City of Bellevue
Development Services Department
Land Use Staff Report

Proposal Name:	Bellevue Technology Center - PUD Amendment
Proposal Address:	2333 158th Ct. NE, Bldg. A
Proposal Description:	Administrative Amendment to an approved Planned Unit Development (Unigard) to construct 27 additional parking stalls adjacent to Building 'A'. Proposal includes the removal of approximately 11 trees from within an existing landscape area to accommodate the additional parking stalls, in addition to a proposed tree mitigation planting plan for removal of the trees.
File Number:	**15-103369-LI**
Applicant:	Mark Jackson
Decisions Included:	Amendment of Planned Unit Development (Process II, LUC 20.35.200)
Planner:	Laurie Tyler, Associate Land Use Planner
State Environmental Policy Act Threshold Determination:	Exempt
Director's Decision:	Administrative Approval with Conditions

Michael A. Brennan, Director
Development Services Department

By: Carol V Helland
Carol V. Helland, Land Use Director

Date of Application:	March 3, 2015
Notice of Application:	April 2, 2015
Public Meeting:	April 14, 2015
Decision:	August 13, 2015
Appeal Deadline:	August 27, 2015

Appeal of the PUD Amendment Decision must be received in the City Clerk's office by 5 p.m. on the date noted for appeal of the decision.

I. REQUEST, BACKGROUND AND REVIEW PROCESS

A. Request

The applicant is requesting to remove an existing landscape area within Phase 1 of the Unigard Planned Unit Development (PUD) in order to install 27 new parking spaces. The purpose of this request is to provide additional parking stalls for new tenants which are now occupying buildings 'A' through 'D2'. An overall increase in tenant occupancy in the past few years within this northern portion of the PUD campus, is driving the need for the additional parking stalls. The installation of this new parking area would require the removal of eleven (11) significant trees within the existing landscape area, along with areas of lawn and groundcover. A significant tree is any healthy tree, eight (8) inches or greater in diameter, measured four (4) feet above existing grade.

Figure 1 – Project Location Map

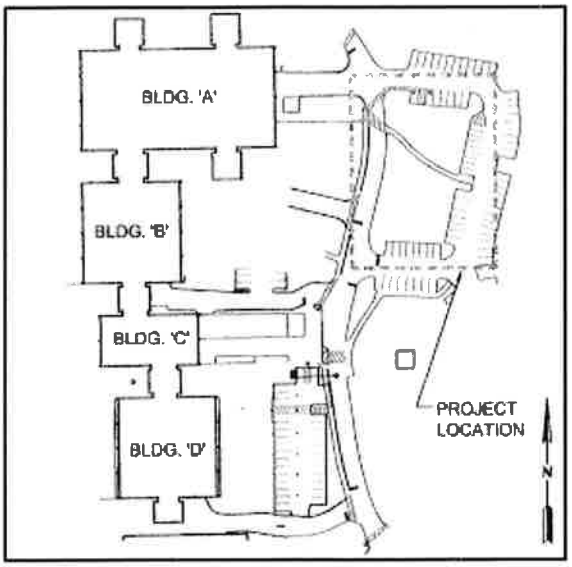


Figure 2 – Existing Conditions

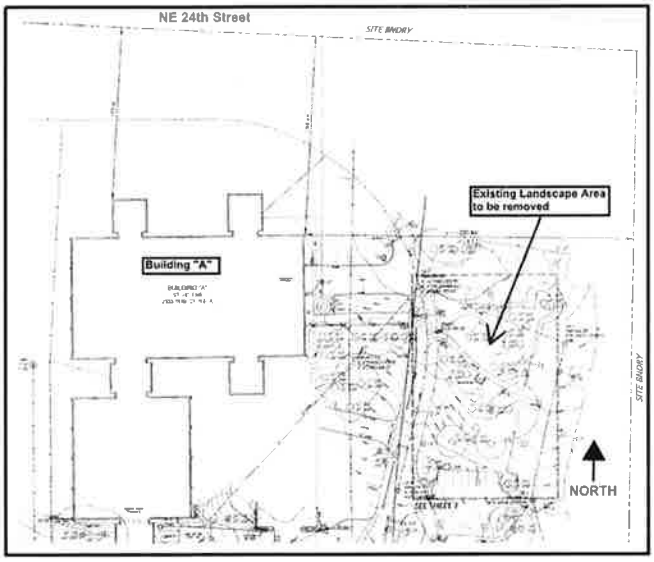


Figure 3 – Aerial Photograph

B. Background

On April 10, 1972, the Bellevue City Council adopted Resolution No. 1955 approving preliminary plans for the Unigard Planned Unit Development (PUD) to be developed in three phases, consisting of approximately 325,000 square feet of office space. Phase I and II were approved by Ordinance No. 1846 (Sept. 25, 1972) and No. 2657 (Dec. 18, 1978). Ordinance No. 1846 also included a reclassification of the site from Residential and Agricultural Use (R-A) to Open Use (O-U). Phase I consisted of approximately 75,000 square feet of office space in four buildings and Phase II consisted of approximately 67,000 square feet of office space in one building. Phase III was approved on January 8, 1992 by Ordinance No. 4318, and consisted of 180,000 square feet of office space to be constructed in two buildings, over two levels of parking. However, on May 15, 1997, the property owner received approval of an Administrative Amendment (LUA-97-344) applicable to Phase III only in order to modify the development from two buildings to four buildings, each with 45,000 gross square feet. On May 6, 1999, the property owner received a second Administrative Amendment approval (LUA-98-3065) to Phase III which revised several transportation related conditions of the original Phase III approval. It should also be noted that a Rezone of the site from Open Use (O-U) to Office (O) occurred on May 1, 1995 by Ordinance No. 4760, which incorporated all conditions of approval of the original PUD to ensure that they would remain in effect and unaltered by the reclassification.

On January 7, 2002 the City approved a Land Use Exemption (01-108311-LJ) which granted the installation of "delayed parking" in two separate areas of the Unigard PUD. The first was a 23 stall parking area located east of the northerly office building (Building 'A'), which included landscape treatment within the parking area, in addition to perimeter landscape treatment to augment the existing vegetation in the area. The second was a 52 stall parking area located southeast of the southerly office building, which included a combination landscape treatment of evergreen and deciduous trees, along with a variety of shrubs and ground cover, consistent with other areas of the Unigard campus. However, neither of the approved parking areas were installed, and the Land Use Exemption approval expired. Other small areas of parking have been approved and installed through buiding permits which had Land Use Exemptions attached. Approval of additional parking areas through a Land Use Exemption does not meet the exemption criteria. Therefore, the current request to install additional parking is being reviewed through the Administrative Amendment process, which is the appropriate method for review.

C. Approvals Required

A Planned Unit Development (PUD) Amendment is a Process II decision made by the Director of the Development Services Department (LUC 20.30D.285). The amendment may be appealed by a party of record to the Hearing Examiner.

II. CURRENT SITE DESCRIPTION, ZONING, AND LAND USE CONTEXT

A. Site

The project site is located in the Crossroads Subarea, District B, of northeast Bellevue. The subject landscape area is located adjacent to Building "A" within Phase 1 of the 46-acre Unigard PUD. Phase I is approximately 12 acres in size. Primary access to Phase 1 is via NE 24th Street to the north, although there are two other access points into the PUD: one to the west off 156th Avenue NE and one to the south, off Northup Way. There are no Critical Areas on the site, as defined by LUC 20.25H.

Figure 4 – Unigard PUD Aerial Photograph

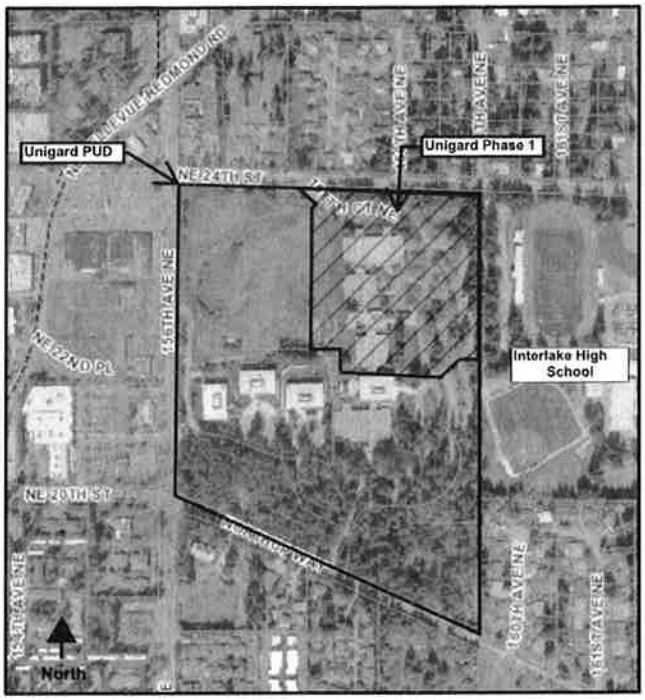
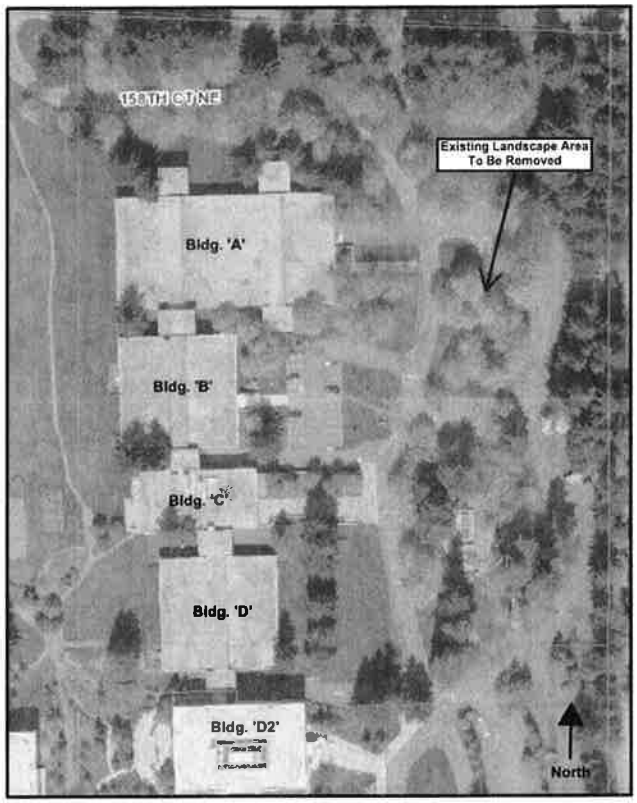


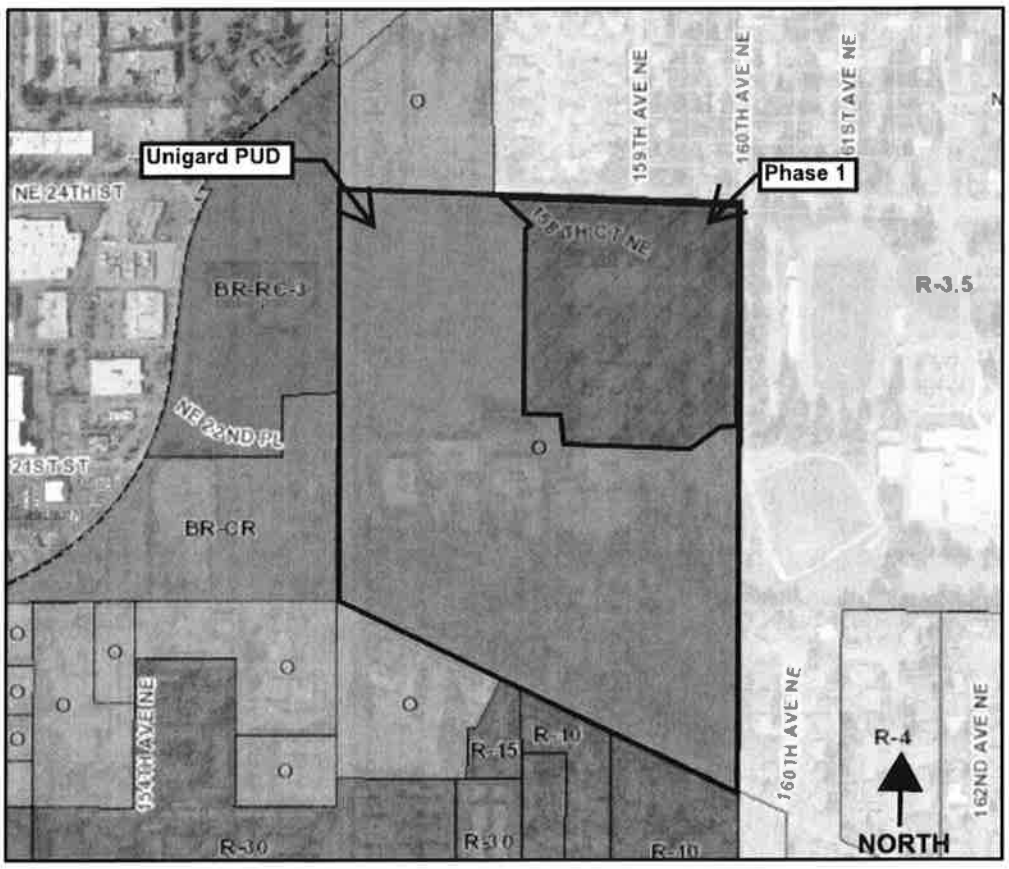
Figure 5 – Phase 1 & Bldg. 'D2'



B. Zoning and Land Use Context

The subject site is located within the Office "O" Land Use District and is within the Crossroads Subarea, District B. The overall Unigard PUD is currently improved with nine office buildings and associated parking areas. Phase 1 is specifically improved with four of the nine office buildings, along with areas of parking. Surrounding land uses consist of single-family residential (R-3.5) and office (O) to the north, Interlake High School and single-family residential (R-3.5) to the east, office (O) and multi-family residential (R-10, R-15) to the south, and a mixture of commercial and multi-family residential properties (BR-RC-3, BR-CR) to the west. The site is bordered by NE 24th Street to the north, 156th Avenue NE to the west, and Northup Way to the south, which are all categorized as minor arterials. The northern 300' and eastern 300' of Phase 1 are located within the Single-Family Transition Overlay District (LUC 20.25B).

Figure 6 – Zoning Map



III. PROPOSED SITE CHANGES

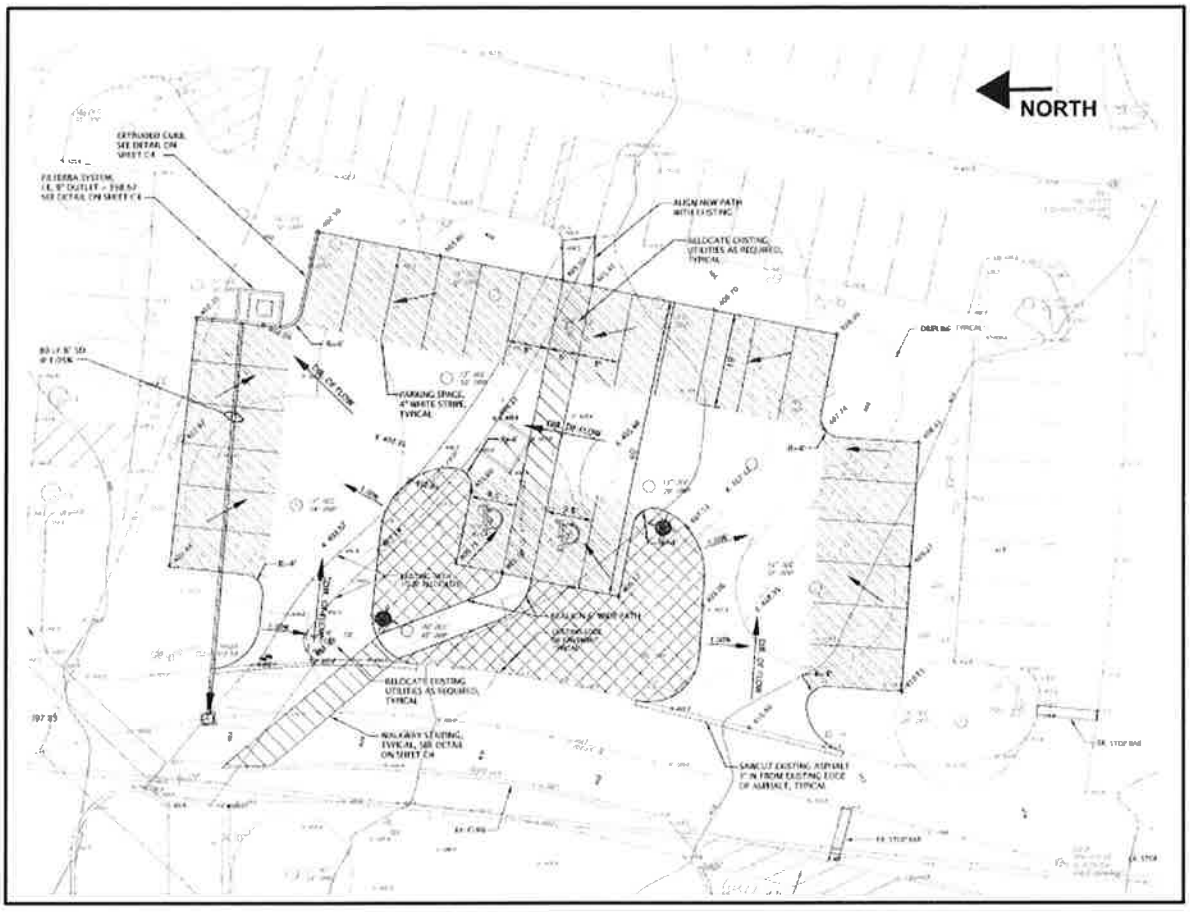
A. Site Design – Proposed Changes

The proposal would remove the existing landscape area which is located east of building 'A', and currently surrounded by parking, to install 27 parking spaces for use by tenant(s) of buildings 'A' through 'D2'. Due to the number of parking stalls proposed, two of the 27 parking spaces will be handicap accessible, which is required by the Americans with Disability Act (ADA). It should be noted that the ADA standards require the accessible parking spaces be located on the shortest accessible route to the building.

A new pedestrian path of travel would connect the existing back parking lot through the proposed parking lot and over to building 'A'. Two new light standards would be installed within the proposed landscape planter adjacent to the ADA stalls. In addition, a new Filterra system, or catch basin, would be installed in the north east corner of the parking lot, in order to treat runoff from the new impervious surface before it's discharged into the storm water system.

It should be noted that the arborist for the project raised a concern regarding the likelihood of survival of tree T-16, due to the proximity of the proposed adjacent catch basin. Staff advised the applicant to modify the location of the catch basin in order to further protect the viability of tree T-16 to help ensure its survival during and after construction. This change is now reflected on Sheet C2 of the civil set of drawings, attached to this staff report.

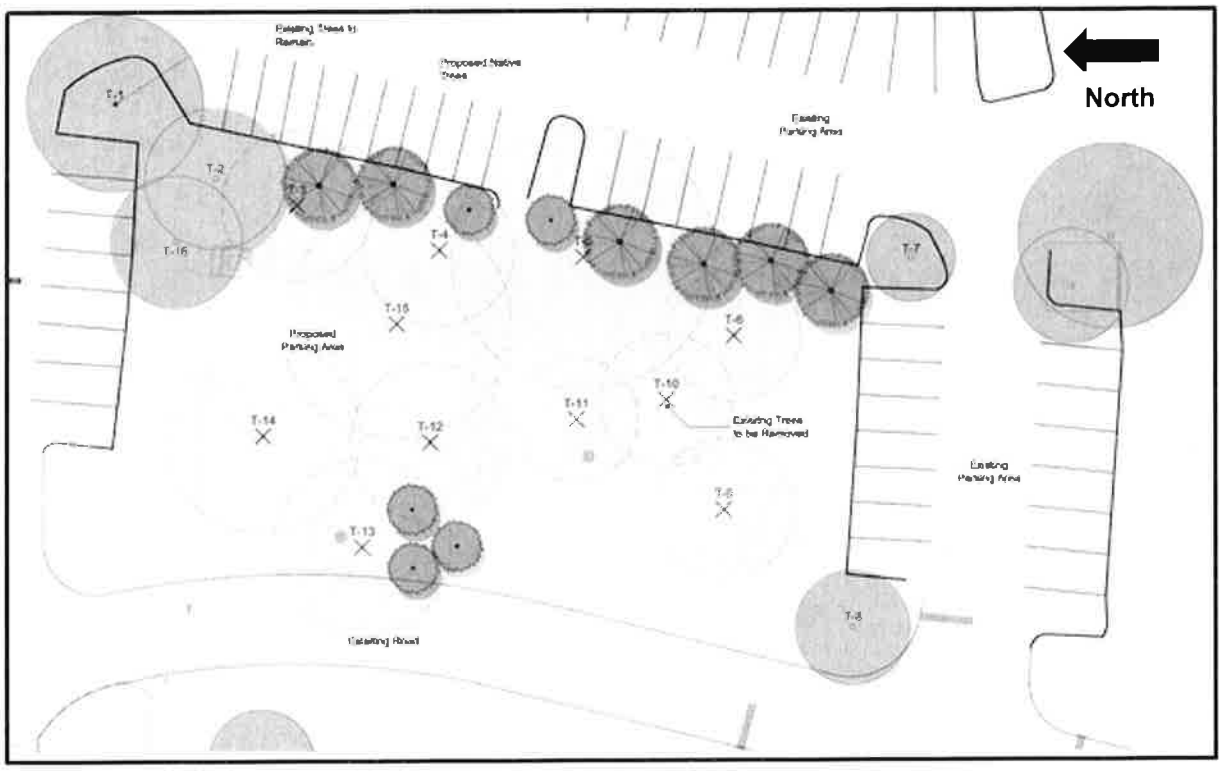
Figure 7 – Proposed Parking



B. Landscape Design – Proposed Changes

Currently the landscape area contains sixteen (16) *Acer platanoides* trees, commonly known as Norway Maple, which equate to 269.8 diameter inches. All sixteen trees are considered significant trees, as defined by LUC 20.50.046. The proposal would require the removal of eleven (11) trees, which are located within the central portion of the landscape area. Refer to Figure 8, below. The existing lawn and groundcover would also be removed as part of the proposal.

Figure 8 – Tree Removal Plan

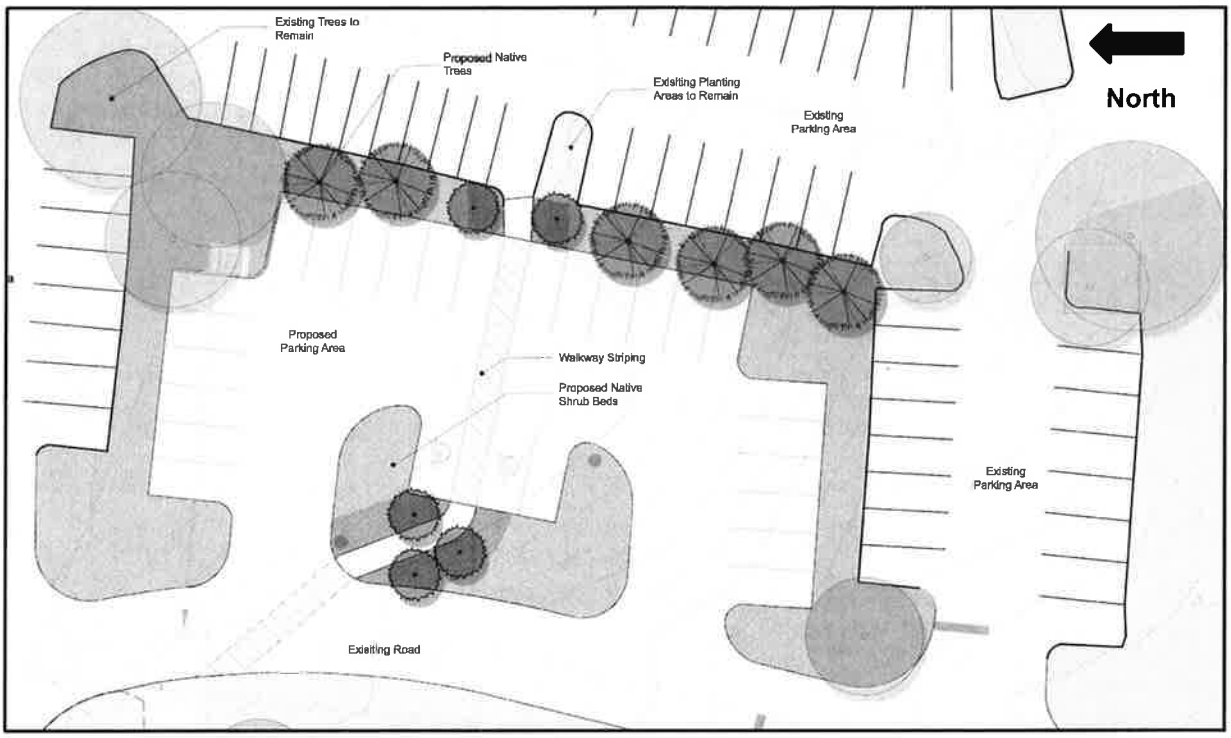


The eleven (11) trees to be removed equate to 188.3 diameter inches, which is a 69% reduction in significant diameter inches from this small landscaped area. However, in comparison with the overall PUD campus which is heavily planted with a variety of tree species, including evergreen and deciduous trees, the area impacted by this proposal is considered minor.

In order to augment the tree loss, the applicant proposes a one-to-one replacement ratio which requires eleven (11) replacement trees at a minimum of 8-10 feet in height at installation. The replacement tree species proposed are Douglas Fir and Western Hemlock, which are native to the region and can also be found successfully growing elsewhere within the PUD campus. A significant number of Salal and Western Sword Ferns would also be planted within the revised landscape planters surrounding the parking area. Refer to Figure 9, below.

As previously stated, the arborist report prepared by Gilles Consulting indicated a concern regarding the likelihood of survival of tree T-16, located in the north east corner of the subject area. With the proposed catch basin located adjacent to and within the tree drip line, the likelihood of survival is minimal. Therefore, Staff advised the applicant to slightly shift the location of the catch basin in order to save the tree. It should also be noted that tree protection measures will need to be in place during construction to ensure the survival of the remaining trees to be retained. **Refer to Section XI.B for Condition of Approval regarding Tree Protection.**

Figure 9 – Tree Mitigation and Landscape Planting Plan



The Norway maple trees proposed for removal were likely installed during the construction of Phase 1 of the Unigard PUD. Historical plan sets from Phase 1 indicate Norway maple trees to be planted within the subject landscape area. However, there do not appear to be any specific conditions of approval from the original PUD that required these Norway maple trees to be preserved. The original PUD approval placed a heavy influence on preservation of both the meadow feature and the dense southern tree line, but not interior landscaping which was and continues to be more ornamental (non-native) in nature.

IV. COMPLIANCE WITH APPLICABLE LAND USE CODE REQUIREMENTS

A. Land Use Code Dimensional Requirements

The Unigard PUD was originally reviewed for consistency with the dimensional standards of the Land Use Code at the time each phase was developed. In order to approve this PUD amendment, any changes to the previously approved decision must be consistent with the current Land Use Code, in addition to any specific conditions of the original PUD approval. The changes proposed under this request for modification are limited to changes in impervious surface, landscaping and maximum parking stall thresholds. No changes to the building layout, structures, or access points are proposed.

1. Impervious Surface

Phase 1 of the Unigard PUD campus is located on Lot 1, which has an overall land area of 12.37 acres or 538,699 square feet. Currently, Phase 1 has an impervious surface coverage of 225,000 square feet, or 42%, which includes all building footprints, eaves, and paved areas. The proposal would increase the impervious coverage by 4,753 square feet, which is a less than 1% increase. Per LUC 20.20.010, properties located within the Office (O) land use district cannot exceed 80% impervious surface. Therefore, the project as proposed will remain in

compliance with the land use code limits on impervious surface area.

2. Landscape

Per LUC 20.20.520.F.3, parking areas are required to provide Type V landscaping. The purpose of Type V landscaping is to provide visual relief and shade for parking areas. For a parking lot with no more than 50 parking spaces, at least 17.5 square feet of landscape development must be provided for each parking stall proposed. This equates to 472.5 square feet of landscape development for the proposed 27 stall parking lot. In addition, the landscape areas within a parking lot must be at least 100 square feet, extend at least four feet in any direction, and contain at least one tree. The remaining landscape areas must be covered with plant materials, decorative mulch or unit pavers. As proposed, the landscape plan will meet these parking lot landscape requirements.

In terms of tree removal, LUC 20.20.900.D sets the standards for perimeter and interior tree retention. The proposal would not impact the perimeter tree canopy, but would remove a very minimal percentage of interior trees in comparison to the overall PUD campus.

3. Parking

The minimum number of parking spaces required by LUC 20.20.590 for a general office use is 4/1,000 net square feet (nsf). The maximum number of parking spaces allowed is 5/1,000 nsf. The PUD campus is currently developed with approximately 306,000 net square feet of office space, which equates to a minimum of 1,224 parking stalls (4/1,000 nsf) and a maximum of 1,530 stalls (5/1,000 nsf). Currently the PUD campus has a total of 1,079 parking stalls (504 surface parking, 490 garage, 85 covered stalls) which are shared throughout the campus. As part of the Phase III approval, the minimum parking required by code was not installed, as the previous property owner took advantage of a 10% reduction in parking stalls through the use of the shared parking provision in LUC 20.20.590.I. This 10% reduction was likely requested as the office buildings were not fully tenanted as part of the final PUD build out. The 10% reduction in parking would also explain why the minimum parking required (1,224 stalls) is not currently installed for the overall PUD campus.

The office buildings are projected to be fully tenanted by Fall 2015, and the property owner has recognized the need for additional parking stalls for the campus. With the proposed increase of 27 parking stalls, the total on-site parking will be increased from 1,079 to 1,106 stalls. By continuing to utilize the shared parking provision, only 1,102 parking stalls are required for the overall campus. Therefore, increasing the parking stall count by 27 stalls brings the development closer to compliance with the minimum required by code (1,224), but still takes advantage of the permitted 10% reduction (1,102).

In order to take advantage of the shared parking provisions, the property owner(s) are required to file a written agreement providing for the shared parking use with King County and with the Bellevue City Clerk. This did not appear to take place after the Phase III approval in 1998. Therefore, Staff has included a Condition of Approval which requires the current property owner(s) to record a shared parking agreement. **Refer to Section XI.B for Condition of Approval regarding Shared Parking Agreement.**

V. CONSISTENCY WITH THE COMPREHENSIVE PLAN AND ZONING

The Unigard property is located in the Crossroads Subarea, District B, and is designated as Office (O) per the Comprehensive Plan. This proposal is consistent with the Comprehensive Plan, which includes policies and goals which address site design. The most relevant Comprehensive Plan Policy related to this proposal is the following:

Policy S-CR-66: Office use as a conditional use is appropriate for the property east of 156th Avenue NE between Northup Way and NE 24th Street (commonly known as Unigard). Discussion: This area should be developed under a conditional use permit with attention given to retaining large stands of trees, views through the site from adjacent streets, and the open character of the site.

Finding: *No new building structures or modifications to existing structures are proposed as part of this application. However, it should be noted that by eliminating the subject stand of trees within the interior of the site, there will be no impact to the remaining large stands of trees surrounding the site, most notably along the northern, eastern and southern portions of the PUD campus. Therefore, the large stands of trees along the border of the campus will remain, views through the site from adjacent streets will not be impacted, and the open character of the site will be unchanged.*

VI. STATE ENVIRONMENTAL POLICY ACT

This proposal is Exempt from the requirements of the State Environmental Policy Act (SEPA) per Bellevue City Code 22.02.032 as determined under WAC 197-11-800(1), as the amount of cut/fill is anticipated to be only 272 cubic yards, which is below the 500 cubic yard categorical exemption threshold.

VII. PUBLIC NOTICE AND COMMENT

Application Date:	March 3, 2015 (Completeness Date)
Notice of Application:	April 2, 2015
Public Meeting:	April 14, 2015
Minimum Comment Period:	April 16, 2015

The minimum required public comment period ended on April 16, 2015, but written comments were accepted up to the date of this decision. On April 14, 2015, a public meeting was held at Bellevue City Hall. The meeting was attended by several citizens, many of which were in opposition to the project. The main objection expressed at the public meeting and in subsequent comment letters submitted to City staff was that the removal of trees to facilitate additional parking should not be granted. The comments received from the public are summarized below, followed by a response from staff.

Comment: There are two large existing shipping containers located over parking stalls. Should these be moved to capture additional parking that is needed by the applicant? Are they required to have a special permit to have these containers on site?

Response: *After a site visit, it was determined that approximately four shipping containers are located within the various parking areas of the overall PUD campus which are blocking access to a number of parking stalls. However, it has been confirmed that as a result of numerous tenant*

improvement projects within the office buildings, these shipping containers are being utilized as job trailers for construction staging and materials, and help limit the visual impacts that can accompany construction. Once construction is complete, these shipping containers will be removed, freeing up the additional parking stalls for use by employees. Parking proposed with this amendment is necessary to meet minimum parking requirements so that overflow parking conditions will not occur as vacancy rates diminish.

Comment: There has been a leasing sign on the property for some time; therefore, the buildings are not at full capacity so they shouldn't need any additional parking.

Response: *Since acquiring the property in 2012, the owner has revitalized the 46-acre campus by recruiting over 100,000 square feet of new office tenants to buildings 'A' through 'D2'. An overview of the tenant occupancy within these four buildings can be found in the project file. At the time of application, over 40% of the new tenants had not yet moved into these buildings. These office tenant spaces are expected to be fully occupied by fall 2015. Therefore, while some parking stalls appear available today, these new tenants will finish occupying the office buildings by the fall, necessitating the need for these additional parking stalls.*

Comment: The property owner should encourage their tenants to use alternate means of transportation and discourage single-occupancy vehicles.

Response: *The applicant has indicated that the Bellevue Technology Center property manager does encourage and provide information to the various tenants throughout the office campus regarding commute trip reduction, carpool/vanpool opportunities, and public transit options, in an effort to reduce trip generation and single-occupancy vehicles to the site.*

The Bellevue Technology Center is subject to a City code requirement (BCC 14.60.070) that mandates owners/managers of real estate developments exceeding certain size thresholds develop and implement Transportation Management Programs (TMPs) to encourage workers to use commute modes other than driving alone. Requirements at the Bellevue Technology Center include designating a Building Transportation Coordinator, posting information about transit and ridesharing (carpool, vanpool) options, designating parking spaces for carpools and vanpools, providing a $15 monthly subsidy for transit, carpool and vanpool users, and providing an emergency ride home to transit, carpool and vanpool users who miss their regular ride due to work requirements, illness or home emergency.

The City has a similar requirement (BCC 14.40) that applies to employers that have worksites which have more than 100 workers commuting in the morning peak period (6am-9am). There is currently one tenant at the Bellevue Technology Center (QBE Americas) that is affected by this "Commute Trip Reduction" program requirement, which also includes a provision for periodic commute surveys of employees and a worksite performance goal. Programmatic activities undertaken by employers pursuant to Commute Trip Reduction are similar to the TMP implementation activities, except that employers have a more direct means of communication to employees and generally provide a higher level of incentive i.e. heavily subsidized or "free" transit pass/vanpool fare.

Comment: The tenant that originally requested the need for additional parking stalls has since recognized that they can accommodate their parking needs without the additional parking spaces requested. Please research the necessity of this proposal.

Response: *The request to install additional parking stalls was not made based on a specific tenant request. It was based on a need due to buildings 'A' through 'D2' being fully tenanted by fall 2015, which results in an overall increase in tenant occupancy for this northern portion of the PUD campus.*

Comment: Trees should not be sacrificed to accommodate additional parking on site when there are other ways to accommodate the extra parking i.e. restripe parking, add carpool/compact parking stalls, remove unused dumpsters to free up parking, remove existing lawn areas to install parking.

Response: *The applicant recently re-striped the parking lot throughout the PUD campus during the review of this amendment. The re-striping was according to the previously existing layout with no parking stalls added or subtracted. A permit is not required to re-stripe a parking lot unless there is a modification to the layout or number of stalls. The applicant opted not to install compact parking stalls as part of the re-striping project, and they are not required to be installed by City code.*

While there may be creative ways to install the requested 27 parking stalls in areas currently covered by lawn or groundcover, the applicant is proposing this parking lot installation adjacent to Building 'A' in order to provide parking closer to the building and comply with minimum parking requirements. Installation of these parking stalls elsewhere on the site could result in the additional parking stalls being located further away from Buildings 'A' through 'D2' now at full occupancy, which is not what the applicant is trying to achieve. It should also be noted that the previous property owner had also requested additional parking in the same location, which was previously approved by the City. The approval associated with this prior parking increase request expired, and necessitated the processing of this PUD Amendment.

VIII. SUMMARY OF TECHNICAL REVIEWS

A. Utilities Review

The plans generally conform to the requirements applicable to this stage of the design process. It is the applicant's responsibility to verify the accuracy of all field information and data gathered for the feasibility of this project. Any development on the site will be required to mitigate impacts with a building and/or clear and grade permit.

B. Transportation Review

The Transportation Department has reviewed the proposal for compliance with applicable codes and standards. All work is interior to the site. Therefore, there are no Transportation related issues.

C. Clear and Grade Review

The Clear and Grade reviewer has reviewed the plans and materials submitted for this project and has determined that the application can be approved. The future Clearing and Grading permit application for this development must comply with the City of Bellevue Clearing and Grading Code (BCC 23.76).

D. Fire Review

The Fire Department has reviewed the proposal for compliance with applicable codes and standards. There are no concerns with the proposal.

IX. CHANGES TO PROPOSAL DUE TO CITY REVIEW

During review of the proposal, Staff recommended that the proposed catch basin in the north east corner of the parking area be shifted outside of the required drip line of tree T-16. This will help to ensure the survival of tree T-16 during and after construction.

X. DECISION CRITERIA – LUC 20.30D.285.D

The Director may approve modifications to an approved Planned Unit Development as an administrative amendment subject to the procedures set forth in LUC 20.35.200 if the following criteria are met:

A. The amendment maintains the design intent or purpose of the original approval; and

Response: *The original Unigard PUD approval placed a heavy influence on the preservation of the meadow feature and the southern tree line. No specific restrictions were placed on the PUD approval regarding parking lot vegetation or vegetation adjacent to structures. Because this request does not propose tree/vegetation removal within the mature forested areas of the property (property boundaries), or modifications to the meadow feature, the amendment maintains the design intent or purpose of the original approval.*

B. The amendment maintains the quality of design or product established by the original approval; and

Response: *Although 11 of the original Norway maple trees will be removed as part of the proposal, the applicant has proposed tree mitigation planting in an effort to maintain a level of tree canopy within the parking lot areas. In addition, the proposal aims to install native tree and shrub species around the new parking lot, in an effort to replace the non-native (ornamental) vegetation found within the PUD campus. Therefore, this amendment will maintain the quality of design established by the original approval through the incorporation of native vegetation, while maintaining the preservation of the mature tree line along the property boundaries, as well as the meadow feature.*

C. The amendment is not materially detrimental to uses or property in the immediate vicinity of the subject property.

Response: *The proposal to install 27 parking stalls will not be materially detrimental to uses or property in the immediate vicinity of the subject property. The subject landscape area is small in comparison to the overall PUD campus. Dense vegetation exists along the northern, eastern and southern boundaries, which provides adequate screening of the subject landscape area. It should also be noted that the Unigard PUD approval placed a heavy influence on the preservation of the meadow feature and the large stands of trees along the southern border, to which this landscape area in question is not adjacent. Parking proposed with this amendment will bring available stalls into compliance with minimum parking standards and avoid overflow parking in the vicinity of the PUD site as tenant spaces are occupied.*

XI. DECISION OF DIRECTOR WITH CONDITIONS

After conducting the various administrative reviews associated with the proposal, including applicable Land Use consistency, and City Code & Standard compliance reviews, the Director of the Development Services Department does hereby **APPROVE WITH CONDITIONS** the Planned

Unit Development amendment application.

A. Compliance with Bellevue City Codes and Ordinances
Compliance with all applicable Bellevue City Codes and Ordinances including but not limited to the following is required:

Clearing and Grading Code - BCC 23.76	Savina Uzunow,	425-452-7860
Transportation Code - BCC 14.60	Chris Dreaney,	425-452-5264
Trans. Improvement Program - BCC.22.16	Chris Dreaney,	425-452-5264
Bellevue Utilities Code - BCC Title 24	Don Rust,	425-452-4856
Land Use Code - BCC Title 20	Laurie Tyler,	425-452-2728
Sign Code - BCC Title 22B	Laurie Tyler,	425-452-2728
Noise Control - BCC 9.18	Laurie Tyler,	425-452-2728
Uniform Fire Code - BCC 23.11	Travis Ripley,	425-452-6042

B. GENERAL CONDITIONS

1. Conditions of Approval
All conditions of approval of the original PUD decision, File # PC-B-71-1, and all subsequent phases and amendments apply to this PUD amendment.

REVIEWER: Laurie Tyler, Development Services Department
AUTHORITY: City of Bellevue File# PC-B-71-1

2. Clear & Grade Permit
A Clearing and Grading permit is required to construct the parking lot, utility infrastructure and landscape improvements.

REVIEWER: Savina Uzunow, Clearing and Grading
AUTHORITY: Bellevue City Code 23.76

3. Tree Protection
To mitigate adverse impacts during construction to the trees to be retained, the applicant must comply with the following:

a) Clearing limits shall be established for the retained tree within the developed portion of the site, outside of the drip lines. Six foot chain link fencing with driven posts, or an approved alternative, shall be installed at the clearing limits (outside of the drip lines) prior to initiation of any clearing and grading. Refer to Clearing and Grading Standard EC-021.

b) No excavation of clearing should be performed within drip lines of the retained tree except as specifically approved on plans. All such work shall be done by hand to avoid damage to roots and shall be done under the supervision of an arborist approved by the City.

REVIEWER: Laurie Tyler, Development Services Department
AUTHORITY: Bellevue City Code 23.76 & Land Use Code 20.20.900.D

4. Shared Parking Agreement
The property owner(s) shall file with King County and the Bellevue City Clerk a written agreement for the shared parking use, which includes a 10% reduction in the minimum parking required

throughout the PUD campus. This agreement shall be recorded on the title records of each affected property.

REVIEWER: Laurie Tyler, Development Services Department
AUTHORITY: Land Use Code 20.20.590.I.3

5. Noise & Construction Hours
The proposal will be subject to normal construction hours of 7:00 a.m. to 6:00 p.m., Monday through Friday and 9:00 a.m. to 6:00 p.m. on Saturdays, except for Federal Holidays and as further defined by the Bellevue City Code. Proximity to existing residential uses will be given special consideration. Upon written request to the Development Services Department (DSD), work hours may be extended to 10:00 p.m. if the criteria for extension of work hours as stated in BCC 9.18 can be met and the appropriate mitigation employed. The use of best available noise abatement technology consistent with feasibility is required during construction to mitigate construction noise impacts to surrounding uses.

REVIEWER: Laurie Tyler, Development Services Department
AUTHORITY: Bellevue City Code 9.18.020.C & 9.18.040

6. Utilities
Utilities Department approval is for the PUD Administrative Amendment application only. There are no implied approvals of the conceptual utility design.

REVIEWER: Don Rust, Utilities
AUTHORITY: Bellevue City Code 24.02, 24.04 & 24.06

7. Storm Drainage
The storm drainage system shall be designed per Utility Codes BCC 24.06 and the Utilities Engineering Standards. The storm drainage improvement shall be reviewed, approved and inspected under the storm drainage permit (UB) application.

REVIEWER: Don Rust, Utilities
AUTHORITY: Bellevue City Code 24.02, 24.04 & 24.06

C. PRIOR TO ISSUANCE OF ANY CLEAR AND GRADE PERMIT

1. Landscape Installation Assurance Device
All site landscaping shall be 100% complete per the plan approved by the City. Alternatively, the applicant shall submit the following: 1) a red-marked plan identifying which landscape areas are incomplete; 2) an estimate for the total cost to complete these areas; and 3) an assurance device dedicated to the City for 150% of the estimated cost to complete these areas per the approved Landscape Plan. The assurance device will be released upon complete installation and 600 inspection approval.

REVIEWER: Laurie Tyler, Development Services Department
AUTHORITY: Land Use Code 20.40.490

2. Landscape Maintenance Assurance Device
File with the Development Services Department a landscape maintenance assurance device for a one-year period for 20% of the cost of labor and materials for all required landscaping.

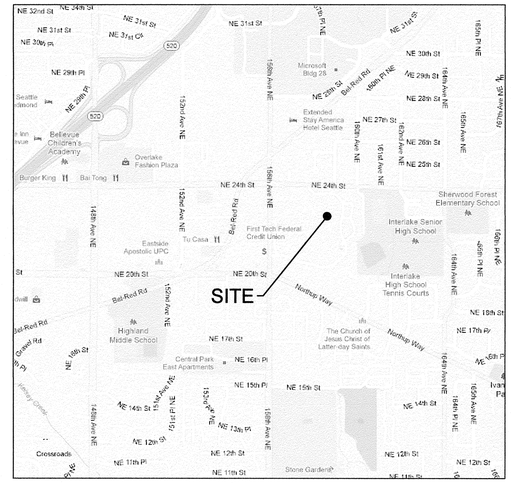
REVIEWER: Laurie Tyler, Development Services Department
AUTHORITY: Land Use Code 20.40.490

Attachments:
A. Project Drawings
B. Arborist Reports

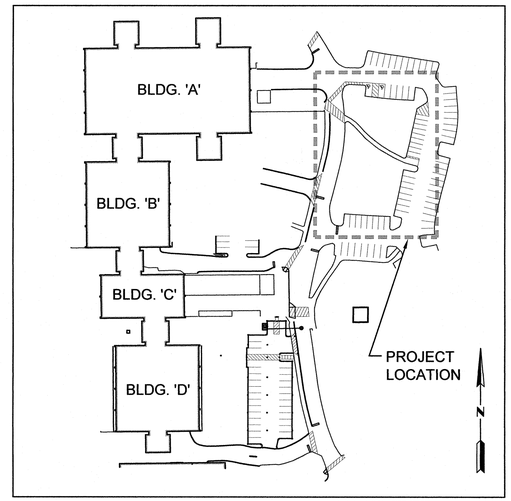
BELLEVUE TECHNOLOGY CENTER
PRELIMINARY BUILDING 'A' SITE IMPROVEMENTS FOR PUD ADMINISTRATIVE AMENDMENT

APPLICATION #15-103369 LI
2333 - 158th COURT NE
BELLEVUE, WA 98007

DATE: NOVEMBER 2014
REV. AUGUST 2015



VICINITY MAP
N.T.S.



PROJECT LOCATION MAP
N.T.S.

Prepared for: TRANSWESTERN
Contact: Mr. Mark Jackson
2018 - 156th Ave. N.E., Suite 100
Bellevue, WA 907

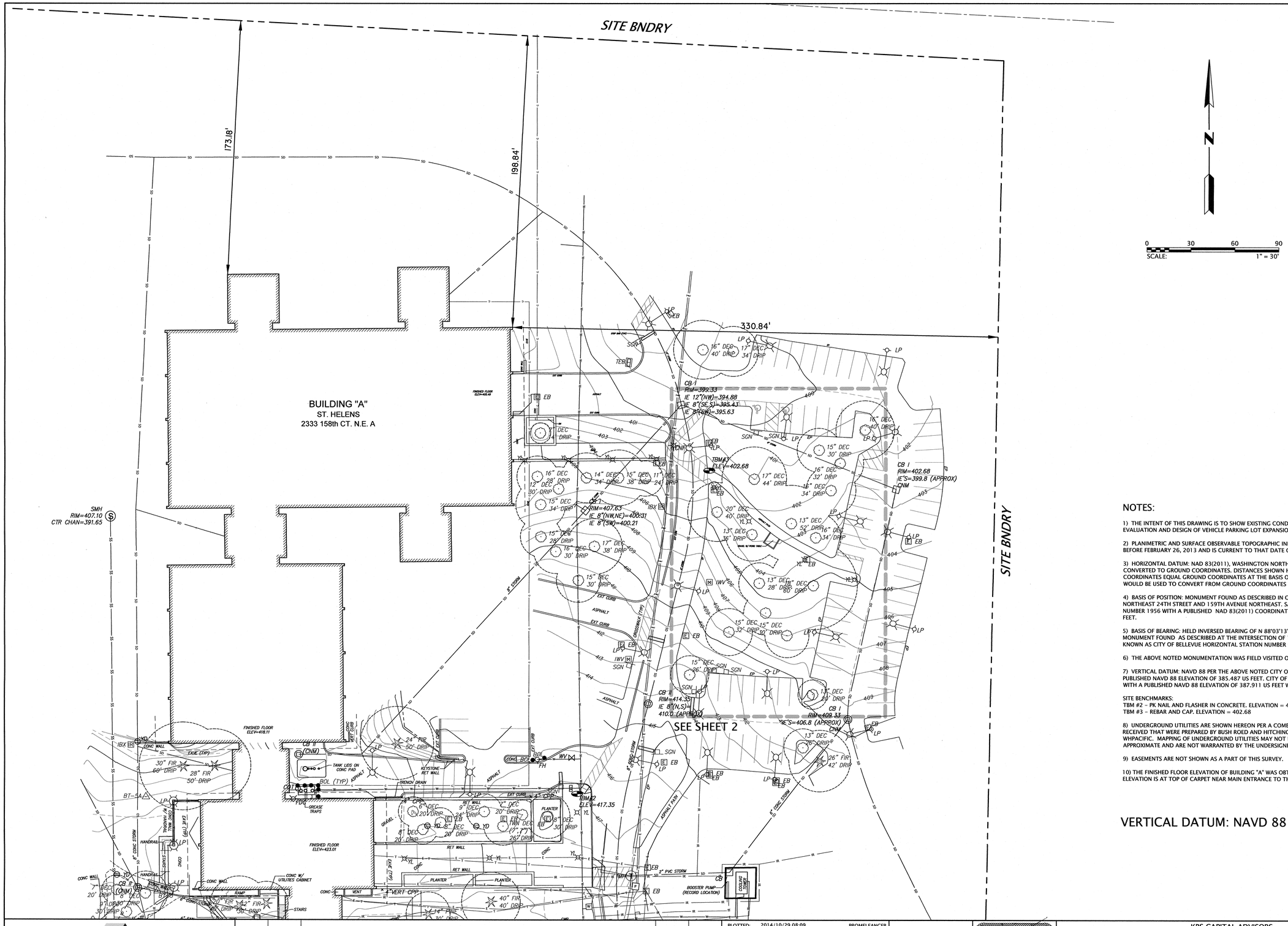
Overlay District: Crossroads Subarea
Comprehensive Plan Designation: Office (O)
Zoning: Office (O)

SHEET INDEX

City of Bellevue

GOLDSMITH
LAND DEVELOPMENT SERVICES
1215 114th Ave SE, Bellevue, WA 98004 | PO Box 3565, Bellevue, WA 98009
T 425 462 1080 F 425 462 7719 www.goldsmithengineering.com

GRID L-5, SECTION 26, TOWNSHIP 25N, RANGE 5E, W.M.



LEGEND

●	BOL	BOLLARD
△	BT–	GOLDSMITH SURVEY CONTROL POINT
□	CB I	CATCH BASIN TYPE I
◎	CB II	CATCH BASIN TYPE II
✳	CNF	CONCRETE NAIL FOUND (AS NOTED)
	CNM	COULD NOT MEASURE
	CONC	CONCRETE
	DEC	DECIDUOUS
	DRIP	TREE DRIP LINE DIAMETER (TYP)
E	EB	ELECTRIC BOX
	EP	EDGE OF PAVEMENT
	EXT	EXTRUDED
⊙	FH	FIRE HYDRANT
	GM	GAS METER
IR	IBX	IRRIGATION WATER BOX
IV	IWV	IRRIGATION WATER VALVE
⊙	LP	LIGHT POLE
	SGN	SIGN
⬬	TBM	BENCHMARK
	TEB	TELEPHONE BOX
	TWN	TWIN
	TYP	TYPICAL
⋈	WV	WATER VALVE
W	WVLT	WATER VAULT
⊙	YL	YARD LIGHT

NOTES:

1) THE INTENT OF THIS DRAWING IS TO SHOW EXISTING CONDITIONS IN THE VICINITY OF BUILDING "A" FOR THE PURPOSE OF EVALUATION AND DESIGN OF VEHICLE PARKING LOT EXPANSIONS, AND OTHER CONTEMPLATED IMPROVEMENTS.

2) PLANIMETRIC AND SURFACE OBSERVABLE TOPOGRAPHIC INFORMATION SHOWN HEREON WAS GATHERED IN THE FIELD ON OR BEFORE FEBRUARY 26, 2013 AND IS CURRENT TO THAT DATE ONLY.

3) HORIZONTAL DATUM: NAD 83(2011), WASHINGTON NORTH ZONE (PER CITY OF BELLEVUE SURVEY STATION DATA CARDS), CONVERTED TO GROUND COORDINATES. DISTANCES SHOWN HEREON ARE GROUND DISTANCES. WASHINGTON NORTH ZONE GRID COORDINATES EQUAL GROUND COORDINATES AT THE BASIS OF POSITION ONLY. A COMBINED SCALE FACTOR OF 0.9999629312 WOULD BE USED TO CONVERT FROM GROUND COORDINATES TO GRID COORDINATES. (GROUND X 0.9999629312 = GRID)

4) BASIS OF POSITION: MONUMENT FOUND AS DESCRIBED IN CONCRETE SIDEWALK AT THE NORTHWEST CORNER OF INTERSECTION OF NORTHEAST 24TH STREET AND 159TH AVENUE NORTHEAST. SAID MONUMENT IS KNOWN AS CITY OF BELLEVUE HORIZONTAL STATION NUMBER 1956 WITH A PUBLISHED NAD 83(2011) COORDINATE OF NORTHING = 233,062.381, AND EASTING = 1,321,077.347, IN US FEET.

5) BASIS OF BEARING: HELD INVERSED BEARING OF N 88°03'13" W BETWEEN THE ABOVE NOTED BASIS OF POSITION AND THE MONUMENT FOUND AS DESCRIBED AT THE INTERSECTION OF 156TH AVENUE NORTHEAST AND NORTHEAST 24TH STREET, ALSO KNOWN AS CITY OF BELLEVUE HORIZONTAL STATION NUMBER 0062.

6) THE ABOVE NOTED MONUMENTATION WAS FIELD VISITED ON FEBRUARY 15, 2013.

7) VERTICAL DATUM: NAVD 88 PER THE ABOVE NOTED CITY OF BELLEVUE MONUMENT, HORIZONTAL STATION NUMBER 0062 WITH A PUBLISHED NAVD 88 ELEVATION OF 385.487 US FEET. CITY OF BELLEVUE SURVEY BENCHMARK NUMBER 571 (FOUND AS DESCRIBED) WITH A PUBLISHED NAVD 88 ELEVATION OF 387.911 US FEET WAS ALSO OBSERVED IN THE CONDUCT OF THIS SURVEY.

SITE BENCHMARKS:
TBM #2 – PK NAIL AND FLASHER IN CONCRETE. ELEVATION = 417.35
TBM #3 – REBAR AND CAP. ELEVATION = 402.68

8) UNDERGROUND UTILITIES ARE SHOWN HEREON PER A COMBINATION OF OWNER SUPPLIED INFORMATION, ELECTRONIC DRAWINGS RECEIVED THAT WERE PREPARED BY BUSH ROED AND HITCHINGS, AND ELECTRONIC DRAWINGS RECEIVED THAT WERE PREPARED BY WHPACIFIC. MAPPING OF UNDERGROUND UTILITIES MAY NOT BE COMPLETE. LOCATIONS SHOWN HEREON SHOULD BE CONSIDERED APPROXIMATE AND ARE NOT WARRANTED BY THE UNDERSIGNED SURVEYOR.

9) EASEMENTS ARE NOT SHOWN AS A PART OF THIS SURVEY.

10) THE FINISHED FLOOR ELEVATION OF BUILDING "A" WAS OBTAINED BY THE UNDERSIGNED SURVEYOR ON MARCH 8, 2013. ELEVATION IS AT TOP OF CARPET NEAR MAIN ENTRANCE TO THE BUILDING.

VERTICAL DATUM: NAVD 88

APPROVED BY

GOLDSMITH
LAND DEVELOPMENT SERVICES
1215 114th Ave SE, Bellevue, WA 98004 | PO Box 3565, Bellevue, WA 98009
T 425 462 1080 F 425 462 7719 www.goldsmithengineering.com

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KEITH J. GOLDSMITH — STATE OF WASHINGTON — 24597 — REGISTERED PROFESSIONAL ENGINEER

LEE D. NYCUM — STATE OF WASHINGTON — 19084 — REGISTERED PROFESSIONAL LAND SURVEYOR

KBS CAPITAL ADVISORS

JOB NO. 12181

BUILDING 'A' PARKING PLAN
2333 – 158th CT. NE, BELLEVUE, WA 98007
TOPOGRAPHIC SURVEY
BELLEVUE TECHNOLOGY CENTER
APPLICATION #XX–XXXXXX XX
GRID L–5, SEC. 26, TWP. 25N, RGE. 5E, W.M.

SHEET 1

City of Bellevue Submittal Requirements	4

STATISTICAL INFORMATION SHEET

10/24/06

Note: If Site Plan B is required for your project, this information must also appear on the Site Plan.

		Required/ Allowed	Proposed
1.	Land Use Zone		Office
2.	Site Area, in square feet and acres		Lot 1: 538,669 sf; 12.37 ac.
3.	Site Data Summary		
	a. Number of dwelling units per acre		N/A
	b. Total number of dwelling units		N/A
	c. Area of each proposed structure		
	Net		N/A
	Net leasable (for Shopping Center)		N/A
	Gross		N/A
	d. Floor Area Ratio (F.A.R.)		N/A
	e. Area of proposed building by use		
	Net		N/A
	Gross		N/A
4.	Percentage of lot coverage		0.1
5.	Amount of impervious area in square feet		4,753
6.	Cut/fill (cubic yards)		272
7.	Building height: Measured from avg. existing grade in Shoreline & Transition Areas; measured from average finished grade for all other areas.		N/A
8.	Parking: Total # of spaces for the project.		27
	a. # of spaces by each proposed use		27
	b. The percentage of compact stalls		0
	c. The percentage of handicapped stalls		7%
9.	Area of Proposed Landscaping or mitigation		
	a. Adjacent to right-of-way		N/A
	b. Adjacent to interior property lines		N/A
	c. Within the parking area		Tree Plan
	d. Significant Trees to be retained		5

EXTRUDED CURB, SEE DETAIL ON SHEET C4

FILTERRA SYSTEM, I.E. 8" OUTLET = 398.67 SEE DETAIL ON SHEET C4

ALIGN NEW PATH WITH EXISTING

RELOCATE EXISTING UTILITIES AS REQUIRED, TYPICAL

84 LF 8" SD @ 1.00%

DRIPLINE, TYPICAL

PARKING SPACE, 4" WHITE STRIPE, TYPICAL

EXISTING PATH TO BE RELOCATED

REALIGN 6' WIDE PATH

EXISTING EDGE OF PAVEMENT, TYPICAL

EX. CROSSWALK

NEW CB, TYPE I
RIM = 401.65±
I.E. 8" (IN/OUT) = 397.83

RELOCATE EXISTING UTILITIES AS REQUIRED, TYPICAL

WALKWAY STRIPING, TYPICAL, SEE DETAIL ON SHEET C4

EX. CURB

SAWCUT EXISTING ASPHALT 1' IN FROM EXISTING EDGE OF ASPHALT, TYPICAL

EX. STOP BAR

EX. CROSSWALK

EX. STOP BAR

EX. STOP BAR

CB I
RIM=402.68
IE'S=399.8 (APPROX)
CNM

CB I
RIM=409.33
IE'S=406.8 (APPROX)
CNM

CB I
RIM=399.33
IE 12"(NW)=394.88
IE 8"(SE,S)=395.43
IE 8"(SW)=395.63

CB II
RIM=414.35
IE 8"(N,S)=
410.8 (APPROX)

NOTES:
1. SEE IMPERVIOUS PAVEMENT SECTION ON SHEET 6.
2. SEE PERVIOUS PAVEMENT SECTION ON SHEET 6.
3. SEE SIDEWALK SECTION ON SHEET 6.
4. HANDICAP PARKING SPACES SHALL BE MARKED IN ACCORDANCE WITH ADA REQUIREMENTS.

PAVEMENT LEGEND

IMPERVIOUS PAVEMENT = 4,753 SF

PERVIOUS PAVEMENT = 4,556 SF

SCALE: 1" = 10'

THE ON-SITE STORM DRAINAGE SYSTEM IS PRIVATE

VERTICAL DATUM: NAVD 88

APPROVED BY

GOLDSMITH
LAND DEVELOPMENT SERVICES
12151 14th Ave SE, Bellevue, WA 98004 | PO Box 3565, Bellevue, WA 98009
T 425 462 1080 F 425 462 7719 www.goldsmithengineering.com

REV NO.	DATE	DESCRIPTION	MADE BY	CHK'D BY
1	7-31-15	REVISED FILTERRA SYSTEM LOCATION TO AVOID TREE DRIPLINE.	ETE	ETE

PLOTTED: 2015/08/03 10:04 EENSTROM
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DESIGNED: ETE
APPROVED: ETE
FIELD BOOK:
PAGE #:

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KEITH J. GOLDSMITH — STATE OF WASHINGTON — 24507 — REGISTERED PROFESSIONAL ENGINEER — 8/3/15

MARK A. BARBER — STATE OF WASHINGTON — 38000 — REGISTERED PROFESSIONAL ENGINEER — 7/30/15

KBS CAPITAL ADVISORS

BUILDING 'A' SITE IMPROVEMENTS FOR PARKING
2333 – 158th CT. NE, BELLEVUE, WA 98007

SITE PLAN

BELLEVUE TECHNOLOGY CENTER

APPLICATION #XX-XXXXXX XX
GRID L-5, SEC. 26, TWP. 25N, RGE. 5E, W.M.

JOB NO. 12181

SHEET 2

EXTRUDED CURB, SEE DETAIL ON SHEET C4

FILTERRA SYSTEM, I.E. 8" OUTLET = 398.67 SEE DETAIL ON SHEET C4

84 LF 8" SD @ 1.00%

NEW CB, TYPE I RIM = 401.65± I.E. 8" (IN/OUT) = 397.83

EX. CROSSWALK

ALIGN NEW PATH WITH EXISTING

RELOCATE EXISTING UTILITIES AS REQUIRED, TYPICAL

DRIPLINE, TYPICAL

PARKING SPACE, 4" WHITE STRIPE, TYPICAL

DIR. OF FLOW

EXISTING PATH TO BE RELOCATED

REALIGN 6' WIDE PATH

EXISTING EDGE OF PAVEMENT, TYPICAL

RELOCATE EXISTING UTILITIES AS REQUIRED, TYPICAL

WALKWAY STRIPING, TYPICAL, SEE DETAIL ON SHEET C4

SAWCUT EXISTING ASPHALT 1' IN FROM EXISTING EDGE OF ASPHALT, TYPICAL

EX. CURB

EX. STOP BAR

EX. CROSSWALK

6" CONC STORM

8" CONC STORM

12" STORM

CB I RIM=402.68 IE'S=399.8 (APPROX) CNM

CB I RIM=409.33 IE'S=406.8 (APPROX) CNM

CB I RIM=399.33 IE 12"(NW)=394.88 IE 8"(SE,S)=395.43 IE 8"(SW)=395.63

CB II RIM=414.35 IE 8"(N,S)= 410.0 (APPROX)

EARTHWORK ESTIMATE

CUT:	37 CY
FILL:	235 CY
NET:	272 CY

SCALE: 1" = 10'

THE ON-SITE STORM DRAINAGE SYSTEM IS PRIVATE

VERTICAL DATUM: NAVD 88

APPROVED BY

NOTES:
1. SEE IMPERVIOUS PAVEMENT SECTION ON SHEET 6.
2. SEE PERVIOUS PAVEMENT SECTION ON SHEET 6.
3. SEE SIDEWALK SECTION ON SHEET 6.
4. HANDICAP PARKING SPACES SHALL BE MARKED IN ACCORDANCE WITH ADA REQUIREMENTS.

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KEITH J. GOLDSMITH, STATE OF WASHINGTON, 24597, REGISTERED PROFESSIONAL ENGINEER

MARK A. BABBIE, STATE OF WASHINGTON, 36000, REGISTERED PROFESSIONAL ENGINEER

KBS CAPITAL ADVISORS

JOB NO. 12181

BUILDING 'A' SITE IMPROVEMENTS FOR PARKING
2333 – 158th CT. NE, BELLEVUE, WA 98007

PRELIMINARY DRAINAGE AND GRADING PLAN

BELLEVUE TECHNOLOGY CENTER

APPLICATION #XX-XXXXXX XX
GRID L-5, SEC. 26, TWP. 25N, RGE. 5E, W.M.

SHEET 3

EXTRUDED CURB, SEE DETAIL ON SHEET C4

FILTERRA SYSTEM, I.E. 8" OUTLET = 398.67 SEE DETAIL ON SHEET C4

84 LF 8" SD @ 1.00%

ALIGN NEW PATH WITH EXISTING

RELOCATE EXISTING UTILITIES AS REQUIRED, TYPICAL

DRIPLINE, TYPICAL

PARKING SPACE, 4" WHITE STRIPE, TYPICAL

DIR. OF FLOW

EXISTING PATH TO BE RELOCATED

REALIGN 6' WIDE PATH

EXISTING EDGE OF PAVEMENT, TYPICAL

ESTIMATED NEW LANDSCAPE AREA

NEW CB, TYPE I
RIM = 401.65±
I.E. 8" (IN/OUT) = 397.83

RELOCATE EXISTING UTILITIES AS REQUIRED, TYPICAL

WALKWAY STRIPING, TYPICAL, SEE DETAIL ON SHEET C4

SAWCUT EXISTING ASPHALT 1' IN FROM EXISTING EDGE OF ASPHALT, TYPICAL

EX. CURB

EX. CROSSWALK

EX. STOP BAR

EX. CROSSWALK

EX. STOP BAR

EX. STOP BAR

CB I
RIM=402.68
IE'S=399.8 (APPROX)
CNM

CB I
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CB I
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IE 12"(NW)=394.88
IE 8"(SE,S)=395.43
IE 8"(SW)=395.63

CB II
RIM=414.35
IE 8"(N,S)=
410.8 (APPROX)

6" CONC STORM

8" CONC STORM

12" STORM

8" STORM

CROSSWALK (TYP)

CURB

ASPHALT

NOTES:
1. SEE IMPERVIOUS PAVEMENT SECTION ON SHEET 6.
2. SEE PERVIOUS PAVEMENT SECTION ON SHEET 6.
3. SEE SIDEWALK SECTION ON SHEET 6.
4. HANDICAP PARKING SPACES SHALL BE MARKED IN ACCORDANCE WITH ADA REQUIREMENTS.

LEGEND

EXISTING PARKING LOT LIGHTING

ESTIMATED LOCATION OF NEW PARKING LOT LIGHTING

SCALE: 1" = 10'

THE ON-SITE STORM DRAINAGE SYSTEM IS PRIVATE

VERTICAL DATUM: NAVD 88

APPROVED BY

GOLDSMITH
LAND DEVELOPMENT SERVICES
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KEITH J. GOLDSMITH — STATE OF WASHINGTON — 24597 — REGISTERED PROFESSIONAL ENGINEER

MARK A. BARBER — STATE OF WASHINGTON — 36000 — REGISTERED PROFESSIONAL ENGINEER

KBS CAPITAL ADVISORS

BUILDING 'A' SITE IMPROVEMENTS FOR PARKING
2333 – 158th CT. NE, BELLEVUE, WA 98007
PRELIMINARY LANDSCAPING AND LIGHTING
BELLEVUE TECHNOLOGY CENTER
APPLICATION #XX-XXXXXX XX
GRID L–5, SEC. 26, TWP. 25N, RGE. 5E, W.M.

JOB NO. 12181

SHEET 4

STORM DRAINAGE GENERAL NOTES:

(1) ALL WORK SHALL CONFORM TO THE 2013 EDITION OF THE CITY OF BELLEVUE UTILITIES DEPARTMENT ENGINEERING STANDARDS AND THE DEVELOPER EXTENSION AGREEMENT.

(2) STORM PIPE SHALL BE PVC CONFORMING TO ASTM D-3034 SDR 35 (4"H – 15"H) OR ASTM F-679 (18"H-27"H). BEDDING AND BACKFILL SHALL BE AS SHOWN IN THE STANDARD DETAILS.

(3) THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREON HAVE BEEN ESTABLISHED BY FIELD SURVEY OR OBTAINED FROM AVAILABLE RECORDS AND SHOULD THEREFORE BE CONSIDERED APPROXIMATE ONLY AND NOT NECESSARILY COMPLETE. IT IS THE SOLE RESPONSIBILITY OF THE EXCAVATOR TO INDEPENDENTLY VERIFY THE ACCURACY OF ALL UTILITY LOCATIONS SHOWN, AND TO FURTHER DISCOVER AND AVOID ANY OTHER UTILITIES NOT SHOWN HEREON WHICH MAY BE AFFECTED BY THE IMPLEMENTATION OF THIS PLAN. IMMEDIATELY NOTIFY THE ENGINEER IF A CONFLICT EXISTS.

(4) THE FOOTING DRAINAGE SYSTEM AND THE ROOF DOWNSPOUT SYSTEM SHALL NOT BE INTERCONNECTED AND SHALL SEPARATELY CONVEY COLLECTED FLOWS TO THE CONVEYANCE SYSTEM OR TO ON-SITE STORMWATER FACILITIES.

(5) PROVIDE AND MAINTAIN TEMPORARY SEDIMENTATION COLLECTION FACILITIES TO ENSURE THAT SEDIMENT OR OTHER HAZARDOUS MATERIALS DO NOT ENTER THE STORM DRAINAGE SYSTEM IN ACCORDANCE WITH THE SITES APPROVED CSWPPP. FOR ALL CONSTRUCTION DURING THE RAINY SEASON, DOWNHILL BASINS AND INLETS MUST BE PROTECTED WITH CATCH BASIN INSERTS. SIMPLY PLACING FILTER FABRIC UNDER THE GRATE IS NOT ACCEPTABLE.

(6) PRIOR TO FINAL INSPECTION AND ACCEPTANCE OF STORM DRAINAGE WORK, PIPES AND STORM DRAIN STRUCTURES SHALL BE CLEANED AND FLUSHED. ANY OBSTRUCTIONS TO FLOW WITHIN THE STORM DRAIN SYSTEM, (SUCH AS RUBBLE, MORTAR AND WEDGED DEBRIS), SHALL BE REMOVED AT THE NEAREST STRUCTURE. WASH WATER OF ANY SORT SHALL NOT BE DISCHARGED TO THE STORM DRAIN SYSTEM OR SURFACE WATERS.

(7) ENDS OF EACH STORM DRAIN STUB AT THE PROPERTY LINE SHALL BE CAPPED AND LOCATED WITH AN 8' LONG 2" X 4" BOARD, EMBEDDED TO THE STUB CAP AND EXTENDING AT LEAST 3 FEET ABOVE GRADE, AND MARKED PERMANENTLY "STORM". A COPPER 12 GA. LOCATE WIRE FIRMLY ATTACHED. THE STUB DEPTH SHALL BE INDICATED ON THE MARKER.

(8) ALL GRATES IN ROADWAYS SHALL BE DUCTILE IRON, BOLT-LOCKING, VANED GRATES PER THE STANDARD DETAILS. STRUCTURES IN TRAFFIC LANES OUTSIDE OF THE CURBLINE WHICH DO NOT COLLECT RUNOFF SHALL BE FITTED WITH ROUND, BOLT-LOCKING SOLID COVERS. OFF-STREET STRUCTURES WHICH DO NOT COLLECT RUNOFF SHALL BE FITTED WITH BOLT-LOCKING SOLID COVERS.

(9) VEGETATION/LANDSCAPING IN THE DETENTION POND, BIORETENTION FACILITY, VEGETATED ROOF AND/OR DRAINAGE SWALE(S) ARE AN INTEGRAL PART OF THE RUNOFF TREATMENT SYSTEM FOR THE PROJECT. SUCH DRAINAGE FACILITIES WILL NOT BE ACCEPTED UNTIL PLANTINGS ARE ESTABLISHED.

(10) ALL NEW MANHOLES SHALL HAVE A MINIMUM INSIDE DIAMETER OF 48"H AND SHALL CONFORM TO THE STANDARD DETAILS. ALL NEW CATCH BASINS SHALL CONFORM TO THE STANDARD DETAILS.

(11) SIDE STORM STATIONS ARE REFERENCED FROM NEAREST DOWNSTREAM MANHOLE/ CATCH BASIN.

(12) ALL TESTING AND CONNECTIONS TO EXISTING MAINS SHALL BE DONE IN THE PRESENCE OF A REPRESENTATIVE OF THE CITY OF BELLEVUE UTILITIES DEPARTMENT.

(13) ALL TRENCHES SHALL BE COMPACTED, AND HOT MIX ASPHALT IN PLACE IN PAVED AREAS, PRIOR TO TESTING STORM LINES FOR ACCEPTANCE.

(14) ALL PUBLIC STORM DRAINS SHALL BE AIR TESTED AND HAVE A VIDEO INSPECTION PERFORMED PRIOR TO ACCEPTANCE (SEE #23 BELOW). STORM MAIN CONSTRUCTED WITH FLEXIBLE PIPE SHALL BE DEFLECTION TESTED WITH A MANDREL PRIOR TO ACCEPTANCE.

(15) STORM STUBS SHALL BE TESTED FOR ACCEPTANCE AT THE SAME TIME THE MAIN STORM IS TESTED.

(16) ALL MANHOLES/ CATCH BASINS IN UNPAVED AREAS SHALL INCLUDE A CONCRETE SEAL AROUND ADJUSTMENT RINGS PER STANDARD DETAILS.

(17) ALL STORM MAIN EXTENSIONS WITHIN THE PUBLIC RIGHT-OF-WAY OR IN EASEMENTS MUST BE "GSTAKED"H BY A SURVEYOR LICENSED IN WASHINGTON STATE FOR "GLINE AND GRADE"H AND CUT SHEETS PROVIDED TO THE ENGINEER, PRIOR TO STARTING CONSTRUCTION.

(18) THE CONTRACTOR SHALL USE A VACUUM STREET SWEEPER TO REMOVE DUST AND DEBRIS FROM PAVEMENT AREAS AS DIRECTED BY THE ENGINEER. FLUSHING OF STREETS SHALL NOT BE PERMITTED WITHOUT PRIOR CITY APPROVAL.

(19) STORM DRAINAGE MAINLINES, STUBS AND FITTINGS SHALL BE CONSTRUCTED USING THE SAME PIPE MATERIAL AND MANUFACTURER. CONNECTIONS BETWEEN STUBS AND THE MAINLINE WILL BE MADE WITH A TEE FITTING. TEE FITTING SHALL BE FROM SAME MANUFACTURER AS PIPE. CUT-IN CONNECTIONS ARE ONLY ALLOWED WHEN CONNECTING A NEW STUB TO AN EXISTING MAINLINE.

(20) MANHOLES, CATCH BASINS AND VAULTS ARE CONSIDERED TO BE PERMIT-REQUIRED CONFINED SPACES. ENTRY INTO THESE SPACES SHALL BE IN ACCORDANCE WITH CHAPTER 296-809 WAC.

(21) PLACEMENT OF SURFACE APPURTENANCES (MH LIDS, VALVE LIDS, ETC) IN TIRE TRACKS OF TRAFFIC LANES SHALL BE AVOIDED WHENEVER POSSIBLE.

(22) CALL 1-800-424-5555, OR 8-1-1, 72 HOURS BEFORE CONSTRUCTION FOR UTILITY LOCATES.

(23) THE CONTRACTOR SHALL PERFORM A VIDEO INSPECTION AND PROVIDE A DVD OF THE STORM PIPE INTERIOR FOR THE CITY'FS REVIEW. THE VIDEO SHALL PROVIDE A MINIMUM OF 14 LINES PER MILLIMETER RESOLUTION AND COVER THE ENTIRE LENGTH OF THE APPLICABLE PIPE. THE CAMERA SHALL BE MOVED THROUGH THE PIPE AT A UNIFORM RATE (≤ 30 FT/MIN), STOPPING WHEN NECESSARY TO ENSURE PROPER DOCUMENTATION OF THE PIPE CONDITION. THE VIDEO SHALL BE TAKEN AFTER INSTALLATION AND CLEANING TO INSURE THAT NO DEFECTS EXIST. THE PROJECT WILL NOT BE ACCEPTED UNTIL ALL DEFECTS HAVE BEEN REPAIRED.

(24) CLEARLY LABEL PUBLIC AND PRIVATE SYSTEMS ON THE PLANS. PRIVATE SYSTEMS SHALL BE MARKED "GPRIVATE"H AND SHALL BE MAINTAINED BY THE PROPERTY OWNER(S).

(25) ALL CONCRETE STRUCTURES (VAULTS, CATCH BASINS, MANHOLES, OIL/WATER SEPARATORS, ETC.) SHALL BE VACUUM TESTED.

(26) MANHOLES, CATCH BASINS AND INLETS IN EASEMENTS SHALL BE CONSTRUCTED TO PROVIDE A STABLE, LEVEL GRADE FOR A MINIMUM RADIUS OF 2.5 FEET AROUND THE CENTER OF THE ACCESS OPENING TO ACCOMMODATE CONFINED SPACE ENTRY EQUIPMENT.

(27) TOPS OF MANHOLES/ CATCH BASINS WITHIN PUBLIC RIGHT-OF-WAY SHALL NOT BE ADJUSTED TO FINAL GRADE UNTIL AFTER PAVING.

(28) CONTRACTOR SHALL ADJUST ALL MANHOLE/ CATCH BASIN RIMS TO FLUSH WITH FINAL FINISHED GRADES, UNLESS OTHERWISE SHOWN.

(29) CONTRACTOR SHALL INSTALL, AT ALL CONNECTIONS TO EXISTING DOWNSTREAM MANHOLES/CATCH BASINS, SCREENS OR PLUGS TO PREVENT FOREIGN MATERIALS FROM ENTERING EXISTING STORM DRAINAGE SYSTEM. SCREENS OR PLUGS SHALL REMAIN IN PLACE THROUGHOUT THE DURATION OF THE CONSTRUCTION AND SHALL BE REMOVED ALONG WITH COLLECTED DEBRIS AT THE TIME OF FINAL INSPECTION AND IN THE PRESENCE OF A REPRESENTATIVE OF THE CITY OF BELLEVUE UTILITIES DEPARTMENT.

(30) SURFACE RESTORATION OF EXISTING ASPHALT PAVEMENT SHALL BE AS REQUIRED BY THE RIGHT-OFWAY USE PERMIT.

(31) THE CONTRACTOR SHALL MAINTAIN A MINIMUM OF FIVE FEET (5'F) HORIZONTAL SEPARATION BETWEEN ALL WATER AND STORM DRAINAGE LINES. ANY CONFLICT SHALL BE REPORTED TO THE UTILITY AND THE DEVELOPER'FS ENGINEER PRIOR TO CONSTRUCTION.

(32) IT SHALL BE THE CONTRACTOR'FS RESPONSIBILITY TO ENSURE THAT NO CONFLICTS EXIST BETWEEN STORM DRAINAGE LINES AND PROPOSED OR EXISTING UTILITIES PRIOR TO CONSTRUCTION.

(33) BEFORE COMMENCEMENT OF TRENCHING, THE CONTRACTOR SHALL PROVIDE FILTER FABRIC FOR ALL DOWNHILL STORM DRAIN INLETS AND CATCH BASINS, WHICH WILL RECEIVE RUNOFF FROM THE PROJECT SITE. THE CONTRACTOR SHALL PERIODICALLY INSPECT THE CONDITION OF ALL FILTER FABRIC AND REPLACE AS NECESSARY.

(34) MINIMUM COVER OVER STORM DRAINAGE PIPE SHALL BE 2 FEET, UNLESS OTHERWISE SHOWN.

(35) AVOID CROSSING WATER OR SEWER MAINS AT HIGHLY ACUTE ANGLES. THE SMALLEST ANGLE MEASURE BETWEEN UTILITIES SHOULD BE 45 DEGREES.

(36) AT POINTS WHERE EXISTING THRUST BLOCKING IS FOUND, MINIMUM CLEARANCE BETWEEN CONCRETE BLOCKING AND OTHER BURIED UTILITIES OR STRUCTURES SHALL BE 5 FEET.

(37) WHEN WORK IS TO OCCUR IN EASEMENTS, THE CONTRACTOR SHALL NOTIFY THE EASEMENT GRANTOR AND BELLEVUE UTILITIES IN WRITING A MINIMUM OF 48 HOURS IN ADVANCE OF BEGINNING WORK (NOT INCLUDING WEEKENDS OR HOLIDAYS). FAILURE TO NOTIFY GRANTOR AND BELLEVUE UTILITIES WILL RESULT IN A STOP WORK ORDER BEING POSTED UNTIL THE MATTER IS RESOLVED TO THE SATISFACTION OF BELLEVUE UTILITIES. A WRITTEN RELEASE FROM THE EASEMENT GRANTOR SHALL BE FURNISHED TO THE UTILITIES INSPECTOR PRIOR TO PERMIT SIGN-OFF.

(38) THE CONTRACTOR SHALL RESTORE THE RIGHT-OF-WAY AND EXISTING PUBLIC STORM DRAINAGE EASEMENT(S) AFTER CONSTRUCTION TO A CONDITION EQUAL OR BETTER THAN CONDITION PRIOR TO ENTRY. THE CONTRACTOR SHALL FURNISH A SIGNED RELEASE FROM ALL AFFECTED PROPERTY OWNERS AFTER RESTORATION HAS BEEN COMPLETED.

(39) WHERE A NEW UTILITY LINE CROSSES BELOW AN EXISTING AC MAIN, THE AC PIPE SHALL BE REPLACED WITH DI PIPE TO 3 FEET PAST EACH SIDE OF THE TRENCH AS SHOWN ON STANDARD DETAIL W-8. ALTERNATIVELY, WHERE DIRECTED BY THE UTILITY, THE TRENCH SHALL BE BACKFILLED WITH CONTROLLED DENSITY FILL (CDF, AKA FLOWABLE FILL) FROM BOTTOM OF TRENCH TO BOTTOM OF AC MAIN.

CLEARING AND GRADING STANDARD NOTES

1. ALL CLEARING & GRADING CONSTRUCTION MUST BE IN ACCORDANCE WITH CITY OF BELLEVUE(COB) CLEARING & GRADING CODE, CLEARING & GRADING EROSION CONTROL STANDARD DETAILS (EC-1 THROUGH EC-23), DEVELOPMENT STANDARDS, LAND USE CODE, UNIFORM BUILDING CODE, PERMIT CONDITIONS, AND ALL OTHER APPLICABLE CODES, ORDINANCES, AND STANDARDS. THE DESIGN ELEMENTS WITHIN THESE PLANS HAVE BEEN REVIEWED ACCORDING TO THESE REQUIREMENTS. ANY VARIANCE FROM ADOPTED EROSION CONTROL STANDARDS IS NOT ALLOWED UNLESS SPECIFICALLY APPROVED BY THE CITY OF BELLEVUE DEPARTMENT OF PLANNING & COMMUNITY DEVELOPMENT(PCD) PRIOR TO CONSTRUCTION.

   IT SHALL BE THE SOLE RESPONSIBILITY OF THE APPLICANT AND THE PROFESSIONAL CIVIL ENGINEER TO CORRECT ANY ERROR, OMISSION, OR VARIATION FROM THE ABOVE REQUIREMENTS FOUND IN THESE PLANS. ALL CORRECTIONS SHALL BE AT NO ADDITIONAL COST OR LIABILITY TO THE COB. ALL DETAILS FOR STRUCTURAL WALLS, ROCKERIES OVER FOUR FEET IN HEIGHT, GEOGRID REINFORCED ROCKERIES AND GEOGRID REINFORCED MODULAR BLOCK WALLS, MUST BE STAMPED BY A PROFESSIONAL ENGINEER.

2. A COPY OF THE APPROVED PLANS MUST BE ON-SITE DURING CONSTRUCTION. THE APPLICANT IS RESPONSIBLE FOR OBTAINING ANY OTHER REQUIRED OR RELATED PERMITS PRIOR TO BEGINNING CONSTRUCTION.

3. ALL LOCATIONS OF EXISTING UTILITIES HAVE BEEN ESTABLISHED BY FIELD SURVEY OR OBTAINED FROM AVAILABLE RECORDS AND SHOULD, THEREFORE, BE CONSIDERED ONLY APPROXIMATE AND NOT NECESSARILY COMPLETE. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO INDEPENDENTLY VERIFY THE ACCURACY OF ALL UTILITY LOCATIONS AND TO DISCOVER AND AVOID ANY OTHER UTILITIES NOT SHOWN WHICH MAY BE AFFECTED BY THE IMPLEMENTATION OF THIS PLAN.

4. THE AREA TO BE CLEARED AND GRADED MUST FLAGGED BY THE CONTRACTOR AND APPROVED BY THE CLEARING AND GRADING INSPECTOR PRIOR TO BEGINNING ANY WORK ON THE SITE.

5. A REINFORCED SILT FENCE MUST BE INSTALLED IN ACCORDANCE WITH COB EC-5 AND SHALL BE LOCATED AS SHOWN ON THE APPROVED PLANS OR PER THE CLEARING AND GRADING INSPECTOR, ALONG SLOPE CONTOURS AND DOWN SLOPE FROM THE BUILDING SITE.

6. A HARD-SURFACE CONSTRUCTION ACCESS PAD IS REQUIRED PER CLEARING & GRADING STANDARD DETAIL EC-1 OR EC-2. THIS PAD MUST REMAIN IN PLACE UNTIL PAVING IS INSTALLED.

7. CLEARING SHALL BE LIMITED TO THE AREAS WITHIN THE APPROVED DISTURBANCE LIMITS. EXPOSED SOILS MUST BE COVERED AT THE END OF EACH WORKING DAY WHEN WORKING FROM OCTOBER 1ST THROUGH APRIL 30TH. FROM MAY 1ST THROUGH SEPTEMBER 30TH, EXPOSED SOILS MUST BE COVERED AT THE END OF EACH CONSTRUCTION WEEK AND ALSO AT THE THREAT OF RAIN.

8. ANY EXCAVATED MATERIAL REMOVED FROM THE CONSTRUCTION SITE AND DEPOSITED ON PROPERTY WITHIN THE CITY LIMITS MUST BE DONE IN COMPLIANCE WITH A VALID CLEARING & GRADING PERMIT. LOCATIONS FOR THE MOBILIZATION AREA AND STOCKPILED MATERIAL MUST BE APPROVED BY THE CLEARING AND GRADING INSPECTOR AT LEAST 24 HOURS IN ADVANCE OF ANY STOCKPILING.

9. TO REDUCE THE POTENTIAL FOR EROSION OF EXPOSED SOILS, OR WHEN RAINY SEASON CONSTRUCTION IS PERMITTED, THE FOLLOWING BEST MANAGEMENT PRACTICES (BMPS) ARE REQUIRED.
   - PRESERVE NATURAL VEGETATION FOR AS LONG AS POSSIBLE OR AS REQUIRED BY THE CLEARING AND GRADING INSPECTOR.
   - PROTECT EXPOSED SOIL USING PLASTIC (EC-14), EROSION CONTROL BLANKETS, STRAW OR MULCH (COB GUIDE TO MULCH MATERIALS, RATES, AND USE CHART), OR AS DIRECTED BY THE CLEARING AND GRADING INSPECTOR.
   - INSTALL CATCH BASIN INSERTS AS REQUIRED BY THE CLEARING AND GRADING INSPECTOR OR PERMIT CONDITIONS OF APPROVAL.
   - INSTALL A TEMPORARY SEDIMENT POND, A SERIES OF SEDIMENTATION TANKS, TEMPORARY FILTER VAULTS, OR OTHER SEDIMENT CONTROL FACILITIES. INSTALLATION OF EXPOSED AGGREGATE SURFACES REQUIRES A SEPARATE EFFLUENT COLLECTION POND ONSITE.

10. FINAL SITE GRADING MUST DIRECT DRAINAGE AWAY FROM ALL BUILDING STRUCTURES AT A MINIMUM 2% SLOPE, PER THE UNIFORM BUILDING CODE.

11. THE CONTRACTOR MUST MAINTAIN A SWEEPER ON SITE DURING EARTHWORK AND IMMEDIATELY REMOVE SOIL THAT HAS BEEN TRACKED ONTO PAVED AREAS AS RESULT OF CONSTRUCTION.

12. TURBIDITY MONITORING MAY BE REQUIRED AS A CONDITION OF CLEARING AND GRADING PERMIT APPROVAL. IF REQUIRED, TURBIDITY MONITORING MUST BE PERFORMED IN ACCORDANCE WITH THE APPROVED TURBIDITY MONITORING PLAN AND AS DIRECTED BY THE CLEARING AND GRADING INSPECTOR. MONITORING MUST CONTINUE DURING SITE (EARTHWORK) CONSTRUCTION UNTIL THE FINAL SIGN-OFF BY THE CLEARING AND GRADING INSPECTOR.

13. ANY PROJECT THAT IS SUBJECT TO RAINY SEASON RESTRICTIONS WILL NOT BE ALLOWED TO PERFORM CLEARING AND GRADING ACTIVITIES WITHOUT WRITTEN APPROVAL FROM THE PCD DIRECTOR. THE RAINY SEASON EXTENDS FROM NOVEMBER 1ST THROUGH APRIL 30TH, AS DEFINED IN SECTION 23.76.093A OF THE CLEARING AND GRADING CODE.

CONSTRUCTION NOISE NOTES

CONSTRUCTION NOISE OUTSIDE THE ALLOWABLE HOURS IS PROHIBITED PER BCC 9.18.040. TO BE CONSIDERED A VIOLATION, THE CONSTRUCTION-RELATED NOISE MUST BE AUDIBLE ACROSS A PROPERTY LINE OR AT LEAST 75 FEET FROM THE SOURCE. ANY VIOLATION IS A CIVIL INFRACTION AND THE CITY MAY ASSESS A MONETARY PENALTY TO THE INDIVIDUAL CREATING THE NOISE. THE PENALTIES ARE:

- A WARNING WILL BE ISSUED IF NO CONSTRUCTION NOISE VIOLATION HAS BEEN COMMITTED BY THE SAME PERSON WITHIN THE PREVIOUS TWO YEARS AT ANY LOCATION WITHIN THE CITY.
- A CITATION WILL BE ISSUED AND A $125 FINE IMPOSED IF ONE PREVIOUS VIOLATION HAS BEEN COMMITTED BY THE SAME PERSON WITHIN THE PREVIOUS TWO YEARS AT ANY LOCATION WITHIN THE CITY.
- A CITATION WILL BE ISSUED AND A $250 FINE IMPOSED IF TWO OR MORE PREVIOUS VIOLATION HAVE BEEN COMMITTED BY THE SAME PERSON WITHIN THE PREVIOUS TWO YEARS AT ANY LOCATION WITHIN THE CITY.

FOR ALL COMMERCIAL, MULTI-FAMILY, AND NEW SINGLE-FAMILY HOMES: CONSTRUCTION-RELATED NOISE IS ALLOWED:

- 7 AM TO 6 PM ON WEEKDAYS
- 9 AM TO 6 PM ON SATURDAYS

CONSTRUCTION -RELATED NOISE IS NOT ALLOWED:

- OUTSIDE OF ALLOWABLE HOURS
- LEGAL HOLIDAYS
- SUNDAYS

MOBILIZATION/STOCKPILE AREA NOTES

ANY EXCAVATED MATERIAL REMOVED FROM THE CONSTRUCTION SITE AND DEPOSITED ON PROPERTY WITHIN THE CITY LIMITS MUST BE DONE IN COMPLIANCE WITH A VALID CLEARING & GRADING PERMIT.LOCATIONS FOR THE MOBILIZATION AREA AND STOCKPILED MATERIAL MUST BE APPROVED BY THE PCD INSPECTOR AT LEAST 24 HOURS IN ADVANCE OF ANY DUMPING.

STREET SWEEPING NOTE

CONTRACTOR SHALL IMMEDIATELY SWEEP THE PAVED CITY RIGHT-OF-WAY WHEN DIRT OR OTHER CONSTRUCTION RELATED DEBRIS IS DEPOSITED.

DUST SUPPRESSION

DUST FROM CLEARING, GRADING, AND OTHER CONSTRUCTION ACTIVITIES SHALL BE MINIMIZED AT ALL TIMES. ANY DUST SUPPRESSANTS USED SHALL BE APPROVED BY THE DIRECTOR. PETROCHEMICAL DUST SUPPRESSANTS ARE PROHIBITED. WATERING THE SITE TO SUPPRESS DUST IS ALSO PROHIBITED UNLESS IT CAN BE DONE IN A WAY THAT KEEPS SEDIMENT OUT OF THE PUBLIC DRAINAGE SYSTEM.

DESIGN CHANGES AFTER PERMIT ISSUANCE

IF UTILITIES DESIGN CHANGES RESULT IN CHANGES TO THE CLEARING LIMITS SHOWN ON THESE PLANS,THE APPLICANT MUST SUBMIT A REVISION TO THE CLEARING AND GRADING PERMIT THAT INDICATES THE LOCATION OF THE NEW CLEARING LIMITS.

GEOTECHNICAL NOTES

THE PROJECT GEOTECHNICAL ENGINEER OF RECORD OR HIS REPRESENTATIVE MUST BE ONSITE DURING CRITICAL EARTHWORK OPERATIONS. THE GEOTECHNICAL ENGINEER SHALL OBSERVE ALL EXCAVATIONS AND FILL AREAS. IN ADDITION, THE ENGINEER SHALL INSPECT THE SOIL CUTS PRIOR TO CONSTRUCTION OF THE ROCKERIES AND INSPECT THE COMPACTION IN FILL AREAS. THE ENGINEER MUST SUBMIT FIELD REPORTS IN WRITING TO THE PCD INSPECTOR FOR SOILS VERIFICATION AND FOUNDATION CONSTRUCTION. ALL EARTHWORK SHOULD BE IN CONFORMANCE WITH THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORT. THE GEOTECHNICAL ENGINEER MUST BE PRESENT AT THE PRE-CONSTRUCTION MEETING. IN ADDITION, THE FOLLOWING CONSTRUCTION STAGES MUST BE INSPECTED, MONITORED, AND TESTED AS NECESSARY BY THE GEOTECHNICAL ENGINEER OF RECORD:

1. SITE CLEARING AND STRIPPING OF ORGANIC TOPSOIL FOR ALL AREAS TO RECEIVE STRUCTURAL FILL, PAVEMENTS, OR FOUNDATIONS.
2. CUT SLOPES OVER FOUR FEET HIGH.
3. BENCHING FOR FILL TO BE PLACED ON SLOPES.
4. INSPECTION OF PROPOSED IMPORT FILL MATERIAL, PRIOR TO PLACEMENT.
5. PLACEMENT OF STRUCTURAL FILL, INCLUDING OBSERVATION OF PROPER MOISTURE CONTENT, LIFT THICKNESS, AND MINIMUM COMPACTION.
6. SUBGRADES FOR RETAINING WALLS, FOUNDATIONS, AND FOR THE BASE OF ROCKERIES.
7. INSTALLATION OF SUBSURFACE DRAINAGE FACILITIES.
8. UTILITY TRENCH BEDDING AND BACKFILL, INCLUDING OBSERVATION OF PROPER MOISTURE CONTENT, LIFT THICKNESS, AND MINIMUM COMPACTION.
9. UTILITIES ON STEEP SLOPES; SLOPE ANCHORS AND/OR BACKFILL SLOPE STABILIZATION.
10. ANY UNUSUAL SEEPAGE, SLOPE, OR SUBGRADE CONDITION AS DELINEATED IN THE GEOTECHNICAL REPORT OR DISCOVERED IN THE FIELD. AT THE END OF THE CONSTRUCTION, THE GEOTECHNICAL ENGINEER SHALL SUBMIT A FINAL SUMMARY LETTER VERIFYING THAT CRITICAL STAGES OF THE CONSTRUCTION HAVE BEEN INSPECTED AND ARE IN CONFORMANCE WITH GEOTECHNICAL REPORT.

APPROVED BY

GOLDSMITH
LAND DEVELOPMENT SERVICES
1215 114th Ave SE, Bellevue, WA 98004 | PO Box 3565, Bellevue, WA 98009
T 425 462 1080 F 425 462 7719 www.goldsmithengineering.com

REV NO.	DATE	DESCRIPTION	MADE BY	CHK'D BY

PLOTTED: 2014/10/27 10:52 PROMELFANGER
DRAWN: ETE
DESIGNED: ETE
APPROVED: ETE
FIELD BOOK:
PAGE #:

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KEITH J. GOLDSMITH — STATE OF WASHINGTON — 24597 — REGISTERED PROFESSIONAL ENGINEER

MARK A. BARBER — STATE OF WASHINGTON — 38004 — REGISTERED PROFESSIONAL ENGINEER

KBS CAPITAL ADVISORS

BUILDING 'A' SITE IMPROVEMENTS FOR PARKING
2333 – 158th CT. NE, BELLEVUE, WA 98007

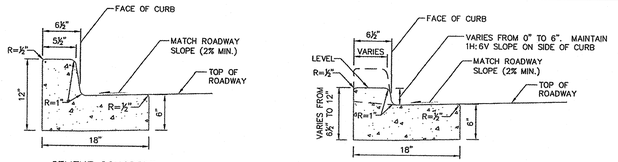
GENERAL NOTES

BELLEVUE TECHNOLOGY CENTER

APPLICATION #XX-XXXXXX XX
GRID L-5, SEC. 26, TWP. 25N, RGE. 5E, W.M.

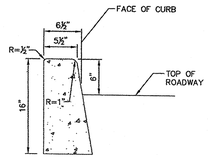
JOB NO. 12181

SHEET 5

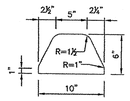


CEMENT CONCRETE TRAFFIC CURB AND GUTTER
NOT TO SCALE

DEPRESSED CURB SECTION
NOT TO SCALE



CEMENT CONCRETE TRAFFIC CURB
NOT TO SCALE



EXTRUDED CURB
NOT TO SCALE

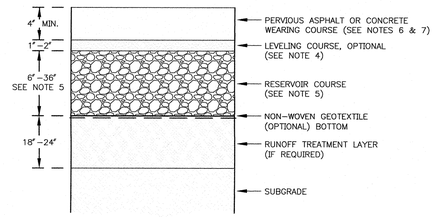
NOTES:

1. ALL CEMENT CONCRETE CURBS, EXCEPT EXTRUDED CURB, SHALL BE CONSTRUCTED WITH AIR ENTRAINED CONCRETE CLASS 3000 CONFORMING TO WSDOT STD. SPEC. 6-02.
2. CEMENT CONCRETE CURB OR CURB AND GUTTER ALONG THE FULL WIDTH OF A DRIVEWAY ENTRANCE SHALL BE CONSTRUCTED WITH AIR ENTRAINED CONCRETE CLASS 4000 CONFORMING TO WSDOT STD. SPEC. 6-02.
3. REMOVAL/REPLACEMENT OF CEMENT CONCRETE CURB SHALL BE FROM EXPANSION JOINT TO EXPANSION JOINT UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

City of Bellevue

CEMENT CONCRETE CURBS

DRAWING NUMBER	TE-10
SCALE	NONE
REVISION DATE	3/07
DEPARTMENT	TRANS



NOTES:

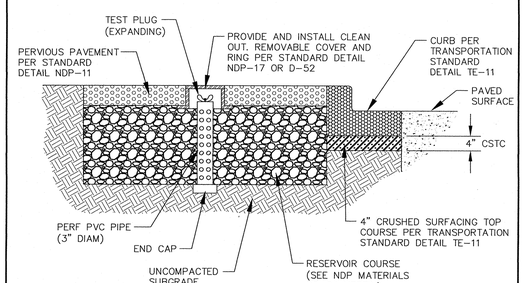
1. PERVIOUS PAVEMENT WITHIN CITY RIGHT-OF-WAY REQUIRES APPROVAL BY THE CITY WHEN PLACED BENEATH A TRAVELED WAY. THESE GUIDELINES PROVIDE A MINIMUM DEPTH FOR THE HYDROLOGIC PERFORMANCE OF THE PERVIOUS PAVEMENT. THE STRUCTURAL CAPACITY OF PAVEMENT SECTIONS WHEN SUBJECT TO VEHICULAR LOADS DEPENDS ON SEVERAL FACTORS AND MUST BE DESIGNED BY A LICENSED PROFESSIONAL ENGINEER.
2. LONGITUDINAL SLOPE, 0 TO 5% MAX. FOR PERVIOUS ASPHALT, 6% MAX. FOR PERVIOUS CONCRETE.
3. USE CHECK DAM OR OTHER METHODS TO MAXIMIZE PONDING IN THE SUBSURFACE FOR LONGITUDINAL SLOPES EXCEEDING 2%. SEE STANDARD DETAIL NDP-15.
4. LEVELING COURSE MATERIALS: 1.5" TO U.S. NO. 8 UNIFORMLY GRADED, CRUSHED (ANGULAR), THOROUGHLY WASHED STONE.
5. RESERVOIR COURSE MINIMUM DEPTH OF 6" WITHOUT UNDERDRAIN, 22" MINIMUM WITH UNDERDRAIN.
6. PERVIOUS CONCRETE MUST BE INSTALLED BY A CERTIFIED PERVIOUS CONCRETE INSTALLER. PERVIOUS ASPHALT MUST BE INSTALLED BY AN EXPERIENCED PERVIOUS ASPHALT INSTALLER.
7. SEE NDP CHAPTER D6-04 HEREIN FOR ALL MATERIALS.

City of Bellevue — STORM AND SURFACE WATER UTILITY

TITLE: PERVIOUS ASPHALT OR CONCRETE PAVEMENT SECTION

NO. NDP-11

JANUARY 2013 — NO SCALE



NOTES:

READ WATER TABLE DEPTH:
1. MEASURE DISTANCE FROM TOP EDGE OF RISER TO WATER SURFACE INSIDE OF PIPE.
2. MEASURE DISTANCE FROM TOP EDGE OF RISER TO FINISH GRADE OF PERVIOUS PAVEMENT.
3. ADD 1 AND 2 FOR DEPTH TO WATER TABLE.
4. NOTE IF B HAS CHANGED FROM PREVIOUS OBSERVATIONS (IF SHIFTING).

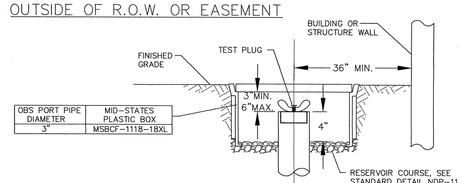
City of Bellevue — STORM AND SURFACE WATER UTILITY

TITLE: OBSERVATION PORT FOR PERVIOUS PAVEMENT

NO. NDP-16

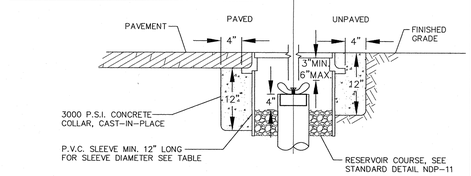
JANUARY 2013 — NO SCALE

A.) OUTSIDE OF R.O.W. OR EASEMENT



OBS PORT PIPE DIAMETER	MID-STATES PLASTIC BOX
3"	MSBCF-1118-18XL

B.) RIGHT-OF-WAY OR EASEMENT



OBS PORT PIPE DIAMETER	RING AND COVER DIAMETER	P.V.C SLEEVE DIAMETER
3"	12"	12"

NOTES:

1. BOLT-LOCKING CAST IRON RING AND COVER SHALL BE USED IN RIGHT-OF-WAY AND EASEMENTS AND MUST BE RATED HS-20 IF USED IN TRAFFIC AREAS. SEE TABLE FOR SIZES.
2. MID-STATES PLASTIC BOX OR EQUAL MAY BE USED IF OBSERVATION PORT IS OUTSIDE OF RIGHT-OF-WAY OR EASEMENT. SEE TABLE FOR SIZES. THE COVER FOR THE PLASTIC BOX SHALL BE DUCTILE IRON AND READ "STORM" OR BE BLANK (NO LABEL).
3. CAST IRON COVER SHALL READ "STORM, DO NOT BURY", OR EQUIVALENT.
4. LOCKING BOLTS SHALL BE 5/8"-11 N.C. 304 STAINLESS STEEL SOCKET (ALLEN) HEAD, 2" LONG.
5. 14" BOLT-LOCKING CAST IRON COVER SHALL BE EQUAL TO INLAND FOUNDRY NUMBER 209, OR 210. FOR TRAFFIC AREAS, SEE STANDARD DETAIL D-52.
6. SPECIAL "DECORATIVE" CASTING MAY BE USED IF PREAPPROVED BY CITY OF BELLEVUE.

City of Bellevue — STORM AND SURFACE WATER UTILITY

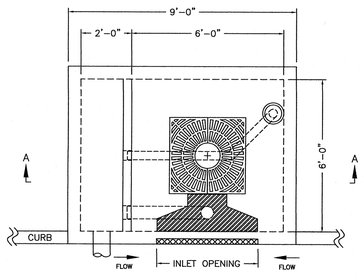
TITLE: OBSERVATION PORT COVERS FOR PERVIOUS PAVEMENT

NO. NDP-17

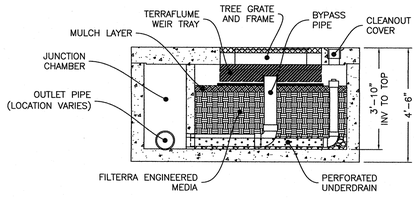
JANUARY 2013 — NO SCALE

WATER QUALITY TREATMENT BMP

1. TREATMENT LEVEL = ENHANCED
2. WATER QUALITY DESIGN FLOW = 0.045 CFS
3. DESIGN TREATMENT AREA = 12,200 SF
4. PROPOSED TREATMENT AREA = 9969 SF (INCLUDES PERVIOUS PAVEMENT)



PLAN VIEW



SECTION A-A

UNIT TO BE SET PLUMB AND LEVEL

TERRAFLUME IS PATENTED BY AMERICAST (US PAT 7,833,412)

AMERICAST®

Copyright © 2007 by Americast

DATE: 06-06-13 — DWG: FTIB-C 6x6-6

6'x6' FILTERRA INTERNAL BYPASS CURB WITH TERRAFLUME JUNCTION CHAMBER MODEL

filterra® US PAT 6,277,274 AND 6,569,321

Filterra® Standard Plan Notes

filterra® Bioretention Systems

Construction & Installation

A. Each unit shall be constructed at the locations and elevations according to the sizes shown on the approved drawings. Any modifications to the elevation or location shall be at the direction of and approved by the Engineer.

B. If the Filterra® is stored before installation, the top slab must be placed on the box using the 2x4 wood provided, to prevent any contamination from the site. All internal fittings supplied (if any), must be left in place as per the delivery.

C. The unit shall be placed on a compacted sub-grade with a minimum 6-inch gravel base matching the final grade of the curb line in the area of the unit. The unit is to be placed such that the unit and top slab match the grade of the curb in the area of the unit. Compact undisturbed sub-grade materials to 95% of maximum density at +1- 2% of optimum moisture. Unsuitable material below sub-grade shall be replaced to the site engineer's approval.

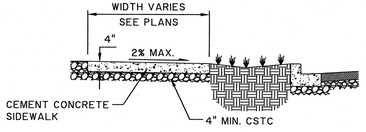
D. Outlet connections shall be aligned and sealed to meet the approved drawings with modifications necessary to meet site conditions and local regulations.

E. Once the unit is set, the internal wooden forms and protective mesh cover must be left intact. Remove only the temporary wooden shipping blocks between the box and top slab. The top lid should be sealed onto the box section before backfilling, using a non-shrink grout, butyl rubber or similar waterproof seal. The boards on top of the lid and boards sealed in the unit's throat must **NOT** be removed. The Supplier (Americast or its authorized dealer) will remove these sections at the time of activation. Backfilling should be performed in a careful manner, bringing the appropriate fill material up in 6" lifts on all sides. Precast sections shall be set in a manner that will result in a watertight joint. In all instances, installation of Filterra® unit shall conform to ASTM specification C891 "Standard Practice for Installation of Underground Precast Utility Structures", unless directed otherwise in contract documents.

F. Curb and gutter construction (where present) shall ensure that the flow-line of the Filterra® units is at a greater elevation than the flow-line of the bypass structure or relief (drop inlet, curb cut or similar). Failure to comply with this guideline may cause failure and/or damage to the Filterra® environmental device.

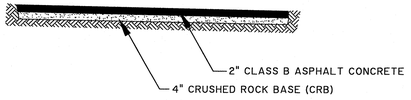
G. Each Filterra® unit must receive adequate irrigation to ensure survival of the living system during periods of drier weather. This may be achieved through a piped system, gutter flow or through the tree grate.

www.filterra.com



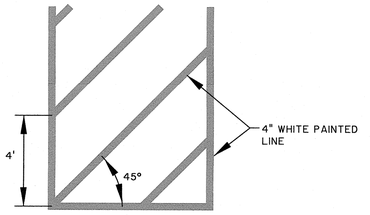
SIDEWALK SECTION
N.T.S.

NOTES:
1. CONCRETE SHALL BE AIR ENTRAINED CLASS 3000 PER SECTION 6-02 OF WSDOT STANDARD SPECIFICATIONS.
2. FINISH: LIGHT FINISH WITH A STIFF BROOM PERPENDICULAR TO CURB. FOR GRADES OVER 4%, FINISH WITH A STIPPLE BRUSH.

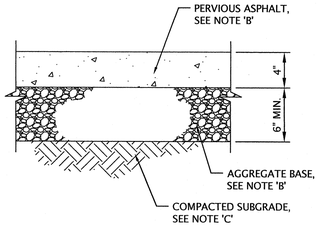


PAVEMENT SECTION
N.T.S.

NOTE: PAVING MATERIALS SHALL CONFORM TO THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS FOR CLASS B ASPHALT CONCRETE AND CRB.



WALKWAY STRIPNG DETAIL
N.T.S.



PERVIOUS ASPHALT PAVING NOTES:

A. FOR PERVIOUS PAVING, VOID RATIO OF 16% to 25% PER ASTM D3203

B. POROUS ASPHALT AND BASE COURSE SHOULD MEET THE SPECIFICATIONS AND CONSTRUCTION METHODS USE THE LOW IMPACT DEVELOPMENT: TECHNICAL GUIDANCE MANUAL FOR PUGET SOUND (PUGET SOUND PARTNERSHIP, DECEMBER 2012.

C. SUBGRADE SHALL BE FIRM AND STABLE PRIOR TO CONSTRUCTION. FIRM AND STABLE CONDITIONS SHALL BE VERIFIED BY PROOF ROLLING WITH A HEAVY RUBBER TIRED VEHICLE, SUCH AS A LOADED 10 YARD DUMP TRUCK.

D. PERVIOUS ASPHALT TO BE INSTALLED BY A CONTRACTOR WITH EXPERIENCE IN THE INSTALLATION OF PERVIOUS ASPHALT.I: CONTRACTOR SHALL PROVIDE EVIDENCE.

E. INSTALL OBSERVATION PORT PER COB DETAIL NDP-16 AND NDP-17 (INCLUDED ON THIS SHEET).

F. SEE COB DETAIL NDP-11 FOR ADDITIONAL PERVIOUS PAVEMENT DESIGN AND CONSTRUCTION DETAILS (INCLUDED ON THIS SHEET).

PERVIOUS ASPHALT PAVING SECTION
NTS

APPROVED BY

GOLDSMITH
LAND DEVELOPMENT SERVICES
1215 114th Ave SE, Bellevue, WA 98004 | PO Box 3565, Bellevue, WA 98009
T 425 462 1080 F 425 462 7719 www.goldsmithengineering.com

REV NO.	DATE	DESCRIPTION	MADE BY	CHK'D BY

PLOTTED: 2014/10/28 07:23 PROMELFANGER
DRAWN: ETE
DESIGNED: ETE
APPROVED: ETE
FIELD BOOK:
PAGE #:

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KEITH J. GOLDSMITH — STATE OF WASHINGTON — 24097 — REGISTERED PROFESSIONAL ENGINEER

MARK A. BARBER — STATE OF WASHINGTON — 38000 — REGISTERED PROFESSIONAL ENGINEER

KBS CAPITAL ADVISORS

BUILDING 'A' SITE IMPROVEMENTS FOR PARKING
2333 - 158th CT. NE, BELLEVUE, WA 98007

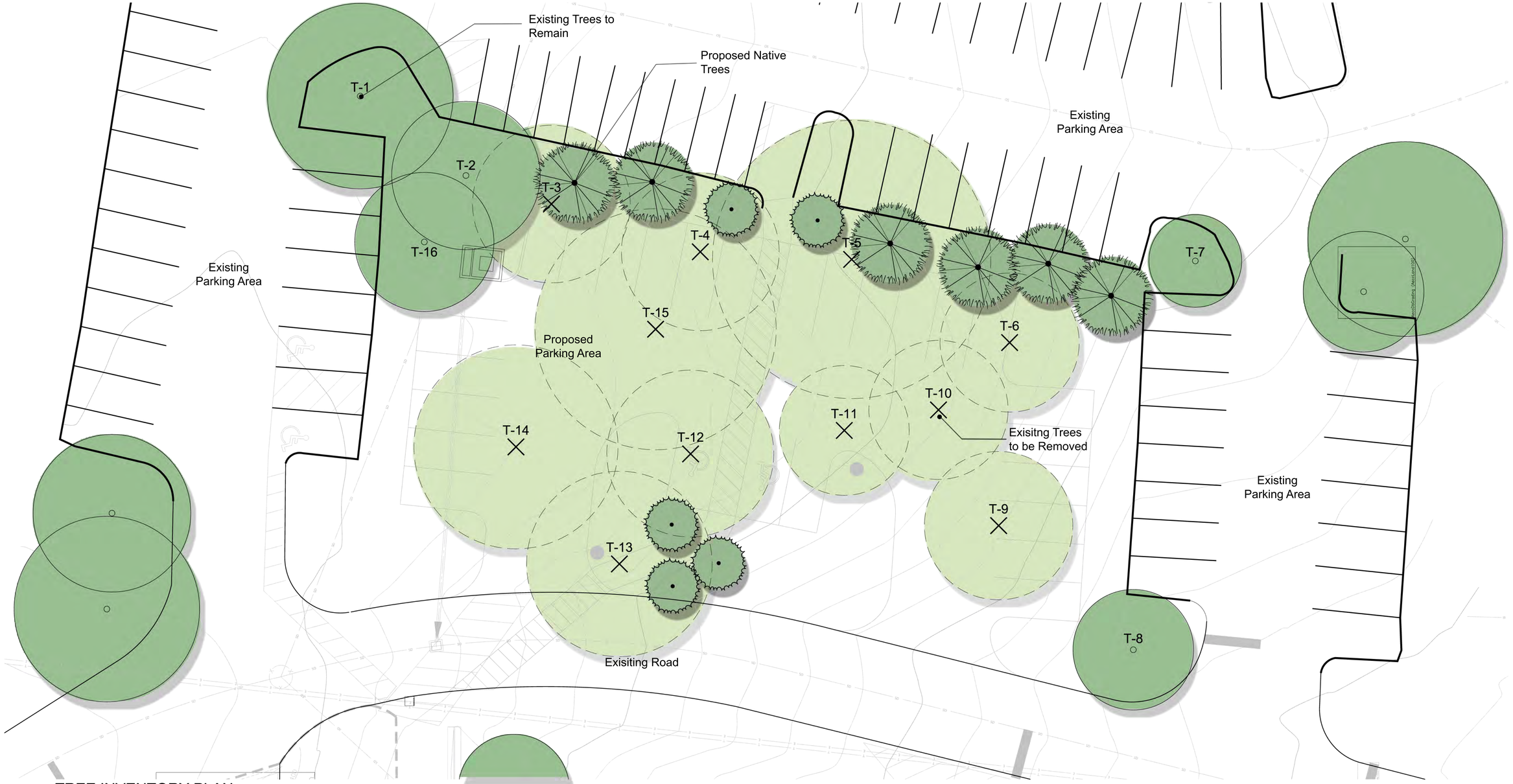
GENERAL DETAILS

BELLEVUE TECHNOLOGY CENTER

APPLICATION #XX-XXXXXX XX
GRID L-5, SEC. 26, TWP. 25N, RGE. 5E, W.M.

JOB NO. 12181

SHEET 6



1 TREE INVENTORY PLAN

Scale: 1"=10'

TREE INVENTORY TABLE

TREE	SPECIES	DIAMETER	TREES WITHIN SITE INTERIOR	TREES TO BE REMOVED
T-1	ACER PLAT.	18.7"	18.7"	
T-2	ACER PLAT.	16.4"	16.4"	
T-3	ACER PLAT.	16.0"	16.0"	16.0"
T-4	ACER PLAT.	16.5"	16.5"	16.5"
T-5	ACER PLAT.	21.3"	21.3"	21.3"
T-6	ACER PLAT.	16.1"	16.1"	16.1"
T-7	ACER PLAT.	13.7"	13.7"	
T-8	ACER PLAT.	15.7"	15.7"	
T-9	ACER PLAT.	16.5"	16.5"	16.5"
T-10	ACER PLAT.	16.3"	16.3"	16.3"
T-11	ACER PLAT.	14.5"	14.5"	14.5"

TREE	SPECIES	DIAMETER	TREES WITHIN SITE INTERIOR	TREES TO BE REMOVED
T-12	ACER PLAT.	14.8"	14.8"	14.8"
T-13	ACER PLAT.	21.7"	21.7"	21.7"
T-14	ACER PLAT.	21.2"	21.2"	21.2"
T-15	ACER PLAT.	13.4"	13.4"	13.4"
T-16	ACER PLAT.	17.0"	17.0"	
TOTAL		269.8"	269.8"	188.3"
SITE INTERIOR TREE RETENTION REQUIREMENT, 15% OF DIAMETER INCHES 269.8 x 15% = 40.47"				
TOTAL SIGNIFICANT TREES RETAINED: 81.5" OR 30%				
TOTAL SIGNIFICANT TREES ON SITE: 269.8"				

1 PLANTING PLAN

Scale: 1"=10'

PLANT SCHEDULE

TREES	CODE	BOTANICAL NAME / COMMON NAME	CONT	HEIGHT	QTY
	PS	Pseudotsuga menziesii / Douglas Fir	B & B	8-10` HT. MIN.	5
	TH	Tsuga heterophylla / Western Hemlock	B & B	8-10` HT. MIN.	6

SHRUB AREAS	CODE	BOTANICAL NAME / COMMON NAME	CONT	SPREAD	SPACING	QTY
	GA	Gaultheria Shallon / Salal	1 gal		36" o.c.	809
	PM2	Polystichum munitum / Western Sword Fern	1 gal		24" o.c.	156

GCH geyer coburn hutchins

planning and landscape architecture

BELLEVUE TECHNOLOGY CENTER
BELLEVUE, WASHINGTON

MARCH 2015

NORTH

SCALE 1"=10'

1 SECTION A

Scale: 3/16"=1'-0"

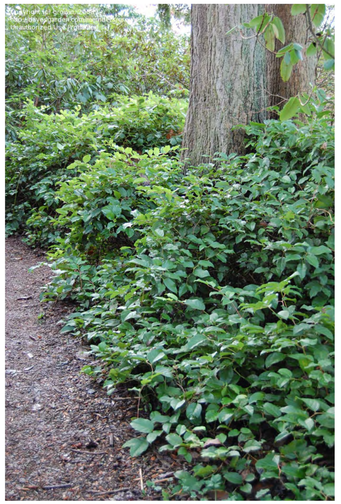
2 SECTION B

Scale: 3/16"=1'-0"

Pseudotsuga menziesii

Tsuga heterophylla

Polystichum munitum



Gaultheria Shallon

Gilles Consulting
Brian K. Gilles
425-822-4994

EVALUATION OF SELECTED TREES AT

THE BELLEVUE TECHNICAL CENTER
15805 NE 24th Street
Bellevue, WA 98008

June 17, 2014

PREPARED FOR:

John McCullough, Principle
McCullough Hill, PS
701 Fifth Avenue
Suite 7220
Seattle, WA 98104

PREPARED BY:

GILLES CONSULTING
Brian K. Gilles, Consulting Arborist
ISA Certified Arborist # PN-0260A
ASCA Registered Consulting Arborist # RCA-418
PNW-ISA Certified Tree Risk Assessor #148

fax: 425-822-6314
email: bkgilles@comcast.net
P.O. Box 2366 Kirkland, WA 98083

CONTENTS

ASSIGNMENT

John McCullough, Principle with McCullough Hill PS, contracted with Gilles Consulting to evaluate the 16 trees impacted by the proposed parking lot expansion at the Bellevue Technical Center in the Overlake Neighborhood of Bellevue, Washington. Specifically, Mr. McCullough requested that I inventory the trees to document their species, size, condition, and legal status. In addition, Mr. McCullough requested that I review the letter from the City of Bellevue Planning Department letter dated December 17, 2013 concerning the parking lot expansion. He requested that I summarize my observations, conclusions, and recommendations for retention/removal in this report for use in permitting with the City of Bellevue.

METHODOLOGY

To evaluate the trees as well as to prepare this report, I drew upon my 30+ years of experience in the field of arboriculture and my formal education in natural resources management, dendrology, forest ecology, plant identification, and plant physiology. I followed the protocol of the International Society of Arboriculture (ISA) for tree risk assessment. Published in 2011, the *Best Management Practices, Tree Risk Assessment, ANSNI A300 Part 9* was developed to aid in the interpretation of professional standards and guide work practices based upon current science and technology. Using this process, now called the *Tree Risk Assessment Qualification,* or TRAQ for short, I performed a Level Two assessment which included looking at the overall health of the tree as well as the site conditions. This is a scientifically based process to look at the entire site, surrounding land and soil, as well as a complete look at the tree itself.

In examining each tree, I looked at such factors as: size, vigor, canopy and foliage condition, density of needles, injury, insect activity, root damage and root collar health, crown health, evidence of disease-causing bacteria, fungi or virus, dead wood and hanging limbs.

In addition I reviewed the Bellevue Development Code for the definition of a *significant tree*.

Tree Tags

The trees were tagged and numbered 1 through 16. The tags are made of shiny aluminum approximately one inch by three inches in size and are attached to the tree with staples and a one foot strip of brightly colored survey tape. The tags were placed as high as possible to minimize their removal and were generally placed on the backsides of the trees as inconspicuously as possible. Please refer to *Attachment 1, Site Plan* for an orientation to the site, the proposed parking lot expansion, and the approximate location of the 16 trees.

OBSERVATIONS

The Bellevue Technical Center is bounded on the west by 156th Avenue NE, on the north by NE 24th Street, on the south by Northup Way, and on the east by a single family development and Interlake High School.

As detailed in *Attachment 1, Site Plan,* the proposed parking lot expansion is a small area of lawn and landscape trees that is bordered on the west by the internal drive lane, and on the north, south, and east by existing parking areas. This would be a small infill of 20+ stalls, associated stormwater control, walkways, and curbing.

The proposed parking addition is east of buildings and open space and is not visible from any public street. To the north and south are large wooded natural areas that screen NE 24th Street and Northup Way from view. To the east is a belt of the proposed parking addition is a strip of trees on the Tech Center property and what appears to be a matching strip of trees on the school property. This means that the proposed parking addition is not clearly visible from the outside.

Photo # 1: A 5/4/13 Google Earth image of the Bellevue Technical Center.
The proposed parking expansion is in this area of trees and lawn. NE 24t Street Interlake High School

The proposed parking expansion is in this area of trees and lawn.

The area has a gentle slope from the southwest corner down to the northeast corner. It is completely covered with lawn and the 16 trees.

The 16 potentially impacted trees, only 11 of which are proposed for removal, compose an incredibly small percentage of the trees on this large, expansive, and mostly wooded property. There are literally hundreds and hundreds of trees on the property. As illustrated in the Google Earth image above, the small group of 11 trees proposed for removal is barely if at all visible from any public road.

In an effort to present the information and conclusions for each of the 16 impacted trees in a manner that is clear and easy to understand, as well as to save paper, I have included a detailed spreadsheet, *Attachment 2, Tree Inventory/Condition Spreadsheet*. All the same information from the ISA Tree Hazard Form is included in this spreadsheet and the attached glossary. The descriptions on the spreadsheet were left brief in order to include as much pertinent information as possible and to make the report manageable. The attached glossary provides a detailed description of the terms used in the spreadsheet and in this report. It can be found in *Attachment 3, Glossary*. A brief review of these terms and descriptions will enable the reader to rapidly move through the spreadsheet and better understand the information.

DISCUSSION

Right-of-Way Trees

There are no rights-of-way trees impacted by this proposed project.

Trees on Adjacent Properties

There are no trees on adjacent properties impacted by this proposed project.

Trees on the Subject Property

There are 16 trees impacted by this proposed project. The trees were numbered in sequence from 1 through 16 and tagged. Based upon my observations of the site, the size and conditions of the trees, and be proposed parking lot expansion improvements I judge the following:

- Trees # 2, 3, 4, 5, 6, 9, 10, 11, 12, 13, and 14 are within the excavation required to build the parking expansion.
    - They would have to be removed.
- Trees 1, 2, 7 and 8 are in the northeast, southeast, and southwest corners of the impact area and could be retained with adequate tree protection measures during construction.
    - I judge that they have the current health, vigor, and internal stored reserves to withstand the stresses of construction if they are adequately protected and cared for during construction.

- Tree # 16 is in a lawn area close to the northeast corner of the proposed parking lot expansion.
    - There is a catch basin proposed for this corner that is inside the dripline of the tree.
    - This would be a severe impact on the tree and its long-term survival could be compromised by the excavation required for the catch basin installation.
    - **Conclusion:**
        - The current design is to move the catch basin to the west outside the dripline of the tree in order to retain the tree.
        - I judge that tree # 16 has the current health, vigor, and internal stored reserves to withstand the stresses of construction if it is adequately protected and cared for during construction

CONCLUSIONS AND RECOMMENDATIONS

There are several conclusions that I have about the trees impacted by this proposed parking expansion. They are:

1. There are 16 trees impacted by the proposal.

2. All 16 trees are *Significant Trees* as defined by Bellevue City Code.

3. All 16 trees were planted as part of the landscape installation decades ago.

4. All 16 trees are a cultivar of a *non-native* species, Norway Maple, *Acer platanoides*.

5. 11 of the 16 trees are within the excavation required for the parking lot expansion.
    a. They are #'s 2, 4, 5, 6, 9, 10, 11, 12, 13, 14, and 15. #3 included
    b. They will need to be removed to accomplish the expansion.

6. Four trees, #'s 1, 2, 7, & 8 appear to be located where they can be retained.
    a. They appear to be able to withstand the stresses of construction with adequate tree protection measures.

7. One tree, # 16, appears to be in danger due to required excavation for the catch basin.
    a. The tree could be retained if the catch basin could be moved to the west outside the dripline of the tree.
    b. I measured the dripline as being 16 feet. Given the location of the tree, if the catch basin can be moved at least midway into the second closest or the third parking stall, I believe tree 16 can be retained.

c. This effort is consistent with the December 17, 2013 letter from the City Planning Department requesting that tree removal be minimized.

8. The project is projected to require less than 100 yards of earth movement, this includes exported and imported materials.
   a. Therefore, this is well below the threshold of 500 cubic yards and will *not* trigger a SEPA review.
9. *The removal of 11 trees from inside the site will be almost unobservable from anywhere off the site.*
   a. *The entire site appears to be well above the 15% requirement of retention in PUD's as required in LUC 20.20.900.*
   b. *This parking lot expansion is retaining 5 of the 16 impacted trees, or 31.25% of the impacted trees are to be retained.*
   c. *Therefore, I judge that* ***no*** *mitigation planting is required.*

Tree Protection Measures

In order for trees to survive the stresses placed upon them in the construction process, tree protection must be planned in advance of equipment arrival on site. If tree protection is not planned integral with the design and layout of the project, the trees will suffer needlessly and possibly die. With proper preparation, often costing little or nothing extra to the project budget, trees can survive and thrive after construction. This is critical for tree survival because damage prevention is the single most effective treatment for trees on construction sites. Once trees are damaged, the treatment options available are limited.

The minimum Tree Protection Measures in *Attachment 9, Tree Protection Measures* are on three separate sheets that can be copied and introduced into all relevant documents such as site plans, permit applications and conditions of approval, and bid documents so that everyone involved is aware of the requirements. These Tree Protection Measures are intended to be generic in nature. They will need to be adjusted to the specific circumstances of your site that takes into account the location of improvements and the locations of the trees.

WAIVER OF LIABILITY

There are many conditions affecting a tree's health and stability, which may be present and cannot be ascertained, such as, root rot, previous or unexposed construction damage, internal cracks, stem rot and more which may be hidden. Changes in circumstances and conditions can also cause a rapid deterioration of a tree's health and stability. Adverse weather conditions can dramatically affect the health and safety of a tree in a very short amount of time. While I have used every reasonable means to examine these trees, this evaluation represents my opinion of the tree health at this point in time. These findings do not guarantee future safety nor are they predictions of future events.

The tree evaluation consists of an external visual inspection of an individual tree's root flare, trunk, and canopy from the ground only unless otherwise specified. The inspection may also consist of taking trunk or root soundings for sound comparisons to aid the evaluator in determining the possible extent of decay within a tree. Soundings are only an aid to the evaluation process and do not replace the use of other more sophisticated diagnostic tools for determining the extent of decay within a tree.

As conditions change, it is the responsibility of the property owners to schedule additional site visits by the necessary professionals to ensure that the long-term success of the project is ensured. It is the responsibility of the property owner to obtain all required permits from city, county, state, or federal agencies. It is the responsibility of the property owner to comply with all applicable laws, regulations, and permit conditions. If there is a homeowners association, it is the responsibility of the property owner to comply with all Codes, Covenants, and Restrictions (CC&R's) that apply to tree pruning and tree removal.

This tree evaluation is to be used to inform and guide the client in the management of their trees. This in no way implies that the evaluator is responsible for performing recommended actions or using other methods or tools to further determine the extent of internal tree problems without written authorization from the client. Furthermore, the evaluator in no way holds that the opinions and recommendations are the only actions required to insure that the tree will not fail. A second opinion is recommended. The client shall hold the evaluator harmless for any and all injuries or damages incurred if the evaluator's recommendations are not followed or for acts of nature beyond the evaluator's reasonable expectations, such as severe winds, excessive rains, heavy snow loads, etc.

This report and all attachments, enclosures, and references, are confidential and are for the use of the client concerned. They may not be reproduced, used in any way, or disseminated in any form without the prior consent of the client concerned and Gilles Consulting.

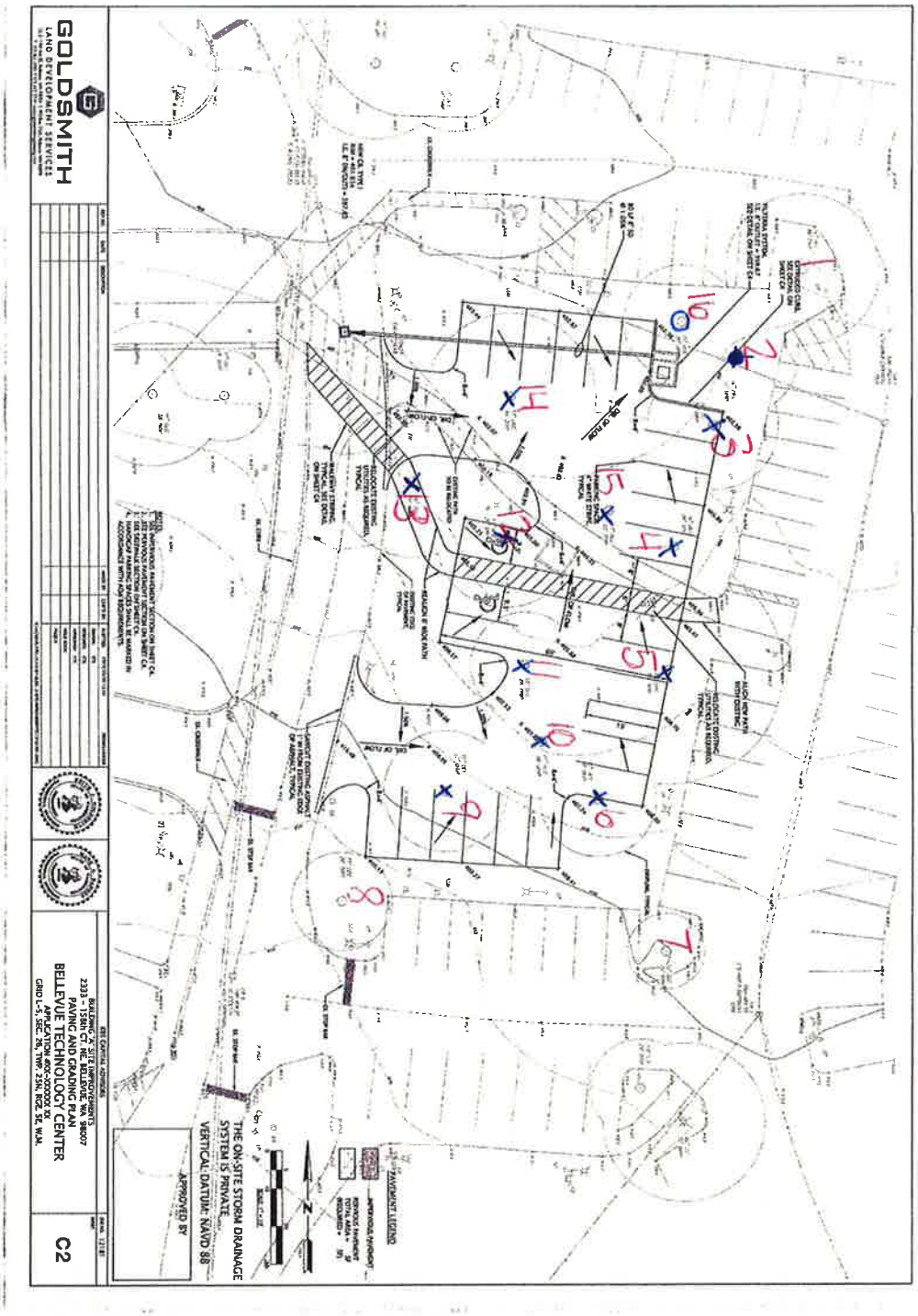
Thank you for calling Gilles Consulting for your arboricultural needs.

Sincerely,

Brian K. Gilles, Consulting Arborist
ISA Certified Arborist # PN-0260A
ASCA Registered Consulting Arborist # RCA-418
PNW-ISA Certified Tree Risk Assessor #148

ATTACHMENTS

ATTACHMENT 1 - SITE PLAN



ATTACHMENT 2 - TREE INVENTORY/CONDITIONS SPREADSHEET

ABBREVIATED LEGEND–SEE GLOSSARY IN REPORT ATTACHMENTS FOR GREATER DETAIL

#1 *Tree #:* The unique tag number of each tree.
#2 *Species:*
NM/Ap 'p' Norway Maple, *Acer platanoides 'Parkway'*
#3 *DBH:* Trunk diameter @ 4.5' above average ground level.
#4 *Drip Line:* The radius, the distance from the trunk to the furthest branch tips.
#5 *Limits of Disturbance:* The boundary between the area of minimum protection around a tree and the allowable site disturbance as determined by a qualified professional.
#6 *LCR:* *Live Crown Ratio* - the amount of live canopy expressed as a % of the entire tree height
#7 *Symmetry:* General shape of canopy and weight distribution of the tree around the trunk.
#8 *Foliage:* General description of foliage density that indicates tree health and vigor.
#9 *Crown Condition:* The most important external indication of tree health and vigor.
#10 *Trunk:* Description of trunk condition or abnormalities if any.
#11 *Root Collar:* The base of the tree where the trunk flares into the roots–deformities or problems are noted here.
#12 *Roots:* Root problems are noted here.
#13 *Comments:* Additional observations about the tree's condition.
#14 *Current Health Rating:* A description of general health ranging from dead, dying, poor, fair, good, very good, to excellent.
#15 *Status/Recommendation:* This is an estimate of whether or not the tree is of sufficient health, vigor, and structure that it is worth consideration of retention.

1	2	3	4	5 -- LIMITS OF DISTURBANCE				6	7	8	9	10	11	12	13	14	15
TREE #	SPECIES	DBH	DRIP LINE	North	South	East	West	LCR	SYMMETRY	FOLIAGE	CROWN CONDITION	TRUNK	ROOT COLLAR	ROOTS	COMMENTS	CURRENT HEALTH RATING	RECOMMENDATION
1	NM/Ap 'p'	18.7"	28'	To asphalt	To asphalt	To asphalt	To asphalt	80%	Generally symmetrical	Thin	Weak	Forked at 6', typical	Partially exposed	Surface, restricted	Growing in the northeast planter bulb. Roots are uplifting the parking lot.	Fair	Potential to retain with tree protection measures
2	NM/Ap 'p'	16.4"	22'	To asphalt	22'	To asphalt	22'	80%	Minor asymmetry	Thin	Weak	Forked at 7', typical	NAD	Restricted	Base is approximately 6 feet west of parking lot. Growing west of the parking lot.	Fair	Potential to retain with tree protection measures
3	NM/Ap 'p'	16.0"	28'	To asphalt	28'	To asphalt	28'	80%	Major asymmetry	Thin	Weak	Forked at 7 and 14', typical	NAD	Surface, restricted	Growing west of the parking lot. Mower damage to the surface roots. Girdling root on the north side approximately 25% of the circumference.	Fair	Potential to retain with tree protection measures
4	NM/Ap 'p'	16.5"	26'	To asphalt	26'	To asphalt	26'	75%	Generally symmetrical	Thin	Average	Forked at 6', typical	Partially exposed	Surface, restricted	Growing west of the parking lot. Growing north of the asphalt walkway.	Fair	Potential to retain with tree protection measures
5	NM/Ap 'p'	21.3"	36'	To asphalt	36'	To asphalt	36'	80%	Minor asymmetry	Thin	Average	Forked at 7'. Slight lean northeast	NAD	Surface, restricted	Growing west of the parking lot. Growing south of the asphalt walkway.	Fair	Potential to retain with tree protection measures
6	NM/Ap 'p'	16.1"	24'	24'	To asphalt	To asphalt	24'	65%	Major asymmetry	Average	Average	Forked at 16', Slight bow south	NAD	Surface	Dead branches in canopy.	Fair	Potential to retain with tree protection measures
7	NM/Ap 'p'	13.7"	20'	To asphalt	To asphalt	To asphalt	To asphalt	80%	Major asymmetry	Average	Average	Forked at 8', typical	NAD	Restricted	Growing in southeast planter bulb. Dead branches in canopy.	Fair	Potential to retain with tree protection measures

1	2	3	4	5 -- LIMITS OF DISTURBANCE				6	7	8	9	10	11	12	13	14	15
TREE #	SPECIES	DBH	DRIP LINE	North	South	East	West	LCR	SYMMETRY	FOLIAGE	CROWN CONDITION	TRUNK	ROOT COLLAR	ROOTS	COMMENTS	CURRENT HEALTH RATING	RECOMMENDATION
8	NM/Ap 'p'	15.7"	22'	22'	To asphalt	To asphalt	To asphalt	55%	Generally symmetrical	Thin	Average	Forked at 6', typical	Partially exposed	Surface, restricted		Fair	Potential to retain with tree protection measures
9	NM/Ap 'p'	16.5"	28'	28'	28'	28'	28'	80%	Major asymmetry	Average	Average	Forked at 5.5', typical	NAD	Surface	Surface roots have excessive mower damage.	Fair	Potential to retain with tree protection measures
10	NM/Ap 'p'	16.3"	28'	28'	28'	28'	28'	65%	Minor asymmetry	Average	Average	Forked at 5.5', typical	NAD	Surface	Dead branches in canopy.	Fair	Potential to retain with tree protection measures
11	NM/Ap 'p'	14.5"	16'	16'	16'	16'	16'	80%	Major asymmetry	Average	Average	Forked at 6', typical	NAD	Surface		Fair	Potential to retain with tree protection measures
12	NM/Ap 'p'	14.8"	24'	To asphalt	24'	24'	24'	80%	Minor asymmetry	Average	Average	Forked at 12', typical	NAD	Restricted	Growing south of the asphalt walkway. Roots are uplifting the walkway.	Fair	Potential to retain with tree protection measures
13	NM/Ap 'p'	21.7"	32'	To walkway	32'	32'	To asphalt	75%	Major asymmetry	Average	Average	Forked at 5', typical	NAD	Surface, restricted	Dead branches in canopy.	Fair	Potential to retain with tree protection measures
14	NM/Ap 'p'	21.2"	32'	To asphalt	To walkway	32'	To asphalt	85%	Minor asymmetry	Average	Average	Forked at 5.5', center rot	Probable base rot	Surface, restricted	Dead branches in canopy. Open wound on the south side from 3.5-4 feet with large callous in-rolls.	Fair	Potential to retain with tree protection measures
15	NM/Ap 'p'	13.4"	27'	27'	To asphalt	27'	27'	80%	Major asymmetry	Thin	Weak	Serpentine, typical	Partially exposed	Surface, restricted	Dead branches in canopy.	Fair	Potential to retain with tree protection measures
16	NM/Ap 'p'	17.0"	16'	To asphalt	16'	16'	16'	85%	Minor asymmetry	Average	Average	Forked at 6', typical	NAD	Surface, restricted	Calloused crack on the south side from 2.5-4 feet.	Fair	Potential to retain with tree protection measures

ATTACHMENT 3 - GLOSSARY

Terms Used in This Report, on the Tree Condition / Inventory Spreadsheet, and Their Significance

In an effort to clearly present the information for each tree in a manner that facilitates the reader's ability to understand the conclusions I have drawn for each tree, I have collected the information in a spreadsheet format. This spreadsheet was developed by Gilles Consulting based upon the *Tree Risk Assessment in Urban Areas and the Urban/Rural Interface* course manual and the *Tree Risk Assessment Form*, both sponsored by the Pacific Northwest Chapter of the International Society of Arboriculture, and the *Hazard Tree Evaluation Form* from the book, *The Evaluation of Hazard Trees in Urban Areas*, by Matheny and Clarke. The descriptions were left brief on the spreadsheet in an effort to include as much pertinent information as possible, to make the report manageable, and to avoid boring the reader with infinite levels of detail. However, a review of these terms and descriptions will allow the reader to rapidly move through the report and understand the information.

1) **TREE #**—the unique tag number of each tree.
2) **SPECIES**—this describes the species of each tree with both most readily accepted common name and the officially accepted scientific name.
3) **DBH**—Diameter Breast Height. This is the standard measurement of trees taken at 4.5 feet above the average ground level of the tree base.
    i) Occasionally it is not practical to measure a tree at 4.5 feet above the ground. The most representative area of the trunk near 4.5 feet is then measured and noted on the spreadsheet. For instance, a tree that forks at 4.5 feet can have an unusually large swelling at that point. The measurement is taken below the swelling and noted, e.g. '28.4" at 36"'.
    ii) Trees with multiple stems are listed as a "clump of x," with x being the number of trunks in the clump. Measurements may be given as an average of all the trunks, or individual measurements for each trunk may be listed.
        (1) Every effort is made to distinguish between a single tree with multiple stems and several trees growing close together at the bases.
4) **DRIP LINE**—the radius, the distance from the trunk to the furthest branch tips.
5) **% LCR**—Percentage of Live Crown Ratio. The relative proportion of green crown to overall tree height. This is an important indication of a tree's health. If a tree has a high percentage of Live Crown Ratio, it is likely producing enough photosynthetic activity to support the tree. If a tree has less than 30% to 40% LCR, it can create a shortage of needed energy and can indicate poor health and vigor.
6) **SYMMETRY**—is the description of the form of the canopy, i.e., the balance or overall shape of the canopy and crown. This is the place I list any major defects in the canopy shape, e.g. does the tree have all its foliage on one side or in one unusual area? Symmetry can be important if there are additional defects in the tree such as rot

pockets, cracks, loose roots, weak crown, etc. Symmetry is generally categorized as Generally Symmetrical, Minor Asymmetry or Major Asymmetry:

i) Gen. Sym.—Generally Symmetrical. The canopy/foliage is generally even on all sides with spacing of scaffold branches typical for the species, both vertically and radially.
ii) Min. Asym.—Minor Asymmetry. The canopy/foliage has a slightly irregular shape with more weight on one side, but appears to be no problem for the tree.
iii) Maj. Asym.—Major Asymmetry. The canopy/foliage has a highly irregular shape for the species with the majority of the weight on one side of the tree. This can have a significant impact on the tree's stability, health and hazard potential—especially if other defects are noted such as cracks, rot, or root defects.

7) **FOLIAGE/BRANCH**—describes the foliage of the tree in relation to a perfect specimen of that particular species. First the branch growth and foliage density is described, and then any signs or symptoms of stress and/or disease are noted. The condition of the foliage, or the branches and buds for deciduous trees in the dormant season, are important indications of a tree's health and vigor.
   i) For Deciduous trees in the dormant season:
      (1) The structure of the deciduous tree is visible.
      (2) The quantity and quality of buds indicates health, and is described as good bud set, average bud set, or poor bud set. These are abbreviated in the spreadsheet as: gbs, abs, or pbs.
      (3) The amount of annual shoot elongation is visible and is another major indication of tree health and vigor. This is described as:
         a) Excellent, Good, Average, or Short Shoot Elongation. These are abbreviated in the spreadsheet as ESE, GSE, ASE, or SSE.
   ii) For evergreen trees year round and deciduous trees in leaf, the color and density of the foliage indicates if the tree is healthy or stressed, or if an insect infestation, a bacterial, fungal, or viral infection is present. Foliage is categorized on a scale from:
      (1) Dense—extremely thick foliage, an indication of healthy vigorous growth,
      (2) Good—thick foliage, thicker than average for the species,
      (3) Normal/Average—thick foliage, average for the species, an indication of healthy growth,
      (4) Thin or Thinning—needles and leaves becoming less dense so that sunlight readily passes through; an indication that the tree is under serious stress that could impact the long-term survivability and safety of the tree,
      (5) Sparse—few leaves or needles on the twigs, an indication that the tree is under extreme stress and could indicate the future death of the tree,
      (6) Necrosis—the presence of dead twigs and branchlets. This is another significant indication of tree health. A few dead twigs and branches are reasonably typical in most trees of size. However, if there are dead

twigs and branchlets all over a certain portion of the tree, or all over the tree, these are indications of stress or attack that can have an impact on the tree's long-term health.

(7) Hangers—a term to describe a large branch or limb that has broken off but is still hanging up in the tree. These can be particularly dangerous in adverse weather conditions.

8) **CROWN CONDITION**—the crown is uppermost portion of the tree, generally considered the top 10 to 20% of the canopy or that part of the canopy above the main trunk in deciduous trees and above the secondary bark in evergreen trees.
   i) The condition of the tree's crown is a reflection of the overall health and vigor of the entire tree. The crown is one of the first places a tree will demonstrate stress and pathogenic attack such as root rot.
   ii) If the **Crown Condition** is healthy and strong, this is a good sign. If the crown condition is weak, broken out, or shows other signs of decline, it is an indication that the tree is under stress. It is such an important indication of health and vigor that this is the first place a trained forester or arborist looks to begin the evaluation of a tree. Current research reveals that, by the time trees with root rot show significant signs of decline in the crown, fully 50% or more of the roots have already rotted away. **Crown Condition** can be described as:
      (1) Healthy Crown—exceptional growth for the species.
      (2) Average Crown—typical for the species.
      (3) Weak Crown—thin spindly growth with thin or sparse needles.
      (4) Flagging Crown—describes a tree crown that is weak and unable to grow straight up.
      (5) Dying Crown—describes obvious decline that is nearing death.
      (6) Dead Crown—the crown has died due to pathological or physical injury. The tree is considered to have significant stress and/or weakness if the crown is dead.
      (7) Broken out—a formerly weak crown condition that has been broken off by adverse weather conditions or other mechanical means.
      (8) Regenerated or Regenerating—formerly broken out crowns that are now growing back. Regenerating crowns may appear healthy, average, or weak and indicate current health of the tree.
      (9) Suppressed—a term used to describe poor condition of an entire tree or just the crown. Suppressed crowns are those that are entirely below the general level of the canopy of surrounding trees which receive no direct sunlight. They are generally in poor health and vigor. Suppressed trees are generally trees that are smaller and growing in the shade of larger trees around them. They generally have thin or sparse needles, weak or missing crowns, and are prone to insect attack as well as bacterial and fungal infections.

9) **TRUNK**—this is the area to note any defects that can have an impact on the tree's stability or hazard potential. Typical things noted are:

i) FORKED—bifurcation of branches or trunks that often occur at a narrow angle.
ii) INCLUDED BARK—a pattern of development at branch or trunk junctions where bark is turned inward rather than pushed out. This can be a serious structural defect in a tree that can and often does lead to failure of one or more of the branches or trunks, especially during severe, adverse weather conditions.
iii) EPICORMIC GROWTH—this is generally seen as dense thick growth near the trunk of a tree. Although this looks like a healthy condition, it is, in fact the opposite. Trees with Epicormic Growth have used their reserve stores of energy in a last ditch effort to produce enough additional photosynthetic surface area to produce more sugars, starches and carbohydrates to support the continued growth of the tree. Generally speaking, when conifers in the Pacific Northwest exhibit heavy amounts of Epicormic Growth, they are not producing enough food to support their current mass and are already in serious decline.
iv) INTERNAL STRUCTURAL WEAKNESS—a physical characteristic of the tree trunk, such as a **kink, crack, rot pocket, or rot column** that predisposes the tree trunk to failure at the point of greatest weakness.
v) BOWED—a gradual curve of the trunk. This can indicate an Internal Structural Weakness or an overall weak tree. It can also indicate slow movement of soils or historic damage of the tree that has been corrected by the curved growth.
vi) KINKED—a sharp angle in the tree trunk that indicates that the normal growth pattern is disrupted. Generally this means that the internal fibers and annual rings are weaker than straight trunks and prone to failure, especially in adverse weather conditions.
vii) GROUND FLOWER—an area of deformed bark near the base of a tree trunk that indicates long-term root rot.

10) **ROOT COLLAR**—this is the area where the trunk enters the soil and the buttress roots flare out away from the trunk into the soil. It is here that signs of rot, decay, insect infestation, or fungal or bacterial infection are noted. **NAD** stands for **N**o **A**pparent **D**efects.
11) **ROOTS**—any abnormalities such as girdling roots, roots that wrap around the tree itself that strangle the cambium layer and kill the tree, are noted here.
12) **COMMENTS**—this is the area to note any additional information that would not fit in the previous boxes or attributes about the tree that have bearing on the health and structure of the tree.
13) **CURRENT HEALTH RATING**—A description of the tree's general health ranging from dead, dying, poor, senescent, suppressed, fair, good, very good, to excellent.
14) **RECOMMENDATION**— this is an estimate of whether or not the tree is of sufficient health, vigor, and structure that it is worth retaining. Specific recommendations for each tree are included in this column. They may include anything from pruning dead wood, mulching, aerating, injecting tree-based fertilizer

into the root system, shortening into a habitat tree or wildlife snag, or to completely removing the tree.

i) **Monitor:** "Monitor" is a specific recommendation that the tree be re-evaluated on a routine basis to determine if there are any significant changes in health or structural stability. "Monitor annually" (or bi-annually, tri-annually, etc.)" means the tree should be looked at once every year (or every 2 or 3 years, etc.) This yearly monitoring can be a quick look at the trees to see if there are any significant changes. Significant changes such as storm damage, loss of crown, partial failure of one or more roots, etc. require that a full evaluation be done of the tree at that time.

ii) **Potential to retain with tree protection measures:** means that the tree appears to have the internal resources, the health and vigor, structural stability, and the wind firmness to be able to withstand the stresses of construction if development requirements and construction requirements allow.

iii) **Habitat or Remove:** means that the tree has a high potential to fail and cause either personal injury or property damage—in other words the tree has been declared a hazard tree and should be dealt with prior to the next large storm. If it is at all possible the recommendation is to leave some of the trunk standing for wildlife habitat and some of the trunk on the ground as a nurse log. The height of the standing habitat tree depends upon the size of the tree, the condition of the tree, and the distance to a probable target. It should be short enough so that when it does fail years in the future it will not cause personal injury or property damage. Nurse logs can be laid horizontally across the slope to aid with erosion control and to provide microenvironments for new plantings. The nurse logs meaning to be steak to prevent their movement and potential harm to people. If for some reason this is not possible that should be removed for safety.

NOTE: TREES WITH THE SAME DESCRIPTION AND DIFFERENT RATINGS: Two trees may have the same descriptions in the matrix boxes, one may be marked "Significant," while another may be marked "Non-Significant." The difference is in the degree of the description, i.e., "early necrosis" versus "advanced necrosis" for instance. Another example is "center rot" or 'base rot". In a Western Red Cedar tree, the presence of low or even moderate rot is not significant and does not diminish the strength of the tree. However, low levels of rot in the base of a Douglas Fir tree, in an area known to have virulent pathogens present, is highly significant and predisposes that tree to windthrow.

ATTACHMENT 4 - TREE PROTECTION MEASURES

In order for trees to survive the stresses placed upon them in the construction process, tree protection must be planned in advance of equipment arrival on site. If tree protection is not planned integral with the design and layout of the project, the trees will suffer needlessly and will possibly die. With proper preparation, often costing little, or nothing extra to the project budget, trees can survive and thrive after construction. This is critical for tree survival because damage prevention is the single most effective treatment for trees on construction sites. Once trees are damaged, the treatment options available are limited.

The following minimum Tree Protection Measures are included on three separate sheets so that they can be copied and introduced into all relevant documents such as site plans, permit applications and conditions of approval, and bid documents so that everyone involved is aware of the requirements. These Tree Protection Measures are intended to be generic in nature. They will need to be adjusted to the specific circumstances of your site that takes into account the location of improvements and the locations of the trees.

TREE PROTECTION MEASURES:

1. Tree Protection Fences will need to be placed around each tree or group of trees to be retained.
    a. Tree Protection Fences are to be placed according to the attached drawing at a distance of not less than 5 feet outside the dripline of the tree or group of trees to be saved.
    b. Tree Protection Fences must be inspected prior to the beginning of any demolition or construction work activities.
    c. Nothing must be parked or stored within the Tree Protection Fences—no equipment, vehicles, soil, debris, or construction supplies of any sorts.

2. Cement trucks must not be allowed to deposit waste or wash out materials from their trucks within the Tree Protection Fences.

3. The Tree Protection Fences need to be clearly marked with the following or similar text in four inch or larger letters:

"TREE PROTECTION FENCE
DO NOT ENTER THIS AREA
DO NOT PARK OR STORE MATERIALS
WITHIN THE PROTECTION AREA

Any questions, call Brian K. Gilles at Gilles Consulting
@ 425-417-0850"

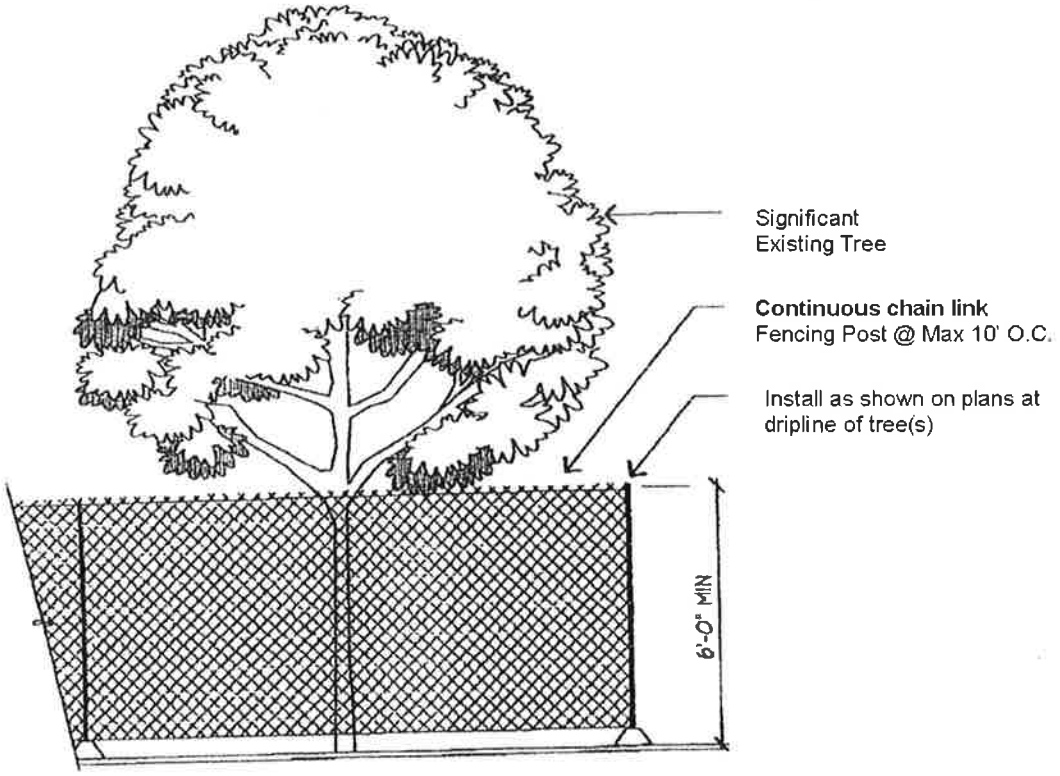
4. The area within the Tree Protection Fencing must be covered with wood chips, hog fuel, or similar materials to a depth of 8 to 10 inches. The materials should be placed prior to beginning construction and remain until the Tree Protection Fencing is taken down.

5. When excavation occurs near trees that are scheduled for retention, the following procedure must be followed to protect the long term survivability of the tree:
    a. An International Society of Arboriculture, (ISA) Certified Arborist must be working with all equipment operators.
        i. The Certified Arborist should be outfitted with a shovel, hand pruners, a pair of loppers, a handsaw, and a power saw (a "sawsall" is recommended).
    b. The hoe must be placed to "comb" the material directly away from the trunk as opposed to cutting across the roots.
        i. Combing is the gradual excavation of the ground cover plants and soil in depths that only extend as deep as the tines of the hoe.

c. When any roots of one inch diameter or greater, of the tree to be retained, is struck by the equipment, the Certified Arborist should stop the equipment operator.
d. The Certified Arborist should then excavate around the tree root by hand/shovel and cleanly cut the tree root.
    i. The Certified Arborist should then instruct the equipment operator to continue.

6. Putting Utilities Under the Root Zone:
    a. Boring under the root systems of trees (and other vegetation) shall be done under the supervision of an ISA Certified Arborist. This is to be accomplished by excavating a limited trench or pit on each side of the critical root zone of the tree and then hand digging or pushing the pipe through the soil under the tree. The closest pit walls shall be a minimum of 7 feet from the center of the tree and shall be sufficient depth to lay the pipe at the grade as shown on the plan and profile.
    b. Tunneling under the roots of trees shall be done under the supervision of an ISA Certified Arborist in an open trench by carefully excavating and hand digging around areas where large roots are exposed. No roots 1 inch in diameter or larger shall be cut.
    c. The contractor shall verify the vertical and horizontal location of existing utilities to avoid conflicts and maintain minimum clearances; adjustment shall be made to the grade of the new utility as required.

7. Watering:
    a. The trees will require significant watering throughout the summer and early fall in order to survive long-term. An easy and economical watering can be done using soaker hoses placed three feet from the trunk of the tree and spiraled around the tree. One 75-foot soaker hose per tree is adequate. It is best to place the soakers using landscape staples, (available from HD Fowler in Bellevue for pennies apiece) then cover the area with two to three inches composed materials. The composted material will act as a mulch to minimize evaporation and will also stimulate the microbial activity of the soil which is another benefit to the health of the tree.
    b. Water the tree to a depth of 18 to 20 inches. I recommended leaving the water on the soaker hoses for six to eight hours and then digging down to determine how deep your water is penetrating. Then adjust accordingly. It may take a good two days of watering to reach the proper depth.
    c. Once the water reaches the proper depth, turn off the hoses for four weeks and then water again. Water more often when temperatures increase—every three weeks when temperatures exceed 80 degrees and every two weeks when temperatures exceed 90 degrees. This drying out of the soil in between watering is important to prevent soil pathogens from attacking the trees.



Six-foot high temporary chain link fence shall be placed as shown on plans. Fence shall completely encircle tree(s). Install fence posts using pier blocks only. Avoid driving posts or stakes into major roots.

Make a clean straight cut to remove damaged portion of root for all roots over 1" in diameter damaged during construction. ***All*** exposed roots shall be temporarily covered with damp burlap and covered with soils the same day, if possible, to prevent drying. If not possible, burlap must be kept moist at all times.

Work with the protection fencing shall be done manually. No stockpiling of materials, soil, debris, vehicle traffic, or storage of equipment or machinery shall be allowed within the limit of the fencing.

Cement trucks must not be allowed to deposit waste or wash out materials from their trucks within the Tree Protection Fences.

The area within the Tree Protection Fencing must be covered with wood chips, hog fuel, or similar materials to a depth of 8 to 10 inches. The materials should be placed prior to beginning construction and remain until the Tree Protection Fencing is taken down.

ATTACHMENT 5 - REFERENCES

1. Dirr, Michael A. *Manual of Woody Landscape Plants, Their Identification, Ornamental Characteristics, Culture, Propagation, and Uses*. Champaign: Stipes Publishing Company, 1990.

2. Harris, Richard W. et al. *Arboriculture, Integrated Management of Landscape Trees, Shrubs, and Vines*. 4th ed. Upper Saddle River: Prentice Hall, 2004.

3. Matheny, Nelda P. and Clark, James R. *Trees & Development, A Technical Guide to Preservation of Trees During Land Development*. Savoy: The International Society of Arboriculture Press, 1998.

4. Mattheck, Claus and Breloer, Helge. *The Body Language of Trees, A Handbook for Failure Analysis*. London: HMSO, 1994.

5. Pacific Northwest Chapter-ISA. *Tree Risk Assessment in Urban Areas and the Urban/Rural Interface*. Course Manual. Release 1.5. PNW-ISA: Silverton, Oregon, 2011.

6. Watson, Gary W., and Neely, Dan, eds. *Trees & Building Sites*. Savoy: The International Society of Arboriculture Press, 1995.

Gilles Consulting
Brian K. Gilles
425-822-4994

TREE RESTORATION PLAN
AT

THE BELLEVUE TECHNOLOGY CENTER
15805 NE 24th Street
Bellevue, WA 98008

June 25, 2014

PREPARED FOR:

Mark Jackson
Transwestern
1420 Fifth Avenue
Suite 2204
Seattle, WA 98101

PREPARED BY:

GILLES CONSULTING
Brian K. Gilles, Consulting Arborist
ISA Certified Arborist # PN-0260A
ASCA Registered Consulting Arborist # RCA-418
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CONTENTS

ASSIGNMENT

Mark H. Jackson, Senior Vice President Management Services for TRANSWESTERN, contracted with Gilles Consulting to develop this *Restoration Plan* for the 11 trees proposed for removal for the proposed parking lot expansion at the Bellevue Technology Center on NE 24th Street in Bellevue, Washington. Specifically, Mr. Jackson requested that I determine the number of replacement trees needed, where they can be installed, and how to insure their survival. He requested that I summarize my recommendations in this report for use in permitting with the City of Bellevue.

SPECIFIC REPLACEMENT PLAN

Species Selection

The 11 trees proposed for removal to expand the parking availability are non-native trees that were planted as part of the landscape design when the property was developed years ago. The species is now considered an invasive species in much of the country and is less in favor than decades before.

Since the enabling development permit stressed the retention of native trees and associated vegetation in key areas of the property, I have selected two native species as replacement trees. They are: Douglas Fir, *Pseudotsuga menziesii,* and Western Hemlock, *Tsuga heterophylla*. Both are native species indigenous to the region and to this property specifically. The Western Hemlock is in fact, the Washington State tree. Both species have a solid track record of surviving long-term in our area when used as replacement trees.

Replacement Tree Numbers and Size

Given the immense size of the property and the large open-space natural areas with hundreds of trees, I have chosen a one to one replacement. Therefore, 11 replacement trees are proposed. I also propose that the trees be a minimum of 8 to 10 feet tall.

Replacement Tree Locations

The proposed parking lot expansion is well screened from the north by the dense forest, from the west by the structures and landscaping, and from the south by the extensive native remnant forest. There is an area of native trees and associated understory vegetation along the east property line. The adjacent school property has a matching green-belt area. However, this is the narrowest of all the screens to the proposed parking lot expansion. Therefore, I have chosen to locate the restoration trees along the east open-space area where the least amount of screening is currently located. The trees can be strategically located to fill in open areas along the western edge of this open-space. This will allow the existing irrigation system can be easily adjusted to take into account these new 11 trees.

Photo # 1: A 5/4/13 Google Earth image of the Bellevue Technology Center.
The proposed parking expansion is in this area of trees and lawn. NE 24t Street Interlake High School

The proposed parking expansion is in this area of trees and lawn.

Restoration installation area
for 11 replacement trees

Installation Instructions

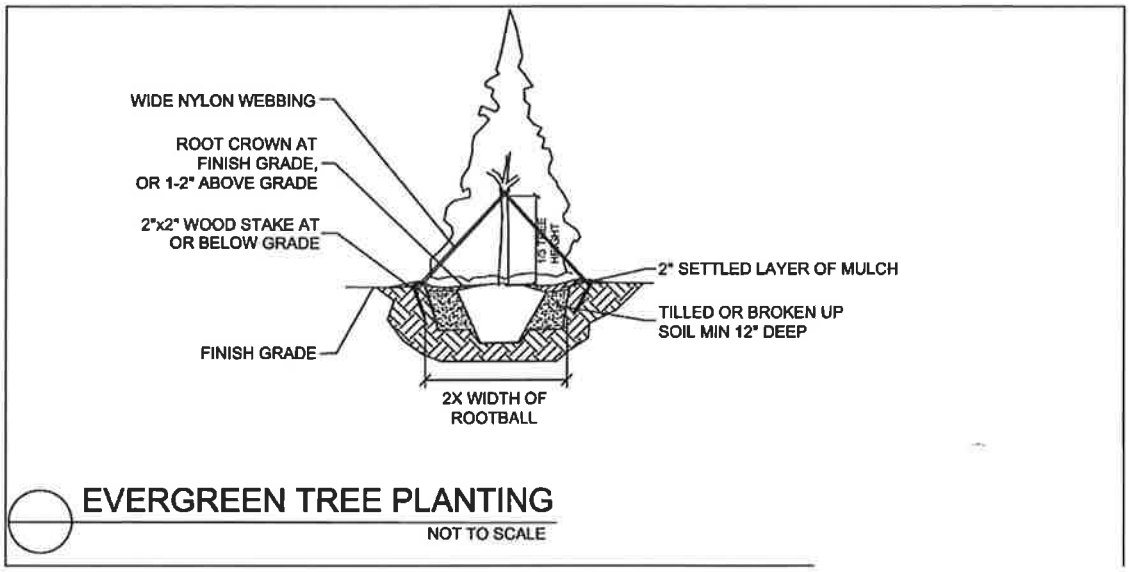
The 11 replacement trees shall be planted according to current ANSI standards and current nursery industry standards. This includes:

1. All plant materials shall be in accordance with the *American National Standards Institute for Nursery Stock ANSI Z60.0-2004*.
    - Trees shall appear healthy and free of pests or disease.
    - Trees shall have dense canopies that extend all the way to the base.
2. All installation shall be according to *ANSI A300 Part 6-2012, Transplanting, (American National Standard for Tree Care Operations – Tree, Shrub, and Other Woody Plant Maintenance Standard Practices*).
3. Dig the planting hole a minimum of 2 times the width of the root ball for at least the first 12 inches of depth.

- Below 12 inches, dig the hole wide enough to permit adjusting.
- Do not dig the hole deeper than the root ball depth.

4. Scarify the subgrade and sides of the planting hole when planting in clay soils, (soils with more than 15% clay).
5. Lift and set the tree by the root ball only.
   - Do NOT lift using the tree trunk.
   - Do NOT use the tree trunk as a lever.
6. Set the top of the root ball level with the soil surface or slightly higher if he soil is prone to settling.
7. *After* the tree is set in place, remove the burlap, wire, and straps or string.
   - *All* of the string/twine/straps must be completely removed from the root ball.
   - The wire and burlap must be cut from the tops and sides of the root balls and removed.
   - The wire and burlap on the bottom should be left in place.
8. Backfill with existing soil that has been well-tilled or broken up.
   - *Do not* use add amendments to the backfill soil.
9. Amend the service with mulch.
   - Two inches of approved compost or other mulch is all that is needed.
   - Remove any mulch from direct contact with the base of the trunk.
10. Use three (3) 2" x 2" wood stakes driven into undisturbed soil a minimum of 16 inches.
    - Space the stakes equally around the tree.
11. Attach ¾" nylon webbing to connect the tree to the stakes.
    - Attach the webbing at 1/3rd the tree height.
    - Tie the webbing tight enough to keep the tree from falling over but allow 1 to 3 inches of movement in any direction.
12. Mulch the planting area.
    - Apply a 2 to 3 inch (settled) depth of bark mulch or composted material to the planting surface.
    - Leave a 2-inch space around the trunk free of mulch for circulation.
      - This is *important!*
13. Pruning:
    - Limit pruning to dead, diseased, or damaged limbs only.
    - All pruning cuts shall be in accordance with ANSI A300 pruning specifications using clean sharp tools, *ANSI A300 (Part 1) – Pruning.*
14. Trunk Wraps:
    - If the tree arrives from the nursery/grower with trunk wrap, it shall be removed prior to staking.
    - No wraps shall be placed on the trunk.

Planting Detail



One Year of Maintenance

The owner will provide three maintenance events for the 12 month period after installation. The three maintenance events will include:

- Maintenance Work:
  - Inspection of the general health and condition of the tree.
  - Inspection of the irrigation system for proper functioning.
    - Make corrections as needed.
  - Check the staking to ensure proper functioning.
    - Make corrections as needed.
  - Control any invasive species encroachment within 3 feet of the dripline of the newly installed tree.
    - Remove debris from the site to reduce re-establishment.

- Documentation:
  - The owner will provide the City of Bellevue with documentation of each of the three maintenance events.
  - The owner will provide the City of Bellevue with a year-end report documenting that 80%, or 9 of the 11 replacement trees, are alive *and thriving.*

- Replacement Restoration Trees:
  - If three or more trees are dead at the end of the one year maintenance period, or appear to be dying as judged by a professional, the owner will replace *all* of the dead and dying trees.
  - The replacement restoration trees will be selected and installed as above.
  - If replacement trees are required, the one year maintenance period will initiate from the date of documentation that the replacement trees have been properly installed is provided to the City of Bellevue.

WAIVER OF LIABILITY

There are many conditions affecting a tree's health and stability, which may be present and cannot be ascertained, such as, root rot, previous or unexposed construction damage, internal cracks, stem rot and more which may be hidden. Changes in circumstances and conditions can also cause a rapid deterioration of a tree's health and stability. Adverse weather conditions can dramatically affect the health and safety of a tree in a very short amount of time. While I have used every reasonable means to examine these trees, this evaluation represents my opinion of the tree health at this point in time. These findings do not guarantee future safety nor are they predictions of future events.

The tree evaluation consists of an external visual inspection of an individual tree's root flare, trunk, and canopy from the ground only unless otherwise specified. The inspection may also consist of taking trunk or root soundings for sound comparisons to aid the evaluator in determining the possible extent of decay within a tree. Soundings are only an aid to the evaluation process and do not replace the use of other more sophisticated diagnostic tools for determining the extent of decay within a tree.

As conditions change, it is the responsibility of the property owners to schedule additional site visits by the necessary professionals to ensure that the long-term success of the project is ensured. It is the responsibility of the property owner to obtain all required permits from city, county, state, or federal agencies. It is the responsibility of the property owner to comply with all applicable laws, regulations, and permit conditions. If there is a homeowners association, it is the responsibility of the property owner to comply with all Codes, Covenants, and Restrictions (CC&R's) that apply to tree pruning and tree removal.

This tree evaluation is to be used to inform and guide the client in the management of their trees. This in no way implies that the evaluator is responsible for performing recommended actions or using other methods or tools to further determine the extent of internal tree problems without written authorization from the client. Furthermore, the evaluator in no way holds that the opinions and recommendations are the only actions required to insure that the tree will not fail. A second opinion is recommended. The client shall hold the evaluator harmless for any and all injuries or damages incurred if the evaluator's recommendations are not followed or for acts of nature beyond the

evaluator's reasonable expectations, such as severe winds, excessive rains, heavy snow loads, etc.

This report and all attachments, enclosures, and references, are confidential and are for the use of the client concerned. They may not be reproduced, used in any way, or disseminated in any form without the prior consent of the client concerned and Gilles Consulting.

Thank you for calling Gilles Consulting for your arboricultural needs.

Sincerely,

Brian K. Gilles, Consulting Arborist
ISA Certified Arborist # PN-0260A
ASCA Registered Consulting Arborist # RCA-418
PNW-ISA Certified Tree Risk Assessor #148