be signed and attached to Utilities Request.

TYPICAL EXCAVATION AND CROSS SECTION



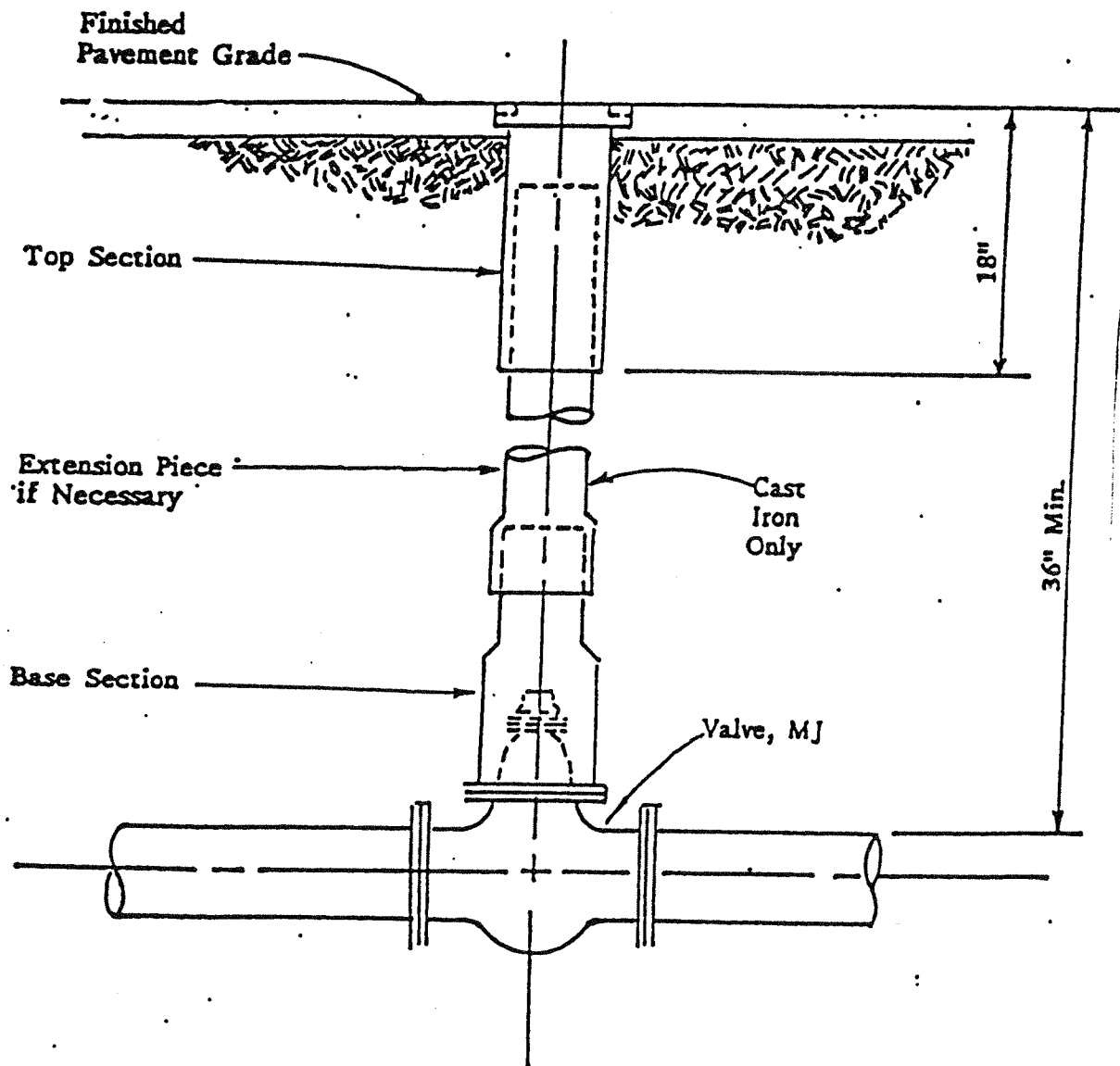
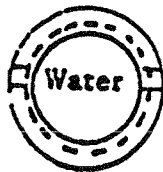
All fill shall be compacted to 95% of maximum density

THRUST BLOCK PLACEMENT

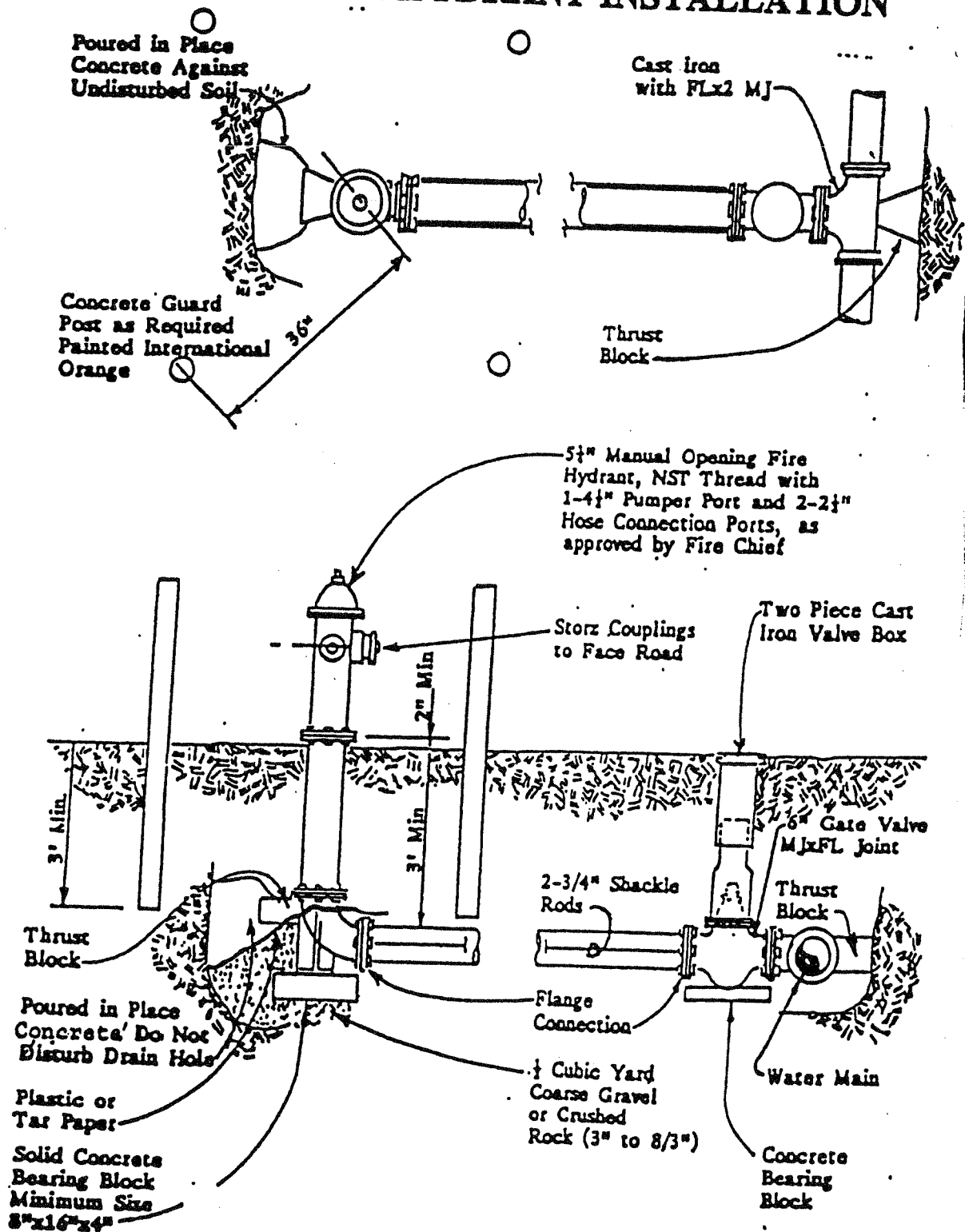


Fitting sizes	Bearing Area of Block in Square Feet			
	Tees & Ends	90 Deg.	45 Deg.	22½ Deg
4"	1.6	2.3	1.2	1.0
6"	3.5	4.9	2.7	1.4
8"	5.9	8.4	4.5	2.3
10"	9.2	13.0	7.0	3.6
12"	12.9	18.2	9.9	5.0

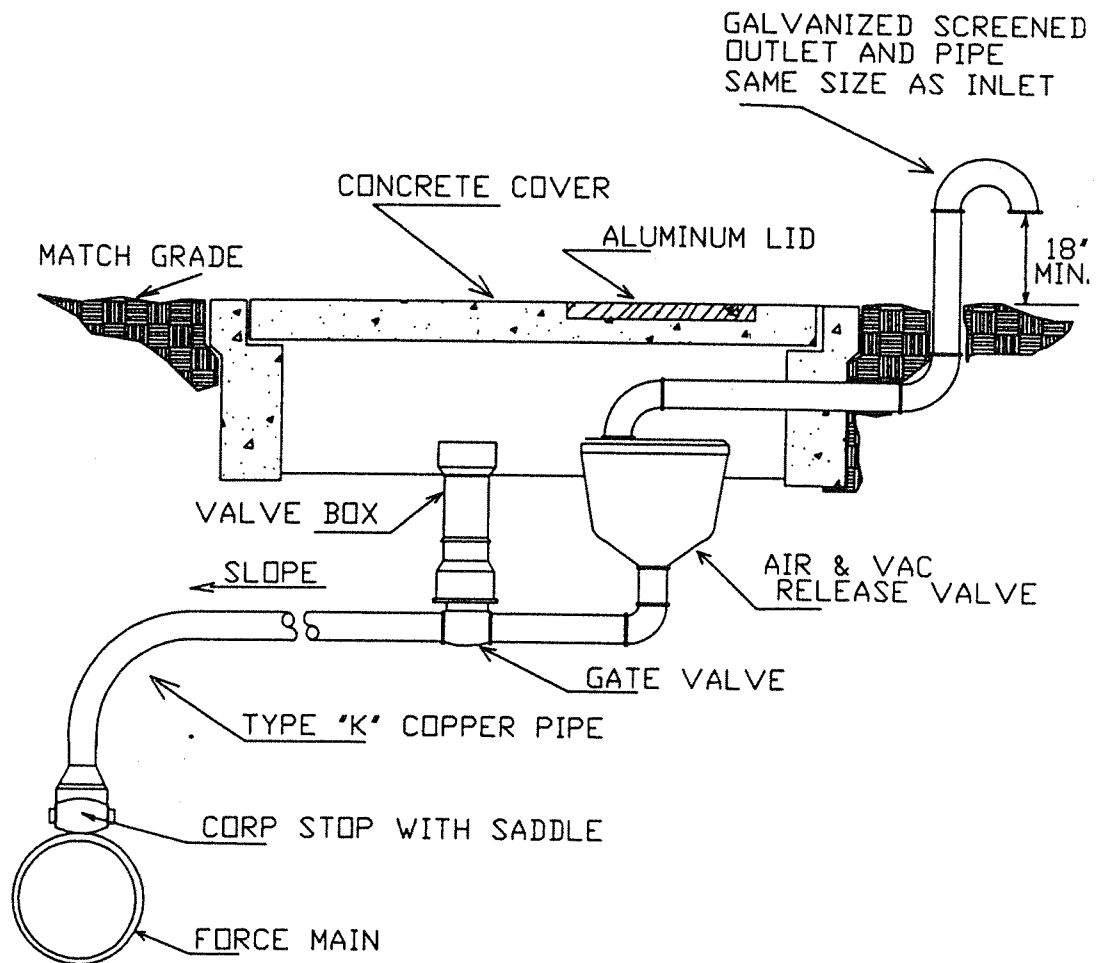
TYPICAL WATER VALVE SETTING



TYPICAL HYDRANT INSTALLATION



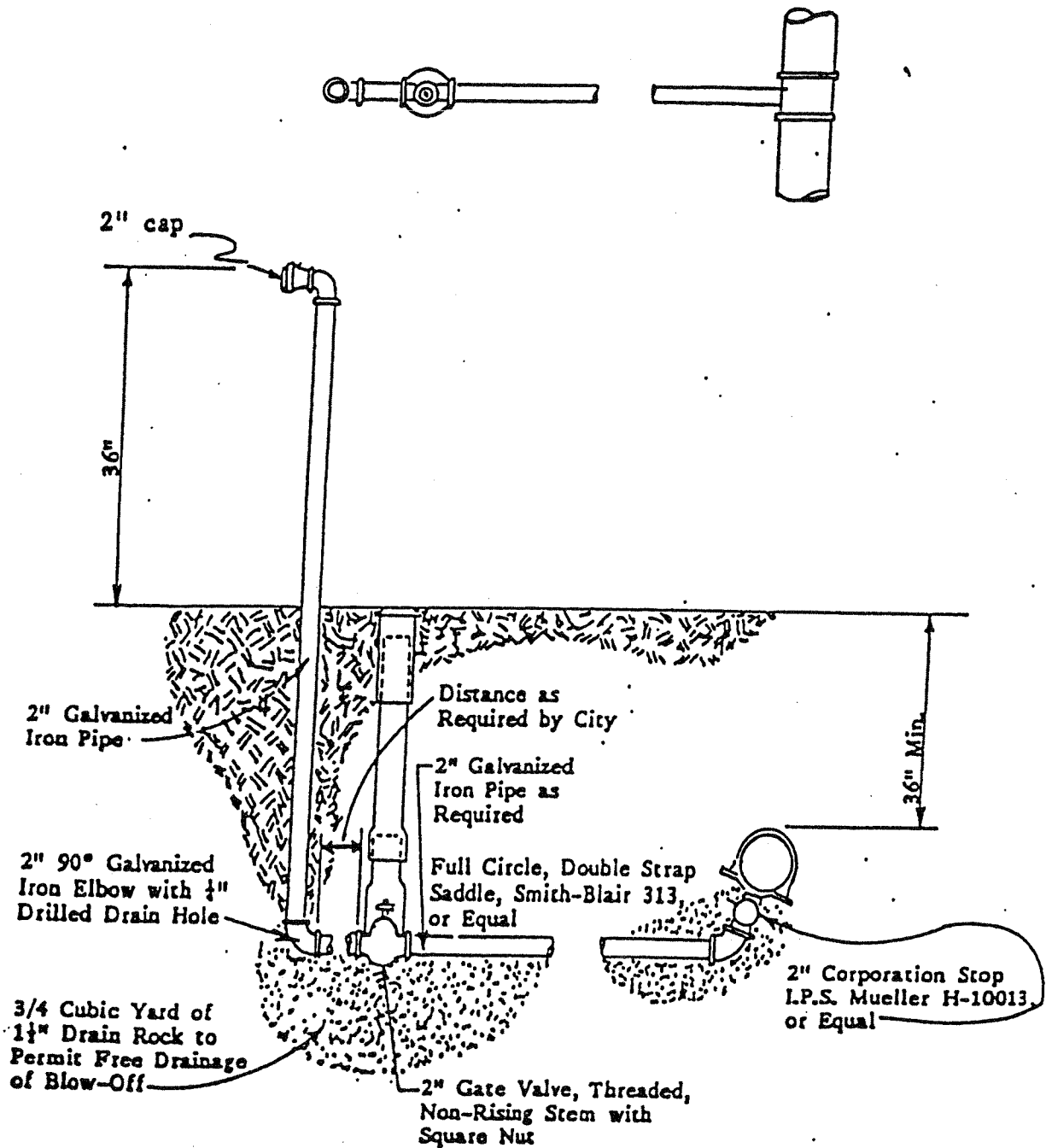
AIR & VACUUM RELEASE



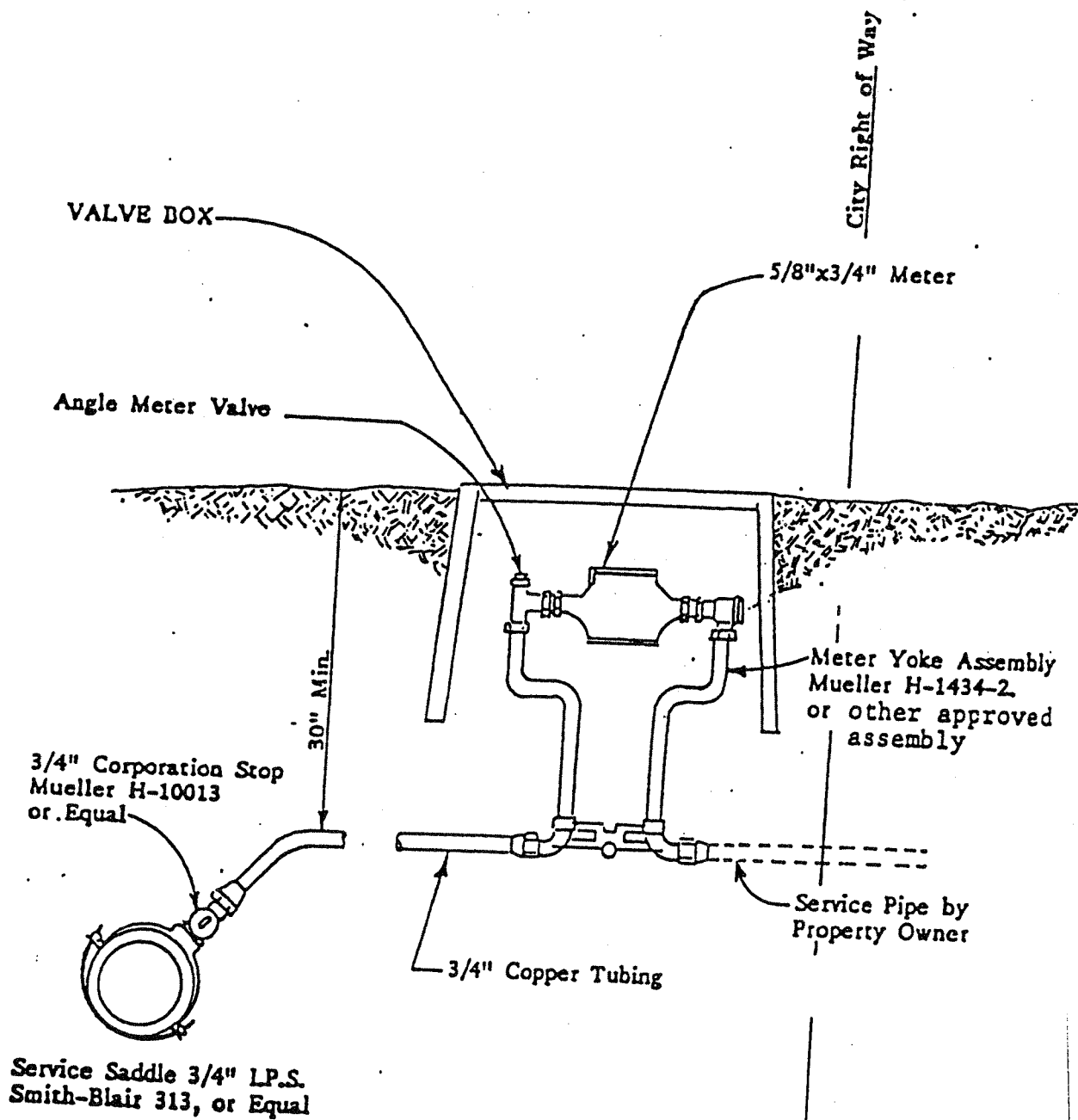
NOTES

1. USE 2" PIPE UNLESS OTHERWISE SPECIFIED
2. LOCATE AT HIGH POINT OF MAIN
3. TAP TOP OF MAIN

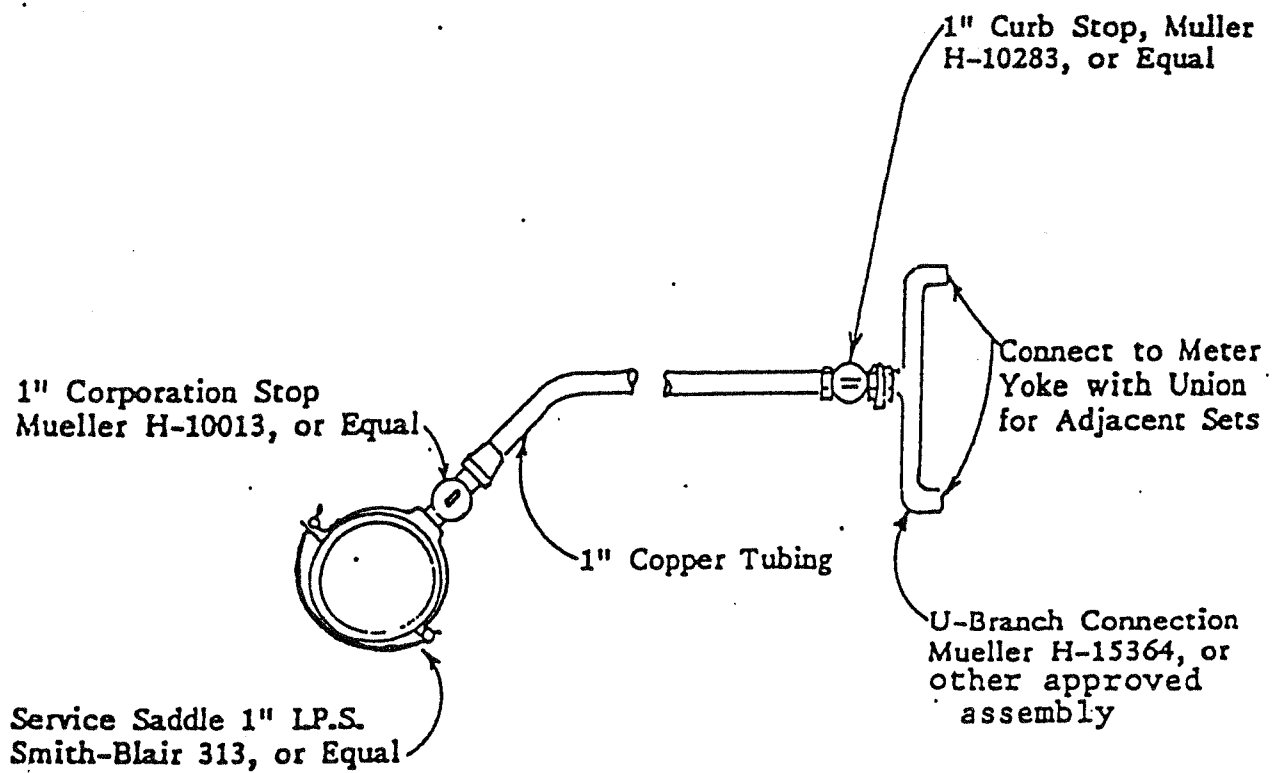
TYPICAL BLOWOFF ASSEMBLY



TYPICAL WATER SERVICE CONNECTION



DOUBLE WATER SERVICE CONNECTION



6. Sewer System Standards

The City complies with the standards of the American Public Works Association and the Washington State Department of Ecology.

The minimum sewer main diameter shall be 8 inches, unless specifically exempted by the City Engineer.

The minimum sewer service line shall be 4 inches in diameter for lines serving two dwelling units. Otherwise, the minimum diameter shall be 6 inches. Each single-family residence, apartment building or other building shall have its own sewer lateral from its building to the sewer main. Two laterals may be connected at the right of way to be served by one service line to the main.

Cleanouts are required at the right of way and by the building being served by sewer. The cleanout shall be flush with the final grade.

Manholes will be provided at a minimum of 400 feet. In addition, manholes will be installed at locations where the pipe diameter of the main increases and where the main changes grade and/or direction and/or intersections of sewer mains. All new manholes shall be watertight and grouted from both the outside and inside.

Unless otherwise approved by the City Engineer, manholes will be provided at the beginning of a new sewer main.

Sewers shall have a uniform slope between manholes.

The sewer manhole diameter shall be 48 inches. The bottom of the manhole shall be formed to provide for a channel of flow. Joints between the precast units shall have rubber gaskets and shall be grouted.

Inside drops are acceptable in existing manholes. All drops will be extended to the floor of the manhole and directed into the channel flow.

In cases of proximity near water mains, the sewer main shall:

1. Be lower than the water main.
2. Be at least 10 feet from the water main, if the pipes are parallel
3. Be at least 36 inches below the water main, if the pipes cross.

Sewer mains shall be televised and air tested prior to acceptance. The main shall hold 5 PSI for 15 minutes.

Detecting tape with wire for underground locates shall be installed over all non-metallic sewer mains and laterals. The tape shall be 1 foot above the pipe and extend its full length.

Enclosed are the following drawings:

- Criteria for Sewer Works Design
- Typical Sewer Excavation
- Typical 48 Inch Pre-cast Manhole
- Typical Drop In Manhole
- Typical Single Connection
- Typical Double Connection

Sewer Pump Control Panel Requirements

The following is the minimum requirements for a City owned and operated duplex pump station:

GENERAL

1. Conform to NEMA Standards ICS 1 and ICS 2.
2. Placement and design of the panel shall be approved by the City, prior to construction of the pump station.

VOLTAGE SUPPLY

1. 208 VAC, 3 Phase, 60 HZ for operating voltage.
2. If a permanent backup power supply is not a part of the pump station, the Developer will include a manual transfer switch and include and install the required plug to allow the City's generator to connect to the station.

CODES AND DESIGN

1. The panel shall be UL approved for "Intrinsically Safe 913"
2. All control items in the panel shall be UL approved.

PANEL ENCLOSURE

1. All panels shall be able to be locked with a City padlock.
2. Panels shall meet NEC codes and be a NEMA 12 construction for inside applications and NEMA 3R for outside.

CONTROLS

1. Each pump shall have a hand-off auto selector switch, green run light, and elapsed time meter (non-resetable).
2. Each pump station shall be equipped with an alternator to change the sequence of the pumps.
3. The panel shall have an alarm and test circuit for each pump.
4. Both pumps will automatically run when activated by the high wet well alarm.
5. All pumps shall have hour meters.

ALARMS

1. Each panel shall have an alarm; audible and red light, to warn of the following:
 - High wet well
 - Low wet well
 - Pump #1 failure
 - Pump #2 failure
 - Pump #1 over-temperature
 - Pump #2 over-temperature
2. Pump stations shall be designed with a conduit for the telephone connection to the telemetry system, a push to test and push to silence on audible, and telemetry contacts for high wet well, low wet well, pump failure 1 and 2, and pump over-temperature.
3. Alarms shall be activated by floats, unless otherwise approved by the City.

BACKUP POWER

1. Unless specifically exempted by the City Council, all City owned pump stations shall have permanent backup power, such as a generator, and an automatic switching station.

"CRITERIA FOR SEWER WORKS DESIGN"

Wash. State Dept. of Ecology

Revised Oct., 1985

DOE 78-5

CITY OF PORT ORCHARD

OCT 06 1984

PUBLIC WORKS

- d. A manhole or cleanout shall be provided at the end of the 6-inch line.
- e. No extension of the 6-inch line will be possible at a later date.
- f. The minimum slope allowable for 6-inch lines will be 0.006 foot per foot.

2.312 Depth [Revised 3/80]

Generally, sewers should not be less than three feet deep, but should be sufficiently deep to prevent freezing and physical damage and should receive sewage from existing dwellings by gravity.

2.313 Roughness Coefficient

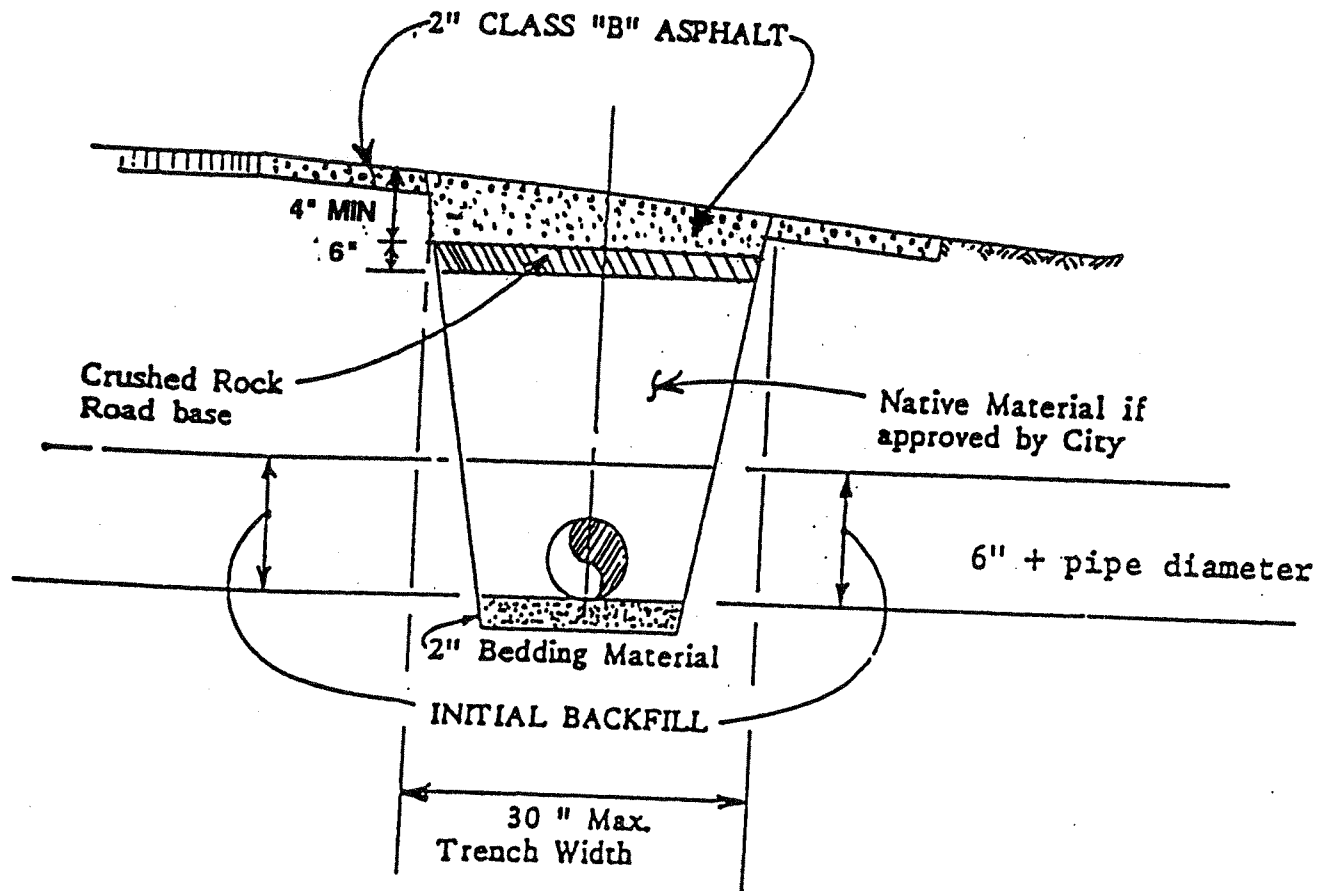
An "n" value of 0.013 shall be used in Manning's formula for the design of all sewer facilities (regardless of pipe material) except inverted siphons, where an "n" value of up to 0.015 can be used.

2.314 Slope

All sewers shall be designed and constructed to give mean velocities, when flowing full, of not less than 2.0 feet per second. The following minimum slopes should be provided; however, slopes greater than these are desirable:

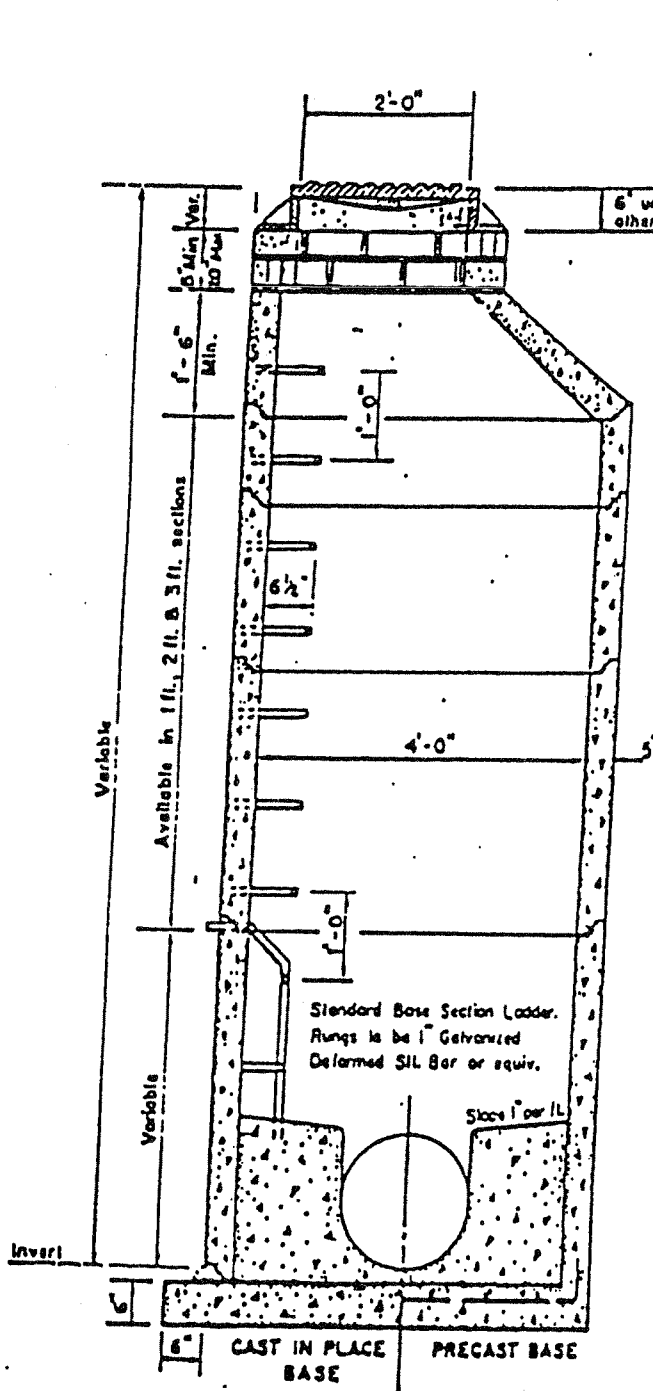
<u>Sewer Size</u> <u>(inches)</u>	<u>Minimum Slope</u> <u>(feet per 100 feet)</u>
8	0.40
10	0.28
12	0.22
14	0.17
15	0.15
16	0.14
18	0.12
21	0.10
24	0.08
27	0.07
30	0.06
36	0.05

TYPICAL SEWER EXCAVATION

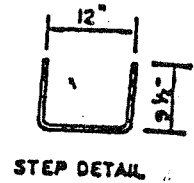


All fill shall be compacted to 95% of maximum density

TYPICAL PRECAST MANHOLE



1" Galvanized Deformed SLL Bar or equivalent.



Manhole Ring & Cover -
Olympic Foundry No. 5943 or equal.

Adjusting Blocks -
Min. 2 courses. Max. 5 courses.

Reinforce wall sections with at least
0.12 sq. ins. of circumferential steel
per linear foot.

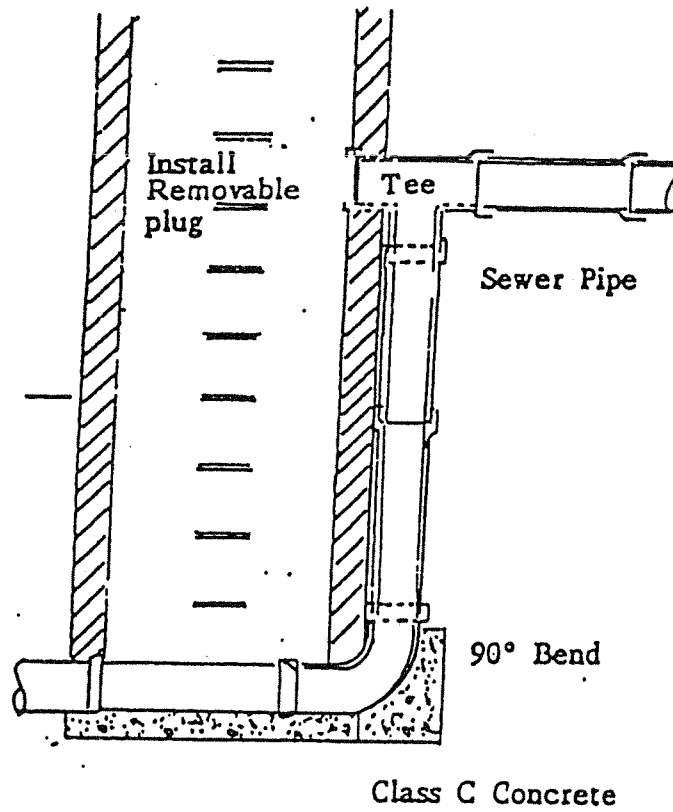
Pipe channel to be formed of class 5(11/2)
concrete after manhole has been set in
place and pipes have been grouted in.

Reinforce precast base section with No. 4
bars spaced 8" o. c. both ways and set
2" to 4" below top of slab with bars
extending into wall section and tied to
longitudinal steel.

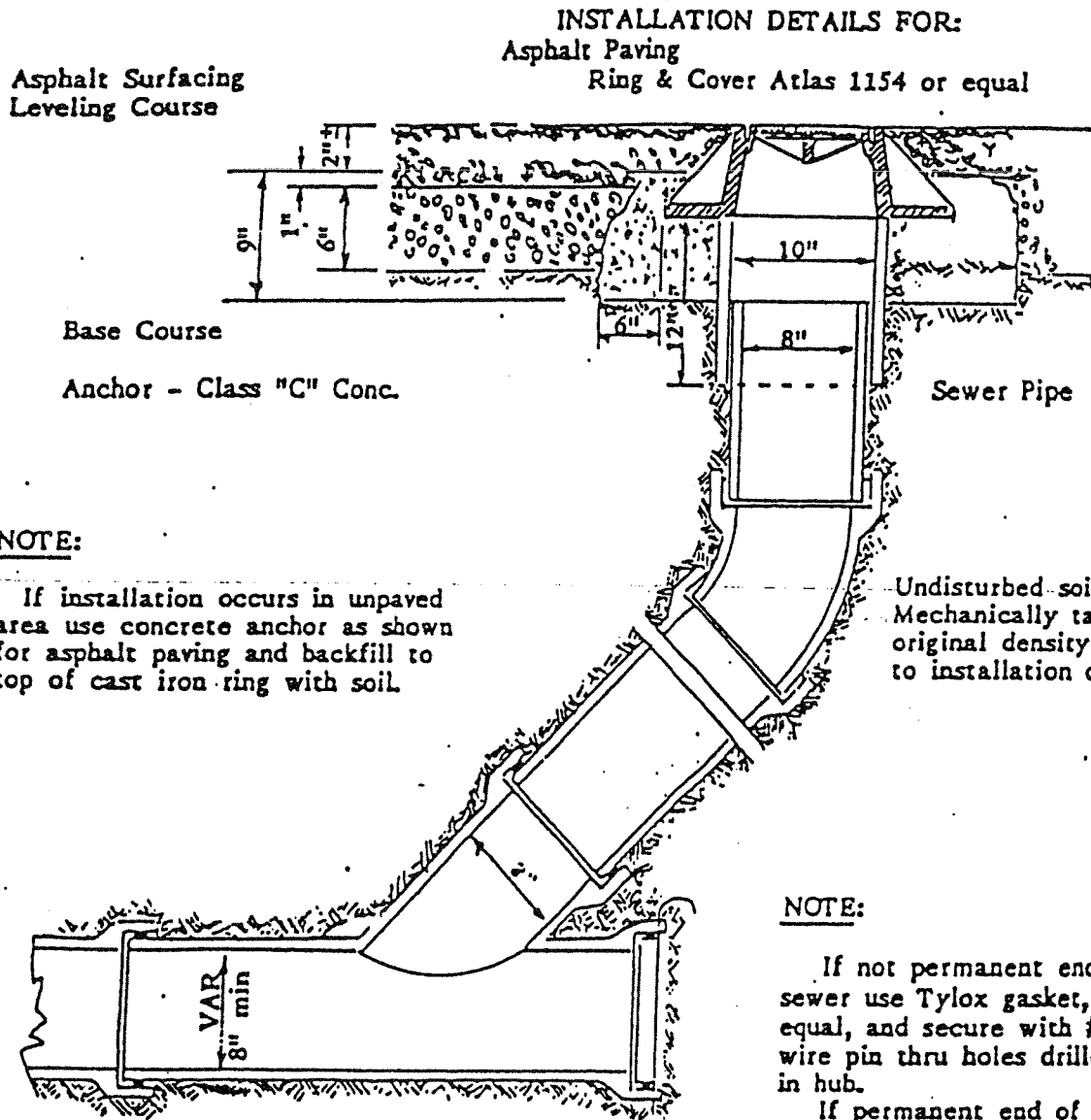
Install drop manhole connection if invert
of any incoming sewer is more than
2'-0" above top of main sewer.

All rigid pipe entering or leaving
the manhole shall be provided
with flexible joints within 1 1/2
pipe diameters of the manhole
structure.

DROP IN MANHOLE



TYPICAL CLEANOUT



NOTE:

If installation occurs in unpaved area use concrete anchor as shown for asphalt paving and backfill to top of cast iron ring with soil.

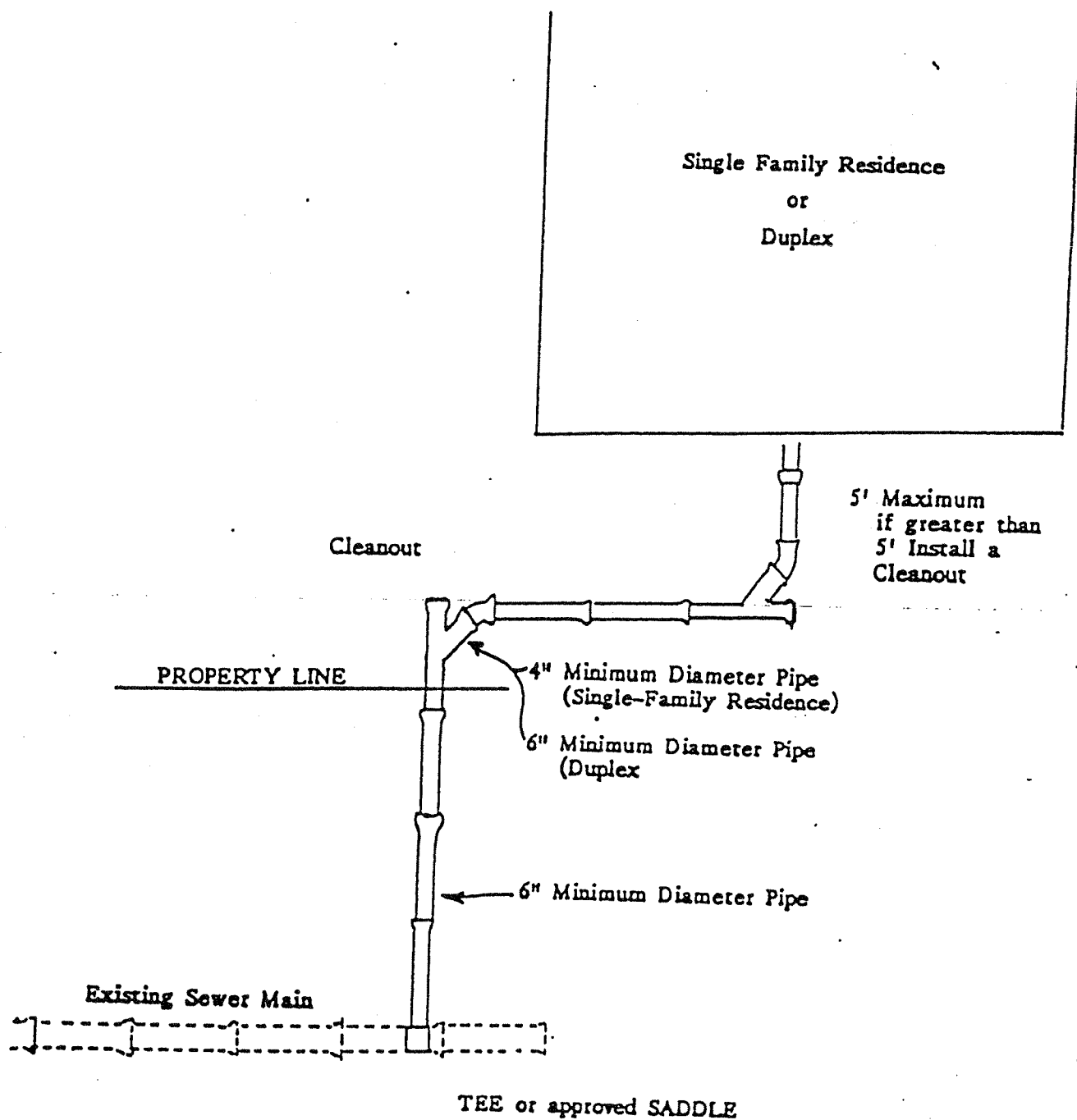
Undisturbed soil, OR: Mechanically tamped to original density prior to installation of pipe.

NOTE:

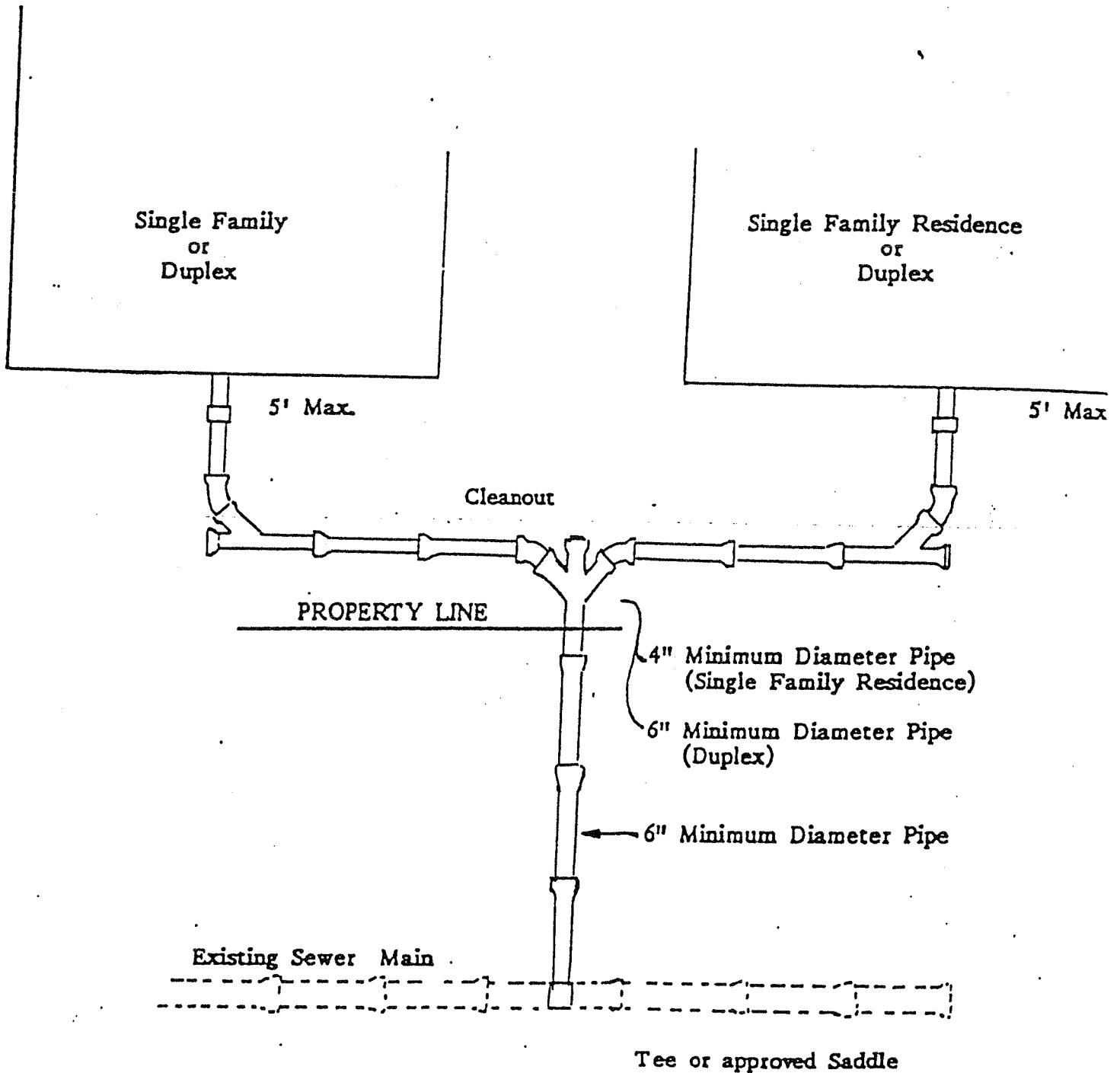
If not permanent end of sewer use Tylox gasket, or equal, and secure with #8 wire pin thru holes drilled in hub.

If permanent end of sewer use mortar to secure plug.

SINGLE CONNECTION



DOUBLE CONNECTION



**DIVISION VI
INDIVIDUAL GRINDER PUMP INSTALLATIONS**

VI-1.000 DESCRIPTION

1.010 General

- A. Any extension of the Kitsap County sanitary sewer extension shall be completed in accordance with the applicable requirements of the Standards for Sanitary Sewer Extensions, Division I, Section I-4.000, Forms and Agreements. Together with submittal of the individual sewage pump installation plans for approval, the property owner shall also submit two signed copies of the "Sewage Pump Installation, Operation, and Maintenance Agreement" together with a \$10.00 filing fee.
- B. The station's operational components shall be located at an elevation that is not subjected to the 100 year frequency storm flood and associated wave action, or shall be otherwise adequately protected as certified by a professional engineer registered in the State of Washington.

1.020 Individual Grinder Pump Stations

- A. Only one residence is allowed per grinder pump station. It will be the responsibility of the home owner to maintain the grinder station and the forcemain on their property. Areas with up to 10 homes (without further possibility of expanding) shall be served by individual grinder pump stations and shall be reviewed and approved by Kitsap County on a case by case basis. Developments with more than 10 homes will use a commercial pump station maintained by the County.
- B. It will be the property owners responsibility to obtain preliminary approval of the concept for their particular situation. Upon preliminary approval, the property owner will be required to submit an engineered plan of the proposed installation showing all pertinent information together with specifications of all materials to be used.

VI-2.000 MATERIAL AND CONSTRUCTION

2.010 General

- A. The developer shall submit information from the material manufacturer or fabricator showing that the materials meet the requirements of the design and pertinent specifications. The developer shall provide submittals to the County on all materials to be used.

2.020 Pump Station

- A. The individual sewage pump installation shall consist of a single two horsepower grinder pump, tank, system controls, valves and piping.
- B. The grinder pump shall be two horsepower grinder pump designed to grind solids normally contained in domestic and commercial wastes. A pump curve indicating the pump capacity at design head for the pump to be installed shall be included with submittal.
- C. Tanks shall be either fiberglass, steel with protective coating for underground installations, or concrete meeting the dimensions shown on the standard plan. Tanks shall be watertight.

2.030 Piping and Control Facilities

- A. System controls shall consist of a high water alarm light, one circuit breaker per pump, 120V AC control voltage transformer, starters, NEMA 3R enclosure for electrical control circuits which shall be mounted on the building adjacent to the pump unit, three liquid level control floats (pump off, pump on, high water alarm) and necessary wiring and appurtenances for a complete installation.
- B. The service piping from the pump unit to the county pressure main shall be a minimum of 1-1/4 inch diameter schedule 80 PVC. A minimum burial depth of 24 inches shall be maintained.
- C. Where a gravity sewer main exists in the public right-of-way, building sewer pressure lines shall discharge into gravity side sewers at the property/easement line as per County Standard Detail.

VI-3.000 INSTALLATION

3.010 General

- A. A check valve and a gate valve shall be provided inside the tank with a union or quick disconnect fitting provided for easy removal of the pump. An appropriate size saddle shall be provided where the service line connects to the county pressure main and shall be provided with a corporation stop, check valve and valve box installed over the corporation stop as shown on the County Standard Details.
- B. No individual sewage pump shall be installed on the discharge side of an existing septic tank. Pumping units shall be connected directly to the building sewer line.

VI-4.000 TESTING

4.010 General

- A. The completed grinder pump station shall be given an operational test of all equipment for leaks in all piping and seals, and for correct operation of the automatic control system and all auxiliary equipment. Developer shall conduct preliminary tests and be assured that the section to be tested is in an acceptable condition before requesting the County to witness the test.
- B. Only after final testing and acceptance by the County is the grinder pump station allowed to pump sanitary sewage into the County system.

7. Road Construction Standards

Unless specifically exempted by the City Engineer, all new roads will be paved prior to acceptance by the City.

The City will only maintain the roads to the standards at which they were accepted. All road base and sub base shall be compacted to 95% of maximum density.

For fire code interpretation, an all weather road is a minimum of 20 feet roadway and is paved.

The maximum grade for any City street is 12%. Road grades can exceed 12% for a short increment, if safety and use is not degraded.

Roads with traffic volumes in excess of 2,000 ADT will be striped.

The City may require consolidations of driveways to minimize access points.

Private roads are limited to certain short plats. Subdivisions require public roads.

Enclosed are the following road standards. Site conditions and engineering studies can require more stringent design requirements.

Collector Road

Access Road

Feeder Road

Private Road

Cul De Sac

Alley

Road Patch

RESOLUTION NO. 1971

A RESOLUTION OF THE CITY OF PORT ORCHARD,
WASHINGTON REPEALING RESOLUTION NO. 1795 AND
ADOPTING ROAD STANDARDS.

WHEREAS, the City of Port Orchard provides and maintains a transportation network within the corporate limits, and

WHEREAS, the City of Port Orchard requires development actions such as subdivisions and short plats to construct roads that are used for and by the public; and

WHEREAS, the City needs roads to have certain requirements to provide for efficient transportation pedestrian access and public safety; now, therefore,

**THE CITY COUNCIL OF THE CITY OF PORT ORCHARD, DOES HEREBY RESOLVE
THE FOLLOWING:**

SECTION 1. Effective April 1, 2002 Ordinance No. 1795 is hereby repealed.

SECTION 2. The City of Port Orchard hereby adopts the following standards for the roads as listed below:

1. **ARTERIAL ROAD:** Travel lanes shall be twelve feet (12') feet wide. Each design shall be proposed by the design engineer to fit the specific conditions of the project.
2. **COLLECTOR ROAD:** The sixty feet (60') section with curb and gutter. The pavement width would be forty feet (40'), which allows parking on both sides of the road. ATTACHMENT "A"
3. **ACCESS ROAD:** The fifty feet (50') right of way section with curb and gutter. The pavement width would be twenty-eight feet (28'). Which allows parking on both sides of the road. ATTACHMENT "B"
4. **FEEDER ROAD:** The forty feet (40') right of way section with curb and gutter. The pavement width would be twenty-two feet (22'). Parking would not be prohibited. ATTACHMENT "C"
5. **PRIVATE ROAD:** The Fire Codes call for a twenty foot (20') wide "all weather" road. This standard would clarify that all-weather means paved. It is typically used in a short plat which needs access. Private roads will be limiting to serving 5 dwelling units and can only be used in short plats, unless an exemption is specifically approved by the City Council. The road will not be maintained by the City. ATTACHMENT "D"
6. **CUL DE SAC:** The forty-foot (40') paved radius. The Fire Authority should have the ability to waive a cul-de-sac if another method is available to turn his equipment. The sidewalk will be all the way around the cul-de-sac, which would require the total radius to be increased from forty-five feet (45') to fifty feet (50'). ATTACHMENT "E"

7. **ALLEY:** Sixteen feet (16') wide pavement. ATTACHMENT "F"

No single roadway can transition from one Road Standard to another.

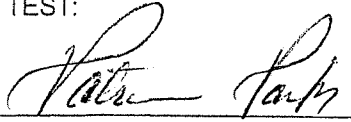
The Public Works Department shall require road projects to comply with these standards. Only the City Council can modify any aspects of the established standards.

PASSED by the City Council of the City of Port Orchard, APPROVED by the Mayor and attested by the Clerk in authentication of such passage this 25th day of March 2002.



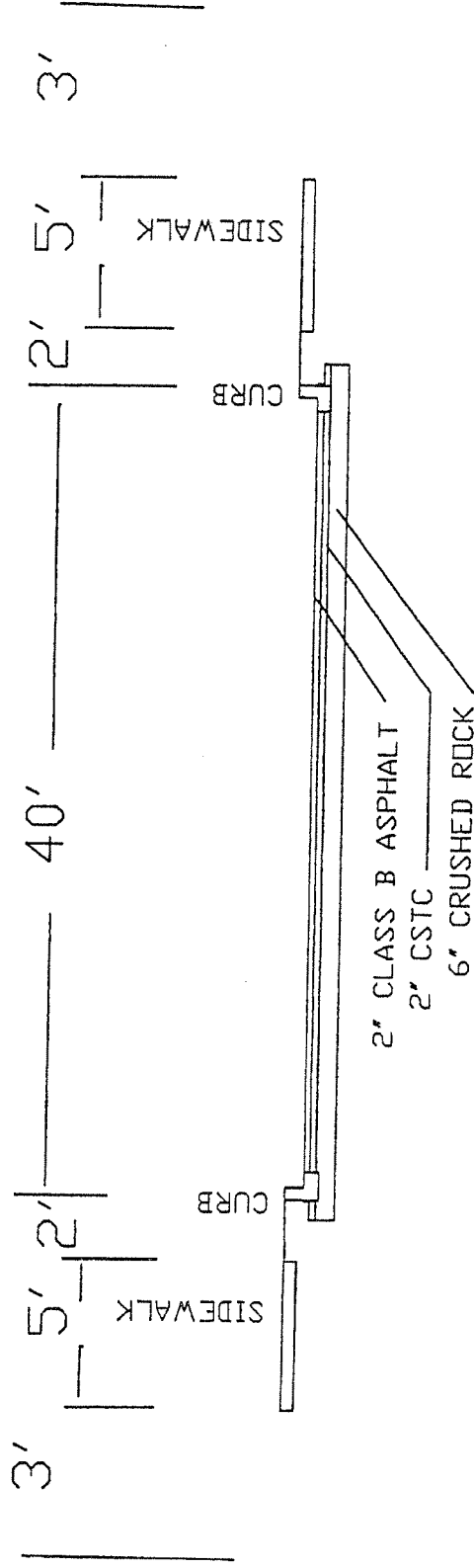
LESLIE J. WEATHERILL, MAYOR

ATTEST:



Patricia Parks, City Clerk

COLLECTOR

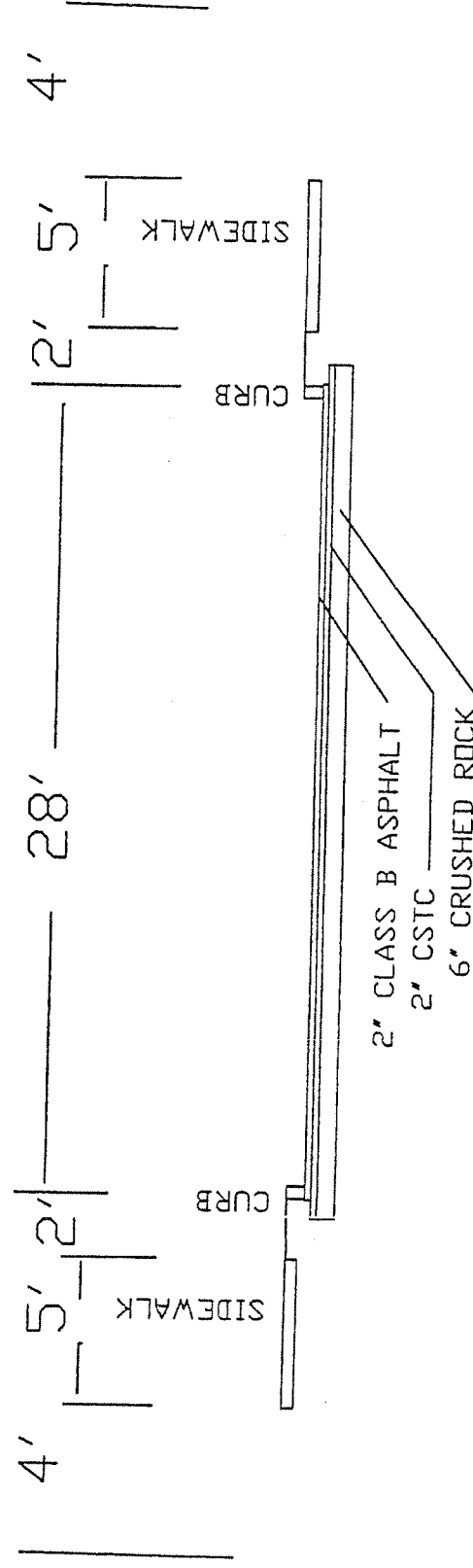


NOTES:

1. Right of way width is 60 feet
2. Concrete sidewalks on both sides

MAXIMUM ACCESS: 350 LIVING UNITS

ACCESS

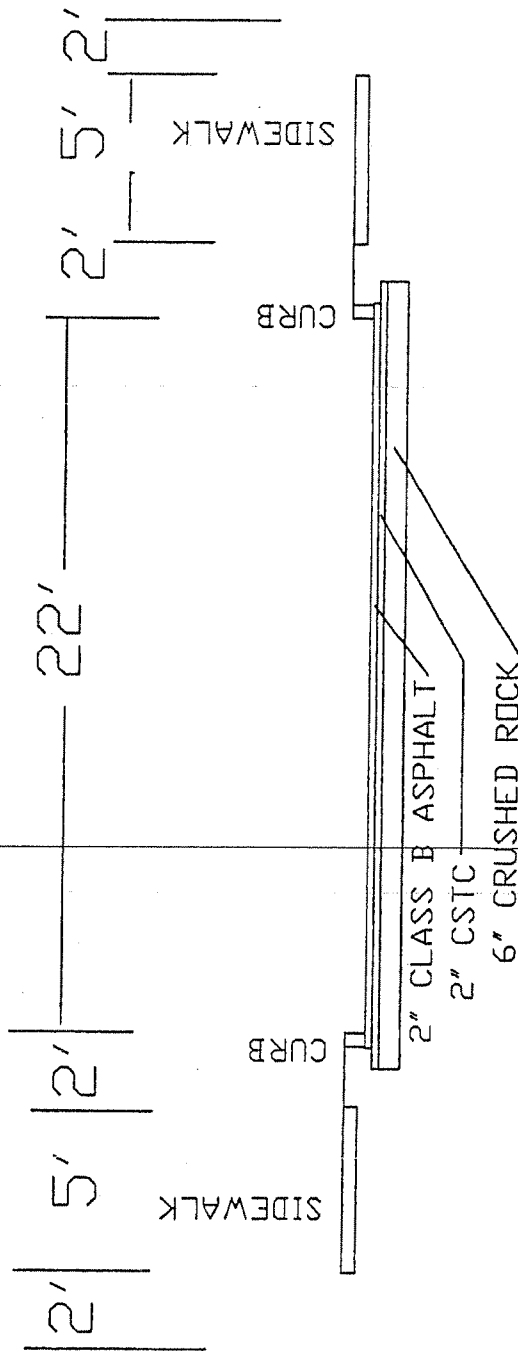


NOTES:

1. Right of way width is 50 feet
2. Concrete sidewalks on both sides unless Council approves one side only
3. Curb to be 6 inches high, cast in place concrete
4. Pavement dimensions to be inside the curb
5. Future road extensions cannot exceed maximum capacity.

Maximum Access: 100 Living Units

FEEDER



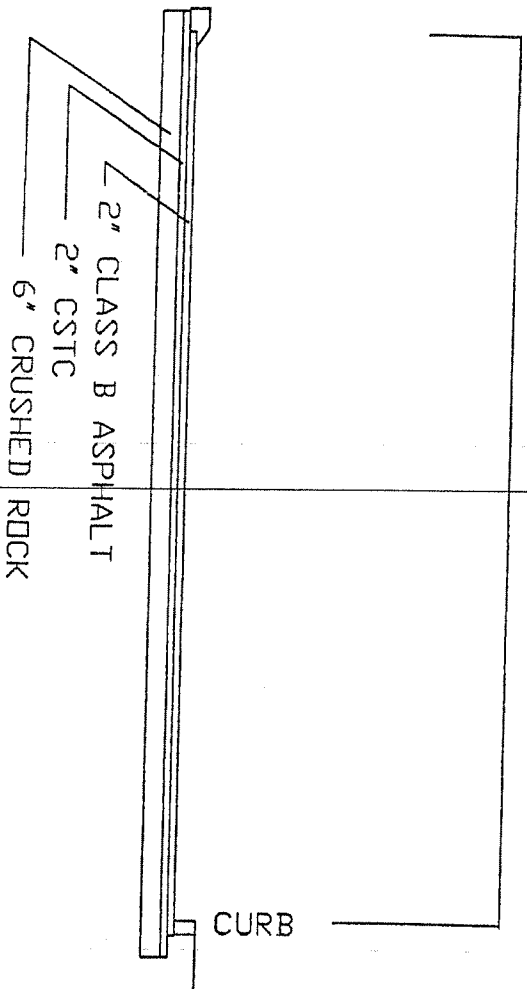
Maximum Access: 12 living units

NOTES:

1. Right of way is 40 feet wide
2. Dimensions are to be from inside the curbs
3. Future road extensions cannot exceed maximum capacity
4. Concrete sidewalk to be on both sides of the road
5. Curb to be cast in place concrete and 6 inches high

PRIVATE

20'



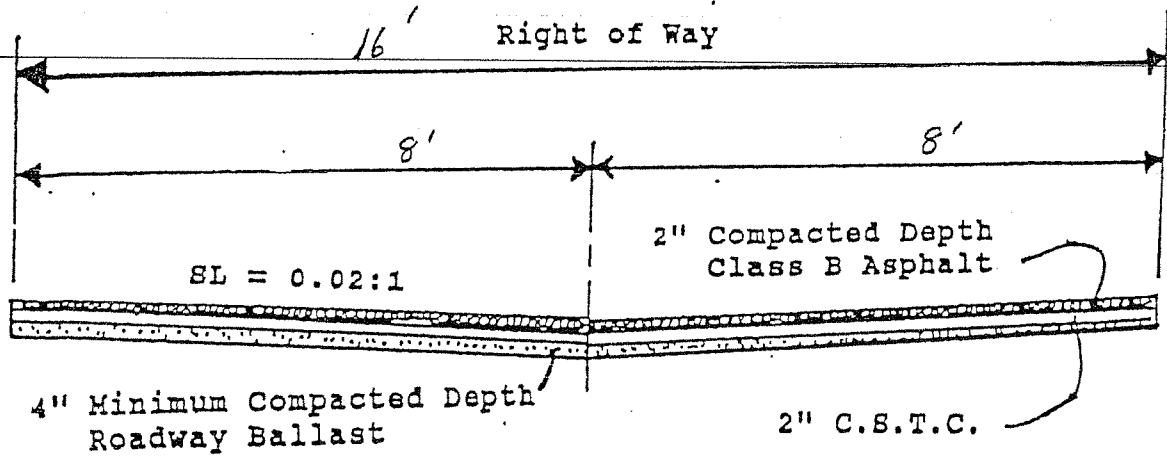
NOTES:

Maximum Access: 5 Living Units

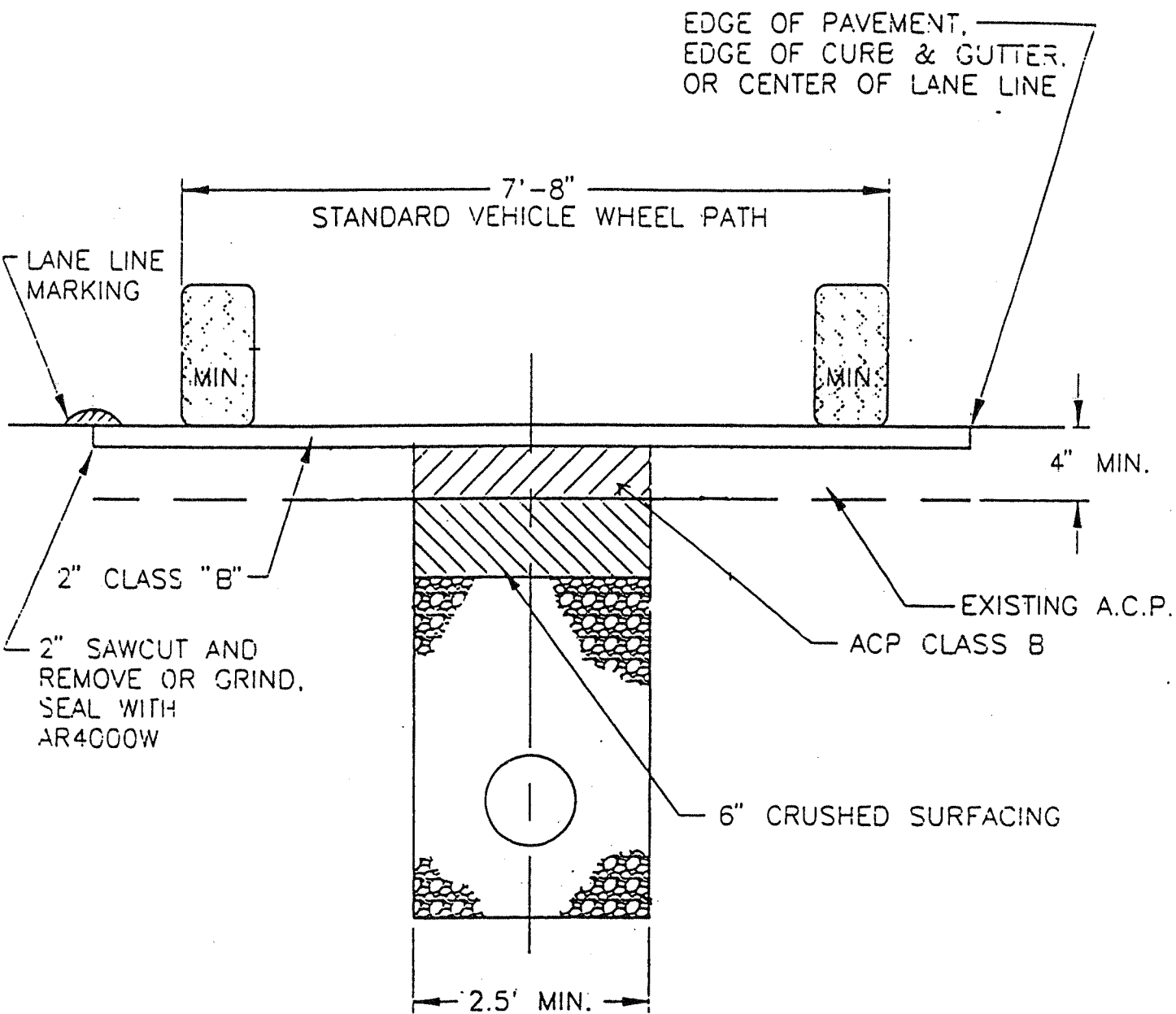
1. Road easement shall be a minimum of 20 feet
2. This road section is used to meet fire codes, as approved by the City.
3. The City will not maintain private roads
4. Asphalt berms may be used for stormwater control.
5. Limited to use in short plats

ALLEY

Resolution No. 1971
Attachment "F"



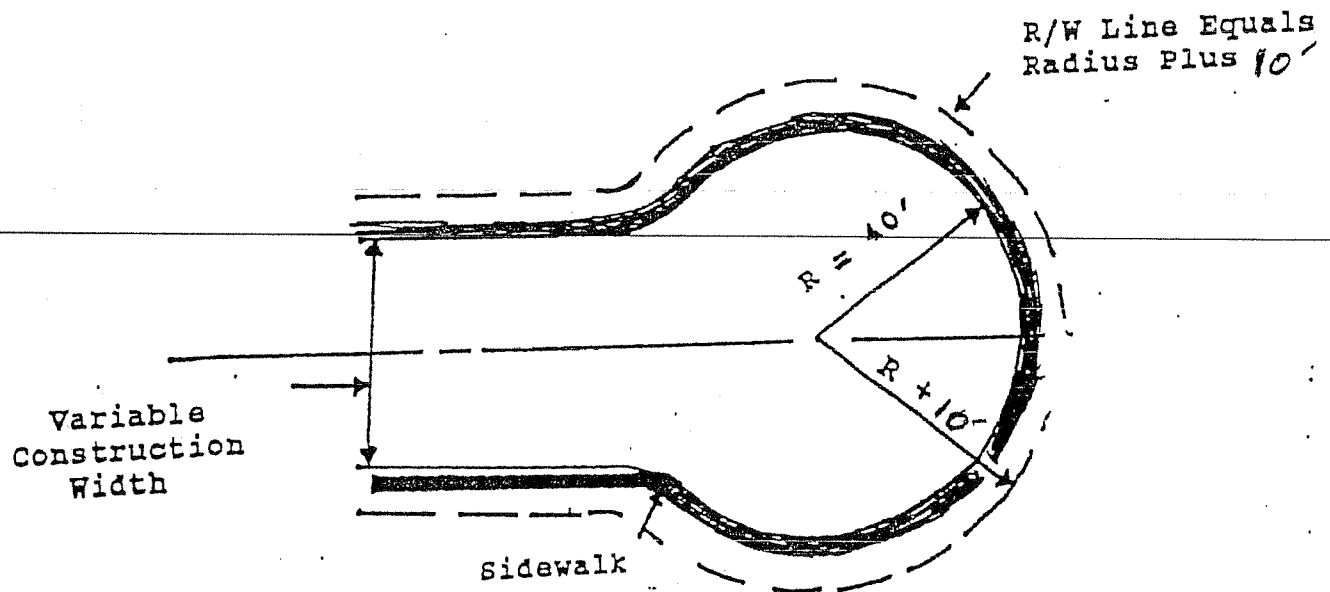
ALLEY



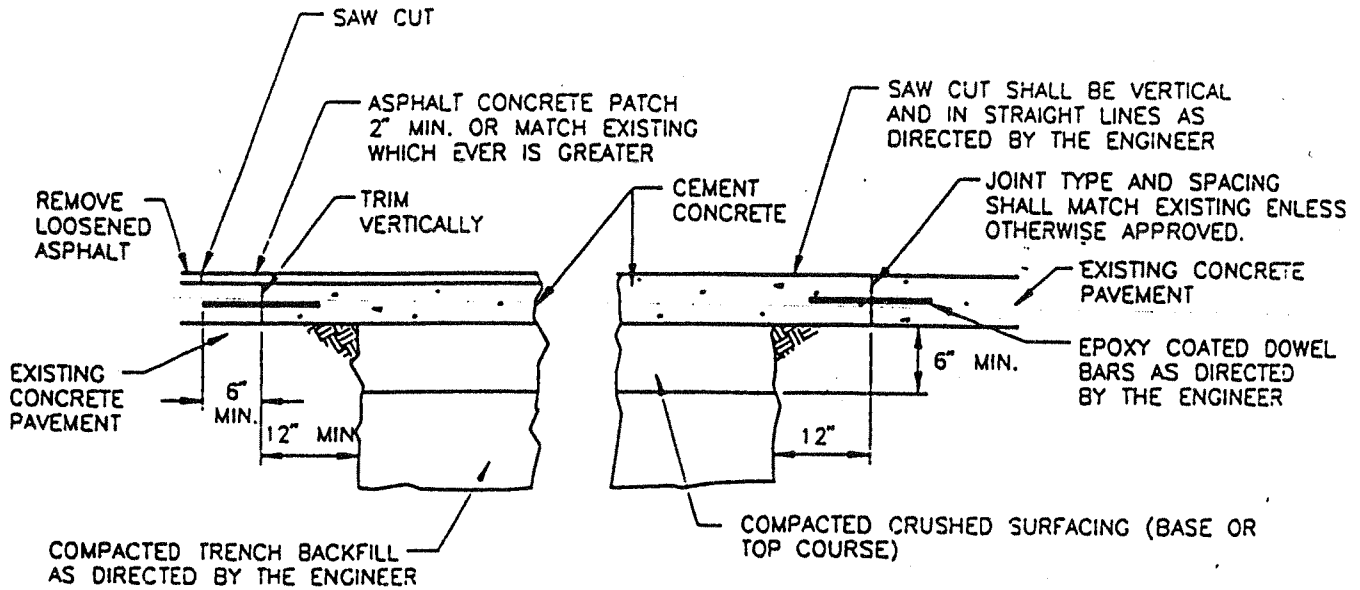
SAWCUT ONLY UNLESS OTHERWISE AUTHORIZED

CUL-DE-SAC

Resolution No. 197:
Attachment "E"

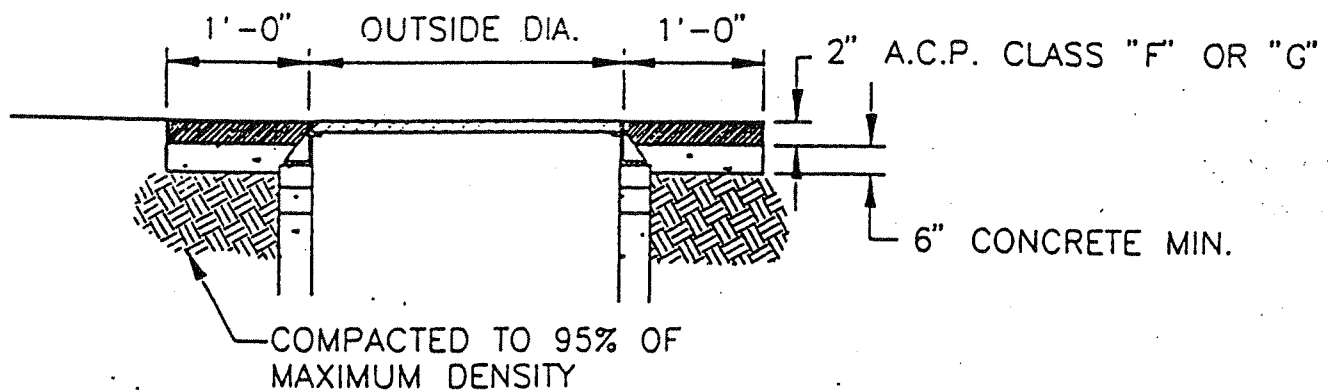
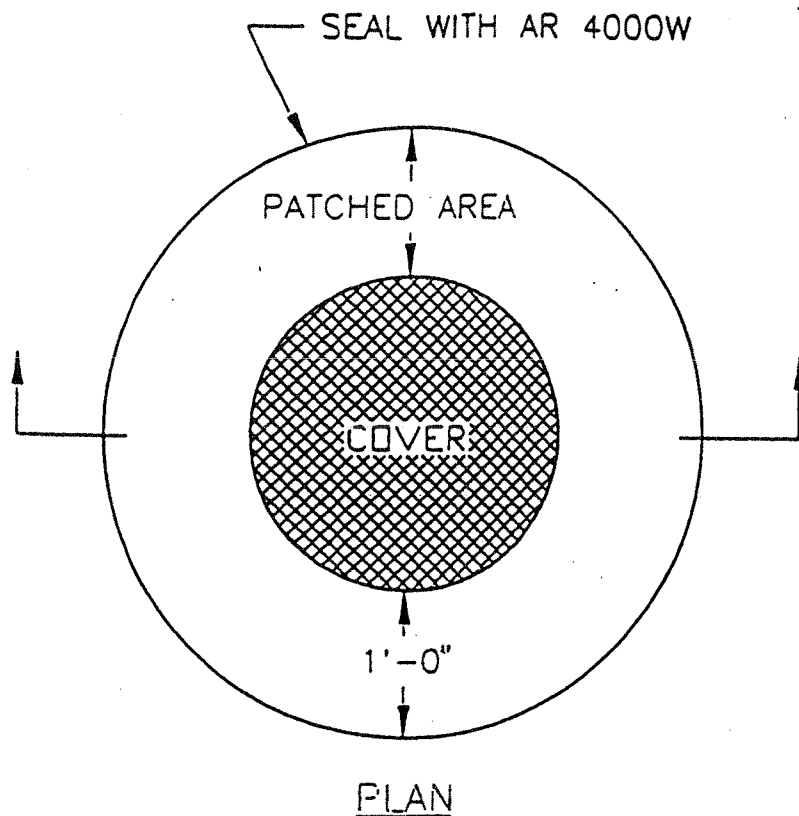


SAWCUT ONLY UNLESS OTHERWISE AUTHORIZED



CUT AND PANEL REPLACEMENT DETERMINATION:

FULL CEMENT PANEL REPLACEMENT: FOR CEMENT CONCRETE SURFACE STREETS, THE MINIMUM RESTORATION SHALL BE FULL PANEL REPLACEMENT.



REMOVE PAVEMENT AND BASE MATERIALS FOR A DISTANCE WHICH IS EQUAL TO THE DIAMETER OF THE FRAME PLUS TWO FEET. ADJUST CASTING FRAME TO PAVEMENT SURFACE USING CONCRETE BLOCKS.

REPLACE ALL BUT TOP 2" OF EXCAVATED MATERIAL WITH CLASS 3000 CONCRETE (3/4). FINISH PAVEMENT SURFACE WITH 2" OF A.C.P. CLASS "F" OR "G".

8. Storm Drainage

Stormwater design, improvements, and Best Management Practices will comply with the City's Stormwater ordinance. Material selection will be approved by the City and shall conform to best engineering practices as referred to in WSDOT specifications and American Public Works Association (APWA) specifications. All work shall conform to APWA standards.

Detaining stormwater in a parking lot is not acceptable and will not be approved.

Catch Basins shall meet WSDOT standards. The typical catch basin is a WSDOT Type 1. All catch basins shall be water tight and grouted from the outside.

The minimum culvert diameter shall be 12 inches. The culvert pipe material can be corrugated metal pipe or ADS (N-12). Plastic pipe shall be constructed with tracer wire.

Manhole placement and construction shall comply with the sanitary sewer standards. All manholes shall be water tight and grouted from the outside.

Trench details for stormwater culverts shall comply with the sanitary sewer standards. The trench fill be compacted to 95% of maximum density.

Enclosed are the following:

Ordinance 1845: Stormwater Management
Typical trench cross section

ORDINANCE NO. 1845

AN ORDINANCE OF THE CITY OF PORT ORCHARD AMENDING POMC 15.32 REESTABLISHING DEVELOPMENT STANDARDS RELATING TO STORMWATER MANAGEMENT, LAND CLEARING, AND GRADING. (Repealing Ordinance No. 1736.)

WHEREAS, an expanding population and increased development of land, coupled with inadequate drainage controls, can lead to problems related to land clearing, grading, and stormwater runoff impacts; and

WHEREAS, these problems contribute to increased sedimentation in ponds, creeks, and streams, and to water quality and fisheries habitat degradation, through excessive discharge of nutrients, metals, oil and grease, toxic materials, and other detrimental substances to surface and groundwater; and

WHEREAS, inadequate surface and subsurface drainage planning and practice can lead to erosion and property damage, and risk to life; and

WHEREAS, excess water runoff on streets and highways poses a safety hazard to both lives and property; and

WHEREAS, future problems could be reduced if land developments, both public and private, provide for adequate drainage of property, and adequate grading of slopes; and

WHEREAS, a legal mechanism to enforce the provisions of adequate drainage facilities and adequate grading and land clearing practices in the development and use of property is necessary to ensure compliance with adopted standards; and

WHEREAS, RCW 90.54.090 charges the state, local governments, and municipal and public corporations with carrying out the powers vested in them in manners which are consistent with the goals and provisions of the Clean Water Act, the Water Resources Act of 1971, and the Growth Management Act; and

WHEREAS, the Puget Sound Water Quality Plan requires that municipalities in the Puget Sound Basin adopt stormwater management ordinances that are substantially equivalent to the "Stormwater Management Manual for the Puget Sound Basin" adopted by the Washington State Department of Ecology, now, therefore,

THE CITY COUNCIL OF THE CITY OF PORT ORCHARD, WASHINGTON, DOES HEREBY ORDAIN AS FOLLOWS:

SECTION 1. Section 15.32.010 is hereby amended to read as follows:

12.32.010 General provisions

(1) Declaration of Title – this ordinance shall be known as the "Stormwater Management Ordinance".

(2) Stormwater Management Standards and Specifications - The Port Orchard City Council recognizes that stormwater control technology is a developing and evolving science. In order to ensure that the latest and best technology is utilized in Port Orchard, Exhibit "A", attached hereto and incorporated herein by this reference is hereby adopted as the "Port Orchard Stormwater Design Manual". All references to this ordinance shall include the Port Orchard Stormwater Design Manual. The Director may amend the Port Orchard Stormwater

Design Manual, with the approval of the Port Orchard City Council, as necessary to reflect changing conditions and technology. All requirements contained in the Port Orchard Stormwater Design Manual, together with any amendments thereto, must be complied with as provided in Section 1(6) (Applicability).

(3) Technical Deviations - The Director may grant technical deviations from requirements contained in the Port Orchard Stormwater Design Manual, provided that all of the following criteria are met:

- (a) The technical deviation will not otherwise result in non-compliance with this ordinance.
- (b) The granting of the technical deviation will not result in non-compliance with the development conditions imposed upon the project by the City Council.
- (c) The granting of the technical deviation will produce a compensating or comparable result that is in the public interest.
- (d) The granting of the technical deviation will meet the objectives of safety, function, appearance, environmental protection, and maintainability based on sound engineering judgment.

(4) Variances - The City Council may, at a public hearing, grant a variance from the provisions of this ordinance, provided that all of the following criteria are met:

- (a) The granting of the variance will produce a compensating or comparable result that is in the public interest.
- (b) The granting of the variance will meet the objectives of safety, function, appearance, environmental protection, and maintainability based on sound engineering judgment.

(5) Water Quality - For circumstances or conditions related to water quality which are not specifically addressed within the scope of this ordinance, the most current edition of the Washington State Department of Ecology publication "Stormwater Management Manual for the Puget Sound Basin" is hereby adopted as the preferred reference for the design and implementation of stormwater management practices.

(6) Applicability - The provisions of this ordinance shall apply to all site development activities requiring land use permits and approvals as defined in Section 2 herein, both public and private, within the bounds of incorporated Port Orchard. The provisions of Section 8 (Operation and Maintenance) shall also apply to existing stormwater facilities in incorporated Port Orchard. The provisions of Section 10 (Water Quality) shall apply to all situations and circumstances throughout incorporated Port Orchard.

(7) Applicability of Other Ordinances - Any land development which is required by operation of any City of Port Orchard ordinance, State law, or Federal law to construct, install, or modify any natural or manmade drainage features within, abutting, or serving the development shall do so in accordance with this ordinance. However, where the provisions of this ordinance directly conflict with any other City of Port Orchard ordinance, State law,

Federal law, or comprehensive drainage plan, the more stringent provisions shall apply to the extent permissible by law.

(8) Administration - The Director, or an assignee, shall administer this ordinance. The Director shall have the authority to develop and implement procedures to administer and enforce this ordinance.

(9) Appeals - An aggrieved party may appeal any administrative interpretation or departmental ruling related to this ordinance to the Port Orchard City Council.

(10) Effective Date - This ordinance codified in this title shall become effective on March 25, 2002.

SECTION 2. Section 15.32.020 is hereby amended to read as follows:

15.32.020 Definitions - The following definitions of terms shall apply to this ordinance:

(1) Accepted Performance of Construction shall mean the written acknowledgment from the Director of the satisfactory completion of all work accepted by the city, including all work shown on the accepted plans, accepted revisions to the plans, and accepted field changes.

(2) Applicant shall mean the person, party, firm, corporation, or other legal entity that proposes to engage in site development activities in incorporated Port Orchard by submitting an application for any of the activities covered by this ordinance on a form furnished by the city and paying the required application fees.

(3) Basin Plan shall mean a plan and all implementing regulations and procedures including, but not limited to, land use management adopted by ordinance for managing stormwater quality and quantity management facilities and drainage features within individual sub-basins.

(4) Best Management Practices (BMP) shall mean physical, structural, and/or managerial practices that, when used singly or in combination, prevent or reduce pollution of water, and have been approved by the city as accepted BMPs.

(5) Biofiltration/Biofilter Facilities shall mean vegetative BMPs that treat stormwater by filtration through vegetation. Biofiltration facilities include, but are not limited to, grassed or vegetated swales and filter strips.

(6) Bond shall mean a financial guarantee, in the form of a surety bond, assignment of funds, or irrevocable bank letter of credit, that shall guarantee compliance with applicable provisions of this ordinance.

(7) City shall mean City of Port Orchard.

(8) Civil Engineer shall mean a professional engineer currently registered in the State of Washington to practice in the field of civil engineering.

(9) Clearing or land clearing shall mean the surface removal of vegetation.

- (10) Closed Depressions shall mean low-lying areas that have no surface outlet, or such a limited surface outlet that in most storm events the area acts as a retention basin, holding water for infiltration, evaporation, or transpiration.
- (11) Comprehensive Drainage Plan shall mean a detailed analysis, adopted by the city, for a drainage basin which assesses the capabilities and needs for runoff accommodation due to various combinations of development, land use, structural and nonstructural management alternatives. The plan recommends the form, location and extent of stormwater quantity and quality control measures that would satisfy legal constraints, water quality standards, and community standards, and identifies the institutional and funding requirements for plan implementation.
- (12) Contiguous Land shall mean land adjoining and touching other land regardless of whether or not portions of the parcels have separate Assessor's tax numbers or were purchased at different times, lie in different Sections, are in different government lots, or are separated from each other by private road or private rights-of-way.
- (13) Critical Drainage Area shall refer to those areas designated in Section 9 (Critical Drainage Areas) which have a high potential for stormwater quantity or quality problems.
- (14) Design Storm Event shall mean a theoretical storm event, of a given frequency, interval, and duration, used in the analysis and design of a stormwater facility.
- (15) Detention Facilities shall mean stormwater facilities designed to store runoff while gradually releasing it at a pre-determined controlled rate. "Detention facilities" shall include all appurtenances associated with their designed function, maintenance, and security.
- (16) Developed Site shall mean the condition of the development site following completion of construction of the development including all approved phases of construction.
- (17) Director shall refer to the City Engineer, who is the Director of the City of Port Orchard Department of Public Works or assigns.
- (18) Diversion shall mean the routing of stormwater to other than its natural discharge location.
- (19) Drainage Feature shall mean any natural or manmade structure, facility, conveyance, or topographic feature which has the potential to concentrate, convey, detain, retain, infiltrate, or affect the flow rate of stormwater runoff.
- (20) Drainage Plan shall mean a plan for the collection, transport, treatment, and discharge of runoff, and may include both the plan and profile views of the site as well as construction details and notes.
- (21) Easement shall mean an acquired privilege or right of use or enjoyment that a person, party, firm, corporation, municipality, or other legal entity has in the land of another.
- (22) Erosion Control Design Storm shall mean the 2-year frequency, 24-hour duration storm event used for analysis and design of sedimentation and erosion control facilities.
- (23) Existing Stormwater Facilities shall mean those facilities constructed or under permitted construction prior to the effective date of this ordinance.

(24) Forested Land shall mean "forested land" as defined in RCW 76.09.020, and shall include all land which is capable of supporting a merchantable stand of timber and is not being actively used in a manner incompatible with timber growing.

(25) Geotechnical Engineer shall mean a practicing professional engineer licensed in the State of Washington who has at least four years of professional experience in geotechnical and landslide evaluation.

(26) Geotechnical Report shall mean a study of the effects of drainage and drainage facilities on soil characteristics, geology and groundwater. The geotechnical analysis shall be prepared by a geotechnical engineer.

(27) Grading shall mean any excavating, filling, or embanking of earth materials.

(28) Grubbing shall mean the removal of vegetative matter from underground, such as sod, stumps, roots, buried logs, or other debris, and shall include the incidental removal of topsoil to a depth not exceeding 12 inches.

(29) Hydrograph shall mean a graph of runoff rate, inflow rate, or discharge rate, past a specific point over time.

(30) Hydrograph Method shall mean a method of estimating a hydrograph using a mathematical simulation. Commonly accepted hydrograph methods include the Soil Conservation Service TR-55 Method and the Santa Barbara Urban Hydrograph Method.

(31) Illicit Discharge shall mean all non-stormwater discharges to stormwater drainage systems that cause or contribute to a violation of state water quality, sediment quality, or ground water quality standards, including but not limited to, sanitary sewer connections, industrial process water, interior floor drains, and graywater systems.

(32) Impervious Surface shall mean a hard surface area which either prevents or retards the entry of water into the soil mantle as under natural conditions prior to development, and/or a hard surface area which causes water to run off the surface in greater quantities or at an increased rate of flow from the flow present under natural conditions prior to development. Common impervious surfaces include, but are not limited to, roof tops, walkways, patios, driveways, parking lots, or storage areas, concrete or asphalt paving, gravel roads, packed earthen materials, and oiled, macadam or other surfaces which similarly impede the natural infiltration of stormwater. Open, uncovered retention/detention facilities shall not be considered as impervious surfaces.

(33) Land Disturbing Activity shall mean any activity that results in a change in the existing soil cover (both vegetative and nonvegetative) and/or the existing soil topography. Land disturbing activities include, but are not limited to, demolition, construction, paving, clearing, grading, and grubbing.

(34) Land Use Permits and Approvals shall mean any use or development of land that requires city action in legislation, administration, or approval.

(35) Maintenance shall mean any activity that is necessary to keep a stormwater facility in good working order so as to function as designed. Maintenance shall include complete

reconstruction of a stormwater facility if reconstruction is needed in order to return the facility to good working order. Maintenance shall also include the correction of any problem on the site property that may directly impair the functions of the stormwater facilities.

(36) Maintenance Covenant shall mean a binding agreement between the City of Port Orchard and the person or persons holding title to a property served by a stormwater facility whereby the property owner promises to maintain certain stormwater facilities; grants the city the right to enter the subject property to inspect and to make certain repairs or perform certain maintenance procedures on the stormwater control facilities when such repairs or maintenance have not been performed by the property owner; and promises to reimburse the city for the cost should the city perform such repairs or maintenance.

(37) Maintenance Schedule shall mean a document detailing required stormwater facility maintenance activities to be performed at specified intervals.

(38) Major Development shall mean any new development or any redevelopment activity that (1) includes the creation or cumulative addition of 5,000 square feet or greater of impervious surface area from the pre-development conditions, or (2) includes land disturbing activity of one acre or greater, or (3) includes grading involving the movement of 5,000 cubic yards or more of material.

(39) Manual shall mean Exhibit A of this ordinance entitled the "Port Orchard Stormwater Design Manual".

(40) Minor Development shall mean any new development or redevelopment activity that (1) includes the creation or addition of less than 5,000 square feet of new impervious surface area, and (2) includes land disturbing activity of less than one acre, and (3) includes grading involving the movement of less than 5,000 cubic yards of material.

(41) Non-forestry Use shall mean an active use of land that is incompatible with timber growing.

(42) Off-site Drainage Analysis shall mean a study of those land areas contributing surface runoff to a development site as well as a study of the existing and predicted impacts of surface runoff from the development site on properties and drainage features that have the potential to receive stormwater from the development site.

(43) Oil/Water Separator shall mean a structure or device used to remove suspended oil and greasy solids from water.

(44) Operation and Maintenance Manual shall mean a written manual, prepared by a qualified civil engineer, which provides a description of operation and maintenance procedures for specific stormwater control facilities, for use by operation and maintenance personnel.

(45) Owner shall mean any person or persons having a legal or equitable property right or interest, whether or not said right is legal or equitable in character, including a fee owner, contract purchaser or seller, mortgagor or mortgagee, optionor or optionee, and beneficiary or grantor of a trust or deed of trust.

(46) Pollution shall mean contamination or other alteration of the physical, chemical, or biological properties of waters of the state, including change in temperature, taste, color, turbidity, or odor of the waters, or such discharge of any liquid, gaseous, solid, radioactive or other substance into any waters of the state as will or is likely to create a nuisance or render such waters harmful.

(47) Pre-development Conditions shall mean site conditions as they existed prior to manmade alterations other than those alterations that have been made with a prior approved storm drainage plan.

(48) Professional Engineer shall mean a person who, by reason of his or her special knowledge of the mathematical and physical sciences and the principles and methods of engineering analysis and design, acquired by professional education and practical experience, is qualified to practice engineering as attested by his or her legal registration as a professional engineer in the State of Washington.

(49) Project Engineer shall mean the professional engineer responsible for the design of the project, who will affix his/her seal on the project drainage plans and drainage analysis. The project engineer shall be licensed in the State of Washington and qualified by experience or examination.

(50) Redevelopment shall mean any land disturbing activity occurring on existing developed property.

(51) Retention Facilities shall mean drainage facilities designed to store runoff for gradual release by evaporation, plant transpiration, or infiltration into the soil. Retention facilities shall include all such drainage facilities designed so that none of the runoff entering the facility will be discharged as surface water. Retention facilities shall include all appurtenances associated with their designed function, maintenance, and security.

(52) SEPA shall mean the Washington State Environmental Policy Act.

(53) Shorelines of the State shall mean the total of all "shorelines" and "shorelines of state-wide significance" within the state, as defined in RCW 90.58.030, also known as the Shoreline Management Act.

(54) Site Development Activity shall mean the alteration of topography, clearing, paving, grading, construction, alteration of stormwater systems, site preparation, or other activity commonly associated with site development.

(55) Soils Investigation Report shall mean a study of soils on a subject property with the primary purpose of characterizing and describing the soils. The soils investigation report shall be prepared by a qualified soils engineer, who shall be directly involved in the soil characterization either by performing the investigation or by directly supervising employees.

(56) Soils Engineer shall mean a practicing civil engineer licensed as a professional civil engineer in the State of Washington who has at least four years of professional employment as a civil engineer dealing with soil descriptions and characterizations.

(57) Source Control BMP shall mean a Best Management Practice (BMP) that is intended to prevent pollutants from entering stormwater. Examples include erosion control practices,

maintenance of stormwater facilities, constructing roofs over storage and working areas, and directing wash water and similar discharges to the sanitary sewer or a dead end sump.

(58) Stormwater shall mean the surface water runoff that results from all natural forms of precipitation.

(59) Stormwater Facility shall mean a component of a manmade drainage feature, or features, designed or constructed to perform a particular function or multiple functions, including, but not limited to, pipes, swales, ditches, culverts, street gutters, detention basins, retention basins, wetponds, constructed wetlands, infiltration devices, catch basins, oil/water separators, and sediment basins. Stormwater facilities shall not include building gutters, downspouts, and drains serving one single-family residence.

(60) Stormwater Quality Control shall mean the control of the introduction of pollutants into stormwater and the process of separating pollutants from stormwater. Stormwater quality control facilities include, but are not limited to, source controls, biofiltration/biofilter facilities, wetponds, wetland forebays, oil/water separators, constructed wetlands and erosion and sedimentation control facilities.

(61) Stormwater Quantity Control shall mean the control of the rate and/or volume of stormwater released from a development site. Stormwater quantity control facilities include, but are not limited to, detention and retention facilities.

(62) Technical Deviation shall mean permission granted by the Director to deviate from the provisions of the ordinance.

(63) Variance shall mean permission granted by the City Council to deviate from the provisions of this ordinance.

(64) Water Quality Design Storm Event shall mean a design storm event selected by the Director for the purpose of establishing design performance criteria for water quality BMPs. Under most conditions, the term applies to the runoff rate and volume resulting from 64-percent (64%) of the precipitation of the 2-year frequency, 24-hour duration storm event.

(65) Wetland shall mean those areas that are defined by separate ordinance, regulation, or statute as wetlands.

SECTION 3. Section 15.32.030 is hereby amended to read as follows:

15.32.030 Permits

(1) Review By Department of Public Works - Proposed site development activities shall be reviewed by the Port Orchard Department of Public Works to determine the permits required.

(2) Expiration of Existing Construction Plan Approval - Any construction plans previously approved by the city prior to September 8, 1998 are expired. The Director may extend the expiration date if the project is under construction and progressing satisfactorily towards final completion.

(3) Stormwater Management Permit Required - A Stormwater Management Permit, issued by the Department of Public Works, shall be required for any of the following activities:

- (a) Site development or redevelopment activities that meet the definition of a major development.
- (b) Site development or redevelopment activities that require connection to a public storm drainage system.
- (c) Grading activities that result in the movement of 150 cubic yards or more of earth.
- (d) Grading activities that will result in a temporary or permanent slope having a steepness exceeding 3 to 1 (3 feet horizontal to 1 foot vertical) and having a total slope height, measured vertically from toe of slope to top of slope, exceeding 5 feet.
- (e) Grading activities that include the construction of embankment berms that will result in the impoundment of water to a depth exceeding 18 inches and/or with a maximum volume exceeding 2,500 cubic feet of water.
- (f) Grading activities that will result in the diversion of existing drainage courses, both natural and man-made, from their natural point of entry or exit from the grading site.
- (g) Any land clearing or grading on slopes steeper than 30%, or within the mandatory setback of a wetland, stream, lake, Puget Sound, as established by separate ordinance or by the Public Works Department.

No site development activity, including land clearing, grading, or other construction activity as described in this ordinance, shall occur until a Stormwater Management Permit has been issued, nor shall said site development activity continue without a Stormwater Management Permit in force.

(4) Exemptions - Commercial agriculture and forest practices regulated under Title 222 WAC are exempt from the provisions of Section 3.

Development that is undertaken by the Washington State Department of Transportation in state highway rights-of-way and is regulated by Chapter 173-270 WAC, the Puget Sound Highway Runoff Program, shall be exempt from the provisions of Section 3.

Grading activities described in Section 6(9) are exempt from the provisions of Section 3.

Residential lots 2.5 acres or larger shall be exempt from the provisions of Section 7 unless otherwise determined by the Director. Cases where the exemption does not apply includes, but is not limited to, sites within or adjacent to critical areas or watersheds, steep or unstable slopes, or where the cumulative impacts of development warrant. Site development activities taking place on individual lots of 2.5 acres or larger, which meet the definition of a Major Development, are not exempt from the requirements of Section 7. Proposed access roadways serving residential lots larger than 2.5 acres which meet the definition of a Major Development, are not exempt from the requirements of Section 7.

(5) Permit Requirements - The Director shall establish requirements for the issuance of Stormwater Management Permits, subject to the following criteria:

- (a) All site development activities shall comply with the standards, specifications, and requirements contained in the Stormwater Design Manual.
- (b) The Director shall establish fees for Stormwater Management Permits. Stormwater Management Permit fees shall include fees for the review of permit applications and documents and for inspections during construction.
- (c) A Stormwater Management Permit shall, at the time of its issuance, specify a maximum expiration date, not to exceed 3 years from the date of issuance. A Stormwater Management Permit shall expire upon approved completion of construction, or upon the specified maximum expiration date, whichever comes first. In the event that a Stormwater Management Permit expires prior to the completion of construction, all construction activity must cease, a new Stormwater Management Permit application must be submitted, and the issuance of a new Stormwater Management Permit shall be, at the discretion of the Director, subject to city site development standards in force at the time of the new permit application.
- (d) Approved Stormwater Management Permit placards shall be prominently displayed on construction sites at all times until the completion of all permitted site development activities.

(6) When A Professional Engineer Is Required - Unless otherwise required by Sections 5 or 6 of this ordinance, Stormwater Management Permit applications shall require the submittal of documents prepared by a qualified Professional Engineer when one of the following conditions exists:

- (a) Any land use or building or development on real property which meets the definition of a major development, OR;
- (b) Any improvements within the boundaries of city rights-of-way for which Port Orchard will ultimately assume responsibility for maintenance, OR;
- (c) Any site development activity that the Director deems to be in the public's best interest to require that certain Stormwater Management Permit application submittal documents be prepared by a Professional Civil Engineer.

(7) Off-site Analysis - All Stormwater Management Permit applications which meet any of the criteria listed in Section 3(6) of this ordinance shall include, along with other required submittal documents, an off-site drainage analysis as described in Section 7(3)(f) and Section 7(8)(f) prepared by a qualified Professional Engineer and based on a field investigation of the development's off-site contributing and receiving drainage areas.

(8) Geotechnical Analysis - All Stormwater Management Permit applications for development activities where grading or the construction of retention facilities, detention

facilities, or other stormwater facilities is proposed within 200 feet of slopes steeper than thirty percent (30%), or where the Director deems that the proposed construction poses a potential hazard due to its proximity to a slope, shall, when required by the Director, include a geotechnical analysis, prepared by a qualified engineer. Said geotechnical analysis shall address the effects of groundwater interception and infiltration, seepage, potential slip planes, and changes in soil bearing strength.

(9) Soils Analysis - All Stormwater Management Permit applications which meet any of the criteria listed in Section 3(6) of this ordinance, where the soils underlying the proposed project have not been mapped, or where existing soils maps of the project site are inconsistent, or where the Director deems that existing soils maps of the project site are not of sufficient resolution to allow proper engineering analysis, shall include a soils investigation report.

(10) Permit Modifications - Proposed modifications to an approved Stormwater Management Permit must be submitted to the Department of Public Works and be reviewed for compliance with this ordinance. Substantial proposed modifications, as determined by the Director, shall require additional review fees and shall require re-issuance of the required permit. Minor proposed modifications may be accepted by the Director without requiring the re-issuance of the accepted permit or the payment of additional review fees.

(11) Erosion and Sedimentation Control - All final drainage, grading, clearing, or other site development plans requiring acceptance from the Department of Public Works shall include a plan for the control of erosion and sedimentation as required in Section 5(1) and Section 5(3), for the period beginning with the commencement of site development activity and continuing without interruption until permanent site stabilization is achieved.

No clearing, grubbing, grading, or other construction activity may take place on a project site until an Erosion and Sedimentation Control Plan has been approved by the Department of Public Works.

SECTION 4. Section 15.32.040 is hereby amended to read as follows:

15.32.040 Covenants, Sureties, and Liability Insurance

(1) Site Stabilization - Prior to the issuance of a Stormwater Management Permit and prior to beginning any construction activity on a project site, the owner of the project will be required to record a performance covenant or post a performance surety for site stabilization and erosion and sedimentation control. In addition, the owner may be required to provide a Certificate of Commercial Liability Insurance as outlined in Section 4(5) below.

This performance requirement for stabilization and erosion control should not be confused with the performance bond accepted at the time of final plat recording as a surety for construction items not yet completed. When a performance bond is accepted for a final plat in lieu of construction completion, the surety or covenant for stabilization and erosion control will be released, and the new performance bond shall cover site stabilization and erosion control along with the other incomplete construction items.

(2) Performance Covenant for Site Stabilization - For project sites with less than 5 acres of land disturbing activity, a Performance Covenant may be recorded in lieu of performance surety for site stabilization prior to issuance of the Stormwater Management Permit to

guarantee the city that temporary erosion and sedimentation control and permanent site stabilization measures will perform in accordance with the Stormwater Management Ordinance. This Covenant shall be recorded with the Kitsap County Auditor and shall run with the land until such a time as the city issues final acceptance of the permitted activities, or until a separate performance bond is posted prior to final plat approval. Upon issuance of final project approval, the Department of Public Works will record a document that extinguishes the Performance Covenant.

(3) Performance Surety for Site Stabilization - The term "Bond" as defined in the ordinance shall mean a surety bond, assignment of funds, or irrevocable bank letter of credit. For project sites with 5 or more acres of land disturbing activity, a Performance Bond shall be posted prior to issuance of a Stormwater Management Permit to guarantee the city that temporary erosion and sedimentation control and permanent site stabilization measures will perform in accordance with the ordinance. The amount of the performance bond shall be as follows:

- (a) One hundred fifty percent (150%) of the estimated cost of performing minor grading and installing temporary erosion and sedimentation control, and permanent site stabilization measures to bring the construction site into compliance with the ordinance. A cost estimate shall be submitted by the project engineer subject to the approval of the Director. The minimum amount of the "Bond" shall be five thousand dollars (\$5,000.00), OR;
- (b) One thousand dollars (\$1,000.00) per acre of land disturbing activity. No engineer's estimate is required.

If the site work is determined by the Director to be in violation of the Stormwater Management ordinance, the city may use the Performance Bond to provide temporary and permanent site stabilization.

All Performance Bonds shall run continuously until released by the city, and shall not be subject to an expiration or cancellation date.

(4) Performance Bond for Uncompleted Site Improvements - For single family residential developments, a Performance Bond shall be provided prior to the final recording of the plat/PUD, guaranteeing completion of all site improvements not yet completed. The amount of the Performance Bond shall be one-hundred fifty percent (150%) of the estimated cost of said improvements. The estimated cost of the construction shall be determined by a civil engineer subject to the approval of the Director.

All Performance Bonds shall run continuously until released by the city, and shall not be subject to an expiration or cancellation date.

(5) Commercial Liability Insurance - The owner of any project must provide a Certificate of Liability Insurance to the Department of Public Works prior to issuance of a Stormwater Management Permit. The liability insurance shall remain in force until final project approval is issued by the city. The commercial liability insurance shall be in the amount of not less than one million dollars (\$1,000,000.00) combined single limit bodily injury and property damage, with a two million dollar (\$2,000,000.00) aggregate. Such insurance shall include the City of Port Orchard, its officers, and employees as additional insureds, with respect to the terms and conditions of the policy.

- (6) Maintenance Bonds - A maintenance bond is required for residential plats/PUD's and other projects for which maintenance of the stormwater facilities and/or roads is to ultimately be taken over by the city.

Prior to the final approval of construction and release of any performance sureties, a Maintenance Bond must be posted and maintained by the project owner for a period of two (2) years. The Maintenance Bond shall guarantee the stormwater facilities and roads constructed under permit against design defects and/or failures in workmanship, and shall guarantee that the facilities constructed under the permit will be regularly and adequately maintained throughout the maintenance period. At the end of this time, the city will inspect the system and, when the facility is acceptable and eighty percent (80%) of the lots in that phase have been improved, the city will take over the maintenance and operations of the system. In the event that eighty percent (80%) of the lots in a residential development have not been improved by the end of the two year maintenance period, the maintenance bond may be extended, subject to the approval of the Director, for one (1) additional year.

The amount of the Maintenance Bond shall be ten percent (10%) of the estimated construction cost of the stormwater facilities and roads requiring maintenance, or five thousand dollars (\$5,000.00), whichever is greater. The construction cost of the facilities requiring maintenance shall be estimated by the Project Engineer, subject to the approval of the Director.

SECTION 5. Section 15.32.050 is hereby amended to read as follows:

15.32.050 Erosion and Sediment Control

- (1) Minor Developments - All Minor Developments, as defined in this ordinance, shall be required to control erosion and sedimentation during construction, to permanently stabilize soil exposed during construction, and to comply with the Minor Development Requirements described in Section 5(2)(a)through (e).

(2) Minor Development Requirements

- (a) Construction access route. Construction vehicle access shall be, whenever possible, limited to one route. Access points shall be stabilized with quarry spall or crushed rock to minimize the tracking of sediment onto public roads.
- (b) Stabilization of denuded area. All exposed and unworked soils not actively being worked shall be stabilized by suitable application of BMPs. From October 1 through April 30, soils not actively being worked shall remain unstabilized for no more than 48 hours. From May 1 through September 30, the owner or contractor shall have the materials readily available to stabilize denuded areas as site and weather conditions dictate. Prior to leaving the site, stormwater runoff shall pass through a sediment pond, sediment trap, or other appropriate BMP.
- (c) Protection of adjacent properties. Adjacent properties shall be protected from sediment deposition by appropriate use of vegetative buffer strips, sediment barriers or filters, dikes or mulching, or by a combination of these measures and other appropriate BMPs.

- (d) Maintenance. All erosion and sediment control BMPs shall be regularly inspected and maintained to ensure continued performance of their intended function.
 - (e) Other BMPs. Any adverse effects of increased runoff resulting from land disturbing and/or land development activities shall be controlled by appropriate BMP's.
- (3) Major Developments - Any new development meeting the definition of a major development, shall comply with Section 5(5). For any redevelopment project meeting the definition of a major development, those portions of the site that are being redeveloped shall comply with Section 5(5).
- (4) Erosion and Sedimentation Control Plan Required - Compliance with the erosion and sedimentation control requirements of Section 5(5) shall be demonstrated through the implementation of an approved Erosion and Sedimentation Control plan.
- (5) Major Development Erosion and Sedimentation Control Minimum Requirements
- (a) Stabilization and sediment trapping. All exposed soils shall be stabilized by suitable application of BMPs, including but not limited to, sod or other vegetation, mat covering, mulching, or application of compacted ground base material on areas to be paved. All BMPs shall be selected, designed and maintained in accordance with the Manual. From October 1 through April 30, soils not actively being worked for more than 48 hours shall be protected or stabilized. From May 1 through September 30, the owner or contractor shall have the materials readily available to stabilize denuded areas as site and weather conditions dictate.
 - (b) Delineate clearing and easement limits. Clearing limits and/or any easements, setbacks, sensitive/critical areas and their buffers and drainage courses shall be clearly marked in the field, and on the construction plans.
 - (c) Protection of adjacent properties. Adjacent properties shall be protected from sediment deposition by appropriate use of vegetative buffer strips, sediment barriers or filters, dikes or mulching, or by a combination of these measures and other appropriate BMPs.
 - (d) Timing and stabilization of sediment trapping measures. Sediment ponds and traps, perimeter dikes, sediment barriers and other BMPs intended to trap sediment on-site shall be constructed as a first step. These BMPs shall be functional before land disturbing activities take place. Earthen structures such as dams, dikes, and diversions shall be stabilized according to the timing indicated in Erosion and Sedimentation Control Requirement 5(a).
 - (e) Cut and fill slopes. Cut and fill slopes shall be designed and constructed in a manner that will minimize erosion. In addition, slopes shall be stabilized in accordance with Erosion and Sedimentation Control Requirement 5(a).

- (f) Controlling off-site erosion. Properties and waterways downstream from development sites shall be protected from erosion due to increases in the velocity of stormwater runoff from the development site.
- (g) Stabilization of temporary conveyance channels and outlets. All temporary on-site conveyance channels shall be designed, constructed, and stabilized to prevent erosion from the expected flow velocity from a 2-year/24-hour duration storm for the post-development condition. Stabilization adequate to prevent erosion of outlets, adjacent streambanks, and slopes shall be provided at the outlets of all conveyance systems.
- (h) Inlet protection. All storm drain inlets made operable during construction shall be protected so that stormwater runoff does not enter the conveyance system without first being filtered or otherwise treated to remove sediment. The requirement for inlet protection may be waived on a site-specific basis when the conveyance system downstream of the inlet discharges to an appropriate sediment containment BMP and the conveyance system can be adequately cleaned following site stabilization.
- (i) Underground utility construction. The construction of underground utility lines shall be subject to the following criteria:
 - (i) For trenches on a downslope of more than 5%, no more than 500 feet of trench shall be opened at one time, unless otherwise approved by the Director.
 - (ii) Where consistent with safety and space considerations, excavated material shall be placed on the uphill side of trenches.
 - (iii) Trench dewatering devices shall discharge into a sediment trap or sediment pond.
- (j) Constructed access routes. Wherever construction vehicle access routes intersect paved roads, provisions must be made to minimize the transport of sediment (mud) onto the paved road by use of appropriate BMP's such as a Stabilized Construction Entrance. If sediment is transported onto a road surface, the roads shall be cleaned thoroughly, as a minimum, at the end of each day. Sediment shall be removed from roads by shoveling or sweeping and be transported to a controlled sediment disposal area. Street washing shall be allowed only after sediment is removed in this manner.
- (k) Dewatering construction sites. Dewatering devices shall discharge into a sediment trap or sediment pond.
- (l) Control of pollutants other than sediment on construction sites. All pollutants other than sediment that occur on-site during construction shall be handled and legally disposed of in a manner that does not cause contamination of stormwater.
- (m) Maintenance. All temporary and permanent erosion and sedimentation control BMPs shall be maintained and repaired as needed to assure

continued performance of their intended function. All maintenance and repair shall be conducted in accordance with the Manual. The Applicant shall be responsible for assuring that any such facilities damaged during floods, storms or other adverse weather conditions are immediately returned to normal operating condition.

- (n) Removal of temporary BMPs. All temporary erosion and sedimentation control BMPs shall be removed within 30 days after final site stabilization is achieved or after the temporary BMPs are no longer needed. Trapped sediment shall be removed or stabilized on-site. Disturbed soil areas resulting from removal of temporary BMPs shall be permanently stabilized. The removal of temporary erosion and sedimentation control BMPs may not be required for those projects, such as single family plats, that will be followed by additional construction under a different permit. In these circumstances, the need for removing or retaining the measures will be evaluated on a site-specific basis.
 - (o) Financial liability. A Performance Covenant, performance bonding, or other appropriate financial instruments, required by Section 4, shall ensure compliance with the approved erosion and sedimentation control plan.
- (6) Erosion Control Design Storm Event - Facilities designed for the control of erosion and sedimentation shall be designed for the erosion and sedimentation control design storm event, defined as the 2-year, 24-hour duration storm.

SECTION 6. Section 15.32.060 is hereby amended to read as follows:

15.32.060 Grading

- (1) Authority of the Director - The Director is the designated agent for the issuance of Stormwater Management Permits for grading, and shall have the authority to prepare regulations and set administrative procedures to carry out the purposes and intent of this Section.
- (2) Grading Plan Required - Grading projects meeting the criteria of Section 3(6) shall be required to have an approved engineered grading plan.
- (3) Abbreviated Grading Plan - Grading projects meeting the definition of a Minor Development will require an approved abbreviated grading plan in lieu of an engineered grading plan. An abbreviated grading plan is a grading plan that does not require the seal of a professional civil engineer.
- (4) Erosion and Sedimentation Control - The grading plan shall include a temporary erosion and sedimentation control plan. The plan shall clearly indicate the construction sequence for establishment of all erosion and sedimentation control work, both temporary and permanent. The plan shall conform to all requirements and standards for erosion and sedimentation control set forth in Section 5 of this ordinance.

(4) Drainage

- (a) All grading activities shall conform to the requirements of this ordinance concerning stormwater management.
- (b) Where required by the Director, all discharge of runoff from the project site shall be of like quality, flow rate, and velocity as that which flowed from the project site prior to the work for which the Stormwater Management Permit has been issued.
- (c) Stormwater flows shall be accepted onto, and shall be discharged from, a project site at the natural or otherwise legally existing locations.

(6) Minimum Grading Standards - This ordinance sets forth minimum standards which shall apply to grading activities as described in Section 3(3). For circumstances not specifically addressed in this ordinance or the Stormwater Design Manual, the provisions of the Uniform Building Code shall apply.

(7) Hazards - Whenever the Director determines that an existing excavation, embankment, or fill on private property has become a hazard to public safety, endangers property, or adversely affects the safety, use or stability of a public way, critical drainage area, or drainage channel, such conditions shall become a violation of Section 11(9) of this ordinance.

(8) Additional Review - Permits regulating grading activities for major developments may be subject to review and recommendation of approval by the City Planning Department.

(9) Permit Exemptions - The following grading activities shall not require the issuance of a Stormwater Management Permit:

- (a) Excavation for utilities, or for wells or tunnels under separate permit.
- (b) An excavation below finished grade for basements and footings of a building, retaining wall or other structure authorized by a valid Building Permit. This shall not exempt the placement of any fill material removed from such an excavation, and shall not exempt any excavation beyond the limits of the basement or footing excavations nor exempt excavations having an unsupported height greater than 5 feet after the completion of such a structure.
- (c) Agricultural crop management outside of critical drainage areas limited to the preparation of soil by turning, disking, or other means endorsed by the Kitsap Conservation District.
- (d) Excavation for cemetery graves.
- (e) Landscape installation where fill is confined to less than one (1) foot of topsoil and land disturbing activities are limited to less than one (1) acre.
- (f) The disposal of solid waste, wood waste, problem waste, and demolition waste authorized pursuant to R.C.W. 70.95, and regulations presently

enacted or as may be amended or as specifically approved by the Bremerton-Kitsap County Health District.

- (g) Mining, quarrying, excavating, processing, and/or stockpiling of rock, sand, gravel, aggregate, or clay where established and provided by law, and a permit for said activity has been issued by the State of Washington or the Federal Government, provided such operations do not affect the lateral support or increase the stresses in or pressure upon any adjacent or contiguous land.
- (h) Exploratory excavations under the direction of a qualified civil engineer.
- (i) Grading activities already approved by separate permit granted by any governing authority.
- (j) Emergency sandbagging, diking, ditching, filling, or similar work during or after periods of extreme weather conditions when done to protect life or property.
- (k) Maintenance activities within public rights-of-way performed by city personnel. However, exemption from the Stormwater Management Permit does not constitute an exemption from the other requirements of this ordinance.

(10) Changes in Site Topography

- (a) The maximum surface gradient on any artificially created slope shall be two (2) feet of horizontal run to one (1) foot of vertical fall (2:1). This gradient may be increased to that gradient which can be demonstrated through engineering calculations to be stable, if, in the opinion of the Director, it has been demonstrated by the Applicant through engineering calculations performed by a qualified professional engineer that surface erosion can be controlled to that erosion rate equal to a properly stabilized 2:1 slope under the same conditions.
- (b) The Applicant shall, at all times, protect adjacent private properties and public rights-of-way or easements from damage occurring during grading operations. The Applicant shall restore public improvements damaged by his/her operations.
- (c) The Applicant shall be responsible for obtaining and coordinating all required State or Federal permits associated with the filling of wetlands or other regulated activities.

(11) Rockeries and Retaining Structures - Any rockery or other retaining structure greater than 4 feet in height shall be permitted under a separate Building Permit issued by the City Building Department.

(12) Maintenance - It shall be the responsibility of the Applicant to maintain all erosion control and drainage facilities in good operating condition at all times, as required in Section 5.

(13) Progress of Work - All work permitted under this ordinance shall proceed continuously to completion in an expeditious manner unless otherwise authorized by the Director, with the intent that work may be halted due to weather conditions or the need to coordinate other construction on the project site. Stormwater Management Permits, issued for grading only, shall expire six (6) months after issuance.

SECTION 7. Section 15.32.070 is hereby amended to read as follows:

15.32.070 Stormwater Management

(1) Redevelopment Activities - Where redevelopment activities meet the definition of a major development, the requirements of Section 7 of this ordinance shall apply to that portion of the site that is being redeveloped. In addition, where one or more of the following conditions exist, the requirements of Section 7 of this ordinance shall apply, to the maximum extent practicable, for the entire site, including adjoining parcels, if they are part of the project:

- (a) Existing sites greater than one (1) acre in size with 50% or more impervious surface.
- (b) Sites that discharge to a receiving water that has a documented water quality problem.
- (c) Sites where the need for additional stormwater control measures has been identified through a basin plan.

(2) Approved Hydrological Methods for Design - Estimation of peak stormwater runoff rates used in the design of stormwater quantity control facilities shall utilize hydrograph methods of analysis approved by the Director. The design of storage facilities that are a part of stormwater quantity control facilities shall be designed using methods approved by the Director.

(3) Stormwater Quantity Control - The following minimum requirements for stormwater quantity control shall apply to all land developments that meet the definition of a major development:

- (a) All surface water and stormwater entering the development site in its pre-development state shall be received at the naturally occurring or otherwise legally existing locations. All surface water and stormwater leaving the development site shall be discharged at all times during and after development at the naturally occurring or otherwise legally existing locations so as not to be diverted onto or away from adjacent downstream properties, EXCEPT, diversion which will correct an existing man-made downstream problem may be permitted by the Director. For the purposes of this ordinance, "naturally occurring location" shall mean the location of those channels, swales, and pre-existing and established systems as defined by the first documented topographic contours existing for the subject property, either from maps or photographs, site inspections, decisions of a court of law, or other means determined appropriate by the Director.

- (b) The post-development peak stormwater discharge rates from the development site for the 2, 10, and 100-year, 24-hour duration storm events and the 100-year, 7-day duration storm event shall at no time exceed the pre-development peak stormwater runoff rates for the same design storm events, except as expressly permitted by this ordinance. Also, where stormwater directly or indirectly discharges to open channels or streams, streambank erosion protection is required; the post-development peak stormwater discharge rate from the development site for the 2-year, 24-hour duration storm event shall not exceed fifty percent (50%) of the pre-development peak stormwater runoff rate for the same design storm event. The Director may require that runoff from a development site be controlled for additional design storm events.
- (c) Closed depressions shall be analyzed using hydrograph routing methods. Infiltration shall be addressed where appropriate. If a proposed project will discharge runoff to an existing closed depression that has greater than 5,000 square feet of water surface area at overflow elevation, the following requirements must be met:
 - (i) CASE 1: The pre-development 100-year, 7-day and 24-hour duration design storms from the drainage basin tributary to the closed depression are routed into the closed depression using only infiltration as outflow. If the design storms do not overflow the closed depression, no runoff may leave the site for the same storm events following development of a proposed project. This may be accomplished by excavating additional volume in the closed depression subject to all applicable requirements. If a portion of the depression is located off of the project site, impacts to adjacent properties shall be evaluated.
 - (ii) CASE 2: The pre-development 100-year, 7-day 24-hour duration design storm events from the drainage basin tributary to the closed depression are routed to the closed depression using only infiltration as outflow, and overflow occurs. The closed depression shall then be analyzed as a detention/infiltration pond. The required performance, therefore, shall not exceed the pre-development runoff rates for 50% of the 2-year and 100% of the 10-year and 100-year, 24-hour duration and 100-year, 7-day duration design storms. This will require that a control structure, emergency overflow spillway, access road, and other applicable design criteria be met. If the facility will be maintained by the city, the closed depression shall be placed in a dedicated tract. If the facility will be privately maintained, the tract shall be located within a drainage easement. If a portion of the depression is located off of the project site, impacts to adjacent properties shall be evaluated.
 - (iii) CASE 3: When a proposed project is contributory to a closed depression located off-site, the volume of runoff discharged may not be increased for the 2, 10, and 100-year, 24-hour duration, and the 100-year, 7-day duration storm events. The exception to this requirement is in the case where discharge would not result in an

increase in water surface elevation of greater than 0.01-foot for the 100-year storm events.

- (d) Land developments shall provide stormwater quantity control facilities designed to meet, as a minimum performance standard, the requirements of this Section, except in the following circumstances:
 - (i) The development site discharges directly into Puget Sound, or directly into the tidally influenced areas of rivers and streams discharging into Puget Sound, where runoff quantity control is not required by other governmental agencies.
 - (ii) The development site discharges to a regional stormwater facility approved by the Director to receive the developed site runoff.
 - (iii) The development site discharges to a receiving body of water (lake, wetland, etc.) where it can be demonstrated by the Applicant, to the satisfaction of the Director, that stormwater quantity control is not warranted.
 - (e) In the event that conditions downstream from a proposed development site are determined by the Director to be exceptionally sensitive to potential stormwater discharges from the subject site, the Director may require a factor of safety be applied to the total retention/detention storage volume and/or a reduction of allowable stormwater release rates.
 - (f) Submittals for all proposed development projects shall include an analysis of downstream water quantity impacts resulting from the project and shall provide for mitigation of these impacts. The analysis shall extend a minimum of one-fourth of a mile downstream from the project. The existing or potential impacts to be evaluated and mitigated shall include, but not be limited to, excessive streambank erosion, flooding, surcharging of existing closed drainage conveyance facilities, discharge to closed depressions, and discharge to existing off-site runoff control facilities.
 - (g) Retention facilities and open stormwater quantity control facilities shall not be located in dedicated public road rights-of-way.
 - (h) Reasonable access for maintenance, as determined by the Director, shall be provided to all stormwater facilities.
 - (i) As the first priority, streambank erosion control BMPs shall utilize infiltration to the fullest extent practicable, only if site conditions are appropriate and ground water quality is protected. Streambank erosion control BMPs shall be selected, designed, and maintained according to the Manual. Streambank erosion control BMPs shall not be built within a natural vegetated buffer, except for necessary conveyance systems as approved by the Department of Public Works.
- (4) Stormwater Quality Control - Water quality best management practices (BMPs) shall be used to the maximum extent practicable to control pollution in stormwater. Water quality

BMPs shall be used to comply with the standards of this ordinance, including those contained in the Manual. Construction and post-development water quality BMPs shall be utilized for all developments. Said water quality BMPs shall provide runoff water quality treatment for all storm events with intensities less than or equal to the water quality design storm event, as defined in Section 7(8)(b).

(5) Illicit Discharges - Illicit discharges, as described in Section 10(2) or illicit connections to a stormwater drainage system, as described in Section 10(3), are prohibited.

(6) Experimental Best Management Practices - In those instances where appropriate best management practices are not in the Manual, experimental BMPs should be considered. In an effort to improve stormwater quality technology, experimental BMPs are encouraged as a means of solving problems in a manner not addressed by the Manual. Experimental BMPs must be approved by the Director. The Director may require that the performance of experimental BMPs be monitored to document their effectiveness for future use.

(7) Incorporation Into Stormwater Quantity Control Facilities - Water quality BMPs may be incorporated into the design of stormwater quantity control facilities where appropriate.

(8) Minimum Requirements - The following minimum requirements for stormwater quality control shall apply to all land developments that meet the definition of a major development:

(a) Source control of pollution. Source control BMPs shall be applied to all projects to the maximum extent practicable.

(b) Stormwater treatment BMPs. Treatment BMPs shall be sized to capture and treat developed runoff from the water quality design storm, defined as the 6-month, 24-hour duration storm event. For the purpose of this ordinance, the precipitation from a 6-month, 24-hour storm event shall be considered equivalent to 64% of the precipitation from a 2-year, 24-hour storm event. All treatment BMPs shall be selected, designed, and maintained according to the Manual.

Stormwater treatment BMPs shall not be built within a natural vegetated buffer, except for necessary conveyance systems as approved by the Department of Public Works.

All major developments shall provide treatment of stormwater discharge utilizing wetponds and/or biofiltration BMPs. Other water quality BMPs may only be substituted subject to the granting by the Director of a technical deviation from the provisions of the Stormwater Design Manual.

(c) Wetponds shall be required for development sites with greater than five (5) acres of new impervious surface subject to motor vehicle use, which:

(I) discharges directly to a regional facility, receiving body of water, or closed depression without providing on-site stormwater quantity control; or

(II) discharges directly or indirectly to a Class 1, 2, or 3 stream, or a Class 1 or 2 wetland within 1 mile downstream of the site.

"Wetpond" shall mean a stormwater basin which is intended to maintain a permanent pool of water equal to the post-development runoff volume of the 6-month frequency, 24-hour duration design storm.

- (d) Presettling basin. All stormwater, prior to discharge to a facility designed to utilize infiltration, shall pass through an appropriate stormwater treatment BMP.
- (e) Water quality-sensitive areas. Where the Director determines that these major development minimum requirements do not provide adequate protection of water-quality sensitive areas, either on-site or within the drainage basin in which the development is located, more stringent controls shall be required to protect water quality.
- (f) Downstream analysis and mitigation. All major developments shall conduct an analysis of downstream water quality impacts resulting from the project and shall provide for mitigation of these impacts. The analysis shall extend a minimum of one-fourth of a mile downstream from the project. The existing or potential impacts to be evaluated and mitigated shall include excessive sedimentation, streambank erosion, discharges to ground water contributing or recharge zones, violations of water quality standards, and spills and discharges of priority pollutants.
- (g) Oil/Water separators. All stormwater from paved areas subject to motor vehicle traffic shall flow through a spill-containment type oil/water separator prior to discharge.

Development sites that include use, storage, or maintenance of heavy equipment, and those development sites that include petroleum storage or transfer, shall utilize appropriately sized API or CPS-type oil/water separators.

(9) Stormwater Conveyance Facilities

- (a) All proposed developments must provide on-site stormwater conveyance facilities having sufficient capacity to convey, without flooding or otherwise damaging existing or proposed structures, the post-development peak stormwater runoff rate resulting from a 100-year storm event, plus any existing upstream runoff that will be conveyed through the development site.
- (b) Estimation of peak stormwater runoff rates used in the design of water conveyance facilities shall use either the Rational Method or a Hydrograph Method of analysis accepted by the Director.
- (c) Existing drainage ways and/or other conveyance facilities downstream from proposed developments that are identified within the scope of the downstream portion of the off-site drainage analysis, shall have sufficient capacity to convey, without flooding or otherwise damaging existing or proposed structures, the post-development peak stormwater discharge for the 25-year storm event. All newly constructed downstream drainageways and/or conveyance facilities shall have sufficient capacity to convey the

post-development peak stormwater discharge for the 100-year storm event. Downstream improvements or additional on-site stormwater quantity control measures shall be provided to eliminate any potential downstream flooding or other damage that may occur following completion of the proposed development. The Director has the authority to waive the requirement for downstream improvements.

- (d) Drainage through closed conveyance structures such as pipes shall not discharge directly onto the surface of a public road.

(10) Easements, Tracts, and Covenants

- (a) Drainage easements shall be provided in a proposed development for all stormwater conveyance systems that are not located in public rights-of-way or tracts. Said drainage easements shall be granted to the parties responsible for providing on-going maintenance of the systems.
- (b) Stormwater facilities that are to be maintained by the city, together with maintenance access roads to said facilities, shall be located in public right-of-way, separate tracts dedicated to the city, or drainage easements located in designated Open Space. The exception is for stormwater conveyance pipes that may be located within easements on private property, provided that all catch basins can be accessed without entering private property.
- (c) All runoff from impervious surfaces, roof drains, and yard drains shall be directed so as not to adversely affect adjacent properties. Wording to this effect shall appear on the face of all final plats/PUD's, and shall be contained in any covenants required for a development.

(11) Wetlands - The following requirements apply only to situations where stormwater discharges directly or indirectly into a wetland, and must be met in addition to meeting the requirements in Major Development Minimum Requirement 7.35 (2), Stormwater Treatment BMPs:

- (a) Stormwater discharges to wetlands must be controlled and treated to the same extent as all other discharges, with the goal of meeting State Water Quality and Groundwater Quality Standards.
- (b) Discharges to wetlands shall maintain the hydroperiod and flows of pre-development site conditions to the extent necessary to protect the characteristic functions of the wetland. Prior to discharging to a wetland, alternative discharge locations shall be evaluated, and natural water storage and infiltration opportunities outside the wetland shall be maximized.
- (c) Created wetlands that are intended to mitigate for loss of wetland acreage, function and value shall not be designed to also treat stormwater.
- (d) In order for constructed wetlands to be considered treatment systems, they must be constructed in areas which are not designated as wetland or wetland buffer or in other areas which are in conflict with designated critical areas and associated buffers, and they must be managed for stormwater

treatment. If these systems are not managed and maintained in accordance with the Manual for a period exceeding three years, these systems may no longer be considered constructed wetlands.

- (e) Wetland BMPs shall not be built within a natural vegetated buffer, except for necessary conveyance systems as approved by the Department of Public Works.

(12) Regional Facilities - When the Director has determined that the public would benefit by the establishment of a regional stormwater facility which would serve as an alternative to the construction of separate on-site drainage facilities, the Director may recommend to the City Council that a regional stormwater facility be constructed which would serve more than one development in providing stormwater quantity and/or quality control. In the event that a regional stormwater facility is required by the City Council, such a regional stormwater facility shall be located outside of fish-bearing streams, unless otherwise accepted by the Washington State Department of Fish and Wildlife. All future developments constructed on lands designated by the City Council to be served by the regional facility shall, at the time of issuance of a Stormwater Management Permit for a development, be required to contribute a fair share to the cost of land purchase, design, and construction of said regional facility. In the event that a proposed regional stormwater facility is not yet in operation at the time of completion of construction of a development that is to be served by said regional facility, the Applicant for said development shall be required to provide temporary stormwater quantity and quality controls. Temporary quantity and quality controls may be constructed in temporary easements, rather than in separate tracts.

(13) Basin Planning - An adopted and implemented basin plan may be used to develop requirements for source control, stormwater treatment, streambank erosion control, wetlands and water quality sensitive areas that are tailored to a specific basin. Adopted and implemented watershed-based basin plans may be used to modify any or all of the minimum requirements for stormwater quantity or quality control addressed in this ordinance, provided that the level of protection for surface or ground water achieved by the basin plan will equal or exceed that which would otherwise be achieved by implementation of the provisions of this ordinance in the absence of a basin plan. Basin plans shall evaluate and include, as necessary, retrofitting of BMPs for existing development and/or redevelopment in order to achieve watershed-wide pollutant reduction goals. Standards developed from basin plans shall not modify any of the above requirements until the basin plan is formally adopted and fully implemented by the city.

SECTION 8. Section 15.32.080 is hereby amended to read as follows:

15.32.080 Operation and Maintenance

(1) Maintenance of Stormwater Facilities by Owners

- (a) Any person or persons holding title to a non-residential property for which stormwater facilities and BMPs have been required by the city shall be responsible for the continual operation, maintenance, and repair of said stormwater facilities and BMPs in accordance with the provisions of this ordinance.

- (b) For privately maintained stormwater facilities, the maintenance requirements specified in this ordinance, including the Manual, shall be enforced against the owner(s) of the subject property served by the stormwater facility.

(2) Maintenance Covenant Required for Privately Maintained Drainage Facilities

- (a) Prior to the beneficial use of a development constructed under a city permit, the owner shall record a Maintenance Covenant that guarantees Port Orchard that the stormwater facilities shall be properly operated and maintained. The restrictions set forth in such covenant shall be included in any instrument of conveyance of the subject property and shall be recorded with the Kitsap County Auditor.
- (b) The Director may require the owners of existing stormwater facilities for which the city has not previously accepted operation and maintenance responsibility, to record a Maintenance Covenant, or to request that the city accept operation and maintenance responsibility for the stormwater facilities subject to the requirements of this ordinance.
- (c) Maintenance Covenants shall remain in force for the life of the development, or until the responsibility for the operation and maintenance of the subject stormwater facilities is accepted by the city.

(3) City Acceptance of New Stormwater Facilities - The city may accept for maintenance those new residential stormwater facilities constructed under an accepted Stormwater Management Permit that meets the following conditions:

- (a) Improvements in residential plats/PUDs have been completed on at least 80% of the lots, unless waived by the Director, AND;
- (b) All drainage facilities have been inspected and accepted by the Director and said drainage facilities have been in satisfactory operation for at least two (2) years, AND;
- (c) All drainage facilities reconstructed during the maintenance period have been accepted by the Director, AND;
- (d) The stormwater facility, as designed and constructed, conforms to the provisions of this ordinance, AND;
- (e) All easements required under this ordinance, entitling the city to properly operate and maintain the subject drainage facility, have been conveyed to the city and have been recorded with the Kitsap County Auditor, AND;
- (f) For non-standard drainage facilities, an operation and maintenance manual, including a maintenance schedule, has been submitted to and accepted by the city, AND
- (g) A complete and accurate set of reproducible mylar as-built drawings have been provided to the city.

(4) City Acceptance of Existing Stormwater Facilities - Port Orchard may accept for maintenance those stormwater facilities for residential developments existing prior to the effective date of this ordinance that meet the following conditions:

- (a) Improvements in residential plats/PUDs have been completed on at least 80% of the lots, AND;
- (b) An inspection by the Director has determined that the stormwater facilities are functioning as designed, AND;
- (c) The stormwater facilities have had at least two (2) years of satisfactory operation and maintenance, unless otherwise waived by the Director, AND;
- (d) The person or persons holding title to the properties served by the stormwater facilities submit a petition containing the signatures of the title holders of more than 50% of the lots served by the stormwater facilities requesting that the city maintain the stormwater facilities, AND;
- (e) All easements required under this ordinance, entitling the city to properly operate and maintain the subject stormwater facilities, have been conveyed the city and have been recorded with the Kitsap County Auditor, AND;
- (f) The person or persons holding title to the properties served by the stormwater facilities show proof of the correction of any defects in the drainage facilities, as required by the Director.

(5) City Inspections of Privately Maintained Stormwater Facilities

- (a) The Director is authorized to develop an inspection program for privately owned and maintained stormwater facilities in the city. The purpose of this inspection program shall be to determine if said stormwater facilities, conveyance structures and water quality facilities are in good working order and are properly maintained, and to ensure that stormwater quality BMPs are in place and that non-point source pollution control is being implemented.
- (b) Whenever the provisions of the inspection program are being implemented, or whenever there is cause to believe that a violation of this ordinance has been or is being committed, the inspector is authorized to inspect during regular working hours and at other reasonable times any and all stormwater drainage facilities within the city to determine compliance with the provisions of this ordinance.
- (c) Prior to making any inspections, the Director or his assignee shall follow the procedures delineated in Section 11(3).

(6) Inspection Schedule - The Director is authorized to establish a master inspection and maintenance schedule to inspect appropriate stormwater facilities that are not owned and operated by the city. The party (or parties) responsible for maintenance and operation shall be identified. Critical stormwater facilities, as so deemed by the Director, may require a more frequent inspection schedule.

SECTION 9. Section 15.32.090 is hereby amended to read as follows:

15.32.090 Critical Drainage Areas

- (1) Special Drainage Improvements - In order to mitigate or eliminate potential drainage-related impacts on critical drainage areas, the Director may require drainage improvements in excess of those required in other sections of this ordinance.
- (2) Designation - The following are designated as critical drainage areas:
 - (a) All lands having a slope of thirty percent (30%) or greater:
 - (i) As determined by a topographic survey of the site, OR;
 - (ii) As shown on a U.S.G.S. topographic quadrangle map, when other topographic survey information is not available, OR;
 - (iii) As determined by the Director based on field investigation of the site.
 - (b) Geologic hazardous area and historically documented unstable slopes.
 - (c) All lands within 200 feet of the ordinary high water mark of bodies of water possessing fish spawning and rearing habitat for anadromous and resident fish species, as designated by the State Department of Fish and Wildlife;
 - (d) All lands designated critical areas in any Comprehensive Drainage Plan, or defined as critical areas by separate ordinance;
 - (e) All lands that are classified as wetlands as defined by any separate city ordinance or policy;
 - (f) Any lands that have existing local requirements for the management of groundwater, aquifers, or sole source aquifers;
 - (g) Any lands that drain to a natural feature that is a closed depression;
 - (h) Any lands that have existing local or state requirements for the protection of particular fish or wildlife habitats;
 - (i) Any lands that are established by law as shellfish protection areas.
 - (j) Any lands determined by the Director to have a high potential for drainage and water quality problems, and/or are sensitive to the effects of construction or development.
- (3) Conflicting Information - In the event of conflict between maps or other available information resources, the final determination of whether or not certain lands are critical drainage areas shall be made by the Director. In making such a final determination, the

Director may use detailed site surveys and/or other topographic data that the Director may require the Applicant to furnish at the Applicant's expense.

SECTION 10. 15.32.100 is hereby amended to read as follows:

15.32.100 Water Quality

(1) Purpose - This Section implements the directive of the 1991 Puget Sound Water Quality Management Plan (Sec. EM-10. Enhanced Local Enforcement).

(2) Illicit Discharges - Illicit discharges to stormwater drainage systems are prohibited.

(3) Illicit Connections and Uses - The stormwater system of Port Orchard, natural and artificial, may only be used to convey stormwater runoff. Stormwater System shall mean all natural and man-made systems that function together or independently to collect, store, purify, discharge, and convey stormwater. Included are all stormwater facilities as well as natural systems such as streams and creeks and all natural systems which convey, store, infiltrate, or divert stormwater. Violation of this section can result in enforcement action being taken as prescribed in Section 11.

No person shall use this system to dispose of any solid or liquid matter other than stormwater. No person shall make or allow any connection to the stormwater system that could result in the discharge of polluting matter. Connections to the stormwater system from the interiors of structures are prohibited. Connections to the stormwater system for any purpose other than to convey stormwater or groundwater are prohibited and shall be eliminated.

(4) Pollution Control Device Maintenance - Owners and operators of oil/water separators, wet ponds, bio-filtration/biofilter facilities, sediment and erosion control systems, infiltration systems and any other pollution control devices shall operate and maintain such control devices to assure that performance meets the intended level of pollutant removal. Recommended maintenance schedules for these devices are included in the Manual.

(5) Test Procedure - In the event that water quality testing is utilized in determining whether a violation of this Section has occurred, said water quality test procedures shall be followed as described in the most recent edition of the publication "Standard Methods for the Examination of Water and Wastewater", published by the American Water Works Association.

(6) Exemptions - The following discharges are exempt from the provisions of this Section:

- (a) The regulated effluent from any commercial or municipal facility holding a valid state or federal wastewater or stormwater discharge permit.
- (b) Acts of nature not compounded by human negligence.
- (c) Properly operating on-site domestic sewage systems.
- (d) Properly applied agricultural chemicals and materials.

SECTION 11. 15.32.110 is hereby amended to read as follows:

15.32.110 Enforcement

- (1) Violations of This Ordinance - The placement, construction, or installation of any structure, or the connection to a public storm drainage facility, or the discharge to a public storm drainage facility, or grading, which violates the provisions of this ordinance shall be and the same hereby is declared to be unlawful and a public nuisance and may be abated as such through the use of civil penalties and Stop Work Orders, as well as any other remedies which are set forth in this ordinance, including, but not limited to, revocation of any permits. The choice of enforcement action taken and the severity of any penalty shall be based on the nature of the violation, the damage or risk to the public or to public resources.
- (2) Inspection - Whenever there is cause to believe that a violation of this ordinance has been or is being committed, the Director or his assignee is authorized to inspect during regular working hours and at other reasonable times all development activity sites and all stormwater drainage facilities within the city to determine compliance with the provisions of this ordinance.
- (3) Inspection Procedures - Prior to making any inspections, the Director or his assignee shall present identification credentials, state the reason for the inspection and request entry.
 - (a) If the property or any building or structure on the property is unoccupied, the Director or his assignee shall first make a reasonable effort to locate the owner or other person(s) having charge or control of the property or portions of the property and request entry.
 - (b) If after reasonable effort, the Director or his assignee is unable to locate the owner or other person(s) having charge or control of the property, and has reason to believe the condition of the site or of the stormwater drainage system creates an imminent hazard to persons or property, the inspector may enter.
 - (c) Unless entry is consented to by the owner or person(s) in control of the property or portion of the property, unless conditions are reasonably believed to exist which create imminent hazard, the Director or his assignee shall obtain a search warrant, prior to entry, as authorized by the laws of the State of Washington.
 - (d) The Director or his assignee may inspect the development activity site and/or the stormwater drainage system without obtaining a search warrant provided for in Subsection 3(c) above, provided the inspection can be conducted while remaining on public property or other property on which permission to enter is obtained.
- (4) Stop Work Orders - "Stop Work Order" shall mean a written notice, signed by the Director or his assignee, that is posted on the site of a construction activity, which order states that a violation of a city ordinance has occurred and that all construction-related activity, except for erosion and sedimentation control activities authorized by the Director, is to cease until further notice. The Director may cause a Stop Work Order to be issued whenever the Director has reason to believe that there is a violation of the terms of this

ordinance. The effect of such a Stop Work Order shall be to require the immediate cessation of such work or activity until authorization is given by the Director to proceed.

(5) Cumulative Civil Penalty - Every person who violates this ordinance, or the conditions of an accepted Stormwater Management Plan, shall incur a civil penalty. The penalty shall not be less than \$100.00 or exceed \$1000.00 for each violation. This penalty shall be in addition to any other penalty provided by law. Each and every such violation shall be a separate and distinct offense, and each day of continued or repeated violation shall constitute a separate violation.

(6) Aiding or Abetting - Any person who, through an act of commission or omission, aids or abets in the violation shall be considered to have committed a violation for the purposes of the civil penalty.

(7) Order to Maintain or Repair - The Director shall have the authority to issue to an owner or person an order to maintain or repair a component of a stormwater facility or BMP to bring it in compliance with this ordinance. The order shall include:

- (a) A description of the specific nature, extent and time of the violation and the damage or potential damage that reasonably might occur;
- (b) A notice that the violation or the potential violation cease and desist and, in appropriate cases, the specific corrective actions to be taken; and
- (c) A reasonable time to comply, depending on the circumstances.

(8) Notice of Civil Infraction – Assessment of Penalty – Whenever the Director has found that a violation of this ordinance has occurred or is occurring, a Notice of Civil Infraction shall be issued pursuant to Port Orchard Municipal Code 2-64 (Code Enforcement Officer).

(9) Hazards

- (a) Whenever the Director determines that any existing construction site, erosion/sedimentation problem or drainage facility poses a hazard to public safety or substantially endangers property, or adversely affects the condition or capacity of the drainage facilities, or adversely affects the safety and operation of city right of way, or violates State water pollution laws, the person to whom the permit was issued, or the person or persons holding title to the property within which the drainage facility is located, shall upon receipt of notice in writing from the Director, repair or otherwise address the cause of the hazardous situation in conformance with the requirements of this Section.
- (b) Should the Director have reasonable cause to believe that the situation is so adverse as to preclude written notice, he may take the measures necessary to eliminate the hazardous situation, provided that he or she shall first make a reasonable effort to locate the owner before acting, in accordance with Section 11(3). In such instances, the person or persons holding title to the subject property shall be obligated for the payment to the city of all costs incurred by the city. If costs are incurred and a bond pursuant to this

Section or other city requirement has been posted, the Director shall have the authority to collect against the bond to cover costs incurred.

SECTION 12. Severability - If any provision of this ordinance or its application to any person or property is held invalid, the remainder of the ordinance or the application of the provision to other persons or property shall not be affected.


SECTION 13. Repealer. - City of Port Orchard Drainage Ordinance Number 1736 enacted September 28, 1998 is repealed in its entirety as of the effective date of this ordinance.

PASSED by the City Council of the City of Port Orchard, APPROVED by the Mayor and attested by the Clerk in authentication of such passage this 11th day March 2002.



LESLIE J. WEATHERILL, MAYOR

ATTEST:



Patricia Parks, City Clerk

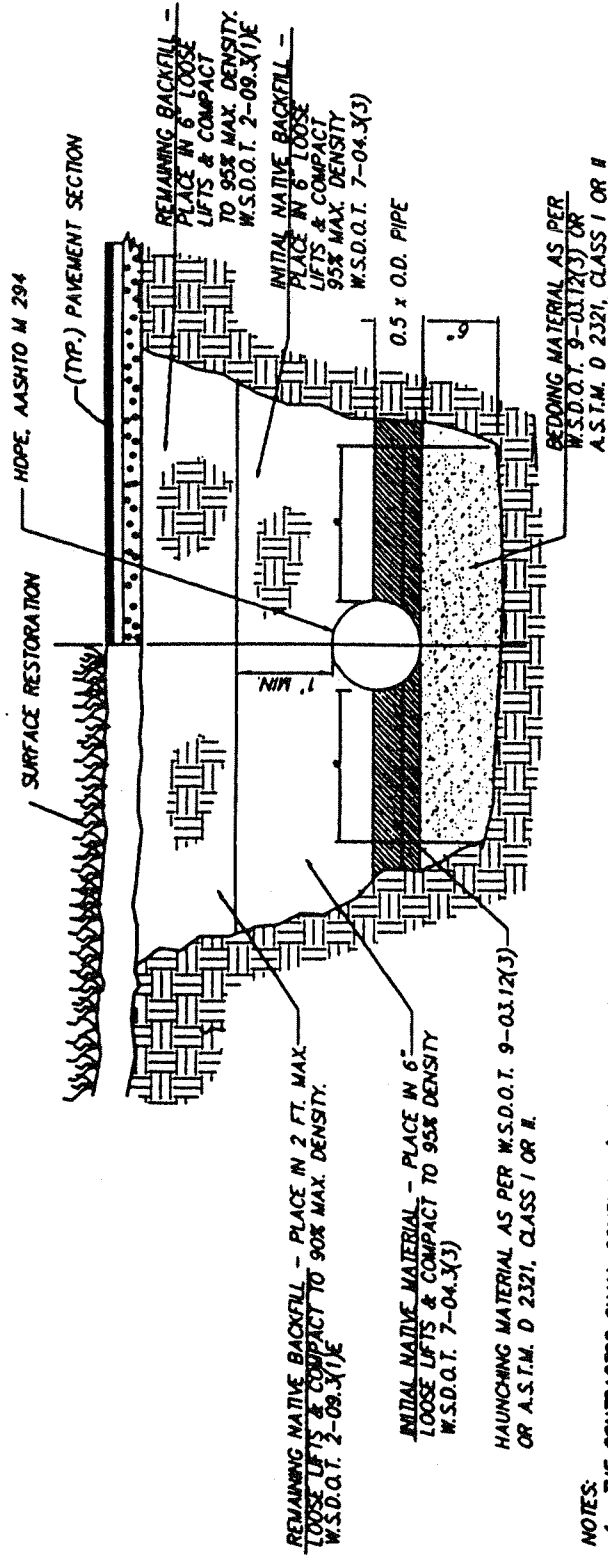
APPROVED AS TO FORM:



City Attorney

Sponsored by:

Don Morrison, Councilman



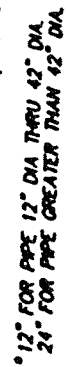
NOTES:

1. THE CONTRACTOR SHALL COMPLY W/ W.I.S.H.A. SAFETY STANDARDS.
2. THE CONTRACTOR SHALL INSTALL STORM & SEWER PIPES PER A.S.T.M. D 2321 & AS REQUIRED BY MANUFACTURER SPECIFICATIONS.

* 12" FOR PIPE 12" DIA THRU 42" DIA.
24" FOR PIPE GREATER THAN 42" DIA.

HDPE STORM TRENCH

(PER W.S.D.O.T. 7-02.3(1)
NOT TO SCALE



CMP STORM TRENCH

(PER W.S.D.O.T. 7-02.X(1)
NOT TO SCALE
(SEE CONSTRUCTION NOTE NO. 11))

- NOTES:
1. THE CONTRACTOR SHALL COMPLY W/ N.I.S.H.A. SAFETY STANDARDS.
 2. PIPE BEDDING MAY BE DELETED IF THE "ENGINEER" DETERMINES THAT THE MATERIAL EXISTING IN THE BOTTOM OF THE TRENCH IS SATISFACTORY FOR PIPE BEDDING. PROVIDED THE EXISTING MATERIAL IS LOOSENEED, REGRADED, & COMPACTED TO FORM A DENSE UNYIELDING BASE.
 3. UNSUITABLE FOUNDATION MATERIAL BEING ROCK, UNYIELDING MATERIAL, OR SOFT MATERIAL SHALL BE REMOVED PRIOR TO PIPE INSTALLATION.

9. Erosion and Sedimentation Control

Overview

Each year large amounts of sediment are washed from construction sites into lakes, streams, watercourses, and Puget Sound. Sedimentation is a major source of pollution of the surface water draining from watersheds in which development is occurring. This needless damage to our water resources and the consequent cost to the taxpayers for cleanup could be largely avoided through the implementation of adequate erosion and sediment control practices.

1.1 Erosion and Sedimentation

Erosion

The likelihood that a given construction area has the potential for serious erosion is largely dependent on three things: the characteristics of the soils, the extent and type of vegetative cover, and the topography of the site.

Soils containing high percentages of fine sands and silts are usually more erodible than soils that have a higher content of clay or organic material. Although clays are more resistant to erosion, they absorb less rainfall and tend to produce more surface runoff, which acts to erode the soil. Once clays have eroded, they are more likely to be carried along in the runoff and are difficult to remove from the surface water. Soils with high organic content tend to be more resistant to erosion. However, they are resistant to infiltration and are often found in areas likely to impound water. Well-drained and well-graded gravel and gravel-sand mixtures are usually the least erodible soils.

Vegetative cover is very important in controlling erosion by: 1) shielding the soil surface from the impact of falling rain, 2) holding the soil particles in place, 3) maintaining the soil's capacity to absorb water, and 4) slowing the flow of runoff over the ground. By minimizing the size of the areas to be cleared, and by staging the removal of vegetation, the extent of erosion and the time during which erosion can take place is also kept to a minimum. By establishing temporary and permanent vegetative cover for those areas that are disturbed, soil erosion and the resulting sedimentation downstream can be significantly reduced. The size, shape and slope of the watershed that the construction site is a part of influence the amount and rate of runoff through the site. If the site is downstream of a large watershed, or if the site itself is sizable, there is the potential for a considerable amount of runoff to be flowing through the site during a storm. If the site has steep slopes, the velocity of the runoff will be greater, resulting in a higher potential for erosion.

The site's orientation can also be a factor. If the site faces to the north away from the sun (or if the site has poor soils for growing plants), it may be very difficult to establish a permanent vegetative cover following construction. For this reason, it is important to take

into consideration the natural development of existing vegetation on a site prior to clearing. Hydroseeding a site is no guarantee that plant life will become re-established to the extent that erosion protection can take place without costly maintenance and periodic replanting.

Sedimentation

Sediments are the fine particles of soil, which are carried in surface runoff and are eventually deposited after the water has slowed down enough for the soil particles to settle out. Excessive amounts of sediment are generated by erosion during major storm events. Some erosion and sedimentation occurs during all storm events. Sediment is often carried farther downstream with each peak storm event, being picked up from where it was deposited during the previous peak storm. For this reason, it is important to bear in mind that the facilities that are placed on a site to collect sediment (silt fencing, ponds, etc.) are going to be primary sources of sediment in later storms.

Most soils in Kitsap County contain fine silt, which when suspended in water, remain suspended for long periods of time and do not immediately settle out once the flow of water slows down. Suspended silt usually gives water an opaque, light brown appearance, a condition called "turbidity". This condition is harmful to plants in that it inhibits photosynthesis, which in turn reduces food supply and habitat to fish. Turbid stream water can also directly affect some species of fish that rely on their vision for feeding.

Impacts of Erosion and Sedimentation

Erosion and sedimentation can cause both economic and environmental impacts:

1. Economic Impacts:

- a. Sediment fills channels and ponds, resulting in the need for more frequent sediment removal, and also resulting in the increased likelihood of damage to property from flooding.
- b. Cost of restoration of topsoil to promote plant growth.
- c. Cost of restoration of eroded slopes, channels and roads.
- d. Cost to clean storm sewers, catch basins and other drainage facilities.
- e. Cost to clean up downstream channels, lakes, streams and wetlands.

- a. Eroded soil contains nutrients, which could trigger the growth of algae, which then reduces water clarity, depletes oxygen, and leads to fish kills.
- b. Erosion of stream banks and adjacent areas destroys vegetation that provides aquatic and wildlife habitat.
- c. Excessive deposits of sediment in streams blanket the bottom, destroying fish spawning areas.
- d. Turbidity of the water, resulting from sedimentation, reduces in-stream photosynthesis, which leads to reduced food supply and habitat.
- e. Erosion removes the fines from topsoil, reducing its ability to support plant growth.
- f. Sediment physically damages fish by abrasion and clogging of their gills.

1.2 Performance

The erosion and sedimentation control measures shall perform so that no sediment larger than a #200 sieve, (0.075 mm) leaves the site or enters on-site wetlands, streams or lakes.

1.3 Design Storm

Unless otherwise specified, the design storm event for erosion and sedimentation control BMPs shall be the 2-year, 24-hour storm event.

1.4 Developments

Developments will be required to control erosion and sediment during construction, to permanently stabilize soil exposed during construction, and to comply with the following requirements:

- (1) Stabilization and sediment trapping. All exposed and unworked soils not actively being worked shall be stabilized by suitable application of BMPs. From October 1 through April 30, soils not actively being worked shall remain unstabilized for no more than 48 hours. From May 1 through September 30, the owner or contractor shall have the materials readily available to stabilize denuded areas as site and weather conditions dictate. Prior to leaving the site, stormwater runoff shall pass through a sediment pond, sediment trap, or other appropriate BMP.

- (2) Delineate clearing and easement limits. Clearing limits, any sensitive/critical areas and their buffers, and drainage courses shall be clearly marked in the field.
- (3) Protection of adjacent properties. Adjacent properties shall be protected from sediment deposition by appropriate use of vegetative buffer strips, sediment barriers or filters, dikes or mulching, or by a combination of these measures and other appropriate BMPs.
- (4) Timing and stabilization of sediment trapping measures. Sediment ponds and traps, perimeter dikes, sediment barriers and other BMPs intended to trap sediment on-site shall be constructed as a first step in grading. These BMPs shall be functional before land disturbing activities take place. Earthen structures such as dams, dikes, and diversions shall be seeded and mulched according to the timing indicated in item (1) above.
- (5) Cut and fill slopes. Cut and fill slopes shall be designed, constructed and stabilized in a manner that will minimize erosion.
- (6) Controlling off-site erosion. Properties and waterways downstream from development sites shall be protected from erosion due to increases in the volume, velocity, and peak flow rate of stormwater runoff from the development site by the implementation of appropriate BMPs to minimize adverse downstream impacts.
- (7) Stabilization of temporary conveyance channels and outlets. All temporary on-site conveyance channels shall be designed, constructed and stabilized to prevent erosion from the expected flow velocity from a 2-year, 24-hour storm event for post-development conditions. Stabilization adequate to prevent erosion of outlets, adjacent stream banks, slopes and downstream reaches shall be provided at the outlets of all conveyance systems.
- (8) Storm drain inlet protection. All storm drain inlets made operable during construction shall be protected so that stormwater runoff shall not enter the conveyance system without first being filtered or otherwise treated to remove sediment. The requirement for inlet protection may be waived on a site-specific basis when the conveyance system downstream of the inlet discharges to the appropriate sediment containment BMP and the conveyance system can be adequately cleaned following site stabilization.
- (9) Underground utility construction. The construction of underground utility lines shall be subject to the following criteria:
 - a. For trenches on a downslope of more than 5%, no more than 500 feet of trench shall be opened at one time, unless otherwise approved by the Director.

- b. Where consistent with safety and space considerations, excavated material shall be placed on the uphill side of trenches.
 - c. Trench dewatering devices shall discharge into a sediment trap or sediment pond.
- (10) Constructed access routes. Wherever construction vehicle access routes intersect paved roads, provisions must be made to minimize the transport of sediment (mud) onto the paved road. If sediment is transported onto a road surface, the roads shall be cleaned thoroughly, as a minimum, at the end of each day. Sediment shall be removed from roads by shoveling or sweeping and be transported to a controlled sediment disposal area. Street washing shall be allowed only after sediment is removed in this manner.
- (11) Removal of temporary BMPs. All temporary erosion and sedimentation control BMPs shall be removed within 30 days after final site stabilization is achieved or after the temporary BMPs are no longer needed. Trapped sediment shall be removed or stabilized on-site. Disturbed soil areas resulting from removal of temporary BMPs shall be permanently stabilized. The removal of temporary erosion and sedimentation control BMPs may not be required for those projects, such as single family plats, that will be followed by additional construction under a different permit. In these circumstances, the need for removing or retaining the measures will be evaluated on a site-specific basis.
- (12) Dewatering construction sites. Dewatering devices shall discharge into a sediment trap or sediment pond.
- (13) Control of pollutants other than sediment on construction sites. All pollutants other than sediment that occur on-site during construction shall be handled and legally disposed of in a manner that does not cause contamination of surface waters.
- (14) Maintenance. All temporary and permanent erosion and sedimentation control BMPs shall be maintained and repaired as needed to assure continued performance of their intended function. The Applicant shall be responsible for assuring that any such facilities damaged during floods, storms or other adverse weather conditions are immediately returned to normal operating condition.

1.5 Erosion and Sedimentation Control Plan

An Erosion and Sedimentation Control plan shall be submitted for review and approval prior to beginning site development activities.

City staff will review the ESC plan to verify that a reasonable plan is being proposed to control erosion and sedimentation and, ultimately, to preserve the quality of the stormwater leaving the construction site.

A Permit will not be issued until an ESC plan is approved which complies with the minimum requirements for erosion and sedimentation control and which represents a reasonable plan for the specific project site. The City will require that the plan be strictly adhered to as minimum requirements for erosion and sedimentation control. Erosion and sedimentation controls shall be maintained until the project site is permanently stabilized.

An Erosion and Sedimentation Control (ESC) plan must address the control of erosion and sedimentation continuously throughout construction and also following construction. The ESC plan may be a separate plan specifically addressing erosion and sedimentation control, or it can be a part of another construction plan. For all major developments, the ESC plan must also be prepared by and bear the seal of a Professional Civil Engineer.

At times it will be found that the approved erosion and sedimentation control facilities are not adequate. This may be because of unanticipated conditions that have arisen on the construction site, or because of damage resulting from storms, construction equipment, soil failures, etc. In order to maintain the quality of water leaving the project site under these circumstances, it may be necessary that the erosion and sedimentation control facilities be modified. In circumstances where the erosion and sedimentation control facilities are to be modified, the following rule must be followed:

Except for emergency conditions or when changes are deemed by the Director to be of a minor nature, the Project Engineer must revise the ESC plan and submit it for approval to the City prior to any modifications being made on the project site.

It should be emphasized that, except for emergency conditions, the contractor may not deviate from the ESC plan and that only the Project Engineer (not the owner or contractor) is authorized to direct changes in the erosion and sedimentation control facilities.

For an ESC plan to be effective, it is essential that provisions for erosion and sedimentation control measures be made in the early planning stage of the project. The following basic planning principles should be applied to the maximum extent possible in order to control erosion/sedimentation during and after construction:

1. Fit the project to the terrain to minimize the amount of clearing and grading.
2. Time grading and construction to minimize soil exposure, particularly for highly erodible soils.
3. Retain existing vegetation whenever feasible.
4. Vegetate and mulch denuded areas.
5. Direct runoff away from denuded areas in a timely manner.
6. Minimize length and steepness of slopes.
7. Keep runoff velocities low.
8. Prepare drainage ways and outlets to handle concentrated or increased runoff.
9. Trap sediment on site.
10. Inspect and maintain control measures frequently.

ESC BEST MANAGEMENT PRACTICES REFERENCE GUIDE

Impact:

Control Measure:

CONSTRUCTION VEHICLE TRAFFIC

Mud, dirt, rock transported onto roads from site having bare ground

Stabilized Construction Entrance (may be used with Filter Fabric Fence).

Erosion of constructed roads following rough grading, caused by construction equipment.

I

Construction Road Stabilization.

Surface and air movement of dust from exposed soil surfaces subjected to vehicle traffic.

Dust Control (may be used with Stabilized Construction Entrance).

BARE GROUND

Surface runoff over bare ground results in silt suspended in stormwater, causing turbidity.

Limit Clearing of Site.

Water velocity and turbulence caused erosion.

RipRap.

Sheetflow velocity causes erosion on small slope areas no steeper than 2:1.

Straw/Hay Bale Barrier.

During extended rainy periods, bare ground is subject to erosion.

Cover areas left unworked for more than 48 hours (may use Mulching, Sodding or Plastic Sheeting).

During extended rainy periods, bare ground is subject to erosion during short construction delays.

Mulching (often with Nets and Mats).

Bare slopes steeper than 2:1, or with highly erodible soils, are subject to erosion.

Nets and Mats.

Bare ground no steeper than 2:1 has topsoil removed or is too dense or impermeable to support vegetation growth.

Bare ground sloping up to 10% for 100 ft or less, not subject to traffic, will not be ready for permanent cover treatment for 30 days to 1 year, and is subject to erosion.

Bare ground, subject to erosion, is ready for permanent stabilization or will not be ready for permanent stabilization for 1 year or more.

Bare ground being seeded for erosion control is subject to erosion from surface runoff velocity before vegetation becomes established.

Bare ground is subject to erosion unless immediate vegetative cover is established and/or aesthetics is a factor. Also, waterways carrying intermittent flows are subject to erosion unless stabilized.

Bare ground, seedbeds, or other areas are subject to erosion unless immediate erosion protection is provided, particularly during winter when seeding is not recommended, or when areas cannot be covered by mulching.

Topsoiling (used in conjunction with Temporary or Permanent seeding).

Temporary Erosion Control Seeding (may be used with Topsoiling, Surface Roughening, Mulching, Plastic Sheeting and Nets and Mats).

Permanent Seeding (may be used with Topsoiling, Surface Roughening, Mulching, Plastic Sheeting and Nets and Mats).

Surface Roughening (may be used with Topsoiling, Temporary Erosion Control Seeding, Permanent Seeding, Mulching and Sodding.

Sodding (may be used with Topsoiling).

Plastic Sheeting.

SEDIMENT IN STORMWATER

Sediment-laden runoff from a small site having a tributary drainage area of less than 3 acres and where permanent stabilization is expected within 6 months.

Sediment-laden runoff from a site having a tributary drainage area of less than 10 acres and where permanent stabilization is not expected within 6 months.

Sediment-laden runoff discharges from site by sheet flow or from minor swale or ditch with maximum flow of 0.5 cfs.

Sediment-laden runoff sheet-flows from <1/4 acre tributary area of site, and residue brush is available.

Sediment-laden runoff in cleared rights-of-way or other traffic areas.

Small amounts of sediment migrate from bare disturbed slopes no steeper than 2:1.

Sediment-laden runoff enters a storm drain inlet from a tributary area less than 1 acre that is flatter than 5% slope.

Sediment-laden runoff enters a storm drain inlet from a large tributary area resulting in flows >0.5 cfs.

Sediment-laden runoff enters a storm drain inlet from a large tributary area resulting in flows >0.5 cfs, and

Sediment Trap.

Sediment Pond.

Filter Fabric Fence (may also be used with Sediment Trap, Sediment Pond, Brush Barrier, or Inlet Barrier).

Brush Barrier (may be used with Filter Fabric Fence).

Gravel Filter Berm.

Straw/Hay Bale Barrier.

Filter Fabric Fence Inlet Barrier (using Filter Fabric Fence material).

Block and Gravel Filter Inlet Barrier.

Gravel and Wire Mesh Filter Inlet Barrier.

construction traffic may occur over the inlet.

STEEP SLOPES

Runoff flowing down face of steep slopes causes erosion and/or saturation of slide-prone soils.

Volume and/or velocity of runoff flowing down face of disturbed slopes cause erosion.

Site has relatively deep, permeable soils which are excessively wet, or there is seepage from face of slope.

Slopes are unstable due to seepage from the face of slopes and/or non-cohesive soils.

STOCKPILES

Exposed, uncompacted earth stockpiles are constructed during winter months, or are otherwise prone to excessive erosion caused by surface runoff

SHORELINES

Graded slopes, or the placement of earth at or near shorelines, may slough, slide or erode.

STREAMS

Increased stream flow or disturbance during construction results in eroding section of stream bank.

Pipe Slope Drains (may be used with Interceptor Dike/Berm and Swale).

Interceptor Dike/Berm and Swale (may be used with Pipe Slope Drains).

Subsurface Drains (may be used with Filter Fabric, Fence Material, and in conjunction with a Sediment Trap or Sediment Pond).

RipRap

Cover and properly locate stockpiles (may be used in conjunction with Topsoiling Plastic Sheeting, Mulching, Nets and Mats).

Restrict placement of constructed slopes or earthworks (may be used with Plastic Sheeting, or Nets and Mats).

Structural Streambank Stabilization (may be used with RipRap).

Increased stream flows or disturbance during construc-

tion resulting in a potential for excessive erosion of stream banks.

OUTFALLS

Flow velocity at outlet of a channel or pipe could result in erosion of downstream or flooding at outlet.

NO DEFINED DOWNSTREAM

Runoff flow, which is relatively free of sediment, is concentrated on-site and can cause damage to downstream property if not converted to sheetflow.

OFF-SITE DRAINAGE ENTERING SITE

Runoff enters construction site, flowing through areas to be disturbed, increasing potential for erosion and sedimentation.

SWALES, CHANNELS OR DITCHES

Flow velocity in unvegetated swales, channels and ditches can cause erosion.

Flow velocity in unvegetated swales, channels and ditches having a tributary area <10 acres can cause erosion, but Riprap armoring is not feasible.

Vegetative Streambank Stabilization.

Outlet Protection (may be used with RipRap).

Level Spreader.

Diversion Channels and Ditches.

RipRap.

Check dams.

TRENCHES FOR UNDERGROUND UTILITIES

Trenches excavated on down slope of >5% can convey stormwater at high velocity, resulting in erosion of

trench bottom.

Surface water entering open trenches can cause erosion of trench walls and bottom.

Dewatering devices for trenches (or from other wet soil conditions) can, if discharged improperly, adversely impacted downstream properties and drainage facilities.

Restrict the length of trench opened at any one time.

Divert surface runoff from entering trench (may also use Interceptor Dike/Berm and Swale).

Discharge dewatering devices properly (also see Sediment Trap).

Figure 3-1 STABILIZED CONSTRUCTION ENTRANCE

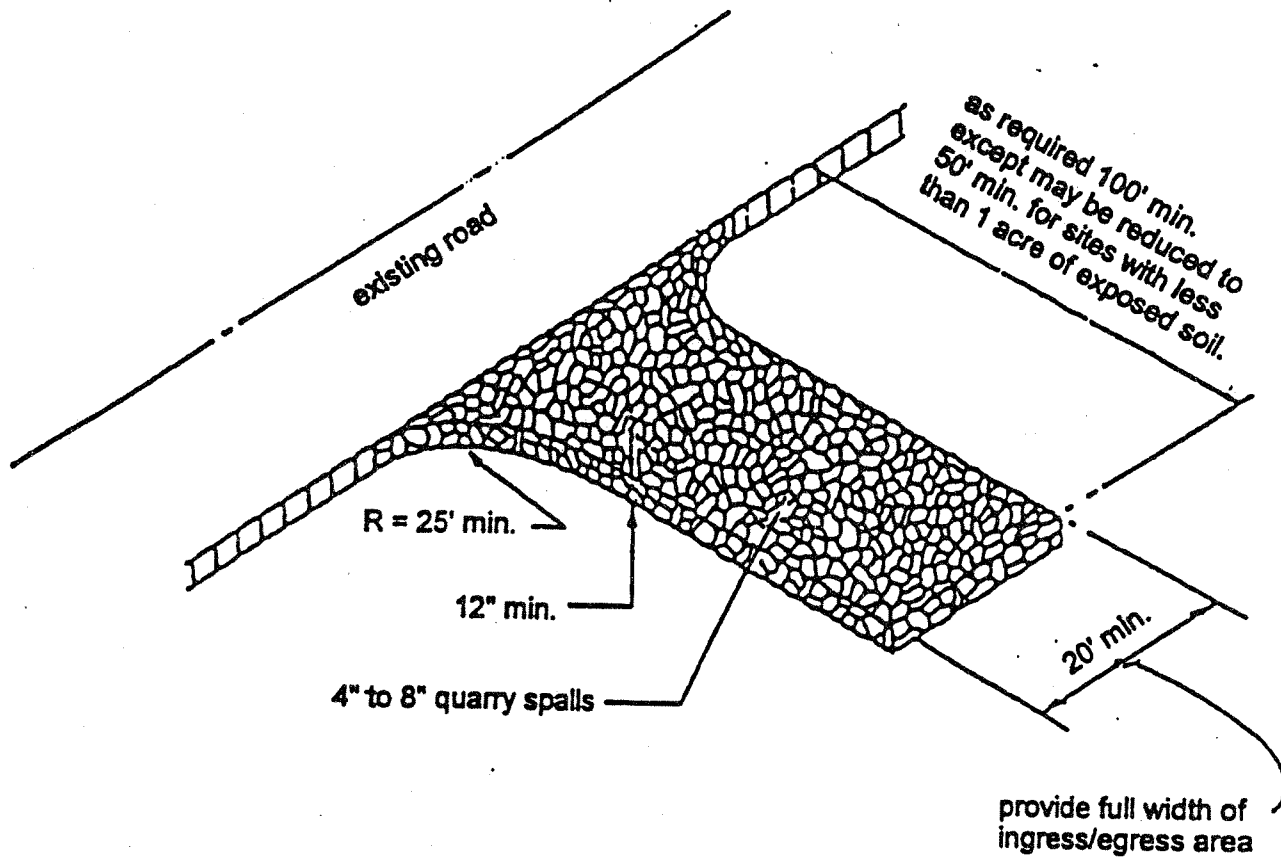


Figure 3-5 SEDIMENT TRAP

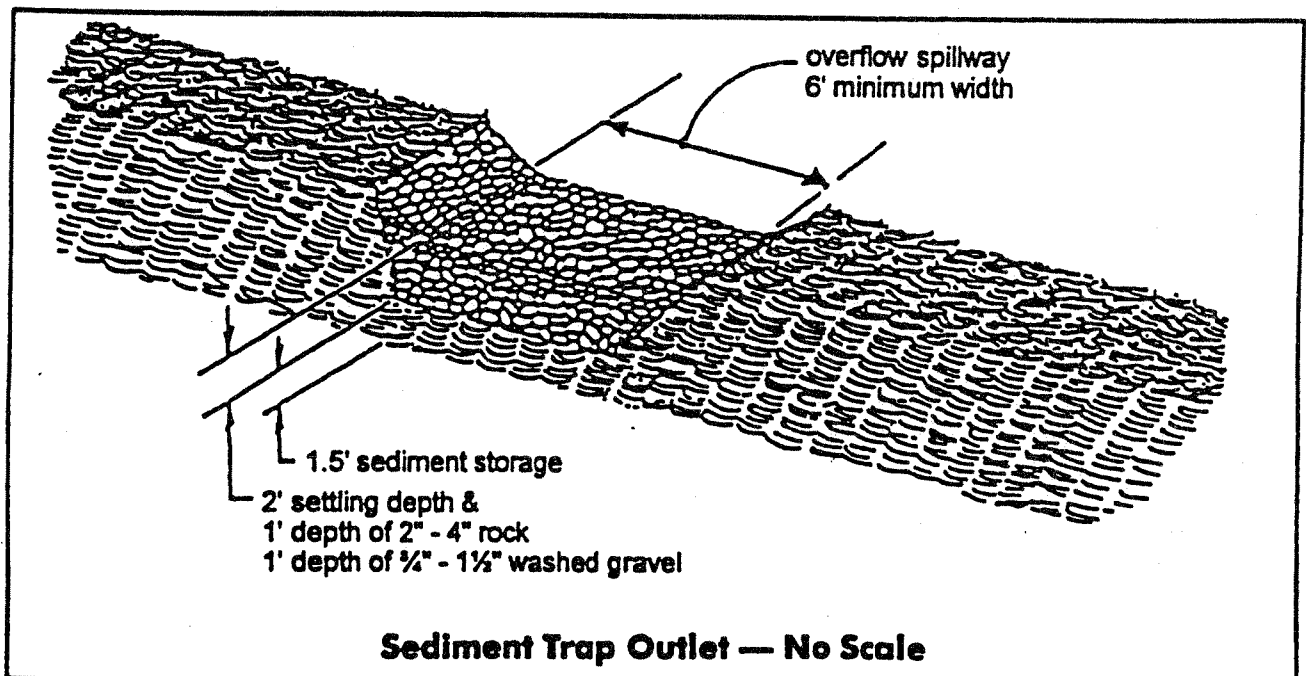
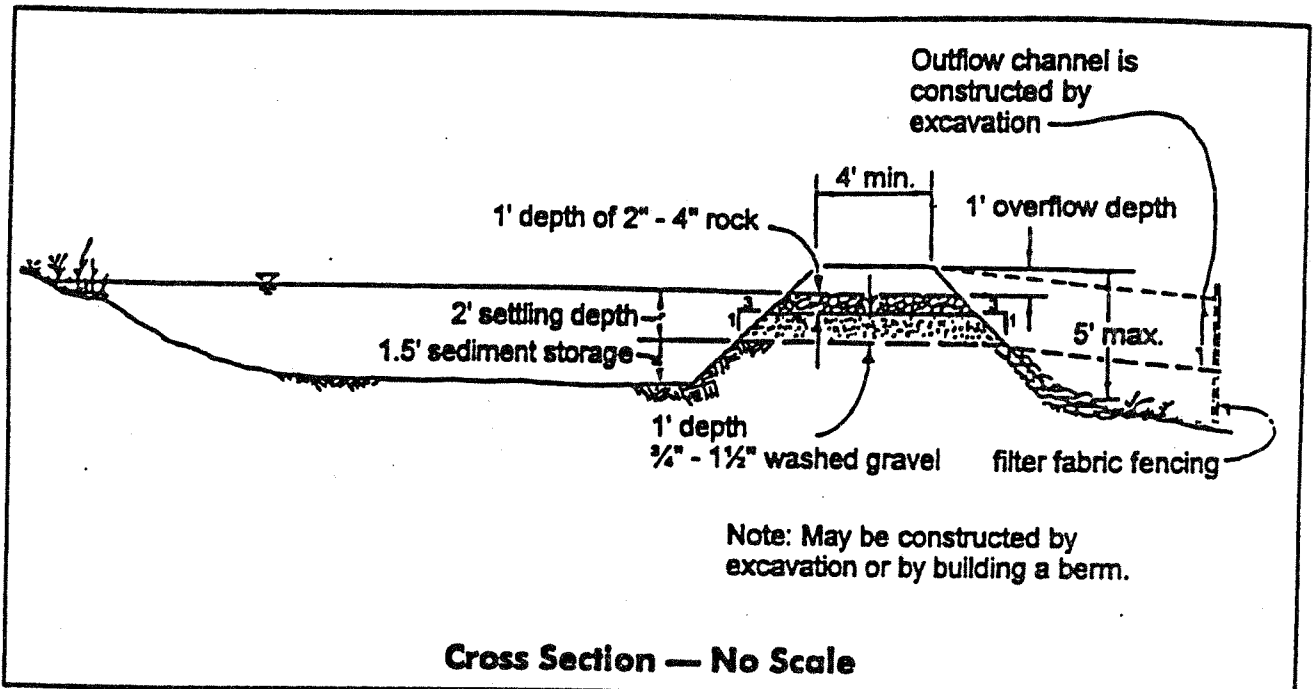


Figure 3-7 SEDIMENT POND

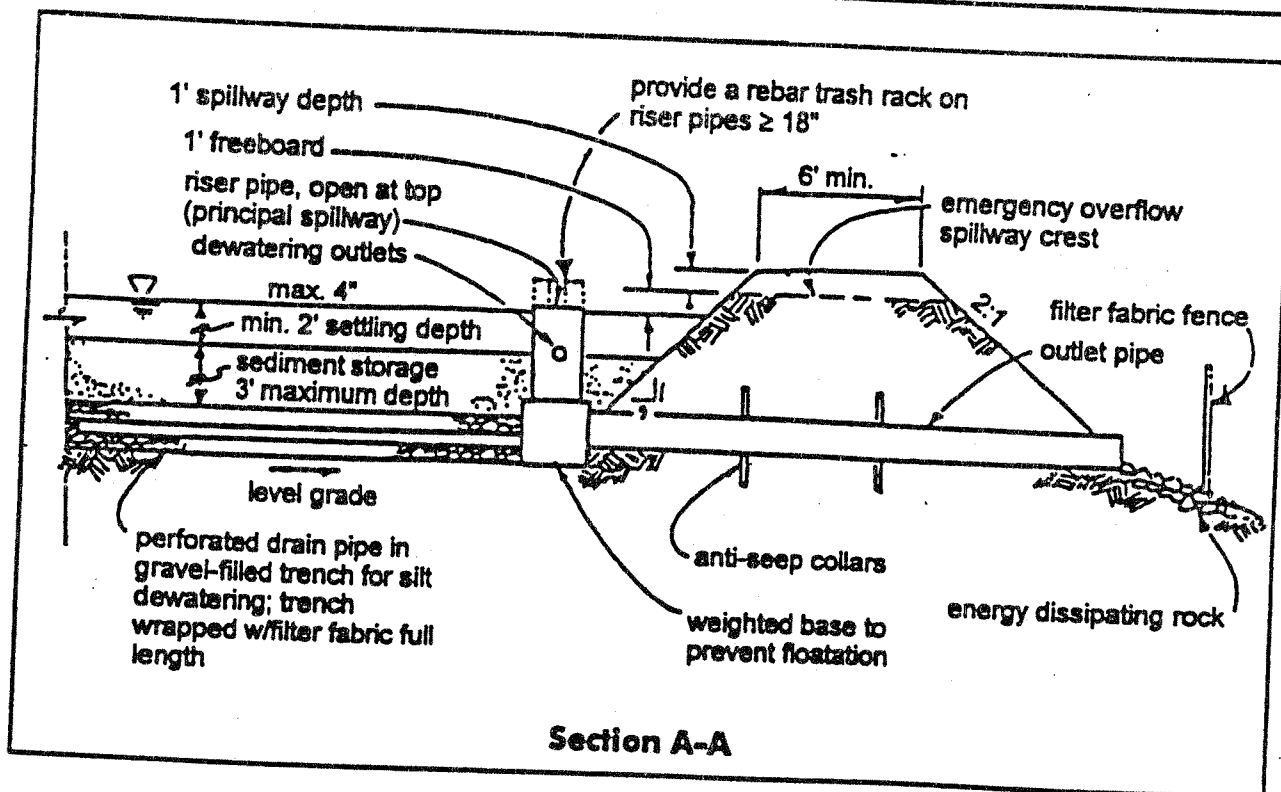
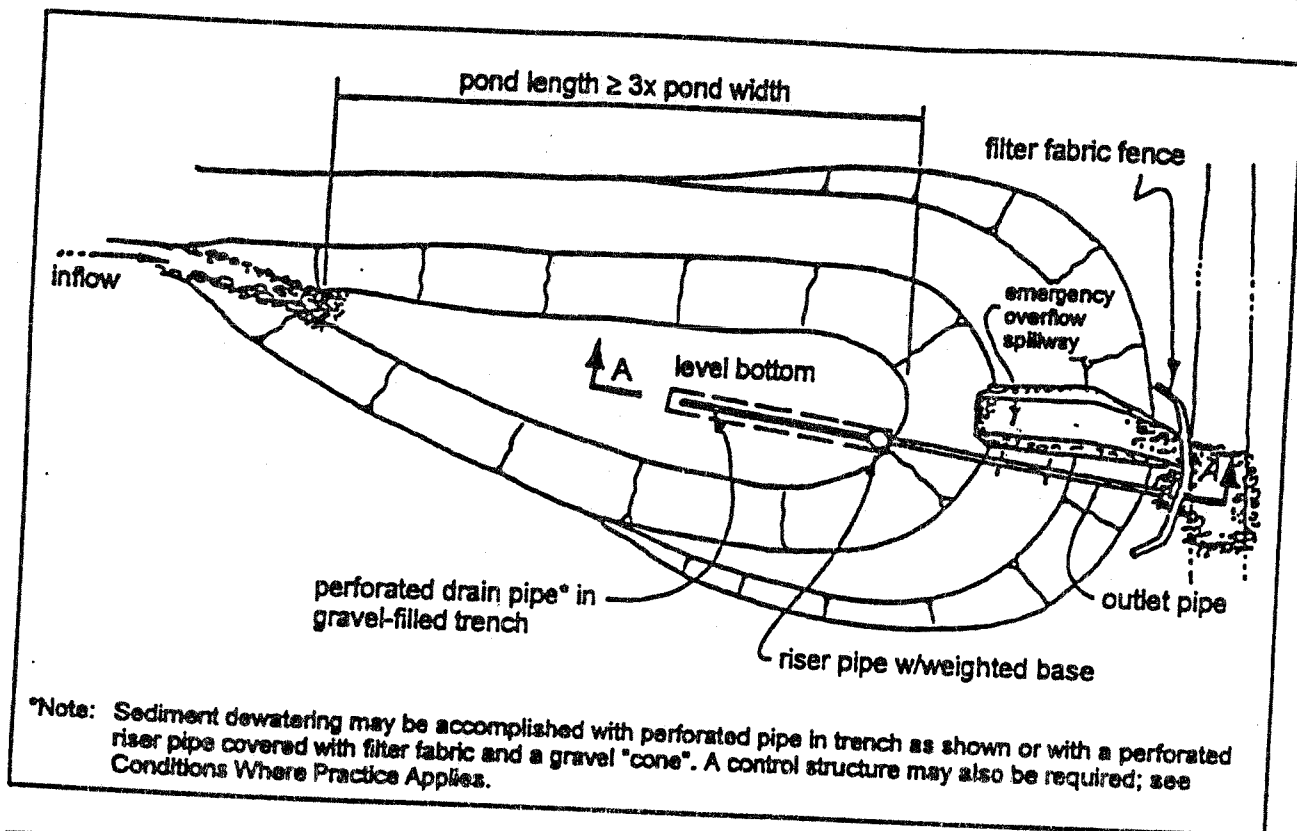


Figure 3-9 FILTER FABRIC FENCE

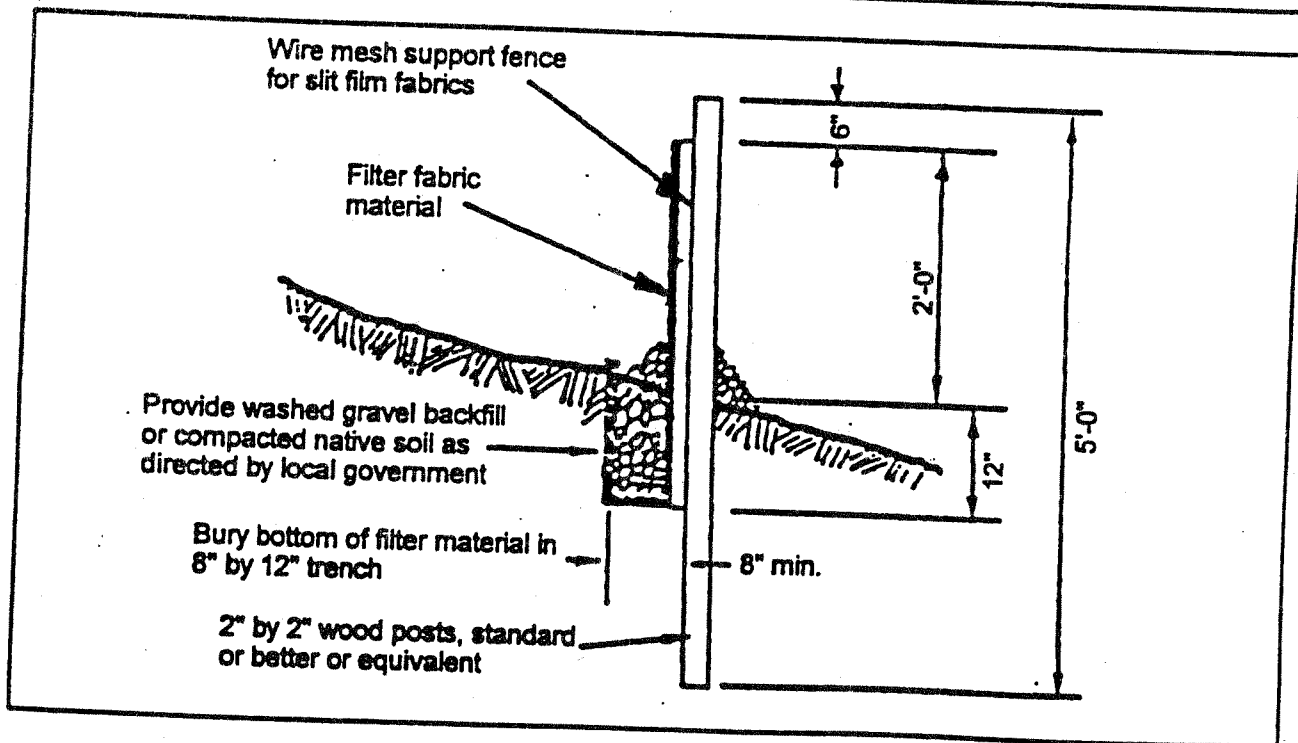
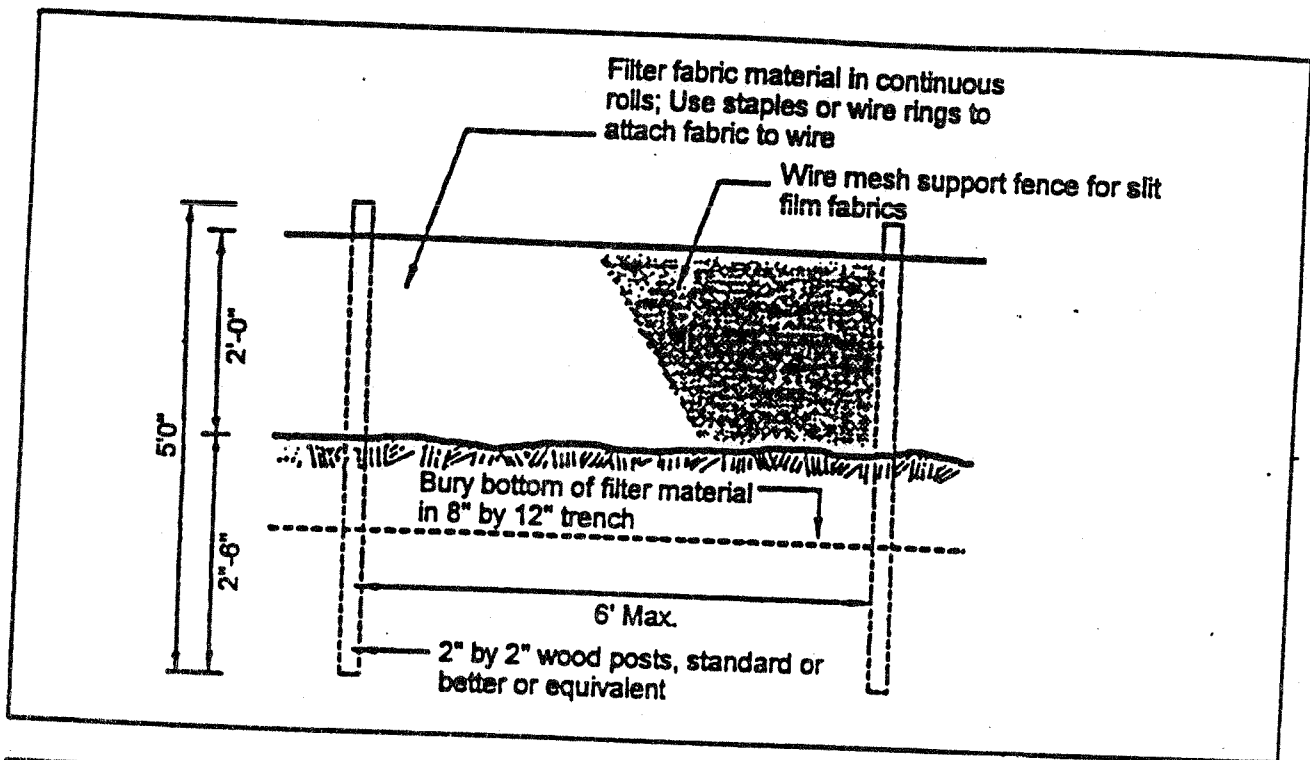
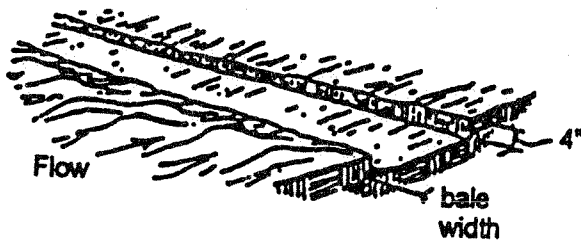
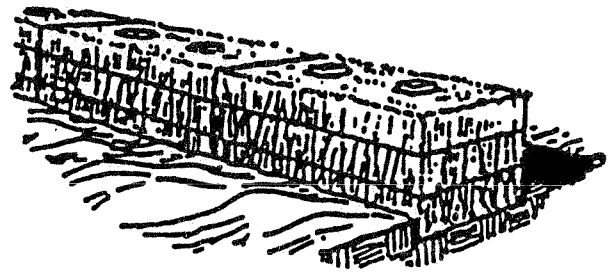


Figure 3-12 STRAW/HAY BALE BARRIER

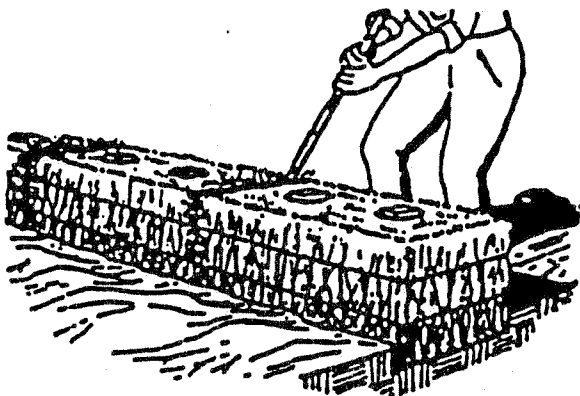
1. Excavate the trench.



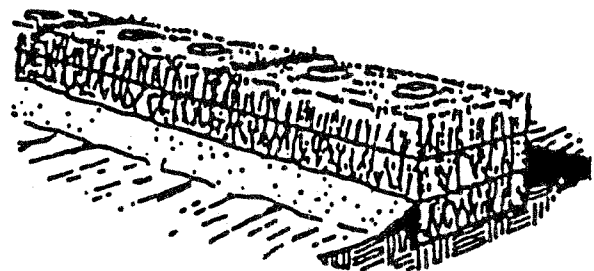
2. Place and stake straw bales.



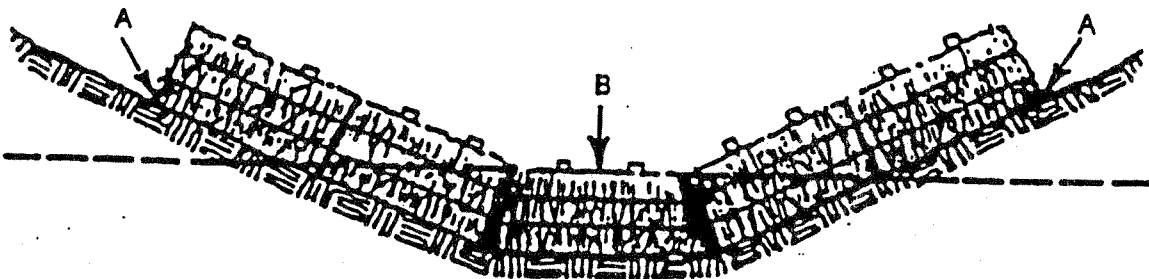
3. Wedge loose straw between bales.



4. Backfill and compact the excavated soil.



Construction of A Straw Bale Barrier



Points A should be higher than point B

Proper Placement of Straw Bale Barrier in Drainage Way

Figure 3-13 STRAW BALE CHECK DAM

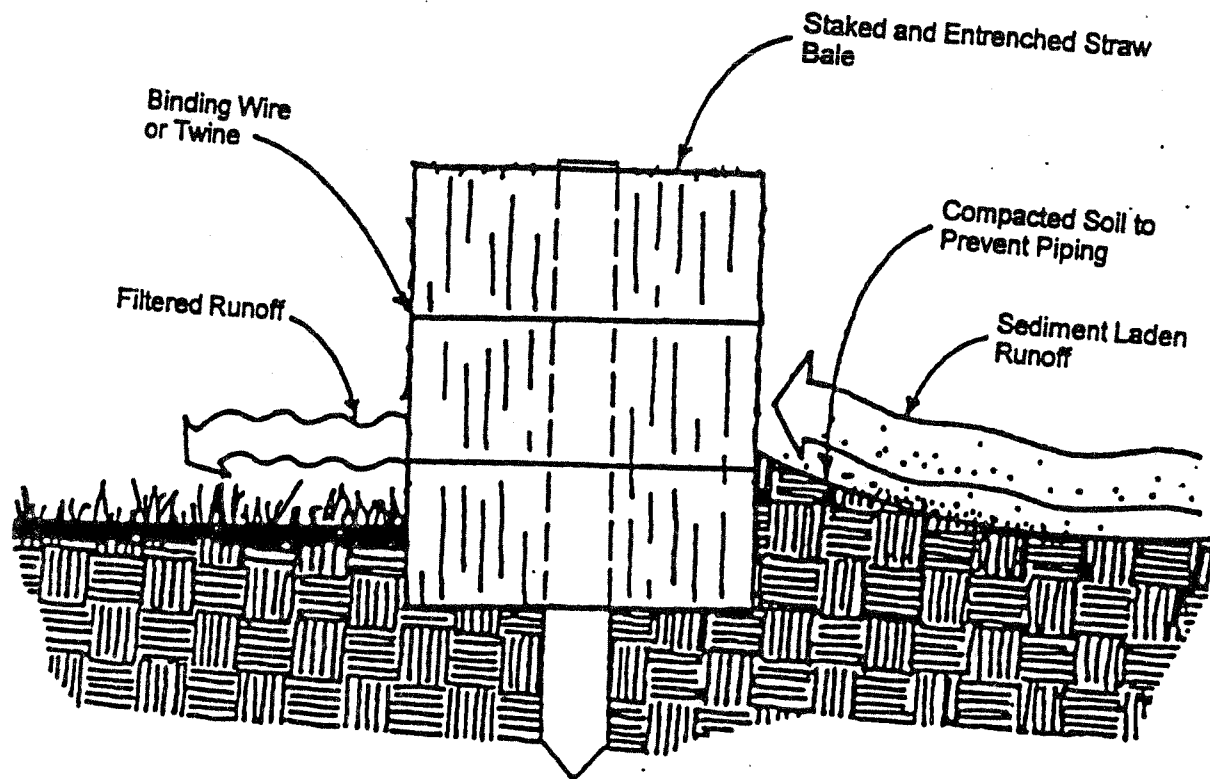


Figure 3-14 FILTER FABRIC FENCE INLET BARRIER

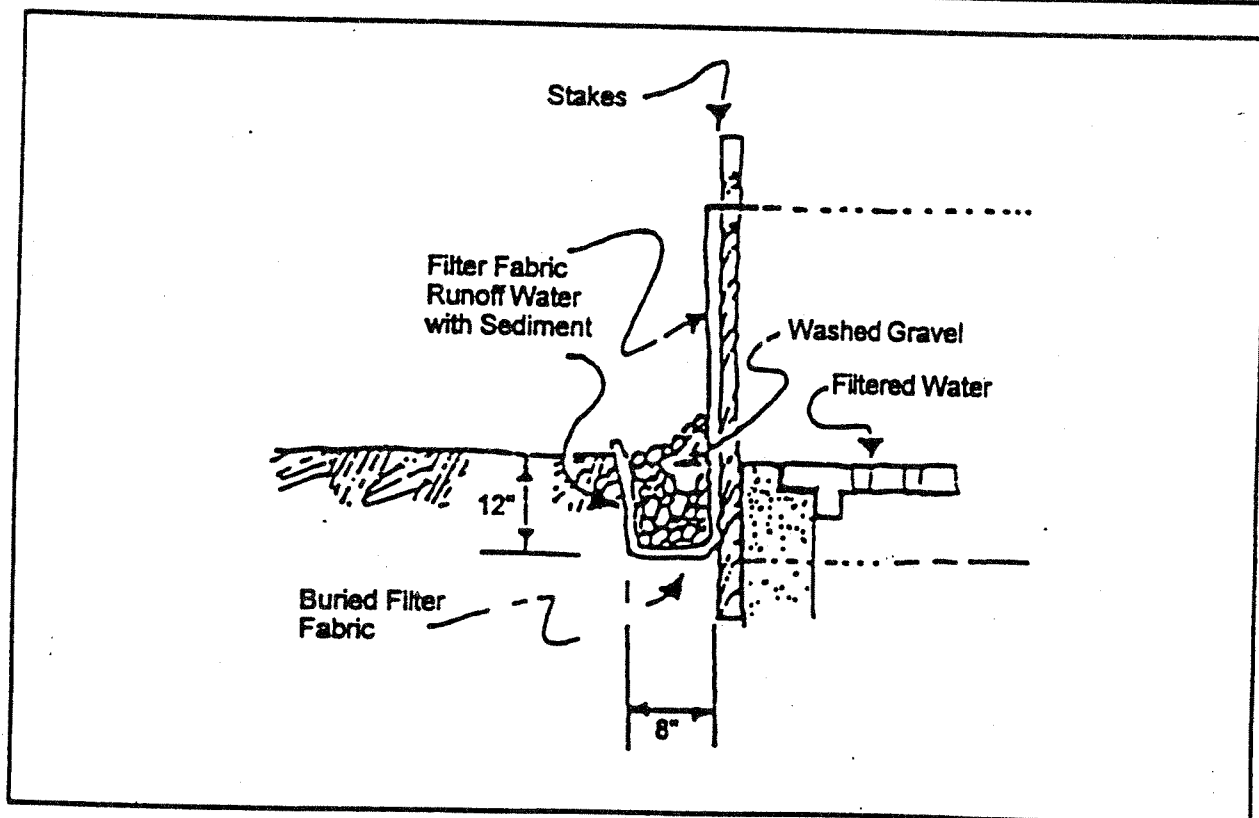
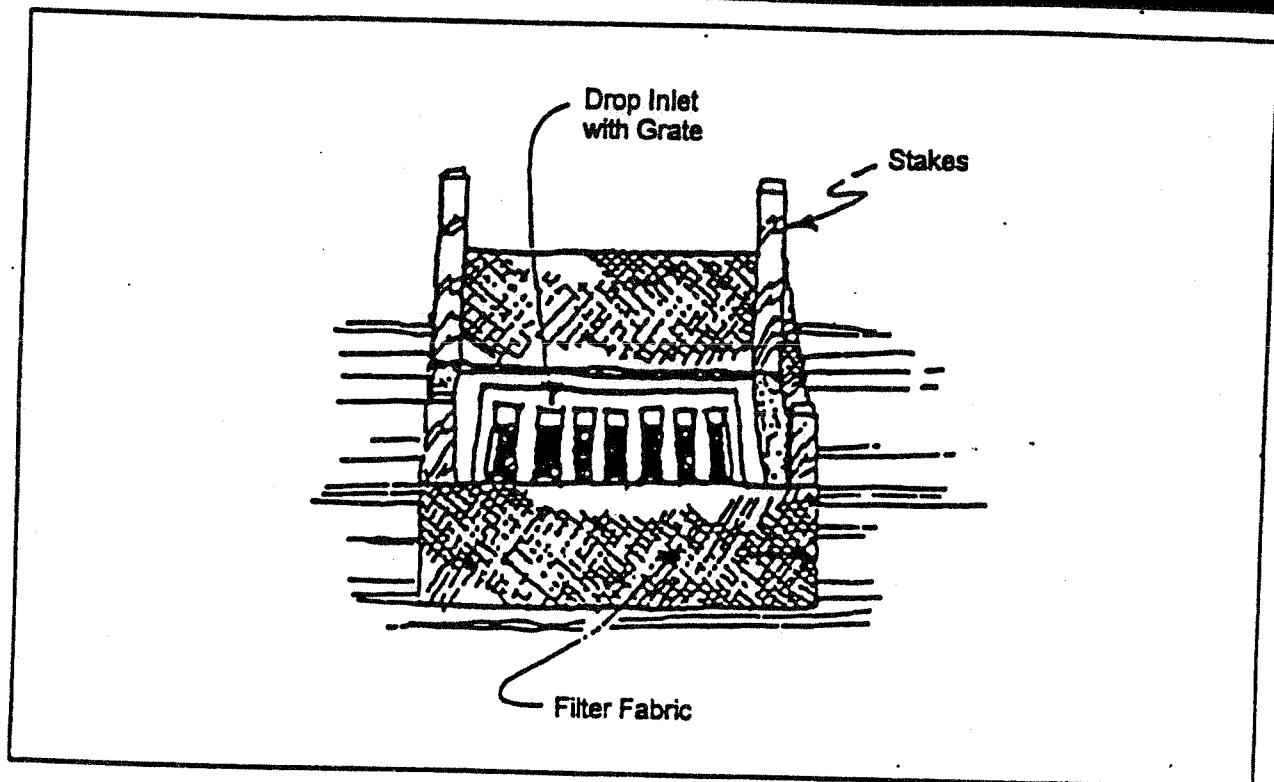


Figure 3-15 BLOCK AND GRAVEL FILTER INLET BARRIER

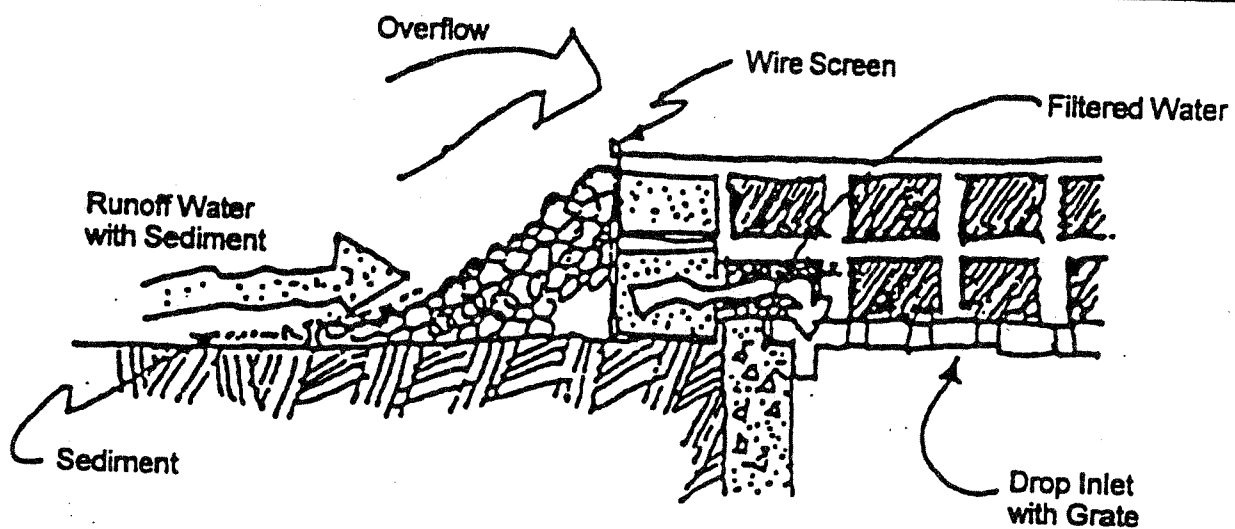
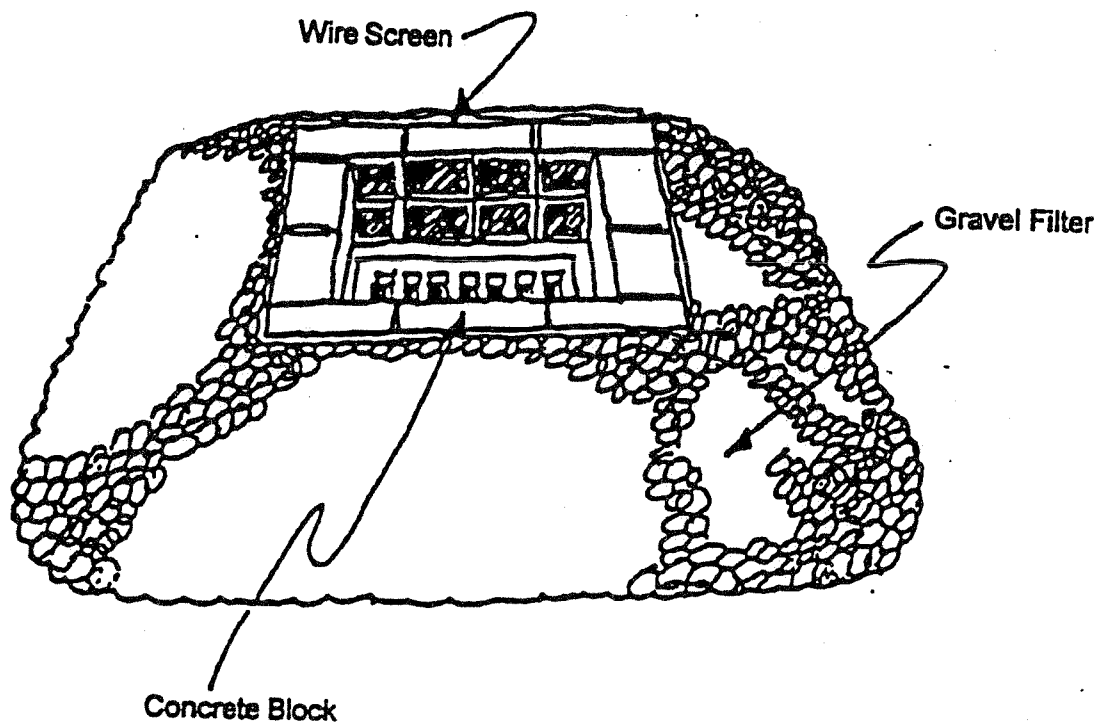


Figure 3-16 GRAVEL AND WIRE MESH FILTER INLET BARRIER

