Arch 463 ECS **Fall 2023**

SiteX–1 "Julia Davis Park Site Analysis"

For this site exercise you will be expected to explore, document, and experiment with your assigned (surrogate) site. Your TAs will be on hand to lend you guidance and the equipment required to complete your assignment on the field trip day, Saturday, Sept. 9. Before you go you should **print out** your **site plan** (large!), identify potential building sites, and print out at least **two vertical sun projection plots** for the latitude of your assigned city (see *MEEB* App. D.4 pp1645–1648) or use UO's Sun Path Chart program to create a custom chart <http://solardat.uoregon.edu/SunChartProgram.html>).

Specific assignments:

(1) Before the site visit, examine the site topography and vegetation using the site plan and Google Earth to identify potentially advantageous microclimates for your future building site (and plot them on your site plan). Direct experience of the topography and vegetation of the site is invaluable toward your understanding of it. Make a log of your observations about vegetation and water features on the site plan. (It would be a good idea to make a large copy of the site plan mounted on a clipboard for note taking.) Photographs can be an invaluable component for recording the site configuration. Indicate the position and direction of each photograph on your site map. Include this annotated site map, and your photos/drawings in the documentation for the LabX.

(2) On the site, locate and identify all the trees on your site plan then plot the visual horizon for at least two potential building sites [from LabX-1, *InsideOut* B1.6] to determine its suitability for solar heating and site-scale shading. Record the position of the plot on your site plan. Use the global compass (or a simple protractor, soda straw, and lead weight rendition) to accurately measure the horizon plot. Make the plot on copies of the appropriate Mazria elevational sun chart. [See *MEEB* 6.4(d), pp 172–178 for a detailed explanation and *MEEB* D.4 pp1645–1648 for Vertical Sun Path Projection Charts.]

(3) Gather site-specific relative weather sensations [use your senses] for eventual microclimate analysis. You'll want to find out what the coolest/hottest, windiest/calmest, and wettest/driest spots on your site are. Record these sensations on your site plan.

(4) Write a conclusion about your site visit to explain the meaning of your observations and the data that you've collected. Also, draw conclusions (and defend them with information, not data) about the site's potential to support the building type that you've been assigned.

All the above should be incorporated into your presentation for LabX-1.