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July 15, 2013

Revised: November 4, 2013

Andrew Miller
CamWest A Toll Brothers Company
9720 NE 120th Pl. Suite 100
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98034

Re: Tree Inventory Report – Seattle Children’s Home

Andrew:

This report is provided to address the tree inventory and assessment I conducted of 86 trees on or adjacent to, the site of the Seattle Children’s Home in the City of Seattle, WA. I inventoried all of the surveyed trees, each identified with metal tags labeled by the surveyors with numbers corresponding to those referenced in this report and on the accompanying Tree Evaluation Data spreadsheet. In the data, information is given on all of the trees, including species, dbh, crown spread, limits of development (for Exceptional trees only), size status and condition.

1.0 Summary of This Report

The project site is in a very urbanized portion of Seattle in the Queen Anne neighborhood. It is currently developed with several buildings, a considerable amount of impervious surface and is landscaped with trees, shrubs, ground cover and turfgrass. In total, there are 86 trees on or adjacent to the site; 23 healthy Exceptional trees, 1 unhealthy diseased Exceptional and 62 non-Exceptional trees.

2.0 Exceptional Trees

Twenty three trees were found to be Exceptional based upon the criteria in Director’s Rule 16-2008. These trees are considered to have unique historical, ecological or aesthetic value. Following are the trees classified as Exceptional either based upon meeting or exceeding the dbh size threshold in the Director’s Rule or by having a dbh of 75% or more of the largest specimen of that species as noted in *Trees of Seattle, Second Edition* (Jacobson, 2006):

<u>Tree #</u>	<u>Species</u>	<u>Dbh</u>	<u>Exceptional Criteria</u>
709	Douglas fir	34”	Meets the threshold diameter
773	Pacific madrone	14”	Meets the threshold diameter
774	Pacific madrone	14”	Meets the threshold diameter
776	Pacific madrone	14”	Meets the threshold diameter
778	Scot’s pine	24”	Meets the threshold diameter
784	Deodar cedar	30”	Meets the threshold diameter
741	Pacific madrone	12”	Meets the threshold diameter
739	Pacific madrone	14”	Meets the threshold diameter
740	Pacific madrone	12”	Meets the threshold diameter
730	Pacific madrone	14”	Meets the threshold diameter

<u>Tree #</u>	<u>Species</u>	<u>Dbh</u>	<u>Exceptional Criteria</u>
729	Pacific madrone	14"	Meets the threshold diameter
721	Pacific madrone	14"	Meets the threshold diameter
722	Douglas fir	30"	Meets the threshold diameter
737	American elm	32"	Meets the threshold diameter
735	American elm	32"	Meets the threshold diameter
743	American elm	36"	Meets the threshold diameter
717	Japanese black pine	14"	Meets 75% dbh of largest in Seattle
744	American elm	36"	Meets the threshold diameter
746	American elm	34"	Meets the threshold diameter
747	American elm	40"	Meets the threshold diameter
792	Japanese maple	14"	Meets the threshold diameter
768	Western red cedar	32"	Meets the threshold diameter
731	Pacific madrone	8"	Meets the threshold diameter

3.0 Tree Protection

For each of the Exceptional Trees, a protection zone, referred to as the Limits of Development (LOD), a radial distance from the trunk of each tree, is specified on the Tree Evaluation Data spreadsheet. For most of the trees, the LOD is just beyond the dripline, which, in each case, is adequate to provide sufficient protection for the trees as the crowns are low.

Trees number 737, 735, 743, 744, 746 and 747, all American elms with sufficient clearance below the lower portions of their crowns, the LODs are set within the crowns at a distance of 15 feet from the trunks. These trees are in the 9th Ave. right-of-way so no development will be done to the east of these trees leaving the roots on that side undisturbed. Based upon the sizes of the trees, this distance is sufficient to maintain the integrity of the main structural roots and provide protection for the rootplate and to retain a large percentage of the feeder roots. In addition, existing below-ground structures, such as building foundations and retaining walls, within the driplines have restricted root growth beyond. Structures proposed to be within driplines can be moved to the location of existing structures provided adequate protection can be provided for the roots to maintain their structural integrity and eliminate damage.

3.1 Tree Protection Measures

For all retained trees, Exceptional and non-Exceptional, orange plastic tree protection fencing is to be installed at the LOD of each tree prior to beginning work and is to remain in place until development and house construction is completed.

If the development calls for excavation into the subgrade at the 15 foot LOD of trees #737, 735, 743, 744, 746 and 747, all damaged roots are to be hand cut by the project consulting arborist prior to backfilling the trenches or installing rockeries. If this work occurs during the summer, the ground surface beneath the trees is to be covered with 3-4 inches of woodchip mulch and a temporary irrigation system (either drip, spray or regular dousing with large amounts of water) is to be established to provide supplemental irrigation to compensate for the reduction of water uptake due to the loss of roots.

4.0 Use of This Report

This report is provided to CamWest for the purpose of addressing the existing conditions and statuses of the trees on the site of the Seattle Children's Home in the City of Seattle, WA. This information is the

property of CamWest and cannot be amended by anyone other than Tony Shoffner. This report doesn't guarantee against damage caused by the failure of any tree, nor does it guarantee that trees to be retained will live long into the future. These evaluations only pertain to the conditions of the trees at the time the evaluation was conducted. This report is based upon professional experience and opinion and on interpretation of methods used to determine the Exceptional status of trees in the City of Seattle and is not a guarantee that city staff will concur with my findings requiring additional trees to be classified as Exceptional. This report does not provide findings on which trees are required or proposed to be retained or which trees are proposed to be removed as that information is driven by the development plan and approval by the City of Seattle Department of Planning and Development.

If you have any questions regarding this report, please feel free to call me directly.

Cordially,

A handwritten signature in black ink that reads "Tony Shoffner". The signature is written in a cursive, flowing style.

Tony Shoffner
ISA Certified Arborist #PN-0909A
CTRA/TRAQ #1759

Survey Tag Number	Tree Spp	Common Name	DBH (In)	Spread (Diam. Ft)	LOD (Radius ft)	Condition Rating	Tree Size Status and Condition Notes
706	ILAQ	English Holly	9	15	N/A	1	Non-Exceptional - Good condition and health
707	ACJA	Japanese maple	5	16	N/A	1	Non-Exceptional - Good condition and health
708	PRCE	Thundercloud plum	7	16	N/A	1	Non-Exceptional - Good condition and health
709	PSME	Douglas fir	34	35	18	1	Exceptional - Good condition and health
710	PSME	Douglas fir	24	35	N/A	1	Non-Exceptional - Good condition and health
711	PITH	Japanese pine	12	18	N/A	1	Non-Exceptional - Good condition and health
712	TSHE	Western hemlock	10	36	N/A	1	Non-Exceptional - Good condition and health
713	PITH	Japanese pine	12	16	N/A	1	Non-Exceptional - Good condition and health
714	TSHE	Western hemlock	17	35	N/A	1	Non-Exceptional - Good condition and health
715	PISY	Scot's pine	20	22	N/A	1	Non-Exceptional - Good condition and health
716	PISY	Scot's pine	18	36	N/A	1	Non-Exceptional - Good condition and health
717	PITH	Japanese pine	14	18	10	1	Exceptional - Good condition and health
718	PISY	Scot's pine	20	32	N/A	1	Non-Exceptional - Good condition and health
719	PISY	Scot's pine	20	32	N/A	1	Non-Exceptional - Good condition and health
720	PISY	Scot's pine	12	26	N/A	1	Non-Exceptional - Good condition and health
721	ARME	Pacific madrone	10	16	18.5	1	Exceptional - Good condition and health
722	PSME	Douglas fir	30	38	19.5	1	Exceptional - Good condition and health
723	PISY	Scot's pine	14	26	N/A	1	Non-Exceptional - Good condition and health
724	PISY	Scot's pine	12	24	N/A	1	Non-Exceptional - Good condition and health
725	PSME	Douglas fir	16	20	N/A	1	Non-Exceptional - Good condition and health
726	TIAM	American linden	14	54	N/A	1	Non-Exceptional - Good condition and health
727	TIAM	American linden	14	60	N/A	1	Non-Exceptional - Good condition and health
728	TIAM	American linden	24	56	N/A	1	Non-Exceptional - Good condition and health
729	ARME	Pacific madrone	16	32	16.5	1	Exceptional - Good condition and health
730	ARME	Pacific madrone	8	24	12.5	1	Exceptional - Good condition and health
731	ARME	Pacific madrone	8	16	10'	1	Exceptional - Good condition and health
732	TIAM	American linden	14	46	N/A	1	Non-Exceptional - Good condition and health
733	PITH	Japanese pine	10	15	N/A	1	Non-Exceptional - Good condition and health
734	CEDE	Deodar cedar	28	40	N/A	1	Non-Exceptional - Good condition and health
735	ULAM	American elm	32	62	15	1	Exceptional - Good condition and health
736	PITH	Japanese pine	6	12	N/A	1	Non-Exceptional - Good condition and health
737	ULAM	American elm	32	60	15	1	Exceptional - Good condition and health
738	ILAQ	English Holly	mt 6	8	N/A	1	Non-Exceptional - Good condition and health
739	ARME	Pacific madrone	14	21	11	1	Exceptional - Good condition and health
740	ARME	Pacific madrone	12	32	16.5	1	Exceptional - Good condition and health
741	ARME	Pacific madrone	12	32	16.5	1	Exceptional - Good condition and health
743	ULAM	American elm	36	64'	15	1	Exceptional - Good condition and health
744	ULAM	American elm	36	55	15	1	Exceptional - Good condition and health
745	ULAM	American elm	28	40	N/A	1	Non-Exceptional - Good condition and health
746	ULAM	American elm	34	50	15	1	Exceptional - Good condition and health
747	ULAM	American elm	40	65	15	1	Exceptional - Good condition and health
748	ILAQ	English Holly	10	20	N/A	1	Non-Exceptional - Good condition and health
749	RHTY	Staghorn sumac	8	24	N/A	1	Non-Exceptional - Good condition and health
750	PITH	Japanese pine	10	16	N/A	1	Non-Exceptional - Good condition and health
751	PITH	Japanese pine	10	16	N/A	1	Non-Exceptional - Good condition and health
752	PITH	Japanese pine	10	16	N/A	1	Non-Exceptional - Good condition and health

Survey Tag Number	Tree Spp		DBH (In)	Spread (Diam. Ft)	LOD (Radius ft)	Condition Rating	Tree Size Status and Condition Notes
753	PITH	Japanese pine	10	16	N/A	1	Non-Exceptional - Good condition and health
754	PITH	Japanese pine	10	16	N/A	1	Non-Exceptional - Good condition and health
755	PSME	Douglas fir	24	30	N/A	1	Non-Exceptional - Good condition and health
756	COKO	Korean Dogwood	8	12	N/A	1	Non-Exceptional - Good condition and health
757	MADO	Apple	18	28	N/A	1	Non-Exceptional - Good condition and health
758	ACCI	Vine maple	5.6	24'	N/A	1	Non-Exceptional - Good condition and health
759	ACCI	Vine maple	4.7	20'	N/A	1	Non-Exceptional - Good condition and health
760	ACCI	Vine maple	5	24'	N/A	1	Non-Exceptional - Good condition and health
761	ILAQ	English Holly	4	16	N/A	1	Non-Exceptional - Good condition and health
762	THPL	Western red cedar	16	24	N/A	1	Non-Exceptional - Good condition and health
763	PHFR	Frasers photinia	10	36	N/A	1	Non-Exceptional - Good condition and health
764	ALRU	Red alder	8	20	N/A	1	Non-Exceptional - Good condition and health
765	ALRU	Red alder	8	24	N/A	1	Non-Exceptional - Good condition and health
766	ALRU	Red alder	12	30	N/A	1	Non-Exceptional - Good condition and health
767	PSME	Douglas fir	14	24	N/A	1	Non-Exceptional - Good condition and health
768	THPL	Western red cedar	32	34	18	1	Exceptional - Good condition and health
769	PRCE	Thundercloud plum	8	16	N/A	1	Non-Exceptional - Good condition and health
770	ARME	Pacific madrone	8	26	13.5	4	Exceptional - Poor condition, diseased.
771	TIAM	American linden	10	16	N/A	1	Non-Exceptional - Good condition and health
772	ACMA	Big-leaf maple	28	48	N/A	1	Non-Exceptional - Good condition and health
773	ARME	Pacific madrone	14	26	13.5	1	Exceptional - Good condition and health
774	ARME	Pacific madrone	14	38	19.5	1	Exceptional - Good condition and health
775	PISY	Scot's pine	8	15	N/A	1	Non-Exceptional - Good condition and health
776	ARME	Pacific madrone	14	36	18.5	1	Exceptional - Good condition and health
777	PISY	Scot's pine	14	12	N/A	1	Non-Exceptional - Good condition and health
778	PISY	Scot's pine	24	38'	19.5	1	Exceptional - Good condition and health
779	CEDE	Deodar cedar	24	26	N/A	1	Non-Exceptional - Good condition and health
780	CEDE	Deodar cedar	16	22	N/A	1	Non-Exceptional - Good condition and health
781	CEDE	Deodar cedar	30	45'	23	1	Exceptional - Good condition and health
782	ILAQ	English Holly	8	14	N/A	1	Non-Exceptional - Good condition and health
783	PRCE	Thundercloud plum	8	18	N/A	1	Non-Exceptional - Good condition and health
784	ARUN	Strawberry tree	6	12	N/A	1	Non-Exceptional - Good condition and health
785	ARUN	Strawberry tree	6	12	N/A	1	Non-Exceptional - Good condition and health
786	PIMU	Mugo pin	mt 3	9	N/A	1	Non-Exceptional - Good condition and health
787	PRCE	Thundercloud plum	6	16	N/A	1	Non-Exceptional - Good condition and health
788	PITH	Japanese pine	12	18	N/A	1	Non-Exceptional - Good condition and health
789	PISY	Scot's pine	18	30	N/A	1	Non-Exceptional - Good condition and health
790	PISY	Scot's pine	18	32	N/A	1	Non-Exceptional - Good condition and health
791	PIAB	Norway spruce	20	32	N/A	1	Non-Exceptional - Good condition and health
792	ACJA	Japanese maple	14	34'	18	1	Exceptional - Good condition and health

Tree# - Corresponds to numbers as shown on map and numbers assigned to tree tags

Tree Species Codes -

ACCI=Acer circinatum (vine maple)
ACJA=Acer japonicum (Japanese maple)
ACMA=Acer macrophyllum (big-leaf maple)
ACPL=Acer platanoides (Norway maple)
ALRU=Alnus rubra (red alder)
ARME=Pacific madrone
ARUN=Arbutus unedo (strawberry tree)
CEDE=Cedrus deodara (Deodara cedar)
COKO=Cornus kousa (Korean dogwood)
ILAQ=Ilex aquifolium (English holly)
MADO=Malus domestica (Apple)
PHFR=Photinia x. fraseri (Fraser's photinia)

PIAB=Picea abies (Norway spruce)
PIMU=Pinus mugo (mugo pine)
PISY=Pinus sylvestris (Scot's pine)
PITH=Pinus thunbergiana (Japanese pine)
PRCE=Prunus cerasifera 'thundercloud' (Purple leaf plum)
PSME=Pseudotsuga menziesii (Douglas fir)
RHTY=Rhus typhina (staghorn sumac)
TIAM=Tilia americana (American linden)
THPL=Thuja plicata (western red cedar)
TSHE=Tsuga heterophylla (western hemlock)
ULAM=Ulmus americana (American elm)

DBH - Diameter in inches at 4.5' above grade

Spread - Approximate average crown spread in feet

Limits of Development (Radius) = Distance from tree development to maintain

Condition Rating

1=Excellent Condition

2=Good Condition, candidate for retention given no, or limited, impacts

3=Fair Condition, candidate for retention given no, or limited impacts and potential targets

4=Poor condition, removal recommended

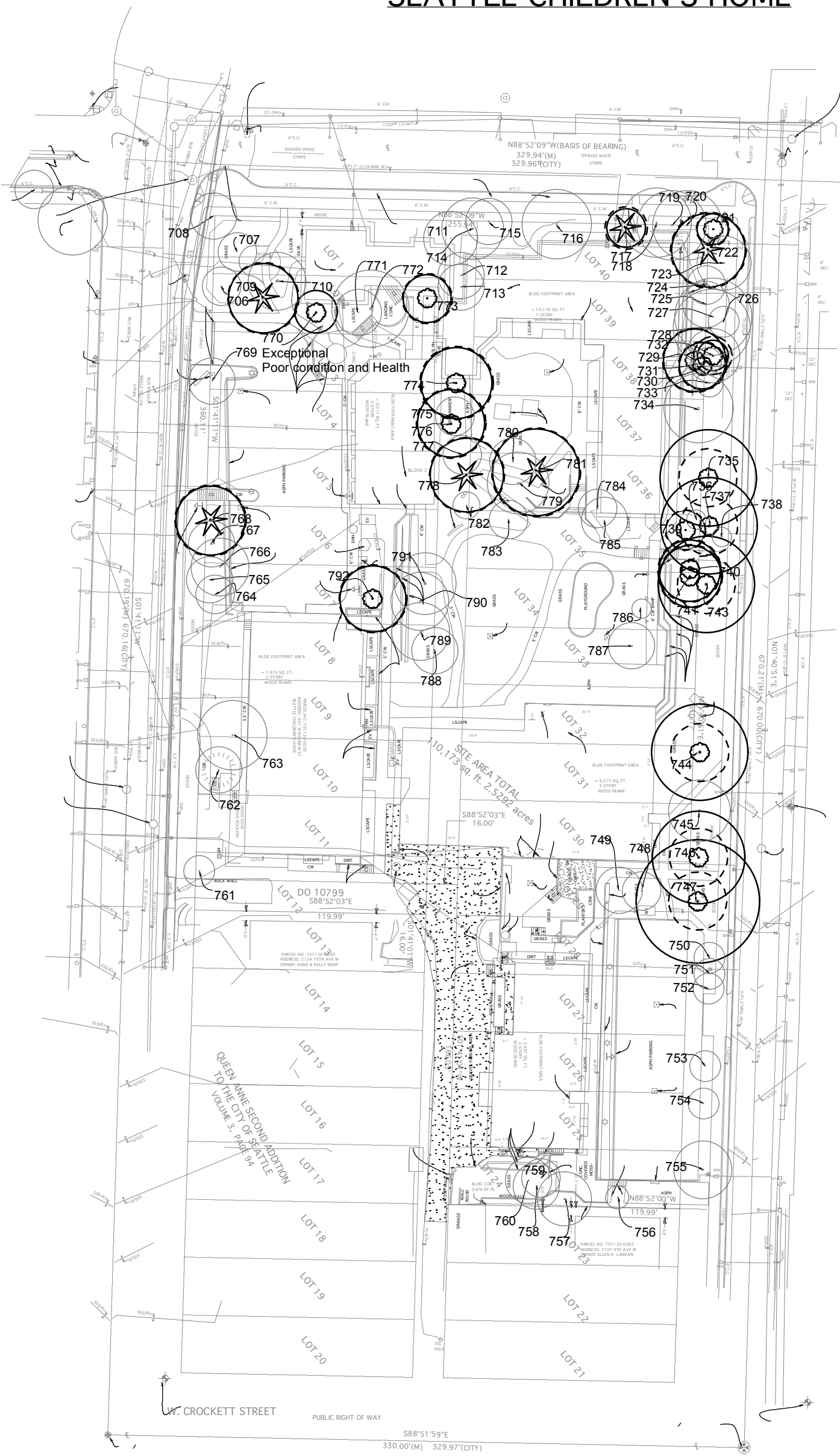
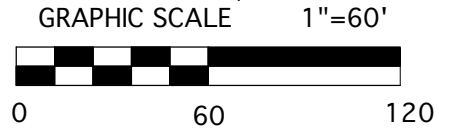
Recommended Fate - Recommendations for retention or removal of a tree based upon condition and anticipated impacts

Remove - I = Remove for impacts

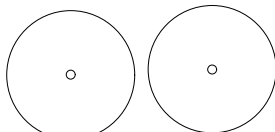
Remove - C = Remove for condition (high hazard/risk)

Retain = Good condition and health or poor condition but out of range of house therefore low risk

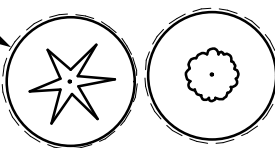
TREE INVENTORY CAMWEST DEVELOPMENT, INC. A TOLL BROTHERS COMPANY SEATTLE CHILDREN'S HOME



NON EXCEPTIONAL TREES IN GOOD HEALTH AND CONDITION WITH DRIPLINES



EXCEPTIONAL TREES IN GOOD HEALTH AND CONDITION WITH DRIPLINES



PREPARED BY: SHOFFNER CONSULTING
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REVISED: NOVEMBER 4, 2013

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