

Chapter 2

Description of the Proposed Action and Alternatives

CHAPTER 2 DESCRIPTION OF PROPOSED ACTIONS AND ALTERNATIVES

Chapter 2 of the Draft EIS provides a description of the Proposed Actions and the Alternatives evaluated in this Draft EIS. The description of the Proposed Actions included in this chapter represents the applicant's (La Pianta LLC) proposal for long-term development of the Tukwila South site. Pertinent City of Tukwila planning and environmental review actions related to the Proposed Actions are also discussed in this chapter.

2.1 Introduction

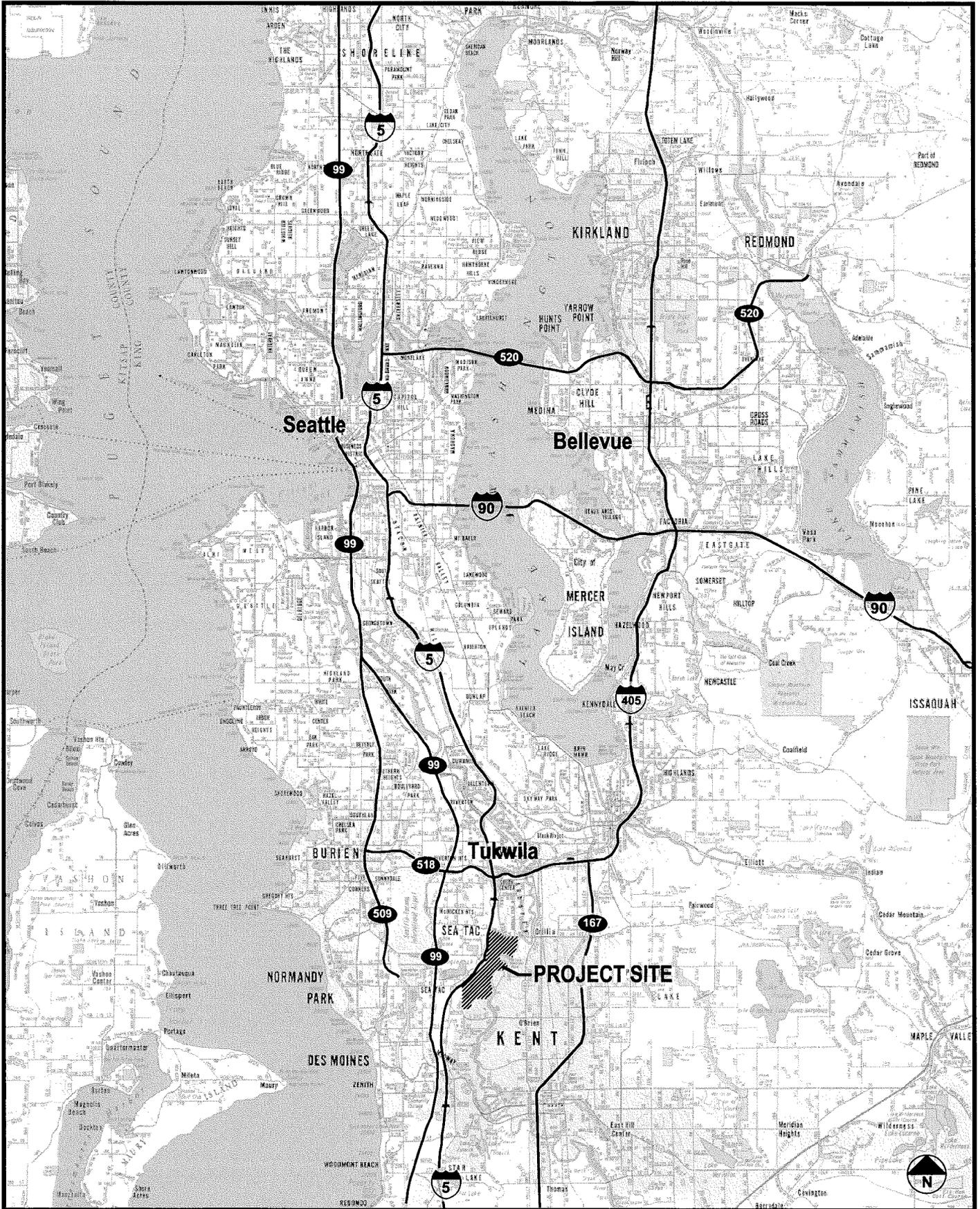
La Pianta LLC is proposing a master plan (Tukwila South Master Plan) and long-term development of up to approximately 14 million square feet in a large-scale, campus setting on approximately 498 contiguous acres located in the City of Tukwila and portions of unincorporated King County and the City of Kent that lie due south of the City. Figure 2-1 is a vicinity map. The vast majority of the site is under the control of a single property owner. Proposed uses are campus-style office and research environments with an array of commercial, retail, residential, hotel and recreational uses. Overall, the project would be developed to accommodate the needs of national and international companies and institutions specializing in emerging technology industries that have need of an integrated campus setting with expansion opportunities, a range of other uses, and adjacent amenities. The project is intended to create a major new employment hub and to implement the new vision and policies for the Tukwila South planning area outlined in the City of Tukwila's Comprehensive Plan (2004).

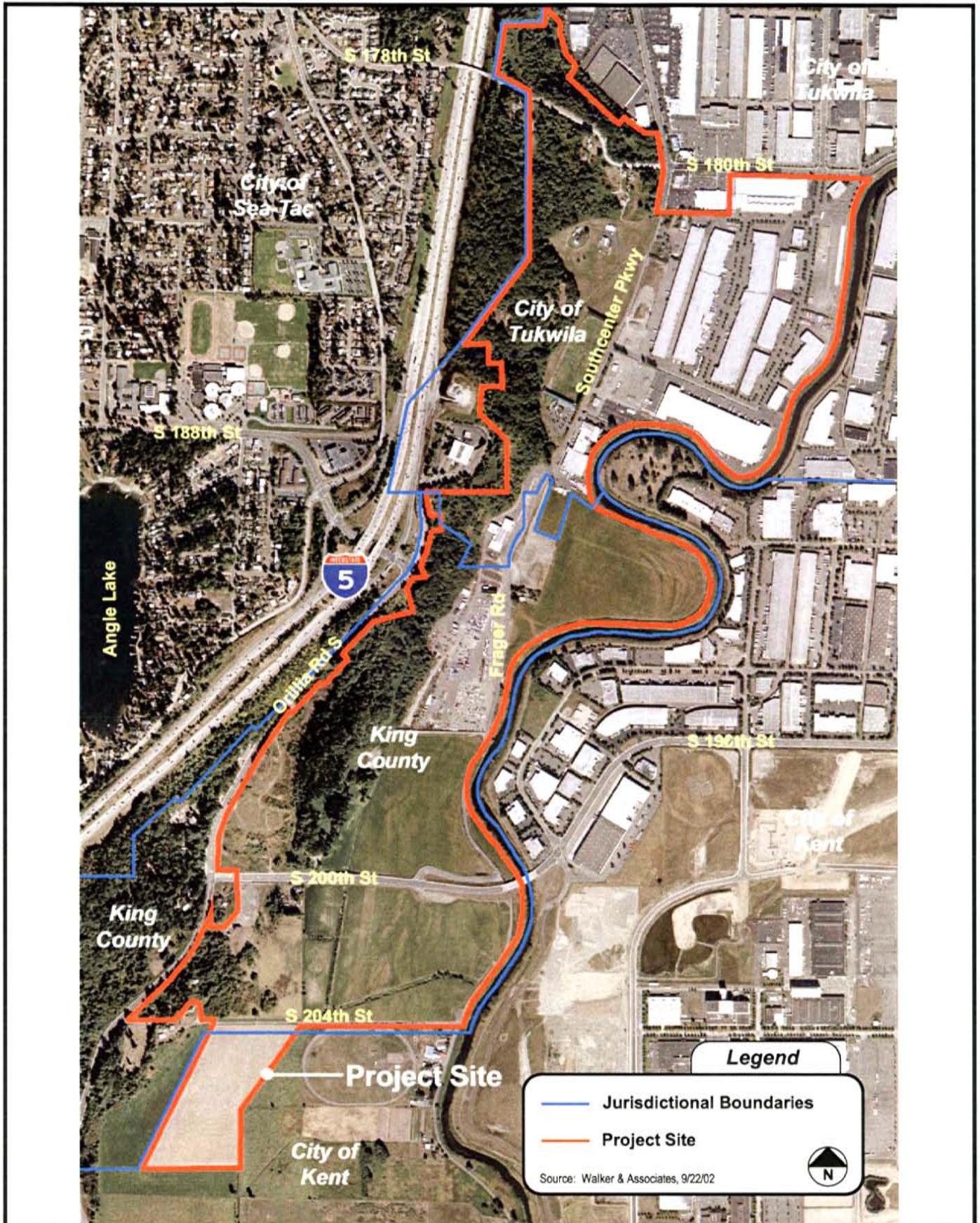
The site of the Tukwila South Project lies within the City of Tukwila's Tukwila South planning area, which extends from S 180th Street in the City of Tukwila to S 204th Street in King County. The site is proximate to SeaTac International airport and the regional transportation infrastructure network (I-5, I-405, and SR 167). General site boundaries are S 178th/S 180th Street on the north; S 204th Street on the south; Orillia Road and Interstate-5 on the west; and the Green River on the east. Figure 2-2 is a site map. Approximately 217 acres are located within the City of Tukwila city limits; the remaining 281 acres are located in unincorporated King County and the City of Kent (an approximate 22-acre portion of the site in the southwest corner is located in the City of Kent). It is intended that the portion of the site within unincorporated King County be annexed to the City in 2005, subsequent to issuance of the Final EIS and City decisions on the Master Plans and a Development Agreement between La Pianta and the City.

The EIS is intended to provide decision makers with relevant information needed to fully understand the probable significant environmental impacts from long-term development of the site under a range of land use scenarios, and to facilitate consideration of the Proposed Actions and a Development Agreement between the City of Tukwila and La Pianta LLC.

Proponent Objectives

- To plan comprehensively for major new employment, commercial, and residential areas on a 498-acre site in the Tukwila South area.
- To develop an economically and financially viable project that can accommodate emerging technology industries and institutions (such as biotech/bioscience,





research centers, computer software and technology and other advanced technology entities) in an integrated campus-type environment, with a synergistic mix of uses.

- To transition the property gradually, based on market conditions, to a broader mix of higher-density uses.
- To diversify the City's employment base by creating opportunities for new types of businesses and substantial new employment.
- To create compatible and unified development, leading to a strong and cohesive identity for the area; new public access to the Green River; and, a coordinated and integrated approach to natural resources in the area.
- To encourage, through public/private partnerships, the recruitment of emerging technology industries that can co-locate on a site with capacity to accommodate their expansion needs.
- To provide a site that allows for adequate campus security, and has convenient access to SeaTac Airport, existing biotech/bioscience clusters (including research institutions), regional transportation infrastructure (including transit opportunities) and adjacent amenities of the Tukwila Urban Center.
- To create additional and diversified residential units to help meet the City's Growth Management housing targets.
- To create areas on site that can become neighborhood gathering places for Tukwila residents.
- To develop the major site infrastructure requirements in the initial phase of the project in order to advance the long-term vision for emerging technology development in the region and to facilitate future development of the Tukwila South planning area in a more consistent and timely manner, in response to market conditions.
- To provide a net benefit to fisheries resources and wetland habitat through substantial restoration and rehabilitation efforts.

2.2 Purpose and Need

The Purpose and Need for the Tukwila South Project, as defined by the applicant, is presented below. The purpose and need for the project will be evaluated as part of the US Army Corps of Engineers Section 404 permit (required for proposed fill of wetlands).

The purpose and need of the Tukwila South Project is to accommodate the needs of national and international emerging technology industries and institutions for an integrated, large-scale campus environment that allows for campus security, is near a major international airport and supporting facilities and services, and is not far from existing biotech/bioscience clusters.

The Puget Sound region is a national leader of emerging technology industries such as biotechnology and biosciences, applied and fundamental medical research, computer software and technology, and other similar advanced technology and research activities. Existing industry leaders include the University of Washington, the Fred Hutchinson Cancer Research Center, Virginia Mason Research Center, the Bill and Melinda Gates Foundation, and others. The biotechnology/bioscience industry in Washington State is comprised of more than 190 companies (90% of which are located in the Seattle metropolitan area), and the industry is growing at an increasing pace. These enterprises are focused on the research and development of therapeutic products, diagnostics, and genomics (the study of genes and their

functions) /informatics, among other areas. There is a recognized need within this growing industry for a new, large-scale campus setting in an appropriate location to house a substantial number of companies and institutions that seek to co-locate, and that cannot readily be accommodated on smaller sites or on traditionally-sized city lots and street grids.

There is a pressing need for a site at least 250 acres in size for the core industry uses, plus an additional 100 acres of adjacent property for supporting facilities and services. This size is necessary to accommodate the estimated demand of 10-14 million square feet of development over time. The project must be able to support a range of functions in applied research, development and manufacturing in an integrated campus setting. The campus must include retail, hotel, residential, and other uses. The campus must have physical characteristics to allow for effective campus security. Campus security can be promoted by existing physical characteristics of a site that provide separation from surrounding land uses and allow for controlled access to the site. Alternatively, a secure campus setting could be created. The site must be located in convenient proximity to an international airport to accommodate efficient and secure international transportation of scientists, research specimens, and materials. It must also be located within a convenient drive time from existing biotech/bioscience clusters in Seattle (e.g., the University of Washington and South Lake Union.)

The Tukwila South site has unique characteristics of size, security, and proximity to SeaTac airport and existing biotech/bioscience clusters. The property's attributes are unique within the Puget Sound region and the State of Washington and to some degree are unusual nationally and internationally. The property will accommodate integrated activities that do not physically fit anywhere else in the region, while providing sufficient room to grow over time. The property owner is committed to the necessary up-front infrastructure investment at this site to advance the long-term vision for biotech/bioscience development in our region. The property owner is also committed to plan comprehensively for sustainable site development including appropriate mitigation of environmental impacts.

To feasibly accomplish the integrated campus development and to create a development site of sufficient size, the on-site flood protection barrier dike that protects the surrounding Tukwila area in the event of Green River levee failure must be relocated south of its current location. In addition, an efficient transportation network on site and in the site vicinity must also be provided to accomplish an economically viable development and fulfill the City's transportation goals as outlined in the City's Comprehensive Plan. This includes: the extension and expansion of Southcenter Parkway to support a campus-type development. While not referenced by the City's Comprehensive Plan, the relocation of S 178th Street is part of the proposed project. Roadway improvements will be designed and sited to improve public safety, minimize multiple access points, and maximize efficiency in circulation and capacity by aligning the road such that future secondary road connections are feasible. Roadway improvements are intended to provide safer and more efficient connections to the local and regional road network than currently exists.

A related purpose and need of the Tukwila South project is to stimulate economic development to create family-wage jobs, economic benefits to the region, and new general tax revenues, in a manner that is consistent with state and local growth management goals and that fully mitigates potential environmental impacts.

It is estimated that full buildout of the Tukwila South Project will attract approximately 25,000 direct jobs in an industry that includes a wide variety of personnel needs ranging from highly

technical workers to service employees. The demographic area within which the Tukwila South project is located (much of Tukwila, SeaTac, Kent, and Renton) has a higher percentage of lower-income and less-educated residents than the rest of King County. The 1999 median household income in the area was \$40,973, which was 23% less than the King County median (\$53,157), 10% less than Seattle's median (\$45,736) and 34% less than Bellevue's median (\$62,338). Nineteen percent of persons aged 25 years and older in the study area have no high school diploma, which is a higher proportion than King County (10%), Seattle (11%), and Bellevue (6%). Thus, economic development in this area has the added benefit of bringing new employment opportunities closer to disadvantaged populations. In addition, the site is located within the urban growth area as identified through regional, county, and city comprehensive plans adopted pursuant to the state Growth Management Act. The project is consistent with the Act's adopted goal of promoting urban in-fill development rather than exurban sprawl. Finally, the site is close enough to existing urban centers to allow for efficient transit service. Sound Transit is now studying the feasibility of developing a high capacity transit system that would connect this site to the Link light rail line now under construction and to Tukwila's Sounder commuter rail station, thus reducing reliance on single occupant vehicles (SOV) trips.

Development at Tukwila South will include environmental mitigation for potential project impacts. The proposed development concept calls for: creation of new valuable off-channel habitat for fisheries and other wildlife along the Green River; rehabilitation of degraded, low-value wetlands; and restoration of existing Johnson Ditch from its current channelized condition. This comprehensive approach to natural resources is intended to result in net benefits to anadromous fisheries and overall wetland, stream and fisheries habitat. Note that "Johnson Ditch" is used in this document to refer to the watercourse in its existing condition as a ditched stream; "Johnson Creek" is used to refer to the watercourse in its proposed realigned condition; the drainage basin for the watercourse is referred to as the "Johnson Creek basin". For an explanation of the City of Tukwila's regulated watercourse definitions, see Section 3.2, Water Resources, and Section 3.2, Plants and Animals including Table 3.3-1.

2.3 Site Description

As described in the Introduction section, the site represents approximately 498 contiguous acres along the Interstate-5 corridor, currently located in the City of Tukwila and unincorporated King County (approximately 22 acres in the southwest portion are located in the City of Kent) (refer to Figures 2-1 and 2-2). The majority of the site is designated in the City's Comprehensive Plan as Tukwila Valley South (TVS), with contiguous areas designated Heavy Industrial (HI), Tukwila Urban Center (TUC), Low Density Residential (LDR), and Mixed Use Office (MUO). Southcenter Parkway extends through the site in a north-south direction. As the two-lane road crosses the jurisdictional boundary between the City and King County, it is named Frager Road, and continues south along an alignment that follows the Green River.

Existing development on the site consists of a mix of low density industrial, recreational and agricultural uses. The Segale Business Park is located on approximately 92 acres adjacent to and south of S 180th Street, in the north portion of the site. Several businesses, including Southcenter Golf, Seattle Tractor, and Atlas Van Lines are located on either side of Southcenter Parkway, within the City limits. The area of the site currently in unincorporated King County and the City of Kent is mostly undeveloped and in agricultural use. Farmlands are actively worked throughout the south and central portions of the site.

The site is primarily situated on the Green River Valley floor. A flood protection barrier dike bisects the site from east to west at S 196th Street. The site includes steep slopes along the western valley rise (hillside), which extend along much of the length of the site from Interstate-5/Orillia Road down to the Green River valley floor. Watercourses in the form of ditched streams run along the foot of the hillside; there are several, naturally occurring spring-fed streams on the western hillside. The existing Johnson Ditch, a ditched stream at the south end of the site, drains agricultural fields and conveys off-site drainage to the Green River. Wetland areas are located in agricultural fields at the confluence of agricultural ditches and ditched streams in the southern portion of the site. Other wetland areas are associated with hillside seeps and are located on the western hillside. Several other smaller wetland areas are scattered across the site.

2.4 Description of the Proposed Actions

The Description of Proposed Actions includes the following: background information for the Tukwila South Project; a description of environmental review and planning actions that the City of Tukwila undertook in 2004 that provide context for the EIS; a detailed description of the Proposed Actions and project phasing; and a description of the Alternatives evaluated in this EIS.

Background

In December 2003, La Pianta submitted an application to the City of Tukwila, requesting consideration of text amendments to the Tukwila South element of the Comprehensive Plan in 2004. Proposed text amendments include updating the vision, goals, and policies of the Tukwila South element to facilitate a planned, coordinated approach to future development of the Tukwila South planning area. The proposed text amendments support gradual transition of the Tukwila South area from a mix of existing industrial and agricultural uses to a dynamic, urban, multi-use development that will create the opportunity for major new employment, commercial and residential areas.

In January of 2004, La Pianta amended its application, requesting creation of a “Tukwila South Master Plan” overlay that would correspond to the boundaries of the site and would govern future development according to the terms of the overlay zone along with the Master Plan and/or Development Agreement.

In May, 2004, La Pianta submitted the “Tukwila South Proposal”, in accordance with the City of Tukwila’s Comprehensive Plan (1995) and Zoning Code requirements (Tukwila Municipal Code [TMC] 18.40.075). The City issued a Determination of Significance (DS)/Scoping Notice on July 28, 2004 for preparation of an EIS in accordance with SEPA (RCW 43.21C), the SEPA Rules (WAC 197-11) and City of Tukwila’s SEPA regulations (TMC 21.04). Refer to Chapter 1 for a synopsis of the purpose of this EIS and a summary of the issues identified during the public scoping process. In March, 2005, La Pianta submitted a “Proposed Tukwila South Master Plan”, refining the previous “Tukwila South Proposal”.

City of Tukwila Planning Process

The City of Tukwila updated its Comprehensive Plan (10-year update) in 2004 to comply with the requirements of the Growth Management Act (GMA), as mandated under RCW 36.70A.

The City is required to plan for the population, housing and job growth that is expected over the next twenty years and to ensure that adequate urban services, such as transportation, water, and sewer are provided concurrently with new growth. The City issued a Determination of Non-Significance (DNS) on the GMA-related proposed amendments to its Comprehensive Plan on May 4, 2004. Proposed amendments related to the GMA update were adopted in December 2004, in accordance with the state mandated schedule.

The City elected to consider and include the text and map amendments proposed by La Pianta as part of its annual 2004 Comprehensive Plan amendment process and drafted a City ordinance amending the Comprehensive Plan and Land Use Map. The City issued a Determination of Non-Significance (DNS) on these proposed amendments to the Comprehensive Plan (separate from the overall GMA-related amendments) in April, 2004. Proposed text and map amendments to the Tukwila South element, as well as certain related text amendments needed to ensure consistency within the Comprehensive Plan, were adopted by the City Council in December, 2004. Amendments to the Comprehensive Plan are summarized as follows, in order to provide a background context for the Proposed Actions evaluated in this EIS.

Tukwila South Element

- A “Vision Statement” was added that outlines a vision for the Tukwila South area that recognizes “the ability of the area to transition to a dynamic, urban, multi-use district.” It further highlights the opportunity to create major, new employment, commercial and residential areas.
- Under the “Issues” section, text was added to state that the Southcenter Parkway extension will further improve access to Tukwila South and the Tukwila Urban Center.
- Under Goal 9.2, Residential Areas, text was added that promotes housing opportunities that serve a broad range of ages, family mixes, lifestyles and incomes. The “Implementation Strategy” for Goal 9.2 calls for the Tukwila South area to be zoned to allow residential uses.
- A new goal, entitled Goal 9.5, Economic Development was added that: refers to new high quality development with public amenities in the Tukwila South area that also respects the natural environment; requires a master plan to guide development of the Tukwila South area; and, supports improved connections to the airport, Tukwila Urban Center, and transportation facilities.

Comprehensive Land Use Map and Legend

- Under “Land Use Designations”, text was added to the Low-Density Residential (LDR), Mixed-Use Office (MUO), Tukwila Urban Center (TUC), Tukwila Valley South (TVS) and Heavy Industrial (HI) designations stating that LDR, MUO, TUC, TVS and HI areas that fall within the Tukwila South Master Plan overlay area shall be governed according to the terms of that overlay zone along with the corresponding master plan.
- Under the “Special Overlay” section, text was added to the Tukwila South Master Plan Area designation that expands the existing Tukwila South Master Plan Area overlay to include areas designated TVS, HI, TUC, LDR, or MUO. *Note:* The Tukwila South Master Plan Area overlay coincides with the boundaries of the Tukwila South site evaluated in this Draft EIS.
- Under the “Sub-Areas” section, text was added to the Tukwila South designation that identifies the expectation that the Tukwila South area will be annexed to the City.

Economic Development Element

- Under Policy 2.1.12, text was added allowing redevelopment of industrial lands within the Tukwila South Master Plan Area, pursuant to City Council approval of a Master Plan and/or Development Agreement.

Residential Neighborhoods Element

- Under Policy 7.6.3, text was added to allow Planned Residential Developments (PRDs) within the Tukwila South Master Plan Area, pursuant to City Council approval of a Master Plan and/or Development Agreement.

City of Tukwila Sensitive Areas Ordinance (SAO)

Recent amendments to the GMA require that local governments use best available science (BAS) in the development of critical areas regulations and that special consideration be given to anadromous fisheries (RCW 36.70A.172). The purpose of the City's SAO is to protect the environment, human life and property, to designate and classify ecologically sensitive and hazardous areas and to protect these areas and their functions and values, while also allowing for reasonable use of public and private property. The amended SAO (2004) provides for designation of Sensitive Area Master Plan overlays and preparation of Sensitive Area Master Plans, in order to encourage a comprehensive approach to critical area protection, enhancement and creation, where certain criteria are met (refer to the discussion of the Sensitive Area Master Plan, later in this chapter).

Annexation and Shoreline Designation

The portion of the site that lies within unincorporated King County is intended to be annexed to the City in 2005 subsequent to issuance of the Final EIS and City decisions on the Master Plans and a Development Agreement between La Pianta and the City. Annexation of the site would occur consistent with RCW 35A.14 (annexation is exempt from SEPA (RCW 43.21C.222)). The Green River forms the eastern boundary of the site and the portion of its shoreline adjacent to the site and outside the City limits would also be annexed into the City. All shorelines within the City of Tukwila (including the Green River) are designated Urban in the City's Shoreline Master Plan (TMC 18.44.020). La Pianta has proposed that the City apply its current shoreline regulations to the annexed shoreline area and designate it "Urban", consistent with the remainder of the Green/Duwamish River shoreline in the City.

Proposed Actions

The Proposed Actions for the site include:

- City approval of a Master Plan for the site;
- Designation of the site as a Sensitive Area Master Plan Overlay district and approval of a Sensitive Area Master Plan for the site;
- Approval of other development-related code amendments relevant to site development (including modifications to the zoning and subdivision sections of the Municipal Code);
- A Development Agreement between the City of Tukwila and La Pianta LLC (under Chapter 36.70B RCW);

- Permitting and construction of infrastructure, buildings, roads and other improvements over the buildout period (i.e. grading, shoreline substantial development, site plan approvals, building permits); and,
- Extension of the City's Shoreline Master Plan Map designation of urban to the annexed portion of the site within the shoreline management jurisdiction.

The City's Comprehensive Plan text and land use map amendments (2004) authorized expansion of the existing Master Plan Overlay boundaries to coincide with the boundary of the Tukwila South site. The proposed Tukwila South Master Plan is intended to implement the relevant policies of the Comprehensive Plan. The proposed Tukwila South Master Plan, Sensitive Area Master Plan and long-term buildout of the site are analyzed in this Draft EIS. The Master Plans would govern future development of the site, in conjunction with the Development Agreement and development standards to be adopted. La Pianta LLC has proposed entering into a Development Agreement with the City of Tukwila in accordance with RCW 36.70B.170.

The proposed Tukwila South Master Plan concept and Sensitive Area Master Plan are described in greater detail later in this chapter.

Project Timing

This Draft EIS addresses the probable, significant environmental impacts that could occur as a result of the Proposed Actions and future development of the site. Implementation of the overall Tukwila South Master Plan calls for construction of the major infrastructure elements in the initial phase. Installation of major infrastructure elements in the initial phase is intended to facilitate future development of the Tukwila South site in a more coordinated and timely manner, and allow future development to efficiently respond to market conditions through buildout of the site. The initial infrastructure phase includes improvement of Southcenter Parkway from S 180th Street to S 200th Street and the realignment of S 178th Street.

This Draft EIS is intended to include a sufficient level of analysis and detail to support federal, state, and local permit decisions, and City legislative actions related to both the initial site preparation and infrastructure development phase (refer to the Fact Sheet of this Draft EIS for a list of required permits and approvals), as well as to support permit decisions for long-term development of the site.

The probable, significant environmental impacts of the Tukwila South Project are evaluated for two primary time periods:

- Infrastructure Development Phase (2006 – 2008)
- Full Buildout (assumed by year 2030)

Following this EIS process, the proposed project will be subject to additional review processes and approvals, which will provide opportunities for public input. These include review of the proposed Master Plan, the Sensitive Areas Master Plan Overlay designation and development-related code amendments by the Planning Commission and/or City Council; and review of the Development Agreement by the City Council. In addition, as specific development projects are proposed in the future on the Tukwila South site, site plan review and other development permits would be required from the City.

Infrastructure Development Phase

Major site preparation and infrastructure development is proposed at the outset of the project. This includes establishing site grades as part of a comprehensive earthwork program, extension of the major roadways (including the Southcenter Parkway extension), installation of utilities and stormwater control facilities, relocation of an existing flood protection barrier dike, and construction of key features of the Sensitive Area Master Plan. Permit applications for initial construction activities may be submitted concurrently with (and subsequently to, in some cases) the EIS; however, no construction activity would occur on the site until after the EIS process is complete and all relevant legislative and permit decisions have been made. Elements of the infrastructure development phase are described in detail below.

Full Buildout

To evaluate probable significant environmental impacts that could occur as a result of future, long-term development on the site, a range of development scenarios (alternatives), and accompanying level of detail and analysis, has been included in the EIS. Three alternatives are evaluated (including a No Action Alternative) that encompass a broad range of land uses that the site could potentially accommodate in the future (refer to the Description of Alternatives, later in this chapter). For purposes of analysis, full buildout of the site is assumed by the year 2030. However, it should be noted that actual development would be incremental and market forces, together with zoning regulations and development standards, would ultimately determine the specific timing and level of development, and mix of uses over the long term. As such, full buildout of the site could occur earlier or later than assumed for this EIS.

2.5 Tukwila South Master Plan Proposal

The City's Tukwila South Master Plan provision of the Comprehensive Plan requires preparation of a Master Plan for the site. A master plan created under this provision would guide long-term development on the site. This section provides an overview of the preliminary Tukwila South Master Plan proposal and a summary description of the elements of the Infrastructure development phase (the proposed Master Plan is on file at the City of Tukwila). The proposed Tukwila South Master Plan is referred to throughout this document as "Master Plan". A separate plan, termed the proposed Sensitive Area Master Plan would govern the alteration of environmentally sensitive areas on the site; that plan is referred to throughout this document as the "Sensitive Area Master Plan". A description of the Sensitive Area Master Plan is included in Section 2.6.

Development Concept

The development concept for the Tukwila South Master Plan involves creation of a major new employment base on the 498-acre site. The EIS evaluates the potential for between 10 and 14 million square feet of development that would be accommodated in a combination of campus-type research and office environments and districts (the No Action Alternative evaluated in this EIS reflects up to 2 million square feet of new development that could occur over the long-term buildout period without approval of the Proposed Actions). Districts would include a mix of other uses such as retail, residential, hotel and recreational uses. Southcenter Parkway would be expanded in an alignment along the base of the site's western slope and would function as the major transportation arterial through the site. S 178th Street would be realigned and would

intersect with Southcenter Parkway at Segale Park Drive C. Figure 2-3 is a graphic representation of the proposal that divides the site into conceptual planning areas and shows the major transportation facilities.

As proposed, the site would be positioned to accommodate the needs of national and international companies and institutions specializing in emerging technology industries that have need of the following site attributes: an integrated campus setting with expansion opportunities where companies can co-locate; a range of retail, residential, hotel and recreational uses; site conditions that allow for adequate campus security; adjacent amenities; proximity to other existing biotech/bioscience and research clusters; convenient access to SeaTac airport; and, direct access to the regional transportation infrastructure network (I-5, I-405, and SR 167) and multi-modal transportation options.

In concept, a “campus environment” is typically defined as spatially cohesive – building placements frame organized open spaces (such as central plazas and public gathering places), circulation within the campus is pedestrian-oriented, and vehicular circulation is simplified. The physical characteristics of the site allow for adequate campus security, which is important to some research and technology companies and institutions. There is access to amenities, including retail, restaurant, entertainment and hotel uses. Building design, construction, and materials are coordinated through comprehensive design principles. Development is at a scale and orientation that promotes ease of circulation and movement and fosters a sense of integration throughout the campus. Major access roads are typically located at the perimeter of the development area and do not bisect the site.

The natural boundaries of the Tukwila South site, including the hillside on the west and the Green River on the east, give the site a north-south orientation. The expansion of Southcenter Parkway in a more westerly alignment onsite would create the large contiguous land areas needed to implement the development concept and would provide opportunities for future north-south secondary road connections within the narrow site orientation. In addition, as called for in the proposed Master Plan, future development on the site would include internal roads and pedestrian pathways that would be constructed in a manner consistent with a campus-type environment. Features could include sidewalks, bicycle paths and signage for pedestrians and bicyclists.

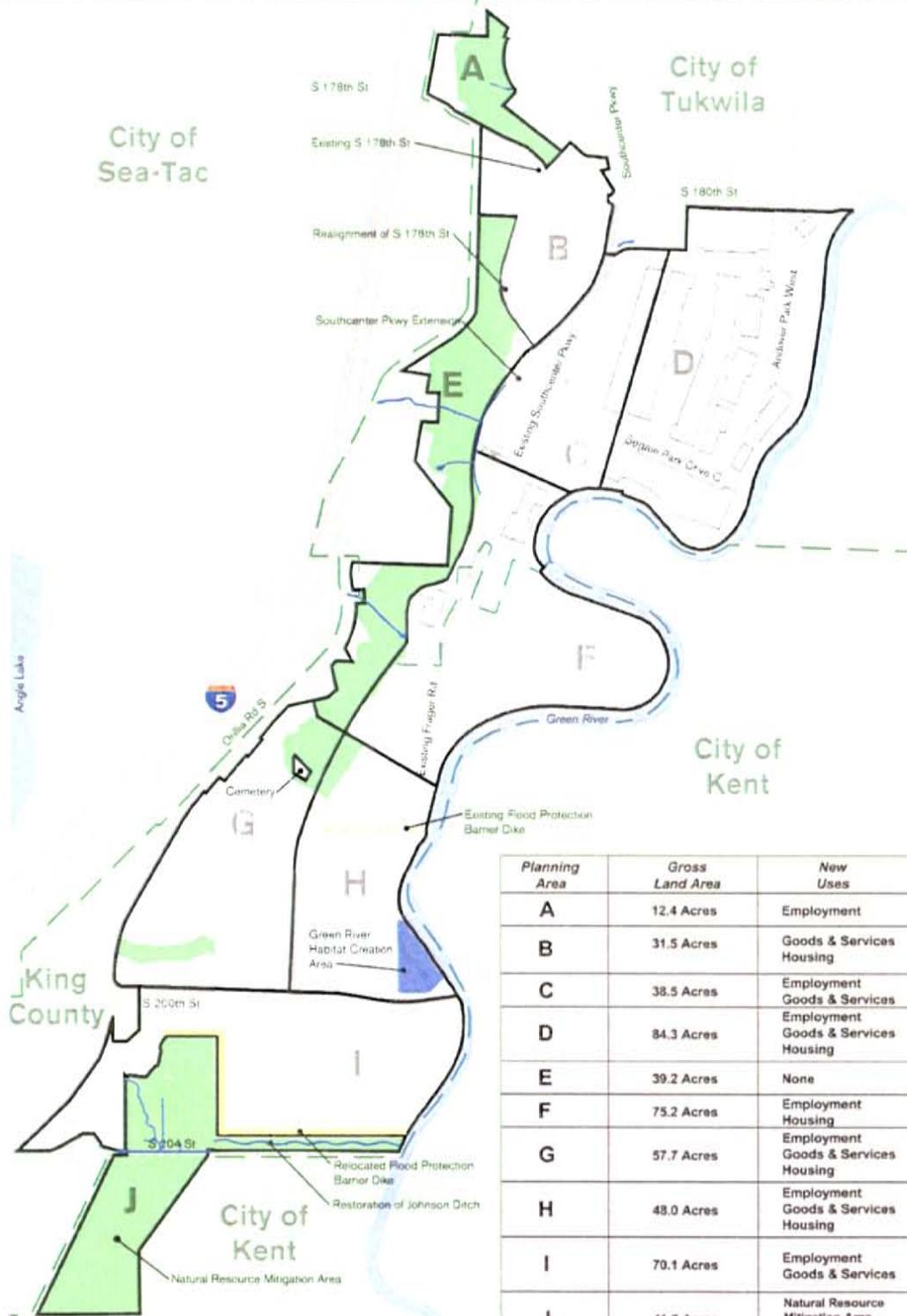
As proposed, the placement and organization of buildings, from north to south, are intended to define the campus-type environment of the overall development. The “core” of the campus development would likely be located in the central and southern portion of the site (Planning Areas F, G, H, and I) and would serve as the symbolic and functional “center” of the development. From this “center”, each adjacent area would be accessible via a 10-minute walk. The northern end of the site (Planning Areas A, B, C, and D) would likely include a mix of employment, goods and services and housing that would complement the central campus, and is intended to reflect the character of a dynamic urban, mixed use area with a range of office, retail, residential, hotel and entertainment uses.

Legend

- Primary Roadway Network
- - - Jurisdictional Boundaries
- Planning Areas
- Relocated Flood Protection Barrier Dike

Areas To Be Preserved

- Ditches & Streams
- Wetlands & Slopes



Planning Area	Gross Land Area	New Uses
A	12.4 Acres	Employment
B	31.5 Acres	Goods & Services Housing
C	38.5 Acres	Employment Goods & Services
D	84.3 Acres	Employment Goods & Services Housing
E	39.2 Acres	None
F	75.2 Acres	Employment Housing
G	57.7 Acres	Employment Goods & Services Housing
H	48.0 Acres	Employment Goods & Services Housing
I	70.1 Acres	Employment Goods & Services
J	41.5 Acres	Natural Resource Mitigation Area
Total	498.3 Acres	



As currently called for in the proposed Master Plan, the proposed development concept would feature public and private amenities, such as urban plazas and courtyards, landscaped open space areas, pocket parks and pedestrian/bicycle pathways that would link onsite uses to other onsite uses (research office to retail, residential to retail), uses to trails/amenities and the campus to adjacent areas, and potentially to the trail system on the east side of the Green River. There would be opportunities to create “gateways” at the entrance points to the campus. Development within the shoreline would occur consistent with applicable provisions of the City of Tukwila’s Shoreline Master Plan.

The architectural scale of the majority of the campus would generally be low-rise to mid-rise with both surface and structured parking; it is possible that heights in certain portions of the site (in the denser, more urban-oriented areas) could reach eight to ten stories. Design and construction would be coordinated by City-approved design principles.

The proposed Tukwila South Master Plan addresses the following: types, possible locations, targeted quantities and pattern of development; urban design principles; shoreline uses and critical areas; open space network; flood protection; infrastructure requirements; and development timing.

Infrastructure Development Concept

Infrastructure Elements

Elements of the Tukwila South Master Plan that are common to the Proposed Action (under both Alternatives 1 and 2) and that would occur during the initial Infrastructure development phase include:

- Implementation of a mass grading program to establish site grades and construct the major infrastructure elements, in lieu of smaller, incremental grading and earthwork activities associated with individual development projects.
- The extension and expansion of Southcenter Parkway in a new alignment along the base of the western hillside through the Tukwila South planning area.
- Realignment of S 178th Street to intersect with Southcenter Parkway at Segale Park Drive C.
- Installation of utilities within Southcenter Parkway and S 178th Street.
- Relocation of the existing flood protection barrier dike from S 196th Street to the southern boundary of the site (north of S 204th Street).
- Installation of a temporary construction stormwater management system, including a polymer treatment system for all construction stormwater runoff (water from non-construction areas, such as from springs on the hillside and groundwater seepage, would be diverted around construction areas).
- Installation of a comprehensive permanent stormwater control and water quality system for the entire site, including two new stormwater outfalls into the Green River.
- Implementation of a Sensitive Area Master Plan, of which the primary features include: creation of an off-channel habitat restoration area adjacent to the Green River; rehabilitation of a wetland complex associated with tributary drainage to the Green River; and restoration of existing Johnson Ditch into a fish-friendly tributary connected with the Green River.

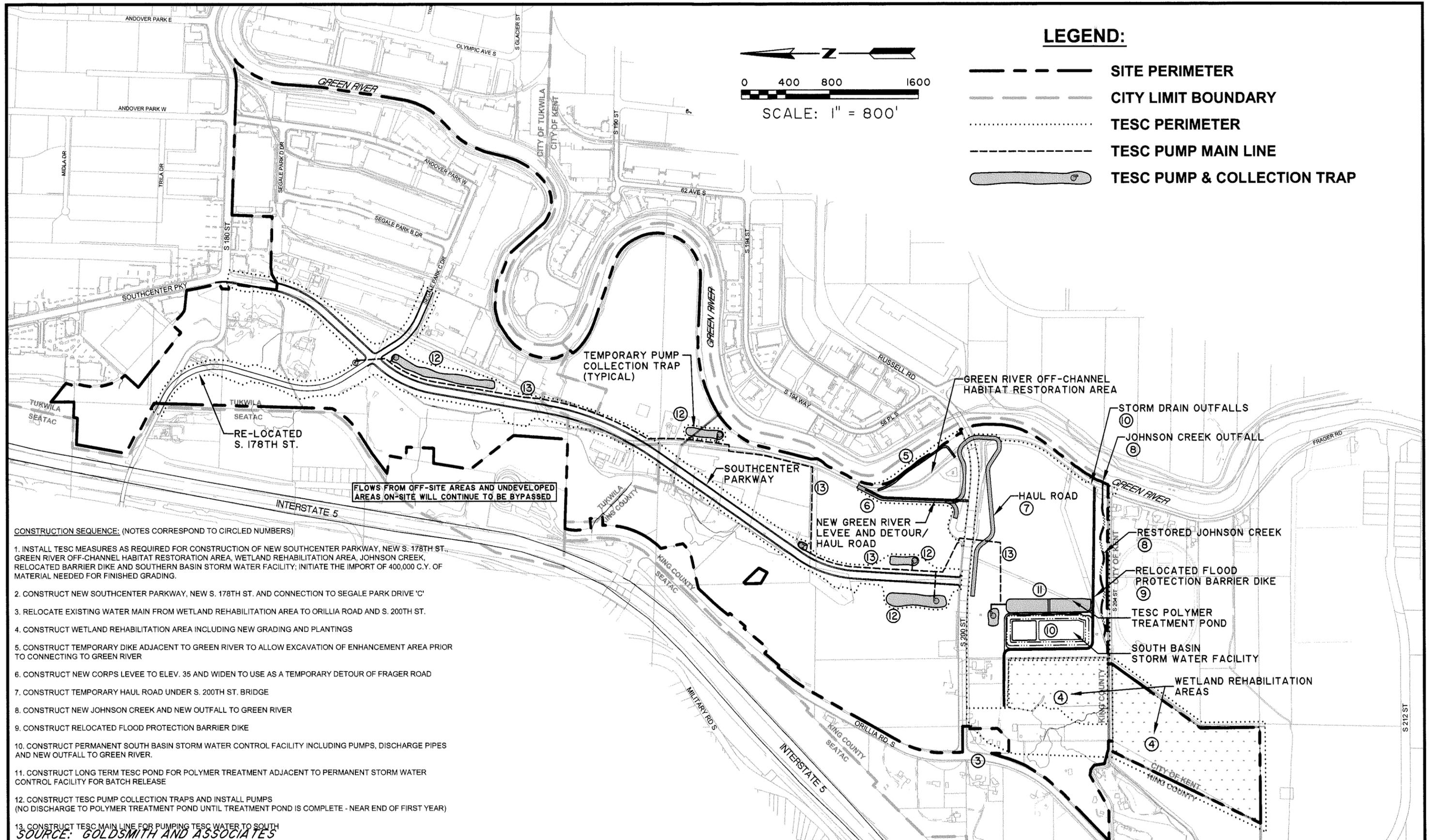
Infrastructure elements are shown on Figures 2-4, 2-5 and 2-6, which show, respectively, elements assumed to be constructed during the first, second and third years. Also shown are conditions in the fourth year and beyond. Following are descriptions of the elements of the infrastructure development phase. Figure 2-7 illustrates the conceptual grading activities across the site in year 3 for Alternatives 1 and 2. Refer to the Construction Sequence discussion beginning on page 2-22 for further detail.

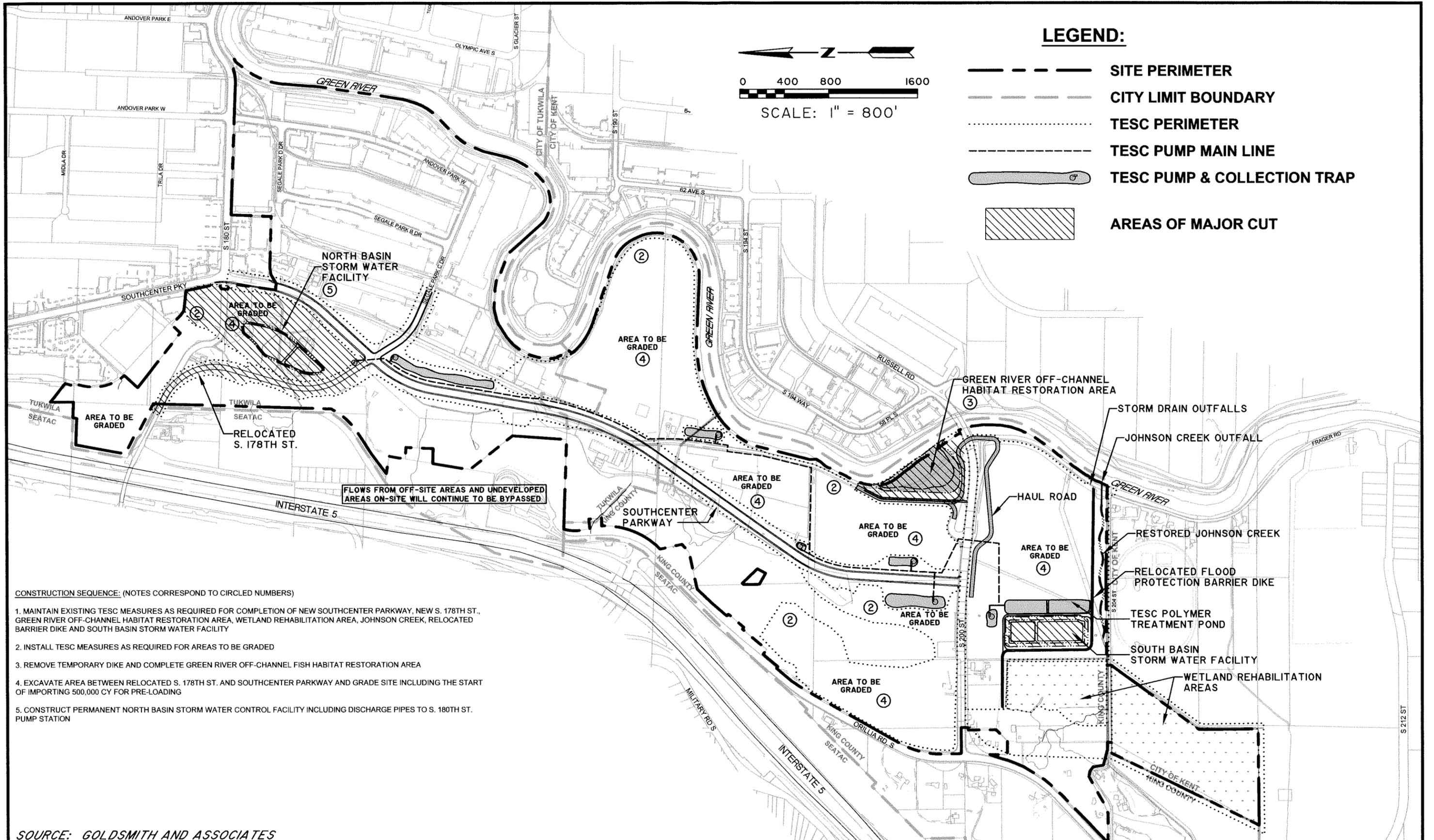
Southcenter Parkway Extension

Southcenter Parkway would function as the major transportation spine for the site and surrounding development. S 178th Street would be realigned to intersect with Southcenter Parkway at Segale Park Drive C. Southcenter Parkway was originally called S 57th Street. The City of Tukwila identified a need to improve this stretch of what is now Southcenter Parkway/Frager Road from S 180th to S 200th in its 1979 Transportation Improvement Plan. In 1989, the City prepared a preliminary design report that evaluated several alignments for the expansion of Southcenter Parkway. The expansion of Southcenter Parkway through the site from S 180th Street to the city limits is currently a planned improvement project included in the City of Tukwila's 2004-2009 Capital Improvement Program (#84-RW37). The City has recently updated the 1989 alternatives analysis and has selected a preferred alignment that is consistent with City objectives and the proposed development objectives for the Tukwila South Project; detailed engineering design is in progress. Refer to Appendix B for further detail on the proposed design of the Southcenter Parkway improvement.

The expansion of Southcenter Parkway through the entire site in an alignment that follows the base of the hillside is a fundamental component of the proposed Tukwila South development concept and is intended to be consistent with the ability to develop a campus environment. The natural boundaries of the site (the hillside on the west and the Green River on the east) give it a narrow, north-south orientation. The alignment of the road along the toe of the western hillside is proposed to achieve the large contiguous land areas needed to implement the development concept and to provide opportunities for future north-south secondary road connections within the narrow site orientation.

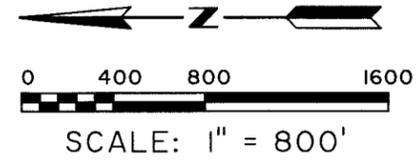
Southcenter Parkway would be expanded from S 180th Street to S 200th Street, a distance of approximately 7,500 linear feet or 1.5 miles. The improvement would consist of a five-lane road section: two 12-foot southbound lanes; two 12-foot northbound lanes; and one, 12-foot center (two-way) left turn lane (or a 12-foot center planter median where possible) with a total right-of-way requirement of 80 feet. Nine-foot sidewalks would be constructed on each side of the road. Other improvements would include: an enclosed storm drain collection system; water quality treatment facilities; new traffic signals (at Segale Park Drive C, at S 200th Street and potentially at other locations along Southcenter Parkway); lighting and signage; utility relocations as necessary; and water and sewer main extensions (Highline Water District and City of Tukwila). The right-of-way needed for the road extension either exists as right-of-way for the existing two-lane Frager Road, or would be acquired from La Pianta LLC, the property owner that controls all of the land adjacent to the proposed extension. Figure 2-3 shows the alignment of the roadway relative to site topography and proposed planning areas, and the proposed intersection with S 178th Street. Figure 2-8 is a typical cross section of the proposed alignment for Southcenter Parkway.





LEGEND:

-  SITE PERIMETER
-  CITY LIMIT BOUNDARY
-  TESC PERIMETER
-  TESC PUMP MAIN LINE
-  TESC PUMP & COLLECTION TRAP
-  AREAS OF MAJOR CUT



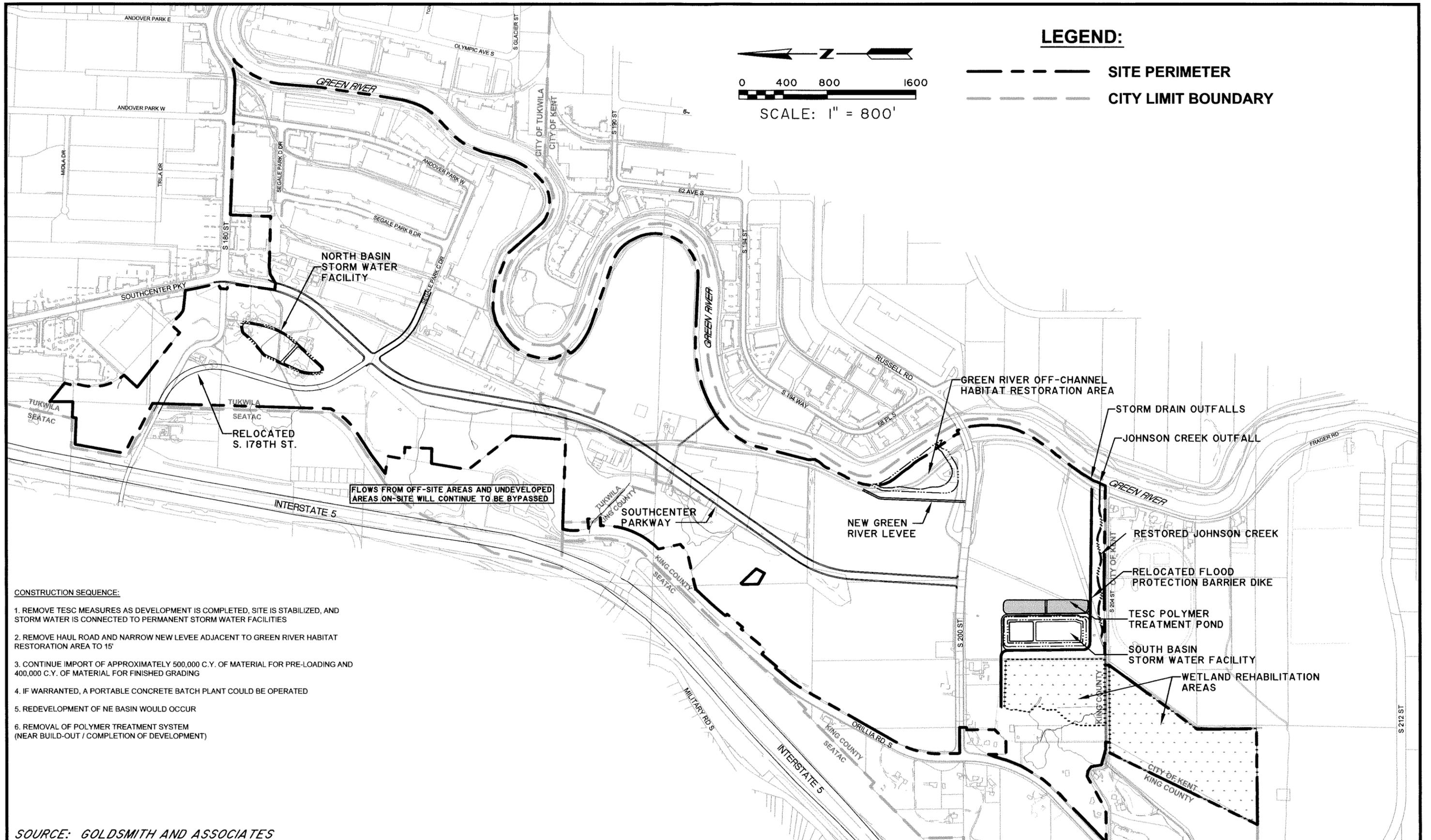
CONSTRUCTION SEQUENCE: (NOTES CORRESPOND TO CIRCLED NUMBERS)

1. MAINTAIN EXISTING TESC MEASURES AS REQUIRED FOR COMPLETION OF NEW SOUTHCENTER PARKWAY, NEW S. 178TH ST., GREEN RIVER OFF-CHANNEL HABITAT RESTORATION AREA, WETLAND REHABILITATION AREA, JOHNSON CREEK, RELOCATED BARRIER DIKE AND SOUTH BASIN STORM WATER FACILITY
2. INSTALL TESC MEASURES AS REQUIRED FOR AREAS TO BE GRADED
3. REMOVE TEMPORARY DIKE AND COMPLETE GREEN RIVER OFF-CHANNEL FISH HABITAT RESTORATION AREA
4. EXCAVATE AREA BETWEEN RELOCATED S. 178TH ST. AND SOUTHCENTER PARKWAY AND GRADE SITE INCLUDING THE START OF IMPORTING 500,000 CY FOR PRE-LOADING
5. CONSTRUCT PERMANENT NORTH BASIN STORM WATER CONTROL FACILITY INCLUDING DISCHARGE PIPES TO S. 180TH ST. PUMP STATION

SOURCE: GOLDSMITH AND ASSOCIATES

**Figure 2-5
Second and Third Year Construction Sequence Plan**





SOURCE: GOLDSMITH AND ASSOCIATES



Figure 2-6
Fourth Year and Beyond Construction Sequence Plan

Tukwila South
Project EIS

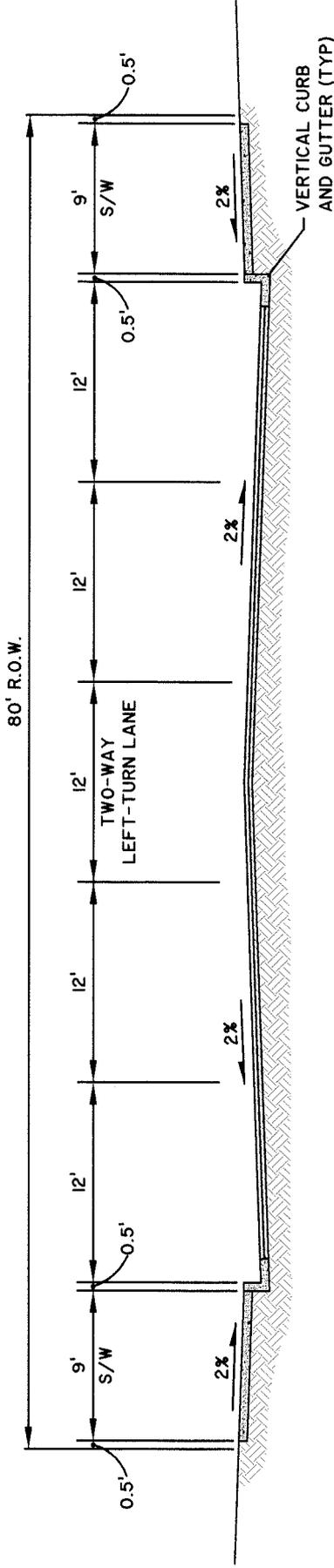


Site Plan: Conceptual Grading Activities, Year 3
 Not to Scale

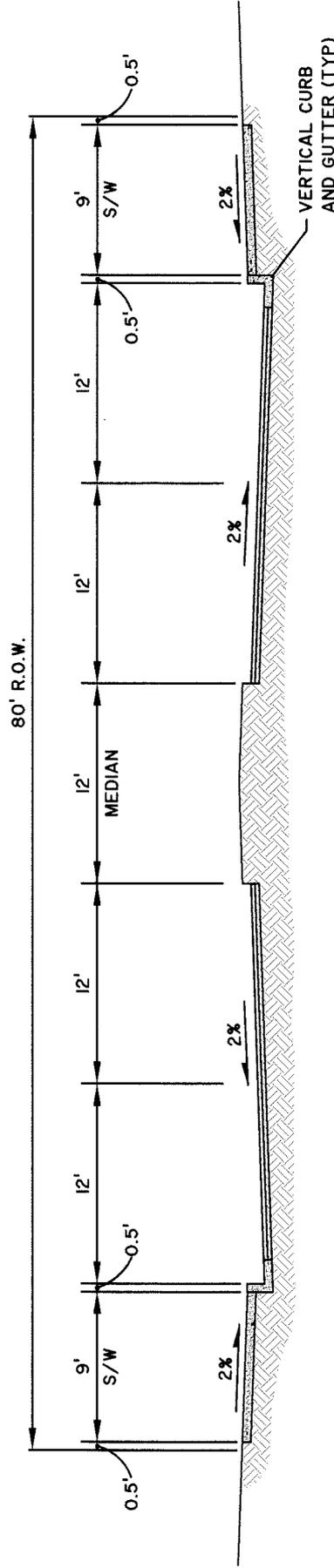
Source: CollinsWoerman / Goldsmith



Figure 2-7
 Conceptual Grading Activities, Year 3 (Alternatives 1 & 2)



PROPOSED SOUTHCENTER PARKWAY W/ TWO-WAY LEFT-TURN LANE



PROPOSED SOUTHCENTER PARKWAY W/ MEDIAN

SOURCE: GOLDSMITH AND ASSOCIATES



Figure 2-8
Proposed Southcenter Parkway Cross Section (Typical)

Realignment of S 178th Street

Under the proposed Master Plan, S 178th Street would be realigned to connect with Southcenter Parkway at an intersection with Segale Park Drive C (refer to Figure 2-3). This realignment would reduce existing steep grades and improve safety conditions on the roadway, as well as allow for improved capacity and vehicular circulation through the site. The existing grade and configuration of S 178th Street reduces the arterial's capacity and limits the potential for future capacity improvements. Elimination of the S 178th Street approach at its intersection with

Southcenter Parkway/S 180th Street would improve the operational efficiency of the intersection and increase the available capacity for future turning movement volumes. This redevelopment, combined with the Southcenter Parkway expansion, would better balance traffic flows through the intersection. In addition, these improvements are intended to provide more efficient connections to the local and regional road network than currently exists in the Tukwila South area. S 178th Street would consist of two lanes (expandable to 4 lanes) with an estimated right-of-way width of approximately 60 feet. Figure 2-9 shows a plan view of the realigned road, depicting the alignment of the road relative to the existing and regraded hillside (refer to Section 3.1, Earth, 3.2, Water Resources, 3.6, Land Use, 3.11, Aesthetics and 3.12 Transportation for discussion of impacts related to the proposed realignment).

Future East-West Road Connection between the Site and Orillia Road

Under Alternatives 1 and 2, a new east-west roadway connection could be developed between the site and Orillia Road in the future, in order to accommodate traffic volumes from the site. This potential future road is not part of the proposal evaluated in this EIS; rather, it could serve as a potential mitigation measure in the future (see Section 3.12, Transportation and Appendix I). The specific design, alignment, configuration and timing of this possible roadway connection would be determined in conjunction with the City of Tukwila, and would be dependent on the specific mix and density of uses developed at the site. Further technical analysis would be conducted as part of the design and construction process of the possible roadway connection. If such a road is to be constructed in the future, it would be subject to further environmental review.

Utility Infrastructure Improvements

Major utility infrastructure would be extended through the site within the Southcenter Parkway right-of-way. Utilities would include stormwater conveyance lines, and other public utilities, including water, sewer, electricity, gas, and telecommunications. A 48-inch (final size to be determined by the City of Tukwila as part of the design process) stormwater conveyance pipe would be constructed within the Southcenter Parkway right-of-way and would be sized to convey drainage from future proposed development areas to the comprehensive stormwater control system (described below). A water transmission line (12-inch main) and sewer trunk line (24-inch) would extend within the Southcenter Parkway right-of-way as well, from S 180th Street to S 200th Street. Improvements to the electrical and natural gas system, including one and possibly two new electrical substation(s), transmission lines and local feeder/distribution lines would be required. Electrical transmission lines and substations would be above ground. Local electrical feeder/distribution lines, gas mains and distribution lines, and, where possible, natural gas district regulators, would be underground. Installation of utilities would be coordinated with the City of Tukwila, Highline Water District and Puget Sound Energy (refer to Chapter 3.16,



Figure 2-9
S 178th Street Realignment Plan

Utilities for more detail). Extensions to these major utility lines would be constructed as development occurs within the individual development planning areas.

Currently, the Segale Business Park is served by a private street system; under Alternatives 1 and 2, it is assumed that the Segale Business Park would be redeveloped in the future. It would be determined at the time of redevelopment whether these streets would be converted to public streets.

Stormwater Management

Following are descriptions of the proposed short- and long-term construction stormwater management systems, and the permanent, comprehensive stormwater management system, which would be installed during the infrastructure development phase.

Construction Stormwater Management

Discharge of stormwater during construction would require a National Pollutant Discharge Elimination System (NPDES) permit and an individual Section 401 Water Quality Certification issued by Ecology. Together, the NPDES permit and 401 Certification would include a variety of measures for construction stormwater discharge that are intended to result in no adverse impacts to receiving waters. Temporary Erosion and Sediment Control (TESC) best management practices (BMPs) would be implemented and maintained in accordance with a Stormwater Pollution Prevention Plan (SWPPP), as required by the NPDES permit. Refer to Section 3.2, Water Resources and the Water Quality Technical Report (Appendix C) to this Draft EIS for additional detail on proposed TESC measures that would be implemented.

In general, a temporary stormwater retention system would be operable during the first construction season (featuring temporary TESC collection traps) while construction of a longer-term construction stormwater management system is established. The longer-term construction management system would ultimately link each collection trap to three polymer treatment ponds in the southern portion of the site, that would treat all construction runoff prior to release to the Green River. No surface discharge of stormwater offsite would be planned during the first construction season. At the end of the first construction season, the longer-term construction stormwater management system would become operable.

Comprehensive Permanent Stormwater Management

The comprehensive, permanent stormwater control system proposed as part of the Tukwila South Project would meet the requirements of the 1998 King County Surface Water Design Manual, adopted by the City of Tukwila, and would include a conveyance system and two major water quality treatment and runoff control facilities (one each in the north and south portions of the site). These facilities would be constructed as “combined wet-detention ponds” and sized to meet the water quality treatment and runoff control requirements for the entire site at full build-out. The design of the proposed stormwater system is described briefly below; a more detailed discussion of the stormwater system is included in Chapter 3.2 of this Draft EIS, Water Resources, the Tukwila South Preliminary Master Drainage Plan (MDP; Appendix B), and the Tukwila South Water Quality Technical Report (Appendix C).

Future developed area drainage would be consolidated as part of the mass grading program into two major subbasins: north and south (the existing Segale Business Park comprises a third

subbasin, the northeast basin). The north stormwater facility (to be located in Planning Area B) and south stormwater facility (to be located in Planning Area I) would be constructed as “combined wet-detention ponds.” Figure 3.2-3 in Chapter 3 of this Draft EIS shows the proposed basin boundaries and locations for the north and south stormwater management facilities (see Figure 2-3 for a depiction of the planning areas within the site). Consolidation into two major facilities would preclude the need for multiple stormwater control facilities across the site.

The south pond would provide for permanent water quality treatment and Level 1 flow control for discharge to the Green River through a new outfall. The required storage volume for the south pond would be 14.7 acre-feet. The north pond would provide permanent water quality treatment and back-up detention storage for flow to the existing S 180th pump station, which ultimately discharges to the Green River. The required storage volume for the north pond would be 12.9 acre-feet.

Stormwater runoff in the northeast basin (Segale Business Park) would receive wet vault water quality treatment (upon redevelopment); this is currently an area that does not receive water quality treatment. After treatment, discharge from the northeast basin would be routed to the City’s P-17 pump station, and ultimately to the Green River. As the amount of impervious surface area subsequent to redevelopment would be similar to or less than under existing conditions in this basin, increased stormwater flows from this portion of the site would not result. Refer to Section 3.2, Water Resources, for a discussion of impacts associated with redevelopment within the northeast basin.

A key component of the stormwater plan is the intended avoidance of impacts to the Johnson Creek basin by isolating runoff from the developed areas of the site from the remainder of the Johnson Creek basin. The relocated flood protection barrier dike (discussed below) and the south stormwater facility would serve to isolate runoff collected from the developed areas. In addition, baseflows entering the site from undeveloped portions of the western slope would bypass the stormwater system.

Relocation of Flood Protection Barrier Dike

Relocation of the flood protection barrier dike from S 196th Street to the southern boundary of the site (approximately 120 to 140 feet north of S 204th Street) is proposed to create contiguous buildable area and allow development of a large-scale campus environment. At its existing location, the flood protection barrier dike precludes development south of the dike due to the infeasibility of obtaining flood insurance. The flood protection barrier dike would be relocated in the initial phase of the project and would provide emergency flood protection to the entire site, without a loss of flood storage area. It would extend from the Green River levee, across the valley at a corresponding elevation (35 feet). As indicated, the relocated flood protection dike would separate the proposed new, realigned Johnson Creek and wetland rehabilitation area (described below) from the developed portions of the site, and would provide for continuation of the existing hydrologic support to these areas.

Sensitive Area Master Plan

Portions of the 498-acre site are constrained by the presence of sensitive areas including, steep slopes, wetlands and watercourses. Slope areas extend along much of the length of the western hillside. Under the Tukwila South Master Plan, the majority of the steep slope and

wetland areas would be preserved from development. All of the natural streams would remain undisturbed. Overall, approximately 20 to 25 percent of the site would be retained in some form of open space.

In order to develop the site, disturbance of some of the existing wetlands and relocation of some agricultural drainage ditches and ditched streams is proposed. A comprehensive Sensitive Area Master Plan would be implemented in the initial phase of development. The proposed Sensitive Area Master Plan is discussed below in Section 2.5. The primary features of the plan are as follows:

Creation of an Off-Channel Habitat Restoration Area in the Green River

The Green River Off-channel Habitat Restoration Area would be created as mitigation for impacts to agricultural ditches on site. The Restoration Area would create new summer rearing, winter refuge, and upstream migration holding habitats. Approximately 800 feet of the existing Green River flood levee would be removed and a new levee constructed 500 feet to the west, to create a 7-acre off-channel habitat area. An approximately 4.5 acre area (acreage below the Ordinary High Water Mark) would be excavated down to the bed elevation of the Green River to create open water habitat. Approximately 2.5 acres of upland area would be planted with native species and enhanced with large woody debris. This area would be contoured and planted to maximize salmonid accessibility and rearing habitat quality (refer to Chapter 3.3 of this Draft EIS, Plants and Animals and Appendix E for further detail).

Rehabilitation of a Wetland Complex

Rehabilitation of wetland habitat in the southwestern portion of the site would be accomplished to compensate for proposed fill of 9.45 acres of onsite wetlands. The habitat mitigation plan is intended to rehabilitate approximately 32.4 acres of degraded pasture wetland onsite by improving existing hydrology through contouring, and re-establishing a palustrine, scrub-shrub and emergent wetland habitat. The rehabilitated wetland area would provide diverse, contiguous aquatic habitat along restored stream channels associated with the Johnson Creek restoration plan described below (refer to Chapter 3.4 of this Draft EIS, Wetlands and Appendix F for further detail).

Stream Mitigation Plan

Johnson Creek would be restored into an enhanced meandering tributary within a new channel, replacing existing Johnson Ditch to be filled under the proposal. A minimum of 0.34 acres of stream channel would be provided and configured to maximize salmonid rearing habitat. Features would include natural meanders, large woody debris and dense native riparian vegetative plantings. A new outfall would be constructed through the Green River levee and a fish-friendly flap gate would be installed to allow salmonid passage (refer to Chapter 3.3, Plants and Animals and Appendix E for further detail).

Grading Plan

As described above, the Tukwila South Master Plan proposes to establish site grades as part of an overall mass earthwork program at the outset of the project (Project Year 1). The mass grading program would allow construction of the major infrastructure elements at the outset of

the project and would support the Proponent's Objectives (see earlier discussion of the objectives in this Chapter).

Onsite movement of approximately 1.5 million cubic yards of earthwork would be necessary to establish site grades and for construction of major infrastructure components (Goldsmith & Associates, 2004). A temporary access road under the S 200th Street bridge would be constructed to facilitate transport of material between the north and south portions of the site. The major areas proposed for excavation include Planning Area B in the northwest portion of the site and the proposed Green River Off-Channel Habitat Restoration Area (an element of the Sensitive Area Master Plan, discussed below). Major fill areas for the excavated material include the new site for the flood protection barrier dike and the other areas across the site to establish the sub-grade for future development. All fill used on site would be clean fill. It is anticipated that approximately 400,000 cubic yards of imported clean fill would be required. Beginning in the second year of construction, an additional approximately 500,000 cubic yards of clean fill dirt would be imported for preloading and to establish finished grades, as needed for specific development projects on the site. The mass earthwork program would accomplish the following goals:

- Balance the movement of earthwork on-site as much as practical and limit the degree of import and export of material from the site;
- Establish unified sub-grades for the planned extension of Southcenter Parkway and S 178th Street realignment;
- Provide a feasible subgrade for future site development under the Master Plan;
- Ensure a unified elevation for the planned utility connections (e.g., wastewater) and to allow drainage to stormwater control and conveyance facilities.
- Allow installation of the comprehensive stormwater control system that is intended to serve the site at full buildout.
- Allow relocation of the flood protection barrier dike.
- Allow implementation of key features of the proposed Sensitive Area Master Plan in the initial phase.

Areas that would be graded and key construction components are shown in the construction sequence graphics previously referenced above (see Figures 2-4, 2-5, 2-6). The proposed grading plan is described in detail in the Tukwila South Preliminary Master Drainage Plan (MDP) (Goldsmith & Associates, 2005), included as Appendix B to this EIS (see Figure 2-4 of the MDP).

Construction Sequence

The Infrastructure development phase is expected to take three years and is currently projected for the year 2006-2008 time period. This phase would include construction of the elements described above. The sequence of major site construction activities during the anticipated three-year infrastructure development phase is outlined below. Figures 2-4, 2-5, and 2-6 depict the location of the construction activities across the site.

Year 1 Construction Activities (2006)

- Install Temporary Erosion and Sediment Control (TESC) Measures across the site to facilitate construction of infrastructure and site grading.

- City of Tukwila to construct Southcenter Parkway extension, start realignment of S 178th Street and related utility relocations/extensions.
- Begin excavation of the Green River Off-channel Habitat Restoration Area.
- Construct new Green River levee and widen to use as a temporary detour route for Frager Road.
- Construct temporary haul road under S 200th Street bridge.
- Construct new Johnson Creek channel and outfall to the Green River.
- Construct relocated flood protection barrier dike.
- Construct temporary and permanent southern stormwater control facility.
- Construct wetland rehabilitation area, including new grading and plantings.
- Begin excavation from the northwest portion of the site to establish site grades for development.
- Begin import of clean fill to the site.

Year 2 and 3 Construction Activities (2007-2008)

- Maintain existing TESC measures across site, as applicable.
- Complete Off-channel Habitat Restoration Area.
- Place site fill to subgrade elevations per the grading plan, starting from the north portion of the site.
- Begin import of material for pre-loading.
- Complete excavation from the northwest portion of the site.
- Construct permanent northern stormwater control facility.

Year 4 Construction Activities and Beyond (2009 +)

- Continue import of material for pre-loading, and to establish finished grades as needed to support site development.
- If warranted, locate and operate a portable concrete batch plant (see note below).
- Connect developed areas to permanent stormwater control system, as areas are developed.
- Redevelopment of the Segale Business Park (on a lot by lot basis).

At the start of construction of the Southcenter Parkway improvements, the road would be closed to thru-traffic (open for local-access traffic only). The road would remain closed until it is fully completed in 2007. Segale Park Drive C would be temporarily closed, east of Southcenter Parkway, to reduce traffic volumes on the Parkway. Truck crossings of Southcenter Parkway would be necessary for trucks hauling excavated material from the 178th Street realignment and other excavation activities in the northwest portion of the site to other areas of the site east of the Parkway. Crossings would likely occur at two points along the road, and would be ongoing through mass grading operations. Construction traffic control/flagging during truck hauling would be implemented, as necessary. To reduce the traffic volumes on Southcenter Parkway during grading operations, existing S 178th Street would remain open through the end of the 2007 construction season. During year 3 (6-month construction season during 2008), the new S 178th Street alignment would be opened; during this period, traffic control for truck crossings would be most critical. Segale Park Drive C would be reconnected to Southcenter Parkway after completion of excavation hauling from the northwest portion of the site.

Once the improved Southcenter Parkway is open, the existing Southcenter Parkway/Frager Road would be used as an internal haul road through the site; likewise, the old roadway would likely be used as the access road for trucks hauling import fill to the site.

Note: A temporary (portable) concrete batch plant could be used on-site during the infrastructure development phase, if economically warranted by the need for concrete during construction of the Tukwila South Project. The temporary plant could start in operation in 2008, or later, as need dictates. A temporary plant could be required more than once during full buildout. The plant would not service other projects outside of the construction site. A Sand and Gravel National Pollutant Discharge Elimination System (NPDES) permit would be obtained through Ecology prior to operating the batch plant. If the batch plant is operated for longer than 18 months, it would need to obtain a permit from Ecology for a permanent batch plant. Refer to Appendix C for additional detail.

2.6 Sensitive Area Master Plan

As stated above, the City adopted amendments to its Sensitive Areas Ordinance (SAO, 2004) that provide for designation of Sensitive Area Master Plan overlays and preparation of Sensitive Area Master Plans. These provisions of the SAO are intended to encourage a comprehensive approach to critical area protection, enhancement and creation, where certain criteria exist related to site size and potential for improvements to sensitive area functions and values.

The City's SAO allows development of a Sensitive Area Master Plan in situations where a comprehensive plan for alteration and mitigation would result in net environmental benefits, giving special consideration to conservation or protection measures necessary to preserve or enhance anadromous fisheries. The Tukwila South Project proposes to use the Sensitive Area Master Plan provisions of the City of Tukwila's SAO (TMC 18.45.160); the intent of the proposed Sensitive Area Master Plan is to yield substantial net benefits to the environment that would not be realized under the standard provisions of the SAO.

The proposed Sensitive Area Master Plan focuses on yielding net benefits to the environment, rather than using avoidance or like-kind mitigation measures emphasized by the standard SAO provisions. In this way, the proposed Tukwila South plan intends to convert low quality agricultural ditches and ditched streams and agricultural cropland wetlands into higher quality fish habitat and associated wetlands. To mitigate for impacts, the proposed plan seeks to: 1) create summer rearing, winter refuge and upstream migration holding fish habitat in the Green River; 2) relocate and restore Johnson Ditch in a larger channel with enhanced fish passage to the Green River through an improved floodgate; and 3) rehabilitate 32 acres of degraded cropland wetlands and connect these wetlands in a habitat corridor through the new Johnson Creek channel.

The proposed Sensitive Area Master Plan is intended to result in a net benefit to habitat, water quality and hydrologic functions and values of the streams and wetlands on the site and of the Green River adjacent to the site. The key features of the plan are described earlier in this chapter. The full proposed Sensitive Area Master Plan is included as Appendix L to this EIS.

2.7 Description of Alternatives

This Draft EIS addresses the probable significant environmental impacts of the Proposed Actions (under two development Alternatives) and the No Action Alternative. At this stage in the process, there is no specific plan for development of the site. The proposed Tukwila South Master Plan would allow a range and mix of higher and lower density land uses, intended to be consistent with the City's vision for the Tukwila South planning area (refer to the Background section). Therefore, no one alternative should be considered a definitive development plan for the site. The alternatives addressed in this Draft EIS have been created in order to allow a meaningful evaluation of a range of potential environmental impacts.

For purposes of environmental review, three development scenarios have been developed (Alternatives 1 through 3) that encompass a broad range of land uses that the site area could potentially accommodate in the future. The alternatives are intended to represent an overall envelope of potential development for analysis in the EIS. They function to provide representative levels and types of development that could be achieved incrementally over the buildout period, based on the Proponent's Objectives, the City's Comprehensive Plan policies for the Tukwila South area, the proposed elements of the Master Plan and market conditions. It should be noted that the Infrastructure development phase, described earlier in this Chapter, would be the same under Alternatives 1 and 2. The elements of the Infrastructure development phase are common to both alternatives in order to be consistent with the Purpose and Need of the project, summarized in Section 2.1 of this Chapter. Future development of the site is assumed to be complete by the year 2030. Following is a description of the alternatives proposed for evaluation in the EIS.

Alternative 1: High Intensity Campus Development

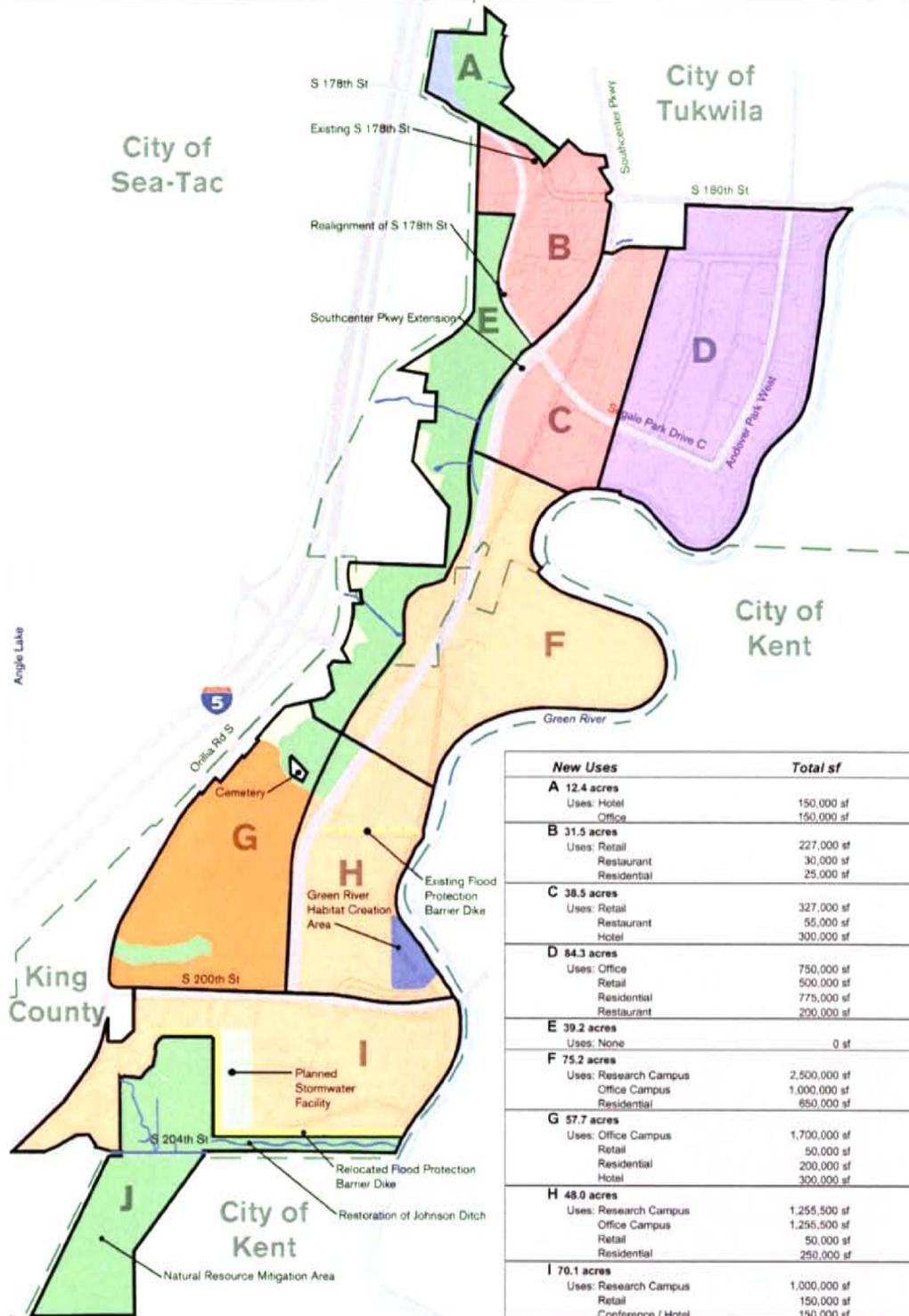
Alternative 1 reflects a potential maximum end of the development envelope (approximately 14 million square feet of new development) that could potentially be developed by 2030 (see Figure 2-10). The mix of uses and densities under this alternative would be consistent with a campus environment, and would result in a higher intensity, denser, urban character of development. It is assumed that Alternative 1 would include approximately 8.7 million square feet developed in "emerging technology" uses, including research and development and office campus uses. Other uses would include approximately 900,000 square feet of office use, 1.3 million square feet of retail use, 1.9 million square feet of residential use (1,900 units), 900,000 square feet of conference/hotel use (approximately 880 rooms), and approximately 300,000 square feet of restaurant use. Redevelopment of the existing Segale Business Park is assumed during the latter stages of the buildout period.

Under Alternative 1, Southcenter Parkway would be expanded in a new alignment along the base of the western hillside to S 200th Street, in order to support the campus-style development concept. S 178th Street would be realigned to intersect with Southcenter Parkway at Segale Park Drive C. The existing flood protection barrier dike would be relocated to the southern boundary of the site (north of S 204th Street). Alternative 1 includes implementation of a Sensitive Area Master Plan (described above, under Section 2.5). Portions of the site would be preserved from development, including the seep/spring wetlands, and natural streams within the western steep slopes.

- Legend**
- Primary Roadway Network
 - Jurisdictional Boundaries
 - Planning Areas
 - Existing Flood Protection Barrier Dike
 - Relocated Flood Protection Barrier Dike

- Areas To Be Preserved**
- Ditches & Streams
 - Wetlands & Slopes

- Development Area Legend**
- Research Campus - Mix of Uses
 - Corporate Support Office
 - Retail Village
 - Entertainment District - Mix of Uses
 - Commercial Development
 - Potential Future Development



New Uses	Total sf
A 12.4 acres Uses: Hotel Office	150,000 sf 160,000 sf
B 31.5 acres Uses: Retail Restaurant Residential	227,000 sf 30,000 sf 25,000 sf
C 38.5 acres Uses: Retail Restaurant Hotel	327,000 sf 55,000 sf 300,000 sf
D 84.3 acres Uses: Office Retail Residential Restaurant	750,000 sf 500,000 sf 775,000 sf 200,000 sf
E 39.2 acres Uses: None	0 sf
F 75.2 acres Uses: Research Campus Office Campus Residential	2,500,000 sf 1,000,000 sf 850,000 sf
G 57.7 acres Uses: Office Campus Retail Residential Hotel	1,700,000 sf 50,000 sf 200,000 sf 300,000 sf
H 48.0 acres Uses: Research Campus Office Campus Retail Residential	1,255,500 sf 1,255,500 sf 50,000 sf 250,000 sf
I 70.1 acres Uses: Research Campus Retail Conference / Hotel	1,000,000 sf 150,000 sf 150,000 sf
J 41.6 acres Uses: None	0 sf
Total 498.3 Acres	14,000,000 sf

Source: CollinsWoelmer / Goldsmith



Alternative 2: Moderate Intensity Campus Development

Alternative 2 would reflect a level of development (approximately 10.3 million square feet of new development) that represents a “lower” end of what could potentially be developed by 2030 (see Figure 2-11). The mix of uses and densities under this alternative would also be consistent with a campus environment, and would result in a moderate intensity, less dense character of development than is represented by Alternative 1. It is assumed that Alternative 2 would include approximately 6.5 million square feet developed in “emerging technology” uses, including research and development and office campus uses. Other uses would include approximately 850,000 square feet of office use, 950,000 square feet of retail use, 700,000 square feet of residential use (700 units), 750,000 square feet of hotel use (approximately 730 rooms), 500,000 square feet of flex-tech use and approximately 85,000 square feet of restaurant use. As under Alternative 1, redevelopment of the existing Segale Business Park is assumed during the latter stages of the buildout period.

Under Alternative 2, Southcenter Parkway and S 178th Street would be realigned in the same configuration as under Alternative 1. Relocation of the existing flood protection barrier dike to the southern boundary of the site (north of S 204th Street) would also occur. Alternative 2 also includes implementation of the Sensitive Area Master Plan. The same portions of the site would be preserved from development as described under Alternative 1.

Alternative 3: No Action

The No Action Alternative is defined by what would be most likely to happen if the proposal did not occur, given existing zoning and site characteristics. This alternative would reflect a scenario that is consistent with the 25-year development potential of the site (approximately 2 million square feet of new development), assuming no approval of the Proposed Actions, no relocation of the existing protection barrier dike, and limited changes to existing wetland and ditch/stream conditions (see Figure 2-12). Existing agricultural uses would continue in the southern portion on the site. It is assumed that the existing Segale Business Park and certain other existing uses would remain. This alternative assumes that annexation of the portion of the site within the City’s Potential Annexation Area occurs at some point in the future; therefore, it assumes that development would occur consistent with City of Tukwila regulations. Under the No Action Alternative, improvements to S 178th Street are not assumed; however, the extension of Southcenter Parkway to support a lower-density, more industrial character of development is assumed, in an alignment that would bisect the site (different than under Alternatives 1 and 2). It is assumed that the site would develop consistent with the more traditional pattern of light industrial and warehouse land uses that exist in the area. Under the No Action Alternative, portions of the site, including wetlands, streams and steep slope areas are assumed as preserved from development. Other portions of the site that would remain undeveloped include areas south of the existing flood barrier dike. The proposed Sensitive Area Master Plan would not be implemented.

Development Assumptions

To provide the basis for environmental review of these alternative development scenarios, assumptions have been made regarding the mix and level of development of uses, parking,

Legend

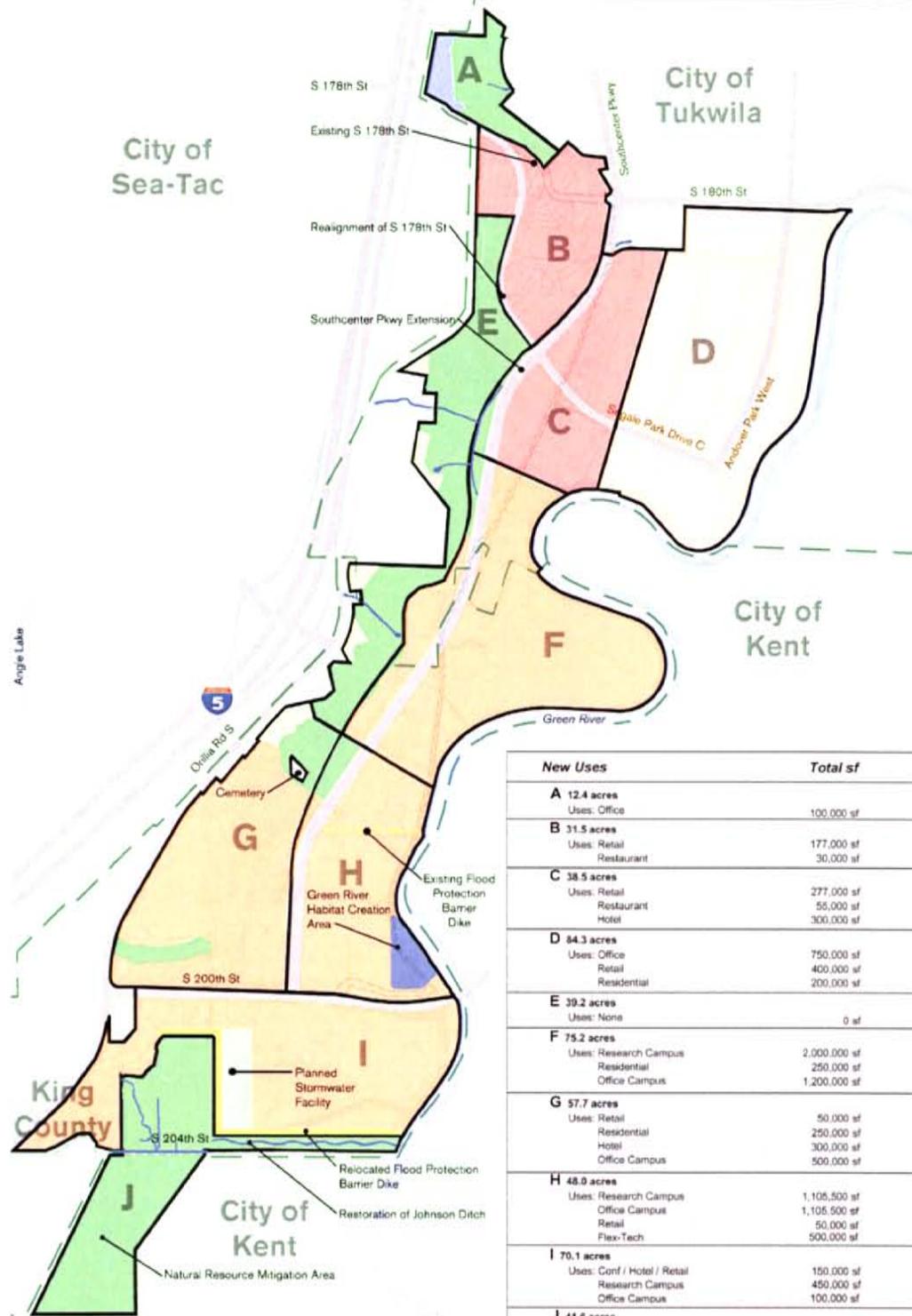
- Primary Roadway Network
- Jurisdictional Boundaries
- Planning Areas
- Existing Flood Protection Barrier Dike
- Relocated Flood Protection Barrier Dike

Areas To Be Preserved

- Ditches & Streams
- Wetlands & Slopes

Development Area Legend

- Research Campus - Mix of Uses
- Retail Village
- Redevelopment - Mix of Uses
- Commercial Development
- Potential Future Development



New Uses	Total sf
A 12.4 acres Uses: Office	100,000 sf
B 31.5 acres Uses: Retail Restaurant	177,000 sf 30,000 sf
C 38.5 acres Uses: Retail Restaurant Hotel	277,000 sf 55,000 sf 300,000 sf
D 84.3 acres Uses: Office Retail Residential	750,000 sf 400,000 sf 200,000 sf
E 39.2 acres Uses: None	0 sf
F 75.2 acres Uses: Research Campus Residential Office Campus	2,000,000 sf 250,000 sf 1,200,000 sf
G 57.7 acres Uses: Retail Residential Hotel Office Campus	50,000 sf 250,000 sf 300,000 sf 500,000 sf
H 48.0 acres Uses: Research Campus Office Campus Retail Flex-Tech	1,105,500 sf 1,105,500 sf 50,000 sf 500,000 sf
I 70.1 acres Uses: Conf / Hotel / Retail Research Campus Office Campus	150,000 sf 450,000 sf 100,000 sf
J 41.6 acres Uses: None	0 sf
Total 498.3 Acres	10,300,000 sf

Source: Collins & Wrightman + Goldsmith



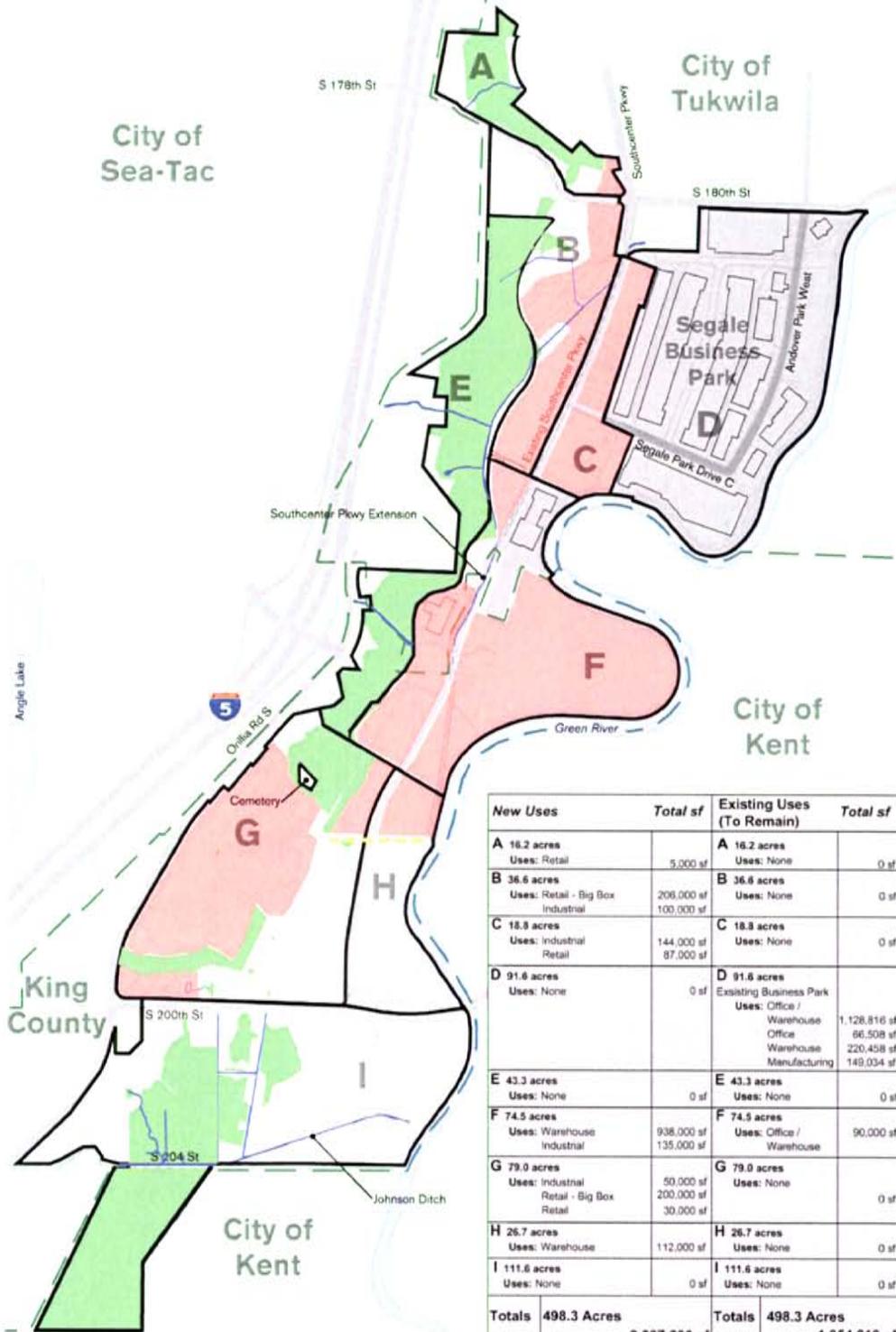
Figure 2-11
Alternative 2: Moderate Intensity
Campus Development

Tukwila South
Project EIS

- Legend**
- Primary Roadway Network
 - Jurisdictional Boundaries
 - Planning Areas
 - Existing Flood Protection
 - Barrier Dike

- Existing Uses to Remain
- New Uses
- Wetlands & Slopes to be Preserved
- Ditches & Streams to be Preserved
- Assumed Undeveloped Areas (white)

Note: Assumed undeveloped areas are areas south of the existing flood control levee, certain slope areas and other miscellaneous areas. Areas south of the existing flood control levee assumed to continue as agricultural uses.



New Uses	Total sf	Existing Uses (To Remain)	Total sf
A 16.2 acres Uses: Retail	5,000 sf	A 16.2 acres Uses: None	0 sf
B 36.6 acres Uses: Retail - Big Box Industrial	205,000 sf 100,000 sf	B 36.6 acres Uses: None	0 sf
C 18.8 acres Uses: Industrial Retail	144,000 sf 87,000 sf	C 18.8 acres Uses: None	0 sf
D 91.6 acres Uses: None	0 sf	D 91.6 acres Existing Business Park Uses: Office / Warehouse Office Warehouse Manufacturing	1,128,816 sf 66,508 sf 220,458 sf 149,034 sf
E 43.3 acres Uses: None	0 sf	E 43.3 acres Uses: None	0 sf
F 74.5 acres Uses: Warehouse Industrial	938,000 sf 135,000 sf	F 74.5 acres Uses: Office / Warehouse	90,000 sf
G 79.0 acres Uses: Industrial Retail - Big Box Retail	50,000 sf 200,000 sf 30,000 sf	G 79.0 acres Uses: None	0 sf
H 26.7 acres Uses: Warehouse	112,000 sf	H 26.7 acres Uses: None	0 sf
I 111.6 acres Uses: None	0 sf	I 111.6 acres Uses: None	0 sf
Totals 498.3 Acres	2,007,000 sf	Totals 498.3 Acres	1,654,816 sf

Source: CollinsWoernian / Goldsmith



open space, impervious surface coverage, number of stories and building heights, etc. under such scenarios. Ultimately, market factors, together with zoning regulations and development standards, would determine the specific timing, pattern of development, level of development, and mix of uses across the site over the long term. Table 2-1 is a summary comparison of assumed square feet of new development under for Alternatives 1, 2, and 3 (No Action).

**Table 2-1
BUILDOUT SUMMARY, SQUARE FEET, ALTERNATIVES 1 AND 2 AND 3**

Proposed New Development	Alternative 1 (Gross SF)	Alternative 2 (Gross SF)	Alternative 3 No Action (Gross SF)²
Research Campus	4,755,500	3,555,500	----
Office Campus	3,955,500	2,905,500	----
Office	900,000	850,000	----
Retail	1,304,000	954,000	527,000
Restaurant	285,000	85,000	----
Flex-Tech	----	500,000	----
Industrial	----	----	430,000
Warehouse	----	----	1,050, 000
Hotel/Conference	900,000	750,000	----
Multifamily Residential	1,900,000	700,000	----
Total, New Development	14,000,000	10,300,000	2,007,000
Existing Development Assumed to Remain	0	0	1,655,000
TOTAL DEVELOPMENT, FULL BUILDOUT	14,000,000	10,300,000	3,662,000

Source: La Pianta LLC and Collins Woerman, 2005.

The types of uses assumed under Alternatives 1 and 2 represent the development concept for the Tukwila South Master Plan of campus-type office and research environments in districts that include a mix of commercial, retail, and residential uses. The “campus” style of land use implies a shared use of facilities and provision of accessible, common open spaces. Under both Alternatives, *Research Campus* would encompass the greatest amount of gross square feet on the site. The *Research Campus* designation is anticipated to contain a combination of research and development, and laboratory, laboratory support, and office space. Laboratories are typically specialized areas (often requiring additional floor to floor heights) where research is conducted. The *Office Campus* and *Office* designations include business and professional offices where no retail, wholesale, or distribution or production of products typically occurs.

The *Retail* category could include a mix of retail uses, including retail uses that support the employment and residential components of the Tukwila South project, such as more service-oriented establishments. These could include grocery stores, food and beverage stores, video retail, dry cleaners, travel agencies, printing shops, etc. Retail uses could also take the form of entertainment/recreation retail (such as cinemas, theatres, art galleries, museums, night clubs, etc.) Additionally, retail use could include establishments that are more regional in nature, that could serve as a catalyst and draw other types of tenants that want to co-locate with the catalyst. These could include an outdoor/sporting goods store or major furniture anchor that are new to the area.

In the shorter term (through 2015), retail development could take a more traditional form (resembling what currently exists in the Tukwila area), with a grocery store anchor(s), possibly big box stores, served by surface parking lots. By 2030, it is anticipated that retail uses onsite would become more urban in character than what currently exists in the area. Surface parking lots would be expected to transition to structured parking facilities and the retail uses would take on more of an urban village form.

Under Alternative 2, the moderate density alternative, *Flex Tech* use is assumed. *Flex-Tech* use includes business and professional offices, but may also include limited product production and distribution uses that are accessory to the office use. Land uses assumed under Alternative 3 would typify the more traditional pattern of light industrial, warehouse, and big box land uses that exist in the area.

It is assumed that residential land use would consist of a variety of multifamily unit types including townhouses, condominiums and apartments. Residential building heights could vary between low rise (1-3 stories), mid-rise (3-6 stories) and high-rise (6+ stories). No high-rise structures are assumed under Alternative 2. Table 2-2 summarizes the number of permanent residential units assumed under Alternatives 1, 2, and 3.

**Table 2-2
PERMANENT RESIDENTIAL UNITS, ALTERNATIVES 1 AND 2, 2030**

Unit Type (Density)	Number of Units	
	Alternative 1	Alternative 2
Low-Rise (12-15 units/acre)	475	400
Mid-Rise (18-24 units/acre)	1,075	300
Hi-Rise (60-100 units/acre)	350	----
Total	1,900	700

Source: La Pianta LLC and Collins Woerman, 2005.

Table 2-3 summarizes the height and parking characteristics related to assumed new development under Alternatives 1, 2, and 3. It is assumed that development standards would address the specific setbacks, parking ratios, maximum building height, amount of open space, etc., that would apply to the site, and would ultimately regulate the character of development onsite.

Development under Alternative 1 is assumed to average between four and eight stories, with building heights ranging from 60 to 100 feet for the research and office campus land uses. At full buildout, parking would be mostly housed as structured parking, as opposed to surface lots. In early stages of development, surface parking could be utilized. Site character would reflect a higher-density, urban scale of development. Development under Alternative 2, with approximately four million less gross square feet, is assumed to average between four and six stories, with slightly lower building heights assumed for all land uses. Site character would reflect a moderate-density, urban scale of development. Parking would be provided in a combination of surface lots and structures. Under Alternative 3, the warehouse, light industrial and big box retail development proposed across the developable area is assumed at one story (approximately 30 to 40 feet). Parking for these uses would be surface lots.

**Table 2-3
ASSUMED LAND USE CHARACTERISTICS, ALTERNATIVES 1 AND 2, 2030**

Alternative	New Land Use Types	Total Stories	Total Height (feet)¹	Parking Type
1	Research Campus	4-6	60-90	Surface/Structured
	Office Campus	6-8	75-100	Surface/Structured
	Office	2-10	30-125	Surface/Structured
	Retail/Restaurant	1-2	15-35	Surface
	Residential	1-6+	10-60+	Surface/Structured
	Hotel	4-8	45-85	Surface/Structured
2	Research Campus	4-6	60-90	Surface/Structured
	Office Campus	2-6	25-75	Surface/Structured
	Office	4-5	50-65	Surface/Structured
	Flex Tech	2	40	Surface
	Retail/Restaurant	1-2	15-35	Surface
	Residential	1-6	20-60	Surface
	Hotel	4-6	45-65	Surface
3	Retail	1	15	Surface
	Retail – Big Box	1	40	Surface
	Light Industrial	1	30	Surface
	Warehouse	1	30	Surface

Source: La Pianta LLC and Collins Woerman, 2005.

¹ Total Height is based on “floor to floor” heights associated with the different land use types.