# CAPITAL IMPROVEMENT PLAN

## AND

# METHODOLOGY FOR STORM DRAINAGE UTILITY FEES AND SYSTEMS DEVELOPMENT CHARGES

## PREPARED FOR THE

## CITY OF PHILOMATH

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# CHAPTER 1

# INTRODUCTION

## 1.1 BACKGROUND

The City of Philomath is planning to upgrade certain storm drainage facilities within the City to both solve existing drainage problems and increase capacity. Several improvement projects are anticipated and necessary to solve these drainage problems and provide this increased capacity, and these projects are more specifically described and outlined in the "Storm Drainage System Master Plan" developed in 1997.

The purpose of this study is to establish a basis and methodology for implementation of a Utility Fee and Systems Development Charges to amortize the cost of planned storm drainage system improvements.

## 1.2 AUTHORIZATION

In January 1998, the City of Philomath authorized BST, Inc. to prepare this report.

## 1.3 SERVICE AREA

The service area consists of the City of Philomath Urban Growth area.

## 1.4 PREVIOUS STUDIES AND REPORTS

Studies and reports utilized in the preparation of this Capital Improvement Plan include the following:

"Storm Drainage System Master Plan" Prepared by Westech Engineering, Inc. and KCM, Inc.

## 1.5 ORGANIZATION

The organization of this study follows the logical development of Utility Fees and Systems Development and includes a Capital Improvement Plan and Systems Development Charges Methodology.

## 1.6 ACKNOWLEDGMENTS

We wish to thank both Randy Kugler and Beau Vencil for their assistance in the preparation of this report. Without their helpful assistance, the completion of this report would have been infinitely more difficult.

# CHAPTER 2

## CAPITAL IMPROVEMENT PLAN

### 2.1 POPULATION ESTIMATES

The Capital Improvement Plan was developed, and is illustrated together with cost estimates, in the 1997 Storm Drainage System Master Plan. Estimates for population growth for the City of Philomath are illustrated below in Table 2-1. These population figures are based upon a current population of 3080 persons, and an annual growth rate of 2.0 percent.

Table 2-1 illustrates the projected population for the City of Philomath through year 2018.

**TABLE 2-1 POPULATION PROJECTIONS**

| Year | Population at 2.0 Percent Annual Growth |
|---|---|
| 1998 | 3080 |
| 2002 | 3334 |
| 2005 | 3609 |
| 2010 | 3906 |
| 2014 | 4228 |
| 2018 | 4577 |

### 2.2 SUMMARY OF PROPOSED IMPROVEMENTS

A summary of the proposed street improvements is presented in this Chapter with the preliminary costs for construction, engineering and inspection, legal and administration, and contingency costs.

The improvements included in this section are those which are beyond the scope of periodic maintenance and are defined as necessary to provide both a solution to existing drainage problems, and to develop excess capacity within the City's storm drainage system.

## PROPOSED STORM DRAINAGE SYSTEM IMPROVEMENTS

Drainage improvements illustrated in Table 5-2 of the 1997 Storm Drainage System Master Plan include a total of 4 possible phasing configurations. We recommend that Priority 1A improvements be constructed within a ten-year period, and that the remaining improvements be implemented within 20 years.

The 1997 Master Plan indicate a total estimated cost of $1,547,600 for Priority 1A improvements, including construction, contingency, engineering, legal, and administration costs. Total recommended improvement costs is estimated at $2,748,195.

## 2.3 IMPROVEMENT IMPLEMENTATION

The City Council should set an initial scope for the project based on recommendations in this Capital Improvement Plan. The scope should include improvements the Council feels will satisfy the highest priority needs in the community and which will be affordable to the residents.

# CHAPTER 3

## UTILITY FEE AND SYSTEMS DEVELOPMENT CHARGES

## 3.1 BACKGROUND INFORMATION

Utility Fees are charges assessed against existing development in an attempt to capitalize the cost of operation and maintenance of infrastructure systems, and to provide capital for implementing improvements needed to maintain a high level of service to this existing development.

Systems Development Charges (SDC's) are charges assessed against new development in an attempt to recover some of the costs incurred by local government in providing the capital facilities required to serve the new development. SDC's are applied to new development to generate revenue for expansion or construction of municipal facilities located outside the boundaries of new development. This is different from local improvement districts (LID's) which are often used to assess the cost of constructing or expanding City services on-site, within the development.

During the 1989 Legislature session, lobbyists for local government, the League of Oregon Cities, and the home building industry reached agreement on a bill regulating the use of Systems Development Charges. HB 3224, the Oregon Systems Development Charges Act passed by the 1989 Legislature, governs the requirements for Systems Development Charges as of July 1, 1991.

The purpose of this Chapter is to develop a Utility Fee and Systems Development Charge Report for the Storm Drainage System of the City of Philomath which will meet with the 1989 System Development Charge Act (HB 3224).

## 3.2 SUMMARY OF SDC LAW

The League of Oregon Cities prepared the following summary of major features of the SDC law.

1. *Authorized Government Objectives.*

The charge must be for capital improvements that are facilities or assets used for:

a. Water supply, treatment and distribution.
b. Wastewater collection, treatment and disposal.
c. Drainage and flood control.
d. Transportation.

e. Parks and recreation.

Administration office facilities are authorized only if they are an incidental part of the listed capital improvements. Routine maintenance may not be funded from system charges. Charges collected for future improvements must be spent on capacity increasing capital improvements in proportion to the capacity requirements of current projected development.

2. *Systems Development Charges Methodology.*

An ordinance or resolution must establish the Systems Development Charges. Two general types of fees could be combined into a single charge for each infrastructure system, depending on whether infrastructure improvement capacity was pre-financed or whether the monies are collected toward a future improvement. Several factors, such as the cost of the facilities, value of unused capacity and others must be considered in the methodology.

3. *Infrastructure Plan Relationship.*

A capital improvement plan, public facilities plan, master plan or comparable plan should list the improvements that would be eligible for Systems Development Charges. Modification of the lists in the plans is allowed at any time in order to keep current with development trends. Amendment procedures may exist in other statutes or rules or may, for some types of plans, need to be developed locally. This provision allows the City to measure and analyze facility standards and services that may be related to current or projected development.

4. *Segregated Funds and Fund Accountability.*

The charges collected must be segregated from the general fund and reserved for use only on the specific infrastructure systems for which they were collected. An annual accounting is needed to report total revenues collected for each system and the projects funded.

5. *Credit for Other Exactions.*

There must be a credit available if a builder/developer pays an SDC and also contributes toward the same infrastructure improvement through a development exaction. The credit need not exceed the amount of the systems charge paid. Cities will rely on the plan and methodology to identify instances where the two forms of contribution for one improvement occur. This provision only affects off-site development exactions. It should be noted that the City's existing policy regarding development exactions may not be in conformance with this requirement.

6. *Existing Deficiencies and Utility Fees.*

In general, Cities will not be authorized to use Systems Development Charges to correct system deficiencies. However, the governing language in the bill is in concept of "capacity increasing" improvements. Since the solution of existing deficiencies is only in part "capacity increasing", it

is reasonable to expect that existing development should pay a portion of the costs of improving the associated facilities. A Utility Fee is charged to existing development to amortize the associated cost of these improvements.

7. *Judicial Review.*

A statute of limitations outlines a time period to contest methodology. The City would adopt administrative review procedures to enable a challenge of an expenditure. The decision of the City is appealed only by a writ of review. The legal challenge procedures are clear, well-defined and efficient. The remedy for misspent expenditures is replenishment of the fund by a time certain.

## 3.3 SDC REIMBURSEMENT FEE AND IMPROVEMENT CHARGE

The Oregon Systems Development Act permits two types of Systems Development Charges: a reimbursement fee and an improvement charge.

A **reimbursement fee** is a charge for unused capacity in capital improvements already constructed or under construction. This is a "buy-in" charge for new development to utilize excess capacity in an existing facility that was paid for by others.

Care must be taken to make sure that new development is not charged twice for capital improvements. For example, if an existing improvement was financed with property taxes, then all property, including undeveloped property, paid for the improvement and it may not be equitable to charge a reimbursement fee. Reimbursement fees must be established by City ordinance or resolution setting forth a methodology that considers the cost of the existing facility or facilities, prior contributors by existing users, the value of unused capacity, financing and other relevant factors. The new law requires that the methodology used be available for public inspection.

An **improvement charge** is a fee associated with capital improvements to be constructed. Revenues from improvement charges can only be spent on "capacity increasing" capital improvements. The portion of improvements funded by improvement charges must be related to new development. The Oregon SDC Act requires improvement charges be established by ordinance or resolution setting forth a methodology that considers the cost of projected capital improvements needed to increase the capacity of the systems to which the fee is related. The methodology for establishing fees shall be available for public inspection.

## 3.4 ACCUMULATION OF UTILITY FEES AND SDC'S

This Plan identifies certain capital improvements for the City of Philomath Storm Drainage System. Although preliminary plans have been developed, it is difficult to accurately predict when the facilities will actually be constructed. Therefore, the City needs to periodically review growth

patterns (at least once every 5 years) and update the Phasing plan. SDC's historically have been accumulated for time periods of 10 years or less before the money is spent. Developers in some states have filed suits against cities and districts which pooled the money for longer periods of time. We recommend that the City plan to construct high priority items as funding becomes available, and that the Utility Fees and SDC's not be accumulated for any longer than 10 years.

## 3.5 UTILITY FEE AND SYSTEMS DEVELOPMENT CHARGE METHODOLOGY

The following methodology has been used to develop the recommended Utility Fee Systems Development Charges structure.

### General

Development of equitable Utility Fees and SDCs for the storm drainage system in the Philomath is needed to help fund future capital improvements. A significant amount of improvement is needed to complete the storm drainage systems as outlined in this Plan.

### Existing Planning Documents

The planning documents used to developed a Capital Improvement Plan and to determine equitable storm drainage system SDC's, in addition to this Plan, are:

"Storm Drainage System Master Plan", 1997, by Westech Engineering, Inc. and KCM, Inc.

### Proportionate Share of Costs

Oregon's new SDC Act requires equity among types of development - equal development should pay equal amounts. Charges need to be proportioned based on the burden created by the user. An equitable method is to proportion charges based on the number of equivalent dwelling units (EDU's) created by the development. However, establishing a fair methodology for determining the value of an EDU is one of the most difficult tasks when developing SDC's.

We believe that the fairest method for proportioning the costs of storm drainage improvements is on the basis of "impervious surface area". This is due to the fact that increased storm drainage runoff is almost always due to the conversion of a natural ground surface to either paved surface or a roofed structure. The use associated with a typical single family dwelling in Philomath is equivalent to 1 EDU and can be calculated as follows:

1 EDU = 3,000 Square Feet of Impervious surface

This area of impervious surface would be equivalent to that generated by the construction of a home with a 1600 square foot surface imprint, a 24' wide by 22' deep 2-car garage, a driveway 16 feet wide and 30 feet long, and 392 square feet of walkway and solid surfaced deck area.

The number of EDU associated with a proposed development can be estimated by dividing the proposed area of impervious surface by 3000. We recommend that the resulting number of EDU be rounded off to the nearest 1/100 EDU.

As an example, suppose an application is received by the City to construct a 10,000 square foot structure with 15,000 square feet of paved lot surface. The associated Systems Development Charge would be calculated by dividing the total proposed impervious surface (25,000 square feet) by the impervious square footage allowed for one EDU (3,000 square feet) and multiplying the resulting figure (25,000/3,000=8.33) by the amount of the adopted SDC per EDU.

## 3.6 STORM DRAINAGE SYSTEM CAPITAL IMPROVEMENT PLAN

The Capital Improvement Plan outlined in Chapter 2 of this report and in the City's Storm Drainage System Master Plan for the storm drainage system has been developed as improvements which were identified in discussions with the City Public Works Director and the City Manager.

## 3.7 REIMBURSEMENT CHARGE

Although there is probably some nominal value in the existing storm drainage system, this value is difficult to estimate in that it gets lost due to the fact that the existing storm drainage system is incapable, for the most part, of conveying fairly frequent storm drainage events. The proposed system of improvements is basically planned as a replacement of much of this existing system. We propose no Reimbursement SDC until improvements are constructed for which a reimbursement would be reasonable.

## 3.8 IMPROVEMENT CHARGE

The recommended improvements listed in the Capital Improvement Plan are associated with providing additional storm drainage capacity and should be paid for primarily through Improvement Systems Development Charges.

The proposed drainage improvements in Philomath will benefit new residents more than existing residents for two reasons:

1. The land developed first was that which was not impacted significantly by lack of a drainage system. New construction is more and more likely to occur on land more significantly impacted by the lack of a drainage system, and therefore will benefit more from the proposed improvements.

2. The additional storm drainage runoff produced by new construction will increasingly impact existing residents without construction of the proposed improvements.

3. New construction contributes to the drainage problem by increasing the run-off coefficient of the existing ground surface through the construction of roofs and paved surfaces, and therefore should be responsible for mitigating this impact on existing residents.

## Improvement SDC

The methodology developed to establish the Improvement SDC was based upon the assumption that storm drainage run-off is proportional to the amount of impervious surfacing constructed on the original bare ground. We estimated the total area of impervious surfacing within the City Limits of Philomath at year 2019. The following estimated were used for the methodology calculations:

| | |
|---|---|
| Impervious Street Surfacing (Excl. Hwy 20) ..... | 2,930,000 square feet |
| Impervious Residential Use Surfacing ..... | 5,517,000 square feet |
| Impervious Commercial/Industrial Surfacing ..... | 1,820,000 square feet |
| TOTAL IMPERVIOUS SURACING | 10,267,000 quare feet |

The Maximum Improvement SDC was calculated by dividing the cost of the proposed improvements by the total impervious surfacing, as follows:

| | |
|---|---|
| Cost of Proposed Drainage Improvements | $ 2,748,195.00 |
| Total Impervious Surfacing | 10,267,000.00 s.f. |
| Maximum Improvement SDC (per square foot) | $ 0.27 |
| Impervious Surfacing Per EDU | 3000 s.f. |
| Maximum Improvement SDC per EDU | $ 803.02 |

The Maximum Improvement SDC per EDU which would be charged to new construction would be $803. To calculate the SDC charge for a particular project, simply multiply this SDC per EDU charge times the number of EDU equivalents for the project. For the example illustrated in Section 5.3 of this Chapter, the total project SDC charge would be $803 per EDU x 8.33 EDU = $6,689.

Because the calculation of these SDC's included the impervious street surfacing, developers building streets would also pay the SDC per square foot rate for new paved streets and sidewalks. Remember to calculate the Total Project SDC by multiplying the number of EDU's in the project (including new paved streets constructed by the developer) times the SDC per EDU.

## Utility Fee

Perhaps the most accurate method for establishing the Utility Fee would be to calculate the monthly cost for amortizing the SDC for one EDU over the 20 year planning period. If we assume that accumulated interest will just about offset the effects of construction inflation over this period, the monthly cost would be $3.35 per month.

We realize that the addition of $3.35 per month to existing City service fees may be difficult to implement, and we suggest that the City may want to initially reduce this amount to $1.50 or $2.00 per month per Equivalent Dwelling Unit. The addition of this fee will go a long way toward providing the capital to construct the highest priority storm drainage improvements in the nearest future. Under this scenario, new construction will contribute to the improvements both through the payment of the Utility Fee and through the payment of a Systems Development Charge equal to proportionate fair share of the cost of the improvements. After the Priority 1A improvements are constructed, all residents will continue to pay a Drainage Utility Fee for maintenance and repair of the drainage system and to complete the other priority drainage improvements.

## 3.9 UTILITY FEE AND IMPROVEMENT SDC COMBINATIONS

Several reasonable combinations of Utility Fee and SDC's are available. Table 3.9 illustrates the capital accumulated through the collection of SDC's and a variety of Utility Fee amounts.

**TABLE 3.9**
**UTILITY FEE AND SDC CALCULATIONS**

| Year | EDU Equivalents | Annual/Accumulated Utility Fee and SDC's Collected | | |
|---|---|---|---|---|
| | | $0 per mo. | $1.50 per mo. | $2.00 per mo. |
| 1998 | 2258 | $0.00 | $40,644.00 | $54,192.00 |
| | | $0.00 | $40,644.00 | $54,192.00 |
| 1999 | 2303 | $36,263.48 | $77,720.36 | $91,539.32 |
| | | $36,263.48 | $118,364.36 | $145,731.32 |
| 2000 | 2349 | $36,263.48 | $79,274.77 | $93,370.11 |
| | | $72,526.96 | $197,639.13 | $239,101.43 |
| 2001 | 2396 | $36,263.48 | $80,860.26 | $95,237.51 |
| | | $108,790.44 | $278,499.39 | $334,338.93 |
| 2002 | 2444 | $36,263.48 | $82,477.47 | $97,142.26 |
| | | $145,053.92 | $360,976.86 | $431,481.19 |
| 2003 | 2493 | $36,263.48 | $84,127.02 | $99,085.10 |
| | | $181,317.40 | $445,103.87 | $530,566.30 |
| 2004 | 2543 | $36,263.48 | $85,809.56 | $101,066.81 |
| | | $101,066.81 | $530,913.43 | $631,633.10 |

| | | | | |
|---|---|---|---|---|
| 2005 | 2594 | $36,263.48 | $87,525.75 | $103,088.14 |
| | | $137,330.29 | $618,439.18 | $734,721.25 |
| 2006 | 2646 | $36,263.48 | $89,276.26 | $105,149.90 |
| | | $173,593.77 | $707,715.44 | $839,871.15 |
| 2007 | 2699 | $36,263.48 | $91,061.79 | $107,252.90 |
| | | $209,857.25 | $798,777.23 | $947,124.05 |
| 2008 | 2752 | $36,263.48 | $92,883.02 | $109,397.96 |
| | | $246,120.73 | $891,660.26 | $1,056,522.01 |
| 2009 | 2808 | $36,263.48 | $94,740.69 | $111,585.92 |
| | | $282,384.21 | $986,400.94 | $1,168,107.93 |
| 2010 | 2864 | $36,263.48 | $96,635.50 | $113,817.64 |
| | | $318,647.69 | $1,083,036.44 | $1,281,925.57 |
| 2011 | 2921 | $36,263.48 | $98,568.21 | $116,093.99 |
| | | $354,911.17 | $1,181,604.65 | $1,398,019.57 |
| 2012 | 2979 | $36,263.48 | $100,539.57 | $118,415.87 |
| | | $391,174.65 | $1,282,144.22 | $1,516,435.44 |
| 2013 | 3039 | $36,263.48 | $102,550.36 | $120,784.19 |
| | | $427,438.13 | $1,384,694.59 | $1,637,219.63 |
| 2014 | 3100 | $36,263.48 | $104,601.37 | $123,199.87 |
| | | $463,701.61 | $1,489,295.96 | $1,760,419.50 |
| 2015 | 3162 | $36,263.48 | $106,693.40 | $125,663.87 |
| | | $499,965.09 | $1,595,989.36 | $1,886,083.37 |
| 2016 | 3225 | $36,263.48 | $108,827.27 | $128,177.15 |
| | | $536,228.57 | $1,704,816.63 | $2,014,260.51 |
| 2017 | 3289 | $36,263.48 | $111,003.81 | $130,740.69 |
| | | $572,492.05 | $1,815,820.44 | $2,145,001.21 |
| 2018 | 3355 | $36,263.48 | $113,223.89 | $133,355.50 |
| | | $608,755.53 | $1,929,044.33 | $2,278,356.71 |
| 2019 | 3422 | $36,263.48 | $115,488.37 | $136,022.61 |
| | | $645,019.01 | $2,044,532.69 | $2,414,379.32 |

**Utility Fee and SDC Recommendation:**

Since the rate of growth will greatly impact the collection of both Storm Drainage SDC's and the accumulation of Storm Drainage System Utility Fees, we recommend that the City Council adopt the highest reasonable Utility Fee rate and the associated SDC per EDU based on a conservative level of growth. We understand that the imposition of a new fee will be distasteful to existing residents, and it may be necessary to set this initial fee at a low rate.

We recommend a Storm Drainage Utility Fee of at least $1.50 per month per EDU, and a Maximum Storm Drainage Systems Development Charge of $803 per EDU.

## 3.10 UPDATING STORM DRAINAGE SDC'S

Cost estimates presented in this report should be updated periodically to account for actual inflation. The SDC's should also be updated accordingly. The costs presented above are based on an estimated ENR Construction Cost Index for August, 1997. We recommend that the City annually adjust the SDC's to the new ENR Construction Cost Index for each year subsequent to 1997.