

ORDINANCE NO. 383

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF UNIVERSITY PLACE, WASHINGTON, ADOPTING THE CHAMBERS CREEK PROPERTIES STANDARDS AND GUIDELINES ESTABLISHING DEVELOPMENT STANDARDS AND GUIDELINES BY WHICH DEVELOPMENT OF THE CHAMBERS CREEK PROPERTIES SHALL BE SUBJECT IN ACCORDANCE WITH SECTION 6 OF THE CHAMBERS CREEK PROPERTIES JOINT PROCEDURAL AGREEMENT.

WHEREAS, Pierce County owns approximately 920 acres of land in the vicinity of Chambers Creek. The land is collectively known as the "Chambers Creek Properties"; and

WHEREAS, Portions of the Chambers Creek Properties are located within the City of University Place the City of Lakewood, and unincorporated Pierce County; and

WHEREAS, The Pierce County Council passed Ordinance No. 97-71S on August 19, 1997, which adopted the "Chambers Creek Properties Master Site Plan"; and

WHEREAS, The City of University Place, the City of Lakewood and Pierce County entered into a "Joint Procedural Agreement" (JPA) regarding the Chambers Creek Properties and the Chambers Creek Properties Master Site Plan, to facilitate further use and development of the Chambers Creek Properties; and

WHEREAS, Section 6 of the Joint Procedural Agreement describes steps the Cities and County will take to promote the implementation of the Mater site Plan including adoption of Design Standards and Guidelines to be developed by an independent contractor; and

WHEREAS, Following the development of draft Design Standards and Guidelines, Staff from each of the Cities and the County worked to refine the Design Guidelines to ensure consistency the adopted plans and regulations, and

WHEREAS, The Final Environmental Impact Statement for the Chambers Creek Properties Master Site Plan was adopted on April 11, 1997 to fulfill the requirements of the State Environmental Policy Act, and

WHEREAS, The City Council has held three public meetings including a public hearing to deliberate the merits of the Design Guidelines, NOW, THEREFORE,

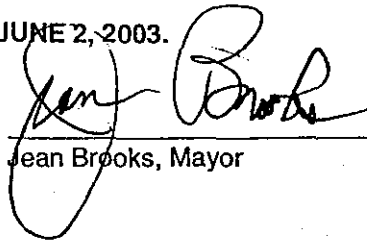
THE CITY COUNCIL OF THE CITY OF UNIVERSITY PLACE, WASHINGTON, DOES HEREBY ORDAIN AS FOLLOWS:

Section 1. The Chambers Creek Properties Standards and Guidelines attached hereto as Exhibit A is hereby adopted to serve as the minimum standards for development of the Chambers Creek Properties Master Site Plan (Pierce County Ordinance No. 97-71S).

Section 2. Severability. If any provision of this Ordinance or its application to any person or circumstance is held invalid, the remainder of the Ordinance or the application of the provision to other persons or circumstances by a court of competent jurisdiction shall not be affected.

Section 3. Publication and Effective Date. A summary of this Ordinance consisting of its title shall be published in the official newspaper of the City. This Ordinance shall be effective five (5) days after publication.

PASSED BY THE CITY COUNCIL ON JUNE 2, 2003.



Jean Brooks, Mayor

ATTEST:



Catrina Craig, City Clerk

APPROVED AS TO FORM:



Timothy X. Sullivan, City Attorney

Published: 6/4/03
Effective Date: 6/9/03



Chambers Creek Properties
Standards and Guidelines



PIERCE COUNTY

Ordinance No. 2003-99
Adopted November 4, 2003

r e c l a i m i n g o u r r e s o u r c e s

Table of Contents

SECTION 1: INTRODUCTION	I
1.1 Purpose of Chambers Creek Properties Design Guidelines and Development Standards	I
1.2 Introduction to Chambers Creek Properties Master Site Plan	1
1.3 Applicability of Design Guidelines	6
1.4 Permitting & Design Review Process	9
1.5 Severability	10
SECTION 2: CIRCULATION & ACCESS	11
2.1 Site Entrances & Gateways	12
2.2 Interior Access Roadways	15
2.3 Service & Emergency Access	18
2.4 Non-Motorized Circulation	21
2.5 Paving Materials	26
2.6 Transit Facilities	27
SECTION 3: PARKING AREA DESIGN	29
3.1 Parking Lot Requirements	29
3.2 Parking Area Landscaping	32
SECTION 4: UTILITIES	35
4.1 Surface Water Management/ Site Grading	35
4.2 Telecommunications	36
4.3 Electrical Power	39
4.4 Solid Waste Disposal	40
4.5 Water Utilities	41
4.6 Wastewater Facilities	42
4.7 Fire Flow	43
SECTION 5: LANDSCAPE AND SITE DESIGN	45
5.1 Site Wide Landscape Design	46
5.2 Landscape Types	51
5.3 Parking Area Landscaping	60
5.4 Roadway Trees	60
5.5 Palette of Approved Species for Planting	61
5.6 Significant Tree Retention	62
5.7 View Protection	62

SECTION 6: FENCING, BARRIERS, & BUFFERS	69
6.1 Fencing	69
6.2 Vegetated Security Barriers	72
6.3 Landscaped Buffers	73
6.4 Retaining Walls/Guardrails	73
SECTION 7: SITE LIGHTING	77
7.1 Site Wide Lighting Design	77
7.2 Lighting Locations	79
SECTION 8: SIGNAGE & GRAPHICS	83
8.1 Site Wide Signage and Graphic Design	83
8.2 Signage Types	85
SECTION 9: ARCHITECTURAL GUIDELINES	89
9.1 Building Placement & Design	89
9.2 Building Materials & Colors	91
9.3 Auxiliary Spaces & Mechanical Equipment	92
9.4 Building Expansions & Renovations	93
9.5 Transit Facilities	94
SECTION 10: PUBLIC ART & INTERPRETATION	95
10.1 Interpretive Opportunities	95
10.2 Practical Design Issues for Public Art	97

APPENDICES

Appendix 1	Applicable Codes
Appendix 2	Site Uses/Parking Requirements
Appendix 3	Jurisdictional Responsibilities

List of Figures

SECTION 1: INTRODUCTION

Figure 1	Adopted Site Uses, Chambers Creek Properties Master Site Plan	2
Figure 2	Master Site Plan	3

SECTION 2: CIRCULATION & ACCESS

Figure 3	Hierarchy of Circulation System	11
Figure 4	Vehicle Roads and Entries	12
Figure 5	Site Entry Diagram (Area 3)	13
Figure 6	Two-way Roadway	17
Figure 7	Rolled Drainage Curb Detail	17
Figure 8	Drainage Swale on Steep Slope	17
Figure 9	One-way Roadway	17
Figure 10	Urban Trail/Service & Emergency Access	19
Figure 11	Non-motorized Circulation	20
Figure 12	Urban Trail	21
Figure 13	Pedestrian Walkway	21
Figure 14	Nature Trail	22
Figure 15	Appropriate Paving Materials	27

SECTION 3: PARKING AREA DESIGN GUIDELINES

Figure 16	Typical Parking Plan	30
Figure 17	Parking Stall and Curb Placement	30
Figure 18	Pedestrian Walkway through Parking Area	31
Figure 19	Plant Sizes and Spacing for Parking Areas	32

SECTION 5: LANDSCAPE AND SITE DESIGN

Figure 20	Landscape Types	46
Figure 21	Location of Woodland Forest Buffers	49
Figure 22	Location of Steep Slopes	50
Figure 23	Location of Structured Landscape Areas	51
Figure 24	Structured Landscape in Area 5	52
Figure 25	Location of Prairie/Open Meadow	53
Figure 26	Nature Trail through Prairie/Open Meadow	53
Figure 27	Location of Shoreline Landscape Type	54
Figure 28	Public Access Areas in Area 8	55
Figure 29	Location of Riparian Corridor	56
Figure 30	Preferred Trail Placement in Riparian Corridor	57
Figure 31	Location of Vegetated Security Barrier	58
Figure 32	Views Above Vegetated Security Barrier with Fence	59
Figure 33	Allowed Plant Palette and Use by Landscape Type	65

SECTION 6: FENCING, BARRIERS, & BUFFERS

Figure 34	Fencing & Barrier Types and Appropriate Application	69
Figure 35	Site-Wide Fencing, Gate, and Vegetated Barrier Locations	70
Figure 36	Fence and Vegetation Placement Along Railroad Right-of-way	71

SECTION 7: SITE LIGHTING

Figure 37	Recommended Site Lighting and Bollard	78
Figure 38	Lighting Types and Characteristics	79
Figure 39	Low-Level Lighting Integrated With Landscape	80
Figure 40	Up-Lighting to Highlight Landscape Features	80
Figure 41	Bollard Lighting for Pathways, Trailheads, and Other Pedestrian Oriented Spaces	81
Figure 42	Lighting Integrated with Infrastructure	81

SECTION 8: SIGNAGE & GRAPHICS

Figure 43	Examples of "Families of Signs"	84
Figure 44	Use of Color to Create Contrast	85
Figure 45	Examples of Signage Materials Integrated with Landscape	86
Figure 46	Example of Icon Signage	87
Figure 47	Example of Perimeter Signage	87
Figure 48	Example of Directional Signage	87
Figure 49	Example of Building Identification Signage	88

SECTION 9: ARCHITECTURAL GUIDELINES

Figure 50	Building Placement Can Protect Views	90
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SECTION 10: PUBLIC ART & INTERPRETATION

Figure 51	Example of Public Art Integrated into a Public Plaza	95
Figure 52	Example of Public Art Incorporating Landscape Elements	95
Figure 53	Remnant Mining Infrastructure Provides Interpretive Opportunities	96

Section I: Introduction

1.1 Purpose of Chambers Creek Properties Design Guidelines and Development Standards

The 930 acre Chambers Creek Properties included in the Master Site Plan contain a variety of the regional services provided by Pierce County, as well as commercial and industrial activities provided by former owners and tenants. The primary goal of the Master Site Plan is the inclusion of public access and other public uses that are compatible with the further development of the County regional services that will remain on the Properties. In achieving the primary goal of the Master Site Plan, some of these commercial and industrial activities will be displaced as the Master Site Plan is implemented.

Each parcel of the Chambers Creek Properties was purchased by Pierce County at different times for a specific purpose. The Master Site Plan combines the Properties into one integrated site, providing for multiple and balanced uses which include government services, public access and recreation uses, and revenue generating uses.

The long term plan for the existing gravel mines is to use wastewater treatment by-products for reclamation, returning the mines to biological productivity. Wastewater treatment by-products such as biosolids, when combined with other organic materials or soils and through soil mixing processes, create soils which may be used in mine reclamation. Treated wastewater can be reclaimed (reused), through further treatment processes such as advanced treatment ponds or similar treatment processes, and used for irrigation. Re-use of by-products transforms them from waste products in need of disposal to valuable resources which can be used for a variety of productive purposes.

Figures 1 and 2 illustrate permitted site uses by area as programmed in the Master Site Plan. Appendix 2 identifies detailed levels of development per site area.

1.2 Introduction to Chambers Creek Properties Master Site Plan

The purpose of the Chambers Creek Properties Design Guidelines and Development Standards (hereafter, "Design Guidelines" or "Guidelines") is to establish the design and development standards which will guide the quality of

Figure 1: Adopted site uses, Chambers Creek Properties Master Site Plan, 1997

FUTURE LAND USES SUMMARY

USE	Area	Utility	Government Services	Public Access/Recreation	Revenue Generator
Arboretum	1	●		●	
Botanical Garden	1	●		●	
Golf Course	1	●		●	●
Grandview/64th Trail	3,5			●	
Soundview Trail	1,6,8			●	
Other Urban Trails	1,3,5,6,8			●	
Nature Trails	7			●	
Overlooks/Trailheads	3,5,7			●	
Shoreline Public Access (a)	1,6			●	
Concessions	1,5,6				
Picnic and Play Areas	1,3,6			●	
Water Production	1,2,3,6,8(b)	●	●	●	
Water Reclamation	1,2(c)	●	●	●	
Visitor Center/Env. Ed. Center	1	●	●	●	
Administration/Maintenance (d)	1,2,4,5,6	●	●		
Potential Rail Relocation	1,2,6				
Mining and Reclamation	1,2,3,5,6,8				
Buffers	1,3,5,6	●		●	
Wastewater Treatment Plant	2	●	●		
Production Nursery	2	●	●		
Soils Manufacturing	2	●	●		
View Restaurant (e)	3				●
Commercial Offices	5				●
Multi-purpose playfields	5(f)			●	●
Open Space	1,3,5,6,7,8	●		●	
Boat Launch	6			●	●

NOTES

- a) North Dock, Area 1 and South Dock, Area 6
- b) Water Production Facilities in Areas 1 and 2, and wells in Areas 1, 2, 3, 6, and 8
- c) Water Reclamation Facilities in Areas 1 and 2, and reclaimed water used for irrigation in Areas 1, 2, 3, 4, 5, 6, and 8
- d) Public Works and Utilities Department and Parks and Recreation Department administration and maintenance facilities
- e) Southern end of Area 3
- f) Could also be located in Area 6, but priority is placed on Area 5

1 FILE NO. 462

PROPOSAL NO. 2003-99

2 Sponsored by: Councilmembers Paul Bocchi and Terry Lee

3 Requested by: County Executive/Public Works and Utilities

4 -Environmental Services Division

5
6 ORDINANCE NO. 2003-99
7

8 AN ORDINANCE OF THE PIERCE COUNTY COUNCIL ADOPTING THE CHAMBERS
9 CREEK PROPERTIES STANDARDS AND GUIDELINES, APRIL
10 2003; ESTABLISHING STANDARDS AND GUIDELINES BY WHICH
11 DEVELOPMENT OF THE CHAMBERS CREEK PROPERTIES SHALL BE
12 SUBJECT IN ACCORDANCE WITH SECTION 6 OF THE CHAMBERS
13 CREEK PROPERTIES JOINT PROCEDURAL AGREEMENT.
14

15 WHEREAS, Pierce County owns approximately 930 acres of land in
16 the vicinity of Chambers Creek, collectively known as the "Chambers
17 Creek Properties"; and
18

19 WHEREAS, Portions of the Chambers Creek Properties are located
20 within the City of Lakewood, within the City of University Place,
21 and within unincorporated Pierce County; and
22

23 WHEREAS, The Final Environmental Impact Statement for the
24 Chambers Creek Properties Master Site Plan was adopted on April 11,
25 1997, to fulfill the requirements of the State Environmental Policy
26 Act; and
27

1 WHEREAS, The Pierce County Council, with endorsement from the
2 City Councils of Lakewood and University Place, and the County
3 Executive, passed Ordinance No. 97-71s on August 19, 1997, which
4 adopted the *Chambers Creek Properties Master Site Plan*; and
5

6 WHEREAS, Ordinance No. 97-71s established that implementation
7 of the Master Site Plan by Pierce County would involve several
8 jointly adopted actions such as a procedural agreement between
9 Pierce County and the Cities of Lakewood and University Place; and
10 design and development standards governing the development of
11 Master Site Plan projects; and further provided that these joint
12 actions be forwarded to the Council for its review and concurrence
13 prior to execution; and
14

15 WHEREAS, In 2000, the City of Lakewood, City of University
16 Place, and Pierce County entered into a Joint Procedural Agreement
17 (JPA) regarding the Chambers Creek Properties and the *Chambers*
18 *Creek Properties Master Site Plan* to facilitate further use and
19 development of the Chambers Creek Properties; and
20

21 WHEREAS, Section 6 of the JPA described steps the Cities and
22 the County would take to promote the implementation of the Master
23 Site Plan, including adoption of design standards and guidelines;
24 and
25
26
27

1 WHEREAS, Following the development of draft standards and
2 guidelines, staff from each of the Cities and the County worked to
3 refine the draft standards and guidelines to ensure consistency
4 with adopted plans and regulations; and
5

6 WHEREAS, Negotiations were conducted on the draft standards
7 and guidelines with the City of University Place, and the City of
8 Lakewood which culminated in the April 3, 2003, version of the
9 *Chambers Creek Properties Standards and Guidelines, April 2003*; and
10

11 WHEREAS, The attorneys of the Cities of Lakewood and
12 University Place have concurred with a legal opinion from the
13 Pierce County Prosecuting Attorney's Office that said standards and
14 guidelines constitute development standards under Revised Code of
15 Washington (RCW) 36.70B.170(3), and thus are not subject to 60-day
16 review by the State prior to adoption, pursuant to RCW
17 36.70A.106(1); and
18

19 WHEREAS, The *Chambers Creek Properties Standards and*
20 *Guidelines, April 2003*, will facilitate further use and development
21 of the Chambers Creek Properties by Pierce County in accordance
22 with the Master Site Plan; and
23

24 WHEREAS, On June 3, 2003, the University Place City Council
25 unanimously approved University Place Ordinance No. 383, adopting
26 the *Chambers Creek Properties Standards and Guidelines, April 2003*;
27

1 WHEREAS, On July 21, 2003, the Lakewood City Council
2 unanimously approved Lakewood Ordinance No. 312, adopting the
3 Chambers Creek Properties Standards and Guidelines, April 2003;
4 NOW, THEREFORE,

5
6 BE IT ORDAINED by the Council of Pierce County:

7
8 Section 1. The Council adopts the Chambers Creek Properties
9 Standards and Guidelines, April 2003, attached hereto as "Exhibit
10 A," and incorporated herein by reference, to serve as minimum
11 standards for the development of the Chambers Creek Properties
12 under the Chambers Creek Properties Master Site Plan.

13
14 PASSED this 4th day of November, 2003.

15
16 ATTEST:

PIERCE COUNTY COUNCIL
PIERCE COUNTY, Washington

17
18 Denise D. Johnson
19 Denise D. Johnson
Clerk of the Council

Harold Moss
Councilmember Harold Moss
Council Chair

20
21 Approved As To Form Only:

PIERCE COUNTY EXECUTIVE

22
23 David J. Miener
24 Deputy Prosecuting Attorney

John Ladenburg
John Ladenburg
Approved ☒ Vetoed ☐
this 14 day of Nov, 2003.

25
26 Date of Publication of
27 Notice of Public Hearing: October 15, 2003
Effective Date of Ordinance: November 24, 2003

ORDINANCE NO. 312

AN ORDINANCE of the City Council of the City of Lakewood, Washington, adopting the Chambers Creek Properties Standards and Guidelines Establishing Development Standards and Guidelines by Which Development of the Chambers Creek Properties Shall Be Subject in Accordance with Section 6 of the Chambers Creek Properties Joint Procedural Agreement

WHEREAS, Pierce County owns approximately 930 acres of land in the vicinity of Chambers Creek, collectively known as the "Chambers Creek Properties"; and,

WHEREAS, portions of the Chambers Creek Properties are located within the City of Lakewood, the City of University Place, and unincorporated Pierce County; and

WHEREAS, the Pierce County Council passed Ordinance No. 97-71S on August 19, 1997, which adopted the Chambers Creek Properties Master Site Plan; and,

WHEREAS, in 2000, the Cities of Lakewood and University Place and Pierce County entered into a Joint Procedural Agreement (JPA) regarding the Chambers Creek Properties and the Chambers Creek Properties Master Site Plan to facilitate further use and development of the Chambers Creek Properties; and,

WHEREAS, Section 6 of the JPA describes steps the cities and the County will take to promote the implementation of the Master Site Plan, including adoption of design standards and guidelines; and,

WHEREAS, following the development of draft design standards and guidelines, staff from each of the cities and the County worked to refine the design guidelines to ensure consistency with adopted plans and regulations; and,

WHEREAS, the Final Environmental Impact Statement for the Chambers Creek Properties Master Site Plan was adopted on April 11, 1997, to fulfill the requirements of the State Environmental Policy Act; and,

WHEREAS, the attorneys of the Cities of Lakewood and University Place have concurred with a legal opinion from the Pierce County Prosecuting Attorney's Office that said design guidelines constitute development standards under RCW 36.70B.170(3), and thus are not subject to 60-day review by the State prior to adoption, pursuant to RCW 36.70A.106(1);

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF LAKEWOOD, WASHINGTON, DO ORDAIN as Follows:

Section 1. The Chambers Creek Properties Standards and Guidelines dated April 3, 2003, a copy of which is on file in the Office of the City Clerk as "Exhibit A," are hereby adopted to serve as minimum standards for the development of the Chambers Creek Properties under the Chambers Creek Properties Master Site Plan (Pierce County Ordinance No. 97-71S).

Section 2. Severability. If any portion of this Ordinance or its application to any person or circumstances is held invalid, the remainder of the Ordinance or the application of the provision to other persons or circumstances shall not be affected.

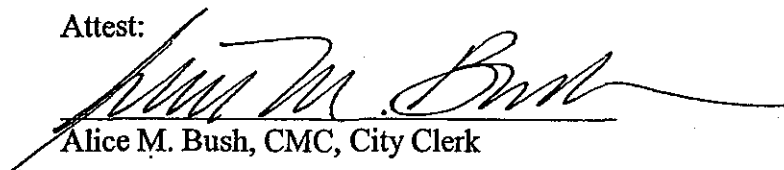
Section 3. Effective Date. That this Ordinance shall be in full force and effect on the 21st day of July, 2003, and five (5) days after publication of the Ordinance Summary.

ADOPTED by the City Council this 21st day of July, 2003.

CITY OF LAKEWOOD


Bill Harrison, Mayor

Attest:


Alice M. Bush, CMC, City Clerk

Approved as to Form:

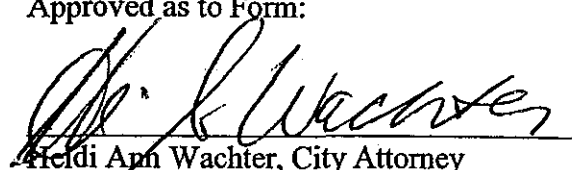

Heidi Ann Wachter, City Attorney

Figure 2: Master Site Plan

AREA 1 - North Area
Public Recreation Area: Arboretum, Golf Course, Botanical Garden and Trails

- Service/Emergency Access Road
- Water Reclamation Area (Ponds)
- Clubhouse and Parking
- Access Road
- Water Production Area
- Visitor/Environmental Education Center
- Permit-only Parking
- Public Access Pier
- Buffer Area
- Sound View Trail
- Potential Rail Relocation
- Picnic/Play Area

AREA 2
Wastewater Treatment Plant

- Production Nursery
(Interim Use in WWTP area)
- Long term expansion area
- Existing WWTP

AREA 8
Beach and Public Pier (via tunnel)

- Shoreline public access/pier
- Permit-only Parking

AREA 6 - South Area
Open Space/Boat Launches

- Buffer area
- Parking
- Passive open space
- Boat Launch (4 lanes)

AREA 4 - SWM Shop
Administration/Maintenance Facilities

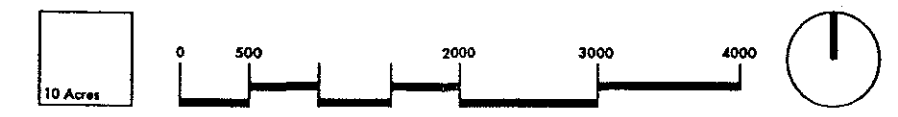
AREA 3
Grandview/64th Trail and Buffer
Public Trail, Trailhead/Overlook Area
Buffer/Steep Slopes
View Restaurant/Trailhead/Overlook/Play Area

AREA 5 - Road Shop
Government Services/Recreation/Commercial Offices
Trailhead/Overlook/Play Area
Commercial Offices
Continued Maintenance Facility
Administration/Maintenance Facilities
Playfields/Public Trail
Continued School bus lease

AREA 7
Chambers Creek Canyon Park

Note:
The Bristonwood property, identified in the MSP as Area 4, is not included in, nor subject to the JPA or the Design Guidelines, as that property was purchased by the City of University Place in December 1998. During the next amendment process for the MSP, Pierce County will process an amendment to delete Area 4 from the MSP (Ordinance No. 97-715)

Note: This is a conceptual drawing, not to scale. Detailed site plans with actual locations will be prepared during final site plan development.



development as the Chambers Creek Master Site Plan, adopted in 1997, is implemented. The Plan and the implementing Joint Procedural Agreement (JPA) between Pierce County and the Cities of University Place and Lakewood specifically call for the preparation of Design Guidelines. The JPA further provides that once Pierce County and the cities of University Place and Lakewood formally adopt the Chambers Creek Properties Design Guidelines, these guidelines and standards will replace the design and development standards of the individual jurisdictions, and will be applied to all subsequent Master Site Plan projects. Because implementation of the Master Site Plan is expected to span several decades, the Design Guidelines are intended to ensure that development on the site achieves the following:

- A unified and identifiable visual character throughout the site;
- A reflection of site-wide and area-specific conditions and characteristics; and
- A balance between the biological function and human utility of the site.

1.2.1 Master Site Plan Objectives

The following "Project Objectives" guided the development of Master Site Plan alternatives:

- Accomplish short- and long-term reclamation of the two gravel mines in a manner which allows for multiple public uses of the site and utilizes reclaimed water and other recycled waste products;
- Develop a Master Site Plan which retains flexibility in design while insuring that the unique characteristics and qualities of the site are protected;
- Be responsive to the development constraints and opportunities of the site and adjacent areas, and design the Master Site Plan to mitigate potential adverse environmental impacts;
- Include design features in the Master Site Plan that retain natural features, provide buffers and open spaces, provide for additional safe public access, and maintain environmental quality, while preserving essential functions that already exist; and
- Develop a Master Site Plan which provides economically viable uses.

1.3 Applicability of Design Guidelines

1.3.1 Replacement of Development Standards and Other Codes

Because the Chambers Creek Properties lie within three separate jurisdictions (the cities of University Place and Lakewood and unincorporated Pierce County, see Appendix 3), specific development activities to date have been regulated by the codes of the respective jurisdictions. In order to simplify the permitting process for implementation of Master Site Plan projects, and to achieve consistency among implementation projects, the three jurisdictions entered into a Joint Procedural Agreement (JPA) effective June 8, 2000, which will allow all development activities to be implemented under one consolidated permitting process.

To guide the new permitting process specified in the JPA, Pierce County has developed Design Guidelines for the Chambers Creek Properties. These Design Guidelines, which include development standards and area specific guidelines, will replace the various development regulations of University Place, Lakewood, and Pierce County for implementation of the Master Site Plan projects.

This document is organized into chapters by topics which generally pertain to each site area:

- Circulation and Access
- Parking Area Design
- Utilities
- Landscape and Site Design
- Fencing, Barriers, and Buffers
- Site Lighting
- Signage
- Architectural Guidelines
- Public Art and Interpretation

Within the chapters, detailed site development direction is provided by development standards and guidelines. Standards are quantifiable, typically use "shall" and "will," directing thereby specific mandatory design response. Guidelines provide design direction, using "should", "could", and "may", and leave the specific solution to the designer.

Both standards and guidelines are written in response to a set of design objectives for each topic, which will be used to evaluate whether a particular design response meets the stated intent. Site-wide and area-specific development standards and design guidelines apply to all Master Site Plan projects.

Where standards and guidelines are not specifically articulated in the Guidelines, the code of the jurisdiction in which

development will be located shall apply. (See Appendix I- Applicable Codes, which identifies where these Guidelines and other codes apply.)

While most of the site is within the City of University Place, some site development will occur in Lakewood and unincorporated Pierce County. Appendix 3 denotes the jurisdictional responsibilities within the Chambers Creek Properties.

Because most of the site development work will occur in the City of University Place, these Guidelines are generally intended to either replace, augment, or default to the development regulations of University Place and, in specific limited instances, to Lakewood and Pierce County. The types of development that will occur in Lakewood and Pierce County pertain to trails and parking areas. Appendix I, Applicable codes, delineates those codes that are replaced by the Design Guidelines, those that remain in place, and those which do not apply.

When applying the provisions of this document to projects governed by the Chambers Creek Properties Master Site Plan, "Standard", which provides specific performance direction, will take precedent over "Guidelines", which provide general performance direction.

1.3.2 Adjustments and Amendments

All Master Site Plan development activities on the Chambers Creek Properties shall conform to the Chambers Creek Properties Design Guidelines. Non-Master Site Plan activities which are exempt from the Design Guidelines are identified in Section 9 of the JPA, "Exemptions", and include such activities as gravel mining and mine reclamation, wastewater collection and treatment operations, road maintenance activities, transportation services, and other on going County operations, and other accessory uses.

Adjustments

The Design Guidelines are intended to provide specific parameters to a broad range of development activities on the Chambers Creek Properties. Given the breadth of these activities and the implementation time frame set forth in the Master Site Plan and the JPA, the jurisdictions recognize that some flexibility in the application of the Guidelines to specific projects will be necessary, though limited. This flexibility in application or "adjustment" is defined at two distinct levels: Minor and Major.

Minor Adjustments: An interpretation of the application of a standard or guideline to a specific development project that does not substantially alter the overall site development objectives and character as delineated in the

Master Site Plan and JPA shall be considered a Minor Adjustment. Interpretation of these Design Guidelines includes the exercise of any administrative discretion that is authorized in the applicable City or County Code provisions, or these Guidelines. Minor Adjustments shall be in writing, granted at the mutual discretion of the Pierce County, University Place, and Lakewood planning directors or designated staff members, and approved by an authorized signature.

Pierce County shall maintain a copy of all Minor Adjustment decisions. If the Directors or designated staff members are unable to reach mutual agreement on a Minor Adjustment, it shall be resolved in accordance with the procedures for Major Adjustments. Approved Minor Adjustments may be incorporated into updated versions of the Design Guidelines.

Major Adjustments: A modification of the application of a standard or guideline to a specific development project that requires an adjustment to a City or County Code provision not already modified by these Design Guidelines shall be considered a Major Adjustment. Interpretation of these Design Guidelines includes the exercise of any administrative discretion that is authorized in the applicable City or County Code provisions, or these Guidelines.

Major Adjustments will be processed through the variance procedure, or most comparable procedure established in the applicable City or County Code. Any appeals of the final decision made through the applicable procedure shall be filed pursuant to Chapter 36.70C RCW, the Land Use Petition Act. Pierce County shall maintain a record copy of all Major Adjustment decisions. Approved Major Adjustments may be incorporated into updated versions of the Design Guidelines. Major Adjustments shall not authorize a prohibited use.

Amendments

A Master Site Plan-wide change to these Design Guidelines shall be considered an Amendment. It is anticipated that each jurisdiction will periodically need to revise their respective Codes, some of which have been incorporated verbatim or as modified into these Design Guidelines. Pursuant to the JPA, unilateral actions by any of the jurisdictions cannot subsequently amend the Master Site Plan, or these Design Guidelines. The jurisdictions recognize that some flexibility and expediency in the application of these revisions may be necessary while maintaining needed predictability and consistency.

To facilitate the incorporation of these periodic changes and maintain the effectiveness of these Guidelines, Pierce County, University Place, and Lakewood will annually provide a report

documenting revisions to any of the code sections incorporated by reference into these Design Guidelines. The annual report may include a request to immediately initiate the Amendment process pursuant to Section 10 G of the JPA. Regardless of whether any code revisions or other amendments to these Design Guidelines are adopted during the intervening years, the Guidelines will undergo a complete review and revision process every five years. The five year cycle will start on the original effective date of the Guidelines, and will not be based on the effective date of any intervening amendment processes. During the five year update, the applicable City and County Code revisions will automatically be incorporated into the Design Guidelines as adopted unless one or more of the parties requests negotiation to modify any of the revisions. All mutually agreed upon revisions will be incorporated into the updated Design Guidelines.

Pierce County shall maintain a copy of all Amendment decisions. Approved Amendments will be incorporated into updated versions of the Design Guidelines.

1.4 Permitting & Design Review Process

The permitting and design review process to be used for the Chambers Creek Properties is delineated in Section C of the Joint Procedural Agreement. Each jurisdiction is invited to participate in the Design Review of individual development projects. The JPA states that:

All parties shall be responsible for reviewing applications and providing comments in a timely manner as set forth in applicable City Code and/or state law. After adoption and implementation of the Design Guidelines, University Place will serve as the single point of application and administration for all building and related permits and associated SEPA documents, regardless of which party or parties have underlying jurisdictional responsibility, and shall administer the Design Guidelines on behalf of the three jurisdictions (Cities of University Place and Lakewood and Pierce County). The appointed staff members of the three jurisdictions shall review and comment on all development applications and their consistency with the Design Guidelines.

Appeals or disputes regarding a development project's consistency with the Design Guidelines shall be resolved by the appointed staff members of the three jurisdictions.

Except as specifically noted, permit processing shall follow applicable City of University Place procedures in effect at the time of application. Further detail regarding permitting, the design review process, and dispute resolution is outlined in the JPA.

1.5 Severability

If any parts of these Design Guidelines are found to be invalid, all other parts shall remain in effect.

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Section 2: Circulation & Access

Section 2 guides the design of circulation and access to, from and within the site, and recognizes its importance to the overall experience of users within the Chambers Creek Properties. Section 2 addresses the location and type of circulation and access facilities, including vehicular roadways, pedestrian walkways and pathways, pedestrian and bicycle trails, emergency and service access, and site entrances.

Pierce County will maintain a system of private roadways and trails; no public streets will exist on the Chambers Creek Properties. Circulation and access facilities should be integrated into the site landscape and should contribute to a rich experience of the site by users, whether they are on foot, bicycle, in cars or buses.

This section outlines on-site circulation facilities and their purpose, width, surfacing materials, and uses. All circulation facilities should be developed within this hierarchy, as described in Figures 3 and 4.

Figure 3: Hierarchy of circulation system

Type	Purpose	Width	Users
Roadway	Vehicle Circulation	20-24' (2-way) 16' (1-way)	Trucks, cars, bikes
Urban Trail and Emergency /Service Access	Recreation and emergency /service access	12' with 2' shoulders	Pedestrians, bikes, skates, emergency/service vehicles
Walkway	Pedestrian Circulation	5-6'	Pedestrians
Pathway	Circulation between walkways, trails, and buildings	4'	Pedestrians
Nature Trail	Recreation	2-4'	Pedestrians

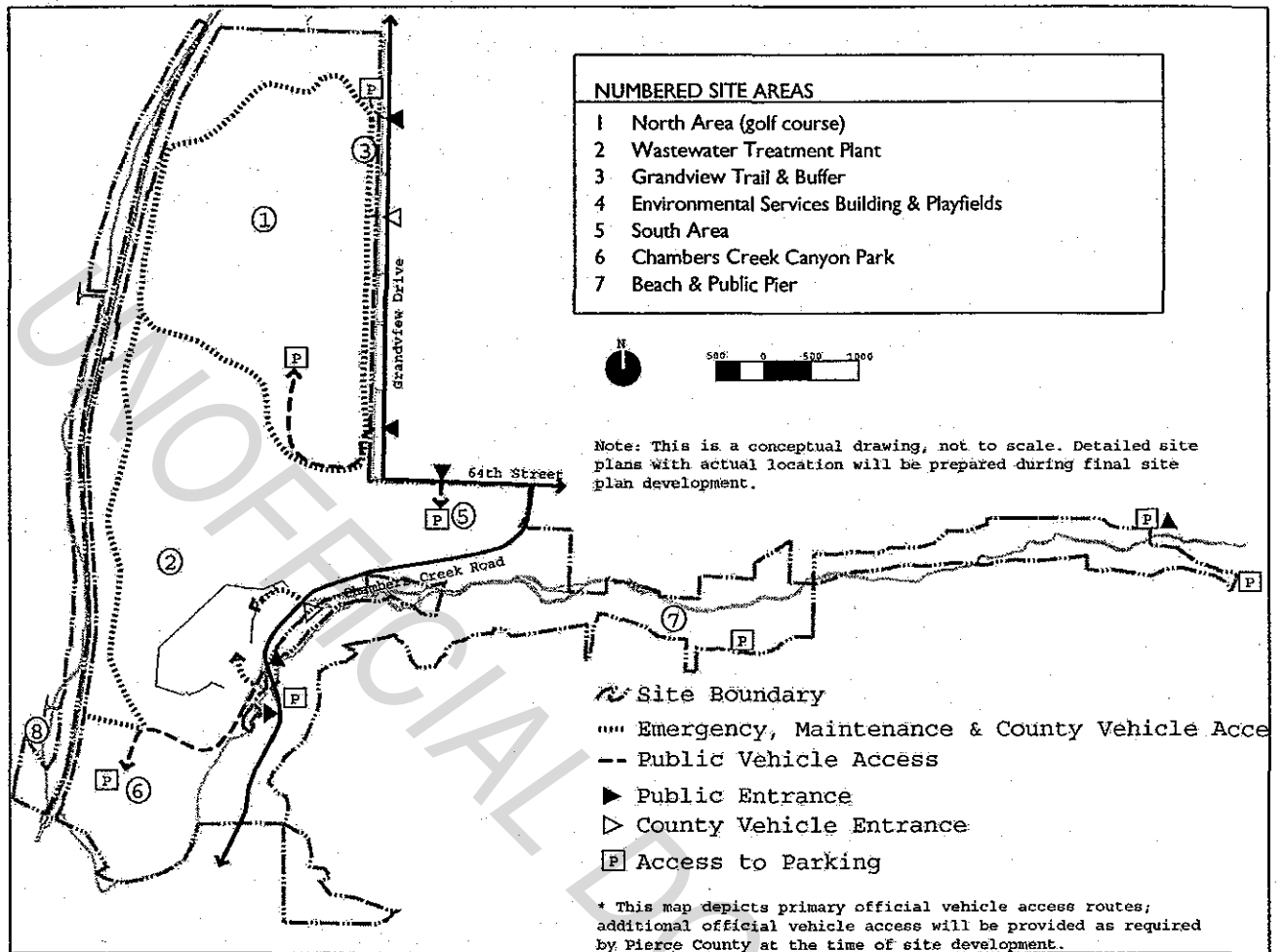


Figure 4: Vehicle roads and entries

2.1 Site Entrances & Gateways

2.1.1 Design Objectives

- To provide vehicle site access as described in Figures 4 and 5.
- To create clearly identified entries to the site that respond to site context and uses.
- To create a distinctive visual identity for the site through gateways and entries that allows visitors to know that they have entered the site.
- To provide clear and consistent signage at all site entries.
- To consolidate public access to the site with three major public vehicular entrances.

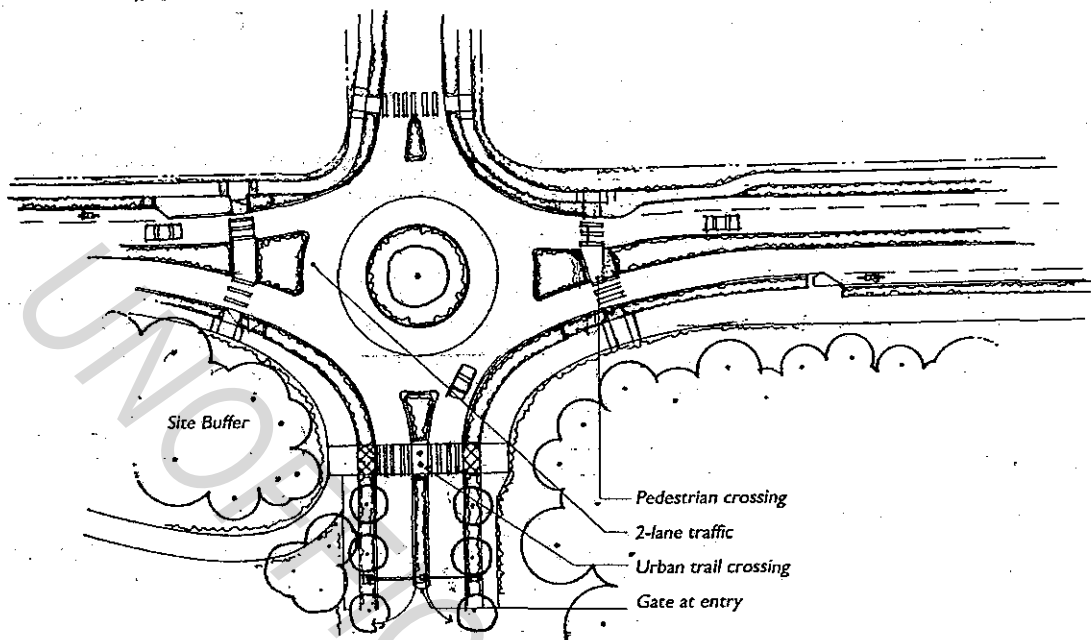


Figure 5: Site entry diagram (Area 3)

- f) To utilize design features that improves public safety and sense of security for visitors.
- g) To provide clear distinction between public accesses and restricted entrances to the site.

2.1.2 Development Standards

- a) Intersections of site roadways with public city streets shall be designed per the City of University Place Public Works Standards.
- b) All public vehicle entrances shall provide for both ingress and egress.
- c) Trails and vehicle entries will be controlled access points to the site. Vehicular entries will be gated for security purposes. Bollards at trail/entrances will prevent general vehicular use while permitting emergency and service vehicle access.
- d) Access provisions shall allow and support 24-hour access for county operators and emergency vehicles.

2.1.3 Design Guidelines

- a) Public vehicle entries should have at least one vehicle lane in each direction for entry and exit.
- b) Landscaping at site entries should be provided according to locations in specified "landscape types" (See Chapter 5, Figure 20, Landscape Types).
- c) Site entries should be designed to allow vehicular turnarounds when entry gates are closed.
- d) The public entrance to Area 3 (one of the three major public entrances) will be located on Grandview at 62nd Avenue West (Figure 5).

2.1.4 Area-Specific Standards and Guidelines

Area 1 (North Area) & Area 3 (Grandview Trail & Buffer) Standards

- a) A public pedestrian gateway plaza at Grandview and Cirque Drive, designed in conjunction with any street improvements, shall serve as the northern trailhead for Grandview/Soundview Trails.
- b) Pedestrian crossings and walkways must be clearly marked for pedestrian safety.

Area 1 (North Area) and Area 3 (Grandview Trail & Buffer) Guidelines

- c) The entrance to Areas 1 and 3 is a major public gateway, which should be formal yet naturalistic in appearance, and which should provide a glimpse into the site and its sweeping views of the Puget Sound and beyond. It should incorporate elements of the Grandview Drive improvements while providing a visual transition to the site.
- d) Additional pedestrian entries should be located along Grandview Drive to connect the public to the Grandview Trail.
- e) Pedestrian entrances on Grandview should be minor in scale designed to coordinate with Grandview improvements.

Area 5 (Environmental Services Building and Playfields) Standards

- f) The site entry on 64th east of Grandview (one of three major entrances) shall provide access to Area 5 (Pierce County Environmental Services Building and playfields).

Area 5 (Environmental Services Building and Playfields) Guidelines

- g) The entrance to Area 5 shall be visually compatible with other entries.
- h) This entry will be controlled access, with public pedestrian crossings and bicycle access.

Area 6 (South Area) Guidelines

- i) Public access to the South End (Area 6) should be located on Chambers Creek Road at the same location as the Area 2 entrance. The entrance may be modified to better facilitate vehicle access to Area 2 and 6.
- j) The Chambers Creek Road entrance to Area 6 should be visually compatible with adjacent landscapes as well as other site entrances.

Area 7 (Canyon Park) Guidelines

- k) Four parking areas in Area 7 will provide informal access to trailheads. These parking areas will be located at Chambers Creek Road, Phillips Road, Zircon Road, and Chambers Lane (Figure 4).

2.2 Interior Access Roadways

Note: Grandview Drive W., 64th St., and Chambers Creek Rd. are public streets and are subject to the City of University Place development standards. Interior roadways are private streets which will be developed according to these Guidelines.

2.2.1 Design Objectives

- a) To provide adequate interior site access for site users, including visitors, employees, and for service and emergency vehicles on "private" roadways.
- b) To limit vehicular access through site interior via discontinuous road network.
- c) To provide the minimum necessary interior roadways on site, minimizing impervious surfaces and visual intrusion of roadways.
- d) To link urban trails for bicycle and pedestrian access.
- e) To provide direct bicycle and pedestrian access between Areas 1, 3 and 5 to Area 6.

2.2.2 Development Standards

- a) Limited vehicular access to the site interior of Areas 1, 5, and 6 shall be provided as identified in Figure 4.

- b) No public streets will exist on the Chambers Creek Properties.
- c) Public access roadways shall be 16 to 24 feet in width with a rolled curb and, where possible, using bioswale for drainage (Figures 6-9), and acceptable alternatives identified in the King County Surface Water Design Manual (1998) where needed.
- d) Roadways must comply with the City of University Place standards for road gradients and curves. The City of University place Public Works Department and the University Place Fire Marshall must approve variations from these standards.
- e) Pedestrian walkways shall be provided to service all major public uses on the site and shall be separated from roadways with a 4' minimum landscaped planting strip. Walkways shall parallel the major access roadways from Grandview Drive to the view restaurant, golf course/club house/ facilities, (Area 1), and to the Environmental Services Building and Playfields in Area 5. Walkways shall also connect Area 6 to the Canyon trailhead and parking areas.
- f) Pedestrian walkways shall be provided in and through parking areas.
- g) Parking areas shall be separated from roadways to visually screen and allow for closure of parking areas.
- h) Parking shall generally not be allowed on roadways, and where, in limited instances, parking is allowed, room must be provided for emergency vehicle access.
- i) Intersections shall be well-lit and clearly marked to distinguish areas for vehicular use from the pedestrian realm.
- j) Bicycles may use roadways in areas without urban trails. No separate designated bike lane will be provided.

2.2.3 Design Guidelines

- a) Improvements to existing roadways should follow grades of existing routes where possible to reduce erosion of hillsides and slopes. Grades and curvatures of new roadways will be built to City of University Place Standards. Roadways should be located in response to site topography, views and other natural features as much as possible.
- b) To avoid accidents, pedestrian use of roadways should be discouraged by providing clear, designated pedestrian facilities adjacent to roadways.

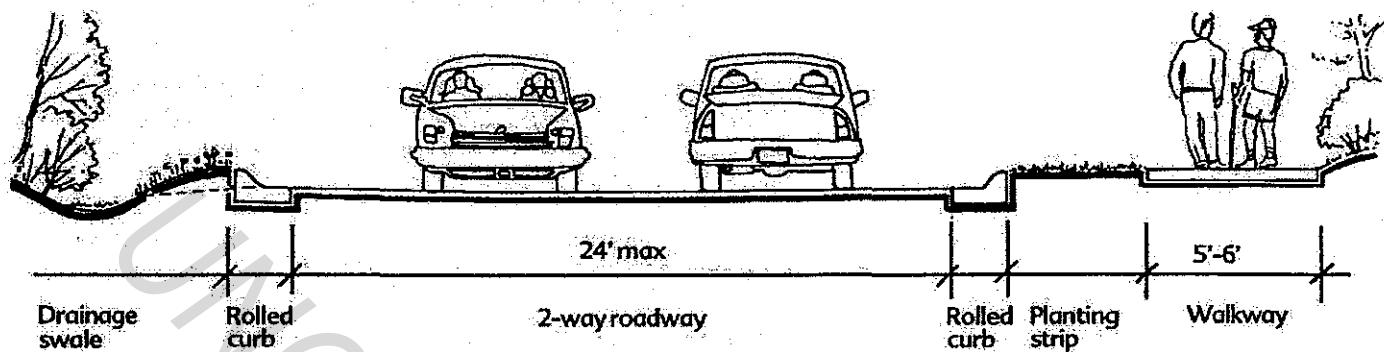


Figure 6: 26-foot two-way roadway section with drainage swale and sidewalk (typical condition)

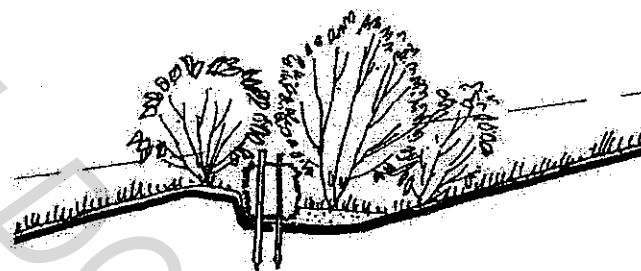
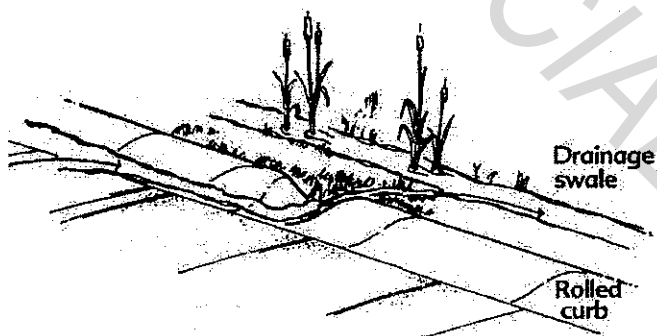


Figure 7: Rolled curb and drainage detail

Figure 8: Drainage swale on steep slope

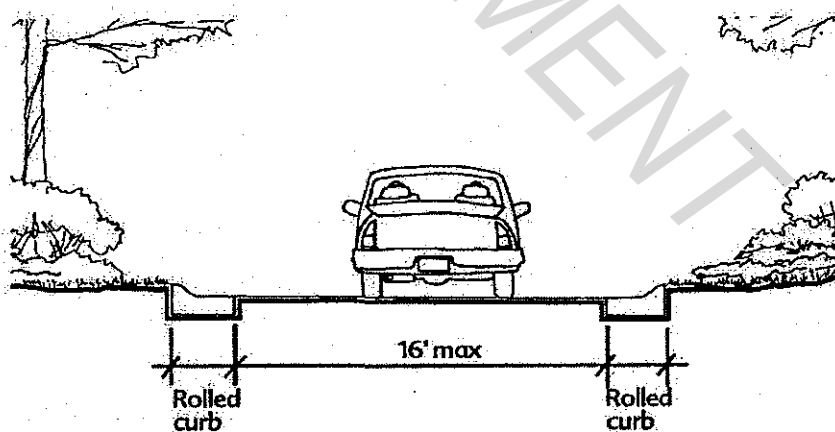


Figure 9: 16-foot one-way roadway section (for one-way roadway loops)

2.2.4 Area-Specific Standards and Guidelines

Area 1 (North Area) & Area 3 (Grandview Trail & Buffer) Guidelines

- a) Public vehicular access will be provided to the golf course, arboretum/botanical garden and the north dock (ADA only), view restaurant, and Grandview Trail south parking area.
- b) A pedestrian walkway shall be provided on the upslope side adjacent to the Area 1 entrance roadway.

Area 2 (Wastewater Treatment Plant) Guidelines

- c) Vehicular access into Area 2 will be generally limited to County and other official vehicles.

Area 5 (Offices and Playfields) Standards

- d) Vehicular access shall be provided to the offices and playfields and associated parking areas.

Area 6 (South Area) Standards

- e) Public entrances and accesses shall be clearly distinguished from those for non-public use.

Area 6 (South Area) Guidelines

- f) Vehicular access (ADA only) to Area 8 should be provided in Area 6.

2.3 Service & Emergency Access

2.3.1 Design Objectives

- a) To provide access to the site interior for service and emergency vehicles from adjacent public rights of way and from the sites interior roads.
- b) To provide the minimum necessary service and emergency access roads in the interest of minimizing impervious surfaces and visual intrusions on site.

2.3.2 Development Standards

- a) Service and emergency vehicles shall use urban trails for access (Figures 10 and 11) where available in the interest of providing emergency services on urban trails, adding minimal impervious surface to the site and to avoid redundant accesses. Trails shall not be used for public vehicular access.

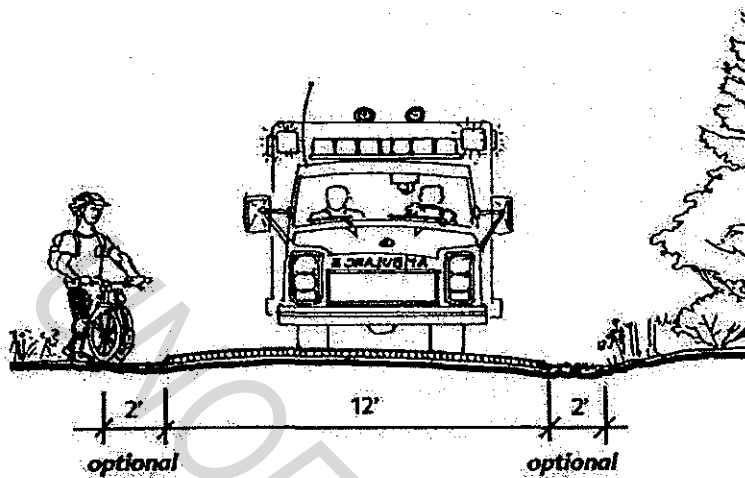


Figure 10: Urban trail/Service & emergency access

- b) Service and emergency roads shall be a minimum of 12 feet wide (Figure 10).
- c) Accepted all-weather surfacing, including permeable crushed rock, gravel, or other porous surfacing shall be used (as listed in Section 2.5) for service and emergency vehicle access where urban trails are not available. Emergency vehicle access with grades in excess of 12% must be paved.
- d) Service and emergency access through Area 2 will be provided to connect Areas 1 and 6.
- e) If grading and slope configurations allow, an emergency and service route shall be provided between Areas 2 and 5.
- f) Pavement and structural sub-base of trails must be designed to be capable of handling occasional emergency and service vehicle use.
- g) Turn-around areas shall have a 46-foot radius where a cul-de-sac or T-intersection is provided.
- h) Service and emergency roads shall be gated and locked to prohibit non-official use. Where trails are used for service and emergency purposes, removable bollards should be used to control and provide access.

2.3.3 Design Guidelines

- a) The visual impact of service and emergency access roads should be minimized by integrating them with trail infrastructure where possible.
- b) Service and emergency access roads should be sited to also serve as an urban trail where possible and to provide emergency access on trails. Trails should not be used to provide public vehicular access (Figures 10 and 11).

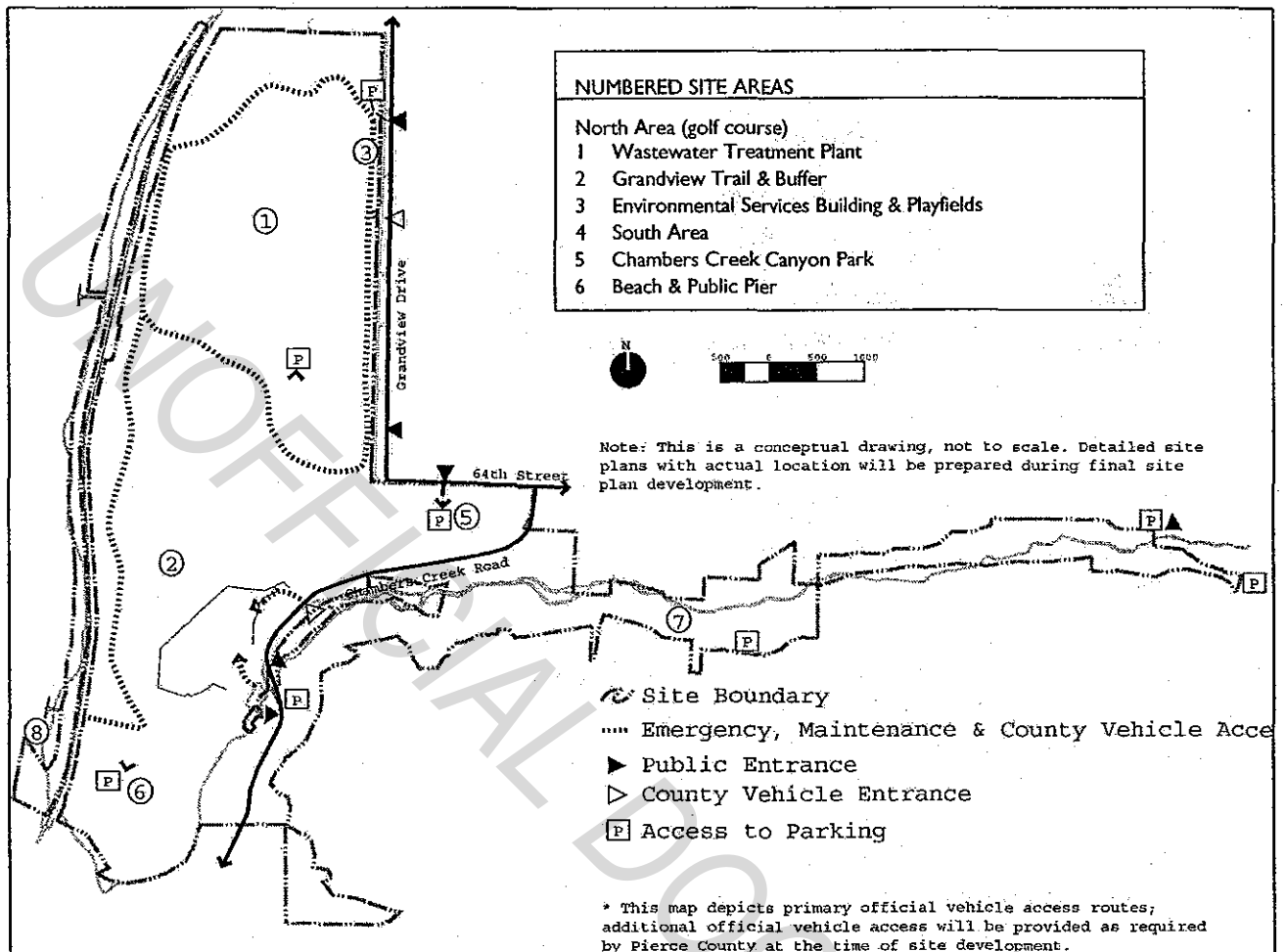


Figure 11: Non-motorized circulation

- c) Existing access roads for service and emergency vehicles may follow grades of existing routes where possible (up to a 15% grade) but shall be designed to City of University Place Emergency Vehicle standards and the Uniform Fire Code (as a guideline).
- d) New access roads for service and emergency vehicles shall be designed to the City of University Place Engineering and Emergency Vehicle standards.

2.3.4 Area-Specific Standards and Guidelines

Area 1 (North Area) Standards

- a) Grandview and Soundview Trails should serve as emergency access roads and shall be linked using the connector loop trail along the northern boundary of the site and from the North Dock to the parking area in Area 1.

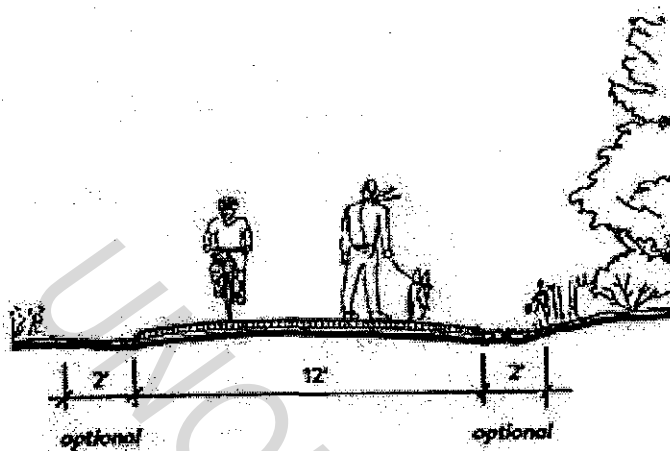


Figure 12: Urban trail section

Area 2 (Wastewater Treatment Plant) Guidelines

- b) Access for service and emergency vehicles should be provided to connect Areas 1, Area 5 and Area 6 where urban trails are not available or provide too circuitous a route.
- c) Access road design should conform to the site-wide standards for service and emergency vehicle access unless official operations require a specific alternative standard.
- d) Service and emergency access should be provided to the wastewater treatment plant and other Area 2 uses as specified by Pierce County.

2.4 Non-Motorized Circulation

2.4.1 Design Objectives

- a) To provide the public nonvehicular access throughout the site except in the Wastewater Treatment Plant (Area 2).
- b) To minimize conflicts between vehicular and pedestrian uses, and to provide separate vehicular and nonvehicular access and circulation where possible and necessary for safety purposes except on urban trails, which shall double as trails and emergency access routes to non-motorized use areas of the site.
- c) To locate pedestrian access away from environmentally sensitive areas as much as possible.
- d) To provide visual and physical links between uses such as parking areas and trailheads.

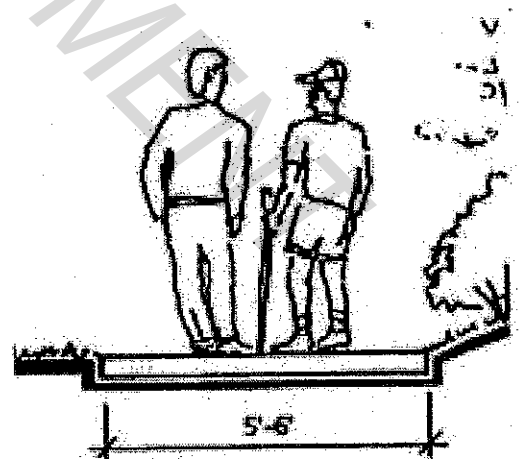


Figure 13: Pedestrian walkway (occurs adjacent to roadways)

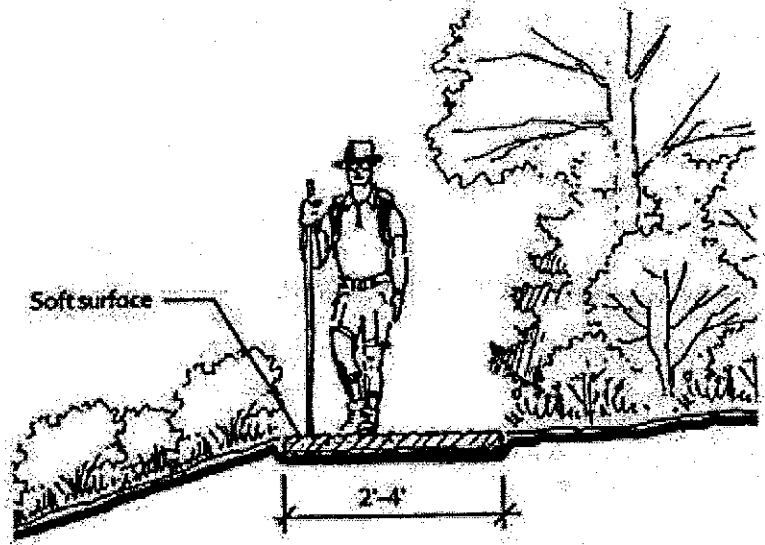


Figure 14: Nature trail

- e) To provide accessible public trails and walkways where feasible. Steep canyon walls, wetlands, and unstable slopes may restrict accessible routes in Area 6 and Area 7.
- f) To provide joint use sidewalks, walkways, and trails where appropriate to avoid construction of redundant facilities and to minimize site development impacts.

2.4.2 Non-Motorized Circulation Development Standards

- a) Non-motorized Urban Trail site circulation is identified in Figure 11. Precise location of walkways and pathways will be determined as individual development projects occur in order to establish the most beneficial pedestrian connections and to minimize site impacts.
- b) Access to trailhead parking lots will be gated between dusk and dawn.
- c) Equestrian use of trails shall be prohibited.
- d) Informational signage along trails will specify daylight hour trail usage only.
- e) Bicycles shall be allowed on urban trails and interior roadways only. Bicycles are prohibited on public pathways, walkways, and nature trails.

Urban Trail Standards

- f) Urban trails shall conform to the Pierce County standard for urban trails, 12 feet wide with asphalt, concrete surfacing, or other accepted all-weather surfacing (see Section 2.5 Paving Materials) and optional 2-foot gravel shoulders (Figures 12 and 15).
- g) Urban trails are appropriate in Area 1 (Grandview and Soundview Trails), Area 5 (near playfields and on 64th Avenue), Area 6 (Soundview Trail), as a connection to the Canyon Trail in Area 7 or Area 8 (Beach Access), and as major connector trails. See Figure 8 for approximate location of urban trails.
- h) Urban trails may be jointly used as walkways and pathways or sidewalks on street frontage where appropriate to avoid construction of redundant facilities and to minimize site development impacts. No gravel shoulders are required in Areas 3 and 5 where urban trails are used as sidewalks or walkways.

Walkway Standards

- i) Walkways for pedestrian circulation shall be provided adjacent to major interior roadways in areas without urban trails. Service and emergency accesses may be used jointly as walkways.
- j) Walkways adjacent to entry roads shall be provided, particularly near major site entrances (i.e., Area 1) and near off site parking areas.
- k) A minimum of 4-foot planting area shall be used to buffer pedestrian walkways from interior roadways where located adjacent to roads.
- l) Walkways shall be all-weather surfaces, including asphalt or concrete paved (see Section 2.5), and be 5 to 6 feet in width (Figures 13 and 15). Walkways may be wider in selected areas where pedestrians gather (i.e. parking lots or plazas).
- m) Walkways will be located on a site-specific basis as individual development projects occur in order to establish the most beneficial pedestrian connections and to minimize site impacts.

Pathway Standards

- n) Pathways shall lead pedestrians between buildings, parking areas, and other uses within close proximity of each other.
- o) Clear, safe, designated pedestrian access shall be provided between buildings, parking areas, and other pedestrian access areas to link trail segments.

- p) Pathways shall be a maximum of 3-4 feet wide all-weather surfacing (see Section 2.5), concrete gravel, or other all-weather surfacing (Figure 15). Pathways may be wider in selected areas where pedestrians gather.
- q) A visual transition between different areas of use shall be provided using appropriate landscape treatments adjacent to pathways.
- r) Pathways will be located on a site-specific basis as individual development projects occur in order to establish the most beneficial pedestrian connections and to minimize site impacts

Nature Trails Standards

- s) Nature trails shall conform to the Pierce County standard for nature trails, 2-4 feet wide with soft, porous surfacing (Figure 14 and 15).
- t) Nature trails shall be sited and designed to ensure that public access is discouraged in environmentally sensitive areas such as wetlands and unstable slopes.
- u) Nature trails are appropriate in Area 5 (on the perimeter of the playfields), Area 7 (Canyon Park), and as minor connector trails throughout the site.
- v) Nature trails will be limited to foot traffic only.
- w) Nature Trails will be located on a site-specific basis as individual development projects occur in order to establish the most beneficial pedestrian connections and to minimize site impacts.
- x) Emergency call boxes should be located at all trailheads, in Area 8, and in other isolated areas of the site on an as-needed basis.

Crosswalks Standards

- y) Clear and safe crosswalks shall be provided across vehicular roadways at all pedestrian crossings. Crosswalks shall be visually and tactilely different from the roadways through the use of paint or other materials.

2.4.3 Area-Specific Standards and Guidelines

Area 1 (North Area) Standards

- a) Lighted pedestrian pathways shall be provided between the central parking area, arboretum/botanical garden, clubhouse, golf course, and urban trail access points.
- b) A walkway shall be constructed adjacent to the Area 1 entrance roadway on the upslope side.

Area 3 (Grandview Trail & Buffer) Standards

- c) Lighted pedestrian pathways shall be provided between the restaurant, parking area, trailhead, and Grandview Drive.
- d) Transitions between Area 3 uses shall be provided through appropriate landscape treatments adjacent to pathways. This transition space should reflect and serve as an entry to the Grandview Trail.

Area 3 (Grandview Trail and Buffer) Guidelines

- e) Regrading of the western slope below the Grandview Trail should occur where appropriate to stabilize slopes and to improve conditions for planting and vegetation.

Area 6 (South Area) Standards

- f) Lighted pedestrian pathways shall be provided between the main parking area, administrative offices, and trailheads for Area 6 trails.
- g) Walkways shall be provided along the roadway to connect pedestrians to the public beach and pier in Area 8, and to connect Area 6 to Chambers Creek Road.

Area 6 (South Area) Guidelines

- h) Nature trails in Area 6 should provide clear delineation between trail and grassland while still providing the feeling of an open meadow for trail users.

2.4.4 Accessibility Standards

- a) Site facilities shall be accessible as much as possible. Nature trails, and trails located on steep slopes will not meet ADA standards.
- b) Site facilities shall be developed according to State accessibility standards.

2.4.5 Skateboard Deterrents

- a) Hardware that deters skateboarder use of ramps and public plazas shall be installed as needed on a case by case basis.

2.5 Paving Materials

2.5.1 Design Objectives

- a) To provide durable, cost-effective paving material that is appropriate for each walking and driving surface.
- b) To allow the minimum necessary impervious surfaces on the site, and to encourage the use of porous paving as much as possible.
- c) To reduce reliance on volatile organic compounds (VOC's) such as tar and petroleum products for site paving and to encourage the use of alternative pavements such as tree-resin based paving products.
- d) To support the purpose of demonstrating environmental sensitivity and sustainability on the Chambers Creek Properties.

2.5.2 Development Standards

- a) Figure 15 identifies appropriate paving materials for vehicular and pedestrian facilities.
- b) Concrete is an appropriate paving material for areas which will experience heavy vehicular and pedestrian use. Concrete is an appropriate paving material for all pedestrian and vehicular facilities (roadways, parking areas, emergency and service access, walkways, pathways, urban trails, and pedestrian plazas) except overflow parking areas and nature trails.
- c) Asphalt is appropriate paving material for areas which will experience heavy vehicular and pedestrian use and which will have appropriate drainage facilities. Asphalt is an appropriate paving material for all pedestrian and vehicular facilities (roadways, parking areas, emergency and service access, walkways, pathways, urban trails) except overflow parking areas, nature trails, and pedestrian plazas.
- d) Resin pavement (such as tree-resin based pavement material) is appropriate paving material for areas which are typically paved with concrete or asphalt, including roadways, parking areas, emergency and service access, walkways, pathways, urban trails, and pedestrian plazas. Resin pavement is not appropriate paving material for nature trails or overflow parking areas.
- e) Gravel is appropriate for low-use and -impact areas of the site which will have informal drainage systems, including emergency and service access (when separate from urban trails), pathways, and nature trails.

Figure 15: Appropriate paving materials

Material	Roadway	Parking Areas	Parking Overflow	Emergency/ Service Access*	Pathway	Walkway	Urban Trail	Nature Trail	Plaza
Concrete	•	•		•	•	•	•		•
Asphalt	•	•		•	•	•	•		
Resin Pavement	•	•		•	•	•	•		
Gravel				•	•			•	
Bark								•	
Unit Pavers/Masonry					•	•			•
Grasscrete			•	•					

* When separate from urban trails

- f) Gravel is not appropriate paving material for roadways, walkways, parking areas, urban trails, pedestrian plazas, or emergency vehicle access with grades steeper than 12%.
- g) Bark is an appropriate paving material on site for nature trails only.
- h) Unit pavers/masonry are appropriate pavement materials for pathways, walkways, plazas, and pedestrian crosswalks. Unit pavers are not appropriate for roadways, parking areas, parking overflow, emergency/service access, or nature trails.
- i) Grasscrete is an appropriate paving material on-site for emergency/service accesses and overflow parking areas only.
- j) Roadway paving will be constructed to City of University Place Standards.

2.6 Transit Facilities

2.6.1 Design Objectives

- a) To provide loading and layover space on site to accommodate transit and High Occupancy Vehicles.

2.6.2 Design Guidelines

- a) Vehicle loading and waiting areas should be provided in public areas of the site where users are likely to arrive by transit, such as Areas 1/3, and 6.

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Section 3: Parking Area Design

The primary purpose of the Design Guidelines for parking areas is to ensure that development of parking areas does not overwhelm the site aesthetic or environmental quality. Parking areas should be designed such that both their visual and ecological impact is minimized.

The numbers of parking stalls to be provided per site use was determined in the MSP and are listed in this document in Appendix 2.

3.1 Parking Lot Requirements

3.1.1 Design Objectives

- a) To provide adequate on-site parking in locations convenient to future site uses.
- b) To provide ample pedestrian circulation through parking areas.
- c) To locate and screen parking lots so that they are not the visually predominate element within the site landscape (boat launch parking may be excepted) (See Section 5.7, View Protection).

3.1.2 Development Standards

- a) These standards shall apply to all parking lots with 10 or more spaces.
- b) The minimum dimensions for parking spaces shall be:
 - Standard space: 8 feet wide and 18 feet long,
 - Compact space: 8 feet wide by 15 feet long,
 - ADA stalls as required State of Washington,
 - Aisle width: 24 feet (90° head-in parking and two-way traffic) or 16 feet (angle parking and one-way traffic).
- c) Fifty percent of stalls in lots containing more than 20 total stalls may be compact stalls. Compact stalls shall be labeled as such.
- d) Overflow parking areas shall be constructed with permeable materials to avoid excessive paving and reduce run off (See Section 2.5, Paving Materials).
- e) Consolidated parking with oversize stalls will be provided for buses and other large vehicles.
- f) Pedestrian pathways through parking lots will provide direct connections to the uses they serve and to other adjacent public areas (Figure 16).

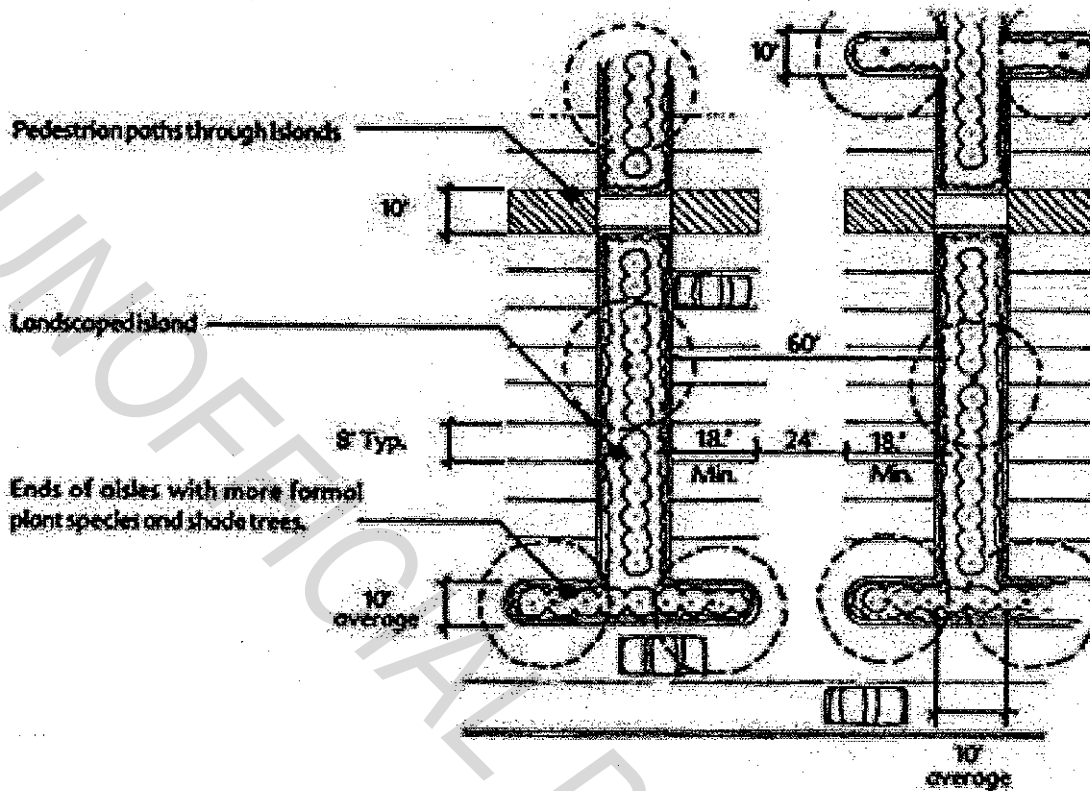


Figure 16: Typical parking plan

- g) Pedestrian pathways will be provided across drainage and planting areas within parking lots as necessary to provide direct connections to the uses they serve and other adjacent public use areas.

3.1.3 Design Guidelines

- a) These guidelines apply to parking lots with 10 or more spaces.
- b) Create parking areas that look natural and respond to the site's existing and future landscape characteristics.
- c) A curvilinear parking pattern should be utilized as feasible to minimize the visual mass of parking areas.
- d) Parking should be sited away from steep slopes, established stands of vegetation, and outside of public view areas to avoid creating view impacts (See Section 5.7, View Protection).

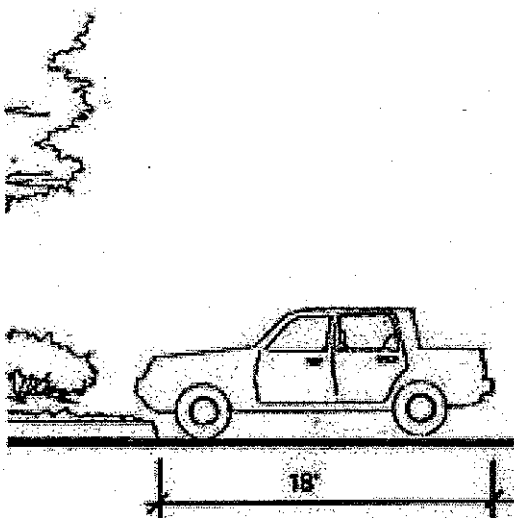


Figure 17: Parking stall and curb placement

- e) Large parking areas should be broken up into smaller areas which are separated and screened visually using vegetation, topography, and terracing, where appropriate.
- f) Ninety-degree head-in parking is preferred throughout the site, except at Chambers Creek Canyon trailheads and at the boat launch, where diagonal parking may be appropriate due to space constraints and turning radii.
- g) Curb stops should be minimized in parking areas. Curbs of vegetated islands may serve as curb stops with 1.5 feet of low groundcover planted along island perimeters. Recycled and other non-traditional materials for curb stops should be used where possible (Figure 16).
- h) Provide parking lot features which improve public safety, sense of security and visibility of the surrounding area, including lighting and appropriate landscape treatments.
- i) Shared parking strategies should be used among adjacent site uses where possible to reduce site-wide parking requirements, for example, administrative and office parking may be shared in part with playfield parking, as can other adjacent uses whose peak use times are different.

3.1.4 Area-Specific Standards and Guidelines

Area 1 (North Area) Guidelines

- a) The central parking area should be sited at the bottom of the hill below the major site entrance near the golf course club house.
- b) The parking area should be broken up into smaller areas with landscaping and/or terraced into benches to break up the visual expanse and scale of the parking area.
- c) The parking area should be sited such that it does not obstruct views (See Section 5.7, View Protection).

Area 3 (Grandview Trail & Buffer) Guidelines

- d) The view restaurant and trailhead parking area should be sited so as not to obstruct views from the restaurant or public use areas (See Section 5.7; View Protection).
- e) The parking area should be broken up into smaller areas with landscaping and/or terraced into benches to break up the visual expanse and scale of the parking area (See Section 5.7, View Protection).
- f) The parking areas should be located so that they do not obstruct or impact views from above.

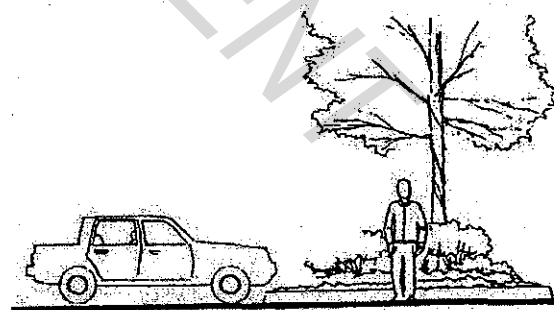


Figure 18: Pedestrian walkway through planting area

Figure 19: Plant sizes and spacing for parking areas

Plant Type	Size at time of planting	Spacing	Uses, comments
Deciduous trees, shade/canopy	2" diameter caliper, balled and burlapped. No bare root trees allowed	Maximum spacing as street trees: 30 feet on center, 25 feet on center in parking lot perimeters	Use as shade, canopy trees, break up parking lot areas in islands
Deciduous trees, small/decorative	2" diameter caliper, balled and burlapped. No bare root plants allowed	As clumps, specimens (such as Vine Maples, Shadblows, wild cherries)	Use as colorful accents and naturalization.
Coniferous trees	12'-10', balled and burlapped, no bare root trees allowed	8-10 feet on center as solid row or clumps	Use as screening, clumped, or as backdrop for colorful deciduous tree species
Large shrubs	5-gallon pots or tubs, or balled and burlapped	4-5 feet on center maximum	Mass planting or clumps for hedging where sight lines are not a problem.
Small, medium shrubs	3-gallon or 5-gallon pots at time of planting	2-3 feet on center	Hedges, massing, and edge definition, color and for fragrance
Ground covers	1-gallon pots at time of planting	3 feet on center to assure coverage in 3 years time. Should be evergreen.	Green cover of ground in lieu of grass, naturalizing areas.
Emergent Plant Species	1-gallon plants or rhizomes	1-3 feet on center	May be used in drainage swales to capture sediments, provide filtration, and protect erosion

Area 5 (Offices and Playfields) Standards

- g) Parking lots shall be screened from views on 64th St. West with the use of landscaping, terraces, and other appropriate means.

Area 5 (Offices and Playfields) Guidelines

- h) Parking for offices and playfields should be shared as much as possible.

Area 6 (South Area) Guidelines

- i) The central parking area should be located to avoid view impacts as much as possible (See Section 5.7, View Protection).

3.2 Parking Area Landscaping

3.2.1 Design Objectives

- a) To minimize impervious surfacing of parking areas.
- b) To minimize visual impacts of parking areas.

3.2.2 Development Standards

- a) Figure 19 identifies required plant sizes and spacing for parking lots.
- b) Landscaping within and around parking areas shall be provided to minimize visual impacts, screen illumination, and to provide pervious surfacing/drainage swales.
- c) Parking area landscaping shall be averaged over the entire parking lot.
- d) A landscaped area of a minimum average width of 10 feet and length of 18.5 feet shall be provided between every 10 parking stalls.
- e) Perimeter landscaping around parking areas shall be a minimum average width of 15 feet, from inside of curb to inside of curb, and planted with a combination of berming, trees, shrubs and ground covers required.
- f) Landscaped interior parking lot islands should be a minimum average of 10 feet wide from insides of curbs, and planted in trees, native ground covers and shrubs.
- g) Interior parking landscape areas should be an average of 10 feet in width minimum and may contain walkways, pathways, or drainage swales.
- h) Irrigation is required in all parking area landscaping for a minimum of three years, to establish plant viability.
- i) Section 5.1 and Figure 20 provide additional detail regarding acceptable landscape materials by site area.
- j) Grass shall not be considered a substitute for groundcover.

3.2.3 Design Guidelines

- a) Integrated landscaping and biofiltration methods should be utilized to reduce drainage and nonpoint source pollution caused by surface parking. These methods should be dispersed (as opposed to consolidated) throughout each parking area to maximize the visual effect of such landscape treatments.
- b) Shrubs in planting islands should not exceed 3 feet from tops of curbs in order to preserve sight lines in parking lots.
- c) Shrubs species in drainage swales in the parking lots that exceed 3 feet above curb heights should consist of those that respond well to periodic pruning.
- d) Bark mulch used in parking area landscaping should be well-decomposed mulch, and be used at a depth not exceeding 2-1/2 inches after settlement, so application should be used at 3 inches.

- e) To assure survival of planting in high-use areas, soil depths should be adequate to store water during dry seasons and normal periods of precipitation.
- f) Reclaimed/re-used water may be used for irrigation where possible.
- g) Drainage swales should be used to convey and treat stormwater.
- h) Soils should allow moisture retention for plant survival and still allow adequate drainage so as not to drown plant roots.
- i) Soil depths will be affected by the excessively fast percolation rate of subsurface sands and gravels, and should be adjusted accordingly. The following minimum depths are recommended:
 - Trees: 6 inches below root ball. Soil also should be provided at least 4 feet on all sides of root ball to allow for root spread,
 - Shrubs: Whole beds: minimum 18 to 24 inches deep,
 - Groundcovers: Whole beds: minimum 12 to 18 inches deep,
 - Lawn (high traffic areas): 6 to 8 inches deep (for seeded areas or sodded areas),
 - Lawn (low traffic areas): 6 inches deep (for seeded areas or sodded areas).

3.2.4 Area-Specific Development Standards

Area 7 (Chambers Creek Canyon)

- a) As the parking lots in this Area will be small and located in forested areas, (4 parking lots with 25 maximum stalls in one location), parking lot developments may be exempted from perimeter and interim landscaping requirements.

Section 4: Utilities

The Guidelines for utilities are intended to ensure that site development achieves its program goals, which may require telecommunication, electrical and other utilities, while minimizing or negating adverse visual or environmental impacts. It is the intent of the Master Site Plan that site development takes advantage of natural, sustainable, and experimental technologies for the provision of utilities where possible. This section addresses surface water management, grading, telecommunications, electrical power, solid waste, water utilities, and fire flow.

4.1 Surface Water Management/ Site Grading

As updates to the Surface Water Design Manual are adopted by the City of University Place, the Design Guidelines may be amended according to the procedures identified in the JPA.

4.1.1 Design Objectives

- a) To reduce development related impacts of sedimentation and erosion from construction activities.
- b) To manage surface water movement and quality control in all site areas after construction.
- c) To reduce runoff volume and impacts of run-off.
- d) To control and minimize nonpoint water pollution from surface water runoff from paved surfaces.
- e) To treat surface water before discharge.
- f) To improve water quality in all areas of the site.
- g) To develop surface water management areas as demonstration areas for sustainable development practices.
- h) To visually integrate above ground storm water management facilities into the site landscape.
- i) Where applicable, interpretive and educational displays should accompany alternative waste collection and treatment systems.

4.1.2 Development Standards

- a) The King County Surface Water Design Manual (1998) shall be the minimum design standards for surface water management for the site.
- b) Gravel mining and mine reclamation activities are exempt from these Design Guidelines as specified in Section 9,

Exemptions of the JPA, however mine areas will be contoured, graded and reclaimed according to DNR standards and will meet overall master site plan design intent.

4.1.3 Design Guidelines

- a) Grading should respond to existing contours or contours should be regraded to reduce site runoff potential and manage sedimentation and/or erosion impacts to critical water resources and environmentally sensitive areas.
- b) Site areas should be graded to provide optimal growing conditions in areas that are to be vegetated.
- c) Biofiltration swales, detention ponds and wetlands (wet pools) should be designed to improve wildlife habitat.
- d) Drainage and water management systems should reduce reliance on hard surfaced (piping) conveyance systems, and should utilize natural means of water handling, flow control, purification and infiltration as much as possible.
- e) Water control and filtration features should be constructed once to avoid repeated disturbance. Reconstruction of surface water management features should be avoided during phased construction activity.

4.1.4 Area-Specific Guidelines

- a) Demonstration sites may be provided in each area for educational purposes regarding environmental response of utilities.

4.2 Telecommunications

4.2.1 Design Objectives

- a) To retain the overall site landform and increased vegetation as the predominant visual features.
- b) To provide telecommunication and telemetry facilities to service and facilitate MSP uses and WWTP uses.
- c) To provide for the installation of telecommunication facilities and infrastructure in a manner which is visually unobtrusive and in which they are visually subsumed within the site landscape and/or architecture.
- d) To locate telecommunication facilities out of the line of site of major public views, such as towards other site areas, the Puget Sound, Islands, and mountains (Olympics and Mt. Rainier).

4.2.2 Development Standards

Siting of Facilities

- a) Telecommunication, telemetry towers and antennae shall be allowed only to service and facilitate MSP, WWTP, and emergency uses unless the facilities comply with University Place Municipal Code permitting and siting requirements for telecommunication facilities.
- b) Antennae attached to existing structures are preferred to free standing towers. Free standing towers shall only be permitted where it can be demonstrated that building or structure mounted facilities will not meet project objectives.
- c) Equipment for building-mounted wireless communication facilities shall be located within the building in which the facility is located or integrated into the building design.
- d) Wireless communication towers located on the roof or side of any public building on site shall be grouped together, integrated into the building design, and thoroughly screened from public view. Roof or side-mounted facilities that are not integrated into the building design and screened are prohibited.
- e) The maximum height of roof-mounted facilities shall not exceed 15 feet above the high point of the roof upon which the facility is located.
- f) Building-mounted wireless telecommunication facilities shall be painted in a non-reflective color scheme that blends in with the visual background colors against which the facility will be viewed.
- g) All facilities shall be located outside of major public views and view corridors on site to the Puget Sound, Islands, Olympics, Mt. Rainier, and views across the site to other areas.

Ground-mounted Facilities

- h) Ground-mounted wireless telecommunication facilities shall be set back a distance equal to the height of the facility, from any public or private street or roadway, unless locating the facility closer to a property line will allow at least 75% of its height to be screened by existing coniferous trees.
- i) To the greatest extent possible, ground-mounted facilities shall be screened from view.
- j) To the greatest extent possible, ground-mounted facilities shall be located where existing trees, existing structures, or other existing site features camouflage these facilities from prevalent views.

- k) Existing mature vegetation shall be retained to the greatest extent possible in order to help screen the facility.
- l) Facilities should be sited to avoid being visible from off-site.
- m) A landscaping plan shall be required for all proposed facilities showing the best use of existing vegetation. The landscaping plan shall also identify the addition of new landscaping to effectively screen the facility.
- n) Equipment enclosures shall be placed unobtrusively underground if site conditions permit and if technically feasible. Where underground placement is not feasible, they shall be incorporated into building design or screened according to the standards and guidelines in Chapter 6 (Fencing, Barriers, and Buffers) of this document.
- o) Each pole is limited to one wireless telecommunication device. Multiple wireless telecommunication facilities shall not be located on the same pole.
- p) Ground-mounted wireless telecommunication facilities shall be painted in a non-reflective color scheme that blends in with the visual background colors against which the facility will be viewed.
- q) Ground-mounted wireless telecommunications facilities shall be limited to 110' in height.

Structure-mounted Facilities

- r) Wireless telecommunication facilities mounted on structures other than buildings, such as flag poles, light poles, or other structures, shall be designed to blend in visually with the structure upon which it was mounted and to, when completed, to be inconspicuous in character.

Prohibited Facilities

- s) The following wireless telecommunication facilities are prohibited:
 - Guyed towers,
 - Roof-mounted lattice towers.

Maintenance

- t) The vendor shall maintain the wireless telecommunication facilities to standards imposed. Such maintenance shall include, but not be limited to painting, structural integrity, and landscaping.
- u) If, in any event, the applicant fails to maintain the facility, Pierce County may undertake enforcement action as allowed by existing codes and regulations.

Abandonment and Discontinuation of Use

- v) At such time as use of a wireless telecommunication device is discontinued or abandoned, the vendor shall notify Pierce County within 30 days prior to abandonment or discontinuation.
- w) Upon discontinuation or abandonment of use, the vendor shall physically remove the wireless telecommunication facility within 90 days of abandonment or discontinuation of use. Physical removal shall include, but not be limited to:
 - Removal of antennas, mount, equipment and cables, cabinets, and security barriers from the site,
 - Transportation of the antennas, mount, equipment and cables, cabinets, and security barriers to a repository off-site,
 - Restoration of location of the wireless telecommunication facility to its natural condition, except for landscaping, which shall remain in place.

4.2.4 Design Guidelines

There are no Design Guidelines for Telecommunications.

4.2.5 Area-Specific Guidelines

There are no Area-Specific Guidelines for Telecommunications.

4.3 Electrical Power

4.3.1 Design Objectives

- a) To provide adequate electrical power supply to all areas of the site requiring power.
- b) To locate ducting, and power sources in a manner that does not impact the visual appearance of the site.
- c) To allow for creative and alternative power sources compatible with the Chambers Creek Properties Master Site Plan, such as solar and/or wind power, cogeneration opportunities, and use of methane from the wastewater treatment plant.
- d) To comply with applicable standards of the electrical service provider(s).

4.3.2 Development Standards

- a) All electrical wiring, junction boxes, vaults, ducting and pull boxes shall conform to the Uniform Energy Code for electrical supply construction and installation practices.

- b) Above ground utility vaults, transformers, and switch boxes shall be located in such a way that they do not visually impact the surrounding landscape.
- c) Electricity shall be installed according to service provider standards except for underground installation of wires, which is addressed below in Section 4.3.3.
- d) Underground installation of wiring serving the site is required. However, high-voltage transmission wires may be above ground.

Note: Grandview Drive W., 64th St., and Chambers Creek Rd. are public streets and are subject to the City of University Place development standards. Interior roadways are private streets which will be developed according to these Guidelines.

4.3.3 Design Guidelines

- a) Major entry roads and site entries should not have overhead wiring cross them nor run parallel to them.
- b) Junction boxes, pull boxes, and vaults should be consolidated in locations that improve servicing efficiency and visual unobtrusiveness.
- c) All ducting for power supply and telecommunications should be installed simultaneously to avoid future site disruption.
- d) Consider the use of solar power in specific building design.
- e) Solar, wind and other alternative power supply systems should be highlighted as part of educational opportunities.

4.3.4 Area-Specific Guidelines

There are no Area-Specific Guidelines for Electrical Power.

4.4 Solid Waste Disposal

4.4.1 Design Objectives

- a) To provide space for storage of recyclable materials and solid waste in accordance with Chapter 51-20-09 of the Washington Administrative Code.
- b) To visually integrate recycling storage areas and solid waste storage into site development in a non-obtrusive manner.
- c) To design and locate facilities in a manner that allows efficient storage, collection, and removal of waste materials.

4.4.2 Development Standards

- a) Waste disposal facilities shall be designed to blend in with the surrounding buildings and landscape.

- b) Storage spaces for solid waste shall be enclosed behind a sight-obscuring screen. If chain link is used as the enclosure, landscaping must be used to obscure the visibility of the chain link fence. The facility shall be screened on all sides by 6- foot high screen to screen facilities from view, to ensure the safety of children by keeping them away from the dumpsters, and to contain any garbage which might escape the containers and blow around the site.
- c) Gate openings should be a minimum of 12 feet wide to allow haulers easy access into the container space without damaging the fencing.
- d) Solid waste storage areas must be free of overhead obstacles, such as power lines, building overhangs, etc., so that haulers may use an overhead lift system without interference with the collection process, or causing damage to the vehicle or structure.
- e) A minimum of fifty foot "straight in" approach to front of enclosure must be provided to allow easy access for haulers.
- f) Outdoor collection points shall not obstruct pedestrian circulation.
- g) A minimum of 20" clearance shall be provided around all containers to allow space around each container for accessibility to the hauler and the user.

4.4.3 Design Guidelines

There are no Design Guidelines for Solid Waste Disposal.

4.4.4 Area-Specific Guidelines

There are no Area-Specific Guidelines for Solid Waste Disposal.

4.5 Water Utilities

4.5.1 Design Objectives

- a) To provide adequate, cost effective water to service site uses.
- b) To visually and functionally integrate water utility facilities located on site into the overall site landscape and public use areas.

4.5.2 Development Standards

- a) Water utility facilities located on site outside of Area 2 shall be designed in accord with these Guidelines.

- b) Water utilities shall be installed according to State and Health Regulations and to service provider standards.
- c) Water utility facilities are also subject to the standards and guidelines in this document in addition to State and Health regulations.

4.5.3 Design Guidelines

There are no Design Guidelines for Water Utilities Design.

4.6 Wastewater Facilities

4.6.1 Design Objectives

- a) To integrate wastewater facilities outside of Area 2 that are related to MSP activities (such as reclaimed water facilities) into the overall site landscape and public use areas.
- b) To provide adequate, cost effective wastewater facilities to service site uses and areas.

4.6.2 Development Standards

- a) Generally, wastewater collection and treatment operations, located in Area 2 are exempt from these Design Guidelines as specified in Section 9, Exemptions of the JPA. However wastewater facilities shall be installed according to Pierce County standards.
- b) Wastewater facilities that are related to MSP uses in public areas outside of Area 2 shall be designed in accord with these Guidelines.
- c) All permanent facilities on-site which generate wastewater shall be required to hook up to the WWTP.
- d) Development of reclaimed water facilities and the use of biosolids are identified as future WWTP facilities in the MSP. These facilities will be developed to State and Health Regulations. When located outside of Area 2, the WWTP, these facilities are subject to these standards and guidelines, and shall be visually integrated into the public use areas.

4.6.3 Design Guidelines

There are no Design Guidelines for Wastewater Facilities Design.

4.7 Fire Flow

4.7.1 Design Objectives

- a) To provide adequate fire protection on site according to UFC standards.
- b) To develop water/fire flow infrastructure incrementally as the site develops over the long term.

4.7.2 Development Standards

- a) Fire flow facilities shall be installed on site according to UFC Standards.
- b) Water/fire flow utilities shall be installed incrementally over time on site as needed to service individual developments as they occur.

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Section 5: Landscape and Site Design

The guidelines in this section are intended to guide future development of the site in a manner that is highly responsive to the site's unique landscape conditions, landform and views.

This chapter identifies seven "landscape types" that comprise this expansive site. These landscape types may currently exist on the site but should be improved in conjunction with other site improvements. In some cases, certain landscape types, such as the oak savannah prairie, are known to have existed on the site but were disturbed by mining and other human activities. These historic environmental conditions should be reflected in the landscape design of the site as much as possible.

The landscape types are "organized" on the site based on historic and existing landscape conditions as well as on the programmatic requirements of Pierce County. In addition, this section provides guidance on the species and landscape treatments appropriate within each of these landscape types.

Figure 20 depicts the approximate location of the seven landscape types:

- **Woodland forest buffer:** Screens site perimeter and wastewater treatment plant with high proportion of coniferous trees and a high canopy to allow for views in key locations.
- **Steep slope:** Stabilizes existing steep slopes – particularly in reclaiming mining areas – with high proportion of deciduous trees and evergreen understory.
- **Structured landscape:** Man-made landscape provides active recreation (i.e., golf course and playfields) and a more formal environment around buildings.
- **Prairie/open meadow:** Reflects the unique historic oak savannah prairie which continues to exist in the site vicinity, characterized by open grasslands interspersed with key species such as Garry Oak.
- **Shoreline:** Stabilizes dunes above sandy beach and tidelands in a narrow strip of shoreline along the site edge.
- **Riparian corridor:** Provides a densely vegetated buffer along Chambers Creek that is similar in composition to woodland forest buffer and steep slope landscape types, but is more likely to be influenced by riparian and wetland conditions.

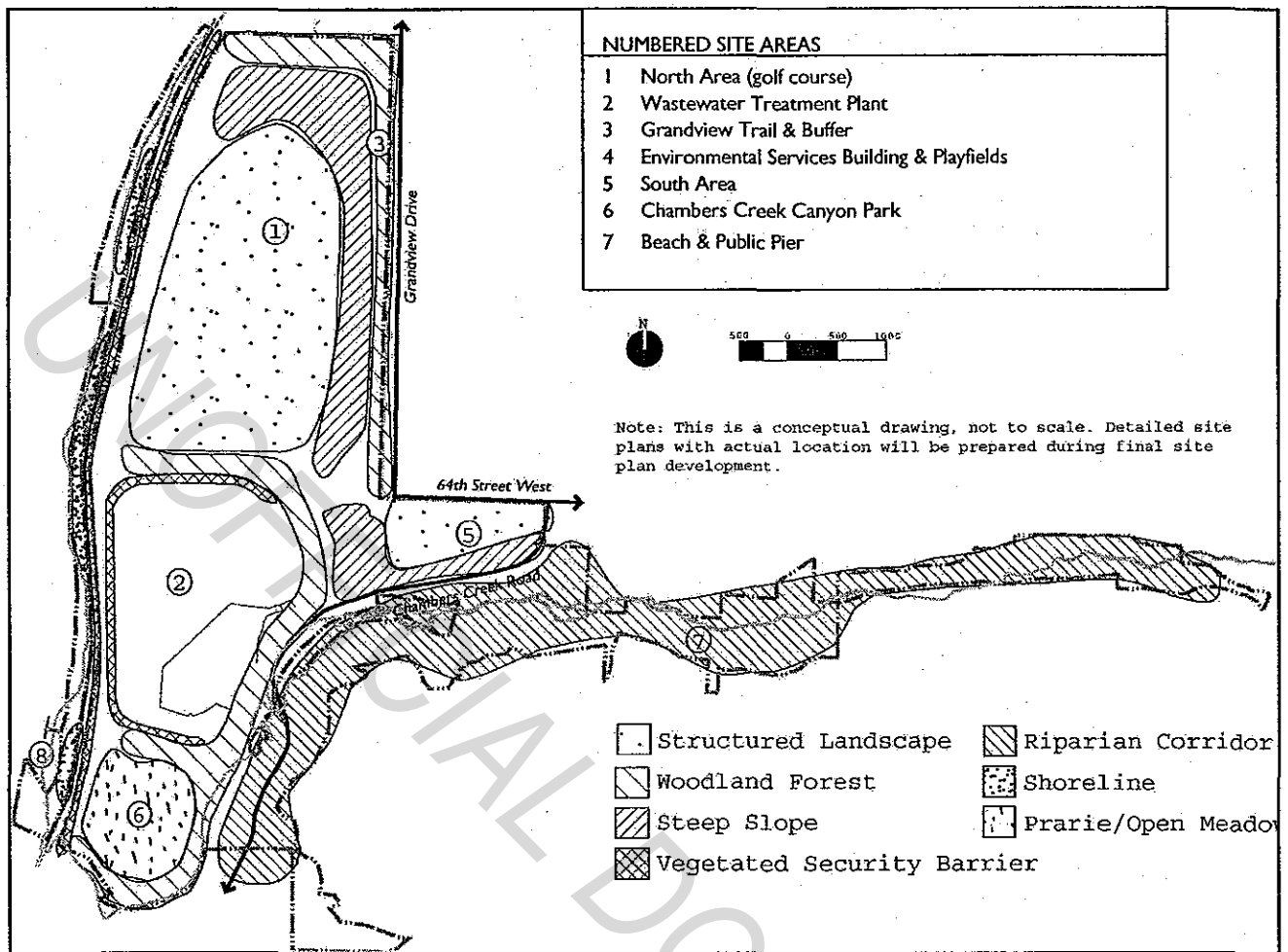


Figure 20: Landscape types

- **Vegetated security barrier:** Inhibits public access into hazardous areas (such as the Wastewater Treatment Plant and railroad corridor) using densely planted, thorny native shrubs.

5.1 Site Wide Landscape Design

5.1.1 Design Objectives

- To create a varied and memorable experience for users of the site and define discrete areas of the site.
- To reconstruct native vegetation and wildlife habitat, and to stabilize steep slopes as much as possible.
- To restore the biological function of the site and achieve biodiversity and a balanced ecosystem using a variety of landscape species.
- To utilize landscape treatments in order to minimize visual and ecological impacts of site development.

- e) To maximize the interpretive and educational experience of site visitors.
- f) To support utilization of biosolids and reclaimed wastewater in landscape development and maintenance.
- g) To retain existing site vegetation as much as possible and to increase overall volume of trees and plant cover with full site development over time with the exceptions listed below.
- h) To allow selective thinning, pruning, and revegetation to improve the health of plants and to improve public views of the Sound, mountains, and other regional landscape features.
- i) Invasive, non-native plants may be, and should be removed from the site.

5.1.2 Development Standards

- a) Figure 20 identifies landscape types and their approximate locations on the site.
- b) Figure 33 identifies accepted plant species per landscape type.
- c) All landscape plans for the Chambers Creek Properties shall be completed by a licensed landscape architect in the State of Washington.
- d) Existing site vegetation shall only be removed as necessary: to ensure plant health; to improve slope stability; to provide selective public views; to protect plants in public access areas, on a minimal, selective, individual basis; to allow development to occur as long as the overall site average tree and vegetative cover is sustained and increased; and, to remove invasive non-native species.
- e) Areas landscaped with non-native, non-drought tolerant species must be permanently irrigated.
- f) Plant seeding and levels, other than for parking areas, which shall conform to the City of University Place Perimeter and Buffer Standards, (See Section 5.3), shall be determined at the time of individual project design.

5.1.3 Design Guidelines

- a) Existing native vegetation should be retained wherever possible.
- b) Where removal of vegetation is required for a development, overall density of vegetative cover should be maintained and increased.

- c) Habitat value should be maximized by reconstructing native plant communities, decreasing and minimizing human disturbance, and reclaiming areas impacted by gravel mining operations.
- d) Dense vegetation should be planted in areas that are inappropriate for public access, particularly along unstable slopes, wetland and riparian areas, and other sensitive landscapes. Landscaping should clearly distinguish public access areas.
- e) Landscape treatments may be used to rehabilitate degraded portions of the site and to discourage human use of these areas.
- f) Plant, wildlife and fish habitat should be enhanced in order to increase numbers and diversity of native species.
- g) Drought-tolerant species that are native to Western Washington should be utilized for landscape treatments and revegetation as much as possible (see Plant List Figure 33).
- h) Exotic plant species that are widespread and invasive (such as *Cytisus scoparius* (Scot's Broom), *Rubus discolor* (Himalayan Blackberry), *Hedera helix* (English Ivy), and *Polygonum cuspidatum* (Japanese knotweed)) should be removed.
- i) All soil and soil amendments introduced to the site should be free of seeds and live propagules.
- j) Ease of irrigation should be considered in all landscape plans.
- k) Landscape design features which improve public safety and sense of security through appropriate plant placement should be utilized.
- l) Naturally occurring wildlife structures such as downed logs, boulders, and standing snags should be retained and provided.

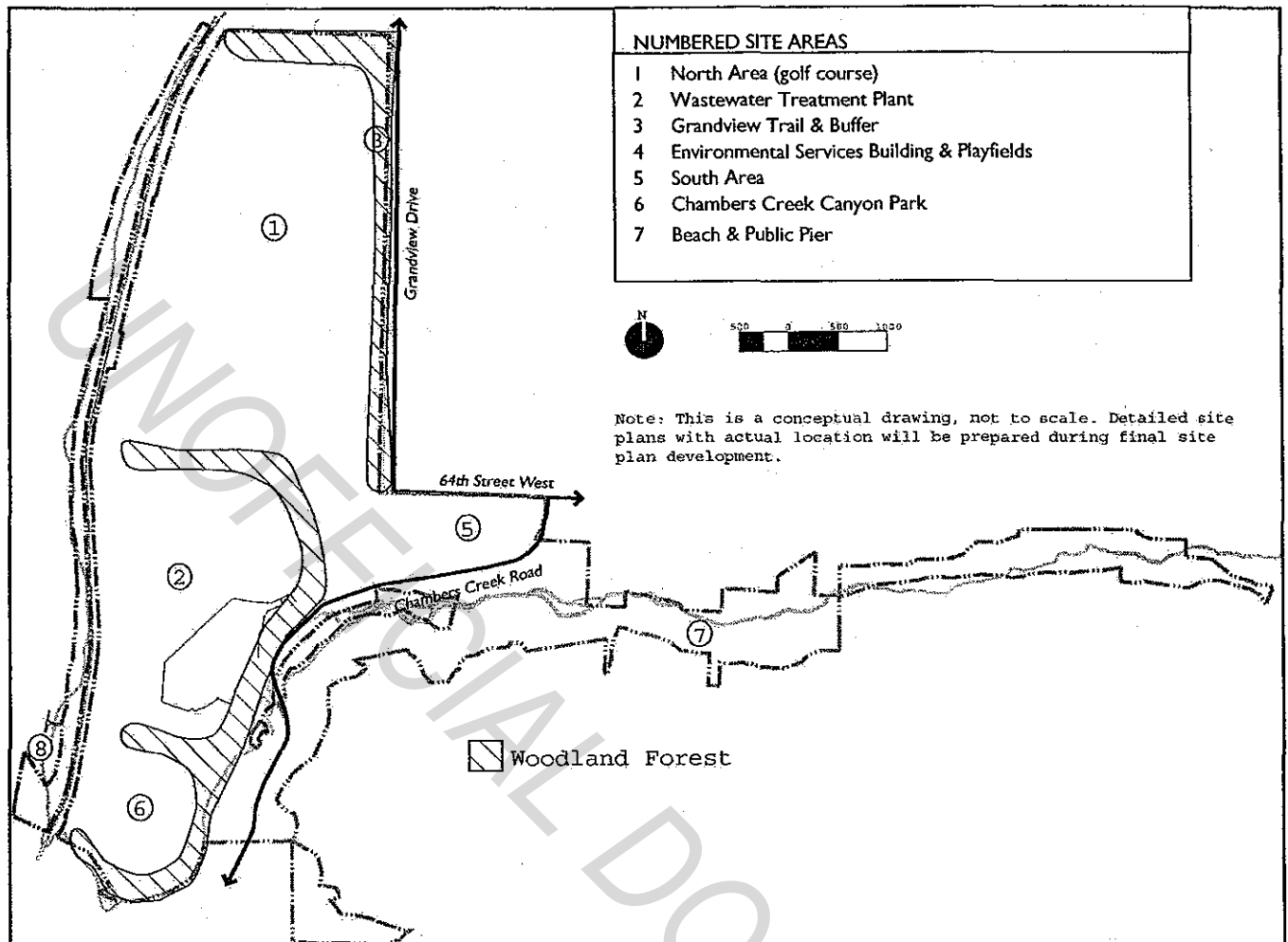


Figure 21: Location of woodland forest buffers

5.1.4 Area-Specific Standards and Guidelines

Area 2 (Wastewater Treatment Plant) Standards

- Area 2 shall be surrounded by a Woodland Forest buffer so that the Wastewater Treatment Plant is screened from view from adjoining locations and areas above, such as Areas 1,3,5,6 and 8. A variety of coniferous and deciduous trees and shrubs should be planted as a visual screen and to obscure wastewater treatment structures.

Area 3 (Grandview Trail & Buffer) Guidelines

- The eastern edge of Area 3 should be maintained as a Woodland Forest buffer.
- Exotic and invasive plant species should be eradicated from the site using hand labor and avoiding the use of chemical herbicides.

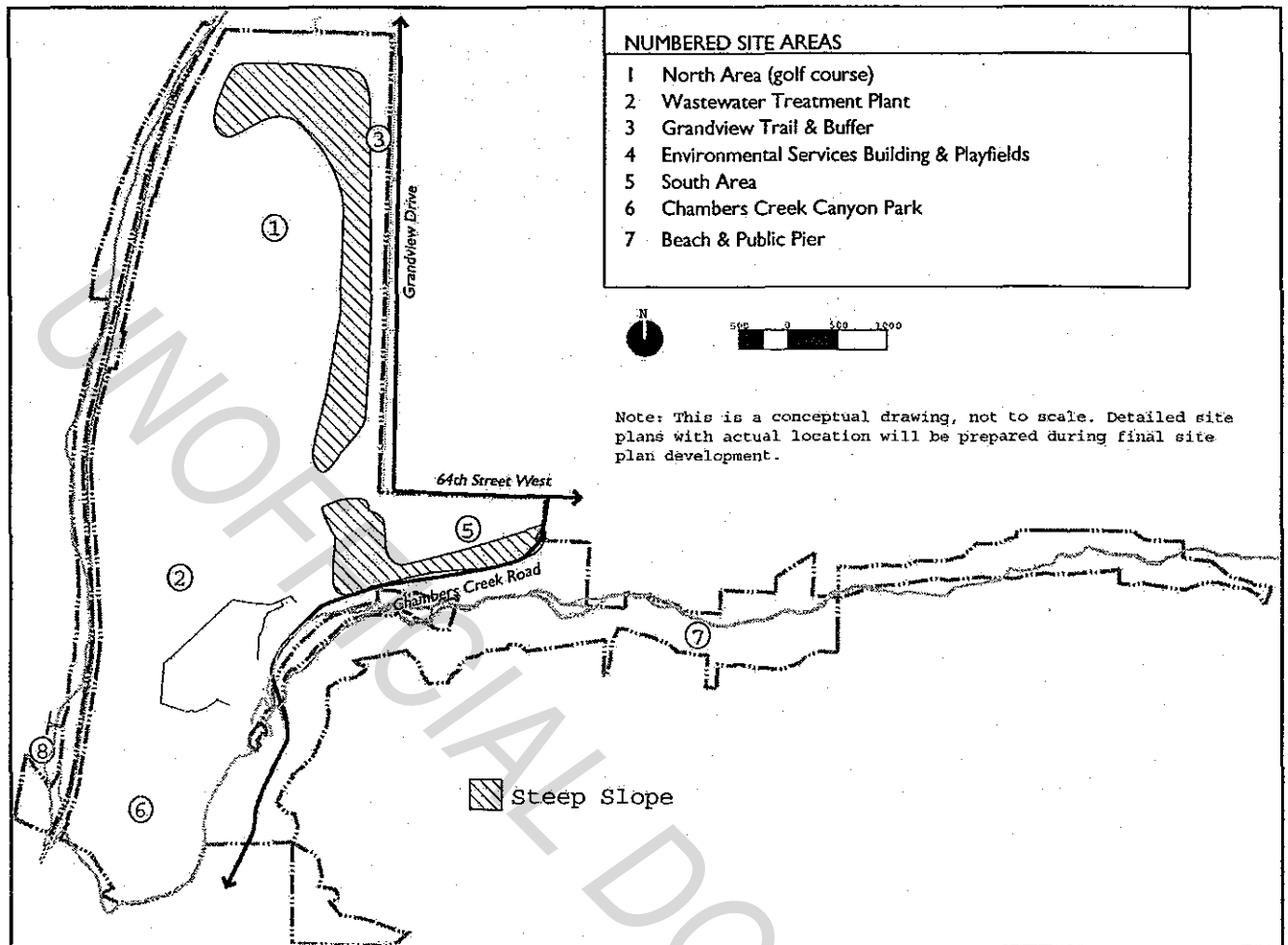


Figure 22: Location of steep slopes

- d) Views from the Grandview Trail should be protected and enhanced by eliminating invasive vegetation located above the line of sight. The forest understory should be thinned selectively to provide views into the site from Grandview Drive.
- e) The steep slope along the western edge of Area 3, as well as the portion that lies south of the entry road, should be regraded to increase slope stability and should be densely planted using guidelines for steep slopes in the site-wide standards.

Area 6 (South Area) Standards

- f) Area 6 slopes shall be planted to prevent erosion.

Area 7 (Chambers Creek Canyon) Guidelines

- g) Exotic and invasive plant species should be eradicated from the site using hand labor and avoiding the use of chemical herbicides.

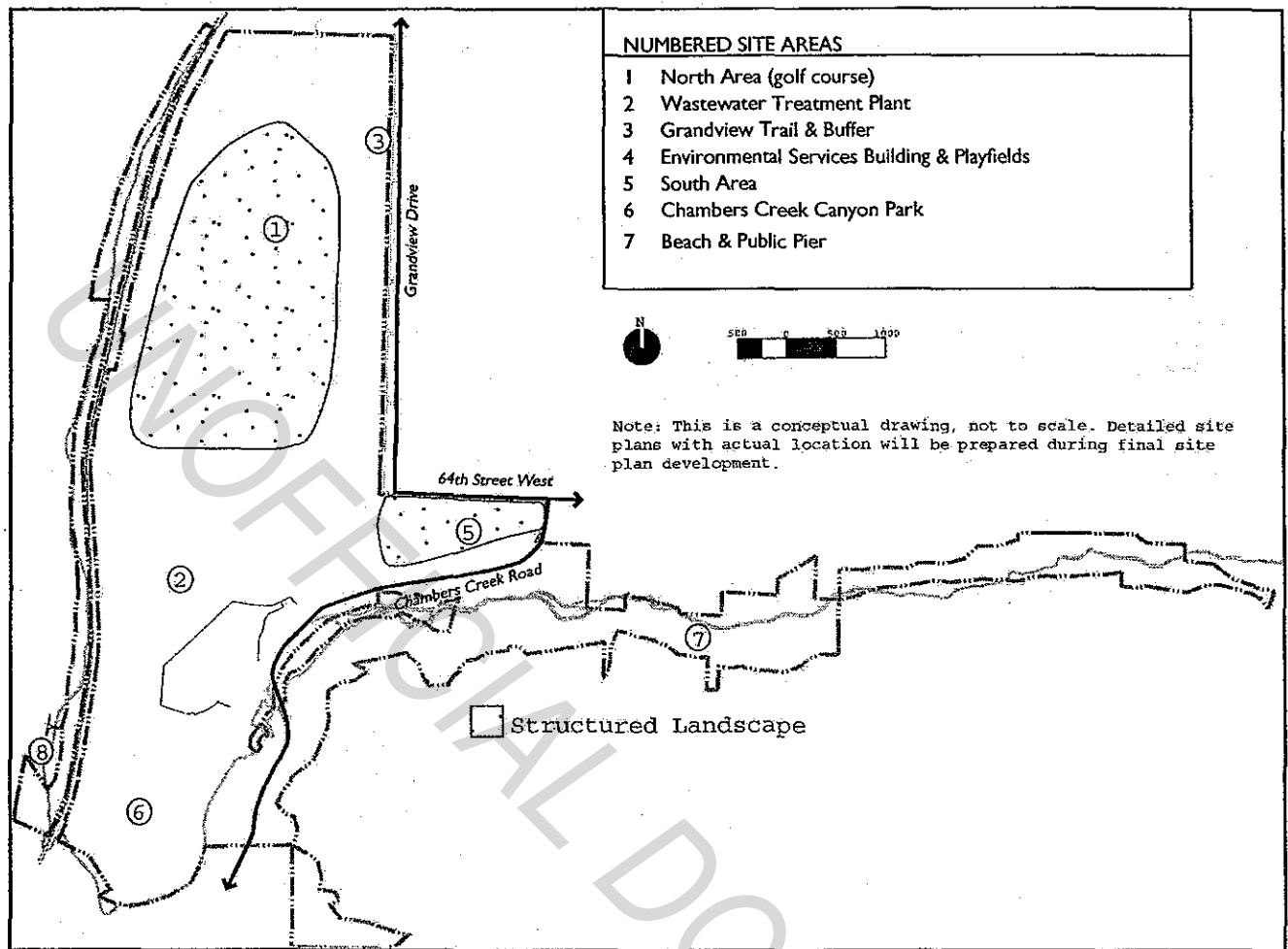


Figure 23: Location of structured landscape areas

5.2 Landscape Types

5.2.1 Woodland Forest Buffer Guidelines

- Figure 21 identifies the approximate location of Woodland Forest Buffers within the site.
- A multi-layered canopy should be provided in woodland buffers and interior forest areas.
- Native trees and shrubs in existing site perimeter buffers should be retained and enhanced as much as possible.
- A diversity of native plant species should be used to provide a range of views from and into the site through openings in trees and understory.
- A minimum of 75% coniferous trees in woodland forest areas should be planted, particularly emphasizing *Pseudotsuga menziesii* (Douglas fir), *Pinus ponderosa* (Ponderosa Pine) and *Tsuga heterophylla* (Western Hemlock).

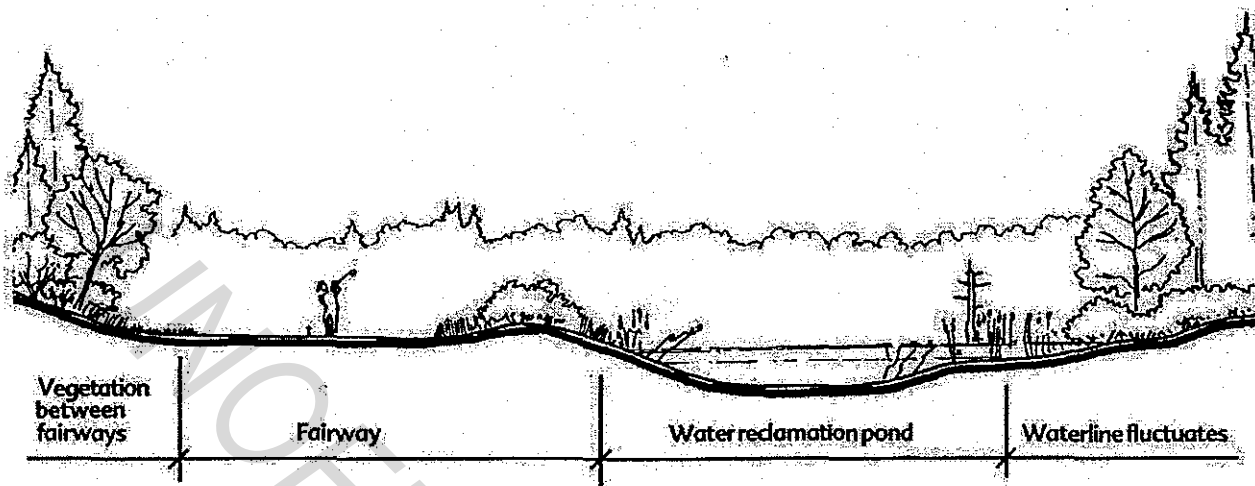


Figure 24: Structured landscape in Area 1 accommodates golf course fairways and water reclamation ponds

- f) Unusual tree species that are highly specific and unique to the site biome should be highlighted, particularly *Pinus ponderosa* (Ponderosa Pine) and *Quercus garryana* (Garry Oak).
- g) Coniferous trees should be planted primarily as backdrop to deciduous species to maximize contrast in color, especially in autumn.
- h) Public access should be minimized in woodland forest buffers to avoid disturbance of wildlife habitat and establishment of new trees and shrubs.
- i) Trails should be incorporated where public access is desired or appropriate, and access should be restricted in areas where it is desired to minimize impacts to the woodland forest.

5.2.2 Steep Slopes Guidelines

- a) Figure 22 identifies the approximate location of Steep Slopes within the site.
- b) A maximum of 25% coniferous tree canopy should be planted on steep slopes in order to maximize the amount of organic matter being returned to the soil through a leaf litter humus layer.
- c) *Arbutus menziesii* (Pacific Madrone) should be a dominant species on steep slopes, and care should be taken to protect existing Madrone specimen on site.

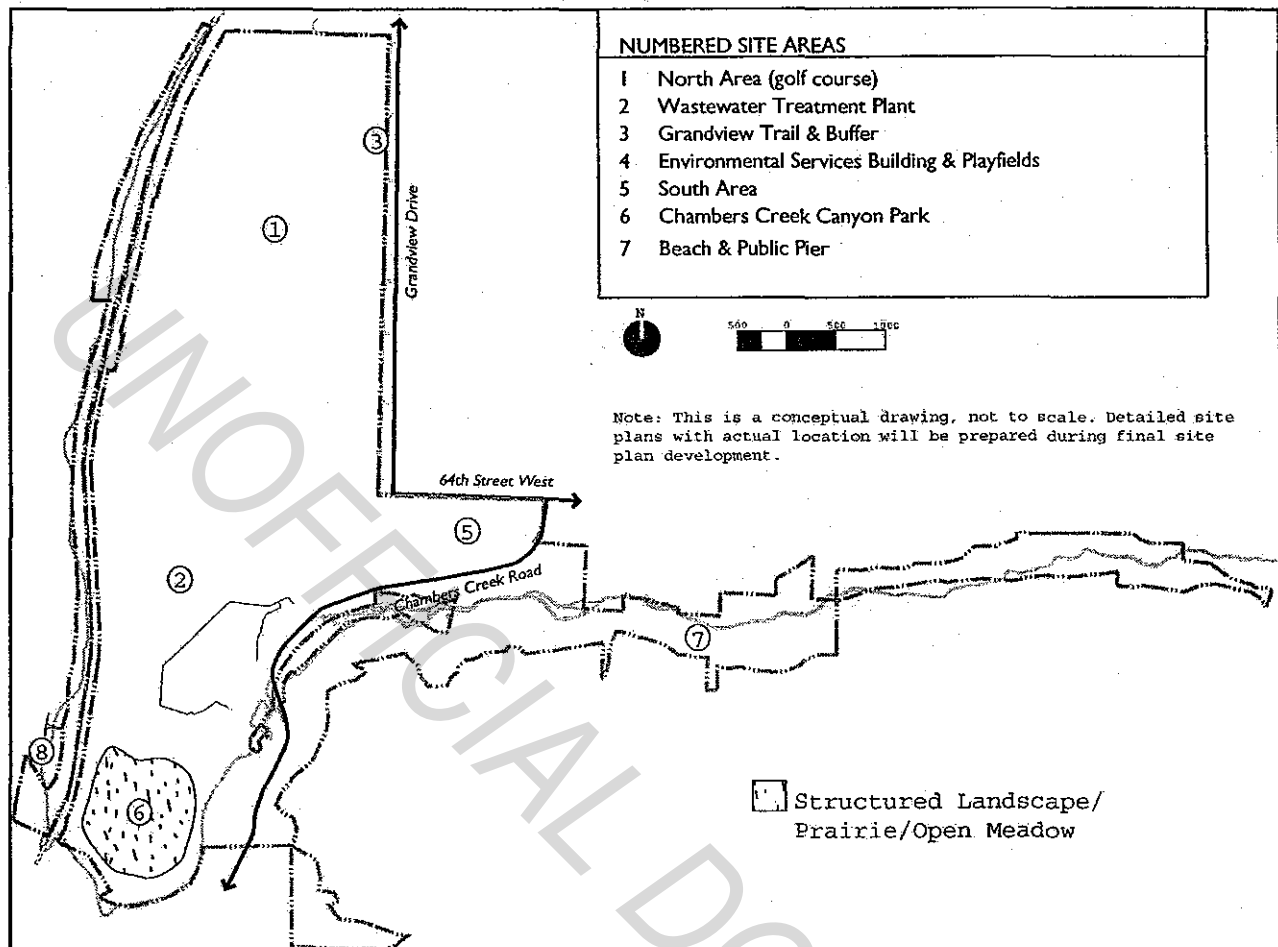


Figure 25: Location of prairie/open meadow



Figure 26: Nature trail through prairie/open meadow

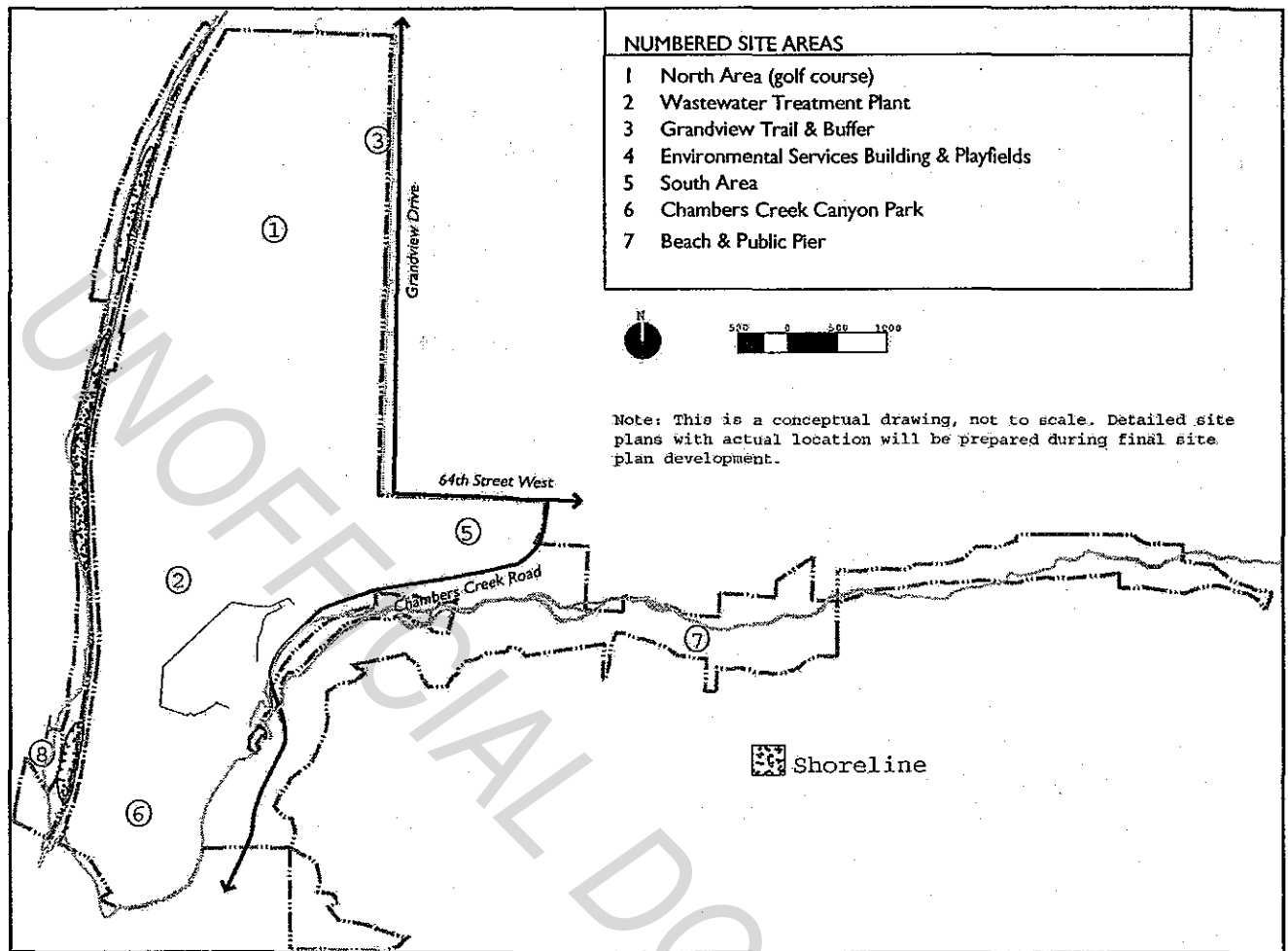


Figure 27: Location of shoreline landscape type

- d) A minimum of 75% evergreen understory and groundcover should be planted to reduce soil erosion caused by rainfall and wind.
- e) Public access on steep slopes should be prohibited in order to facilitate slope stabilization and provide for public safety.
- f) Allow tree trimming and removal only as necessary to ensure the health of trees and protect slope stability.

5.2.3 Structured Landscape Guidelines

- a) Figure 23 identifies the approximate location of the Structured Landscape within the site.
- b) Drought-tolerant seed mixes should be utilized for turf grass in golf course and playfields to accommodate the site's rapidly draining soils and to reduce irrigation needs.
- c) A similar vegetation composition to the woodland forest buffer should be utilized.

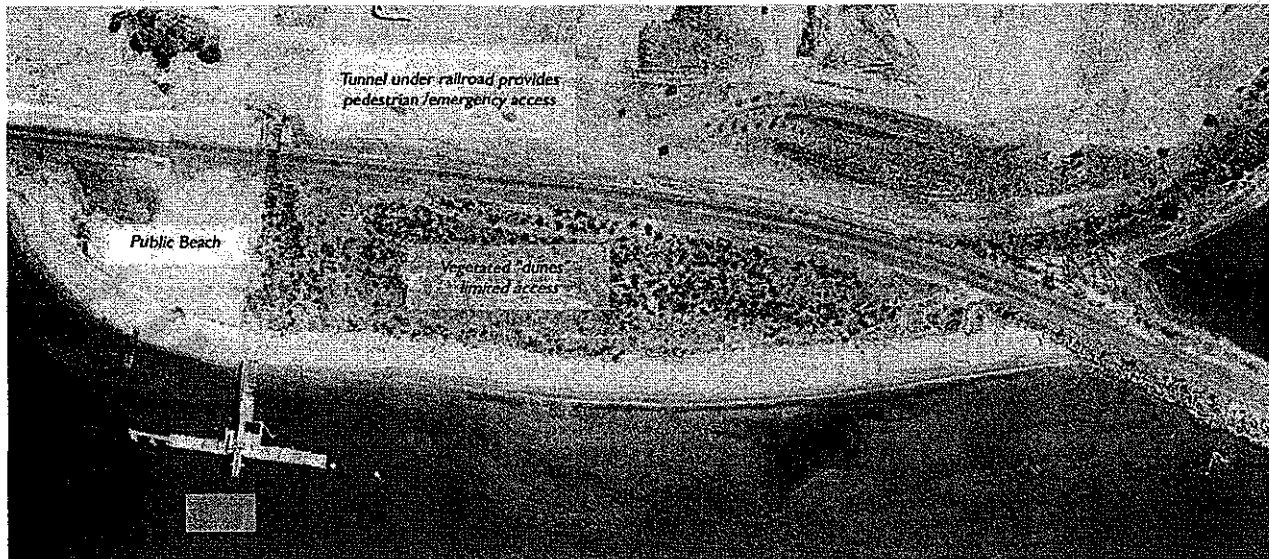


Figure 28: Public access areas in Area 8

- d) Use quick growing pioneer tree species such as *Alnus Rubra* (Red Alder) and *Populus Deltoides* (Black Cottonwood), (where appropriate) in former mining areas to provide soil stabilization, nutrient loads (leaf litter), and shade for young conifers.
- e) Native vegetation with structural diversity between open expanses of turf grass for active recreation (i.e., between golf course fairways and playfields) should be maximized (Figure 24).
- f) Utilize plant species that thrive on reclaimed water (for use when the service is available).
- g) Plant consolidated stands of trees and shrubs and avoid thinly dispersing vegetation throughout structured landscapes.
- h) Native nitrogen-fixing plants such as *Psoralea physodes* (California tea) and *Lupinus rivularis* (Bank Lupine) in stands of trees and shrubs should be utilized.

5.2.4 Prairie/Open Meadow Guidelines

- a) Figure 25 identifies the approximate location of the Prairie/Open Meadows within the site.
- b) The meadow planting and maintenance program set forth by Pierce County in Area 6 should be continued.
- c) Where new meadow grass need to be planted, *Festuca rubra* (Creeping Red Fescue), seeded very thickly at 40 pounds to the acre should be used where appropriate.

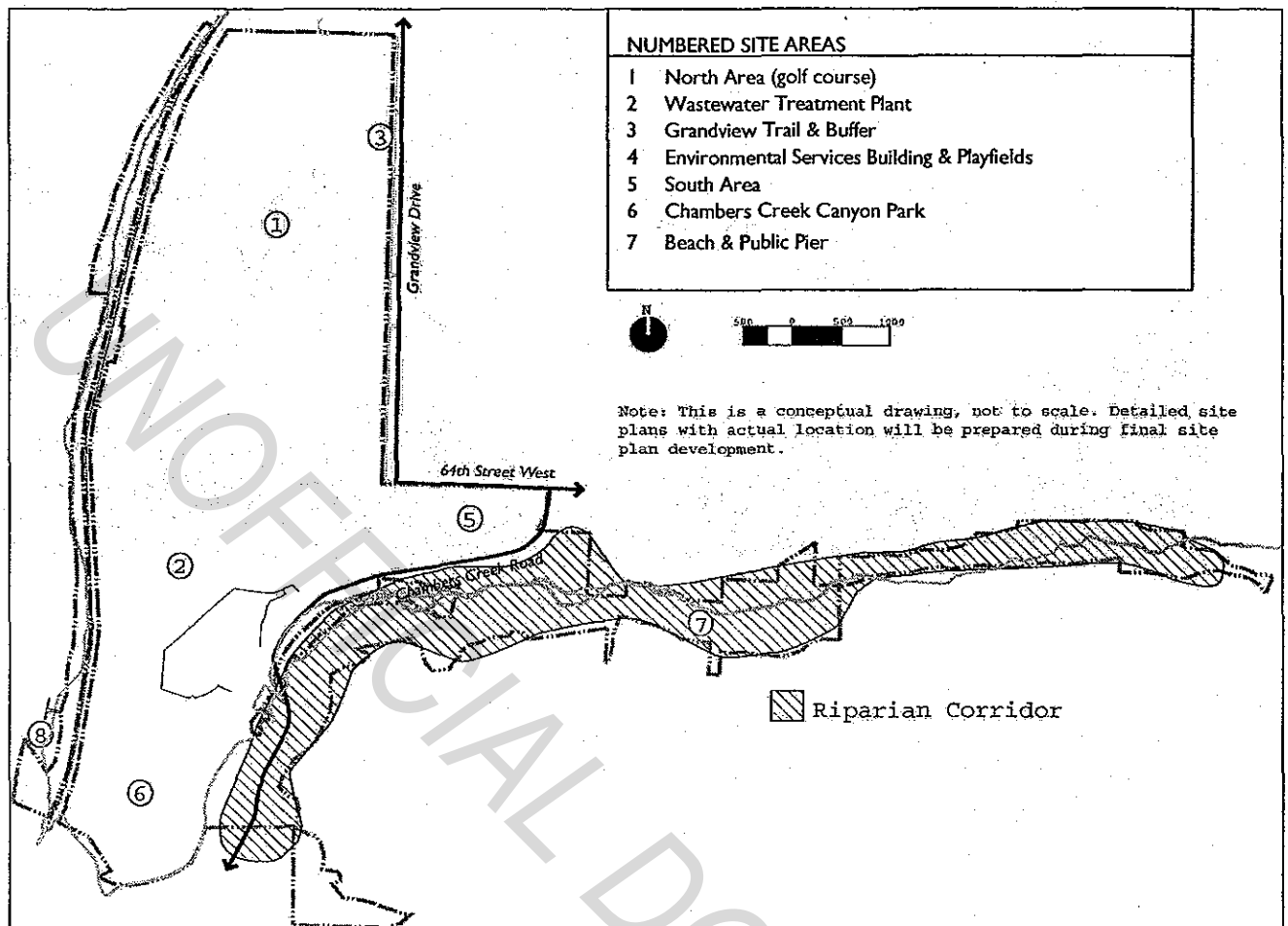


Figure 29: Location of Riparian Corridor

- d) *Agrostis tenuis* (Colonial Bentgrass) can be planted at 5 pounds to the acre in addition or in lieu of Creeping Red Fescue.
- e) Inoculated Dutch White or red clover seed should be planted at 5 pounds to the acre in addition to the grass seed to provide structure.
- f) *Camassia quamish* (Common Camas) and *Lupinus rivularis* (Bank Lupine) can be planted in the Prairie/Open Meadow.
- g) A transition along the perimeter of the meadow into multilayered mixed forest woodland should be provided to simulate natural meadow, and to create the visual impression of the meadow as a natural opening in the forest.
- h) Human impacts on open grassland areas should be minimized through clear delineation of trails, while maintaining the feel of an open meadow for trail users (Figure 26).

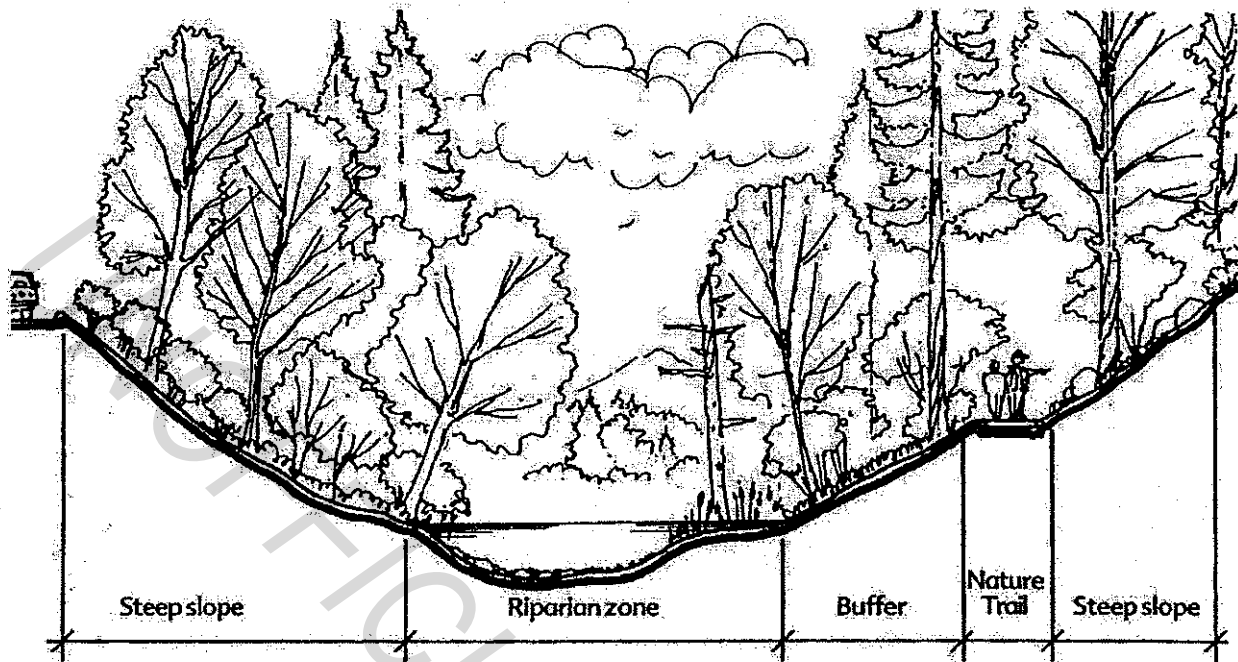


Figure 30: Preferred nature trail placement in Riparian Corridor

- i) Mowed active use areas should be strategically located in areas within meadows. Meadows may be mowed for maintenance or mulching as necessary. Turf grasses may be used in areas with heavy pedestrian use.

5.2.5 Shoreline Landscape Guidelines

- a) Figure 27 identifies the approximate location of the Shoreline Landscape within the site.
- b) Non-native beach grass along marine/intertidal shoreline should be replaced with native vegetation. *Elymus mollis* (American dunegrass) is the preferred native beach grass.
- c) 'Dunes' above the sandy beach in Area 8 should be stabilized and vegetated to protect and enhance the saltwater shoreline environment.
- d) Public access should be encouraged along the Puget Sound on the sandy beach in Area 8, and access along other areas of shoreline should be limited (Figure 28).
- e) Landscape treatments that encourage walking in designated beach and tidal areas should be provided.
- f) Educational and interpretive opportunities about the shoreline landscape should be provided to visitors.

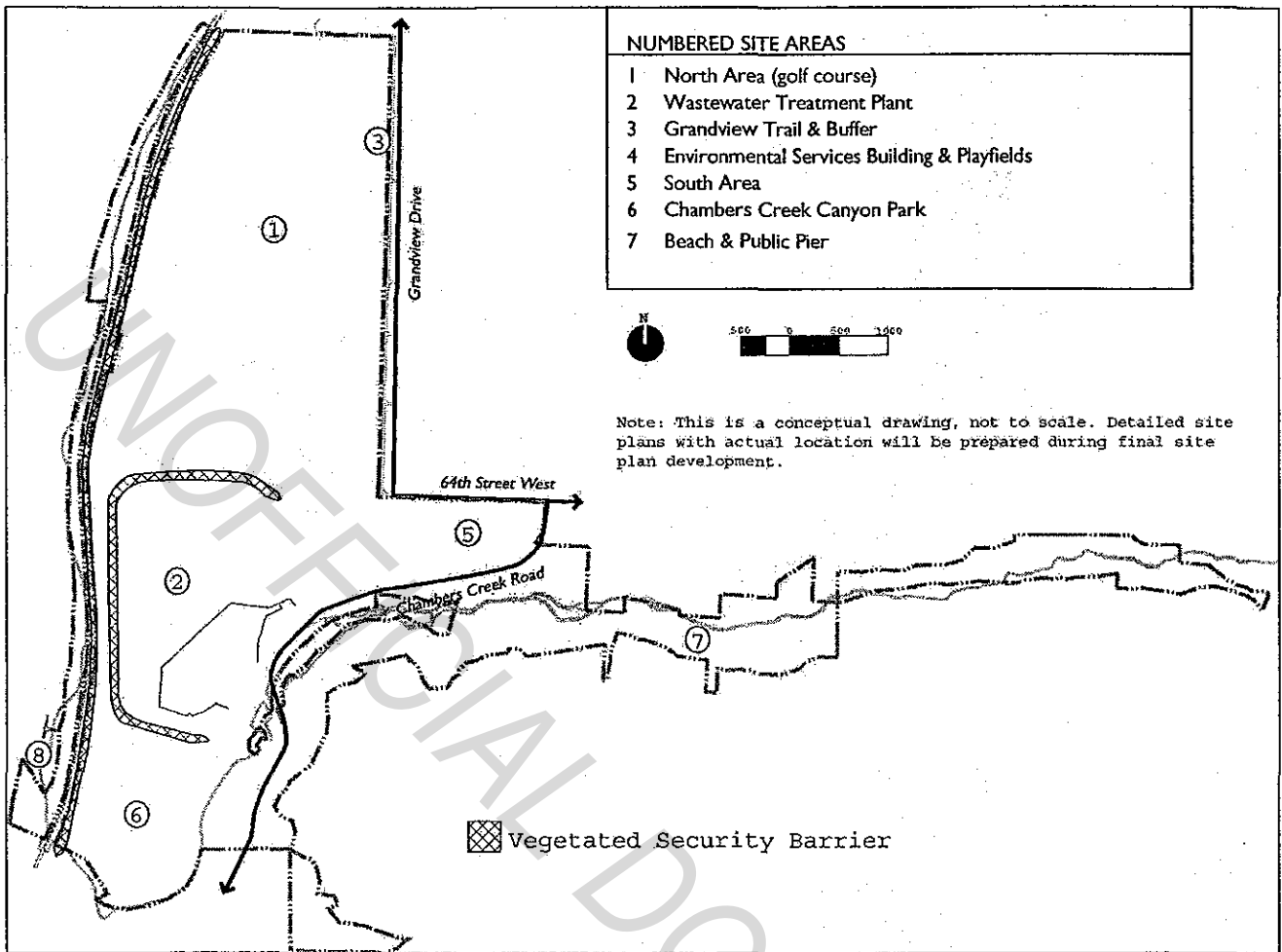


Figure 31: Location of vegetated security barrier

- g) A landscaped security barrier between the shoreline and the western edge of the railroad right-of-way should be incorporated in areas where public access is allowed to the shoreline.

5.2.6 Riparian Corridor Standards and Guidelines

Figure 29 identifies the approximate location of the Riparian Corridor within the site.

Development Standards

- a) The dense riparian tree and shrub cover along Chambers Creek shall be retained to protect salmon runs and promote suitable breeding and rearing habitat for all species utilizing the riparian corridor.
- b) Disturbed areas in the riparian corridor shall be revegetated with appropriate native species.
- c) Vegetation shall be utilized to stabilize steep slope areas in the riparian corridor.

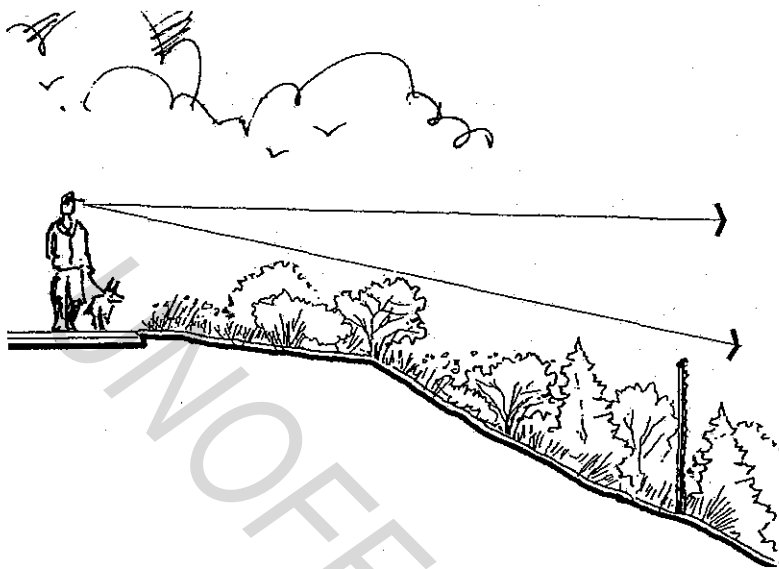


Figure 32: Views above vegetated security barrier with fence

Design Guidelines

- a) Exotic and invasive plant species should be eradicated from the site using hand labor and avoiding the use of chemical herbicides.
- b) Landscape treatment should be used to control public access in sensitive areas such as wetlands, streams, and steep slopes.
- c) A multilayered canopy that provides a full range of wildlife and bird habitat should be furnished, and naturally occurring wildlife structures such as downed logs and standing snags should be recreated.

5.2.7 Vegetated Security Barrier

Figure 31 identifies the approximate location of Vegetated Security Barriers within the site.

- a) Dense, thorny impervious thickets of native plants should be utilized to inhibit public access into hazardous areas (particularly along the railroad corridor and around the wastewater treatment plant, golf course, and slope of Area 5). Barriers should be planted at a density, or in combination with fencing, so that they are impassable by the public at the time of occupancy of all specific projects by the public. Species include but are not limited to *Amelanchier alnifolia* (Saskatoon/Serviceberry), *Cornus stolonifera* (Red Twig Dogwood), *Corylus cornuta* 'Californica' (California Hazel), *Ribes bracteosum* (Stink Current), *Ribes lacustre* (Black Swamp Gooseberry), and *Rosa gymnocarpa* (Baldhip

Rose). See Figure 33 for the Approved List of Plant Species in this landscape type.

- b) Vegetative buffers may be used as freestanding barriers or in conjunction with fencing, depending on degree of security requirements (such as Area 2, and restricted access areas as needed in other areas for wells, water supply, grounds maintenance, and other utilities' needs). Vegetation-only barriers are preferable so as to allow for passage of wildlife; however vegetative buffers, where used without fencing, must be impervious at the time of occupancy of that area by the public.
- c) Vegetative screening should be used wherever fencing occurs, except in areas that are not highly visible to the public.

5.3 Parking Area Landscaping

See Section 3.2 for Development Standards for Parking Area Landscaping.

5.3.3 Development Standards

- a) Permanent irrigation shall be used in areas landscaped with non-native, non-drought tolerant plants.

5.3.4 Design Guidelines

See Section 3.2 for Design Guidelines for Parking Area Landscaping.

- a) Figure 33 lists trees and shrubs appropriate for landscaping within parking areas.

5.3.4 Area-Specific Guidelines

There are no Area-Specific Guidelines for Parking Area Landscaping.

5.4 Roadway Trees

5.4.1 Design Objectives

- a) To allow for the use of roadway trees in areas where a more formal roadway landscape is desired.

5.4.2 Development Standards

There are no Development Standards for Roadway Trees.

5.4.3 Design Guidelines

- a) Trees may be planted along roadway edges to create a more formal tone in the vicinity of major entries to Areas 1, 3, 5 and 6.
- b) Trees may be planted in the landscaped buffer separating roadways from pedestrian walkways (see Figures 6 and 12 for road configurations where trees may be appropriate).
- c) Trees appropriate for planting along roadways are listed in Figure 33.
- d) Trees should be selected and planted using techniques that ensure root growth will not buckle roadway or walkway pavement.

5.4.4 Area-Specific Guidelines

There are no Area-Specific Guidelines for Roadway Trees.

5.5 Palette of Approved Species for Planting

5.5.1 Development Standards

- a) New plant species for use on the site must be included on the list of approved plant species in Figure 32. The list includes but is not limited to the plant species observed to currently exist on site. The plant palette illustrates which species are dominant, appropriate, or inappropriate in each landscape type.
- b) Some plant species on the list are uncommon or unavailable in the landscape industry but are included in the Plant Palette as appropriate species for use on the site. *Arbutis menziesii* (Pacific Madrone), for example, is a key species for use on the site but is generally unavailable in the landscape industry; relocation of existing or propagation of new *Arbutis menziesii* specimen is appropriate for on-site use. Some plant species on the list are associated with the first stages of evolution and are commonly known as weeds.
- c) Plant species not listed may be utilized on the site if it can be demonstrated that the species are native to Western Washington and appropriate for use on this site. Approval may be granted on a project-specific basis.
- d) Plant seeding and levels, other than for parking areas, (See Section 5.3) and perimeter buffering, which shall conform to the City of University Place Perimeter Buffer Standards, shall be determined at the time of individual project design.

5.6 Significant Tree Retention

5.6.1 Design Objectives

- a) To increase overall tree and vegetative mass on a site-wide, long-term basis.
- b) To retain existing volume of tree and vegetative mass in Area 7, Chambers Creek Canyon.
- c) To increase overall tree and vegetative mass in previous and existing mining areas (Areas 1, 3, 5, and 6).
- d) To retain the flexibility to remove existing trees and vegetation as necessary, with individual development projects, and as maintenance requires, while meeting the overall design objectives of retaining and increasing existing volume of tree and vegetative mass, except in Chambers Creek Canyon.

5.6.2 Development Standards

- a) Trees over 12 inches in dbh (diameter at breast height) shall not be removed from existing perimeter buffers, steep slopes, or area 7 unless the tree is damaged or diseased.
- b) Individual trees may be removed as necessary on a case-specific basis to accomplish individual development projects as part of the overall tree and vegetative mass management on the site.
- c) Healthy trees shall not be topped or limbed in order to enhance views.

5.6.3 Design Guidelines

- a) Diseased and dangerous trees in site perimeter buffers, or on steep slopes, and in Area 7 should be pruned to remove any hazards.
- b) Hazardous portions of these trees should be removed rather than whole trees, where possible, in order to retain the trees for habitat purposes.

5.7 View Protection

5.7.1 Design Objectives

- a) To retain significant public views to and from the site for public enjoyment, such as views to other site areas, of the Puget Sound, the Islands, the Olympics, and Mt. Rainier.
- b) To consider view potentials in individual development projects.

- c) To place vegetation, screening, and buildings on site to specifically increase (improve public view access) or to decrease views (provide screening) based upon the desired objective.

5.7.2 Development Standards

- a) The following views (on-site) are established as significant for consideration in design of individual development projects. Views shall be considered from public areas of the site.
 - Views to and from other site areas,
 - Views from site to Puget Sound,
 - Views from site to Islands,
 - Views from site to the Olympic Mountains,
 - Views from site to Mt. Rainier.
- b) Chapter 4, Utilities, Chapter 5, Landscape and Site Design, Chapter 6, Fencing, Barriers, and Buffers, and Chapter 9, Architectural Guidelines, of this document also apply regarding views and screening.
- c) The need to provide views and screening shall be decided upon a case by case basis for each individual development project.

5.7.3 Design Guidelines

- a) Consider the provision or improvement of public views in individual development projects to: other site areas; the Puget Sound; the islands; the Olympic Mountains; and Mt. Rainier as appropriate.
- b) Locate parking lots outside of, or below the line of sight from public view areas. Screen parking, and terrace into benches to avoid view impacts.

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Figure 33: Plant palette and use by landscape type

Plant Name	Plant commonly found in area								
	Woodland forest	Steep slope	Structured landscape	Open meadow	Shoreline	Riparian corridor	Vegetated buffer/screen	Parking areas	Roadway trees
<i>Prunella lewisii</i> - Mock Orange	○	○				○		○	
<i>Physocarpus opulifolius</i> - Pacific Ninebark	○	○				○			
<i>Ribes cereum</i> - Red Flowering Currant	○	○				○		○	
<i>Rosa nutkana</i> - Nootka Rose	○	○				○		○	
<i>Rubus spectabilis</i> - Salmonberry	●	●				●	●		
<i>Salix hookeriana</i> - Hookers' Willow	○	○				○			
<i>Sambucus racemosa</i> - Red Elderberry	○	○				○			
<i>Symphoricarpos albus</i> - Common Snow Berry*	●	●				●	●		
<i>Vaccinium parvifolium</i> - Red Huckleberry	○	○				○		○	
Small Shrubs and Ground Cover (Evergreen)									
<i>Arctostaphylos columbiana</i> - Hairy Manzanita	○	○				○		○	
<i>Arctostaphylos uva-ursi</i> - Kinnikinnick*	○	●				○		○	
<i>Ceanothus velutinus</i> - Snowbrush	○	○				○		○	
<i>Linnaea borealis</i> - Twinflower	○	○				○			
<i>Mahonia nervosa</i> - Low Oregon Grape	○	○				○		○	
<i>Pachysandra myrsinites</i> - Oregon Boxwood	●	●				○		○	
Small Shrubs and Ground Cover (Deciduous)									
<i>Ceanothus sanguineus</i> - Red Stem Ceanothus	○	○				○		○	
<i>Lonicera involucrata</i> - Black Twinberry	○	○				○		○	
<i>Oplopanax horridus</i> - Devil's Club	○	○				○			
<i>Ribes bracteatum</i> - Striped Currant	○	○				○			
<i>Ribes lacustre</i> - Black Swamp Gooseberry	○	○				○			
<i>Rosa gymnocarpa</i> - Baldhip Rose	○	○				○		○	
<i>Rubus leucodermis</i> - Black Raspberry	○	○				○			
<i>Rubus parvifolius</i> - Huckleberry	○	○				○			
<i>Rubus Ursinus</i> - Trailing Black Berry*	○	○				○			
<i>Spiraea douglasii</i> - Douglas' Steeplebush	○	○				○			
<i>Symphoricarpos mollis</i> - Creeping Snow Berry*	●	●				●	●		
Vines									
<i>Lonicera flava</i> - Western Trumpet Honeysuckle	○	○				○		○	
<i>Lonicera hispidula</i> - Hairy Honeysuckle	○	○							
Ferns and Moss									
<i>Adiantum pendulum</i> - Western Maidenhair Fern						○			
<i>Adiantum flex-femina</i> - Lady Fern*						○			
<i>Blechnum spicant</i> - Deer Fern						○		○	
<i>Dryopteris austriaca</i> - Mountain Wood Fern						○			
<i>Eurythmum pascuorum</i> - Moss						○			
<i>Gymnocarpium dryopteris</i> - Oak Fern						○		○	

Native Plant

Plant commonly found in area

Figure 33: Plant palette and use by landscape type

Plant Name	Native Plant Plant commonly found in area								
	Woodland forest	Steep slope	Structured landscape	Open meadow	Shoreline	Riparian corridor	Vegetated buffer/screen	Parking areas	Roadway trees
<i>Philadelphus lewisii</i> - Mock Orange	○	○						○	
<i>Physocarpus opulifolius</i> - Pacific Ninebark	○	○				○			
<i>Ribes sanguineum</i> - Red Flowering Currant	○	○							
<i>Rosa nutkana</i> - Nootka Rose	○	○				○		○	
<i>Rubus spectabilis</i> - Salmonberry	●	●				●	●		
<i>Salix hookeriana</i> - Hookers' Willow	○	○				○			
<i>Sambucus racemosa</i> - Red Elderberry	○	○				○			
<i>Symphoricarpos albus</i> - Common Snow Berry	●	●				●	●		
<i>Vaccinium parviflorum</i> - Red Huckleberry	○	○				○			
Small Shrubs and Ground Cover (Evergreen)									
<i>Arctostaphylos columbiana</i> - Hairy Manzanita	○	○				○		○	
<i>Arctostaphylos uva-ursi</i> - Kinnikinnick	○	●				○		○	
<i>Ceanothus velutinus</i> - Snowbrush	○	○				○		○	
<i>Linnaea borealis</i> - Twinflower	○	○				○			
<i>Mahonia nervosa</i> - Low Oregon Grape	○	○				○		○	
<i>Pachysandra myrsinites</i> - Oregon Boxwood	●	●				○		○	
Small Shrubs and Ground Cover (Deciduous)									
<i>Ceanothus sanguineus</i> - Red Stem Ceanothus	○	○				○		○	
<i>Lonicera involucrata</i> - Black Honeysuckle	○	○				○		○	
<i>Oplopanax horridum</i> - Devil's Club	○	○				○			
<i>Ribes bracteatum</i> - Stink Currant	○	○				○			
<i>Ribes lacustre</i> - Black Swamp Gooseberry	○	○				○			
<i>Rosa gymnocarpa</i> - Baldhip Rose	○	○				○		○	
<i>Rubus leucodermis</i> - Black Raspberry	○	○				○			
<i>Rubus parviflorus</i> - Thimbleberry	○	○				○			
<i>Rubus Ursinus</i> - Trailing Black Berry	○	○				○			
<i>Spiraea douglasii</i> - Douglas' Steeplebush	○	○				○			
<i>Symphoricarpos mollis</i> - Creeping Snow Berry	●	●				●	●		
Vines									
<i>Lonicera caerulea</i> - Western Trumpet Honeysuckle	○	○				○		○	
<i>Lonicera hispidula</i> - Hairy Honeysuckle	○	○							
Ferns and Moss									
<i>Adiantum pedatum</i> - Western Maidenhair Fern						○			
<i>Athyrium filix-femina</i> - Lady Fern						○			
<i>Blechnum spicatum</i> - Deer Fern						○			
<i>Dryopteris austriaca</i> - Mountain Wood Fern						○			
<i>Eurhynchium praeclarum</i> - Moss						○			
<i>Gymnocarpium dryopteris</i> - Oak Fern						○		○	

Figure 33: Plant palette and use by landscape type

Plant Name	Woodland forest	Steep slope	Structured landscape	Open meadow	Shoreline	Riparian corridor	Vegetated buffer/screen	Native Plant	
								Plant commonly found in area	Roadway trees
<i>Polystichum munitum</i> - Sword Fern									
Grasses (Partial List)									
<i>Festuca rubra</i> - Creeping Red Fescue				●					
<i>Agrostis tenuis</i> - Colonial Bentgrass				●					
<i>Camassia quamish</i> - Common Camas				●					
<i>Lupinus hirsutus</i> - Bank Lupine				●					
<i>Elymus mollis</i> - American Dunegrass					●				
Herb Layer (Partial List)									
<i>Achillea millefolium</i> - Deertongue/Yarrow	○	○				○			
<i>Asarum canadense</i> - Wild Ginger	○	○				○			
<i>Brodiaea congesta</i> - Cluster Lily	○			○					
<i>Brodiaea coronaria</i> - Harvest Lily	○			○					
<i>Bromus turgidus</i> - Columbia Brome	○	○				○			
<i>Camassia quamish</i> - Common Camas	○								
<i>Clematis umbellata</i> - Western Prince's Pine	○	○				○			
<i>Collomia heterophylla</i> - Varied-leaved Collomia	○	○				○			
<i>Disporum hookeri</i> - Hooker's Fairybells	○	○				○			
<i>Epilobium angustifolium</i> - Fireweed	○	○				○		○	
<i>Epilobium paniculatum</i> - Autumn Willowweed	○	○				○			
<i>Eriophyllum lanatum</i> - Woolly Yellow Daisy	○			○					
<i>Festuca occidentalis</i> - Western Fescue	○								
<i>Festuca subuliflora</i> - Crinkle-awn Fescue	○								
<i>Fragaria virginiana</i> - Blueleaf Strawberry	○			○					
<i>Galeum triflorum</i> - Sweet Scented Bedstraw	○	○				○		○	
<i>Goodyera oblongifolia</i> - Rattlesnake Plantain	○	○				○			
<i>Lathyrus polyphyllus</i> - Pacific Pea Vine	○	○				○			
<i>Lupinus hirsutus</i> - Bank Lupine	○					○			
<i>Lysichiton americanum</i> - Skunk Cabbage	○					○			
<i>Machaeranthera gracilis</i> - German Tar Weed	○	○				○			
<i>Melica subulata</i> - Alaska Oniongrass	○								
<i>Osmorhiza chilensis</i> - Mountain Sweetroot	○	○				○			
<i>Psoralea physodes</i> - California Tea	○								
<i>Ranunculus occidentalis</i> - Western Buttercup	○			○					
<i>Smilacina stellata</i> - Starry Solomonplume	○	○				○			
<i>Tharella trifoliata</i> - Three-leaf Coolwort	○	○				○			
<i>Tharella unifoliata</i> - Western Coolwort	○	○				○			
<i>Thermopsis lasrata</i> - Star Flower	○					○			
<i>Trillium ovatum</i> - White Trillium	○	○				○			
<i>Viola glabella</i> - Wood Violet	○	○							
<i>Viola sempervirens</i> - Evergreen Violet	○	○				○			

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Section 6: Fencing, Barriers, & Buffers

This section addresses the location and type of fencing, barriers and security measures necessary and appropriate on the site. Fencing and barriers should be integrated into the site landscape as much as possible, and, while inhibiting public access where necessary for public safety and security reasons, should be as visually unobtrusive as possible.

This section establishes the variety of appropriate fencing and barrier types and their approximate location on the site, as described in Figures 34 and 35.

Figure 34: Fencing and barrier types and appropriate application

Area	Black vinyl cyclone	Stone Wall/ Decorative	Cyclone/ Barbed Wire	Vegetative Barrier*	Berm	Temporary Fencing	Mesh/ Wire
Steep slopes in Area 5	•			•		•	
Railroad corridor	•	•	•	•	•		
Grandview Trail/ Golf course	•		•	•		•	
Wastewater Treatment Plant	•	•	•	•	•	•	•
Secure storage areas	•	•	•	•	•		
Bus barn	•			•			
Northern site boundary	•		•	•			
Playfields	•						

* Must be sufficient size that it is impassible when that area is open to the public

6.1 Fencing

6.1.1 Design Objectives

- To provide physical barriers between public and non-public uses.
- To minimize visual impacts of fencing and barriers through visual integration with landscape.
- To separate the public from steep slopes.
- To create a safety barrier along railroad tracks.
- To provide secure storage areas for materials and vehicles, particularly around buildings.

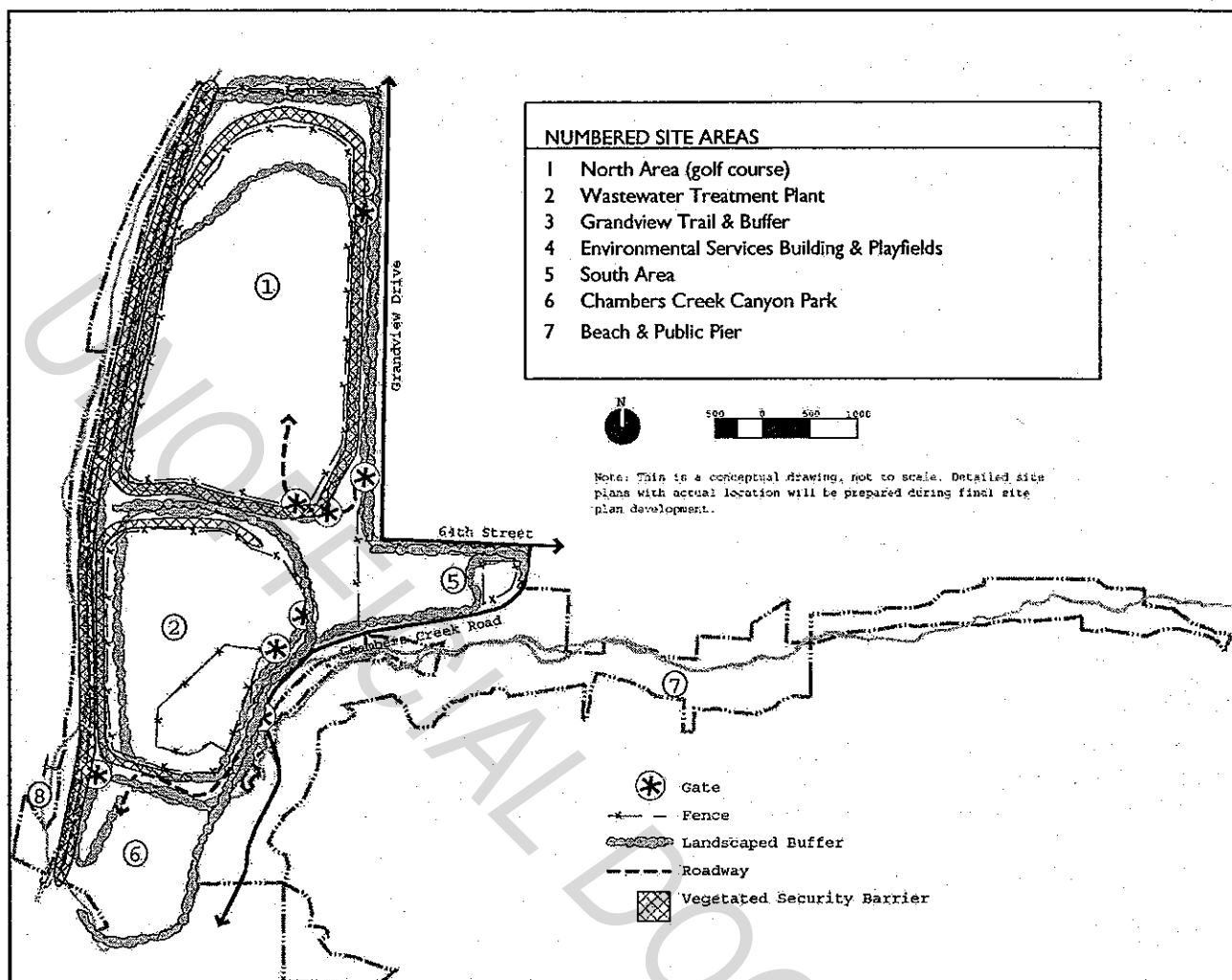


Figure 35: Site-wide fencing, gate, and vegetated barrier locations

6.1.2 Development Standards

- Vegetated permanent impassable barriers are preferred to fencing; however, vegetative barriers where used without fencing, shall be impassable by the time the area is opened to the public.
- Temporary fencing shall be utilized where necessary as an interim measure until vegetation is mature enough to serve as a permanent barrier.
- Fences without vegetative screening shall include features to resist damage such as a welded top and bottom rail and steel binding clips.
- Security fencing and/or vegetated security barriers shall be provided around the golf course, along portions of the railroad right-of-way, and the Wastewater Treatment Plant.

6.1.3 Design Guidelines

- a) Barbed wire may be used on fence tops for security in non-public areas of the site.
- b) Fencing should be unobtrusive and visually integrated with landscape.
- c) Fencing should be located below the line of sight (in a trench or lower than eye level down slope) to minimize view impacts (Figures 32 and 36).
- d) A combination of fencing and thorny vegetation should be used around the railroad right-of-way and wastewater treatment plant.
- e) Fencing, should be constructed of durable, recycled, low-maintenance, environmentally sensitive and/or locally available materials whenever possible.
- f) Fencing when combined with vegetative barriers should be designed with offsets and/or breaks to allow movement of wildlife, through the area, while maintaining security.

6.1.4 Area-Specific Standards and Design

Area I (North Area) Standards

- a) Fencing must be provided at the northern property boundary of the site per the Master Site Plan.

Area I (North Area) Guidelines

- b) Fencing should be provided in combination with vegetation around the golf course to improve public safety.
- c) Wire mesh and/or screening may be installed for safety around the golf course or driving range.

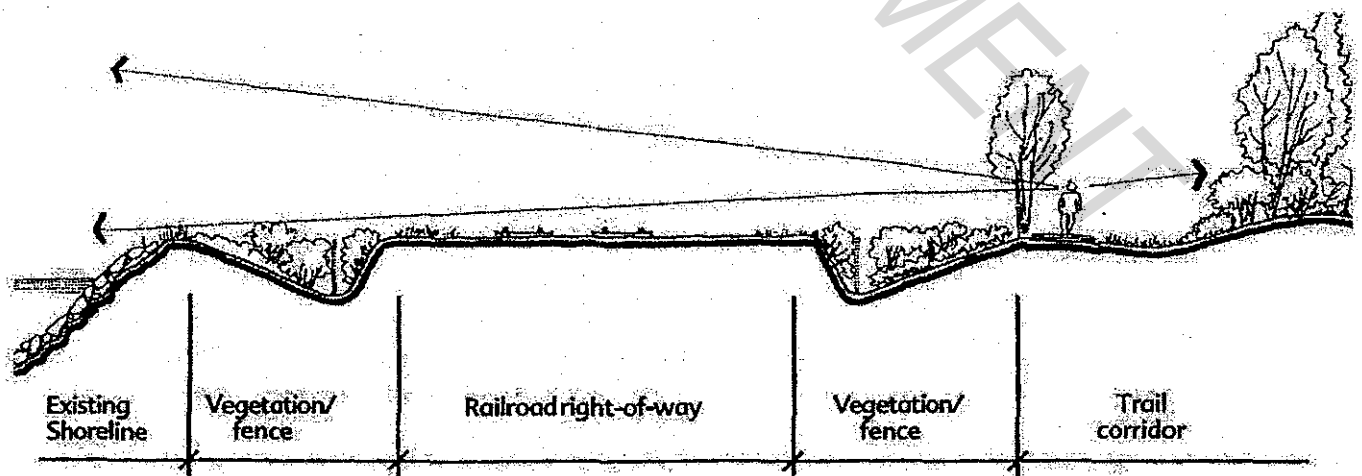


Figure 36: Fence and vegetation placement along railroad right-of-way

Area 2 (Wastewater Treatment Plant) Guidelines

- d) Security fencing should be provided in combination with vegetation around all wastewater treatment plant facilities.

Area 5 (Offices and Playfields) Guidelines

- e) The athletic and playfields may have special safety fencing requirements that will need to be addressed at the time of development.

6.2 Vegetated Security Barriers

6.2.1 Design Objectives

- a) To provide physical barriers between public and non-public uses.
- b) To minimize visual impacts of fencing and barriers through visual integration with landscape.
- c) To minimize use of non-penetrable materials for wildlife by utilizing permanent vegetative barriers and breaks in fencing wherever possible.
- d) To separate the public from steep slopes.
- e) To create a safety barrier along railroad tracks.

6.2.2 Development Standards

- a) Permanent, impassable vegetated barriers are preferred to fencing.
- b) Temporary fencing will be utilized where necessary until vegetation is mature enough to serve as a permanent barrier.
- c) Vegetated barriers such as densely planted, thorny shrubs shall be utilized in lieu of, or in addition to security fencing where appropriate.
- d) Landscape treatments shall be utilized to screen developments and as security barriers in hazardous or non-public areas when possible.

6.2.3 Design Guidelines

Figures 31 and 35 identify the approximate location of vegetated security barriers.

- a) A combination of fencing and thorny vegetation should be used in hazardous areas such as the railroad right-of-way and Wastewater Treatment Plant.
- b) See Figure 33 for the approved list of plant species in vegetated security barriers.

- c) Section 5.2.7 provides further guidance on vegetated security barriers.

6.2.4 Area-Specific Guidelines

Area 2 (Wastewater Treatment Plant) Standards

- a) Security fencing shall be provided around all Wastewater Treatment Plant facilities.
- b) Vegetated barriers should be utilized to screen security fencing where possible.
- c) Densely planted, thorny shrubs should be utilized as security barriers where fencing is not practical.

6.3 Landscaped Buffers

6.3.1 Design Objectives

See Section 5.2.1 for Design Objectives for Landscape Buffers.

6.3.2 Development Standards

See Section 5.2.2 for Development Standards for Landscape Buffers.

6.3.3 Design Guidelines

See Section 5.2.3 for Design Guidelines for Landscape Buffers.

6.3.4 Area-Specific Standards

Area 2 (Wastewater Treatment Plant) Standards

- a) A 100-foot wide vegetated berm should be provided around the wastewater treatment facility area per the Master Site Plan, and shall conform to Woodland Buffer standards and guidelines.

6.4 Retaining Walls/Guardrails

6.4.1 Design Objectives

- a) To provide erosion protection and to prevent foundation settlement and unstable soils conditions.
- b) To construct retaining walls and guardrails in a manner which integrates them into the site landscape.

6.4.2 Development Standards

- a) Rock walls may be used as guardrails and for retaining walls for erosion protection of cut or fill embankments up to a maximum height of eight feet in stable soil conditions which will result in no significant foundation settlement or

outward thrust upon the walls. For heights over six feet or where soil is unstable, a structural wall of acceptable design stamped by a licensed structural engineer shall be used. Rock walls over six feet in height shall be subject to inspection by a geo-technical engineer.

- b) Any rock wall over thirty inches in height in a fill section shall be designed by a landscape architect and reviewed by a geotechnical engineer. The geotechnical engineer shall continuously inspect the installation of the wall as it progresses and shall submit inspection reports, including compaction test results and photographs taken during construction, documenting the techniques used and the degree of conformance to the geotechnical engineer's recommended design.
- c) In the absence of such a rock wall design, walls having heights over four feet or walls to be constructed in conditions when soil is unstable shall require a structural wall having a design approved by the Building Official. The design of structural walls shall be by a landscape architect and reviewed by a professional engineer qualified in retaining wall design.
- d) Any proposed retaining wall supporting a surcharge less than fifteen feet from the base shall be designed by a landscape architect and reviewed by a geotechnical engineer.
- e) Stone used in rock walls shall extend through the wall. The rock material shall be hard, sound, durable, and free from weathered portions, seams, cracks, or defects. The rock density shall be a minimum of 160 cubic pounds per foot.
- f) All rock walls shall be started by excavating a trench having a depth below subgrade of one half of the course or one foot base (whichever is greater).
- g) Rock selection and placement for rock walls shall be such that there will be minimum voids and, in the exposed face, no open voids over six inches across in any direction. The final course shall have a continuous appearance and shall be placed to minimize erosion of the backfill material. The larger rocks shall be placed at the base of the rockery so that the wall will be stable and have a stable appearance. The rock shall be placed in a manner such that the longitudinal axis of the rock shall be at right angles or perpendicular to the rockery face. The rocks shall have all inclining faces sloping to the back of the rockery. Each course of rocks shall be seated as tightly and evenly as possible on the course beneath. After setting each course of rock, all voids between the rocks shall be chinked on the back with quarry rock to eliminate any void sufficient to pass a two-inch square probe.

- h) Wall backfill shall consist of quarry spalls with a maximum size of six inches and a minimum size of four inches or as specified by a licensed engineer. This material shall be placed to a twelve inch minimum thickness between the entire wall and the cut or fill material. The backfill material shall be placed in lifts to an elevation approximately six inches below the top of each course of rocks as they are placed. Any backfill material on the bearing surface of one rock course shall be removed before setting the next course.
- i) Perforated drainage pipe and filter fabric shall be installed per the City of University Place standards. The pipe requirement may be waived by the City Engineer upon a showing that no subsurface water problems exist.
- j) Blank concrete retaining walls or railings or "jersey barriers" are prohibited in public areas of the site.

6.4.3 Design Guidelines

- a) Rock walls, retaining walls, and railings should be designed as any element of the overall site development and in visual accord with other elements in that area.
- b) Decorative plantings, patterns, and public art are encouraged treatments for rock walls, retaining walls, and railings.

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Section 7: Site Lighting

One of the goals of the Chambers Creek Properties Master Site Plan is to minimize any negative aesthetic or environmental impacts from site development to adjoining properties. By limiting the number of evening uses on the site, lighting requirements (and their spill-over effects) have been minimized. However, it is the goal of these Design Guidelines to ensure that lighting is adequate for site uses and is utilized in a manner that improves the site appearance and identity, while increasing the sense of security in evening-use areas.

7.1 Site Wide Lighting Design

7.1.1 Design Objectives

- a) To provide adequate and decorative illumination for site activities while keeping illumination levels to a minimum.
- b) To light night use areas for safety and security.
- c) To minimize negative (i.e., glare, character) impacts of lighting, both on and off site.
- d) To primarily only light areas of the site that will be open to the public in the evening.
- e) To create a light standard that will be used on a site-wide basis in response to a variety of site conditions.
- f) To provide energy-efficient illumination.

7.1.2 Development Standards

- a) Intersections of pedestrian, vehicular, and bicycle traffic shall be appropriately lighted for nighttime visibility where night use will occur.
- b) Glare from lighting sources into wildlife habitat areas and into surrounding neighborhoods shall be avoided.
- c) If designated playfields are to be lit for nighttime use, low-glare cut-off fixtures that minimize glare and reflection shall be used.
- d) Lighting shall be directed downward and shaded to not travel horizontally and create glare.
- e) Entry roadway and parking lot lighting shall be installed at a maximum 0.5 foot-candle level of illumination.

7.1.3 Design Guidelines

- a) Light standards should be designed and located based on the following criteria:

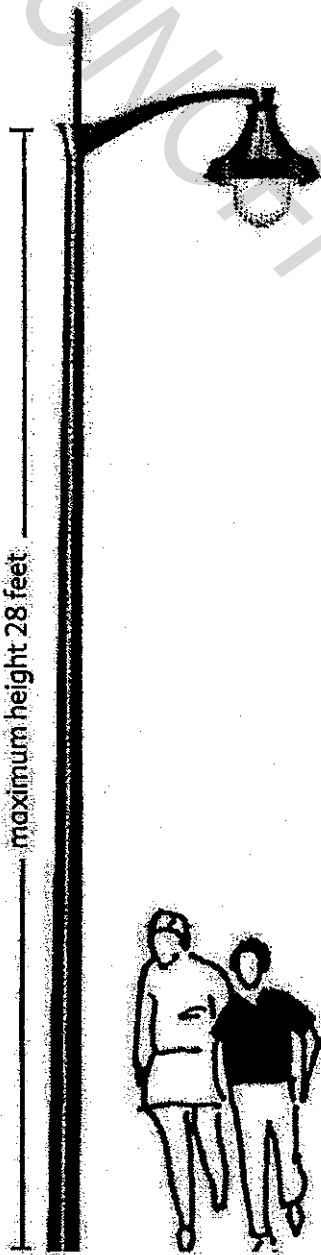


Figure 37: Recommended style of overhead lighting

- Distinctive appearance that creates identity;
 - Visual compatibility/unobtrusiveness within site landscape;
 - Minimization of glare;
 - Energy efficiency;
 - Ease of maintenance.
- b) Lighting should be located to assure public safety and sense of security, and to provide aesthetic benefits.
 - c) Lighting may be used to highlight unique site features such as buildings and landscape elements, but should be done so in a manner that does not increase off-site glare.
 - d) Lighting should be utilized for the following purposes:
 - Site entry lighting,
 - Roadway lighting,
 - Walkway lighting,
 - Pathway lighting,
 - Parking area lighting,
 - Landscape lighting,
 - Lighting for other public spaces (overlook areas, plazas, etc.),
 - Playfield lighting (it will be determined whether playfield lighting will be allowed at the time of site development).
 - e) Lighting fixtures should reflect the natural character and industrial history of the site.
 - f) Two basic lighting fixtures (overhead and bollard lighting) should be used throughout the site for entrances, roadways, pathways, and parking areas. The fixtures are illustrated in Figures 37 (landscape, plaza and other development specific lights will be used on a case by case basis with fixture type being selected depending upon circumstance).
 - g) These lighting standards should be used throughout the site in a variety of conditions over the implementation period of the Master Site Plan.
 - h) Overhead lighting (Figure 37) should be provided at site entrances, along roadways, and in parking areas.



Recommended bollard

- i) Bollard lighting (Figure 37) should be provided in plazas, along pedestrian pathways, at trailheads, and in plazas and other pedestrian-oriented spaces.
- j) Illumination levels, pole spacing and height will be determined on a case by case basis by a lighting engineer.

7.1.4 Area-Specific Guidelines

There are no Area-Specific Guidelines for Site Wide Lighting Design.

7.2 Lighting Locations

Site lighting should fit into the following classifications and should have the corresponding characteristics:

7.2.1 Site Entry Lighting

- a) Site entry lighting should consist of overhead, pedestrian and bollard lighting as determined to be appropriate at the time of site design.
- b) Landscape lighting and lighting integrated with site infrastructure (e.g., stone walls at entrances) may also be appropriate on a development specific basis.

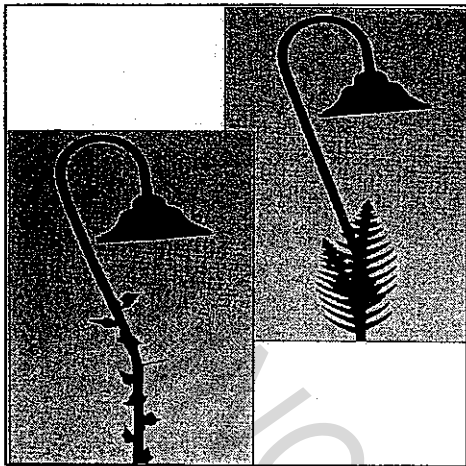
7.2.2 Roadway Lighting

- a) Roadway (overhead) lighting should consist of overhead lighting at a spacing determined by a lighting engineer on a development specific basis.
- b) Roadway lighting should be a maximum of 28 feet in height to provide adequate lighting for a roadway 20 to 25 feet in width.

Figure 38: Lighting types and characteristics

Lighting Location	Fixture	Height	Max. Spacing*
Site Entry Lighting	Overhead	max 28'	Varies
Roadway Lighting	Overhead	max 28'	Varies
Pathway Lighting	Bollard	3'	Varies
Parking Area Lighting	Overhead	max 28'	Varies
Landscape Lighting	Varies	Varies	Varies
Playfield Lighting	To be determined	To be determined	To be determined

* Lighting should be provided only to meet minimum desired illumination levels.



Figures 39: *Low-level lighting can be integrated with landscape*



Figure 40: *Up-lighting can highlight landscape features*

7.2.3 Walkway and Pathway Lighting

- a) Pedestrian pathways should be lit for safety by bollards for safety (Figure 37 and 41).
- b) Spacing and placement of bollards may vary depending on pathway length, although bollards should be spaced at a distance of 20 feet (or greater as determined on a case by case basis).

7.2.4 Parking Area Lighting

- a) Parking areas shall be lit by overhead lighting to illumination levels as determined on a case by case basis by a lighting engineer.
- b) Spacing of overhead lighting will vary based on configuration of parking area.

7.2.5 Landscape Lighting

- a) Other lighting fixtures may be used to provide illumination for landscape elements or to highlight unusual site features in an unobtrusive manner. See Figures 39 and 40 for examples of lighting fixtures that are integrated with landscape features.



Figure 41: Bollard lighting for pathways, trailheads, and other pedestrian-oriented spaces

7.2.6 Lighting for Plazas and Other Public Spaces

- a) Bollards should be used to light plazas and other public spaces.
- b) Spacing of bollards will vary based on configuration and design of these spaces. Figure 41 illustrates potential spacing of bollards in open areas and along pathways.



Figures 42: Lighting integrated with infrastructure

- c) Landscape, plaza and other development specific lights will be used on a case by case basis with fixture type being selected depending upon circumstance.
- d) Entry roadway and parking lot lighting should be installed at a maximum 0.5 foot-candle level of illumination.
- e) Other types of lighting fixtures may be integrated into site infrastructure (such as pedestrian bridges and stairways). Figure 42 illustrates lighting integrated with infrastructure.

Section 8: Signage & Graphics

Signage can greatly enrich the experience of visitors by providing way finding and visitor information, as well as providing interpretive opportunities about site history, environmental issues, and other aspects of the site. The purpose of this section is to provide guidance on visually unifying and integrating signage within the site landscape while maximizing legibility for users.

8.1 Site Wide Signage and Graphic Design

8.1.1 Design Objectives

- a) To provide a site-wide signage system that can be used for all site program requirements, that is easily identified by site users and is visually compatible with site character.
- b) To provide clear and legible directions and interpretive signage for visitors.
- c) To use durable and resource-efficient materials.

8.1.2 Development Standards

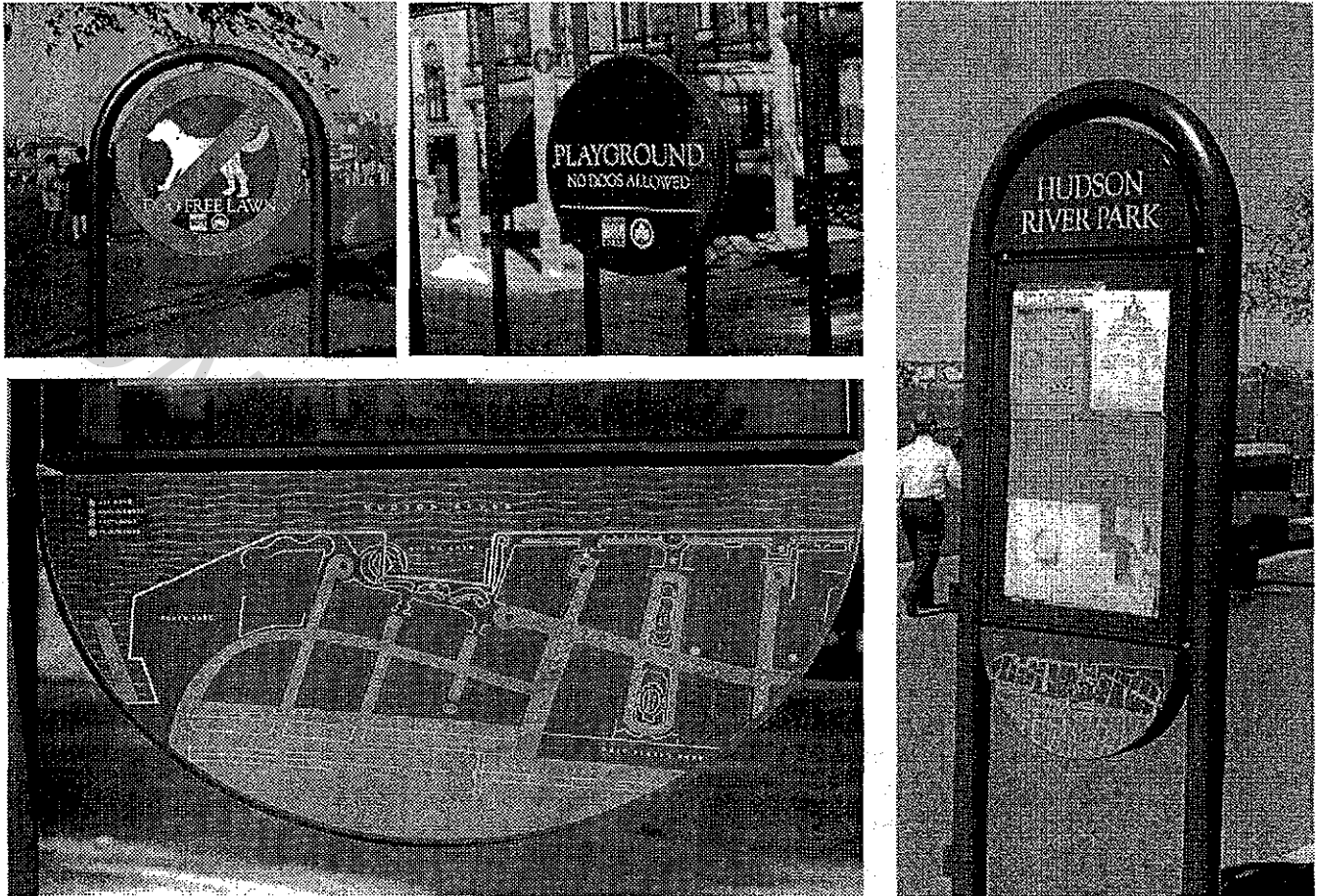
See Section 8.2 for Development Standards by signage type.

8.1.3 Design Guidelines

- a) All signage in the system should be clearly identifiable as elements of the Chambers Creek Properties system.
- b) Signs may be organized into sub-groups according to function. Functional signage groups can be created using elements including, but not limited to, shape, font type and size, color, materials, construction details, and type of supports while retaining clear identity as parts of the Chambers Creek Properties system.
- c) Signage should be used to express the nature of the site and its uses.
- d) Signs should be visually and physically integrated into site design elements, both landscape and built form.

Use of Color

- e) Colors should relate to, but not necessarily blend with the site environment in order to ensure that the signage system is visually appropriate (Figure 44).
- f) Contrast should be used to draw attention.



Figures 43: Examples of “families of signs”

- g) Signs on the Chambers Creek Properties should primarily use brown and green colors, except where the intent is to draw attention, in those cases bright colors may be appropriate, particularly as accents.

Fonts

- h) Sans serif fonts are more legible and are therefore appropriate for large blocks of text.
- i) Sans serif fonts have more visual impact/weight and are therefore appropriate for headings.
- j) Sign fonts should be highly legible when viewed at the distance required.
- k) If sign fonts use 3-D letters, both upper and lower case versions should be able to be easily read when viewed at an angle.

Materials

- l) All signage should be constructed of durable, recycled, environmentally sensitive, and/or locally available materials (Figure 45).
- m) Signage materials should be visually integrated with the site landscape.
- n) Signs may be constructed of materials found on site.
- o) All materials should have manufacturers' guarantees against wear under regular conditions and be the most suitable for the application.

8.1.4 Area-Specific Guidelines

There are no Area-Specific Guidelines for Site Wide Signage and Graphic Design.

8.2 Signage Types

8.2.1 Entrance Signage Guidelines

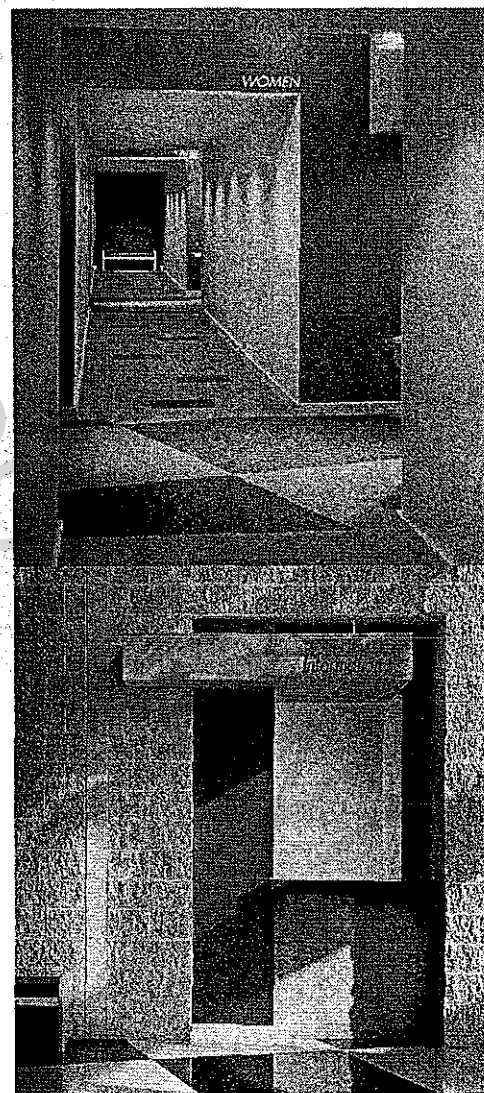
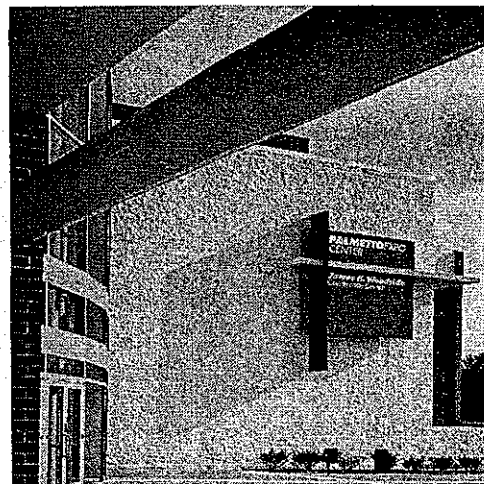
- a) Entrance signage should be used to identify public and non-public site entrances.
- b) Entrance signage should be large enough to be visible to drivers after dark.
- c) Site "icons" or symbols, whether freestanding or combined with text, may be used to provide a unique and recognizable entrance to specific areas of the site (Figure 46). Icons could be developed as part of the public art program.

8.2.2 Perimeter Signage Guidelines

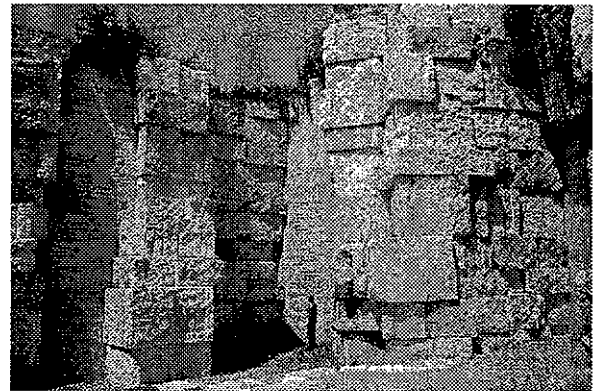
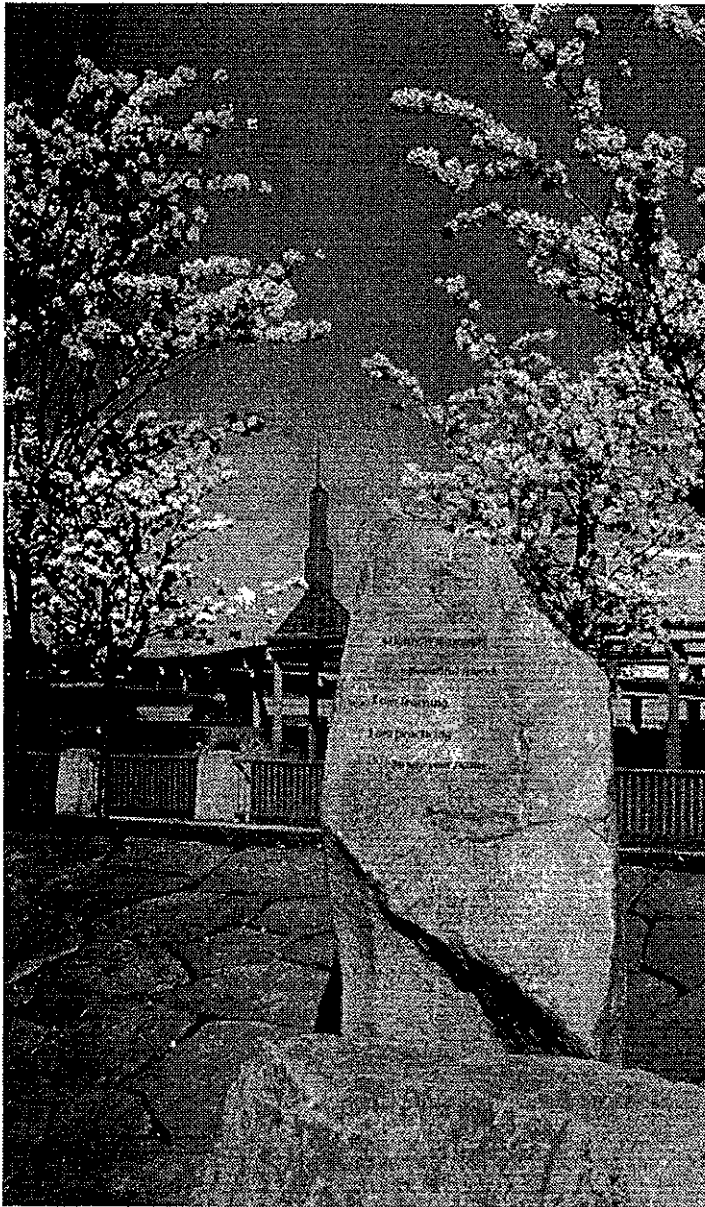
- a) Perimeter signage should be located along site buffers and boundaries to identify the site (Figure 47).
- b) Perimeter signage may indicate that an area is not publicly accessible at that location, or may indicate the direction of a site entrance.
- c) The primary text for perimeter signage should have a maximum readable distance of 50 feet and maximum impact at 20 feet.

8.2.3 Directional Signage Guidelines

- a) Directional signage should be used to emphasize clarity, order, balance, contrast, unity, harmony (Figure 48).
- b) Directional signage should center the visitor on the map.



Figures 44: Use of color to create contrast



Figures 45: Examples of signage material integrated with landscape

- c) The primary text for directional signage should have a maximum readable distance of 50 feet and maximum impact at 20 feet.

8.2.4 Informational Signage Guidelines

- a) Informational signage should provide information such as visitors' hours of operation, event announcements, rules and regulations, and other operational information.
- b) The primary text for informational signage should have a maximum readable distance of 25 feet and maximum impact at 10 feet.

- c) The secondary text for informational signage should have a maximum readable distance of 5 feet and maximum impact at 5 feet.

8.2.5 Interpretive Signage Guidelines

- a) Interpretive signage may take many forms, including, but not limited to:
- Conceptual (types of writing style and types of content);
 - Graphic (with photos and illustrations as well as words);
 - Interactive (with different types of involvement);
 - Emotional (with humor, human interest, first-person stories);
 - Physical (with labels at different heights and positions).
- b) Interpretive signage should use graphic elements, including:
- Color: as an organizing element, used expressively or figuratively or both;
 - High resolution photos: black & white, duotone and color;
 - Illustrations: technical and freehand;
 - Tactile elements: that supplement graphics where appropriate, providing "hands-on" experiences.
- c) The primary text for interpretive signage should have a maximum readable distance of 25 feet and maximum impact at 10 feet.
- d) The secondary text for interpretive signage should have a maximum readable distance of 15 feet and maximum impact at 5 feet.

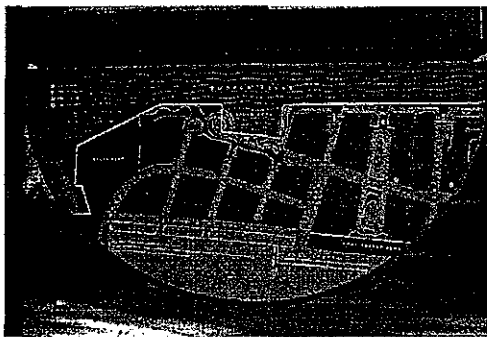


Figure 48: Directional signage

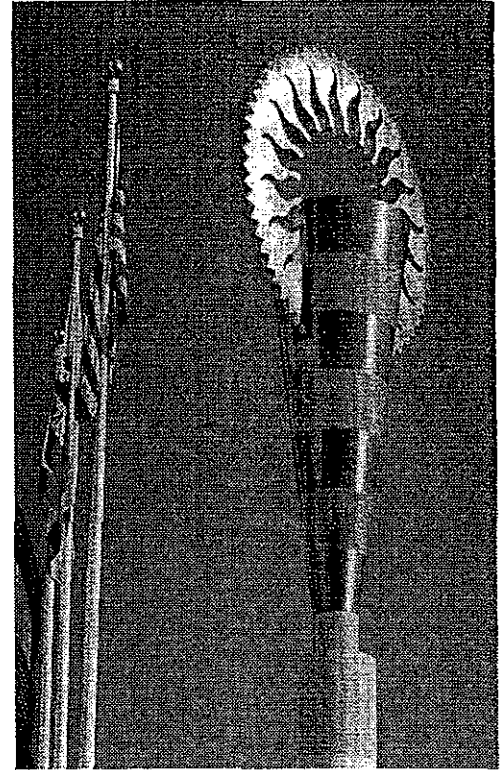


Figure 46: Example of an icon used to identify entrance to areas

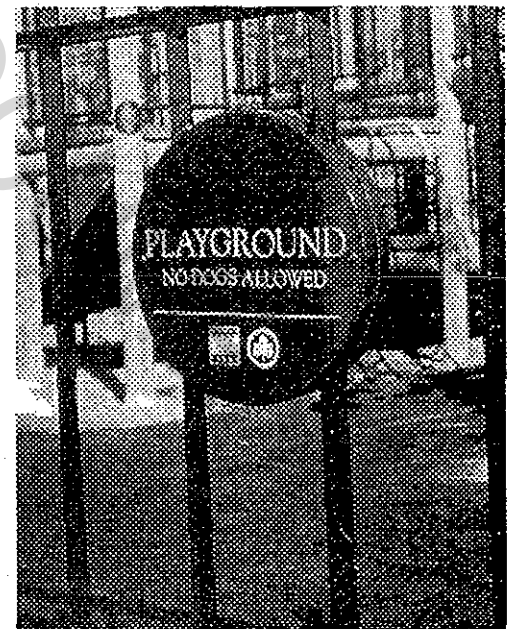


Figure 47: Example of perimeter signage

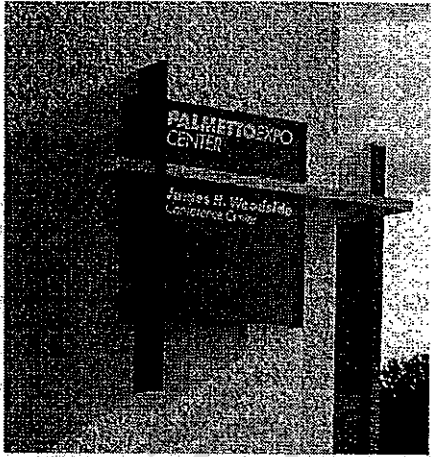


Figure 49: Building identification signage

8.2.6 Building Identification Signage Guidelines

- a) Building Identification Signage should be visually compatible with the architecture (Figure 49).
- b) Building Identification Signage should be considered integral to architecture, as visually important as light fixtures, elevations, and other building elements.
- c) Building Identification Signage should achieve a balance, maximizing legibility without sacrificing the integrity of the design.

8.2.7 Regulatory Signage Standards

- a) All regulatory signs visible from off-site shall conform to the requirements of the City of University Place Municipal Code (limited to permits, height, size, and setbacks).
- b) If a sign is needed that does not meet the City of University Place code, the proposal will be addressed in accordance with the provisions of Section 1.3.2, Adjustments and Amendments.
- c) Traffic control signs shall comply with MUTCD (Manual of Uniform Traffic Control Devices) standards.

8.2.8 Accessibility

- a) Signage should be designed to indicate degree of accessibility of the site uses.

Section 9: Architectural Guidelines

The architectural guidelines provide parameters for building designs that complement the site landscape and that are sensitive to environmental features such as views. It is the intent of the Master Site Plan that development is visually unobtrusive and complementary to the natural characteristics of the site. However, it is also desired that on-site development be of "signature" quality and be of the highest design and construction standards. "Alternative" and "experimental" building design and construction is encouraged whenever possible, assuming such design meets the environmental and aesthetic criteria set forth in the Design Guidelines.

9.1 Building Placement & Design

9.1.1 Design Objectives

- a) To retain the landform and landscape as the predominate site features.
- b) To integrate new buildings within the site landscape.
- c) To ensure that buildings are sited to effectively serve their desired function for users.
- d) To site buildings to protect major views and panoramas, while also maximizing preservation of those views from inside buildings.
- e) To develop buildings and sites using "sustainable" materials and practices to ensure that they are energy efficient, provide non-toxic working conditions and environmentally sensitive features.

9.1.2 Development Standards

- a) Buildings shall be sited to minimize impacts to steep slopes, significant stands of vegetation and wildlife habitat.
- b) New buildings shall be limited to a height of 40 feet (plus five feet for a pitched roof).
- c) New buildings shall be setback a minimum of 25' from roads to preserve major view corridors.

9.1.3 Design Guidelines

- a) Building entrances should be easily visible and accessible from adjacent parking lots and pathways.

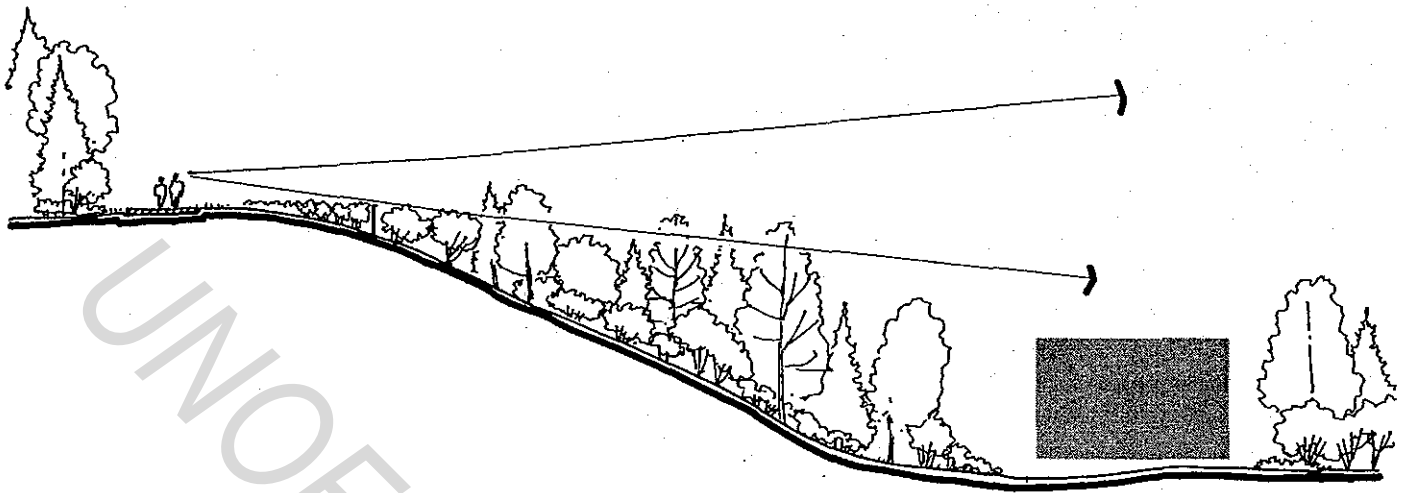


Figure 50: Building placement can protect views

- b) Building entrances should provide protection from the weather.
- c) Buildings should be sited and oriented to take advantage of natural light in interior spaces.
- d) Promote high indoor air qualities through the use of techniques such as natural air circulation, nontoxic finishes/materials and others.
- e) Use cost-effective materials that are recycled or that consist of sustainable/renewable products, and which meet LEED standards as much as possible, (LEED is a self assessing system that evaluates environmental performance from a "whole building perspective over a buildings whole life cycle, providing a definitive standard for what constitutes a green building. LEED is based upon accepted energy and environmental principals and strikes a balance between known effective practices and energy concepts) such as certified wood (wood from forests guaranteed by an independent third party using stringent principles that address both the social and economic impacts of harvesting wood), engineered products such as veneers made from fast growing, small diameter trees (instead of old growth trees), bamboo, fiber cements and others.

9.1.4 Area-Specific Guidelines

Area 1 (North Area)

- a) The golf course club house should be sited at the base of, or benched into the hillside so as not to impact long distance views across the site, and to help stabilize slopes (Figure 50).

- b) The golf course clubhouse in Area 1 should be sited to take advantage of sweeping views of Puget Sound and beyond.

Area 3 (Grandview Trail & Buffer)

- c) The restaurant in Area 3 should be sited to take advantage of sweeping views of Puget Sound and beyond, while being sensitive to preservation of major views from the Grandview Trail.
- d) The restaurant should not be situated such that the predominant view from the major site entry and overlook is obscured.

Area 5 (Environmental Services & Playfields)

- e) The Environmental Services Building and Environmental Education Center should be sited in the northwest portion of Area 5 to take advantage of sweeping views of Puget Sound and beyond.
- f) The new buildings in Area 5 should be sited to avoid development on unstable slopes.
- g) The new buildings in Area 5 should be setback from the top of the slope to preserve views from other parts of Area 5.

Area 6 (South Area)

- h) The administrative offices and parking area should be sited in the southwestern portion of Area 6.
- i) The building should be oriented to take advantage of southwesterly views of the Puget Sound and so as not to obstruct views from the open meadow area.
- j) The building and parking area should be sited out of the line of sight from trails and other adjacent uses.

9.2 Building Materials & Colors

9.2.1 Design Objectives

- a) To reflect the natural character of the site through sensitive use of building materials.
- b) To utilize materials that achieve a balance of building prominence and integration within the site landscape.
- c) To encourage the use of locally-available, recycled, and environmentally sensitive building materials.

9.2.2 Development Standards

- a) Buildings shall be constructed of non-reflective, non-glare producing materials.

- b) Reflective metals and reflective glass may not be used as primary building materials.
- c) Primary building colors shall be subdued and responsive to site conditions.
- d) Bright colors may be used as accent colors.

9.2.3 Design Guidelines

- a) Building materials should relate visually to site characteristics (e.g., wood, brick, and non-reflective metal).
- b) Durable, environmentally sensitive, locally available, non-toxic, and/or recycled building materials should be utilized.

9.2.4 Area-Specific Guidelines

There are no Area-Specific Guidelines for Building Materials & Colors.

9.3 Auxiliary Spaces & Mechanical Equipment

9.3.1 Design Objectives

- a) To screen auxiliary spaces and mechanical equipment from view.
- b) To integrate auxiliary spaces and mechanical equipment into building design.

9.3.2 Development Standards

- a) Auxiliary spaces shall be integrated into overall building and site design so as to minimize visual prominence of these spaces.
- b) Building service areas, such as garbage and recycling collection areas shall be screened with fences and/or vegetation.
- c) Mechanical equipment shall be placed in areas that are obscured from view and stepped away from the roof edge to ensure being obscured.
- d) Mechanical equipment shall be visually integrated with the design of the building, and shall be constructed of or screened by materials and colors that are compatible with adjacent buildings.

9.3.3 Design Guidelines

- a) For exterior waste storage, to ensure that adequate and efficient outside storage space is provided for collection containers for recyclable materials and solid waste, storage areas shall be designed and constructed to meet the needs

of the occupants, efficiency of pickup, and accessibility to occupants and collection companies (See Section 4.4 Solid Waste Disposal).

- b) Mechanical equipment such as antennas and satellite dishes shall be limited to a maximum of 110 feet, provided they are placed appropriately and are screened from view (See Section 4.2, Telecommunication for detailed standards).
- c) Window wells should not be used for mechanical equipment such as air conditioners.

9.3.4 Area-Specific Guidelines

There are no Area-Specific Guidelines for Auxiliary Spaces & Mechanical Equipment.

9.4 Building Expansions & Renovations

9.4.1 Design Objectives

- a) To preserve and enhance the character of original buildings when expanded or renovated.

9.4.2 Development Standards

There are no Development Standards for Building Expansions & Renovations.

9.4.3 Design Guidelines

- a) Design elements that define building character should be retained and preserved when renovating or expanding buildings.
- b) Architectural patterns and articulations such as window and door openings should be continued when renovating or expanding buildings.
- c) Roof lines and architectural details should not be altered during renovations and should be continued in building expansions.
- d) Building materials used in renovations and expansions should be the same as or visually compatible with original building materials.

9.4.4 Area-Specific Guidelines

There are no Area-Specific Guidelines for Building Expansions & Renovations.

9.5 Transit Facilities

9.5.1 Design Objectives

- a) To develop transit facilities as needed.
- b) To respond to site context and area-specific architecture and development context.

9.5.2 Design Guidelines

- a) Transit waiting sheds may be provided in public areas of the site where users are likely to arrive by transit, including Areas 1/3 and 6. Facilities should be designed to fit within the site landscape and the architectural and development context of the particular area within which it is located.

Section 10: Public Art & Interpretation

Offering a multitude of aesthetic, interpretive, and educational benefits, public art is an important aspect of overall site design. Pierce County administers a "One Percent For Public Art" program that will promote the installation of public art on the Chambers Creek Properties. Selection of specific art installations will comply with County procedures for One Percent For Public Art.

10.1 Interpretive Opportunities

10.1.1 Design Objectives

- a) To enhance "sense of place" and help create identity and character of the area and site.
- b) To offer a sense of exploration and discovery.
- c) To encourage a broad range of artistic expression.
- d) To ensure the selection and placement of artwork that is responsive to site character, including natural, historical, and built context.
- e) To encourage artwork that offers interpretive and educational opportunities.
- f) To provide an appropriate level of guidance for public artwork that does not overwhelm or undermine the creative process of the audience.

10.1.2 Development Standards

There are no Development Standards for Public Art and Interpretation.

10.1.3 Design Guidelines

- a) Public art should provide opportunities for interpretation and education for visitors on a range of issues relating to the site (Figure 51).
- b) Public art should be accessible to persons of all ages, sizes, and physical ability.
- c) Public art should be integrated into the built environment, including building exteriors, play areas, benches, lighting fixtures, pathways, and other site infrastructure.
- d) Public art should reflect the landscape character of the site and can be integrated into individual landscape elements or constructed of materials available on the site.

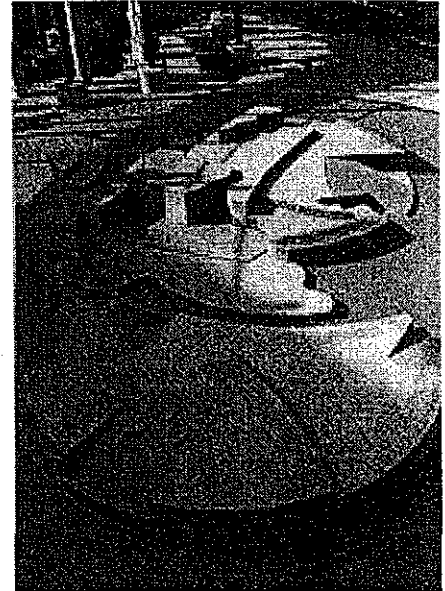


Figure 51: Example of public art integrated into a public plaza

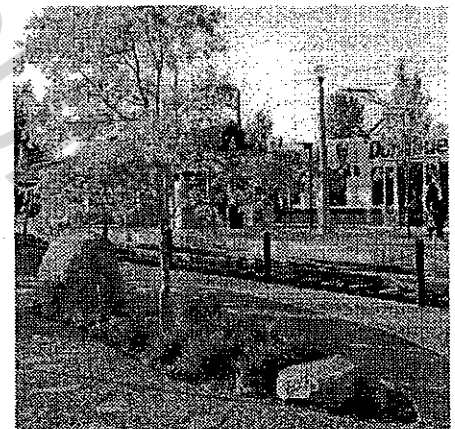


Figure 52: Example of Public art incorporating landscape elements

- e) Public art should provide opportunities for interpretation on site history, cycles of human use, mine reclamation, and the natural environment. There is particular opportunity to provide interpretive artwork that reflects the gravel mine using remnant mine “artifacts” and infrastructure on the site.

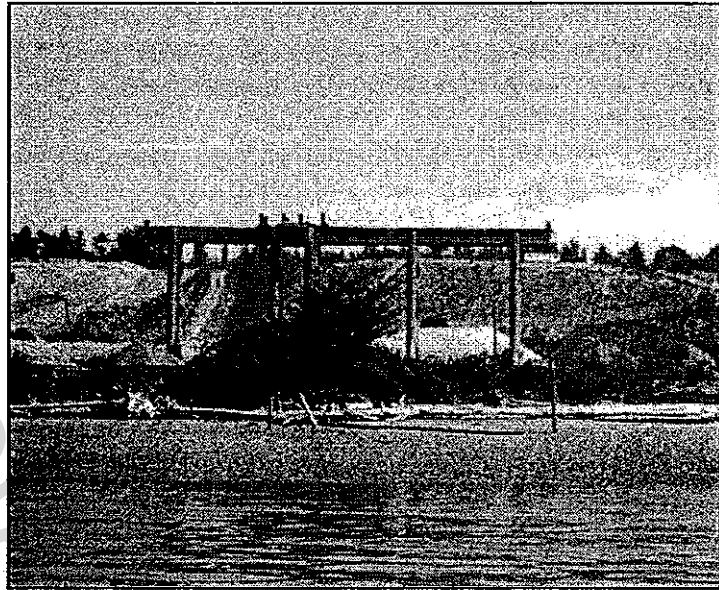


Figure 53: Remnant mining infrastructure provides interpretive opportunities

- f) Artwork can use forms or materials that reflect or explain the history of the site, including gravel mine operation (Figure 53).
- g) Public art and interpretive installations should provide insights into environmental issues such as conservation, reuse and recycling. Use of reused or recycled materials in art installations is encouraged.
- h) Public art should reflect native cultures that inhabited the area prior to the site's use for timber extraction and mining.
- i) Public art on the site can be used to help guide people from place to place. It should be used in entrances to the site to welcome people.

10.1.4 Area-Specific Guidelines

There are no Area-Specific Guidelines for Public Art & Interpretation.

10.2 Practical Design Issues for Public Art

10.2.1 Design Objectives

- a) To ensure that public art and interpretive installations are durable.
- b) To ensure that public art and interpretive installations do not present a hazard to site visitors.

10.2.2 Development Standards

There are no Development Standards for Public Art and Interpretation.

10.2.3 Design Guidelines

- a) Materials should be durable and should endure continuous exposure to a variety of weather conditions.
- b) Artwork should not require excessive maintenance.
- c) Artwork should utilize existing infrastructure for possible electricity or water requirements.
- d) Artwork should consider prevention of vandalism in its design.
- e) Children's safety should be taken into consideration when designing public art and interpretive installations. Artwork should minimize sharp edges and corners and ability for children to fall from a dangerous height.
- f) Artwork should be integrated with utilities such as lighting, benches, trash, and recycling receptacles.

10.2.4 Area-Specific Guidelines

There are no Area-Specific Guidelines for Public Art & Interpretation.

Chambers Creek Properties
Standards and Guidelines

Appendices

UNOFFICIAL DOCUMENT

Chambers Creek Properties
Standards and Guidelines

APPENDIX I
Applicable Codes

UNOFFICIAL DOCUMENT

Appendix I – Applicable Codes Matrix

This table serves as a guide for use in administration of the Guidelines and for processing Chambers Creek Properties permit applications.

Topic	CCPMSP/FEIS Defines	CCP Design Guidelines Apply	UP Code Applies	Lakewood Code Applies	Pierce County Code Applies	N/A
SITE INFRASTRUCTURE						•
Scope		Section 1				
Definitions and Terms	X ¹		13.10.020			
Stop Orders			13.10.030			
Standard Specifications						
Storm Drainage		2.2, 4.1 ²	13.10.040.G			
Tacoma Water System Plan			13.10.040.B			
Pierce County Sewer Plan			13.10.040.C			
Sewer Pre-Treatment Standards			13.10.040.D		Title 13	
Pierce County Health Regulations			13.10.040.E			
University Place Comprehensive Plan			13.10.040.F			
King County Surface Water Design Manual		2.2, 4.1	13.10.040.G			
LAG Manual			13.10.040.H			
City and County Road Standards						• ³
WSDOT Design Manual						•
MUTCD			13.10.040.K			
WSDOT Construction Manual			13.10.040.L			
State Health Regulations for Water			13.10.040.M			
Criteria for Sewage Works Design			13.10.040.N		Title 13	
Washington State L and I Conditions			13.10.040.O			
ITE Criteria	X**					
HUD/FHA Design Criteria						• ³
Highway Capacity Manual						•
ITE Trip Generation Manual	X**					
AASHTO Policy, Geometric Design			13.10.040.T			

1 See Definitions, CCPMSP FEIS

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NA Refers to conditions not found on Chambers Creek Properties

** Appendix 2 of these Guidelines identifies levels of use and traffic for the site (from the CCPMSP)

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Uniform Building Code			13.10.040.U			
King County Road Drainage Standards		2.2, 4.1	13.10.040.G			
Tacoma Electrical Code			13.10.040.W			
State of Florida Roundabout Design Guidelines						•
State of Maryland Roundabout Design Guidelines						•
Other Specifications not Listed Above			13.10.040.Z			
Permit Requirements		1.3-1.5				
Regulations for Tree Cutting on Public Lands/ROW						• ³
Construction Control						• ³
Inspection			13.10.080			
As-Builts			13.10.0085			
Utility Locations		4.1-4.2				
Easements						•
Pavement Cutting						•
Utility Extensions			13.10.120			
Traffic Control						•
Call Before you Dig			13.10.140			
Variations and Penalties			13.10.150			
Severability		1.3-1.5				
Variations		1.3-1.5				
Appeals		1.3-1.5				
Circulation - Roadways						
General		Section 2				
Traffic Analysis	X**					

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Design Standards						
Alignment		2.2, 2.3				
Grade		2.2, 2.3				
Width		2.2, 2.3				
Width Measurement		2.2, 2.3				
Measurement		2.2, 2.3				
Parking and Fire Lanes		2.2, 2.3				
Bus Stops, Pullouts		2.6, 9.5				
Street Construction						
State Standard Specifications						3
Traffic Control Plans						3
Vertical/Horizontal Staking						3
Asphalt Joints						3
Compaction Specifications						3
Form and Subgrade Inspection						3
Street Name						.
Regulatory Signs		8.2				
Temporary Erosion Control						3
Functional Classification						.
Naming						.
Signing		8.2				
Right-of-Way						.
Private Streets and Alleys		2.2				
Development of Substandard Streets		2.2				
Street Frontage Improvements						.
Cul-de-sac		2.3				
Hammerhead Turnaround		2.3				

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Topic	CCPMSP/FEIS Defines	CCP Design Guidelines Apply	UP Code Applies	Lakewood Code Applies	Pierce County Code Applies	N/A
Temporary Dead Ends						3
Medians						3
Intersections		2.1				3
Driveways						3
Sight Obstruction						3
Surfacing Requirements		2.5				3
Temporary Street Patching						3
Trench Backfill and Restoration						3
Staking						3
Testing						3
Circulation - Walkways, Pathways, and Trails						
General		2.4				
Design Standards		2.4				
Walkways		2.4				
Pedestrian Circulation		2.4				
Urban and Nature Trails		2.4				
Curb and Gutter		2.2, 4.1				
Handicap Accessibility Ramps		2.4				
Bus Pads		2.6, 9.5				
Staking						
Testing						
Circulation - Bicycles						
General		2.2, 2.4				
Illumination						
General		Section 7				
Design Standards		7.1				

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Topic	CCPMSP/FEIS Defines	CCP Design Guidelines Apply	UP Code Applies	Lakewood Code Applies	Pierce County Code Applies	N/A
Roadway Light Construction			13.15.345			• ³
Staking			13.15.350			•
Testing			13.15.360			•
Circulation - Signals						
General						•
Design Standards						•
Induction Loops						•
Staking						•
Testing						•
Circulation - Additional Features						
General						•
Design Standards						•
Staking						•
Testing						•
Survey Monuments			13.15.470			
Bus Stops, Shelters, and Amenities		2.6, 9.5				
Mailboxes						•
Retaining Walls/Guard Rails	6.4					
Circulation - Emergency Access						
Purpose			13.15.540			
Administration			13.15.550			
Emergency Vehicle Access Requirement			13.15.560			
Design Standards		2.3				
Emergency Access Locations		2.3				

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Topic	CCPMSP/FEIS Defines	CCP Design Guidelines Apply	UP Code Applies	Lakewood Code Applies	Pierce County Code Applies	N/A
Utilities						
Surface Water Management		4.1				
Telecommunications		4.2				
Electrical Power		4.3				
Solid Waste Disposal		4.4				
Water Utilities		4.5				
Wastewater Facilities		4.6				
Fire Flow		4.7				
DEVELOPMENT STANDARDS						
Land Use						
Introduction		1.1-1.5				
Development Regulations		1.1-1.5				
Interpretation and Application		1.1-1.5				
Severability		1.5				
Brief User's Guide		1.1-1.5				
Definitions	X ¹		19.15			
Zone Classifications and Use Tables						
Purpose		1.1-1.2				
List of Classifications		1.3, Appendix 2 ²	19.25			
Use Map		1.2, Appendix 2				
Interpretation of Uses and Use Tables		1.1-1.5, Appendices 1-3				
Exempted Uses	X	1.1-1.5, Appendices 1-3				
Zone Classifications and Use Tables	X	1.1-1.5, Appendices 1-3				
List of Categories						•

¹ See Definitions, CCPMSP FEIS

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Topic	CCPMSP/FEIS Defines	CCP Design Guidelines Apply	UP Code Applies	Lakewood Code Applies	Pierce County Code Applies	N/A
Residential Use Category – Description						•
Civic Use Category – Description						•
Utilities Use Category – Description						•
Office/Business Use Category – Description						•
Resource Use Category – Description						•
Commercial Use Category – Description						•
Industrial Use Category – Description						•
Accessory Use and Structures			19.30			
Temporary Use /Housing			19.35			
Standards						
Density and Dimension		1.3, Section 9, Appendix 2				
Landscaping and Buffering						
Purpose		3.2, Section 5				
Perimeter Landscape buffer (parking lots and open spaces)		3.2, 5.3, Section 6				
Parking Lot Landscaping		3.2, 5.3				
Critical Area Buffering		Section 6	19.35.030.D	Title 14		
Landscaping and Buffering		Sections 3,5				•
Expansion of Existing Development		1.3-1.5				
Landscape Levels		3.2, Section 5, Section 6	19.65.150 ¹			
Existing Vegetation		5.6				
Plant Sizes and Standards		3.2, 5.3				
Significant Tree Preservation		5.6				
Irrigation		3.2, 5.1, 5.3				
Planting and Irrigation Plans		3.2, 5.1, 5.3				

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Topic	CCPMSP/FEIS Defines	CCP Design Guidelines Apply	UP Code Applies	Lakewood Code Applies	Pierce County Code Applies	N/A
Maintenance		3.2, 5.1, 5.2				
Replacement		3.2, 5.1, 5.2				
Bonding						•
Root Control		5.4				
Offstreet Parking and Loading	X**	Appendix 2				
Open Space and Set Aside Lands						•
Home Occupations						•
Day Care Facilities						•
Accessory Dwelling Units						•
Agricultural Uses and Animals						•
Mobile and Manufactured Home Parks						•
Solid Waste Handling		4.4, 9.3				•
Hazardous Waste Handling						•
Nonconforming Standards						•
Improvements						•
Signs						
Code Adopted		Section 1				•
Purposes		Section 8				
Definitions		Section 8				
Administration and Enforcement		Section 8				
Permits Required		Section 8				
Applications for Sign Permits		Section 8				
Prohibited Signs		Section 8				
Exemptions		Section 8				
Permit Issuance		Section 8				
Right of Entry		Section 8				

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Topic	CCPMSP/FEIS Defines	CCP Design Guidelines Apply	UP Code Applies	Lakewood Code Applies	Pierce County Code Applies	N/A
Zoning Compliance		1.3-1.5	19.20 and 19.25 ¹			
Conflicting Regulations			19.75.120			
Liability			19.75.130			
Revocation of Permits			19.75.140			
Nuisance Abatement						•
Damaged Nonconforming Signs						•
Permit Fees						•
Freestanding Letters						•
Plans Filed						•
Individual Signs						•
Permits Issued to Whom			19.75.210			•
Marquee - Canopy						•
Wall Signs						•
Street Banners - Decorations						•
Signs not to Obstruct Signals						•
Public Right-of-way						•
Billboards - General Requirements						•
Billboards - General						•
Billboard Lighting						•
Setback Lines		Section 8				
Maximum Height - Generally		Section 8				
Visibility			19.75.320			
Establishment of Property Lines			19.75.330			
Sizes and Types of Signs Permitted in Zones		Section 8				
Planter Boxes/Bumper Guards etc			19.75.350			

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Topic	CCPMSP/FEIS Defines	CCP Design Guidelines Apply	UP Code Applies	Lakewood Code Applies	Pierce County Code Applies	N/A
Entrance and Exit Signs		Section 8				
Entrance /Exit/Ingress/Egress/Gateways		Section 8				
A-Board and Similar Signs						•
Electric Power Lines - Clearance						•
Signs on Fences		8.1-8.2				
Temporary Residential Area Development Signs			19.75.410 ⁴			
Temporary Signs		Section 8	19.75.415 ⁴			
Non-conforming Signs		Section 8	19.75.420 ⁴			
Replacement of Non-conforming Signs		Section 8	19.75.440 ⁴			
Sign Removal Provisions						•
Sign Removal - Time Period						•
Penalty for Violations						•
Severability		1.5				
Discretionary Land Use Permits						
Administrative Use Permit		1.1-1.5				
Conditional Use Permit		1.1-1.5				
Variances		1.1-1.5				
Planned Development Districts		1.1-1.5				
Public Facilities Permit		1.1-1.5				
Nonconforming Use Permit		1.1-1.5				
Procedures						
Applications, Review Process, and Permits		1.1-1.5				
Amendments		1.1-1.5				
Appeals and Reconsiderations		1.1-1.5				
Revocation and Expiration		1.1-1.5				

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Permits, Enforcement & Penalties		1.1-1.5				
Fencing, Barriers, and Buffers						
Fencing		6.1				
Vegetated Security Buffers		6.2				
Landscaped Buffers		6.3				
Architectural Guidelines						
Building Placement and Design		9.1				
Building Materials and Colors		9.2				
Auxiliary Spaces and Mechanical Equipment		9.3				
Building Expansions & Renovations		9.4				
Public Art & Interpretation						
Interpretive Opportunities		10.1				
Practical Design Issues		10.2				
Shoreline Master Program			Title 18	Title 14		
Critical Areas Ordinance			Title 17	Title 14		

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* See Appendix 3 for Jurisdictional Locations

Chambers Creek Properties
Standards and Guidelines

APPENDIX 2
Site Uses/ Parking Requirements

Area 1—North Area

Area 1 (240 acres) will provide a mix of public recreation and utility uses. Figure 1 identifies Area 1 uses in detail.

FIGURE 1
AREA 1 USES

USES	Acres	Square feet	Employees	Parking
Arboretum	40	*	10-15 (a)	100-120 (b)
Botanical Garden	(c)	45,000-50,000	25-35 (d)	80-100 (e)
Golf Course	150	*	(c)	(c)
Trails	(c)	*	0	(c)
Greenhouse	(f)	10,000 (g)	35-45 (h)	(i)
Visitor/Env. Ed. Center	(c)	12,000-16,000	(c)	(i)
Administration/Maintenance	(i)	(i)	(i)	(i)
Picnic and Play area	(c)	*	0	(c)
Water Reclamation	85-90 (k)	*	0	0
Water Production	45-50 (m)	*	0	0
Shoreline Public Access (n)	*	*	0	15-25 (o)
Concessions (n)	*	*	3	(o)
Buffer	*	*	0	0
Potential Rail Relocation	(p)	*	0	0
Mining and Reclamation	(q)	*	(r)	0
TOTALS	240	*	73-98	198-245

NOTES

Acreages are not additive; multiple uses occur in some areas

* Not applicable

s.f. Means square feet

(a) Includes Arboretum and Golf Course maintenance employees

(b) Parking for both Arboretum and Golf Course

(c) Included in Arboretum number

(d) Includes 10-15 Greenhouse employees, 15-20 Administration employees

(e) With additional overflow area

(f) Included in Golf Course number

(g) Includes Pro Shop, Maintenance, and 5,000 s. f. Restaurant

(h) Includes 35-40 Restaurant employees and 5 Pro Shop employees

(i) Included in Botanical Garden number

(j) 5,000 s. f. included in Botanical Garden s. f. number

(k) Integrated with other Area 1 uses, includes 40 acres of ponds

(l) Included in WWTP employees, Area 2

(m) Integrated with other Area 1 uses

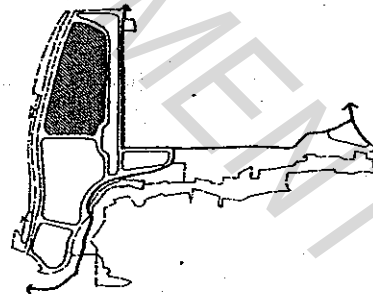
(n) at North Dock, access provided via tunnel (preferred to an overpass)

(o) Included in Area 1 and North Dock parking

(p) Unknown at time of MSP adoption

(q) Mine reclamation will continue to proceed as mining activities are reduced

(r) No greater than typical Lone Star Northwest employment



Area 2—Wastewater Treatment Plant

Area 2 (160 — 180 acres) is reserved for existing and future wastewater utility use and in general, public access to the WWTP will continue to be restricted for safety and security reasons. Figure 2 identifies Area 2 uses in detail.

**FIGURE 2
AREA 2 USES**

USES	Acres	Square feet	Employees	Parking
WWTP	160-180	*	399 (a)	(b)
Administration/Maintenance	(c)	*	(c)	(b)
Production Nursery	(c)	*	(c)	(b)
Soils Manufacturing	(b)	*	(c)	(b)
Water Reclamation	(c)	*	*	(c)
Water Production	(c)	*	*	(c)
Mining and Reclamation	(d)	*	(c)	*
TOTALS	160-180	*	399	(a)

NOTES

WWTP means Wastewater Treatment Plant

* Not applicable

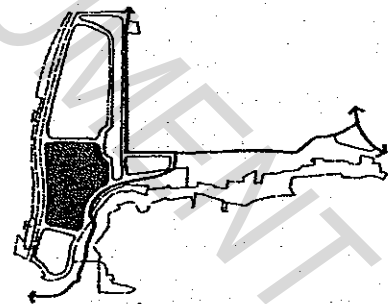
(a) Existing and future employees

(b) To be determined based on the demand for each phase

(c) Included in WWTP

(d) Mine reclamation will continue to proceed as mining activities are reduced

(e) No greater than typical Lone Star Northwest employment



Area 3—Grandview/64th Street W Trail and Buffer

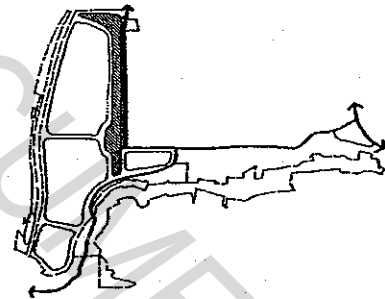
Area 3 (80–100 acres) will provide a mix of public recreation and commercial uses listed in Figure 3.

**FIGURE 3
AREA 3 USES**

USES	Acres	Square feet	Employees	Parking
Trail	*	*	0	0
Trailhead/Overlook (a)	*	*	0	15-25
Food/restaurant (b)	*	10,000 (c)	75	100
Buffer	*	*	0	0
Mining and Reclamation	(d)	*	(e)	*
TOTALS	80-100	*	75	115-125

NOTES

- * Not applicable
- s.f. Means square feet
- (a) Northern end of Area 3
- (b) Includes Trailhead/Overlook, and play area, southern end of Area 3
- (c) s.f. applies to Restaurant only
- (d) Mine reclamation will continue to proceed as mining activities are reduced
- (e) No greater than typical Lone Star Northwest employment



Area 5—Maintenance Facility Area (road shop)

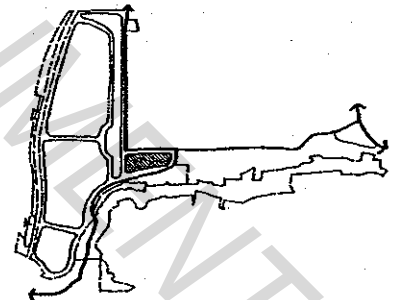
Area 5 (64 acres) will provide a mix of public recreation, government facilities, and commercial uses. Figure 4 identifies Area 5 uses in detail.

**FIGURE 4
AREA 5 USES**

USES	Acres	Square feet	Employees	Parking
Trail	*	*	0	0
Trailhead/Overlook	*	*	0	15-25
Administration/Maintenance	*	18,000-25,000 (a)	60-85 (b)	45-62
Commercial Offices	*	40,000-50,000	130-165	100-125
4-6 Multi-purpose playfields	*	70,000 (c)	0	140-210
Concession (d)	*	(e)	(e)	(d)
School bus barn (f)	6	(f)	42 (f)	(f)
Mining and Reclamation	(h)	*	(i)	*
TOTALS	64		232-292	300-422

NOTES

- * Not applicable
- s.f. Means square feet
- (a) s. f. applies to new facilities only
- (b) Existing and future employees
- (c) Per field
- (d) Included with playfields
- (e) Unknown at time of MSP adoption
- (f) Total existing, no new proposed
- (g) No new proposed
- (h) Mine reclamation will continue to proceed as mining activities are reduced
- (i) No greater than typical Lone Star Northwest employment



Area 6—South Area

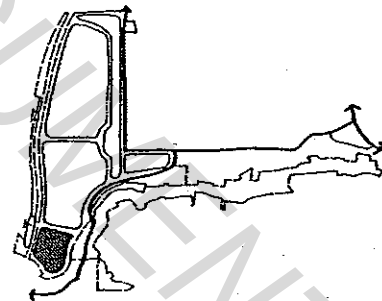
Area 6 (50–60 acres) will have uses listed in Figure 5.

FIGURE 5
AREA 6 USES

USES	Acres	Square feet	Employees	Parking
Open Space (a)	*	*	*	25-50
Trails	*	*	*	(b)
Boat Launch-4 lanes	*	*	(c)	105-135 (d)
Administration/Maintenance	*	12,000-20,000 (e)	18-23 (f)	
Concessions	*	(g)		(h)
Buffer	*	*	0	0
Parking for Area 8 (b)	*	*	0	20
Mining and Reclamation	(i)	*	(j)	*
TOTALS	50-60		18-23	150-205

NOTES

- * Not applicable
- s.f. Means square feet
- (a) Includes passive recreation, picnic area, children's play area
- (b) Included with open space parking
- (c) Unknown at time of MSP adoption
- (d) 80–100 trailer spaces, 25–35 car only spaces
- (e) Includes 5,000 s. f. administration, plus restrooms, maintenance, and concessions
- (f) Includes 15–20 Administration and maintenance, and Concessions, 3
- (g) Included in Administration /Maintenance
- (h) Included in Area 6 and South Dock parking
- (i) Mine reclamation will continue to proceed as mining activities are reduced
- (j) No greater than typical Lone Star Northwest employment



Area 7—Chambers Creek Canyon Park Area

Area 7 (200 acres) will be accessible for foot traffic only through a linked series of nature trails in the Canyon as shown in Figure 6.

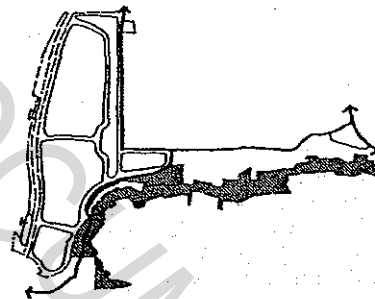
FIGURE 6

AREA 7 USES

USES	Acres	Square feet	Employees	Parking
Nature Trails			0	
Trailhead Chambers Creek Road W	*	*	0	8 to 12
Trailhead Phillips Rd	*	*	0	5 to 10
Trailhead Zircon Dr	*	*	0	5 to 10
Trailhead Chambers Lane	*	*	0	10 to 20
TOTALS	200	*	0	28-47

NOTES

* Not applicable



Area 8—West of Railroad

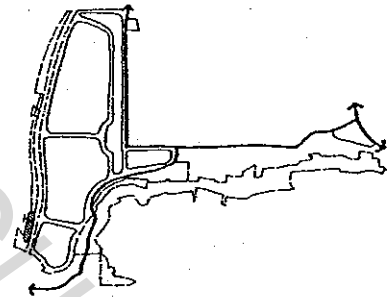
Area 8 (8 acres) will be provide public access to the Puget Sound shoreline via either a tunnel (preferred) or an overpass to the South Dock. Figure 7 identifies Area 8 uses in detail.

FIGURE 7
AREA 8 USES

USES	Acres	Square feet	Employees	Parking
Shoreline public access (a)	8	*	0	(b)
Mining and Reclamation	(c)	*	(d)	*
TOTALS	8	*	0	0

NOTES

- * Not applicable
- (a) Beach and pier access provided via tunnel (preferred to an overpass)
- (b) Included in area 6 and South Dock parking
- (c) Mine reclamation will continue to proceed as mining activities are reduced
- (d) No greater than typical Lone Star Northwest employment



Chambers Creek Properties
Standards and Guidelines

APPENDIX 3
Jurisdictional Locations

UNOFFICIAL DOCUMENT

APPENDIX 3

JURISDICTIONAL LOCATIONS

The Table below identifies the jurisdiction in which each site area is located.

SITE AREA	Responsible Jurisdiction	NOTES
1	University Place	
2	University Place	
3	University Place	
5	University Place	
6	University Place	
7	Pierce County	Those portions of Area 7 which are located south of the centerline of Chambers Creek between Section Line 28 and Lot 62 of the Oakbrook 7th Addition
7	University Place	Those portions of Area 7 north of the Centerline of Chambers Creek
7	Lakewood	Those portions of Area 7 which are located south of the centerline of Chambers Creek EXCEPT those portions of Area 7 which are located south of the centerline of Chambers Creek between Section Line 28 and Lot 62 of the Oakbrook 7th Addition