



To: City of Seattle Design Review Board
From: M. S. Patterson, MSES/MPA, Research Associate Steinbrueck Urban Strategies, LLC
RE: Project #30200338, 2939 East Madison Street, Seattle

October 21, 2016

This letter is in response to the second arborists' report produced by Tree Solutions, Inc., dated September 15th, the Tree Canopy Calculation document, the response of the City of Seattle Department of Construction and Inspections dated October 3rd, the recent memo on the second EDG review meeting packet, and the most recent applicant re-submittal (09-28-2016).

First and most importantly, we believe that the city is entirely correct in rejecting the arborists' most recent conclusions that have been presented about the current status and possible fate of the exceptional trees and grove present on the site. The assessment of these trees by the certified arborist does not indicate that these trees are hazards *in the present*, only that they would be negatively impacted such that they would *become* hazards due to construction *which may or may not take place*. Whether or not the trees would become hazards and as such no longer be eligible for protection under city code under some possible future is not pertinent to their current status. Nearly all living trees will eventually become hazards in an urban context, but this does not mean that they should not, or cannot, be protected during the decades of their life in which they are not hazards.

EDG Correction Item One deals with the retention of the collection of 13 mature trees of varying species that would be impacted by proposed ROW improvements on East Dewey Place. The response put forward by the arborist references an attached geotechnical report, building footprint, and landscape design that have an unclear relationship with the previously submitted design concept. They appear to relate to the minimally described "No Departures" design that was included in the second EDG packet. This makes a detailed response somewhat difficult, particularly given that the attached survey document that shows the details of this excavation work is a quite degraded image and largely illegible.

The updated survey, however, provides better information regarding the status of the trees on site, as well as their location (though the site map is also largely illegible). As before, we have few disagreements with the factual findings, but object to the proposed course of action for dealing with the problems presented by the future construction. There appears to be conflict between the proposed widening and improving of East Dewey Place and the need to put forward a design which will protect the exceptional trees on site. The excavation plan attached to the arborists report goes some way to addressing this problem; in the two section cuts, Section 1 shows a building stem wall at 21.48' from the

ROW dedication, and Section 2 shows it at 41', with an additional retaining wall at 5' from the dedication. Because of the low quality imagery attached to the arborist's report, it is difficult to determine exactly which trees would be contained within the area between the stem wall and the proposed retaining wall. However, the bulk of the grove in question would be impacted, with at least four of the trees being in the area of the wall or dedication and thus requiring removal.

This excavation plan does appear to allow for a significantly larger planting area, suitable for larger species of trees, as well as a large cutout on the north end of the site, potentially allowing retention of one of the large poplars. However, it is very unclear how this diagram relates to the parking garage, massing of the building, façade, streetscape, and other pieces of information needed to make a more complete assessment. By placing the residential parking garage entrance between the cut-out and tree grove-remnant the length of landscape zone along Dewey street is further reduced and thus, there is even less area to provide a quality pedestrian experience, and satisfactory transition with adjacent single family residences across the street.

EDG Correction Item Two deals with the presence of a grove on the site. The recent judgement by the city that the issue at hand is about present condition of the site means that a "significant" grove under the city's tree preservation ordinance is in fact present.

It is important to note that the concerns about future conditions on the site raised here are valid, particularly those related to altered hydrology and the loss of root system imposed by excavation. However, the lost water supply could potentially be replaced by supplemental irrigation, as it is likely that automated irrigation systems would be put into place for the finished landscaping. The prospects for disease and increased instability due to reduction in root plate are harder to address, but that strongly indicates that a compromise design between the improved right-of-way and slope should be required, to effectively respond to the city's significant tree protection policies.

It is also worth considering that the loss of a number of these trees in the future from altered hydrological conditions or disease is not necessarily a negative thing. It would represent a temporary loss of canopy, this is undeniable. However, the much larger area of preserved slope would make it possible to plant larger native species to replace that canopy over time. Any trees that die some time post-construction could be assessed for the creation of a managed snag. As has been previously noted, standing dead trees provide a valuable ecological resource, particularly in the urban forest, where they are comparatively uncommon. While efforts should be made to protect the exceptional trees on site, the conversion of a few into snags in a location where new planting can take place may represent a net positive for the larger urban forest of the area, and retain the site's role as an ecologically useful feature of the urban forest corridor in Madison Valley.

EDG2 Correction Item Three deals with canopy replacement. The proposed canopy replacement, while numerically impressive, may not functionally or ecologically equivalent. The majority of the trees put forward in the replacement plan are small or very small in stature, have extremely limited canopy volumes. Many hardly classify functionally as trees until they have been in place for considerable time, and would effectively be shrubs or potted plants until they reach maturity. Due to the green roof on site, many might in fact actually be potted plants. If non-dwarf varieties of Incense Cedar and Cypress are planted, these nine trees will eventually achieve significant size. Landscape renderings seem to suggest that dwarf varieties may be intended for the site.

If this is correct, even at maturity, the proposed replacement trees cannot and would never intercept the same volume of rainwater, sequester the same mass of carbon, or provide equivalent ecological function as the stand of large trees currently present. In terms of sequestered carbon, the new plantings are likely, over their entire lifespan, to account for less than that contained in the *single* large alder currently on site. In terms of other ecosystem functions, a number of the proposed replacement trees produce fruit that can be excellent forage for birds, small mammals, and members of the community. However, most would remain too small in stature to be useful as habitat or nesting sites for small mammals and birds. The choice of these small, decorative trees appears to be driven by aesthetic criteria (being both pleasant to look at and not obstructing the views of residents in the new building), and by the restricted soil volume left for tree planting on the site post-development by the designs originally presented.

The proposed replacement plan fails to adequately address the loss of important ecological services generated by clearing the majority of the existing canopy from the site, both in terms of services to the city (rainwater catchment, carbon sequestration) and from a larger ecological perspective including wildlife habitat. However, the plan seems to reflect the original preferred design put forward, and not the (possible?) excavation plan contained within the arborists report. The larger setbacks associated with this document suggest that the planting of trees that are native, suited to the site, and of larger stature is possible, and that meaningful and appropriate replacement of existing canopy is more likely to be possible.

Revisions to the Preferred Design include a 5 ft. increase of a portion of the building setback on Dewey, which allows for a small increase in landscaped area. We think this is still sorely insufficient compensation for the substantial (and permanent) loss of significant tree canopy, and will not mitigate the impact of the oversized, out of scale building mass. The staggered design of the landscape wall and setback (5', 10', and 15') will not allow adequately for the creation of a continuous run of large or medium statured trees and healthy root structure. Increasing the 15' setback area to 20' would allow for the planting of medium-sized trees, and would serve as a better urban forest corridor component, as

well as increasing the volume of canopy on site. The revision includes a helpful update in design by suggesting the construction of a “layered”, sloped landscape composed of understory (herbaceous plants and shrubs), small/medium trees and large coniferous trees to reduce the impact of the building massing and parking garage on residents of Dewey Place. A 15’ setback begins to make this possible. A more substantial setback of 20’ would allow for more variety of plantings, larger sized trees, more varied understory plantings and more understory trees.

In summary:

1. The proposed development deprives the city and neighborhood of significant mature tree canopy does not adequately compensate for the permanent loss of ecological services and aesthetic benefits that exist today on the site. Little has been to modify the design to protect the existing tree canopy or provide for its replacement.
2. The Preferred Design in EDG2 still does not address the exceptional status of the trees currently present, or the presence of the grove.
3. Recommendation: The landscape zone along Dewey should be increased to at least 20 ft. (preferably 25 ft.) in width, and should be continuous along the full length of the Dewey street and the property to ensure healthy, layered tree growth, fuller continuous canopy development, and adequate landscaping buffer.

Thank you for your thoughtful consideration of these concerns.